CHAPTER - I INTRODUCTION

1.1 General Background

In the modern era, globalization has played a vital role to combine the world together. At the same time, the technologies being used are changing regularly which effects in the job of an individual. The manager of an organization is to become accustomed the new technologies and apply it appropriately. But the manager has to be very careful in his decisions and watch how his/her decision affects the organization, employees and society.

Management information system (MIS), as of our knowledge is a set of interrelated components that collect (or retrieve), process, store and distribute information to support decision-making and control in an organization. Organizations are large systems composed of interrelated sub-systems. Three broad levels- operation, middle management and strategic management of management decision makers- influence the subsystems. A management information system can also help unite some of the computerized information function of a business, although it doesn't exist as a singular structure anywhere in the business. It is a system of processing information in the business organizations. Information being a vital resource, great attention should to be given to manage it as other organizational resources. Right information in right time helps the managers take the right decisions.

"The term Management Information System (MIS) also designates a specific category of information systems serving management-level functions. Management information systems serve the management level of the organization, providing managers with reports and, in some cases, with online access to the organization's current performance and historical records" (*Laudon and Laudon; 2010:43*).

"Information systems and organizations influence one another. Information systems must be aligned with the organization to provide information that important groups within the organization need. At the same time, the organization must be aware of and be open to influences of information systems in order to benefit from new technologies. The interaction between information technology and organizations is very complex and is influenced by a great many mediating factors. Managers must be aware that information system can markedly alter life in the organization" (*Laudon and Laudon; 2010:75*).

Information systems have helped managers communicate and distribute information; however, they have provided only limited assistance for management decision making. Managers will also be faced with ongoing problems of security and control. Information system must be designed to function as intended so that humans can control the process. It should now be obvious that managers should insist the societal and personal impact of using computers must be considered when computer based information system is being developed. A major management objective should be for developing systems that can be easily and effectively accessible to the managerial levels.

The four interrelated dimensions of MIS involves not just information technology, but also its instantiation, as reactive and inextricable elements, both an information system and its organizational context, information technology as a form of intellectual technology. Information Technology is regarded as the modern handling of information by electronic means, which involves its access, storage, processing, transportation or transfer and delivery.

MIS is a system to support the decision making function in the organization. The difference lies in defining the elements of the MIS. However, in today's world, the MIS is a computerized business processing system-generating information for the people in the organization to meet the information needs for decision making to achieve the corporate objectives of the organization. MIS helps in optimizing the use of scarce resources, through their improved utilization, and by supporting intelligent decision making a co-ordination without wasteful delays. Effective Information management involves the communication of intelligence or knowledge. It appraises and notifies surprises and stimulates, reduces uncertainty, reveals additional alternatives and helps

eliminate irrelevant or poor ones, and influences individual and stimulates them to action. In any organization, information should give early warning and portend the future. Therefore, it is essential that those in the professional lines should be aware of MIS and be included to its effective utilization.

In the Nepalese business industries, organizations are spending much more hard work on information technology. These investments would be profitable if managers learn to use the technology and mechanism of information. The key to building and using effective information system is that the managers need to know how to apply information technology to solve the problem and make decision. Also the companies that can integrate various technologies to achieve business goals are often very successful. The design and implementation of information systems in an organization necessitates the identification of information requirements.

"From a business perspective, an information system is an organizational and management solution, based on information technology, to a challenge posed by the environment. Managers cannot ignore information systems because they play such a critical role in contemporary organizations. Today's systems directly affect how managers decide, how senior managers plan, and in many cases what products and services are produced (and how), responsibility for information systems cannot be delegated to technical decision makers. Information systems today play a strategic role in the life of the firm. In today's computerized world MIS is familiar to most of the managers of the public and private organizations. MIS helps every level manager to designate the information for the decision" (*Sharma; 2004:35*).

The ninth plan has included the initiation and development of the information system for enhancing working capability and competence of various related institutions. It has further incorporated the building of a networking system to ensure the availability of information to the common people. It further emphasized the simplifying of the banking transactions by expanding the application of computers and new communication instruments such as credit cards and ATM services and facilities into practice to facilitate paying bills, purchasing goods. The implementation and recognition of the information system and information technology has been enhanced in the national level.

The tenth plan has focused that the information and communication sector, which is a crucial infrastructure for development plays a vital role in overall development of the country. It is indisputable that the development, expansion and effective mobilization of information and communication can play an important role in bringing together every citizen in the process of nation building by raising their awareness.

The tenth plan further integrated IT as a vital tool for the socio-economic development of the country. In context of Nepal, it is important to establish IT based industries and expand their services to become an active partner of global IT market and get maximum benefits from latest IT revolution. Flow of information is an important part for socioeconomic development of a country. The expansion of IT can contribute in achieving a high economic growth rate through quick dissemination and availability of necessary information.

"As choice of information technology is the backbone of the Management Information system, the success of MIS lies in how the information technology is implemented in the organization. Hence, a manager of the modern organization should always remember that a good management information system design requires a matching support from the information technology" (*Sharma; 2004:37*).

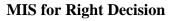
The manager has to face the quickly changing environment of the organization. The best and qualified manager understands his role and the modern techniques to cope up with the changing environment and make decision that is favorable with the environment. The broader decision process involves collecting data, identifying problems and making choice. Mostly the task performed by the manager is in the decision process. Decisions often require creativity, because data are generally needed to be collected before problem arises. So it is an undeniable fact that designing the information system is a difficult task. The scope of a formal information system in an organization is limited by the data that can be obtained; the cost of obtaining, processing and storing, retrieval and distribution; the value of the information to the user and the capability of the humans to accept and act on the information. CBIS is designed to both reduce the costs and increase the capabilities of organizational information processing and increase organizational effectiveness.

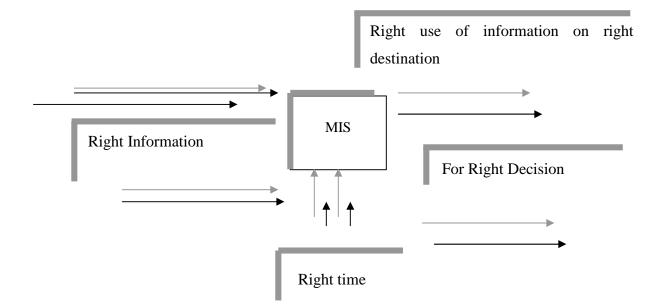
"Management Information System deals with the planning for development, management and use of information technology tools to help people perform all information processing tasks" (The 5 Cs of information processing tasks- Capture (obtain information at its point of origin), convey (present information in its most useful form), create (processing information to obtain new information), cradle (store information for use at a late time) and communicate.) and management. Customer service is colonizing more and more activities and ideas, it is changing in the way it is practiced, experienced and understood. The key dynamics of market relations has become a central feature of work organizations. The managers and their advisers are to delineate and intervene into the organization of paid work.

Different classes of users of MIS will use it differently. Clerical users primarily provide input and data control. First line supervisors use it for operational control and detailed exception reporting. Management uses it for special reports and analysis, often employing a staff specialist to manipulate decision models and perform analysis. Because of the complexity of the process of MIS development and need for judgment, there is a need for comprehensive academic training for MIS professionals.

The organizations exist by creating a precarious regularity of human behavior. The decisive defining feature of all organizations is rendering of its members' actions predictable.

Figure: 1.1





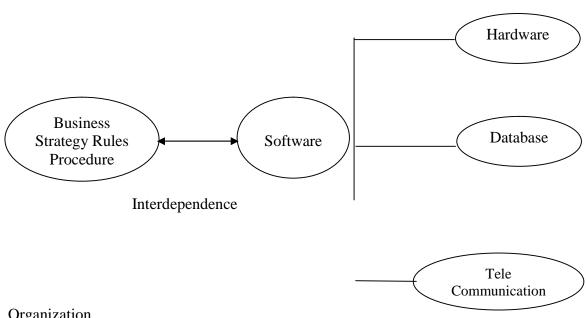
(Source: Laudon and Laudon; 2010:55)

Today no organization can survive long without the computers and proper information systems. As a manager of the modern organization, the need of the information system is emphasized for the following purpose:

- *)* Meeting the global challenges
-) Capturing opportunities in the Marketplace
- J Supporting corporate strategy
-) Linking Departments whose functions are different
- J Enhancing worker productivity
- J Increasing the quality of goods and services

The world has become a small place; the competition faced by a business is no longer limited by national boundaries. For an organization to be successful, timely, accurate and reliable information is very much necessary. Information system allows organization identify strategic growth opportunities in the marketplace. Executive decision-making today in any field is very complex. Both strategic and tactical decisions rely on information that is timely and accurate and therefore, the use of information procuring systems has become essential in every significant management activity. The rapid development of MIS and of its technology itself, its convergence and integration, birth of new concepts like information resource management, or the extension of the role of information professional within the organization are the new trend setters. Thus, information is a vital ingredient for the operations and management of any organization.

1.1.2 The Interdependence between Organizations and Information System



Organization and MIS

Figure: 1.2

Organization

Information System

(Source: Laudon and Laudon; 2010:56)

This is the age of globalization and the worldwide interdependence of resource suppliers, product markets and business competition. The global economy is real and we are touched by it. In the information age, knowledge and knowledge workers are the principal resources of a competitive society. We have left the times of stability and entered times of dramatic and continuous change. In this age of information technology, the availability and ease of transferring information is affecting organization as work environment and even the very nature of business itself. Managers and leaders in all settings know that they are expected to do the right things, not just the convenient things or self-deriving things. Society expects the best of organizations and their leadership must be committed to meeting the responsibility.

In this era of information, knowledge is an irreplaceable resource, and the goal should always be to grow and create "intellectual capital"(the collective brainpower or shared knowledge of a workflow).Just as computer and information technologies have changed education and learning process, they are also dramatically and continually changing the nature of work organizations. The key is the information and the way it flows and is utilized by people in the organization. More information about more things is being made available to more people in organization more quickly than ever before.

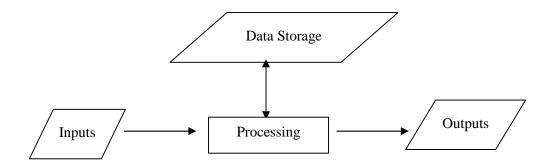
Today, the merging of telecommunication and information processing technologies has led to consolidation of the separate organizations that used to manage these technologies so that they are now under the leadership of one senior IT executive. Because information technology is now widely dispersed throughout organizations, senior IT executives also must take on extensive staff responsibility. The executive management team must recognize information technology's value and the importance of making sound decisions regarding its use.

Organizational changes and new business methods heavily impact IT executives. These executives must use current information systems innovatively and adopt new computing and telecommunication systems and products to facilitate organizational transitions and deal with competitive threats. IT executives become agents of change when firms are exploring their menus of technological opportunities, making selections, and introducing new technology.

Needing to streamline business processes and improve efficiency and productivity, managers frequently must make organizational changes and introduce new technology. Data and information come from sources both inside and outside an organization, and an information system should be designed as to obtain or capture all the relevant data and information from whatever source. Informal gathering of information from the environment goes on all the time, consciously or unconsciously, because the employees of an organization learn what is going on in the world around them- perhaps from newspapers, television reports and meetings with business associates or the trade press.

Management Information System is nowadays very familiar to almost all the managers of the public and private enterprises. MIS helps in each management level. The organization and information systems can be divided into strategic, management, knowledge and operational levels. The operational level system enhances the operational managers by keeping track of the elementary activities and transactions of the organization. The major task is to answer routine questions and to track the flow of transactions through the organization. A system to record bank deposits from automated teller machines is the best example of this system. The knowledge level managers are supported by the information system to improve the productivity of knowledge and data workers in the organization.





(Source: Laudon and Laudon; 2010:58)

The management level is supported by the system in monitoring controlling, decision making and administrative activities. The major task is to provide the periodic reports

rather than the instant report. Sometimes the non-routine decision making is also supported by this system in this management level. The strategic level management is supported by the information system in goal setting, tackling and addressing the strategic issues and long term trends, both in the firm and the external environment. MIS can be considered as a tool to gain insight into the overall health of the organization in case of the strategic level management.

1.2 Decision Support System

Decision Support System (DSS) is the name of a specific discipline and of a movement, which have over the last 25 years, captured the attention of many researchers from academia, of system developers, and users from the public sector and private industries. DSS is a computer- based system that helps the decision maker utilizes data and models to solve unstructured problems.

"A DSS is a set of well-integrated, user-friendly, computer-based tools that combine internal and external data with various decision-making models to solve semi structured and unstructured problems. A DSS can be integrated with the existing information system. It can support individual decision making or group decision making. A DSS is primarily a problem- solving system. It supports a wide variety of decision making processes and styles and assists the decision maker to make decision under dynamic business condition" (*Gupta; 2010:288*).

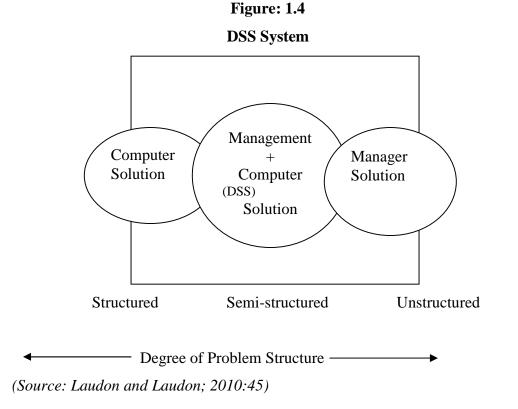
Organizational problems involve entire departments within an organization and require multiple experts from different areas. A DSS is an ideal candidate for interrelated and inter- organizational problems. Companies and government agencies use DSS all over the world to solve complex and data-intensive problems. The DSS also helps managers identify the location of each facility for optimal utilization.

A DSS can consolidate data from different sources to forecast demand, determine the appropriate quantity and mix resources necessary to meet the demand, and balance supply and demand for a wide variety of products. DSS is applied also in corporate

planning, developing effective advertising strategies and pricing policies, determining an optimal product mix, and handling investment portfolios.

The main objective of the DSS is to make the decision making process as efficient as possible. The DSS is not intended to replace the manager. The computer can be applied to the structured portion of problem, but the manager is responsible for the unstructured portion- applying judgment or intuition and conducting analyses.

Decisions are at the heart of success, and at times there are critical moments when they can be difficult, perplexing, and nerve racking. A decision is something you have the capability of changing. Organizational decisions usually involve intensive communication between the organizational entities such as different stakeholders, departments and managers.



Today's business environment is one of rapid change. Mergers, acquisitions, competition, and the internet, have further complicated the world of information technology. We live

in an age of the information maze where the Public Internet and Company Intranets have virtually changed the way that individuals and corporations transact business. These data networks provide a new means via which business is transacted, information is exchanged, and communication is conducted.

