

**ORGANIZATIONAL IMMUNE SYSTEM AND CHANGE MANAGEMENT IN  
NEPALESE MANUFACTURING AND NON-MANUFACTURING FIRMS**

A DISSERTATION

SUBMITTED BY:  
RAJ KUMAR BHATTARAI

FOR THE DEGREE OF DOCTOR OF PHILOSOPHY (PhD) IN MANAGEMENT

SUBMITTED TO:  
OFFICE OF THE DEAN  
FACULTY OF MANAGEMENT  
TRIBHUVAN UNIVERSITY

KIRTIPUR, KATHMANDU

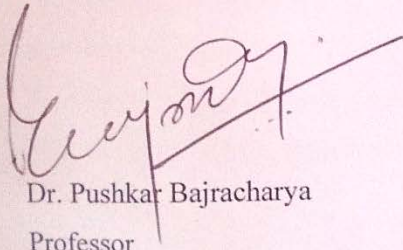
SEPTEMBER 2015

## RECOMMENDATION

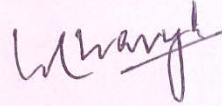
We certify that the dissertation entitled "**Organizational Immune System and Change Management in Nepalese Manufacturing and Non-manufacturing Firms**" submitted by Raj Kumar Bhattarai to the Faculty of Management, Tribhuvan University for the degree of Doctor of Philosophy (PhD) in Management of the University, has been completed under our joint supervision and guidance as per the format prescribed and approved by the Faculty of Management. This thesis is the candidate's original research work. We have carefully read his final work, and we are fully satisfied with the language and the substance of this dissertation submitted to the Faculty of Management.

To the best of our knowledge, the candidate has fulfilled all the necessary requirements of the PhD degree of the Faculty of Management, Tribhuvan University.

We, therefore, recommend that this dissertation be considered for the award of the PhD degree.



Dr. Pushkar Bajracharya  
Professor  
Faculty of Management  
Tribhuvan University  
Kathmandu, Nepal



Dr. Govinda Prasad Acharya  
Professor Emeritus  
Faculty of Management  
Tribhuvan University  
Kathmandu, Nepal



**TRIBHUVAN UNIVERSITY**  
**Faculty of Management**

Office of the Dean  
Kirtipur, Kathmandu, Nepal.

Tel. : 01-4330814, 01-4330818, 01-4335066  
Fax : 977-01-4333396  
E-mail : fomdean@gmail.com  
: exam.mgmt.tu@gmail.com

**VIVA-VOCE SHEET**

We have conducted the viva-voce examination of the dissertation submitted by

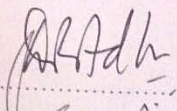
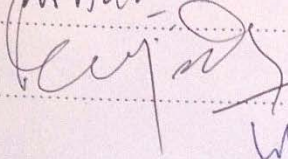
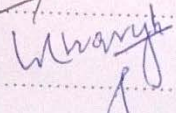
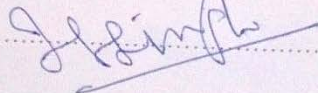
Raj Kumar Bhattarai

Entitled

**“Organizational Immune System and Change Management in Nepalese  
Manufacturing and Non-manufacturing Firms”**

is found that the dissertation to be the original work of the candidate and written as per the format prescribed by the Faculty of Management, Tribhuvan University. We recommend the dissertation to be accepted as the fulfillment of the requirements for the degree of Doctor of Philosophy (PhD) in management.

**Viva-voce Committee**

Chairman .....   
Supervisor .....   
Supervisor .....   
External expert ..... 

## **DECLARATION**

I hereby declare that this study entitled “Organizational Immune System and Change Management in Nepalese Manufacturing and Non-manufacturing Firms” embodies the results of the research work carried out by me for the degree of Doctor of Philosophy (PhD) in management in the Faculty of Management, Tribhuvan University under the joint supervision of Professor Dr. Pushkar Bajracharya and Professor Dr. Govinda Prasad Acharya. No part of this research has been submitted to any other university / institution by me or by anybody, and conferred any degree or diploma.

Kathmandu, Nepal

September 2015

Raj Kumar Bhattarai

## ACKNOWLEDGEMENT

This dissertation is a sum total of the opinions and responses of the key informants and respondents who were taking part in the research on organizational immune system and change management in Nepal at one part and the scholarly works on the field from the scholars around the globe on the other part. I have been beholden to both of my study supervisors Professor Dr. Pushkar Bajracharya and Professor Dr. Govinda Prasad Acharya

I would like to express my indebtedness and gratitude to my study supervisors and would like to extend sincere thanks to all the participants and respondents who have contributed, directly and indirectly, by providing information and ideas in the entire study period. I would like to acknowledge and honor all scholars in the field who provided foundation for the study by publishing their scholarly works.

I always remember Julian Birkinshaw, Professor at London Business School for providing references, suggestions and updating about the contemporary research on the areas at the early stage of the study. I would like to appreciate Lisa Valikangas, professor at School of Economics, Aalto University, Finland for her appreciative inquiry in order to develop insights into the entire research process. Similarly, I appreciate Sari Stenfors, Chief Executive Officer at Innovation Democracy, USA for her continuous encouragement throughout the research process.

I would like to thank Professor Dr. Prem Raj Panta, Professor Dr. Madhav Raj Koirala, and Professor Dr. Dev Raj Adhikari for their contribution while carrying out the course audit during the process of this study. I always remember for the support of Professor Dr. Santosh Raj Paudel, Professor Dr. Fatta Bahadur KC, and Professor Dr. Shyam Krishna Shrestha at Faculty of Management, Tribhuvan University for their support in due course of the research process.

My sincere thanks go to Professor Dr. Devendra Bahadur Chhetry for his continuous support from the beginning to the variable identification, questionnaire construction, data preparation, analysis and interpretation. Similarly, I have been indebted to Professor Dr. Vikash Raj Satyal for his ideas of log linear modelling and Kendall's tau correlation at one part and I have been obliged to Professor Dr. Shankar Khanal at Central Department of Statistics, Tribhuvan

University for his ideas and interpretations concerning binary logistic regression applied in this study.

I have been grateful to Robert Kegan and Lisa Laskow Lahey, professors at Harvard Business School, USA for providing worthy ideas through edX during the course of unlocking the immunity to change offered by HarvardX.

In the end, I would like to thank the personnel at the Dean's Office, Faculty of Management, Rector's Office and Accounts Section of the Tribhuvan University who have extended their cooperation throughout the study period. Moreover, I would like to thank all individual who have contributed directly or indirectly in the entire research by providing their precious time, resources, and secrets. I always remain committed to maintain their secrecy.

Deliberate and continuous support as well as well wishes from my wife Dr. Shailaja Pokharel, son Sampanna Bhattarai, mother Druga Devi Bhattarai, father-in-law Professor Dr. Madhav Prasad Pokharel and mother-in-law Sharada Pokharel enhanced my energy in order to make this work possible.

This work is dedicated to my late father Krishna Prasad Bhattarai.

Kathmandu

September 2015

## LIST OF ABBREVIATION

|                                     |  |
|-------------------------------------|--|
| APA                                 | American Psychological Association                     |
| AC                                  | Architectural crossbreeding                            |
| AD                                  | Anno Domini  |
| AI                                  | Architectural Inbreeding                               |
| B                                   | Breeding   |
| BC                                  | Before Christ  |
| BBC                                 | British Broadcasting Corporation                       |
| BOD                                 | British Broadcasting Corporation                       |
| c                                   | Circa  |
| cb                                  | crossbreeding  |
| CEO                                 | Chief Executive Officer                                |
| CIAA                                | Commission for the Investigation of Abuse of Authority |
| CNLU                                | Chanakya National Law University                       |
| CPN                                 | Communist Party of Nepal                               |
| DICE                                | Duration Integrity Commitment Effort                   |
| HBR                                 | Harvard Business Review                                |
| HR                                  | Human Resource   |
| ib                                  | inbreeding   |
| IC                                  | Inbreeding and Crossbreeding                           |
| IBM                                 | International Business Machines Corporation            |
| Inquiry A,B,C,D,E,F,G,H,I,J,K,L,M&N | Question number  |
| KMO                                 | Kaiser-Mayer-Olkin                                     |
| ln                                  | natural logarithm                                      |
| M                                   | Manufacturing  |
| MD                                  | Managing Director                                      |
| NM                                  | Non-manufacturing                                      |
| OED                                 | Online Etymology Dictionary                            |
| OIS                                 | Organizational Immune System                           |
| OR                                  | Odds Ratio   |
| SD                                  | Standard Deviation                                     |
| SE                                  | Standard Error   |
| SLC                                 | School Leaving Certificate                             |
| SPSS                                | Statistical Package for the Social Sciences            |
| TDS                                 | Training and Development Solutions                     |
| TQM                                 | Total Quality Management                               |
| UML                                 | Unified Marxist-Leninist                               |
| VAT                                 | Value Added Tax  |

*Inside cover page*  
*Recommendation*  
*Viva-voce sheet*  
*Declaration*  
*Acknowledgement*  
*List of abbreviation*

## **Table of Contents**

### **Chapter 1: Introduction**

|  |    |
|--|----|
| 1.1. Background .....                    | 1  |
| 1.1.1. The change .....                  | 2  |
| 1.1.2. Organizational immune system..... | 3  |
| 1.1.3. Response to the change.....       | 4  |
| 1.2. The problem statement .....         | 5  |
| 1.3. The study objectives.....           | 6  |
| 1.4. Study significance .....            | 7  |
| 1.5. Conceptual framework .....          | 8  |
| 1.6. Limitations of study .....          | 10 |
| 1.7. Chapter plan .....                  | 11 |

### **Chapter 2: Review of literature**

|  |    |
|--|----|
| 2.1. Organization .....                        | 13 |
| 2.2.1. Organizational dynamics .....           | 14 |
| 2.2.2. Organization study precursors .....     | 15 |
| 2.2. Perspectives in organization studies..... | 16 |
| 2.3.1. Mechanical perspective.....             | 16 |
| 2.3.2. Behavioral perspective.....             | 18 |
| 2.3.3. Organic perspective .....               | 23 |
| 2.3.4. System perspective.....                 | 24 |
| 2.3.5. Social network perspective .....        | 25 |
| 2.3.6. Agency perspective .....                | 26 |
| 2.3.7. Isomorphic perspective .....            | 27 |
| 2.3.8. Virtual perspective .....               | 28 |
| 2.3. Management praxis .....                   | 29 |
| 2.4.1. Corporate governance .....              | 29 |



|         |   |    |
|---------|---|----|
| 2.4.2.  | Corporate culture .....                             | 30 |
| 2.4.3.  | Organizational learning.....                        | 31 |
| 2.4.4.  | Leadership style .....                              | 32 |
| 2.4.5.  | Quality management .....                            | 33 |
| 2.4.6.  | International management.....                       | 34 |
| 2.4.7.  | Environmental adaptation .....                      | 35 |
| 2.4.8.  | Human and natural intelligence .....                | 35 |
| 2.4.9.  | Strategic management.....                           | 36 |
| 2.4.10. | Performance management.....                         | 37 |
| 2.4.11. | Organizational polity and industrial relations..... | 38 |
| 2.4.    | Organization as a biological metaphor.....          | 39 |
| 2.5.1.  | Organization as an organism.....                    | 39 |
| 2.5.2.  | Organization as an autopoiesis.....                 | 40 |
| 2.5.3.  | Organization as a living entity .....               | 40 |
| 2.5.4.  | Organization as an evolutionary process .....       | 40 |
| 2.5.5.  | Organization as homeostasis.....                    | 40 |
| 2.5.    | Organizational schemata and change .....            | 41 |
| 2.6.1.  | The changing environment .....                      | 43 |
| 2.6.2.  | Resistance to change .....                          | 45 |
| 2.6.3.  | Tolerance to change .....                           | 47 |
| 2.6.4.  | Acceptance to change .....                          | 48 |
| 2.6.    | Organizational immune system.....                   | 49 |
| 2.7.1.  | The immune system .....                             | 50 |
| 2.7.2.  | Immune system architecture .....                    | 54 |
| 2.7.    | Change management .....                             | 61 |
| 2.8.1.  | Change management perspectives .....                | 64 |
| 2.8.2.  | Maintaining status quo .....                        | 68 |
| 2.8.3.  | Rejuvenation .....                                  | 69 |
| 2.8.4.  | Transformation.....                                 | 70 |
| 2.8.    | Research gap .....                                  | 72 |

### **Chapter 3: Research methodology**

|      |                                 |    |
|------|---------------------------------|----|
| 3.1. | The paradigm.....               | 74 |
| 3.2. | Research design.....            | 76 |
| 3.3. | Sample selection.....           | 78 |
| 3.4. | Data type and measurement ..... | 79 |

|        |  |    |
|--------|--|----|
| 3.5.   | Interview with key informants .....    | 81 |
| 3.6.   | Data collection.....                   | 82 |
| 3.7.   | Statistical tools and techniques ..... | 82 |
| 3.6.1. | Descriptive analysis .....             | 82 |
| 3.6.2. | Chi-square tests .....                 | 83 |
| 3.6.3. | Kendall's tau-b.....                   | 85 |
| 3.6.4. | Data distribution.....                 | 85 |
| 3.6.5. | Log linear models .....                | 87 |
| 3.6.6. | Exploratory factor analysis .....      | 89 |
| 3.6.7. | Reliability statistics.....            | 91 |
| 3.6.8. | Binary logistic regression .....       | 91 |

#### **Chapter 4: Status of change and immunity: Examination and evaluation of associations**

|         |  |     |
|---------|--|-----|
| 4.1.    | Existing status of immunity and change .....                       | 95  |
| 4.1.1.  | Demography of the respondents .....                                | 95  |
| 4.1.2.  | Risk: as a matter of change and immunity to change .....           | 97  |
| 4.1.3.  | Status of immunity and change.....                                 | 98  |
| 4.1.4.  | Change preventers in organizations and businesses .....            | 100 |
| 4.1.5.  | Change makers in organizations and businesses .....                | 100 |
| 4.1.6.  | General environmental triggers for change.....                     | 101 |
| 4.1.7.  | Industry environmental triggers for change.....                    | 101 |
| 4.1.8.  | Immune and vulnerable areas .....                                  | 102 |
| 4.1.9.  | Shields for organization and business.....                         | 104 |
| 4.1.10. | Change management style and instruments.....                       | 105 |
| 4.1.11. | Organizational reasons for change.....                             | 106 |
| 4.1.12. | Change management process influencers .....                        | 107 |
| 4.1.13. | Variables immune to change.....                                    | 108 |
| 4.1.14. | Variables vulnerable to change.....                                | 110 |
| 4.1.15. | Acceptance to change occurrence.....                               | 111 |
| 4.1.16. | Tolerance to change occurrence.....                                | 113 |
| 4.1.17. | Resistance to change occurrence .....                              | 113 |
| 4.2.    | Examining associations .....                                       | 116 |
| 4.2.1.  | Risky areas in manufacturing and non-manufacturing industries..... | 116 |
| 4.2.2.  | Organizational dynamism .....                                      | 121 |
| 4.2.3.  | Preventers of changes in organization .....                        | 128 |

|         |   |     |
|---------|---|-----|
| 4.2.4.  | Change makers in the organization.....                        | 131 |
| 4.2.5.  | General environmental triggers for change.....                | 135 |
| 4.2.6.  | Industry environmental triggers for change.....               | 140 |
| 4.2.7.  | Areas of strengths of the organizations.....                  | 144 |
| 4.2.8.  | Shields of the organization.....                              | 149 |
| 4.2.9.  | Change management style and instrument in organization .....  | 153 |
| 4.2.10. | Reasons for making change in organization .....               | 158 |
| 4.2.11. | Managing change in organization.....                          | 164 |
| 4.3.    | Grouping of associations.....                                 | 171 |
| 4.4.    | Modelling for categorical associations within variables ..... | 182 |
| 4.5.    | Evaluation of the sub-categorical associations.....           | 187 |

## **Chapter 5: Organizational change and immunity: Discussion of the results**

|        |  |     |
|--------|--|-----|
| 5.1.   | Immunity to change: Adoptive challenge .....   | 208 |
| 5.2.   | Change triggers: uncertain fear and optimism bias.....   | 209 |
| 5.3.   | Static and changing areas of organization: state of breeding (inbreeding and crossbreeding)..... | 214 |
| 5.4.   | Category of change and response to the change: status of immunity and vulnerability .....        | 216 |
| 5.5.   | Managing change: working with the instruments .....  | 222 |
| 5.6.   | Change management typology: model-free breaking and building of immunity .....                   | 224 |
| 5.6.1. | Immunity and change: Intramural and extramural.....  | 225 |
| 5.6.2. | Organizational immune system architecture.....   | 227 |
| 5.6.3. | Organizational change category.....  | 230 |
| 5.6.4. | Change management instruments .....  | 231 |
| 5.7.   | Pointer discussion.....  | 233 |

## **Chapter 6: Summary, conclusions, and implications**

|        |   |     |
|--------|---|-----|
| 6.1.   | A brief summary of the findings .....                               | 235 |
| 6.1.1. | Environmental triggers.....   | 235 |
| 6.1.2. | Status of immunity and change.....                                  | 236 |
| 6.1.3. | Association of change and response to the change.....               | 236 |
| 6.1.4. | Change management style and instruments.....                        | 237 |
| 6.1.5. | Typology of organizational immune system and change management..... | 238 |
| 6.2.   | Conclusions .....   | 238 |

|        |  |     |
|--------|--|-----|
| 6.2.1. | The state of breeding.....                           | 239 |
| 6.2.2. | Model-free breaking and building immunity.....       | 241 |
| 6.2.3. | The need for change and staticness.....              | 241 |
| 6.2.4. | Managing change: moving with the immune system ..... | 242 |
| 6.2.5. | Inbreeding and crossbreeding of leadership .....     | 243 |
| 6.2.6. | Theorization from the study.....                     | 244 |
| 6.3.   | Managerial policy implications.....                  | 246 |
| 6.4.   | Future research implications .....                   | 248 |
|        | Works Cited .....                                    | 249 |

### List of Tables

|             |  |     |
|-------------|--|-----|
| Table 3-1:  | Reliability statistics .....                       | 91  |
| Table 4-1:  | Demography of the respondents.....                 | 96  |
| Table 4-2:  | Risky items as change triggers .....               | 98  |
| Table 4-3:  | Areas remaining static and changing.....           | 99  |
| Table 4-4:  | Organizational change preventers .....             | 100 |
| Table 4-5:  | Organizational change facilitators.....            | 100 |
| Table 4-6:  | General environmental triggers .....               | 101 |
| Table 4-7:  | Industrial triggers .....                          | 102 |
| Table 4-8:  | Areas being immune and vulnerable.....             | 103 |
| Table 4-9:  | Shields for organization and business .....        | 104 |
| Table 4-10: | Instruments for managing change .....              | 106 |
| Table 4-11: | Organizational reasons for change .....            | 106 |
| Table 4-12: | Organizational triggers for change .....           | 107 |
| Table 4-13: | Variables immune to change .....                   | 109 |
| Table 4-14: | Variables vulnerable to change .....               | 111 |
| Table 4-15: | Acceptance to change occurrence .....              | 112 |
| Table 4-16: | Tolerance to change occurrence .....               | 113 |
| Table 4-17: | Resistance to change occurrence.....               | 113 |
| Table 4-18: | Risk from competition and substitute products..... | 117 |
| Table 4-19: | Risk from unethical business practices .....       | 117 |
| Table 4-20: | Risk from scarcity of resources .....              | 118 |
| Table 4-21: | Risk from technology change.....                   | 118 |
| Table 4-22: | Risk from regulatory pressures.....                | 119 |
| Table 4-23: | Risk from commodity price volatility .....         | 119 |

|  |     |
|--|-----|
| Table 4-24: Relationship between the risk triggers .....                     | 120 |
| Table 4-25: Dynamics of technology and work processes .....                  | 121 |
| Table 4-26: Dynamics of supply chain and business network.....               | 122 |
| Table 4-27: Products and service design dynamics .....                       | 123 |
| Table 4-28: Industrial and labor relation dynamics .....                     | 123 |
| Table 4-29: Dynamics of organization structure and hierarchy.....            | 124 |
| Table 4-30: Dynamics of corporate culture and etiquette.....                 | 124 |
| Table 4-31: Personnel attitude and value dynamics .....                      | 125 |
| Table 4-32: Dynamics in funds mobilizations .....                            | 125 |
| Table 4-33: Relationship between the organizational dynamics .....           | 126 |
| Table 4-34: Role of top management in preventing organizational changes..... | 128 |
| Table 4-35: Role of organizational change in preventing change .....         | 129 |
| Table 4-36: Role of employees and unions in preventing change .....          | 129 |
| Table 4-37: Role of consultants and experts in preventing change .....       | 130 |
| Table 4-38: Relationship between the change preventers.....                  | 130 |
| Table 4-39: Role of top management in making change in organization .....    | 132 |
| Table 4-40: Role of consultants and experts in making change .....           | 132 |
| Table 4-41: Role of employees and unions in making change .....              | 133 |
| Table 4-42: Role of organizational culture in making change.....             | 133 |
| Table 4-43: Relationship between the change makers in organizations .....    | 134 |
| Table 4-44: Role of technological forces for change.....                     | 135 |
| Table 4-45: Role of political forces for change .....                        | 136 |
| Table 4-46: Role of economic forces for change.....                          | 136 |
| Table 4-47: Role of natural environmental forces .....                       | 137 |
| Table 4-48: Role of legal forces.....  | 137 |
| Table 4-49: Role of socio-cultural forces .....                              | 138 |
| Table 4-50: Relationship between the general environmental forces.....       | 138 |
| Table 4-51: Role of competitors for change .....                             | 140 |
| Table 4-52: Role of customer and clients for change .....                    | 141 |
| Table 4-53: Role of suppliers and donors .....                               | 141 |
| Table 4-54: Role of regulator and government for change.....                 | 142 |
| Table 4-55: Role of unions and associations for change .....                 | 142 |
| Table 4-56: Role of channel members for change .....                         | 143 |
| Table 4-57: Relationships between the industrial forces for change .....     | 144 |
| Table 4-58: Organizational immunity to the technology and work process.....  | 145 |

|   |     |
|---|-----|
| Table 4-59: Organizational immunity to customers and clients .....                          | 146 |
| Table 4-60: Organizational immunity to supply chain and business network.....               | 146 |
| Table 4-61: Organizational vulnerability to human resources.....                            | 147 |
| Table 4-62: Organizational vulnerability to intellectuality.....                            | 147 |
| Table 4-63: Organizational vulnerability to suppliers and donors.....                       | 148 |
| Table 4-64: Relationships between the areas of strengths of the organizations .....         | 149 |
| Table 4-65: Role of the laws of the Land in shielding organizations .....                   | 150 |
| Table 4-66: Role of police and security agencies in shielding the organizations.....        | 151 |
| Table 4-67: Role of insurance policies in shielding the organizations .....                 | 151 |
| Table 4-68: Role of unions and associations in shielding the organizations .....            | 152 |
| Table 4-69: Role of consultants and experts in shielding the organizations.....             | 152 |
| Table 4-70: Relationships between the shields of organizations and businesses .....         | 153 |
| Table 4-71: Instrumentality of education and communication in managing change.....          | 154 |
| Table 4-72: Instrumentality of collaboration and participation in managing change.....      | 155 |
| Table 4-73: Instrumentality of delegation and direction in managing change .....            | 155 |
| Table 4-74: Instrumentality of the use of power and force in managing change .....          | 156 |
| Table 4-75: Instrumentality of manipulation and cooptation in managing change .....         | 156 |
| Table 4-76: Relationships between change management instruments and style .....             | 157 |
| Table 4-77: Influence of unfavorable employee attitude for change.....                      | 158 |
| Table 4-78: Influence of obsolete and outdated technology and work process for change ..... | 159 |
| Table 4-79: Influence of ineffective authority hierarchy for change.....                    | 159 |
| Table 4-80: Influence of unproductive organizational culture for change .....               | 160 |
| Table 4-81: Influence of unattractive designs of products and services for change.....      | 161 |
| Table 4-82: Influence of stakeholders and unions for change .....                           | 161 |
| Table 4-83: Influence of adequate profitability and productivity for unchange.....          | 162 |
| Table 4-84: Influence of compatible supply chain and business network for unchange.         | 162 |
| Table 4-85: Relationships between organizational reasons for change and unchange....        | 163 |
| Table 4-86: Technical and procedural facilitation in managing change.....                   | 165 |
| Table 4-87: Cultural and attitudinal facilitation in managing change .....                  | 166 |
| Table 4-88: Economic and financial support in managing change.....                          | 166 |
| Table 4-89: Legacy and habitual facilitation in managing change .....                       | 167 |
| Table 4-90: Relational and operational support in managing change.....                      | 167 |
| Table 4-91: Business network and structural forces influencing for unchange.....            | 168 |
| Table 4-92: Regulatory forces influencing for unchange .....                                | 168 |

|   |     |
|---|-----|
| Table 4-93: Personnel and labor forces influencing for unchange .....           | 169 |
| Table 4-94: Relationships between change facilitators and blockers .....        | 170 |
| Table 4-95: Mean and standard deviation of the variables .....                  | 171 |
| Table 4-96: Kaiser-Meyer-Olkin measure of sampling adequacy .....               | 173 |
| Table 4-97: Communalities.....  | 174 |
| Table 4-98: Eigenvalues and total variance .....                                | 175 |
| Table 4-99: Rotated component matrix .....                                      | 177 |
| Table 4-100: Component score coefficient matrix .....                           | 178 |
| Table 4-101: Component transformation matrix .....                              | 179 |
| Table 4-102: Factor loadings and factor score coefficient.....                  | 180 |
| Table 4-103: Log linear model design matrix for expected frequency.....         | 182 |
| Table 4-104: Contingency table- business ethics.....                            | 184 |
| Table 4-105: Log linear modelling summary parameters and statistics .....       | 185 |
| Table 4-106: Resistance to government policy changes.....                       | 189 |
| Table 4-107: Resistance to the changes in laws and acts.....                    | 191 |
| Table 4-108: Resistance to changes in authority delegation and withdrawal.....  | 192 |
| Table 4-109: Resistance to the change in supply chain and business network..... | 193 |
| Table 4-110: Resistance to organizational polity influence.....                 | 193 |
| Table 4-111: Resistance to the change in operational freedom .....              | 194 |
| Table 4-112: Resistance to the shift in organizational value priority .....     | 195 |
| Table 4-113: Resistance to the change in work of choice and preference.....     | 195 |
| Table 4-114: Resistance to the change in events, festivals, and rituals .....   | 196 |
| Table 4-115: Resistance to the change in technology and working processes ..... | 196 |
| Table 4-116: Resistance to the change and transfer of key personnel.....        | 197 |
| Table 4-117: Resistance to the organizational learning imposition.....          | 197 |
| Table 4-118: Resistance to the undesired behavior of the suppliers.....         | 198 |
| Table 4-119: Resistance to the need of change in business etiquette .....       | 198 |
| Table 4-120: Resistance to the change in product development program.....       | 199 |
| Table 4-121: Resistance to the decrease in demand of major products.....        | 199 |
| Table 4-122: Resistance to the decrease in supplies to the organization.....    | 200 |
| Table 4-123: Resistance to the change in capital and equity .....               | 201 |
| Table 4-124: Resistance to the change in investment.....                        | 201 |
| Table 4-125: Resistance to the change in application of authority .....         | 202 |
| Table 4-126: Resistance to the discrimination at work.....                      | 202 |
| Table 4-127: Resistance to the change in business philosophy .....              | 203 |

|   |     |
|---|-----|
| Table 4-128: Resistance to the change in business ethics.....               | 203 |
| Table 4-129: Resistance to the change in working standards .....            | 204 |
| Table 4-130: Resistance to the change in personnel development program..... | 204 |
| Table 4-131: Resistance to the change in code of conduct.....               | 205 |
| Table 4-132: Resistance to the change in organizational objective.....      | 205 |
| Table 4-133: Resistance to the desire for unchange .....                    | 206 |
| Table 4-134: Resistance to the change in inheritance and legacy .....       | 206 |

### **List of Figures**

|   |     |
|---|-----|
| Figure 1-1: Conceptual framework.....                           | 8   |
| Figure 3-1: Research design.....                                | 77  |
| Figure 4-1: Scree plot.....                                     | 176 |
| Figure 5-1: Immunity and change: Intramural and extramural..... | 225 |
| Figure 5-2: Immunity continuum.....                             | 226 |
| Figure 5-3: Supreme immunity .....                              | 227 |
| Figure 5-4: Organizational immune system architecture.....      | 228 |
| Figure 5-5: Category of change .....                            | 231 |
| Figure 5-6: Change management instruments and style .....       | 232 |
| Figure 6-1: Model free breaking and building immunity .....     | 240 |
| Figure 6-2: Changing core .....                                 | 242 |
| Figure 6-3: Continuum of change .....                           | 244 |

### **List of Appendix**

|            |  |     |
|------------|--|-----|
| Appendix 1 | Executive discourse in brief .....                           | 270 |
| Appendix 2 | Metanarrative extension on organizations and businesses..... | 297 |
| Appendix 3 | Narratives of the discourse to variables .....               | 307 |
| Appendix 4 | Questionnaire .....  | 310 |
| Appendix 5 | Pearson correlation coefficient.....                         | 315 |
| Appendix 6 | Anti-image correlation matrix.....                           | 316 |



# Chapter 1

## INTRODUCTION

### 1.1. BACKGROUND

Organization develops immunity in due course of its operation over time. Immunity to change influences the intensity to change. Change is a continuous process that compels organization to become adoptive to its environment. The compulsion activates the immune system that does not permit the changes, which are not compatible to the existing. The immune system is constantly scanning for intruders and invaders within the changes. There is nothing capable to predict the days ahead of an organization accurately; therefore, different stakeholders perceive the likely change differently; some perceive positively and some perceive negatively of it. The perceptual differences about the likely impact of change in business determine the degree of acceptance of and resistance to the change.

The change in environment is insisting the managers to meet the adaptive challenges ahead of their organizations and businesses. The entrepreneurial optimism helps to promote the appearance of new organizations and products in the market at one part and the uncertain fear of the entrepreneurs is leading to a disappearance of organizations and products from the market on the other. Both the optimism bias and uncertain fear are concerning the adaptive challenges of the organizations and businesses. The adoptive challenges are leading the state of status quo of an organization to the state of rejuvenation and transformation.

The immune system of an organization stands firmly in order to defend the status quo from the forces inside and outside the organization. Every organization is working with its own settings- the organization structure, technology, personnel, products and services among others. An established setting reflects the values, preferences, and choices of the principal stakeholders. Making changes in the established settings is also changing the values, preferences, and choices as well, which is very hard and painful because the existing position of the organization is an accumulation of the entire past. It is not easy to abandon the entire achievement in the name of change.

Continuation of the past is not a change in real sense. Change needs discontinuation of the past in the future. Organizations and their stakeholders are familiar with the past and they make an attachment to the system and processes. The status quo is familiar to the stakeholders, but the change is not as such. Therefore, some stakeholders are in support of

change and some are against of it. The status quo and change both have their own merits and demerits, both have attractions and distractions, and some are in support and against of them. Those who are in favor of status quo, they attempt to resist the change.

The dictum of this study refers to the organizational immune system, organizational change, and organizational response to the change. There is change in the environment of an organization and business. The change in environment propels an organization to response to the changes. The response of an organization depends on the immune system of the organization.

### **1.1.1. The change**

There is nothing permanent than change. Discontinuity is a nature of change therefore, continuity looks like a challenge in a dynamic environment. Some changes are workable comparatively for a longer period and some are workable for a shorter period. An organization is continuous with discontinuity because the change is not continuous. That is why adaptability of an organization has come to be increasingly valued in recent years. Prediction of future demand for an organization's offerings will be less significant when compared to the changing expectations of its stakeholders and new business challenges as they happen. An organization's response to such expectations and challenges, more efficiently and effectively before the new opportunities disappear or the expectations metamorphose into something else, has become an urgency of every organization (Haeckel, 2008).

The concept of schemata- organizing frameworks for understanding events- can facilitate organizational change and development interventions. Organization and business are phenomena of social world and distinctly different from the physical world i.e. accuracy of prediction is higher in physical world than the social world. The social context of an organization conceptualizes as being dependent on resources in its environment for its survival. To extent to which an organization is dependent upon external organizations and stakeholders depends on the importance of a particular resource to the organization, the degree to whom have control over the resources, the discretion they have over its allocation, and the construct of power for understanding both intra-organizational and inter-organizational behavior (Pfeffer & Salancik, 1978).

Interpretation of change or way of understanding events is linking two state of affairs- the existing state of affairs and the desired state of affairs. Whether the existing state of affairs

of the organization works best in the days ahead or it needs change is primary concern of the key personnel in an organization. An organization's existing state of affairs is a reflection of belief, attitude, value, and behavior of the key personnel at one part and the belief, attitude, value, and behavior of the personnel are outcomes of their experience, observation, and experimentation on the other. The actors consider that the outcomes of their experience, observation, and experimentation are more valuable and they do not wish to discard or discontinue of it. That is why a significant change in an organizational setting is hard to enjoy.

This study considers organization as a living being and its decisions and actions are resulting from change. The never-ending change is making hard to calculate an organization's life expectancy, but there were too many companies suffering a sudden deaths during the past. Every organization plans for their longevity therefore a reduction in organization's mortality rate seems to be advantageous for all parties: employees, suppliers, shareholders and the entire stakeholders (Geus, 2008). A well-developed organizational immune system detects and responds to the likely threats to the organizations. The major conviction is that there are triggers in the areas and levels of changes influencing the organizations and businesses.

### **1.1.2. Organizational immune system**

Immune system of an organization is a complex architecture that cannot be easily developed and destroyed. How strongly the immune system exists that determines how much the firm can be protected from the threats and imitation of its core ideas or business secrets at one part and faces difficulty in bringing change on the other part. Organizations develop 'immune system' (Smith, 1993) that leaders must overcome if they hope to implement a new strategy. Creating difficulty of imitation is one important aspect of sustaining competitive advantage (Johnson, Scholes, & Whittington, 2008) as well.

Organization known as an organism is a living thing that has the ability to act or function independently because an organism can develop such ability (Burns & Stalker, 1961) for its continuity. An organization is a social organism known as system that is considered analogous in structure or function to a living body. Organization is taken as a social organism therefore, one of the images of an organization considered as 'organism'.

“Organization as a living entity” indicates that it has life and functions as a reflection of product and process as well. Some products and processes pass a longer life span and some

pass quite shorter. The concepts about organization relates life sciences primarily in different ways like the tenure of individual and longevity of the organization itself and the next is the life cycle of its stakeholders (Jawahar & McLaughlin, 2001), goods and services. Personnel working in an organization have fixed time and they get retirement; the goods and services are changing in their design, size, shape and so on over time; and the organization itself is not permanent all the time in all ways.

Organizational dynamism witnesses the failures of deliberate strategy and success of emergent strategy. If organizations would have strong immunity to change, then they would be static and there would be no change in their plans and strategies. Adversely, if there would be weak immunity to change, then there would be no more sustainable changes. Preventing organizations from unwanted change elements and discarding impacts of the elements preventing the desired change are two dimensions of an organizational immune system. The general conviction is that the immune system recognizes self and non-self as well as favorable and unfavorable change interventions and attempts to respond accordingly.

### **1.1.3. Response to the change**

An organization's immune system acts in against alien objects or ideas by erecting a powerful barrier in the form of people, policies, procedures, and the culture it creates to prevent change, regardless of the consequences. Just as the body responds to foreign objects and real or perceived threats, people encounter new ideas and form opinions, which they then present to other employees for acceptance or rejection (Gilley, Godek, & Gilley, 2009). The actors in the organization may view the change intervention as a real threat, even when the change is potentially positive. Leaders, managers, and employees view policies, procedures, and culture as providing control and security. Change interventions threaten their fundamental assumptions derived from their experience, observation, experimentation, and intuition as well.

Plurality in the interest of the actors prevents unity when change interventions are in their place. The status quo may be acceptable to some actors or stakeholders and the same may be unacceptable for others. Who are happy with the status quo, they resist change interventions and who are not satisfied with the status quo or foresee more benefits from the change interventions, they may accept it. Organizational immune system influences the success of the change interventions. It can attack all intruders with little attention to the overall implications, similar to the rejection of new ideas in an organizational setting.

Defensive move of the actor(s) ignores the overall well-being of the organization. They may perceive organizational change as a real threat, even when the change is positive.

There is an urgency of understanding of an immune system response specific to the context of organizations and businesses. Planned change in organization occurs when the leaders or change agents see the necessity of the change or they are compelled to move from the status quo. Status quo is the sum total of entire efforts they had paid during the past and it is not easy to abandon or discontinue of it for unknown benefits i.e. status quo is familiar and known but outcome of the change is unknown and uncertain. The organization may not like to discontinue its present totally, but may discontinue partially depending on the odds or likelihood of the outcomes. Therefore, every change agent need to know about the organizational immune system in order to know that what will be accepted and what will be rejected when there will be change interventions in the organization and business. The general conviction is that the immune system of organizations responds to the favorable and unfavorable change interventions.

## **1.2. THE PROBLEM STATEMENT**

The problem statement originates from the limited literature concerning organizational immune system influencing the process of managing changes in the context of Nepal. The organizations and business in Nepal have witnessed plenty of changes ranging from the so-called system changes to the maintenance of status quo. The planned attempts of changes exercised during the past in Nepal could not bring the results as promised and intended (Bhattarai, 2013).

The organizational immune system (Gilley, Godek, & Gilley, 2009), change and response to the change (Huy & Mintzberg, 2003) dictums are integral parts of change management process. Change is inevitable, managerial response to the change is necessary, but the immune system does not permit for such change (Kegan & Laskow Lahey, 2001). The major problem is to know what is more risky to respond or risky not to respond; and what response becomes acceptable and what response becomes unacceptable.

The environment of an organization is changing and eventually the organizations need to make changes in order to be adoptive in their environment. The environment consists the forces in the general environment, in the industry, and within the organization. Today's change requires reinforcement in order to make it workable for tomorrow. Reinforcement of the change strengthens the immune system of an organization and it constantly attempts

to maintain the status quo. A strong immune system does not permit for change i.e. the status quo is immune to change. When the status quo stands firmly and does not break, there is hard to bring change. Therefore, organizations need changes at one part and the strong status quo does not permit the intended change at the other part.

The fundamental issue of enquiry in this study is the adoptive challenges (Bertalanffy, 1950; Boulding, 1956; Hannan & Freeman, 1984; Geus, 2008; Kegan & Laskow Lahey, 2009; Valikangas, 2010) that the managers face while managing their organizations and businesses. The 1) change triggers; 2) organizational areas of remaining static and changing; 3) level of change occurrence and the pattern of response behavior of the manufacturing and non-manufacturing organizations are the problem areas of this study. The need for change concerning the problem areas is constantly seeking for 4) instruments and 5) typology that help bests the organizations to become adoptive in their environment. The followings are specific problems of this study.

- How do the forces from the general environment and industry environment trigger the actors in manufacturing and non-manufacturing firms for change and unchange in their organizational settings?
- What make the organizational settings being static and changing for the actors in the firms while responding to the forces for change?
- Which level of change occurrence corresponds to which category of response to the change in the manufacturing and non-manufacturing firms?
- While responding to the change, which instruments do the actors prefer most and what are their implications?
- What typology of change management does work best in order to meet the adoptive challenges of the manufacturing and non-manufacturing firms?

### **1.3. THE STUDY OBJECTIVES**

The general objective of the study is to explore the organizational immune system and change management practices in order to meet the adoptive challenges of the organizations and businesses in the context of Nepal. The specific objectives of this study are as follows:

- To determine the forces in the general environment and in the industry environment those are triggering changes in organizations and businesses in Nepal.

- To identify the status of immunity and change in organizational settings, and examine the factors therein those are leading the organizations to the state of staticness/immunity or changes.
- To examine the categorical associations between the levels of change occurrence and response to the change occurrence in manufacturing and non-manufacturing industries, and assess the probability of statistically significant resistance to the categorical changes therein.
- To identify the instruments the actors prefer most while managing change in the organizations and businesses
- To present a typology of organizational immune system and change management that works best in order to meet the adoptive challenges of the manufacturing and non-manufacturing firms in Nepal.

#### **1.4. STUDY SIGNIFICANCE**

Breaking and building immunity are two dimensions of change management. Breaking the immunity means initiating the intended change and building the immunity means strengthening the realized change for its sustainability. This study provides an insight into the breaking and building of an organizational immune system in order to increase accuracy in the change management process. It will help to narrow down the gap between intended change and realized change in organizational settings.

Continuation of status quo against the undesirable influencers, and making a change for desirable outcomes, require a clear understanding of the organizational immune system. Change is not only to make positive effects, but also to keep the firm surviving in difficult situations.

The existing organization studies are not sufficient to develop insight into the process of moving the state of intended change to the state of realized change. The role of the immune system is unavoidable while moving and sustaining changes in both manufacturing and non-manufacturing industries.

The typology derived from the study will be an important milestone in the areas of organization theory and development as well as change interventions and their sustainability. It has developed a unique insight in the field of change management that is

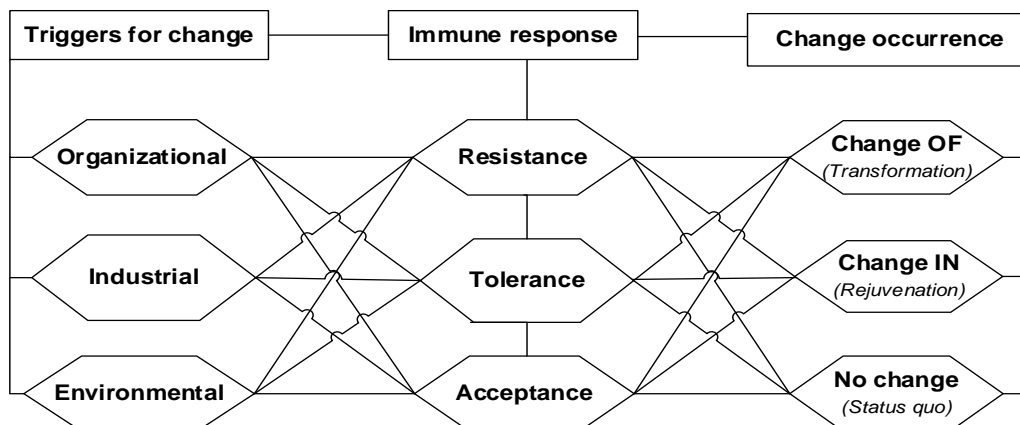
a significant contribution in the areas of organization studies and change management in Nepal.

### 1.5. CONCEPTUAL FRAMEWORK

The study conceptualizes that every organization is functional within an open system (Bertalanffy, 1950) of its business environment. An organization directs its functions to strengthen the desired things and to abandon the undesired things, which are influenced by the environment. The environment is changing and influencing the organizational functioning in its own way. The strength of desired and undesired things varies according to the change in the environment. The adaptive capability (Haeckel, 2008) of the organization varies depending on the frequency of the effectiveness of the change and developmental interventions exercised in the organizations.

An organization's capability of meeting the adaptive challenge depends on its changeability. The immune system of an organization is determining the changeability of the organization. Organizational immune system (Gilley, Godek, & Gilley, 2009) may accept and welcome or ignore and tolerate or oppose and resist the change triggers at one part and change interventions for maintaining status quo or rejuvenation or transformation at the other part. The immune response is always attempting to resist the harmful elements and accept the beneficial elements concerning the organization i.e. it allows the beneficial elements to enter into the organization and prevents an organization from incoming harmful elements. The organizational immunity to change (Kegan & Lahey, 2009) is active between the change triggers and the occurrence of change in the organizations and businesses as mentioned in the *Figure 1-1*.

*Figure 1-1: Conceptual framework*



The variables relating to this conceptual framework are identified from literature review and executive discourse developed based on interviews with the key executive informants.



The **environmental triggers** for change consist of forces in the general environment of an organization or a business. The forces are emerging from the national and international politics, economy, society and culture, technology, natural environment like global warming and climate change, and laws, rules and regulations. The **industrial triggers** for change refer to the forces in the industry environment consisting the behavior of the regulators and government agencies, customers and clients, suppliers and donors, channel members, competitors, unions and associations of the employees and employers as well. The organizational triggers for change also refers to the perceived conditions in the organization concerning the ineffectiveness of authority hierarchy, unproductiveness of the organizational culture, obsolescence and outdated of technology, incompatible supply chain and business network, unattractive product and service design, and compelling behaviors of the stakeholders. Similarly, an unacceptable compliance capability, unproductive organization structure, unethical business practices, and incompatible business etiquettes are other triggers for change.

The perception of risks associated with the forces consisting the scarcity of resources like energy, water, raw materials, and preference of the top management and administration among others are further triggering for change in the organizations and businesses.

There are three category of changes in the organizations. The categories are in a continuum ranging from the status quo to the transformation. The change occurrence of *status quo* refers the level of **no change** or a minor change of recurring nature within the limit of a normal budget and resources carrying out just to maintain the existing state of affairs. The change occurrence of *rejuvenation* refers the level of **change IN** represents the changes and modifications of non-recurring nature under the purview of existing organizational settings by making arrangement of additional budgets, resources, and authority as well. The change occurrence of transformation refers to the level **change OF** that represents the major transformational change and replacement substantially affecting the existing organizational settings by making special arrangement of new technology and policies as well as resources and structure for *transformation* of the existing state of affairs to a new state of affair.

**Acceptance** to the change interventions refers to the conditions in which the actors in the organizations and businesses welcome the change. Actors do not hesitate to assume their responsibility as assigned and feel happy with the change. They advocate in favor of the change with their positive attitude. The change agents also feel happy and they attempt to make necessary arrangements in order to strengthen an already changed phenomenon.

**Resistance** to change interventions refers to the conditions in which the actors in the organizations and businesses attempt to prevent the change. Actors do not assume their responsibility as assigned and feel unhappy with the change. They start campaigning against the change with their negative attitude towards the change agents and create obstacles in the entire organizational processes. The change agents may be frustrated from change interventions and they attempt to use force and coercive power in order to become successful in their attempt for change.

The **tolerance** to change interventions refers to the condition of no resistance but the actors in the organizations and business do not remain happy with the changes. Actors attempt to adjust with the change by making necessary arrangements in order to assume responsibility as assigned to them. They express their unwillingness to take part in the change initiatives. If there are other actors accepting and resisting the changes in the organization, these actors remain quite indifferent, but there is a high change of their shifting to the group of resisters. The change agents have to take initiation in order to get support of the actors tolerating the changes. These people are very reliable, and quite complacent as well in the organizations and businesses.

#### **1.6. LIMITATIONS OF STUDY**

Determination of variables was based on literature review, executive discourse, and study supervisors' advises. Sample of 415 respondents purposefully selected from manufacturing and non-manufacturing establishments in Nepal. Duration of data collection was almost a year- 11 months between 2013 and 2014. Sample selection was based on the availability of prior information about the change interventions concerning the organization and business of the respondents. The researcher had promised the respondents not to disclose their identity and confidentiality regarding their likely response to the changes in their organization and business; that is why identity of the respondents and their organizations has not been disclosed. Moreover, the followings consist additional limitations and assumptions concerning this study.

- The variables like respondent's gender, age, and qualification; occupation of the respondent's parent, annual turnover, number of employees, and geographic location of the firms were confined only to exhibit the demographic status of the respondents as the variables were not considered, in this study, significant intervening variables while building immunity or in breaking immunity in the process of change management.

- The study has included only business organizations and it has excluded non-business organizations like police, military, government organizations and non-government organizations from sample selection. The business organizations were assumed to be those organizations whose primary activities are buying and selling of goods and services for profit motive.
- This study divided the environment into two categories- general environment and industry environment to make it more categorical particularly from the study perspective.
- The triggers to change and unchange were sought within the general environment and industry environment as well as within the organizational settings.
- The primary data collection tools were interviews and questionnaire. There were extensive use of qualitative data including executive discourse and metanarratives as well.
- Status quo/No change, rejuvenation/change IN, and transformation/change OF were considered three categories/levels of changes. Similarly, acceptance, tolerance, and resistance were made three category/levels of response to the change occurrence.

## **1.7. CHAPTER PLAN**

This dissertation consists six chapters and addendums in the form of appendices. Chapter 1 provides a general introduction about the study highlighting briefly on the dictums of changes and response to the changes in relation to organizations and businesses. It specifies problem statement and study objectives as well. The limitations as well as significance of the study are also included in the chapter. Chapter 2 reflects the review of literature in the field of organizations and businesses consisting the perspectives, theories, and praxis as well. Chapter 3 covers the methodological part of the dissertation highlighting on the research design, sample selection, statistical tools and techniques for data collection, analysis, evaluation and prediction. Chapter 4 consists the existing status of change triggers, immunity to change, and response to the changes in organizations and businesses. This chapter further examines the associations, and evaluates the impacts of the associations thereof. Chapter 5 presents the findings and pointer discussion of the results in relation to the organizational immunity and change management process. Chapter 6 provides summary, conclusions and implications with a framework for understanding organizational change and immunity to make an organization adaptive to its environment. The chapter

also highlights on the managerial and policy implications of the research and further provides leads to future research in the field of organization and business management. Reference section provides the bibliographic details of the works cited in the dissertation. The appendices consist the executive discourse in brief, metanarrative extension on organizations and businesses, narratives of the discourse, questionnaire, Pearson correlation coefficient and anti-image correlation matrix.

## **Chapter 2**

# **REVIEW OF LITERATURE**

### **2.1. ORGANIZATION**

Organizations do have lifecycles (Chandler, 1962; Geus, 2008; Austrian, 2013) meaning that they are created, grow and in many cases die or are closed. Establishment, operationalization, and dissolution of organizations are common phenomena in both manufacturing and non-manufacturing industries. One fundamental question is that why do organizations dissolve shortly after their establishments or how do organizations are operational for a longer period. The environment during the time of an organizations establishment does not remain static but it is changing. The assumptions of organization establishment do not remain intact because the environment is changing over time.

Organizations generally face discontinuity due to change but the degree and pattern of change itself are varying and diverse. Adaptability of an organization has come to be increasingly valued in recent years because the change can be favorable or unfavorable and desirable or undesirable. Not all the changes in an organization are desirably favorable for all. That is why some may accept the change and some may come in against of it. Nevertheless, organizations intend to get benefits from the favorable change and attempt to minimize the impacts of unfavorable change.

Literature on planning puts an emphasis on contingency planning in order to give continuity to an organization. However, the urgency is not on the contingency planning but the urgency is to develop an ability to adapt quickly with the change by developing readiness and enhancing coordination of contemporary activities and resources. Contingency planning requires rigorous exercise to predict the future, which is not certain. It consumes substantial time and resources in obtaining pertinent information about future changes. Organizations adopt contingency plans only after failure of the original plan; but both the plans are prepared in advance. Therefore, when there is failure in the achievement of the original plan than there is nominal chance of the success of the contingency plans. The failure of both the plans is due to inaccurate premising.

The assumptions and forecasts made at the time of planning are likely to change at the time of the plan's implementation. Adaptation process is continuous with the change and the

best way is to attempt to address the change in order to adapt and adjust to the new paradigm than escalating on the original plans.

Organization is a consciously coordinated and structured social entity. It is coordinating activities and resources within its structural boundary on a relatively continuous basis. The process of coordinating activities and resources seems continuous from the very beginning of human civilization to the society of the modern era. The process is constantly interacting with its environment in order to give continuity to the value and structure of the organization.

### **2.2.1. Organizational dynamics**

Organizational dynamics refers to the changes in an organization's various processes concerning the actors, environment, and performance. An organization is a dynamic social entity that primarily focuses on the behavior of its actors, likely changes in its environment, and the impact of the changes on its values and interests. Therefore, an organization is dealing with conflicting interests and following change process as well as constantly managing for results.

Change in the environment is inevitable; therefore, organization is unable to continue without making changes in due course of its operations over time. Organizational values, strategies, structures and controls all are changing over time that is why an organization's life seen aligned to its environment.

Theory of disruption (Pech & Oakley, 2005; Wessel & Christensen, 2012) points that organizations can hardly imagine what feature and advantage they will add to their goods or services in future. The disruption brings addition and subtraction in business and sometimes it makes existing business obsolete in the way the microcomputers made typewriters practically obsolete. Disruption is affecting organizational activities sometimes quickly and completely, but sometimes slowly and incompletely.

There was proposition of a systematic assessment of barriers to disruption. There were five kinds of disruptions, from easiest to the hardest, like momentum barrier (customers are used to the status quo); the technology implementation barrier; the ecosystem barrier; the new-technology barrier (the technology needed to change the competitive landscape does not yet exist); and the business model barrier- the disrupter would have to adopt the cost structure (Wessel & Christensen, 2012).

Disruption to the existing process is one form of compulsion for change in an organization; therefore, the barriers to disruption emerge as immunity to the management of change. As stronger the barriers are as difficult is in bringing change in an organization.

### **2.2.2. Organization study precursors**

The beginning of coordinating activities and resources dates back thousands of years referring the military campaigns in the mythological epochs of *Ramayana* and *Mahabharata*. The *Ramayana* and *Mahabharata* epics indicate the development of the concept of educational organization, political organization, and military organization during the epochs.

Indus Valley people passed skills on coordinating activities and resources in the areas of trading, farming, brick-making as well as arts and crafts about 5000 years ago (BBC, 2012). Chinese started to use extensive organization structure for government agencies and the arts before 3500c years; and Romans used organized structure for communication and control circa 700 BC (Wren, 1979).

One of the greatest figures of wisdom and knowledge in the field of organizing and administering was Chanakya, also known as *Kautilya* or *Vishnugupta*, who is regarded a pioneer thinker in the field of economy, strategy, immunity, and governance from the period of 350-283 BC in India. The famous ancient literature of Chanakya, '*Kautilya's Arthashastra*' includes fundamental principles of governing an organization and strategizing the military. The principles are grouped into two sets; the principles of division of labor, coordination, separation, specialty, hierarchy, and equity at one part and the principles of authority, obedience, discipline, duty, interest, and responsibility on the other part (Inamdar, 1996).

Venetians used organization design and planning concept to control the seas during 500 AD (Wren, 1979). The role of labor and property in the development of organizations and the role of organizations in the transformation of the society remained as a focal point of the then organizational thinkers. However, there was emphasis on the division of labor in order to gain efficiency.

Adam Smith wrote '*The Wealth of Nations*' circa 1776 by capturing the ideas "as factories developed, workers undertake minute and specialized tasks that contribute for the efficiency of an organization". Robert Owen began to look at industrial establishments from the perspective of the organization's human resources from the very beginning of his career

in the later part of the 18<sup>th</sup> Century. Until his era, factory workers were viewed in much the same way that machinery and equipment were.

Emphasis on efficiencies remained a primary concern of the manufacturers in order to continue their operations, and perfection was necessary for a better performance. When organizations and workers once establish the efficiency of a contrivance (a device or control that is very useful for a particular job) with good workmanship, it will be easy afterwards to ascertain the degree of perfection, which will suffice for its due action (Babbage, 1832).

## **2.2. PERSPECTIVES IN ORGANIZATION STUDIES**

Organizational study is a paradigmatically anchored phenomenon. The differing assumptions about the nature of organizational phenomena (ontology), the nature of knowledge about those phenomena (epistemology), and the nature of ways of studying those phenomena (methodology) are stimulating debates (Gioia & Pitre, 1990) in the process of organization studies.

Organization theory refers to both the descriptive and prescriptive aspects of the structure and design of organizations. It describes how organizations are actually structured and offers suggestions on how they can be constructed to improve their effectiveness (Robbins, 1999). Formal organization structure concerns with the task and reporting relationships and tells that how the tasks to design, who reports to whom, and the formal coordinating mechanisms and interaction patterns that will be followed in the organizational processes. Organization design is primarily concerned with constructing and changing an organization's structure in view of achieving the organization's goals and interests over time.

Organizational practitioners, researchers, and the thinkers are accelerating the pace of studies on organizational change and development. The perspectives in organization studies are marking by an increase importance, influence, and power of intended and unintended changes taking place in organizations. The odyssey of organizations and their processes are marking punctuated perspectives along with the changes in their environment.

### **2.3.1. Mechanical perspective**

Karl Marx's critic of political economy published in 1867 reads about the impact of machinery over the labor, and class struggles between the labor and bourgeois in an



industrial society affecting the operations of the organizations. The critic assumes that historical change achieved through class struggles between the labors and bourgeois.

Frederick W. Taylor (1911) writes that a larger part of the organization of employers, as well as employees, is for war rather than for peace, and that perhaps the majority on either side do not believe that it is possible so to arrange their mutual relations that their interests become identical. However, the relationship between employer and employee is most significant part in gaining harmony in an industrial establishment.

Taylor suggested organization consists one set of men engaged in development of the science of laboring through time study and they help and guide the men in their work. Another set of tool room men provide the proper implements and keep them in perfect order, and another set of clerks who plan the work well in advance, move the men with the least loss of time from one place to another, and properly record each man's earnings. This furnishes an elementary illustration of what has been referred to as cooperation between the management and the workmen.

The writing of Max Weber points that hierarchy, authority, and bureaucracy lie at the foundation of all social organizations. Weber originated the scientific study of organizations by examining the relationship between bureaucracy and modernization, which eventually published as *Theory of Social and Economic Organization* in 1920 in German language. He attributed the rise of organizations to the expansion of markets, to developments in the law, and especially to the change in the nature of authority (Britannica, 2011). According to Weber, organizations are able to develop unparalleled calculability and efficiency by combining two structures. The first one is a system of explicit rules, clearly marked jurisdictions between offices, and permanently documenting the processing of cases, and the second one is a unique division of labor.

Henry Fayol's observations appeared in 1916 in French language acknowledging the role of management in organizations and suggesting that activities of an industrial undertaking could be divided into six groups- financial, security, accounting, technical, commercial, and managerial (Wehrich & Koontz, 1993).

One of the notable features in the writings of Luther Gulick and Lyndal Urwick (1937c) is the importance they attached to the structure of administration while almost neglecting the role of men in the organization. Their writings indicate that organizations are similar to mechanical devices with fixed tasks, rules, and structures. Urwick remarks that it is

impossible for humanity to advance its knowledge of organization unless the factor on structure is isolated from other considerations (Rao, 1996). Sustainability of an organization is largely dependent on the structure of the organization i.e. how an organization is structured that determines its functioning.

More often formal organizations are molded by forces tangential to their rationally ordered structures and stated goals, and attempts to mobilize human and technical resources as means for the achievement of its ends (Selznick, 1949). The practice of informal organization dates back to the human civilization, but the primary focus should remain on the formal organizations.

The mechanical perspective adopts 'machine' metaphor to explain the organizations. It is considered as a mechanical device as an organization has its own set of predetermined values, rules, regulations, components and parts that are permanent in nature as that of a machine. The mechanical theories ignore the behavior of organizational actors in structuring, operationalizing and sustaining an organization.

The mechanistic set of assumptions about organization insists to the adoption of scientific rationality by making human beings marginal to an organization, and it regards people as an interchangeable, replaceable part of a structured system. These perspectives of organization studies have tied men to limited jobs, which did not utilize their capabilities, have discouraged the acceptance of responsibility, have encouraged passivity, and have eliminated meaning from work (McGregor, 1957). This implies the treatment of employees as a mechanical device and it does not permit human skills, emotions, and affections because they are not structured and defined in the organizational system.

### **2.3.2. Behavioral perspective**

Organization is a social entity that maintains its social order based on two very different forms of solidarity- mechanical solidarity and organic solidarity. Primitive society is referred to as a mechanical solidarity where people act and think alike with a collective common conscience. In an advanced industrial society, complex division of labor exists in which people are arranged and rewarded in society according to their merits. Social inequality reflects natural inequality where moral and economic regulations need to maintain organic solidarity in organizations with people able to compose their differences (Durkheim, 1984). People form groups and develop their values and norms in order to control "human conduct" in organizations.

There were attempts to explain organizations in a number of ways. Hugo Munsterberg (1912) attempted to answer three questions- how to find people whose mental qualities best fit them for the work they are to do; under what psychological conditions the greatest and most satisfactory output can be obtained from the work of every person; and how a business can influence workers in such a way so as to obtain the best possible results from them in an organizational setting. In the same line, Lillian Gilberth (1914) focused on the human aspects of work and understanding of workers' personalities. She concluded that the monotony of work is not the factor that causes so much worker dissatisfaction, rather, management's lack of interest in workers that results so (Weihrich & Koontz, 1993).

There is no doubt that human behavior has played a significant role in the development of organizations. The importance of truemanship has been realized from the very beginning of the history of organizational thoughts. Mary Parker Follett (Follett, 1918) suggests 'finding the truman only through group organization'. The potentialities of an individual remain potentialities until they are release by group life. Man discovers his true nature, gains his true freedom only through a group. Group has dual aspects- it is a union of individuals in one part and the individual is in a larger union on the other part. The group processes are collective idea, collective feeling, and collective will too.

One proposition is not only the integration of the organism must be taken into account, but also the possibility of isolated, specific, partial or segmental reactions of the organism too. When human organism is dominated by a certain need, the whole philosophy of the future tends also to change (Maslow, 1943). The situation or the field in which the organism reacts one must take into account of it.

Organization study further extended to cover the job design aspects very well. Frederick Herzberg (1959) emphasizes on job design while structuring an organization (TDS, 2012). He argues that hygiene and motivation factors are both determinants of job dissatisfaction and job satisfaction. Presence of hygiene factors prevents from job dissatisfaction and presence of motivation factors increase the level of job satisfaction. The state of satisfaction with status quo can be a cause leading to the organizational resistance to change, and the state of dissatisfaction with it can be a cause of acceptance to the change.

There is a disclosure about the belief about human, he is by nature resistant to change; however, he is not resistant to organizational needs, if anyone becomes so due to experience in an organization. When man's needs are thwarted, he behaves in ways that tend to defeat

organizational objectives. He becomes resistant, antagonistic, and uncooperative. His expectations and whole conceptions of membership in an industrial organization is conditioned by his experience in the organization (McGregor, 1957). The main argument has been that ‘the theoretical assumptions which the management holds about controlling its human resources determine the whole character of the enterprise’. The frequent invidious/undesirable comparison of the practical and the theoretical with respect to the management of human resources has been a serious handicap to progress in the field.

There are different approaches to describe human organizations. The approaches are complementary rather than competitive. An organization is a part of its environment. Two possible approaches to the understanding of organizations prevails the first approach is to look over the empirical universe and to pick out certain general phenomena which are found in many different disciplines, and to seek to build up general theoretical models relevant to these phenomena. The second approach is to argue the empirical fields in a hierarchy of complexity of organization of their basic ‘individual’ or unit of behavior, and to try to develop a level of abstraction appropriate for each (Boulding, 1956).

The illustration to the first approaches relates populations to clarify the first approach. Populations- aggregates of individuals conforming to a common definition, to which individuals are added (born) and subtracted (die) and in which the age of the individual is a relevant and identifiable variable. These populations exhibit dynamic movements of their own, which can frequently be described by simple systems of difference equations. Population change, both in absolute number and in structure, can be discussed in terms of birth and survival functions relating numbers of births and of deaths in specific age groups to various aspects of the system. Another phenomenon is that of the interaction of an ‘individual’ of some kind with its environment. Every discipline studies some kind of ‘individual’- electron, atom, molecule, virus, family, tribe, group, organization, etc. Each of these individuals exhibits ‘behavior,’ action, or change, and this behavior is considered to be related in some way to the environment of the individual.

The illustration to the second approach to general systems theory is through the arrangement of theoretical systems and constructs in a hierarchy of complexity, roughly corresponding to the complexity of the ‘individuals’ of the various empirical fields. This approach is leading towards a ‘system of systems’ as ‘levels’ of theoretical discourse. The levels known as hierarchy of systems read: 1) the static structure that might be called the level of framework; 2) the simple dynamic system with predetermined, necessary motions;

3) the control mechanism or cybernetic system, which might be nicknamed the level of the thermostat; 4) the open system or self-maintaining structure. This is the level at which life begins to differentiate itself from not-life; 5) the genetic-societal which is typified by the plant, and it dominates the empirical world of the botanist. The outstanding characteristics of these systems are a division of labor among cells to form a cell-society with differentiated and mutually dependent parts- roots, leaves, seeds, etc.; 6) the animal level, characterized by increased mobility, teleological behavior, and self-awareness. Here are the development of specialized information-receptors (eyes, ears, etc.) leading to an enormous increase in the intake of information; also a great development of nervous systems, leading ultimately to the brain, as an organizer of the information intake into 'knowledge structure' or 'image;' 7) the human level that is of the individual human being considered as a system. Man possesses self-consciousness which is something different from mere awareness; 8) the social organization consisting individual man of symbolic images and behavior; and 9) the transcendental systems as a set of roles tied together with channels of communication, ultimates and absolutes and the inescapable unknowables, and they also exhibit systematic structure and relationship.

People in organization may intend to be rational in their decision-making but the actual conditions impose a certain amount of subjectivity. Standard models of rational choice cannot understand organizational decision-makers. This direction defined the central problem of organizations as managing the uncertainties inherent in complex work settings (Britannica, 2011). The work of Simon and March set the agenda on organizational learning and, more specifically, on the relationship between learning and the adaptability of organizations.

Organization studies state that reality is socially constructed and that the sociology of knowledge must analyze the process in which this occurs. Individuals and groups of individuals serve as definers of reality. In order to understand the state of the socially constructed universe at any given time, or its change over time, one must understand the social organization that permits the definers to do their defining. Persons and groups interacting in a social system form concepts or mental representations of each other's actions, and that these concepts eventually become habituated into reciprocal roles played by the actors in relation to each other (Berger & Luckmann, 1967).

Modern developed society is a society of organizations in which the major social tasks are performing in and through institutions, whether they are business corporations or

government agencies, hospitals, schools or universities, or the armed services (Drucker, 1983). Today organizations are recognizing as one member of a species, with the resemblances among various members much greater than the differences. All of them require reorganization and structure.

There is an argument that the stakeholders are influencing organizations in three different ways (Jawahar & McLaughlin, 2001). Firstly, at any given organizational life cycle stage, certain stakeholders, because of their potential to satisfy critical organizational needs, become more important than others be. The next, they identified specific stakeholders are likely to become more or less important as an organization evolves from one stage to the next. The third they proposed that the strategy an organization uses to deal with each stakeholder will depend on the importance of that stakeholder to the organization relative to other stakeholders.

The relationships between the organization and actors at one part and the power and exchanges among the actors on the other part have become the driving force of organizational behaviors. Organization theory is accelerating as a distinctive matter of the social science subject, and it has become a body of thinking and writing, which describes, explains and influences what goes on in organizations (McAuley, Duberley, & Johnson, 2007).

Organization designs are less influenced by tasks and reporting requirements than social factors like traditions, costumes, and conventions. They do have organization structure as a traditional one, and actions do not strictly rely on the structure. Formal rules and regulations are formalities until informal relationship of the structural actors remains functional. The key organizational problem is gaining and maintaining support from external constituencies including the regulators and government authorities. The duality in organizational working pattern with internal and external constituencies has become a challenge in organization research.

Human organization is also a reflection of the behavior of individuals associated with it. Behavior of people in organizations is relatively more influenced by their informal relationships than formal workplace relationships confined into formal rules, regulations and work procedures. Thus, this perspective acknowledges human behavior as a strong influencer in organizational processes.

### **2.3.3. Organic perspective**

Formal organizations are conscious, deliberate, and purposeful cooperation among men (Barnard, 1938). As a living thing men possess a power of adjustment, an ability to maintain an internal balance, and a continuity, despite incessant (never-ending) changes within and wide variations without itself. Men are known by their behavior, and all living behavior is a synthesis of both physical and biological factors. The nature of cooperation determines the organizational processes that shape the functions of the executives in the organization. The nature of organizational functions and processes are not static and mechanical but dynamic and organic one.

There are examinations of how organizations identify and respond to conditions of stability and change and classify responses as appropriate or dysfunctional. Two important organizational approaches- mechanistic and organic are identified. The mechanistic approach, suitable for stable industries, is marked by precise definition of member function and is highly hierarchical. The organic approach is more appropriate to industries undergoing change and is characterized by fluid definitions of function and interactions that are equally lateral as they are vertical (Burns & Stalker, 1961).

Individuals within an organizational system tend to resist being treated as means. They interact as whole, bringing to bear their own special problems and purposes; moreover, the organization is imbedded in an institutional matrix and is therefore subject to pressure upon it from its environment, to which some general adjustment must be made (Selznick, 1949). The organization may be significantly viewed as an adaptive social structure, facing problems, which arise simply because it exists as an organization in an institutional environment, independently of the special goals, which called it into being.

Alfred Chandler (1962) introduces stages to an organizational life cycle model in which he notes that as the stages change, so do firms' strategies and structures. Organizational life cycle models vary widely by a number of features, including the actual number of stages. There is a rough sequential ordering of stages: birth, growth, maturity, and revival. In a number of studies, researchers have used the four-stage model. In general, the life cycle of a typical organization consists of four identifiable but overlapping phases of start-up, emerging, growth, maturity, and revival (Jawahar & McLaughlin, 2001).

The organic set of assumptions focus on complete human beings at work in which the size and shape of the organization is changing according to its requirements. The turbulent

world may increasingly require organic approaches (Elkin & Strach, 2006) in the days ahead.

Organic form of organization is much more adjustable to changing and unpredictable circumstances (Salaman & Asch, 2003). An organization is also considered living organism due to its inherent nature of interacting with its environment.

Human organizations are composed of individuals' actions, reactions, and interactions guided by their own intuition and emotions moderated by their expectations. The expectations of individuals from their organization also change in due course of time and influence their psychological contracts as well. The intuitive and emotional dimension of an individual is dynamic in nature at one part and the same dimension is constantly influencing the functioning of an organization on the other part.

The organic perspective also concerns the ecological modernization theory. Industrial development and environmental protection are achieved jointly through innovation and technology development. The practice of green supply chain management is consistent with the concept of environmental innovation from the viewpoint of eco-innovation or ecological modernization theory (Zhu, Sarkis, & Lai, 2012). There are surveys and anecdotes about largest global companies that are adopting 'green' concept and practices, especially in the light of sustainable global supply chain (Wu, Dunn, & Forman, 2012).

#### **2.3.4. System perspective**

Vilfredo Pareto, during 1896 and 1917 viewed society as an intricate cluster of interdependent units or elements known as a social system with many subsystems. His thesis was that social attitudes, sentiments or functions cause the system to seek equilibrium when disturbed by these forces (Weihrich & Koontz, 1993).

Business operations are a matter not merely of machinery and methods but also of gearing these with the social system to develop a complete socio-technical system. It led to an increased emphasis on the behavior of individuals in the study of business organizations and to the recognition that an organization is part of a bigger social system (Mayo, 1933). In the same line, Chester Bernard (1938) looked the managerial tasks in the system where they operate.

The characteristic state of the living organism is that of an open system (Bertalanffy, 1950). A system is closed if no material enters or leaves it; it is open if there is import and export and, therefore, change in the components. Living systems are open systems, maintaining



themselves in exchange of materials with environment, and in continuous building up and breaking down of their components. Organization is an open system having changeable components working with it.

There are feasibility and usefulness of the differentiation and integration of major subsystems in complex organizations. Modern organizations are being expected to cope with heterogeneous environments that have highly dynamic and quite stable sectors. Advances in science are increasing the tempo of change in some subsystems at one part and the requirements for regularity and standardization remain in other part (Lawrence & Lorsch, 1967). The need for differentiation in organizations is increasing; yet the requirements for integration to achieve a unified effort are at least as great as ever.

It is obvious that there is movement in an organization as that of an organism. Organizational diversity and rate of entry and exist. They explored the competition for resources arguing that macro-social processes play a major role in determining organizational success or failure. Destinies of organizations are determined more by impersonal forces than by the intervention of individuals (Hannan & Freeman, 1989), therefore, the role of situation and chance is still significant.

Organization is a subsystem of the main global socio-economic system. The national and international economic systems are affecting the functioning of an organization. As a subsystem it has to function in line with the main system, i.e. organization cannot go against the functioning of its main system; therefore, change in its processes is obvious.

### **2.3.5. Social network perspective**

The conception of organization boundaries- efficiency, power, competence, and identity- is emerging a central phenomenon (Santos & Eisenhardt, 2005) in this age of global interdependence. Efficiency conception adopts a legal-ownership view of atomistic boundary decisions. The boundaries are determined by efficient locus of transactions; the power conception adopts a permeable view that emphasizes the sphere of influence of an organization over other organizations and institutions whereas the competence conception is a dynamic view that focuses on the resources portfolio and coevolves with the environment. The identity conception takes a holistic view, such that boundaries are the often-unconscious mind-set that organizational members use to gain cognitive and emotional coherence about 'who we are'.

Emphasis is on the non-rational aspect of organizations as well. There is argument that one of the most important feature of organizations is the tendency for structures and processes to become 'infused with value beyond the technical requirements at hand.' That is to say, an organization's structures and processes tend to take on new meanings that are unrelated to the reasons they were adopted in the first place (Selznick, 1949). This is the sense in which organizations become institutionalized and structures resist change. All organizations have a crucial need to gain support from key constituencies in the larger social system. The task of constituency building and networking is the basic job responsibility of top managers (Britannica, 2011).

Organizations are existing through networks and relationships within and outside the organizations. Compatible network of actors in their supply chain and delivery chain is necessary, as interdependence has increased in producing products and delivering the same with accompanying services.

Social network theory also assumes that organizational outcomes as a function of the social relationships between organizations or individuals in an organization (Jones, Hesterly, & Borgatti, 1997). Buyer-supplier relationships for performance improvement can be explained or constructed around using social network theory lens (Seyfang, 2006). The stronger the relationship, the greater exists the embeddedness of the parties in that relationship, and network theory can be used to analyze and understand the structure of supply chain relationships among firms operating within an industry (Hitt, 2011).

### **2.3.6. Agency perspective**

Agency perspective focuses on a problem faced by the owners of corporations known as stakeholders; they must hire agents known as top management or chief executive officer to manage their properties, but the agents as according to the agency theory, will naturally focus on maximizing their own material interest (Lawrence, 2010). The functions of an organization are similar as the relationships of an agent and principal (Bowie & Freeman, 1992). As a principal depends on the functions of its agent as the shareholders depend on the functions of their organization and managers.

The difference between ownership and management is leading an organization to the state of an agency. Shareholders are the owner and they hold the ownership of the organizations. Managers need not necessarily be shareholders but preference of the organizations largely depends on the competencies and compliance of the managers.

In case of a business organization, the shareholders are immune to optimize their wealth and dividend at one part and the managers are immune to optimize their professionalism, salary and bonus on the other part. Government and non-government organizations are also facing more or less similar situations in due course of their operations. Conflicting immunity of the principal and agent obviously obstructs the change management processes in the organizations and businesses.

### **2.3.7. Isomorphic perspective**

‘Isomorphic’ is a biological term known as having similar appearance but being genetically different. Vertical as well as horizontal diversification is an urgency of modern organizations; therefore, different organizations are forming a network of reciprocal interdependence and developing strong supply and delivery chain. The actors in such chain are fundamentally different in terms of ownership, structure, location, and work culture, but are designing and delivering a particular product collectively. As an example, a cup of tea is an outcome of joint efforts of the teashop and different suppliers of tea bags, cups, sugar, and milk. A product reaches correctly to the place of final consumer from its origin if the firms are isomorphic in their operations.

The theoretic structural constructs are isomorphic in multilevel organizational networks too. The actors in an organizational network can be individuals, groups, or organizations, but the structure of the ties that connect them can be analyzed using the same network theoretic constructs (Moliterno & Mahony, 2010). Network theoretic construct will appear to be isomorphic across organizational levels of analysis. Ahuja (2000) argues that in the inter-firm linkage networks direct ties and indirect ties differ in the nature of benefits offered: direct ties provide resource sharing and information spillover benefits, but indirect ties provide only the latter.

Organizational design aspects, especially those that are observable to outsiders, play an important ‘ceremonial’ role. Organizations attempt to gain approvals by adopting the organizational designs favored by influential experts such as management professors and consultants (Meyer & Brian, 1977). Institutional rules function as myths, which organizations incorporate, gaining legitimacy, resources, stability, and enhanced survival prospects. Organizations whose structures become isomorphic with the myths of the institutional environment- in contrast with those primarily structured by the demands of technical production and exchange- decrease internal coordination and control in order to maintain legitimacy. Organizations therefore face a choice between using “informal”

designs that fit internal needs and using those “formal” designs that meet the standards dictated by external groups. This theory thus explains the characteristic discrepancy between and organizational structures (Britannica, 2011).

The influential experts recommend organizational designs for different types of organizations ranging from micro, cottage, small, and the largest irrespective of the size and nature of the organizations. The so-called outside experts are not well familiar with the organizations’ internal culture and informal organizational practices. The norms of informal organizations may remain immune to the expert advises and recommendations but the key decision makers are in favor of the expert advises and recommendations. The designs favored by outside experts, however, often fail to support the details of the work that organizations must accomplish, because the reality of work is more complicated than what can be recognized by the experts. The outside experts are not doers and the challenges to be faced by the doer managers are far more painful and burdensome too.

Isomorphism is one of the challenges in change management because of the diverse nature of informal organizational practices within the formal organization designs and structures across the supply and delivery chains. Maintaining isomorphic state in an organization’s operation is difficult while managing changes where the organizations are forming network of interdependence throughout their supply and delivery chain.

#### **2.3.8. Virtual perspective**

Advancements, mainly in the field of telecommunications and Internet are making organizational functions virtual day by day. The virtual organization presents numerous challenges to managers because it is unrestricted by the traditional boundaries of space and time. They are radically changing the way people work and the way communication and interaction are viewed, practiced and studied. Likewise, management practices need to adapt and evolve to accommodate these changes. The virtual organization is based on pattern of relationships that is why management’s emphasis is shifting from structures to people (Papastefanou, 2010) and artificial intelligence. The structure of virtual organization is increasingly being complex by making its adaptive system further complex due to the widespread application of the Internet.

There is complexity in virtual perspectives. Complexity theory tells that as complexity increases, firms find it more difficult to plan and predict their organizational actions. It is necessary for the regulation of the firms to be sensitive and responsive to their

environments with co-evolution and interdependencies (Crozier & Theoenig, 1976). The literatures concern to the purchasing and supply activities of manufacturers, transportation and logistics functions of the merchants and retailers, and the value-adding activities from the raw materials extractor to the end users (Tan, 2001). The boundary of supply chain management is needed to be defined and expanded (Cooper, Lambert, & Pagh, 1997) so as to increase predictability on it.

### **2.3. MANAGEMENT PRAXIS**

Readings in the areas of organization and management praxis concentrated on the innovative adaptation to their environment. It focuses on the role of environmental change and organizational and business legacy in consideration of innovation and social adaptation.

Human and their organizations continue to grow and evolve and that take nurturing (Denton, 1998). More success in management is likely to be achieved by changing people's attitude and values rather than changing their working environment and technology (Bland, 1999). The business network, actor relationships, and the patterns of works influence the most in organization and management. Global corporations need the business manager, the country manager, the functional manager, and the corporate manager as well (Bartlett & Ghoshal, 1992). Corporate citizenship is a priority component in building and strengthening global governance structures (Marsden, 2000). Executives desiring improved performance may well find it worthwhile to investigate and implement novel organizational designs and strategy. There is significance of managerial practices in order to enhance the understanding on organizations and businesses.

#### **2.4.1. Corporate governance**

Good governance needs to abide by certain principles- knowing what governance is; achievement of strategic ends; Board-CEO relationship; unity of direction; unity of command; unity of accountability and responsibility; ownership needs; self-improvement; and understanding the cost of governance (Taylor D. W., 2000). Prescriptive legislation on corporate governance is likely to be ineffective in preventing corporate misconducts. The monitoring role of independent board members has been recognized. Trust is a key to good corporate governance (Morrison, 2004).

Organizational practice and procedure as well as employee enthusiasm influence the effectiveness of corporate governance and social responsibility (Collier & Esteban, 2007).

Awareness of social responsibility and attitudes of individuals are related in an organizational setting. Individuals have positive attitude towards those companies that are meeting the social responsibility (Sen, Bhattacharya, & Korschun, 2006). The thematic categories of corporate social responsibility have been identified as high ethical standards, dedication to community service, embracing diversity, employer of choice, compassion for the disadvantaged, commitment to charitable giving, and concern for the environment. The major choices reflected in the strategies of the company include- environmental protection, enlightened employee policies, strategic consistency in replicating the business model in developing countries, and stakeholder awareness raising.

#### **2.4.2. Corporate culture**

Organizational culture, identity and image are all symbolic, value-based constructions that are becoming increasingly intertwined (Hatch & Schultz, 1997). There are nine common values pointed out as trust, mutual respect, teamwork, empowerment, risk taking, sense of urgency, and continuous improvement, commitment, and customer satisfaction in organizational setting (Despain, Leinicke, Ostrosky, & Rexroad, 2003). People intend to find at least one or more role models especially from among those at higher hierarchical levels. Role models are salient to individuals throughout their careers. Metaphors seem to be a strong means of catching especially negative perceptions in organizations. The collective perceptions of employees were stronger in old and well-institutionalized organization. Qualitative analysis tends to reveal the perception of greater productivity, higher morale, increased flexibility and longer work hours due to telework, as well as an equivocal influence on work/life balance and a negative influence on teamwork (Hill, Miller, Colihan, & Wiener, 1998).

The relationship between culture and behavior might be more completed than research to date suggests- we cannot blindly support that national culture strongly affects behavior in organizations. It is argued that collectivists, more than individualists, have concept derived from in-group identity and relationships with others, are inextricably linking to particular situations or contexts. Classical management principles can potentially provide useful broad guidelines for managers engaged in international planning. The managerial behavior might be influenced by national culture characteristics (Chong & Park, 2003), therefore, the employers need to look inside each of their working practices, and need to seek an improved design that builds and safeguards for the work-life balance.

### **2.4.3. Organizational learning**

Organizational learning processes reflect a fundamental shift in management thinking and practice from traditional concept of command and control to more contemporary concepts of facilitation and empowerment. The impact of learning move up from individuals to groups and then to the entire organization. Perceived individual-level learning effectiveness impacts perceived organization-level learning effectiveness. The importance of individual-level learning is not only for individuals and their groups, but also for their entire organization. Cooperative learning, when used in conjunction with work outcomes, has proven itself useful as a meaningful theoretical construct to describe and measure the often difficult-to-measure knowledge creation and dissemination (Janz & Prasarnphanich, 2003).

Organizational learning refers the adaptation to the changes in operational culture, development of new ways of doing things, norms and paradigms (Lahteenmaki, Toivonen, & Mattila, 2001). There is mediating role of organizational learning and change resistance in the change process as well. The creativity and innovation processes and the learning processes complement one another, sometimes to a remarkable degree. The potential synergy between the two sets of processes should not be ignored when investments in either are considered.

There is a concept of ‘seven dimensions of learning- continuous learning, dialogue and inquiry, team learning, empowerment, embedded system, system connection, and strategic leadership (Zhang, Zhang, & Yang, 2004). The organizational process is characterized by measurement, detection and correction of errors, and cost reduction. Organizational learning is a single-loop type of an incremental change process, which reminds a technical variant of the learning organization. Continuous improvement occurs through procedural practices which forms a structure for sustaining learning. Organizations emphasizing on organizational learning can realize huge bottom-line benefits. Those do ignore the significance of learning suffer tremendous costs in terms of lost revenues, customers, and markets too.

Learning process is embedded in the workplace and shaped by organizational decisions and practices. The hierarchical structuring of relationships make crucial knowledge and information readily available to the senior staff, while restricting the availability to the clerks and junior employees. Similarly, organizational decisions make about the design of jobs, and the movement of employees through them, and provided senior managers with

knowledge in breadth and depth about the organization and its production/operation system.

There is a significant recognition and use of on-the-job or informal learning within an organization. Training, education, supervision, team, mentoring, observation, learning fora, self-help, projects, shadowing, trial and error, and rotation are the sources of learning. There are evidences that organizations are short-term focused and see little worth in developing management competencies that will produce above average returns in the long run. Surprisingly, there is no support for the notion that competencies have an impact on long-term performance. In some industries, for example, the construction industry at least, the links between short-term priorities and long-term goals are fundamentally at a greater deal.

Adult learning, system theory and psychology were identified as the disciplinary bases of human resource development. Adjusting to changes in work patterns and how work is organized have been considered as a key trend influencing the field (Goh, 2003). Issues of professionalization and balancing the needs of employees, organizations and society are identified as key challenges facing the field.

#### **2.4.4. Leadership style**

The dynamic relationship between task and people orientation of leaders may have important performance implications at work places (Adeyemi-Bello, 2001). Psychological empowerment mediates between transformational leadership and the attitudes of followers with respect to general job satisfaction and affective commitment to the organizations. Mentoring can be passive, whereas sponsorship is active. It puts the onus on leaders (McAlearney, 2005). Attaining organizational diversity is a journey; it starts with a commitment of building a culture that supports the mission, and it includes goals to which leaders are held accountable- as well as programs and processes that make the attainment of diversity much more likely.

Transformational leadership is the most effective type for managing change (Yun, Cox, & Sims, 2007). The propensity of people to undergo role modification will possibly be related to certain underlying cultural or geographical characteristics. The dynamics of team role means that team members autonomously supplant the roles of the missing members. High level of interactions between heads of department, managers and staff help everyone to take responsibility for the quality of their work.



The relationship between dispersed leadership and ‘stimulant’ dimensions of the work environment for creativity is positive and significant while managing change. The relationship between dispersed leadership, with the exception of encouraging self-reinforcement, and the ‘obstacle’ dimensions of the work environment for creativity is negative (Politis, 2005). The ‘stimulant’ dimensions of the work environment for creativity have a positive and significant impact on both creativity and productivity for change. Younger and older managers have different profiles from their consultative and participative leadership styles. Older managers are consulted more widely in comparison with younger managers.

#### **2.4.5. Quality management**

Total quality management (TQM) has been suggested as a means of coping with turbulent change. It has been expanded to include all areas of management and almost any management approach that works in practice can be considered as quality management. The strong and simple central focus allow an internal war to be waged on complacency that prepares an organization for strong external competition (Michael, Sower, & Motwani, 1997). This has kept the discipline alive but diluted its significance. The true nature of the discipline can only be understood by revealing its deeper implicit assumptions and by focusing research on those assumptions. TQM managers need to understand existing organizational culture and whether it is compatible with quality culture.

An implementation of technical methods and principles requires a quality in management-managerial values, attitudes, skills, and behavior- that flourish over time (Beer, 2003). Corporate leaders will have to consider requiring all sub-unit managers to lead a regular process of organizational learning from which they also can learn. To create environment of continuous improvement, front-line workers require to see the practical benefits of a structured and planned performance enhancement culture and have the appropriate resources to achieve that goal.

Benchmarking requires some conceptual rethinking. It is argued that the need for re-conceptualizing is due to the appearance of three new forms of benchmarking (i.e. a competence benchmarking, a global benchmarking and a networking benchmark) and new fields of benchmarking (i.e. public and semi-public sectors as well as small firms). The earlier stages of benchmarking development efforts and practices stressed an activity and/or process orientation (Fernandez, McCarthy, & Rakotobe-Joel, 2001). Recently, the applied

art of benchmarking has become broader in nature to include strategies and systems. The attention to benchmarking successful customer orientated strategies is especially noted.

#### **2.4.6. International management**

International management practice encounters changes in different categories- global business environment, internationalization, entry mode decisions, international joint ventures, foreign direct investment, international exchange, transfer of knowledge, strategic alliances and networks, multinational enterprises, subsidiary-headquarters relations, subsidiary and multinational team management, and expatriate management (Werner, 2002).

The expanding international public role of the private sector has both potential benefits and potential dangers. Transnational corporations are increasingly asked to be good corporate citizens and they will continue to enter or be drawn into public roles as providers of private foreign aid, as self-regulators, and as influential political forces in shaping national and international policies. They are sources of enormous wealth and power, some of which can be put to effective use in preventing and alleviating social ills.

In order to succeed in alliance related work, it is necessary to ensure that there are clear strategy and objectives, high trust levels, involvement of the right people, commitment and assurance, and planning for open and frequent communication at the onset of the changes in favor of sustained and aggressive incremental change (Boje & Rosile, 2003). But, in today's volatile business environment, executives are called on to change their operating models much more frequently than ever before. More often than not, they do not have all the skills and capabilities they need to succeed at the new game. Companies that have fallen behind should consider using business transformation outsourcing to regain their lead.

Firms with an average economic performance were just as likely to adopt environmental initiatives as their high-performing competitors (Hitchens, Thankappan, Trainor, Clausen, & Marchi, 2005). Moreover, regardless of managers voicing personal concerns about the environment, most small firms do relatively little about the environment in practice and are reluctant to seek advice about it. Managers that define the process as a one-dimensional strategy will be doomed to failure. Effective implementation requires a tailored solution, 'one size does not fit' all firms. Outsourcing must be a part of an overall corporate strategy and management must ensure that all employees are aware of the overall situation. Some

combinations of insourcing, outsourcing, and contracting out may be the optimal solution for any particular scenario.

#### **2.4.7. Environmental adaptation**

Outsourcing invites significant changes in organizations and businesses. It has been a fashionable management technique (Beaumont & Sohal, 2004). Unlike other management fads, such as quality control or participation, there are good theoretical reasons such as success to economies of scale and expertise for its use. Its practical benefits can be inferred from its growing use. Effective implementation requires a tailored solution, 'one size does not fit' all firms. Outsourcing must be part of an overall corporate strategy and management must ensure that all employees are aware of the overall situation. Some combinations of insourcing, outsourcing, and contracting out may be the optimal solution for any particular scenario.

Given an option, most executives will avoid the disruption of seismic changes in their organizations in favor of sustained and aggressive incremental change (Linder, Cole, & Jacobson, 2002). But, in today's volatile business environment, executives are called on to change their operating models much more frequently than ever before. More often than not, they do not have all the skills and capabilities they need to succeed in the new game. Companies that have fallen behind should consider using business transformation outsourcing to regain their lead.

Empowerment appears to be a largely subjective and somewhat intangible concept. The three main reasons to this 1) empowerment may be related to positional power; 2) empowerment relates to members' expectations of the gains from the changes and the degree to which these expectation are met; and 3) empowerment also appears to be context-related (Smith & Mouly, 1998). Empowerment for production workers comes hand-in-hand with closer, long-term efficiency based logic. There exists no single organizational structure or optimal industrial model that best accomplishes this goal, but each level of the organization must contribute value to the overall success of the organization.

#### **2.4.8. Human and natural intelligence**

Changes in human and natural intelligence should be essential looking at the the results that enrich the organization's value to customers, investors, and employees (Ulrich, 1998). Change has a way of scaring people- scaring them into inaction. Role of the personel as a change agent is to replace resistance with resolve, planning with results, and fear of change

with excitement about its possibilities. Organizations will need to be in a never-ending state of transformation, perpetually creating fundamental, enduring change. Hence, human resource capability is found to be a significant predictor of sustainable competitive advantage.

The issues of bribery and corruption, training and development, tribalism, and resistance to change are some of the challenges in the process of change management. At the same time, the role of natural intelligence is increasingly assigned to line managers, and that the extent of such assignment varies from organization to organizations (Okpara & Wynn, 2008). The universal applicability of Anglo-Saxon model of managing natural intelligence is questioned, and a basis for a contextual framework/model for its evaluation in different contexts has been emerging. The model of 'culture fit' suggests that organizational culture is shaped by multiple forces external and internal to the organization.

