

**COST VOLUME PROFIT ANALYSIS OF PUBLIC ENTERPRISES
WITH SPECIAL REFERENCE TO
NEPAL ELECTRICITY AUTHORITY (NEA)**

Submitted By :

Shushil Kumar Majhi

Ramswarup Ramsagar Multiple Campus, Janakpur

Roll No.: 254/2065

Exam Roll No.:- 140138

T.U. Reg. No.: 7-2-12-439-2005

Submitted To :

Office of the Dean

Faculty of Management

Tribhuvan University



**In Partial Fulfillment of the Requirements for the Degree of
Master of Business Studies (MBS)**

Janakpur

9th June 2013

RECOMMENDATION

This is to certify that the thesis.

Submitted by:

Shushil Kumar Majhi

Entitled

*Cost Volume Profit Analysis of Public Enterprises
with Special Reference to Nepal Electricity Authority
(NEA)*

has been prepared as in the form as per the fulfillment of the
partial requirement for the Master's Degree in Business
Studies of the
Faculty of Management, Tribhuvan University

This thesis is forwarded for examination.

.....

.....

Mr. Jagannath Chaudhary

Labh Karn

(Thesis Supervisor)

Department)

Dr. Shailendra

(Head of Research

Mr. Jugeshwor Sah

(Assistant Campus Chief)

Dr Vishnudeo Yadav

(Campus Chief)

VIVA VOCE SHEET

**We have conducted the Viva Voce examination of the thesis
presented by
Shushil Kumar Majhi**

Entitled

***Cost Volume Profit Analysis of Public Enterprises
with Special Reference to Nepal Electricity Authority
(NEA)***

**and found that the thesis to be the original work of the student and
written according to the prescribed format. We recommend the
thesis to be
accepted as partial fulfillment of the requirement for degree of
Master's of Business Studies (MBS)**

Viva-Voce Committee

Member (Research Department Head).....

Member (Thesis Supervisor).....

Member (External Expert).....

Date:.....

DECLARATION

I, Hereby declare that the work Reported in the thesis entitled "**Cost volume profit analysis of public enterprises with special reference to Nepal Electricity Authority (NEA)**" submitted to office of Dean faculty o management Tribhuvan University, is my original work done in the form of pactial fulfillment of the requirement for the master's of Business studies (MBS) under the supervision of Jagannath Chaudhary, Ramsworup Ramsagar multiple campus Janakpur.

.....

Shushil Kumar Majhi

Date :

ACKNOWLEDGEMENT

The project work "**cost volume profit analysis a public enterprises with special reference to Nepal Electricity Authority**" (NEA) has prepared for fulfilling partial requirement of the master's Degree in Business studies (MBS) under the supervision Jagannath Chaudhary of Ramswarup Ramsagar multiple campus Janakpur.

My Sincere gratitude goes to my Advisors, Lecturer Jagannath Chaudhary of Ramswarup Ramsagar multiple campus Janakpur for their encouragement constructive suggestions and valuable guidance, who generously took time out from their own busy schedule.

I am Extremely thankful to all those Employee who enabled me to collect all the Required data during the entire period of this study. Similarly, I am grateful to the Employees Nepal Electricity Authority for their worthy suggestions and guidance.

I am beholden to my parents and all family members, especially for my wife pinky paikara. For their encouragement and providing me a very friendly environment for my study.

Last but not the least I would also like to thank Mr. Sushil Kumar Singh Concept Cyber, Bishwakarma Chowk, Janakpur for computerized.

Shushil Kumar Majhi
Researcher

List of Contents

COVER PAGE	i
RECOMMENDATION	ii
VIVA VOCE SHEET	iii
DECLARATION	iv
ACKNOWLEDGEMENT	v
LIST OF CONTENTS	vi
LIST OF TABLE	vii
LIST OF FIGURE	viii
ABBREVIATIONS	ix

Page No.

CHAPTER – I

INTRODUCTION

1. Background of the Study	1
1.1 Public Enterprise	2
1.1.1 Meaning of Public Enterprises	2
1.2 Role of Public Enterprises in Nepal	4
1.3 A Brief Overview of Nepal Electricity Authority (NEA)	5
1.4 Focus of the Study	5
1.5 Statement of the Problem	6
1.6 Objective of the Study	7
1.7 Significance of the Study	7
1.8 Limitation of the Study	8
1.9 Organizational of the Study	8

CHAPTER - II
REVIEW OF LITERATURE

2. Introduction	10
2.1 Conceptual Framework of Profit Planning and Control	10
2.1.1 Concept of Profit	10
2.1.2 Concept of Planning	11
2.1.3 Concept of Control	12
2.2 Meaning and Definition of Profit Planning	13
2.3 Cost–Volume Profit Analysis as Tool of Profit Planning and Control.	16
2.4 Concept of Cost Volume Profit Analysis.	17
2.5 Costs and its Classification	18
2.5.1. Concept of Cost	18
2.5.2 Classification of Costs	18
2.5.2.1 Behavior Wise Classification of Cost	19
2.5.2.2 Segregation of Semi Variable Cost	21
2.6 Approaches to Cost-Volume-Profit Analysis	23
2.6.1. Contribution Margin Approach	23
2.6.2 Cost and Revenue Equation Approach	25
2.6.3 Break-even analysis	26
2.6.3.1 Computation of Break Point	26
2.6.3.2. Application of Break Even Analysis.	29
2.6.3.3. Assumption of Break Even Analysis.	30
2.6.3.4. Limitations of Break Even Analysis.	30
2.6.3.5 Other Use of Break Even Analysis.	31
2.6.3.6 Cash Breakeven Point.	32