1.2.1 Group Decision Support System

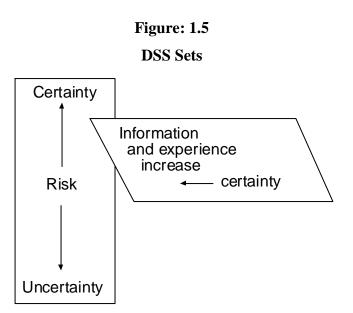
Group decision making process is a cooperative work of a finite set of human decision makers. In theory, a subset of the criteria could be considered as representing a decision maker and the group ranking of the alternatives could be determined in similar way to the individual rankings.

"Group Decision support system (GDSS) is computer-based information systems that enhance group decision making by facilitating the exchange and use of information by group members, and interaction between the group and the computer, to formulate and solve unstructured problems" (*Gupta*; 2009:307).

The advantages of GDSS are that it fosters an environment that is favorable to decision making and allows all members of group to participate. In a decision room, any participants have the liberty to express their views without any inhibition.

1.2.2 Decision Support System Users (Sharma; 2004:36)

Decision-making occurs in all three levels of the organization: the strategic, the managerial, and the operational. The decisions of the operational level are mostly thorough and automated; so are in the many routine managerial decisions. For the solution of the semi- structured, complex problems, DSS can be used. A strategic and managerial level has to face this kind of problems. The decision maker is free to analyze and react to the process, not to the mechanics of it.



(Source: Laudon and Laudon; 2010:47)

Decisions are usually made under three sets of conditions: certainty, uncertainty and risk. Most business decisions are made under the risk factor. The relationship among certainty, uncertainty and risk is along with the resources of information and experience.

A DSS is best conceptualized as a process instead of a product. DSS focuses on the decision maker's interaction with the system and not on the output generated. Decision support systems change as the needs of the end user change, and the decision maker changes by interacting with the DSS process.

1.3 Evolution of Banking Industry

A bank is an entity which borrows money from its customers and re-lends it. Simply a bank is defined as the financial intermediary between the depositors and the credit seekers, or as a media to collect deposits from the general people and provide them loans by charging a certain rate of interest. Banks and financial institutions are a critical component of any economy. They provide financing for commercial enterprises, basic financial services to a broad segment of the population and access to payment system.

Banking made its first beginning publicly around the middle of the twelfth century in Italy. The Bank of Venice founded in 1157 was the first public banking institution. In the ancient times, there was reference to the activities of money changers in the temple of Jerusalem in the new testimony. In ancient Greece, the famous temples of Delphi and Olympia served as the great depositories for peoples' surplus funds and these were the centers of money lending transaction. The goldsmiths were the bankers in the ancient period in England. They too served as depositors and lenders to the government. The public kept their ornaments at the goldsmiths for safety.

On the ground of with reference to MIS concept, a bank can be treated as:

-) As an information processor.
-) As a regulated firm.
- As a portfolio or balance sheet.
- As communication firms.

Banks and communication firms are similar in that they both establish networking relationship through which they collect, store, process and transmit information for themselves and customer's accounts.

The bank lending function concentrates on the gathering, processing, and analyzing of timely and accurate information and on establishing customer relationship and incentives to remedy informational asymmetries and hidden actions arising from lender- borrower agency problems. The overall goal of bank regulation and deposit insurance is to maintain public confidence in the banking system.

1.3.1 Commercial Banks

The commercial bank has its own role and contribution and maintains economic confidence of various segments and extends credit to people. The commercial banks facilitate in the overall development of the economy, with major thrust in industrial development. These types of banks came into existence with the objectives of collecting the idle funds, mobilizing them into productive sectors and overall economic

development. "A sound banking system is important because of the key role it plays in the economy; intermediation, maturity transformation, facilitating payments flows, credit allocation and maintaining financial discipline among borrowers" (*KFA Research; 2011:31*).

The banking sector in Nepal started with the establishment of Nepal Bank Limited in B.S. 1997. Now there are 30 commercial banks in operation with two public and twenty eight private banks. The detail of the 30 commercial banks is attached in annex 1.

1.3.2 Risks of Banking

Bankers manage portfolio of assets and liabilities and the accompanying information flows. Key portfolio risks are credit risk (uncertainty associated with loan repayment), interest rate risk and liquidity risk. Commercial banks perform all of the functions; they are vital to any financial system as clearing and settling payments, accumulating, processing and disseminating information for decision making purpose.

1.4 Introduction of Laxmi Bank

Laxmi Bank had a soft opening on 1st April, 2002 as the country's 16th commercial bank. In 2004 Laxmi Bank merged with HISEF Finance Limited, a first generation financial company which was the first and ever merger in the Nepali corporate history. They provide a complete range of banking products and services to their clients through fully functional branches in Birgunj, Banepa, Pokhara, Biratngar_, Hattisar and most of the cities of the country.

Laxmi Bank is a Category 'A' Financial Institution and re-registered in 2006 under the "Banks and Financial Institutions Act" of Nepal. The Bank is a technologically driven progressive Bank with strong risk and corporate governance foundations. The bank is known for its innovation and claim too many "firsts" in the Nepalese financial market. It has the best asset quality among all financial institutions in the country and its technology has been rated "Highly Secure" by an independent internationally accredited information system auditors.

Laxmi Bank's award winning Annual Reports has set the standards for quality, presentation and disclosure for the Nepalese corporate sector to follow since 2005.

Laxmi Bank promotes a separate life insurance company – Prime Life Insurance Limited which came into operation in 2009.

The bank is promoted by Khetan Group along with Sunrise Group, R.L. Shanghai Group and Sikaria Group. The bank's authorized capital is NPR 1 billion of which NPR 610M has been issued. The IPO to the general public was opened on 2nd August 2003. The Bank's shares are listed and actively traded in the Nepal Stock Exchange (NEPSE). The current shareholding structure is as under:

Promoters	55.42%
Citizen Investment Trust (10% share of NRB)	9.02%
General Public	35.56%

Laxmi bank has a technical service agreement (TSA) with Hatton National Bank (HNB) of Sri Lanka. The TSA provides them with HNB's technical and managerial expertise and also allows access to HNB's vast network of 450 banks in 80 countries. HNB is among the largest commercial banks in Sri Lanka and is among the prominent banks in Asia. In 1995, HNB was recognized as the flagship of Sri Lanka's commercial banking by Asia Money.

They have made a large investment in banking technology. A world class banking software-flexcube-has been installed to ensure delivery of reliable and quality service to the clients. Flexcube is among the best banking systems in the world, with over 100 financial institutions worldwide having embraced it. This system enables them to provide safe, seamless and reliable service to their clients through a complete range of delivery channels including mobile and internet devices. Currently, with the help of this software, a full-fledged Internet banking service has been launched, with the most potent online banking capability in Nepal.

Laxmi Bank has become a member of the SWIFT community. In fact, it is the first bank in the SAARC region to implement SWIFT Net, the advanced version of the technology which is IP based. Through an alliance with Smart Choice Technologies (SCT) they also have an access over a network of about 20 ATMs, and over 200 Point of Sales (PoS) terminals located in all major urban centers of the country, which adds into milestone of technological accomplishments.

Laxmi Bank, an IT progressive bank is a prominent emerging bank with a mission statement "We are committed to excellence in delivery of entire gamut of financial services in order to achieve sound business growth and maximize stakeholder values by embracing team spirit, progressive technology and good corporate governance" (*http://www.laxmibank.com/mission.asp*; 2011) and it is already a key player in consumer finance.

In the context of Laxmi bank, the IT decision is a technical decision, where it is required to decide between the various configuration alternatives made of a variety of hardware and software options. The configurations are the real time networking, Oracle Database, Universal Banking solutions – Flexcube enabling retail and corporate operations and, most robust Intranet.

The organization chart of Laxmi Bank is attached in annex 2.

1.4.1 Products and Services of Laxmi Bank

A) Deposits

Saving Account

The three different types of saving accounts are accessible in Laxmi Bank.

- a) Normal Saving Account
- b) Laxmi Saving account and
- c) Super Saving Account
- d) Junior Savings Samrakshan
- e) Corporate Staff Savings under payroll management

- J Fixed Deposit
- J Call Account
- J Sweep facility
-) Current Account
-) Specialized Saving Account
 - a) Gurkha Savings
 - b) Students Savings

B) Credit

-) Overdraft
-) Working Capital Loan/ Demand Loan/ Short Term Loan
- J Supply Finance
- J Term Loan
- J SME Loan
- J Trust Receipt/ Importer's Loan
- J Packing Credit/ Export Loan
-) Letter of Credit
-) Bank Guarantee
-) Car Loan
- J Home Loan
- J Home Equity Loan
-) Personal Loan

C) Other Services

-) Demand Drafts
-) Locker
- J Funds Transfer/ Remittance
-) Clearing/ Collection
- J Foreign Exchange
- J Financial Advisory

- J Laxmi iBank Complete Internet Banking
-) sms@laxmibank SMS Banking
- *Extended Banking*
-) Dhana Laxmi Debit Card accepted over ATM and PoS outlets
- *)* Payroll Management
-) NRN Cell

The detailed descriptions of these items are attached in annex 3.

1.5 MIS in Bank

The scope of banking service in today's world is expanded where the banks have become an instrument in providing financial assistance to a number of activities as a policy or by regulation or for meeting socio-economic obligations. The bank has a wide range of customers like individuals, institutions, trusts, business organizations, government and local bodies. The banks deal with a number of transactions which also vary widely in terms of length and complexity.

The MIS in banking industry revolves around solving the customers' problems in the financial matters and the single, most widely used measure of quick service in the elapsed time of transaction execution. The customers of the bank are conscious about the status of their account to make decisions for withdrawal or payment. In the same way they are interested in obtaining the loan assistance at a reasonable rate of interest. The MIS is to be designed to identify, decide and design a service strategy for offering a distinctive service to the wide range of customers seeking a variety of service demands.

It is necessary to set the internal standards on the art, accuracy, responsiveness and timeliness. The systems and resources provided to achieve these standards need monitoring and the MIS will provide a feedback on these standards so they can be regulated and controlled.

The management of the bank should create a customer database and analyze the needs of the customers from time to time to create suitable service package. The MIS helps the management obtain the reports about the accounts so that they are facilitated to alert or warn the customers to act on his account to correct the situation. The MIS is concentrated on the collection of the data from various sources to analyze the future business strategy and support the bank manager in making decisions. In upgrading the human resource, MIS plays a major role. The financial service business is becoming competitive and offering a good distinctive service to improve the business prospects. MIS aid management to identify the needs and design the training courses for the employees to improve the knowledge about the banking and the financial world.

IT revolution in the banking industry will help to cope with the explosive growth in the number of transactions and to provide improved customer service. We have human capital and opportunities in Information Technology, and when we are aware of the fact that a number of countries have developed their financial sector through an extensive use of IT as the medium of growth.

Obviously banks in future cannot survive without the support of Information Technology. Computerization of branch operations, controlling offices and the Head offices has been going on swiftly in recent times since that is the only way by which senior managements in banks can gain information on the size of operations on a daily basis.

Communication networks have also helped the banking industry to gain in terms of improved bank services. Now a customer can check his account details, transfer his money, and pay their bills through the Internet within a small span of time. Even if the branch is Information Technology revolution in the banking industry will help to cope with the explosive growth in the number of transactions and to provide improved customer service. Nepal is also witnessing a myriad of cyber activities both at private and government levels. The point to brood over is whether the industry is now balanced for the challenges that arise as a result.

The development and use of closed, system is up and running 24 hours a day and account-holders can access the account and even perform the transaction through ATM, PoS and Internet Banking in real time.

1.6 Statement of the Problem

Any organization has to sustain in today's competitive condition. To reach the sustainability and be an excellent performer, it is most important to observe whether the organization is performing well in terms of information. In the light of the growing importance of information for the managers in Nepal and for the service sector, the problem of the study is to access the role of the MIS in meeting the information needs for the effective decision making.

Laxmi Bank could still be taken as a fresh bud in the banking sector as it has started service just three years back in 2002 as the country's 16th commercial bank. They provide a complete range of banking products and services to their clients through fully functional branches in Birgunj, Banepa, Pokhara, and Biratnagar and now in Kathmandu.

The study is conducted to find out the answers of the following questions:

- 1. What are the beneficiaries of the new systems and technique introduced by Laxmi Bank?
- 2. What are the advantages of MIS in the management functions?
- 3. What is the contribution of information technology to information system?

1.7 Objectives of the Study

The basic objective of this research is to study and evaluate the effectiveness of the existing systems and technologies in Laxmi Bank Ltd. This study has the following specific objectives:

-) To study the existing information system of Laxmi Bank.
-) To analyze the use of Information System and Information Technology in management process in Laxmi Bank.
-) To identify any problem (gap) in the use of IS in Laxmi Bank.
-) To suggest the appropriate MIS in the study area based on the analysis.

1.8 Limitations of the Study

Some of the limitations of this research are given below:

-) The research study has been limited within the information system, its process, technology employed in existing information system.
-) The study based on that information which organization provides because they don't want to disclose their confidential information.
-) The research study has been based on primary and secondary data.
- Due to the time limitation, data and information which researchers collected might be insufficient for the study.

So, this study has some limitations like time bound, purpose bound, and scope bound. These limitations arise by various reasons from the researcher side or the organization's rules and regulations.

1.9 Organization of the Study

The study comprises five chapters.

Chapter- I: Introduction

This chapter deals about the introduction of the study, objectives, statement of the problem, rationale of the study and the limitations.

Chapter- II: Literature Review

This part of study is related with the literature review. In this chapter literatures related with MIS and IT are reviewed.

Chapter- III: Research Methodology

This chapter provides the methodology and way of data presentation. Within this chapter, the method of data collection and analysis and presentation of the study are also included.

Chapter-IV: Data Representation and Analysis

This section provides overall situation of MIS. Primary and secondary data are analyzed within this chapter. The chapter highlights the study findings such as comprehensive analysis of MIS, decision making, human resource management process and information flow system.

Chapter-V: Summary, Conclusion and Recommendations

The final chapter is the conclusion part. This chapter will present the summary, conclusion and recommendations of the study.

CHAPTER - II LITERATURE REVIEW

2.1 Conceptual Framework of MIS

Globalization of economies and financial liberalization within the economies has opened new opportunities of growth for techno-savvy institutions, while for others these have resulted in the shrinkage of revenues. The ever-increasing complexities of the business environment, a growing need for guidance on concept, issues and strategies for understanding, developing and managing information systems in organizations are being felt all over the world. Most of the organizations are building the information system to face the competition in the competent world. The development of the organizational information system adds the value to the products and services in order to achieve the competitive edge.