A wide recognition of the desirability and benefits of commitment are seen in practice along with a clear disparity between the way academics and practitioners conceptualize and measure the employee commitment. Despite the variety of formal measuring tools available, organizational monitoring of commitment can be described as ad hoc and subjective (Shepherd & Mathews, 2000). The subjective approach adopted by practitioners could inform the approaches of academics just as the structured 'objective' approaches of academics should inform practitioners. Continuation of such practices helps in linking the fundamental changes occurring in academia and businesses.

#### **2.4.9. Strategic management**

Strategic management requires a holistic approach with not only an internal integration between organizational systems but also an integration between those systems and the organization's overall strategy. Increasing the core competencies of the firm leads to a high rate of successful firm performance in manufacturing and non-manufacturing industries.

Every strategy is associated with change in organization and businesses. The great divide in strategy is between the 'design school' and the 'process school' of strategy thoughts. Design school assumes that strategy is usually deliberate and built upon an assumption of economic rationality whereas the process school covers a variety of approaches that how strategies are made and what influence strategy formulation- what actually happens with explanations coming from experience rather than deductive theory (Purcell, 2001).

Strategic management is largely about integration and adaptation among business philosophy, policies, programs, practices, processes, culture, tasks, and tradition that involve political compromises as well as serious cognitive challenges (Schuler, 1992). At the same time, there is mixture of both hard and soft approaches of working with people. Factors such as the external and internal environment of the organization, its strategy, culture and structure all have a vital role to play in the way in which strategy operates.

There is an assumption of considering personnel a center point in strategic management (Gunnigle & Moore, 1994). There are attempts to explore the linkages of business strategy and personnel policy in anticipation of a result of increased competitive pressures, organizations will emphasize the search for competitive advantage and strive to align better personnel policy choice with business strategy.

#### **2.4.10. Performance management**

Employees may agree to be co-operative and participate in new process improvement and change programs subject to their performance and benefits. They may, at some stages, become involved in these activities, thus giving more of themselves in terms of intellectual and affective contribution. There had been considerable policy debate in the European Union concerning job quality and the need to create not only more but also better jobs. There are arguments that organization need not sacrifice profitability in order to provide quality jobs for their employees (Cooke, 2001). However, a mutually beneficial situation is not only feasible but also highly desirable.

Change interventions require positive attitude of personnel and the attitude depends on stress-level of the performance. Work and family demands may cause life stress among the employees. Contrary to the expectations, work demands appear to have a lesser impact on life stress than family demands, although the difference is not substantial (Edgar & Geare, 2005). Furthermore, while the effect of family demands on life stress is fully mediated by work-family conflict, work demands affect life stress both directly and indirectly through work-family conflict.

The change agents are mainly interested in the performance of their department or work unit, and work-life policies are often seen as disruptive. However, when the least disruptive request is considered (short-term leave), the researchers find that dependency arguments also play an important role and managers are more likely to respond to their employees' personal and family needs. There are studies that reveal a range of reasons- from

monotonous work, stressful work environment, adverse working conditions, lack of career development opportunities, to better job opportunities elsewhere, which emerge as the key causes of increasing attrition rates in the organization.

Eventually, those items are leading the employees to the acceptance or resistance to the change interventions. The role of unionism is considerable in the process of change. There is a shift towards de facto enterprise unionism in the private sector of different industries. However, the degree of this varies and the pace of change has been uneven. There is, therefore, no simple convergence (Becker & Gerhart, 1996). These changes are in part to be explained by the activities of governments and the actions of unions and their members. More important, however, have been changes in the nature of markets and firms and resultant shifts in bargaining power and employer strategy.

#### **2.4.11. Organizational polity and industrial relations**

From the innovation side, personnel management should be viewed as a strategic and integrated field contributing to the organization as a whole, and not just as fragmented practices supporting specific innovation activities, types or even phases. From the personnel perspective, innovation must not be seen, in a rather static way, as only a one-time strategic choice for the organization as a whole, but related to all kinds of dynamics inside and outside the organization (Bacon & Storey, 2000). Experts project that within a few years, more than 1.3 billion people will work virtually. A community-based, low-cost, convenient, and eco-friendly solution like things are changing the organization design quite significantly. “Presenteeism” has come to mean showing up at an office even when the task could be more productive doing from elsewhere.

There are three important sets of factors in shaping the industrial relations- 1) the strategic and organizational factors; 2) the transactional factors; and 3) perceived, risks associated with human resources, with providers and with the results of outsourcing. The innovative recruitment and compensation practices have a positive significant relationship with firm performance. It was observed that recruitment, the role of the HR department and compensation practices seem to be significantly changing these days (Benson & Gospel, 2008).

The increasing ease and decreasing cost of innovation mean that as soon as a young organization gets a whiff of success, it has to race against dozens of copycats. Entrepreneurs will continue to give birth to great businesses, and nonprofits will continue striving to build

a better society. But the people changing the world today are as likely to be in corporate cubicles and conference rooms or at social-impact conferences. Organizational culture characterized by high adaptability found to have a significant and direct effect on the sustainability of an organizations change practices.

#### **2.4. ORGANIZATION AS A BIOLOGICAL METAPHOR**

Metaphors have the effect of both describing and constructing our realities. By naming a situation through a metaphor, we not only give it a rich identity but also engender actions that actually create the reality (Akin & Palmer, 2000). Biological metaphor is appearing in organizational management for many decades, more frequently with the behavioural perspective. The concept of 'neural network' is applicable in the information and communication network of an organization and an analysis of perceptron in the study of organization and business is gaining its own significance.

The biological metaphor permits creative thinking and solution for complex problems of organizations and businesses. The creative process and solutions are organic in nature i.e. this is not like a mechanical object. The intelligence information processing capability of an organization is instrumental in solving such complex problems.

One of the central questions in organizational life is that 'how long' the identity of an organization continues within its system. Identity of an organization directly relates to the survival of the organization that depends on the relationship between and among its actors. The actors' relationship is proportional to the patterns of their reciprocal exchanges, which tends to be immune as long as the exchanges continue. The immunity is comparatively stable but the time is more changing.

##### **2.5.1. Organization as an organism**

Organism is a living thing that has an ability to act or function independently, and can develop such ability as well. Social organism is a system considered analogous in structure or function to a living body. Organization is taken as a social organism therefore, one of the images of an organization is considered 'organism'.

The several perspectives, mainly the behavioral, organic, and system provide foundation for the adoption of biological metaphor in the study of organizations. The organizations are constantly acting, reacting, and interacting within their environment instead of remaining stand still as a mechanical device.

### **2.5.2. Organization as an autopoiesis**

Autopoiesis refers to the state of self-creating or self-organizing system (Van Gulick, 2011). It is self-producing, expanding, inventing or creating according to its requirements. Forward and backward integration as well as establishment of vertical and horizontal network of autonomous organizations are common in organization and business. Designing, modifying, and mobilizing the goods and services are integral functions of an organization.

### **2.5.3. Organization as a living entity**

The products and processes of an organization have life, some products and processes pass a longer life span and some pass a quite shorter. The concepts about organization relates life sciences primarily in two ways- the one is tenure of individual and longevity of the organization itself and the next is the life cycle of its goods and services. Personnel working in an organization have fixed time and they get retirement; the goods and services are changing in their design, size, shape and so on over time; and the organization itself is not permanent all the time.

Organizations are receiving, verifying, processing, storing, and using information at the time of decision-making. They process information intelligently in combination with both the natural intelligence and artificial intelligence.

### **2.5.4. Organization as an evolutionary process**

Organizations establish, operate and evolve over time. Small organizations becomes larger, business limited in a specific area is expanding and entering into new market segments. The technology and process are advancing over time and there is paradigm shifts towards further improvements.

Organizations are different in creativity and innovation. Some organizations are comparatively more creative and some are not under the similar conditions of capital, assets, people, resources and circumstances. Similarly, organizations are taking risks, exploiting opportunities, and responding differently. This type of characteristic is available with organic objects not with the mechanistic objects.

### **2.5.5. Organization as homeostasis**

Homeostasis refers the tendency of a system that maintains internal stability, owing to the coordinated response of its parts to any situation or stimulus that would tend to disturb its normal condition or function (OED, 2013). The philosophy of hermetism, assumed in this



study, is based upon harnessing this biological phenomenon in a deliberate and systematic way in order to increase strength and resistance. It offset disrupting changes for the organizational health and longevity as biological hormesis.

Hormesis is a healing process with foresight, designed with the intent of increasing organizational fitness within a rapidly changing environment and competitive hostilities. Literally, it is a metabolic equilibrium actively maintaining by several complex biological mechanisms, which operate through the autonomic nervous system and offset the disrupting change. It has been designed with the knowledge that the environment may yet dispense an even greater challenge, still to be met.

Hormesis demonstrates more than a step in an organizational learning process as it conveys an adaptive response designed to prevent future disruptions. It is not only maintaining the condition of homeostasis but it may have the potential to produce growth and advancement that would not normally occur under ordinary circumstances (Pech & Oakley, 2005). Organization anticipates disruption in its processes and attempts to maintain a condition of homeostasis in case of disrupting situations. This practice is available with the behavior of biological objects but not seen in the functioning of mechanical devices.

## **2.5. ORGANIZATIONAL SCHEMATA AND CHANGE**

Organization is considered as a living being and its decisions and actions are resulting from change, mainly the planned change. The never-ending change is making hard to calculate corporate life expectancy accurately, but there are too many companies suffering a premature death. Every organization plans for their longevity therefore a reduction in organization mortality rate seems to be advantageous for all parties: employees, suppliers and contractors, shareholders and the entire stakeholders (Geus, 2008).

Many organizations follow the path toward their own collapse simply because they do not know that there is another way of doing business. The way worked best in the past and the way working best at present is likely to become worse in the future. If we know anything about the future, it is that it will be different from the present. Whatever currently exists is going to change. The only certainty is that there will be many changes (Bridges, 2003).

Organizational mortality concerns the changes in its environment. Organizations would not be dying if there would not be any change and a plan prepared once would be continuous forever, but the case is different i.e. there is change. Therefore, organizational schemata or plans and schemes are built on assumptions about future customer demand and

competitors' offerings, along with expectations about economic growth, technological change, and geopolitics (Wessel & Christensen, 2012). Where change exists, there is immune response in the organizations. The mortality rate can be reduced by making its immune response intelligently adaptive.

The relatively recent developments in the concept of schemata- organizing frameworks for understanding events- can facilitate organizational change and development interventions. Immunity to change is also a matter of perception of the actors about the present state of affairs and the desired state of affairs. Cognition, interpretation, or way of understanding events are guided by organizing frameworks or schemata.

There is relationship between organizational change interventions and the schemata. First-order change is incremental change occurring within particular schemata already shared by members of a client system, second-order change is the modifications in the shared schemata themselves, and the third-order change is the development of the capacity of the client system to change the schemata, as events require. (Bartunek & Moch, 1987).

The nature of change propels managers to proceed with the pace of change, therefore, they are compelled to plan for or go with the change. Organizational change models and theories need to support manager in different ways by answering fundamental questions like- why does change occur, how will change occur, and what will occur then are seeking answers. Identification of the driving forces of change answers the first question; the stages, scale, timing, and process are instrumental to understand how change will occur. The content and outcomes of the change, and the ways of measuring them help managers in order to understand the circumstances of their environment.

Organizational change agents face challenges as misconceptions about what is possible. Newly discovered fads drive managers to launch ill-conceived initiatives. In any organizational change, people feel they will win in the change and be better off, and others feel they will lose and thus be worse off. The change agent expects assistance from the first group and resistance from the second. A better approach is to change resistance to assistance by showing people how they will benefit from the proposed change (Englund, Graham, & Dinsmore, 2003). However, it is not as such, what to do for all those things about which people have been habitual and emotional by being too familiar for a long time working together and being together? People who are attached to the status quo are immune to the change initiatives.

Psychological commitments of the individual actors are hard to uncover within a short time frame of reference. It needs organizational intelligence and regular record keeping of the actions, reactions, and interactions of the individuals towards his/her contacts and events. The implicit promise, regarded as psychological commitment, is hidden but functioning secretly and deliberately throughout the career of an individual whereas the explicit promise, regarded as known commitment is functioning reciprocally with the functioning of the explicit commitment of the others. The inherent nature of an individual of working with such two commitments make the merit prediction of the change inaccurate, which is the primary concern of every change agent.

The traditional process for creating organizational change involves digging deep to uncover the root causes of problems, hiring experts or importing best-of-breed practices, and assigning a strong role to leaders as champions of change. The positive deviants- usually individuals on the periphery of their organizations or societies who are far removed from the orthodoxies of mainstream change endeavors. These innovators' uncommon practices and behaviors enable them to find better solutions to problems than others in their communities. (Pascale & Sternin, 2005). The attempt of bringing change working with the positive deviants looks like more effective because they are the key in the entire change management process.

The dynamic nature of change propels the organization design decisions compelling them to make it compatible over time. Everyday activities of the managers will be a guide in making organization design decisions. In this dynamic world of change, temporal structuring could be purposed as a way of understanding and studying time as an enacted phenomenon within organizations (Orlikowski & Yates, 2002). Organization structure is not permanent; therefore, it would be better to have contingent structure that would be organic and be changing as required.

### **2.6.1. The changing environment**

The work of Ludwig von Bertalanffy (1950) considers an organization from the perspective of an open system, similar to the biological organism. Open system is not in isolation but is interacting with its environment. The environment is changing, therefore, an organization has to respond to such changes in order to sustain and survive.

The social context of organizations is "being dependent on resources in its environment for its survival" (Pfeffer & Salancik, 1978). The extent to which an organization is dependent

upon external organizations and stakeholders depends on the importance of a particular resource to the organization, the degree to which those who control the resource have monopoly over the resource, the discretion they have over its allocation, and the construct of power for understanding both intraorganizational and interorganizational behavior.

Organization design and structure are relative to the change initiatives of an organization. The change and developmental efforts are directed to give continuity to the life of organizations with growth and advancement. The pace of environmental change is forcing organizations to bring changes, partially or completely at one part, and organizations are not ready to leave the status quo, which has been an integral part of the organization, on the other part. The role of organizational immune system is instrumental in the process of abandoning things that are no longer useful and accepting things that looks like useful in the days ahead.

Learning and adjusting structure enhances the chance of survival only if the speed of response is commensurate with the temporal patterns of relevant environments. Organizations respond relatively slowly to the occurrence of threats and opportunities in their environment. Structure of organizations has high inertia when the speed of reorganization is much lower than the rate at which environmental conditions change (Hannan & Freeman, 1984).

Pressures, threats, and opportunities in the external and internal environment of an organization vary with the life cycle stage (Anderson & Zeithaml, 1984). More specifically, businesses of small scales are facing external environmental problems more important in early stages of development, with internal problems becoming more critical as small businesses grow and mature (Dodge & Robbins, 1992).

Differentiation and integration are two key elements in the process of development (Riggs, 1961). Differentiation means existence of a situation in which every function has a corresponding specialized structure for its performance. Integration means a mechanism to tie together, to link up, to mesh, and to coordinate the various kinds of specialized roles. The levels of differentiation and integration represent diffracted conditions of development (Prasad & Manohar, 1996).

The new economy has ushered in great business opportunities and great turmoil. The pace of change is unpredictably high in this age associated with rapid entrepreneurial growth.

Most traditional organizations, have accepted, in theory, at least, that they must either change or die (Beer & Nohria, 2000).

The brick factories in Bhaktapur had to change their chimney because of the government's new regulations. The factories were causing air pollution excessively; however, entrepreneurs resisted the government's move at least for a year and more. Ultimately, the factories have managed either by shifting their locations, or by making changes according to the government's instruction.

Change leaders are sometimes compelled to answer questions related to the likely resistance and the possible ways of overcoming the resistance. Leading major organizational change often involves radically reconfiguring a complex network of people, tasks, and institutions that have achieved a kind of *modus vivendi*, no matter how dysfunctional it has appeared to the change agent. When the status quo is upset, people feel a sense of profound loss and dashed expectations. They will feel incompetent or disloyal in any given period. There is no wonder they resist the change or try to eliminate its visible agent (Heifetz & Linsky, 2002).

Resistance, tolerance, and acceptance to change are the forms of reactions in organization (Pascale & Sternin, 2005). The less a company operates in control of its environment, the more open it should be: foreign bodies and ideas will be able to enter easily. However, the company can never be sure how these bodies and ideas will behave, once, inside. Every intruder has a choice: it can select a symbiotic relationship or it can pursue its own benefit, to the exclusion of all others (Geus, 2008).

### **2.6.2. Resistance to change**

When managers are asked to identify key obstacles to organizational change, one possible response is 'resistance to change'. This is the number one roadblock for change interventions. Resistance is a natural process of adapting change; therefore, managers should not be surprised when resistance occurs.

Effecting organizational change is an inarguably difficult and demanding process, and even the best-designed programs will encounter resistance along the way (Smith P. G., 1993).

Resistance to change does not always reflect opposition, nor is it merely a result of inertia. Instead, even as they hold a sincere commitment to change, many people are unwittingly applying productive energy toward a hidden competing commitment. The resulting dynamic equilibrium stalls the effort in what looks like resistance but is in fact a kind of

personal immunity to change (Kegan & Lahey, 2001). A diagnostic test for immunity to change- notice and record current behavior, look for contrary evidence, explore the history, test the assumption, and evaluate the results is necessary for a successful change management.

One dimension of organizational immune system is resistance to change. It is known as 'change-prevention system' (Kegan & Lahey, 2009) that is thwarting challenging aspirations by preventing realization or attainment of a desires, plans or efforts. Kegan and Lahey refer resistance to change as a built-in "immune system."

The emergence of resistance provides an opportunity for gaining insight into the cultural norms, values, and beliefs that serve to anchor portions of the organization in existing patterns of behavior, attitudes, and motivations (Latta, 2009). Until they are objectified, tacit cultural commitments hold organizations subject to their influence.

Change initiatives are introduced in such a way to reduce resistance to change. Change agent needs to look at the professionals' comments over the change initiatives; sometimes they are facilitating and sometimes blocking the change (Dirkx, Gilly, & Gilly, 2004).

Most of the organizational change programs include top-tier strategies for overcoming employee resistance by building a sense of urgency, creating feelings of inclusion and empowerment, and providing clear communication. However, although these are essential elements, they do not necessarily address resistance among individuals or small groups- where it can be at its most nefarious- not good enough. The change agent need to focus on where would resistance be most harmful, where might resistance have spreading power, where might resistance run the deepest, and so on. One of the biggest mistakes change leaders can make is to assume that resistance is without merit-and in the heat of the heat of the moment, it is very tempting to do so (Michelman, 2007). Some encourage resistance because it can help point out potential objections of tough clients and wary consumers.

Many managers worry about what the change will mean to them and how will it affect their function or product line (Kaplan, 2010). They become defensive, which manifests itself in resistance to change. Often, resistance to change comes from the senior management team. A principal challenge for many change management program is sustaining momentum during the journey. Many change efforts fail during this critical middle stage of the journey as managers and employees get discouraged by the distance still to be traversed.

### **2.6.3. Tolerance to change**

People also resist change because they fear they will not be able to develop new skills and behavior that will be required from them. All human beings are limited to their ability to change, with some people much more limited than others (Kotter & Schlesinger, 1979).

People in organization are 'rational economic' who strive to achieve reward within a rational framework. They are rewarded for meeting organizational objectives (Schein, 1988). Organizations are changing in their structure over time, and human being are rewarding in their contribution to achieve the organizational goals. In other words, the event of rewarding people has not changed with the change of the organization structure.

Tolerance to change is considered next dimension of organizational immunity. It is known as 'feeling system' (Kegan & Laskow Lahey, 2009) in which the organization is managing continually recurring or persistent anxiety. The immune system is tolerating unwanted changes that are beyond the control of the organization's managerial purview at one part and it is attempting to seek alternatives to the changes on the other part.

People are at their best when they are in harmony with their world- their environment and each other. People have to be open to unlearn what is useless or obsolete. In every organization, people develop elaborate ways to prevent the discomfort that comes when the prospects of change generate intolerable levels of intensity. Like individuals, organizations have numerous commitments, and sometimes these commitments come into conflict (Heifetz, Grashow, & Linsky, 2009).

Many acquisitions and most mergers are likely to raise above the tolerance limits of both partners. Acquisitions and mergers are infections that may affect the stakeholders of both the parties along with the processes merging and acquiring. Sometimes, people are from different cultural context and adaption needs, therefore, tolerance and patience are instrumental in order to make the change successful.

There is a significant failure rate when it comes to organizational change of any type at any time. Managers understand the importance of organizational change, but many of them do not know how to execute it effectively. Leadership, culture, structure, and the related organizational factors can undermine successful change (Rosenberg & Mosca, 2011).

Tolerance to change requires a great deal of patience. It is the state of no acceptance to the change or the situation of waiting for the desired change. People may look like complacent at this time; therefore, the change agent has to manage these people in order to make them

as advocates of change, or there is need of facilitation and support in order to fuel their patience or tolerance.

#### **2.6.4. Acceptance to change**

What worked best in the past does not mean that the same works best today or will work best tomorrow, but managers tend to give continuity to the strategy, structure, ideology or power that worked best in the past. The changing environment is suggesting organizations to be adaptive regularly. Miller and Friesen (1980) argue that continuity is pervasive because it represents a conscious attempt to pursue an orientation that has proved to be successful. The cognitive limitations cause models of reality to be resistant to reformulation. The pervasiveness of continuity is caused by a reluctance or inability to disturb the intricate balance or gestalt among strategic, structural, and environmental variables.

Invention, innovation or discovery is essential in order to give continuity to an organizational life, but the greatest challenge is gaining acceptance for it in organizational settings (Le Storti, 2003). Acceptance to change requires *persuasion* to embrace and executive needed change. Organization or change agent need to develop a bold message that provides compelling reasons to do things differently (Garvin & Roberto, 2005).

The existing beliefs can be replaced at this point of time. The change agent might have identified the organization's target belief's weak point, have attacked it with alternative language, logic, or evidence that focuses on positive outcomes of the change program (Michelman, 2007).

The third dimension of organizational immune system is acceptance to change. It is 'knowing system' (Kegan & Laskow Lahey, 2009) in which the organization is organizing the reality. The immune system understands the importance of change in absence of alternatives and attempts to adopt the changes.

Leaders can facilitate a process of resolving the competing cultural commitments influencing the success of planned change initiatives so that new levels of systemic integration can be achieved. Overcoming cultural immunity to change requires resolving discrepancies in an organization's systems of meaning. A leader's degree of cultural awareness will determine his or her effectiveness in facilitating organizational change (Latta, 2009).



Resistance can be converted into acceptance if it is properly understood as feedback, can be an important resource in improving the quality and clarity of the objectives and strategies at the heart of a change proposal. And, properly used, it can enhance the prospects for successful implementation. When we pin failure on resistance, we risk overlooking opportunities to strengthen operational outcomes- and to correct our own biases. We also lose credibility in the eyes of change recipients, who may in turn withhold their specialized knowledge and sabotage the success of the change initiative (Ford & Ford, 2009).

Studies of organizational change reveal that some leadership characteristics, such as degree of involvement of subordinates in decision making have a positive effect on the acceptance of change (Cabrera, Cabrera, & Barajas, 2012).

Organizational change perspectives talk much more about the resistance, tolerance and acceptance to change. Sometimes, people tend to avoid and do not even want to listen the idea to change. Why do people in organization act and react in such a way? In fact, planned or proposed change may be for a good cause in every organization. It is an urgency of finding the sources to such avoidance, resistance, tolerance and acceptance.

## **2.6. ORGANIZATIONAL IMMUNE SYSTEM**

Human and organizational systems are remarkably similar-both are complex yet delicate collections of interrelated functions (Gilley, Godek, & Gilley, 2009). An organization's immune system, like the human one, protects against change (foreign objects or ideas) by erecting a powerful barrier in the form of people, policies, procedures, and the culture it creates to prevent change, regardless of the consequences. Just as the body responds to foreign objects and real or perceived threats, people encounter new ideas and form opinions, which they then present to other employees for acceptance or rejection. Similarly, employees may view organizational change as a real threat, even when the change is potentially positive. Leaders, managers, and employees view policies, procedures, and culture as providing control and security. Change threatens this. Unfortunately, the immune system attacks all intruders with little attention to the overall implications, similar to the rejection of new ideas in an organizational setting. The individual's response, like that of the cell, is a visceral defensive move that ignores the overall well-being of the system (the organization). Employees may perceive organizational change as a real threat, even when the change may be positive.

### **2.7.1. The immune system**

The human immune system is a useful metaphor for understanding challenges of leading change and avoiding predictable surprises (Watkins, 2007). The role of immune system in case of leading change shall be to distinguish between ‘self’ and ‘not-self’. Organizational culture and political networks in organizations operate in an analogous way to the human immune system; and when they are working well, they prevent ‘bad thinking’ and ‘bad people’ from entering and doing damage to the organization. If the organization’s immune system is sufficiently strong, bad leadership can infect the business and do tremendous damage. In contrary, if the system is strong enough, nothing coming in from the outside is permitted to survive.

The concept of organizational immune system is derived from the concept of human immune system. William R. Clark (2007) describes human immune system mainly referring the functioning of bone marrow, thymus, lymphocytes, and lymph nodes and spleen. *The Bone Marrow*: This is the pale yellowish-white, jelly-like substance found in the center of most bones. The function of bone marrow is to give rise to all of the cells found in the blood (mainly red blood cells and white blood cells).

*The Thymus*: This is a glandular organ just above the heart. It is the site for development of a special immune cell called a T-cell, the ‘T’ reflecting its thymic origin. T-cells learn what is self in the body and what is not.

*Lymphocytes*: One of the types of white blood cells arising from bone marrow stem cells is called lymphocytes. There are two major subsets of lymphocytes- T-cells and B-cells. T-cells must pass through the thymus to complete their maturation. B-cells arise in, and complete their entire maturation in, the bone marrow. The job of B-cells is to product a blood protein called antibody, which hunts down and helps destroy foreign invaders swimming around the body fluids. T-cells- also known as killer T-cell- help to make antibody, provides a powerful defense against all sort of microbial invaders.

*Lymph Nodes and Spleen*: Spleen is a large, red organ just next to the stomach, but human have literally hundreds of small lymph nodes scattered throughout the body. Lymph is fluid that circulates from tissue to blood and back again, carrying food, oxygen, and waste products as well as cells of the immune system. Lymph nodes have a strict internal structure that is repeated in every node. As blood and lymph pass through these structures, the substances they are carrying are trapped there and examined. Anything that is ‘self’ allowed

to pass through, anything that is ‘not self’ triggers a series of alarms and sets an immune response in motion, activating T-cells and B-cells that recognize the offending antigen as foreign.

One of the main functions of spleen is to remove dead and dying red cells from the blood and recover the iron from the hemoglobin they carry. Portions of the spleen also function like a giant lymph node and trap foreign material for inspection by resident T and B cells. Adaptive immunity of human immune system has two arms- antibodies and T-cells. Antibodies and T-cells play important roles in the adaptive response against viruses.

Legendary Chinese emperor Fu His creates dualistic cosmic theory of yin and yang circa 2300 BC. Early Vedic practice in medicine begins 1500 BC circa that practice includes expulsion of demons believed to cause disease (Britannica, 2011). As an immunity thinker, Chanakya during 300 BC used to add poison in little amounts daily in his king Chandragupta’s food in order to make him immune to poison, lest some enemy tries to poison (CNLU, 2014).

The first medical use of the term ‘immunity’ appears in 1775, when Van Swieten, a Dutch physician, used ‘immunitas’ to describe the effects induced by an early attempt at variolisation (Moulin, 1991).

Roman school of physicians known as Methodists develops theory that disease depends on relative tenseness and laxness of the body around 100 AD circa. The discovery of Russian Zoologist (1882 circa) and microbiologist Elie Metchnikoff in animals of amoeba-like cells that engulf foreign bodies such as bacteria- a phenomenon known as phagocytosis and a fundamental part of the immune response- from which he develops the cellular theory of immunity (Britannica, 2011).

Drawing lifeline of an ongoing organization is very difficult task. How does an organization pass through which stage(s), and ultimately why does it die or does not die, do not have right answers, and because of the nature of change, the answer varies with time, contexts, and setting. However, there are evidences that organizations progress through their own lifeline.

Some small businesses are formed and soon they disappear; others remain as small, independently operated enterprises as long as their owner-manager lives. A few companies become organizational giants, and sometimes large organizations reduce their size through layoffs or divestitures (Griffin, 2005). Numerous organizations are getting birth and being

operational with or without growth and diversifications. Enterprises being operational are also disappearing or dissolving in the course of their timeline.

Immune system of an organization plays a role as that of a guardian by making stakeholders aware about compatibility between the status quo and the anticipated change and development. The system is acting as sensor and monitor of the intruders to the organization. It is standing against the forces that are attempting invasion of the organizational operations. The job of immune system is to make certain this invasion does not happen; however, the immune system may not be perfect. At times, it prevents the organization from accepting potentially life-saving organizational change interventions similar to the ways as human immune system prevents an individual from accepting potentially life-saving organ transplant.

Knowledge is based on different paradigms, each with its own assumptions about the world. The basic concern is to find explanations for the radical change, deep-seated structural conflict, modes of domination and structural contradiction, which its theorists see as characterizing modern society. The incompatible and conflicting characteristics of the society are immune to change and development (Burrell & Morgan, 1979).

Convincing people of the need for change is much harder. It is often said that major change is impossible unless the head of the organization is an active supporter. Strong immunity to change of the influencing person or stakeholder emerges as the organization's immunity to change (Kotter, 1995).

An examination of the forces that resist the subsidiary initiatives in multinational corporations and concluded that the most successful ones typically gain allies outside the corporation early on, and only confront the corporate immune system once they are relatively well-established (Birkisnshaw & Ridderstrale, 1999). There are disparate forces at various levels and locations with the organization that act to suppress subsidiary initiatives with the result that many efforts probably do not come to fruition. One way of viewing this process, the authors suggest, is to see the initiative as an alien body that the 'corporate immune system' seeks to destroy.

One major deterrent to a firm's ability to change lies in its immune system which is the collection of people, policies, procedures, and processes that prevent change without regard for its consequences, positive or negative. As the human body has built-in immune systems as the organization has in order to protect it from foreign objects. The human immune

systems judge the foreign objects and attempt to resist it in case the nature of the objects is judged as harmful to the body. But, the immune system can also fail, or misjudge the nature of the threat, or attack the body it is supposed to defend (Gilley, Godek, & Gilly, 2009). In the same line, people in organizations often feel secure and any change do they perceive likely to threaten them, they strongly resist it, even if the change is inevitable to the survival of the organization.

Leaders and organizations that master the immunity to change will be dominant in their sectors in the new century (Kegan & Laskow Lahey, 2009). They will set the standard in terms of accomplishing their own goals. They will be the most admired by their competitors. They will have the greatest loyalty and commitment of their internal constituents. Organizational immune system does not only prevent the organization in bringing change. It also acts intelligently to protect the organization in difficult situations. Every immunity to change can be seen as an asset and a source of strength in an organization.

The structures, systems, predispositions, and the set of organizational forces that act as components of an organization's immune system suppress or resist the organizational change initiatives. Because the immune system resides at the interface between the organism and its environment, it serves as a first line of defense, but more broadly as an information processor for the host organism. Cognitive functions are fundamentally open, and thus immune theory should describe how immune system design permits, and then responds to, open information flow as a primary function. So, if immunologists are to decipher the complexities of the immune system's organization, then immunity must be characterized with this open, more holistic consideration of immune regulation that includes environmental inputs, the processing of information, and the regulation arising from responses to this larger context (Zalta, 2010).

A study provides a frame of organization's immunity to corruption based on corporate and organizational identity in search of the ways of building organization's immunity to corruption (Stachowicz-Stanusch, 2010). An organization can build effective immunity to corruption through developing and consequently managing positive corporate and organizational identity, which creates the moral frame for legal and ethical behavior of the organizational members and of the organization itself.

Personality differences, value incongruence, roles ambiguity, and perceptual differences on top of the expected outcomes of the change initiatives of key individual also resist the change and development of an organization. In the countries like Nepal, the leader or senior manager is found to be stressful or frustrated while initiating change. They often say that change is an urgent necessity, but people do not believe and support them as required, instead, in some cases in politics and public sectors, attempt to fail the leader. Very interestingly, power play and blame game seem effective, but when the resister comes to the power, the blame itself becomes the slogan for change!

Organization is considered as a system within a system. It is a sub-system of its industrial system. An organization's system also consists a number of systems like accounting system, financial system, information system, administrative system, and so on. For an instance, accounting system is concerned primarily recording and reporting cash and kinds, financial systems is concerned to the sources and uses of funds, information system is concerned to the accumulation and dissemination of information. Organization immune system is primarily concerned to the changes in all the systems and attempts to maintain the status quo.

“Why organizations should have an immune system?” is a fundamental question. Every organization prepares plans and implements them in the future. Every plans have their own planning premises popularly known as assumptions and forecasts in which the plans are operationalized. The plans are effective at those conditions when the planning premises remain intact. In order to keep the premises intact, it is necessary to allow things that are compatible to the plans and block those things that are not compatible to the planned processes. In order to safeguard the planning premises, organizations must have a well-established immune system.

### **2.7.2. Immune system architecture**

The architecture of an organizational immune system is supposed to be multi-layered with detection, prevention and protection mechanisms. The system can be innate also known as inborn as well as adaptive also known as acquired.

The communication (connections) between the units is explained by the ordering (command and control) as well as reporting (complain and accomplishments) systems. The coordination mechanism is making the innate system more straightforward and easy to

understand. As an organization continues functioning in this straightforward way, eventually, it develops a working culture/nature known as *Dharma (in Sanskrit)*.

The connections are primarily based on the inputs – outputs models i.e. one node reports to next node. The reported matter serves both inputs as well as outputs. It becomes outputs for the reporting nodes and the same becomes inputs for the recipient nodes. As long as the reporting and receiving nodes are intact, there is no change in the innate immunity, but only the matter could be changed. When a change is likely affecting the innate immunity, and if the natural intelligence or artificial intelligence accepts the changes, there is no immunity to change; otherwise, there is an immunity to change.

The entire information that are encoded in the form of intention, documents, working patterns and policies at the beginning indicate the innate part of the immune system. The system has its own limitations confined by the laws of the land, memorandum of association and article of associations, working philosophy, code of conducts, objectives, norms, and values. The organization ordinarily cannot go beyond and against such things. If any force attempts to deviate it from its original position, the innate system stands against it.

There are assumptions that human intelligence/intent/brain is modifying, changing, or replacing the original documents (innate immune system) over time. The documents are inanimate objects that cannot move at their own; in order to make it moveable, human brain or intelligence is needed. The human behavior and the function of intelligence intent is another part of the organization immune system known as acquired or ascribed immune system.

There are mainly two aspects of problems immune system faces- the *adoption* of the factors that are likely to enter into the organizational systems and *prevention* of the factors from entering into the system of the organization in order to protect the firm from any harm. Additionally, there are four other problems immune system faces in the process of detection and prevention of the intruders. It attempts to avoid and resist in its process of prevention and it attempts to tolerate and accept in the process of its adoption.

#### INNATE/INBORN IMMUNITY

The term ‘innate’ refers to that part of the immune system with which the organization is born; that is, it does not change or adapt to specific factors, but provide a rapid first line of defense (Hofmeyr, 2001). Innate immunity is known as inherited resistance from birth,

which allows us to see more clearly the possibility of non-adoption i.e. certain types of organization are immune to certain types of ideas (Rovik, 2011).

**Business philosophy** as well as core beliefs hinder change and it makes people blind to the change's benefits. However, the beliefs are artificial that they rest on a shaky combination of logic and selected evidence, and they persist in language (Michelman, 2007).

Some professionals like professors, physicians, engineers and so on have acquired exclusive rights to perform certain task of their professional nature and evaluate the tasks' performance as well. The professional or occupational culture associated with these people is quite immune to the administrative practices of their organization (Cabrera, Cabrera, & Barajas, 2012). For an instance, administrators in a university or college faces severe challenges if they wish to bring change the teaching style of their professors.

Organizational immune system stands as an apparent challenge in the invention and discovery of new ideas and processes, perhaps in gaining acceptance for them. New concepts, especially radical ones, tend to activate the immune system (Le Storti, 2003). The immune system is likely to discourage autonomous initiatives to the extent that they deviate from mainstream thinking in the firm and conventional routines. If a few champions have access to informal communication and decision-making channels that may allow them to circumvent or even to supersede the corporate immune system, and at that time the autonomous project will prove successful. Corporate immune system is likely to discourage autonomous initiatives to the extent that they deviate from mainstream thinking in the firm and conventional routines. (Rugman & Verbeke, 2003).

People form **union/association** in order to safeguard them from internal or external threats. In case of a change initiative, it is likely to affect as opposition; they gather themselves together and attempt to stop the change initiative.

Employees will not make sacrifices, even if they are unhappy with the status quo, unless they believe that useful change is possible. Most of the executives consciously attempt to become a living symbol of the new corporate culture. Nothing undermines change more than behavior by important individuals that is inconsistent with their words (Kotter, 1995).

**Strategic alliances** or joint ventures are business practices in domestic as well as international business. A few reasons are to exploit the market potentialities, promote existing product market, and strengthen competitive position and so on. The partners in the



alliances or joint ventures may be diversified in different terms like financial position, technological capabilities, and market position.

The strategic alliance gains a power when one enlists the help of like-minded and similarly tempered individuals or organizations. The alliance gains a sense of legitimacy, access to resources and contacts, technical and task assistance, emotional support, advice as well as power to move issues to the forefront more quickly and directly than they might by working alone (Meyerson, 2001).

Innovation and change initiatives can be initiated also from the subsidiaries or any one partner of the alliances or joint ventures. There is not much literature on how the innovations made by small subsidiaries can be implemented or 'diffused' in the global parent companies. There is doubt that a global company's immune system permits the changes initiated by the subsidiaries or the alliance partners. Very easily, the corporate immune system prevents the diffusion of innovations, which applies also to parent-subsidiary relationships (Yrjanainen, Suomala, & Uusitalo, 2012).

**Syndicate/cartels**, explicit or implicit, are shaping the market in their own favor. However, the dynamics of the organizational world are shaping by processes of legitimation and competition. In this context, legitimation refers to the extent to which a group or procedure is taken for granted. That is to say, an organizational form is legitimated when there is little or no dispute over the suitability of the form for the accomplishment of certain tasks. Competition refers to the "crowding" that occurs when multiple units (such as businesses and individuals) try to gain the same resources (such as customers and investors). More organizations will be created, and fewer organizations will fail, when the legitimation of the form is high and competition is weak. Extensive research shows that situations of high legitimation and low competition contribute strongly to the profusion and longevity of organizations (Britannica, 2011).

The immune system is likely to discourage autonomous initiatives to the extent that they deviate from mainstream thinking in the firm and conventional routines. If a few champions have access to informal communication and decision-making channels that may allow them to circumvent or even to supersede the corporate immune system, and at that time the autonomous project will prove successful. Corporate immune system is likely to discourage autonomous initiatives to the extent that they deviate from mainstream thinking in the firm and conventional routines. (Rugman & Verbeke, 2003).

The immune system beyond the national boundary is quite complex due to the limitation of national laws and jurisdiction of the local courts. 'The immunity of international organizations is based on the principle of functionality, i.e. the immunity encompasses all acts needed for the execution of the 'official functions and activities of the organization' and that the concrete determination of immunity must be based on the constitutional instrument and internal rules of the organization in question' (VU, 2006).

**Authority delegation/structure** reminds an example at a television broadcasting organization. The general manager here wants to restructure the organization and takes initiatives, consults expert, and comes up with an idea of formation of a task force that would suggest for restructuring. The ministry of Information and Communication does not give consent for the same; in absence of such consent, the manager could not continue his change initiatives. Instead, if the general manager would be fully authorized than he would be able to move ahead with the experts/change consultants to bring change. The regulatory mechanism and reporting relationships, sometimes prevents the managers from necessary changes.

**Promises and commitments** make people personally immune to change (Kegan & Laskow Lahey, 2001). One of the fundamental concepts in organizational commitments is that the pursuit of official goals characterizes organizational actions and programs. However, the goals are set at present, for the future, based on assumptions and forecasts. Future is uncertain, thus, organization needs changes in its actions and programs over time depending on the then contemporary circumstances, not on the assumptions and forecasts made at the time of setting goals and preparing plans.

#### ACQUIRED/ASCRIBED IMMUNITY

The acquired or ascribed immunity is known as the adaptive immune system is so-called because it adapts or "learns" to recognize specific kind of intruders, and retains a "memory" of them for speeding up future responses (Hofmeyr, 2001). Adaptive challenges are typically grounded in the complexity of values, beliefs, and loyalties rather than technical complexities, and stir up intense emotion rather than dispassionate analysis.

Macro-centralized and micro-centralized adaptive systems usually applied to help organizations better deal with emerging threats (Watkins, 2007). Organizations have 'brains' in the form of senior leadership teams that are charged with scanning and shaping their organizations' external and internal environments. It takes in 'big picture' information

from their senses, processes it, identifies potential threats and opportunities, develops adaptive strategies, and learns. Its role is to identify macro-trends and fashion macro-level adaptive responses such as new strategies and organizational change initiatives.

Acquired immunity in biology has two hallmarks: *specificity* (the immunity response is targeted to the specific virus with which one has previously been infected and not others) and *memory* (i.e. the immune response will for a period ‘remember’ with which micro-organism it has been infected). In light of the notion of ‘acquired immunity’, one may look for instances where organizations for shorter or longer periods, avoid certain concepts with which they have previously had unsatisfactory experiences (Rovik, 2011).

A long-lived company has four features- identity, tolerance, fiscal consideration, and sensitivity. The identity feature refers to the ‘sense of who we are that transcends what we do’; the tolerance feature indicates ‘openness to what we do not know’; the fiscal conservatism attempts to ‘maintain control of one’s destiny’; and the sensitivity to environment concerns the ‘larger sense of responsibility as a natural by-product of how we operate’ (Geus, 2008).

Acquired tips, habits, or techniques will not help to transform a traditional organization into an adaptive one instead; the organizations must challenge long-established concepts of leadership, strategy, and responsibility in order to adopt the change (Haeckel, 2008)

**Laws and agreements** are governing the organizations. Social institutions are changed in order to bring them into conformity with already existing theories, that is, to make them more legitimate (Berger & Luckmann, 1967).

Historically, much of the pressure for change in organizations and businesses has been channeled through the state regulators specifically from Beema Samiti (Insurance regulator), Nepal Rastra Bank (Central Bank), Security Exchange Board, and the Departments and Ministries of the government of Nepal. The role of top management is to interpret appropriately the breadth and depth its institutional environment requires and to implement system-wide balance with integration and internal influence in its companies. (Bhambri & Sonnenfeld, 1988)

Statements like “... domestic courts should follow the principles of justice, equity and good conscience in dealing with sovereign immunity issues, and thus must make it a point to rely on or supplement their forum data with comparative survey of state practice the world over; ...national legislation must be discouraged so as to pave way for the modern judge to have

a latitude of freedom to explore and solve by reasoning the difficulties usually associated with immunity of states and international commercial transaction..” (Bankas, 2005: ix) are providing insights to the practicing managers around the world.

**Ownership and management** of a living organization assume that people do not come to work to be used, they come to the work to contribute. The fundamental questions to the ownership and management (in case of a living company) is how effectively they have got contribution from their people and when. All of the people in organization come together around a worthy goal to accomplish something great.

**Socio-cultural setting** is one determinants of change. In any work setting, sustained high performance is only achieved via sustained social wellbeing, and vice versa. The meaning of organization resides in the contexts and occasions where it has been created and used by the members rather than it is in a specific and fixed substantive form. This is important because paramount features of postmodernism appear to be rapidly changing conceptions among social actors themselves. Organizational effectiveness can be re-conceptualized as an evaluation made by social actors of the relevance of organizations to their images of personal, social and organizational needs (Boje, Gephart Jr, & Thatchenkery, 1996) that is why there are many possible ways to give continuity to the organizations.

**Structural settings** reflect an organization’s design and hierarchy. Value is created in a collaborative social system where everyone as a potential contributor in the network accepts everyone. Organization is an interlinkage of tasks and relationships and failure in the functioning of an element of the structure is contributing to the failure of the entire structure.

When implementing a significant change, management needs to be aware of how defense mechanisms are associated with an individual’s behavioral intentions. A balanced approach to implementing change rather than focusing attention and energy only on technical aspects, it is equally important for management to work with the human factors associated with resistance to aid the change process (Bovey & Hede, 2000).

**Seeding funds and resources** are influencing the change process. The immune system needs to be able to detect, adopt and eliminate the factors that are in favor or against the organization as quickly as possible. Organizational immune system is artificial immune system; therefore, it needs to be effective in sensing the factors in its environment and determining whether the factor will be favorable for the organization’s future or not. The

system needs to be effective enough in order to adopt if it seems favorable and equally effective enough to eliminate if it seems unfavorable.

Every immune response costs to the organization and impacts on its performance. The threats detection and prevention system, and opportunities detection and adoption system both are influencing the performance of an organization. Threats detection and prevention system contributes in minimizing the likely loss and damage at one part and opportunities adoption system takes the organization to a height of its prosperity at the other part.

## **2.7. CHANGE MANAGEMENT**

Chris Argyris (1964) suggests an intervention strategy for organizational change and development in four core areas. The organization should provide an environment for the development of the individual towards personal or psychological maturity, a program for organization change should aim at improving the interpersonal competence of the employees, changes must be introduced to transform the traditional pyramidal form of organization, and adoption of the techniques for programmed learning aimed at individual change should be introduced. Argyris sharpened the various facets of the human relations and participative schools of thought on organizations (Raghavulu, 2012).

Arthur L. Stinchcombe (1965) argues that the key features of organizations in any industry are related to the era in which the industry emerges. Imprinting of such developmental period can have a long lasting impact in the life of an organization. According to Michels's 'iron law of oligarchy', the top leaders tend to develop a strong personal interest in maintaining their powers and privileges. Michels held that self-interest prevents such leaders from doing anything that would risk the survival of the organization—even if this means subverting the organization's original goals and principles (Britannica, 2011).

Yehezkel Dror (1971) states about the coordination between the human-capacities and policy making capabilities to shape the environment, society, organizations, and human beings. Dror indicated that the scientific knowledge is triggering change without supplying new values and belief systems that are most urgent in order to address the multidimensional nature of changes required in societal systems (Haragopal, 1996). Therefore, the organizations should enable the societies to raise the level of rationality as an important component of societal direction system.

Level of interdependence between organizations depends on the level of change in their environment. As the critical environmental contingencies change as the interdependence or

resources are likely to change (Pfeffer & Salancik, 1978). The interplay of organization theories is a contest over the future shaping of the organizational world. An awareness of the underlying values and bases upon which theory is constructed becomes essential in the analysis of an organization. The values and biases act as assumptions or sometimes convictions that guide theorizing and they constitute paradigms that channel attention in specific directions and preclude the investigation of alternative theoretical, ideological, and practical spheres. Even when organizational theorists claim to be free from values, they invariably imply and contribute to value commitments through the construction of partial views of reality. A proper study organizations across levels of analysis is to understand the dialectical relationships between forces of conflict, coercion, and disruption at one level of organization, and forces of consensus, unity, and integration at another level- forces that are prerequisites and reciprocals of each other (Astley & Van de Ven, 1983).

There is no agreement that organizational adaptation can be derived, managerially or environmentally, based on a particular model. Organizational adaption is a dynamic process that is the result of the relative strength and type of power or dependency between organization and its environment. The interdependence and interactions between strategic choice and environmental dynamism define adaptation; each is insufficient and both are necessary to a satisfactory explication of organizational adaptation (Hrebiniak & Joyce, 1985). It is a dynamic process therefore the organizational immunity stands, as a barrier in the change management process i.e. a static immune system will be incompatible to the dynamic adaptation process.

High emphasis on administrative science is necessary in order to straighten the paths of government, to make its business less unbusiness like, to strengthen and purify its organization, and to crown its duties with dutifulness (Wilson, 1986). The organizations familiar with one paradigm are not familiar with new paradigm, and the process of shifting is also painful and costlier as well.

Change is a prerequisite for corporate survival in a dynamic environment at one part and the corporate immune system may resists the change process in the other part. Nevertheless, the immune system is not always negative, within reason; corporate immunity to change should be viewed as a positive sign of the company's health. Management's challenge is to find ways to rechannel the energy that is siphoned off by corporate immune system, so that it flows toward more productive ends (Smith, 1993).

Organizations have gone under many banners like total quality management, reengineering, rightsizing, restructuring, cultural change, and turnaround in the past. But, the basic goal has been the same: to make fundamental changes in how business is conducted in order to help cope with a new, more challenging market environment. Most major change initiatives- whether intended or boost quality, improve culture, or reverse a corporate death spiral- generate only lukewarm results; but many fail miserably (Kotter, 1995).

People in organizations perceive their environment to be in constant flux because they only notice the things that do change. In fact, change has no meaning unless it is juxtaposed against continuity. Because many things remain stable- pockets on a coat for an instance- change has to be managed with a profound appreciation of stability. Accordingly, there are times when change is sensibly resisted. Dramatic change is frequently initiated in times of crisis or of great opportunity when power is concentrated and there is great slack to be leveraged. Systematic change is slower, less ambitious, more focused, and more carefully constructed and sequenced than dramatic change. The formal leadership usually drives the dramatic change, and specialists usually promote systematic change, organic change tends to arise from the ranks without being formally managed. It often involves the messy processes with vague labels like venturing, learning and politicking, and nurtured behind the scenes in the skunk works of big companies (Huy & Mintzberg, 2003).

Workers and their organizations face ever-increasing rates of change in products and services, the knowledge and expertise required to deliver these products and services, structures, procedures, processes of work, and policies and regulations intended to ensure public safety and confidence (Dirkx, Gilly, & Gilly, 2004). Bridging the gap between ‘what is happening’ and ‘what is likely to happen’ is what change management is all about (Pascale & Sternin, 2005).

Only a very few successful companies are able to allow signals of a radically changing world to penetrate their corporate immune system (Geus, 2008). Change is hard because people need to penetrate the adaptive challenges. Adaptive challenges demands three tasks: figuring out what to conserve from past practices, figuring out what to discard from the past practices, and inventing new ways that build from the best of the past (Heifetz, Grashow, & Linsky, 2009).

A genuinely developmental stance recognizes that neither change in mindset nor change in behavior alone leads to transformation, but that each must be employed to bring about the

other (Kegan & Lahey, 2009). The trouble is that the organic approach can be splintered and is itself anarchical. Groups may begin to work at cross-purposes and fight each other over resources. When informal groups indulge in experiential learning, narrowed competences can result if each focuses on promoting only what it knows best to serve its own interests. Organic change is not systematically organized when it begins and it does not depend on managerial authority or specialized change agents. Indeed, it often proceeds as a challenge to that authority and those agents, sometimes in rather quirky ways.

### **2.8.1. Change management perspectives**

Kurt Lewin's (1947) three step change model consists three phases- unfreeze, transition, and freeze. The unfreezing phase is reducing the forces that are striving to maintain the status quo, and dismantling the current mind set. At this phase, the change agent usually represents a provocative problem or event to get people to recognize the need for change and to search for new solutions. The transition phase is developing new behaviors, values, and attitudes, sometime through organizational structure and process changes and development techniques. There may be a period of some confusion as the situation moves from the old ways of doing things to new one. The third phase is crystallizing and the adaptation of ownership of the new state of affairs. The organization may revert to former ways of doing things at this point unless the changes are reinforced through freezing.

Organizations are social entities. Every socially constructed universe is changing, and the change is brought about by the concrete actions of human beings. To understand the state of the socially constructed universe at any given time, or its change over time, one must understand the social organization that permits the definers to do their defining (Berger & Luckmann, 1967).

Michael Hannan and John Freeman (1989) describe three **change perspectives**- selection, adaption and random transformation. Selection theories argue that “the most of the variability in the core structures of organizations comes about through the creation of new organizations and organizational forms and the demise of old ones. These perspectives argue that existing organizations, especially the largest and most powerful, rarely change strategy and structure quickly enough to keep up with the demands of uncertain, changing environments. Adaption theories purpose that organizational variability reflects designed changes in the strategy and structure of individual organizations in response to environmental changes, threats, and opportunities. Random transformation theories claims that organizations change their structures mainly in response to endogenous processes but



that such changes are only loosely coupled with the desires of organizational leaders and with the demands and threats of environments” (Hannan & Freeman, 1989:12-13).

Major theoretical perspectives that are necessitating organizational change consists a variety. **Rational adaptive theories** imply that human decision making is widely recognized as adaptive rather than calculative. Adaptive rationality indicates behavior that is shaped by experience and by influence from others (May, 2006). Organizations are also influencing from externalities, therefore, they need to change the way that is being obsolete.

**Institutional theories** assume that organizations identify and then adapt to changing circumstances in their environment as a process of learning. Changes in that environment constitute a set of opportunities for the institution, as well as a threat to its established pattern of behavior. This perspective on change points to the almost random nature of change in organizations. Even an individual, entering an organization with individual expectations, starts to accept the values of the organization (Peters, 2012).

There is no single typology of change capable to address all the questions pertaining to change. An observation has identified six main typologies of organizational change models- evolutionary, teleological, life cycle, dialectical, social cognition, and cultural (Kezar, 2001). Social cognition models tend to come from a phenomenological or social-constructivist view of organizations, although not all of them do. Functionalists hold that there is a single organizational reality that all people perceive similarity. The reasons for change in organizations are tied to appropriateness and a reaction to cognitive dissonance.

**Lifecycle theories** suggest that life follows a temporal sequence from birth to death, with cultural influences and individual variations. The periods in life cycle are relatively stable that may be qualitatively different. As change goes on within and there is a need for transition from one to another, and therefore, life span is simply the interval between birth and death (Austrian, 2013). Life cycle typology views that changes occur within the life cycles of people, and within the organizations, they create. It is evolved from studies of child development and focus on the stages of life.

**Ecological and evolutionary theories** observe that the forces of technological change, commonly understood as innovation, are in constant conflict with forces of continuity and stability (Lenski, 2005) such as tradition, conservatism, opposition of vested interest to disruptive technologies, and general tendency of human to resist to change. The main assumption underlying evolutionary theories is that change is a response to external

circumstances, situational variables, and the environment faced by each organization (Morgan, 1986).

**Policy diffusion and innovation model** assumes that dissemination of policy impact on innovation and change management. Innovation refers something new that was not in the past. High emphasis on the development of policy networks significantly increases the likelihood of policy entrepreneurs achieving their legislative goals. Those investigating the diffusion of policy innovations for change should pay careful attention to the role that policy networks play in this process (Mintrom & Vergari, 1998)

**Dialectical and conflict theories** of change refer directly to the Marxian perspective in which the pattern, value, ideal, or norm in an organization is always present with its polar opposite. Conflict is seen as an inherent attribute of human interaction. Change processes are considered to be predominantly bargaining, consciousness-raising, persuasion, influence and power, and social movements (Bolman & Deal, 2008). Cultural models blend the assumptions of the social-cognition and dialectical methods. Change occurs naturally as a response to alternations in the human environment; cultures are always changing.

Planned change, organizational development, and adaptive learning approaches come under the **teleological category**. This model assumes that change occurs because leaders, change agents, and others see the necessity of change. It follows mainly two approaches for change- planned approach to change and market approach to change (Carnall, 2007). Carnall highlights the change architectural blocks in five steps: 1) creating a guiding coalition; 2) visioning the future; 3) identifying gaps; 4) mapping; and 5) modeling the dynamics of the vision. Similarly, while coping with the change, an organization completes a cycle- 1) denial for the change; 2) defense of the status quo; 3) discarding the present; 4) adaptation to the change; and 5) internalization of the change.

Successful change requires commitment, coordination, and competency. The change leaders mobilize commitment to change through joint diagnosis of problems; develop a shared vision of how to organize for competitiveness; and foster consensus for the new vision, competence to enact it, and cohesion to move it. Similarly, they spread revitalization to all departments without pushing it from the top; institutionalize revitalization through formal policies, systems, and structures; and monitor and adjust strategies in response to problems in the revitalization process (Beer, Eisenstat, & Spector, 1990) in order to make a change initiative successful.

Organizational change management follows a sequence as establishing a sense of urgency; forming a powerful guiding coalition; creating a vision; communicating the vision; empowering others to act on the vision; planning for and creating short-term wins; consolidating improvements and producing still more change; and institutionalizing new approaches (Kotter, 1995).

There are hard and soft approaches to change management as well. Theory E, known as 'hard' is change based on economic value whereas theory O, known as 'soft' is change based on organizational capability (Beer & Nohria, 2000). The hard E approach to change assumes that shareholder value is the only legitimate measure of corporate success. Change usually boosts return through heavy use of economic incentives, drastic layoffs, downsizing, and restructuring. The soft approach to change assumes that the managers believe that if they were to focus exclusively on the price of their stock, they might harm their organizations. In this approach to change, the goal is to develop corporate culture and human capability, patiently building trust and emotional commitments to the company through teamwork and communication as well as individual and organizational learning.

The immunological perspective of change management suggest a process to break through an employee's immunity to change by diagnosing the competing commitment; identifying the big assumptions; creating a sentence stem that inverts the competing commitment, then "fill in the blank"; testing and considering replacement of the big assumptions (Kegan & Lahey, 2001).

Many change management gurus have focused on soft issues, such as culture, leadership, and motivation. Such elements are important for success, but managing these aspects alone is not sufficient to implement transformation projects. Such factors do not directly influence the outcomes of many change programs. "Two out of every three transformation programs fail. Why? Companies overemphasize the soft side of change: leadership style, corporate culture, employee motivation. Though these elements are critical for success, change projects cannot get off the ground unless companies address harder elements- DICE first (Sirkin, Keenan, & Jackson, 2005). The essential hard elements DICE (Duration: time between milestone reviews-the shorter, the better; Integrity: project teams' skill; Commitment: senior executives' and line managers' dedication to the program; and Effort: the extra work employees must do to adopt new processes- the less, the better) influences the success of change initiatives.

Change resides at the heart of top management. Organizational culture is one of many situational variables that have emerged as pivotal in determining the success of leaders' efforts to implement change initiatives (Latta, 2009). Managing change is tough, but part of the problem is that there is little agreement on what factor most influence transformation initiatives. There were no records of successful completion of organizational transformation in managing civil construction projects, which completed within the planned period with planned quantity and costs. Either any one or more of the situation- the planned period extension, volume of work revision, and demand for price escalation extension- were existing due to the changes taking place between the planned period and their execution (Bhattarai, 2010).

The enduring ideas from the McKensey & Company introduced in the late 1970, presents the 7-S framework consisting shared values, style, skills, systems, structure, staff, and strategy. The framework is a breakthrough in understanding an organization that it shifted the attention of the managers from focusing on structure alone to a holistic approach of coordination among the 7-S of the framework. As organizations grew in size and complexity, the more critical question became one of coordination. The main idea is the influence of the interrelated factors of the framework on an organization's ability to change (McKinsey&Company, 2008). The framework suggest to make change in order to make the factors compatible to each other while making changes in the organizations and businesses.

### **2.8.2. Maintaining status quo**

Why people do not want change? "Any healthy system will resist change, because as a living system its life depends on its ability to establish a steady state at least at the level at which adequate exchange of materials with the environment can take place. It matters little whether the change is initiated inside or comes from outside; it is to be expected that there will be resistance. Resistance, therefore, is not something that is to be deplored as due only to bad behavior, lack of insight, or stupidity, but it is a part of any change process and must be treated as such. Resistance is inevitable; but change can be destructive as well as constructive. Some of the resistance to change is, therefore, a healthy resistance to destructive change, and to those who would move too quickly for healthy development. Difficulty occurs when resistance leads to the conscious or unconscious redefinition of the primary task as the preservation of an institution for its own sake, without regard to its survival in terms of the task it was created to perform" (Rice & Rice, 1963:262-263).

A long-lived company sees oneself that it is a living human entity rather than a machine for producing product (Geus, 2008). The basic question, which it asks, tends to focus upon the need to understand why organization is maintained as an entity. It emphasizes its underlying unity and cohesiveness. It attempts to hold together with regulations instead of shifting apart from the present position, place or status. It is distinctly different from transformational change, and concerns more with social order, consensus or spontaneous agreement of opinion, social integration and cohesion, solidarity, need satisfaction and actuality (Burrell & Morgan, 1979).

One of the long accepted hypotheses of group behavior is that an external threat draws group members together and increases group cohesiveness (Staw, Sandelands, & Dutton, 1981). The rationality behind the cohesiveness is the desire to be safe and continuous in their processes.

People who spend the better part of their work lives are also differing from their organizational status quo in some ways like in values, race, gender, or sexual performance (Meyerson, 2001). Some of them may have differing view over the deliberate strategy and work practices of their companies if the strategy and practice are adversely affecting their better part of life at work and beyond.

### **2.8.3. Rejuvenation**

Many well-established corporate collapses can be viewed as failures to alter response in the face of environmental change. Threats appear to be accompanied by a change in organizational structure that resembles a mechanistic shift. This change is evident in increased centralization, formalization, standardization and routinization. From available evidence at the organizational level, the shift to a more rigid structure seems to be due to decision makers' attempts to enhance control so as to insure that organizational members act in a concerted way in meeting a threat situation (Staw, Sandelands, & Dutton, 1981).

One of the challenges of organizations in this age of competition is adjusting to the nonstop change. The organizations will need to be in a never-ending state of transformation, perpetually creating fundamental, enduring change. They must be able to learn rapidly and continuously, innovate ceaselessly, and take on new strategic imperatives faster and more comfortably (Ulrich, 1998).

Population of organizations is subject to environmental pressures: they evolve through periods of incremental adaptation punctuated by discontinuities. Variations in

organizational strategy and form are more or less suitable for different environmental conditions. Those organizations and managers most able to adapt to a given market or competitive environment will prosper (Tushman & O'reilly III, 2007).

All the changes are not complete change meaning to the change of everything. Change in program, process and parts are regular in organizations in order to make an alignment with the contemporary conditions. Incremental change looks like evolutionary, which is gentle, incremental, decentralized and over time produces a broad and lasting shift with less upheaval (Meyerson, 2001). Incremental change usually entails the realignment of one or two organizational components like a change in the reward system. It will not suffice in the face of changing innovation streams (Tushman & O'reilly III, 2007).

Organizational change, in one part, is learning of individuals associated with it, mostly the influential personalities. The individual trajectory of mental development in adulthood indicates plateaus representing a quite different way of knowing the world. More specifically, mental development does not unfold continuously; there are periods of stability and period of change. When a new plateau is reached, people tend to stay on that level for a considerable period of time although elaborations and extensions within each system can certainly occur (Kegan & Laskow Lahey, 2009).

The wellbeing of a company is under constant attack from the inside and the outside. The attacks come from individuals or group of individuals who do or do not want to be a part of the whole. They are there for their own purpose. It does not matter how honorable or dishonorable the purposes may be. When the corporate immune system cannot cope with the openness of a tolerant company, the resulting stress puts the entire organization in danger (Geus, 2008).

Contingency theory gained popularity during the 1960s and 1970s and disputed the assumption that a single form of organization is best in all circumstances. Instead, they claimed that the most appropriate form is the one that is best suited to the kinds of action the organization undertakes. Therefore, management of gradual change in the program, product, and part is very common in the lifeline of an organization.

#### **2.8.4. Transformation**

Radical change also referred as transformational change is often visionary and utopian; it is concerned with what is to the extent possible with alternatives rather than with acceptance of the status quo or modifications on the existing. It is distinctly different than the status

quo and concerns more with transformation, structural conflict, modes of domination, contradictions, emancipation, deprivation, and potentiality (Burrell & Morgan, 1979).

Transformational change takes place in the tension of consciousness (Berger & Luckmann, 1967). There are much more expectations from the change consequences. This change represents a fundamental and radical shift that rejects current paradigms or questions underlying assumptions and mind-sets. Transformation is no less decisively destructive of a previously established paradigm (Kuhn, 1970).

A change in the basic patterning or cause-effect relations in an environment requires diversity in input mechanisms and variety in response. For example, when market parameters change or task and learning environments are radically different, the entity cannot adapt by narrowing its input and response repertoire. Only variety in response insures survival under conditions of radical change. However, when adversity results from a radical change in the environment, it may be dysfunctional for an organization to tighten controls and press efficiency (Staw, Sandelands, & Dutton, 1981).

Miller and Friesen's (1984) disclose five common stages of corporate life cycle: birth, growth, maturity, revival, and decline. Organizational growth and increasing environmental complexity would cause each stage to exhibit certain significant differences from all other stages; and organizations tend to move in a linear progression through the five stages, proceeding sequentially from birth to decline. However, they did not produce the evidence justifying that every organization passes through the five stages of the life cycle.

Organizational transformation program requires an aggressive cooperation of many individuals. Without motivation, people will not help, and the effort goes nowhere. When the transformation urgency rate is not pumped up enough, the transformation process cannot succeed, and the long-term future of the organization is put in jeopardy. In every successful transformation effort, the organization or guiding coalition develops a picture of the future that is relatively easy to communicate and appeals to customers, stockholders, and employees (Kotter, 1995).

Transformational change is drastic in nature. It is discontinuous and often forced on the organization or mandated by top management in the wake of major technological innovations, by a scarcity or abundance of critical resources, or by sudden changes in the regulatory, legal, competitive, or political landscape. Under such circumstances, change

may happen quickly and often involves significant pain (Meyerson, 2001). It requires a departure from the notions of benchmarking and best practices with which the organization is familiar (Pascale & Sternin, 2005).

It is nonetheless true that radical changes in an established organization's core features can increase its risk of failure. The inertia that tends to characterize most large organizations can prevent them from adapting to new conditions such as changes in the nature of the workforce, technological improvements, and challenges from new competitors. By the same token, these traits also provide opportunities for entrepreneurs outside the established organizations. When possible, nimble organizations that meet the challenges of a new environment can establish a strong position in the market before the established, dominant entities are able to enter the scene (Britannica, 2011).

## **2.8. RESEARCH GAP**

The perspectives in organization studies and management praxis discussed here above clearly indicate the changing nature of an organization and a business. The change is constantly challenging the organizations and businesses in order to be adoptive to their environment; however, the organizational immunity does not permit for change (Gilley, Godek, & Gilly, 2009; Kegan & Laskow Lahey, 2009) Discontinuation within continuation is the nature of change process where time becomes a matter of consideration- how long the persons, property, goods and services are continuous. Some are comparatively continuous comparatively for a longer period and some are continuous for a shorter period. A planned change is intended change that depends on its own premises- assumptions and forecasts. The contingency plan- as an alternative to the original plan- comes to its effect only after failure of the original plan, but it does not develop adaptability of the organizations and businesses. The organization perspectives and theories do not cover the immunological perspectives of an organization that is influencing the adaptive capability of an organization. Every actors in change management need to develop an adaptability to the ever-changing environment.

There are limitations of the well-established literature in the field as well. The literature like frontiers in group dynamics, known as three step change model (Lewin, 1947); the management of innovation (Burns & Stalker, 1961); leading change (Kotter, 1995) the rhythm of change (Huy & Mintzberg, 2003); and managing change in organizations (Carnall, 2007) do not specify the areas that are remaining static and changing in the organizations and businesses. Similarly, the literature like fighting the corporate immune



system (Birkisnshaw & Ridderstrale, 1999); immunity to change (Kegan & Laskow Lahey, 2009); and the organizational immune system (Gilley, Godek, & Gilley, 2009) are not extending their limitations to cover the components of an organizational immune system, reasons for being immune to change, and likely risks associated to the change attempts.

The role of organizational immune system is pivotal in the age of discontinuity. The authority hierarchy, product, process, technology, structure, and similar others have their own time and life. The phenomena of longer life span and shorter life span have relationships with the change triggers. If there would be no change, what worked best yesterday that would be working best for today and tomorrow as well. Therefore, there is no only one way that works best forever. Change is obvious in the environment of an organization that is why there are change triggers to every organization and business. Organization develops immune system that a change agent must overcome it in order to move the organization from the state of status quo to the state of rejuvenation or transformation.

There is a gap between the existing literature in the field and the expected solutions to the problems concerning organizational immune system architecture; typology of working with the immune system, industry specific change triggers as well as the instruments that are maintaining balance between the organizational immune system and the change management process. The immune system need not to become a problem, but it need to function as a solution in the change process. It must need to permit intended change and need to avoid an unintended change. Understanding of immunity to change concerning the change triggers is necessary for every organization and business.

The existing literature further indicates that the organizational stakeholders do not accept all the changes at one part and the status quo cannot make all the stakeholders satisfied all the time at the other part, therefore, change is necessary. However, the literature does not tell us which type of change wherein is acceptable to what extent and what type of change wherein is resistible to what extent in Nepalese manufacturing and non-manufacturing industries. The management praxis is also missing the design and development of a well-established immune system in the organization and businesses whereas the executive discourse clearly indicates an urgency of a series of studies concentrating on the organizations immune system and change management practices.

## **Chapter 3**

# **RESEARCH METHODOLOGY**

### **3.1. THE PARADIGM**

The study attempts to explore the adaptive challenges of the organizations and businesses in the perspective of organizational immune system and change management practices. The process begins with the determination of the change triggers in the general and industry environment as well as within the organizations and businesses in the manufacturing and non-manufacturing establishments in Nepal. There is an attempt of assessing the impact of change triggers by finding the organizational settings remaining static and changing in the establishments. The impact assessment of the triggers indicates the real reasons of immunity to change in the manufacturing and non-manufacturing firms.

An examination of the association between industries and between variables became necessary in order to understand the status of immune areas and sectors, levels of change, response to the change occurrence, and the risks associated therein. Similarly, assessment of the effectiveness of the instruments applicable while managing change remained necessary to support the typology of the organizational immune system and change management that works best in order to meet the adoptive challenges of the manufacturing and non-manufacturing firms in Nepal.

The demographic description of the respondents is used to provide an insight into status of the organizations and businesses concerning their financial position, human resources, and businesses thereof. The tables consisting frequency and percentage indicate the existing status of immunity and change in the industries. The chi-square test is used to determine the associations between manufacturing and non-manufacturing firms and Kendall's tau-b has been used to indicate the degree of correlation between the variables concerning the paradigm of the immunity and change.

The organization theories, perspectives, praxis, and executive discourse, concerning the paradigm of immunity and change, have been categorized into 37 central variables with three levels of change occurrence and the three levels of response to the change occurrence of each variable among others. The exploratory factor analysis has been carried out to obtain the components by reducing the dimension of the variables. The components obtained as are used for determining organizational immune system architecture.

The components of an organizational immune system architecture are associated with the levels and categories of change in the industries and response thereof. There is modelling of the associations of the categories/levels existing within variables of each component as extracted from the exploratory factor analysis. Log linear modelling has been used to determine the categorical associations within the variables. It is used to indicate that whether the levels of change and response to the change across the industries were statistically significant or not. Furthermore, the statistically significant associations are further estimated to know about the risks of resistance in the areas of significance, therefore, binary logistic regression is used to obtain the odds ratio, which are useful to predict the risk of resistance to the change in the industries.

The study moves through the exploration, correlation, and conformation stages. The first part of the study carries out exploratory activities by identifying variables, determining the components of organizational immune system architecture (configuration), identifying the areas remaining static and changing in the organizations and businesses. The second part of the study determines the associations and relationships between manufacturing and non-manufacturing firms and between the variables in order to confirm the level of change occurrence, and likely responses to the categorical change levels of status quo, rejuvenation, and transformation. The third part of the study evaluates the probability of the likely acceptance and resistance to the change interventions and finally it presents a typology of organizational immune system and change management.

The data obtained from questionnaire are fitted into IBM's SPSS Statistics 20 for obtaining percentage, mean, standard deviation, correlation coefficient, and odds ratios along with the chi-square test statistics, exploratory factor analysis and log linear modelling. Chi-square test of independence and goodness-of-fit are obtained to determine the association of the variables with the industry type of manufacturing and non-manufacturing firms. Kendall's tau-b has been used to determine the ties of the variables and their statistical significance as well. Exploratory factor analysis is used to reduce the dimension of the variables and the log linear modelling has been done to provide expected frequencies in order to obtain the model of chi-square goodness-of-fit of the sub-categorical associations between the level of change and response to the change. Finally, binary logistic regression has been obtained to provide odds ratio of statistical significance to find the probability of risk of acceptance and resistance so as to understand the role of organizational immune system in the process of change management. The executive discourse and literature have

been used for variable identification and developing insights for intuitive reasoning therein. The results obtained from all of the analysis provide inputs to conclude the study with an ideal of typology of an organizational immune system and change management.

### **3.2. RESEARCH DESIGN**

The research paradigm concerns the organizational immune system and change management under dynamic environment. The paradigm has been expressed in the form of problem statement and research questions. The methodological aspect of the study consists the theories, executive discourse, management praxis, and opinions of the key informants in manufacturing and non-manufacturing industries. The research design comprises a sequence of activities, consisting literature review, discussion with the key informants, questionnaire survey, and data analysis and interpretations. Literature review is completed in order to develop metanarratives on management praxis, perspectives and theories. Discussions with the key informants are carried out for executive discourse on the informant's experience and practices in the organizations. Questionnaire survey and interviews have been completed in order to obtain response to the variables under study.

The metanarratives, executive discourse and questionnaire survey are the major sources of the data. The descriptive statistics, Chi-square statistics, Kendall's tau-b, exploratory factor analysis, log linear modeling, and binary logistic regression are major statistical tools used in this study (*Figure 3-1*).

The metanarratives and executive discourse helped to identify the variables for seeking opinions in order to address the research questions. The questionnaire (*Appendix 4*) remained the main techniques of obtaining data for the purpose of further analysis and interpretation. The information obtained as such entered into the SPSS Statistics (version 20) for further tests and analysis.

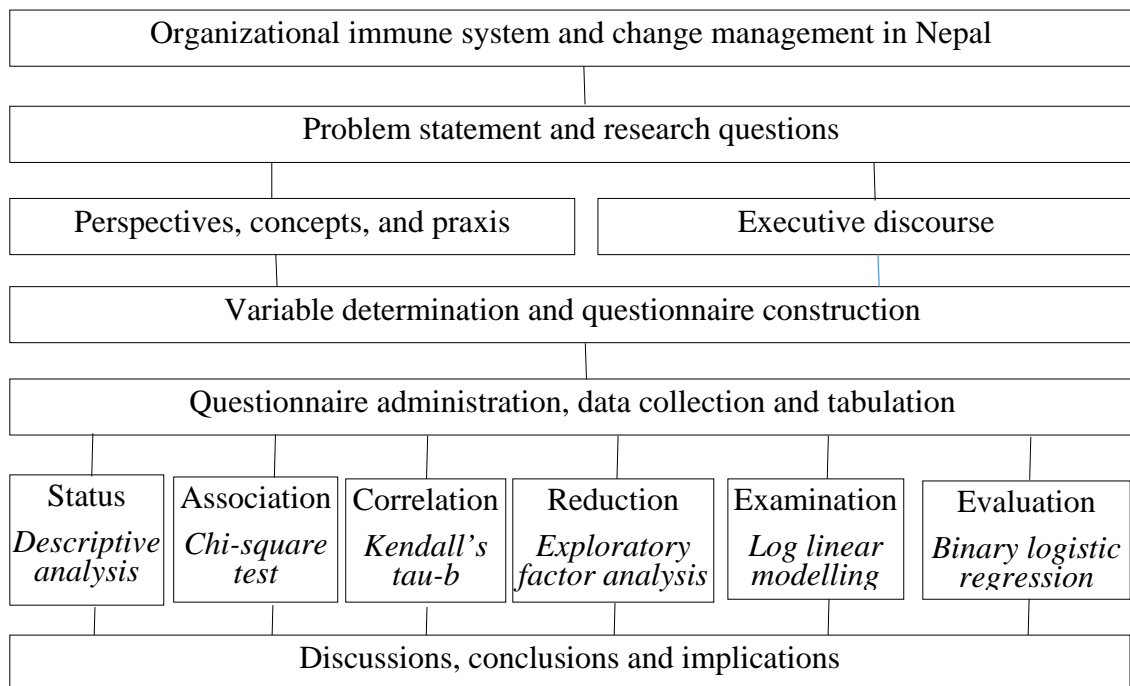
The study adopts a hybrid design framework of archival, ethnographic, and survey for obtaining information. Archival design involves an analysis of metanarratives that are necessary to understand the organization study perspectives, concepts, and theories. Meta data are derived mostly from the archives in libraries and the Internet.

While visiting the manufacturing and non-manufacturing firms, naturalistic observations were made at the work units to observe ongoing behavior of the respondents, and as their response to changes. The observation had no interventions by the researcher; it was simply studying behaviors that occur naturally in natural contexts, unlike the artificial environment

of a controlled laboratory setting. There was no attempt to manipulate or influence. Behaviors like *tete-a-tete* and gossiping, appreciation and criticism, flattering and backbiting about the change and no change were taking place in the organization noticed quite frequently.

Based on the ethnographic study, it prepared a brief demography of the respondents and key informant executives. It examined the group's observable and learned patterns of behavior, customs, and ways of life as well. The narratives of success and failure change initiatives were for variable determination in view of a 'bounded system' over time through a detailed, in-depth conversations and interviews with the senior personnel in the responding organization. The system was bounded by time and place, and it were the stories being studied – a change program, an event, an activity, or individual. It is an in-depth study of the change interventions or no change initiatives rather than a sweeping statistical

*Figure 3-1: Research design*



survey.

The survey questionnaire and interviews have been used to obtain information about the opinions, feeling, judgment, and happening concerning the respondents in relation to the changes thereof. It gained insights about the nature and functions of the phenomenon and collected evidences to describe and explain the change and response to the change relationships as well. It was also useful to verify the results in large scale.

The literature review part of the study has been made to understand the precursors and perspectives of organizations; the concept of organization as organic entity working with its own dynamic environment; and the managerial praxis. The books, book sections, journal articles, articles in periodicals, conference proceedings, reports, dissertations, website, and documents from websites are major sources of information concerning the precursors, perspectives, concepts, and praxis. The study adopts the citation style sheet of APA (sixth edition) for reference and bibliography purpose. The perspectives and theories, concepts, and praxis provide an enriched metanarratives on the study areas. The executive discourse consists summary of the in-depth interviews with selected key personnel. The metanarratives and executive discourse provide foundation for questionnaire construction.

### 3.3. SAMPLE SELECTION

This study has adopted convenient sampling approach in consideration of industry type the most appropriate basis of sample selection because the selection criteria like ownership pattern, geographic location, average annual turnover, market position, listing for stock exchange, value of capital or market capitalization, number of employees, products and services offerings are considered inappropriate for the purpose of this study. The study attempts to explore the change and no change in the areas like technology, supply chain and business network, industrial relations, product design, employee attitude, organization culture like things which were sensibly representative in manufacturing and non-manufacturing firms in Nepal.

The researcher was unsure about the population size as it was really difficult to determine the number of manufacturing and non-manufacturing firms that were active in Nepal. Industry opening, closing, and keeping the firm inactive were common tendency in the country. Strictly following the established practice in social science research and instructions of the study supervisors, an assumption of confidence level 95% with margin of error of  $\pm 5\%$  and .5 expected variance ( $\sigma$ ) was made for the purpose of this study

The confidence level corresponded to a Z-score (1.96), a constant value needed for sample size equation, obtained from Z-score table. The following formula fitted the Z-score, standard of deviation, and confidence interval and obtained the sample size (N).

$$N = \frac{Z^2[\sigma(1 - \sigma)]}{E^2} = \frac{1.96^2[.5(1 - .5)]}{.05^2} = \frac{.9604}{.0025} = 384.16 \text{ Say } 385$$

The sample size of 385 is obtained with the assumption of a 95% confidence level, .5 standard deviation, and a margin of error (confidence interval) of  $\pm 5\%$  as mentioned here above, though the study made the sample size of 415 in order to increase the accuracy. Kaiser-Meyer-Olkin measure of sampling adequacy provides 0.8 score, which is great for statistical analysis.

The sample of this study represents the population of manufacturing and non-manufacturing industries in Nepal. The sample size consists 174 respondents from 163 manufacturing firms and 241 respondents from 223 non-manufacturing firms selected purposively. The organizational change interventions like organization redesigning; change in supply/delivery chain; excessive political/union influence in decision-making; new technology/machine/plant installations; introduction of new products in the market or redesign of existing products; and success and failure stories of the firm were made main criteria in order to be considered for a sample. In addition to the selection criteria of the firm, the level of relevant knowledge, experience, and position/seniority in the firm were other criteria for the selection of the respondent(s) from the probable firm. The probable respondent in probable firm, who was meeting one or more of the criteria, were contacted by telephone, email, and in person in order to fix appointment for interview and questionnaire survey.

#### **3.4. DATA TYPE AND MEASUREMENT**

The researcher has adopted multiple measurement and data techniques in order to complete the entire research process in a logical conclusion. This study adopts two types of measurement and data techniques known as qualitative and quantitative. Both the techniques are generating six different types of data.

Data type one includes the existing numerical data like the turnover, number of employees, number of products or services, profitability, investment, capital and similar other data of the responding organizations. Data type two includes the newly generated numerical data like the frequency tables, percentage, coefficients, parameters, and odds ratios. The data type three consists the existing linguistic data like the metanarratives consisting business philosophy, code of conducts, change initiatives, values and preferences and similar others in the form of literature. Data type four consists the newly generated linguistic data like executive discourse, variables, more often changing areas and no more often changing areas and similar others. The data type five includes the existing visual data like the interior and exteriors, installations of plant and machineries, products design, etiquette, culture,

behavior and similar others. The data type six includes the newly generated visual data specifically the figures. Data type five and six have been more useful in drawing conclusions and implications.

**QUALITATIVE MEASURE** is used to understand, interpret, evaluate, and predict the phenomenon by the application of the researcher's judgment and evaluation. The common sources of qualitative measures are metanarratives, focused group analysis, and in-depth interview. The metanarratives consist two parts- content analysis and discourse analysis.

**Content analysis** has been used to examine the words and phrases within a wide range of texts. Analysis of the perspective, concepts, praxis, company profiles, product catalogues, operational manuals, organizational commitments, plan documents, strategies, agendas in annual general meeting, auditor's reports and similar other literature came under this category of qualitative measures. **Discourse analysis** has been used to give meaning to the contents available in written, vocal, or sign language used or any significant semiotic event expressed and noticed during the in-depth interviews. The contents analysis is used to narrow down the broader areas of organizational immunity and change management whereas discourse analysis is used to specify that when and why the contents were taking place there.

**Focus group study** was conducted primarily to understand the behavior and opinion of the personnel in the responding organizations. The work units, site offices, plant units, branch offices and similar work settings are considered focus group for the purpose of variable identification in this study. At this part of data collection, this study focused on the questions like how the personnel in particular work unit experienced the change and change initiatives, and how did they respond to the changes during their past in the organizations.

**Interviews and questionnaire** includes the personal view, opinion, judgment, and feeling about the matter of concern of the respondents. The questions arranged in multiple-choice form with an option of open response. Interviews and conversations attempted to explore the experience and preferences of the respondents in relation to the change. **Observation** focused on the actions, reactions and interactions of the respondents at their work unit as an effect of change and no change concerning their jobs and organizations. The qualitative measures extremely used while making interpretation of the phenomenon.

**QUANTITATIVE MEASURE** is used to understand, evaluate, and predict the change and likely response to the change by the application of statistical techniques. This part of the study



depends on the dichotomous as well as ordinal data. The data reflected the associations and correlations between the variables as well as probability of acceptance and resistance to the change interventions. Dimension reduction with exploratory factor analysis is completed using the ordinal data. The questionnaire is used to collect the quantitative data.

Questionnaire construction relied on the literature review, interviews with the key informants and the advices of the study supervisors. The questionnaire consists four parts. The first part attempts to obtain demographic information of the respondents. The second part includes 12 multiple-choice questions with one option open for the respondents. The third part of the questionnaire intends to determine the level of change occurrence in Likert type scale at one part and dichotomous response to the same level of change on the other parts. There were 37 questions on one to one basis. The fourth part of the questionnaire extends the dichotomous response- acceptance and resistance to five different categories- ignore, tolerate, resist, accept, and bargain in order to understand the policy and managerial implications.

### **3.5. INTERVIEW WITH KEY INFORMANTS**

In-depth interviews and conversations with the executives working in both manufacturing and non-manufacturing industries concentrate on a number of issues and challenges concerning change interventions and response to the interventions. The primary attempt of this part of the study was to accommodate the experience and perceptions of the selective executives in selective firms in relation to the frequency and levels of changes occurrence and response to the changes in their organizations and businesses.

The conversations began by asking questions like were there change initiatives carried out during the past, has the organization a well-developed mechanism for detecting and responding to the changes in their environment, was there any attempt of acceptance or resistance at the time of changes, and similar others.

The researcher fixed appointment with selective executives in both the industries in advance, requested them with a firm assurance for non-disclosure of their responses, made notes of important points, and prepared discourse using word processors. The average time spent with the key informants and executives was one hour and fifteen minutes approximately. A brief discourse is mentioned in *Appendix 1*.

### **Selective discourse on organizational immune system and change management**

The discourse analysis on the organizational immune system determines very sensible narratives in multiple areas. The narratives are converted into the form of variables as mentioned in *Appendix 2*. The selected narratives of the discourse (literature review and interviews with key informants), an addition to the variables concerning risky areas, risks preventing instruments, immune and vulnerable areas, style and reasons for change, and the role of the environment and the key personnel in the process of change management are available in *Appendix 3*.

### **3.6. DATA COLLECTION**

Literature review, executive discourse, and supervisory advises were major determinants of the variables. The variables are arranged in the form a questionnaire (*Appendix 4*) consisting dichotomous and multiple-choice questions with some Likert's scale type questions as well. There was a separate section for demographic information of the respondents. Each question provided an open space for respondents in order to provide information beyond the options available in the questionnaire.

The questionnaire were administered physically and virtually as well. Physically administered questionnaire were paper printed and virtually administered questionnaire were in Google document. The paper printed questionnaire were distributed personally and the Google documents were sharing virtually. The responses were entered into SPSS Statistics (version 20) data editor and in a research diary for their further analysis and interpretation.

### **3.7. STATISTICAL TOOLS AND TECHNIQUES**

The study adopts descriptive statistics, Chi-square test statistics of independence and goodness-of-fit, Kendall's tau-b correlation coefficient, exploratory factors analysis, log linear modeling, and binary logistic regression analysis.

#### **3.6.1. Descriptive analysis**

Descriptive analysis is carried out by preparing frequency table, obtaining percentage, calculating mean and standard deviation concerning change and unchange in the manufacturing and non-manufacturing firms. With this analysis/statistics, the study describes the risky perception, changing and unchanging areas in the firms, change triggers, instruments of change management, change facilitators and blockers.

### 3.6.2. Chi-square tests

**Chi-square goodness-of-fit**, as a test statistics, is used in order to examine the association between the categories (Dunn, 2001) associated within the categories of change and categories of response to the change. The actual calculation for the test statistic is obtained from the following formula.

$$\chi^2 = \frac{\Sigma(f_0 - f_e)^2}{f_e}$$

In the above formula,  $f_0$  refers the frequency obtained from questionnaire, and  $f_e$  refers the expected frequency under respective null hypothesis  $H_0$ . The association between variable is considered unrelated when the value of the  $\chi^2$  test statistics comes out relatively less than the tabulated value the null hypothesis is ought to be accepted. As the difference between the observed and expected values exceeds the tabulated value the null hypothesis can be rejected i.e. a statistically reliable difference is identified.

Once the value of the test statistic comes, than it is necessary to calculate the degrees of freedom for the  $\chi^2$ , which comes from the following formula:

$$df_x = k - 1$$

In the above formula, k is equal to the number of available categories. In case of two categories, the degrees of freedom for the  $\chi^2$  test statistic is one (2-1). Once the degrees of freedom are identified, the value of test statistic is compared with the table of critical values of  $\chi^2$ . The corresponding critical value is obtained under the confidence level of .05 at the corresponding row of one degrees of freedom.

The response, from the 415 respondents, is expected to be distributed unequally, therefore, it is difficult to draw conclusion that the difference in response is statistically significant. The general rule of thumb for determining the expected frequencies for the chi-square test for goodness-of-fit is simply dividing N by the number of available categories. The alternative hypothesis, then, is:  $H_1$ : there is a statistically reliable difference between the observed and expected frequencies. For an instance, there are 415 respondents and they are rating in five categories- strongly agree, agree, undecided, disagree, and strongly disagree, then the expected frequency becomes 83 (415/5) in equal basis for the all five categories. But, in reality, it is not be the same i.e. the actual response of the respondents is not distributed among the five categories equally, it varies. The chi-square goodness-of-fit determines the statistical significance of the categories of change and categories of response

to the change. Log linear modelling provided expected frequencies for the purpose of this test.

**Chi-square test for independence** is required to determine the relationship between industry type of manufacturing and non-manufacturing firms. This test has been used to reveal that whether the relationship between industry type and the changing and unchanging areas, risky and non-risky areas, triggering and non-triggering forces, and similar others does exist or not. In case of relationship, there is necessary of simultaneous consideration and vice versa. When the chi-square value equals or exceeds a critical value, then the null hypothesis of independence is rejected and the two variables are considered in a dependent relationship with one another. The varying pattern of frequencies shown in the contingency table, then, is considered due to chance rather than any dependent relationship. The following formula for calculating  $\chi^2$  value, in case of row and column, the following formula is used.

$$\chi^2 = \sum_{r=1} \sum_{c=i} \frac{(f_o - f_e)^2}{f_e}$$

In the above formula, r is the number of rows and c is the number of columns. This formula directs the data analysis to determine the difference between the observed  $f_o$  and expected  $f_e$  frequencies in a given cell, square that difference, and then divide it by the expected frequency. The following formula obtains the expected frequency.

$$f_e = \frac{\text{row total} \times \text{column total}}{415}$$

In the above formula, row total and column total is the sum of the responses.

Once obtaining  $\chi^2$  statistic, it is necessary to determine its degree of freedom before declaring it whether it is statistically significant or. The following formula determines the degrees of freedom for the chi-square test for independence.

$$df_x = (r - 1)(c - 1)$$

In the above formula, r is the number of rows (i.e., categories) and c is the number of columns (i.e. response to the categories) representing the respective variables shown in the original contingency table. In the APA style, chi-square statistic is reported as  $\chi^2$ (degrees of freedom, N= 415) = value of chi-square statistics,  $p \Leftrightarrow .05$ .

### 3.6.3. Kendall's tau-b

The study consists a large number tied score of the responses. Kendall's tau ( $\tau$ ) statistic is actually better estimate of the correlation in such type of data set where there is a large number of ties. It is a more accurate gauge of what the correlation in the population would be. The coefficient is representing the effect size of the correlation, but it is not squared as Pearson's correlation coefficient,  $r$ , is squared (Field, 2009).