2.6.3.7 Break Even Sales Volume in the Presence of Step or Moving Fixed Cost.	32
2.7. Cost Volume Profit Analysis for Product Firm.	33
2.7.1 Break-Even point of Multi–Product/firm	33
2.8. Margin of Safety (MOS)	34
2.9. Cost – Volume Profit Analysis and Limiting Factors.	35
2.9.1 CVP Analysis with a Single Constraint.	36
2.9.2. CVP Analysis with a Multiple Constraints.	36
2.10. CVP and Leverage	37
2.11. Assumptions Underlying CVP Analysis	37
2.12. Limitations of CVP Analysis	38
2.13. Purpose of CVP Analysis	39
2.14. Sensitivity Analysis	39
2.15. A Brief Review of Books.	49
2.16 Review of Previous Research Work.	42
2.17. Research Gap	48

CHAPTER – III

RESEARCH METHODOLOGY

3. Introduction	49
3.1 Research Design	49
3.2 Research Population and Sample	50
3.3 Sources and Type of Data.	50
3.4 Variable of Studies	51
3.5 Method of Data Collection	52
3.6. Method of Analysis and Presentation.	52

3.6.1 Descriptive Techniques.	53
3.6.2 Quantitative Techniques	53

CHAPTER-IV

PRESENTATION AND ANALYSIS OF DATA

4.1 Analysis of Budgeted and Actual Sales	59
4.2 Profit (loss) Pattern of NEA.	63
4.3 Cost Analysis of NEA	64
4.3.1. Fixed Cost Analysis of NEA.	65
4.3.2. Analysis of Variable	66
4.3.3 Analysis of Sales and Cost Relationship of NEA	68
4.4 Cost Volume-Profit Analysis of NFA	69
4.4.1 Computation of BEP	70
4.4.1.1 Analysis of BEP is Rupees for the Authority	71
4.4.1.2 Computation of BEP as Percentage of Capacity	71
4.4.2 Analysis of Contribution Margin	73
4.4.2.1 Analysis of Contribution Margin	74
4.4.2.2 Analysis of Safety Margin of NEA	74
4.4.2.3 Cost Analysis of NEA	74
4.4.3 Profit-Volume Analysis	75
4.4.3.1 Profit Volume Analysis	76
4.5. Analysis of Hypothesis Test	76
4.6. Summary of the Projection.	78
4.7. Major Findings	79

CHAPTER – V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1. Summary	81
5.2. Conclusion	82
5.3. Recommendations	83

BIBLIOGRAPHY

APPENDIX

List of Table

	Page no.
Table 3.1 : Classification of Variables	52
Table 3.2 : Profits of Respondents	52
Table 4.1 : Total Budgeted and Actual Sales Volume of NEA	59
Table 4.2 : Summary of Statistical Calculations of Sales	61
Table 4.3 : Calculation of the Trend of Total Sales of NEA	62
Table 4.4 : Profit (loss) Trend of NEA	63
Table 4.5 : Fixed Cost of NEA	65
Table 4.6 : Statement of variable costs of NEA	67
Table 4.7 : Cost Structure Analysis of NEA	69
Table 4.8 : Income Statement of NEA for the Year 2064/65 to 2068/69	70
Table 4.9 : Computation of BEP as Percentage of Estimated Sales of NEA	72
Table 4.10 : Computation of Cash BEP of NEA.	73
Table 4.11 : Two Way Anova Table of NEA	77
Table 4.12 : Summary of the Projection	78

List of Figure

	Page no.
Figure 2.1 : Variable Cost	19
Figure 2.2 : Fixed Cost	20
Figure 2.3 : S-V Cost / Mixed Cost	21
Figure 2.4 : Graphic Approach to CVP.	29
Figure 4.1 : Sales Target and Sales Achievement of NEA	60

ABBREVIATIONS

A.S	– Actual Sales
BEP	– Break Even Point
BPPNL	– Bhrikuti Plap and Paper Nepal Limited
BS	– Budgeted Sales
CM	– Contribution Margin
CVP	– Cost Volume Profit
D.F	– Degree of Freedom
DNPL	– Dabur Nepal Pivate Limited
F/Y	– Fiscal Year
FC	– Fixed Cost
HDL	– Himalayan Distillery Limited
KD	– Kathmandu Dairy
Ltd	– Limited
MOS	– Margin of Sefety
NEA	– Nepal Electricity Authority
P/V	– Profit Volume
PPC	– Profit Planning and Control
Pvt	– Private
R&D	– Research and Development
SR	– Sales Revenue
T.U.	– Tribhuvan University
TVC	– Total Variable Cost

- UNDP – United Nation's Development Program
- UNL – Unilever Nepal Limited
- VC – Variable Cost
- WTO – World Trade Organization