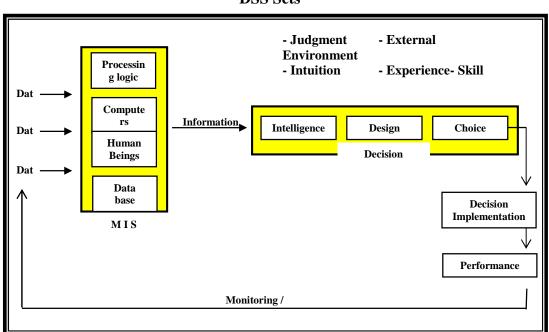


Figure: 2.1 DSS Sets

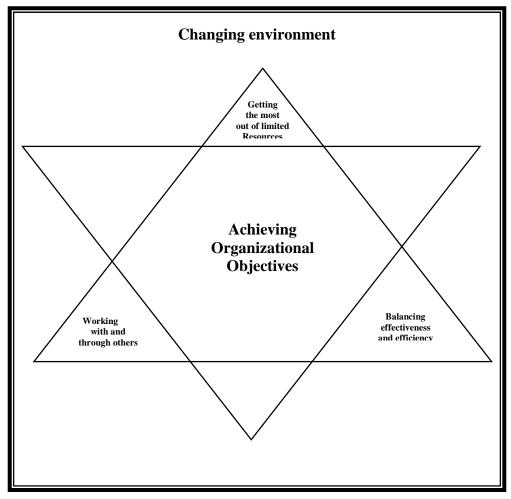
(Source: Goya; 2009: 45)

The three subcomponents of MIS are: Management, Information and System. These three subcomponents are dealt individually as follows.

2.1.1 Management

Greater management knows how to lead to better performance by enabling the manager to increase the output and quality of the work group. It helps the manager better understand the objectives and functions of the company as a whole. Effective management is the key to a better world but mismanagement squanders the resources and jeopardizes our well- being. Organizational objectives or goals always require collective action.

Figure: 2.2 Key Aspect of the Management Process



(Source: Kreitner; 2009:25)

Along with major functions, another gateway to the understanding of management is an analysis of the activities actually performed by managers. The importance of the different functions varies in particular with the three levels of management. Organizations are usually more successful when their activities are guided by challenging, and achievable goals and objectives.

Management is the social process of working with and through others to achieve organizational objectives in a changing environment (*Kreitner*; 1999:5).

Managers are responsible for getting things done by working with and through others.

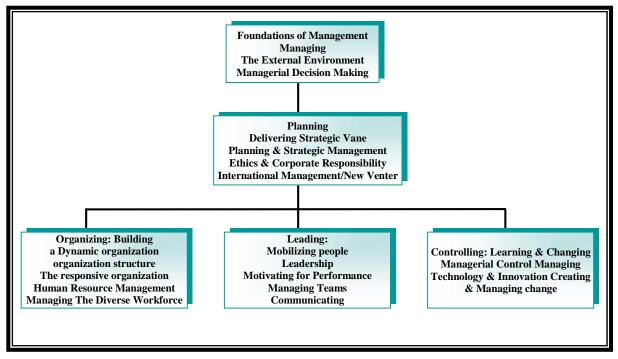
Management can be defined as a set of activities directed at the efficient and effective utilization of resources in the pursuit of one or more goals (*Fleet; 1991:8*). Successful management is the achievement of both efficiency and effectiveness.

Managers must be aware that balance between effectiveness (Kreitner has described effectiveness as a central element in the process of management that entails achieving a stated organizational objective) and efficiency (according to Kreitner, efficiency is a central element in the process of management that balances the amount of resources used to achieve an objective against what was actually accomplished.) is the key to competitiveness today. Successful managers predict and alter to changing circumstances rather than being passively swept along or jammed unprepared. Management functions are the sets of activities inherent in most managerial jobs.

Managerial functions are general administrative duties that need to be carried out in virtually all productive organizations to achieve desired outcomes. Management is the process of working with people and resources to accomplish organizational goals and to be efficient is to achieve goals with minimum waste of resources; i.e. to make the best possible use of money, time, materials and people (*Bateman; 2010:14*).

Figure: 2.3

Key Aspect of the Management Process



(Source: Bateman; 2010:32)

According to Bateman and Snell, the major functions of the management are divided into Planning, Organizing, Leading and Controlling.

A) Planning

Planning process in management is principally "Delivering strategic value" (People throughout the organization use their brains and the brains of customers, suppliers and other stakeholders to identify opportunities to create, seize, strengthen, and sustain competitive advantage), specifying the goals to be achieved and deciding in advance the appropriate actions taken to achieve those goals. It includes analyzing current situations, anticipating the future, determining objectives, deciding in what types of activities the company will engage, choosing corporate and business strategies and determining the resources needed to achieve the organization's goals.

It is impossible to organize or control something that has not been planned. The start of every act of management must be the making of a plan. Plans should exist for everything a manager does. Unplanned activities may occur in the best of organizations once in a while, as a response to unusual events.

B) Organizing

The major aspect of organizing is Building a dynamic organization to assemble and coordinate human, financial, physical, information and other resources needed to achieve goals. The three basic concepts of organizing are creating, or designing jobs; grouping jobs; and delegating authority. It includes the attracting of people to the organization, specifying jobs into work units, marshalling and allocating resources and creating conditions so that people and things work together to achieve maximum success.

C) Leading

Leading- the set of processes associated with guiding and directing employees toward goal attainment. Mainly leading focuses on directing, motivating and communicating with the employees individually and in groups to stimulate them to be a high performer. Managers must be good at mobilizing people to contribute their ideas, to use their brains in ways never needed to dream of in the past.

D) Controlling

The controlling process chiefly highlights the learning and changing practice. It monitors progress and implements the necessary changes and makes sure that the goals are met. If managers are not devoted adequately to attention for functions will be failures and will not be deemed as good managers.

The major jobs of management are categorized as "Decision making, organizing, staffing planning, controlling, communicating and directing" (Decision making is the process by which a course of action is consciously chosen from available alternative for the purpose of achieving a desired result). Henry Mintzberg, a psychologist has proposed the three interrelated managerial roles as:

- a. Interpersonal
- b. Informational
- c. Decisional

Interpersonal role refers to teaching and leading the employees. Informational task is to transfer the information throughout the organization and the decisional role involves evaluating and choosing direction that benefits the firm.

2.1.1.1 Management Levels and Skills

A) Top Level Managers

The top level managers are responsible for organization's overall management and focus on long term issues and emphasize the survival, growth and overall effectiveness of the organization. This level is accountable for interaction with organization and external environment.

B) Middle Level Managers

This level bridges the gap between higher and lower levels channeling and translating of information from front lines to upward. The major responsibility is for translating the general goals and plans developed by strategic manager into more specific objectives and activities. The theme is "to help develop the people to develop the business" (*Snell*; 2010:17).

C) Frontline Managers

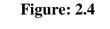
The frontline managers are directly involved with non-management employees, implementing the specific plans developed with the middle management. This level supervises the operational activities of the organization and link between management and non-management personnel. They are increasingly called upon to be innovative and entrepreneurial, managing for growth and new business development.

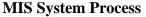
Managers need a variety of skills to perform well. Skills are specific abilities that result from knowledge, information, practice and aptitude. The major rated skills are technical skills (ability to perform a specialized task that involves a certain method or process.), conceptual and decision (Skills pertaining to a manager's ability to recognize complex and dynamic issues, examine the numerous and conflicting factors such issues involve and resolve the problems for the benefit of the organization and its members.) skills and interpersonal and communicating (the ability to lead, motivate and communicate effectively with others.) skills.

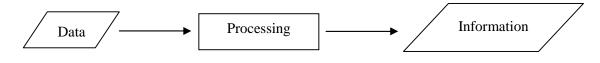
Managers must focus more on interpersonal skills, sharing information with others and teaching and helping people learn. The result is a high performance work environment when the key management functions are performed by managers who have these critical management skills.

2.1.2 Information

Information is data that has been processed in such a way as to be meaningful to the person who receives it. An organization requires information for a range of purposes (According to Business Basics: information technology, those categories are as follows: Information for planning, controlling, recording transactions, performance measurement and decision making.). The recipient may then use it to improve the quality of decision making.







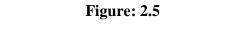
(Source: Snell; 2010:38)

Data----- facts Data + Meaning = Information

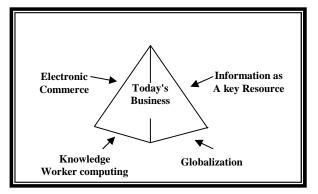
The information is the summarization of data. Technically, data are raw facts and figures that are processes into information. Often information is viewed as a type of input to an organism or designed device.

Information is a critical resource in the operation and management of organizations. Timely availability of relevant information is vital for effective performance of managerial functions such as planning, organizing, leading and control. Information is data that have been put into a meaningful and useful context and communicated to a recipient who uses it to make decisions.

The foundation of management rest with information or data made useful for decision making. The intelligence information is needed to deal effectively with competitors, government agencies, creditors, suppliers and stockholders. Management information system use information technology to meet the information needs of managers in daily decisions.







(Source: Snell; 2010:32)

2.1.2.1 The Qualities of Good Information

A raw data can be processed into good or bad information. Good information is information which has value to the user. It is useful to the recipient, can be relied upon and helps in the decision making process. The qualities of good information can be evaluated as:

-) complete
-) relevant
-) timely
-) as accurate as is required
-) understandable
-) significant
-) communicated to the right person
-) communicated via an appropriate channel

Good information commands the confidence of the user and is useful so long as its value is higher than the cost of generating it. Managers at all levels should be provided with the information to assist them with planning and controlling activities. The different factors like the objectives of the organization, the size and diversity of its operations, management structure, and management style influence the principles of providing the information.

"Information is defined as a data (Data is defined as a group of non random symbols in the form of text, images or voice representing quantities, actions and objects.) that has been processed into a form that is meaningful to the recipient and is of real or perceived value in the current or the prospective actions or decisions of the recipient" (*Jawadekar*; 2009:88).

Information is recognized as competitive advantage (Information is a valuable resource that can enable an organization to establish an advantage over their competitors). Organizations that make a good use of information in decision making, and which use new technologies to access, process and exchange information are likely to be best placed to survive in increasingly competitive world markets.

Information has a great impact on decision making, and hence its value is closely tied to the decision that results from its use. Its value is related to those who use it, when it is used, and what situation it is used. Information supports decisions, decisions trigger actions, and actions affect the achievements or performance of the organization.

People in the organizations are constantly converting knowledge into various forms of information and acquiring information for others to improve their knowledge. A modern organization requires a wide range of systems to hold process and analyze information. Information Technology access to deliver information to different levels in the organization.

2.1.2.2 Organization and Information

"The management consists of a group of people who are placed in organization at various levels with assigned task, job and responsibility to achieve the goals. Information plays a key role in the organization hence concepts are applicable to all of them. It is very necessary to understand the use of information, the nature of the information, the value of the information, the media and the structure of reporting with reference to the type and levels in the organization (*Jawadekar; 2009:104*).

2.1.2.3 System

"A system is a set of interacting components that operate together to accomplish a purpose" (*Jawadekar*; 2009:108). "A system is also regarded as a group of interrelated components working together toward a common goal by accepting inputs and producing outputs in an organized transformation process" (*O'Brien*; 2002:8).

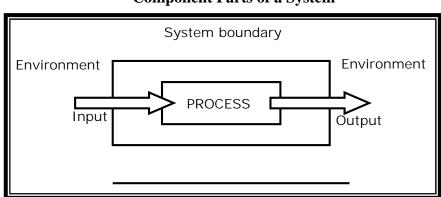
"The system approach to management views the organization as a unified, purposeful system composed of interrelated parts. This approach gives manager a way of looking at the organization as a whole and as a part of the larger, external environment" (Stoner, *Freeman and Gilbert; 2010:46*).

An organization itself is a whole system and has different sub systems which directly or indirectly affect the information systems of the organization. System is also used to describe a collection of hardware, software, instructions and people working together in a similar environment to perform a common task.

2.1.2.4 The Component Parts of a System:

- / Input
-) Processes and
-) Outputs.

Figure: 2.6



Component Parts of a System

(Source: Stoner, Freeman and Gilbert; 2010:46)

The set of elements for a system may be understood as Input, Process and Output. A system may have single input and multiple outputs or may have multiple inputs and outputs. An organization is itself a whole system having different sub systems which directly or indirectly affect the information system of that particular organization.

"The system approach to management views the organization as a unified, purposeful system composed of interrelated parts. This approach gives managers a way of looking at the organization as a whole and as a part of the larger, external environment *(Snell; 2010:17)*.

2.1.2.5 Management Information System

People have relied on information systems to correspond with each other via a variety of physical devices (hardware), information processing instructions and procedures (software), communication channels (networks) and stored data(data resources) since the dawn of civilization. All information systems use people, hardware, software, data and network resources to perform input, processing, output, storage and control activities that transform data resources into information products.

From a business perspective, an information system is an organizational and management solution, based on information technology, to a challenge posed by the environment.

Managers cannot ignore information systems because they play such a critical role in contemporary organizations. Today's systems directly affect how managers decide, how senior managers plan, and in many cases what products and services are produced (and how), responsibility for information systems cannot be delegated to technical decision makers. Information systems today play a strategic role in the life of a firm and its focus is on information that management needs to prepare its job.

"Management Information System is a general term for the computer systems in an enterprise that provide information about its business operations. It is also used to refer to the people who manage these systems"

(<u>http://search390.techtarget.com/sDefinition/O,,sid10.gci214098,00.html;2011</u>).

"An information system is the system consisting of the network of all communication channels used within an organization. A management information system may also be defined as a system that collects and processes data (information) and provides it to managers at all levels, which use it for decision making, planning, program implementation, and control. An information system is comprised of al the components that collect, manipulate, and disseminate data or information"

(<u>http://en.wikipedia.org/wiki/Management_information_system</u>;20111).

"Management Information System —usually called MIS—is the career of choice for business professionals who investigate, design, build and manage business information systems. MIS is a dynamic mix of people, business and technology"

(<u>http://www.bus.oregonstate.edu/news/literature/mislowres.pdf</u>;2011).

"MIS is the system helping managers run the company: a system for gathering the financial, production, and other information that managers need to operate a business, especially a system that is computerized"

(http://encarta.msn.com/encnet/features/dictionary/DictionaryResults.aspx?refid=18616 93309; 2011). "Information system is defined as the interrelated parts or components working together to assemble, process, store and distribute information to facilitate and support decision making, coordination, control, analysis, and transparency in an organization" (http://krooman.com/KM_pp_MIS.pdf#search;2011).

"MIS is usually used within large organizations and is generally understood as an integrated, user-machine system that converts data from internal and external sources into information that provides a full range of functions. It will communicate this information to managers at all levels, in all functions, to enable them to make timely and effective decisions for planning, directing and controlling the activities for which they are responsible. MIS is responsible for managing and administrating information as well as developing and managing all networking and computer resources" (*http://www.directessays.com/viewpaper/101115.html;2011*).

"The fundamental ingredients in business systems are information, people and technology. MIS business analysts provide the tools that manage information, making it useful and powerful. MIS professionals look for new ways to generate, store and manipulate information using technology"

(<u>http://www.bus.oregonstate.edu/news/literature/mislowres.pdf</u>;2011).

"MIS is defined as a formal method of making available to management the accurate and timely information necessary to facilitate the decision making process and enable the organization's planning, control and operational functions to be carried out effectively" (*Lynch; 2009: 20*).