The following formula is used to obtain the correlation coefficient. A pair of observation is concordant (C) if the subject that ranks higher on variable X also ranks higher on variable Y. Similarly, a pair is said to be discordant (D) if the subject that ranks higher on variable X ranks lower on Y (Lawal, 2003).

$$\tau = \frac{2(C - D)}{\sqrt{(C + D + T_A)(C + D + T_B)}}$$

$$C = n_{ij} \left( \sum_{u=i+1}^I \sum_{v=j+1}^J n_{uv} \right); D = n_{ij} \left( \sum_{u=i+1}^I \sum_{v=1}^{j-1} n_{uv} \right)$$

$$T_A = \frac{1}{2} \sum_i n_{i+} (n_{i+} - 1); T_B = \frac{1}{2} \sum_j n_{+j} (n_{+j} - 1)$$

The Kendall's tau-b coefficient is more effective in determining whether two variables under study with ties correlate or not. The values of tau-b range from -1 (100% negative association, or perfect inversion) to +1 (100% positive association, or perfect agreement). A value of zero indicates the absence of association. SPSS has obtained the coefficients and the significance of relationships between the variables. In this study, the tau-b coefficient less than  $\pm 0.09$  indicate insignificant or weak relationship and the coefficient  $\pm 0.10$  and above indicate significant or strong relationship.

### 3.6.4. Data distribution

The data set shows Poisson distribution for log linear analysis because the change occurrence and response to the change occurrence are random. Poisson distribution is telling that how likely it is to maintain the status quo or change IN or change OF in the organizational settings and how likely to occur resistance or tolerance or acceptance in case of the change thereof. Log linear analysis is not conditional on the total sample size at one part and the event of an observation being in a cell is statistically independent of the cell counts of other cells on the other part (IBM, 2011).

The data consisting the levels of change and response to the change, obtained from manufacturing and non-manufacturing firms, are arranged in the contingency table for further processing. The contingency table shows joint frequency of the variables that is necessary to measure the association between the levels of change and response to the change. The frequency in each cell of the contingency table, called a joint frequency, is denoted by  $n_{ij}$ . It is important to note that each individual observation is counted once, therefore, it appears in (or be classified into) one and only one cell of the table. Each frequency appearing in the margin of the table is termed as a marginal frequency and it represents the row or column total for one category of one variable. A marginal frequency for a row is denoted by  $n_{i+}$  and a marginal frequency for a column is denoted by  $n_{+j}$ . The overall total number of observations is denoted by  $n_{++}$ . The marginal frequencies for the rows (or columns) represent the marginal distribution of the row (or column) variable (Azen & Walker, 2011)

Each of the cell frequencies are converted to a joint proportion (or probability) by dividing the cell frequency by the total number of observations and written as  $\pi_{ij} = \frac{n_{ij}}{n_{++}}$ . This study is based on categorical variables; therefore, it ignores the correlation coefficient and depends on the odds ratio in order to evaluate the associations between variables.

The odds ratio (or likelihood) associated with the events (change and response to the change) are the probability that the event occurs relative to the probability that the event does not occur, and written as:

$$Odds = \frac{\pi}{1 - \pi}$$

The odds ratio refers the ratio of two odds, and the formula for calculating the odds ratio is as follow:

$$Odds\ ratio = \theta = \frac{Odds\ for\ group\ 1}{Odds\ for\ group\ 2}$$

The odds ratio needs to be positive, as it is based on either frequencies. Its distribution is not symmetric around the value of 1. An odds ratio greater than 1.0 indicates an increased likelihood of the event occurring, while an odds ratio less than 1.0 indicates a decreased likelihood of the event occurring (Morgan & Teachman, 1988). The odds ratio is typically transformed by taking its natural logarithm, denoted by  $\ln$ , to obtain what is referred to as the “log odds ratio” as:

$$\log \text{ odds ratio} = \ln(\text{odds ratio}) = \ln(\theta)$$

The log transformation allows to use a distribution that approximates the standard normal distribution to infer whether there is enough evidence to suggest that the odds ratio reflects a statistically significant association or lack of independence. Exponentiating a value that has been transformed using the natural log function has the effect of “canceling out” the log transformation and returning the variable to its original value, such that  $\exp[\ln(x)] = e^{\ln(x)} = x$ , where the exponential value is a constant (Azen & Walker, 2011).

Similarly, the general formula for the confidence interval around the log odds ratio is  $\ln(\theta) \pm z^* SE_{\ln(\theta)}$ , where  $z^*$  is a value from the standard normal table corresponding to the 5% desired confidence level and  $SE_{\ln(\theta)}$  is the standard error of the log odds ratio. In case of 2 x 2 contingency table the error is computing as:

$$SE_{\ln(\theta)} = \sqrt{\frac{1}{n_{11}} + \frac{1}{n_{12}} + \frac{1}{n_{21}} + \frac{1}{n_{22}}}$$

It is in practice that if any of the cell frequencies are zero or very small, a value of 0.5 is added to each  $n_{ij}$  before computing the odds ratio and the standard error. The upper limit of the confidence interval is  $\ln(\theta) + z^* SE_{\ln(\theta)}$ , and the lower limit is  $\ln(\theta) - z^* SE_{\ln(\theta)}$ . Once the upper limit and lower limit of confidence is computed, these two values of the limits are exponentiated to obtain the confidence interval for the odds ratio,  $\theta$ .

### 3.6.5. Log linear models

Log linear models is used in modelling the cell counts of change and response to the change in contingency tables. The primary use of fitting a log linear model is to estimate parameters that describe the relationships between change and response to the change. Fitting a log linear model is appropriate in this study because all of the variables are categorical in nature and the intention of the study is to understand how a count within a particular cell of the contingency table depends on the different levels of the categorical variables that define that particular cell. The dependency is, in turn, determined by the associations that either exist or do not exist among the categorical variables (Azen & Walker, 2011).

In an  $I \times J$  contingency table, that cross-classifies  $n$  subjects, the responses are statistically independent, the joint cell probabilities  $\{\pi_{ij}\}$  are determined by the row and column marginal totals,

$$\pi_{ij} = \pi_{i+} \pi_{+j}, \quad i = 1, \dots, I, \quad j = 1, \dots, J$$

The cell *probabilities*  $\{\pi_{ij}\}$  are parameters for a multinomial distribution. Loglinear model formulas use expected frequencies  $\{\mu_{ij} = n\pi_{ij}\}$  rather than  $\{\pi_{ij}\}$ . Under independence,  $\mu_{ij} = n\pi_{i+}\pi_{+j}$  for all  $i$  and  $j$  (Agresti, 2007).

In the study, the expected cell counts, denoted by  $\mu_{ij}$  for the cell in the  $i^{th}$  row and  $j^{th}$  column, are the outcome values from a log-linear model. The data in inquiry numbers 13 and 14 (more specifically inquiry no 13) cross classifies respondents according to their assessment of changes taking place in their organizations and their response behavior in case of such changes. The joint probability,  $\pi_{ij}$ , of observations falling into a particular cell is determined by the product of the row and column marginal probabilities. In other words,  $\pi_{ij} = \pi_{i+}\pi_{+j}$  for all  $i = 1, 2, \dots, I$  and  $j = 1, 2, \dots, J$  as mentioned in previous paragraph. Therefore, using  $n$  as total sample size, under independence the expected cell counts or frequencies are computed as:

$$\mu_{ij} = n\pi_{ij} = n\pi_{i+}\pi_{+j}.$$

Taking the logarithms of the expected cell counts, used to link the random and *systematic* components of the model, results in the following log linear model under independence. Consideration in application of natural logarithm  $\log_e$  ( $\ln$ ) is necessary while calculating the value. Common logarithm is based on 10, however, the natural logarithm, applied in this study, is based on Euler's value which is about 2.71828.

$$\log(\mu_{ij}) = \log(n\pi_{ij}) = \log(n\pi_{i+}\pi_{+j}) = \log(n) + \log(\pi_{i+}) + \log(\pi_{+j})$$

The above-mentioned expression is log linear expression; and the following is the log linear model.

$$\ln(\mu_{ij}) = \lambda + \lambda_i^M + \lambda_j^N + \lambda_j^P$$

In the above model,  $\lambda$  represents an overall effect or constant. The term ensures that the sum of the expected cell counts is equal to the total sample size,  $n$ .  $\lambda_i^M$  represents the marginal effect of the change, M (levels of change). This term ensure that the expected row marginal totals are equal to the observed row marginal totals.  $\lambda_j^N$  represents the marginal effect of the column variable, N(response to the change).  $\lambda_j^P$  represents the marginal effects of the row variable, industry type of manufacturing and non-manufacturing. It represents the 'effect' of classification in column  $j$  relative to the reference (e.g., last) column. It is assumed that the expected column marginal totals are equals to the observed column marginal totals (Azen & Walker, 2011).



Using dummy coding, the following parameter estimates were obtained by using SPSS Statistics (version 20).

$$\ln(\mu_{ij}) = \lambda + \lambda_i^X + \lambda_j^Y = \lambda + \lambda_1^X + \lambda_2^X + \lambda_3^X + \lambda_1^Y + \lambda_2^Y + \lambda_3^Y + \lambda_1^P + \lambda_2^P$$

There is use of dummy coding, therefore, each of the parameter estimates corresponding to the last row and column of the table i.e.  $\lambda_3^X$ ,  $\lambda_3^Y$ , and  $\lambda_2^P$  are zero. There are two unique parameters associated with M (change occurrence) because it has a total of three categories. The last category of M, change OF, is considered the reference category and so its parameter is set to zero. The same is true in case for M (response behavior) and industry type, with the last category resistance and non-manufacturing as the reference category respectively.

### 3.6.6. Exploratory factor analysis

Exploratory factor analysis is used to reduce the dimension of maximally correlated variables. The common objective of factor analysis is to analyze the interrelationships among the 37 variables and to explain these variables in terms of small number of variables, called factors/components. Identification of maximally correlated variables became necessary because there is no theoretical hypothesis about organizational changes and likely response behavior to the changes.

The principal components analysis approach has been selected to extract the factors from the usual correlation matrix. This approach corresponds to components analysis, which is more popular in social science research as well. The eigenvalue is used to extract the factors/components. Thus,  $\lambda_1$  is the largest variance extracted by the first factor say  $F_1$ . Similarly,  $\lambda_2$  is the second largest variance extracted by the second factor, as  $F_2$ , and so on. The total components extracted from the analysis indicate the value of p. In general, first k factor extract may be expressed as percent of the total variance:

$$\frac{\lambda_1 + \lambda_2 + \dots + \lambda_k}{p} \times 100$$

As other studies, this study is also involved in a question of inquiring how many number of factors to extract in factor analysis. There is no definite answer to this question. However, the guideline based on eigenvalues are adopted. Kaiser criterion and scree test have been considered as mentioned hereunder.

**Kaiser criterion** proposed by Henry Kaiser in 1960 that the number of factors to be retained is same as the number of eigenvalues greater than 1. Similarly, Raymond B Cattell in 1966 proposed **scree test criterion** to plot the eigenvalues against the factor number. Starting with the first factor, the plot generally slopes downward initially and then becomes an approximately horizontal line. The point at which the curve first begins to straighten out is considered to indicate the maximum number of factors to extract.

Factor loading is obtained to find the correlation between variable and factor. The component matrix is exhibiting the factor loading obtained from SPSS. Factor loadings is necessary in interpretation of the factors. Each variable's factor loadings is high on only one factor and low on all other factors. When the loadings are high on two or more factors then the problem of cross loading arises and interpretation of the factors becomes difficult. However, there is no more problem of cross loading in this study of factor loading less than .4 has been suppressed while extracting the factors.

Communality is obtained to determine the proportion of the variable's variance explained by the retained factors. The anti-image correlation matrix has been obtain to find the negatives of the partial correlation coefficients. The measure of sampling adequacy for a variable is also displayed on the diagonal of the anti-image correlation matrix.

This study relied on factor rotation the SPSS default while extracting the factors. SPSS offered a wide variety of methods such as Varimax, Quartimax, Equamax, and so on. However, the most commonly used method is Varimax developed by Henry Felix Kaiser in 1958. This method of factor rotation has been used to minimize the complexity of the components by making the large loadings larger and the small loadings smaller within each factor.

With factor analysis, this study attempted to group the submitted 37 number of variables into 9 number of mutually exclusive groups in such a way that the variables within each group correlate highly and correlate poorly with variables of other groups. The relationship between the submitted 37 number of variables and the newly created 9 number of factors studied in a 37 x 9 matrix, where  $(i, j)^{\text{th}}$  element called factor loading of the  $i^{\text{th}}$  variable on the  $j^{\text{th}}$  factor which measured the correlation coefficient between  $i^{\text{th}}$  variable and  $j^{\text{th}}$  factor. The factor loadings were useful in determining the importance of each variable to each factor and eventually they were useful in interpreting and naming each factor. The sum of

squared factor loadings across the row yielded communalities. Communality of a variable is the proportion of total variance of the variables extracted by the nine factors.

The submitted data set has passed a set of minimum standards before qualifying for conducting factor analysis. The three standards are 1) Kaiser-Mayer-Olkin (KMO) measure of sampling adequacy > 0.5; 2) Bartlett’s test of sphericity (p-value < 0.05); and 3) each diagonal element of anti-image correlation matrix > 0.5. SPSS upon request has provided the value of KMO measure, p-value of Bartlett’s test, and anti-image correlation matrix, and this study has passed all the standards very well.

Major SPSS outputs obtained in the study are 1) correlation matrix, 2) KMO and Bartlett’s test, 3) anti-image correlation matrix, 4) communalities, 5) total variance explained, 6) component transformation matrix, 7) rotated component matrix (factor loadings of rotating solutions), and 9) factor contribution scores.

### 3.6.7. Reliability statistics

Reliability test is done to check the reliability of the scale in order to validate a questionnaire. The test score is used to refer the measure of the questionnaire that should consistently reflect the construct being measured. One way to think of this is that, other things being equal, a respondent should get the same score on a questionnaire if s/he completes it at two different points in time. A value of .7 and above is acceptable value for

*Table 3-1: Reliability statistics*

| <b>Case Processing Summary</b> |          |            |     |
|--------------------------------|----------|------------|-----|
|                                |          | N          | %   |
| Cases                          | Valid    | 415        | 100 |
|                                | Excluded | 0          | 0.0 |
|                                | Total    | 415        | 100 |
| <b>Reliability Statistics</b>  |          |            |     |
| Cronbach's Alpha               |          | N of Items |     |
| .809                           |          | 37         |     |

Cronbach’s  $\alpha$ ; values substantially lower indicate an unreliable scale (Field, 2009). The questionnaire adopts Likert’s type scale ranging from 1 to 5 that has the  $\alpha$  value greater than .8 (*Table 3-1*) which is reliable enough for the purpose of statistical analysis.

### 3.6.8. Binary logistic regression

This study consisted categorical variables in both parts- predictor part and outcome part of the data set. Depending on the nature of data, binary logistic regression is used to identify the probability that an observed difference between industry and categorical levels of

change and response to the categorical change is dependable one or the difference might have happened by chance.

The outcomes of logistic regression provides an indication that whether a change, specially intended by the management will likely be acceptable to the concerned parties and they welcome it or the same will likely be unacceptable and they resist it. In logistic regression, instead of predicting the value of a variable (Y = outcome = response to the change) from a predictor variable (X = predictor = level of change), the study predicts the *probability* of Y occurring given the known value of X as seen in the equation hereunder.

$$P(R) = \frac{1}{1 + e^{-(b_0 + b_1X_{1i} + b_2X_{2i} + \dots + b_nX_{ni})}}$$

In which P(Y) is the probability of Y occurring, e is the base of natural logarithms, b<sub>0</sub> is the Y intercept, b<sub>1</sub> is the gradient of the straight line, and X<sub>1</sub>, X<sub>2</sub> and X<sub>3</sub> are the values of the predictor variables- non-manufacturing, rejuvenation (change IN) and transformation (change OF) respectively. The constant term was the estimated coefficient for the intercept.

This study selected the equation in terms of probability of occurrence of acceptance or resistance to the areas of changes. The state of tolerance considered the state of ‘not resistance’ and the frequency associated with tolerance added with the frequency of acceptance in order to run binary logistic regression. The resulting value, therefore, varies between zero and one. A value close to zero means that acceptance or resistance is very unlikely to have occurred, and a value close to one means acceptance or resistance is very likely to have occurred. The values of the parameters are estimated using maximum-likelihood estimation, which selects coefficients that make the observed values most likely to have occurred.

The Wald statistics is used in the study to tell that whether the b coefficient for that predictor is significantly different from zero. If the coefficient is significantly different from zero then there is assumption that the predictor is making a significant contribution to the prediction of the outcome of acceptance or resistance. SPSS provides the Wald statistics, which is the value of the regression coefficient divided by its associated standard error. SPSS actually displays the Wald statistic squared. However, if the regression coefficient b is large, likelihood ratio shall be consider instantly to make prediction.

$$Wald = \frac{b}{SE_b}$$

This study primarily uses the odds ratios,  $Exp(B)$  obtained by running SPSS output to explain the change in odds resulting from a unit change in the predictor. The odds ratio is interpreted in terms of the change in odds of the predictive variable for a unit change in the predictor variable. This study coded zero = acceptance and one = resistance so the study considered the change in state from acceptance to resistance.

Comparison of odds ratio takes place in terms of one, and the ratio less than one becomes protective and more than 1 becomes risky i.e.  $Exp(B)$  less than one indicates that there is no resistance or there is chance of acceptance and  $Exp(B)$  greater than one indicates that there is resistance to the change intervention.

As mentioned earlier, the odds of an event occurring are the probabilities of an event (acceptance or resistance) occurring divided by the probability of that event (acceptance or resistance) not occurring. The odds ratio of resistance is the odds before and after a unit change in the predictor variable. It is a matter to calculate the proportionate change in odds by dividing the odds after a unit change in the predictor by the odds before that change. The value of proportionate change in odds is the same as the value that SPSS reports for  $Exp(B)$ .

$$odds = \frac{P(event)}{P(no\ event)}$$

$$P(event\ Y) = \frac{1}{1 + e^{-[(b_0 + b_1 X_1)]}}$$

$$P(no\ event\ Y) = 1 - P(event\ Y)$$

$$\Delta odds = \frac{odds\ after\ a\ unit\ change\ in\ the\ predictor}{original\ odds}$$

There are two main uses of logistic regression in this study. The first one is that it calculates the probability of resistance over the probability of acceptance; the results of the analysis are in the form of an odds ratio. The second one is that it also provides knowledge of the relationships and strengths among the variables. Interpretation of the regression equation depended on its specified hypothesis that the null hypothesis, which is when all the coefficients in the regression equation take the value zero, and the alternate hypothesis that the model with predictors currently under consideration is accurate and differs significantly from the null of zero.

The study used SPSS default methods 'enter' of conducting binary logistic regression. The predictors were categorical, and the first category was the reference category for running binary logistic regression. The significance at the 0.5 level or lower means the model with the predictors is significantly different from the one with the constant only (all 'b' coefficients being zero or null hypothesis or the model only with reference categories). It measures the improvement in fit that the explanatory variables make compared to the null model. When probability fails to reach the 5% significance level, the study assumes that the predictors- industry type and level of changes have no increased effects (i.e. make no difference) in predicting the acceptance or resistance to the change.

## **Chapter 4**

# **STATUS OF CHANGE AND IMMUNITY: EXAMINATION AND EVALUATION OF ASSOCIATIONS**

### **4.1. EXISTING STATUS OF IMMUNITY AND CHANGE**

This section of the study reflects the areas and sectors of being immune and change in manufacturing and non-manufacturing industries in Nepal. The information derived from the questionnaire is arranged in the form of number and percentage that provide meaning to understand and interpret the immune and changing aspects in the organizations and businesses. The demographic information about the respondents provides a richness of the characteristics of the respondents that well-educated and well-experienced respondents were participating in the study. The data indicates the intensity, importance, and pattern of immunity and change as well as the causes and response thereof. Absolute number in the form of frequency and percentage are the main statistics for understanding, analysis and interpretation.

The metanarratives consisting literature review and executive discourse developed foundations for variables identification and questionnaire construction. The demography of the respondents indicates the pattern of questionnaire administration for data collection and analysis. Chi-square test statistics is used to determine the associations between the manufacturing and non-manufacturing organizations. Kendall's tau-b correlation coefficient is obtained in order to explain the relationship between variables associated to both the industries. Exploratory factor analysis reduced the dimensions of the variables and provided indications for the purpose of identification of the components of the immune system architecture. Log linear modelling has been used to determine the categorical associations within the variables included in the factors component are determined by the exploratory factor analysis. Binary logistic regression provides odds ratios for determining the level of risks of resistance in response to the level of change occurrence across the industries.

#### **4.1.1. Demography of the respondents**

Respondents' demography (*Table 4-1*) indicates that there were very few female employees in the surveyed organizations. Female proportion of the respondent is only about 20 percent when compared with their male counterpart. The data generated by this study indicates that

both the manufacturing and non-manufacturing industries are male dominated in all the ways.

Academic qualification of the respondents and their job matching were quite interesting. More than 90% of the respondents were master and bachelor degree holders. Composition of the respondents indicates that there is compulsion of being attached to any job in any type in the industry for the respondents. Academic qualification of respondents ranging from doctoral level to the higher secondary level could not find commensurate their position in their organizations.

*Table 4-1: Demography of the respondents*

| Particulars                       |   | Quantity               | Percent |
|-----------------------------------|---|------------------------|---------|
| A: Description of the respondents |   |                        |         |
| 1                                 | Total number                                  | 415                    | 100     |
|                                   | <i>Male</i>                                   | 316                    | 76.14   |
|                                   | <i>Female</i>                                 | 81                     | 19.52   |
|                                   | <i>Denial to disclose</i>                     | 18                     | 4.34    |
| 2                                 | Academic qualification                        |                        |         |
|                                   | <i>Doctorate</i>                              | 3                      | 0.72    |
|                                   | <i>Master</i>                                 | 236                    | 56.87   |
|                                   | <i>Bachelor</i>                               | 151                    | 36.38   |
|                                   | <i>Intermediate/+2</i>                        | 25                     | 3.86    |
|                                   | <i>No response</i>                            | 9                      | 2.17    |
| 3                                 | Age (Mean $\pm$ SD) in year                   | 38.91 $\pm$ 9.60       |         |
| 4                                 | Relevant experience (Mean $\pm$ SD) in year   | 12.56 $\pm$ 8.78       |         |
| 5                                 | Position in organization                      |                        |         |
|                                   | <i>Number of managerial personnel</i>         | 373                    | 89.88   |
|                                   | <i>Number of non-managerial personnel</i>     | 42                     | 10.12   |
| 6                                 | Number of parent's employment position        |                        |         |
|                                   | <i>Self-employed father</i>                   | 142                    | 34.22   |
|                                   | <i>Self-employed mother</i>                   | 8                      | 1.93    |
|                                   | <i>Somewhere else employed father</i>         | 109                    | 26.26   |
|                                   | <i>Somewhere else employed mother</i>         | 21                     | 5.06    |
|                                   | <i>Mother disclosed as housewife</i>          | 163                    | 39.28   |
|                                   | <i>Denial to disclose father's employment</i> | 164                    | 39.52   |
|                                   | <i>Denial to disclose mother's employment</i> | 223                    | 53.73   |
| B: Description of organizations   |   |                        |         |
| 7                                 | Number of manufacturing respondents           | 174                    | 41.93   |
| 8                                 | Number of non-manufacturing respondents       | 241                    | 58.07   |
| 9                                 | Number of manufacturing firms                 | 162                    | 42.08   |
| 10                                | Number of non-manufacturing firms             | 223                    | 57.92   |
| 11                                | Number of employees (Mean $\pm$ SD)           | 1405.61 $\pm$ 2371.71  |         |
| 12                                | Annual turnover (Mean $\pm$ SD) in million    | 9467.96 $\pm$ 17983.15 |         |



The study attempts to include well-educated and highly experienced respondents in order to accumulate reliable responses. People with longer period of association and experience would have better judgments and they are witness of the changes taking place in their organizations. The average experience of the respondent was more than 12 years and average age of them was about four decades.

About 90% respondents were people holding managerial positions in their organizations. These people are involving in change management process and they have commitments to the stakeholders as well. Performance of these people depends on their achievements rather than the attendance in the office. These people are assigning tasks or responsibilities on and often and the study found that they were serious to meet the expectations of the assignment. These people were more instrumental in managing change too.

There was transformation of profession in the society because most of the respondents' parents were unemployed, mainly the mothers. One of the assumptions of this study was occupational changes from parents to their children is high in Nepal. It is also assumed that employed parents are developing their children more suitably for the organizational settings because they themselves are familiar with the organizational environment, and they are teaching their child how to behave in an organizational setting.

Responding organizations are classified into two categories- manufacturing and non-manufacturing. The manufacturing firms in Nepal are estimated fewer when compared with the non-manufacturing firms that is why this study consists 174 respondents from manufacturing firms fewer than 241 respondents from non-manufacturing firms.

#### **4.1.2. Risk: as a matter of change and immunity to change**

Risk perception was found one of the major reasons for change and immunity to change in organization. Businesspersons attempted to minimize the adverse impacts and they were looking at the risk triggers, and they attempted to make changes in their business related items and activities. This study has made an assumption that **no changes no risk; no risks no change.**

Inquiry (*Table 4-2*) on risk related items results that competition and substitute products and services were more risky in the days to come followed by the unethical business practices. Primarily unfair competition was more risky because of an unfair practice of importing and exporting as well as poor market monitoring mechanisms. Compliance practices were so poor and consequently there were unethical and illegal business practices

like not meeting the regulatory requirements, adulteration, black-marketing, cartelling, tax avoidance, falsification and misrepresentation. The resource scarcity, technology change and regulatory pressures were moderately risky for the business organizations. More interestingly, commodity price volatility was not risky for the business, as others were considering more risky.

The open-ended questions regarding risk perception solicited a large number of risky items of doing business in Nepal. The items include excessive politicization, government hurdles, tariff barriers, local's opposition, theft of design, HR incompetency (brain drain), poor governance, absence of accountability, negative attitude towards work or mentality of no work but more pay, switching/shifting behavior of channel members, use of pesticides in case of agro business, and unwillingness to change.

*Table 4-2: Risky items as change triggers*

| Risky items                        | Risks perception |          |
|------------------------------------|------------------|----------|
|                                    | Number           | Percent* |
| A2: Competition and substitutes    | 213              | 51       |
| A6: Unethical business practices   | 161              | 39       |
| A5: Resource scarcity              | 133              | 32       |
| A4: Technology change              | 128              | 31       |
| A1: Regulatory/compliance pressure | 126              | 30       |
| A3: Commodity price volatility     | 85               | 20       |

*\*percent total may exceed 100 due to multiple choice*

The inquiry indicates that frequent change in price of the products is assumed not risky because the prices changes were more often increasing only. Increase in price of supplies to the companies was adjusted by increasing the price of the supplies from the company. Eventually, the price increments did not perceive as risks for the organizations and businesses. Competition and substitute products and services are perceived more risky because the market position of the respondents was not immune and strong enough but it was quite vulnerable.

#### **4.1.3. Status of immunity and change**

Inquiry (*Table 4-3*) carried out to identify more often-changing areas and no more often-changing areas found that technology and work processes were more often the areas of change. Information technology driven change was taking place in most of the work processes mainly in documentation and communication. Internal networking, use of computers as well as Internet and email was indicating the changes in work processes. There was mild change in the design of products and services and their supply chain and

business network. The contents of the services were no more changing but there was substantial change in the pattern of its delivery. There was change in the perception of labor unions that the unions and their members were more often working in support of political parties depending on their political affiliation instead of support for their profession.

*Table 4-3: Areas remaining static and changing*

| More often changing areas                     | Changes |          |
|---|---------|----------|
|   | Number  | Percent* |
| B4: Technology and work processes             | 204     | 49       |
| B5: Supply/delivery chain or business network | 106     | 26       |
| B7: Design/pattern of products and services   | 108     | 26       |
| B8: Industrial/labor relations                | 92      | 22       |
| <b>No more often changing areas</b>           |         |          |
| BA: Organization structure and hierarchy      | 208     | 50       |
| BB: Corporate culture and etiquette           | 194     | 47       |
| BC: Personnel attitude and values             | 161     | 39       |
| BF: Pattern of sources and uses of funds      | 80      | 19       |

*\*percent total may exceed 100 due to multiple choice*

Organization structure and hierarchy was more static and considerably mechanical in nature. The tendency of bossism was prevalent in the organizations and hierarchy was more important for the employees in their career. The authority distribution was quite traditional based on hierarchy i.e. lower level personnel had to obtain permission from their supervisor. More noteworthy aspects in hierarchical setting was the tendency of violating the chain of command and the scalar chain. There were blames, in many cases, like immediate supervisors, especially at lower level and middle level were unable to get control over their immediate subordinates. The subordinates were found to be more loyal to their affiliated union/political leaders or directly to the higher-level executives, mainly the chief of the organization but not loyal to their immediate supervisors.

Corporate culture and etiquette was found immune to change. There was reflection of inheritance and legacy while meeting, eating, seating, and treating a customer and clients more often in private firms. Corporate attire was quite effective in most of the organizations. The culture of celebration was flourishing irrespective of the nature of the organization. In a few organizations, personnel manner was found not praiseworthy, and the organizational culture was too conservative and not so encouraging for a researcher too.

In line with blame, personnel attitude towards work did not appear to be adequately positive as such, and preference of the personnel was noticed for leisure and pleasure rather than the performance and productivity. Personnel preference was more focused on worth than

their duties i.e. money-oriented mentality was more often noticed than the responsibility-oriented mentality in most of the cases. There was a discourse that in absence of well-developed capital markets, money markets, and commodity markets, there were no more fundamental changes in the pattern of collection and utilization of funds as well.

#### 4.1.4. Change preventers in organizations and businesses

In search of the preventers to changes in organizations and businesses, one question was asked that whether the no more often changing areas as discussed earlier were immune to change at their own or was there something that prevented the changes or made the areas immune to changes. The respondents considered that the areas at their own were not immune to change but there was significant role of the top management/administration to make the areas and sectors immune to change. In majority of the firms *Table 4-4*, the top management and administration was preventing the changes actively by advocating in favor of the status quo in the organizations and businesses.

*Table 4-4: Organizational change preventers*

| Main actors                       | Change preventers |          |
|-----------------------------------|-------------------|----------|
|                                   | Number            | Percent* |
| C1: Top management/administration | 206               | 50       |
| C4: Organization culture          | 145               | 35       |
| C3: Employees/unions              | 65                | 16       |
| C2: Consultants/experts           | 31                | 7        |

*\*percent total may exceed 100 due to multiple choice*

The data indicates that no area is vulnerable or immune to change in its own; however, the actors are attempting to make changes or to prevent the changes depending on the environment and their judgment.

#### 4.1.5. Change makers in organizations and businesses

The more often changing areas (*Table 4-5*) like technology and work processes as discussed earlier were not vulnerable to change at their own but there was substantial role of the top management and administration for such changes.

*Table 4-5: Organizational change facilitators*

| Main actors                       | Change makers |         |
|-----------------------------------|---------------|---------|
|                                   | Number        | Percent |
| D1: Top management/administration | 174           | 42      |
| D2: Consultant/expert advice      | 66            | 16      |
| D3: Employees/unions              | 58            | 14      |
| D4: Organization culture          | 52            | 13      |

*\*percent total may exceed 100 due to multiple choice*

The study identified that the role of top management and administration including board members and the key decision-makers was instrumental in both the cases- preventing changes and making the changes happened.

#### 4.1.6. General environmental triggers for change

Inquiry (Table 4-6) on general environment carried out to determine the forces triggering for change and no change resulted that technological forces and political forces were triggering for changes followed by economic and natural environmental forces.

The socio-cultural forces were not compelling the organizations most for changes but the technological forces were. It was noticed in many organizations that if there would be no changes in technology, there would be no more changes in the organizations. The result indicated that socio-cultural forces were rooted into the society and remained immune to changes. The competition and substitute products and services were more risky dimensions of the businesses and organizations because there were advancements in the technology and working processes. The competitors were adopting new technology and bringing substitute products in the market. Eventually, the organizations were compelled to make changes accordingly. The study points out the pivotal role of technology while making changes in the organizations.

Table 4-6: General environmental triggers

| General environmental triggers for change          | Influence |          |
|--|-----------|----------|
|  | Number    | Percent* |
| E4: Technological                                  | 219       | 53       |
| E1: Political                                      | 190       | 46       |
| E2: Economical                                     | 151       | 36       |
| E5: Environmental                                  | 129       | 31       |
| <b>General environmental triggers for unchange</b> |           |          |
| EE: Legal forces                                   | 115       | 28       |
| EC: Socio-cultural                                 | 106       | 26       |

\*percent total may exceed 100 due to multiple choice

#### 4.1.7. Industry environmental triggers for change

Inquiry (Table 4-7) on industry environment carried out to determine the forces triggering for change and no change result that competitors were triggering for changes followed by the buyers. Regulator and union or association were triggering for no changes in the industry. The competitive rivalry compelled to bring change in the organization as one part and the regulatory requirements were not facilitating as such in order to bring changes in the organizations on the other part.

Table 4-7: Industrial triggers

| Industrial triggers                      | Influence |          |
|--|-----------|----------|
|  | Number    | Percent* |
| F4: Competitor                           | 269       | 65       |
| F2: Buyer/consumer/client                | 159       | 38       |
| F3: Supplier/banker/donor                | 88        | 21       |
| <b>Industrial triggers for no change</b> |           |          |
| FA: Regulator/government                 | 155       | 37       |
| FF: Union/association                    | 141       | 34       |
| FE: Channel member                       | 85        | 20       |

\*percent total may exceed 100 due to multiple choice

Nepal Rastra Bank (central bank), Beema Samiti (insurance regulator), Department of Inland Revenue, Department of Industry were more influential in the change process initiated by the business organizations at one part and the employers' as well as employees' unions or associations were influential in regulator initiated change process on the other part. For an instance, during the process of VAT implementation, there was opposition from the employers' association and the regulator was in opposition when the business organizations were requesting to reduce taxes on the import of automobiles.

Changes in organizations were corresponding the changes in the general environment and industry environment. It was noticed that the question of change would be irrelevant if there would be no change in the environment. The organizations were looked like a subsystem of the main system of environment being established and operational in a given environment. Therefore, survival of a firm depended on the ability to adjust to its own environment. The study could not found organization that was creating its own environment; instead, all the organizations were attempting to adjust to the changing environment in one way or the other.

#### 4.1.8. Immune and vulnerable areas

The study found that the areas of an organization were not equally immune to change. Inquiry (Table 4-8) on the areas of an organization that was more strong/immune or weak/vulnerable resulted that technology and work process was more strong/immune to change. The organizations under study were facing difficulties while managing change. More interestingly, the more often changing force in the environment was technology, but the technology and work process were so strong in the organization that it was very hard to change or break. For an instance, the organization's information system was computerized but still manual system of filing and paper works was continuous. It was not economical at

one part and employees and clients were not capable to adopt to the changes on the other part. Similarly, the working procedures and document types and processes were too traditional even after computerization. However, some cases in banks, like deposit and withdrawal process were very effective due to queuing system, any branch banking system, and online banking too. Even in the banks, the process of new technology introduction was quite expensive, and it was hard to materialize.

*Table 4-8: Areas being immune and vulnerable*

| <b>More strong/immune areas</b>       | <b>Immunity</b> |                 |
|---------------------------------------|-----------------|-----------------|
|                                       | <b>Number</b>   | <b>Percent*</b> |
| G1: Work process/technology           | 171             | 41              |
| G5: Customers/clients                 | 164             | 40              |
| G3: Supply chain and business network | 126             | 30              |
| <b>More weak/vulnerable areas</b>     |                 |                 |
| GB: Human resources                   | 167             | 40              |
| GF: Intellectual property             | 76              | 19              |
| GD: Suppliers/bankers                 | 65              | 16              |

*\*percent total may exceed 100 due to multiple choice*

The preference and choice of the customers and clients were next strong/immune areas in the organizations. They were on top of the priority of the organizations. They were not changing as expected by the organizations; instead, the organizations changed in order to meet the expectations of the clients and customers. The competition made the customer/client's preference more superior. It has been realized that if there would be no viable alternative to the customers/clients, their preference would have no more meaning because the competition provided alternative and choices for the customers/clients.

As opined by the respondents, the human resources of the organizations were too vulnerable. It was very hard to get control over the employees. The role of unions was more concerned for their politics than the strength of the organizations in many firms. Most of the firms considered their human being as their resources but in reality, they did not consider that they were strong enough because of their employees. In some cases, so-called competent employees were leaving the organizations in search of better jobs in the same industry instead of becoming a part of the strength of the firm. For an instance, almost all Chief Executive Officers in newly established banks and finance companies were employees of other banks and finance companies in the same industry. The firms were locating key personnel at other firms in the same industry. A realization has been made that the tendency of changing organization in the same industry could not bring changes in real sense, instead promoted inbreeding in design and delivery of the services i.e. the ideas were transferring along with the employees to the newly established organizations.

The organizations had no more influences over the suppliers and bankers. The conditions imposed by the suppliers and bakers were acceptable for the organizations. The copyrights, patent and design known as intellectual property was not strong enough to establish legal as well as financial rights of the companies.

The study found that the impact of externalities like the forces in general and industry environment were very likely in functioning of an organization. It was obvious for the firms to protect the business and programs from unwanted changes as well. The laws and acts of the land, insurance policies and so on were considered as means of protecting the firms from unwanted elements.

#### 4.1.9. Shields for organization and business

Inquiry (Table 4-9) on the instrumentality of the means of protecting business from unwanted elements resulted that the laws and rules of the country was preferred more instrumental. There was necessary to safeguard the business by introducing new laws and making amendment on the existing laws of the country. The organizations trusted the laws and rules most and trusted least the advice of consultants and experts as their shields.

Table 4-9: Shields for organization and business

| More instrumental in protecting business/programs from externalities | Instrumentality |          |
|--|-----------------|----------|
|  | Number          | Percent* |
| H1: The laws and rules of the Land                                   | 325             | 78       |
| H2: Police and security agencies                                     | 204             | 49       |
| H4: Insurance policy   | 194             | 47       |
| H3: Union/associations   | 168             | 40       |
| H5: Consultants/experts  | 137             | 33       |

\*percent total may exceed 100 due to multiple choice

Police and security agencies and insurance policy were also instrumental in protecting the business. The first choice was laws and rules followed by the police and security agencies. The insurance policy was compensating financially in case of unwanted changes or threats to the business. Therefore, most significant was the law and order in the country in order to safeguard the business from externalities or threats. Advices and suggestions did not found safeguarding the business as such.

The study pointed out that the stakeholders might resist or accept the change depending on their perception towards the outcomes of the change i.e. if they considered that the change is likely to bring benefits for them they were likely to accept and welcome the change; otherwise, they tended to resist for it.



It has been a realization that the change agent needs to adopt appropriate style while managing changes. Sometimes change may be acceptable but the stakeholders may be unable to adopt to the changes. Contrary to the acceptance, a few stakeholders may not like the change as well, but the change may be beneficial. In either cases, the change agent needs to adopt appropriate change management style.

#### **4.1.10. Change management style and instruments**

Inquiry (*Table 4-10*) carried out to identify the more preferred change management style/instrument resulted that education and communication as a most effective instrument of managing change followed by collaboration and participation. The primary assumption of the respondents behind the choice of educating and communicating the stakeholders was that people only resisted change if they were not convinced that the change was necessary for them.

Sometimes people were found doubtful about the change and its consequences as well. In this circumstance, it was best to collaborate with the parties involved in change and ensure their participation as much as practicable. It was opined that when the change agent increases collaboration and participation, the actors become more confident and feel honored as well. Similarly, when the change agent finds the actors are capable to manage the change, the best strategy will be delegation and direction.

The term 'hidden commitments' as mentioned by Kegan and Lahey were some secrets of the actors in relation to their business or association with the organization. It was very hard for people to go in against such commitments. Ordinarily, the change agent did not see any reason for going in against the change initiatives, but the actors were not accepting the change. In that situation, the strategies as discussed earlier, sometimes did not work best and the change agent needed to exercise the style or strategies like use of power/force and coercion as well as manipulation and cooptation. While using power, the change agent was providing incentives as reward power, and sometimes the agent influenced with some sort of threats as well. The commonly used threats were termination of the contracts, stoppage in promotion, irregularity in supplies, and isolation from the mainstream business.

Manipulation and cooptation were least preferred strategies while managing changes. Under this style, the change agents wanted to misrepresent the actors by creating some illusions in order to gain support in favor of change. They are reported to make false promises to avaricious, greedy, poor, and innocent people in order to win their supports.

Sometimes, they bargained unnecessarily, violated the socio-cultural norms and legal provisions too.

*Table 4-10: Instruments for managing change*

| Change management style and instruments | Effectiveness |          |
|---|---------------|----------|
|   | Number        | Percent* |
| I1: Education and communication         | 352           | 85       |
| I2: Collaboration and participation     | 302           | 73       |
| I3: Delegation and direction            | 265           | 64       |
| I5: Use of power/force and coercion     | 252           | 61       |
| I4: Manipulation and co-optation        | 125           | 30       |

*\*percent total may exceed 100 due to multiple choice*

#### 4.1.11. Organizational reasons for change

Inquiry (*Table 4-11*) on the organizational reasons for making change or no change resulted that unfavorable employee attitude was one of the major organizational reasons appealing for change followed by obsolescence of technology and work process. The employee attitude towards work was unfavorable in most of the organizations where the preference of employee was leisure and pleasure. The study found that employees were seeking more leisure and benefits fetching assignments and locations in most of the firms. The organizations were found failing to adopt differential treatment for employees on the basis of attitude towards the work.

*Table 4-11: Organizational reasons for change*

| Organizational reasons for change                | Appealing influence |          |
|--|---------------------|----------|
|  | Number              | Percent* |
| J3: Unfavourable employee attitude               | 214                 | 52       |
| J4: Obsolescence of technology/work process      | 198                 | 48       |
| J1: Ineffectiveness of authority hierarchy       | 195                 | 47       |
| J2: Unproductiveness of organization culture     | 174                 | 42       |
| J7: Unattractiveness of product/service design   | 116                 | 28       |
| J8: Compelling nature of stakeholders and unions | 93                  | 22       |
| <b>Organizational reasons for no change</b>      |                     |          |
| JF: Adequacy of profitability/productivity       | 100                 | 24       |
| JE: Compatible business network/actors           | 98                  | 24       |

*\*percent total may exceed 100 due to multiple choice*

The productivity and profitability was not appealing for change as such. Complacent attitude towards profitability and productivity worked best because the organizations were quite happy with their performance. Productivity and profitability was the matter of performance and in those organizations where performance was not laudable, complacency was obvious. There were no more problems found with the networks and actors in the process of their business.

The role of organizational setting was found significant while managing changes. It was sometimes permitting and facilitating the changes and sometimes blocking and preventing the changes. As discussed earlier, certain settings and systems were immune to change and some are vulnerable too. The settings, for the purpose of this study, were considering as forces as well. The setting was deeply rooted and had been fixed with its own way of functioning. Therefore, managing change was found both the process of dismantling and the process of assembling.

It was opined that dismantling of the existence referred to the tasks of removing the fixations and assembling of the existing means building up the fixations for future use. The organizational fixations were termed as the established nodes, known as neurons that were working together to form the whole organization. An organization was found a composite whole of various settings or forces assembled as a system.

#### 4.1.12. Change management process influencers

The inquiry (*Table 4-12*) on the forces that were permitting or blocking change resulted that technical and procedural forces were permitting for change followed by cultural and attitudinal forces. The result indicated that the desired change was technically and procedurally possible. The stakeholders' attitude was positive for change i.e. the major stakeholders were in favor of such changes.

*Table 4-12: Organizational triggers for change*

| Organizational forces permitting for change        | Influencing change |          |
|--|--------------------|----------|
|  | Number             | Percent* |
| K4: Technical and procedural forces                | 158                | 38       |
| K3: Cultural and attitudinal forces                | 131                | 32       |
| K6: Economical and financial forces                | 98                 | 24       |
| K7: Legacy and habitual forces                     | 92                 | 22       |
| K5: Operational and relational forces              | 73                 | 18       |
| <b>Organizational forces preventing for change</b> |                    |          |
| KA: Business network and structural forces         | 167                | 40       |
| KB: Compliance and regulatory forces               | 142                | 34       |
| KH: Personnel and labor forces                     | 92                 | 22       |

\*percent total may exceed 100 due to multiple choice

However, the established business network, especially supply chain was not found compatible while managing changes in the organizations. It was noticed difficult to bring

change in one node of the system, because the node was connected with other nodes as well<sup>i</sup>.

There were quite complicated legal procedures and weak law and order enforcement in industries, which have to comply with defined standards, for example in poultry firms, meat processing and dairy firms, or in food industries in general. The provisions regarding quality control and marketing monitoring was not encouraging for major investment for advancement. For an instance, there was no compulsion for scientific slaughtering house in the poultry industry. Labor shortage at one part and influence of the labor unions on the other were blocking for change initiatives that were affecting the benefits and employment of the employees.

#### **4.1.13. Variables immune to change**

Inquiry (*Table 4-13*) on the agreement and disagreement on the changes provided the foundations for drawing inference to the identification of more static and immune areas, dynamic and sensible areas and non-static and vulnerable areas for changes. The following areas were more static and immune in the organizations and businesses under study. There were no more changes over time and if any changes were there that were only to maintain the status quo.

Most of the organizations were found deliberately involving at least to maintain the demand of their major products. They were making adjustments like process and quality improvement in order to remain in the market with their existing products. The intended purpose of the organization was intact in every situations. Organizations with intended purpose of profit were finding the best possible ways of earning profit. Their motive of profit making was not changing in the entire course of their business.

Employees were working at their specified positions with specific job description and authority. Gender discrimination was found existing at work place that females were

---

<sup>i</sup> For instance, while making observations at the Valley Group of Companies involved in poultry industry, it was reported that the change initiatives for the improvement in quality of poultry products was not possible by making changes alone either in poultry firm or in the slaughter house. It was equally important to take initiatives in all the organizations involved in the poultry supply chain mainly in the hatchery, feed, farming, slaughtering, and transportation as well. Quality day old commercial chicks needed quality feed and farming in order to have quality live birds. The quality in transportation of the live birds to and from the slaughterhouse was equally important as importance of slaughtering and processing of the birds and its meats.

enjoying more flexibility in terms of work shift, types of work assignments, and leave facilities compared to their male counterpart.

*Table 4-13: Variables immune to change*

| <b>The areas of change</b>                         | <b>Number</b> | <b>Percentage</b> |
|--|---------------|-------------------|
| Organization's value/priority <sup>9</sup>         | 244           | 59                |
| Intended purpose <sup>35</sup>                     | 244           | 59                |
| Working standards <sup>30</sup>                    | 237           | 57                |
| Work preference/choice for employee <sup>10</sup>  | 225           | 54                |
| Business philosophy definition <sup>28</sup>       | 222           | 53                |
| Code of conduct specification <sup>33</sup>        | 219           | 53                |
| Personnel development policy <sup>32</sup>         | 218           | 53                |
| Adherence to business ethics <sup>29</sup>         | 213           | 51                |
| Business partnership <sup>5</sup>                  | 206           | 50                |
| Supply chain and business network <sup>6</sup>     | 198           | 48                |
| Gender/ethnic discrimination at work <sup>27</sup> | 183           | 44                |
| Change of major products <sup>20</sup>             | 171           | 41                |
| Structural empowerment <sup>4</sup>                | 168           | 40                |
| Events, festivals and rituals <sup>11</sup>        | 158           | 38                |

The organizations under study were found struggling to minimize the adverse impact from the shortages of materials, utilities and supplies to their firms. There were attempts of substantial adjustments like installation of power generators, in order to maintain the regularity in the supplies. The mechanism of threats detection and prevention system was found static and ineffective in most of the organizations, and it was not updating and optimizing to meet its requirement.

The organizations were found comfortable working with the parties of their business and supply chain as well. It was too riskier to change supply chain and business network for a short-term gains, therefore, it was not acceptable for most of the firms. The work systems and practices were too conventional and attitude towards technology change was not positive. It was noticed that the firms were interested to make changes in technology and work systems if they found something compelling for the change. The events, festivals and rituals were found continuous as an integral part of the organizational lives.

The investment decisions and return on investment were considered by the firms not only intramural and extramural activities but also considered intermural activities. The study found that there was increase in investment and return on investment in majority of the responding firms.

The organizations were committed to their intended purpose. Majority of the organizations were clearly defining business philosophy and code of conduct and they were quite adherent to their business ethics as well. However, it was noticed that the firm committed to its business philosophy and code of conduct was not stable in the market. It was opined that there was no more role of business philosophy, code of conduct, and business ethics in bringing success in the firms.

Personnel development policy was quite compelling for some private limited companies in view of spending money in the name of employee development, it was considered as a loss of revenue, and also taken it as a threat of high turnover in some firms. It was reported that work assignment to the personnel was not easy for most of the supervisors because the employees were readily rejecting the assignment or opposing the assignment if the same was somewhat incompatible to the interest and preferences of the employees.

There was an attempt of commitment to the work schedule and timetable, but it was very hard to maintain it. There was a demand for 'work anywhere at any time' in some high-tech companies. However, the management was reluctant to grant such permission to their employees. There was a mixture for meeting the delivery and payment schedule among the suppliers and buyers. Failure of meeting installment schedule was more often noticed in banking and finance companies as well as in insurance companies too.

Investment decisions and return on investment were observed as other sensible issues in the organizations because these two decisions were directly linked with the company image and shareholders' equity. There was a tendency of working with the existing products and services as long as they could sustain in the market. An investment in product development and modification was found a last option for these companies.

#### **4.1.14. Variables vulnerable to change**

The study found that more often changing areas were vulnerable to change as well. The reasons of vulnerability were mainly the environmental triggers- both general environmental and industry environmental. The following *Table 4-14* exhibits the major areas being vulnerable and more often changing.

The role of authority was observed ineffective due to an increase in misuse and abuse of authority for personal benefits among the executives in most of the organizations. The behavior of the bosses to refute employees even in minor mistakes was reported to be making employee's self-respect vulnerable, specifically in some private firms.

*Table 4-14: Variables vulnerable to change*

| <b>Variables vulnerable to change</b>               | <b>Number</b> | <b>Percentage</b> |
|---|---------------|-------------------|
| Investment decisions <sup>24</sup>                  | 258           | 62                |
| Return on investment/profitability <sup>31</sup>    | 241           | 58                |
| Work plans/schedule and timetable <sup>26</sup>     | 232           | 56                |
| Regulatory directives <sup>3</sup>                  | 216           | 52                |
| Buyer's behavior <sup>17</sup>                      | 209           | 50                |
| Technology and processes <sup>12</sup>              | 208           | 50                |
| Inheritance and legacy <sup>37</sup>                | 208           | 50                |
| Government's policies <sup>1</sup>                  | 207           | 50                |
| Capital and equity <sup>23</sup>                    | 206           | 50                |
| Investment in product development <sup>19</sup>     | 197           | 47                |
| Key personnel <sup>13</sup>                         | 183           | 44                |
| Operational/functional freedom at work <sup>8</sup> | 176           | 42                |
| Supplier's behavior <sup>16</sup>                   | 175           | 42                |
| Abuse/misuse of authority <sup>25</sup>             | 174           | 42                |
| Laws and Acts <sup>2</sup>                          | 173           | 42                |
| Organizational polity <sup>7</sup>                  | 166           | 40                |
| Desire for change <sup>36</sup>                     | 161           | 39                |
| Learning from mistake at workplace <sup>15</sup>    | 160           | 39                |

Contrarily, the increasing influence of unions and associations was minimizing the role of managerial power of making decisions in case of unionized firms. The habit of learning from own mistake at works was developing; therefore, the frequency of making mistakes at workplace was observed to be reducing in some firms making the operative environment conducive for work.

#### **4.1.15. Acceptance to change occurrence**

Inquiry on the likely response to the changes resulted with three categories of response namely acceptance, tolerance and resistance to the occurrences of change. The followings *Table 4-15* shows the well-accepted changes in the organizations and businesses.

According to the response, working patterns and processes adopted by the organizations were acceptable to the employees and their stakeholders. The working processes consisting code of conduct specification were developing a comfortable working environment in the organizations. There were no more comments of the employees about the intended purpose of the organizations.

It was observed that change of a key personnel was common in some organizations. The paid up capital as well as the amount of capital employed was also increasing. Consequently, there was increase in return on investment of the companies. The

organizations' priority was changing no more often. The practice of authority delegation and withdrawal was common in the organizations.

*Table 4-15: Acceptance to change occurrence*

| <b>Acceptable areas of change</b>                | <b>Number</b> | <b>Percentage</b> |
|--|---------------|-------------------|
| Code of conduct specification <sup>33</sup>      | 289           | 70                |
| Intended purpose <sup>35</sup>                   | 274           | 66                |
| Key personnel <sup>13</sup>                      | 263           | 63                |
| Capital and equity <sup>23</sup>                 | 262           | 63                |
| Profitability/return on investment <sup>31</sup> | 238           | 57                |
| Structural empowerment <sup>4</sup>              | 229           | 55                |
| Government's policies <sup>1</sup>               | 226           | 54                |
| Organization's value/priority <sup>9</sup>       | 213           | 51                |
| Business partnership <sup>5</sup>                | 201           | 48                |
| Laws and Acts <sup>2</sup>                       | 198           | 48                |
| Events, festivals and rituals <sup>11</sup>      | 189           | 46                |
| Inheritance and legacy <sup>37</sup>             | 188           | 45                |
| Work plans/schedule and timetable <sup>26</sup>  | 184           | 44                |
| Change of major products <sup>20</sup>           | 161           | 39                |
| Regulatory directives <sup>3</sup>               | 159           | 38                |
| Buyer's behavior <sup>17</sup>                   | 155           | 37                |

The government policies, laws and acts, and regulatory directives were changing more often. Sometimes, those changing were adversely affecting the companies too. The well-established mechanism for detecting and responding to threats to the companies was required in the companies, but there was more resistance in its absence.

Change of business parties was in practice and buying behavior of the consumers was changing quite dramatically. The expectation of commission or some sort of personal financial gain while making buying and selling transactions were common in the responding firms. It was noticed that the firms wanted to change their major products or to change the product attributes as an alternative in order to sustain their business.

The behavior of the boss to refute was observed being 'acceptable by compulsion' in certain firms. The acceptance was inferred as a reflection of the culture of accepting the seniors by the juniors at one part and a fear of job loss, in case of resistance, on the other part.

In relation to acceptance to change, the study determined two principal reasons- absence of alternatives and an increase in contextual understanding. Absence of alternatives, one after another, was compelling the stakeholders to adjust to the situation in any way. The respondents were becoming habitual in tolerating all their hardships and satisfying even in



absence of alternatives to them. Contextual understanding was another reason for acceptance that the level of education and awareness of business etiquette, stakeholders were being more adjustable to the complex situations. They were also aware about the necessity of the changes taking place around them at one part and availability of the alternatives limited to the decision-makers on the other.

#### 4.1.16. Tolerance to change occurrence

There were much more organizations not resisting but being adjustable by tolerating the changes *Table 4-16*. The work choice and preference was tolerating by majority of the respondents. Widespread unemployment was also a cause for accommodating every difficulties and dislikes at workplace. There was no alternative than to tolerate with the available of work for employees and the stakeholders of the organization.

*Table 4-16: Tolerance to change occurrence*

| <b>Tolerable areas of change</b>                   | <b>Number</b> | <b>Percentage</b> |
|--|---------------|-------------------|
| Work preference/choice for employees <sup>10</sup> | 139           | 43                |

#### 4.1.17. Resistance to change occurrence

The following *Table 4-17* provides an insight to the areas and sectors of resistance to the change interventions in the organizations. A habit of tolerating did not find opposing when the change agent initiates the change initiatives concerning the areas mentioned hereunder.

*Table 4-17: Resistance to change occurrence*

| <b>Resistible areas of change</b>                  | <b>Number</b> | <b>Percentage</b> |
|--|---------------|-------------------|
| Business philosophy definition <sup>28</sup>       | 261           | 63                |
| Gender/ethnic discrimination at work <sup>27</sup> | 236           | 57                |
| Adherence to business ethics <sup>29</sup>         | 224           | 54                |
| Organizational polity <sup>7</sup>                 | 221           | 53                |
| Learning from mistake at workplace <sup>15</sup>   | 195           | 47                |
| Abuse of authority <sup>25</sup>                   | 193           | 47                |
| Desire for change <sup>36</sup>                    | 184           | 44                |
| Investment decisions <sup>24</sup>                 | 178           | 43                |
| Working standards <sup>30</sup>                    | 177           | 43                |
| Supply chain and business network <sup>6</sup>     | 175           | 42                |
| Supplier's behavior <sup>16</sup>                  | 170           | 41                |
| Investment in product development <sup>19</sup>    | 168           | 40                |
| Personnel development policy <sup>32</sup>         | 168           | 40                |
| Operational freedom at work <sup>8</sup>           | 161           | 39                |
| Technology and processes <sup>12</sup>             | 150           | 36                |

Clearly defined business philosophy was considered necessary in order to guide the entire business processes of the companies in most of the firms. In absence of it, there were difficulties in formulating strategies and determining ethical standards. The discrimination between male and female, especially, softness towards the female employees was not acceptable for the male counterpart in certain firms. There was expectation of equal facilities and behavior, among male respondents, for both male and female employees.

Whether to adhere to the business ethics was also controversial among the respondents. It was opined that when the market would be dominating by the influence of unethical practices, the sustainability of an ethical business practices would be considered questionable.

The influence of unions and associations was putting the managerial freedom for making decisions in a big question mark. The top management used to charge the union-leaders specifically in public enterprises. One of the major changes was that the leaders were attempting to take control over entire organization in one way or another. Contrary to the statement, the union leaders opined that they were alert only for the interest and welfare of the employees and the organizations, and they never tried to get control over the management of the organization.

The major product's demand was not decreasing in most of the companies. Products' demand was one of the major factors of determining whether the management was effective or not. In case of decrease in demand, there was resistance from the stakeholders to the managerial activities of significance. The organization was also resisting to the factors that were responsible for decrease in demand.

The product demand was closely associated with the supplies of materials and parts. As increase in demand of major products as there is increase in supply of materials and supplies in order to produce more to meet the increasing demand of the products. Therefore, organizations were resisting if they started to notice the likely shortages of the materials and supplies.

The behavior of buyers and suppliers was more concentrating on their personal benefits like meeting their monthly targets of sales and commission. It was nearly impossible to close a sales deal in absence of a handsome commission. Their behavior was also dependent on the significance of their products to the respective parties. Somewhere, buyers were pleasing the sellers and somewhere sellers were pleasing the buyers. In both the cases,

undue pleasing activities were resisting in the organizations. There were attempts of changing suppliers and supply and delivery chain as well. The attempt of changing supply chain was unacceptable to the organizations in general conditions.

The practice of work place learning was found quite interesting in the organizations. At one part, learning from own mistakes was desired and encouraged in expectation of improvement. On the other part, when there was mistake while carrying out tasks there was practice of taking actions in against of it. The response received so far in this category was indicating that personnel were learning from their own mistakes at one part and at the same time, there was opposition to such practices on the other parts.

There was increasing use and misuse of authority in the organizations. The role of authority was in a big question mark when thought from the perspective of its effectiveness. Authority was necessary to carry out the tasks, but misuse of it for personal benefit and favor was not good for the organizations. People were more concerned to their authority and rights and power but their responsibility and obligation was not reciprocating their concerns for authority.

The attitude of top management towards technology change was quite negative. Technology change was demanding additional investment, which was very hard to get approval from the top management. The assumptions like ‘why not to continue with the existing technology as long as it does work’ was widely available in the firms. In absence of technology change, there was no change in job design too. Work assignment standards were quite traditional and it was unacceptable to the employees, but the employees had no option than to go with it.

The organizations were increasingly investing in the name of product development and modification. The pace of technology change and investment for technology improvement did not maintain an equal pace. Product development was meaning to change in technology; and technology change was meaning to automation and automation was meaning to manual job loss. As an instance, improvements in services of television transmission through the ‘new media’ – watch anywhere at any time was also being unacceptable for those influential personalities who were not familiar with information technology. The attempts like technology change, product development, job design and work assignment standards, employee development, and ensuring freedom at workplace were some unacceptable areas and sectors to the key decision makers in the organizations.

## **4.2. EXAMINING ASSOCIATIONS**

Examination of associations between the variable across the industries was necessary to understand the patterns of immunity and changes in the organizations and businesses. This study applied Chi-square test statistics and Kendall's tau-b in order to obtain sufficient statistics for examining associations of the variables in manufacturing and non-manufacturing industries. The crosstabs option available with SPSS statistics 20 provided the statistics for examination and interpretation of the associations.

The crosstabulation cells displayed the counts and percentage within industry. The questionnaire construction followed multiple-choice pattern. While entering the data into SPSS data editor, one was assigned for the choice of the respondents and zero was assigned otherwise. Every fourth column of the contingency tables reflected the true choice number exactly as reflected in the existing status of immunity and change section of this report and the third columns of the tables reflected the otherwise choice numbers. The rows represent industry type- manufacturing and non-manufacturing and the columns represent predictive (dependent) variables. The distribution of respondents was not equal in the industries; therefore, the examination and interpretation consider the statistics exhibited in the rows of the tables.

### **4.2.1. Risky areas in manufacturing and non-manufacturing industries**

The study found uneven distribution of risk across the industries. Some areas were found more risky and some were found less risky. Inquiry A carried out to determine respondent's perception of more risky areas resulted that competition and substitute products and services area as a more risky one and the commodity price volatility as less risky areas among others for their business and organizations in the days to come (*Table 4-18*). The Chi-square test statistics and Kendall's tau-b correlation coefficients were obtained to determine the association between the industry and risky areas of organizations and businesses. The industry type was made independent variable and arranged on the side, and the risky areas were made dependent variables and arranged on the top.

The perceptual score associated with the existence of competition and substitutes- inquiry A2, resulted that the area of competition and substitute products and services were risky for both types of industry. Chi-square statistics  $\chi^2(1, N = 415) = 0.433, p = .511 > .05$  indicate that the two industry type of manufacturing and non-manufacturing firms have no statistical association in perception of risk regarding competition and substitute products

and services i.e. risk of competition and substitute products and services was not varying across the industry. The chi-square value of 0.433 is less than the critical value 3.84, which is leading to the acceptance of the null hypothesis that risk associated with competition and substitute products and services is independent and unrelated.

*Table 4-18: Risk from competition and substitute products*

| Industry          |                   | Competition and substitute products and services |            | Total |
|-------------------|-------------------|--|------------|-------|
|                   |                   | No more risky                                    | More risky |       |
| Manufacturing     | Count             | 88   | 86         | 174   |
|                   | % within Industry | 50.6   | 49.4       | 100   |
| Non-manufacturing | Count             | 114  | 127        | 241   |
|                   | % within Industry | 47.3   | 52.7       | 100   |
| Total             | Count             | 202  | 213        | 415   |
|                   | % within Industry | 48.7   | 51.3       | 100   |

Similarly, the score associated with perception of ethics of supply chain members and employees- inquiry A6, indicated that unethical business practices was second risky area than competition and substitute products and services. Chi-square statistics  $\chi^2(1, N= 415) =0.011$ ,  $p =.918 >.05$  showed that the industry type (*Table 4-19*) have no statistical association in perception of risk regarding unethical business practices. The test indicated that unethical business practices were equally influencing both manufacturing and non-manufacturing firms. The unethical business practices by employees and supply chain partners like bribery and corruption were considered risky in the firms.

*Table 4-19: Risk from unethical business practices*

| Industry          |                   | Unethical business practices |            | Total |
|-------------------|-------------------|------------------------------|------------|-------|
|                   |                   | No more risky                | More risky |       |
| Manufacturing     | Count             | 107                          | 67         | 174   |
|                   | % within Industry | 61.5                         | 38.5       | 100   |
| Non-manufacturing | Count             | 147                          | 94         | 241   |
|                   | % within Industry | 61.0                         | 39.0       | 100   |
| Total             | Count             | 254                          | 161        | 415   |
|                   | % within Industry | 61.2                         | 38.8       | 100   |

The test associated to the shortage and scarcity of resources like energy, water, utilities- inquiry A5, exhibited that resource scarcity was the next risky area less than the unethical business practices. Chi-square test statistics  $\chi^2(1, N= 415) =6.804$ ,  $p =.009 <.05$  indicated that the industry type of manufacturing and non-manufacturing firms (*Table 4-20*) have statistical association in perception of risk regarding resource scarcity. The chi-square value of 6.804 is greater than the critical value 3.84, which is leading to the acceptance of alternative hypothesis that there is varying risk of resource scarcity in manufacturing and non-manufacturing firms. The p value of .009 is less than 0.05, which indicates that a

simultaneous consideration is necessary while formulating policies in both the industries. The scarcity of water, energy, materials and supplies was influencing the manufacturing and non-manufacturing firms differently i.e. the manufacturing industry was experiencing adverse impacts more than non-manufacturing industry from the scarcity of the resources.

*Table 4-20: Risk from scarcity of resources*

| Industry          |                   | Resource scarcity |            | Total |
|-------------------|-------------------|-------------------|------------|-------|
|                   |                   | No more risky     | More risky |       |
| Manufacturing     | Count             | 106               | 68         | 174   |
|                   | % within Industry | 60.9              | 39.1       | 100   |
| Non-manufacturing | Count             | 176               | 65         | 241   |
|                   | % within Industry | 73.0              | 27.0       | 100   |
| Total             | Count             | 282               | 133        | 415   |
|                   | % within Industry | 68.0              | 32.0       | 100   |

Similarly, the inquiry A4, concerning changes in the ways/methods/machines of doing/making things, indicated that technology change was the next risky area less than resource scarcity. Chi-square statistics  $\chi^2(1, N= 415) = 6.316$ ,  $p = .012 < .05$  determined that risk of technology change was industry specific. There was statistical association between the industry and technology change concerning risk perception. Non-manufacturing firms were perceiving higher risk of technology change in comparison with the non-manufacturing firms (*Table 4-21*). The test score of 6.316 is greater than the critical value 3.84, which is leading to the acceptance of alternative hypothesis that risk perception regarding technology change is related to the manufacturing and non-manufacturing firms. The p value of .012 is less than 0.05, which provides insights for considering the firms simultaneously while formulating policies concerning technology change in the industry.

*Table 4-21: Risk from technology change*

| Industry          |                   | Technology change |            | Total |
|-------------------|-------------------|-------------------|------------|-------|
|                   |                   | No more risky     | More risky |       |
| Manufacturing     | Count             | 132               | 42         | 174   |
|                   | % within Industry | 75.9              | 24.1       | 100   |
| Non-manufacturing | Count             | 155               | 86         | 241   |
|                   | % within Industry | 64.3              | 35.7       | 100   |
| Total             | Count             | 287               | 128        | 415   |
|                   | % within Industry | 69.2              | 30.8       | 100   |

Regulatory and compliance were also considered risky for the firms. The Inquiry A1 indicated that regulatory or compliance pressure was the next risky area less than technology change. Chi-square statistics  $\chi^2(1, N = 415) = 0.001$ ,  $p = .970 > .05$  reflects that the industry type of manufacturing and non-manufacturing firms (*Table 4-22*) have no statistical association with the perception of risk regarding regulatory and compliance pressure. The test is leading to the acceptance of the null hypothesis that compliance

pressure and industry were independent. Both the industries had equal concern for regulatory and compliance parts of their business.

*Table 4-22: Risk from regulatory pressures*

| Industry          |                   | Regulatory pressure |            | Total |
|-------------------|-------------------|---------------------|------------|-------|
|                   |                   | No more risky       | More risky |       |
| Manufacturing     | Count             | 121                 | 53         | 174   |
|                   | % within Industry | 69.5                | 30.5       | 100   |
| Non-manufacturing | Count             | 168                 | 73         | 241   |
|                   | % within Industry | 69.7                | 30.3       | 100   |
| Total             | Count             | 289                 | 126        | 415   |
|                   | % within Industry | 69.6                | 30.4       | 100   |

The perceptual score concerning the changes in prices of the goods and services- inquiry A3, indicates that commodity price volatility was least risky area among all. Chi-square statistics  $\chi^2(1, N= 415) = 5.325$ ,  $p = .021 < .05$  indicates that the industry type of manufacturing and non-manufacturing firms (*Table 4-23*) have statistical association in perception of risk regarding commodity price volatility. The chi-square value of 5.325 is greater than the critical value 3.84, which is leading to the rejection of the null hypothesis. The risk perception of manufacturing and non-manufacturing firms regarding commodity price volatility was dependent i.e. firm specific. The p value of .021 is less than 0.05, which indicates that a synchronized attention while policy formulation is necessary in both the industries because of a significant statistical association of the industry type and commodity price volatility. The risk of price volatility was less risky in both the industries i.e. fluctuation in price was not a major challenges in the organizations and businesses.

*Table 4-23: Risk from commodity price volatility*

| Industry          |                   | Commodity price volatility |            | Total |
|-------------------|-------------------|----------------------------|------------|-------|
|                   |                   | No more risky              | More risky |       |
| Manufacturing     | Count             | 129                        | 45         | 174   |
|                   | % within Industry | 74.1                       | 25.9       | 100   |
| Non-manufacturing | Count             | 201                        | 40         | 241   |
|                   | % within Industry | 83.4                       | 16.6       | 100   |
| Total             | Count             | 330                        | 85         | 415   |
|                   | % within Industry | 79.5                       | 20.5       | 100   |

Inquiry on risk perception resulted that the firms were statistically dependent in the areas of resource scarcity, technology change, and commodity price volatility. The perception of risk in those areas was industry specific and varying across the firms whereas the risk perception associated with competition and substitutes, unethical business practices, and regulatory practices was similar across the firms.

The chi-square test statistics reflected the association between the areas of risk and industry type. It was necessary to determine the association of the risky areas in order to understand

the nature of their relationships. The categorical data set consisted a large number of ties, therefore, this study has obtained Kendall's tau-b for determining the relationships and significance thereof. The relationship was varying as seen in the *Table 4-24*

*Table 4-24: Relationship between the risk triggers*

| <b>Kendall's tau_b correlation coefficients</b> |                        | A2    | A6            | A5           | A4    | A1    | A3    |
|---|------------------------|-------|---------------|--------------|-------|-------|-------|
| A2: Competition and substitutes                 | Correlation            | 1.000 |               |              |       |       |       |
|   | <i>Sig. (2-tailed)</i> | .     |               |              |       |       |       |
| A6: Unethical business practices                | Correlation            | -.066 | 1.000         |              |       |       |       |
|   | <i>Sig. (2-tailed)</i> | .182  | .             |              |       |       |       |
| A5: Resource scarcity                           | Correlation            | -     | .015          | 1.000        |       |       |       |
|   | <i>Sig. (2-tailed)</i> | .001  | .762          | .            |       |       |       |
| A4: Technology change                           | Correlation            | .045  | -.050         | .000         | 1.000 |       |       |
|   | <i>Sig. (2-tailed)</i> | .361  | .310          | .996         | .     |       |       |
| A1: Regulatory/compliance pressure              | Correlation            | -     | -.009         | -.016        | .002  | 1.000 |       |
|   | <i>Sig. (2-tailed)</i> | .000  | .847          | .752         | .975  | .     |       |
| A3: Commodity price volatility                  | Correlation            | .040  | <b>.160**</b> | <b>.112*</b> | .049  | .041  | 1.000 |
|   | <i>Sig. (2-tailed)</i> | .412  | .001          | .023         | .320  | .399  | .     |

*\*\**. Correlation is significant at the 0.01 level (2-tailed). *\**. Correlation is significant at the 0.05 level (2-tailed).

Competition and availability of substitute product and services did not indicate any relationship with the resources availability as well as regulatory or compliance pressures. Alternatives to the customers were depending on the availability of resources and comfortable regulatory provisions. The negative correlation between unethical business practices like bribery and corruption from employees and business network actors indicated that there was no fair competition in the market. Its positive correlation with technology change and commodity price volatility indicates that the major factors influencing market competition were the commodity price volatility and technology change. In other words, technology and the price were two major determinants of market competition.

The unethical business practices were influencing the commodity prices significantly. An increase in unethical business practice, there was chances of unfair increase in the commodity prices. Similarly, resources scarcity and commodity price were forming significant relationships as increase in resource scarcity as increase in commodity prices as well. However, commodity price volatility was more often influencing by unethical business practices than the resource scarcity.

Competition in the market and availability of substitute products and services were adversely related with resource scarcity and regulatory/compliance pressures. When the government imposes much more regulatory requirements, there was a tendency of uniting



business actors and developing their strength. Similarly, competition was quite sensible in the position of resources sufficiency i.e. sufficient resources mainly technological and financial resources were basic requirement for competition. During the period of resources insufficiency, there were strategy practices of joint ventures and strategic alliances, especially in civil construction sector of the economy. Eventually, the Kendall's tau-b coefficients indicated strong ties between price volatility in the market and unethical business practices and the scarcity of the resources.

#### 4.2.2. Organizational dynamism

The study found changes in organization and business. Some sectors of an organization were more often changing and some are no more often changing. Inquiry B carried out to determine the organizational dynamism in terms of more often changing areas and no more often changing areas identified that technology and work process was more often changing area and pattern of sources and uses funds was no more often changing areas among others in the organizations and business. The Chi-square test statistics was carried out to determine the association between industry type and areas of more often changing and no more often changing sectors at one part and Kendall's tau-b correlation coefficients was obtained to determine the relationships between the areas of more often changing and no more often changing in the organization and business.

An assessment of the response associated to the more often changing areas of the firms-inquiry B4, indicated that the technology and work process was more often-changing area in the organization and business among others. Chi-square statistics  $\chi^2(1, N = 415) = 2.247$ ,  $p = .134 > .05$  indicated that the industry type of manufacturing and non-manufacturing firms (*Table 4-25*) have no statistical association with the more often-changing area of technology and work process.

*Table 4-25: Dynamics of technology and work processes*

| Industry          |                   | Technology and work processes |                | Total |
|-------------------|-------------------|-------------------------------|----------------|-------|
|                   |                   | No often changing             | Often changing |       |
| Manufacturing     | Count             | 96                            | 78             | 174   |
|                   | % within Industry | 55.2                          | 44.8           | 100   |
| Non-manufacturing | Count             | 115                           | 126            | 241   |
|                   | % within Industry | 47.7                          | 52.3           | 100   |
| Total             | Count             | 211                           | 204            | 415   |
|                   | % within Industry | 50.8                          | 49.2           | 100   |

The chi-square value of 2.247 is less than the critical value 3.84, which is leading to the acceptance of the null hypothesis that change in technology and work process and industry types were independent i.e. technology change was seen in both the industries

correspondingly. The process of getting things done were more often changing in non-manufacturing industry.

Similar assessment of the response associated to the more often changing areas-inquiry B5, indicated that supply/delivery chain and business network was next more often-changing area less than the changes in technology and work process in the firms. The result of Chi-square test  $\chi^2(1, N = 415) = 26.477, p = .001 < .05$  indicated that the manufacturing and non-manufacturing firms (*Table 4-26*) have statistical association with the more often-changing area of business network i.e. the change was significantly varying across the industries. The chi-square value of 26.477 is greater than the critical value 3.84, which is leading to the rejection of the null hypothesis that industry type and supply/delivery chain or business network were independent. The p value of .001 is less than 0.05, which indicates that change interventions bring different outcomes in the industries; therefore, both needs to be considered because of a significant statistical association of the industry type and supply chain and business network. The supply chain and business networks are linking both the industries i.e. one industry is for the other industry. Manufacturing industry depends on the non-manufacturing and vice versa. There is strong association between the industries.

*Table 4-26: Dynamics of supply chain and business network*

| Industry          |                   | Supply chain and business network |                | Total |
|-------------------|-------------------|-----------------------------------|----------------|-------|
|                   |                   | No often changing                 | Often changing |       |
| Manufacturing     | Count             | 107                               | 67             | 174   |
|                   | % within Industry | 61.5                              | 38.5           | 100   |
| Non-manufacturing | Count             | 202                               | 39             | 241   |
|                   | % within Industry | 83.8                              | 16.2           | 100   |
| Total             | Count             | 309                               | 106            | 415   |
|                   | % within Industry | 74.5                              | 25.5           | 100   |

Likewise, the assessment on the response associated with the more often changing areas of the firms- inquiry B7, exhibited that the design and pattern of products and services was next more often-changing area less than the supply/delivery chain or business network in the manufacturing and non-manufacturing firms. Chi-square statistics  $\chi^2(1, N = 415) = 3.907, p = .048 = .05$  revealed that the industry (*Table 4-27*) had statistical association with the design/pattern of products and services. The chi-square value of 3.907 is greater than the critical value 3.84, which is leading to the acceptance of alternative hypothesis that change in design/pattern of products and services and industry type were dependent. The p value of .048 is equivalent to 0.05, which indicates that simultaneous consideration is

necessary in both the industries because of a significant statistical association of the industry type and design and pattern of products and services.

*Table 4-27: Products and service design dynamics*

| Industry          |                   | Design of products and services |                | Total |
|-------------------|-------------------|---------------------------------|----------------|-------|
|                   |                   | No often changing               | Often changing |       |
| Manufacturing     | Count             | 120                             | 54             | 174   |
|                   | % within Industry | 69.0                            | 31.0           | 100   |
| Non-manufacturing | Count             | 187                             | 54             | 241   |
|                   | % within Industry | 77.6                            | 22.4           | 100   |
| Total             | Count             | 307                             | 108            | 415   |
|                   | % within Industry | 74.0                            | 26.0           | 100   |

Assessment of the responses concerning the industrial relations in the industries- inquiry B8, indicated that the area of industrial/labor relations was next more often changing area less than the design of products and services in the firms. Chi-square test scores  $\chi^2(1, N = 415) = 2.369$ ,  $p = .124 > .05$  indicated that the industry type of manufacturing and non-manufacturing firms (*Table 4-28*) have no statistical association with the more often-changing area of industrial/labor relations. The chi-square value of 2.247 is less than the critical value 3.84, which is leading to the acceptance of the null hypothesis that changes in industrial and labor relations and industry type were independent.

*Table 4-28: Industrial and labor relation dynamics*

| Industry          |                   | Industrial/labor relations |                | Total |
|-------------------|-------------------|----------------------------|----------------|-------|
|                   |                   | No often changing          | Often changing |       |
| Manufacturing     | Count             | 129                        | 45             | 174   |
|                   | % within Industry | 74.1                       | 25.9           | 100   |
| Non-manufacturing | Count             | 194                        | 47             | 241   |
|                   | % within Industry | 80.5                       | 19.5           | 100   |
| Total             | Count             | 323                        | 92             | 415   |
|                   | % within Industry | 77.8                       | 22.2           | 100   |

The study further made an assessment on the responses concerning the areas of no more often changing areas- inquiry BA, and found that organization structure and hierarchy was not changing in the firms. This area was conforming to the same principles or course of action over time without making any more changes in due course of operations. Chi-square statistics  $\chi^2(1, N = 415) = 28.412$ ,  $p = .001 < .05$  indicated that the industry type of manufacturing and non-manufacturing firms (*Table 4-29*) have statistical association with the unchanging area of organization structure and hierarchy. The chi-square value of 28.412 is greater than the critical value 3.84, which is leading to the acceptance of alternative hypothesis that industry type and organization structure and hierarchy were dependent. The p value of .001 is less than 0.05, which indicates that a synchronized attention necessary in both the industries because of a significant statistical association of the industry type and

organization structure and hierarchy. There is strong association between the organization structure and hierarchy and industry type where manufacturing firms are immune to change in relation to organization structure and hierarchy when compared with the non-manufacturing firms.

*Table 4-29: Dynamics of organization structure and hierarchy*

| <b>Industry * Organization structure and hierarchy Crosstabulation</b> |                   |                         |            |       |
|--|-------------------|-------------------------|------------|-------|
| Industry   |                   | Structure and hierarchy |            | Total |
|  |                   | Changing                | Unchanging |       |
| Manufacturing  | Count             | 60                      | 114        | 174   |
|  | % within Industry | 34.5                    | 65.5       | 100   |
| Non-manufacturing  | Count             | 147                     | 94         | 241   |
|  | % within Industry | 61.0                    | 39.0       | 100   |
| Total  | Count             | 207                     | 208        | 415   |
|  | % within Industry | 49.9                    | 50.1       | 100   |

Similarly, the assessment of responses concerning the areas of no more often changing areas- inquiry BB, indicated that corporate culture and etiquette was next unchanging area in the organization and business. This area was conforming to the same principles or organizational life and continued with the same etiquette over time without making any more changes in due course of operations. Chi-square statistics  $\chi^2(1, N = 415) = 0.071$ ,  $p = .789 > .05$  pointed out that the manufacturing and non-manufacturing firms (*Table 4-30*) have no statistical association with the unchanging area of corporate culture and etiquette. The chi-square value of 0.071 is less than the critical value 3.84, which is leading to the acceptance of the null hypothesis that the industry type and corporate culture and etiquette were independent. The pattern of making decisions, the ways of solving problems, respects and honor at work place, treating the customers, clients and suppliers were varying in the industries, though the variation was not statistically significant.

*Table 4-30: Dynamics of corporate culture and etiquette*

| Industry          |                   | Corporate culture and etiquette |            | Total |
|-------------------|-------------------|---------------------------------|------------|-------|
|                   |                   | Changing                        | Unchanging |       |
| Manufacturing     | Count             | 94                              | 80         | 174   |
|                   | % within Industry | 54.0                            | 46.0       | 100   |
| Non-manufacturing | Count             | 127                             | 114        | 241   |
|                   | % within Industry | 52.7                            | 47.3       | 100   |
| Total             | Count             | 221                             | 194        | 415   |
|                   | % within Industry | 53.3                            | 46.7       | 100   |

In the same line, another assessment on the responses associated with inquiry BC, concerning no more often changing areas, indicated that personnel attitude and value was unchanging area in the organization and business. This area was conforming to the same principles or continued with the same attitude over time without making any more changes

in due course of operations. Chi-square statistics  $\chi^2(1, N = 415) = 1.259, p = .262 > .05$  indicates that the industry (*Table 4-31*) had no statistical association with the unchanging area of personnel attitude and value. The chi-square statistics is leading to the acceptance of the null hypothesis that industry type and personnel attitude and value were independent.

*Table 4-31: Personnel attitude and value dynamics*

| Industry          |                   | Personnel attitude and value |            | Total |
|-------------------|-------------------|------------------------------|------------|-------|
|                   |                   | Changing                     | Unchanging |       |
| Manufacturing     | Count             | 101                          | 73         | 174   |
|                   | % within Industry | 58.0                         | 42.0       | 100   |
| Non-manufacturing | Count             | 153                          | 88         | 241   |
|                   | % within Industry | 63.5                         | 36.5       | 100   |
| Total             | Count             | 254                          | 161        | 415   |
|                   | % within Industry | 61.2                         | 38.8       | 100   |

Likewise assessment on inquiry BF, associated to the areas of no more often changing areas, indicated that the pattern of sources and uses of funds was another unchanging area in the firms. The area was conforming to the same practice at one part and was continuing with the same style of mobilizing financial resources over time on the other part. Chi-square statistics  $\chi^2(1, N = 415) = 0.411, p = .521 > .05$  indicated that the industry type of manufacturing and non-manufacturing firms (*Table 4-32*) have no statistical association with the unchanging area of pattern of sources and uses of funds. The chi-square statistics tell to accept the null hypothesis of industry type and pattern of sources and uses of funds were independent.

*Table 4-32: Dynamics in funds mobilizations*

| Industry          |                   | Pattern of sources and uses of funds |            | Total |
|-------------------|-------------------|--------------------------------------|------------|-------|
|                   |                   | Changing                             | Unchanging |       |
| Manufacturing     | Count             | 143                                  | 31         | 174   |
|                   | % within Industry | 82.2                                 | 17.8       | 100   |
| Non-manufacturing | Count             | 192                                  | 49         | 241   |
|                   | % within Industry | 79.7                                 | 20.3       | 100   |
| Total             | Count             | 335                                  | 80         | 415   |
|                   | % within Industry | 80.7                                 | 19.3       | 100   |

Inquiry on the organizational dynamism identified that the manufacturing and non-manufacturing industries were statistically dependent and related in the areas of supply chain and business network, design and pattern of products and services, and organization structure and hierarchy. Whereas, the industries were statistically unrelated and independent in the areas of technology and work processes, industrial and labor relations, corporate culture and etiquette, personnel values and attitude, and the pattern of sources and uses of funds.

The chi-square test statistics reflected the associations between industry type and the areas of more often changing and unchanging. Further, it was necessary to determine the effect size of relationships of the variables of changing and unchanging areas. Relationships between the variables were necessary to understand the nature of changing and unchanging areas as well. As seen in the previous data, the categorical data set in this inquiry also consisted a large number of ties and Kendall's tau-b was one reliable statistical tool for determining the relationships between the variables *Table 4-33*.

*Table 4-33: Relationship between the organizational dynamics*

|  |                         | B4           | B5            | B7           | B8            | BA            | BB            | BC   | BF   |
|--|-------------------------|--------------|---------------|--------------|---------------|---------------|---------------|------|------|
| B4: Technology and work processes          | Correlation Coefficient | 1.00         |               |              |               |               |               |      |      |
|  | Sig. (2-tailed)         | .            |               |              |               |               |               |      |      |
| B5: Supply chain or business network       | Correlation Coefficient | .010         | 1.00          |              |               |               |               |      |      |
|  | Sig. (2-tailed)         | .841         | .             |              |               |               |               |      |      |
| B7: Design/pattern of products or services | Correlation Coefficient | <b>.120*</b> | <b>.119*</b>  | 1.00         |               |               |               |      |      |
|  | Sig. (2-tailed)         | .015         | .016          | .            |               |               |               |      |      |
| B8: Industrial/labor relations             | Correlation Coefficient | -.003        | -.060         | -.039        | 1.00          |               |               |      |      |
|  | Sig. (2-tailed)         | .958         | .223          | .429         | .             |               |               |      |      |
| BA: Structure and hierarchy                | Correlation Coefficient | <b>.113*</b> | <b>.231**</b> | <b>.097*</b> | <b>.126*</b>  | 1.00          |               |      |      |
|  | Sig. (2-tailed)         | .021         | .000          | .047         | .010          | .             |               |      |      |
| BB: Corporate culture and etiquette        | Correlation Coefficient | <b>.103*</b> | -.006         | <b>.171*</b> | <b>.128**</b> | <b>.143**</b> | 1.00          |      |      |
|  | Sig. (2-tailed)         | .037         | .901          | .001         | .009          | .004          | .             |      |      |
| BC: Personnel attitude and value           | Correlation Coefficient | .038         | <b>.112*</b>  | <b>.204*</b> | <b>.147**</b> | <b>.191**</b> | <b>.324**</b> | 1.00 |      |
|  | Sig. (2-tailed)         | .437         | .023          | .000         | .003          | .000          | .000          | .    |      |
| BF: Pattern of sources and uses of funds   | Correlation Coefficient | .008         | .036          | .044         | .063          | .048          | .069          | .012 | 1.00 |
|  | Sig. (2-tailed)         | .867         | .465          | .368         | .202          | .332          | .163          | .806 | .    |

\*. Correlation is significant at the 0.05 level (2-tailed). \*\*. Correlation is significant at the 0.01 level (2-tailed).

The inverse relationship of industrial/labor relations with the technology and work processes; supply/delivery chain or business network, and design/pattern of products and services indicated that the unionism was not supportive to the changes in the respective areas. Union leaders wanted to influence in one way or the others while making changes in such areas at one part and the management or change agent attempted not to give more emphasis to the union leaders at the other part. This indicated a conflicting condition in organizations and business.

The attitude and value of higher-level executives were more significantly influencing the corporate culture and business etiquette in an organizational setting. The preference and choices of influential executives was instrumental in shaping the practices of setting and meeting the organizational culture. The pattern of greeting people, dealing with fellow workers and customers or clients, setting norms for rituals, events, and festivals were some areas of their influence. At the same point, the corporate culture and etiquette was

influencing the attitude and value of lower-level personnel. The interior and exterior, cleanliness and order of persons and property were quite effectively changing the behavior of newly appointed personnel. The quality of workplace was one of the determinant of employee attitude. Personnel attitude and preferences were significantly affecting the pattern of product and services, industrial/labor relations as well as supply and delivery chain and business network activities too.

The corporate culture and business etiquette were reflected in the pattern of products design and delivery as well. Treatment of customers, dealing with unsatisfied customers, and packaging of the products were representing the culture of the organization. Recognition to the employee rights and valuing the contribution of human resources was varying from one organizational culture to another. Industrial and labor problems were not only associated with monetary and material wellbeing but they were associated with their respect and dignity workplace as well.

It was observed that taller organizations with strong hierarchies were more traditional in meeting business etiquette compared to the flatter organizations with weak hierarchies. The taller organizations were mechanistic in nature and there was a wide gap between personnel working at lower level and higher levels with rigid rules and regulations in those organizations. The flatter organizations were more organic in nature and the personnel were working with flexible rules and regulations with a narrow gap between supervisor and subordinates.

Change in technology and work processes was demanding changes in organization structure and hierarchy correspondently. Design and pattern of products and services was maintaining good relationships with the technology and work processes. However, there was quite significant role of organization culture and etiquette in bringing changes in technology and work processes. There were no more differences between changes in technology and process and the changes in the design and patterns of products and services.

More interestingly, no more change in the pattern of obtaining funds to meet the operational requirement of the organizations had no more significant relationships with other areas of changes in the organization. Similarly, there was no relationship between the ways of spending money and the levels of changes in the organizations. Money was important to meet the operational requirements but not at similar pattern of obtaining it.

### 4.2.3. Preventers of changes in organization

The study identified change preventers in both manufacturing and non-manufacturing firms. In some cases as mentioned in following (Table 4-34), the firm's top-level management and administration, consultants and experts, employees and unions, as well as the organization culture of learning or unlearning were preventing the changes. Inquiry C was carried out to determine the role of the preventers of changes in the organizations. It was necessary to determine that whose role remained significant to prevent changes in the organizations and business. The role of top-management and administration was more instrumental in preventing changes among others. The study carried out Chi-square test to determine the association between industry type and the instrumentality of the change preventers at one part and it obtained Kendall's tau-b correlation coefficients to determine the effective size of the relationships between the preventers of the changes on the other part.

The role of change preventers reflected in the inquiry C1, concerning the apex body of the firms, reported that top-level management or administration was more instrumental in preventing changes in the organization and business. Chi-square statistics  $\chi^2(1, N = 415) = 0.848, p = .357 >.05$  indicated no statistical association between industry and top-level management or administration. The chi-square value of 0.848 is less than the critical value 3.84, therefore, acceptance of the null hypothesis that the manufacturing and non-manufacturing firms were unrelated and independent with their top-level management and administration.

Table 4-34: Role of top management in preventing organizational changes

| Industry          |                   | Top management/administration |                           | Total |
|-------------------|-------------------|-------------------------------|---------------------------|-------|
|                   |                   | Passive in blocking change    | Active in blocking change |       |
| Manufacturing     | Count             | 83                            | 91                        | 174   |
|                   | % within Industry | 47.7                          | 52.3                      | 100   |
| Non-manufacturing | Count             | 126                           | 115                       | 241   |
|                   | % within Industry | 52.3                          | 47.7                      | 100   |
| Total             | Count             | 209                           | 206                       | 415   |
|                   | % within Industry | 50.4                          | 49.6                      | 100   |

Similar assessment associated to the cultural aspect of the firms- inquiry C4, indicated that organization culture of no learning was preventing changes in the firms. Chi-square statistics  $\chi^2(1, N = 415) = 2.010, p = .156 >.05$  indicated that the industry type of manufacturing and non-manufacturing firms (Table 4-35) have no statistical association with the role of organization culture in preventing the changes in different areas. The chi-



square value of 2.010 is less than the critical value 3.84, which is leading to the acceptance of the null hypothesis that the industry type and organization culture were independent.