"Management information system is a system that gathers, organizes, summarizes and reports data for use by managers, sometimes called information reporting systems, MIS serve to help link the several parts of an organization together" (*Lynch; 2009: 20*).

"An information system in an organization is like the nervous system in the human body: it is the link that connects all the organization's components together and provides for better operation and survival in a competitive environment. The term information system usually refers to a computer-based system, one that is designed to support the operations, management, and decision functions of an organization. Information systems in organizations thus provide information support for decision makers" (*http://www.fao.org/docrep/W5830E/w5830e0k.htm*; 2011).

2.1.2.6 Positive Impacts of Information System

-) Information systems help the companies learn more about the purchase patterns and preferences of their customers.
-) It provides new efficiencies through services such as ATMs, telephone systems, computer controlled airplanes and air terminals
-) Internet distributes information instantly to millions of people across the world.

2.1.2.7 Negative Impacts of Information System

-) Information system may eliminate jobs by automating activities previously done by people.
-) It may allow the organization to collect personal details of the people that violate their privacy.
-) System outage can cause shutdown of businesses or transportation services, paralyzing communities.

"Management Information system is a combination of planned procedures, suitably designed forms, an appropriate organization structure and managers who are capable of utilizing the output which is produced to assist them in the administration and use of available resources" (*Lynch*; 2009: 22).

Management information system is the original type of information system developed to support managerial decision making that produces information to support many of day-to day decision making needs of managers and business professionals.

"Management information system is an organized combination of people, hardware, software, communications networks and data resources that collects, transforms and disseminates information in an organization" (*Lynch*; 2009: 23).

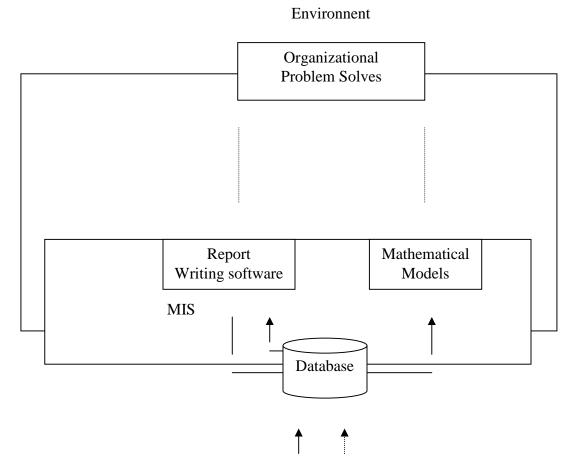
Nearly every business uses information technology —in fact, the rapid pace of development is forcing businesses world-wide to redesign the way they do business. They rely on MIS professionals' use of information technology to help build long-term sustainable competitive advantage in local and global markets. People are often confused with the difference between Computer Science and MIS. Computer Science is concerned with computer application design and programming while MIS uses many different kinds of information technology to solve business problems.

"MIS refers broadly to a computer-based system that provides managers with the tools for organizing, evaluating and efficiently running their departments. In order to provide past, present and prediction information, an MIS can include software that helps in decision making, data resources such as databases, the hardware resources of a system, decision support systems, people management and project management applications, and any computerized processes that enable the department to run efficiently"

(<u>http://www.webopedia.com/TERM/M/MIS.html;2011</u>).



Component of MIS



Environnent

(Source: Stoner, Freeman and Gilbert; 2010:48)

MIS can be defined as the systematic or organized way of providing informational support to the managerial functions of an organization. The system utilizes computer hardware, software, manual procedures, and models for analysis, planning control and decision-making and a database. In other words, MIS is an automated system which presents information both internal and external to the business that aids in making a specific set of routine decisions.

Information management, information systems and information technology are distinguished with each other. The growth in IT/IS outsourcing, leads us to make explicit the need for IT/IS sourcing strategy and supportive capabilities within the contemporary organization.

2.1.2.9 SWOT for a new information systems installation:

Strengths:

-) excitement, opportunity
-) state of the art
- J Training for staff
-) Everyone else' has one

Weakness:

-) Cost
-) Teething troubles
- Access to advice and problem solving

Opportunities:

) Develop expertise

-) Develop quality access and use of information
- J Develop staff
-) Change culture(if required)

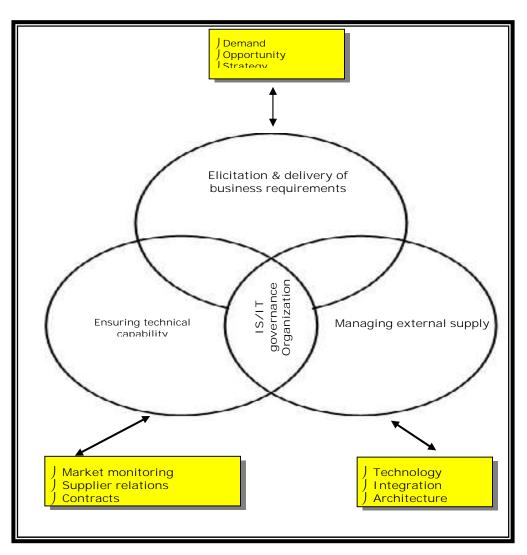
Threats:

-) Costs, on- costs and hidden costs
-) May be at the mercy of suppliers
- J Staff may not like it, and will not use it.

2.1.2.10 The four faces of IS function

) The business face is concerned with the elicitation and delivers of business requirements. The information system strategy is concerned where the relevant interrelationship and interdependencies with other systems.

-) The technical face, concerned with the business, has access to the technical capability and the information technology strategy is to provide technical support for delivery of the IT strategy.
-) The governance face, concerned with information management strategy, defines the governance and co-ordination of the organization's IT/IS activity.
-) The supply face encompasses understanding and use of the external IS/IT services market, its activity is driven by decisions about the sourcing of activity.



The Four 'Faces' of IS Function

Figure: 2.8

(Source: Wendy and Galliers; 2010:76)

The pervasiveness of co mputers and information systems in business has made them essential tools in many tasks, such as managing the shop floor, evaluating the performance of employees, tracking customers, and generating the payroll. Quality oriented efforts and decisions are highly information-intensive, so computers help a company achieve its quality goals by providing the right information to the right people at the right time.

2.1.3 Conceptual View of DSS

A decision support system (DSS) is a computer system that typically encompasses mathematical models as well as informational databases and a user interface in order to provide recommended decisions to manager-users. A DSS differs from a management information system (MIS) in that it not only provides the user with information or databases as does an MIS, but it also provides answers to user queries, i.e., decisions, through its modeling component. In essence a DSS is a computer system that helps managers make decisions.

2.1.3.1 Decision Making and DSS

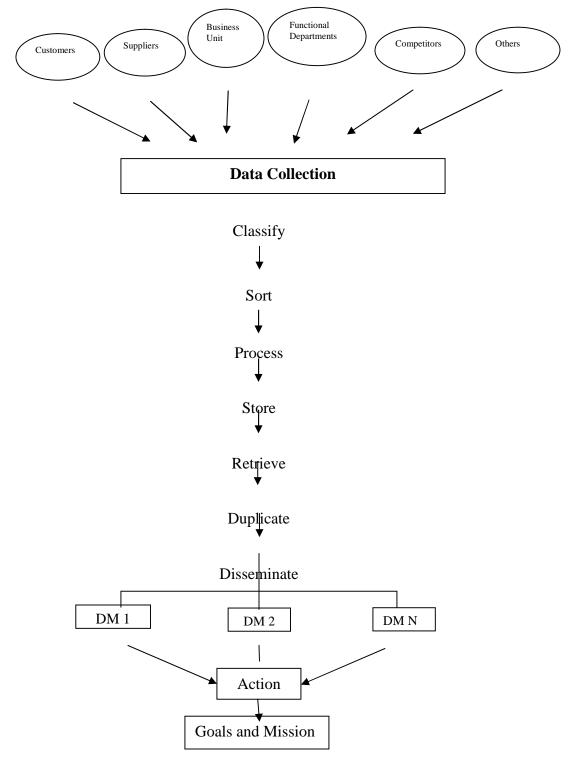
(http://en.wikipedia.org/wiki/Decision_Support_Systems; 2011)

Decisions are classified as programmable decisions and non-programmable decisions. The programmable decisions are rule-based structure, can be computerized as inputs, pro cessing methodology, analysis and choice of decision making are predetermined whereas the non- programmable decisions are those in which the rule is not fixed or predetermined and requires every time the user to go through the decision-making cycle.

Decision support system can organize information for decision situations, interact with decision-makers, expand the decision maker's horizons, present information for decision makers' understanding, add structure to decisions, and use multiple criteria decision-making models. DSS supports the decision-making process through the presentation of information that is designed for the decision-maker's problem solving approach and application needs. It neither displaces judgment nor makes decision for the users. A useful DSS will challenge and eventually change a decision-maker. Decision makers use information to achieve the goals and the mission of the organization.

Figure: 2.9

Decision Making and DSS



(Source: Wendy and Galliers; 2010:78)

2.1.3.2 Decision Making Phases

According to Simon, there are three phases in decision-making process. It is the systematic process, which involves intelligence phase, design phase and choice phase. All this occurs independently of the next step and is completed before the next step is carried out. Modeling is an essential part of this process. The decision makers start with the intelligence phase.

Intelligence phase: An active awareness of changes in environments that call for action. The decision makers search the external and internal business environments, checking for decisions that need to be made. Intelligence translated to vigilance: continual searching and scanning. This phase provides the impetus for the two other phases.

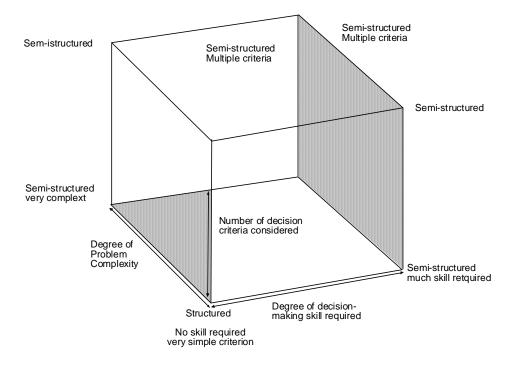
Design Phase: In this stage, the decision-maker formulates a problem and analyzes several alternative solutions. To reach the solutions, decision-makers adopt different management techniques and decision-making tools and models. If necessary data are not available for ranking, the system back-tracks to the intelligence phase to obtain relevant information.

Choice phase: The most complex phase in decision-making process. The decision-maker chooses a solution to the problem or an opportunity identified in intelligence phase. This choice follows from the foregoing analysis in the design phase and is reinforced by information gained in choice phase. It also includes implementation of the decision-maker's choice.

It is hypothesized that all decisions may contain "deep structure"-that is, structure that is presented but not yet apparent. If this is considered true, then all decisions could be treated as semi-structured, and the usefulness of a DSS would be substantially broader.



Decision Making Phases



(Source: Wendy and Galliers; 2010:89)

2.2 Review of Case Studies

Marchand and Paddack, (2004), have conducted the case study of "*Skandia Banken: Developing Information capabilities for an effective E-business strategy.*" A summary of this case study is as follows.

In December 2000, Skandia Banken had been awarded 'The Best Bank of the Year' for the third year in a row and was the only bank to have been awarded the honor more than once in the competition's 10-year history. Skandia Banken, Sweden's first branchless bank was created in October 1994, marking the first successful entry of a non- bank into Swedish banking market. By the end of 2000, eight months after beginning its Norway operations, Skandia Banken had also captured 6 percent of the Norwegian Internet banking market, surpassing expectations. Skandi Banken's 380 employees served over 400,000 customers from its two offices in Stockholm, Sweden and Bergen, Norway. In the call center, a computer- based monitoring system tracked-in real time- service levels, average call times, down times, and customer response rates for both individuals and teams. They used the system as a tool for setting and attaining goals rather than as a watch-dog system. They kept the information process simple, eliminating as many sub-processes and instructions as possible to satisfy the largest number of customers. In 1998, Skandia Banken supported four separate call centers: for savings accounts, car leading accounts, mortgage accounts and equities advice.

In the development of Skandia Banken IT system, three principles were guided: low cost, practicality and simplicity, and the outsourcing of non-value-adding systems. The development of an IT application "Switch-board" allowed Skandia Banken not only to link all of its databases and systems into one integrated structure but also to add new databases or remove old ones quickly and easily. In a joint venture with Ericsson and IBM, Skandia Banken became the first bank in Europe to develop an application link for telephone-activated pop-up screens in the call center, greatly improving customer service. With the development of the IT systems, Skandia Banken began its first cross- border expansion into neighboring Norway and jumped to be the leading online bank in Norway with a 6 percent market share.

Pradhan (2006), in her case study, "Information Technology in Nepal: What Role for the Government?" focuses on the importance of information technology in the developing countries in reference to Nepal. The author believes that developing countries, in particular Nepal, need to urgently develop a culturally appropriate national strategy if they wish IT to have a positive impact on their overall socio-economic development.

This paper argues that Nepal needs to base its national IT strategy on a much greater consideration of local cultural and social issues. IT is the most important factor separating the developing and developed countries. The government has a major role to play if the country wants to stand in the information arena. She has focused that the countries being encouraged to attract economic growth by entering the 'information age', and being able

to compete at the multinational level. The government must play an important role, not only as a major user, but also through its other role as regulator, promoter and diffuser.

Nepal has a hierarchical society and is built upon traditional criteria such as kinship, residence, age and sex, but has become merged with the top-down authority. Powerful top -down authority operates in the line of strict task division. In a broad sense, juniors execute while seniors supervise and delegate. An understanding of the potential influences of organizational structures and control is a must, especially if the acquisition of new technology is aimed to be effective.

IT is of critical importance for a number of reasons for Nepal: IT makes it easier and more plausible for a small land-locked country to acquire a global perspective through direct links with the rest of the world; and it is an essential part of restructuring and moving upstream into high value-added, highly skilled activities.

In conclusion, the case study has intensified that the appropriate information technology at the level of the policy maker means IT provides the means for or supports activities, which in national terms are seen as desirable. Formulating an appropriate information strategy, which is favorable and supportive to development, a country can best use information technology for overall progress.

Curto (2008), in his case study, "Bricks and Clicks: The Supplementation of Banking Transactions with Online Banking" has tried to focus on the concerns of the customers about the security and comfort level associated with online transactions whereas there is limited awareness of the benefits achieved through augmenting an account with online features.

Banks that want customers to augment their current service with online banking face difficult challenges. These challenges do not include the banks' willingness to offer online banking to their customers, as the overwhelming majority of banks have some online transactional interface for their customers.

This case study has the primary purpose of highlighting the problems that banks face in implementing online banking as part of their offering to customers and to discuss possible solutions. Customers using online banking, in addition to traditional banking transactions, have a special set of needs in order to have complacency using such services. Banks that address these special needs for online banking users are progressing towards a successful, long-lasting relationship with their customers.

Advancements in hardware and software technologies have allowed for faster, more dependable transactions to occur. There exist tremendous convenience factors achieved for customers through the use of online banking. Banks that offer online transactions achieve cost savings through reduced manual record-keeping activities and costs associated with person-to-person (P2P) transactions.

The main focus of this study is specifically those who make decisions concerning the implementation of online banking. This could include the marketing department, website designers, and strategic management of firms engaging in online banking. The marketing department and website designers are imperative to the customer's decision to accept of online banking because each plays a role in developing the interaction relationship with customers. Strategic management, on the other hand, is important in the decision-making process for dedication and allocation of financing for developing online banking. The overwhelming majority of these problems can be quantified into a monetary amount. Other problems have time allocations associated with them.

There exist many problems relating to the low adoption rates of online banking to both banks and customers. The strategic management carries the burden of making executive decisions. These decisions include, but are not limited to, approving marketing plans, developing executive goals and missions, deciding viability of projects, and allocating resources to the implementation of online banking. Without properly considered decisions being made by the strategic management, online banking cannot succeed. Ron Condron (2010), in his case study, "*Hardcat at ANZ Bank : Comprehensive Asset Management System*" has tried to focus on the concerns of the customers about the security and comfort level associated with online transactions whereas there is limited awareness of the benefits achieved through augmenting an account with online features.

ANZ Bank is one of the largest companies in Australia and it ranks amongst the leading financial institutions of the world. It has been established in the UK for more than 50 years, where it employs around 500 people. ANZ in London operates as a division of the Australia and New Zealand Banking Group Limited and, organizationally, its business is concentrated in Investment Banking, Private Banking and International network services. Before Hardcat, auditing and asset control were traditionally undertaken using a paperbased hard copy system but this was time consuming, and inevitably prone to inaccuracies, with the risk that not all assets were being recorded. This meant that depreciation calculations were imprecise and, in the event of disaster like a fire, flood or theft, difficult to ensure that accurate insurance claims could be made. Ron Condron, Head of Operations Support at ANZ Bank, realized the hard copy system as inept to keep track of the assets with real accuracy. With more and more IT equipment going into the offices, the bank decided that proper control was required.

ANZ looked at several tracking and management packages without being convinced they were entirely right, until a recommendation from their headquarters in Melbourne, Australia pointed the British offices towards Hardcat Systems (UK) Ltd. ANZ selected the Hardcat Core System, together with the Bar coding, Purchasing, Depreciation, Preventative Maintenance and Helpdesk modules, ensuring that they had a comprehensive asset management system that tracked their assets from 'cradle to retirement'.

After the Implementation of Hardcat, the large number of assets to be collected, recorded and entered on the system took less time than previous audits and provided much more accurate and reliable information. As well as delivering a complete fixed asset management system to the bank, Hardcat also assisted in the review, design and implementation of a new asset management policies and procedures process. The accuracy of Hardcat records ahead of the savings on time and resources the system makes possible. Hardcat has the facility for the functions to be carried out quickly and easily. ANZ can now be confident that their Hardcat system is now accurate and being administered in an easy and manageable way. There is no better promotion for a company than that of a customer's own opinion.

2.3 Review of Thesis

Joshi (2009), in her study "Management Information System in Nepalese Bank; a study in Rastriya Banijya Bank" has tried to focus on the efficiency and effectiveness of banking industries in reliance to information system. She has tried to stress on the need of information system in the banking industries for the smooth information flow within and outside the organization. The effective flow of information in different levels supports a sound decision making process. In the context of Rastriya Banijya bank, she found that if the information system is applied correctly, the position and the performance of Rastriya Banijya Bank can be uplifted and has concluded that effective information system is most important to enhance the overall standard of Rastriya Banijya Bank.

Karmacharya (2010), has tried to focus the implementation of management information system in the banking sector with reference to Agriculture Development Bank in her study "*Implementation of Management Information system; a case study of Agriculture Development Bank, branch office, New Baneshwor.*" She has stated that the competition in the commercial banks and introduction of the new technology has generated more challenges to the banking sectors. The newly introduced banks have been implementing advanced technologies to facilitate customers and proved themselves as the quick service providers. Her study shows that the Agriculture Development Bank is lacking in these perspectives.

Management information system is not practiced in the branch office and the office is semi- automated as there is a lot of paper work. The human resource management is also weak due to unpracticed new technologies. The position for the management information issues is falsely created for the managers and employees. So her study shows the gap in the existing information system in the bank. Thapa (2010), in his study "*Future Prospective of Online Banking in Nepal*", has focused on the environment in which banks are operating in Nepal and to the compulsions that work to make computerization in banks an imperative. He has tried to find out the opportunities of the online banking in the context of Nepalese commercial banks and the security threats rose from the online banking system.

His study finds out that in the technology based generation, the online banking has pursued the advantage to the people. His study shows that among his respondents 95% are dissatisfied with the traditional banking system and most are aware of the online banking services. Some cases show that the lack of computer knowledge has shaped difficulty in implementing full-fledged online banking in Nepal.

Maharjan (2010), has studied the human resource information system in the Buddha Air in his study "*Human Resource Information System; An analysis of the existing system and Model Building for the Buddha Airways.*" He has tried to identify the correlation of human resource and information system, the technology and education integrated in human resource information system. The study is to find out the design of HRIS to facilitate effective utilization of this resource and effective decision making.

The objective of his study is to elucidate the policies and problem area of human resource management in Buddha Air. The network of the information flow is also highlighted. He has the findings that Buddha Air is completely computerized and paperless organization. He has concluded Buddha Air as a big entity having superior information system as compared to other domestic airlines.

CHAPTER - III RESEARCH METHODOLOGY

3.1 Introduction

Research methodology is the process of arriving at the solution of the problem through planned and systematic dealing. It describes the methods and process applied in the entire aspects of the study for analysis and interpretation of facts and figures. For this, it consists of the sources and nature of data, sampling procedure, pilot test and analysis, data-mining, presentation and analyzing tools used in this study.

3.2 Research Design

This research is descriptive and analytical case study in nature. The study has tried to cover the existing system of Laxmi Bank and how the proper information system helps to a better management. Descriptive method was adopted for the study. The relevant information was collected from primary and secondary sources.

3.3 Population

For the purpose of the study, population has been defined in terms of commercial banks within Kathmandu metropolitan city. There are altogether 31 commercial banks in Nepal (See Annex 1). Laxmi bank has been taken as the major sample for the research work whereas other commercial banks are also considered for the comparison of the information system implementation credentials.

3.4 Data and Information Gathering Techniques

Data and information gathering techniques are classified into two groups.

3.4.1 Primary Data and Information

The primary data and information has been collected via observation, questionnaire, formal and informal interviews and field visits. The unstructured interview method was applied for the information collection. The information related with the banking system, management of the bank and its hierarchy maintained for the decision making process,

technology implemented by the bank and the routine information flow was highlighted on the interview with the different departmental heads and staffs of the bank. The bank also facilitated the direct observation of different activities within the premises for the information collection.

3.4.2 Secondary Data and Information

The profile of Laxmi Bank, in house journals, records from all departments, websites, journals and magazines published by the related sectors, different books, publications, official records has been mobilized as the source for secondary data and information. The internal reports, annual reports and published materials from the bank have also been used for this study.

3.5 Data Presentation and Analysis Procedures

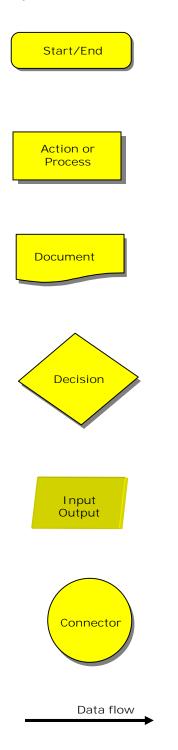
This study was mainly based on the management, information system and information technology implemented in the bank. After the collection of sufficient data from observation, interview and other sources, the data was analyzed and presented in the flow chart and Entity Relation (ER) diagram for the documentation of information flow of banking system. The data collected from the formal questionnaire are presented in the tabular form, simple bar diagram and pie chart. The format of the questionnaire is attached in annex 4. After presenting and analyzing the information, necessary conclusions and recommendations are drawn.

3.5.1 Tools for the Documentation of Information Flow

3.5.1.1Flowchart

The flowchart is a means of visually presenting the flow of data through an information processing systems, the operations performed within the system and the sequence in which they are performed. Basically our concern is with the program flowchart, which describes what operations are required to analyze and present the given data.

Symbols used in Flow Charts

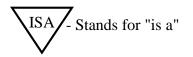


3.5.1.2 Entity-Relationship Diagram (E-R Diagram)

E-R diagrams represent the schemes in the overall organization of the system. In the diagram different types of symbols will be used to present the overall system of organization.

Symbols used in ER Diagram

1) Rectangle	-represent entity sets	
2) Ellipses	- represent attributes	\bigcirc
3) Diamonds	- represents relationship sets	\diamond
4) Lines	-link attributes to entity sets and entity sets to relationship set	s
5) Double Ellipses	-multi valued attributes	\bigcirc
6) Dashed ellipses	-denote derived attributes	
7) Double Lines	-indicate total participation of An entity in a relationship set	
8) Double rectangles	-represents weak entity sets	



* Entity is a person, group, department, or any system that either receives or originates information or data.

* A relationship is the association that describes the interaction among the entities.

* Weak entity set- entity set may not have sufficient attributes to form a primary key

CHAPTER- IV DATA PRESENTATION AND ANALYSIS

4.1 General Background

The findings of the study on the management information system and its importance in the banking sector in reference to Laxmi bank have been tried to be presented in this chapter. An attempt has been made to highlight the focus of the study to find out the present situation of information system and information technology in different functional areas of the bank. For this purpose observation method has been applied.

Organizations are spending much more on information technology these days. These investments would be profitable if managers learnt to use the technology and mechanism of information. The key to building and using effective information system is that the managers need to know how to apply information technology to solve the problem and make decisions. Also the companies that can integrate various technologies to achieve business goals are often very successful.

Laxmi Bank is an emerging key player in the Nepalese Banking arena providing a comprehensive range of financial services: personal, corporate banking, retail banking; trade and supply finance services; cash management; treasury and retirement fund management through a wide range of delivery channels and a global network of correspondents.

To a competitive situation, Laxmi bank is trying to introduce and develop new systems and techniques to uphold its image and be the leader. They are providing more facilities to the customers in an easy and better way and are being successful for being the quick service providers. Success always depends on right decision. Right decision at the right time could be made only with the help of right information. Hence MIS can provide right information to the decision-maker in a proper way.

4.2 Analysis of Existing System of Laxmi Bank, Hattisar

Laxmi Bank has a convenient and dependable communication network for efficient flow of information within the organization. The organization is paperless and totally into computer software systems. This has provided a major edge to it in prompt decision making. The system as Universal Banking Solutions – Flexcube, Intranet, Business Objects reporting, Communication Server, Chat System, and Telerate are the key components of the MIS within Laxmi Bank. The MIS of Laxmi Bank is not just a snapshot during the cut- off time, is a complete real time and comprising all its branches in centrally solutions.

Explosive technological advances and the rapid globalization are continually challenging most firms and their executives. Most contemporary organizations are critically dependent on skillfully managed computer network operations. The information system is in series with their critical activities.

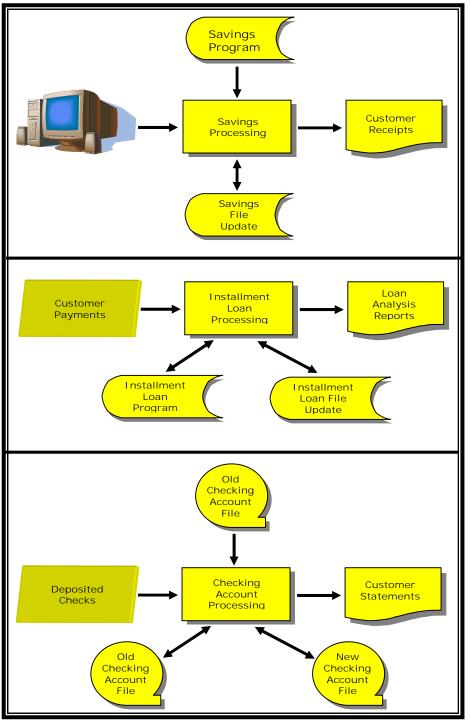
MIS involves in generating information, processing and transmitting it. Laxmi Bank has its own centralized database system. The information and data stored in the computerized database are collected, analyzed, organized and disseminated for decision making. The ultimate use of such system is for managerial decision-making. However all information may not be required to all the managerial level staff, hence only related information to the right personnel is disseminated at the right time.

The development of today's information infrastructure is the most complex human activity ever undertaken. Information technology plays a more critical role in business success; managers must adopt more sophisticated models to help them oversee their firm's increasingly vital information assets and they all should be capable of analyzing, interpreting and presenting the right information and taking the decision accordingly at the right time.

Flow Chart of Savings and Loan Processing

Figure: 4.1

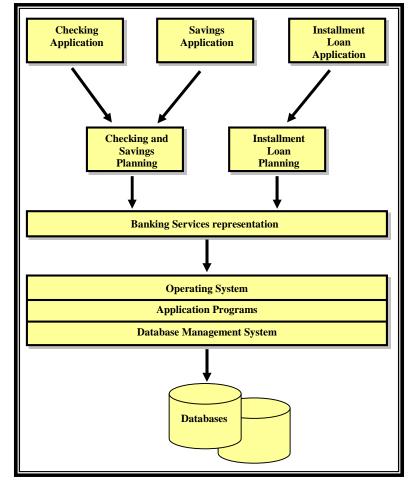
Flow Chart



(Source: Wendy and Galliers; 2010:79)

4.2.1 Database System of Laxmi Bank

Figure: 4.2



Database System of Laxmi Bank

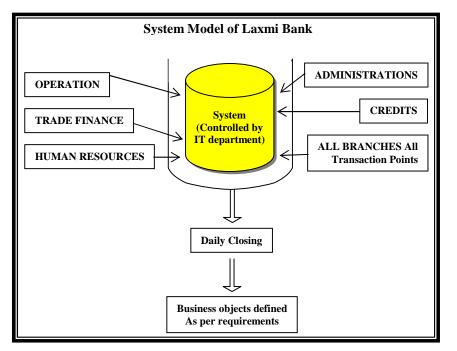
(Source: <u>www.laxmibank.com</u>:2011)

IT Department is the heart of the bank operating all the functional systems to support other departments. They themselves develop their reporting software and integrated with the banking solutions as per the requirement. The system makes the flow of information easy allowing access of the data to the personnel of all departments which help to improve the efficiency of the human resource operations.

4.2.2 System Model of Laxmi Bank

IT managers have a clear and realistic view of technology trends and keen appreciation for their firm's technological maturity. This knowledge is essential for providing the CEO and the executive/management staff with the information upon which reasonable expectations can be built. In today's climate of rapid technological change, substandard IT management is rarely tolerated, and savvy IT managers strive to position themselves as indispensable resources to their executives.