*Table 4-35: Role of organizational change in preventing change*

| Industry          |                   | Organization culture       |                           | Total |
|-------------------|-------------------|----------------------------|---------------------------|-------|
|                   |                   | Passive in blocking change | Active in blocking change |       |
| Manufacturing     | Count             | 120                        | 54                        | 174   |
|                   | % within Industry | 69.0                       | 31.0                      | 100   |
| Non-manufacturing | Count             | 150                        | 91                        | 241   |
|                   | % within Industry | 62.2                       | 37.8                      | 100   |
| Total             | Count             | 270                        | 145                       | 415   |
|                   | % within Industry | 65.1                       | 34.9                      | 100   |

Similarly, the assessment concerning unionization in the firms- inquiry C3, indicated that employees and their unions were also active in preventing changes in the organization and business. Chi-square statistics  $\chi^2(1, N = 415) = 6.415$ ,  $p = .011 < .05$  indicated that the industries (*Table 4-36*) have statistical association with the role of employees and their unions in preventing the changes in different areas in the organizations. The chi-square value of 6.415 is greater than the critical value 3.84, which is leading to the acceptance of the alternative hypothesis that the industry type of manufacturing and non-manufacturing firms and role of employees or unions were dependent. The p value of .011 is less than confidence level .05, which indicates that a synchronized consideration is necessary in both the industries while formulating policies.

*Table 4-36: Role of employees and unions in preventing change*

| Industry          |                   | Employees/unions           |                           | Total |
|-------------------|-------------------|----------------------------|---------------------------|-------|
|                   |                   | Passive in blocking change | Active in blocking change |       |
| Manufacturing     | Count             | 156                        | 18                        | 174   |
|                   | % within Industry | 89.7                       | 10.3                      | 100   |
| Non-manufacturing | Count             | 194                        | 47                        | 241   |
|                   | % within Industry | 80.5                       | 19.5                      | 100   |
| Total             | Count             | 350                        | 65                        | 415   |
|                   | % within Industry | 84.3                       | 15.7                      | 100   |

Likewise, the assessment concerning advices of the experts and consultants- inquiry C2, indicated that the consultants and experts were less active in preventing changes in the organization and business. Chi-square statistics  $\chi^2(1, N = 415) = 2.294$ ,  $p = .130 > .05$  indicated that the manufacturing and non-manufacturing firms (*Table 4-37*) have no statistical association with the role of consultants or experts in preventing the changes in the organizations. The chi-square value of 2.294 is less than the critical value 3.84, which is leading to the acceptance of the null hypothesis that the industry type of manufacturing and non-manufacturing firms and role of consultants and experts were independent.

Table 4-37: Role of consultants and experts in preventing change

| Industry          |                   | Consultants/experts        |                           | Total |
|-------------------|-------------------|----------------------------|---------------------------|-------|
|                   |                   | Passive in blocking change | Active in blocking change |       |
| Manufacturing     | Count             | 157                        | 17                        | 174   |
|                   | % within Industry | 90.2                       | 9.8                       | 100   |
| Non-manufacturing | Count             | 227                        | 14                        | 241   |
|                   | % within Industry | 94.2                       | 5.8                       | 100   |
| Total             | Count             | 384                        | 31                        | 415   |
|                   | % within Industry | 92.5                       | 7.5                       | 100   |

Inquiry on the preventers of change in the organization indicates that the top-management and administration was primarily resistant to the changes. The role of the consultants and experts is negligible. However, the employees and their unions were influencing differently in the firms.

The chi-square test statistics reflected the association between industry type and the roles of change preventers in organization and business. It was required to determine the nature of relationships between the change preventers as well. The effect size of the relationships were necessary to determine the association of the variables during the change process. Similar to the other inquiries, the categorical data set in this inquiry also consisted a large number of ties; and Kendall's tau-b considered a reliable statistical tool for determining the relationships between the change preventers. The relationships was varying as seen in the Table 4-38.

Table 4-38: Relationship between the change preventers

| <b>Kendall's tau_b correlation coefficient</b> |                         | C1             | C2    | C3    | C4    |
|--|-------------------------|----------------|-------|-------|-------|
| C1: Top management / administration            | Correlation Coefficient | 1.000          |       |       |       |
|  | Sig. (2-tailed)         | .              |       |       |       |
| C2: Consultants/experts                        | Correlation Coefficient | .030           | 1.000 |       |       |
|  | Sig. (2-tailed)         | .548           | .     |       |       |
| C3: Employees/unions                           | Correlation Coefficient | <b>-.096*</b>  | .029  | 1.000 |       |
|  | Sig. (2-tailed)         | .050           | .557  | .     |       |
| C4: Organization culture                       | Correlation Coefficient | <b>-.242**</b> | -.035 | -.010 | 1.000 |
|  | Sig. (2-tailed)         | .000           | .474  | .841  | .     |

\*. Correlation is significant at the 0.05 level (2-tailed). \*\*. Correlation is significant at the 0.01 level (2-tailed).

There was an adverse relationship between the role of organization culture and top-level management and administration in relation to the prevention of change in organizations. The culture is deeply rooted in organizations and it is very hard to make change. Top-level management wanted to make lower level employees more accountable to the outcomes of their activities but they did not assume their responsibility as expected by the top management. The lower level people were reluctant to make decisions at their own because

of a fear of unknown consequences of such decisions, in case of failure. More interestingly, top-level management theoretically, delegated decision-making power to the lower level employees, but ultimately, in practice, directly or indirectly, they inquired and followed in such a way that the lower level employees had not to enjoy the authority at their own. This was more noticed in the areas of personal benefits fetching. The case was more widespread in public enterprises compared to private sector organizations. Approval was always necessary from the top-level management for every decisions of the lower-level managers in both privately and publicly owned firms. More specifically, the concerned ministry or department was seeking active role in every change interventions in case of public enterprises.

There was a tendency among the lower-level officers of forwarding files to the upper-level for further consideration if the decision was involved even small financial or procedural risks or the decisions were not directly benefiting the lower-level officers. However, the scenario was different in case of decisions that generated some personal benefits for them. In brief, the culture of working only for personal benefits and well-being was one of the most significant barriers in making change in organizations. Both the upper-level executives and the lower-levels were viewing the change interventions from the lens of their personal benefits and career advancement.

The adverse relationship between top-management and employees / unions was affecting change initiatives in the organization. The assumption of pluralistic interest in organizational setting was another factor leading to the adverse role relationships. The barriers of organizational culture and union activities were adversely affecting the change interventions in the organizations.

#### **4.2.4. Change makers in the organization**

The study identified change makers in the firms as well. The organization's top-level management and administration, consultants and experts, employees and their unions as well as the organizational culture of learning are facilitating the changes. Inquiry D was carrying out to determine the instrumentality of the makers of the changes in the organizations. It was necessary to determine that whose role remained significant while facilitating changes in the organizations and business. The role of the top-level management and administration was more instrumental in facilitating changes among others. The Chi-square test statistics carried out to determine the association between industry type and the

instrumentality of the role of change facilitators at one part and it obtained Kendall's tau-b correlation coefficients to determine the relationships between the makers of the changes on the other part.

Contrarily, the role of change makers reflected in inquiry D1, concerning the apex body of the firms, indicated that top-level management and administration was more instrumental in facilitating the changes in the organization and business. Chi-square statistics  $\chi^2(1, N = 415) = 0.037$ ,  $p = .847 > .05$  indicated that the industry type of manufacturing and non-manufacturing firms (*Table 4-39*) has no statistical association with the instrumentality of top-level management in facilitating the changes in different areas in the organizations and businesses. The chi-square value of 0.037 is less than the critical value 3.84, which is leading to the acceptance of the null hypothesis that the industry type of manufacturing and non-manufacturing firms and the role of top-level management in making change were independent.

*Table 4-39: Role of top management in making change in organization*

| Industry          |                   | Top management/administration |                           | Total |
|-------------------|-------------------|-------------------------------|---------------------------|-------|
|                   |                   | Passive in bringing change    | Active in bringing change |       |
| Manufacturing     | Count             | 102                           | 72                        | 174   |
|                   | % within Industry | 58.6                          | 41.4                      | 100   |
| Non-manufacturing | Count             | 139                           | 102                       | 241   |
|                   | % within Industry | 57.7                          | 42.3                      | 100   |
| Total             | Count             | 241                           | 174                       | 415   |
|                   | % within Industry | 58.1                          | 41.9                      | 100   |

The instrumentality of change facilitators- the consultants and experts of the firms- reflected in inquiry D2 indicated that the consultant and expert advices were also instrumental among others in facilitating changes in the firms. The chi-square test scores  $\chi^2(1, N = 415) = 2.963$ ,  $p = .085 > .05$  exhibited no statistical association between industry and consultant or expert advices (*Table 4-40*) in facilitating the changes in the organizations and businesses.

*Table 4-40: Role of consultants and experts in making change*

| Industry          |                   | Consultants/experts        |                           | Total |
|-------------------|-------------------|----------------------------|---------------------------|-------|
|                   |                   | Passive in bringing change | Active in bringing change |       |
| Manufacturing     | Count             | 140                        | 34                        | 174   |
|                   | % within Industry | 80.5                       | 19.5                      | 100   |
| Non-manufacturing | Count             | 209                        | 32                        | 241   |
|                   | % within Industry | 86.7                       | 13.3                      | 100   |
| Total             | Count             | 349                        | 66                        | 415   |
|                   | % within Industry | 84.1                       | 15.9                      | 100   |

The chi-square value of 2.963 is less than the critical value 3.84, which is leading to the acceptance of the null hypothesis that the industry type of manufacturing and non-manufacturing firms were independent with the consultant or expert advices.

Similarly, an assessment made on the inquiry D3, concerning unionization in the firms, indicated that employees or unions were more active in facilitating changes in the organization and business. Chi-square statistics  $\chi^2(1, N = 415) = 0.442, p = .506 >.05$  indicated that the industry type of manufacturing and non-manufacturing firms (*Table 4-41*) had no statistical association with the role of employees and their unions in facilitating changes in the firms. Therefore, and the null hypothesis of indicating independence had been accepted.

*Table 4-41: Role of employees and unions in making change*

| Industry          |                   | Employees/unions           |                           | Total |
|-------------------|-------------------|----------------------------|---------------------------|-------|
|                   |                   | Passive in bringing change | Active in bringing change |       |
| Manufacturing     | Count             | 152                        | 22                        | 174   |
|                   | % within Industry | 87.4                       | 12.6                      | 100   |
| Non-manufacturing | Count             | 205                        | 36                        | 241   |
|                   | % within Industry | 85.1                       | 14.9                      | 100   |
| Total             | Count             | 357                        | 58                        | 415   |
|                   | % within Industry | 86.0                       | 14.0                      | 100   |

In the same line, the role of the organizational culture as change maker reflected in inquiry D4 indicated that organization culture of learning was also active in facilitating changes in the organization and business. Chi-square statistics  $\chi^2(1, N = 415) = 2.083, p = .149 >.05$  indicated that the manufacturing and non-manufacturing firms (*Table 4-42*) had no statistical association with the role of organization culture in facilitating changes in different areas of firms. The chi-square value of 2.083 is less than the critical value 3.84, which is leading to the acceptance of the null hypothesis that the industry type and role of the organization culture were independent.

*Table 4-42: Role of organizational culture in making change*

| Industry          |                   | Organization culture       |                           | Total |
|-------------------|-------------------|----------------------------|---------------------------|-------|
|                   |                   | Passive in bringing change | Active in bringing change |       |
| Manufacturing     | Count             | 157                        | 17                        | 174   |
|                   | % within Industry | 90.2                       | 9.8                       | 100   |
| Non-manufacturing | Count             | 206                        | 35                        | 241   |
|                   | % within Industry | 85.5                       | 14.5                      | 100   |
| Total             | Count             | 363                        | 52                        | 415   |
|                   | % within Industry | 87.5                       | 12.5                      | 100   |

The inquiry on the makers of changes indicated that the top management was the principal actors for making change in both the industry.

The chi-square test statistics reflected the associations between industry type and the roles of change makers in organization and business. It was necessary to determine the nature of relationships between the change facilitators too. The effect size of the relationships were necessary to determine the nature of the variables while making changes in organizations and businesses. Similar to the other inquiries, the categorical data set in this inquiry also consisted a large number of ties; and Kendall's tau-b considered a reliable statistical tool for determining the relationships between the change makers. The relationships were varying as in *Table 4-43*

*Table 4-43: Relationship between the change makers in organizations*

| <b>Kendall's tau_b correlation coefficient</b> |                         | D1    | D2    | D3    | D4    |
|--|-------------------------|-------|-------|-------|-------|
| D1: Top management / administration            | Correlation Coefficient | 1.000 |       |       |       |
|  | Sig. (2-tailed)         | .     |       |       |       |
| D2: Consultants/experts                        | Correlation Coefficient | .044  | 1.000 |       |       |
|  | Sig. (2-tailed)         | .366  | .     |       |       |
| D3: Employees/unions                           | Correlation Coefficient | -.075 | -.004 | 1.000 |       |
|  | Sig. (2-tailed)         | .128  | .931  | .     |       |
| D4: Organization culture                       | Correlation Coefficient | -.071 | -.045 | -.027 | 1.000 |
|  | Sig. (2-tailed)         | .149  | .358  | .588  | .     |

There was an adverse relationship between the role of top-level management and administration with the organization culture, employees and their unions while making change in the organizations and business. Top-level management was quite close with the consultants or experts and they were seeking advices from them as well.

As discussed earlier, the lower level people were not ready to make decisions at their own even if they are getting authority to do the same from the top. The attitude of working for personal benefits and well-being was one of the most significant barriers in making change in organizations. Both the upper-level executives and the lower-levels were viewing the change interventions from the lens of personal benefits and career advancement.

A serious concern for change managers was found on two parts- the organization culture and employees and their unions were at one part and the top management and the advices of the experts and consultants were on the other part. It was necessary that all the parties concerned to the change initiatives should come together in order to bring change in real sense. The adverse relationship between top-management and employees / unions was affecting change initiatives in the organization. The assumption of pluralistic interest in organizational setting was another factor leading to the adverse roles relationships. The barriers of organizational culture and union activities were adversely affecting the change interventions in the organizations.

#### 4.2.5. General environmental triggers for change

Environment of the firms were constantly influencing for change and not for change as well. The nature of environment was changing and the organization, as being a part of the environment, was also affecting from the environmental changes, but the effects of environmental changes was found varying from industry to industry. A change might be inviting opportunity for an industry, but the same change might be posing threat for other industry. Inquiry E carried out to determine the forces in general environment that were triggering for change and not for change in the organizations and businesses. The inquiry identified that technology was the major forces triggering for change at one part and socio-cultural forces was triggering for no change on the other part. This study carried out Chi-square test statistics to determine the association between industry type and the general environmental forces triggering for change and not for change and Kendall's tau-b correlation coefficients to determine the relationships between the forces triggering and not triggering for changes in the organization and business.

The inquiry E4 associated to the forces of general environment indicated that technological forces were more often triggering for changes in the organization and business among others. Chi-square statistics  $\chi^2(1, N = 415) = 0.923$ ,  $p = .337 > .05$  indicated that the manufacturing and non-manufacturing firms (*Table 4-44*) had no statistical association with the technological forces triggering more often for change. The chi-square statistics of 0.923 was less than the critical value 3.84, which was leading to the acceptance of the null hypothesis that industry type and technological forces were independent.

*Table 4-44: Role of technological forces for change*

| Industry          |                   | Technological forces      |                       | Total |
|-------------------|-------------------|---------------------------|-----------------------|-------|
|                   |                   | Not triggering for change | Triggering for change |       |
| Manufacturing     | Count             | 87                        | 87                    | 174   |
|                   | % within Industry | 50.0                      | 50.0                  | 100   |
| Non-manufacturing | Count             | 109                       | 132                   | 241   |
|                   | % within Industry | 45.2                      | 54.8                  | 100   |
| Total             | Count             | 196                       | 219                   | 415   |
|                   | % within Industry | 47.2                      | 52.8                  | 100   |

Next assessment on inquiry E1 associated to the political aspect of general environment also indicated that the political forces were next set of forces more often triggering for changes in the organization and business. Chi-square statistics  $\chi^2(1, N = 415) = 0.218$ ,  $p = .641 > .05$  indicated that the firms (*Table 4-45*) had no statistical association with the political forces triggering more often for change. The statistics of 0.218 is less than the

critical value 3.84 that was leading to the acceptance of the null hypothesis that industry type and political forces were not related.

*Table 4-45: Role of political forces for change*

| Industry          |                   | Political forces          |                       | Total |
|-------------------|-------------------|---------------------------|-----------------------|-------|
|                   |                   | Not triggering for change | Triggering for change |       |
| Manufacturing     | Count             | 92                        | 82                    | 174   |
|                   | % within Industry | 52.9                      | 47.1                  | 100   |
| Non-manufacturing | Count             | 133                       | 108                   | 241   |
|                   | % within Industry | 55.2                      | 44.8                  | 100   |
| Total             | Count             | 225                       | 190                   | 415   |
|                   | % within Industry | 54.2                      | 45.8                  | 100   |

Similarly, another assessment on the inquiry E2 associated to the economical aspect of general environment indicated that the economic forces were also triggering for changes in the organization and business. Chi-square statistics  $\chi^2(1, N = 415) = 0.469$ ,  $p = .494 > .05$  indicated that the industry type of manufacturing and non-manufacturing firms (*Table 4-46*) had no statistical association with the economic forces triggering more often for change. The chi-square statistics of 0.469 found less than the critical value 3.84, which was leading to the acceptance of the null hypothesis that industry type and economic forces were independent.

*Table 4-46: Role of economic forces for change*

| Industry          |                   | Economic forces           |                       | Total |
|-------------------|-------------------|---------------------------|-----------------------|-------|
|                   |                   | Not triggering for change | Triggering for change |       |
| Manufacturing     | Count             | 114                       | 60                    | 174   |
|                   | % within Industry | 65.5                      | 34.5                  | 100   |
| Non-manufacturing | Count             | 150                       | 91                    | 241   |
|                   | % within Industry | 62.2                      | 37.8                  | 100   |
| Total             | Count             | 264                       | 151                   | 415   |
|                   | % within Industry | 63.6                      | 36.4                  | 100   |

Next assessment on the inquiry E5 concerned to the natural environmental aspect of general environment indicated that the environmental forces were also triggering for changes in the organization and business. Chi-square statistics  $\chi^2(1, N = 415) = 1.115$ ,  $p = .291 > .05$  indicated that the industry type of manufacturing and non-manufacturing firms (*Table 4-47*) have no statistical association with the environmental forces triggering more often change. The chi-square statistics of 1.115 is less than the critical value 3.84, which is leading to the acceptance of the null hypothesis that industry type and environmental forces were not related.



Table 4-47: Role of natural environmental forces

| Industry          |                   | Natural environmental forces |                       | Total |
|-------------------|-------------------|------------------------------|-----------------------|-------|
|                   |                   | Not triggering for change    | Triggering for change |       |
| Manufacturing     | Count             | 115                          | 59                    | 174   |
|                   | % within Industry | 66.1                         | 33.9                  | 100   |
| Non-manufacturing | Count             | 171                          | 70                    | 241   |
|                   | % within Industry | 71.0                         | 29.0                  | 100   |
| Total             | Count             | 286                          | 129                   | 415   |
|                   | % within Industry | 68.9                         | 31.1                  | 100   |

Forces in the general environment were not only triggering for changes, but they were triggering for unchange as well. The legal forces and socio-economic forces were triggering for unchange in the organization and businesses too.

An assessment on the inquiry EE associated to the legal aspect of the general environment indicated that the legal forces were more often triggering for unchange in the organization and business. Chi-square statistics  $\chi^2(1, N = 415) = 0.878$ ,  $p = .349 > .05$  indicated that the firms (Table 4-48) had no statistical association with the legal forces triggering for more often unchange. The chi-square statistics of 0.878 was found less than the critical value 3.84 that led to accept the null hypothesis that the firms and legal forces were independent.

Table 4-48: Role of legal forces

| Industry          |                   | Legal forces                |                         | Total |
|-------------------|-------------------|-----------------------------|-------------------------|-------|
|                   |                   | Not triggering for unchange | Triggering for unchange |       |
| Manufacturing     | Count             | 130                         | 44                      | 174   |
|                   | % within Industry | 74.7                        | 25.3                    | 100   |
| Non-manufacturing | Count             | 170                         | 71                      | 241   |
|                   | % within Industry | 70.5                        | 29.5                    | 100   |
| Total             | Count             | 300                         | 115                     | 415   |
|                   | % within Industry | 72.3                        | 27.7                    | 100   |

Similarly, the assessment on the inquiry EC associated to the socio-cultural aspect of general environment indicated that the socio-economic forces were more often triggering for unchange in the organization and business. Chi-square statistics  $\chi^2(1, N = 415) = 1.027$ ,  $p = .311 > .05$  indicated that the industry type of manufacturing and non-manufacturing firms (Table 4-49) had no statistical association with the socio-cultural forces triggering more often for unchange. The chi-square statistics of 1.027 is less than the critical value 3.84 that led to accept of the null hypothesis that industry type and socio-cultural forces were independent.

The inquiry carried out to determine the role of general environmental forces in manufacturing and non-manufacturing forces is resulting that the forces were triggering for

both the industries. However, the legal and socio-cultural forces were quite stable and did not compel the organizations and business for change as other forces compelled for it.

*Table 4-49: Role of socio-cultural forces*

| Industry          |                   | Socio-cultural              |                         | Total |
|-------------------|-------------------|-----------------------------|-------------------------|-------|
|                   |                   | Not triggering for unchange | Triggering for unchange |       |
| Manufacturing     | Count             | 134                         | 40                      | 174   |
|                   | % within Industry | 77.0                        | 23.0                    | 100   |
| Non-manufacturing | Count             | 175                         | 66                      | 241   |
|                   | % within Industry | 72.6                        | 27.4                    | 100   |
| Total             | Count             | 309                         | 106                     | 415   |
|                   | % within Industry | 74.5                        | 25.5                    | 100   |

The chi-square statistics indicated that the forces in general environment were independent with industry type. There was no statistically significant impact of the forces in either manufacturing or non-manufacturing firms.

Statistical association determined between industry types and forces triggering for change and unchange showed by the chi-square test statistics was not sufficient to understand the nature of effects of the forces in the general environmental of the organizations and businesses. It was necessary to determine the relationships between the forces more often triggering for change and unchange as well. Such relationships were necessary to understand the effect size of the relationships between the forces. Similar to the other inquiries, the categorical data set in this inquiry also consisted a large number of ties, therefore, Kendall's tau-b is selected as a statistical tool for determining the relationships between the forces. Table 4-50 shows the nature and type of relationships of the forces.

*Table 4-50: Relationship between the general environmental forces*

| <b>Kendall's tau_b correlation coefficient</b> |                         | E4            | E1            | E2            | E5            | EE            | EC    |
|--|-------------------------|---------------|---------------|---------------|---------------|---------------|-------|
| E4: Technological                              | Correlation Coefficient | 1.000         |               |               |               |               |       |
|  | Sig. (2-tailed)         | .             |               |               |               |               |       |
| E1: Political                                  | Correlation Coefficient | <b>-.099*</b> | 1.000         |               |               |               |       |
|  | Sig. (2-tailed)         | .043          | .             |               |               |               |       |
| E2: Economical                                 | Correlation Coefficient | .023          | .029          | 1.000         |               |               |       |
|  | Sig. (2-tailed)         | .636          | .558          | .             |               |               |       |
| E5: Environmental                              | Correlation Coefficient | <b>.104*</b>  | <b>-.126*</b> | .001          | 1.000         |               |       |
|  | Sig. (2-tailed)         | .035          | .010          | .989          | .             |               |       |
| EE: Legal                                      | Correlation Coefficient | <b>.144**</b> | -.007         | .069          | <b>.131**</b> | 1.000         |       |
|  | Sig. (2-tailed)         | .003          | .886          | .161          | .008          | .             |       |
| EC: Socio-cultural                             | Correlation Coefficient | <b>.167**</b> | <b>.127**</b> | <b>.143**</b> | .013          | <b>-.116*</b> | 1.000 |
|  | Sig. (2-tailed)         | .001          | .010          | .004          | .799          | .019          | .     |

\*. Correlation is significant at the 0.05 level (2-tailed). \*\*. Correlation is significant at the 0.01 level (2-tailed). N=415

Adverse relationships between socio-cultural forces and legal forces had statistical significant. It was indicating that an advancement in comfortable socio-cultural

environment decreases the cases of seeking legal actions and remedies. Similarly, the political and environmental issues were quite in against of each other. There was a clear indication that a degradation of natural environment was an aggregation of political issues. The reverse relationship between technological forces and political forces was indicating that improved and optimized processes were minimizing the chances of political involvement and influence.

The technological advancement and natural environmental concern were triggering for changes in the industry. However, the political, legal, and socio-cultural forces were not well supportive for such changes. Legal formalities and taxation issues were not encouraging for those companies that were willing to change in their work processes. Computer software and applications were capable for almost every processes, but the provision of producing and maintaining hard copies of the documents, for instance, was a not-required necessity in the name of maintaining records. The society was comfortable with traditional practices most and quite reluctant to adopt changes that brought by the technological advancement. The society was more confident with hard copies of documents than electronic version of it.

The pace of socio-cultural and legal changes was slower than the pace of technological and environmental changes. Socio-cultural changes and economic changes were closely associated especially with buying and selling of commodities. The items available in retail stores were indicating the economic status of the local community. The retail stores were full of quite expensive items in economically sound locality and vice versa.

The political activities and environmental concerns were inversely correlating and indicating that the political processes were not sufficient for environment concern. Similar scenario was in the case of socio-cultural settings as well because the respondents who considered political triggering for changes considered socio-cultural forces not triggering for changes.

The inverse relationship between legal and socio-cultural forces indicated the practice of imposing new laws, rules and regulations that may not suit into the socio-cultural settings. The practices of avoidance and deviation from regulatory and compliance requirements like tax evasion, product contamination, and black-marketing were found to be strengthening the inverse relationship.

#### 4.2.6. Industry environmental triggers for change

Industry environment was found more specific when compared to the general environment. The environmental forces, either general or industry specific, were constantly influencing for change and not for change. The nature of influence varied depending on the nature of the environmental forces and the industry type. Inquiry F carried out to determine the forces in industry environment that were triggering for change and not for change in the organizations and businesses. The inquiry identified that competitors were the major forces triggering for change and channel members were triggering for unchange. The Chi-square test statistics has been carried out to determine the association between industry type and the industry environmental forces triggering for change and unchange and Kendall's tau-b correlation coefficients obtained to determine the relationships between the forces triggering and not triggering for changes in the organization and business.

The inquiry F4 associated to the competitive forces of the industry environment indicated that the competitors were more often triggering for changes in the organization and business among others. Chi-square statistics  $\chi^2(1, N = 415) = 1.453$ ,  $p = .228 > .05$  indicated that the manufacturing and non-manufacturing firms (*Table 4-51*) had no statistical association with the competitors triggering more often for change. The chi-square score of 1.453 was found less than the critical value 3.84 that led to accept the null hypothesis that the firms and competitors were independent.

*Table 4-51: Role of competitors for change*

| Industry          |                   | Competitor                |                       | Total |
|-------------------|-------------------|---------------------------|-----------------------|-------|
|                   |                   | Not triggering for change | Triggering for change |       |
| Manufacturing     | Count             | 67                        | 107                   | 174   |
|                   | % within Industry | 38.5                      | 61.5                  | 100   |
| Non-manufacturing | Count             | 79                        | 162                   | 241   |
|                   | % within Industry | 32.8                      | 67.2                  | 100   |
| Total             | Count             | 146                       | 269                   | 415   |
|                   | % within Industry | 35.2                      | 64.8                  | 100   |

Next assessment on the inquiry F2 associated to the buyer/consumer/client dimension of industry environment indicated that the consumer and clients were triggering for changes in the organization and business. Chi-square statistics  $\chi^2(1, N = 415) = 14.077$ ,  $p = .001 < .05$  indicated that the industry type of manufacturing and non-manufacturing firms (*Table 4-52*) had statistical association with the buyer/consumer/client triggering for more often change. The chi-square statistics of 14.077 was found greater than the critical value 3.84, which led to accept the alternative hypothesis that industry type and customer/client were

dependent. The p value of .001 is less than 0.05, which indicates a necessity of instantaneous concern in both the industries because of a significant statistical association of the industry type and buyer/consumer/client in relation to the forces triggering for change in organization and business.

*Table 4-52: Role of customer and clients for change*

| Industry          |                   | Buyer/consumer/client   |                       | Total |
|-------------------|-------------------|-------------------------|-----------------------|-------|
|                   |                   | Triggering for unchange | Triggering for change |       |
| Manufacturing     | Count             | 89                      | 85                    | 174   |
|                   | % within Industry | 51.1                    | 48.9                  | 100   |
| Non-manufacturing | Count             | 167                     | 74                    | 241   |
|                   | % within Industry | 69.3                    | 30.7                  | 100   |
| Total             | Count             | 256                     | 159                   | 415   |
|                   | % within Industry | 61.7                    | 38.3                  | 100   |

Similar assessment carried out on the inquiry F3 associated to the supplier/banker/donor dimension of industry environment indicated that the supplier/banker/donor were more often triggering for changes in the organization and business. Chi-square statistics  $\chi^2(1, N = 415) = 11.782$ ,  $p = .001 < .05$  indicated that the industry type of manufacturing and non-manufacturing firms (*Table 4-53*) had statistical association with the supplier/banker/donor triggering for more often change. The chi-square statistics of 11.782 found greater than the critical value 3.84, which led to accept the alternative hypothesis that industry type and supplier/banker/donor were dependent. The p value of .001 is less than 0.05, which indicated for a simultaneous concern in both the industries because of a significant statistical association of the industry type and supplier/banker/donor more often triggering for change in the firms.

*Table 4-53: Role of suppliers and donors*

| Industry          |                   | Supplier/banker/donor   |                       | Total |
|-------------------|-------------------|-------------------------|-----------------------|-------|
|                   |                   | Triggering for unchange | Triggering for change |       |
| Manufacturing     | Count             | 123                     | 51                    | 174   |
|                   | % within Industry | 70.7                    | 29.3                  | 100   |
| Non-manufacturing | Count             | 204                     | 37                    | 241   |
|                   | % within Industry | 84.6                    | 15.4                  | 100   |
| Total             | Count             | 327                     | 88                    | 415   |
|                   | % within Industry | 78.8                    | 21.2                  | 100   |

The forces in industry environment were not only triggering for changes, but they were triggering for unchange as well. The regulator/government, union/association, and channel member were triggering for unchange in the organization and businesses.

The inquiry FA associated to the regulating forces in the industry environment indicated that the regulator/government was quite comfortable with unchange in the organization and

business. Chi-square statistics  $\chi^2(1, N = 415) = 0.043$ ,  $p = .835 > .05$  indicated that the industry type of manufacturing and non-manufacturing firms (*Table 4-54*) had no statistical association with the regulator/government triggering for more often unchange. The chi-square test scores of 0.043 found less than the critical value 3.84, which led to the acceptance of the null hypothesis that the industry type and regulator/government were independent.

*Table 4-54: Role of regulator and government for change*

| Industry          |                   | Regulator/government        |                         | Total |
|-------------------|-------------------|-----------------------------|-------------------------|-------|
|                   |                   | Not triggering for unchange | Triggering for unchange |       |
| Manufacturing     | Count             | 108                         | 66                      | 174   |
|                   | % within Industry | 62.1                        | 37.9                    | 100   |
| Non-manufacturing | Count             | 152                         | 89                      | 241   |
|                   | % within Industry | 63.1                        | 36.9                    | 100   |
| Total             | Count             | 260                         | 155                     | 415   |
|                   | % within Industry | 62.7                        | 37.3                    | 100   |

Similar inquiry FF associated to the organized forces like chambers of commerce and industry, professional and vocational organizations' associations, and similar others in the industry environment indicated that the unions/associations were more often triggering for unchange in the organization and business too. Chi-square statistics  $\chi^2(1, N = 415) = 0.034$ ,  $p = .853 > .05$  indicated that the industry type of manufacturing and non-manufacturing firms (*Table 4-55*) had no statistical association with the union/association triggering for unchange. The chi-square statistics of 0.043 found less than the critical value 3.84, which led to accept the null hypothesis that the industry type and union/association were unrelated.

*Table 4-55: Role of unions and associations for change*

| Industry          |                   | Union/association     |                         | Total |
|-------------------|-------------------|-----------------------|-------------------------|-------|
|                   |                   | Triggering for change | Triggering for unchange |       |
| Manufacturing     | Count             | 114                   | 60                      | 174   |
|                   | % within Industry | 65.5                  | 34.5                    | 100   |
| Non-manufacturing | Count             | 160                   | 81                      | 241   |
|                   | % within Industry | 66.4                  | 33.6                    | 100   |
| Total             | Count             | 274                   | 141                     | 415   |
|                   | % within Industry | 66.0                  | 34.0                    | 100   |

Likewise, inquiry FF concerning intermediaries and supply/delivery chain members in the industry environment indicated that the channel members were also triggering for unchange in the organization and business. Chi-square statistics  $\chi^2(1, N = 415) = 2.678$ ,  $p = .102 > .05$  indicated that the industry type of manufacturing and non-manufacturing firms (*Table 4-56*) did not form statistical association with the channel members triggering for unchange.

The chi-square statistics of 2.678 found less than the critical value 3.84, which was leading to the acceptance of the null hypothesis that the industry type and channel members were independent.

*Table 4-56: Role of channel members for change*

| Industry          |                   | Channel member              |                         | Total |
|-------------------|-------------------|-----------------------------|-------------------------|-------|
|                   |                   | Not triggering for unchange | Triggering for unchange |       |
| Manufacturing     | Count             | 145                         | 29                      | 174   |
|                   | % within Industry | 83.3                        | 16.7                    | 100   |
| Non-manufacturing | Count             | 185                         | 56                      | 241   |
|                   | % within Industry | 76.8                        | 23.2                    | 100   |
| Total             | Count             | 330                         | 85                      | 415   |
|                   | % within Industry | 79.5                        | 20.5                    | 100   |

The statistically significant association between industry type and the customer/consumer/client indicates that the manufacturing and non-manufacturing industries were found dependent and related, therefore, any change taking place in the dimension of the customer/consumer/clients in one industry that would be reflecting in another industry very well. Similar happening was noticed likely possible in case of supplier/bankers/donors too.

Statistical association determined between industry types and forces in the industry environment triggering for change and unchange shown by the chi-square test statistics was not sufficient to understand the strength of relationship nature of the industry environmental forces. It became necessary to determine the nature of relationships between the forces more often triggering for change and unchange as well. Such relationships were necessary to understand the influence of their relationships while making change decisions in the organization and business. Similar to the other inquiries, the categorical data set in this inquiry also consisted a large number of ties; and Kendall's tau-b selected as a reliable statistical tool for determining the relationships between the forces triggering for change and unchange. Table 4-57 shows the nature and type of relationships of the forces.

Correlation coefficient between channel member and union/association was indicating a quite adverse role between the channel members and union/association. The role of channel members was significant; and some of the channel members were influencing the union leaders by bribing and manipulating too in order to get the changes in their favor as desired. In the same line, somewhere, the union leaders were challenging the channel members by referring their political strength, if they were attempting to influence the organization as against the desire of the unions/associations.

Table 4-57: Relationships between the industrial forces for change

| Kendall's tau_b correlation coefficient |                         | F4           | F2            | F3            | FA    | FF             | FE   |
|---|-------------------------|--------------|---------------|---------------|-------|----------------|------|
| F4: Competitor                          | Correlation Coefficient | 1.00         |               |               |       |                |      |
|   | Sig. (2-tailed)         | .            |               |               |       |                |      |
| F2: Buyer/consumer/client               | Correlation Coefficient | .051         | 1.00          |               |       |                |      |
|   | Sig. (2-tailed)         | .297         | .             |               |       |                |      |
| F3: Supplier/banker/donor               | Correlation Coefficient | -.038        | <b>.270**</b> | 1.00          |       |                |      |
|   | Sig. (2-tailed)         | .445         | .000          | .             |       |                |      |
| FA: Regulator/government                | Correlation Coefficient | .047         | <b>.170**</b> | .063          | 1.00  |                |      |
|   | Sig. (2-tailed)         | .336         | .001          | .203          | .     |                |      |
| FF: Union/association                   | Correlation Coefficient | <b>.102*</b> | <b>.104*</b>  | <b>.163**</b> | -.028 | 1.00           |      |
|   | Sig. (2-tailed)         | .037         | .034          | .001          | .569  | .              |      |
| FE: Channel member                      | Correlation Coefficient | -.014        | -.007         | -.073         | -.083 | <b>-.150**</b> | 1.00 |
|   | Sig. (2-tailed)         | .780         | .887          | .135          | .090  | .002           | .    |

\*. Correlation is significant at the 0.05 level (2-tailed). \*\*. Correlation is significant at the 0.01 level (2-tailed). N= 415

The positive relationship between buyer/consumer/client and supplier/banker/donor indicated that they were major actors in the industry forcing for change. The influence of buyer and suppliers for change was challenging by the unions and associations as well. More specifically, the organizations were not effective to make changes within themselves in absence of support from the respective unions/associations. Organizations were uncomfortable to make changes as required in the industry and one of the major reasons was the influence of unions/associations. The unions/associations were inversely associated with the regulator and suppliers but positively associated with the channel members i.e. the organizations that were considering union/association triggering for no change were considering the competitors, buyers and suppliers were triggering for the changes.

The positive association between the regulator / government and the buyer/consumer/client indicated that the government was imposing changes looking at the interest of the beneficiaries. Customers' right was a priority of the government while regulating for changes in the industries. The correlation coefficient table indicated that the change in organization primarily depended on the choice and preference of the major actors.

#### 4.2.7. Areas of strengths of the organizations

It was necessary to identify the strong/immune and weak/vulnerable areas of organizations and businesses. This study pointed out the areas of work process/technology, customers/clients, supply chain and business network more immune, as they were hard to make any change. It pointed out the areas of human resources, intellectual property, and suppliers/bankers more vulnerable, as they were weak to make any change. The immune and vulnerable areas were also varying depending on various factors like industry type and



organization types. Some areas in a particular industry were immune and some were vulnerable. One industry's immune areas may be vulnerable in another industry and vice versa. The study carried out inquiry G to determine the strong/immune areas and weak/vulnerable areas of the organizations and businesses. The inquiry identified that work process/technology as more strong/immune areas and suppliers/bankers were weak/vulnerable for them. In other words, their strength was with the strong/immune areas of their concerns. The Chi-square test statistics carried out to determine the association between industry type and the strong/immune as well as weak/vulnerable areas for change and unchange and Kendall's tau-b correlation coefficients obtained to determine the relationships between the strong/immune and weak/vulnerable areas of the firms.

The inquiry G1 concerned to the ways/methods/machines of making/doing things indicated that the work process/technology was more immune to change in the organization and business among others. Chi-square statistics  $\chi^2(1, N = 415) = 6.184, p = .013 < .05$  indicated that the industry type of manufacturing and non-manufacturing firms (*Table 4-58*) had statistical association with the strong/immune areas of the firms. The chi-square statistics of 6.184 found greater than the critical value 3.84 that led to accept the alternative hypothesis that industry type and strength of work process/technology were dependent and related specifically to the firms. The p value of .013 is less than 0.05, which indicated a necessity of synchronized attentions in both the industries because of a significant statistical association of the industry type and the strength of work process/technology of the organizations and businesses.

*Table 4-58: Organizational immunity to the technology and work process*

| Industry          |                   | Technology/work process |             | Total |
|-------------------|-------------------|-------------------------|-------------|-------|
|                   |                   | No more immune          | More immune |       |
| Manufacturing     | Count             | 90                      | 84          | 174   |
|                   | % within Industry | 51.7                    | 48.3        | 100   |
| Non-manufacturing | Count             | 154                     | 87          | 241   |
|                   | % within Industry | 63.9                    | 36.1        | 100   |
| Total             | Count             | 244                     | 171         | 415   |
|                   | % within Industry | 58.8                    | 41.2        | 100   |

Similarly, the inquiry G5 associated to the strong/immune and weak/vulnerable areas of the firms exhibited that the customers/clients were next more strong/immune for changes. Chi-square statistics  $\chi^2(1, N = 415) = 16.170, p = .001 < .05$  indicated strong statistical association of the industry type of manufacturing and non-manufacturing firms with the strong/immune areas of the respective organization and business. The chi-square statistics of 16.170 found greater than the critical value 3.84, which insisted to accept the alternative

hypothesis that industry type and strength of customers/clients were dependent and specific to the firms. The p value of .001 is less than .05, which indicates a necessity of simultaneous considerations from the organization in both the industries because of a significant statistical association of the industry type and the strength of customers/clients as exhibited in the following (Table 4-59).

Table 4-59: Organizational immunity to customers and clients

| Industry          |                   | Customers/clients |             | Total |
|-------------------|-------------------|-------------------|-------------|-------|
|                   |                   | No more immune    | More immune |       |
| Manufacturing     | Count             | 125               | 49          | 174   |
|                   | % within Industry | 71.8              | 28.2        | 100   |
| Non-manufacturing | Count             | 126               | 115         | 241   |
|                   | % within Industry | 52.3              | 47.7        | 100   |
| Total             | Count             | 251               | 164         | 415   |
|                   | % within Industry | 60.5              | 39.5        | 100   |

Likewise, the inquiry G3 associated to the strong/immune and weak/vulnerable areas reflected that the supply chain and business network were next more strong/immune for changes in the firms. Chi-square statistics  $\chi^2(1, N = 415) = 8.120, p = .004 < .05$  indicated that the industry type of manufacturing and non-manufacturing firms (Table 4-60) had shown statistical association with the supply chain and business network of the organization and business. The chi-square statistics of 8.120 is greater than the critical value 3.84, which was leading to the rejection of the null hypothesis that industry type and strength of customers/clients were related and dependent. The p value of .004 is less than .05, which insisted for a necessity of immediate attention in both the industries because of a significant statistical association of the industry type with the strength of supply chain and business network of the organizations and businesses.

Table 4-60: Organizational immunity to supply chain and business network

| Industry          |                   | Supply and business network |             | Total |
|-------------------|-------------------|-----------------------------|-------------|-------|
|                   |                   | No more immune              | More immune |       |
| Manufacturing     | Count             | 108                         | 66          | 174   |
|                   | % within Industry | 62.1                        | 37.9        | 100   |
| Non-manufacturing | Count             | 181                         | 60          | 241   |
|                   | % within Industry | 75.1                        | 24.9        | 100   |
| Total             | Count             | 289                         | 126         | 415   |
|                   | % within Industry | 69.6                        | 30.4        | 100   |

There were not only strong/immune areas of the organizations and business but there were some weak/vulnerable areas as well. Human resources, intellectual property, and suppliers and bankers were the weak/vulnerable areas of the organizations. The strong/immune areas were standing as strength of the organizations in order to stand firmly in the industry whereas the weak/vulnerable areas are posing threats to the organizations and businesses.

Inquiry GB associated with the weak/vulnerable aspect of the firms indicated that the human resource was more weak/vulnerable in the organization and business. Human dimension of the organizations was found very weak and problematic area too. The chi-square statistics  $\chi^2(1, N = 415) = 0.168, p = .682 > .05$  indicated that the industry type of manufacturing and non-manufacturing firms (*Table 4-61*) had no statistical association with the vulnerability of human resource in the organization and business. The chi-square statistics of 0.168 was less than the critical value 3.84, which insisted to accept the null hypothesis that industry type and vulnerability of human resources were independent.

*Table 4-61: Organizational vulnerability to human resources*

| <b>Industry * Human resource Crosstabulation</b> |                   |                    |                 |       |
|--|-------------------|--------------------|-----------------|-------|
| Industry   |                   | Human resource     |                 | Total |
|  |                   | No more vulnerable | More vulnerable |       |
| Manufacturing                                    | Count             | 106                | 68              | 174   |
|  | % within Industry | 60.9               | 39.1            | 100   |
| Non-manufacturing                                | Count             | 142                | 99              | 241   |
|  | % within Industry | 58.9               | 41.1            | 100   |
| Total  | Count             | 248                | 167             | 415   |
|  | % within Industry | 59.8               | 40.2            | 100   |

Inquiry GF concerned with the patent, design, trademark, and copyright indicated that the intellectual property aspect of the firms was more weak/vulnerable in the industry. Ownership and management of intellectual property in organizations were very weak and critical too. The chi-square statistics  $\chi^2(1, N = 415) = 1.744, p = .187 > .05$  indicate that the industry type of manufacturing and non-manufacturing firms (*Table 4-62*) had no statistical association with the vulnerability of intellectual property. The chi-square scores of 1.774 was found less than the critical value 3.84, which was leading to the acceptance of the null hypothesis that industry type and vulnerability of intellectual property were independent.

*Table 4-62: Organizational vulnerability to intellectuality*

| Industry          |                   | Intellectual property |                 | Total |
|-------------------|-------------------|-----------------------|-----------------|-------|
|                   |                   | No more vulnerable    | More vulnerable |       |
| Manufacturing     | Count             | 137                   | 37              | 174   |
|                   | % within Industry | 78.7                  | 21.3            | 100   |
| Non-manufacturing | Count             | 202                   | 39              | 241   |
|                   | % within Industry | 83.8                  | 16.2            | 100   |
| Total             | Count             | 339                   | 76              | 415   |
|                   | % within Industry | 81.7                  | 18.3            | 100   |

Similarly, inquiry GD concerned with the supply side to the firms indicated that the suppliers/bankers were more weak/vulnerable in the organizations and businesses. A heavy dependence of the organizations and business with the suppliers/bankers was making the organizations more vulnerable. The chi-square statistics  $\chi^2(1, N = 415) = 1.688, p = .194$

>. 05 indicated that the industry type of manufacturing and non-manufacturing (*Table 4-63*) had no statistical association with the dependence of the organizations on the suppliers/bankers. The chi-square statistics of 1.688 was less than the critical value 3.84, which was leading to the acceptance of the null hypothesis that industry type and dependency on suppliers/bankers were independent.

*Table 4-63: Organizational vulnerability to suppliers and donors*

| Industry          |                   | Suppliers/donors   |                 | Total |
|-------------------|-------------------|--------------------|-----------------|-------|
|                   |                   | No more vulnerable | More vulnerable |       |
| Manufacturing     | Count             | 142                | 32              | 174   |
|                   | % within Industry | 81.6               | 18.4            | 100   |
| Non-manufacturing | Count             | 208                | 33              | 241   |
|                   | % within Industry | 86.3               | 13.7            | 100   |
| Total             | Count             | 350                | 65              | 415   |
|                   | % within Industry | 84.3               | 15.7            | 100   |

The assessment on the position of strongholds of the organizations and businesses indicated that the technology and work processes, customers and clients as well as supply chain and business network were found statistically significant dimension of the firms i.e. those areas were more strong and immune to change.

Statistical association between industry type and strong/immune as well as weak/vulnerable areas of the organizations and business shown by the chi-square test statistics was insufficient to understand the nature and significance of the strong/immune and weak/vulnerable areas in the firms. It became necessary to determine the nature of relationships between the strong/immune and weak/vulnerable areas as well. Such relationships were necessary to understand the nature and type of relationships between variables while analyzing the strength of and threats to the industries. Similar to the other inquiries, the categorical data set in this inquiry also consisted a large number of ties, therefore, Kendall's tau-b selected as a reliable statistical tool for determining the nature and type of relationships between the strong/immune and weak/vulnerable areas of the organizations. *Table 4-64* shows the nature and type of relationships of the areas.

An increased dependency on the suppliers/bankers was the consequence of the weaknesses of the human resources. The adverse relationship between human resource and suppliers/bankers indicated that a strong human resource reduces the dependency over the suppliers in carrying out the operational activities in the organizations. Suppliers and bankers instructions were necessary even to prepare plans and programs of the organizations. The relationships of technology/work process was negative with the areas

namely customers/clients, supply chain and business network, and human resources as well, though such relationships were statistically insignificant.

*Table 4-64: Relationships between the areas of strengths of the organizations*

|                                       |                         | Kendall's tau_b correlation coefficient |              |              |               |       |       |
|---------------------------------------|-------------------------|---|--------------|--------------|---------------|-------|-------|
|                                       |                         | G1                                      | G5           | G3           | GB            | GF    | GD    |
| G1: Technology/work process           | Correlation Coefficient | 1.000                                   |              |              |               |       |       |
|                                       | Sig. (2-tailed)         | .                                       |              |              |               |       |       |
| G5: Customers/clients                 | Correlation Coefficient | -.056                                   | 1.000        |              |               |       |       |
|                                       | Sig. (2-tailed)         | .256                                    | .            |              |               |       |       |
| G3: Supply chain and business network | Correlation Coefficient | -.042                                   | .013         | 1.000        |               |       |       |
|                                       | Sig. (2-tailed)         | .396                                    | .792         | .            |               |       |       |
| GB: Human resource                    | Correlation Coefficient | -.038                                   | .000         | <b>.110*</b> | 1.000         |       |       |
|                                       | Sig. (2-tailed)         | .439                                    | .999         | .025         | .             |       |       |
| GF: Intellectual property             | Correlation Coefficient | .085                                    | .038         | .067         | -.020         | 1.000 |       |
|                                       | Sig. (2-tailed)         | .085                                    | .442         | .175         | .682          | .     |       |
| GD: Suppliers/bankers                 | Correlation Coefficient | <b>.191**</b>                           | <b>.099*</b> | .033         | <b>.191**</b> | .036  | 1.000 |
|                                       | Sig. (2-tailed)         | .000                                    | .044         | .506         | .000          | .465  | .     |

*\*. Correlation is significant at the 0.05 level (2-tailed). \*\*. Correlation is significant at the 0.01 level (2-tailed). N=415*

There was no significant association between or among the more strong/immune areas in the organizations except the association between human resources and supply chain and business network. The organizations with strong supply chain and business network were also strong in the areas of human resources. The organizations having strong suppliers/bankers were not strong in technology/work process and customers/clients. The inverse relationship between human resources and suppliers/bankers indicates that those who perceived human resources stronger, they perceived that the suppliers and bankers were not enhancing their immunity and vice versa. A strong human resource was found to be helpful to minimize the influence of the suppliers and bankers over the activities of the organization.

#### **4.2.8. Shields of the organization**

Influences, both conducive and unconducive, mainly from externalities to the organizations and business were found unavoidable in due course of organizational operations. It became necessary to identify the shields of organizations and businesses that are instrumental in protecting the business or programs from any unwanted elements. This study pointed out some protectors for the organizations and business, as they were instrumental in doing so. The protectors were also varying depending on various factors like industry and

organization type. Some protectors were more instrumental in one industry and others were more instrumental in other industries. The study carried out inquiry H to determine the protectors of the organizations and businesses. The inquiry identified that laws and rules of the land as more instrumental and the consultants/experts were comparatively less instrumental in protecting the business/programs from the externalities. The Chi-square test was carried out to determine the association between industry type and the shields, and Kendall's tau-b correlation coefficients obtained to determine the relationships between the protectors of the organization and business.

The inquiry H1 associated to the protectors and shields of the firms indicated that the laws and rules of the land were more instrumental in protecting business and programs from externalities for the organization and business among others. The chi-square statistics  $\chi^2(1, N = 415) = 0.813, p = .367 > .05$  indicated that the industry type of manufacturing and non-manufacturing (Table 4-65) had no statistical relationship with the laws and rules of the land in relation to protecting the organizations' business and programs. The chi-square statistics of 0.813 found less than the critical value 3.84, which was leading to the acceptance of the null hypothesis that industry type and the laws and rules of the land as protector of business/programs were independent.

*Table 4-65: Role of the laws of the Land in shielding organizations*

| Industry          |                   | Laws of the Land (country) |               | Total |
|-------------------|-------------------|----------------------------|---------------|-------|
|                   |                   | Low priority               | High priority |       |
| Manufacturing     | Count             | 34                         | 140           | 174   |
|                   | % within Industry | 19.5                       | 80.5          | 100   |
| Non-manufacturing | Count             | 56                         | 185           | 241   |
|                   | % within Industry | 23.2                       | 76.8          | 100   |
| Total             | Count             | 90                         | 325           | 415   |
|                   | % within Industry | 21.7                       | 78.3          | 100   |

Similarly, the inquiry H2 carried out to determine the role of protecting the firms from externalities indicated that the police and security agencies were also more instrumental in protecting business and programs from externalities for the organization and business. However, the chi-square statistics  $\chi^2(1, N = 415) = 1.212, p = .271 > .05$  indicated that the industry type of manufacturing and non-manufacturing (Table 4-66) had no statistical association with the police and security agencies in relation to protecting the organizations' business and programs. The chi-square statistics of 1.212 remained less than the critical value 3.84, which forced to accept the null hypothesis that industry type and the police and security agencies as protector of business/programs were independent.

*Table 4-66: Role of police and security agencies in shielding the organizations*

| Industry          |                   | Police and security agencies |               | Total |
|-------------------|-------------------|------------------------------|---------------|-------|
|                   |                   | Low priority                 | High priority |       |
| Manufacturing     | Count             | 94                           | 80            | 174   |
|                   | % within Industry | 54.0                         | 46.0          | 100   |
| Non-manufacturing | Count             | 117                          | 124           | 241   |
|                   | % within Industry | 48.5                         | 51.5          | 100   |
| Total             | Count             | 211                          | 204           | 415   |
|                   | % within Industry | 50.8                         | 49.2          | 100   |

In the same line, inquiry H4 conducted to ascertain the role of buying insurance policy to protect the business of the firms from externalities/risks indicated that the insurance policies were instrumental in protecting business and programs from externalities for the organization and business. The chi-square statistics  $\chi^2(1, N = 415) = 6.053, p = .014 < .05$  indicated that the industry type of manufacturing and non-manufacturing (*Table 4-67*) had a statistical association with the insurance policies in relation to protecting the organizations' business and programs. The chi-square statistics of 6.053 found greater than the critical value 3.84, which led to accept the alternative hypothesis that industry type and the insurance policies as protector of business/programs were dependent and related to specific industry. The p value of .014 also found less than 0.05, which indicated a necessity of simultaneous considerations from the change agent in both the industries because of a significant statistical association of the industry type and the insurance policies as protector of business/programs.

*Table 4-67: Role of insurance policies in shielding the organizations*

| Industry          |                   | Insurance policies |               | Total |
|-------------------|-------------------|--------------------|---------------|-------|
|                   |                   | Low priority       | High priority |       |
| Manufacturing     | Count             | 105                | 69            | 174   |
|                   | % within Industry | 60.3               | 39.7          | 100   |
| Non-manufacturing | Count             | 116                | 125           | 241   |
|                   | % within Industry | 48.1               | 51.9          | 100   |
| Total             | Count             | 221                | 194           | 415   |
|                   | % within Industry | 53.3               | 46.7          | 100   |

Likewise, the inquiry H3 concerned with the role of trade unions, chambers of commerce and industry, and similar other organizations indicated that the union/associations were also instrumental in protecting business and programs from externalities for their organization and business. The chi-square statistics  $\chi^2(1, N = 415) = 0.013, p = .909 > .05$  indicated that the industry type of manufacturing and non-manufacturing (*Table 4-68*) had no statistical association with the union/association in relation to protecting the organizations' business and programs. The chi-square statistics of 0.013 was less than the critical value 3.84, which was leading to the acceptance of the null hypothesis that industry type and the union/associations as protector of business/programs were unrelated.

*Table 4-68: Role of unions and associations in shielding the organizations*

| Industry          |                   | Unions/associations |               | Total |
|-------------------|-------------------|---------------------|---------------|-------|
|                   |                   | Low priority        | High priority |       |
| Manufacturing     | Count             | 103                 | 71            | 174   |
|                   | % within Industry | 59.2                | 40.8          | 100   |
| Non-manufacturing | Count             | 144                 | 97            | 241   |
|                   | % within Industry | 59.8                | 40.2          | 100   |
| Total             | Count             | 247                 | 168           | 415   |
|                   | % within Industry | 59.5                | 40.5          | 100   |

In similar way, the assessment concerning the role of consultants and experts in protecting the business from externalities- inquiry H5, reported that they were also instrumental in protecting business and programs from externalities for the firms in general. The chi-square test scores  $\chi^2(1, N = 415) = 0.930, p = .335 > .05$  exhibited that the industry type of manufacturing and non-manufacturing (*Table 4-69*) have no statistical association with the consultants/experts in relation to protecting the organizations' business and programs. The chi-square statistics of 0.930 was less than the critical value 3.84, which was leading to the acceptance of the null hypothesis that the industry type and the consultants/experts as protector of business/programs were unrelated and the firms were perceiving in similar ways.

*Table 4-69: Role of consultants and experts in shielding the organizations*

| Industry          |                   | Consultants/experts |               | Total |
|-------------------|-------------------|---------------------|---------------|-------|
|                   |                   | Low priority        | High priority |       |
| Manufacturing     | Count             | 112                 | 62            | 174   |
|                   | % within Industry | 64.4                | 35.6          | 100   |
| Non-manufacturing | Count             | 166                 | 75            | 241   |
|                   | % within Industry | 68.9                | 31.1          | 100   |
| Total             | Count             | 278                 | 137           | 415   |
|                   | % within Industry | 67.0                | 33.0          | 100   |

The assessment identified statistical significance of insurance policies as a shield of the organization and business at the time of adverse influence from the externalities. However, the role of the law and order as well as advices of the consultants and experts was also useful in protection of the business and programs of the organizations.

Statistical association determined between industry type and the shields of the organizations and business shown by the chi-square test statistics remained insufficient to understand the relationship and significance of the protectors in the organization and business. It became necessary to determine the nature of relationships between the protectors as well. Such relationships were necessary to understand the nature and strength of their relationships while analyzing the instrumentality of the shields to the firms. Similar to the other inquiries, the categorical data set in this inquiry also consisted a large number



of ties; and Kendall’s tau-b selected as a reliable statistical tool for determining the nature and type of relationships between the protectors of the organizations. Table 4-70 shows the relationships and significance thereof.

*Table 4-70: Relationships between the shields of organizations and businesses*

| <b>Kendall's tau-b correlation coefficient</b> |                         |               |               |               |               |           |
|--|-------------------------|---------------|---------------|---------------|---------------|-----------|
|  |                         | <i>H1</i>     | <i>H2</i>     | <i>H4</i>     | <i>H3</i>     | <i>H5</i> |
| H1: Laws of the Land (country)                 | Correlation Coefficient | 1.000         |               |               |               |           |
|  | Sig. (2-tailed)         | .             |               |               |               |           |
| H2: Police and security agencies               | Correlation Coefficient | <b>.108*</b>  | 1.000         |               |               |           |
|  | Sig. (2-tailed)         | .028          | .             |               |               |           |
| H4: Insurance policies                         | Correlation Coefficient | <b>.118*</b>  | <b>.373**</b> | 1.000         |               |           |
|  | Sig. (2-tailed)         | .016          | .000          | .             |               |           |
| H3: Unions/associations                        | Correlation Coefficient | <b>.160**</b> | <b>.338**</b> | <b>.339**</b> | 1.000         |           |
|  | Sig. (2-tailed)         | .001          | .000          | .000          | .             |           |
| H5: Consultants/experts                        | Correlation Coefficient | <b>.146**</b> | <b>.232**</b> | <b>.256**</b> | <b>.350**</b> | 1.000     |
|  | Sig. (2-tailed)         | .003          | .000          | .000          | .000          | .         |

*\*. Correlation is significant at the 0.05 level (2-tailed). \*\*. Correlation is significant at the 0.01 level (2-tailed). N=415*

The positive associations between the protectors indicated that all the protectors were shielding the organizations and their business and programs. The strong association between insurance policies and police and security agencies was indicating that risks management was one significant part of granting immunity to the corporations. Similarly, security of persons and property was equally important in order to give continuity to the business. Those who were considering options of insurance and security agencies were considering the role of consultants/experts highly in protecting their business. The relationship of unions/associations was indicating that unity is necessary in order to protect the business from externalities including regulators as well.

People who were in favor of laws and acts of the country are putting their priority to the unions/associations more following by the consultants/experts and insurance policies. They were putting less priority to the police and security agencies for protection of their business from externalities. They believed that police and security agencies are only law enforcing agencies and more important were the laws and acts and their effectiveness.

#### **4.2.9. Change management style and instrument in organization**

The study found varieties change management styles and instruments that were varying from one organization to another especially from change agent to change agents. It was necessary to identify the styles/instruments that were considering best by the respondents while managing changing in the firms. This study pointed out some styles/instruments that were doing well while managing changes in the responding organizations. One style is

found more effective in one firm and next style is found more effective in other firms. The study carried out inquiry I to determine the best styles for change management in the organizations and businesses. The inquiry identified that education and communication were widely preferred and manipulation and cooptation were less preferred instrument while managing change in organizations. The Chi-square test statistics was carried out to determine the association between industry type and the change management styles/instruments, and Kendall's tau-b correlation coefficients obtained to determine the relationships between the styles/instruments preferred most while managing change in the firms.

The response associated with inquiry I1 concerning with the style and instruments of managing change was analyzed to understand the implications of the style and instruments across the industries. The analysis indicated that education and communication were more effective in managing change in organizations and businesses among others. The chi-square statistics  $\chi^2(1, N = 415) = 0.026, p = .871 >.05$  indicated that the industry type of manufacturing and non-manufacturing (*Table 4-71*) had no statistical association with education and communication in relation to managing change. The chi-square statistics of 0.026 is found less than the critical value 3.84, which led to accept the null hypothesis that industry type and education and communication as style of change management were independent and useful in both industries uniformly.

*Table 4-71: Instrumentality of education and communication in managing change*

| Industry          |                   | Education and communication |               | Total |
|-------------------|-------------------|-----------------------------|---------------|-------|
|                   |                   | Low priority                | High priority |       |
| Manufacturing     | Count             | 27                          | 147           | 174   |
|                   | % within Industry | 15.5                        | 84.5          | 100   |
| Non-manufacturing | Count             | 36                          | 205           | 241   |
|                   | % within Industry | 14.9                        | 85.1          | 100   |
| Total             | Count             | 63                          | 352           | 415   |
|                   | % within Industry | 15.2                        | 84.8          | 100   |

Similarly, the analysis associated with inquiry I2 concerning the style and instruments of change management indicated that collaboration and participation were also applicable while managing change in organizations and businesses. The chi-square statistics  $\chi^2(1, N = 415) = 0.131, p = .717 >.05$  indicated that the industry type of manufacturing and non-manufacturing (*Table 4-72*) had no statistical association with collaboration and participation in relation to managing change. The chi-square statistics of 0.131 was less than the critical value 3.84, which was leading to the acceptance of the null hypothesis that

industry type and collaboration and participation as style of change management were independent and the instruments were applicable similarly in the industries.

*Table 4-72: Instrumentality of collaboration and participation in managing change*

| Industry          |                   | Collaboration and participation |               | Total |
|-------------------|-------------------|---------------------------------|---------------|-------|
|                   |                   | No priority                     | High priority |       |
| Manufacturing     | Count             | 49                              | 125           | 174   |
|                   | % within Industry | 28.2                            | 71.8          | 100   |
| Non-manufacturing | Count             | 64                              | 177           | 241   |
|                   | % within Industry | 26.6                            | 73.4          | 100   |
| Total             | Count             | 113                             | 302           | 415   |
|                   | % within Industry | 27.2                            | 72.8          | 100   |

Likewise, the assessment concerning organizational authority- inquiry I3 indicated that delegation and direction were also more effective in managing change in organizations and businesses. The chi-square statistics  $\chi^2(1, N = 415) = 0.001, p = .982 > .05$  indicated that the industry type of manufacturing and non-manufacturing (*Table 4-73*) had no statistical association with delegation and direction in relation to managing change. The chi-square statistics of 0.001 was less than the critical value 3.84, which was leading to the acceptance of the null hypothesis that industry type and delegation and direction as style of change management were independent and applicable in both industries at the same manner.

*Table 4-73: Instrumentality of delegation and direction in managing change*

| Industry          |                   | Delegation and direction |               | Total |
|-------------------|-------------------|--------------------------|---------------|-------|
|                   |                   | No priority              | High priority |       |
| Manufacturing     | Count             | 63                       | 111           | 174   |
|                   | % within Industry | 36.2                     | 63.8          | 100   |
| Non-manufacturing | Count             | 87                       | 154           | 241   |
|                   | % within Industry | 36.1                     | 63.9          | 100   |
| Total             | Count             | 150                      | 265           | 415   |
|                   | % within Industry | 36.1                     | 63.9          | 100   |

In the same line, the assessment regarding the implication of power while managing change- inquiry I5 indicated that use of power/force and coercion were also more effective in managing change in organizations and businesses. The chi-square statistics  $\chi^2(1, N = 415) = 4.438, p = .035 < .05$  indicated that the industry type of manufacturing and non-manufacturing (*Table 4-74*) had statistical association with the use of power/force and coercion in relation to managing change. The chi-square statistics of 4.438 is found greater than the critical value 3.84, which led to accept the alternative hypothesis that industry type and use of power/force and coercion as instrument/style of change management were dependent and varied from one industry to another industry. The p value of .035 was less than 0.05, which indicated a necessity of instantaneous considerations from the change agent in both the industries while managing changes in the industries.

*Table 4-74: Instrumentality of the use of power and force in managing change*

| Industry          |                   | Use of force/power and coercion |               | Total |
|-------------------|-------------------|---------------------------------|---------------|-------|
|                   |                   | Low priority                    | High priority |       |
| Manufacturing     | Count             | 58                              | 116           | 174   |
|                   | % within Industry | 33.3                            | 66.7          | 100   |
| Non-manufacturing | Count             | 105                             | 136           | 241   |
|                   | % within Industry | 43.6                            | 56.4          | 100   |
| Total             | Count             | 163                             | 252           | 415   |
|                   | % within Industry | 39.3                            | 60.7          | 100   |

Similar assessment on the influence attempts- inquiry I4 reported that manipulation and cooptation were also effective in managing change in the firms. The chi-square statistics  $\chi^2(1, N = 415) = 0.093, p = .760 > .05$  indicated that the industry type of manufacturing and non-manufacturing (Table 4-75) had no statistical association with manipulation and cooptation in relation to managing change. The chi-square statistics of 0.093 was less than the critical value 3.84, which was leading to the acceptance of the null hypothesis that industry type and manipulation and cooptation as style of change management were unrelated.

*Table 4-75: Instrumentality of manipulation and cooptation in managing change*

| Industry          |                   | Manipulation and cooptation |               | Total |
|-------------------|-------------------|-----------------------------|---------------|-------|
|                   |                   | Low priority                | High priority |       |
| Manufacturing     | Count             | 123                         | 51            | 174   |
|                   | % within Industry | 70.7                        | 29.3          | 100   |
| Non-manufacturing | Count             | 167                         | 74            | 241   |
|                   | % within Industry | 69.3                        | 30.7          | 100   |
| Total             | Count             | 290                         | 125           | 415   |
|                   | % within Industry | 69.9                        | 30.1          | 100   |

The assessment over the styles/instruments of being applicable while managing changes indicated a significant statistical association between the change instrument of use of force/power or coercion for change and no change with industry type. However, the style like education and communication, delegation and direction as well as participation and collaboration were also facilitating the change management process.

Statistical association determined between industry type and change management style of the organizations and business shown by the chi-square test statistics was not sufficient to understand the nature and significance of the styles of managing change in the organization and business. It was necessary to determine the nature of relationships between the styles of managing changing as well. Such relationships were necessary to understand the significance of the styles and effect size of their relationships while analyzing the instrumentality of the style for the organization and business. Similar to the other inquiries, the categorical data set in this inquiry also consisted a large number of ties, therefore,

Kendall's tau-b considered as a reliable statistical tool for determining the nature and type of relationships between the change management styles. Table 4-76 shows the type of relationships and their level of significance.

Table 4-76: Relationships between change management instruments and style

| Kendall's tau_b correlation coefficient |                         |               |               |               |               |       |
|---|-------------------------|---------------|---------------|---------------|---------------|-------|
|   |                         | I1            | I2            | I3            | I5            | I4    |
| I1: Education and communication         | Correlation Coefficient | 1.000         |               |               |               |       |
|   | Sig. (2-tailed)         | .             |               |               |               |       |
| I2: Collaboration and participation     | Correlation Coefficient | <b>.118*</b>  | 1.000         |               |               |       |
|   | Sig. (2-tailed)         | .016          | .             |               |               |       |
| I3: Delegation and direction            | Correlation Coefficient | <b>.157**</b> | <b>.193**</b> | 1.000         |               |       |
|   | Sig. (2-tailed)         | .001          | .000          | .             |               |       |
| I5: Use of force/power and coercion     | Correlation Coefficient | <b>.182**</b> | <b>.229**</b> | <b>.247**</b> | 1.000         |       |
|   | Sig. (2-tailed)         | .000          | .000          | .000          | .             |       |
| I4: Manipulation and cooptation         | Correlation Coefficient | <b>.175**</b> | <b>.343**</b> | <b>.352**</b> | <b>.410**</b> | 1.000 |
|   | Sig. (2-tailed)         | .000          | .000          | .000          | .000          | .     |

\*. Correlation is significant at the 0.05 level (2-tailed). \*\*. Correlation is significant at the 0.01 level (2-tailed). N=415

The positive relationship between the styles of managing change has indicated that all the styles were effective while managing changes in the organizations and businesses. However, the statistical significance of the relationships was varying depending on the nature and type of the industry.

The respondents who were in favor of education and communication were also intending to use force/power and coercion while managing change. The strong correlation coefficient between the use of force/power and coercion with manipulation was indicating that change is not possible in absence of power with the change agent.

The style of manipulation and cooptation was positively associated with the delegation and direction as well. It was indicating that delegation and direction could not work best in absence of manipulation and cooptation. While collaborating and inviting for participation there was necessity of manipulation and cooptation.

The change management styles were not in isolation. A combination of two or more styles have worked best while managing change in organizational settings. However, when compared with other styles/instruments of managing change, manipulation and cooptation was more significant because it was associating more closely with all other styles except education and communication. Therefore, manipulation and cooption are found most considerable instruments/style of managing change.

#### 4.2.10. Reasons for making change in organization

It was another curiosity that why do organizations attempt changes or what propel them for change in their existing set of businesses. Similarly, why do organizations not attempt for change or what prevents them from making the change? The assumption was not that one answer would be sufficient for all the cases but there would be different reasons for making changes in different type of industries. Reasons for making change were varying from organization to organizations and industry to industry. It was necessary to identify the reasons for making change in organizations and businesses.

This study identified the main reasons for making change and the reasons for making no change in the manufacturing and non-manufacturing industries as discussed earlier. One or more reasons were more effective in one firm and the same reasons were not effective in other firms. The inquiry J determined the major reasons for change and for no change in across the firms. The inquiry identified that perceived unfavorable employee attitude was one major reason for making change and a compatible business network/actors was appealing the organizations for making no change. The Chi-square test statistics carried out to determine the association between industry type and the reasons for making change or not making change and Kendall's tau-b correlation coefficients has been obtained to determine the relationships between the reasons for making and not making change in the organizations and businesses.

The assessment on the reasons for making change- inquiry J3 indicated that perceived unfavorable employee attitude was the major reasons for making change in the organizations and businesses among others. The chi-square statistics  $\chi^2(1, N = 415) = 0.003$ ,  $p = .956 > .05$  indicated that the industry type of manufacturing and non-manufacturing (Table 4-77) had no statistical association with the unfavorable employee attitude as a reason for making changes.

*Table 4-77: Influence of unfavorable employee attitude for change*

| Industry          |                   | Employee attitude seems unfavorable |      | Total |
|-------------------|-------------------|-------------------------------------|------|-------|
|                   |                   | No                                  | Yes  |       |
| Manufacturing     | Count             | 84                                  | 90   | 174   |
|                   | % within Industry | 48.3                                | 51.7 | 100   |
| Non-manufacturing | Count             | 117                                 | 124  | 241   |
|                   | % within Industry | 48.5                                | 51.5 | 100   |
| Total             | Count             | 201                                 | 214  | 415   |
|                   | % within Industry | 48.4                                | 51.6 | 100   |

The chi-square statistics of 0.003 was less than the critical value 3.84, which was leading to the acceptance of the null hypothesis that industry type and unfavorable employee attitude as a major reason for making change were independent.

Similar assessment on the change influencers- inquiry J4 indicated that obsolescence of technology/work process was next major reasons for making change in the organizations and businesses. The chi-square statistics  $\chi^2(1, N = 415) = 5.728$ ,  $p = .017 < .05$  indicates that the industry type of manufacturing and non-manufacturing (*Table 4-78*) has statistical association with the obsolescence of technology/work process as a reason for making changes. The chi-square statistics of 5.728 is greater than the critical value 3.84, which is leading to the rejection of the null hypothesis that industry type and obsolescence of technology/work process as a major reason for making change were independent. The p value of .017 is less than 0.05, which indicates a necessity of synchronized attentions from the management in both the industries because of a significant statistical association of the industry type and the obsolescence of technology/work process as the reason for making changes in organizations and businesses.

*Table 4-78: Influence of obsolete and outdated technology and work process for change*

| Industry          |                   | Technology/work process looks obsolete |      | Total |
|-------------------|-------------------|--|------|-------|
|                   |                   | No                                     | Yes  |       |
| Manufacturing     | Count             | 103                                    | 71   | 174   |
|                   | % within Industry | 59.2                                   | 40.8 | 100   |
| Non-manufacturing | Count             | 114                                    | 127  | 241   |
|                   | % within Industry | 47.3                                   | 52.7 | 100   |
| Total             | Count             | 217                                    | 198  | 415   |
|                   | % within Industry | 52.3                                   | 47.7 | 100   |

Correspondingly, the assessment on the role of reporting relationships- inquiry J1 indicated that ineffectiveness of authority hierarchy was another major reason for making change in the organizations and businesses. The chi-square statistics  $\chi^2(1, N = 415) = 1.318$ ,  $p = .251 > .05$  indicated that the industry type of manufacturing and non-manufacturing firms (*Table 4-79*) had no statistical association with the ineffectiveness of authority hierarchy as a reason for making changes.

*Table 4-79: Influence of ineffective authority hierarchy for change*

| Industry          |                   | Authority hierarchy looks ineffective |      | Total |
|-------------------|-------------------|---------------------------------------|------|-------|
|                   |                   | No                                    | Yes  |       |
| Manufacturing     | Count             | 98                                    | 76   | 174   |
|                   | % within Industry | 56.3                                  | 43.7 | 100   |
| Non-manufacturing | Count             | 122                                   | 119  | 241   |
|                   | % within Industry | 50.6                                  | 49.4 | 100   |
| Total             | Count             | 220                                   | 195  | 415   |
|                   | % within Industry | 53.0                                  | 47.0 | 100   |

The chi-square statistics of 1.318 was less than the critical value 3.84, which was leading to the acceptance of the null hypothesis that industry type and ineffectiveness of authority hierarchy as a major reason for making change were independent and unrelated too.

Likewise, the assessment on the influence of organizational culture as a reason for making change- inquiry J2 indicated that unproductiveness of organization culture was next major reason for making change in the organizations and businesses. The chi-square statistics  $\chi^2(1, N = 415) = 13.102$ ,  $p = .001 < .05$  indicated that the industry type of manufacturing and non-manufacturing firms (*Table 4-80*) had statistical association with the unproductiveness of organization culture as a reason for making changes. The chi-square statistics of 13.102 is found greater than the critical value 3.84 that led to accept the alternative hypothesis that industry type and unproductiveness of organization culture as a major reason for making change were dependent and related to the firms. The p value of .001 was less than 0.05, which indicated a necessity of simultaneous considerations in both the industries because of a significant statistical association of the industry and the unproductiveness of organization culture as the reason for making changes in the firms.

*Table 4-80: Influence of unproductive organizational culture for change*

| Industry          |                   | Organization culture looks unproductive |      | Total |
|-------------------|-------------------|---|------|-------|
|                   |                   | No                                      | Yes  |       |
| Manufacturing     | Count             | 119                                     | 55   | 174   |
|                   | % within Industry | 68.4                                    | 31.6 | 100   |
| Non-manufacturing | Count             | 122                                     | 119  | 241   |
|                   | % within Industry | 50.6                                    | 49.4 | 100   |
| Total             | Count             | 241                                     | 174  | 415   |
|                   | % within Industry | 58.1                                    | 41.9 | 100   |

The assessment on the model, design, and service composition concerning the business of the firms- inquiry J7 indicated that unattractiveness of product/services design was another major reason for making change in the organizations and businesses. The chi-square statistics  $\chi^2(1, N = 415) = 0.341$ ,  $p = .559 > .05$  indicated that the industry type of manufacturing and non-manufacturing (*Table 4-81*) had no statistical association with the unattractiveness of product/services design as a reason for making changes. The chi-square statistics of 0.341 was less than the critical value 3.84, which was leading to the acceptance of the null hypothesis that industry type and unattractiveness of product/services design as a major reason for making change were independent.



*Table 4-81: Influence of unattractive designs of products and services for change*

| Industry          |                   | Product/service design looks unattractive |      | Total |
|-------------------|-------------------|---|------|-------|
|                   |                   | No  | Yes  |       |
| Manufacturing     | Count             | 128                                       | 46   | 174   |
|                   | % within Industry | 73.6                                      | 26.4 | 100   |
| Non-manufacturing | Count             | 171                                       | 70   | 241   |
|                   | % within Industry | 71.0                                      | 29.0 | 100   |
| Total             | Count             | 299                                       | 116  | 415   |
|                   | % within Industry | 72.0                                      | 28.0 | 100   |

In the same line, the assessment on the influence of the key stakeholders for making change in the firms- inquiry J8 reported that the compelling nature of stakeholders and unions was another major reason for making change in the organizations and businesses. The chi-square statistics  $\chi^2(1, N = 415) = 0.914$ ,  $p = .339 > .05$  exhibited that the industry type of manufacturing and non-manufacturing firms (*Table 4-82*) formed no statistical association with the compelling nature of stakeholders and unions as a reason for making changes. The chi-square statistics of 0.914 was less than the critical value 3.84, which was leading to the acceptance of the null hypothesis that industry type and compelling nature of stakeholders and unions as a major reason for making change were unrelated with the firms.

*Table 4-82: Influence of stakeholders and unions for change*

| Industry          |                   | Stakeholders/unions appear compelling |      | Total |
|-------------------|-------------------|---------------------------------------|------|-------|
|                   |                   | No                                    | Yes  |       |
| Manufacturing     | Count             | 131                                   | 43   | 174   |
|                   | % within Industry | 75.3                                  | 24.7 | 100   |
| Non-manufacturing | Count             | 191                                   | 50   | 241   |
|                   | % within Industry | 79.3                                  | 20.7 | 100   |
| Total             | Count             | 322                                   | 93   | 415   |
|                   | % within Industry | 77.6                                  | 22.4 | 100   |

There were no sole reasons for making changes in organizations and businesses, but the reasons for not making changes were also effective in influencing the change agents. The adequacy of profitability and productivity as well as compatible business networks and actors were satisfying the change makers. Consequently, there were no more changes in the industries. This analysis attempted to understand that whether the condition of ‘no change’ was similar in manufacturing and non-manufacturing firms or was there any statistical significance.

Contrarily, the assessment on the reasons for making no change- inquiry JF showed that the adequacy of productivity/profitability was the major reason for making no change in the organizations and businesses. The chi-square statistics  $\chi^2(1, N = 415) = 0.835$ ,  $p = .361 > .05$  indicated that the industry type of manufacturing and non-manufacturing (*Table 4-83*)

had no statistical association with the adequacy of productivity/profitability as a reason for making no changes. The chi-square statistics of 0.835 found less than the critical value 3.84, which was leading to the acceptance of the null hypothesis that industry type and adequacy of profitability/profitability as a major reason for making no change were independent and were not related to each other.

*Table 4-83: Influence of adequate profitability and productivity for unchange*

| Industry          |                   | Productivity/profitability seems adequate |      | Total |
|-------------------|-------------------|---|------|-------|
|                   |                   | No  | Yes  |       |
| Manufacturing     | Count             | 136                                       | 38   | 174   |
|                   | % within Industry | 78.2                                      | 21.8 | 100   |
| Non-manufacturing | Count             | 179                                       | 62   | 241   |
|                   | % within Industry | 74.3                                      | 25.7 | 100   |
| Total             | Count             | 315                                       | 100  | 415   |
|                   | % within Industry | 75.9                                      | 24.1 | 100   |

Similarly, the assessment on the reason for no change in the firms- inquiry JE directed that the business network/actor compatibility was another major reason for making no change in the organizations and businesses. The chi-square test scores  $\chi^2(1, N = 415) = 1.917, p = .166 > .05$  exhibited that the industry type of manufacturing and non-manufacturing (*Table 4-84*) had no statistical association with the business network/actor compatibility as a reason for making no changes. The chi-square statistics of 1.917 was less than the critical value 3.84, which was leading to the acceptance of the null hypothesis that industry type and business network/actor compatibility as a major reason for making no change were not related in the industries.

*Table 4-84: Influence of compatible supply chain and business network for unchange*

| Industry          |                   | Business networks/actors appear compatible |      | Total |
|-------------------|-------------------|--|------|-------|
|                   |                   | No   | Yes  |       |
| Manufacturing     | Count             | 127  | 47   | 174   |
|                   | % within Industry | 73.0                                       | 27.0 | 100   |
| Non-manufacturing | Count             | 190  | 51   | 241   |
|                   | % within Industry | 78.8                                       | 21.2 | 100   |
| Total             | Count             | 317  | 98   | 415   |
|                   | % within Industry | 76.4                                       | 23.6 | 100   |

The assessment determined the statistical significance between manufacturing and non-manufacturing firm regarding the obsolescence of technology and work process and unproductiveness of organizational culture as the reasons for making changes across the firms.

Statistical association determined between industry type and reasons for making change as well as the reasons for making no change in the organizations and business shown by the

chi-square test statistics remained insufficient to understand the nature and significance of the reasons for change and no change in the organization and business. It was necessary to determine the relationships between the reasons for making change and no change as well. Such relationships were necessary to understand the nature and type of their relationships and significance therein while understanding the organizational intensity to change. Similar to the other inquiries, the categorical data set in this inquiry also consisted a large number of ties, therefore, Kendall's tau-b selected as a reliable statistical tool for determining the nature and significance of relationships between the reasons for making change and the reasons for making unchange in the organizations. Table 4-85 shows the relationships between the reasons and significance therein.

*Table 4-85: Relationships between organizational reasons for change and unchange*

|   |                         | Kendall's tau_b correlation coefficient |              |              |               |               |       |              |    |
|---|-------------------------|---|--------------|--------------|---------------|---------------|-------|--------------|----|
|   |                         | J3                                      | J4           | J1           | J2            | J7            | J8    | JF           | JE |
| J3: Employee attitude seems unfavorable             | Correlation Coefficient | 1.00                                    |              |              |               |               |       |              |    |
|   | Sig. (2-tailed)         | .                                       |              |              |               |               |       |              |    |
| J4: Technology/work process looks obsolete/outdated | Correlation Coefficient | .067                                    | 1.00         |              |               |               |       |              |    |
|   | Sig. (2-tailed)         | .175                                    | .            |              |               |               |       |              |    |
| J1: Authority hierarchy looks ineffective           | Correlation Coefficient | <b>.149*</b>                            | .048         | 1.00         |               |               |       |              |    |
|   | Sig. (2-tailed)         | .002                                    | .329         | .            |               |               |       |              |    |
| J2: Organization culture looks unproductive         | Correlation Coefficient | <b>.296*</b>                            | <b>.166*</b> | <b>.237*</b> | 1.00          |               |       |              |    |
|   | Sig. (2-tailed)         | .000                                    | .001         | .000         | .             |               |       |              |    |
| J7: Products design looks unattractive              | Correlation Coefficient | .013                                    | <b>.147*</b> | .059         | <b>.113*</b>  | 1.00          |       |              |    |
|   | Sig. (2-tailed)         | .796                                    | .003         | .229         | .022          | .             |       |              |    |
| J8: Stakeholders/unions appear compelling           | Correlation Coefficient | <b>.232*</b>                            | <b>.135*</b> | <b>.131*</b> | <b>.223**</b> | <b>.129**</b> | 1.00  |              |    |
|   | Sig. (2-tailed)         | .000                                    | .006         | .008         | .000          | .009          | .     |              |    |
| JF: Productivity seems adequate                     | Correlation Coefficient | <b>.106*</b>                            | -.008        | <b>.169*</b> | <b>.161**</b> | .076          | -.046 | 1.00         |    |
|   | Sig. (2-tailed)         | .030                                    | .870         | .001         | .001          | .122          | .349  | .            |    |
| JE: Networks/actors appear compatible               | Correlation Coefficient | <b>.153*</b>                            | .014         | <b>.193*</b> | <b>.148**</b> | -.030         | .055  | <b>.111*</b> | 00 |
|   | Sig. (2-tailed)         | .002                                    | .774         | .000         | .003          | .538          | .264  | .024         | .  |

\*. Correlation is significant at the 0.05 level (2-tailed). \*\*. Correlation is significant at the 0.01 level (2-tailed). N=415

Obsolete technology and processes were affecting the productivity and profitability in the industries. Similarly, the productivity and profitability was adversely influencing mainly because of the unions and stakeholders compelling nature of individualized value maximization. However, the influence was not significant as there were not more impacts of product/services designs and the compelling nature of the stockholders and unions. The positive relationship between the reasons for making change and similar relationships between the reasons for making no change indicated that there was no conflict within the

reasons. However, it was obvious to have conflicting nature of the reasons of opposite zones.

There was association of stakeholders including unions with all the reasons of changes in the organizations. The compelling nature of stakeholders was not associating with the productivity/profitability of the organizations. It clearly indicated that the stakeholders were more serious for their individual benefits and interests than the collective benefits and interests associated with the organizations.

The productivity/profitability and business networks/actors were the reasons of not making change. The significance level of the correlation coefficient indicates that organizations with compatible business networks/actors were maintaining a satisfactory level of productivity/profitability and vice versa. However, the organizations having business networks/actors compatible were suffering from problems like unfavorable employee attitudes, ineffective authority hierarchy, and unproductive organizational culture too. The organizations having adequate productivity/profitability were also confronting the same issues as the organizations having compatible business networks/actors were confronting.

Organizations with unproductive culture were facing the issues of all others as mentioned in the correlation coefficient table. Unproductive organization culture was associated with all other issues and vice versa. Obsolescence of technology/work processes was associating with the unattractive productive design and compelling nature of the stakeholders in addition to the organization culture.

#### **4.2.11. Managing change in organization**

This study made an exploration that what fundamental forces within the organizations were permitting for change or preventing from change, as of the factors in the general environment and industry environment, were influencing. The assumption was that there were varieties of forces permitting for change and preventing for change even within the organizations. The forces were found varying from organization to organizations and industry to industries. Therefore, it became necessary to identify the permitting and preventing forces specific to the firms in order to facilitate the change management process.

This study identified both the forces permitting change and the forces preventing the change in manufacturing and non-manufacturing industries. One or more forces were more effective in one firm and the same forces were not effective in other firms. The study carried out inquiry K to determine the major forces permitting for change and preventing

for change in the organizations and businesses. The inquiry identified that technical and procedural force was the major reasons for permitting change and personnel and labor force was preventing change. The Chi-square test statistics carried out to determine the association between industry type and the forces for permitting as well as preventing change and Kendall's tau-b correlation coefficients obtained to determine the relationships between the forces for permitting and preventing for changes in the organizations and businesses.

Inquiry K4 carried out to ascertain the forces that were facilitating for change indicated that technical and procedural force was most permitting force for change in the organizations and businesses among others. The chi-square statistics  $\chi^2(1, N = 415) = 7.364, p = .007 < .05$  indicated that the industry type of manufacturing and non-manufacturing (*Table 4-86*) had statistical association with the technical and procedural force as a permitting force for making changes. The chi-square statistics of 7.364 was greater than the critical value 3.84, which was leading to the acceptance of the alternative hypothesis that industry type and technical and procedural force as a major force permitting for change were dependent and specific to the firms. The p value of .007 was less than 0.05, which indicated a requirement of synchronized considerations from the management in both the industries because of a significant statistical association of the industry type and the technical and procedural force as the force for permitting changes in the firms.

*Table 4-86: Technical and procedural facilitation in managing change*

| Industry          |                   | Technical and procedural factors |                         | Total |
|-------------------|-------------------|----------------------------------|-------------------------|-------|
|                   |                   | Not facilitating for change      | Facilitating for change |       |
| Manufacturing     | Count             | 121                              | 53                      | 174   |
|                   | % within Industry | 69.5                             | 30.5                    | 100   |
| Non-manufacturing | Count             | 136                              | 105                     | 241   |
|                   | % within Industry | 56.4                             | 43.6                    | 100   |
| Total             | Count             | 257                              | 158                     | 415   |
|                   | % within Industry | 61.9                             | 38.1                    | 100   |

Similar assessment on the forces permitting for making change in the firms- inquiry K3 indicated that cultural and attitudinal force was another permitting force for change in the organizations and businesses. The chi-square statistics  $\chi^2(1, N = 415) = 0.706, p = .401 > .05$  indicated that the industry type of manufacturing and non-manufacturing (*Table 4-87*) had no statistical association with the cultural and attitudinal force as a permitting force for making changes. The chi-square statistics of 0.706 was less than the critical value 3.84, which was leading to the acceptance of the null hypothesis that industry type and cultural and attitudinal force as a major force permitting for change were independent.

*Table 4-87: Cultural and attitudinal facilitation in managing change*

| Industry          |                   | Cultural and attitudinal factors |                         | Total |
|-------------------|-------------------|----------------------------------|-------------------------|-------|
|                   |                   | Not facilitating for change      | Facilitating for change |       |
| Manufacturing     | Count             | 123                              | 51                      | 174   |
|                   | % within Industry | 70.7                             | 29.3                    | 100   |
| Non-manufacturing | Count             | 161                              | 80                      | 241   |
|                   | % within Industry | 66.8                             | 33.2                    | 100   |
| Total             | Count             | 284                              | 131                     | 415   |
|                   | % within Industry | 68.4                             | 31.6                    | 100   |

Likewise, the assessment on the response associated with inquiry K6 concerning monetary impact on the firms from the change indicated that economical and financial force was another permitting force for change in the organizations and businesses. The chi-square statistics  $\chi^2(1, N = 415) = 0.000$ ,  $p = .983 > .05$  indicated that the industry type of manufacturing and non-manufacturing (*Table 4-88*) has no statistical association with the economic and financial force as a permitting force for making changes. The chi-square statistics of 0.000 is less than the critical value 3.84, which is leading to the acceptance of the null hypothesis that industry type and economical and financial force as a major force permitting for change were independent. However, the p value of .983 is greater than 0.05, which indicates the obligation of instantaneous attentions from the management in both the industries because of an insignificant statistical association of the industry type and the economic and financial force as the force for permitting changes in organizations and businesses.

*Table 4-88: Economic and financial support in managing change*

| Industry          |                   | Economical and financial factors |                         | Total |
|-------------------|-------------------|----------------------------------|-------------------------|-------|
|                   |                   | Not facilitating for change      | Facilitating for change |       |
| Manufacturing     | Count             | 133                              | 41                      | 174   |
|                   | % within Industry | 76.4                             | 23.6                    | 100   |
| Non-manufacturing | Count             | 184                              | 57                      | 241   |
|                   | % within Industry | 76.3                             | 23.7                    | 100   |
| Total             | Count             | 317                              | 98                      | 415   |
|                   | % within Industry | 76.4                             | 23.6                    | 100   |

Similarly, the inquiry K7 concentrated on the role of inheritance while managing change indicated that the legacy and habitual aspect was another force permitting for change in the organizations and businesses. The chi-square statistics  $\chi^2(1, N = 415) = 1.200$ ,  $p = .273 > .05$  indicated that the industry type of manufacturing and non-manufacturing (*Table 4-89*) had no statistical association with the legacy and habitual force as a permitting force for making changes. The chi-square statistics of 1.200 was less than the critical value 3.84, which was leading to the acceptance of the null hypothesis that industry type, and legacy

and habitual force as a major force permitting for change were independent and unrelated to each other.

*Table 4-89: Legacy and habitual facilitation in managing change*

| Industry          |                   | Legacy and habitual factors |                         | Total |
|-------------------|-------------------|-----------------------------|-------------------------|-------|
|                   |                   | Not facilitating for change | Facilitating for change |       |
| Manufacturing     | Count             | 140                         | 34                      | 174   |
|                   | % within Industry | 80.5                        | 19.5                    | 100   |
| Non-manufacturing | Count             | 183                         | 58                      | 241   |
|                   | % within Industry | 75.9                        | 24.1                    | 100   |
| Total             | Count             | 323                         | 92                      | 415   |
|                   | % within Industry | 77.8                        | 22.2                    | 100   |

In the same line, the inquiry K5 associated with the business actors' relationships permitting for change indicated that operational and relational force was another permitting force for change in the organizations and businesses. The chi-square statistics  $\chi^2(1, N = 415) = 2.790$ ,  $p = .095 > .05$  indicated that the industry type of manufacturing and non-manufacturing (*Table 4-90*) had no statistical association with the operational and relational force as a permitting force for making changes. The chi-square statistics of 2.790 was less than the critical value 3.84, which was leading to the acceptance of the null hypothesis that industry type and operational and relational force as a major force permitting for change were unrelated.

*Table 4-90: Relational and operational support in managing change*

| Industry          |                   | Relational and operational factors |                         | Total |
|-------------------|-------------------|------------------------------------|-------------------------|-------|
|                   |                   | Not facilitating for change        | Facilitating for change |       |
| Manufacturing     | Count             | 137                                | 37                      | 174   |
|                   | % within Industry | 78.7                               | 21.3                    | 100   |
| Non-manufacturing | Count             | 205                                | 36                      | 241   |
|                   | % within Industry | 85.1                               | 14.9                    | 100   |
| Total             | Count             | 342                                | 73                      | 415   |
|                   | % within Industry | 82.4                               | 17.6                    | 100   |

The fundamental environmental forces of organization and business were not permitting changes, but also blocking for it. The forces namely business network and structural forces, compliance and regulatory forces, and personnel and labor forces were major forces blocking for change in the organizations and businesses.

However, the inquiry KA carried out to ascertain the forces that were preventing changes in the firms indicated that business network and structural force was the major preventing force for change in the organizations and businesses. The chi-square statistics  $\chi^2(1, N = 415) = 1.472$ ,  $p = .225 > .05$  indicates that the industry type of manufacturing and non-manufacturing (*Table 4-91*) had no statistical association with the business network and

structural force as a preventing force for making changes. The chi-square statistics of 1.472 was less than the critical value 3.84, which was leading to the acceptance of the null hypothesis that industry type and business network and structural force as a major force preventing for change were not related to each other.

*Table 4-91: Business network and structural forces influencing for unchange*

| <b>Industry * Business networks and structural forces Crosstabulation</b> |                   |  |                          |       |
|---|-------------------|--|--------------------------|-------|
| Industry  |                   | Business networks and structural factors |                          | Total |
|   |                   | Not influencing for unchange             | Influencing for unchange |       |
| Manufacturing   | Count             | 98                                       | 76                       | 174   |
|   | % within Industry | 56.3                                     | 43.7                     | 100   |
| Non-manufacturing   | Count             | 150                                      | 91                       | 241   |
|   | % within Industry | 62.2                                     | 37.8                     | 100   |
| Total   | Count             | 248                                      | 167                      | 415   |
|   | % within Industry | 59.8                                     | 40.2                     | 100   |

Similarly, inquiry KB associated with the forces blocking for change indicated that compliance and regulatory force was next preventing force for change in the organizations and businesses. The chi-square statistics  $\chi^2(1, N = 415) = 3.999$ ,  $p = .05 = .05$  exhibited that the industry type of manufacturing and non-manufacturing firms (*Table 4-92*) had statistical association with the compliance and regulatory force as a preventing force for making changes. The chi-square statistics of 3.999 is found greater than the critical value 3.84 that led to accept the alternative hypothesis that industry type and compliance and regulatory force as a major force preventing for change were dependent and related to each other. The p value of .05 is equal to 0.05, which indicates a requirement of synchronized considerations from the management in both the industries because of a significant statistical association of the industry type and the compliance and regulatory force as the force for preventing changes in organizations and businesses.

*Table 4-92: Regulatory forces influencing for unchange*

| Industry          |                   | Legal and regulatory factors |                          | Total |
|-------------------|-------------------|------------------------------|--------------------------|-------|
|                   |                   | Not influencing for unchange | Influencing for unchange |       |
| Manufacturing     | Count             | 124                          | 50                       | 174   |
|                   | % within Industry | 71.3                         | 28.7                     | 100   |
| Non-manufacturing | Count             | 149                          | 92                       | 241   |
|                   | % within Industry | 61.8                         | 38.2                     | 100   |
| Total             | Count             | 273                          | 142                      | 415   |
|                   | % within Industry | 65.8                         | 34.2                     | 100   |

Likewise, the inquiry KA concerning human resources as a hurdle while making changes in the firms indicated that personnel and labor force was the next major preventing force for change in the organizations and businesses. The chi-square statistics  $\chi^2(1, N = 415) =$



2.478,  $p = .115 > .05$  provided an indication that the industry type of manufacturing and non-manufacturing (*Table 4-93*) had no statistical association with the personnel and labor as a preventing force for making changes. The chi-square statistics of 2.478 was less than the critical value 3.84, which was leading to the acceptance of the null hypothesis that industry type, and personnel and labor as a major force preventing for change were independent.

*Table 4-93: Personnel and labor forces influencing for unchange*

| <b>Industry * Personnel and labor forces Crosstabulation</b> |                   |                              |                          |       |
|--|-------------------|------------------------------|--------------------------|-------|
| Industry   |                   | Personnel and labor factors  |                          | Total |
|  |                   | Not influencing for unchange | Influencing for unchange |       |
| Manufacturing  | Count             | 142                          | 32                       | 174   |
|  | % within Industry | 81.6                         | 18.4                     | 100   |
| Non-manufacturing  | Count             | 181                          | 60                       | 241   |
|  | % within Industry | 75.1                         | 24.9                     | 100   |
| Total  | Count             | 323                          | 92                       | 415   |
|  | % within Industry | 77.8                         | 22.2                     | 100   |

The assessment provided an insight that the technological and procedural forces and compliance and regulatory forces are statistically significant across the manufacturing and non-manufacturing firms. The technical and procedural aspects were facilitating the change interventions whereas the compliance and regulatory aspects of the organization were blocking the changes in the industries.

Statistical association determined between industry type and the forces permitting for making change as well as the forces preventing for making change in the organizations and business shown by the chi-square test statistics was not sufficient to understand the nature and significance of the permitting and preventing forces for change in the organization and business. It became necessary to determine the nature of relationships between the preventing and permitting forces for change. Such relationships were necessary to understand the statistical significance of the organizational forces while understanding the organizational immunity to change. Similar to other inquiries, the categorical data set in this inquiry also consisted a large number of ties, therefore Kendall's tau-b selected as a reliable statistical tool for determining the nature and type of relationships between the permitting and preventing forces for making change in business and organizations. Table 4-94 shows the relationships and statistical significance therein.

The technical and procedural forces were quite in opposite due to economic and financial involvement of technical and procedural changes in the organization and businesses. Quite negative attitude of the organizations towards the government exhibited significantly

adverse relationship between the attitudinal and regulatory forces. The strong relationship between preventing forces mainly the relationship of business network and organizational structural forces with the regulatory and compliance forces indicated that the areas were immune to change.

Table 4-94: Relationships between change facilitators and blockers

| Kendall's tau_b correlation coefficient |                         | K4            | K3            | K6           | K7           | K5           | KA            | KB            | KH   |
|---|-------------------------|---------------|---------------|--------------|--------------|--------------|---------------|---------------|------|
| K4: Technical and procedural forces     | Correlation Coefficient | 1.00          |               |              |              |              |               |               |      |
|   | Sig. (2-tailed)         | .             |               |              |              |              |               |               |      |
| K3: Cultural and attitudinal forces     | Correlation Coefficient | .044          | 1.00          |              |              |              |               |               |      |
|   | Sig. (2-tailed)         | .370          | .             |              |              |              |               |               |      |
| K6: Economical and financial forces     | Correlation Coefficient | -.039         | .001          | 1.00         |              |              |               |               |      |
|   | Sig. (2-tailed)         | .431          | .987          | .            |              |              |               |               |      |
| K7: Legacy and habitual forces          | Correlation Coefficient | <b>.191**</b> | <b>.112*</b>  | .072         | 1.00         |              |               |               |      |
|   | Sig. (2-tailed)         | .000          | .023          | .143         | .            |              |               |               |      |
| K5: Operational and relational forces   | Correlation Coefficient | .081          | .013          | .071         | <b>.119*</b> | 1.00         |               |               |      |
|   | Sig. (2-tailed)         | .100          | .791          | .149         | .015         | .            |               |               |      |
| KA: Networks and structural forces      | Correlation Coefficient | .035          | -.071         | <b>.122*</b> | .000         | .073         | 1.00          |               |      |
|   | Sig. (2-tailed)         | .481          | .149          | .013         | .996         | .140         | .             |               |      |
| KB: Compliance and regulatory forces    | Correlation Coefficient | .062          | <b>-.118*</b> | <b>.113*</b> | .092         | <b>.107*</b> | <b>.247**</b> | 1.00          |      |
|   | Sig. (2-tailed)         | .206          | .016          | .021         | .061         | .029         | .000          | .             |      |
| KH: Personnel and labor forces          | Correlation Coefficient | .073          | .049          | .070         | .029         | .009         | <b>.127*</b>  | <b>.139**</b> | 1.00 |
|   | Sig. (2-tailed)         | .140          | .316          | .153         | .558         | .857         | .010          | .005          | .    |

\*. Correlation is significant at the 0.05 level (2-tailed). \*\*. Correlation is significant at the 0.01 level (2-tailed). N=415

The technical and procedural forces were associating with the legacy and habitual forces. The legacy and habitual forces were also associated with cultural and attitudinal forces as well. It was associated with the relational and operational forces too. The organizations having the cultural and attitudinal forces facilitative were not adversely affecting by the legal and regulatory forces.

Business networks and structural forces were forming association with legal and regulatory forces as forces preventing for changes while economic and financial forces were facilitating for change. It was indicating that economic and financial forces were constrained by the structural and regulatory forces. The organizations where operational and relational forces were facilitating the change, at the same time the legacy and habitual forces were also facilitating for change.

Business networks and structural forces, legal and regulatory forces as well as personnel and labor forces were preventing for changes. Where personal and labor forces were preventing for change, there the networks and structural forces were also preventing too.

### 4.3. GROUPING OF ASSOCIATIONS

The study made inquiries more specific concerning organizational immunity and change management process. It was necessary to group the variables in order to determine the areas and sectors of the immunity and change in organizations and businesses. The dimension of the associations of the variables became necessary to reduce for further interpretation. There was grouping of the associations of the variables by using exploratory factor analysis available with the dimension reduction option of the SPSS statistics 20.

The analysis dropped the variables M14, M18, M21, M22, and M34 by looking at their theoretical significance while determining the factors. The following *Table 4-95* shows the mean and standard deviation of the variables.

*Table 4-95: Mean and standard deviation of the variables*

| <b>Variables</b>                   | <b>Mean</b> | <b>Std. Deviation</b> | <b>Analysis N</b> |
|------------------------------------|-------------|-----------------------|-------------------|
| M1: Government policy              | 3.24        | 1.346                 | 415               |
| M2: Law and act                    | 3.05        | 1.246                 | 415               |
| M3: Regulatory directive           | 3.42        | 1.113                 | 415               |
| M4: Structural empowerment         | 2.87        | 1.262                 | 415               |
| M5: Business partnership           | 2.65        | 1.278                 | 415               |
| M6: Supply chain/network           | 2.67        | 1.213                 | 415               |
| M7: Organizational polity          | 2.94        | 1.343                 | 415               |
| M8: Operational freedom            | 3.12        | 1.168                 | 415               |
| M9: Organizational priority        | 2.31        | 1.198                 | 415               |
| M10: Preference at work            | 2.53        | 1.227                 | 415               |
| M11: Events, festivals and rituals | 2.94        | 1.169                 | 415               |
| M12: Technology and process        | 3.28        | 1.282                 | 415               |
| M13: Key personnel                 | 3.12        | 1.339                 | 415               |
| M15: Learning at work              | 3.04        | 1.183                 | 415               |
| M16: Supplier's behavior           | 3.22        | 1.082                 | 415               |
| M17: Buyer's behavior              | 3.35        | 1.120                 | 415               |
| M19: Product development           | 3.14        | 1.296                 | 415               |
| M20: Product change                | 2.83        | 1.223                 | 415               |
| M23: Capital and equity            | 3.19        | 1.350                 | 415               |
| M24: Investment                    | 3.68        | 1.144                 | 415               |
| M25: Abuse of authority            | 3.12        | 1.282                 | 415               |
| M26: Work plans                    | 3.43        | 1.274                 | 415               |
| M27: Discrimination at work        | 2.72        | 1.200                 | 415               |
| M28: Business philosophy           | 2.52        | 1.249                 | 415               |
| M29: Business ethics               | 2.68        | 1.230                 | 415               |
| M30: Working standards             | 2.49        | 1.289                 | 415               |
| M31: Profitability                 | 3.57        | 1.112                 | 415               |
| M32: Personnel development         | 2.60        | 1.107                 | 415               |
| M33: Code of conduct               | 2.71        | 1.344                 | 415               |
| M35: Intended purpose              | 2.42        | 1.158                 | 415               |
| M36: Desire for change             | 3.04        | 1.217                 | 415               |
| M37: Inheritance and legacy        | 2.73        | 1.267                 | 415               |

The preliminary analysis began with scanning the correlation matrix. The scanning task concentrated to look for variables that don't correlate with any other variables, or correlate

very highly ( $r = 0.9$ ) with one or more other variable at one part and to check that the determinant of this matrix is bigger than a simple heuristic figure 0.00001 in order to confirm the absence of multicollinearity problem (Field, 2009). The scanning found no highly correlated variable as such and found the determinant equal to 6.756E-005 i.e.  $0.00006756 > 0.00001$ . Although, a mild multicollinearity is not a problem for factor analysis; but it is important to avoid extreme multicollinearity. However, multicollinearity does not cause a problem for principal component analysis (Field, 2009).

Pearson correlation matrix (*Appendix 5*) was not an identity matrix, because the variables in the matrix were correlating quite satisfactorily i.e. all correlation coefficients were not close to zero. If all the off-diagonal correlation coefficients were close to zero then it would mean that all variables are perfectly independent from one another, and there would be no cluster of variables. However, it was important to test that the correlation matrix was significantly different from an identity matrix. Bartlett's test showed whether the correlation matrix was significantly different from an identity matrix or not. The test was significant very well in case of this study then it has been considered good for factor analysis. In summary, all variables selected for factor analysis correlated reasonably well with all others and none of the correlation coefficients was excessively large; therefore, there was no further need to eliminate any variable for interpretation.

Principal Component Analysis (PCA) summarized the information in a correlation matrix as mentioned herewith. The total amount of variance in the correlation matrix was calculated by adding the values on the diagonal: as each element on the diagonal had of value of one, the total amount of variance also corresponded to the number of observed variables. In this data set, the total amount of variance was 32 equals to the total variables processed for the analysis. This total amount of variance partitioned into different parts where each part represents the variance of each component. The eigenvalues (*Table 4-98*) represented the amount of variance associated with each component. If the eigenvalues were added, the resulting total should be the total variance in the correlation matrix i.e. in this case 32. The followings are the Tables that are showings the mean, standard deviation and Pearson correlation coefficient, and anti-image matrix.

KMO and Bartlett's test produced the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test scores. Kaiser recommended a bare minimum of 0.5 and that values between 0.5 and 0.7 are mediocre, values between 0.7 and 0.8 are good, values between 0.8 and 0.9 were great and values above 0.9 were superb (Field, 2009). This value

of this study was 0.8, if rounded the value 0.789, therefore it was considered great (*Table 4-96*) and the sample size was adequate for factor analysis.

Bartlett’s measure tested the null hypothesis that the original correlation matrix was an identity matrix. If the correlation coefficients matrix was an identity matrix then all correlation coefficients would be zero. Therefore, it was necessary to have this test and this study conducted this test to be significant at significance value less than 0.05. The test told that the correlation matrix was not an identity matrix; therefore, there were some relationships between the variables considered for factor analysis. Bartlett’s test was highly significant ( $P < .001$ ) for the data, and therefore factor analysis was appropriate in order to group the associations of the variables.

*Table 4-96: Kaiser-Meyer-Olkin measure of sampling adequacy*

| <b>KMO and Bartlett's Test</b>                  |                    |          |
|---|--------------------|----------|
| Kaiser-Meyer-Olkin measure of sampling adequacy |                    | .789     |
| Bartlett's Test of Sphericity                   | Approx. Chi-Square | 3865.019 |
|   | Df                 | 496      |
|   | Sig.               | .000     |

The diagonal values in the anti-image correlation matrix (*Appendix 6*) indicated the KMO values produced for individual variables. The values made anti-image correlation matrix an extremely important part of the output. It was important to examine the diagonal elements of the anti-image correlation matrix in order to confirm that the values were well above 0.5 for all the variables. In case of the data of this study all values were well above 0.5, which was good for exploratory factor analysis. The off-diagonal elements represented the partial correlations between variables. Smaller the off-diagonal correlations, better the factor analysis, which was very favorable in this study too.

Communality was the proportion of common variance within a variable (*Table 4-97*) in this study. Communality of a variable was the sum total of square of the extracted factor loadings. Uniqueness of a variable was equal to the communality deducted from one. When communality and uniqueness are added, it becomes one for a standardized variable. Intuitively, variables with high communality share more in common with rest of the variables. Variables with high communalities are more informative and vice versa. Communalities in Principal component analysis worked on the initial assumption that all variance was common; therefore, before extraction the communalities were all one as reflected in column ‘initial’. The communalities in the column label ‘extraction’ reflect the common variance. For an instance, 70.9% of the variance associated with the government policy was common, or shared, variance.

Table 4-97: Communalities

| Variables                          | Initial | Extraction | Uniqueness |
|------------------------------------|---------|------------|------------|
| M1: Government policy              | 1.000   | .71        | 0.29       |
| M2: Law and act                    | 1.000   | .77        | 0.23       |
| M3: Regulatory directive           | 1.000   | .66        | 0.34       |
| M4: Structural empowerment         | 1.000   | .50        | 0.50       |
| M5: Business partnership           | 1.000   | .59        | 0.41       |
| M6: Supply chain/network           | 1.000   | .61        | 0.39       |
| M7: Organizational polity          | 1.000   | .54        | 0.46       |
| M8: Operational freedom            | 1.000   | .53        | 0.47       |
| M9: Organizational priority        | 1.000   | .48        | 0.52       |
| M10: Preference at work            | 1.000   | .36        | 0.64       |
| M11: Events, festivals and rituals | 1.000   | .60        | 0.40       |
| M12: Technology and process        | 1.000   | .61        | 0.39       |
| M13: Key personnel                 | 1.000   | .57        | 0.43       |
| M15: Learning at work              | 1.000   | .61        | 0.39       |
| M16: Supplier's behavior           | 1.000   | .71        | 0.29       |
| M17: Buyer's behavior              | 1.000   | .71        | 0.29       |
| M19: Product development           | 1.000   | .56        | 0.44       |
| M20: Product change                | 1.000   | .55        | 0.45       |
| M23: Capital and equity            | 1.000   | .57        | 0.43       |
| M24: Investment                    | 1.000   | .63        | 0.37       |
| M25: Abuse of authority            | 1.000   | .61        | 0.39       |
| M26: Work plans                    | 1.000   | .62        | 0.38       |
| M27: Discrimination at work        | 1.000   | .47        | 0.53       |
| M28: Business philosophy           | 1.000   | .70        | 0.30       |
| M29: Business ethics               | 1.000   | .66        | 0.34       |
| M30: Working standards             | 1.000   | .58        | 0.42       |
| M31: Profitability                 | 1.000   | .60        | 0.40       |
| M32: Personnel development         | 1.000   | .60        | 0.40       |
| M33: Code of conduct               | 1.000   | .69        | 0.31       |
| M35: Intended purpose              | 1.000   | .54        | 0.46       |
| M36: Desire for change             | 1.000   | .65        | 0.35       |
| M37: Inheritance and legacy        | 1.000   | .70        | 0.30       |

Extraction Method: Principal Component Analysis

One major part of this analysis was to determine the linear components within the data set known as eigenvectors by calculating the eigenvalues of the correlation coefficient matrix. SPSS provided the eigenvectors under the title total variance explained (*Table 4-98*). This study relied on the default value provided by SPSS to determine the importance of a particular vector. SPSS, by default, uses Kaiser's criterion of retaining factors with eigenvalues greater than one.

SPSS identified 32 linear components within the data set by using principal component analysis as extraction method. The eigenvalues associated within each factor represent the variance explained by that particular linear component. It has also calculated the eigenvalue in terms of the percentage of variance explained as well. The component one or factor one, explain 16.139% of total variance. SPSS extracted nine factors that have eigenvalue greater than one. First factor was explaining more amount of variance and the subsequent factors

were explaining less amount of variance if compared with preceding factors. The eigenvalues associated with the nine factors were again displayed along with the cumulative percentage in the columns ‘extraction sums of squared loadings’.

The final part was the ‘rotation sums of square loading’ in which it has displayed the eigenvalues of the factors after rotation. Rotation had the effect of optimizing the factor structure and one consequence for these data was that the relative importance of the four factors was equalized. The first factor before rotation explained 16.139% variance and the same factor explained 11.614% after rotation. The total variance in the correlation matrix was 32 (total of diagonal correlation coefficient) and the percentage explained by the first component before rotation was equivalent to the amount of eigenvalue divided by the total variance.

Table 4-98: Eigenvalues and total variance

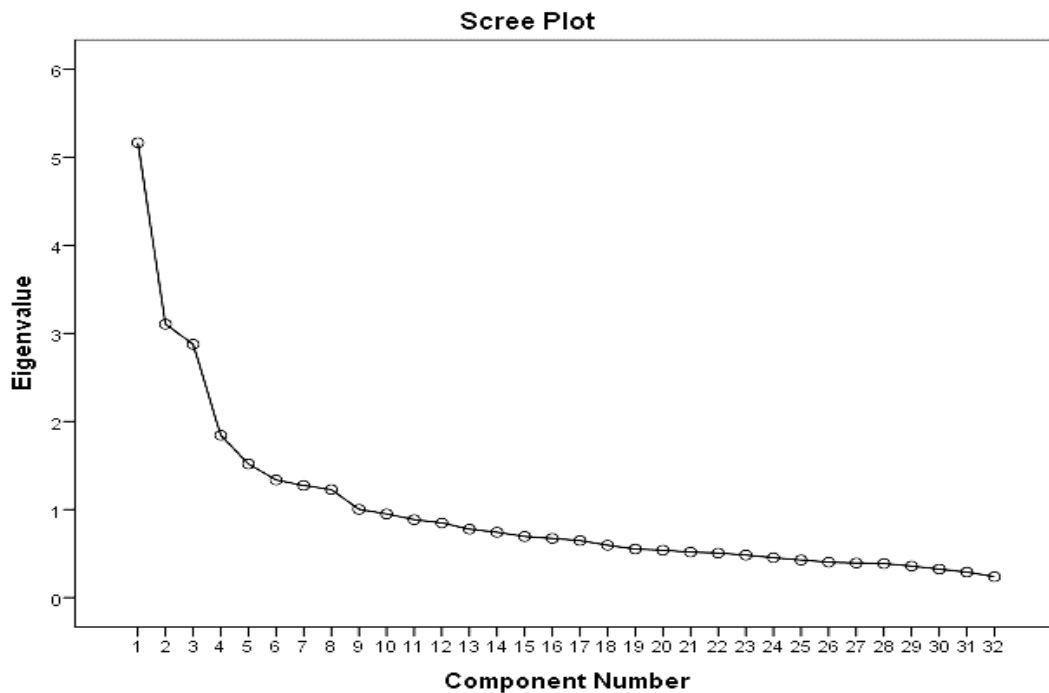
| Component | Total Variance Explained |               |              |                            |               |              |                          |               |              |
|-----------|--------------------------|---------------|--------------|----------------------------|---------------|--------------|--------------------------|---------------|--------------|
|           | Initial Eigenvalues      |               |              | Extraction Sums of Squared |               |              | Rotation Sums of Squared |               |              |
|           | Total                    | % of Variance | Cumulative % | Total                      | % of Variance | Cumulative % | Total                    | % of Variance | Cumulative % |
| 1         | 5.165                    | 16.139        | 16.139       | 5.165                      | 16.139        | 16.139       | 3.716                    | 11.614        | 11.614       |
| 2         | 3.104                    | 9.701         | 25.841       | 3.104                      | 9.701         | 25.841       | 2.517                    | 7.865         | 19.479       |
| 3         | 2.875                    | 8.985         | 34.826       | 2.875                      | 8.985         | 34.826       | 2.250                    | 7.033         | 26.512       |
| 4         | 1.843                    | 5.759         | 40.585       | 1.843                      | 5.759         | 40.585       | 2.190                    | 6.843         | 33.355       |
| 5         | 1.517                    | 4.742         | 45.327       | 1.517                      | 4.742         | 45.327       | 1.963                    | 6.134         | 39.489       |
| 6         | 1.335                    | 4.173         | 49.500       | 1.335                      | 4.173         | 49.500       | 1.959                    | 6.123         | 45.612       |
| 7         | 1.272                    | 3.976         | 53.476       | 1.272                      | 3.976         | 53.476       | 1.871                    | 5.848         | 51.460       |
| 8         | 1.227                    | 3.834         | 57.310       | 1.227                      | 3.834         | 57.310       | 1.554                    | 4.855         | 56.315       |
| 9         | 1.002                    | 3.131         | 60.442       | 1.002                      | 3.131         | 60.442       | 1.320                    | 4.126         | 60.442       |
| 10        | .950                     | 2.968         | 63.410       |                            |               |              |                          |               |              |
| 11        | .885                     | 2.766         | 66.176       |                            |               |              |                          |               |              |
| 12        | .847                     | 2.646         | 68.821       |                            |               |              |                          |               |              |
| 13        | .776                     | 2.425         | 71.247       |                            |               |              |                          |               |              |
| 14        | .741                     | 2.316         | 73.563       |                            |               |              |                          |               |              |
| 15        | .693                     | 2.165         | 75.728       |                            |               |              |                          |               |              |
| 16        | .672                     | 2.100         | 77.828       |                            |               |              |                          |               |              |
| 17        | .647                     | 2.021         | 79.849       |                            |               |              |                          |               |              |
| 18        | .594                     | 1.857         | 81.705       |                            |               |              |                          |               |              |
| 19        | .551                     | 1.722         | 83.427       |                            |               |              |                          |               |              |
| 20        | .537                     | 1.679         | 85.105       |                            |               |              |                          |               |              |
| 21        | .516                     | 1.614         | 86.719       |                            |               |              |                          |               |              |
| 22        | .505                     | 1.579         | 88.299       |                            |               |              |                          |               |              |
| 23        | .482                     | 1.506         | 89.805       |                            |               |              |                          |               |              |
| 24        | .452                     | 1.412         | 91.216       |                            |               |              |                          |               |              |
| 25        | .427                     | 1.333         | 92.549       |                            |               |              |                          |               |              |
| 26        | .401                     | 1.252         | 93.802       |                            |               |              |                          |               |              |
| 27        | .393                     | 1.227         | 95.029       |                            |               |              |                          |               |              |
| 28        | .385                     | 1.204         | 96.233       |                            |               |              |                          |               |              |
| 29        | .357                     | 1.117         | 97.350       |                            |               |              |                          |               |              |
| 30        | .323                     | 1.010         | 98.360       |                            |               |              |                          |               |              |
| 31        | .288                     | .901          | 99.261       |                            |               |              |                          |               |              |
| 32        | .237                     | .739          | 100.000      |                            |               |              |                          |               |              |

While extracting the factors, the data set adopted SPSS default, and it was appropriate because the sample size exceeded 250 and the average of the communalities was 0.6 and above. In the dataset of this study, the sample size was 415, therefore, the SPSS default would be acceptable with the average communalities greater than 0.6 (Field, 2009).

The scree plot (Figure 4-1) was default of SPSS Statistics for determining the number of factors. The plot used eigenvalue and every component consists certain amount of eigenvalue. All the factors with one or higher were extracted for further analysis. This data set extracted nine factors for the purpose of further analysis and interpretation.

Factor loadings less than 0.4 have not been displayed in the rotated component matrix (Table 4-99) because the amount less than 0.4 was suppressed while extracting the factors. There was no hard and fast rule for determining the cut-off point, however, loadings greater than 0.4 represent substantive values. The variables are listed in the order of the size of their factor loadings.

*Figure 4-1: Scree plot*



Factor analysis did not solely depend on statistical analysis, but was more concerned with the grouping and categorizing (giving names to the groups) the variables. SPSS grouped the variables into nine component categories known as factors. There was no hard and fast rule for giving names to the factors. Naming the factors was absolutely the judgment of the



researcher; however, this study concentrated on one major question that how change takes place in an organization. The considerations were on the origin of changes; the role of the change actor or agent regarding the acceptance or resistance to the change or go with the status quo. The purview of decision-making, judgment, and influence for change and no change were taken into account while grouping and giving names to the extracted components.

*Table 4-99: Rotated component matrix*

| Variables                          | Component |       |      |      |      |       |      |       |      |
|------------------------------------|-----------|-------|------|------|------|-------|------|-------|------|
|                                    | 1         | 2     | 3    | 4    | 5    | 6     | 7    | 8     | 9    |
| M29: Business ethics               | .800      |       |      |      |      |       |      |       |      |
| M28: Business philosophy           | .777      |       |      |      |      |       |      |       |      |
| M33: Code of conduct               | .722      |       |      |      |      |       |      |       |      |
| M26: Work plans                    | -.710     |       |      |      |      |       |      |       |      |
| M35: Intended purpose              | .606      |       |      |      |      |       |      |       |      |
| M30: Working standards             | .568      |       |      |      |      |       |      |       |      |
| M10: Preference at work            | -.458     |       |      |      |      |       |      |       |      |
| M24: Investment                    |           | .758  |      |      |      |       |      |       |      |
| M32: Personnel development         |           | -.725 |      |      |      |       |      |       |      |
| M31: Profitability                 |           | .707  |      |      |      |       |      |       |      |
| M23: Capital and equity            |           | .598  |      |      |      |       |      |       |      |
| M6: Supply chain/network           |           |       | .749 |      |      |       |      |       |      |
| M5: Business partnership           |           |       | .694 |      |      |       |      |       |      |
| M27: Discrimination at work        |           |       | .561 |      |      |       |      |       |      |
| M4: Structural empowerment         |           |       | .511 |      |      |       |      |       |      |
| M2: Law and act                    |           |       |      | .861 |      |       |      |       |      |
| M1: Government policy              |           |       |      | .822 |      |       |      |       |      |
| M3: Regulatory directive           |           |       |      | .774 |      |       |      |       |      |
| M7: Organizational polity          |           |       |      |      | .716 |       |      |       |      |
| M8: Operational freedom            |           |       |      |      | .679 |       |      |       |      |
| M9: Organizational priority        |           |       |      |      | .519 |       |      |       |      |
| M36: Desire for change             |           |       |      |      |      | -.712 |      |       |      |
| M12: Technology and process        |           |       |      |      |      | .675  |      |       |      |
| M20: Product change                |           |       |      |      |      | .614  |      |       |      |
| M19: Product development           |           |       |      |      |      | .566  |      |       |      |
| M16: Supplier's behavior           |           |       |      |      |      |       | .829 |       |      |
| M17: Buyer's behavior              |           |       |      |      |      |       | .829 |       |      |
| M13: Key personnel                 |           |       |      |      |      |       |      | .641  |      |
| M15: Learning at work              |           |       |      |      |      |       |      | -.634 |      |
| M25: Abuse of authority            |           |       |      |      |      |       |      | .473  |      |
| M37: Inheritance and legacy        |           |       |      |      |      |       |      |       | .762 |
| M11: Events, festivals and rituals |           |       |      |      |      |       |      |       | .507 |

Extraction Method: Principal Component Analysis; Rotation Method: Varimax with Kaiser Normalization

Factor transformation matrix provided information about the degree to which the factors rotated to obtain the rotated component matrix as mentioned herewith. If no rotation was necessary, the matrix would be an identity matrix. If orthogonal rotation were completely appropriate then there is an expectation of symmetrical matrix i.e. the same values in the

matrix above and below the diagonal. Component score coefficient matrix (*Table 4-100*) has been used to assign weight for the factors.

*Table 4-100: Component score coefficient matrix*

| Variables                          | Component    |              |             |             |             |              |             |              |             |
|------------------------------------|--------------|--------------|-------------|-------------|-------------|--------------|-------------|--------------|-------------|
|                                    | 1            | 2            | 3           | 4           | 5           | 6            | 7           | 8            | 9           |
| M1: Government policy              | -.036        | -.057        | -.046       | <b>.403</b> | -.028       | -.024        | -.039       | -.101        | .061        |
| M2: Law and act                    | .009         | -.010        | -.027       | <b>.408</b> | -.024       | .019         | -.024       | -.035        | .030        |
| M3: Regulatory directive           | .017         | .081         | -.039       | <b>.369</b> | -.066       | -.017        | .035        | .110         | -.030       |
| M4: Structural empowerment         | -.013        | -.041        | <b>.278</b> | -.032       | -.045       | .002         | -.159       | .168         | -.085       |
| M5: Business partnership           | .016         | .028         | <b>.344</b> | .008        | -.097       | -.129        | .023        | -.116        | -.121       |
| M6: Business network               | .006         | -.066        | <b>.389</b> | -.040       | -.121       | .029         | -.028       | -.075        | .083        |
| M7: Organizational polity          | .074         | .039         | -.107       | -.040       | <b>.448</b> | -.042        | .049        | -.032        | .045        |
| M8: Operational freedom            | -.020        | .025         | -.103       | -.037       | <b>.387</b> | -.026        | .073        | .043         | -.007       |
| M9: Organizational priority        | .016         | -.072        | .069        | .017        | <b>.227</b> | .051         | -.057       | -.012        | -.038       |
| M10: Preference at work            | <b>-.153</b> | -.056        | .007        | .051        | .113        | -.030        | -.049       | -.084        | .243        |
| M11: Events, festivals and rituals | -.077        | .091         | .111        | -.045       | .143        | -.067        | .041        | .159         | <b>.426</b> |
| M12: Technology and process        | .042         | .018         | -.082       | .012        | .058        | .372         | .051        | .060         | -.038       |
| M13: Key personnel                 | -.064        | -.009        | -.073       | .051        | .079        | -.004        | .084        | <b>.416</b>  | -.050       |
| M15: Learning at work              | -.029        | -.039        | .050        | .038        | .000        | -.011        | .121        | <b>-.416</b> | -.092       |
| M16: Supplier's behavior           | -.035        | -.018        | -.049       | -.012       | .039        | -.045        | <b>.471</b> | .015         | -.050       |
| M17: Buyer's behavior              | -.006        | -.074        | -.088       | -.016       | .038        | .111         | <b>.489</b> | -.008        | -.083       |
| M19: Product development           | .046         | .083         | .084        | -.036       | -.051       | <b>.281</b>  | -.018       | .063         | -.073       |
| M20: Product change                | .053         | -.046        | .143        | .007        | -.132       | <b>.369</b>  | .041        | .088         | -.010       |
| M23: Capital and equity            | .021         | <b>.274</b>  | .008        | -.044       | .208        | -.093        | -.072       | -.025        | -.015       |
| M24: Investment                    | .107         | <b>.357</b>  | -.022       | -.061       | .065        | -.005        | -.033       | .027         | -.147       |
| M25: Abuse of authority            | .039         | .063         | .105        | -.025       | -.092       | .011         | .109        | <b>.339</b>  | .172        |
| M26: Work plans                    | <b>-.223</b> | .015         | .005        | .030        | -.051       | -.094        | .073        | -.107        | .019        |
| M27: Discrimination at work        | .062         | -.045        | <b>.247</b> | -.036       | .111        | .073         | -.076       | .009         | .043        |
| M28: Business philosophy           | <b>.271</b>  | -.043        | .020        | -.024       | .154        | .070         | -.091       | -.133        | -.031       |
| M29: Business ethics               | <b>.279</b>  | .088         | .035        | .027        | .028        | .047         | -.046       | -.025        | -.114       |
| M30: Working standards             | <b>.135</b>  | .047         | .019        | .031        | .006        | -.085        | .084        | -.181        | .078        |
| M31: Profitability                 | -.019        | <b>.312</b>  | -.029       | .058        | -.111       | -.098        | .026        | .027         | -.011       |
| M32: Personnel development         | -.002        | <b>-.324</b> | .062        | -.050       | .034        | .013         | .039        | -.104        | -.010       |
| M33: Code of conduct               | <b>.184</b>  | -.009        | .043        | .006        | .040        | .009         | -.013       | -.097        | .186        |
| M35: Intended purpose              | <b>.200</b>  | .011         | -.050       | .014        | -.084       | .113         | .071        | .133         | -.223       |
| M36: Desire for change             | -.065        | .150         | .125        | .013        | -.034       | <b>-.461</b> | .033        | .153         | -.131       |
| M37: Inheritance and legacy        | -.060        | -.097        | -.058       | .041        | -.036       | .066         | -.088       | -.028        | <b>.642</b> |

The transformation matrix (*Table 4-101*) shows the degree to which the components rotated to what extent in order to make the extraction more meaningful.

Table 4-101: Component transformation matrix

| Component | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1         | -.736 | .350  | .254  | .109  | .240  | .402  | -.037 | -.137 | -.140 |
| 2         | .199  | -.271 | .534  | .554  | .452  | -.095 | .185  | .206  | -.068 |
| 3         | .365  | .609  | .258  | .036  | -.148 | .131  | .468  | -.241 | .335  |
| 4         | .227  | .305  | -.397 | .668  | -.018 | .163  | -.472 | -.053 | -.018 |
| 5         | .365  | .212  | .229  | -.470 | .509  | .117  | -.525 | .004  | .007  |
| 6         | .018  | .065  | -.011 | -.059 | -.164 | .455  | .038  | .850  | .185  |
| 7         | .125  | -.233 | -.512 | -.063 | .498  | .465  | .411  | -.173 | .029  |
| 8         | -.203 | .410  | -.331 | -.010 | .419  | -.591 | .169  | .326  | .145  |
| 9         | -.209 | -.261 | .046  | .078  | .073  | -.004 | -.220 | -.139 | .898  |

### Mathematical interpretation of the factors

Principle component analysis extracted nine components that were indicating the direction, financing, transaction, regulatory, existence, adaptation, buyer-seller, motivation, and tradition in relation to the responding organization. The nine dimensions of an organizational change are constructing in nine different.

The equations were identical in form and they included all of the variables that were contributing significantly to the component factors. However, the value of b in all equation was different depending on the relative importance of each variable to the particular factor. In fact, the value of factor coefficient score replaced the value of b, and factor score replaced the value of M to obtain the factor weight. The extracted factor equations were as follows:

$$\text{Directional}_{1i} = b_{10}M_{10i} + b_{26}M_{26i} + b_{28}M_{28i} + b_{29}M_{29i} + b_{30}M_{30i} + b_{33}M_{33i} + b_{35}c_{35i}$$

$$\text{Financing}_{2i} = b_{23}M_{23i} + b_{24}M_{24i} + b_{31}M_{31i} + b_{32}M_{32i}$$

$$\text{Trasanctional}_{3i} = b_5M_{5i} + b_6M_{6i} + b_{27}M_{27i} + b_{28}M_{28i}$$

$$\text{Regulatory}_{4i} = b_1M_{1i} + b_2M_{2i} + b_3M_{3i}$$

$$\text{Existential}_{5i} = b_7M_{7i} + b_8M_{8i} + b_9M_{9i}$$

$$\text{Adaptational}_{6i} = b_{12}M_{12i} + b_{19}M_{19i} + b_{20}M_{20i} + b_{36}M_{36i}$$

$$\text{Buyer - Seller}_{7i} = b_{16}M_{16i} + b_{17}M_{17i}$$

$$\text{Motivational}_{8i} = b_{13}M_{13i} + b_{15}M_{15i} + b_{16}M_{16i}$$

$$\text{Traditional}_{9i} = b_{11}M_{11i} + b_{37}M_{37i}$$

Following Table 4-102 shows the mean, factor loadings, factor score, factor score coefficient, and factor weight as well. The purpose of this exploratory factor analysis was

to group and categorize the variables in order to reduce the dimension. The factor weight mentioned in the Table was just for understanding the relative importance of a particular component.

Table 4-102: Factor loadings and factor score coefficient

| Factors                            | Mea  | Factor Loading (FL) | Factor Score Mean x FL (FC) | Factor Score Coefficient (FSC) | Factor weight FSCx FS (b <sub>i</sub> x M <sub>i</sub> ) |
|------------------------------------|------|---------------------|-----------------------------|--------------------------------|--|
| <b>F1: Directional component</b>   |      |                     |                             |                                |  |
| M29: Business ethics               | 2.68 | 0.80                | 2.14                        | 0.28                           | 0.60   |
| M28: Business philosophy           | 2.52 | 0.78                | 1.97                        | 0.27                           | 0.53   |
| M33: Code of conduct               | 2.71 | 0.72                | 1.95                        | 0.18                           | 0.35   |
| M26: Work plans                    | 3.43 | -0.71               | -2.44                       | -0.22                          | 0.54   |
| M35: Intended purpose              | 2.42 | 0.61                | 1.48                        | 0.20                           | 0.30   |
| M30: Working standards             | 2.49 | 0.57                | 1.42                        | 0.14                           | 0.20   |
| M10: Preference/choice at work     | 2.53 | -0.46               | -1.16                       | -0.15                          | 0.17   |
| <i>Total</i>                       |      |                     | <i>5.36</i>                 |                                | <i>2.69</i>  |
| <b>F6: Adaptive component</b>      |      |                     |                             |                                |  |
| M36: Desire for change             | 3.04 | -0.71               | -2.16                       | -0.46                          | 0.99   |
| M12: Technology and process        | 3.28 | 0.68                | 2.23                        | 0.37                           | 0.83   |
| M20: Product change                | 2.83 | 0.61                | 1.73                        | 0.37                           | 0.64   |
| M19: Product development           | 3.14 | 0.57                | 1.79                        | 0.28                           | 0.50   |
| <i>Total</i>                       |      |                     | <i>3.59</i>                 |                                | <i>2.96</i>  |
| <b>F2: Financial component</b>     |      |                     |                             |                                |  |
| M24: Investment                    | 3.68 | 0.76                | 2.80                        | 0.36                           | 1.01   |
| M32: Personnel development         | 2.60 | -0.73               | -1.90                       | -0.32                          | 0.61   |
| M31: Profitability                 | 3.57 | 0.71                | 2.53                        | 0.31                           | 0.79   |
| M23: Capital and equity            | 3.19 | 0.60                | 1.91                        | 0.27                           | 0.52   |
| <i>Total</i>                       |      |                     | <i>5.35</i>                 |                                | <i>2.92</i>  |
| <b>F9: Traditional component</b>   |      |                     |                             |                                |  |
| M37: Inheritance and legacy        | 2.73 | 0.76                | 2.07                        | 0.64                           | 1.33   |
| M11: Events, festivals and rituals | 2.94 | 0.51                | 1.50                        | 0.43                           | 0.64   |
| <i>Total</i>                       |      |                     | <i>3.57</i>                 |                                | <i>1.97</i>  |
| <b>F8: Motivational component</b>  |      |                     |                             |                                |  |
| M13: Key personnel                 | 3.12 | 0.64                | 2.00                        | 0.42                           | 0.84   |
| M15: Learning at work              | 3.04 | -0.63               | -1.92                       | -0.42                          | 0.80   |
| M25: Abuse of authority            | 3.12 | 0.47                | 1.47                        | 0.34                           | 0.50   |
| <i>Total</i>                       |      |                     | <i>1.55</i>                 |                                | <i>2.14</i>  |
| <b>Intramural total</b>            |      |                     |                             |                                |  |
|                                    |      |                     | <b>19.42</b>                |                                | <b>12.68</b>   |
| <b>F4: Regulatory component</b>    |      |                     |                             |                                |  |
| M2: Law and act                    | 3.05 | 0.86                | 2.62                        | 0.41                           | 1.08   |
| M1: Government policy              | 3.24 | 0.82                | 2.66                        | 0.40                           | 1.06   |
| M3: Regulatory directive           | 3.42 | 0.77                | 2.63                        | 0.37                           | 0.97   |
| <i>Total</i>                       |      |                     | <i>7.91</i>                 |                                | <i>3.11</i>  |
|                                    |      |                     |                             |                                |  |

| Factors                            | Mea  | Factor Loading (FL) | Factor Score Mean x FL (FC) | Factor Score Coefficient (FSC) | Factor weight FSCx FS (b <sub>i</sub> x M <sub>i</sub> ) |
|------------------------------------|------|---------------------|-----------------------------|--------------------------------|--|
| <b>F3: Transactional component</b> |      |                     |                             |                                |  |
| M6: Supply chain/business network  | 2.67 | 0.75                | 2.00                        | 0.39                           | 0.78   |
| M5: Business partnership           | 2.65 | 0.69                | 1.83                        | 0.34                           | 0.62   |
| M27: Discrimination at work        | 2.72 | 0.56                | 1.52                        | 0.25                           | 0.38   |
| M4: Structural empowerment         | 2.87 | 0.51                | 1.46                        | 0.28                           | 0.41   |
| <i>Total</i>                       |      |                     | <i>6.82</i>                 |                                | <i>2.19</i>  |
| <b>F7: Buyer-seller component</b>  |      |                     |                             |                                |  |
| M16: Supplier's behavior           | 3.22 | 0.83                | 2.67                        | 0.47                           | 1.26   |
| M17: Buyer's behavior              | 3.35 | 0.83                | 2.78                        | 0.49                           | 1.36   |
| <i>Total</i>                       |      |                     | <i>5.45</i>                 |                                | <i>2.62</i>  |
| <b>F5: Existential component</b>   |      |                     |                             |                                |  |
| M7: Organizational polity          | 2.94 | 0.72                | 2.12                        | 0.45                           | 0.95   |
| M8: Operational freedom            | 3.12 | 0.68                | 2.12                        | 0.39                           | 0.83   |
| M9: Organizational value priority  | 2.31 | 0.52                | 1.20                        | 0.23                           | 0.28   |
| <i>Total</i>                       |      |                     | <i>5.44</i>                 |                                | <i>2.06</i>  |
| <b>Extramural total</b>            |      |                     | <b>25.62</b>                |                                | <b>9.98</b>  |

*Note: If any difference in figure due to decimal places*

In summary, a principal component analysis was conducted on the 32 items with orthogonal rotation (Varimax). The Kaiser-Meyer-Olkin measure verified the sampling adequacy for the analysis, KMO = .8 which was good enough, and all KMO values for individual items were  $\geq .60$ , which is above the acceptable limit of .5 (Field, 2009). Bartlett's test of sphericity  $\chi^2(496) = 3865.019$ ,  $p < .001$ , indicated that correlations between items were sufficiently large for principal component analysis. An initial analysis was run to obtain eigenvalues for each component in the data. Nine components had eigenvalues over Kaiser's criterion of one and in combination explained 60.44% of the variance. The Scree plot clearly indicated the nine components with eigenvalues higher than one. The nine components named as directional, affluent, operational, regulatory, existential, adaptive, buyer-seller, motivational, and traditional. In consideration of the change-taking place with effect, the components- directional, adaptive, financial, traditional, and motivational components named as 'intramural' and the components- regulatory, transactional, buyer-seller, and existential named as 'extramural' factor.

Intramural change was taking place within the managerial purview of an organization i.e. change management processes was confined with the organizational jurisdiction whereas the extramural change was taking place outside the managerial purview of an organization. The intermural change was taking place jointly in interaction of the organization with other

entities. All the factors extracted by the SPSS default included for further analysis and interpretation except the exclusion of financial factor while interpretation of the industry associations.

#### 4.4. MODELLING FOR CATEGORICAL ASSOCIATIONS WITHIN VARIABLES

Examinations and grouping of associations confined between the variables concerning changes and no changes in the organizations and businesses. The change and response to the change were showing categorical patterns and examination of an association of one variable with the next requires further extension of associations. Change was occurring in a continuum that was ranging from the state of status quo to the state of its transformation. The change showed a pattern of status quo, change IN and change OF as discussed in this study.

Similarly, the response to the change was also showing its own pattern of acceptance, tolerance, and resistance to the changes. The variable concerning change has consisted the levels- status quo, change IN, and change OF at one part and the variable concerning the response to the change reflects the pattern of acceptance, tolerance, and resistance on the other part. An examination of associations between one variable with another was not sufficient because there were categories within a variable of this study. Therefore, it was necessary to model the associations of the levels and categories existing within variables of interest of the study.

Table 4-103: Log linear model design matrix for expected frequency

| Parameter | Business ethics |    |          |    |          |    |          |    |          |    |          |    |           |    |          |    |          |    |
|-----------|-----------------|----|----------|----|----------|----|----------|----|----------|----|----------|----|-----------|----|----------|----|----------|----|
|           | Status quo      |    |          |    |          |    | Chang IN |    |          |    |          |    | Change OF |    |          |    |          |    |
|           | Accept          |    | Tolerate |    | Resist   |    | Accept   |    | Tolerate |    | Resist   |    | Accept    |    | Tolerate |    | Resist   |    |
|           | Industry        |    | Industry |    | Industry |    | Industry |    | Industry |    | Industry |    | Industry  |    | Industry |    | Industry |    |
|           | M               | NM | M        | NM | M        | NM | M        | NM | M        | NM | M        | NM | M         | NM | M        | NM | M        | NM |
| Constant  | 1               | 1  | 1        | 1  | 1        | 1  | 1        | 1  | 1        | 1  | 1        | 1  | 1         | 1  | 1        | 1  | 1        |    |
| [M29 = 1] | 1               | 1  | 1        | 1  | 1        | 1  | 0        | 0  | 0        | 0  | 0        | 0  | 0         | 0  | 0        | 0  | 0        |    |
| [M29 = 2] | 0               | 0  | 0        | 0  | 0        | 0  | 1        | 1  | 1        | 1  | 1        | 1  | 0         | 0  | 0        | 0  | 0        |    |
| [N29 = 1] | 1               | 1  | 0        | 0  | 0        | 0  | 1        | 1  | 0        | 0  | 0        | 0  | 1         | 1  | 0        | 0  | 0        |    |
| [N29 = 2] | 0               | 0  | 1        | 1  | 0        | 0  | 0        | 0  | 1        | 1  | 0        | 0  | 0         | 0  | 1        | 1  | 0        |    |
| [P = 0]   | 1               | 0  | 1        | 0  | 1        | 0  | 1        | 0  | 1        | 0  | 1        | 0  | 1         | 0  | 1        | 0  | 1        |    |

Model: Poisson. Design: Constant + Change $M_i$ + Response $N_i$  + Industry $P_i$

Custom log linear modelling of all 3-way type was adopted to find the expected frequency for each level of each variable concerning change and response to the change. SPSS provided the model with three categories with a constant as mentioned hereunder. The

indicators provided by SPSS fitted into the design matrix and obtained the design Table 4-103

$$\text{The model: } \ln(\mu_{ij}) = \lambda + \lambda_1^M + \lambda_2^M + \lambda_3^M + \lambda_1^N + \lambda_2^N + \lambda_3^N + \lambda_1^P + \lambda_2^P$$

The corresponding parameters obtained from SPSS statistics fitted into the design matrix and generated the contingency table. The scores obtained from the model were in the form of Euler's log (ln) and the log values converted into the real values using the button  $e^x$  of a calculator. The real values obtained as such fitted to form a contingency table for Chi-square goodness-of-fit tests.

$$\begin{aligned} \ln(\mu_{11}) &= \lambda + \lambda_1^M + \lambda_1^N + \lambda_1^P = 3.567 + 0.639 - 0.477 - 0.326 = 3.403 \text{ or } (\mu_{11}) \\ &= 30.054 \end{aligned}$$

$$\ln(\mu_{41}) = \lambda + \lambda_1^M + \lambda_2^M + \lambda_1^N = 3.567 + 0.639 - 0.477 = 3.729 \text{ or } (\mu_{41}) = 41.637$$

$$\begin{aligned} \ln(\mu_{12}) &= \lambda + \lambda_1^M + \lambda_2^M + \lambda_2^N + \lambda_1^P = 3.567 + 0.639 - 1.460 - 0.326 = 2.420 \text{ or } (\mu_{12}) \\ &= 11.245 \end{aligned}$$

$$\ln(\mu_{42}) = \lambda + \lambda_1^M + \lambda_2^N = 3.567 + 0.639 - 1.460 = 2.746 \text{ or } (\mu_{42}) = 15.580$$

$$\ln(\mu_{13}) = \lambda + \lambda_1^M + \lambda_1^P = 3.567 + 0.639 - 0.326 = 3.880 \text{ or } (\mu_{13}) = 48.424$$

$$\ln(\mu_{43}) = \lambda + \lambda_1^M = 3.567 + 0.639 = 4.206 \text{ or } (\mu_{43}) = 67.087$$

$$\begin{aligned} \ln(\mu_{21}) &= \lambda + \lambda_2^M + \lambda_1^N + \lambda_1^P = 3.567 - 0.250 - 0.477 - 0.326 = 2.514 \text{ or } (\mu_{21}) \\ &= 12.354 \end{aligned}$$

$$\ln(\mu_{51}) = \lambda + \lambda_2^M + \lambda_1^N = 3.567 - 0.250 - 0.477 = 2.840 \text{ or } (\mu_{21}) = 17.115$$

$$\begin{aligned} \ln(\mu_{22}) &= \lambda + \lambda_2^M + \lambda_2^N + \lambda_1^P = 3.567 - 0.250 - 1.460 - 0.326 = 1.531 \text{ or } (\mu_{22}) \\ &= 4.622 \end{aligned}$$

$$\ln(\mu_{52}) = \lambda + \lambda_2^M + \lambda_2^N = 3.567 - 0.250 - 1.460 = 1.857 \text{ or } (\mu_{52}) = 6.404$$

$$\ln(\mu_{23}) = \lambda + \lambda_2^M + \lambda_1^P = 3.567 - 0.250 - 0.326 = 2.991 \text{ or } (\mu_{23}) = 19.905$$

$$\ln(\mu_{53}) = \lambda + \lambda_2^M = 3.567 - 0.250 = 3.317 \text{ or } (\mu_{53}) = 27.577$$

$$\ln(\mu_{31}) = \lambda + \lambda_1^N + \lambda_1^P = 3.567 - 0.477 - 0.326 = 2.764 \text{ or } (\mu_{31}) = 15.863$$

$$\ln(\mu_{61}) = \lambda + \lambda_1^N = 3.567 - 0.477 = 3.090 \text{ or } (\mu_{61}) = 21.977$$

$$\ln(\mu_{32}) = \lambda + \lambda_2^N + \lambda_1^P = 3.567 - 1.460 - 0.326 = 1.781 \text{ or } (\mu_{32}) = 5.935$$

$$\ln(\mu_{62}) = \lambda + \lambda_2^N = 3.567 - 1.460 = 2.107 \text{ or } (\mu_{62}) = 8.223$$

$$\ln(\mu_{33}) = \lambda + \lambda_1^P = 3.567 - 0.326 = 3.241 \text{ or } (\mu_{33}) = 25.559$$

$$\ln(\mu_{33}) = \lambda = 3.567 = 3.567 \text{ or } (\mu_{33}) = 35.410$$

The model provided the following contingency *Table 4-104* for the Chi-square goodness-of-fit tests.

*Table 4-104: Contingency table- business ethics*

| Industry          | Level of change | Frequency | Response to change |          |         | Row total |
|-------------------|-----------------|-----------|--------------------|----------|---------|-----------|
|                   |                 |           | Accept             | Tolerate | Resist  |           |
| Manufacturing     | Status quo      | Observed  | 36.000             | 7.000    | 46.000  | 89.000    |
|                   |                 | Expected  | 30.054             | 11.245   | 48.424  |           |
|                   | Change IN       | Observed  | 8.000              | 3.000    | 17.000  | 28.000    |
|                   |                 | Expected  | 12.354             | 4.622    | 19.905  |           |
|                   | Change OF       | Observed  | 27.000             | 9.000    | 21.000  | 57.000    |
|                   |                 | Expected  | 15.863             | 5.935    | 25.559  |           |
| Non-manufacturing | Status quo      | Observed  | 29.000             | 12.000   | 84.000  | 125.000   |
|                   |                 | Expected  | 41.637             | 15.580   | 67.087  |           |
|                   | Change IN       | Observed  | 20.000             | 7.000    | 33.000  | 60.000    |
|                   |                 | Expected  | 17.115             | 6.404    | 27.577  |           |
|                   | Change OF       | Observed  | 19.000             | 14.000   | 23.000  | 56.000    |
|                   |                 | Expected  | 21.977             | 8.223    | 35.410  |           |
| Column total      |                 | Observed  | 139.000            | 52.000   | 224.000 | 415.000   |
|                   |                 | Expected  | 139.000            | 52.009   | 223.962 | 414.971   |

$$\chi^2 (12, N = 415) = 34.984, p = .001 < .05; \text{likelihood ratio} = 34.003$$

Expected value could vary slightly due to uncertainty of decimal digits. The values of expected frequency shown in the table were the outcome of manual solution to the model equation using an ordinary calculator. SPSS provided the parameter estimate, design matrix as well as the values of chi-square goodness-of-fit and p value for all other variables

The degrees of freedom ( $18 - 6 = 12$ ) equal the number of cell counts minus the number of model parameters (Agresti, 2007) in chi-squared goodness-of-fit while fitting the log linear model. There were 18 counts and six parameters in the model of this study as seen in the design matrix. The chi-square test statistic of 34.984 was greater than the critical value 21.026, which was leading to the rejection of the null hypothesis that the industry type (*manufacturing and non-manufacturing*), level of change occurrence (*status quo, change IN, and change OF*) and the response to the change occurrence (*acceptance, tolerance, and resistance*) were independent and unrelated to each other. The p value of .001 was less than the at the .05 confidence level with 12 degree of freedom, which indicated that there was strong associations of the variables and there was necessary of simultaneous considerations while talking about business ethics across the industries.

The procedure as adopted here above continued for all other items extracted from the exploratory factor analysis. The summary parameters and statistics have been mentioned



in the Table 4-105 herewith. The value and significance of likelihood ratio was similar to the Chi-square goodness-of-fit statistics for all the associations except for the association of factor items: M2+N2+P, likelihood ratio of 21.695. However, the chi-square statistics of 20.831 was less than the critical value 21.026, which was leading to the acceptance of null hypothesis that the industry type and level of change occurrence in relation to the laws and acts were independent. In rest of the cases, the chi-square test statistics and likelihood ratios were similar; therefore, the interpretation follows the value of chi-square test statistics alone.

Table 4-105: Log linear modelling summary parameters and statistics

| Factors                            | Chi-square    | Sig.        | Const.       | M=Levels of change |               |               | N=Response to change |               |               | Industry      |               |
|------------------------------------|---------------|-------------|--------------|--------------------|---------------|---------------|----------------------|---------------|---------------|---------------|---------------|
|                                    |               |             |              | Status quo         | Change IN     | Change OF     | Accept               | Tolerate      | Resist        | Mfg.          | Non-mfg.      |
| <b>F1: Directional component</b>   | $\chi^2$      | <i>p</i>    | $\lambda$    | $\lambda_1^M$      | $\lambda_2^M$ | $\lambda_3^M$ | $\lambda_1^N$        | $\lambda_2^N$ | $\lambda_3^N$ | $\lambda_1^P$ | $\lambda_2^P$ |
| <b>M29: Business ethics</b>        | 34.980        | .001        | 3.567        | .639               | -.250         | 0             | -.477                | -1.460        | 0             | -.326         | 0             |
| M28: Business philosophy           | 18.815        | .093        | 3.637        | .763               | -.167         | 0             | -1.076               | -1.390        | 0             | -.326         | 0             |
| M33:Code of conduct                | 19.271        | .082        | 2.423        | .526               | -.693         | 0             | 1.539                | .032          | 0             | -.326         | 0             |
| M26:Work plans                     | 10.129        | .605        | 3.735        | -.702              | -1.227        | 0             | .355                 | -.235         | 0             | -.326         | 0             |
| M35: Intended purpose              | 17.916        | .118        | 2.112        | 1.090              | .082          | 0             | 1.336                | -.043         | 0             | -.326         | 0             |
| <b>M30: Working standards</b>      | <b>40.926</b> | <b>.001</b> | <b>3.104</b> | <b>.972</b>        | <b>-.034</b>  | <b>0</b>      | <b>-.494</b>         | <b>-.309</b>  | <b>0</b>      | <b>-.326</b>  | <b>0</b>      |
| <b>M10: Preference at work</b>     | <b>28.966</b> | <b>.004</b> | <b>2.629</b> | <b>.811</b>        | <b>-.105</b>  | <b>0</b>      | <b>.339</b>          | <b>.581</b>   | <b>0</b>      | <b>-.326</b>  | <b>0</b>      |
| <b>F9: Traditional component</b>   | $\chi^2$      | <i>p</i>    | $\lambda$    | $\lambda_1^M$      | $\lambda_2^M$ | $\lambda_3^M$ | $\lambda_1^N$        | $\lambda_2^N$ | $\lambda_3^N$ | $\lambda_1^P$ | $\lambda_2^P$ |
| <b>M37: Inheritance and legacy</b> | <b>24.067</b> | <b>.020</b> | <b>3.545</b> | <b>-.619</b>       | <b>-.784</b>  | <b>0</b>      | <b>.457</b>          | <b>-.097</b>  | <b>0</b>      | <b>-.326</b>  | <b>0</b>      |
| M11: Events, festivals and rituals | 16.016        | .191        | 3.171        | .180               | -.054         | 0             | .382                 | -.285         | 0             | -.326         | 0             |
| <b>F2: Financing component</b>     | $\chi^2$      | <i>p</i>    | $\lambda$    | $\lambda_1^M$      | $\lambda_2^M$ | $\lambda_3^M$ | $\lambda_1^N$        | $\lambda_2^N$ | $\lambda_3^N$ | $\lambda_1^P$ | $\lambda_2^P$ |
| M24: Investment                    | 7.596         | .816        | 4.163        | -1.348             | -1.053        | 0             | -.226                | -.628         | 0             | -.326         | 0             |
| M32: Personnel development         | 15.742        | .203        | 3.041        | .900               | .184          | 0             | -.312                | -.304         | 0             | -.326         | 0             |
| M31: Profitability                 | 14.951        | .244        | 3.528        | -1.181             | -.880         | 0             | .857                 | -.284         | 0             | -.326         | 0             |
| M23: Capital and quality           | 14.284        | .283        | 3.047        | -.468              | -.946         | 0             | 1.278                | .092          | 0             | -.326         | 0             |
| <b>F6: Adaptive component</b>      | $\chi^2$      | <i>p</i>    | $\lambda$    | $\lambda_1^M$      | $\lambda_2^M$ | $\lambda_3^M$ | $\lambda_1^N$        | $\lambda_2^N$ | $\lambda_3^N$ | $\lambda_1^P$ | $\lambda_2^P$ |
| MC36: Desire for change            | 10.973        | .531        | 3.669        | .025               | -.482         | 0             | -.165                | -.897         | 0             | -.326         | 0             |
| MC12: Technology and process       | 7.795         | .801        | 3.776        | -.575              | -.838         | 0             | -.159                | -.091         | 0             | -.326         | 0             |
| MC20: Product change               | 11.047        | .525        | 3.340        | .200               | -.297         | 0             | .112                 | -.269         | 0             | -.326         | 0             |
| <b>MC19: Product development</b>   | <b>33.460</b> | <b>.001</b> | <b>3.835</b> | <b>-.400</b>       | <b>-.829</b>  | <b>0</b>      | <b>-.226</b>         | <b>-.397</b>  | <b>0</b>      | <b>-.326</b>  | <b>0</b>      |
| <b>F8: Motivational component</b>  | $\chi^2$      | <i>p</i>    | $\lambda$    | $\lambda_1^M$      | $\lambda_2^M$ | $\lambda_3^M$ | $\lambda_1^N$        | $\lambda_2^N$ | $\lambda_3^N$ | $\lambda_1^P$ | $\lambda_2^P$ |
| MC13: Key personnel                | 36.346        | .001        | 2.942        | -.261              | -.699         | 0             | 1.268                | .053          | 0             | -.326         | 0             |
| MC15: Learning at work             | 23.227        | .026        | 3.776        | -.185              | -.271         | 0             | -.398                | -.784         | 0             | -.326         | 0             |
| MC25: Abuse of authority           | 22.529        | .032        | 3.850        | -.210              | -.554         | 0             | -.265                | -.959         | 0             | -.326         | 0             |
| Here above intramural              |               |             |              |                    |               |               |                      |               |               |               |               |

| Factors                                  | Chi-square    | Sig.        | Const.       | M=Levels of change |               |               | N=Response to change |               |               | Industry      |               |
|--|---------------|-------------|--------------|--------------------|---------------|---------------|----------------------|---------------|---------------|---------------|---------------|
|  |               |             |              | Status quo         | Change IN     | Change OF     | Accept               | Tolerate      | Resist        | Mfg.          | Non-mfg.      |
| <b>F5: Existential component</b>         | $\chi^2$      | <i>p</i>    | $\lambda$    | $\lambda_1^M$      | $\lambda_2^M$ | $\lambda_3^M$ | $\lambda_1^N$        | $\lambda_2^N$ | $\lambda_3^N$ | $\lambda_1^P$ | $\lambda_2^P$ |
| M7: Organizational polity                | 17.453        | .133        | 3.938        | -.024              | -.646         | 0             | -.554                | -1.193        | 0             | -.326         | 0             |
| M8: Operational freedom                  | 12.739        | .388        | 3.680        | -.295              | -.488         | 0             | -.214                | -.261         | 0             | -.326         | 0             |
| <b>M9: Organizational value priority</b> | <b>33.954</b> | <b>.001</b> | <b>2.757</b> | <b>1.066</b>       | <b>.035</b>   | <b>0</b>      | <b>.463</b>          | <b>-.678</b>  | <b>0</b>      | <b>-.326</b>  | <b>0</b>      |
| <b>F3: Transactional component</b>       | $\chi^2$      | <i>p</i>    | $\lambda$    | $\lambda_1^M$      | $\lambda_2^M$ | $\lambda_3^M$ | $\lambda_1^N$        | $\lambda_2^N$ | $\lambda_3^N$ | $\lambda_1^P$ | $\lambda_2^P$ |
| <b>M6: Supply chain/business network</b> | <b>33.474</b> | <b>.001</b> | <b>3.247</b> | <b>.634</b>        | <b>.065</b>   | <b>0</b>      | <b>-.492</b>         | <b>-.274</b>  | <b>0</b>      | <b>-.326</b>  | <b>0</b>      |
| <b>M5: Business partnership</b>          | <b>27.036</b> | <b>.008</b> | <b>2.829</b> | <b>.609</b>        | <b>-.144</b>  | <b>0</b>      | <b>.621</b>          | <b>-.019</b>  | <b>0</b>      | <b>-.326</b>  | <b>0</b>      |
| M27: Discrimination at work              | 19.662        | .074        | 3.671        | .430               | -.052         | 0             | -.660                | -1.421        | 0             | -.326         | 0             |
| <b>M4: Empowerment</b>                   | <b>25.475</b> | <b>.013</b> | <b>2.953</b> | <b>.204</b>        | <b>-.220</b>  | <b>0</b>      | <b>.829</b>          | <b>-.151</b>  | <b>0</b>      | <b>-.326</b>  | <b>0</b>      |
| <b>F4: Regulatory component</b>          | $\chi^2$      | <i>p</i>    | $\lambda$    | $\lambda_1^M$      | $\lambda_2^M$ | $\lambda_3^M$ | $\lambda_1^N$        | $\lambda_2^N$ | $\lambda_3^N$ | $\lambda_1^P$ | $\lambda_2^P$ |
| MC2: Law and act                         | 20.831        | .053        | 3.207        | -.136              | -.642         | 0             | .663                 | .120          | 0             | -.326         | 0             |
| <b>MC1: Government policy</b>            | <b>23.659</b> | <b>.023</b> | <b>3.204</b> | <b>-.465</b>       | <b>-.976</b>  | <b>0</b>      | <b>.978</b>          | <b>.202</b>   | <b>0</b>      | <b>-.326</b>  | <b>0</b>      |
| <b>MC3: Regulatory directive</b>         | <b>30.073</b> | <b>.003</b> | <b>3.787</b> | <b>-.898</b>       | <b>-.666</b>  | <b>0</b>      | <b>.085</b>          | <b>-.283</b>  | <b>0</b>      | <b>-.326</b>  | <b>0</b>      |
| <b>F7: Buyer-seller component</b>        | $\chi^2$      | <i>p</i>    | $\lambda$    | $\lambda_1^M$      | $\lambda_2^M$ | $\lambda_3^M$ | $\lambda_1^N$        | $\lambda_2^N$ | $\lambda_3^N$ | $\lambda_1^P$ | $\lambda_2^P$ |
| <b>MC16: Supplier's behavior</b>         | <b>27.119</b> | <b>.007</b> | <b>3.729</b> | <b>-.417</b>       | <b>-.245</b>  | <b>0</b>      | <b>-.501</b>         | <b>-.267</b>  | <b>0</b>      | <b>-.326</b>  | <b>0</b>      |
| MC17: Buyer's behavior                   | 15.635        | .209        | 3.705        | -.810              | -.615         | 0             | .109                 | -.139         | 0             | -.326         | 0             |
| <b>Here above extramural</b>             |               |             |              |                    |               |               |                      |               |               |               |               |

Note: The parameters  $\lambda_3^M$ ,  $\lambda_3^N$  and  $\lambda_2^P$  set to zero. Model: Poisson. Design: Constant +  $M_i$  +  $N_i$  + Industry; rows with bolded letters indicate the rejection of null hypothesis

The modelling of intramural categorical associations of the variables provided a clear insight about the dependency and relatedness of the industry type, level of change occurrence, and the response to the change. The statistically significant associations among the industry, change, and response to the change indicated that the working standards ( $\chi^2 = 40.926$ ;  $p = .001$ ), business ethics ( $\chi^2 = 34.980$ ;  $p = .001$ ), and preference at work ( $\chi^2 = 28.966$ ;  $p = .004$ ) are related and an instantaneous attention was necessary while managing changes of the directional component. Similar consideration was necessary while developing products ( $\chi^2 = 33.460$ ;  $p = .001$ ) in order to be adaptive in the market and the environment. The inheritance and legacy ( $\chi^2 = 24.067$ ;  $p = .020$ ) aspect of tradition of the organizations related one with the others i.e. there was significant associations with the parameters concerning change in the industries.

The motivational aspect in organization and business demanded very strong and close considerations in relation to the change interventions concerning the key personnel ( $\chi^2 = 36.346$ ;  $p = .001$ ), learning at work ( $\chi^2 = 23.227$ ;  $p = .026$ ), and use of authority ( $\chi^2 =$

22.529;  $p = .032$ ). However, the statistically insignificant associations of the financial component with the industry, change, and response to the change have indicated a clear independence. The statistical independence provided an insight that the financial prosperity in manufacturing industry could not bring the financial prosperity in non-manufacturing or vice versa. The data set in this study indicated that the financial aspects of change were unrelated with the industries.

The modelling of the extramural categorical associations of the variables also provided an insight about the dependency of industry, change, and response to the change. The statistically significant associations concerning the organizational value priority ( $\chi^2 = 33.954$ ;  $p = .001$ ) in the existential aspect of change indicated that there was close association of the industry, change, and response to the change; therefore, a synchronized concern while managing change in this aspect was necessary. The transactional aspects of the organization consisted similar association regarding the supply chain and business network ( $\chi^2 = 33.474$ ;  $p = .001$ ), business partnership ( $\chi^2 = 27.036$ ;  $p = .008$ ), and empowerment ( $\chi^2 = 25.475$ ;  $p = .013$ ) as well. In the same line, the regulatory component consisted the close associations of the parameters concerning the regulatory directives ( $\chi^2 = 30.073$ ;  $p = .003$ ) and the government policies ( $\chi^2 = 23.659$ ;  $p = .023$ ). The buyer-seller component of the organizations and businesses concentrated on the supplier's behavior ( $\chi^2 = 27.119$ ;  $p = .007$ ) which was dependent on the industry type, level of change occurrence, and response to the change thereof.

#### **4.5. EVALUATION OF THE SUB-CATEGORICAL ASSOCIATIONS**

Organizational change has been found as a continuum ranging from the state of status quo to the state of transformation. The change in organizational setting was taking place in a pattern of category of categories (referred sub-categories) - status quo (change NO), rejuvenation (change IN), and transformation (change OF) within a variable under consideration. There was chance of acceptance or resistance to the change interventions depending on the category of change. Sometimes, there was resistance to the status quo at one part and there was acceptance of transformation on the other part in the firms. Likewise, in some cases, change IN become acceptable and transformation become unacceptable or resistible, therefore, it was necessary to evaluate the sub-categorical association in order to estimate the risk of resistance to the change in the industries.

Evaluation of the sub-categorical association within the variables concerning the industry, change occurrence, and response to the change became essential. The log linear modelling

provided an insight about the associations of the categories- manufacturing and non-manufacturing within industry; status quo, rejuvenation, and transformation within the level of change; and acceptance, tolerance, and resistance within the category of response to the change. The modeling provided expected frequency required for chi-square test goodness of fit. However, the chi-square test statistics could not provide probability of risk or impact on the predictive (dependent) variables due to change in the industry.

Paying due considerations to the managerial practice, this study attempted to look at the state of response of tolerance from the lens of acceptance and resistance. The attempt considered that the state of tolerance to the status quo, rejuvenation, and transformation did not necessarily mean the state of resistance. Therefore, the observed frequency associated to the response category of tolerance included in the response category of acceptance in order to find a binary outcome of the response- acceptance and resistance. The sub-categories within the category of industry and level of change occurrence selected as predictor (independent) variables and the sub-categories within the category of response selected as predictive (dependent) variable in order to make evaluation of the sub-categorical associations within variables.

The binary outcome (dependent variable) variable referred the response to the change- acceptance and resistance. One predictor (independent variable) refers the level of change occurrence- the status quo, rejuvenation, and transformation. The next predictor (independent variable) refers the industry type- manufacturing and non-manufacturing.

The coding of outcome variable was set to zero and one where zero represented acceptance to the change and one represented resistance to the change. This coding was considering the change in the state from acceptance to resistance.

Coding of one predictor- industry was one and two where one represented manufacturing firm and two represented non-manufacturing firm. The coding of next predictor- occurrence of change was zero, one, and two. The coding zero (status quo) represented no change or a minor change of recurring nature in order to maintain the status quo within the limit of a normal budget and resources. Next coding one (change IN) represented the changes and modifications of non-recurring nature within the limits of existing organizational settings by making arrangement of additional budgets and resources for rejuvenation. The third coding two (Change OF) represented the major transformational change and replacement substantially impacting the existing organizational settings by

making special arrangements for new technology, processes, design, strategies and policies as well as resources and structures that were transforming the existing state of affair to a new state of affair. The outcome acceptance coded zero and outcome resistance coded one for binary logistic regression analysis.

There were two categorical predictors- change occurrence and industry type and therefore there was possible interaction between sub-categories of the industry and the level of change occurrence. This study selected SPSS default ‘enter’ method of binary logistic regression and ‘indicator’ for dummy coding of the categorical predictors. The reference category ‘first’ (manufacturing and status quo) selected as the baselines for the analysis.

Binary logistic regression analysis conducted to predict resistance to change in the areas mentioned hereunder (excluded herewith the statistically insignificant variables) for 415 respondents using industry type and level of change as predictors. The interpretation and reporting primarily based on the odds ratio together with the value of significance, however, Wald statistics could be used to calculate the effect size for each predictor. The interpretation also used a 95% confidence interval for the odds ratio in order to predict the probability of risk of resistance to the change.

Table 4-106: Resistance to government policy changes

| Government policies <sup>1</sup> | b     | Wald  | Sig.        | Exp(B)       | 95% C. I. for EXP(B) |       |
|----------------------------------|-------|-------|-------------|--------------|----------------------|-------|
|                                  |       |       |             |              | Lower                | Upper |
| Non-manufacturing                | -.287 | 2.002 | .157        | .750         | .504                 | 1.117 |
| Rejuvenation                     | .278  | .911  | .340        | 1.321        | .746                 | 2.337 |
| Transformation                   | .520  | 5.095 | <b>.024</b> | <b>1.681</b> | 1.071                | 2.640 |
| Constant                         | -.327 | 2.505 | .113        | .721         |                      |       |

The probability of resistance in manufacturing industry before changing the predictor variable (coding manufacturing = 1)

$$\begin{aligned}
 \text{Probability of resistance } P(\text{Resist}) &= \frac{1}{1 + e^{-[(-0.327 - 0.287(1))]} \\
 &= \frac{1}{1 + e^{0.614}} = 0.351
 \end{aligned}$$

$$\text{Probability of no resistance } P(\text{No Resist}) = 1 - 0.3511 = 0.6489$$

$$\text{Odds} = \frac{0.3511}{0.6489} = 0.5411$$

The probability of non-manufacturing resistance after changing the predictor variable (coding non-manufacturing =2)

$$\begin{aligned} \text{Probability of resistance } P(\text{Resist}) &= \frac{1}{1 + e^{-[(-0.327 - 0.287(2))]} \\ &= \frac{1}{1 + e^{0.901}} = 0.2889 \end{aligned}$$

$$\text{Probability of no resistance } P(\text{No Resist}) = 1 - 0.2889 = 0.7112$$

$$\text{Odds} = \frac{0.2889}{0.7112} = 0.4062$$

$$\Delta\text{Odds} = \frac{0.4062}{0.5411} = \mathbf{0.7507}$$

The probability of resistance to the government policy rejuvenation (change IN) before changing the predictor variable (coding status quo = 0)

$$\begin{aligned} \text{Probability of resistance } P(\text{Resist}) &= \frac{1}{1 + e^{-[(-0.327 + 0.278(0))]} \\ &= \frac{1}{1 + e^{0.327}} = 0.4190 \end{aligned}$$

$$\text{Probability of no resistance } P(\text{No Resist}) = 1 - 0.4190 = 0.5810$$

$$\text{Odds} = \frac{0.4190}{0.5810} = 0.7212$$

The probability of resistance to the government policy rejuvenation (change IN) after changing the predictor variable (coding change IN = 1)

$$\begin{aligned} \text{Probability of resistance } P(\text{Resist}) &= \frac{1}{1 + e^{-[(-0.327 + 0.278(1))]} \\ &= \frac{1}{1 + e^{0.0490}} = 0.4878 \end{aligned}$$

$$\text{Probability of no resistance } P(\text{No Resist}) = 1 - 0.4878 = 0.5122$$

$$\text{Odds} = \frac{0.4878}{0.5122} = 0.9524$$

$$\Delta\text{Odds} = \frac{0.9524}{0.7212} = \mathbf{1.3205}$$

The probability of resistance to government policy transformation (change OF) before changing the predictor variable (coding change IN = 1)

$$\text{Probability of resistance } P(\text{Resist}) = \frac{1}{1 + e^{-[(-0.327 + 0.520(1))]}$$

$$= \frac{1}{1 + e^{-0.193}} = 0.5482$$

$$\text{Probability of no resistance } P(\text{No Resist}) = 1 - 0.5481 = 0.4518$$

$$\text{Odds} = \frac{0.5482}{0.4518} = 1.2133$$

The probability of resistance to the change in government policy after changing the predictor variable (Change OF =2)

$$\begin{aligned} \text{Probability of resistance } P(\text{Resist}) &= \frac{1}{1 + e^{-[(-0.327+0.520(2))]} \\ &= \frac{1}{1 + e^{-0.713}} = 0.6711 \end{aligned}$$

$$\text{Probability of no resistance } P(\text{No Resist}) = 1 - 0.6711 = 0.3289$$

$$\text{Odds} = \frac{0.6711}{0.3289} = 2.0404$$

$$\Delta\text{Odds} = \frac{2.0404}{1.2133} = \mathbf{1.6817}$$

$$\text{Odds}(\text{constant}) = e^b = e^{-0.327} = 0.721$$

A binary logistic regression analysis (Table 4-106) conducted to predict resistance to government policies' change IN and change OF. A test of the full model against a constant only model was statistically significant in case of government policies' transformation (change OF), indicating a 68% higher risk of resistance compared to the situation of status quo.

The 95% confidence interval for odds ratio indicated that the population value of the odds ratio lies between 1.071 and 2.640. Values greater than 1 mean that as the predictor variable increased, so do the odds of being resistance i.e.  $Exp(B) = 1.681$  indicated an increase in resistance risk by 68% when there is transformation in government policies.

Table 4-107: Resistance to the changes in laws and acts

| Laws and Acts <sup>2</sup> | b     | Wald  | Sig.        | Exp(B)       | 95% C.I. for EXP(B) |       |
|----------------------------|-------|-------|-------------|--------------|---------------------|-------|
|                            |       |       |             |              | Lower               | Upper |
| Non-manufacturing          | -.095 | .209  | .647        | .909         | .606                | 1.366 |
| Change IN                  | .026  | .007  | .931        | 1.026        | .572                | 1.841 |
| Change OF                  | -.149 | .317  | .573        | .862         | .514                | 1.446 |
| Constant                   | .603  | 6.241 | <b>.012</b> | <b>1.828</b> |                     |       |

The analysis (Table 4-107) was conducted in order to predict resistance to the rejuvenation or transformation of the laws and acts'. A test of the full model against a 'constant only' model was statistically insignificant in the interventions of rejuvenation and transformation in the laws and acts concerning the organization and business. Rejuvenation of the laws

and acts was quite risky, though it was not statistically significant. The analysis indicated that there was no more risk of rejuvenation or transformation of the laws and acts concerning the organization and business.

The 95% confidence interval for odds ratio indicated that the population value of the odds ratio lies between 0.572 and 1.841. Values greater than 1 mean that as the predictor variable increased, so do the odds of being resistant i.e.  $Exp(B) = 1.026$  indicated an increase in resistance risk approximately by 3%. Values less than 1 mean the opposite: as the predictor variable increases, the odds of being resistance decrease i.e. there is chance of acceptance. Statistically significant constant (0.012) with odds ratio 1.828 indicates a probability of about 83% acceptance to the changes in the laws and acts concerning the organizations and business.

*Table 4-108: Resistance to changes in authority delegation and withdrawal*

| Structural empowerment <sup>4</sup> | b     | Wald  | Sig.        | Exp(B)      | 95% C.I. for EXP(B) |       |
|-------------------------------------|-------|-------|-------------|-------------|---------------------|-------|
|                                     |       |       |             |             | Lower               | Upper |
| Non-manufacturing                   | -.574 | 7.980 | <b>.005</b> | <b>.564</b> | .379                | .839  |
| Change IN                           | -.234 | .853  | .356        | .791        | .481                | 1.301 |
| Change OF                           | .304  | 1.695 | .193        | 1.355       | .858                | 2.141 |
| Constant                            | .081  | .175  | .675        | 1.084       |                     |       |

A binary logistic regression analysis (*Table 4-108*) was conducted in order to predict the resistance to authority delegation and withdrawal practices. A test of the full model against a constant only model was statistically significant in case of non-manufacturing firms compared to the manufacturing firms, indicating about 44% protective or less risk of resistance in non-manufacturing firms. The delegation and withdrawal practice was negatively ( $b = -0.574$ ) associated with outcome i.e. the risk of resistance seems to be less in non-manufacturing establishments compared to the manufacturing establishments which can be visualized by using the odds ratio (OR). The odds of having resistance is less by approximately 44% ( $OR = 0.564$ ) in non-manufacturing establishments.

The 95% confidence interval for odds ratio indicated that the population value of the odds ratio lies between 0.379 and 0.839. Values less than 1 mean that as the predictor variable increases, the odds of being resistance decrease i.e. there is chance of acceptance ranging approximately from 62% to 16% when there is increase in authority delegation and withdrawal practices in non-manufacturing firms compared to the manufacturing firms in the industry.

The binary logistic regression analysis (*Table 4-109*) was conducted in order to predict resistance to change in supply chain or business network. A test of the full model against a



constant only model was statistically significant in case of non-manufacturing firms compared to the manufacturing firms, indicating about 49% protective or less risk of resistance in non-manufacturing firms.

*Table 4-109: Resistance to the change in supply chain and business network*

| Supply chain and Business network <sup>6</sup> | b     | Wald   | Sig.        | Exp(B)       | 95% C.I. for EXP(B) |       |
|--|-------|--------|-------------|--------------|---------------------|-------|
|  |       |        |             |              | Lower               | Upper |
| Non-manufacturing                              | -.676 | 7.831  | .005        | .509         | .317                | .817  |
| Change IN                                      | .337  | 1.535  | .215        | 1.401        | .822                | 2.386 |
| Change OF                                      | .669  | 5.004  | <b>.025</b> | <b>1.953</b> | 1.086               | 3.511 |
| Constant                                       | 1.237 | 30.522 | .000        | 3.446        |                     |       |

The change in supply chain or business network was negatively (b = -0.509) associated with outcome i.e. the risk of resistance seems to be less in non-manufacturing establishments compared to the manufacturing establishments which can be visualized by using the OR. The odds of having resistance is less by approximately 49% (OR = 0.509) in non-manufacturing establishments.

Similarly, the probability of resistance to supply chain or business network transformation was statistically significant with an indication of about 95% higher risk of resistance, which can be visualized by using the OR. The odds of having resistance is higher by approximately 95% (OR = 1.953) in case of transformational change in supply chain and business network. Although, statistically significant constant (0.000) with odds ratio 3.446 indicates a probability of about 3.4 times higher acceptance to the changes in supply chain and business network when compared with the predictors. The result indicates that a well-established supply chain and business network extremely significant for the organizations and businesses.

In case of such transformation, the 95% confidence interval for odds ratio indicates that the population value of the odds ratio lies between 1.086 and 3.311. Values greater than 1 mean that as the predictor variable increased, so do the odds of being resistance i.e.  $Exp(B) = 1.953$  indicates an increase in resistance risk by 95% when there is an attempt of supply chain or business network transformation.

*Table 4-110: Resistance to organizational polity influence*

| Organizational polity <sup>7</sup> | b     | Wald   | Sig.        | Exp(B)       | 95% C.I. for EXP(B) |       |
|------------------------------------|-------|--------|-------------|--------------|---------------------|-------|
|                                    |       |        |             |              | Lower               | Upper |
| Non-manufacturing                  | -.585 | 6.825  | <b>.009</b> | <b>.557</b>  | .359                | .864  |
| Change IN                          | -.084 | .083   | .773        | .920         | .522                | 1.623 |
| Change OF                          | -.019 | .006   | .939        | .982         | .610                | 1.580 |
| Constant                           | 1.200 | 29.774 | <b>.000</b> | <b>3.321</b> |                     |       |

A binary logistic regression analysis (*Table 4-110*) was conducted in order to predict resistance to organizational polity. A test of the full model against a constant only model is statistically significant in case of non-manufacturing firms compared to the manufacturing firms, indicating about 44% protective or less risk of resistance in non-manufacturing firms. The union's influence practice was negatively ( $b = -0.585$ ) associated with outcome i.e. the risk of resistance seems to be less in non-manufacturing establishments compared to the manufacturing establishments which can be visualized by using the odds ratio. The odds ratio of having resistance is less by approximately 44% ( $OR = 0.557$ ) in non-manufacturing establishments.

The 95% confidence interval for odds ratio indicated that the population value of the odds ratio lies between 0.359 and 0.864. Values less than 1 mean that as the predictor variable increases, the odds of being resistance decrease i.e. there is chance of acceptance falling between 64% and 14% in case of non-manufacturing firms when compared to the manufacturing firms in the industry. Although, statistically significant constant (0.000) with odds ratio 3.321 indicates a probability of about 3.3 times higher acceptance to the decisions concerning organizational polity in the organizations and business when compared with the predictors. This result indicates that the actors take authority delegation and withdrawal practices normally in the organization and businesses.

*Table 4-111: Resistance to the change in operational freedom*

| Operational freedom <sup>8</sup> | b    | Wald   | Sig.        | Exp(B)       | 95% C.I. for EXP(B) |       |
|----------------------------------|------|--------|-------------|--------------|---------------------|-------|
|                                  |      |        |             |              | Lower               | Upper |
| Non-manufacturing                | .113 | .270   | .603        | 1.119        | .732                | 1.710 |
| Change IN                        | .005 | .000   | .987        | 1.005        | .578                | 1.748 |
| Change OF                        | .051 | .042   | .838        | 1.052        | .645                | 1.717 |
| Constant                         | .697 | 10.702 | <b>.001</b> | <b>2.009</b> |                     |       |

The analysis (*Table 4-111*) conducted to predict resistance to the rejuvenation or transformation of the operational freedom at work. A test of the full model against a constant only model is statistically insignificant in the interventions of rejuvenation and transformation in the condition of operational freedom at work. All predictors- the non-manufacturing, rejuvenation and transformation were little risky, though the predictors were not statistically significant. The analysis indicates that there is no more risk of resistance to the change in the condition of operational freedom at work.

The 95% confidence interval for odds ratio indicated that the population value of the odds ratio lies between 0.732 and 1.710 (non-manufacturing), between 0.578 and 1.748 (change IN) and 0.645 and 1.717 (change OF). Although, statistically significant constant (0.001)

with odds ratio 2.009 indicates a probability of acceptance about 2 times higher to the changes in the operational freedom at work concerning the organizations and business.

*Table 4-112: Resistance to the shift in organizational value priority*

| Organizational value priority <sup>9</sup> | b     | Wald  | Sig.        | Exp(B)       | 95% C.I. for EXP(B) |       |
|--|-------|-------|-------------|--------------|---------------------|-------|
|  |       |       |             |              | Lower               | Upper |
| Non-manufacturing                          | -.101 | .244  | .621        | .904         | .606                | 1.349 |
| Change IN                                  | .667  | 6.804 | <b>.009</b> | <b>1.948</b> | 1.180               | 3.214 |
| Change OF                                  | .791  | 9.326 | <b>.002</b> | <b>2.207</b> | 1.328               | 3.667 |
| Constant                                   | -.295 | 3.056 | .080        | .745         |                     |       |

The binary logistic regression analysis (*Table 4-112*) was conducted in order to predict resistance to change in organizational priority. A test of the full model against a constant only model is statistically significant at both the level of change- rejuvenation and transformation, indicating about 95% higher risk of resistance in case of rejuvenation and about 2.21 times higher risk of resistance in case of transformation in the organizational priorities. The change in organizational priority is positively (b = 0.667 and 0.791) associated with outcome. The probability of resistance to organizational transformation is statistically significant with an indication about 2.21 times higher risk of resistance, which can be visualized by using the OR (2.207) in case of transformational change in organizational priority. In case of such transformation, the 95% confidence interval for odds ratio indicated that the population value of the odds ratio lies between 1.328 and 3.667.