Figure: 4.3 System Model of Laxmi Bank



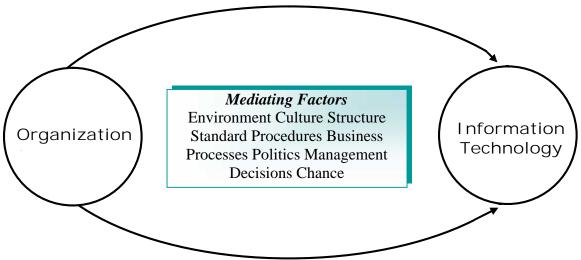
(Source: <u>www.laxmibank.com</u>:2011)

4.2.3 IT Vision and Strategy

- *Earn* profit by using and adopting technology
-) Cost effective
-) Central control
- Always in search of new technology
-) Integration with all delivery channels, banking system and MIS
- Paperless Culture office/ Enhanced office automation
-) Productive output with less staff

Figure: 4.4

IT System of Laxmi Bank



(Source: <u>www.laxmibank.com</u>:2011)

Equipped with:

- Flexcube (No.1 Universal Banking solutions in the world)
- J Inter branch connectivity (WAN) on Real Time mode
-) Policy to regulate IT Operations and health use of computer resources
-) Centralized Antivirus/ Spam filter
- Branch Rollout: Birgunj, Banepa, Pokhara, Biratnagar and Hattisar
-) 24 X 7 online Data Center
-) Centralized bank instrument management system
-) Security: Network, Firewall with IDP/S, corporate group policy and Theme
- J Internet Banking- Laxmi iBank/ Bill payment
- Web site <u>www.laxmibank.com</u>/ secured by verisign GSID
-) Share management system (LBSMS)
- J Intranet: Makuri.com
- J Swift Net
- J Telerate

4.2.4 Intranet

Intranet is an internal organizational Internet that is guarded against outside access by special security. Intranet of the Laxmi Bank has been named as Makuri.com The Makuri.com is internally developed, private, secured corporate information network of Laxmi Bank based on SQL server. It is easy to access and is based on trust enabling employees to take actions to the central office operations. Intranets help the organization create a richer, more expansive information environment and create collaborative environments in which members can exchange ideas, share information and work together regardless of their physical location. The principal use of intranets has been to create online repositories of information that can be updated as often as required.

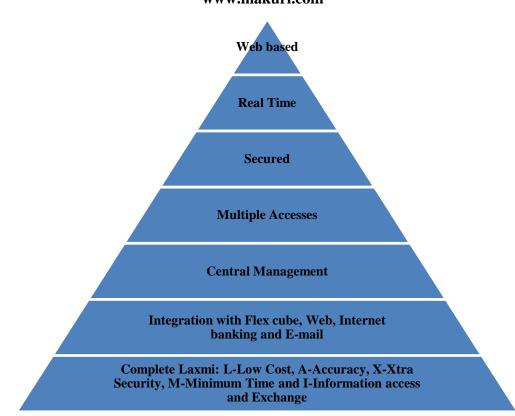


Figure: 4.4 www.makuri.com

(Source: www.laxmibank.com:2011)

4.3 Decision Making in Laxmi Bank

Managers are responsible for moving from task to task and towards the opportunity in the process of mobilizing resources to accomplish goal. They must have the capability to

recognize, performance problems and opportunities, make good decisions and take appropriate actions.

Making decision is a critical element of the organizational life and those decisions don't always follow a carefully formulated rational process. Decision-making occurs as a reaction to a problem. Every decision requires the interpretation and evaluation of information.

In case of the financial management, a manager has to face the quickly changing environment. The major managerial liability of this section is a daily review of key financial figures to monitor the profit aspect, major transactions, system monitoring and report the key financial figures to CEO and chairman on daily basis. The best and qualified manager understands his role and the modern techniques to cope up with the changing environment and make decisions that are favorable with the environment. With the help of MIS, the daily updated reports are available for making meaningful financial decisions and monitoring that statutory and internal reports are prepared with less effort and with maximum accuracy.

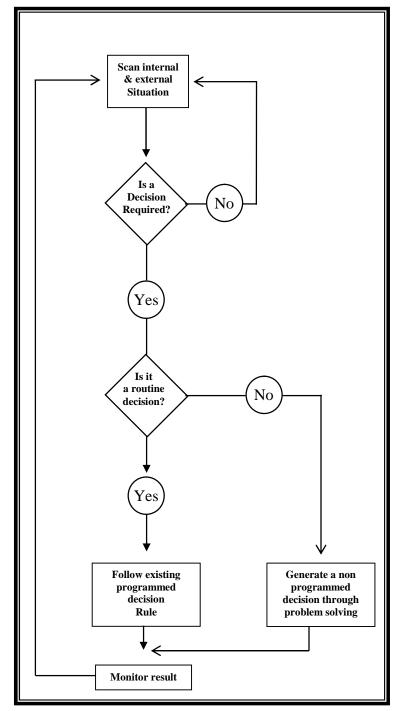
The Relationship Manager bridges the gap between the bank and the customers and executes the policy and guidelines identification. The analysis is completely based on information. The data generally needs to be collected before the problem arises so the corporate banking requires creativity. Every customer is judged individually and negotiated and final decision is made.

Decision-making is like moving from darkness to light. The vision is perpetually obscured by smoke from the very things that are meant to enlighten. Effective decision making requires an appreciation of how people behave in an organization.

4.3.1 The Hierarchy of Management in Decision Making of Laxmi Bank is as follows4.3.2 Decision Making Model in Laxmi Bank



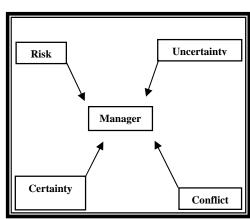
Decision Making Model in Laxmi Bank



(Source: www.laxmibank.com:2011)

4.3.3 Characteristics of Managerial Decisions





Managerial Decisions

(Source: Wendy and Galliers; 2010:79)

Managers face problems constantly hence avoid taking actions. They are always getting involved in risky decisions; tackling a problem but failing to solve it successfully which can hurt their track record. The managerial decisions in context of Laxmi bank are categorized as certainty (state that exists when decision makers have accurate and comprehensive information.), risk (state that exists when probability of success is less than 100 %.), uncertainty (state that exists when decision maker have insufficient information.) and conflict.(opposing pressure from different sources. Two levels of conflict are psychological conflict and conflict that arises between individuals or groups.)

4.4 Flow and Uses of Information for Decision-Making Process

4.4.1 Strategic Information

The strategic level information is to plan the objectives of the organization and to assess whether the objectives are being met in practice which is derived from both internal and external sources, concerned with the whole organization and summarized. This strategic information is qualitative and quantitative, prepared on ad hoc basis and relevant to the long term.

4.4.2 Tactical Information

The tactical level information is used to decide how the resources of the business should be employed, and to monitor how they are being and have been employed. The tactical information is generated internally on quantitative measures and concerned with the activities or different departments in the bank. It is prepared routinely and regularly and relevant to the short and medium term.

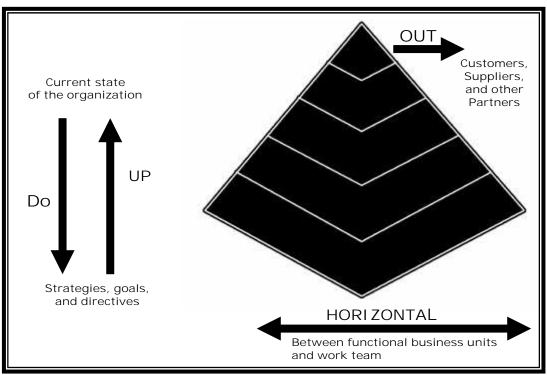
4.4.3 Operational Information

The operational level information is basically to ensure that specific tasks are planned and carried out properly within an organization. This information is completely derived from internal sources, quantitative and task specific. The operational level management is to organize this information very frequently and is relevant to the immediate term.

Banks have become more customer and result-oriented over the last decade. As a consequence, the difference between service and other organizations information requirements has decreased. Businesses have realized that most of their activities can be measured, and many can be measured in similar ways regardless of the business sector.

Technology has provided new sources of information, new ways of collecting, storing and processing it, and new methods of communicating and sharing it. This in turn has meant that information needs have changed and will continue to change as new technologies become available.

Figure: 4.7 Information Flow in Laxmi Bank



(Source: <u>www.laxmibank.com</u>:2011)

Information is managed just like any other organizational resource. Managers can hardly make accurate and timely decisions without sufficient information. Information is managed as:

- J Identifying current and future information needs.
- J Identifying information sources.
-) Collecting the information.
-) Storing the information.
-) Facilitating existing methods of using information and identifying new ways of using it.
-) Ensuring that information is communicated to those who need it, and is not communicated to those who are not entitled to see it.

4.5 How IT is Changing Organization in Context of Laxmi Bank

The effect of IT on an enquiry on a customer's state of account, and services enjoyed by the customers from the banks are perceived by the banks' customers. Generally, the effects of IT on the enquiry of the customer's state of account and services enjoyed by the customers from the banks have an appreciable influence on any bank. The use of a Wide Area Network technology and computer systems have ensured quick and improved services delivery to customers by the banks across all the branches in real time mode.

IT has appreciable positive effects on the bank productivity, cashiers' work, banking transaction, bank patronage, bank services delivery, customer's services, and bank services. Within organization the increasing use of IT has facilitated the individuals and teams working in different departments, levels, branches and physical locations to communicate more easily and electronically share information with one another. The extensive development in the IT sector has decreased the manual jobs to interlink the information flow via middle managers. Information technology has brought the opportunities for competitive advantage in increased speed of decision making, use of better and more timely information for decision making and more coordination of decision making action among relevant components.

The choice of information technology is the backbone of the management information system. Hence the correct implementation of the information technology enhances the effective development of MIS in the organization. This concept has been carefully analyzed in case of Laxmi bank. They are trying to be a pioneer in context of implementation of successful IT for the ease of banking system.

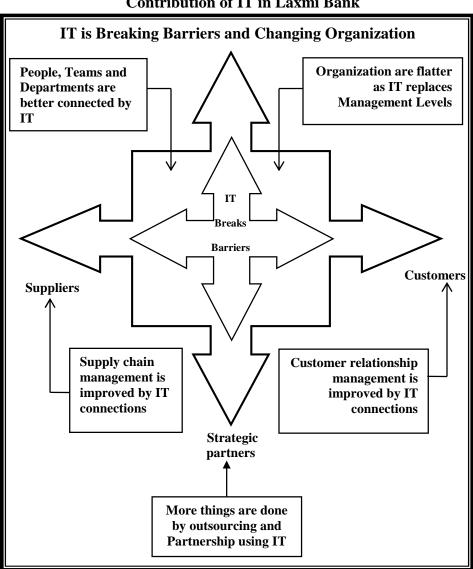


Figure: 4.8 Contribution of IT in Laxmi Bank

(Source: www.laxmibank.com:2011)

Information technology has played important role in customer relationship management by quickly and accurately providing information for decision-makers regarding customer needs, preferences and satisfactions. It has enabled the business contracts to be continuously maintained and efficiently fulfilled regardless of physical location.

TIME	accelerate business	Improve information	obtain early market
	activities	flow	presence
DISTANCE	reduce	Enable	enter
	geographic	integrated	new
	barriers	control	markets
INNOVATION	enhance	Enable	create
	current	new	new
	processes	processes	products

4.6 Networking Strategic Value in Context of Laxmi Bank

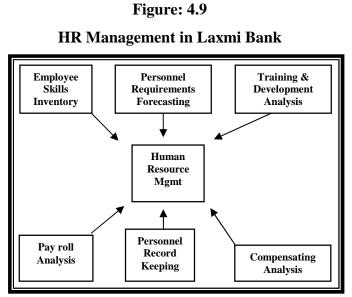
Telecommunication system has enhanced the flow of information between organizational entities, bridging the gap between space and time. The organization uses the networking strategic value to improve efficiency and effectiveness and to generate growth by reducing the negative effects of time and distance. Reducing time and distance barriers to business processes, and refining these processes has improvised organizational efficiency. The Bank updates branch records centrally in real time, which enhances customer service by enabling them to view their accounts from home or office and by having account details available for use at any branch within the system.

The effectiveness has been enhanced by the improvised information flow which reduces the amount of information in transit and has revealed the opportunities to improve business excellence. The introduction of ATM machines has facilitated the customers' access their accounts more easily. By reducing the time to market, the Bank is being able to capture an early market presence and obtain an advantage over competitors. By extending their reach to global markets, web-based applications have helped eliminate intermediate processes and gain new customers.

4.7 Human Resource Management

The planning, acquisition and development of human resources is necessary for organizational success. The current need is accessed by job analysis and job description. The fundamental elements of jobs are determined through systematic observation and analysis and the summary of duties of specific job and qualification for holding it.

4.7.1 Human Resource Management Process in Laxmi Bank



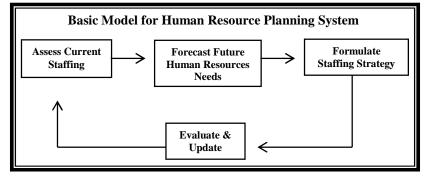
⁽Source: www.laxmibank.com:2011)

The major function of human resource management is to develop HR policies which will enable the organization to attract, retain, remunerate and develop good staff, and to maintain a climate within which they are highly motivated and productive. The human resource management function in the bank includes a variety of activities and key among them is deciding what staffing needs they have and whether to use independent contractors or hire employees to fill their needs, recruiting and training the best employees, ensuring they are high performers, dealing with performance issues, and ensuring their personnel and management practices confirm to various regulations. Activities also include managing their approach to employee benefits and compensation, employee records and personnel policies.

4.7.2 Basic Model for HR Planning System in the Laxmi Bank

Figure: 4.10

HR Planning in Laxmi Bank

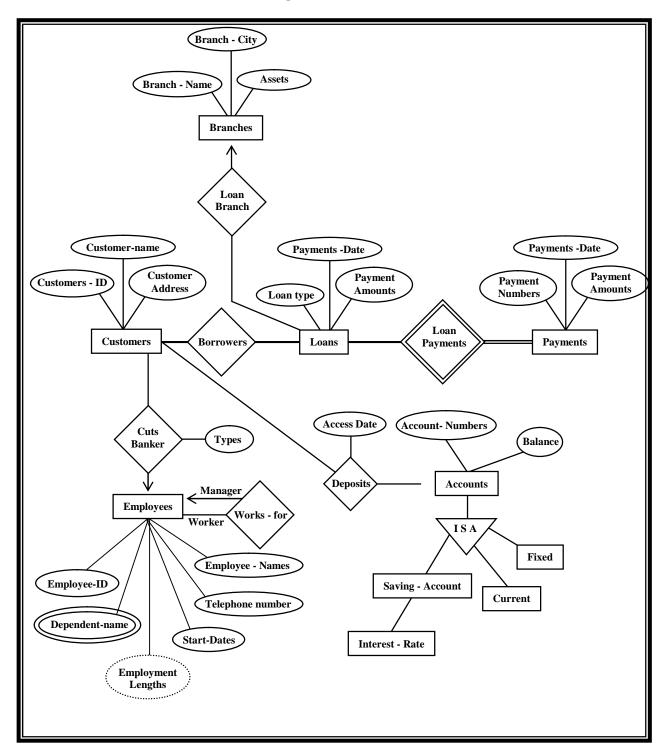


(Source: <u>www.laxmibank.com</u>:2011)

When the vacancies arise, the internal job posting is prioritized and the detail is mentioned in the intranet makuri.com for 4 days. Human Resource committee sits and decides for the interview of the internal applicants. They study the job applicant's database. The HR department has its own policies and guidelines on the basis of which, the basic criteria is set for the selection process. The vacancies are not needed for the internal placement. The internal placement is on the need basis as per requirement on departments and the transfer from one branch to another. The flow of information in the management eases the decision making process. The head of HR directly gets in touch with the unit heads only and there is day-to-day dealing with them.

4.8 E-R Diagram for Laxmi Bank

Figure: 4.12



E-R Diagram for Laxmi Bank

(Source: <u>www.laxmibank.com</u>:2011)

4.9 Analyzing the Importance of Management Information System in the Management Functions of the Banking Sector

The banking sector of Nepal is still apprehensive on accepting the need of IT in its services. Some of the Government banks are still using the traditional banking concept and providing the services to the customers via traditional method. In the last few years, competition in this sector has been increased and the people are conscious about the importance of easy access. Considering customer's choice of action, the private banks have tried to implement the new advanced technology regarding the banking system and are still in the improving stage.

4.9.1 Satisfaction with the Traditional Banking System

Table: 4.1

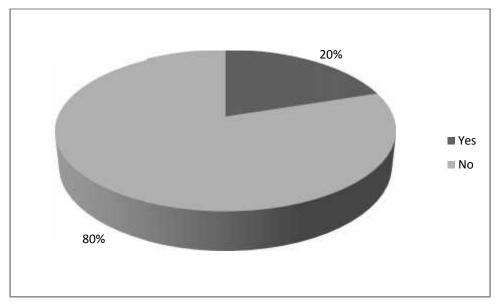
Satisfaction with the Traditional Banking System

S.N.	Particulars	
1	Yes	18
2	No	72
	Total	90

Source: Questionnaire

Figure: 4.13

Satisfaction with Traditional Banking



This chart shows that out of 90 respondents, 72 are not satisfied with the traditional banking system whereas 18 are still positive towards traditional banking system. This shows that 80% among the total prefer modern banking system with highly advanced technologies. Hence it can be concluded that in today's age of technology, modernity is the want of the people in all aspects as well as in the banking sector for convenience and better results.

4.9.2 Difficulties with the Traditional Banking System

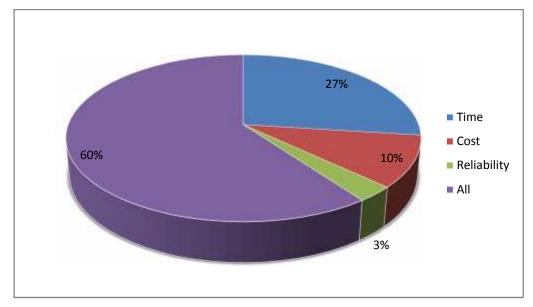
5.N	Particulars	
1	Time	24
2	Cost	9
3	Reliability	3
ł	All	54
	Total	90

Table: 4.2

Source: Questionnaire

Figure: 4	4.14
-----------	------

Difficulties with Traditional Banking



The difficulty with the traditional banking system is in respect of time, cost and reliability. 54 respondents agreed that all these three are the major factors causing

difficulty with the traditional banking approach. While 24 considered time as the main factor, 9 considered cost and 3 of them measured reliability as the obscurity in case of traditional banking system. Majority considered all these three factors: time, cost and reliability intricate in the traditional banking system. For this reason it can be articulated that modern banking system is preferable to all.

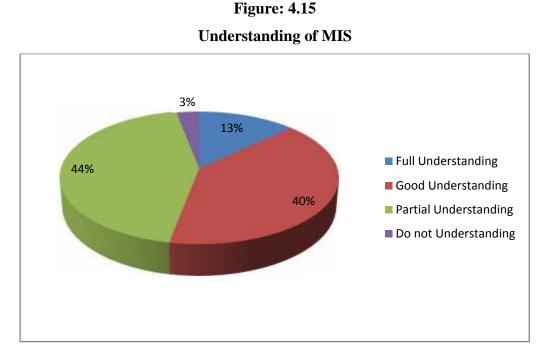
4.9.3 Understanding of Management Information System

Table: 4.3

Understanding of Management Information System

S.N	Particulars	
1	Full Understanding	12
2	Good Understanding	36
3	Partial Understanding	39
4	Do Not Understand	3
	Total	90

Source: Questionnaire



Management information system being a new concept in the Nepalese perspective, only 12 out of 90 respondents had full understanding, 36 of them had good understanding, 39

had partial understanding and 3 did not understand the concept of MIS. This shows that only 44% of the population understood the concept of MIS. So to make the organization more advanced and technology-oriented, the employees are to be well-trained with new concepts as MIS.

4.9.4 Importance of Management Information System in the Banking Sector

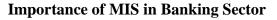
Table: 4.4

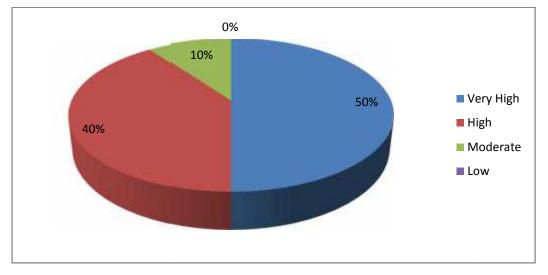
Importance of	[*] Management	Information	System in	the Banking Sector
L · · · · · ·				

S.N	Particulars	
1	Very High	45
2	High	36
3	Moderate	9
4	Low	0
	Total	90

Source: Questionnaire







50% of the respondents agreed that the importance of MIS in the banking sector is very high. 40% considered it of high importance and 10% thought that there is moderate importance of MIS in the banking sector. This shows that though MIS is the new emerging concept in context of Nepal, most of the respondents feel that in the banking sector, the need is very high for a better performance.

4.9.5 Does MIS enhance Management functions (Planning, organizing, decision making, staffing, communicating, motivating, leading and controlling)?

Table: 4.5

Does MIS enhance Management functions (Planning, organizing, decision making,

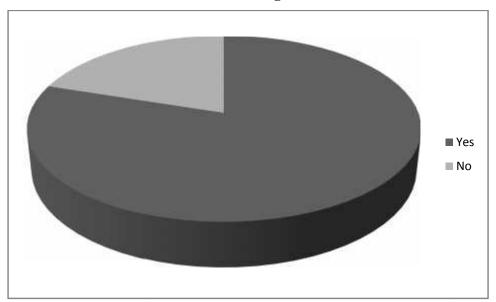
S.N	Particulars	
1	Yes	72
2	No	18
	Total	90

staffing, communicating, motivating, leading and controlling)?

Source: Questionnaire

Figure: 4.17

Does MIS Enhances Management Functions?



The management functions (Planning, organizing, decision making, staffing, communicating, motivating, leading and controlling) are much enhanced by MIS. 72 of the 90 respondents agreed that MIS is useful in integrating the management functions whereas 18 respondents didn't think that MIS improve the management function. This could be regarded as that there is still lack of knowledge in respect to MIS in most of the individual working in the particular organization.

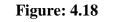
4.9.6 Does Information Technology Support Information System?

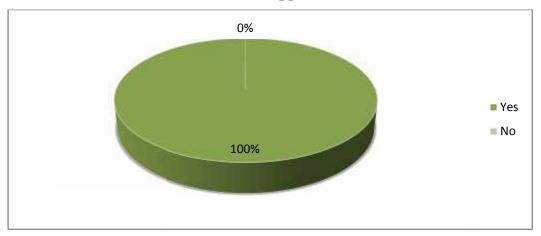
Table: 4.6

Does Information Technology Support Information System?

S.N	Particulars	
1	Yes	90
2	No	0
	Total	90

Source: Questionnaire





Does IT Support IS

In this regard of relationship between information technology and information system all the respondents answered that IT supports information system. Now this result shows that people are aware of the concept of information technology.

4.9.7 Purpose of Using MIS Officially

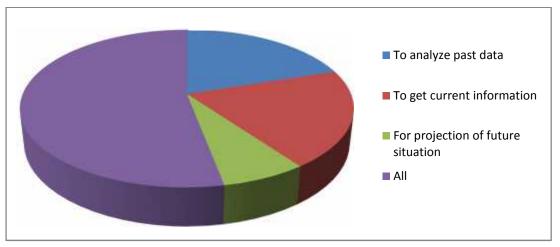
Table: 4.7

Purpose of Using MIS Officially

S.N	Particulars	
1	To analyze past data	18
2	To get Current information	18
3	For projection of future situation	6
4	All	48
	Total	90

Source: Questionnaire

Figure: 4.19 Purpose of Using MIS



As the question arises for the purpose of use of MIS in the organization, 53% responded that MIS is used officially for analyzing past data, getting current information and for the projection of future situation. 20% thought that MIS is used only to analyze the past data, 20% thought it was for getting the current information only whereas 7% responded that MIS is used officially for the projection of future situation. Actually MIS helps for analyzing the past data, getting current timely information and for the projection of the future, so al clear concept of MIS is still lacking.

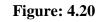
4.9.8 Is MIS practiced in your Organization?

Table: 4.8

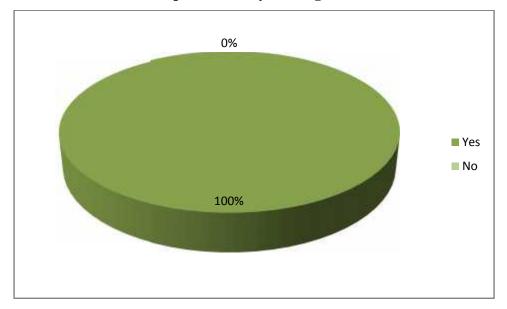
Is MIS practiced in your Organization?

S.N	Particulars	
1	Yes	90
2	No	0
	Total	90

Source: Questionnaire



Is MIS practiced in your Organization



Though in the previous questions some respondents showed unclear thought about MIS, in response to this question they all agreed that the MIS is practiced in their particular organizations.

4.9.9 Does the Current System fulfill your Information Needs?

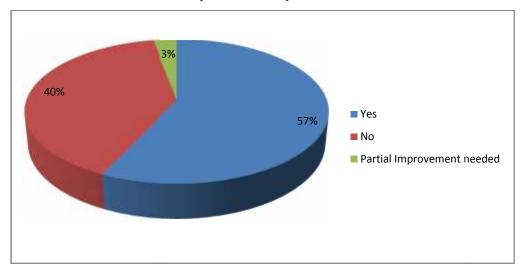
Table: 4.9

S.N	Particulars	
1	Yes	51
2	No	36
3	Partial improvement needed	3
	Total	90

Source: Questionnaire



Does the Current System fulfill your Information Needs?



As all the respondents agreed in the presence of practice of MIS in their organization, 57% of them were satisfied with the system implemented for fulfilling their information needs, 40% told that they were not satisfied with the current system and 3% suggested the system to be partially improved. Hence with this information we can wrap up that the necessity of MIS for the fulfillment of the information needs is addressed in every organization.

4.9.10 What factors will increase the use of information system in your organization?

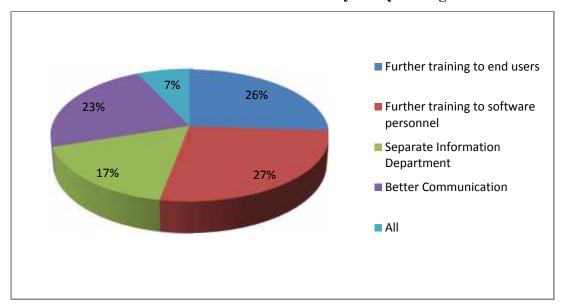
Table: 4.10

What factors wil	l increase t	the use of	information	ı system in	your or	ganization
------------------	--------------	------------	-------------	-------------	---------	------------

S.N	Particulars	
1	Further training to end users	24
2	Further training to software personnel	24
3	Separate Information Department	15
4	Better Communication	21
5	All	6
	Total	90

Source: Questionnaire

Figure: 4.22



What factors will increase to use of information system your organization

When the factors to increase the use of information system in particular organization was discussed, 27% suggested for further training to the software personnel, 26% referred further training to end users, 23% told that better communication would increase the use of information system, 17% suggested for the separate information department and 7% of them recommended all above factors to be considered for the effective use of information system in the particular organization. This study shows that individuals are being aware of the flow of right information at the right time for the right decision in any organization especially in the banking institutions for better performance.

4.10 Major Findings of the Study

On the basis of the study, the major findings are made as follows:

-) Time, cost and reliability are considered as the major factors causing difficulty with the traditional banking approach. 60% of the respondents agreed that all these three are the major factors causing difficulty with the traditional banking approach.
-) Management information system being the new concept in Nepalese perspective, only 12 out of 90 respondents had full understanding, 36 of them had good

understanding, 39 had partial understanding and 3 did not understand the concept of MIS.

-) Though MIS is the new emerging concept in the context of Nepal, most of the respondents feel that in the banking sector, the need is very high for the better performance. 50% of the respondents agreed that the importance of MIS in the banking sector is very high.
-) There is still lack of knowledge in respect to MIS in most of the individual working in different organizations. 72 of the 90 respondents agreed that MIS is useful in integrating the management functions whereas 18 respondents didn't think that MIS improved the management function.
- People are aware of the concept of information technology.
-) 53% responded that MIS is used officially for analyzing past data, getting current information and for the projection of future situation. Actually MIS helps in analyzing the past data, getting current timely information and for the projection of the future so a clear concept of MIS is still lacking.
- As all the respondents agreed in the presence of the practice of MIS in their organization, 57% of them are satisfied with the system implemented for fulfilling their information needs, 40% said that they are not satisfied with the current system and 3% suggested the system to be partially improved. Hence with this information we can conclude that the necessity of MIS for the fulfillment of the information needs is addressed in every organization.
-) Individuals are being aware of the flow of right information at the right time for the right decision in any organization, especially, in the banking institutions for better performance. When the factors to increase the use of information system in a particular organization was discussed, 27% suggested for further training to the software personnel, 26% referred further training to end users, 23% told that better communication will increase the use of information system, 17% suggested for a separate information department and 7% of them recommended all the above factors to be considered for the effective use of information system in the particular organization.