*Table 4-113: Resistance to the change in work of choice and preference*

| Preference at work <sup>10</sup> | b     | Wald   | Sig.        | Exp(B)       | 95% C. I. for EXP(B) |       |
|----------------------------------|-------|--------|-------------|--------------|----------------------|-------|
|                                  |       |        |             |              | Lower                | Upper |
| Non-manufacturing                | -.365 | 2.897  | .089        | .694         | .456                 | 1.057 |
| Change IN                        | -.218 | .700   | .403        | .804         | .482                 | 1.341 |
| Change OF                        | .016  | .004   | .952        | 1.016        | .612                 | 1.685 |
| Constant                         | .949  | 24.126 | <b>.000</b> | <b>2.582</b> |                      |       |

The analysis (*Table 4-113*) conducted to predict resistance to the predictors of the preference at work. A test of the full model against a constant only model was statistically insignificant in the interventions of rejuvenation and transformation in case of preference at work. The predictors- non-manufacturing and rejuvenation were not resisting, but the transformation was quite risky by about 2%, though all the predictors were not statistically significant. The analysis indicates that there is no more risk of resistance to the change in the preference at work from the predictors mentioned herewith.

The 95% confidence interval for odds ratio indicated that the population value of the odds ratio lies between 0.456 and 1.057 (non-manufacturing), between 0.482 and 1.341 (rejuvenation) and 0.612 and 1.685 (transformation). Although, statistically significant constant (0.000) with odds ratio 2.582 indicates a probability of about 2.6 times higher

acceptance to the changes in the preference to work concerning the organizations and business when compared with the predictors.

*Table 4-114: Resistance to the change in events, festivals, and rituals*

| Events, festivals and rituals <sup>11</sup> | b     | Wald  | Sig.        | Exp(B)       | 95% C. I. for EXP(B) |       |
|---|-------|-------|-------------|--------------|----------------------|-------|
|   |       |       |             |              | Lower                | Upper |
| Non-manufacturing                           | -.031 | .024  | .878        | .970         | .654                 | 1.438 |
| Change IN                                   | -.435 | 3.229 | .072        | .647         | .403                 | 1.040 |
| Change OF                                   | -.233 | .958  | .328        | .792         | .497                 | 1.263 |
| Constant                                    | .403  | 3.941 | <b>.047</b> | <b>1.497</b> |                      |       |

The analysis (*Table 4-114*) conducted to predict resistance to the predictors in relation to the events, festivals and rituals. A test of the full model against a constant only model was statistically insignificant in the interventions of rejuvenation and transformation in case of the events, festivals and rituals. The predictors- non-manufacturing, change IN as well as change OF were not resisting significantly. The analysis indicates that there is no more risk of resistance to the change in the events, festivals and rituals from the predictors mentioned herewith.

The 95% confidence interval for odds ratio indicates that the population value of the odds ratio lies between 0.654 and 1.438 (non-manufacturing), between 0.403 and 1.040 (change IN) and 0.497 and 1.263 (change OF). Although, statistically significant constant (0.047) at borderline with odds ratio 1.497 indicates the probability of about 50 % acceptance to the changes in the preference to work concerning the organizations and business when compared with the predictors.

*Table 4-115: Resistance to the change in technology and working processes*

| Technology and processes <sup>12</sup> | b     | Wald   | Sig.        | Exp(B)       | 95% C. I. for EXP(B) |       |
|--|-------|--------|-------------|--------------|----------------------|-------|
|  |       |        |             |              | Lower                | Upper |
| Non-manufacturing                      | -.231 | 1.124  | .289        | .794         | .517                 | 1.217 |
| Change IN                              | .157  | .252   | .615        | 1.170        | .634                 | 2.160 |
| Change OF                              | -.166 | .437   | .508        | .847         | .518                 | 1.385 |
| Constant                               | .996  | 16.481 | <b>.000</b> | <b>2.708</b> |                      |       |

The analysis (*Table 4-115*) conducted to predict resistance to the predictors of the technology and working processes. A test of the full model against a constant only model was statistically insignificant. The predictors- non-manufacturing and change OF were not resisting, but change IN technology and work processes was quite risky by 17% whereas all the predictors were statistically insignificant. The analysis indicates that there is no more risk of resistance to the change in technology and work process from the predictors mentioned herewith.

The 95% confidence interval for odds ratio indicated that the population value of the odds ratio lies between 0.517 and 1.217 (non-manufacturing), between 0.634 and 2.160 (change IN) and 0.518 and 1.385 (change OF). Values greater than 1 mean that as the predictor variable increased, so do the odds of being resistance i.e.  $Exp(B) = 1.170$  indicates an increase in resistance risk approximately by 17% and the values less than 1 mean the opposite: as the predictor variable increases, the odds of being resistance decrease i.e. there is chance of acceptance. Although, statistically significant constant (0.000) with odds ratio 2.708 indicates a probability of about 2.71 times higher acceptance to the changes in the technology and processes concerning the organizations and business when compared with the predictors.

*Table 4-116: Resistance to the change and transfer of key personnel*

| Key personnel <sup>13</sup> | b     | Wald   | Sig.        | Exp(B)       | 95% C.I. for EXP(B) |       |
|-----------------------------|-------|--------|-------------|--------------|---------------------|-------|
|                             |       |        |             |              | Lower               | Upper |
| Non-manufacturing           | .083  | .149   | .700        | 1.086        | .714                | 1.653 |
| Change IN                   | .698  | 5.890  | <b>.015</b> | <b>2.010</b> | 1.144               | 3.533 |
| Change OF                   | .534  | 4.736  | <b>.030</b> | <b>1.706</b> | 1.055               | 2.759 |
| Constant                    | -.998 | 22.409 | .000        | .369         |                     |       |

The binary logistic regression analysis (*Table 4-116*) was conducted in order to predict resistance to change in key personnel. A test of the full model against a constant only model was statistically significant in case of change IN and change OF compared to the status quo. The test indicated that approximately 2.01 times higher risk of resistance in case of change IN (mostly in transfer of personnel) and about 71% risk of resistance in case of change OF (mostly in hire and fire of personnel) when compared with the status quo. The analysis indicates that there is higher risk of resistance to the change in key personnel from the predictors mentioned herewith.

In case of such change, the 95% confidence interval for odds ratio indicated that the population value of the odds ratio lies between 1.144 and 3.533 in case of change IN and between 1.055 and 2.759 in case of change OF. Values greater than 1 mean that as the predictor variable increased, so do the odds of being resistance i.e.  $Exp(B) = 2.010$  indicated an increase in resistance risk by 2.01 times when compared to the predictors.

*Table 4-117: Resistance to the organizational learning imposition*

| Learning at work <sup>15</sup> | b     | Wald  | Sig.        | Exp(B)       | 95% C. I. for EXP(B) |       |
|--------------------------------|-------|-------|-------------|--------------|----------------------|-------|
|                                |       |       |             |              | Lower                | Upper |
| Non-manufacturing              | .079  | .134  | .714        | 1.082        | .709                 | 1.651 |
| Change IN                      | -.069 | .069  | .793        | .933         | .558                 | 1.562 |
| Change OF                      | .431  | 2.812 | .094        | 1.539        | .930                 | 2.548 |
| Constant                       | .592  | 7.222 | <b>.007</b> | <b>1.807</b> |                      |       |

The analysis (*Table 4-117*) conducted to predict the resistance to the predictors in the pattern of recognizing and correcting the mistakes at work. A test of the full model against a constant only model was statistically insignificant in the interventions of the predictors. Manufacturing firms were quite risky, though it was not statistically significant. The analysis indicated that there was no more risk of rejuvenation or transformation in the pattern of learning at work concerning organization and business.

The 95% confidence interval for odds ratio indicates that the population value of the odds ratio lies between 0.709 and 1.651 (non-manufacturing), 0.558 and 1.562 (change IN) and 0.930 and 2.548 (change OF). Although, statistically significant constant (0.007) with odds ratio 1.807 indicates a probability of about 81% acceptance to the changes in the pattern of learning at work the organizations and business.

*Table 4-118: Resistance to the undesired behavior of the suppliers*

| Supplier's behavior <sup>16</sup> | b    | Wald  | Sig.        | Exp(B)       | 95% C. I. for EXP(B) |       |
|-----------------------------------|------|-------|-------------|--------------|----------------------|-------|
|                                   |      |       |             |              | Lower                | Upper |
| Non-manufacturing                 | .064 | .080  | .777        | 1.066        | .685                 | 1.659 |
| Change IN                         | .452 | 2.437 | .118        | 1.571        | .891                 | 2.770 |
| Change OF                         | .360 | 1.774 | .183        | 1.434        | .844                 | 2.436 |
| Constant                          | .668 | 7.180 | <b>.007</b> | <b>1.950</b> |                      |       |

The analysis (*Table 4-118*) conducted to predict the resistance to the change and change OF in the behavior of the suppliers in due course of supplying to the organization and business. A test of the full model against a constant only model was statistically insignificant in the interventions of the predictors. Manufacturing firms were quite risky by about 7%, though it was not statistically significant. Similarly, the change IN and change OF were more risky by about 57% and 43% respectively. The analysis indicates that the change interventions are more risky, though the risk is statistically insignificant.

The 95% confidence interval for odds ratio indicates that the population value of the odds ratio lies between 0.685 and 1.659 in non-manufacturing), between 0.891 and 2.770 case of change IN) and between 0.844 and 2.436 in case of change OF . Although, statistically significant constant (0.007) with odds of 1.905 indicates a probability of about 91% acceptance to the changes in supplier's behavior compared to the predictors.

*Table 4-119: Resistance to the need of change in business etiquette*

| Working etiquette <sup>18</sup> | b     | Wald   | Sig.        | Exp(B)      | 95% C. I. for EXP(B) |       |
|---------------------------------|-------|--------|-------------|-------------|----------------------|-------|
|                                 |       |        |             |             | Lower                | Upper |
| Non-manufacturing               | .214  | .951   | .329        | 1.239       | .806                 | 1.904 |
| Change IN                       | .099  | .150   | .699        | 1.104       | .668                 | 1.824 |
| Change OF                       | -.116 | .198   | .656        | .890        | .533                 | 1.485 |
| Constant                        | -.952 | 19.391 | <b>.000</b> | <b>.386</b> |                      |       |

The analysis (*Table 4-119*) conducted to predict resistance to the change and change OF in working etiquette in the organization and business. A test of the full model against a constant only model was statistically insignificant in the interventions of the predictors. Manufacturing firms were quite risky by about 24%, though it was not statistically significant. Similarly, the change IN was risky by about 10% whereas change OF was protective by 11%. The analysis indicates that the change interventions were quite risky though statistically insignificant.

The 95% confidence interval for odds ratio indicated that the population value of the odds ratio lies between 0.806 and 1.904 in non-manufacturing, between 0.668 and 1.824 in change IN) and between 0.533 and 1.485 in change OF. Although, statistically significant constant (0.000) with odds of 0.386 indicates model insignificant for making prediction.

*Table 4-120: Resistance to the change in product development program*

| Product development <sup>19</sup> | b     | Wald  | Sig.        | Exp(B)       | 95% C. I. for EXP(B) |       |
|-----------------------------------|-------|-------|-------------|--------------|----------------------|-------|
|                                   |       |       |             |              | Lower                | Upper |
| Non-manufacturing                 | .507  | 5.460 | <b>.019</b> | <b>1.661</b> | 1.085                | 2.541 |
| Change IN                         | -.293 | .959  | .327        | .746         | .416                 | 1.340 |
| Change OF                         | -.083 | .113  | .736        | .920         | .566                 | 1.494 |
| Constant                          | .558  | 5.846 | .016        | 1.747        |                      |       |

A binary logistic regression analysis (*Table 4-120*) was conducted to predict resistance to the attempt of investing on product development. A test of the full model against a constant only model was statistically significant in case of non-manufacturing industry compared to the manufacturing industry. The test indicated that approximately 66% higher risk of resistance in non-manufacturing industry. The analysis indicates that the initiatives of product development are more welcomed in manufacturing firms compared to the non-manufacturing firms.

In case of such change, the 95% confidence interval for odds ratio indicated that the population value of the odds ratio lies between 1.085 and 2.541. The values greater than 1 mean that as the predictor variable increased, so do the odds of being resistance i.e.  $Exp(B) = 1.661$  indicated an increase in resistance risk by 66% higher when compared to the predictors.

*Table 4-121: Resistance to the decrease in demand of major products*

| Demand of major products <sup>21</sup> | b     | Wald   | Sig.        | Exp(B)       | 95% C. I. for EXP(B) |       |
|--|-------|--------|-------------|--------------|----------------------|-------|
|  |       |        |             |              | Lower                | Upper |
| Non-manufacturing                      | -.227 | .780   | .377        | .797         | .482                 | 1.318 |
| Change IN                              | -.220 | .537   | .464        | .802         | .445                 | 1.447 |
| Change OF                              | -.538 | 2.682  | .101        | .584         | .307                 | 1.112 |
| Constant                               | 1.650 | 58.091 | <b>.000</b> | <b>5.206</b> |                      |       |

The analysis (*Table 4-121*) conducted to predict resistance to the change in demand of major products in the organization and business. A test of the full model against a constant only model was statistically insignificant in the interventions of the predictors. The predictors were defensive and the analysis indicated that the change interventions were not risky though the risk was statistically insignificant. The negative vales of b indicates that the predictors were adversely associated with the outcome variables i.e. as demand decreased, the chance of resistance increased.

The 95% confidence interval for odds ratio indicates that the population value of the odds ratio lies between 0.482 and 1.318 in non-manufacturing, between 0.445 and 1.447 in case of change IN and between 0.307 and 1.112 in case of change OF. Although, statistically significant constant (0.000) with odds ratio 5.506 indicates about 5.21 times higher acceptance to the condition of changes in the major product's demands.

*Table 4-122: Resistance to the decrease in supplies to the organization*

| Supply of major items <sup>22</sup> | b     | Wald   | Sig.        | Exp(B)       | 95% C.I.for EXP(B) |       |
|-------------------------------------|-------|--------|-------------|--------------|--------------------|-------|
|                                     |       |        |             |              | Lower              | Upper |
| Non-manufacturing                   | -.656 | 6.767  | <b>.009</b> | <b>.519</b>  | .316               | .851  |
| Change IN                           | -.038 | .018   | .894        | .963         | .552               | 1.679 |
| Change OF                           | -.572 | 3.761  | <b>.052</b> | <b>.565</b>  | .317               | 1.006 |
| Constant                            | 1.731 | 57.721 | <b>.000</b> | <b>5.647</b> |                    |       |

The binary logistic regression analysis (*Table 4-122*) was conducted to predict resistance to the decrease in supplies to the organization and business. A test of the full model against a constant only model was statistically significant in case of non-manufacturing industry and transformation compared to the non-manufacturing and status quo respectively. The test indicated that the manufacturing industry and transformation were defensive by approximately 48% and 43%. The analysis indicates that there is probability of acknowledgement to the decrease in supply in non-manufacturing firms. The impact of decrease in supplies of items to manufacturing firm was quite severe compared to non-manufacturing firms. Therefore, less resistance in non-manufacturing firms was obvious.

The 95% confidence interval for odds ratio indicated that the population value of the odds ratio lies between 0.316 and 0.851 in case of non-manufacturing industry and between 0.317 and 1.006 in case of change OF. Although, statistically significant constant (0.000) having odds ratio 5.647 indicated about 5.65 times higher acceptance to the decrease in supply of items to the firms.



Table 4-123: Resistance to the change in capital and equity

| Capital and equity <sup>23</sup> | b     | Wald  | Sig.        | Exp(B)      | 95% C. I. for EXP(B) |       |
|----------------------------------|-------|-------|-------------|-------------|----------------------|-------|
|                                  |       |       |             |             | Lower                | Upper |
| Non-manufacturing                | .152  | .533  | .465        | 1.164       | .774                 | 1.751 |
| Change IN                        | .225  | .586  | .444        | 1.252       | .704                 | 2.224 |
| Change OF                        | -.037 | .025  | .874        | .963        | .609                 | 1.525 |
| Constant                         | -.653 | 8.330 | <b>.004</b> | <b>.521</b> |                      |       |

A test of the full model against a constant only model was statistically insignificant in the interventions of the predictors. Non-manufacturing firms and rejuvenation were quite risky by about 16% and 25% respectively whereas the transformation was defensive by 4% approximately though the predictors were statistically insignificant. The analysis indicated that the change interventions were more risky, though the risk was statistically insignificant.

The 95% confidence interval for odds ratio indicates that the population value of the odds ratio lies between 0.774 and 1.751 in non-manufacturing, between 0.704 and 2.224 in case of rejuvenation and between 0.609 and 1.525 in case of transformation. Although, statistically significant constant (0.004) with odds of 0.521 indicates a probability of about 48% acceptance to the changes in supplier's behavior compared to the predictors. However, the predictors indicated that the acceptance and resistance was not major concern for the change agent while managing change.

Table 4-124: Resistance to the change in investment

| Investment <sup>24</sup> | b     | Wald   | Sig.        | Exp(B)       | 95% C. I. for EXP(B) |       |
|--------------------------|-------|--------|-------------|--------------|----------------------|-------|
|                          |       |        |             |              | Lower                | Upper |
| Non-manufacturing        | -.291 | 1.874  | .171        | .748         | .493                 | 1.134 |
| Change IN                | .010  | .001   | .978        | 1.010        | .510                 | 2.001 |
| Change OF                | -.212 | .519   | .471        | .809         | .455                 | 1.440 |
| Constant                 | .957  | 10.607 | <b>.001</b> | <b>2.604</b> |                      |       |

The analysis (Table 4-124) conducted to predict resistance to the change in the pattern of investment of the organization and business. A test of the full model against a constant only model was statistically insignificant in the interventions of the predictors. Non-manufacturing firms and rejuvenation were protective by about 25% and 21% respectively whereas transformation was slightly risky by 1% though the predictors were statistically insignificant. The analysis indicated that the change interventions were not risky as such.

The 95% confidence interval for odds indicates that the population value of the odds lies between 0.493 and 1.134 in non-manufacturing, between 0.510 and 2.001 in rejuvenation and between 0.455 and 1.440 in transformation. Although, statistically significant constant (0.001) with odds of 2.604 indicates of about 2.6 times higher acceptance to the changes in investment compared to the predictors.

*Table 4-125: Resistance to the change in application of authority*

| Abuse of authority <sup>25</sup> | b     | Wald  | Sig.        | Exp(B)       | 95% C. I. for EXP(B) |       |
|----------------------------------|-------|-------|-------------|--------------|----------------------|-------|
|                                  |       |       |             |              | Lower                | Upper |
| Non-manufacturing                | .343  | 2.683 | .101        | 1.410        | .935                 | 2.126 |
| Change IN                        | -.031 | .012  | .912        | .970         | .558                 | 1.684 |
| Change OF                        | -.355 | 2.202 | .138        | .701         | .439                 | 1.121 |
| Constant                         | .556  | 6.527 | <b>.011</b> | <b>1.743</b> |                      |       |

The analysis (*Table 4-125*) conducted to predict resistance to the change in the use and misuse of authority in due course of the organization and business. A test of the full model against a constant only model was statistically insignificant in the interventions of the predictors. The predictors- non-manufacturing firm was risky by 41% whereas rejuvenation and transformation were defensive by 3% and 30% respectively though the predictors were statistically insignificant.

The 95% confidence interval for odds ratio indicates that the population value of the odds ratio lies between 0.935 and 2.126 in non-manufacturing, between 0.558 and 1.684 in rejuvenation and between 0.439 and 1.121 in transformation. Although, statistically significant constant (0.011) with odds of 1.743 indicates a probability of about 74% acceptance to the changes in use of authority compared to the predictors.

*Table 4-126: Resistance to the discrimination at work*

| Discrimination at work <sup>27</sup> | b     | Wald   | Sig.        | Exp(B)       | 95% C. I. for EXP(B) |       |
|--------------------------------------|-------|--------|-------------|--------------|----------------------|-------|
|                                      |       |        |             |              | Lower                | Upper |
| Non-manufacturing                    | .012  | .003   | .955        | 1.012        | .658                 | 1.557 |
| Change IN                            | .085  | .098   | .755        | 1.089        | .639                 | 1.855 |
| Change OF                            | -.408 | 2.595  | .107        | .665         | .405                 | 1.092 |
| Constant                             | .971  | 21.165 | <b>.000</b> | <b>2.641</b> |                      |       |

The analysis (*Table 4-126*) conducted to predict resistance to the change in the discriminating behavior at work. A test of the full model against a constant only model was statistically insignificant in the interventions of the predictors. Non-manufacturing firms and rejuvenation were quite risky by about 1% and 9% respectively whereas transformation attempt was defensive by 33% though the predictors were statistically insignificant.

The 95% confidence interval for odds ratio indicates that the population value of the odds ratio lies between 0.658 and 1.557 in non-manufacturing, between 0.639 and 1.855 in rejuvenation, and between 0.405 and 1.092 in transformation attempt in discrimination at work. Although, statistically significant constant (0.000) with odds of 2.641 indicates about 2.6 times higher acceptance to the change attempt of discrimination at work.

Table 4-127: Resistance to the change in business philosophy

| Business philosophy <sup>28</sup> | b     | Wald   | Sig.        | Exp(B)       | 95% C. I. for EXP(B) |       |
|-----------------------------------|-------|--------|-------------|--------------|----------------------|-------|
|                                   |       |        |             |              | Lower                | Upper |
| Non-manufacturing                 | .067  | .076   | .783        | 1.069        | .664                 | 1.722 |
| Change IN                         | .390  | 1.360  | .243        | 1.477        | .767                 | 2.845 |
| Change OF                         | -.169 | .368   | .544        | .845         | .490                 | 1.457 |
| Constant                          | 1.230 | 34.548 | <b>.000</b> | <b>3.422</b> |                      |       |

The analysis (Table 4-127) was carried out to predict resistance to the change in business philosophy of the organization and business. A test of the full model against a constant only model was statistically insignificant in the interventions of the predictors. Non-manufacturing firms and an attempt of rejuvenation in business philosophy were quite risky by about 7% and 48% respectively whereas the attempt of transformation to the business philosophy was defensive by about 15% though the predictors were statistically insignificant.

The 95% confidence interval for odds ratio indicates that the population value of the odds ratio lies between 0.664 and 1.722 in non-manufacturing firms, between 0.767 and 2.845 in the attempt of rejuvenation, and between 0.490 and 1.457 in the attempt of business philosophy transformation. Although, statistically significant constant (0.000) with odds of 3.422 indicates about 3.4 times higher acceptance to the change attempts in business philosophy.

Table 4-128: Resistance to the change in business ethics

| Business ethics <sup>29</sup> | b     | Wald  | Sig.        | Exp(B)       | 95% C. I. for EXP(B) |       |
|-------------------------------|-------|-------|-------------|--------------|----------------------|-------|
|                               |       |       |             |              | Lower                | Upper |
| Non-manufacturing             | .536  | 6.349 | <b>.012</b> | <b>1.709</b> | 1.126                | 2.594 |
| Change IN                     | -.123 | .197  | .657        | .885         | .515                 | 1.519 |
| Change OF                     | -.413 | 2.843 | .092        | .662         | .410                 | 1.069 |
| Constant                      | .530  | 7.940 | .005        | 1.699        |                      |       |

The binary logistic regression analysis (Table 4-128) was conducted to predict resistance to the degradation in business ethics. A test of the full model against a constant only model was statistically significant in case of non-manufacturing industry. The test indicated that the non-manufacturing industry was risky by about 71% compared to the manufacturing industry. The analysis indicates that there is high risk of resistance to the degradation in business ethics.

The 95% confidence interval for odds ratio indicates that the population value of the odds ratio lies between 1.126 and 2.594 in case of non-manufacturing industry. Values greater than 1 mean that as the predictor variable increased, so do the odds of being resistance i.e.  $Exp(B) = 1.709$  indicates an increase in resistance risk approximately by 71% for an instance.

*Table 4-129: Resistance to the change in working standards*

| Working standards <sup>30</sup> | b     | Wald   | Sig.        | Exp(B)       | 95% C. I. for EXP(B) |       |
|---------------------------------|-------|--------|-------------|--------------|----------------------|-------|
|                                 |       |        |             |              | Lower                | Upper |
| Non-manufacturing               | -.103 | .198   | .656        | .902         | .574                 | 1.419 |
| Change IN                       | .853  | 6.836  | <b>.009</b> | <b>2.347</b> | 1.238                | 4.448 |
| Change OF                       | .384  | 1.791  | .181        | 1.468        | .836                 | 2.578 |
| Constant                        | .870  | 21.603 | .000        | 2.387        |                      |       |

The binary logistic regression analysis (*Table 4-129*) was conducted to predict resistance to the change in working standards. A test of the full model against a constant only model was statistically significant in case of rejuvenation of the standards. The test indicated that the rejuvenation and transformation of working standards were more risky by about 2.35 times and 1.47 times respectively compared to the status quo. The analysis indicates that there is high risk of resistance to the change in working patterns and standards.

The 95% confidence interval for odds ratio indicates that the population value of the odds ratio lies between 1.238 and 4.448 in case rejuvenation of the working patterns and standards. The values greater than 1 mean that as the predictor variable increased, so do the odds of being resistance i.e.  $Exp(B) = 2.347$  indicates an increase in resistance risk by approximately 2.35 times.

*Table 4-130: Resistance to the change in personnel development program*

| Personnel development <sup>32</sup> | b     | Wald   | Sig.        | Exp(B)       | 95% C. I. for EXP(B) |       |
|-------------------------------------|-------|--------|-------------|--------------|----------------------|-------|
|                                     |       |        |             |              | Lower                | Upper |
| Non-manufacturing                   | -.146 | .434   | .510        | .864         | .560                 | 1.334 |
| Change IN                           | -.486 | 3.749  | <b>.053</b> | <b>.615</b>  | .376                 | 1.006 |
| Change OF                           | .148  | .263   | .608        | 1.160        | .658                 | 2.045 |
| Constant                            | 1.055 | 29.030 | <b>.000</b> | <b>2.872</b> |                      |       |

A binary logistic regression analysis (*Table 4-130*) conducted to predict resistance to the initiative of personnel development program. A test of the full model against a constant only model was statistically significant in case of rejuvenation in the development program. The test indicated that the rejuvenation of personnel development program was defensive by about 38% compared to status quo. The analysis indicates that there is acceptance of personnel development programs in the organizations and businesses.

The 95% confidence interval for odds ratio indicates that the population value of the odds ratio lies between 0.376 and 1.006 in case rejuvenation of the personnel development program. Although, statistically significant constant (0.000) with odds of 2.872 indicates a probability of about 87% acceptance of the personnel development programs in the organizations and businesses.

Table 4-131: Resistance to the change in code of conduct

| Code of conduct <sup>33</sup> | b      | Wald   | Sig.        | Exp(B)       | 95% C. I. for EXP(B) |       |
|-------------------------------|--------|--------|-------------|--------------|----------------------|-------|
|                               |        |        |             |              | Lower                | Upper |
| Non-manufacturing             | -.021  | .009   | .924        | .980         | .639                 | 1.502 |
| Change IN                     | .670   | 5.092  | <b>.024</b> | <b>1.955</b> | 1.092                | 3.498 |
| Change OF                     | .404   | 2.799  | .094        | 1.498        | .933                 | 2.405 |
| Constant                      | -1.063 | 28.456 | .000        | .346         |                      |       |

The binary logistic regression analysis (Table 4-131) conducted to predict resistance to the change in code of conducts. A test of the full model against a constant only model was statistically significant in case of rejuvenation in, and transformation of, the code of conduct. The test indicated that the rejuvenation and transformation of code of conduct were more risky by about 96% and 50% respectively compared to the status quo. The analysis indicates that there is high risk of resistance to the change in code of conducts.

The 95% confidence interval for odds ratio indicates that the population value of the odds ratio lies between 1.092 and 3.498 in case rejuvenation of the code of conduct. The values greater than 1 mean that as the predictor variable increased, so do the odds of being resistance i.e.  $Exp(B) = 1.955$  indicates an increase in resistance risk approximately by 96% for an instance.

Table 4-132: Resistance to the change in organizational objective

| Intended purpose <sup>35</sup> | b     | Wald   | Sig.        | Exp(B)       | 95% C. I. for EXP(B) |       |
|--------------------------------|-------|--------|-------------|--------------|----------------------|-------|
|                                |       |        |             |              | Lower                | Upper |
| Non-manufacturing              | .427  | 3.922  | <b>.048</b> | <b>1.532</b> | 1.004                | 2.338 |
| Change IN                      | .139  | .290   | .590        | 1.149        | .693                 | 1.903 |
| Change OF                      | -.547 | 3.535  | .060        | .579         | .327                 | 1.023 |
| Constant                       | -.850 | 19.979 | .000        | .427         |                      |       |

The binary logistic regression analysis (Table 4-132) conducted to predict resistance to the change in organizational purpose. A test of the full model against a constant only model was statistically significant in case of non-manufacturing industry compared to the manufacturing industry. The test indicated that the risk of change in organizational objective was higher by about 53% in non-manufacturing industry though the predictor was statistically significant at borderline. The analysis indicates that there is high risk of resistance to the change in organizational objective.

The 95% confidence interval for odds ratio indicates that the population value of the odds ratio lies between 1.004 and 2.338 in case of change in organizational purpose in non-manufacturing industry. The values greater than 1 mean that as the predictor variable increased, so do the odds of being resistance i.e.  $Exp(B) = 1.532$  indicates an increase in resistance risk approximately by 53% as seen in this analysis.

Table 4-133: Resistance to the desire for unchange

| Desire for change <sup>36</sup> | b    | Wald  | Sig.        | Exp(B)       | 95% C. I. for EXP(B) |       |
|---------------------------------|------|-------|-------------|--------------|----------------------|-------|
|                                 |      |       |             |              | Lower                | Upper |
| Non-manufacturing               | .400 | 3.781 | <b>.052</b> | <b>1.492</b> | .997                 | 2.232 |
| Change IN                       | .362 | 1.771 | .183        | 1.436        | .843                 | 2.446 |
| Change OF                       | .106 | .210  | .647        | 1.112        | .707                 | 1.748 |
| Constant                        | .158 | .622  | .430        | 1.171        |                      |       |

The binary logistic regression analysis (Table 4-133) conducted to predict the resistance to situational demands of change in technology and processes. A test of the full model against a constant only model was statistically significant in case of non-manufacturing industry compared to the manufacturing industry. The test indicated that the risk of resistance to desire for change concerning organizational processes was higher by about 49% in non-manufacturing industry though the predictor was statistically significant at borderline. The analysis indicates that there is a moderate risk of resistance to the desire for necessary change in organization and business.

The 95% confidence interval for odds ratio indicates that the population value of the odds ratio lies between 0.997 and 2.446 in case of non-manufacturing industry. The values greater than 1 mean that as the predictor variable increased, so do the odds of being resistance i.e.  $Exp(B) = 1.492$  indicates an increase in resistance risk approximately by 49% as seen herewith.

Table 4-134: Resistance to the change in inheritance and legacy

| Inheritance and legacy <sup>37</sup> | b     | Wald  | Sig.        | Exp(B)       | 95% C. I. or EXP(B) |       |
|--------------------------------------|-------|-------|-------------|--------------|---------------------|-------|
|                                      |       |       |             |              | Lower               | Upper |
| Non-manufacturing                    | -.215 | 1.141 | .285        | .806         | .543                | 1.197 |
| Change IN                            | .037  | .017  | .896        | 1.038        | .594                | 1.813 |
| Change OF                            | -.355 | 2.234 | .135        | .701         | .441                | 1.117 |
| Constant                             | .485  | 4.640 | <b>.031</b> | <b>1.624</b> |                     |       |

The analysis (Table 4-134) carried out to predict resistance to the attempt of change of the inheritance and legacy in the organization and business. A test of the full model against a constant only model was statistically insignificant in the interventions of the predictors. Non-manufacturing firms and the attempt of transformation in the inheritance and legacy were defensive by about 19% and 30% respectively, whereas an attempt of rejuvenation was quite risky by about 4% though the predictors were statistically insignificant.

The 95% confidence interval for odds ratio indicates that the population value of the odds ratio lies between 0.543 and 1.197 in non-manufacturing firms, between 0.594 and 1.813 in rejuvenation, and between 0.441 and 1.117 in the attempt of transformation. Although, statistically significant constant (0.031) with odds of 1.624 indicates a probability of about 62% acceptance to the changes in supplier's behavior compared to the predictors.

There was no significant risk of resistance regarding the changes concerning the regulatory directives, business partnerships or parties, manner of the boss, product modification, work plan, profitability, and change detection system were not significantly risky in the organizations and businesses.

The issues concerning business ethics, working standards and patterns, product development programs, key personnel movement, government policy transformation, supply chain and business network modification, and shift in organizational value priority were found to be statistically more risky due to the higher risk of resistance. The directional, adaptive, and motivational components of the intramural part and regulatory, transformational and existential components of the extramural parts are the areas of higher immunity to change.

## **Chapter 5**

# **ORGANIZATIONAL CHANGE AND IMMUNITY: DISCUSSION OF THE RESULTS**

### **5.1. IMMUNITY TO CHANGE: ADOPTIVE CHALLENGE**

The most common error organizations and businesses commit is that they try to meet adaptive challenges through technical means, but it would be required to meet the adaptive challenges with adaptive means (Kegan & Lahey, 2009; Valikangas, 2010). The challenging task to a change agent was to meet the adaptive challenges. Change was found an adaptive work beyond the status quo of existing settings. The adaptive challenge is a problem situation for which solutions lie outside the way of currently being operating. It demands experimentation, learning and shift in authority and responsibility. Adaptive work is different from that of technical work and requires people to distinguish between what is precious and essential, and what is expendable within their culture (Heifetz, 2010). It will be very hard for organizations to distinguish what is essential and what is expendable.

The technical means were models and procedures that worked best in the past, but the adaptive challenges exist at present in the absence of such models and procedures. The changes in the systems and procedures did not get the changes right, but changes in immunity did get the changes right. Organizations had to get control over their immunity in order to move along with the change. Older organizations have found deeply rooted with their culture across their operations. The executives with longer experience used to develop their own mind-sets compatible with the culture of their organizations and become very hard to break it at the time of adaptive challenges. Newer organizations and newly appointed employees were found adoptive to the changing context more easily compared to the older ones. The change did not require any model but it required transformation in line with intension of the stakeholders first.

However, the change management should address the technical challenges and adoptive challenges as well. The plant and machinery, hardware and software, procedures and processes models and systems were found determined as technical challenges whereas intention and interest, culture and conviction, context and comfort changes were found as adoptive challenges. Technical challenges were measurable but adoptive challenges were more perceptual in nature. The firms have been found complex adoptive systems, therefore, the strategies of today will not serve best the future interest of the stakeholders. Strategies



were reported only liabilities to the managers because those were their past promises and commitments. Environmental uncertainty ahead did not permit them to guarantee that the promises and commitments would remain intact in their future as well. Eventually, the strategists become adoptive by making perceptual judgment on the functioning of their so-called strategies.

## **5.2. CHANGE TRIGGERS: UNCERTAIN FEAR AND OPTIMISM BIAS**

The organizations were found engaging in change with an optimism about their future. They believed that the change would bring best in their organizations and businesses. They deliberately attempted to make things better to their convictions and commitments towards the stakeholders, and they had a bias of their own convictions and commitments under the condition of uncertain fear.

Adaptive challenges were found along with the regular course of organizations and businesses. Risk of a business organization was one of the adaptive challenges standing in a form of uncertain fear of the managers. The fear factor was an outcome of managerial assessment over the immune system of their organizations and the corresponding forces emerging in the environment of the organizations and businesses.

The risk, one of the managerial fear factors, was associated with a large number of areas consisting the practice of competitors, presence of substitute products or services, unethical business practice of the business network actors and employees, commodity price volatility, resource scarcity, technology change and regulatory compliance pressure.

An assumption about the practice of competitors at one part and availability of substitute products and services on the other as more risky areas indicated that the organizations were biased and interested in making changes in those areas that were providing solutions to the risk considerations.

The union leaders in the organizations were found seeking changes without sacrificing their personal benefits and interests. The perception of technological forces triggering for changes meant that the existing products and services of the organizations were not serving best to their convictions and commitments in the subsequent days.

The next fear factor consisted the perception of unfavorable political processes in the country as well as complacent socio-cultural pattern in relation to their organizations and businesses. The government/ regulator as well as the unions/associations were causing delay in change process in one way or the others.

The existence of uncertain fear factors could be visualized by looking at the other findings as well. The competitive forces compelled to bring change in the organization followed by the buyer's preferences. The regulatory requirements were not facilitating as such in order to bring changes in the organizations. For an instance, the complex procedural formalities and policies regarding taxation and foreign exchanges were obstacles in making changes in the organizations.

The competitors' ways of doing things were found major sources for change. The organizations were being aware about what their competitors were doing and accordingly they were trying to make changes in their businesses. Influence of buyers or clients was found next determinants to the changes i.e. according to the need of the buyers; the organizations were designing and delivering their products and services. The organizations and businesses were found unable to impose over their customers where there were alternatives to the customers and clients.

The regulator was found more influential in the change process initiated by the business organizations and the employers' and employees' unions or associations were more influential in the change process initiated by the regulator. The one was in against another in the change process.

There was rejection of the null hypothesis of independent between manufacturing and non-manufacturing industry in relation to the risk perception of resource scarcity, technology change, and commodity price volatility. The statistics pointed out that the risks associated with those areas are significantly different from industry to industry that justifies that the fear is not certain. If it had been certain, there would be no perceptual differences of the respondents.

The positive relationship between commodity price volatility with the unethical business practices and resource scarcity was found indicating a clear optimism bias that the increasing risk of price volatility was associated with the unethical business practices as well as resource scarcity rather competition or substitutes among others.

The organizations and business were found seeking for attitudinal changes among the employees. Mentality of the employees was more towards personal gains. They were too calculative in case of their benefits but they were not even maintaining accounts of their contributions for the benefits of their organizations. The traditional pattern of working with excessive authority was continuous in most of the organizations. The tendency of shifting

responsibility towards the shoulder of others was noticed promoting unproductive organization culture.

The top three appealing reasons found for change in organizations and business were unfavorable employee attitude towards the work and organizations, obsolescence of technology and work processes, and the ineffectiveness of authority hierarchy. The profitability position of the organization and productivity of the organizational processes were not appealing for change. The organizations were found complacent in case of profitability and productivity. Similarly, there were no more reasons for changes of business network actors due to the unknown fear of incompatible behavior and transaction between them.

The ratings on the aspects of profitability and productivity as well as business network actors indicated a complacent nature of the respondents. There was an absence of lure or any zeal of improvement and innovation in the business in case of public firms. The change, if any, that was not intended but compelled by the unknown fear and optimism bias.

The technical and procedural processes were not creating obstacles while managing changes but the status quo was found very hard to shift from one business network to another because the structural settings inside the organization and outside the organization were hard to break for change. Next identification was that there were no more financial constraints while managing changes i.e. there was no problem of funds for change interventions, there were no change initiatives stuck in absence of funds for it.

The easier area of change management was found technical and procedural whereas the most difficult area was found business network and structures. The organization culture and employee attitude were found manageable subject to the economic benefits of the key personnel.

The organizations were concentrated more on technology development and procedural improvements but they were found failing to enjoy favorable employee attitude and organizational culture as well. The change interventionists were found unable to overcome the problems of power and authority mongers in most of the organizations and businesses.

Unfavorable employee attitude was found one of the major organizational rationales requiring change, followed by obsolescence of technology and work process. Profitability and productivity were acceptable for the firms, however, the employee attitude towards work was unfavorable and unacceptable in most of the firms mainly because of the leisure

and pleasure seeking tendency of the employees. Eventually, employees were seeking more leisure and benefits fetching assignments and locations. The organizations were failing to adopt differential treatment for employees based on their attitude towards work.

Technical and procedural forces were found permitting for change followed by cultural and attitudinal forces. The result indicated that the intended change was technically and procedurally possible. The stakeholders' attitude was manageably positive for change i.e. the major stakeholders were in favor of such changes subject to their unethical interests and performances. A few items of personal benefits like money as bribe, promotion, foreign travel opportunities were noticed instrumental to win support of some key stakeholders. However, the established business network, especially supply chain was not compatible for changes in the organizations.

The study showed a strong association of industry type with obsolescence of technology/work processes and unproductiveness of organization culture. Similarly, the study pointed out a strong association of industry type with the change facilitators, mainly technical and procedural aspects as well as compliance and regulatory aspects of the organization and business.

The most difficult part of change management process was reported the regulatory requirements and compliance procedures. The rules and regulations regarding industry establishments, strategic alliance, foreign exchanges, technology transfer, and intellectual property rights were few to be obstructing parts while inviting foreign direct investment in organizations and businesses.

An obsolete and outdated technology and working processes were found industry specific, therefore, they were appealing the industries for change and not for change differently. Unproductiveness of organization culture and obsolescence of technology and working processes were more appealing in non-manufacturing industry. Therefore, the non-manufacturing firms were more change prone than the manufacturing firms were in the industries.

The significant positive relationships of compliance and regulatory aspect with the network and structural forces, economic and financial forces, and operational and relational forces pointed out an instrumental role of the regulators in the change processes. However, the negative relationship with the culture and attitudinal aspects indicated the basic assumption of this research that organizations do not ordinarily go for change.

The influence of general environmental forces was not statistically different on the manufacturing and non-manufacturing industries. The way manufacturing industries were found influenced by the changes in general environment, was similar to the ways non-manufacturing firms were influenced during the past.

An adverse relationship of political forces with the technological and natural environmental indicated that there was no more role of politics in technological and environmental changes. Where the technological and natural environmental forces were triggering for change, there was no more role of the political forces in prevention of it. Similarly, the adverse relationship between socio-cultural forces and legal forces indicated that higher the influence of legal forces lower the influence of socio-cultural forces.

The role of buyer or consumer or client as well as the role of the supplier or banker or donor was found influencing across the industries i.e. there were strong associations between the industry type and the buyers and suppliers. A strong association of industry type with the buyers or consumers or clients as well as the suppliers or banker or donor provided an idea that those forces were affecting the manufacturing and non-manufacturing industries differently. There was role of the buyers and suppliers while making changes in the organizations and businesses.

Kendall's tau-b indicated that commodity price volatility positively correlated with the unethical business practices and resource scarcity. There was an adverse relationship of political forces with the natural environmental forces and technological forces. Similarly, there was an adverse relationship between legal forces and socio-cultural forces as well.

A strong positive relationship of suppliers with regulator and unions was found existed in the firms. There was negative relationship between the influence of channel members and the influence of the unions and associations in relation to no change.

The suppliers and buyers were found influencing for change in one way whereas the channel members and unions/associations were found influencing in an opposing way. Both the channel members and unions/associations were in against the changes but their interest was quite conflicting for not making changes in the firms. Thus, the unknown fear and optimism bias were the arguments in relation to the change in firms.

### **5.3. STATIC AND CHANGING AREAS OF ORGANIZATION: STATE OF BREEDING (INBREEDING AND CROSSBREEDING)**

Architectural dynamism of an organization was found dependent on the position of its breeding- inbreeding and crossbreeding. Inbreeding was leading an organizational architecture in absence of change whereas crossbreeding was bringing newness and changes in the organizational processes ranging from rejuvenation to transformation. The areas of an organization were found influencing either from inbreeding or from crossbreeding.

There were no areas of an organization being static or changing at their own. The top management and administration of the organization made the areas static and susceptible in due course of its operation. The static nature of organization structure and hierarchy, organization culture and etiquette, and personnel attitude and values clearly indicated that the top management and administration ordinarily did not like change. Its interest in technology and process change was due to the fear of competitors and substitute products and services. The instrumentality of the advices of the consultant and expert advices indicated that the organizations were not prepared for change at their own and they depended heavily with the consultants and the experts while changing technology and work processes. The role of consultants and experts, employees and their unions as well as the culture of making changes in the organization were influencing in this regard.

The positive correlation of no more often changing areas especially the organization structure and hierarchy, personnel attitude and value, corporate culture and etiquette indicated that change in the design/pattern of products or services was free from oppositions. The technology and work processes as well as supply/delivery chain or business network were found supportive to the changes in design/pattern of products and services whereas the structure and hierarchy, culture and etiquette, and personnel attitude and value were not supportive for such changes.

Technology and work processes were found more often changing in the organization and businesses while organization structure and hierarchy, corporate culture and etiquette as well as personnel attitude and values were being static. Generally, the top management was not in favor of change. The role of organizational culture in preventing change indicated that inheritance and legacy was significant in change management process. However, the role of the consultants and the experts was facilitative in support of the changes.

The rejection of concerning null hypothesis indicated that there was stronger association between industry type and organization structure and hierarchy, supply/delivery chain and business networks, and design/pattern of products and services. The changes taking place in those areas in the industry were not by chance but due to the relatedness in the architecture of the organizations in the industries.

A strong association of manufacturing and non-manufacturing firms with the employee's unions provided an indication that influence of unions was found varied from industries to industries. The expected frequency exhibited in Table 4-36 indicated that the unions were found more active in blocking changes in non-manufacturing industries compared to the manufacturing industries. The Kendall's tau-be pointed out that there was absence of congruence among the employees' unions, top-level management, and the organization culture while managing changes in the firms.

The work system, process, and technology were granting immunity to the firms. The human resources aspect of an organization was found weak and vulnerable in most of the organizations. More specially, people in organizations were found with their existing skills, knowledge, and behavior appropriate to the condition of status quo. The need for change only demanded changes in the existing set of skills, knowledge, and behavior of the personnel. However, it was found very hard to instill new set of skills, knowledge, and behavior among the people.

The respondents' consideration of the technology and work processes as one of the more often changing areas at one part and understanding of the same as an immune area provided two insights together. A well-established system, processes, and technology grant immunity to changes in organizations but the technology and work process were not static in nature, and demand for changes. Contrary to this, the organizations were familiar with the well-established system and technology and they did not like to change it easily.

The technological forces were found triggering for change in the environment at one part and the same area- technology and work process of an organization was found immune to change on the other part. In some organizations, it was very expensive and hard too in order to make changes in the technology and work processes in the organizations mainly because of cost, documentation formalities, authenticity and security of the technology and processes. The competition in the market provided choices for the customers and clients.

Consequently, they became strong in the organizations i.e. the organizations compelled to make changes as expected by their customers and clients

It was found easier to replace the old machine by a new one but it was found too hard to replace the old set of skills, knowledge, and behavior of personnel by a new set of skills, knowledge, and behavior. Change was not only replacing machine but also attempting to replace the skills, knowledge, and behavior of the personnel as well. It was considered vulnerable and weak because the existing level of competency was too weak to stand firmly in the challenging industry.

The chi-square test statistics indicated that the well-established systems and technology as well were strongly associated with the industry type. Technology and processes had varying implications in the business that is the change was influencing the both manufacturing and non-manufacturing industries differently. Similarly, there was a strong association of the industry type and customers / clients as well as supply chain and business network, which indicated that both the industries were dependent on these sectors as well.

Technology and work processes were found more static in case of manufacturing industry compared to non-manufacturing industry. It was comparatively easier to bring change in non-manufacturing industry. In the same line, the customers and clients, supply chain and business network were more static in non-manufacturing industry.

The significance of correlation coefficient indicated that better the human resources, better the business network, suppliers, and bankers. Similarly, better the technology and processes, the better the relationship with the business and supplies.

#### **5.4. CATEGORY OF CHANGE AND RESPONSE TO THE CHANGE: STATUS OF IMMUNITY AND VULNERABILITY**

The exploratory factor analysis extracted nine components. The category of change F1 directional component consisted the changes that were directly influencing the entire behavior of the firms. This component covered the aspects of an organization's plans of doing and not doing. It provided direction to the organizations and business so that they were confident about what to do and what not to do, what to consider right and what to consider wrong, and what to say good and what to say bad in relation to the entire activities of the organizations.

The category of change F2 financial component consisted the changes that were directly influencing the prosperity and wealthy aspects of the organization. This component



involved the entire well-being and health of the organization and business. It consisted financial as well as personnel development and advancement. The organizational change attempts intended to improve the financial position as well.

The category of change F3 transactional component covered the entire operational aspects of the firms. This category of change involved the changes concerning the supply chain and business network. There were attempts of changing the suppliers, consultants, joint venture or strategic partners. The changes were ranging from removing discrimination in any cases to making the actors more powerful in making decisions and taking actions.

The category of change F4 regulatory component consisted the changes in government policies, laws and rules as well as directives. The changes were opening some new business avenues as well as limiting the operations of existing businesses too. New laws and regulations were regulating the industries especially in the areas of operations and corporate governance. Corporate social responsibilities, business ethics, compliances, and risks mitigation measures were under the purview of the changes in this category

The category of change F5 existential components consisted the changes concerning primarily the fundamental rights of the personnel at work place, their self-respect and dignity as well as the industrial democratic exercises. There were varying value priorities in the organizations- like profits for the owners and investors, benefits to the employees, protection of the interest of the customers and clients, and welfare of the public. The value priority of personnel was also changing; more personnel were valuing their individual material benefits and advancement than their moral and social benefits and advancement.

The category of change F6 adaptive component consisted the ability of unlearning and abandoning the processes, products, and persons that were not likely useful and significant for their firms in the following days. Some organizations were excited to upgrade their technology and processes and they were loving modernization whereas some were happy with the existing things and they were not spending money and labor in the name of change and advancement. Those who were interested for advancement and modernization were investing much more for product development and eventually they were coming up with new products and services periodically as early as possible and appropriate.

The category of change F7 buyer-seller component covered the changes in the buyer's buying behavior and seller's selling behavior. There were drastic changes in the behavior of buyers and sellers. The change in such behavior referred the buying and selling decision

making of the buyers and sellers as well. Seeking for information and commission, bargaining and misrepresentation, system buying and system selling and individual item buying and selling, and condition of guarantee and warranty were some areas of such changes.

The category of change F8 motivational components covered the change and mobilization of key personnel in the firms. There was stake (personal interest) in change of key personnel- either the interest or motivation of the personnel himself or herself in the interest or motivation of the decision-makers. The tendency towards correction of mistake, learning by doing, attitude towards continuous improvements, intention towards professional advancement were in this category of the change management. There was drastic change in authority exercise- mainly increasing tendency of using organizational property including money, vehicles, stationary, office accessories, parts and instruments.

The category of change F9 traditional component consisted the inheritance and legacy of the organization and businesses as well as their previous key personnel. The change in conventional pattern of doing business, meeting people, and treating the customers and clients were under this category. Similarly, the initiation, continuation and discontinuation of events, festivals, rituals, and etiquette were also changing in the firms.

The 9 categories of factor components extracted from the exploratory factor analysis arranged into the 2 dimensions of change management- namely intramural and extramural. The intramural changes referred the changes occurring within the zone of the organization and business whereas extramural changes were those changes occurring beyond the zone of the organizations. The term outsiders referred the parties in the regulators, pressure groups, buyers, sellers and other stakeholders of the organizations that were not associated only with the organization but concerned with outsiders as well. For instance, the employees and their unions were not having concern with organization alone but the unions had concern of their affiliated political forces and the employees had concern of their family, friends, and competitors as well.

The intramural forces considered immune to change were compared with the extramural forces. There was more resistance to the intramural change areas whereas there was more acceptance to the extramural change areas in the organization.

The changes under the financial category were not statistically significant and that gave clear meaning that wealthy and prosperity was necessary for both the industries.

In relation to the risk of resistance associated with the directional category, the binary logistic regression predicted higher chances of resistance in case of assigning work to employees in absence of specified standards for it. However, the employees were compromising with the unavailability of work choice for them. Haphazard work assignment was not acceptable to the employees. Failure to adhere to the business ethics was not desirable in the firms. A high risk of resistance to the attempt of changing organizational values and priorities indicated that the organizational values like profit, personnel development and others as discussed earlier were more sensible. However, the discontinuation of the things passing through the past of the firms, in the form of inheritance and legacy, were not important as their contemporary value preference.

In case of intramural change management, there were three variables, namely, organizational value priorities, work assignment standards, and business ethics were statistically significant and sensible in the firms.

Statistically significant risk of resistance to the changes in relation to the supply chain and business network indicated that the firms preferred regularity in their supply first. Authority delegation and withdrawal considered a regular phenomenon in the organizations and did not consider risky one. The changes made by business partners were internal matters and there was no more risk of resistance from the organizations as well.

The changes within the partners of the business considered seriously across the industries but such changes were internal matters of the partners and there was no more resistance from the outsiders. The resistance and acceptance seen in the dataset were not statistically significant.

Product development and modification activities were important in both the industries whereas the risk of changes (verify with the frequency table what was resisted in non-manufacturing industry) was higher in non-manufacturing industries under the adaptive category of change.

Change of key personnel more frequently was noticed highly risky interventions for the firms. The variables learning at work and use/misuse of authority were not risky under the motivational category of change. The situation of increase in abuse or misuse of authority at one part and the same was found no more risky in the organization is an alarming signal to the law and order, moral values and business ethics as well.

When modelled under extramural dimension of change management, the log linear modelling provided statistically significant associations in terms of government policies and regulatory directive under the regulatory category of change and supplier's behavior under the buyer-seller category of change.

The binary logistic regression indicated that there was a statistically significant risk of resistance to the changes in government policies and there was no more risk of resistance to the changes in the regulatory directives and supplier's behavior.

In case of extramural change management, government policy change was one statistically significant and sensible variable in the firms.

The log linear modelling determined the statistically significant associations of industry type with the level of change and response to the changes in the areas of business ethics, working standards, and preference at work. The *directional category* of change consisted those areas and the modelling established significant statistical association among the industry type, level of change, and response to the change. Specific consideration was necessary while managing change specifically in the areas of business ethics ( $\chi^2 = 34.980, p = .001$ ), working standards ( $\chi^2 = 40.926, p = .001$ ), and preference at work ( $\chi^2 = 28.966, p = .004$ ).

Statistically significant associations established by the binary logistic regression analysis indicated the risk of resistance to the violation of business ethics [Exp(B) = 1.709] and work assignment in absence of working standards [Exp(B) = 2.347] about 71% and 2.35 times respectively. However, the condition of work choice and preference at work accept the null hypothesis [constant [Exp(B) = 2.582] indicating a strong chance of acceptance to the availability or unavailability of work choice in the firms. There was no need of such attention while managing change in other areas under the directional category of change.

The modeling established a significant statistical association among the industry type, level of change occurrence, and likely response to the change in the areas of organizational value priority ( $\chi^2 = 33.954, p = .001$ ) under *existential category* of change. Similar association established in case of inheritance and legacy ( $\chi^2 = 24.067, p = .020$ ) under the traditional category of change.

The regression analysis indicated the risk of resistance in an attempt of changing the organizational value priority levels- rejuvenation [Exp(B) = 1.948] and transformation [Exp(B) = 2.207]- about 95% and 2.21 times more compared to the status quo. However,

the condition of inheritance and legacy under *traditional category* accepted the null hypothesis [constant [Exp(B) = 1.624] indicating the chance of acceptance to discontinuation of the things coming from the past as an inheritance and legacy.

Application of the model in case of extramural changes, there were statistically significant associations of the level of change occurrence and the response to the change with industry type. The significant areas were the supply chain and business network ( $\chi^2 = 33.474$ ,  $p = .001$ ), business partnership ( $\chi^2 = 27.036$ ,  $p = .008$ ), and structural empowerment ( $\chi^2 = 25.475$ ,  $p = .013$ ) under the *transactional category* of change.

A binary logistic regression analysis indicated a high risk of resistance to the changes in relation to supply chain and business network [Exp(B) = 1.953] by about 95% when compared to the status quo. The authority delegation and withdrawal termed as structural empowerment [Exp(B) = 0.564] was supportive by approximately 44% in non-manufacturing industries.

The log linear modelling determined an association of the product development ( $\chi^2 = 33.460$ ,  $p = .001$ ) with the industry type and levels of change occurrence. The binary logistic regression indicated a risk of resistance if there was no more increase in product development [Exp(B) = 1.661] activities by approximately 66% higher in non-manufacturing industries compared to the manufacturing industries under the *adaptive category* of change.

Similarly, the modelling established associations among the industry type, level of change occurrence, and resistance to the change of the variables key personnel ( $\chi^2 = 36.346$ ,  $p = .001$ ), learning at work ( $\chi^2 = 23.227$ ,  $p = .026$ ), and use/misuse of authority ( $\chi^2 = 22.529$ ,  $p = .032$ ) under the *motivational category* of change.

The risk of resistance under the motivational category of change exhibited as approximately 2.01 times when there was rejuvenation [Exp(B) = 2.010] and approximately 71% when there was transformation [Exp(B) = 1.706] in relation to key personnel changes. However, the condition of learning at work accepted the null hypothesis [constant Exp(B) = 1.807] indicating the chance of acceptance when asked to change in practices and behavior from own mistakes at work. The condition of use/misuse of authority also accepted the null hypothesis [constant Exp(B) = 1.743] indicating the chance of acceptance of misuse or abuse of authority in the organizations and business, which looks like a serious case in organization and management.

There were statistically significant associations among the industry type, level of change occurrence, and response to the change in case of government policy ( $\chi^2 = 23.659, p = .023$ ) and regulatory directive ( $\chi^2 = 30.073, p = .003$ ) under *regulatory category* of change; and suppliers behavior ( $\chi^2 = 27.119, p = .007$ ) under the *buyer-seller category* of change.

The binary logistic regression indicated a risk of resistance to the changes in relation to government policies [Exp(B) = 1.681] about 68% compared to the status quo. However, the risk of resistance associated with the condition of regulatory directive was not statistically significant. The condition of accepted the null hypothesis [constant Exp(B) = 1.950] indicating the chance of acceptance to the change in the behavior of the suppliers.

### **5.5. MANAGING CHANGE: WORKING WITH THE INSTRUMENTS**

Change management found involving into two aspects- breaking immunity to change and building immunity to unchange. The laws and rules of the country had dual roles i.e. the laws and rules are permitting for change and encouraging for change. Permitting change means they never become a hurdle while making changes and the change agent can do as intended. Encouraging for change means they always grants facilities, incentives, and create environment so that the change initiatives can grow and sustain.

Change management was observed model free because there was no single best way to manage the changes in firms but there were noticed many best ways to manage the change. The style and instrument of education and communication was found necessitating the real need for change and change management process, which was inspiring people to move from the status quo to a transformation. When people were reluctant to move forward at their own, then the style of working together or participating with them helped to move forward. Delegation and direction worked best at that conditions where the persons involved in change were interested to make change and they were capable too.

The firms adopted different instruments and styles while managing changes. There was no single best instrument and style of managing change in the firms. Clear and reliable education and communication about the necessity of change and following process was found most preferred among others of collaboration and participation, delegation and direction, use of power/force and coercion, and manipulation and cooptation.

The industry type was found associated with the style of using power or force while managing changes. The other styles were not affecting differently in different industry as

power and force affected where the manufacturing industry preferred the style of using power and force more compared to the non-manufacturing industry.

Plurality of interest in organizational settings, conflicting interest was obvious and certain segment of people were opposing the change. Use of monetary power, emotional power, promotional power, coercive power, and similar other power and forces were found working best while managing changes. Somewhere, creating a gap between saying and doing, deceiving or cheating people, manipulating information, and extending cooperation with significant persons within or outside the organizations were found common while managing changes.

The laws and rules of the country were found instrumental for making and sustaining changes in the organizations particularly safeguarding the rights and interests of the organization and business. Law and order in industrial setting were ensuring effectiveness in regulations and compliance as well. The role of insurance policies, police and security agencies, unions of employers as well as employees were attempting for finding immunity to their business interests too.

Laws, rules, and regulations were more noticed instrumental in protection of the business from external threats. Police and security agencies were found second choice as instrumental in protecting the business and organizations. In short, law and order was considered necessary in order to minimize the impact of unwanted changes and increase in accuracy in predictability over the business opportunities and threats. As increase in predictability as there was increase in accuracy of the planned change interventions.

Education and communication were found more effective change management style/strategy followed by collaboration and participation. However, the strategy of using power/force and involving in coercion were found to be effective as well. The least preferred strategy was manipulation and cooptation but 30% respondents also considered this style as one of the best strategies among all others

The chi-square test statistics exhibited a strong association of industry type with police and security agencies. Better, the laws and rules concerning the process of buying the insurance policy and settling the claim of it, better the purchase of insurance policies.

The role expectations of police and security agencies were reported varying from industry to industry. This was an instrument of maintaining order in the organizations and business.

However, it was considered more effective for making non-manufacturing firms secured compared to manufacturing firms.

The laws and rules of a country were not only protecting the business but there was equal significance of the insurance policies, police and security agencies, unions and associations, and advices of the consultants and experts as well.

#### **5.6. CHANGE MANAGEMENT TYPOLOGY: MODEL-FREE BREAKING AND BUILDING OF IMMUNITY**

The isomorphic nature of organization did not permit different types of tasks structure, reporting relationships, authority hierarchy, control mechanisms, organizational culture, and so on than those from which the organization was receiving funds, program, technology, and managerial competency. As an instance, the donor funded projects were functioning, in most of the cases, as they were being performed according to the donor prescribed modality. The affiliated colleges were found running academic programs following the university instructions and calendars. The core operational aspects of telecommunication companies were following the processes of the technology suppliers. The financial institutions under management contracts were found operating according to the principles of the managing partner as well. There were insurance companies being functional under the instruction of Beema Samiti, banks and finance companies were found working with the already prescribed format and instruction of Nepal Rastra Bank, organizations working in social sector were noticed to be functioning under the description of Social Welfare Council. The industrial and trading organizations were found functioning under the instructions of ministries and departments of the government as well.

The nature of organizational settings as well as effectiveness of the instruments and styles of change management, both have their own varieties and significance. The firms under study were not identical organizations and also there was no single instrument and style of change management. There were varieties of organizational settings and the instruments and styles as well that influenced the degree and acceptability for change.

In addition to the isomorphic nature at one part, the organizations were found varying in their organization structure and hierarchy, supply/delivery chain and business network, design of product and services, organization culture and etiquette, personnel attitude and values, pattern of sources and uses of funds, and industrial and labor relations on the other. Moreover, the change triggers were triggering the firms in different ways. There was no homogeneity of change management instruments and their effectiveness too. The reasons

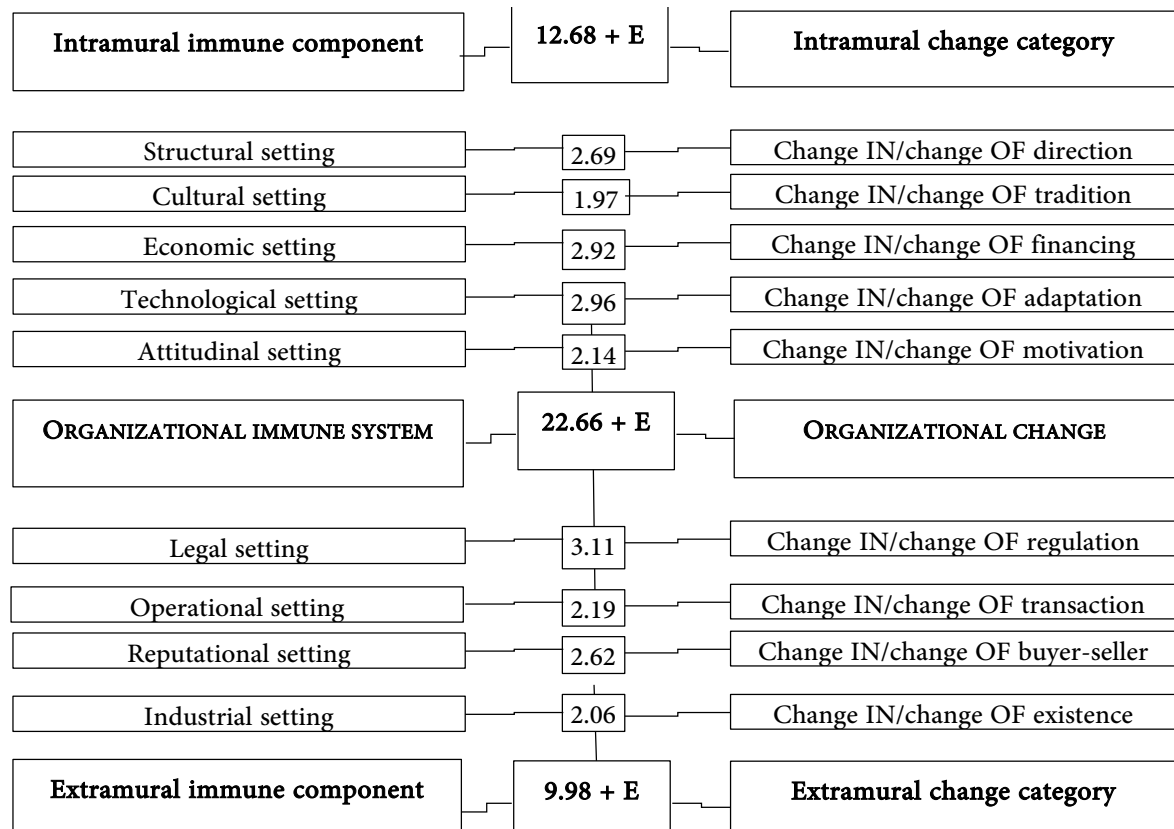


of accepting and resisting change were not similar in the firms. The actors facilitating and blocking the change were also different in the firms. On these premises among others concerning the change management process, this study strongly differs with the concept of model-based change management practices, and argues for the concept of model-free change management practices in the firms. Change itself was found descriptive and management of change could not make prescriptive.

### 5.6.1. Immunity and change: Intramural and extramural

An isomorphic nature of the organization at one part and influence from the externalities on the other, an organization's immune system propelled for categorization into two categories- intramural immune system and extramural immune system (*Figure 5-1*). The intramural immune components and categories of change covered the organizational structure and hierarchy, corporate culture and etiquette, pattern of sources and uses of funds, technology/intellectual property and work processes, and human resource/personnel attitudes and values. The extramural immune components and categories of change consisted the regulatory and compliance requirements, supply chain and business network, suppliers/bankers and customers, and industrial and labor relations.

*Figure 5-1: Immunity and change: Intramural and extramural*

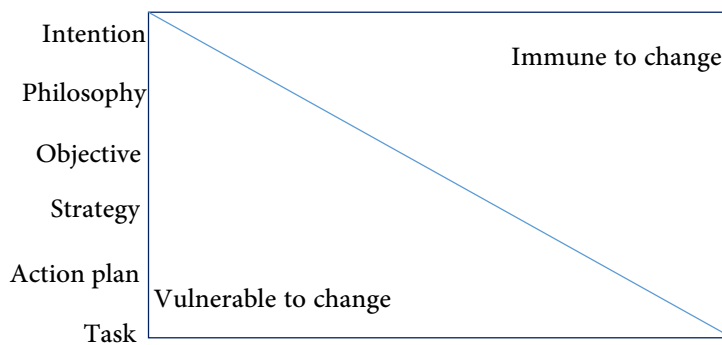


It was very hard to train people to change their personal characteristics and values. Organization hired the characteristics known as personality traits and their inherent values along with their capability of carrying out tasks in the organization. It could not hire only that skills, which is required for it; instead, it is hiring both good aspects and bad aspects of the personnel. The individuals were found immune to their own values and life preferences. They were found accepting change only because they were unable to resist, tolerate, or ignore it, if they were able to do so they would not be accepting the changes in areas in which they were being comfortable. The feeling of uncomfotability with the change was there at top-level of the organization; therefore, top-level managers were more immune to change their values compared to the lower level employees

As seen continuum with the change, immunity was also a continuum because there was nothing absolutely static and immune and completely susceptible and vulnerable (*Figure 5-2*). The intended purpose of an organization was found more immune with non-recurring nature whereas the tasks were susceptible with recurring nature.

For instances, business organization's intended purpose was to earn profit or make money for profit; and a service organization's intended purpose was to provide services not for

*Figure 5-2: Immunity continuum*



profit. Both the firms were changing their strategies, action plan, and tasks more often so that they would be meeting their intended purpose, but at the same pace, they were not changing their objectives, philosophy, and intention. Therefore, the fundamental aspect of immunity was to look at intended purposes, which was the supreme cause of the organizational spirit.

The change triggers were found compelling the organizations towards the rejuvenation and transformation of their organization settings and businesses. The forces in general environment, in the industry environment, and within the organization itself were compelling the organizations for change and no changes by promoting an unknown fear

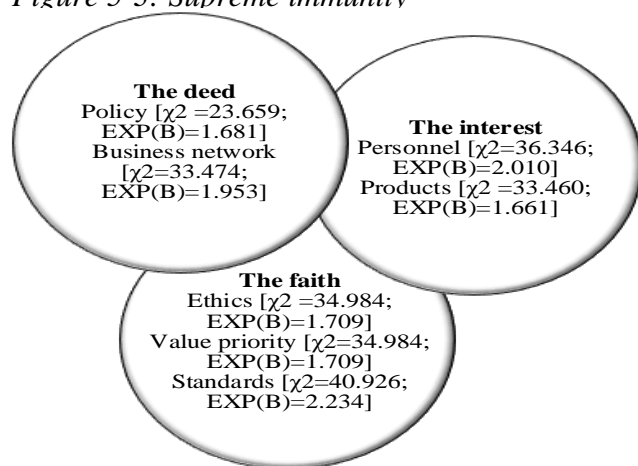
and optimism bias. The reasons for change were appealing, and the areas and levels of changes were noticed alarming the organizations at one part and there were varying degrees of resistance and acceptance to the change interventions at the other part. The actors in the industrial relations and business network were found both facilitating and blocking the change and change interventions.

Change management was found having dual process of breaking the immune system and building the immune system. There was found necessity of breaking the immune system to move the status quo to the state of rejuvenation or transformation, and building the immune system was found necessary to safeguard and strengthen the changed state of affairs. The change management was considered the process of model-free integration of the organizational immune system architecture with the context and content of the real needs that were for change towards the conviction of the organizations and businesses. The process consisted the conviction, context and contents derived instruments and styles.

### 5.6.2. Organizational immune system architecture

An OIS architecture (*Figure 5-4*) consisted nine different settings that were acting as subsystems of the organizational immune system. The architecture was an outcome of the logical reasoning concerning the findings of the study. The architecture consisted of structural setting, cultural setting, economic setting, technical setting, attitudinal setting, legal setting, operational setting, reputational setting, and industrial setting as an outer layer of the immune system also known as ascribed immune system. The inner layer of the immune system has been termed supreme immunity also referred to as innate immune system *Figure 5-3*. The faith<sup>ii</sup> facet of the inner or supreme immunity consisted the business ethics, principles and the ways of an organizational life reflected in the form of values and working standards and strategies adapted thereof. The deed<sup>iii</sup> facet of an organization consisted the

*Figure 5-3: Supreme immunity*



<sup>ii</sup> धर्म तथा निष्ठा

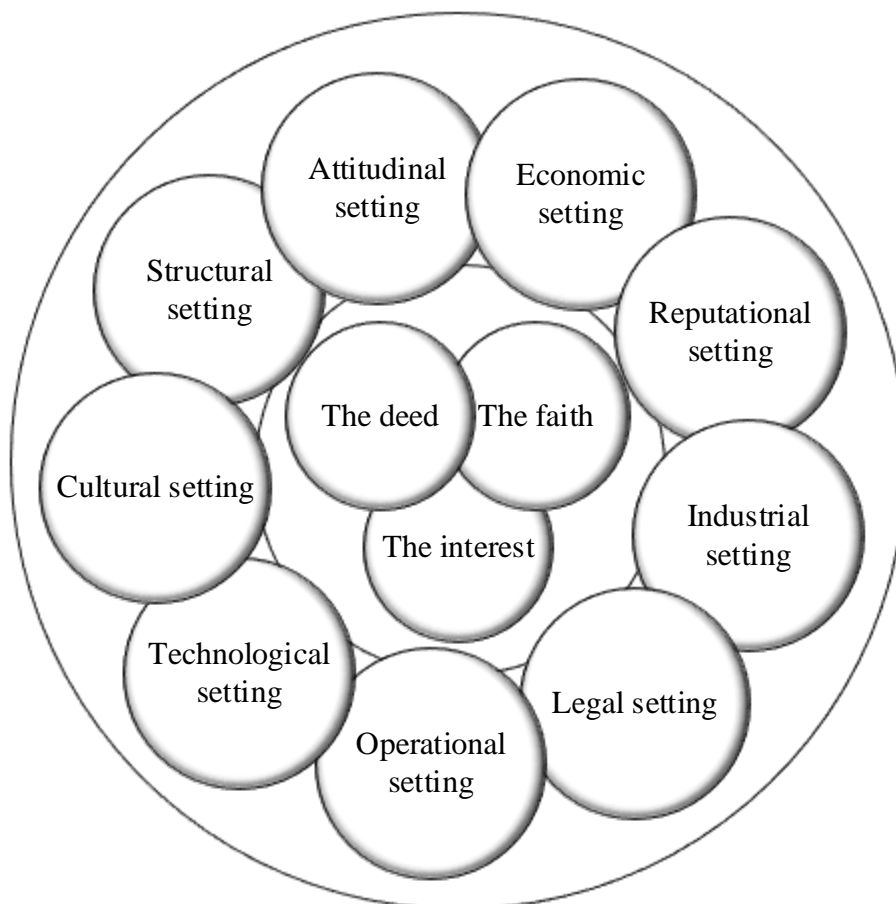
<sup>iii</sup> कर्म तथा कर्तव्य

supply chain and business network along with the accommodation of the hundreds and thousands of promises, compliances and public policies concerning their interests. The interest<sup>iv</sup> consisted the reasons for product development and making the same available into the market. The interest showed the reason for carrying out the business under the faith for the key stakeholders and beneficiaries of the organization and businesses.

The structural setting referred to the anatomical aspect of an organization. The hierarchy of plans consisted the organizational objectives, business philosophy, code of conduct, business ethics, tasks and responsibility assignments to the people. This setting provides an entire image consisting the intended purpose of the organization.

The cultural setting referred to the traditionally transferred practices including the events, festivals, rituals, and etiquette. It was the practice of solving problems and making decisions during the course of organizational operation develops the culture over time.

*Figure 5-4: Organizational immune system architecture*




---

<sup>iv</sup> स्वार्थ तथा नियत

The technological setting indicated the established methods and processes for producing goods and for providing services. It consisted hardware, software, and infoware as well. The industrial establishments capable to provide goods and services were determining the identity of the organizations and businesses by which they were remembering in their society.

Operational setting referred to the entire supply chain and business network including interiors and exteriors of the organizations. The organizational processes, mainly the inputs-outputs processes were operational with this setting.

Legal setting covered the government policies, laws, acts, and directives from the regulators. The policies were providing broader guidelines for the organizations and businesses. Laws and rules were making the policies more specific and applicable in practice. The directives were active in regulating the organizations and businesses specifically in compliance sector. The attitudinal setting concerned the value preference and motivational aspects of the organizations and the key personnel. Personnel attitude towards work depended on their value preferences. For an instance, personnel in organizations were valuing leisure at work for their pleasure and they were not valuing work as 'worship' but they were taking work the way of making money and the ladder of their career advancement.

The reputational aspect of organizational immune system concerned with the identity of the goods and services of the company in the market. The design of products and patterns of services were major determinant in this setting. This setting reflected the brand loyalty, image of the organization, and entire health and recognition of the organizations in the society.

Economical setting referred the capital structure, investment patterns, and profitability aspects of the organizations. Capital adequacy, financial shock bearing ability, return on investment, and risk mitigation measures were some areas of its concern.

Industrial setting consisted the actors of labor and industrial relations. The pattern of actions of the government and its agencies, employers and their associations and employees and their associations were major concern of this setting.

### **5.6.3. Organizational change category**

The areas remaining static and changing in the firms grouped into 9 categories (*Figure 5-5*). The directional category of change consisted the areas of business ethics, code of conduct, organizational objectives, work plans, working standards, and business philosophy.

The adaptive category of change consisted the top-management's desire for change, technology and processes adaptation, activities concerning product development and ultimate change of the products and services.

The financial category of change comprised the amount and pattern of investment, personnel development program, productivity and profitability as well as capital and equity. Similarly, traditional category of change concentrated on the inheritance, legacy, events, festivals, customs, etiquette, and rituals.

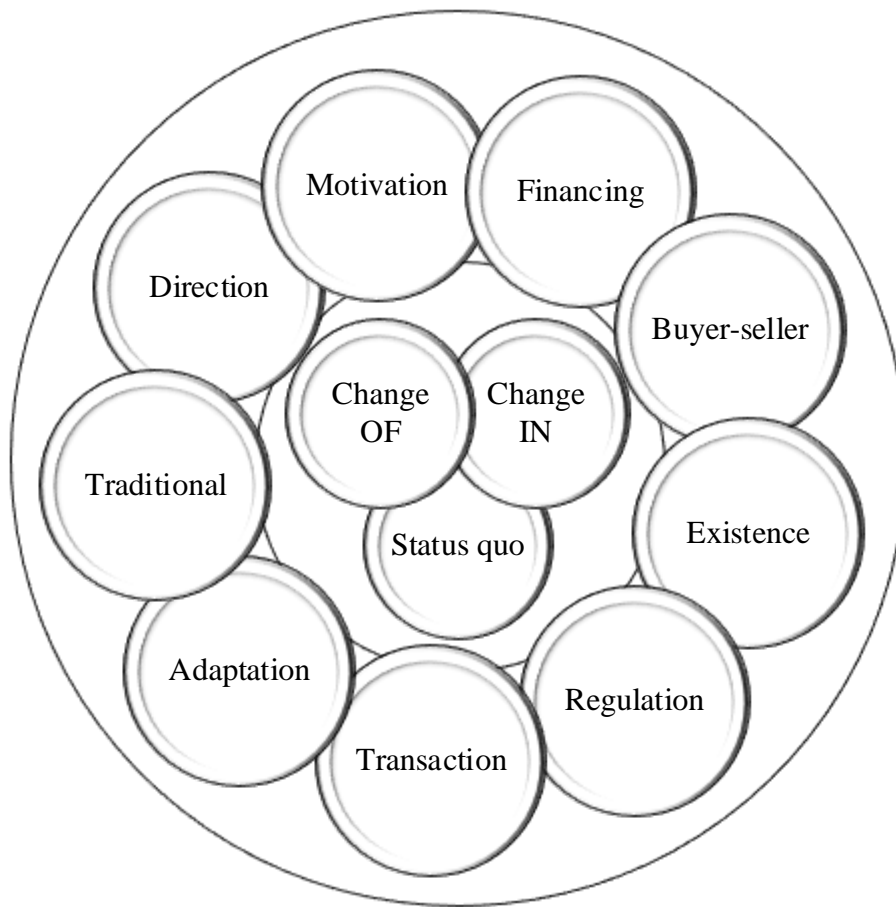
The motivational category of change involved the change of key personnel, organizational learning (the tendency of accepting mistakes and correcting them) as well as the use and misuse of authority while carrying out the organizational tasks.

The regulatory category of change consisted of changes in government policies, introduction and change of new laws and regulations, and issue of directives from the regulatory agencies.

The transactional category of change covered the supply chain and business network, change of business parties including buyers and suppliers, discrimination while assigning tasks, granting authority, creating responsibility, and providing intrinsic and extrinsic rewards.

The buyer-seller category of change concentrated specifically on the behaviors of buyers and suppliers as well as the criteria for the buying and selling. Focus was on the pattern of selling products from the organization and buying products for the organization. The existential category of change concentrated on the organizational politics including the behaviors of the employee unions, functional or operational freedom at work, and value preference of the personnel at the firms.

Figure 5-5: Category of change



#### 5.6.4. Change management instruments

The most preferred instruments in the organizations and business were found education and communication, collaboration and participation, delegation and direction, application of power/force and coercion, and manipulation and cooptation (*Figure 5-6*).

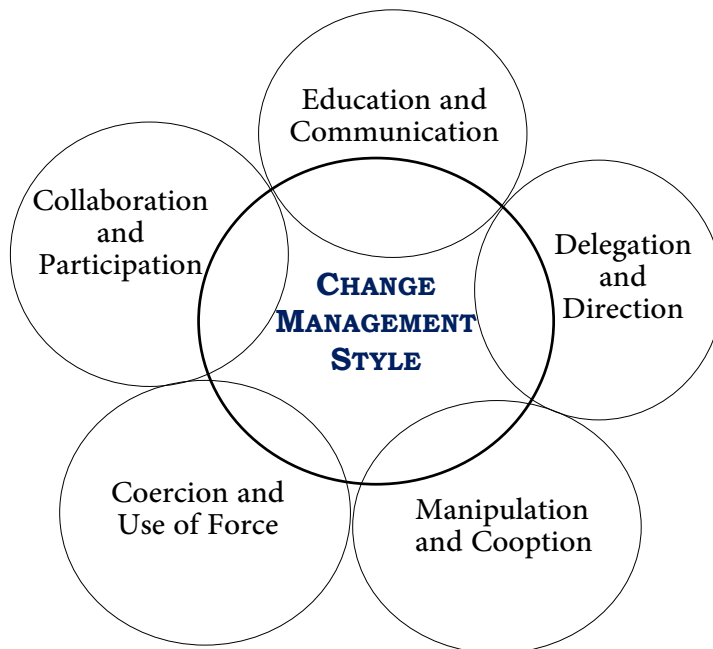
The education and communication style focused on identifying the reasons for change and no change. The process included quite rational approach of collecting evidences that were triggering for change and no change. When the change agents accumulated all the evidences to justify the change needs, then they communicated the same to the actors concerned with the change. This style developed change advocates inside as well as outside the organization in order to build opinion in favor of the change. Executive training, coaching, mentoring, and incubation were common methods of education and communication.

The collaborative and participative style of change management attempted to make the change by making involvement, individually or collectively, in the process of change.

When there was active involvement of the change agents for making change, there was high chance of transfer of learning. Product development partnership, process consultation, strategic alliances, joint ventures, management contracts, and team building were found some common interventions of the collaborative and participative style of change management.

The style of delegation and direction did best when the organizational actors were found competent and excited to make change on their own. Job design and redesign, empowerment, on-demand-job instructions were found some common methods under this style.

*Figure 5-6: Change management instruments and style*



The style of manipulation and cooptation was found appropriate when there was no interest in the organizational actors towards change. The change agents attempted to create some illusions to make the organization members convinced that the change was their necessity. The agent also attempted to make a false promise as well. The cooptation style introduced a

third party, mostly the consultant or independent expert in order to make changes. Somewhere, change agents were found creating a new work unit (a sample or prototype) parallel to the mainstream functioning of the organization so that organizational actors would show their interest towards the change by looking at the functioning of the sample or prototype developed as such. Parallel learning structure, mirror interventions, and involvement of outsiders at work were found some common practice of change management under this study.

The style of coercion and use of force or power was found applicable when the change agents experienced resistance to their change interventions. The agents were enjoying



rights to take control over the organizations at one part and they were attempting to accumulate coercive power at the other part. Common methods included the bribing, threatening, taking actions like pay cuts, suspensions, dismissal, and contract termination. Involvement of unions and associations, media disclosures, police cases and courts cases, and use of criminal groups and gangsters noticed in practice under this style.

### **5.7. POINTER DISCUSSION**

Based on the evidence of the study, top-level management is itself a major actor for making change and preventing change in their organizations. Survival of a firm or death depends on how well the top-management addresses the change triggers i.e. its adaptive challenges (Bertalanffy, 1950; Hannan & Freeman, 1984; Geus, 2008; Kegan & Lahey, 2009). Meeting adaptive challenges depends on the top-management of the organization. An organization and its ownership tend to trust on the top-level managerial personnel whereas the mind-set of the managerial personnel is towards better career opportunities than the survival and growth of the organization.

The environmental (Yoder, 2001; Lee, 2005; Geus, 2008; Wessel & Christensen, 2012) and industrial (Bhambri & Sonnenfeld, 1988; Bacon & Storey, 2000; Taylor B. , 2002; Simmonds & Gibson, 2008) triggers/forces are not targeting a particular company to make it collapsed. The environment is changing in its own way, and it is moving with its own nature. The idea of putting blame over the environment is only a way of seeking excuse, and it never makes an organization adaptive, but it may provide a cause for the excuse to the top management and to all other concerned parties. An excuse to unablenss and tendency of forgiveness to a blunder and incompetency will not save an organization from its failure.

In relation to the triggers for change, this study differs with the arguments of the environmental, industrial, and organizational (Chaganti, Mahajan, & Sharma, 1985; Sirkin, Keenan, & Jackson, 2005; Rosenberg & Mosca, 2011) triggers to change, but argues that the uncertain fear and optimism bias of the key personnel especially at the top-level of management triggers for change. Whether to respond or not to respond to change depends on the intention and interest of the top-level management.

This study differs with the 7-S framework of the McKensey & Company (1970) to change. There is influence on an organization's ability to make the change interventions successful, the role of regulators, business network, organizational reputation, and attitude as well. The

extramural factors are also influencing the changeability of an organization. This study further opposes the idea of 'everything at once' while managing changes in the organizations and businesses because there is no possibility of complete change in the entire settings of an organization.

In terms of the style of change, this study differs with the theory and arguments of model-based change management (Lewin, 1947; Kotter & Schlesinger, 1979; Latta, 2009) and argues that the adaptive challenges are dynamic; therefore, model-free change management practices are necessary.

The state of being static and changing pointed in this study deserves a differing views. It differs with the theory and argument in favor of the possibility of total change (Linder, Cole, & Jacobson, 2002; Dionne, Yammarino, Atwater, & Spangler, 2004; Castro, Perinan, & Bueno, 2008) of an organization and business, but it argues that there is no stand still situation in the environment and the change is taking place in a continuum of more or less changes. That is why, neither an organization remains completely static nor can it bring total changes. The change is only within the continuum- somewhere more change or and somewhere less change. If there is total change, there will be no existence of the organization as it will transfer to some other form, and if it remains completely static, there will be violation of the nature of organizational dynamics.

The study agrees with the arguments of the change categories (Huy & Mintzberg, 2003) of changes. There are categorical levels of changes- status quo, rejuvenation, and transformation. Similarly, it agrees that there is immunity to change (Kegan & Lahey, 2009) in the organizations and businesses. There are responses to the changes- resistance and acceptance or tolerance and bargaining as well. Changes and immunity are the outcomes of the degree of breeding- inbreeding and cross-breeding- in the change and immunity architecture of the organizations and businesses. This study argues in favor of a model-free typology for managing change in organizations and businesses. The model-free change management process consists of breeding process with an intention of grooming, nurturing, and fetching the adaptive capability in the organizations without following a definite pattern laid down by a specific model.

## **Chapter 6**

# **SUMMARY, CONCLUSIONS, AND IMPLICATIONS**

### **6.1. A BRIEF SUMMARY OF THE FINDINGS**

The phenomenon of interest of the study was managing change with the underlying concept of immunity characterized by breeding- inbreeding and crossbreeding for building and breaking the system of an organization. The building and breaking of an organization's immune system depended on a number of factors consisting the organizational settings, environmental triggers, perceptual shields, risk perception, adoption of instruments, role of the actors, and fundamental systems and assumptions concerning the firms and their stakeholders. The study was confined into Nepalese manufacturing and non-manufacturing firms by setting objectives with the coverage of the followings.

#### **6.1.1. Environmental triggers**

The general environmental forces were found triggering both manufacturing and non-manufacturing firms. The forces were not specific to a particular industry. Technological force was perceived highly influencing for change whereas legal force was found influencing for unchange. There was no statistical association between these triggers and the firms.

In relation to industry environmental triggers, the competitors were most compelling forces for change whereas the regulator/government was perceived as a barrier for change, in most of the cases, in both the firms. However, the buyer/customer/client and suppliers/bankers/donors were perceived triggering more in manufacturing firms exhibiting significant statistical association with the industry.

The change triggers from general environment and industry environment were linked to the risk perception and organizational reasons for change and unchange in order to make judgment about the root cause of immunity and change in the firms. Competition and substitute products and services were perceived more risky and commodity price volatility was perceived less risky by the respondents. The study found significant statistical association of the industry type with the risky areas of resource scarcity, technology change, and commodity price volatility. Similarly, unfavorable employee attitude, obsolescence of technology and work processes, ineffectiveness of authority hierarchy, and unproductiveness of organization culture were perceived main reasons for organizational change among others. The industry type exhibited statistical association of independence

with the two reasons of change- obsolescence of technology and work processes and unproductiveness of organizational culture.

Organizational appeal, emerging out from the environmental triggers and risks perception, was found the fulcrum of immunity and change in the firms.

### **6.1.2. Status of immunity and change**

Organization structure and hierarchy, corporate culture and etiquette, and personnel attitude and values were found more immune (no more often changing areas) whereas technology and work processes were found more vulnerable (more often changing areas) in the firms. Organization structure and hierarchy were establishing statistical association of dependency with the industry type but there was no such association in case of technology and work processes.

The work process and technology exhibited dual dimensions- immunity and vulnerability. On the dimension of immunity, it was found very hard and painful process of replacing already established process and technology. The technology and working processes were reflecting the status, image, identity and strength of the firms as well. On the dimension of vulnerability, new technology and advanced working processes were found desirable, which was propelling the firms for replacement of the existing one.

The respondents perceived that their strength/immunity was associated with their work processes/technology, customers/clients as well as supply chain and business network whereas their weakness/vulnerability was associated mostly with their human resources. The industry exhibited statistical association of independence with work process/technology, customers/clients, and supply chain and business network.

The laws and rules of the Land, police and security agencies, and insurance policy were perceived important shields for the firms from externalities. Insurance policy showed statistical association of independence with the industry type of manufacturing and non-manufacturing firms.

Immunity and change were found as integral parts of the manufacturing and non-manufacturing firms. The level of immunity and change was likely to vary across the industry.

### **6.1.3. Association of change and response to the change**

The variables indicating organizational change and response to the change associated with two categories of nine components known as factors. The intramural association of the

variables formed five factors- directional, adaptive, financial, traditional, and motivational. The extramural association of the variables formed four factors- regulatory, transactional, buyer-seller, and existential. Reliable differences, in relation to the change and response to the change, have been found with the variables- business ethics, working standards, and preference at work associated with directional components. Similar differences were identified with the variables- inheritance and legacy as well as product development associated with traditional and adaptive component. There were observed significant differences in all the variables- key personnel change, learning at work, and abuse of authority associated with the motivational component. There was no statistically reliable difference observed with the variables associated with financial component of intramural category of change and response to the change.

In the same line, statistically reliable differences were identified in relation to the variables- supply chain/business network, business philosophy, and empowerment associated with the transactional component. The variables- government policy and regulatory directive associated with regulatory component and the variable- supplier's behavior associated with buyer-seller component were also exhibiting reliable differences in the extramural category.

This study further estimated the probability of the risk of resistance in case of making change in relation to the variables. The odds ratio indicated significant risk of resistance while changing the working standards and patterns [(Exp(B)= 2.347], value priority [Exp(B)= 2.207], key personnel [Exp(B)= 2.010], code of conduct [Exp(B)= 1.955], product design [Exp(B)= 1.661], government policy change [Exp(B)= 1.681], organizational objective [Exp(B)= 1.532], top management's desire for unchange [Exp(B)= 1.492], and supply chain and business network [Exp(B)= 1.492].

The manufacturing and non-manufacturing firms were found reliably different except their financial aspect. The pattern of change and response to the change in relation to investment, expenditure on personnel development program, profitability, and capital structure was noticed similar in the firms. Change and response to the change were found obvious in the firms under study.

#### **6.1.4. Change management style and instruments**

This study identified education and communication, collaboration and participation, delegation and direction, use of power/force and coercion, and manipulation and cooptation

as the style and instruments while managing change in the firms. Education and communication was found most preferred whereas manipulation and cooptation found least preferred among others. The use of power/force and coercion was found statistically independent with the manufacturing and non-manufacturing firms.

The change management style and instruments were observed useful to gain acceptance to the change and change interventions.

#### **6.1.5. Typology of organizational immune system and change management**

The study observed that immunity to change was associated with the top management, organization culture, employees/unions, and consultants/experts. Similarly, the acceptance to change was also associated with same actors of the firms. The firms were exhibiting their statistical association with the employees and their unions while building immunity to change. The business network and structural forces were observed preventing changes mostly along with the compliance and regulatory processes. There was statistical association of independence of the industry with the compliance and regulatory processes. However, the compliance and procedural processes were observed facilitating for acceptance to change with showing their statistical independence with the manufacturing and non-manufacturing firms.

The entire research findings equipped with intuitive reasoning originated the basic ideas concerning organizational immune system and change management. Building immunity to change has been termed as the function of status quo i.e. the condition of inbreeding and no change. Breaking immunity to change has been termed as the movement from the status quo i.e. the condition of crossbreeding and change. Managing change has been termed as the process of building and breaking the immune system.

## **6.2. CONCLUSIONS**

The ‘fear factor’ resulted from the changes in the three major areas, namely, the general environment, industry environment, and the organizational environment triggers for change and no changes in organizations and business. Changes in those areas were a significant factors compelling for changes in organization and business. The fear factor was expressed in terms of “risk” more specifically in the part of competition and substitute products/services, commodity price volatility, resource scarcity (e.g. materials, water, energy) technology change (e.g. methods of doing or making things), unethical business

practices by employees and supply chain partners (e.g. bribery, corruption) and regulatory or compliance pressure.

It is argued that the fear factor leads to presume the environment of an organization that the existing pattern of authority hierarchy is looking ineffective at one part and the organization culture is being unproductive at the other. The employee's attitude seems unfavorable to the management of an organization, hence, technology and work processes become obsolete and outdated when the fear factor starts influencing. Eventually, business networks and actors appear incompatible to their business, productivity and profitability become inadequate, product and service design look unattractive in the market, and behavior of the stakeholders and unions are compelling for the management.

There are no areas in which organizations and businesses are totally immune and volatile to change. Some areas are stronger or immune to change compared to others. The organizations were attempting to make things immune at one part and they were also attempting to bring changes at the other part. They were adopting various means for protecting their business in one way, and they were also applying various techniques while making changes in several other ways. They were likely to experience various level of changes and hence corresponding responses to the changes in and out of the murals of their organizations and businesses.

The intended purpose of an organization influences its philosophy, goals, and objectives. It is an inner core of an organizational immunity. As long as the intended purpose is continuous, the organization remains immune to total change. It is very hard and painful to abandon the intention, belief, and attitudes deeply rooted within the organization since a long period of time.

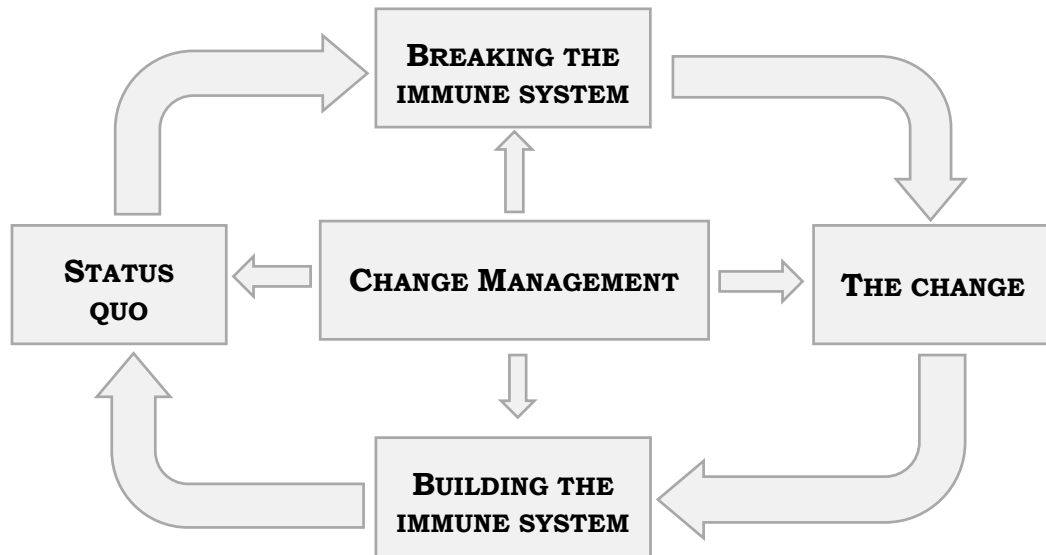
Managing change involves the process of breaking the immune system at one part and building the immune system on the other part. The intramural immunity concerns the intramural forces and changes whereas extramural immune system concerns the extramural forces and changes thereof.

### **6.2.1. The state of breeding**

Organizational immune system is the function of breeding- inbreeding and crossbreeding. The inbreeding of leadership style, working process, technology, interest, and attitude like things in organizations is increasing immunity to change in an organization.

The organizations are immune to change in the areas of their previous success. The product, process, or persons found best and successful during the past are likely to imagine again that the successful one in the past shall bring success in the future as well. Eventually, the

*Figure 6-1: Model free breaking and building immunity*



organization becomes immune to change because they hold the evidence of success in the past doing something to respond to the similar triggers of today. An organization is social entity, therefore, there is no guarantee that what worked best in the past the same works best at present as well. However, the organizations are still rigid with their own process of decision-making, structural arrangement, and selection criteria development on the strength of their past success and failures records. They prefer ideas from that person who was doing best in the past, and assumed that the person is likely to do best in future. The idea would be valid if the past would have continued even in the future. But, the future is different than the past; therefore, the past habit of success or failure is a main source of breeding immunity to change.

The change intervention has its own premises as of a plan. In order to safeguard the purpose, a well-established immune system is necessary in order to build an immunity to change. Building an immune system is an active involvement in order to avoid the undesirables. The dimension of breaking an immune system is actively functioning to either tolerate or accept the desirables.



### **6.2.2. Model-free breaking and building immunity**

The study argues that breaking immunity for change and building immunity for unchange (*Figure 6-1*) as two dimensions of change management. Managing immunity is managing change as well. Both, breaking and building immunity are free from model depending upon the adoptive challenges; therefore, managing change is model-free practice for meeting the challenges.

Organizational immune system is a shield of organizational structures, processes, and interests designed to safeguard the fundamental assumptions of the organizational actors. It was a mural defense mechanism actively engaged in resisting unwanted elements and accepting the intended elements in order to give continuity to its intramural and extramural associations.

The immune system assesses its strength relative to the forces for changes, and if found relatively weaker than the forces, it attempts to tolerate or accept the change. As long as it considers itself stronger than the forces for change, it attempts to resist the change and maintains the status quo. The system active in monitoring changes in the premises is better able to meet the goals, and those, which do not have such systems, are under stress and ultimately fail to address the change in absence of a preparation to respond to it. Organizations that have developed the system of monitoring premises can get sufficient time to response to changes.

### **6.2.3. The need for change and staticness**

The change management process begins with recognition of the need for change and need for unchange. This is a highly debatable part of the change process. The need for change and unchange depends on the unknown fear and optimism bias of the top-level management. The organizations do not like change originally because it has its own roadmap to its own objectives aligned with the intended purpose. The fear and optimism are valid reason for change in organizations and businesses and not the forces in its environment.

Breaking and building immunity becomes effective when the change agent understands the three supreme reasons of an individual concerning his or her acceptance and resistance to change. One reason is his/her interest, the next one is his/her deed, and the next one is his/her faith. People working for their 'interest' prefer the worth associated with change interventions and accept those changes that are meeting their interests, and resist those

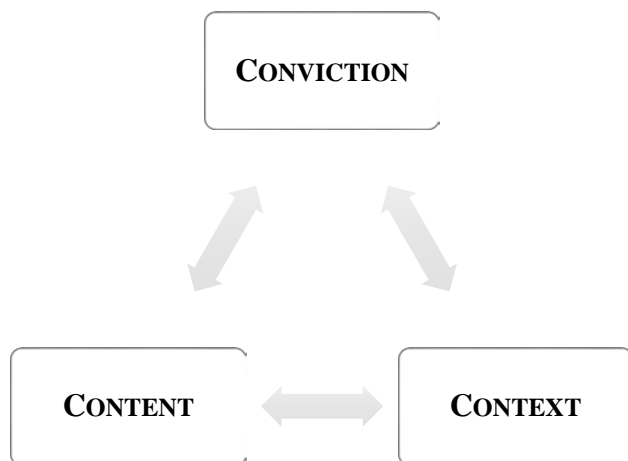
changes that are otherwise. Ordinarily, people who prefer to work for their self-worth or personal benefits concentrate more on short-term. People working for their deed and duty consider work as worshipping; and resist those changes that are beyond the limitations of the deed and duty; and accept those changes that are within the limit of their duty. People who are influenced by their faith tend to concentrate for the long-term and ordinarily they do not exhibit the behavior of acceptance or resistance, but, they tolerate the changes. These people are complacent people with focus on fairness and equity in their way of life.

#### 6.2.4. Managing change: moving with the immune system

Managing change is in dichotomy of an established system (characterized by old technology and working processes) and an innovative system (characterized by new technology and working processes). Innovation driven industry is not complacent with the status quo but it is hungry for change in its organizational settings and the businesses.

Organizational change management is model-free because there is no fixed style of bringing and sustaining changes. As there is no single item that is making an organization more immune or vulnerable, as there is no single style or model for breaking immunity and building immunity. However, the change agent could not ignore to use power/force or coercion while managing changes in their organizations and businesses.

Figure 6-2: Changing core



The process of change management consists the conviction, content, and the context (Figure 6-2). Conviction is the basic assumption of the organization being involved into a business. It is actionable aspect of the intended purpose of the organization. The context refers to the entire organizational settings that stand firmly representing the status quo. It reflects the existing state of affairs in

the industry and general environment along with the status quo of an organization. The contents refer to the change interventions, resources, items and areas going for rejuvenation

or transformation. Existing functions and activities, persons and property, technology and processes, infrastructure and facilities, and similar others of no more use in the days ahead for the organizations and business are the items that go for change. Change of contents is very difficult and painful because organizations have already paid a substantial amount of time, labor, money, and patience to have such things during the past. It becomes very hard to abandon the items of attachments with an individual or an organization.

#### **6.2.5. Inbreeding and crossbreeding of leadership**

There was a tendency of changing organizations in search of better benefits, especially with the higher level personnel. For an instance, appointment of Chief Executive Officer from an already established organization in the same industry does not ensure that the newly established company would promote entirely new ideas and working patterns under the leadership of the chief executive who is there from another organization doing business in the same industry since a long period. There is no guarantee that the executive appointed as such is able to lock up his or her belief, attitude, value, and inheritance somewhere else and joins the organization with completely different belief, attitude, value and competency entry required for the job of the executive.

Organizational immune system and leadership inbreeding is the area of managerial significance in relation to change. It is hard to accept a stranger as a leader, more specifically in family based organizations. The stranger might be from a best schooling background having substantial competency in business. Nevertheless, the successor comes from within the same family and same cultural settings and eventually leadership inbreeding becomes continuous. Similar situation exists in non-family based organizations as well because in those organizations the leadership comes from the same organization in the form of promotion or internal competition. If it comes from outside of the organization, than that will be from similar other organizations in the same industry. There is a rare chance of leadership crossbreeding in organization and businesses.

The assumption behind leadership inbreeding in case of family-based organization is that leaders from outside are not safeguarding the organization and business instead they are safeguarding their own benefits and position. Similarly, in organizations other than family-based, there is an assumption that the leadership candidates are very fresh, immature, have a lack of experience, and are job seekers who are unable to lead well-experienced executives working at different positions in the organization along. According to these

assumptions, leadership inbreeding is necessary in order to safeguard the organization and lead the well-experienced executives.

The inbreeding practice explores leadership from within the organization and it actively involves in succession planning. When an organization involves in breeding leaders form an own breed, there is no shortage of leadership, and eventually, there is a high chance of longevity of the organization too. The practice of leadership inbreeding strengthens the organizational immunity to change.

While breaking an organizational immune system, crossbreeding of leadership works best whereas while building an organizational immune system leadership inbreeding works best. This study argues that change management needs leadership crossbreeding to inject newness in the entire activities of an organizations in what it does.

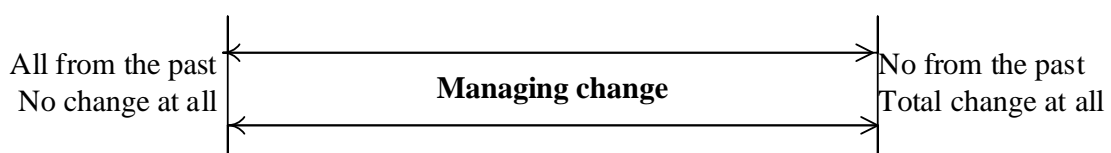
### 6.2.6. Theorization from the study

Immunity to change is the function of status quo  $[(IC_{ic}) = f(sq)]$ . The status quo is the function of inbreeding  $[(sq_i) = f(ib)]$ ; and the change is the function of crossbreeding  $[(AC_c) = f(cb)]$ . When there is inbreeding, there is no change, and the state of no change indicates an immune state of affairs with status quo whereas the crossbreeding is change to bring the rejuvenation or transformation of the status quo.

The isomorphic nature of an organization promotes crossbreeding whereas the autopoiesis nature promotes inbreeding in organizations and businesses. Change management process involves both crossbreeding and inbreeding. Crossbreeding is necessary for breaking immunity and inbreeding is necessary for building immunity. The two dimensions of a change management process are breaking the immunity and building the immunity.

Breaking immunity to change also implies the crossbreeding of leadership and building immunity to unchange implies the inbreeding of leadership in the organizations and businesses. The isomorphic nature of an organization is promoting formal relationships between the actors in a business network. Formal relationship is fuelling for crossbreeding of the organizational products and processes. Autopoiesis of the organization is promoting an informal relationship that is very fertile for inbreeding leading to immunity to change.

Figure 6-3: Continuum of change



Change is a continuum ranging from no change to total change (*Figure 6-3*). At the point of no change, everything is stand still being continuous from the past (either immediate past or far past) and at the point of total change, nothing is continuous of the past.

There is no organization working with everything of the past at present and future at one part and there is no organization working with nothing of the past at present and future on the other part. There is change, minor or major, in one area or in more areas, in the organizations and business. Therefore, organizational change is a matter of degree, high or low, more or less, partially or completely into specific dimensions of an organization and business. The real reason to go only for partial change is the continuous breeding of the past- inbreeding or crossbreeding known as immunity to change.

It may not be correct to attempt to change everything completely, which is not possible. It is not possible to replace every employees, plant and machinery, furniture and fixture, infrastructure and facilities, actors in the supply chain and business network, technology and processes, and culture as well as values at once. Similarly, intention of the actors may remain the same even with the change. Only creation of a new organization is not adequate as the change agents, partially or totally, are there with the same intention and attitude in their new creation too.

The pattern of organizational functioning and decision-making process is less influenced by the tasks and reporting relationships than the inheritance and legacy consisting the tradition, rituals, and habits of the actors. The informal relationships, inheritance and legacy are inbreeding the experience, associations, interests, and preferences of the actors.

Abuse of authority becomes a principal motivator in the organizations and businesses because of the presence of supreme immunity within the organizational actors. Function of the supreme immunity is unique; therefore, the choice and preference of the actors vary. The organizational settings do not permit to function differently i.e. rules apply for everyone. Therefore, actors attempt to ignore the rule of laws of the organization in order to satisfy their own supreme immunity. People feel happy when they find themselves in meeting their faith, deed, and interest. People think that being involved in immoral activity is their necessity and justice to their supreme immunity.

The supreme immunity remains as a challenge for the change agents while moving along with change interventions. Actors in the organization and business are attempting to concentrate mainly on their discretion, which is leading to the abuse of authority, property,

and processes. It is an alarming issue in the businesses and organizations in both the cases-going for change and not going for change. The change interventions are likely to prevent the actors and personnel from abusing their authority. And, they are resisting the change who are abusing authority with the status quo.

The pattern of acceptance and resistance behavior to change interventions reflects pluralistic assumptions. Employees tend to resist employer-initiated change attempts more often because the initiatives are increasing the employees' responsibility and demanding higher competencies and honesty. The initiatives are focusing more on designing jobs covering the work contents, skills and knowledge, performance standards as well as rewards and punishments.

Employers resist the employee-initiated change attempts more often as the initiatives are attempting to increase facilities for employees, providing career advancement options, granting more freedom at workplaces, ensuring job guarantees and improving the quality of work life.

The employers and employees both tend to resist the government-initiated initiatives at their own way because the initiatives are attempting to impose additional burden over the employers and employees in the form of regulatory requirements including taxation. Closing and disclosing the income and incentives, compliance to the taxation system, compensation to the chief executive officer are few areas of interest of the regulators.

### **6.3. MANAGERIAL POLICY IMPLICATIONS**

- The financial prosperity is equally laudable in both industries. It indicates a serious implication of public policy formulation that there is no need of simultaneous consideration while formulating policies concerning the manufacturing and non-manufacturing firms in Nepal.
- Managers in manufacturing firms need to be more aware of resource scarcity like water, energy, and raw materials whereas managers in non-manufacturing firms need to be more aware of technology change and commodity price volatility. The price volatility (mainly increase in prices) is significantly associated with unethical business practices and scarcity of resources.
- Downgrading moral and ethical value needs manager's immediate attention. Unethical practices of employees and actors in the business network is leading to instability in the industries

- Both the industries cannot go parallel with supply chains specific to the industry. Development of integrated supply chain and business network is necessary in order to ensure for regularity in supplies of the goods and services between the industries.
- It is necessary to separate top management and ownership from the organization. There are always conflicts between top-level management with the organization culture and the employees and the investors as well regarding changes in the organization and businesses
- One of the threats to organizational change is its top-management and administration. The top management and administration of an organization is principal actors for making and preventing change. Top management is not only working for the betterment of the organization, but it may be leading the organization to a state of paralysis or complete collapse.
- The attitude of ‘personal benefits fetching’ among the actors and employees is emerging in the industries, which is being a primary barrier for change and development in organizational settings. Supremacy of individual interest over the organizational interest is taking an ideal change intervention to the state of its failure. Every manager needs to replace the attitude of ‘personal benefit fetching’ by ‘collective benefits fetching’ across the organizations and businesses.
- Managers need to develop a habit of insurance. Law and order in society is contributing significantly to minimize risks of the industries, therefore, law-enforcing agencies need to be more effective.
- Application of power and force while managing change is necessary in addition to the styles like education, delegation, and collaboration. The managers must exercise both reward and coercive power while managing changes in their organizations and businesses.
- Every manager and change agent must know that complete change of an organization and its business is not possible at once. They must attempt only for partial changes in one or more areas and sectors of an organization.
- The inner (innate and supreme) part of immune system consisting the intention, *Dharma* and *Karma* is hard to change. The outer (ascribed) immune system consisting the organization structure, culture, attitude, technology, product design, funds, business network, compliance, and industrial relations are comparatively easy to change.

- Managers need to understand what content of the organization is necessary to change to what extent in which context.
- Managing change is a process of breeding as well. Inheritance and legacy promotes inbreeding and isomorphism promotes crossbreeding in the organizations and businesses.
- Necessity of leadership crossbreeding for change and leadership inbreeding for unchange.

#### **6.4. FUTURE RESEARCH IMPLICATIONS**

- The nature and impact assessment of the change triggers across the industries is necessary in order to promote managerial responsiveness to the never-ending process of change. The question like what is the cost-benefits analysis of being immune or vulnerable needs immediate answer.
- It is necessary to examine the pattern and impact of breeding, inbreeding and crossbreeding in organizations and business
- Breaking and building of the immune system are two dimensions of a change management process. Which component of the immune system should break and build at one part and how the process of breaking and building the immune system takes place in the industries in the other part are necessary to address.
- Leadership inbreeding and crossbreeding need further explorations.



## WORKS CITED

- Adeyemi-Bello, T. (2001). The impact of leadership style on organizational growth. *Work Study*, 50 (4), 150-153.
- Adhikari, D. R., & Gautam, D. K. (2010). Labor legislations for improving quality of work life in Nepal. *International Journal of Law and Management*, 52 (1), 40-53.
- Agresti, A. (2007). *An Introduction to Categorical Data Analysis*. New Jersey: Wiley-Interscience.
- Ahanotu, N. D. (1998). Empowerment and production workers: a knowledge-based perspective. *Empowerment in Organizations*, 6 (7), 177-186.
- Ahuja, G. (2000, September). Collaboration networks, structural holes, and innovation: a longitudinal study. *Administrative Science Quarterly*, 45 (3), 425-455.
- Akin, G., & Palmer, I. (2000). Putting metaphors to work for change in organizations. *Organizational Dynamics*(Winter), 67-79.
- Alexander, C. (1998). Creating new futures in turbulent times. *Empowerment in Organizations*, 6 (8), 201-209.
- Anderson, C. R., & Zeithaml, C. P. (1984). Stage of the product life cycle, business strategy, and business performance. *Academy of Management Journal*, 27 (1), 5-24.
- Anjard, R. P. (1998). Total quality management: key concepts. *Work Study*, 47 (7), 238-247.
- Anthony, S. D. (2012). The new corporate garage: where today's most innovative-and world-changing-thinking is taking place. *Harvard Business Review*(September), 45-53.
- Astley, G. W., & Van de Ven, A. H. (1983). Central perspectives and debates in organization theory. *Administrative Science Quarterly*, 28 (2), 245-273.
- Aston, D. N. (2004). The impact of organizational structure and practices on learning in the workplace. *International Journal of Training and Development*, 8 (1), 43-53.
- Austrian, S. G. (2013). *Developmental Theories Through the Life Cycle*. New York: Columbia University Press.
- Aycan, Z., Kanungo, R. N., Mendonca, M., Yu, K., Deller, J., Stahl, G., & Kurshid, A. (2000). Impact of culture on human resource management practices: a 10-country comparison. *Applied Psychology: An International Review*, 49 (1), 192-221.
- Azen, R., & Walker, C. M. (2011). *Categorical Data Analysis for the Behavioral and Social Sciences*. New York: Routledge, Taylor & Francis Group.

- Babbage, C. (1832). *On the Economy of Machinery and Manufacturers*. Retrieved March 27, 2012, from <http://www.fullbooks.com/On-the-Economy-of-Machinery-and-Manufactures4.html>
- Bacon, N., & Blyton, P. (2002). Militant and moderate trade union orientations: what are the effects on workplace trade unionism, union-management relations and employee gains? *The International Journal of Human Resource Management*, 13 (2), 302-319.
- Bacon, N., & Storey, J. (2000). New employee relations strategies in Britain: towards individualism or partnership? *British Journal of Industrial Relations*, 38 (3), 407-427.
- Bamberger, P. A., & Levi, R. (2009). Team-based reward allocation structures and the helping behaviors of outcome-interdependent team members. *Journal of Managerial Psychology*, 24 (4), 300-327.
- Bankas, E. W. (2005). *The State Immunity Controversy in International Law: Private Suits Against Sovereign States in Domestic Courts*. Heidelberg: Springer.
- Barker, J. R. (1993). Tightening the iron cage: concertive control in self-managing teams. *Administrative Science Quarterly*, 38, 408-437.
- Barnard, C. I. (1938). *The Functions of the Executives*. Boston: Harvard Business Press.
- Bartlett, C. A., & Ghoshal, S. (1992). What is a manager? *Harvard Business Review*, 70 (5), 124-132.
- Bartunek, J. M., & Moch, M. K. (1987). First-order, second-order, and third-order change and organizational development interventions: a cognitive approach. *The Journal of Applied Behavioral Sciences*, 23 (4), 483-500.
- Bates, R., & Khasawneh, S. (2005). Organizational learning culture, learning transfer climate and perceived innovation in Jordanian organization. *International Journal of Training and Development*, 9 (2), 96-109.
- Batt, R. (2004). Who benefits from teams? Comparing workers, supervisors, and managers. *Industrial Relations*, 43 (1), 183-212.
- BBC. (2012). *The Ancient World and Us*. (B. B. Corporation, Producer) Retrieved December 25, 2012, from Indus Valley: [http://www.bbc.co.uk/schools/primaryhistory/indus\\_valley/](http://www.bbc.co.uk/schools/primaryhistory/indus_valley/)
- Beal, B. (2003). Teamwork- the key to staff development. *Career Development International*, 8 (5), 235-240.
- Beaumont, N., & Sohal, A. (2004). Outsourcing in Australia. *International Journal of Operation & Production Management*, 24 (7), 688-700.

- Becker, B., & Gerhart, B. (1996). The impact of human resource management on organizational performance: progress and prospects. *Academy of Management Journal*, 39 (4), 779-801.
- Beer, M. (2003). Why total quality management programs do not persist: the role of management quality and implications for leading a TQM transformation. *Decision Sciences*, 34 (4), 623-642.
- Beer, M., & Nohria, N. (2000). Cracking the code of change. In *HBR's 10 Must Reads on Change Management- 2011*. Boston: Harvard Business Review Press.
- Beer, M., Eisenstat, R. A., & Spector, B. (1990). Why change programs don't produce change. In *HBR's Must Reads on Change Management-2011*. Boston: Harvard Business Review Press.
- Benson, J., & Gospel, H. (2008). The emergent enterprise union? A conceptual and comparative analysis. *The International Journal of Human Resource Management*, 19 (7), 1365-1382.
- Berger, P. L., & Luckmann, T. (1967). *The social construction of reality*. London: Penguin Books.
- Berrone, P., Makri, M., & Gomez-Mejia, L. R. (2008). Executive compensation in North American high-technology firms: a contextual approach. *The International Journal of Human Resource Management*, 19 (8), 1534-1552.
- Bertalanffy, L. v. (1950, January 13). The theory of open systems in physics and biology. *Science*, 111 (2872), 23-29.
- Bhambri, A., & Sonnenfeld, J. (1988). Organization structure and corporate social performance: a field study in two contrasting industry. *Academy of Management Journal*, 31 (3), 642-662.
- Bhattarai, R. K. (2010). Case study- what worked best in the context of political insurgency and turmoil in Nepal? *PACE The Journal of Business and Management*, 2 (1), 119-134.
- Bhattarai, R. K. (2013). Structural immunity to technology diffusion in Nepal: planned technology and unplanned adaptation. *IT Application and Management: Digitally Networked Global Society*. Kathmandu: Korea Database Society.
- Birkisnshaw, J., & Ridderstrale, J. (1999). Fighting the corporate immune system: a process study of subsidiary initiatives in multinational corporations. *International Business Review*, 149-180.
- Bland, M. (1999). A new approach to management of stress. *Industrial and Commercial Training*, 31 (2), 44-88.

- Boje, D. M., Gephart Jr, R. P., & Thatchenkery, J. J. (1996). Postmodern management and the coming crisis of organizational analysis. In D. M. Boje, R. P. Gephart Jr, & J. J. Thatchenkery (Eds.), *Postmodern Management and Organization Theory* (pp. 1-19). Thousand Oaks: Sage Publications.
- Boje, D., & Rosile, G. A. (2003). Comparison of socio-economic and other transorganizational development methods. *Journal of Organizational Change Management*, 16 (1), 10-20.
- Bolman, L. G., & Deal, T. E. (2008). *Reframing Organizations* (4th ed.). Jossey-Bass.
- Bond, D., & Middleton, H. (2003). Learning from others at work: communities of practice and informal learning. *Journal of Workplace Learning*, 15 (5), 194-202.
- Boulding, K. E. (1956). General system theory- the skeleton of science. *Management Science*, 2 (3), 197-208.
- Bovey, W. H., & Hede, A. (2000). Resistance to organizational change: the role of defense mechanisms. *Journal of Managerial Psychology*, 16 (7), 534-548.
- Bowie, N. E., & Freeman, R. E. (1992). *Ethics and Agency Theory: An Introduction*. (N. E. Bowie, & R. E. Freeman, Eds.) Oxford: Oxford University Press.
- Boxall, P., & Purcell, J. (2000). Strategic human resource management: where have we come from and where should we be going. *International Journal of Management Reviews*, 2 (2), 183-203.
- Bridges, W. (2003). *Managing Transitions: Making the Most of Change* (2nd ed.). Cambridge: Perseus Publishing.
- Britannica. (2011). Organizational analysis. *Britannica Ultimate Reference Suite*. Chicago: Encyclopaedia Britannica.
- Britannica. (2011). Timelines. *Encyclopedia Britannica Ultimate Reference Suite*. Chicago.
- Brown, R. J. (2008). Dominant stressors on expatriate couples during international assignments. *The International Journal of Human Resource Management*, 19 (6), 1018-1034.
- Budhwar, P. S., Verma, A., Malhotra, N., & Mukharjee, A. (2009). Insights into the Indian call center industry: can internal marketing help tackle high employee turnover? *Journal of Service Marketing*, 23 (5), 351-362.
- Burgess, J., & Connell, J. (2008). Introduction to special issue HRM and job quality: an overview. *The International Journal of Human Resource Management*, 19 (3), 407-418.

- Burns, T. E., & Stalker, G. M. (1961). *The management of innovation*. (Social Science Research Network) Retrieved from University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship: <http://ssrn.com/abstract=149618>
- Burrell, G., & Morgan, G. (1979). *Sociological Paradigms and Organizational Analysis: Elements of the Sociology of Corporate Life*. Burlington: Ashgate Publishing Company.
- Cabrera, A., Cabrera, E. F., & Barajas, S. (2012). *The key role of organizational culture in a multi-system view of technology-driven change*. Retrieved January 23, 2013, from [http://e-archivo.uc3m.es/bitstream/10016/7152/2/key\\_IJIM\\_2001\\_ps.pdf](http://e-archivo.uc3m.es/bitstream/10016/7152/2/key_IJIM_2001_ps.pdf)
- Carnall, C. A. (2007). *Managing Change in Organizations* (5th ed.). London: FT Prentice Hall.
- Caruth, D. L., & Humphreys, J. H. (2008). Performance appraisal: essential characteristics for strategic control. *Measuring Business Excellence*, 12 (3), 24-32.
- Castro, C. B., Perinan, M. M., & Bueno, J. C. (2008). Transformational leadership and followers' attitudes: the mediating role of psychological empowerment. *The International Journal of Human Resources Management*, 19 (10), 1842-1863.
- Chaganti, R., Mahajan, V., & Sharma, S. (1985). Corporate board size, composition and corporate failures in retailing industry. *Journal of Management Studies*, 22 (4), 400-417.
- Chandler, A. D. (1962). *Strategy and Structure: Chapters in the History of the American Industrial Enterprise*. Cambridge: MIT Press.
- Charles, D. (2006). Universities as key knowledge infrastructures in regional innovation systems. *Innovation*, 19 (1), 117-130.
- Choi, J. (2008). Work and family demands and life stress among Chinese employees: the mediating effect of work-family conflict. *The International Journal of Human Resource Management*, 19 (5), 878-895.
- Chong, J. K., & Park, J. (2003). National culture and classical principles of planning. *Cross Cultural Management: An International Journal*, 10 (1), 29-39.
- Clark, W. R. (2007). *In Defense of Self: How the Immune System Really Works*. New York: Oxford University Press.
- CNLU. (2014). *Chanakya the legend*. Retrieved April 6, 2014, from Chanakya National Law University: [http://www.cnlu.ac.in/index.php?option=com\\_content&view=article&id=52](http://www.cnlu.ac.in/index.php?option=com_content&view=article&id=52)

- Collier, J., & Esteban, R. (2007). Corporate social responsibility and employee commitment. *Business Ethics: A European Review*, 16 (1), 19-33.
- Connor, P. E., & Becker, B. W. (1975). Values and the organization: suggestions for research. *Academy of Management Journal*, 18 (3), 550-561.
- Cooke, F. L. (2001). Human resource strategy to improve organizational performance: a route for firms in Britain. *International Journal of Management Reviews*, 3 (4), 321-339.
- Cooper, M. C., Lambert, D. M., & Pagh, J. D. (1997). Supply chain management: more than a new name for logistics. *International Journal of Logistics Management*, 8, 1-14.
- Crozier, M., & Theoenig, J. C. (1976). The regulation of complex organized systems. *Administrative Science Quarterly*, 21, 547-570.
- Davidson, M. (2012). How hard should you push diversity? *Harvard Business Review*(November), 139-143.
- Denton, D. K. (1998). Creating a winning organization. *Empowerment in Organizations*, 6 (3), 81-93.
- Despain, J. E., Leinicke, L. M., Ostrosky, J. A., & Rexroad, W. M. (2003). Work values at Catterpillar: a process. *Organizational Dynamics*, 32 (4), 405-414.
- Dewhurst, M., Hancock, B., & Ellsworth, D. (2013). Redesigning knowledge work. *Harvard Business Review*(January-February), 59-64.
- Dionne, S. D., Yammarino, F. J., Atwater, L. E., & Spangler, W. D. (2004). Transformational leadership and team performance. *Journal of Organizational Change Management*, 17 (2), 177-193.
- Dirkx, J. W., Gilly, J. W., & Gilly, A. M. (2004). Change theory in CPE and HRD: toward a holistic view of learning and change in work. *Advances in Developing Human Resources*, 6 (1), 35-51.
- Dodge, H. R., & Robbins, J. E. (1992). An empirical investigation of the organizational life cycle model for small business development and survival. *Journal of Small Business Management*, 30 (1), 27-37.
- Dose, J. J. (1997). Work values: an integrative framework and illustrative application to organizational socialization. *Journal of Occupational and Organizational Psychology*, 70, 219-240.
- Drucker, P. F. (1983). *Concept of the Corporation* (2nd ed., Vol. 2197 of Mentor Executive Library). New American Library.

- Drucker, P. F. (1993). *Concept of the Corporation*. New Brunswick, N.J.: Transaction Publishers.
- Dulk, L., & Ruijter, J. (2008). Managing work-life policies: disruption versus dependency arguments. Explaining managerial attitudes towards employee utilization of work-life policies. *The International Journal of Human Resource Management*, 19 (7), 1222-1236.
- Dunn, D. S. (2001). *Statistics and Data Analysis for the Behavioral Sciences*. London: McGraw Hill.
- Durkheim. (1984). *The Division of Labor in Society*. (W. D. Halls, Trans.) New York: The Free Press.
- Edgar, F., & Geare, A. (2005). HRM practice and employee attitudes: different measures-different results. *Personnel Reviews*, 34 (5), 534-549.
- Elkin, G., & Strach, P. (2006, February). *Lessons from the indigenous East for Western organizations? Mechanistic and organic approaches to organization and management*. Retrieved February 9, 2012, from [www.business.otago.ac.nz/mgmt/.../wp/Elkin\\_Strach\\_06\\_02.pdf](http://www.business.otago.ac.nz/mgmt/.../wp/Elkin_Strach_06_02.pdf)
- Embleton, P. R., & Wright, P. C. (1998). A practical guide to successful outsourcing. *Empowerment in Organizations*, 6 (3), 94-106.
- Englund, R. L., Graham, R. J., & Dinsmore, P. C. (2003). *Creating the Project Office: A Manager's Guide to Leading Organizational Change*. San Francisco: Jossey-Bass.
- Erdem, F., & Satir, C. (2003). Future of organizational culture in manufacturing organization: a metaphorical analysis. *Work Study*, 52 (3), 129-135.
- Felstead, A., Phizacklea, A., & Walters, S. (2002). Opportunities to work at home in the context of work-life balance. *Human Resource Management Journal*, 12 (1), 54-76.
- Fernandez, P., McCarthy, I., & Rakotobe-Joel, T. (2001). An evolutionary approach to benchmarking. *Benchmarking: An International Journal*, 8 (4), 281-305.
- Field, A. (2009). *Discovering Statistics Using SPSS*. London: Sage.
- Follett, M. P. (1918). *The New State: Group Organization the Solution of Popular Government*. Bombay: Longmans, Green and Co.
- Ford, J., & Ford, L. W. (2009). Decoding resistance to change. *Harvard Business Review*, 87 (4), 99-103.
- Galbraith, J. R. (1974). Organization design: an information processing view. *Interfaces*, 4, 28-38.

- Garofalo, C. (2003). Toward a global ethic: perspectives on values, training and moral agency. *The International Journal of Public Service Management*, 16 (7), 490-501.
- Garsten, C. (2003). The cosmopolitan organization- an essay on corporate accountability. *Global Networks*, 3 (3), 355-370.
- Garvin, D. A., & Roberto, M. A. (2005). Change through persuasion. In *HBR's 10 Must Reads on Change Management*. Boston: Harvard Business Review Press.
- Gergen, K. J. (1992). Organizational theory in the post-modern era. In M. Reed, & M. Hughes (Eds.), *Rethinking Organizations: New Directions in Organization Theory and Analysis*. Sage Publications.
- Geus, A. (2008). *The Living Company: Habits for Survival in a Turbulent Business Environment*. Boston: Harvard Business Press.
- Gibson, D., & Barron, L. A. (2003). Exploring the impact of role models on older employees. *Career Development International*, 8 (4), 198-209.
- Gilley, A., Godek, M., & Gilley, J. W. (2009). The organizational immune system. In A. G. Gilley, *The Praeger Handbook of Human Resource Management, Volume 2*. Westport, CT: Praeger Publishers. Westport, CT: Praeger Publishers.
- Gilley, A., Godek, M., & Gilly, J. W. (2009). Change, resistance, and the organizational immune system. *SAM Advanced Management Journal*, 74 (4), 4-10.
- Gioia, D. A., & Pitre, E. (1990). Multiparadigm perspectives on theory building. *Academy of Management Review*, 15 (4), 584-602.
- Goh, S. C. (2003). Improving organizational learning capability: lessons from two case studies. *The Learning Organization*, 10 (4), 216-227.
- Graham, C., & Nafukho, F. M. (2007). Employees' perception toward the dimension of culture in enhancing organizational learning. *The Learning Organization*, 14(3), 281-292.
- Griffin, R. W. (2005). *Management* (8th ed.). New Delhi: Biztantra.
- Guest, D. E., Michie, J., Conway, N., & Sheehan, M. (2003). Human resource management and corporate performance in the UK. *British Journal of Industrial Relations*, 41 (2), 291-314.
- Gunnigle, P., & Moore, S. (1994). Linking business strategy and human resource management: issues and implications. *Personnel Review*, 23 (1), 63-84.
- Haeckel, S. H. (2008). *Adaptive Enterprise: Creating and Leading Sense-and-Respond Organizations*. Boston: Harvard Business Press.



- Hannan, M. T., & Freeman, J. (1984). Structural inertia and organizational change. *American Sociological Review*, 49 (2), 149-164.
- Hannan, M. T., & Freeman, J. (1989). Organizations and social structure. In *Organizational Ecology*. Harvard University Press.
- Haragopal, G. (1996). Yehezkel Dror. In D. Prasad, V. Prasad, & P. Satyanarayana, *Administrative Thinkers*. New Delhi: Sterling Publishers.
- Hatch, M. J., & Schultz, M. (1997). Relations between organizational culture, identity and image. *European Journal of Marketing*, 31 (5/6), 356-365.
- Hawley, A. H. (1968). Human ecology. In D. L. Sills (Ed.), *International Encyclopedia of the Social Sciences*. New York: Macmillan.
- HBR. (2013). The more we know the more we want to change everything. *Harvard Business Review* (January-February), 67-73.
- Heifetz, R. A. (2010). Adaptive work. *The Journal Kansas Leadership Center*(Spring), 72-77.
- Heifetz, R. A., & Linsky, M. (2002). A survival guide for leaders. In *HBR's 10 Must Reads on Change Management- 2011*. Boston: Harvard Business Review Press.
- Heifetz, R., Grashow, A., & Linsky, M. (2009). *The Practice of Adaptive Leadership: Tools and Tactics for Changing Your Organization and the World*. Boston: Harvard Business Press.
- Hill, J. E., Miller, B. C., Colihan, J., & Wiener, S. P. (1998). Influences of the virtual office on aspects of work and work/life balance. *Personnel Psychology*, 51 (3), 667-683.
- Hill, R. P., Stephens, D., & Smith, J. (2003). Corporate social responsibility. *Business and Society Review*, 108 (3), 339-364.
- Hisrich, R. D., Bucar, B., & Oztark, S. (2003). A cross cultural comparison of business ethics: cases of Russia, Slovenia, Turkey, and United States. *Cross Cultural Management: An International Journal*, 10 (1), 3-28.
- Hitchens, D., Thankappan, S., Trainor, M., Clausen, J., & Marchi, B. (2005). Environmental performance, competitiveness and management of small business in Europe. *Royal Dutch Geographical Society*, 96 (5), 541-557.
- Hitt, M. A. (2011). Relevance of strategic management theory and research for supply chain management. *Journal of Supply Chain Management*, 47 (1), 9-13.
- Hofmeyr, S. (2001). An interpretative introduction to the immune system. In L. A. Segel, & I. R. Cohen (Eds.), *Design Principles for the Immune System and Other Distributed Autonomous Systems*. New York: Oxford University Press.

- Hrebiniak, L. G., & Joyce, W. F. (1985). Organizational adaptation: strategic choice and environmental determinism. *Administrative Science Quarterly*, 30 (3), 336-349.
- Huy, Q. N., & Mintzberg, H. (2003). The rhythm of change. *MIT Sloan Management Review* (Summer), 79-84.
- IBM. (2011). *IBM SPSS Advanced Statistics 20*. IBM Corporation.
- Iida, T., & Morris, J. (2008). Farewell to the salaryman? The changing roles and work of middle managers in Japan. *The International Journal of Human Resource Management*, 19 (6), 1072-1087.
- Inamdar, N. (1996). Kautilya. In D. Prasad, P. VS, & P. Satyanarayana, *Administrative Thinkers*. New Delhi: Sterling Publishers.
- Ismail, T. (2007). Performance evaluation measures in the private sector: Egyptian practice. *Managerial Auditing Journal*, 22 (5), 503-513.
- Janz, B. D., & Prasarnphanich, P. (2003). Understanding the antecedents of effective knowledge management: the importance of a knowledge-centered culture. *Decision Science*, 34 (2), 351-384.
- Jawahar, I., & McLaughlin, G. (2001). Toward a descriptive stakeholders theory: an organizational life cycle approach. *Academy of Management Review*, 26 (3), 397-414.
- Johnson, G., Scholes, K., & Whittington, R. (2008). *Exploring Corporate Strategy* (Seventh ed.). New Delhi: Pearson Education.
- Jones, C., Hesterly, W., & Borgatti, S. (1997). A general theory of network governance: exchange conditions and social mechanisms. *Academy of Management Review*, 22 (4), 911-945.
- Jones, O. (2000). Innovation management as a post-modern phenomenon: the outsourcing of pharmaceutical R&D. *British Journal of Management*, 11, 341-356.
- Ju, T. L., Ju, P. H., Tran, H.-H., & Wang, D. (2006). Antecedents to knowledge transfer in higher education: effective teaching. *Proceeding International Conference: Knowledge management in Institutes of Higher Learning*. Suan Dusit Rajabhat University. Retrieved from Department of Information Management, Su-Te University.
- Kaplan, R. S. (2010, November - December). Leading change with the strategy execution system. *Balanced Scorecard Report*, 12 (6), 1-8.
- Karlson, D. S., Kacmar, K. M., & Stepina, L. P. (1995). An examination of two aspects of work-family conflict: time and identity. *Women in Management Review*, 10 (2), 17-25.

- Katsoulakos, T., & Katsoulakos, Y. (2007). Strategic management, corporate responsibility and stakeholder management integrating corporate responsibility principles and stakeholder approaches into mainstream strategy: a stakeholder-oriented and integrative strategic management framework. *Corporate Governance*, 7 (4), 355-369.
- Kegan, R., & Lahey, L. (2001, November). The real reason people won't change. *Harvard Business Review*, 85-92.
- Kegan, R., & Lahey, L. (2009). *Immunity to Change: How to Overcome It and Unlock Potential in Yourself and Your Organization*. Boston: Harvard Business Press.
- Kezar, A. J. (2001). *Understanding and Facilitating Organizational Change in the 21st Century: Recent Research and Conceptualizations*. ASHE - ERIC Higher Education Report. San Francisco: Jossey - Brass. Retrieved April 10, 2012, from ALED 440 - Principles of Technological Change: [http://aled.tamu.edu/440/READ - Change Theory Article.pdf](http://aled.tamu.edu/440/READ-Change Theory Article.pdf)
- Knippenberg, D. (2000). Work motivation and performance: a social identity perspective. *Applied Psychology: An International Review*, 49 (3), 357-371.
- Kotter, J. P. (1995). Leading change: why transformation efforts fail. In *HBR's 10 Must Reads on Change Management- 2011*. Boston: Harvard Business Review Press.
- Kotter, J. P., & Schlesinger, L. A. (1979). Choosing strategies for change. *Harvard Business Review*, 57, 106-114.
- Kourteli, L. (2000). Scanning the business environment: some conceptual issues. *Benchmarking: An International Journal*, 7 (5), 406-413.
- Kuhn, T. S. (1970). *The Structure of Scientific Revolutions* (2nd ed.). Chicago: The University of Chicago Press.
- Kujala, J., & Lillrank, P. (2004). Total quality management as a cultural phenomenon. *The Total Quality Management Journal*, 11 (4), 43-55.
- Kyro, P. (2003). Revising the concept and forms of benchmarking. *Benchmarking: An International Journal*, 10 (3), 210-225.
- Lahteenmaki, S., Toivonen, J., & Mattila, M. (2001). Critical aspects of organizational learning research and proposals for its measurement. *British Journal of Management*, 12, 113-129.
- Latta, G. F. (2009). A process model of organizational change in cultural context (OC3 model): the impact of organizational culture on leading change. *Journal of Leadership & Organizational Studies*, 16 (1), 19-37.

- Lawal, B. (2003). *Categorical Data Analysis with SAS and SPSS Applications*. London: Lawrence Erlbaum Associates.
- Lawrence, P. R., & Lorsch, J. W. (1967, June). Differentiation and integration in complex organizations. *Administrative Science Quarterly*, 12 (1), 1-47.
- Lawrence, P. R. (2010). *Driven to Lead: Good, Bad, and Misguided Leadership*. San Francisco: Jossey-Bass.
- Le Storti, A. (2003). The innovation/discovery team notes from the field. *Current Issues in Technology Management*, 7 (4), 1-3.
- Lee, L.-Y., & Li, C.-Y. (2008). The moderating effects of teaching method, learning style and cross-cultural differences on the relationship between expatriate training and training effectiveness. *The International Journal of Human Resource Management*, 19 (4), 600-619.
- Lee, T. Y. (2005). Development of management philosophy for Chinese business environment. *Management Decision*, 43 (4), 542-550.
- Lemert, C. (2008). Social ethics? *Journal for the Theory of Social Behavior*, 27 (2-3), 277-287.
- Lenski, G. E. (2005). *Ecological-Evolutionary Theory: Principles and Applications*. Michigan: Paradigm Publishers.
- Leung, S. H., Chan, J. W., & Lee, W. B. (2003). The dynamic team role behavior- the approaches of investigation. *Team Performance Management: An international Journal*, 9 (3-4), 84-90.
- Lewin, K. (1947). Frontiers in group dynamics: concept, method and reality in social science; social equilibria and social change. *Human Relations*, 1, 5-40.
- Linder, J. C., Cole, M. I., & Jacobson, A. L. (2002). Business transformation through outsourcing. *Emerald*, 30 (4), 23-28.
- Marsden, C. (2000). The new corporate citizenship of big business: part of the solution to sustainability. *Business and Society Review*, 105 (1), 9-25.
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50, 370-396.
- Matthews, H. S., & Lave, L. B. (2003). Using input-output analysis for corporate benchmarking. *Benchmarking: An International Journal*, 10 (2), 152-167.
- May, M. W. (2006). Rational choice. In P. J. Burke (Ed.). Stanford University Press.
- Mayo, E. (1933). *The Human Problems of an Industrial Civilization*. New York: The Macmillan Company.

- McAlearney, A. S. (2005). Exploring mentoring and leadership development in health care organizations: experiences and opportunities. *Career Development International*, 10 (6-7), 493-511.
- McAuley, J., Duberley, J., & Johnson, P. (2007). *Organization Theory: Challenges and Perspectives*. Prentice Hall/Financial Times.
- McGregor, D. (1957). The human side of enterprise. *The Management Review*, 46 (11), 22-28.
- McKinsey&Company. (2008). *Enduring Ideas: The 7-S Framework*. Retrieved February 17, 2013, from Insights and Publications: [http://www.mckinsey.com/insights/strategy/enduring\\_ideas\\_the\\_7-s\\_framework](http://www.mckinsey.com/insights/strategy/enduring_ideas_the_7-s_framework)
- McLennan, K. (2005). What do unions do?- a management perspective. *Journal of Labor Research*, 26 (4), 597-621.
- Menon, S. T. (2001). Employee empowerment: an integrative psychological approach. *Applied Psychology: An International Review*, 50 (1), 153-180.
- Meyer, J. W., & Brian, R. (1977). Institutionalized organizations: formal structure as myth and ceremony. *American Journal of Sociology*, 83 (2), 340-363.
- Meyerson, D. E. (2001). Radical change, the quiet way. In *HBR's 10 Must Reads on Change Management*. Boston: Harvard Business Review Press.
- Michael, R. K., Sower, V. E., & Motwani, J. (1997). A comprehensive model for implementing total quality management in higher education. *Benchmarking for Quality Management & Technology*, 4 (2), 104-120.
- Michelman, P. (2007, July). Overcoming resistance to change. *Harvard Management Update*, pp. 3-4.
- Miller, D., & Friesen, P. H. (1980). Momentum and revolution in organizational adaptation. *Academy of Management Journal*, 23 (4), 591-614.
- Miller, D., & Friesen, P. H. (1984). A longitudinal study of the corporate life cycle. *Management Science*, 30 (10), 1161-1183.
- Mintrom, M., & Vergari, S. (1998). Policy networks and innovation diffusion: the case of state education reforms. *The Journal of Politics*, 60 (1), 126-148.
- Mitri, M. (2003). A knowledge management framework for curriculum assessment. *Journal of Computer Information System* (Summer), 15-24.
- Moliterno, T. P., & Mahony, D. M. (2010). Network theory of organization: a multilevel approach. *Journal of Management*.
- Morgan, G. (1986). *Images of Organization*. Newbury Park, CA: Sage.

- Morgan, S. P., & Teachman, J. D. (1988). Logistic regression: description, examples, and comparisons. *Journal of Marriage and the Family*, 50 (4), 929-936.
- Morrison, J. (2004). Legislating for good corporate governance. *Journal of Corporate Citizenship*, 15, 121-133.
- Moulin, A. M. (1991). *The biological notion of self and non-self*. Retrieved August 2, 2012, from Stanford Encyclopedia of Philosophy: <http://stanford.library.usyd.edu.au/entries/biology-self/>
- Murray, P. (2003). Organizational learning, competencies, and firm performance: empirical observations. *The Learning Organization*, 10 (5), 305-316.
- Nelson, L. (2003). A case study in organizational change: implications for the theory. *The Learning Organizations*, 10 (1), 18-13.
- Nourayi, M. M., & Daroca, F. P. (2008). CEO compensation, firm performance and operational characteristics. *Managerial Finance*, 34 (8), 562-584.
- O'Brien, R. C. (1995). Employee involvement in performance improvement: a consideration of tacit knowledge, commitment and trust. *Employee Relations*, 17 (3), 110-120.
- OED. (2013). *Online Etymology Dictionary*. Retrieved February 17, 2013, from Dictionary.com: <http://dictionary.reference.com/browse/homeostasis>
- Ogbonna, E., & Harris, L. C. (2003). Innovative organizational structures and performance. *Journal of Organizational Change Management*, 16 (5), 512-533.
- Okpara, J. O., & Wynn, P. (2008). Human resource management practices in a transition economy: challenges and prospects. *Management Research News*, 31 (1), 57-76.
- Orlikowski, W. J., & Yates, J. (2002). It's about time: temporal structuring in organizations. *Organization Science*, 13 (6), 684-700.
- Oshagbemi, T. (2004). Age influences on the leadership styles and behavior of managers. *Employee Relations*, 26 (1), 14-29.
- Papastefanou, N. (2010, September). A complexity theory-based management framework for virtual organizations. *African Journal of Business Management*, 4 (11), 2323-2337.
- Pascale, R. T., & Sternin, J. (2005, May). Your company's secret change agents. *Harvard Business Review*, 83 (5), 72-81.
- Pech, R. J., & Oakley, K. E. (2005). Hormesis: an evolutionary "predict and prepare" survival mechanism. *Leadership & Organizational Development Journal*, 26 (8), 673-687.

- Pentland, A. (2012). The new science of building great teams. *Harvard Business Review* (April), 62-70.
- Perrini, F., & Minoja, M. (2008). Strategizing corporate social responsibility: evidence from an Italian medium-sized, family-owned company. *Business Ethics: A European Review*, 17 (1), 47-63.
- Perrons, D. (2003). The new economy and the work-life balance: conceptual explorations and a case study of New media. *Gender, Work and Organization*, 10 (1), 65-93.
- Peters, B. G. (2012). *Institutional Theory in Political Science: The New Institutionalism*. London: Continuum.
- Pfeffer, J., & Salancik, G. (1978). *The External Control of Organizations*. New York: Harper & Row.
- Politis, J. D. (2005). Dispersed leadership predictor of the work environment for creativity and productivity. *European Journal of Innovation Management*, 8 (2), 182-204.
- Powell, W. W. (1990). Neither market nor hierarchy: network forms of organization. In B. M. Staw (Ed.), *Research in Organizational Behavior* (Vol. 12, pp. 295-336).
- Prasad, V., & Manohar, K. (1996). Fred W. Riggs. In D. Prasad, V. Prasad, & P. Satyanarayana, *Administrative Thinkers*. New Delhi: Sterling Publishers.
- Psoinos, A., & Smithson, S. (2002). Employee empowerment in manufacturing: a study of organizations in the UK. *New Technology, Work and Employment*, 17 (2), 132-148.
- Purcell, J. (2001). The meaning of strategy in human resource management: a critical text. In J. Storey, *Human Resource Management*. London: Thomson Learning.
- Raghavulu, C. (2012). Chris Argyris. In D. Prasad, P. Prasad, & P. Satyanarayana, *Administrative Thinkers*. New Delhi: Sterling Publishers.
- Rao, P. (2009). The role of national culture on Mexican staffing practices. *Employee Relations*, 31 (3), 295-311.
- Rao, R. S. (1996). Luther Gulick and Lyndall Urwick. In D. Prasad, V. Prasad, & P. Satyanarayana, *Administrative Thinkers*. New Delhi: Sterling Publishers.
- Rashid, F., & Edmondson, L. H. (2013). Leadership lessons from the Chilean mine rescue. *Harvard Business Review* (July August), 113-119.
- Rice, A. K., & Rice, A. L. (1963). *The Enterprise and Its Environment: A System Theory of Management Organization*. London: Tavistock Publications Limited.

- Riggs, F. W. (1961). *The Ecology of Public Administration*. London: Asia Publishing House.
- Robbins, S. P. (1999). *Organization Theory* (3rd ed.). New Delhi: Prentice-Hall of India Private Limited.
- Rondinelli, D. (2002). Transnational corporations: international citizens or new sovereigns? *Business and Society Review*, 107 (4), 391-413.
- Rosenberg, S., & Mosca, J. (2011). Breaking down the barriers to organizational change. *International Journal of Management & Information Systems*, 15 (3), 139-146.
- Rovik, K. A. (2011). From fashion to virus: an alternative theory of organizations' handling of management ideas. *Organization Studies*, 32 (5), 631-653.
- Rugman, A. M., & Verbeke, A. (2003). Extending the theory of the multinational enterprise: internalization and strategic management perspectives. *Journal of International Business Studies*, 34, 125-137.
- Sabherwal, R. (2003). An empirical study of the effect of knowledge management processes at individual, group, and organizational levels. *Decision Sciences*, 34 (2), 225-260.
- Sagheer, S., Yadav, S., & Deshmukh, S. (2009). Developing a conceptual framework for assessing competitiveness of India's agrifood chain. *International Journal of Emerging Markets*, 4 (2), 137-159.
- Saka, A. (2003). Internal change agents' view of the management of change problem. *Journal of Organizational Change Management*, 6 (5), 480-496.
- Salaman, G., & Asch, D. (2003). *Strategy and Capability: Sustaining Organizational Change*. Berlin: Blackwell Publishing.
- Santos, F. M., & Eisenhardt, K. M. (2005). Organizational boundaries and theories of organization. *Organization Science*, 16 (5), 491-508.
- Savolainen, T., & Haikonen, A. (2007). Dynamics of organizational learning and continuous improvemetn in six sigma implementation. *The TQM Magazine*, 19 (1), 6-17.
- Schein, E. (1988). *Organizational Psychology*. Englewood Cliffs: Prentice-Hall.
- Schuler, R. (1992). Strategic human resources management: linking the people wwith the strategic needs of the business. *Organizational Dynamics*, 21 (1), 18-32.
- Selznick, P. (1949). *Tennessee Valley Augthority (TVA) and the Grass Roots: A Study in the Sociology of Formal Organization*. Los Angeles: University of California Press.



- Sen, S., Bhattacharya, C., & Korschun, D. (2006). The role of corporate social responsibility in strengthening multiple stakeholder relationships. *Journal of the Academy of Marketing Science*, 158-166.
- Seyfang, G. (2006). Ecological citizenship and sustainable consumption: examining local organic food networks. *Journal of Rural Studies*, 22 (4), 383-395.
- Shepherd, J. L., & Mathews, B. P. (2000). Employee commitment: academic vs practitioner perspectives. *Employee Relations*, 22 (6), 555-575.
- Sheppard, J. P. (1995). A resource dependence approach to organizational failure. *Social Science Research*, 24, 28-62.
- Simmonds, D., & Gibson, R. (2008). A model of outsourcing HRD. *Journal of European Industrial Training*, 32 (1), 4-18.
- Sirkin, H. L., Keenan, P., & Jackson, A. (2005). The hard side of change management. In *HBR's 10 Must Reads on Change Management- 2011*. Boston: Harvard Business Review Press.
- Smith, A. C., & Mouly, V. S. (1998). Empowerment in New Zealand firms: insights from two cases. *Empowerment in Organizations*, 6 (3), 69-80.
- Smith, I. (2006). Continuing professional development and workplace learning-15: Achieving successful organizational change- do's and don'ts of change management. *Library Management*, 27 (4-5), 300-306.
- Smith, P. G. (1993). Why change is hard. *Across the Board*, (January/February), 55-56.
- Sohail, M. S., Duad, S., & Rajadurai, J. (2006). Restructuring a higher education institution: a case study from a developing country. *International Journal of Educational Management*, 20 (4), 279-290.
- Som, A. (2008). Innovative human resource management and corporate performance in the context of economic liberalization in India. *The International Journal of Human Resource Management*, 19 (7), 1278-1297.
- Stachowicz-Stanusch, A. (2010, April). Corruption Immunity based on positive organizational scholarship towards theoretical framework. *Organization and Management*, 1 (139), 83-103.
- Stanek, M. B. (2004). Measuring alliance value and risk: a model approach to prioritizing alliance projects. *Management Decision*, 42 (2), 182-204.
- Staw, B. M., Sandelands, L. E., & Dutton, J. E. (1981). Threats rigidity effects in organizational behavior: a multilevel analysis. *Administrative Science Quarterly*, 26 (4), 501-524.

- Subramaniam, N., & Mia, L. (2001). The relation between decentralized structure, budgetary participation and organizational commitment. *Accounting, Auditing & Accountability Journal*, 14 (1), 12-29.
- Tan, K. C. (2001). Framework of supply chain management literature. *European Journal of Purchasing & Supply Management*, 7, 39-48.
- Tao, M., Takagi, H., Ishida, M., & Masuda, K. (1998). A study of antecedents of organizational commitments. *Japanese Psychological Research*, 40 (4), 198-205.
- Taylor, B. (2002). Privatization, markets and industrial relations in China. *British Journal of Industrial Relations*, 40 (2), 249-272.
- Taylor, D. W. (2000). Facts, myths, and monsters: understanding the principles of good governance. *The International Journal of Public Sector Management*, 13 (2), 108-124.
- Taylor, F. W. (1911). *Fundamentals of Scientific Management*. Retrieved March 27, 2012, from Principles of Scientific Management : <http://www.marxists.org/reference/subject/economics/taylor/principles/ch01.htm>
- Taylor, S., Levy, O., Boyacigiller, N. A., & Beechler, S. (2008). Employee commitment in MNCs: impacts of organizational culture, HRM and top management orientations. *The International Journal of Human Resource Management*, 19 (4), 501-527.
- TDS. (2012). *Frederick Herzberg- Theory of Motivation*. Retrieved April 6, 2012, from Training and Development Solutions: <http://www.trainanddevelop.co.uk/article/frederick-herzberg-theory-of-motivation-a78>
- Thompson, J. D. (1967). *Organization in Action: Social Science Base of Administrative Theory*. New Brunswick: Transaction Publishers.
- Trist, E. L., & Bamforth, K. W. (1951). Some social and psychological consequences of the Longwall method of coal-getting: an examination of the psychological situation and defense of a work group in relation to the social structure and technological content of the work system. *Human Relations*. doi:DOI: 10.1177/001872675100400101
- Tushman, M. L., & O'reilly III, C. A. (2007). *Winning Through Innovation: A Practical Guide to Leading Organizational Change and Renewal*. Boston: Harvard Business Press.
- Ulrich, D. (1998). A new mandate for human resources. *Harvard Business Review*, (January - February), 124-134.

- Valikangas, L. (2010). *The Resilient Organization: How Adaptive Cultures Thrive Even When Strategy Fails*. San Francisco: McGraw Hill
- Van Gulick, R. (2011). *Consciousness*. Retrieved from The Stanford Encyclopedia of Philosophy: <http://plato.stanford.edu/archives/sum2011/entries/consciousness/>
- Vlachos, I. (2008). The effect of human resource practices on organizational performance: evidence from Greece. *The International Journal of Human Resource Management*, 19 (1), 74-97.
- VU. (2006). Immunity of International Organizations and Alternative Remedies Against the United Nations. *Seminar on State Immunity*. Vienna University International Law.
- Walter, I. (2012). The real leadership lessons of Steve Jobs. *Harvard Business Review* (April), 93-100.
- Wang, C. L., & Ahmed, P. K. (2003). Organizational learning: a critical review. *The Learning Organization*, 10 (1), 8-17.
- Wang, H., & Hong, Y. (2009). China: technology development and management in the context of economic reform and opening. *Journal of Technology Management in China*, 4 (1), 4-25.
- Wang, Z., & Zang, Z. (2005). Strategic human resources, innovation and entrepreneurship fit: a cross regional comparative model. *International Journal of Manpower*, 26 (6), 544-559.
- Watkins, M. (2007, June 11). *Organizational Immunology (Part 1: Culture and Change)*. Retrieved April 11, 2012, from HBR Blog Network: [http://blogs.hbr.org/watkins/2007/06/organizational\\_immunology\\_part\\_1.html](http://blogs.hbr.org/watkins/2007/06/organizational_immunology_part_1.html)
- Watkins, M. (2007, June 15). *Organizational Immunology (Part 2: Brains and Immune Systems)*. Retrieved April 11, 2012, from HBR Blog Network: [http://blogs.hbr.org/watkins/2007/06/organizational\\_immunology\\_part\\_2.html](http://blogs.hbr.org/watkins/2007/06/organizational_immunology_part_2.html)
- Watson, D. (2004). Managing quality enhancement in the personal social services: a frontline assessment of its impact on service provision within residential childcare. *The International Journal of Public Sector Management*, 17 (2), 153-165.
- Wehrich, H., & Koontz, H. (1993). *Management: A Global Perspective*. Singapore: McGraw Hill, Inc.
- Welsh, E., Ganegoda, D. B., Arvey, R. D., Wiley, J. W., & Budd, J. W. (2012). Is there fire? Executive compensation and employee attitudes. *Personnel Review*, 41 (3), 260-282.

- Werner, S. (2002). Recent development in international management research: a review of 20 top management journals. *Journal of Management*, 28 (3), 277-305.
- Wessel, M., & Christensen, C. M. (2012). Surviving Disruption. *Harvard Business Review* (December), 2-10.
- White, M., Hill, S. M., Mills, C., & Smeaton, D. (2003). High-performance management practices, working hours and work-life balance. *British Journal of Industrial Relations*, 41 (2), 175-195.
- William, M. K. (2006). *Descriptive Statistics*. Retrieved March 3, 2014, from Research Methods Knowledge Base: <http://www.socialresearchmethods.net/kb/statdesc.php>
- Williams, C., & Ferguson, M. (2005). Recovering from crisis: strategic alternatives for leisure and tourism providers based within a rural economy. *International Journal of Public Sector Management*, 18(4), 350-366.
- Wilson, K., & Doz, Y. L. (2012). 10 rules for managing global innovation. *Harvard Business Review* (October), 85-90.
- Wilson, W. (1986, November 1). *The Study of Administration*. Retrieved April 6, 2012, from Teaching American History: <http://teachingamericanhistory.org/library/index.asp?document=465>
- Winch, G., Millar, C., & Clifton, N. (1997). Culture and organization: the case of Transmanche-link. *British Journal of Management*, 8, 237-249.
- Woodward, J. (1965). *Industrial Organization: Theory and Practice*. Oxford: Oxford University Press.
- Wren, D. A. (1979). *The evolution of management thought* (2nd ed.). New York: Wiley.
- Wu, J., Dunn, S., & Forman, H. (2012). Study on green supply chain management practices among large global corporations. *Journal of Supply Chain Operations Management*, 10 (1), 182-194.
- Yasin, M. M. (2002). The theory and practice of benchmarking: then and now. *Benchmarking: An International Journal*, 9 (3), 217-243.
- Yoder, T. (2001). Corporate responsibility and the environment. *Business and Society Review*, 106 (3), 255-272.
- Yrjanainen, J. L., Suomala, P., & Uusitalo, O. (2012). *Global Key Account as a Vehicle for Diffusing Subsidiary Initiatives in Multinational Companies*. Retrieved January 23, 2013, from Research Gate: [http://www.researchgate.net/publication/228457414\\_Global\\_key\\_account\\_as\\_a\\_vehicle\\_for\\_diffusing\\_subsidiary\\_initiatives\\_in\\_multinational\\_companies](http://www.researchgate.net/publication/228457414_Global_key_account_as_a_vehicle_for_diffusing_subsidiary_initiatives_in_multinational_companies)

- Yu, H., & Miller, P. (2003). The generation gap and cultural influence- a Taiwan empirical investigation. *Cross Cultural Management: An International Journal*, 10 (3), 23-41.
- Yun, S., Cox, J., & Sims, H. P. (2007). Leadership and teamwork: the effects of leadership and job satisfaction on team citizenship. *International Journal of Leadership Studies*, 2 (3), 171-193.
- Zalta, E. N. (Ed.). (2010, Summer). *The Biological Notion of Self and Non-self*. Retrieved April 8, 2012, from The Stanford Encyclopedia of Philosophy: <http://plato.stanford.edu/archives/sum2010/entries/biology-self/>
- Zhang, D., Zhang, Z., & Yang, B. (2004). Learnig organization in mainland China: empirical research on its application to Chinese state-owned enterprises. *International Journal of Training and Development*, 8 (4), 258.
- Zhu, Q., Sarkis, J., & Lai, K. (2012). Green supply chain management innovation diffusion and its relationship to organizational improvement: an ecological modernization perspective. *Journal of Engineering and Technology Management*, 29 (1), 168-185.

## Appendix 1 **Executive discourse in brief**

### 1. **Senior Consultant** at an international consulting firm

Experience and insight of a senior management consultant tell that every successful organizations prepare the minds of people for the work necessary to the benefits of all stakeholders of the organizations. The primary concern of the management is to make the minds of people and the resources ready to work.

The pace of organizational development urgently needs managerial attention that must consciously reinforce and nurture the constructive forces and phase-out the disruptive ones. There is the need to harness the constructive forces within the organizational setting to stay focused and integrated. This requires both positive thinking and a creative approach not only in one's personal life but at the workplace as well.

We can take the evidence that the societies known as advanced and developed today, they have raised to the higher level not through technological efficiency, but they are practicing sound moral and *ethical values*. The corruption and crime practices are substantially lower in the countries or the societies where there are high-level of their moral and ethical values. When we consider the cases of developed organizations, we find technological advancement and material development but they are also experiencing higher rate of crime. Misuse of power and poor morality of the personnel obstruct the change initiatives for the best purpose.

Positive thinking and creativity is necessary for organization development. However, the beliefs, attitudes, and value preferences are deeply rooted in the minds of influential people and they are immune to changes. We can develop the attitude of positive thinking and creativity through a couple of means like self-analysis, transcending the obvious limitations and dilemmas of work life, and looking at the future with hope and confidence. Creativity and positive thinking forces us to have self-analysis transcends the obvious limitations and dilemmas of work life, took to the future with hope and confidence.

Today, organizations need managers capable to give solution to the problem. They are hiring people to have creativity that is nourishing and sustaining. People work mostly because of their ego or self, which includes revenge as well. The most significant aspect of change management is self-motivation or motivation from within among the personnel working in an organization.

## 2. **Administrative Officer** at an international joint venture project

There are factors like ego and inbuilt values, the tangible and intangible facilities, and external forces influencing the change management process if initiated in the manufacturers of cultural and religious artifacts. The external forces are the forces in the general environment as well as forces in the industry environmental forces. The tangible facilities are the physical infrastructure and intangible facilities are intellectual property. The attitude is representing the ego and inbuilt values of an executive. When one works in such a way that harmonizes all these factors, the work becomes enjoyable, the workers becomes self-motivated.

The change management process needs to maintain a balance between work-life and personal-life of the stakeholders. The process should not focus on traditional and orthodox patterns of working techniques. It should be capable to revive of inner strength of positive thinking and creativity that can be felt and experienced but are not measurable. This prepares an individual to cope with the environmental scramble and existential stress. It enables an individual to become a naturally happy person with no real gap between his/her private face and the public face. Such a person is a realized person because he looks for inspiration and strength within himself. This feature is possible not only for managers and for change agent but for all individuals involved in the entire change management process.

## 3. **Chartered Accountant** at a firm of chartered accountants

In the opinion of a Chartered Accountant, change management process begins with a positive note in our perceptions of those who will be working with us. The starting point is to look at another person with the eye of potentialities. The reason is that the change agent and the stakeholders are in a common enterprise and therefore, both must work together efficiently and effectively in every aspect of organizational life. This set of perceptions can become a concrete reality only when they arise from within, but not imposed from somewhere else. The process greatly focuses on the two major questions- how to get the most out of the fellow workers and how to keep the customers or clients happy and satisfied.

When one attempts to concretize these two questions, the primary focus rests upon the one question- how to satisfy people; because one can get the most out of fellow workers if he can keep them also happy. Now another question arises- can material things make an individual satisfied? Most probably answer comes 'no' because we find people around us so happy and sad irrespective of material wellbeing or technological advancement.

Therefore, our primary concern is to look at the self-respect and dignity of all the concerned parties.

#### 4. **Director** at an hydropower generating and transmitting organization

A director of at a large public enterprise of the country asked two questions. What is change? Why the change is necessary? Everyone wishing to bring change should answer these major questions effectively to the stakeholders. Yes, there is change in the environment and to make change is obvious in an organization as well. When we recognize the need for change that it is necessary for the organization then we need to communicate among the all concerned.

#### 5. **Executive Director** at a chemical fertilizer importing

Transport business is more complex compared to others because it relates greatly to the perception and satisfaction of the customers as well. Our level of satisfaction depends on our perception and evaluation of the causes and consequences of the changes affecting us. The change is different from the usual and the difference may or may not be acceptable to us. Some changes are likely to be acceptable or welcomed and some changes are unacceptable and resisted. It also depends on our judgment of existing state of affairs and future state of affairs. It is our judgment to the present and future impacts of such changes. Understanding of people is necessary in change management process. It evolves around the people and it attempts to motivate employees, to inspire customers, to impress the suppliers, and to ensure returns to the investors. Understanding about the stakeholders shall help to estimate the level of acceptance and resistance to the change interventions.

#### 6. **Managing Director** at an international trading house

For an importer and exporter, the money, material wellbeing, technological advancement, industry structure, organization design and business networks are subservient in the context of diversity in terms of culture, values, and philosophy among others directly related to the product attributes. The management practices around the globe differ significantly. We find American management practices a more contractual on hire and fire basis. Europeans have a dash of family and patriotic values. Japanese favor complete job security and long-term employment. Nepalese would like to have closeness and life-long relationships. We cannot ignore the role of culture, value, and philosophy of doing business. One cannot ignore the legacy of the ancestors while talking about human roles in change management process.



## 7. **Legal Officer** at an industrial trading group

In the opinion of a legal advocate, every change intervention should evolve around success, prosperity, and justice. There are three questions associated to the three terms. One is how successfully the change interventions become complete. The second one is what level of prosperity the change interventions bring for the stakeholders. Moreover, the third one is that do the change interventions provide justice to the all kinds. When every change interventions are capable to provide acceptable answer to these questions, the change shall be a desirable one. Failing to provide acceptable answer, the change shall become an avoidable one.

## 8. **Chief Executive Officer** at an insurance company

The role of regulator is significant in bringing change. The regulatory directives including the directives for good governance are compelling organizations for bringing changes. The insurance companies were significantly changing in the composition of their Board of Directors and compensation policies of the executives including compensations to the chief executive officer.

Senior management in insurance companies does not want change more specifically in modernization of the services by adopting new technology. Seniors fear to delegate authority. They assume that their juniors are not capable of enjoying the authority if delegated. Everything will collapse if they will not take part in actions and decisions. There is an assumption of some personalities, especially in insurance industry that they are not only important for their own company but they considered they are important for the entire insurance industry as well. They intend to take part in every concern of the entire industry.

There is tendency of seeking favor from top-level management including CEO in comparatively large firms. The lower and middle level executives attempt to influence a segment of top management in order to stand firmly in favor or against the idea of change. Moreover, the involvement of unions and use of professional associations in order to protect their interest is common in the industry.

Mentality of the managers, mostly the seniors, is the main reason of not achieving success as it could be achieved from the changes in and around the companies.

When any proposal comes to the board meeting, the board members tend to look at their personal benefits, position power in the organization, and additional responsibility if any.

When they find something not beneficial, or adding responsibility, then they ignore, avoid, or resist and ultimately they do not accept such change.

Chief Executive Officer in almost all of the organizations comes from major shareholders or owners of the organizations. Every personal and household expenditure of the CEO and board members as well becomes the expenditure of the company. Moreover, personal guest of these individuals becomes the company guest and the cost of hotel accommodation, transportation, foods, and any gift for the guest goes to the company expenses. There are rampant irregularities starting just before selling of insurance policy to the settlement of claims; and the change attempts made so far have not been effective in favor of the company.

#### 9. **Chartered Accountant** at an auditor's firm

The commercial banks are making money by charging unnecessarily and unethically to the customers in the name of service charges, commission and transaction charges as well. Syphoning money in the name of relatives, funding fake projects, and manipulation of the mortgage value and property are some example of unacceptable business ethics. There are attempts of changes one after another in order to upgrade the ethical standards in financial institutions, but the strength of unethical practices is much stronger.

The company resources mainly vehicles, stationaries, and utilities are going for the personal purpose of the personnel and their family members. The lower level workers like office assistants were serving at the home of the senior officers or they were working for the personal benefits of the officers. Short-termism is being more attractive instead of a long-termism among the personnel.

#### 10. **Principal** at a college

Education service tax is unacceptable to the educational institutions, but we have to accept it. There is no way of avoidance of it because it is the government's decision.

Authority delegation is normal practice in the college. However, the decision of the person enjoying the delegated authority is acceptable if there is positive result from the application of the authority. Otherwise, the superior seeks clarification from the subordinate, and may take actions against the subordinate if he thinks necessary to take actions if the delegation does not make positive impacts.

There is delegation of authority in practice but the person getting authority cannot make decision independently without consent of the supervisor. Therefore, if supervisor's consent is always necessary, what is the sense of delegating the authority? Ultimately, the supervisor wishes to keep entire power at his own hand.

Appointment of the CEO/MD only based on the share investment considered best, but it would be superb if he actually bears the competencies too. Owner CEO would perform best compared with non-owner CEO/MD. Business development and resources arrangement are depending on personal relationships of the executives.

Business philosophy is changing somewhere but our case is different. Professionalism is the need of the day, but our internal organizational setting especially personal relationship is most significant for us while doing business with us i.e. first priority to personal relationship.

Communal feeling is there at workplace. The caste, geographical location, political affiliation, gender and spoken language are major factors promoting communal feeling and discrimination at work.

Use of information technology is increasing, but the habit of conventional teaching-learning process is dominating in most of the teaching jobs. However, computer and Internet are facilitating the job of teaching and learning.

Major challenge is how to motivate the students towards the course. Students are not motivated in non-science courses like management, humanities, and education programs compared to the science, engineering and medicine programs.

The national and international contexts as well as the role of television, mobile, employment opportunities, attitude towards the education, were the major factor of (de)motivation of the students.

#### 11. **Director** at an educational network

Director at a large educational network tells that there is fundamental change in the concept of group and partnership formation. Previously, it was not very difficult to form partnership or group for business purpose, but it used to be for a short period. Consequently, business organizations were facing serious consequences for example of collapse of the company, establishment and operationalization of similar companies by the breakaway party challenging the original one. There are new colleges established to those colleges in which

the founders of the new colleges were also founder of the previous as well. This is not only in education sector, but it is also in travel and tourism, carpet, garment, and handicraft industries as well.

Establishment of rival firm was not because of partnership break-up and conflict between the partners but it was also from the fired or dissatisfied employees as well. The companies establish as such were not challenging the firm from outside instead they were taking major customers, employees, and business secrets with them as well. The practice of taking customers and employees was more in banking and financial institutions in the country. The original companies had been compelled to change their strategies in order to stand firmly in the market.

May be realizing such cases, new entrepreneurs are changing their mentality only forming groups or partnerships and strategic alliances for giving continuity to their relationships and contributions. There were a couple of colleges established in association with senior most and popular professors but the association did not continue to the success for a longer period.

The concept of teamwork is gaining more importance. Organizations cannot run because of a name and fame or influence of one person alone. This assumption has become obsolete and outdated, but there is need of a team spirit. Therefore, the most serious task is to give continuity to the group or alliances.

## **12. Department Head at a university**

A program director tells that use of authority has become optional looking at the individual benefits and personal gain, credibility improvement of the person. Authority holders rarely use authority in favor of the organization and its beneficiaries. When they see more benefits that are personal they use the authority, otherwise, they say why to do best only for the benefits of others. The director produced an evidence of a construction work at a central department of a university. The department head had completed everything and had just started the process of tendering for the construction work; at the same time new department head replaces the existing department head under the normal process of the organization. The new department head takes the charge of the department, and cancels the process of tendering by saying that tendering process becomes too costlier, only contractor makes abnormal profits, and the idea of tendering is not good, and there is no option then to cancel it! Ultimately, the tendering process cancelled.

There are groups, both internal and external as well, they comes to the organization and asks for facilities or money. The tendency of asking money by various pressure groups is increasing day by day. The groups mainly consist the politicians inside the organization or outside the organizations. The money they are asking is entirely for their own use. However, there were no more pressure groups seeking justifications of the price charged by the organizations for their products or services at one part and the worth or value of such products or services for the clients or customers on the other part.

### 13. **Marketing Officer** in a non-life insurance company

Violation of code of conduct is increasing and there is no option than to tolerate. The boards of directors, executives, ordinary employees, customers, public administrators, all are working in absence of code of conduct or they are violating the code of conduct in one way or another.

### 14. **Business Manager** at a catering service

Celebrations in the name of rituals, events, and festivals are increasing especially focusing on the content than the context. The celebrations have become too costly for the organizations, but there is no option than to tolerate for the organizations.

In fact, there are many changes in organizations. Either a picnic, birthday, anniversary, marriage, ritual and festival or launching new products, there is need of a catering services. The items and patterns of services are changing dramatically. There was opposition, openly or closely, of the restriction imposed by the government in the number of invitees in the marriage like ceremonies. However, the tendency of using catering services is increasing in the society.

### 15. **Operation Officer** at an banquet

Some of the celebrations are against the laws, and beyond the financial viability of the organizations as well, but still continuous. Very interesting part of the stories is why celebrations are so important for some organizations or individuals that they do not hesitate to go in against the laws and financial viability.

### 16. **Sales Officer** at a food and beverage company

Companies are avoiding or ignoring the provisions made by the policies, laws, acts and regulations. Non-disclosure of the financial transactions, invasion of taxes, contamination

and manipulation in quality and quantity of the products and services, non-compliance to the regulatory requirements are some critical examples in the industry.

**17. Business Development Officer** at a secretarial training institute

Appointment of beautiful and smart girls as personal secretary and use of them while welcoming guest has been increasing in the society. Some of the female employees were compelled to be involved in making their supervisor pleased in one way or the others. There were boys working as personal assistant for executives as well. The level of sexual harassment was increasing at workplace. The traditional cultural constraints between male and female were replaced by personal choices and preferences at workplace. Individuals are almost free to adopt their style of leaving.

**18. Administrative Officer** at a five star hotel

Employee feels happy if they get chance of using office vehicles and stationary for their personal purpose. Being late for about an hour may be normal for most of the employee. Preparing low quality or non-hygienic food and serving the guests becomes normal for the employees. Twenty percent of purchase amount as a commission while buying items for the hotel is normal for the employees. Mostly often in hotel and tourism industry girls do not hesitate to spend one night with someone if there is personnel benefits of doing such for them; the colleague consider the act as a normal one! Use of girls and women while making negotiation with the major buyers, suppliers, consultants is increasing in these days.

**19. Chief Engineer** at a software engineering company

Online application / activities are more demanding especially in service sector. For example, there is rapid change in the process of taxation, tax returns submission, payment of telephone bills, electricity bills, and much more online banking system. The change is well accepted. The number of people gathering in technology expo was more concentrated at those stalls where there were application and computer that were useful for online payment, and so on.

**20. Accounts Officer** at an advertising agency

Marketing/selling activities are being more important. There are changes in selling patterns. Guarantee, warranty, home deliveries are there. The concept of “system selling” is being developed especially in the areas of technology/software sector

### 21. **Coordinator** at a college

Despite the rapid changes in the technology, the organization and management is not well prepared to adopt to it quite shortly. The conventional patterns of maintaining records, documentary evidences, and payment and banking practices are dominating even the organizations of urban areas.

There is no more increase in the demand of the local college graduates in the local industry. The concept of foreign education or graduated from foreign university becomes best is still prevalent in the society. Youths do not believe that quality education especially in management is available in Nepalese colleges, and they will be able to find job in the market. When asked about the ever increasing number of enrollment and applications in the college admission, it is arguing that the increase is due to increase in population not because of quality perception.

### 22. **Assistant Manager** at a trading company

Most of the organizations were working with equity capital plus loan and borrowings. Business transactions were in credit in most of the cases, but on verbal basis. Payment was made by selling the goods and services more often. Calculation of the cost of capital was primarily based on the interest rate and amount.

### 23. **Senior Officer** at food supply corporation

Every change initiatives were initiated without concrete road map and action plans. There is tendency not to prepare supporting plans and contingency planning. There are much more variables that are affecting the plans for change, like planning premises. Absence of if... then ..... principle in preparing plans. This practice makes every influencing person irresponsible, and they find much more points for their excuses. It would be successful, if that would have happened. That didn't happened that's why it could not be done, and something like that.

Blame game is so popular in the organization. Almost all the change initiatives are for formalities as well. All others were changing, and why not to change them. There is no clear and deterministic approach to change management in any initiatives in the corporation. There were attempts of bringing changes along with the changes in the political system in the country, but could not be materialized. He relates the case to the major political system changes as the revolution of 2046 was just to throw the then system known as Panchayat system. The plan was just to throw the regime, but no plan at all for

the post revolution. Similar case was the movement against the monarchy, the forces who were against the monarchy the same forces against each other just after the regime change.

Let us see what would be the then situation or wait and see the situation was existing in the similar way. The demolition of the monarchy, state restructuring and similar cases are some examples to look at. What would be the socio-economic impact if the state would be restructured? We do not make analysis of the impact of changes, but we only attempt to bring changes. The change would be compatible or not we never think of it. We have a tendency of let's throw it away first, and then let's see what can be done.

All the change initiatives were found comparatively more successful, that had alternative plans as well as contingency plans prepared in advance / and the parties committed to such plans and initiatives.

#### 24. **Chief Executive Officer** in an insurance corporation

There was no system of early threat detection system. If anything needs responding it is crisis management. If there could be a system, than there could not be the situation of crisis management, managers would be getting sufficient time to respond to the change requirement.

The major strength of the corporation was its fund and image of it as it was government organization. People trust more the government offices than the private companies in Nepal do. The influence of union is too much in the organization. He produces an instance among others that there were 365 vacancies in the organization but only about 160 were filled. One after other attempts of filling the vacant positions of about 200 employees were failing only because of the pressures of more than a half dozen unions of employees in the organization.

The system, technology, and process were too traditional that is why there was no audit for the last five years and corporate governance was too poor as well.

Even SLC failed individual was officer in the company for example.

There was no HR planning, because of the union, there was also the weakness of the government as well, he said, as it was fully government corporation.

There was no marketing plan, no good governance and absence of corporate culture and professionalism. The entire system is immune to change for professionalism.

If any change or developmental attempt started, and sought for union support and cooperation, the unions come with their own demands and ask to fulfil those first. If



fulfilled their demands, again they come with other set of demands. Demands after demands, it becomes nearly impossible to get support from them. If you dare to initiate any new initiative, they all come to you and do not hesitate even to harm you physically in your own chamber.

The idea of separating life and non-life activities of the company actually initiated during 2052 BS. Almost after two decades it is being materialized in its own way. The insurance laws in the country were not permitting two insurance business under one organization, In order to make change of business going against the laws of the land, and to make compatible to the existing laws, it takes decades, how change management becomes successful in the organization, he questions. It is one serious case of change initiatives not being successful.

The government officials are power centered. A section officer, sometimes even lower level officer than the section officer commands a CEO at a public limited companies or private limited companies. The consent of such officers is important, and in absence of their consent, the company heads cannot do anything for the best of their company. More specifically, public limited companies are not independent from the influence of the government.

The competency of government officials is also in question mark. The concept of bossism is very strong among them. The officials sometimes claim that they are havening everything necessary to manage the organizations. The officials are being hurdle for change in some public limited companies.

#### **25. Division Chief at a commercial bank**

The employees are seeking personal benefits from each and everything what they do for the bank, but the pattern was different before a couple of years earlier. Employees were working for the bank even during off hours (before and after the office hours) in absence any financial benefits. They were not seeking financial benefit fetching tasks only. There was devotion towards the bank.

Now, the situation has been changed, very few people are serious to develop their competencies. Unfortunately, most of the employees are not serious to develop their performance and competencies; but they tend to expect more and more personal gains or promotions for doing nothing good for the bank.

Top management of the bank and officials at the ministry of finance primarily do not trust the bank personnel if any serious case comes in front because they assume that the bank personnel are not competent enough to give solution to the problem. Locally available experts, in their opinion, are not experts and they do not prefer them if any consultancy is necessary for the bank. Local experts are not preferred first, if anything sought or recommended locally is not accepted, but the same thing is recommended by the outsiders (mainly by the donors) that is well accepted. In other words, change and development in the organization from within has become almost impossible without donors' and outside consultants' ideas, advices, and supports.

The structural setting in the public enterprise has not been changed even after a serious of change and development efforts. For an instance, the officers from the ministry of finance are chairing the board of directors of the companies. It means the government's control and influence is directly reaches to the top management of the firm and company. The voice of the government officer is found always lauder than the investor or expert directors because the officers have plenty of rights and authority to take action over the company even other companies that do not present in the board of directors. And the other directors as well in one or another real or fictitious reason or ground. In real sense, there is no more economical or operational freedom in Nepalese organization. In fact, the bank personnel know much better about their bank than the outsider consultants or the government officials.

#### 26. **Director** at an oil corporation

Whatever the change initiative is proposed the Board rejects it if the proposal for change is not beneficial (personal) to the Board members or their close associates. The representation of the secretary/high ranking officials from the ministry in the influential position at the Board is not instrumental in bringing change in the organization. Similarly, the tendency of the juniors/subordinates of "not obeying" instruction and order of the supervisor was another dangerous thing for the corporation. The supervisors are almost unable to get things done.

The officer was totally agree with the version of "no change in real sense in Nepal" i.e. the fundamental work process, control mechanisms, decision making process (mainly final approval of the corporation) rest upon the ministry. The procedural changes in appointment of the CEOs from free competition has been ineffective because every decision has to be

passed through the Board, and the Board is controlled totally from the ministry i.e. bureaucracies/secretaries.

#### **27. Training Officer** at an airline

There is substantial support from the regulators like Nepal Rastra Bank for commercial from within the country. Asian Development Bank and The World Bank also for financial sector reform. These organizations are providing almost everything for the change and development of the banks for example Agriculture Development. Unfortunately, the regulator 'Civil Aviation Authority' is penalizing the airlines instead. The government has no more specific plan and support from national and foreign bilateral and multilateral organizations for the development of the public enterprises.

The government was going for privatization of the public enterprises other than banking institutions selling shares of Nepal Telecom, but taking care of the management of Nepal Bank Limited as an instance. The government and regulators need to support for change and management development of the public enterprises.

At this line the change initiative initiated by the organization were primarily based on the 'contextual' aspect much more than the "contents" of the change. For an instance, the fundamental contents of the work are same even after the major change initiatives in the country. The procedures of doing things are almost same, only manual procedures have been converted into the electronic ones. The tasks of the companies are same in most of the cases. But, the persons have been changed, because of the change in persons and no more change in the work contents and their processes, the result was not fundamentally attractive. Adversely, there was no matching between the person and the change initiatives. Context was changed, but content was the same. Persons were the same and the process was the same. The practice of getting citizenship, for example was not different in producing documentary evidences and following up the application forms.

As immune as the intended purpose of an organization, the hierarchy and levels of the organizations are immune to the change. The levels in PEs were fixed from the beginning of their establishment. The organization levels and hierarchy were not found changing according to the change in the environment i.e. the hierarchy was pre assumed to be fixed, and only the tasks and activities were made accordingly. Change intervention without making change in organization structure and hierarchy does not transform the organizations and businesses.

**28. Project Implementation Unit Chief** at a commercial bank

The respondent tells that bank's change is different from the other organizations. More specifically, changes in supply chain, authority distribution, organizing, and so on are not considered change but financial restructuring (sources and uses of funds) is only considered change in case of a commercial bank.

**29. Account Officer** at water supply corporation

There is nothing required then to grant freedom to the public enterprises. The secretaries/joint secretaries are the ones doing everything what they want to do in the public enterprises, however, political influences cannot be ignored. The CEO selection is based on open competition, but actually it is not in practice. The three names are shortlisted, and from among them these three names, the government selects one for CEO which is political person in one way or another. That is why CEOs are appointed politically at one part and the bureaucracy is as powerful on the other part as chairman of PEs Board of Directors comes from the bureaucrats.

**30. Director** at a drug manufacturing company

There is more influence of *taskar*, black-marketers, and undue influencers in the entire management process. The bureaucrats, politicians, and influential personalities in the societies are either secretly associated with or influenced by those forces. If any areas left by the *taskar*, there is influence of foreigners and donors. Role of third party in change management is significant. Any one wish to bring change in an organization, and the change is not favorable for the *taskar*, the change initiator faces severe threats including threats to life or lose his/her job, there will be no sufficient protection and security to the change makers. The threats shall come from anywhere, nationally or internationally.

**31. General Manager** at a paper industry

When top management becomes wrong, everyone and everything will become wrong eventually. Lower-level people do not do wrong things, they are guided by rules and regulations; they must have to follow the rules and regulations, policies and procedures strictly as specified by the respective supervisors. They are constantly supervised, their tasks/products are passing through different modes and nodes of quality control process established in the organizations. Their good or bad/ right or wrong things are immediately reflected in the due process of the products/services, customer behaviors and feedback, supervisor's behaviors and so on. On the other hand, top-level managers' wrong doings are

not reflected as early as the subordinate's wrong doings are reflected. During the time gap (period of the wrongdoing and its consequence), the situation and the context do changes. Then, the seniors put blame over the situation and try to get excuse in different ways.

Similarly, the decisions and actions of the authorities like central bank, revenue administration, custom offices, and their employees teach the businesses how to cheat the government's revenue by manipulating documents and quality standards and specification just for their personal benefits. They bargain with businesspersons asking to bribe them; otherwise, they would be exercising their power in one way or another. The officials do delay unnecessarily and the businesspersons should pay demurrage charges too.

There is no more attempt of improving productivity as such as the practice of increase in taxes and rates. The central bank is excited to make changes in interest rates (however, it has provided freedom to the commercial banks for it), but not excited as such to monitor the effectiveness of the changes in the interest rates and other levies. Similarly, the officials at the ministry of finance, increases the tax rate, custom duty in order to increase in the name of government's revenue. There is no effectiveness audit of such increases in the taxes especially, indirect taxes. The indirect taxes are increasing the prices of the inputs to the industries, which is making the price of the product dearer to the ordinary people. In this case, how the increased revenue from the increase in the taxes and duties compensated the increased prices is not calculated. In these circumstances, how a business can make changes in cost minimization for instance.

### 32. **Officer** at a telecommunication company

Personnel working in organization were stronger because no one can take action against them, no one can fire them. Contrary to it human resources of the company is too weak because there is so poor mobilization of available personnel in the company.

The situation in most of the public organizations looks like that human resources part is immune to change i.e. no one can change because of the union pressure. In absence of HR mobilization, there is no better result.

### 33. **General Manager** at an electronics company

The Labor Act is completely in favor of the workers. There are 3-5 unions in the conglomerate. Each union consists more than a dozen member and the members do not work for the enterprise because most of the time they are in their union offices and parent political parties. The members are more active in their own politics and do not find time to

work for the enterprises. Management cannot take action against them instead, it has to provide office space, furniture, utilities, and supplies in order to run their union offices within the premises of the enterprises. When you take any action against them, they go to the court, and may win the case as well. The Labor Act tells to make a worker permanent if he/she continuously works for more than 240 days! When one becomes permanent, then it is almost impossible to relieve him/her from the employment.

#### **34. Marketing Manager** at a Television company

Unethical behavior of personnel, from top to bottom, is one of the most serious problem in bringing changes in an organization like television transmission. Reality based information are highly demanded in the society, but the ground reality is very different. The key personnel are seeking the parties/discussants/topics for discussion that would fetch money for them for their personal benefits. For example, there are persons offering Rs. 200,000 and more to the person organizing discussion shows in order to select them as a person of discussion or to make the topic of their choice for discussion and transmission for the show. The unethical behavior of the personnel is adversely affecting the company eventually. The entire communication industry is being unreliable too.

#### **35. Proprietor** of a medical devices manufacturer

There is absence of monitoring in the entire health care services. When talked with government and its agencies about the issue, tells about the shortage of manpower and resources to do so. When you propose to provide manpower in this regard, still they say we do not rely on your people, or we have no policy of asking people to the private sector. There is no guarantee that the medical products including the drugs are meeting the standard specification. Low and low-grade materials, ingredients, equipment, tools are in the market and in health care centers as well.

In this regard, no one is calculating the cost of not changing this scenario. The change initiatives, if any, are not based on the contents, but are based and influenced by the context or experts/consultants, and in the fashion of a carry catcher.

#### **36. Project Manager** at a civil construction company

The organization decision is not made compatible with the contextual considerations. For example in the site office of the Gaddachauki-Chaudhar road section, the provision of air conditioners, drinking water, vehicles were not based on the context but based on the content i.e. temperature, basic need of drinking water and transportation but not based on

the suitability of the devices and processes. The air conditioner prescribed for the site office required three-phase electricity supply but there was only two-phase electricity supply in the locality. Only underground water was available for drinking purpose around the project location but there was provision of purified drinking water, which was available only hundreds of kilometers away from the site office. There were no availability of spare parts and service centers for high-end automobiles but the project had specified high-end vehicles for the use of the site office. The items were unfit into the local context where the construction works had to be completed and the site office had to be maintained.

### 37. **Chief Credit Officer** at a commercial bank

We are still following conventional/traditional procedures of documentation in banking processes. For example, the process of loan approval requires documentation between two or more branches and headquarters. We people at the headquarters hesitate to give consent/approval to the branch officer about the loan sanction; we want hard copies of major documents and do not trust on the electronic copies. Similarly, there is duplication of work- like preparing hard copies and electronic copies- two version of same documents.

The private limited company owners and directors are not enjoying immune to their company's liabilities if any. The status of private limited company does not remain limited liability company because we want their personal guarantee at the time of issuing loans or credit limits and any other similar facilities from our bank. When their company fails or becomes unable to pay their dues, in that case, we recover our money from their personal property as well. We do not grant loan and credit facilities without personal guarantee from the directors

It is quite unfair practice in Nepal that the directors at a private limited company are personally liable to pay the company dues but the same is not seen in limited company. When a bank becomes unable to return the deposited money of an ordinary depositor, the bank directors' are not personally liable to pay for it. The bank directors' personal property is immune to the failure of the bank. We are not changing our mentality towards advanced banking practices, we do not finance without personal guarantee.

The worker's attitude is not positive toward hard working, honesty, and loyalty, which had be inherited among the workers. Workers should have to consider that work is worship, but now everyone is guided by the nature and quantity of personal benefits. The context and content both are much more important for change. One trainer or consultant cannot bring

change in the organization culture, but the entire context must be supportive for it. Both, the content and context should be changing simultaneously.

### 38. **General Manager** at a handicraft exporter

The industry is established only for exporting Nepali handmade paper products. The company has expertise in designing varieties of designs for Nepali paper use. It is fair trade industry and is very much serious about environment protection.

The industry is serious about the copying of its design by those who do not have expertise and investment in design. Other firms copy its design, and they are immune to any action too. He shared his experience of London exhibition where he had exhibited very very new and attractively designed paper products. He set up a stall, but be able to sale only Great Britain Pound 40 equivalent products in 2-3 days period of exhibition. He surprised, looking at the worst position of his products in such international exhibition. Meanwhile, he found exactly same design were selling from another stall, set up by some British citizen and Nepalese citizens probably in partnership. He was shocked, but could do nothing. The patent, which actually had owned by his factory, had already owned by someone else.

The intellectual property, if managed and registered properly, grants immunity to the business. Intellectual property like copyrights, patent, design, trademarks, and so on. Countries like Nepal do not have such practices; instead, there is no respect and guarantee of intellectual property rights. Because of such weak legal and socio-cultural system the business have been found vulnerable too.

### 39. **Production Manager** at a carpet factory

There is change in designs in about five years, but there are no more changes in the materials, and fundamental production procedures. Minor changes can bring substantial changes in the outlook of the carpets and its *buttaharu*. The industry is wishing to change the machinery that was continuously operating for about last 30 years. There are new machineries available in the market as well. However, the problem is not only availability of the machinery, but the problem of the existing machineries which are still functional and operational and can be make operational for the next 10 years. What to do with the existing machine, some machine are quite huge and costing millions of rupees as well, no one is buying such machine, installation of new machine costs too high. At one part, you have to sacrifice the existing machines, which is not easy (to lose millions of rupees) and it is



equally difficulty to fund millions of rupees for the new machine on the other. Because of such cases, the factory is immune to change at all.

Similarly, the labor problem is another major issue in the factory. According to his understanding, labor problem is a never-ending problem; there is no permanent solution in labor relations. When you solve one problem today, after some time the same problem comes to you. Time to time it is repeating. For example, today you solve problem of cafeteria, in case of its unavailability, tomorrow, there will be problem of water supply to the cafeteria.

Workers negligence at work is increasing in these days. When you give more value or priority and respect to the labor, he/she start to disobey you. If you try to maintain a distance he/she start to neglect at work, talks adversely about you and the factory, when you ask not to behave in such a way, he/she starts to form grouping, and try to mobilize his/her unions. No supervisor can take action on the charge of his or her negligence at work. The labor behavior has become a major issue in factories.

You cannot change the work assigned to a worker even if it is necessary. For example, job rotation is necessary and transfer from one job to another even within the same factory at your need. If they need changes, you need to do accordingly; otherwise, there will be strike or boycotts, etc. You cannot assign job to the worker at your discretion but you have to do it at their interest and choice.

Another issue was the donation, sponsorship, and financial as well as materials support to the local clubs, political parties, and pressure groups. Failing to meet their expectations, you may have to face unexpected threats too.

The demand of the carpet is very high in the market. Because of labor problem, breakdown of machine, the factory was not meeting the demand. The chemical composition difficulties are there at the plant. In the end, the existing machineries, attitudes of the labors, and political and security problems are the major issues in industrial sectors in Nepal.

#### 40. **Manager** at industrial district management office

The area of industrial zone is surrounded by rapid urbanization, the industrial districts need to be separated from urban areas. There is complain from the local residents about the pollution, noise, and sometimes labor unrests, as affecting their life-style. The change in, especially increase in urbanization and environmental protection pressures is one of the major areas of concerns for the managers and industries as well. In absence of long-term

vision, mainly of the government, the industrial districts are facing problem of haphazard urbanization i.e. complain and uncomfortable feeling of the local residents. Actually, this problem is not only in the industrial districts, but also other areas like Dharan - Biratnagar and Butwal - Bhairahawa industrial corridor as well.

He says, there is too weak implementation of rules and regulations. There is not strong system, and all the components and parts are tied up with the system. There is no system as such, if any it has been hard to follow.

Labor unions and leaders are also changing their parties for example those who were affiliated to CPN (UML) moved to CPN (Maoist), now they may be shifting to somewhere else. As there is shift in political parties, there is shift in the unions as well.

The union leader's behavior in the industry is based on the political affiliation or personal relationships. When they find choice they support if not then they always create problems/obstacles asking one after another facility and benefits.

He suggests the land must be provided to the industry by the government for about 100 years, the present provision of 20-25 years in industrial districts is not effective. When an industry hires lands for more years, it wishes to work for longer period of time over there. But, one strong condition is required in case the industry does not do its business.

#### 41. **Managing Director** at a bee keeping company

There is problem of pesticides in the industry. Farmers use pesticides excessively, and when the bees meet it then they die. There are difficulties in transport of the bees due to *Nepal Bandha*. As bees are transported during the nighttime (during the day, the bees are out for grazing), the police create problems during transportation.

In the forest areas, the local community are charging fee if he wish to keep the bees in their community forestry for some time. There are *Aamaa Samuha*, besides local are also seeking money from them in different forms of their pretense (*bahaanaa*).

There is increasing demand of honey in the market. Customer base is increasing day by day. There are difficulties in marketing and there is no appropriate channel of distribution. The most significant aspect is that of the channel members because, the farmers are getting low amount of money and the customers are also paying more money but the major margin is going to the middlemen. Therefore, specifically, in agricultural products in Nepal, there is major problem of supply chain.

There was no sufficient land for bee grazing (keeping), no subsidies from the part of the government. Most important aspect is that there is no laboratory facilities to test the quality of honey.

In absence of 'bee insurance' policy efficiency, there is huge risk of bee dying. We produce honey mostly, and fairly, but customers doubt because there is no reliable body of quality certification within the country.

#### 42. **HR Manager** at an industrial group

There is increasing concerns for environmental protection, but no more awareness about the environment pollution among the people. Because of low level of awareness, there is no more pressure on the industrialists from the pressure groups for protection of the environment. The conventional machinery, processes, and technology have been continued, and there is no attempt of modernization, because the machines are working at their best.

Industries are quite small compared to the industries in neighboring countries and abroad and they cannot afford for the environmental friendly technology. There are machines, equipment, tools and high tech process of controlling pollution and for the preservation of the environment, but it could not be materialized. The industries are immune to change their plant and machineries, processes and technology in the name of environmental protection losing their machines, methods, and processes/technology.

Actor's relationship is most significant in maintaining industrial peace. The services of the industrial districts management could not be changed and updated. The necessity of the 2016 BS is assumed as necessity of 2070 BS as well. There are no fundamental differences in the design and delivery of the services of the industrial districts management office as well.

#### 43. **Deputy General Manager** at a public limited trading company

The employees in his office do not want to leave the office because they are compelled to accept and tolerate the practice of the office. Mainly, as they spend a couple of year in the office, they lose their competencies, and there is very little chances of getting job outside in private sector. If they find job outside, they do not think they will be able to enjoy the freedom what they are enjoying in the company. As they enter into the organization as they have surrendered themselves. But, unfortunately, the management is unable to utilize them for the benefits of the organizations, because there is unions in favor of the organizations.

They are getting their salary and benefits for not doing jobs at their best and why do they need to do for it actually!

The organization has assured 'job guarantee'. Few employees are uttering and buttering; and bargaining and maintaining relationships and getting things done in an organizational setting for their benefits.

#### 44. **Owner Manager** at a pashmina factory

Employees want more holidays. They attempt to deceive employer on and often. When questioned their behavior, they are threatening in against of it. There was shortage of Nepali workers, and Indian and Bangladeshi workers were working in the factory. There were no more expectations of her from the business, but she wanted to see continuation of her business.

#### 45. **Owner Manager** at a doors and woods products

His business was based on the trees i.e. woods for doors and ply manufacturing. The government policies are not supportive and encouraging in order to grow trees for industrial purpose mainly of those suitable for ply like *Pipal* family trees. The trees are considered as factory products, if grown, not as agricultural products. It is hard to cut the trees for raw materials. There is hard legal provision that is preventing for change in the industry.

#### 46. **Production Manager** at an electronics

Leadership qualities and capabilities is more important in business, but it is quite awkward in family owned business in Nepal. If family owned business would have developed leadership capabilities and succession planning, the business would have reached to a certain height. But, the leadership is transferred by blood relationships in these organization. It is very hard, what type of leadership is available, we all need to accept it.

Design of the products are based on the Samsung's design. The company cannot change it in any items in any way. The owners are concern for profit only, but they are quite supportive in relations to the human resources i.e. they normally do not fire their employees. Almost all the employees are not satisfied with the management because wage and facilities are not sufficient as such. There is provision of salary and benefits increment, but no labor union representative is invited or involved in determining the increment. Actually, the management does not want to involve employee representative in making increment based on their performance; because it must kept confidential.

The employee attitude is quite negative mostly the union leaders. It is general tendency of the union leaders that have always negative attitude towards the management, they always believe that management is deceiving them, exploiting them, and making huge amount of money by minimizing their benefits and compensation.

There is tendency of labors to hide or safeguard the wrong doing of co-workers in the factory at workplace. They want to protect their friends and fellow workers. Sometimes, even the supervisor also intends to protect his/her subordinates, and prepares documents, things that best protect them. It would be very hard to pinpoint the culprit and problem areas actually in the factory. The informal relationship is considered more significant at work place.

The events and festivals celebration is based on the market conditions. Similarly, holidays to the employees also depends on the market conditions. If there is more workload, there will be no more holidays, events, and festivals. The work is considered most important than the events and festivals. Strict control is necessary at work place, workers do not work if there is no supervision.

One work unit had been closed due to the taxation policy of the government. Actually, the product became too expensive if manufactured in Nepal only because of the higher tax on the import of materials and parts as well as local taxes. The product X (name changed) discontinued, consequently, 16 employees were leaving their jobs. However, they were compensated satisfactorily at the time of termination. This is one example of reduction in employment due to the government taxation policy.

The owners are the one safeguarding the companies. There is necessary of excellent leadership quality, but it is not seen in the electronics and its associates. The leadership inbreeding (from within family) is one major challenges to the changes in Nepalese organizational setting.

#### **47. Senior Relationship Manager** at a commercial bank

She tells that nepotism as a biggest challenge in her bank. Excessive practice of nepotism and favoritism has prohibited even well accepted human resources practices. It has polluted the entire organization. There is unnecessary access to critical information for lower-level or irrelevant personnel. Anything happens anywhere or any decision or information is available, that reaches every ear across the bank. The bank has still a good image in the

society, but she doubt of a catastrophe. Cultural 'inbreeding' may be another reason, cause, threat, or immunity in the bank.

#### **48. Production Manager** at a biscuits factory

Technology is advancing and we are working with decades old technology. As company has more and more senior people working for a long period, there is then habit with them that is developed overtime as being immune to change. How the employees are working in the company during the past that has formed a culture in an organization. For example, some people used to smoking, and company asks them not to smoke at workplace, they listen to the instruction, but they smoke at workplace if they find their supervisor is not seeing them smoking. The older companies are comparatively more immune to change compared to the younger companies mainly because of the people i.e. how long people are working with the company as long as they are immune to change. Attitude of the people is the one to look at while managing change in an organization.

Because of the technology and quite inefficient work processes, the company is being unable to compete in the market effectively. As an instance, the company is unable to deliver products; if there is order to deliver it within two weeks; faster than the competitors, the competitors are able to deliver the goods and services within seven days of the special order. They deliver the products in the market within 7 days, but the company cannot do the same even in a month.

The company is old, market is limited and there is no possibility of export. The owner of the company was ex-king who do not need money from businesses and industry, as the royal family may have much more money in banks, and the interest from the bank deposit may be much more for them. If the company would have given to an industrialist, then the scenario would be quite different. The ownership was one major determinants in the company.

The price of raw materials like wheat is fluctuating- increasing too much, foreign exchange rate is increasing and being unfavorable day by day. Power shortage, is another difficulties because of it, there is need of diesel that costs much more when we use it as an alternative to the hydro-electricity.

Transportation cost is too much that is why the product price is going up. Supply chain is very important because its interruption is directly affecting the activities of the company.

#### **49. Human Resource Director** at an airlines corporation

The most risky for the airline is political interferences in its every decision in any area from hiring an assistant to acquiring an aircraft.

The employees used to respect and honor and pay due respects to their seniors during the past. They used to listen to their seniors, but today they do not listen, but they do ignore, and they attempt to order or ask in favor of them/employees. It is a major change in the personnel attitude and value in the PEs; and most probably it is not changing within a short period as well.

The major problem in the organization is the union leader/members behavior of unsupportive. CEO comes from political appointment, even after the provision of CEO appointment based on free competition. The CEO becomes accountable and loyal to the employer i.e. the government/ministry and his/her first priority becomes to safeguard the chair/position or job then the development and welfare of the corporation.

BOD also want to safeguard their seats first, how do they make their job more secure, that is their priority than to develop the organization.

There is change required in the BOD and CEO appointment processes. The corporation has better equipment, but no more aircrafts. It has experienced staff as its strength, no more us of them.

There is fear among the employees that the corporation's position is being deteriorated, and if the situation continues, there is then they may have to lose their job for ever.

The patterns of working procedures have been changed in these days. Previously there were very few places/persons in the then royal palace and in the government. When CEO makes happy of a couple of people, it would be Ok for him to safeguard his position. But now, the scenario has been changed. There are numerous places/persons who are influencing the corporations ranging from within (the unions) political parties, various pressure groups like CIAA, media, human right , civil aviation, etc. It is necessary to make all the parties happy, more clearly, personally happy. The happiness of the people depends on their personal need fulfilment.

After the formation of the Corporation Coordination Council, there are small changes in making some decisions, which has made quite easier. Decision making process is being comparatively simple in these days.

There is no CIAA in private organization as it is in public organizations. The pressure groups are active in case of public enterprise, but not in case of private company. The private companies and international airlines can make decision so quickly but this airline cannot, it has a long process and triggers too.

Few officer level employees left the corporation feeling insecurity of their job in the corporation. The officers were quite competent, they moved to central bank, civil services, at lower level than they were holding in the airlines. Employees want their job more secured and those change initiatives are acceptable by the employees, which make their job secured.

Corporation is said an autonomous body, but nothing is free from government influence, no decision are made in its own.

#### 50. **Administrative Manager** at a beverage factory

The technology, culture, attitude of the people towards work has been changing quite adversely. Previously, people used to work honestly; they were dutiful as well but now they want direct personal benefits. If manager asks even for a minor task, they think that what they will get by doing the task. Every activity what do they do, they ask for additional benefits on top of their regular remuneration.

The company has very old machineries, people, and infrastructure too. The entire working culture is too traditional and it is because of its technology as well. The company has no exporting capacity. In order to develop its capacity to such extent, it needs investment. The pattern of sources and uses of fund is also traditional, the owners are satisfied with present volume of activities, and they do not want to expand it.



## Appendix 2 Metanarrative extension on organizations and businesses

| Year and contributor(s)  | Phenomenon of interest                        | Key concept/idea/findings   |
|--|---|---|
| (1965) Joan Woodward   | Industrial organization                       | Core technologies   |
| (1967) James D Thompson  | Organization design                           | Core technologies; task uncertainty   |
| (1968) Amos H Hawley   | Why there are so many kinds of organizations? | The diversity of organizational forms is isomorphic to the diversity of environments.   |
| (1975) Patrick E Connor and Boris W Becker                       | Values at work                                | The relationships between values and organizational context, values and organizational processes, values and managerial actions, and values and organizational performance is a must to understand  |
| (1985) R. S. Chaganti, V. Mahajan and S. Sharma                  | Structure of the Board of Directors           | The non-failed companies tended to have larger boards   |
| (1993) Peter Drucker   | Concept of the Corporation                    | Internal management; worker relations; company's place in a larger community  |
| (1995) Dawn S Karlson, Michele K. Kacmar, and Lee P. Stepina,    | Work-family conflict                          | Considers social identity as a predictor of work-family conflicts.  |
| (1995) Rita Cruise O'Brien                                       | Personnel attitude and value                  | Employees may agree to be co-operative and participate in new process improvement with intellectual and affective contribution.   |
| (1997) Graham Winch, Carla Millar and Naomi Clifton              | Cultural contrasts                            | One cannot blindly support that national culture strongly affects behavior in organizations.  |
| (1997) Jennifer J Dose   | Work values and ethics                        | Moral values are likely to be more internalized than socially influenced value in general.  |
| (1998) Cheryl Alexander  | Changing nature of the business               | The cost of hiring and firing as well as the expense of benefits and demands are causing to rethink the nature of business  |
| (1998) Ronald P Anjard   | Total Quality Management; turbulent change    | TQM has been suggested as a means of coping with turbulent change. The strong and simple central focus allows an internal war to be waged on complacency that prepares an organization for strong external competition  |
| (1998) N. Duru Ahanotu   | Empowerment<br>Production workers             | There exists no single organization structure or optimal industrial model that best accomplish long-term efficiency through empowerment; but each level of the organization must contribute value to the overall manufacturing mission.   |
| (1998) Peter R Embleton and Phillip C Wright                     | Working pattern; outsourcing                  | Managers that define the process as a one-dimensional strategy will be doomed to failure. Effective implementation requires a tailored solution, 'one size does not fit' all firms. Some combinations of insourcing, outsourcing, and contracting out may be the optimal solution for any particular scenario |
| (1998) Masao Tao, Hiroto Takagi, Masahiro, Ishida and Kei Masuda | Organizational commitment                     | Organizational climate, supervisory behavior, organizational tenure, and role clarity were found to have significant impacts on OC  |
| (2000) Liana Kourтели  | Business environment                          | Organizations are dynamic and complex systems working with its environment  |
| (2000) Oswald Jones  | Innovation management                         | The emergence of new technologies was strongly linked to the project of modernism. Rationalism  |

| Year and contributor(s)  | Phenomenon of interest                              | Key concept/idea/findings   |
|--|---|---|
|  |   | gradually replaced religion as the basis around which society was organized.  |
| (2000) Daan Knippenberg  | Changing motivation                                 | Identification is positively related to work motivation, task performance, and contextual performance to the extent that a) social identity is salient, and b) high performance is perceived to be in the group's or organization's interest.   |
| (2000) Zeynep Aycan, Rabindra N Kanungo, Manuel Mendonca, and others | Cultural influence                                  | The model of 'culture fit' as proposed suggests that organizational culture is shaped by multiple forces external and internal to the organization which are unrelated to societal culture.   |
| (2000) Peter Boxall and John Purcell                                 | Strategic choices                                   | Strategic choices in HRM involve political compromises as well as serious cognitive challenges. Theory in strategic HRM is made more complex by a range of factors, including the segmentation of internal labor markets, the influence of diverse contexts, and the interdependencies of strategic management in firms, among others.  |
| (2001) Nava Subramaniam and Lokman Mia                               | Authority hierarchy                                 | Decentralized structure and budgetary participation influence the managers' organizational commitment   |
| (2001) Timothy Yoder   | Corporate responsibility and ethics                 | Culpability that results from the neglect of those corporate and collective responsibilities  |
| (2001) Sanjay T Menon  | Delegation and employee empowerment                 | The three main dimensions of the experience of power underlying the empowerment process are 1) power as perceived control; 2) power as perceived competence; and 3) power as being energized toward achieving valued goals  |
| (2002) Anna Psoinos and Steve Smithson                               | Areas of changes in organizations                   | Delayering, downsizing, TQM and BPR, employee empowerment, decentralization of decision-making authority, problem solving, and workloads planning and scheduling  |
| (2002) Alan Felstead, Annie Phizacklea and Sally Walters             | Virtual work  | The option to work at home is more likely to be available in the public sector, large establishments and work environments in which individuals are responsible for the quality of their won output. These workplaces are typically less unionized but not especially feminized   |
| (2002) Mahmoud M Yasin   | Benchmarking  | The earlier stages of benchmarking development efforts and practices stressed an activity and/or process orientation, now it has become broader in nature to include strategies and systems   |
| (2002) Dennis Rondinelli   | International corporation<br>International citizens | The expanding international public role of the private sector has both potential benefits and potential dangers. TNCs are increasingly asked to be good corporate citizens and they will continue to enter or be drawn into public roles as providers of private foreign aid, as self-regulators, and as influential political forces in shaping national and international policies. They are sources of enormous wealth and power, some of which can be put to effective use in preventing and alleviating social ills. |
| (2002) Nicolas Bacon and Paul Blyton                                 | Industrial relations; individualism or partnership  | Moderate union representatives were no more likely than their militant counterparts to report a unitarist frame of reference (measured by sharing a common  |

| Year and contributor(s)   | Phenomenon of interest                                      | Key concept/idea/findings  |
|---|---|--|
|   |   | objective, trust and partnership). Representatives with more militant orientations did report greater engagement with management in solving operational problems and working together on long-term issues, suggesting a paradox at the heart of industrial relation partnerships.  |
| (2002) Bill Taylor  | Privatization, markets and industrial relations             | The main pressure for tightening control over the workplace has come from the development of markets and that privatization has had important but limited catalytic effect in this process. Considerable internal and external constraints restrict the impact of privatization, which stem from China's continued ambivalence towards capitalist market relations |
| (2003) Lindsay Nelson   | Organizational change                                       | Change is a discontinuous phenomenon in an organization  |
| (2003) Emmanuel Ogbonna and Lloyd C. Harris,  | Organization structure and performance                      | Executives desiring improved performance may well find it worthwhile to investigate and implement novel organizational designs.  |
| (2003) Ronald Paul Hill, Stephens Debra and Jain Smith                                | Business ethics and CSR                                     | High ethical standards, dedication to community service, embracing diversity, employer of choice, compassion for the disadvantaged, commitment to charitable giving, and concern for the environment are thematic category of CSR.   |
| (2003) Christina Garsten  | Organizational culture                                      | 'Corporate citizenship' and 'accountability' are treated as a form of organizational culture that involves a particular kind of moral cosmopolitanism  |
| (2003) Hui-Chun Yu and Peter Miller   | Cultural influence<br>Cultural factors                      | People who work in different industries shows different work characteristics e.g. education and manufacturing  |
| (2003) Robert D Hisrich, Branko Bucar and Sevgi Oztark                                | Ethical attitudes of business people<br>Cultural comparison | A comparison of ethical attitudes of business people in different countries points out both the universal and local norms operational  |
| (2003) Donald Gibson and Lisa A Barron  | Organizational hierarchy                                    | People intends to find at least one or more role models especially from among those at higher hierarchical levels. Role models are salient to individuals throughout their careers.  |
| (2003) Ferda Erdem and Cigdem Satir   | Organizational culture<br>Immunity to change                | Metaphors seem to be a strong means of catching especially negative perceptions in organizations. The collective perceptions of employees were stronger in the old and well-institutionalized organization   |
| (2003) Charles Garofalo   | Global ethics, values, training and moral agency            | Public interest is the linchpin between universal core values and the justification process. It embodies the common good, signifies obligation and accountability, and symbolizes reason and responsibility  |
| (2003) Michael White, Stephen Hill, Patrick McGovern, Colin Mills and Deborah Smeaton | Working patterns<br>Working hours and work-life balance     | The employers need to look inside each of their working practices, and seek an improved design that builds and safeguards the work-life balance. Flexible hours system and personal discretion over time clearly enable people to have a more balanced lifestyle   |
| (2003) Diane Perrons  | Working patterns<br>Gender discrimination                   | New technologies and patterns of working allow the temporal and spatial boundaries of paid work to be  |

| Year and contributor(s)  | Phenomenon of interest                                 | Key concept/idea/findings  |
|--|--|--|
|  |  | extended, potentially allowing more people, especially those with caring responsibilities, to become involved, possibly leading to a reduction in gender inequality.   |
| (2003) David Bond and Heather Middleton                              | Learning at work                                       | Informal learning that occurs in workplaces and illustrates the complexities of such learning. There is a diverse range of people that we learn from at work, very few of whom are recognized by the employing organization as people with a role in promoting learning.   |
| (2003) Taina Savolainen and Arto Haikonen                            | Inbreeding of knowledge                                | The impact of knowledge management move up from individuals to groups and then to the entire organization. The importance of individual-level learning is not only to the individuals and their groups, but to their entire organization as well   |
| (2003) Michel Mitri  | Curriculum assessment<br>KM framework                  | Knowledge management, collaborative work, artificial intelligence, and decision support techniques are promising avenues for increasing the effectiveness of assessment operations in educational institutions and business organizations  |
| (2003) Samuel H.N Leung, Joseph W. K. Chan and W. B. Lee             | Team role behavior                                     | The propensity of people to undergo role modification will possibly be related to certain underlying cultural or geographical characteristics. The dynamics of team role means that the team members autonomously supplant the roles of the missing members  |
| (2003) Ayse Saka   | Internal change agents' view<br>Change management      | Firms are not as uniform in the manner in which they respond to change. There are cultural and political factors at play that can result in persistent differentiation across organizations.   |
| (2003) Brian Beal  | Staff development<br>Team work                         | High levels of interaction between heads of department, managers and staff helped everyone to take responsibility for the quality of their work  |
| (2003) Paula Kyro  | Benchmarking   | Benchmarking requires some conceptual rethinking. It was argued that the need for re-conceptualizing is due both to the appearance of three new forms of benchmarking (i.e. a competence benchmarking, a global benchmarking and a networking benchmark) and new fields of benchmarking (i.e. public and semi-public sectors as well as small firms) |
| (2003) H. Scott Matthews and Lester B Lave                           | Environmental impacts;<br>benchmarking                 | Companies have been striving to reduce the environmental impacts of their products and packaging, while not incurring costs that put them at a competitive disadvantage. Benchmarking can be expensive, time consuming, or problematic because detailed benchmarking requires detailed, specific data that are generally confidential.               |
| (2003) David E Guest, Jonathan Michie, Neil Conway and Maura Sheehan | Human resource management and<br>Corporate performance | If we are interested in demonstrating an association between greater use of HR practices and performance, then the results are generally positive; if we are more interested in showing that HR practices are associated with a change in performance, then they are negative.   |

| Year and contributor(s)   | Phenomenon of interest                             | Key concept/idea/findings  |
|---|--|--|
| (2003) Catherine L Wang and Pervaiz K Ahmed   | Organizational learning                            | Identifies five focuses of the concept and practices of organizational learning framework namely focus on collectivity of individual learning; process or system; culture or metaphor; knowledge management; and continuous improvement  |
| (2003) Peter Murray   | Organizational goals and objectives                | The results indicate that large contractors are short-term focused and see little worth in developing management competencies that will produce above average returns in the long run. Surprisingly, there is no support for the notion that competencies have an impact on long-term performance. In the construction industry at least, the links between short-term priorities and long-term goals are fundamentally at odds. |
| (2004) Titus Oshagbemi  | Leadership styles and manager's age                | Younger and older managers have different profiles than their consultative and participative leadership styles. Older managers consulted more widely and favor more participation in comparison with younger managers  |
| (2004) Rosemary Batt  | Workers, supervisors, managers Team work           | Participation in self-managed teams is associated with significantly higher levels of perceived discretion, employment security, and satisfaction for workers and the opposite for supervisors   |
| (2004) Shelley D Dionne, Francis J. Yammarino, Leanne E Atwater, and William D Spangler | Team performance Transformational leadership       | Idealized influence/inspirational motivation, intellectual stimulation and individualized consideration could produce intermediate outcomes such as shared vision, team commitment, an empowered team environment and functional team conflict   |
| (2004) Jaakko Kujala and Paul Lillrank  | Total Quality Management Cultural phenomenon       | TQM has expanded to include all areas of management and almost any management approach that works in practice can be considered quality management. TQM managers need to understand existing organizational culture and whether it is compatible with quality culture  |
| (2004) David Watson   | Quality enhancement                                | To create environment of continuous improvement, front-line workers require to see the practical benefits of a structured and planned performance enhancement culture and have the appropriate resources to achieve that goal  |
| (2004) Mary Beth Stanek   | Alliance value and risk; alliance project priority | In order to succeed in alliance related work 1) clear strategy and objectives, 2) high trust levels, 3) alignment with corporate strategy, 4) involvement of the right people and having them involved early, 5) commitment, 6) assurance that each firm is bringing something needed and/or unique that the other desires, and 7) planning for open and frequent communications at the onset of the project are essential       |
| (2004) David N Aston  | Organizational structure and practice              | Learning process is embedded in the workplace and shaped by organizational decisions and practices. The hierarchical structuring of relationships made crucial knowledge and information readily available to the engineers and senior staff, while restricting the available to the clerks and secretaries. Similarly,  |

| Year and contributor(s)                                       | Phenomenon of interest                                     | Key concept/idea/findings   |
|---|--|---|
|   |  | organizational decisions made about the design of jobs, and the movement of employees through them, provided senior managers and some engineers with knowledge in breadth and depth about the organization and its production system.   |
| (2005) Christine Williams and Maggie Ferguson                 | Business risk and sustainability                           | The epidemic of foot and mouth disease devastated the rural tourism and leisure industries in the UK.   |
| (2005) Tat Y. Lee   | Business philosophy and values                             | The values of traditional Chinese philosophy are often shared by the senior leaders of the company  |
| (2005) Ron Sanchez  | Organizational learning                                    | Knowledge management processes reflect a fundamental shift in management thinking and practice from traditional concept of command and control to more contemporary concepts of facilitation and empowerment  |
| (2005) Zhongming Wang and Zhi Zang                            | Cross-cultural implications                                | Team and career based strategic personnel practices have long-term effects on organizational performance. Culture plays a crucial role in formulating personnel practices such as team and corporate culture activities.  |
| (2005) Kenneth McLennan                                       | Functions of unions<br>Union behavior                      | Unions are using their power to pass legislation to benefit their narrow special interests. There are two groups in the workforce that may provide unions with organizing opportunities.  |
| (2005) Reid Bates and Samer Khasawneh                         | Learning culture, learning transfer climate and innovation | Organizational learning culture predicted learning transfer climate, and both these factors accounted for significant variance in the perceived innovative capacity of an organization  |
| (2006) Ian Smith  | Change management  | Change is now a constant organizational imperative  |
| (2006) David Charles  | Regional innovation system<br>University infrastructure    | The university role needs to evolve out of the different national and regional contexts and co-evolve with the regional innovation system. The governance contexts at national and regional levels are part of the innovation system as well as key influences on the responses of the universities |
| (2006) M. Sadiq Sohail, Salina Duad and Jagatheesan Rajadurai | Restructuring; Re-engineering process                      | Higher educational institutions focused on the cost-cutting strategy especially on cost of sales and operational expenses. Consequently, there were increases in the utilization of the learning; vision, mission and strategic direction; core business processes, and so on.                      |
| (2007) Takis Katsoulakos and Yannis Katsoulakos               | Profitability and productivity                             | Synergistic development of advantage-creating knowledge and advantage-creating stakeholder relations in accordance with the criteria of the resource-based theory   |
| (2007) Jane Collier and Rafael Esteban                        | Organizational processes and practices                     | Organizational practices and procedures as well as the employee enthusiasm influence the effectiveness of CSR   |
| (2007) Carroll Graham and Fredrick Muyia Nafukho              | Culture; organizational learning                           | It is important to determine the perceptions of employees toward the dimension of culture in enhancing organizational learning readiness. Work shift and longevity are influencing employee perceptions.  |

| Year and contributor(s)   | Phenomenon of interest  | Key concept/idea/findings  |
|---|---|--|
| (2007) Taina Savolainen and Arto Haikonen   | Organizational learning; continuous improvement                             | The organizational process is characterized by measurement, detection and correction of errors, and cost reduction. It is an incremental change process, which reminds a technical variant of the learning organization. Continuous improvement occurs through procedural practices which forms a structure for sustain learning |
| (2007) Seokhwa Yun, Cox Jonathan and Henry P Sims                                   | Transformational leadership   | Transformational and empowering leadership are the most effective types for the guidance of teams.   |
| (2007) Tariq Ismail   | Performance evaluation  | Companies rely on both financial and non-financial measures of performance evaluation. The profit margin, as a financial measure, is also the most commonly used performance measure. Customer satisfaction is the most commonly used non-financial measure of performance evaluation.   |
| (2008) Francesco Perrini and Mario Minoja   | Organizational priority   | Environmental protection, enlightened employee policies, strategic consistency in replicating the business model in developing countries, and stakeholder awareness raising  |
| (2008) John Burgess and Julia Connell   | Organizational priority   | The need to create not only more but also better jobs. Organization need not sacrifice profitability in order to provide quality jobs for their employees. However, a mutually beneficial situation is not only feasible but also highly desirable   |
| (2008) Jaepil Choi  | Working patterns and culture  | Work and family demands cause life stress. Work demands appear to have a lesser impact on life stress than family demands.   |
| (2008) Laura Dulk and Judith Ruijter  | Employee freedom and facilities at work                                     | Managers are mainly interested in the performance of their department or work unit, and work-life policies, employee freedom and facilities at work are likely seen as disruptive  |
| (2008) Charles Lemert   | Social ethics   | Social ethics must begin with power, and thus with social differences and inequalities-in relation to which there is no original true or good.   |
| (2006) Teresa L Ju, Patricia H Ju, Hoang-Ha Tran and David Wang                     | Knowledge transfer Teaching effectiveness                                   | Effective higher education improves on individual's professional opportunities. Effective teaching and test for effective knowledge transfer   |
| (2008) Carmen Barroso Castro, M Mar Villegas Perinan and Jose Carlos Casillas Bueno | Followers' attitude; transformational leadership; psychological empowerment | Psychological empowerment mediates between transformational leadership and the attitudes of followers with respect to general job satisfaction and affective commitment to the organizations.  |
| (2008) Robert J Brown   | Personnel values and attitude   | The dominant stressor for spouses of <i>Reduced Self</i> included stressors on lowered self-esteem, not feeling valued, and feeling less competent than before. This draws attention to the importance of positive recognition, valuing and social support for spouses during their assignment.                                  |
| (2008) Pascual Berrone, Marianna Makri and Luis R Gomez-Mejia                       | Laws, risks and culture   | Legal systems, governmental interventions, country risk and cultural aspects directly affect the level, structure and composition of managerial pay schemes as well as monitoring mechanisms and thus managerial behaviors and risk attitudes  |

| Year and contributor(s)  | Phenomenon of interest                              | Key concept/idea/findings   |
|--|---|---|
| (2008) Ilias Vlachos   | Organizational performance management practices     | Selective hiring was found to be a key practice that improved organizational performance. Compensation policy, information sharing, decentralization of decision making and extensive training were significant priorities for all performance variables. However, job security was found no support for organizational performance   |
| (2008) Tetsuya Iida and Jonathan Morris                                  | Employment practice                                 | The nature of middle managers jobs had, however, changed: including a greater range of tasks, increased workloads, hours and stress. Interestingly, several of the organizations viewed managers' careers as largely their responsibility and that jobs-for-life were of the past.  |
| (2008) David Simmonds and Rebecca Gibson                                 | Organizational change and outsourcing practices     | Approaches to outsourcing vary between firms, largely because their impetus for taking training outside is likely to differ. There are certain key issues that need to be considered when trying to make an outsourced decision about what to outsource; engaging the right providers; and putting measures in place to build and maintain a strong, trusting, effective relationship |
| (2008) Ashok Som   | Personnel development                               | The innovative recruitment and compensation practices have a positive significant relationship with firm performance  |
| (2008) Li-Yueh Lee and Chia-Ying Li                                      | Learning style, cultural differences                | Expatriates who perceived higher levels of fit between their learning styles and instructor teaching method, perceived lower cross-cultural differences and perceived higher demand for training tended to achieve higher training effectiveness  |
| (2008) Mahmoud M. Nourayi and Frank P. Daroca                            | Executive compensation                              | Firm size and market-based return are the most significant explanatory variables in affecting executive compensation. More limited support was found for accounting-based returns, as was changes in the number of employees  |
| (2008) Sully Taylor, Orly Levy, Nakiye A Boyacigiller and Schon Beechler | Employee commitment and top management orientations | Organizational culture characterized by high adaptability and a HRM system characterized by high performance work practices were found to have a significant and direct effect on employee commitment.  |
| (2008) Donald L Caruth and John H Humphreys                              | Strategic control Performance appraisal             | Without consistent alignment between performance evaluation and strategic control functions, performance appraisal becomes an exercise in futility instead of a vital control measurement, often resulting in not only personnel dissatisfaction, but also, more importantly, and impediment to systematic strategy implementation  |
| (2009) Silpa Sagheer, S .S. Yadav and S. G. Deshmukh                     | Supply chain and business network                   | Competitiveness of business network in developing economy is a must   |
| (2009) Huijiong Wang and Yan Hong  | Business network actors relationships               | Unique combination of national strategic planning system at macro-level and changing behavior of the market oriented enterprises at micro level   |
| (2009) Pawan S Budhwar, Verma, Arup Neeru Malhotra and                   | Working environment                                 | Monotonous work, stressful work environment, adverse working conditions, lack of career development opportunities, to better job  |



| Year and contributor(s)                         | Phenomenon of interest                        | Key concept/idea/findings  |
|---|---|--|
| Avinandan Mukharjee                             |   | opportunities elsewhere, which emerge as the key causes of increasing attrition  |
| (2009) Pramila Rao                              | National culture                              | Staffing practices such as internal recruitment, personal reference, succession planning, psychometric tests, and elaborate bio-data are associated with the cultural dimensions. Also, certain staffing practices, such as e-recruitment and panel interviews, are not very predominant in the Mexican culture  |
| (2009) Peter A Bamberger and Racheli Levi       | Rewards management                            | Relative to equity-based pay structures, equality-oriented pay structures are found to be associated with both significantly more help giving in general and more of the type of help likely to enhance group-level competencies (i.e. autonomous help). Incentive intensity strengthens the effects of reward allocation on the amount (but not the type) of help giving.   |
| (2010) Dev Raj Adhikari and Dhruva Kumar Gautam | Quality of work life and industrial relations | Commitment from the part of government, employees, and union leaders is required for QWL and for a sound and harmonious industrial relations   |
| (2012) Scott D Anthony                          | Corporate innovation<br>Innovative thinking   | The increasing ease and decreasing cost of innovation mean that as soon as a young company gets a whiff of success, it has to race against dozens of copycats. Entrepreneurs will continue to give birth to great businesses, and nonprofits will continue striving to build a better society. But the people changing the world today are as likely to be in corporate cubicles and conference rooms or at social-impact conferences.   |
| (2012) Keeley Wilson and Yves L. Doz            | Innovation management                         | The 10 rules 1) start small; 2) provide a stable organizational context; 3) assign oversight and support responsibility to a senior manager; 4) use rigorous project management and seasoned project leaders; 5) appoint a lead site; 6) invest time defining the innovation; 7) allocate resources on the basis of capability, not availability; 8) build enough knowledge overlap for collaboration; 9) limit the number of subcontractors and partners; and 10) don't rely solely on technology for communication |
| (2012) Isaacson Walter                          | Leadership for change                         | The keys to the success were focus, simplify, take responsibility end to end, when behind leapfrog, put products before profits, don't be a slave to focus groups, bend reality, impute, push for perfection, tolerate only "A" players, engage face-to-face, know both the big picture and the details, combine the humanities with the sciences, and stay hungry, stay foolish   |
| (2012) Martin Davidson                          | Consultants/experts opinion                   | Mentoring can be passive, whereas sponsorship is active. It puts the onus on leaders.  |
| (2012) Alex Pentland                            | Communication in change management            | It seems almost absurd that how we communicate could be so much more important to success than what we communicate. The most valuable form of communication is face to face. E-mail and texting are the least valuable.  |

| Year and contributor(s)   | Phenomenon of interest  | Key concept/idea/findings  |
|---|---|--|
| (2012) Elizabeth Welsh, Deshani B Ganegoda, Richard D Arvey, Jack W Wiley and John W Budd | Executive compensation<br>Employee attitudes                          | Employee attitudes appear to be related to some measures of CEO compensation, although sometimes the relationship that was found was negative and sometimes it was positive, but in all cases the effect size was quite small. Specifically, change in CEO salary was negatively related to evaluation of senior management and general satisfaction.          |
| (2013) Rashid Faaiza, Amy C. Edmondson, and Herman B. Leonard                             | Leadership in change;<br>accidental new idea                          | Changes in any one task will necessitate changes in the other two, so work on all three will coevolve over the course of the effort. This means companies must shift from an orderly and sequential process to a dynamic, iterative one.   |
| (2013) Martin Dewhurst, Bryan Hancock and Diana Ellsworth                                 | The need for change<br>Knowledge work redesign<br>Knowledge outsource | Tasks that require scarce skills but do not depend on in-person interaction can be shifted to people in less costly locations. Aggressive companies are shaking off conventions about where, how and by whom knowledge work is done  |
| (2013) Harvard Business Review  | Virtual work<br>Knowledge work  | Experts project that within a few years, more than 1.3 billion people will work virtually. Coworking spaces are to knowledge work that bike-share programs are to transportation: a community-based, low-cost, convenient, and eco-friendly solution. "Presenteeism" has come to mean showing up at an office even when you could be more productive elsewhere |
| (1974) J. R. Galbraith.   | Organization design and processes                                     | More uncertainty, more information processing. Dependent on handling non-routine acts  |
| (1992) K. J. Gergen   | Understanding the organizations over time                             | Theories cannot be separated by culture. Function of theories not truth but functionality. Rational product of social collaboration.   |
| (1951) E. L. Trist and K. W. Bamforth.  | Defense in organizational work groups                                 | Four types of group defense 1) informal organization; 2) reactive individualism; 3) mutual scapegoating; and 4) self-compensatory absenteeism. The persistence of socially ineffective structure is likely to be a major factor in preventing a rise of morale.  |
| (1990) W. W. Powell   | Network organization  | Firms are blurring boundary between hierarchy and market. Exchanges in networks are indefinite and sequential, normative, reciprocal. Networks involve strategic alliances and partnerships. Three critical components for networks are know-how, demand for speed, and trust  |
| (1993) J. R. Baker  | Concertive controls in teams  | Value system controls team efforts. Value consensus became normative rules for new members. Coordinators became more like old supervisors. Rationalized control without old hierarchy  |
| (1995) Jerry Paul Sheppard  | Organizational survival and failure                                   | Industry profitability, growth and stability. Control over the industry. Influence with critical resource providers. Buffering through diversification. Present level of firm resources  |

### Appendix 3 Narratives of the discourse to variables

| Narratives  | Variables  |
|---|--|
| The policies like economic policy, fiscal policy, monetary policy, industrial policy, trade (export/import) policy environment policy and similar other policies termed public policies   | Public policies <sup>1</sup>                     |
| The acts like company act, industrial enterprise act, value added tax act, income tax act, labor act, intellectual property act, bonus act and similar other acts termed laws and acts  | Laws and acts <sup>2</sup>                       |
| The manuals and directives like tax filing procedure, foreign exchange procedure, corporate/good governance guidance, quality control specification, portfolio investment guidelines, provision for liquidity requirement, solvency position, maintaining capital adequacy ratio, and similar other requirements termed regulatory directives | Regulatory directives <sup>3</sup>               |
| Job design and redesign, responsibility and accountability accounting, job matching, appraisal activities and similar others  | Authority delegation and withdrawal <sup>4</sup> |
| Joint venture, intermediaries, operational contracts, management contracts, consulting agreement, agency arrangement, buying and selling arrangement, competitive rivalry and similar others  | Business partners/parties <sup>5</sup>           |
| Supply chain infrastructure, materials/parts supplies, finished goods delivery, services delivery, suppliers, channel members, facilitators as well as the supply chain actors' competency, industrial context, national context and similar others   | Supply/delivery network <sup>6</sup>             |
| Employee unions' influence, employer unions' influence pressure group's influence, consumer forums' influence, professional unions' influence, political activities in the industry, the country's political processes and similar others' influence concerning the firm's operation  | Influence of unions/associations <sup>7</sup>    |
| Corporate spirituality, professionalism, leadership styles, honor and respects at workplace, accommodation of differing views and similar others  | Operational and functional freedom <sup>8</sup>  |
| Conformance to the vision/mission, hierarchy preferences, seniority preferences corporate social responsibility, motives of the organization-profit motive or not-for-profit motive, product quality and service quality commitment and similar others  | Organizational values and priority <sup>9</sup>  |
| Tasks choices, timing preferences, location choices, co-workers choices and preferences and similar others  | Work choices <sup>10</sup>                       |
| Number of celebrations, norms for celebrations, time spending, resources allocation for the celebrations and similar others   | Events/festivals/rituals <sup>11</sup>           |
| Level of awareness to the research and development, technology transfer, technology adaptation, intellectual property, awareness level, product/services development and similar others   | Upgrading/changing technology <sup>12</sup>      |
| Change of chief executive officer, division/department heads, consultants/experts/advisors and similar other people's changes   | Key personnel changes <sup>13</sup>              |
| Subordination, disobeying, scolding, use of bad words, inappropriate gesture and posture and similar others   | Manner of the personnel / boss <sup>14</sup>     |
| Observation visits, self-help, developmental project, work related meetings, coaching, training, education, supervision opportunity, mentoring, trial and error recordings, job rotation, business process reengineering process involvement and similar others   | Learning at work <sup>15</sup>                   |

| Narratives  | Variables  |
|---|--|
| Undue influence from the suppliers, expectations of the suppliers, awareness level of the suppliers, standards of the suppliers, knowledge of the suppliers about their product, markets and similar others about the suppliers   | Pattern of seller's behavior <sup>16</sup>           |
| Undue influence from the buyers, expectations of the buyers, awareness level of the buyers, standards of the buyers, knowledge of the buyers about the products and similar others  | Pattern of buyer's behavior <sup>17</sup>            |
| Specific guidelines for doing or making things, work assignment procedures, position of law and order, personnel management processes including recruitment and selection, training and development, performance management, motivation, rewards and compensation, retirement plans, and similar other organizational processes | Working patterns and processes <sup>18</sup>         |
| Research and development expenditure, design and composition of products and services, product/service enrichment programs, product life-cycle (development stage, introduction stage, growth stage, maturity stage, decline stage, and post decline stage) consideration and similar others                                    | Investment on product / service design <sup>19</sup> |
| Frequency of product service design change, obsolescence of process or product or technology and similar others   | Change in product/service design <sup>20</sup>       |
| Increase and decrease in demand of the company goods and services, share of major products' in the market, competitive position in the market and similar others  | Demand of major products/services <sup>21</sup>      |
| Increase and decrease in supplies of the goods and services of the company, change of supplies, items and similar others  | Supply of major products/services <sup>22</sup>      |
| Share capital, borrowed capital working capital, goodwill and organizational image and similar others   | Capital, equity and image <sup>23</sup>              |
| Fixed assets, portfolio investment, loans and advances, arrangement for intellectual property rights like copy rights, patents, design, trademark and similar others  | Investment <sup>24</sup>                             |
| Embezzlement of fund, manipulation of accounts, inappropriate rewards and punishment, misuse of organizational property and time and similar other activities   | Abuse/misuse of authority <sup>25</sup>              |
| Tasks interdependence, functional interdependence, business interdependence, resources interdependence, delivery date, work routines and similar others   | Emphasis on work schedule/timetable <sup>26</sup>    |
| Positional power differentiation, expectation about the benefits from the changes, context related feeling of powerlessness, ethnic preference, gender preference, inclusion level and similar others   | (Gender) Discrimination <sup>27</sup>                |
| The intended purpose, basic beliefs, concepts, and ideas of doing business and structuring an organization as well as creating hierarchies like tall structure, flat structure, span of control, chain of command and similar others  | Business philosophy <sup>28</sup>                    |
| Level of compliance to the requirements, gifting and bribing pattern, personal benefit seeking behaviour, personnel manner, equity and fairness and similar others  | Business ethics <sup>29</sup>                        |
| Infrastructural standards for business, standard specification and level of related industry and supporting services, product disposal pattern, costumes and attire, norms and manuals and similar others   | Standards and specifications <sup>30</sup>           |

| Narratives   | Variables  |
|--|--|
| Surplus or profit from the operations and investment as well as increase in image of the organization and business in the market and society and similar others  | Return on investment <sup>31</sup>                           |
| Chances of career advancement, personnel training and development budget, employee welfare programs, social security arrangement, provision for job loss of employee and similar others  | Personnel development policy <sup>32</sup>                   |
| The authority pattern (including the code of centralization, decentralization and delegation) and a set of rules outlining the responsibilities of, or proper practices for an individual, party or department or unit or organization and similar other codes that are creating hierarchies and maintaining orders in the organization and similar others | Code of conduct <sup>33</sup>                                |
| A well-established mechanism for detecting and responding to the early signals of changes and threats in relation to the organization and business and similar other mechanisms  | Significance of change detection system <sup>34</sup>        |
| Variation in saying and doing of the organization, frequency of changes in the goals and objectives, use of long-term goals and plans and similar others   | Goal commitment <sup>35</sup>                                |
| Readiness to change, ownership and management pattern, leadership styles, conformity to the change need and similar others   | Lure towards change and development <sup>36</sup>            |
| The level of changes in the policies and practices of the firms, change of the key personnel and top management, policy implications in short-run and long-runs, level of organizational political stability, change of leadership in unions and similar others  | Stability and tenure of policies and practices <sup>37</sup> |

## Appendix 4 Questionnaire

Name: (optional) ..... Gender: ..... Age: .....

Position: ..... Relevant work experience: ..... Qualification: .....

Organization: ..... Department: .....

Organization location: ..... Number of employees: .....

Annual turnover (in million Rs.) ..... Nature of business/project: .....

Father's occupation: ..... Mother's occupation .....

A. Which of the followings do you see more risky for your organization/business? *Please tick  $\checkmark$  as many as appropriate*

- |   |  |
|---|--|
| <input type="checkbox"/> Regulatory/compliance pressure[1]                                | <input type="checkbox"/> Resource scarcity (e.g. materials, water, energy)[5]  |
| <input type="checkbox"/> Competition and substitute products/services[2]                  | <input type="checkbox"/> Unethical business practices by employees and supply chain partners (e.g. bribery, corruption)[6] |
| <input type="checkbox"/> Commodity price volatility[3]                                    | <input type="checkbox"/> Others, please specify .....  |
| <input type="checkbox"/> Technology change[4] (e.g. methods of doing or making things)[4] |  |

B. In which of the following areas of your organization/business have you noticed more often changes and no more changes during the past? *Please tick  $\checkmark$  for all as appropriate.*

**More often-changing areas**

- Organization structure and hierarchy[1]
- Corporate culture and etiquette[2]
- Personnel attitude and values[3]
- Technology and work processes[4]
- Supply / delivery chain or business network [5]
- Pattern of sources and uses of funds[6]
- Design / pattern of product and services[7]
- Industrial / labor relations[8]
- Others, please specify .....

**No more often-changing areas**

- Organization structure and hierarchy[A]
- Corporate culture and etiquette[B]
- Personnel attitude and values[C]
- Technology and work processes[D]
- Supply / delivery chain or business network [E]
- Pattern of sources and uses of funds[F]
- Design / pattern of product and services[G]
- Industrial / labor relations[H]
- Others, please specify .....

C. More specifically, what do you see not changing (static) in your organization for a quite long time? Please specify .....Is it itself immune to change? Yes  No  If no, whom do you consider more active in preventing from change?

- |   |  |
|---|--|
| <input type="checkbox"/> Top management / administration[1] | <input type="checkbox"/> Organization culture[4]     |
| <input type="checkbox"/> Consultant/expert advice[2]        | <input type="checkbox"/> Others, please specify..... |
| <input type="checkbox"/> Employees/unions[3]                |  |

D. More specifically, what do you see frequently changing in your organization? Please specify..... Was it vulnerable to change? Yes  No  If no, whom do you consider more active in bringing such change?

- |   |  |
|---|--|
| <input type="checkbox"/> Top management / administration[1] | <input type="checkbox"/> Organization culture[4]     |
| <input type="checkbox"/> Consultant / expert advice[2]      | <input type="checkbox"/> Others, please specify..... |
| <input type="checkbox"/> Employees / unions[3]              |  |

E. Which forces in the general environment do you consider more influencing for change and influencing not for change concerning your organization? *Please tick  $\checkmark$  for all as appropriate.*

**Forces triggering for change**

- Political[1]
- Economical[2]
- Socio-cultural[3]
- Technological[4]
- Environmental[5]
- Legal [6]

**Forces triggering for no change**

- Political[A]
- Economical[B]
- Socio-cultural[C]
- Technological[D]
- Environmental[E]
- Legal[F]

F. What forces in the industry environment do you consider more influencing for change and not for change concerning your organization? *Please tick  $\checkmark$  for all as appropriate.*

**Forces triggering for change**

- Regulator / government[1]
- Buyer / consumer / client[2]
- Supplier / banker / donor[3]
- Competitor[4]
- Channel member[5]
- Union/association[6]
- Others, please specify.....

**Forces triggering for no change**

- Regulator / government[A]
- Buyer / consumer / client[B]
- Supplier / banker / donor[C]
- Competitor[D]
- Channel member[E]
- Union/association[F]
- Others, please specify .....

G. What areas of your organization are strong (*immune*) and weak (*vulnerable*) to the external forces? *Please tick  $\checkmark$  for all as appropriate.*

**More strong/immune areas**

- Technology / work process[1]
- Human resources[2]
- Supply chain and business network[3]
- Suppliers/bankers[4]
- Customers / clients[5]
- Intellectual property[6]
- Others, please specify.....

**More weak/vulnerable areas**

- Technology / work process[A]
- Human resources[B]
- Supply chain and business network[C]
- Suppliers/bankers[D]
- Customers / clients[E]
- Intellectual property[F]
- Others, please specify.....

H. Which of the followings are more instrumental in protecting your business/program from externalities (threats)? *Please mention [1] for your first choice, [2] for your next choice, and so on.*

- |  |  |
|--|--|
| <input type="checkbox"/> The Laws and rules of the land (country)[1] | <input type="checkbox"/> Insurance policy[4]         |
| <input type="checkbox"/> Police and security agencies[2]             | <input type="checkbox"/> Consultants / experts[5]    |
| <input type="checkbox"/> Unions/associations[3]                      | <input type="checkbox"/> Others, please specify..... |

I. Which instruments do you consider more effective for managing change in your organization? *Please mention [1] for your first choice, [2] for your next choice, and so on.*

- |   |   |
|---|---|
| <input type="checkbox"/> Education and communication[1]     | <input type="checkbox"/> Manipulation and co-optation[4]    |
| <input type="checkbox"/> Collaboration and participation[2] | <input type="checkbox"/> Use of force/power and coercion[5] |
| <input type="checkbox"/> Delegation and direction[3]        | <input type="checkbox"/> Others please specify .....        |

J. What reason(s) do you see more appealing for making change or no change in your organization/business? *Please tick  $\checkmark$  for all as appropriate.*

**The reasons for making change**

- Authority hierarchy looks ineffective[1]
- Organization culture looks unproductive[2]
- Employee attitude seems unfavorable[3]
- Technology/work process looks obsolete/outdated[4]
- Business networks/actors appear incompatible[5]
- Productivity/profitability seems inadequate[6]
- Product/service design looks unattractive[7]
- Stakeholders/unions appear compelling [8]
- Others, please specify .....

**The reasons for making no change**

- Authority hierarchy looks effective[A]
- Organization culture looks productive[B]
- Employee attitude seems favorable[C]
- Technology/work process looks useful/updated[D]
- Business actors/networks appear compatible[E]
- Productivity/profitability seems adequate[F]
- Product/service design looks attractive[G]
- Stakeholders/unions appear comfortable[H]
- Others, please specify .....

K. What are the factors have you noticed facilitating (permitting) and blocking (preventing) for change in relation to your organization/business? *Please tick  $\checkmark$  for all as appropriate.*

**Factors facilitating (permitting) for change**

- Business network and structural forces[1]
- Compliance and regulatory forces[2]
- Cultural and attitudinal forces[3]
- Technical and procedural forces[4]
- Relational and operational forces[5]
- Economic and financial forces[6]
- Legacy and habitual forces[7]
- Industrial and labor forces[8]
- Others, please specify .....

**Factors blocking (preventing) for change**

- Business network and structural forces[A]
- Compliance and regulatory forces[B]
- Cultural and attitudinal forces[C]
- Technical and procedural forces[D]
- Relational and operational forces[E]
- Economic and financial forces[F]
- Legacy and habitual forces[G]
- Industrial and labor forces[H]
- Others, please specify .....

L. Could you please specify the change initiatives that were highly accepted and totally rejected in your organization during the past?

**Highly accepted change attempt(s)**

**Totally rejected change attempt(s)**

.....  
 .....  
 .....

.....  
 .....  
 .....

M. Do you strongly agree (5) or agree (4) or neutral (3) or disagree (2) or strongly disagree (1) with the following statements and you have found responses to the occurrence? Please indicate √ your choice.

| Occurrence   | Change occurrence |   |   |   |     | Response to the occurrence |          |        |
|--|-------------------|---|---|---|-----|----------------------------|----------|--------|
|  | High              |   |   |   | Low | Resist                     | Tolerate | Accept |
|  | 5                 | 4 | 3 | 2 | 1   |                            |          |        |
| The government's policies concerning your organization are changing more often <sup>1</sup>              |                   |   |   |   |     |                            |          |        |
| There is frequent change in the Laws and Acts affecting your organization <sup>2</sup>                   |                   |   |   |   |     |                            |          |        |
| There is frequent change in regulatory directives affecting your organization <sup>3</sup>               |                   |   |   |   |     |                            |          |        |
| Authority delegation and withdrawal is regular phenomenon in your organization <sup>4</sup>              |                   |   |   |   |     |                            |          |        |
| Your organization is quite often noticing changes within the partners of its business <sup>5</sup>       |                   |   |   |   |     |                            |          |        |
| Your organization regularly changes in its supply chain/business network <sup>6</sup>                    |                   |   |   |   |     |                            |          |        |
| Union/associations are frequently forcing for existing policy change in your organization <sup>7</sup>   |                   |   |   |   |     |                            |          |        |
| Operational/functional freedom at work is changing in your organization <sup>8</sup>                     |                   |   |   |   |     |                            |          |        |
| Organizational value/priority of your organization is changing quite considerably <sup>9</sup>           |                   |   |   |   |     |                            |          |        |
| Work preference/choice for employee is available in your organization <sup>10</sup>                      |                   |   |   |   |     |                            |          |        |
| Events, festivals and rituals are increasing in your organization <sup>11</sup>                          |                   |   |   |   |     |                            |          |        |
| Your organization is regularly upgrading/changing its technology and processes <sup>12</sup>             |                   |   |   |   |     |                            |          |        |
| Key personnel are changing in your organization quite frequently <sup>13</sup>                           |                   |   |   |   |     |                            |          |        |
| Your boss always scolds you in against your minor mistake at work <sup>14</sup>                          |                   |   |   |   |     |                            |          |        |
| Personnel in your organization learns from mistake of their own <sup>15</sup>                            |                   |   |   |   |     |                            |          |        |
| Selling behavior of major suppliers to your organization is changing quite considerably <sup>16</sup>    |                   |   |   |   |     |                            |          |        |
| Buying behavior of major customers of your organization is changing quite considerably <sup>17</sup>     |                   |   |   |   |     |                            |          |        |
| There is often change in working patterns/processes in your organization <sup>18</sup>                   |                   |   |   |   |     |                            |          |        |
| Investment in product development/modification is increasing in your organization <sup>19</sup>          |                   |   |   |   |     |                            |          |        |
| There is more often change of the major products of your organization <sup>20</sup>                      |                   |   |   |   |     |                            |          |        |
| There is a substantial decrease in demands of major products of your organization <sup>21</sup>          |                   |   |   |   |     |                            |          |        |
| There is a substantial decrease in the supply of major products to your organization <sup>22</sup>       |                   |   |   |   |     |                            |          |        |
| There is increase in capital and equity of your company <sup>23</sup>                                    |                   |   |   |   |     |                            |          |        |
| There is substantial increase in investment of your organization <sup>24</sup>                           |                   |   |   |   |     |                            |          |        |
| There is frequent misuse/abuse of authority in your organization <sup>25</sup>                           |                   |   |   |   |     |                            |          |        |
| Your organization puts high value for its work plans/schedule or timetable <sup>26</sup>                 |                   |   |   |   |     |                            |          |        |
| Gender/ethnic discrimination is increasing in your organization <sup>27</sup>                            |                   |   |   |   |     |                            |          |        |
| Your organization has clearly defined business philosophy <sup>28</sup>                                  |                   |   |   |   |     |                            |          |        |
| Your organization strictly adheres to its business ethics <sup>29</sup>                                  |                   |   |   |   |     |                            |          |        |
| There are specified standards for assigning work to employees in your organization <sup>30</sup>         |                   |   |   |   |     |                            |          |        |
| There is a substantial increase in return on investment/profitability of your organization <sup>31</sup> |                   |   |   |   |     |                            |          |        |



| Occurrence  | Change occurrence |   |   |   |     | Response to the occurrence |          |        |
|---|-------------------|---|---|---|-----|----------------------------|----------|--------|
|   | High              |   |   |   | Low | Resist                     | Tolerate | Accept |
|   | 5                 | 4 | 3 | 2 | 1   |                            |          |        |
| Personnel development policy of your organization is being more attractive <sup>32</sup>  |                   |   |   |   |     |                            |          |        |
| Your organization has a clearly defined code of conduct <sup>33</sup>   |                   |   |   |   |     |                            |          |        |
| Your organization has a well-established mechanism for detecting and responding to the early signals of changes/threats in relation to its business <sup>34</sup> |                   |   |   |   |     |                            |          |        |
| Your organization is strongly committed to its intended purpose/goals/objectives <sup>35</sup>  |                   |   |   |   |     |                            |          |        |
| Your organization is not changing despite significant change occurring in the industry <sup>36</sup>  |                   |   |   |   |     |                            |          |        |
| Change in top management leads to change in working policies and patterns <sup>37</sup>   |                   |   |   |   |     |                            |          |        |
|   |                   |   |   |   |     |                            |          |        |

N. What would be your response to the following questions? Please indicate  $\checkmark$  for your choice.

| Statements  | Main response |          |        |        |                 |
|---|---------------|----------|--------|--------|-----------------|
|   | Ignore        | Tolerate | Resist | Accept | Bargain specify |
| In case of unfavorable change in government policies, what does your organization do? <sup>1</sup>                    |               |          |        |        |                 |
| If there is adverse change in the Laws and Acts, what does your organization do? <sup>2</sup>                         |               |          |        |        |                 |
| How does your company respond if there are unfavorable regulatory directives? <sup>3</sup>                            |               |          |        |        |                 |
| How do you respond if your organization changes in its existing authority delegation policies/practices? <sup>4</sup> |               |          |        |        |                 |
| How does your organization respond if there is change with the parties of its business? <sup>5</sup>                  |               |          |        |        |                 |
| How does your organization respond if there is adverse change in its supply chain network? <sup>6</sup>               |               |          |        |        |                 |
| What your company does if its employees/unions compel for existing policy changes? <sup>7</sup>                       |               |          |        |        |                 |
| How do you respond in case of narrowing your functional freedom at work? <sup>8</sup>                                 |               |          |        |        |                 |
| How do you respond if your organization frequently changes its existing value/priority? <sup>9</sup>                  |               |          |        |        |                 |
| If there are no options of work/place choices in your organization, what do you do? <sup>10</sup>                     |               |          |        |        |                 |
| What do you do if your organization discontinues your existing event and festival? <sup>11</sup>                      |               |          |        |        |                 |
| How do you respond if your organization changes technology adversely affecting you? <sup>12</sup>                     |               |          |        |        |                 |
| If you find frequent change of key personnel in your organization, what do you do? <sup>13</sup>                      |               |          |        |        |                 |
| How do you respond when your boss scolds you at work place on your minor mistake? <sup>14</sup>                       |               |          |        |        |                 |
| What do you do when you find your boss more often making mistakes at work? <sup>15</sup>                              |               |          |        |        |                 |
| What your organization does in case a supplier imposes something quite undesired? <sup>16</sup>                       |               |          |        |        |                 |
| What your organization can do if its major customer/client asks something not desired? <sup>17</sup>                  |               |          |        |        |                 |
| What do you do if you are asked to bring change in your present working style? <sup>18</sup>                          |               |          |        |        |                 |
| How do your customers/clients react if you discontinue the major products/services? <sup>19</sup>                     |               |          |        |        |                 |
| How do your customers/clients react if you change the product/service more frequently? <sup>20</sup>                  |               |          |        |        |                 |
| What your organization does if there is likely chance of substantial decrease in its sales? <sup>21</sup>             |               |          |        |        |                 |
| What does your organization do if there is likely shortage of its materials and supplies? <sup>22</sup>               |               |          |        |        |                 |
| How does your organization respond if additional capital has to be injected? <sup>23</sup>                            |               |          |        |        |                 |
| What does your company do if there is further restriction on its investment? <sup>24</sup>                            |               |          |        |        |                 |
| What do you do if you find misuse/abuse of authority in your organization? <sup>25</sup>                              |               |          |        |        |                 |
| What do you do if your organization changes your present work schedule or timetable? <sup>26</sup>                    |               |          |        |        |                 |
| What do you do if you find gender discrimination in your organization? <sup>27</sup>                                  |               |          |        |        |                 |

| Statements   | Main response |          |        |        |                 |
|--|---------------|----------|--------|--------|-----------------|
|  | Ignore        | Tolerate | Resist | Accept | Bargain specify |
| What do you do if you find undefined business philosophy in your organization? <sup>28</sup>                               |               |          |        |        |                 |
| How do you respond if you find unethical behavior of your senior/supervisor/manager? <sup>29</sup>                         |               |          |        |        |                 |
| If your organization assigns you quite undesired works, how do you respond? <sup>30</sup>                                  |               |          |        |        |                 |
| How do you respond if you find decrease in return on investment of your organization? <sup>31</sup>                        |               |          |        |        |                 |
| How do you respond if your organization transfers you to an undesired place/location? <sup>32</sup>                        |               |          |        |        |                 |
| What do you do if your organization changes your present attire/dress code? <sup>33</sup>                                  |               |          |        |        |                 |
| How do you respond if your organization doesn't detect early signals of changes in relation to its business? <sup>34</sup> |               |          |        |        |                 |
| What do you do when you find your organization not committed to its goals/objectives? <sup>35</sup>                        |               |          |        |        |                 |
| What do you do if the top management does not respond to issues requiring immediate attention/change? <sup>36</sup>        |               |          |        |        |                 |
| How would you respond in case of frequent changes in policies/practices of your organization? <sup>37</sup>                |               |          |        |        |                 |

Appendix 5 Pearson correlation coefficient

|     | M1    | M2    | M3    | M4    | M5    | M6    | M7    | M8    | M9    | M10   | M11   | M12   | M13   | M15   | M16   | M17   | M19   | M20   | M23   | M24   | M25   | M26   | M27   | M28   | M29   | M30  | M31   | M32   | M33  | M35  | M36   | M37  |  |  |  |  |  |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|------|------|-------|------|--|--|--|--|--|
| M1  | 1.00  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |       |       |      |      |       |      |  |  |  |  |  |
| M2  | 0.62  | 1.00  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |       |       |      |      |       |      |  |  |  |  |  |
| M3  | 0.44  | 0.58  | 1.00  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |       |       |      |      |       |      |  |  |  |  |  |
| M4  | 0.08  | 0.14  | 0.10  | 1.00  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |       |       |      |      |       |      |  |  |  |  |  |
| M5  | 0.14  | 0.14  | 0.14  | 0.18  | 1.00  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |       |       |      |      |       |      |  |  |  |  |  |
| M6  | 0.04  | 0.14  | 0.08  | 0.20  | 0.42  | 1.00  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |       |       |      |      |       |      |  |  |  |  |  |
| M7  | 0.15  | 0.16  | 0.06  | 0.10  | 0.07  | 0.06  | 1.00  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |       |       |      |      |       |      |  |  |  |  |  |
| M8  | 0.08  | 0.17  | 0.11  | 0.16  | 0.09  | 0.06  | 0.27  | 1.00  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |       |       |      |      |       |      |  |  |  |  |  |
| M9  | 0.21  | 0.21  | 0.15  | 0.28  | 0.14  | 0.15  | 0.23  | 0.34  | 1.00  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |       |       |      |      |       |      |  |  |  |  |  |
| M10 | 0.15  | 0.10  | -0.01 | 0.14  | 0.15  | 0.09  | 0.03  | 0.17  | 0.23  | 1.00  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |       |       |      |      |       |      |  |  |  |  |  |
| M11 | -0.03 | 0.04  | 0.13  | 0.10  | 0.21  | 0.26  | 0.12  | 0.13  | 0.08  | 0.15  | 1.00  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |       |       |      |      |       |      |  |  |  |  |  |
| M12 | 0.07  | 0.11  | 0.05  | 0.03  | 0.02  | 0.09  | 0.03  | 0.15  | 0.19  | 0.24  | 0.09  | 1.00  |       |       |       |       |       |       |       |       |       |       |       |       |       |      |       |       |      |      |       |      |  |  |  |  |  |
| M13 | 0.14  | 0.13  | 0.15  | 0.19  | -0.01 | -0.05 | 0.11  | 0.15  | 0.19  | 0.07  | 0.01  | 0.03  | 1.00  |       |       |       |       |       |       |       |       |       |       |       |       |      |       |       |      |      |       |      |  |  |  |  |  |
| M15 | 0.09  | 0.06  | 0.01  | -0.01 | 0.25  | 0.18  | 0.02  | 0.04  | 0.11  | 0.16  | 0.12  | 0.24  | -0.25 | 1.00  |       |       |       |       |       |       |       |       |       |       |       |      |       |       |      |      |       |      |  |  |  |  |  |
| M16 | -0.02 | 0.03  | 0.09  | -0.06 | 0.19  | 0.17  | 0.05  | 0.01  | -0.03 | -0.03 | 0.25  | -0.03 | 0.00  | 0.17  | 1.00  |       |       |       |       |       |       |       |       |       |       |      |       |       |      |      |       |      |  |  |  |  |  |
| M17 | 0.00  | 0.01  | 0.07  | -0.09 | 0.14  | 0.16  | 0.08  | 0.07  | -0.06 | 0.01  | 0.15  | 0.03  | -0.02 | 0.15  | 0.53  | 1.00  |       |       |       |       |       |       |       |       |       |      |       |       |      |      |       |      |  |  |  |  |  |
| M19 | 0.02  | 0.06  | 0.01  | 0.12  | 0.11  | 0.18  | -0.04 | 0.13  | 0.15  | 0.21  | 0.19  | 0.42  | -0.11 | 0.23  | -0.02 | 0.05  | 1.00  |       |       |       |       |       |       |       |       |      |       |       |      |      |       |      |  |  |  |  |  |
| M20 | 0.07  | 0.13  | 0.08  | 0.13  | 0.16  | 0.22  | -0.02 | 0.08  | 0.15  | 0.13  | 0.14  | 0.33  | -0.06 | 0.17  | 0.04  | 0.19  | 0.41  | 1.00  |       |       |       |       |       |       |       |      |       |       |      |      |       |      |  |  |  |  |  |
| M23 | 0.07  | 0.03  | 0.03  | 0.07  | 0.14  | 0.12  | 0.11  | 0.21  | 0.13  | 0.23  | 0.22  | 0.30  | -0.13 | 0.25  | 0.00  | -0.04 | 0.28  | 0.19  | 1.00  |       |       |       |       |       |       |      |       |       |      |      |       |      |  |  |  |  |  |
| M24 | -0.10 | -0.03 | 0.00  | -0.14 | 0.09  | 0.08  | 0.04  | -0.01 | -0.06 | 0.06  | 0.13  | 0.27  | -0.20 | 0.15  | -0.03 | -0.02 | 0.37  | 0.16  | 0.43  | 1.00  |       |       |       |       |       |      |       |       |      |      |       |      |  |  |  |  |  |
| M25 | -0.06 | 0.00  | 0.08  | -0.07 | 0.09  | 0.11  | -0.01 | -0.17 | -0.11 | -0.26 | 0.20  | -0.11 | 0.11  | -0.24 | 0.27  | 0.15  | -0.16 | 0.02  | -0.12 | -0.04 | 1.00  |       |       |       |       |      |       |       |      |      |       |      |  |  |  |  |  |
| M26 | 0.02  | 0.05  | -0.02 | 0.05  | 0.10  | 0.15  | -0.08 | 0.17  | 0.12  | 0.28  | 0.07  | 0.33  | -0.08 | 0.35  | 0.00  | 0.04  | 0.29  | 0.18  | 0.24  | 0.21  | -0.29 | 1.00  |       |       |       |      |       |       |      |      |       |      |  |  |  |  |  |
| M27 | 0.15  | 0.18  | 0.11  | 0.24  | 0.32  | 0.36  | 0.27  | 0.27  | 0.27  | 0.09  | 0.13  | 0.11  | 0.11  | 0.08  | -0.01 | 0.11  | 0.12  | 0.19  | 0.12  | -0.01 | 0.05  | 0.07  | 1.00  |       |       |      |       |       |      |      |       |      |  |  |  |  |  |
| M28 | -0.03 | 0.07  | 0.06  | -0.07 | -0.03 | -0.06 | 0.11  | -0.08 | -0.02 | -0.24 | -0.02 | -0.29 | -0.04 | -0.18 | 0.05  | -0.03 | -0.28 | -0.21 | -0.17 | -0.13 | 0.16  | -0.54 | 0.01  | 1.00  |       |      |       |       |      |      |       |      |  |  |  |  |  |
| M29 | 0.04  | 0.05  | 0.14  | -0.05 | -0.02 | -0.05 | 0.03  | -0.16 | -0.16 | -0.29 | 0.02  | -0.24 | -0.08 | -0.14 | 0.10  | 0.04  | -0.22 | -0.13 | -0.11 | -0.04 | 0.28  | -0.49 | -0.02 | 0.62  | 1.00  |      |       |       |      |      |       |      |  |  |  |  |  |
| M30 | -0.02 | 0.04  | 0.00  | -0.29 | 0.09  | 0.07  | 0.00  | -0.19 | -0.17 | -0.22 | 0.04  | -0.23 | -0.14 | 0.00  | 0.22  | 0.16  | -0.19 | -0.14 | -0.10 | 0.09  | 0.28  | -0.29 | -0.07 | 0.35  | 0.38  | 1.00 |       |       |      |      |       |      |  |  |  |  |  |
| M31 | -0.04 | -0.01 | 0.04  | -0.14 | 0.06  | 0.06  | -0.08 | -0.10 | -0.18 | 0.07  | 0.12  | 0.15  | -0.23 | 0.19  | 0.05  | 0.08  | 0.24  | 0.14  | 0.25  | 0.40  | -0.05 | 0.19  | -0.04 | -0.26 | -0.03 | 0.08 | 1.00  |       |      |      |       |      |  |  |  |  |  |
| M32 | 0.03  | -0.04 | -0.07 | 0.13  | 0.00  | -0.01 | 0.07  | 0.01  | 0.09  | -0.13 | -0.17 | -0.27 | 0.19  | -0.17 | 0.06  | 0.00  | -0.29 | -0.18 | -0.32 | -0.39 | 0.04  | -0.21 | -0.01 | 0.22  | 0.07  | 0.06 | -0.53 | 1.00  |      |      |       |      |  |  |  |  |  |
| M33 | -0.05 | -0.01 | 0.06  | -0.23 | 0.02  | 0.02  | 0.04  | -0.20 | -0.16 | -0.23 | 0.09  | -0.27 | -0.12 | -0.17 | 0.15  | 0.09  | -0.28 | -0.14 | -0.19 | -0.05 | 0.34  | -0.45 | -0.04 | 0.51  | 0.56  | 0.58 | -0.02 | 0.14  | 1.00 |      |       |      |  |  |  |  |  |
| M35 | -0.06 | -0.03 | 0.08  | -0.08 | -0.08 | -0.14 | -0.07 | -0.18 | -0.18 | -0.25 | -0.13 | -0.23 | 0.10  | -0.27 | 0.08  | 0.05  | -0.24 | -0.21 | -0.33 | -0.14 | 0.21  | -0.47 | -0.10 | 0.36  | 0.41  | 0.30 | -0.11 | 0.16  | 0.38 | 1.00 |       |      |  |  |  |  |  |
| M36 | 0.04  | 0.03  | 0.08  | 0.10  | 0.10  | 0.00  | 0.01  | -0.01 | 0.04  | -0.13 | 0.03  | -0.41 | 0.13  | -0.16 | 0.13  | 0.01  | -0.26 | -0.18 | -0.12 | -0.15 | 0.21  | -0.15 | 0.02  | 0.13  | 0.17  | 0.17 | -0.10 | 0.18  | 0.17 | 0.12 | 1.00  |      |  |  |  |  |  |
| M37 | -0.09 | -0.11 | -0.05 | -0.20 | -0.19 | -0.10 | -0.11 | -0.20 | -0.28 | -0.13 | 0.08  | -0.14 | -0.16 | -0.10 | 0.03  | 0.02  | -0.10 | -0.06 | -0.11 | 0.00  | 0.19  | -0.17 | -0.12 | 0.13  | 0.15  | 0.26 | 0.12  | -0.03 | 0.30 | 0.13 | -0.05 | 1.00 |  |  |  |  |  |

### Appendix 6 Anti-image correlation matrix

|     | M1  | M2   | M3   | M4   | M5   | M6   | M7   | M8   | M9   | M10  | M11  | M12  | M13  | M15  | M16  | M17  | M19  | M20  | M23  | M24  | M25  | M26  | M27  | M28  | M29  | M30  | M31  | M32  | M33  | M35  | M36  | M37  |     |
|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|
| M1  | .66 | -.49 | -.14 | .10  | -.08 | .07  | -.06 | .13  | -.09 | -.10 | .07  | .01  | -.05 | -.05 | .07  | -.04 | -.02 | .02  | -.11 | .11  | .05  | .07  | -.05 | .15  | -.12 | .00  | .02  | -.08 | .04  | .05  | -.02 | -.05 |     |
| M2  |     | .64  | -.43 | -.09 | .05  | -.09 | -.09 | -.12 | .04  | -.05 | .06  | -.05 | -.01 | .01  | -.04 | .10  | -.02 | -.09 | .10  | .02  | -.03 | -.10 | .01  | -.17 | .06  | -.15 | -.01 | .08  | .04  | .01  | .01  | .05  |     |
| M3  |     |      | .70  | -.02 | -.07 | .03  | .09  | -.03 | -.08 | .12  | -.11 | .00  | -.08 | .01  | -.02 | -.07 | .05  | .02  | -.02 | -.05 | .01  | .01  | .03  | .04  | -.07 | .13  | -.04 | .05  | -.07 | -.09 | -.02 | -.01 |     |
| M4  |     |      |      | .75  | -.09 | -.13 | -.04 | .03  | -.11 | -.05 | -.06 | .05  | -.07 | .04  | .03  | .07  | -.08 | -.06 | -.07 | .11  | .05  | .03  | -.08 | .06  | -.14 | .18  | .01  | -.12 | .14  | -.04 | -.10 | .00  |     |
| M5  |     |      |      |      | .76  | -.23 | .04  | -.02 | .04  | -.12 | -.06 | .07  | .01  | -.18 | -.06 | .02  | .01  | -.04 | -.01 | -.08 | -.08 | .00  | -.18 | -.01 | .05  | -.09 | -.03 | -.05 | -.04 | -.02 | -.06 | .18  |     |
| M6  |     |      |      |      |      | .78  | .05  | .08  | -.04 | .02  | -.12 | .01  | .07  | -.01 | -.06 | -.03 | -.05 | -.04 | .00  | -.01 | -.07 | -.06 | -.24 | .01  | .04  | -.09 | -.02 | -.06 | -.04 | .07  | .06  | .06  |     |
| M7  |     |      |      |      |      |      | .67  | -.14 | -.11 | .05  | -.10 | -.01 | -.04 | -.01 | -.03 | -.08 | .10  | .09  | -.04 | -.13 | .03  | .12  | -.19 | -.04 | .03  | .01  | .00  | -.05 | -.05 | .08  | .05  | .06  |     |
| M8  |     |      |      |      |      |      |      | .79  | -.18 | .00  | -.09 | -.02 | -.05 | .09  | .00  | -.11 | -.03 | .04  | -.16 | .06  | .13  | -.06 | -.16 | .01  | -.01 | .03  | .06  | -.03 | .05  | .03  | -.02 | .02  |     |
| M9  |     |      |      |      |      |      |      |      | .82  | -.12 | .01  | -.10 | -.07 | -.08 | -.02 | .12  | -.07 | -.08 | .00  | .04  | .00  | .00  | -.07 | -.11 | .11  | -.02 | .10  | -.04 | -.04 | .06  | -.10 | .13  |     |
| M10 |     |      |      |      |      |      |      |      |      | .85  | -.13 | -.06 | -.07 | .03  | .00  | -.05 | -.01 | .03  | -.10 | .04  | .18  | -.05 | .03  | .03  | .10  | .06  | -.01 | .07  | -.06 | .01  | .04  | -.02 |     |
| M11 |     |      |      |      |      |      |      |      |      |      | .72  | .02  | -.06 | -.04 | -.14 | .01  | -.14 | .00  | -.10 | .02  | -.17 | -.02 | .04  | -.03 | .01  | .04  | .02  | .13  | -.12 | .08  | -.04 | -.13 |     |
| M12 |     |      |      |      |      |      |      |      |      |      |      | .85  | -.12 | -.10 | .00  | -.01 | -.17 | -.11 | -.10 | -.09 | -.09 | -.11 | -.02 | .07  | -.02 | .07  | .02  | .06  | -.02 | -.04 | .32  | .06  |     |
| M13 |     |      |      |      |      |      |      |      |      |      |      |      | .76  | .19  | -.03 | .01  | .07  | .04  | .07  | .04  | -.10 | .06  | -.06 | .05  | .06  | .01  | .05  | -.07 | .11  | -.09 | -.07 | .08  |     |
| M15 |     |      |      |      |      |      |      |      |      |      |      |      |      | .80  | -.16 | -.04 | .00  | -.01 | -.08 | .06  | .21  | -.16 | -.01 | .00  | -.05 | -.11 | -.04 | .02  | .09  | .08  | .07  | .02  |     |
| M16 |     |      |      |      |      |      |      |      |      |      |      |      |      |      | .64  | -.46 | -.01 | .06  | -.05 | .06  | -.18 | -.05 | .14  | -.01 | -.02 | -.05 | -.04 | -.09 | .01  | -.05 | -.07 | .01  |     |
| M17 |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      | .60  | -.01 | -.20 | .11  | .04  | -.01 | -.03 | -.09 | .02  | .00  | -.09 | -.03 | -.01 | .01  | -.04 | .02  | .02  |     |
| M19 |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | .87  | -.24 | .03  | -.24 | .09  | .02  | -.02 | .04  | .01  | .02  | -.05 | .04  | .09  | -.02 | .07  | .00  |     |
| M20 |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | .83  | -.03 | .00  | -.09 | .06  | -.07 | .07  | -.01 | .08  | -.01 | .02  | -.04 | .09  | .06  | -.01 |     |
| M23 |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | .82  | -.30 | .00  | .03  | -.02 | -.03 | -.05 | -.03 | -.04 | .11  | .07  | .16  | -.01 | .05  |     |
| M24 |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | .77  | -.02 | -.11 | .06  | -.03 | -.03 | -.13 | -.16 | .10  | .02  | -.02 | .00  | .02  |     |
| M25 |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | .76  | .11  | -.07 | .12  | -.09 | -.06 | .09  | .07  | -.07 | .00  | -.11 | -.11 |     |
| M26 |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | .89  | -.03 | .26  | .10  | .04  | .00  | .00  | .08  | .21  | -.05 | .02  |     |
| M27 |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | .77  | -.05 | -.02 | .05  | .01  | .07  | -.02 | -.01 | -.02 | -.04 |     |
| M28 |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | .81  | -.41 | -.05 | .21  | -.04 | -.13 | -.02 | .06  | -.03 |     |
| M29 |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | .83  | -.01 | -.08 | .06  | -.25 | -.14 | -.06 | .06  |     |
| M30 |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | .82  | -.06 | -.03 | -.34 | -.11 | -.09 | -.11 |     |
| M31 |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | .78  | .38  | -.04 | .01  | -.04 | -.11 |     |
| M32 |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | .80  | -.08 | .00  | -.04 | -.03 |     |
| M33 |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | .86  | -.06 | -.02 | -.13 |     |
| M35 |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | .89  | .03  | .02  |     |
| M36 |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | .76  | .11  |     |
| M37 |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | .80 |