- Laxmi Bank, an IT progressive bank is a prominent emerging bank and is already a key player in consumer finance.
-) Laxmi Bank is an emerging key player in Nepali Banking arena providing a comprehensive range of financial services: personal, corporate banking, retail banking; trade and supply finance services; cash management; treasury and retirement fund management through a wide range of delivery channels and a global network of correspondents.
-) In the context of Laxmi bank, the IT decision is a technical decision, where it is required to decide between the various configuration alternatives made of a variety of hardware and software options. The configurations are the real time networking, Oracle Database, Universal Banking solutions Flexcube enabling retail and corporate operations and, most robust Intranet.
-) IT department is the heart of the bank operating all the functional systems to support other departments. They themselves develop their reporting software and integrated with the banking solutions as per the requirement.
-) The organization is paperless and totally into computer software systems. This has provided a major edge to it in prompt decision making.
-) The system as Universal Banking Solutions Flexcube, Intranet, Business Objects reporting, Communication Server, Chat System, and Telerate are the key components of the MIS in within Laxmi bank.
-) MIS of Laxmi Bank is not just a snapshot during the cut-off time, is a complete real time and comprising all its branches in centrally solutions. Laxmi bank has its own centralized database system.
- J Intranet of the Laxmi Bank has been named as Makuri.com. The Makuri.com is internally developed, private, secured corporate information network of Laxmi Bank based on SQL server. A principal use of intranets has been to create online repositories of information that can be updated as often as required.
-) The use of a Wide Area Network technology and computer systems have ensured quick and improved services delivery to customers by the banks across all the branches in real time mode.

-) The extensive development in the IT sector has decreased the manual jobs to interlink the information flow via middle managers.
-) The organization uses the networking strategic value to improve efficiency and effectiveness and to generate growth by reducing the negative effects of time and distance.
-) The Bank updates branch records centrally in real time, which enhances customer service by enabling them to view their accounts from home or office and by having account details available for use at any branch within the system.
-) The introduction of ATM machines has facilitated the customers' access to their accounts more easily.
-) The human resource management function in the bank includes a variety of activities and the key among them is deciding what staffing needs they have and whether to use independent contractors or hire employees to fill their needs, recruiting and training the best employees, ensuring they are high performers, dealing with performance issues, and ensuring their personnel and management practices confirm to various regulations.
-) The flow of information in the management eases the decision making process.

CHAPTER - V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter deals with summary and major findings of the study. After the analysis of data, conclusion has been drawn. Finally, the recommendations are mentioned.

5.1 Summary

Time is of essence in today's competitive world, and change is a way of life. So a firm's infrastructure, particularly the information infrastructure, must be adaptable and responsive to change. MIS are rapidly becoming indispensable for planning, decision making and control. IS plays an important role in managing organizations.

For the purpose of the study, population has been defined in terms of commercial banks within Kathmandu metropolitan city. There are all together 17 commercial banks in Nepal (See Annex 1). Laxmi bank has been taken as the major population for the research work whereas other commercial banks are also considered for the comparison of the information system implementation credentials.

The Laxmi Bank is promoted by Khetan Group along with Sunrise Group, R.L. Shanghai Group and Sikaria Group. The bank's authorized capital is NPR 1 billion of which NPR 610M has been issued. The IPO to the general public was opened on 2nd August 2003. The bank's shares are currently listed under Nepal Stock Exchange.

Laxmi Bank, an IT progressive bank is a prominent emerging bank with a mission statement "We are committed to excellence in delivery of entire gamut of financial services in order to achieve sound business growth and maximize stakeholder values by embracing team spirit, progressive technology and good corporate governance" (*http://www.laxmibank.com/mission.asp; 2011*) is already a key player in consumer finance.

In the context of Laxmi bank, the IT decision is a technical decision, where it is required to decide between the various configuration alternatives made of a variety of hardware and software options. The configurations are the real time networking, Oracle Database, Universal Banking solutions – Flexcube enabling retail and corporate operations and, most robust Intranet.

Laxmi bank has its own centralized database system. IT department is the heart of the bank operating all the functional systems to support other departments. They themselves develop their reporting software and integrated with the banking solutions as per the requirement.

Intranet of the Laxmi Bank has been named as Makuri.com. The Makuri.com is internally developed, private, secured corporate information network of Laxmi Bank based on SQL server. The use of a Wide Area Network technology and computer systems have ensured quick and improved services delivery to customers by the banks across all the branches in real time mode.

The basic objective of this research is to study and evaluate the effectiveness of the existing systems and technologies in Laxmi Bank. The focus is also on the use of IS and IT in the management process, identify any problem in the use of IS and finally to suggest the appropriate MIS in the study area based on the analysis.

The primary as well as secondary data and information has been collected via observation, questionnaire, formal and informal interviews, field visits, bank profiles, in house journals, websites, related books and publications. The information related with the banking system, management of the bank and its hierarchy maintained for the decision making process, technology implemented by the bank and the routine information flow was highlighted on the interview with the different departmental heads and staffs of the bank. The Bank also facilitated the direct observation of different activities within the premises for the information collection.

This study was mainly based on the management, information system and information technology implemented in the bank. After the collection of sufficient data from observation, interview and other sources, the data was analyzed and presented in the flow chart and Entity Relation (ER) diagram for the documentation of information flow of banking system. The data collected from the formal questionnaire are presented in the tabular form, simple bar diagram and pie chart. The format of the questionnaire is attached in annex 4. After presenting and analyzing the information, necessary conclusions and recommendations are drawn.

5.2 Conclusions

The ever-increasing complexities of the business environment, a growing need for guidance on concept, issues and strategies for understanding, developing and managing information systems in organizations are being felt all over the world. Most of the organizations are building the information system to face the competition in the competent world. The development of the organizational information system adds the value to the products and services in order to achieve the competitive edge.

In the Nepalese business industries, organizations are spending much more on information technology. These investments would be profitable if managers learn to use the technology and mechanism of information. The key to building and using effective information system is that the managers need to know how to apply information technology to solve the problem and make decision. From a business perspective, an information system is an organizational and management solution, based on information technology, to a challenge posed by the environment.

Today no organization can survive long without computers and proper information systems. For an organization to be successful, timely, accurate and reliable information is extremely necessary. Information system allows organizations identify strategic growth opportunities in the marketplace.

Keeping all the above in mind, this study has been conducted. The findings of the study show that Laxmi Bank, an IT progressive bank, is a prominent emerging bank and is already a key player in consumer finance. They have been adapting new advance technologies to compete in the banking industries.

MIS is the new emerging concept in context of Nepal. Though individuals are being aware of the flow of right information at the right time for the right decision in any organization especially in the banking institutions for better performance, there is still lack of knowledge in respect to MIS in most of the individual working in different organizations. Hence training is necessary for the end-users to better understand the importance of MIS in their organization.

The choice of information technology is the strategic decision, making long-term impact on the effectiveness of the MIS of the enterprise. Hence a wrong choice of IT would also kill the MIS designer's ability to develop a user-friendly computer system. The information technology decision is made for the current needs as well as for the futuristic needs of the organization hence the organization's infrastructural arrangements also influence the information technology decision.

As choice of information technology is the backbone of the Management Information system, the success of MIS lies in how the information technology is implemented in the organization. Hence, the manager of a modern organization should always remember that a good management information system design requires a matching support from the information technology.

Improving information flow enhances effectiveness. It reduces the amount of information in transit and reveals opportunities to improve business excellence. Digital information flowing rapidly to where it is needed and is useful in reducing errors, lowering costs, and making control easier to maintain. In addition, new processes such as, letting customers access their accounts through ATM machines or personal communication devices can be introduced more easily. The firm's senior executives must include the entire organization's environment in their planning activity. This is especially important for technology-intensive firms because the introduction of new technology frequently leads to organizational and other far-reaching changes. Corporate planning in all departments and in the firm's headquarters must anticipate and prepare to respond to IT-induced changes of all kinds.

5.3 Recommendations

5.3.1 Implementing and Establishing a Computerized MIS Department

The use of computers in the organizational tasks has grown rapidly. Though Laxmi bank is paperless and totally into computer software systems, separate MIS department is lacking.

Managers should be aware of the technological problems of system design and installation and it is necessary to analyze whether and to what extent the implementation of a new MIS will be resisted. The following things are to be kept in mind while implementing and establishing a separate MIS department:

-) The establishment of a new MIS can result in changes in several organizational units. Any two related departments may be merged to make more efficient use of the MIS, which may be resisted by department members, who may resent having to change the way they do things or the people with whom they work.
-) The informal communication network may be disrupted as a new MIS alters communication patterns. If the organization members prefer some of the earlier informal mechanisms for gathering and distributing information, they may resist the formal channels set up for the new system. A new MIS cannot interfere with that valuable communication channel.
-) People with many years of service with the organization have a clear vision of how to get things done in the existing systems which makes them resistant to the change tenaciously than the newer people being in the organization for a comparatively short period.
-) The organizational culture supporting the MIS depends on the top management openness in the communication, dealing with grievances and in general establishes

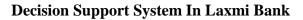
a culture and high trust throughout the organization, less resistant to the installation of a new system.

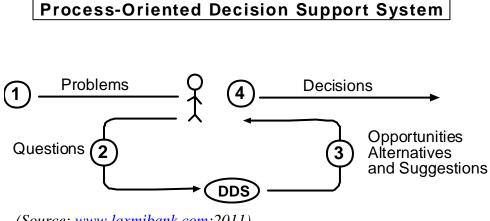
The manner in which changes are designed and implemented affects the amount of resistance those changes will encounter. In general, when managers and employees make change-decisions together, there is a greater likelihood that the changes will be accepted.

5.3.2 Application of Decision Support System in the Bank

People are the major factor in any service organizations. The individual behavior influences the business environment. DSS is the specific tool, which supports management decisions for better services. Since the banking sector relies on people, process and technology, DSS should focus on the evaluation of the service need of the people. The service effectiveness and efficiency should also be evaluated by the DSS. Service enhances technology. The technology in the service sector deals with the communication data and information search.

Figure: 5.1

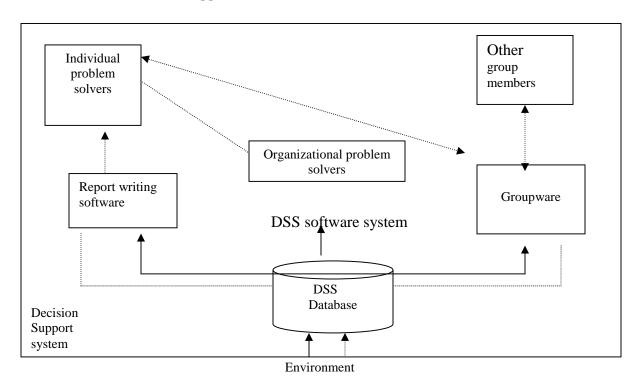




(Source: www.laxmibank.com:2011)

5.3.3 Design of Decision Support System Model

Figure: 5.2



Suggested DSS Model in Laxmi Bank

The figure represents the suggested DSS model for Laxmi bank. The model is composed of DSS database, report writing software, individual problem solver, groupware, organizational problem solver and DSS software system.

-) The report writing software consists of a program the produces both periodic and special records to prepare periodic reports. A periodic report is prepared on the basis of certain schedule and is coded by COBAL or PL/I. Special reports can be prepared in response to unexpected information needs.
- DSS database is a collection of current or historical data from a number of applications. The data may be both the internal and the external.
-) DSS software system contains the software tools that are used for data analysis. The software takes the form of collection of mathematical models, OLAP tools, data mining tools and analytical models easily accessible to users. The future outcomes can be projected using this software. Simulation model is a part of DSS software system, which is used by the decision-maker. It is a technique for conducting

experiments such as 'what-if' analysis with a computer on a model of management system. It involves setting up of a model of a real system and conducting repetitive experiments on it.

-) The Manager, who is independent with other people, is taken as individual problem- solver. His/her goal is to find the most effective solution to the problem-solver at hand.
-) Organizational problem-solver involves entire departments within an organization. Problems that require team effort are solved in coordination with the Managing Director and the concerned experts.
-) Groupware is the technology that groups use and is defined as computer-based system that supports groups of people engaged in a common task or goal that provides an interface to a shared environment. The main groupware functions are electronic mail, fax, voice messaging, internet access, bulletin board system, video conferencing, database access, electronic forms and group documents.

The model supports a variety of decision-making processes and improves the effectiveness of decision-making. The decision-maker has complete control over all steps of the decision- making process in solving a problem. These modeling capabilities enable experimenting with different strategies under different configurations.

BIBLIOGRAPHY

Books

Banerjee, M. (2009). Gems of Management. New Delhi: Jaico Publishing House.

- Basandra, S.K. (2009). *Management Information systems*. New Delhi: A.H. Wheeler and Co. Ltd.
- Bateman, T. S. and Scott, A. S. (2010). *Management: competing in the New Era*. Irwin: McGraw Hill.
- Cadle, J. & Donald, Y. (2010). Project Management for Information Systems. Singapore: Pearson Education Limited.
- Clarke, Steve (2009). .Information Systems Strategic Management: An Integrated Approach. Routledge.
- Currie, W. L. & Bob, G (2010). *Rethinking Management Information System*. London: Oxford University Press Inc.
- Dahal, B. & Dahal, S. (2010). *A handbook to Banking*. Kathmandu: Ashmita Books and stationary.
- Fleet, V. (1991). Contemporary Management. Boston: Houghton Mifflin Co.
- Goyal, D. P. (2009). *Management Information System: Managerial Perspectives*. New Delhi: Macmillan India Ltd.
- Gupta, U.G. (2007). *Management Information System: A managerial Perspective*. New Delhi: Galgotia publication Pvt. Ltd.
- Haag, S.M., & Donald, J.Mc .(2010). *Management Information Systems for the Information Age*. New York: McGraw Hill Companies Inc.
- Jawadekar, W. S., (2009). *Management Information System*. New Delhi: Tata McGraw Hill publishing company Ltd.
- Kreitner, R. (2009). Management. London: AITBS Publishers and Distributors.
- Laudon, K. C, & Jane, P.L. (2010). *Management Information Systems; Managing the digital form*. New York: Pearson Prentice Hall.
- Lucas, H. (1992). Information system Concepts for management. New York: McGraw Hill Book Co.
- Murdick, R.G., Joel, E.R. & James, R.C. (2010). *Information Systems for Modern Management*. New Delhi: Prentice Hall India.

O' Brien, J. A. (2002). Management Information Systems- Managing Information Technology in the E-business Enterprise. Irwin: McGraw Hill.

Robbins, P. S. (2010). Organizational Behavior .Singapore: Pearson Education

Stoner, J. AP, R. Edward, F. and Daniel, R. (2010). *Management*. New Delhi: Prentice hall of India.

Bulletins and Others

- KFA Research and Training Center (2011). *General Banking Course, Course Materials*. Kathmandu: KFA Research and Training Center.
- Laxmi Bank Limited (2011). Newsletter, Monthly Economic and Business Updates. Kathmandu: Laxmi Bank Limited.

Plans and Policy

- National Planning Commission (1998). *The Ninth Plan (1997-2002)*. Kathmandu: HMG National Planning Commission.
- National Planning Commission (2002). *The Tenth Plan (2002-2007)*. Kathmandu: HMG National Planning Commission.

Thesis and Project Reports

- Joshi, N. B. (2009). Management Information Systems In Nepalese Bank: a study in Rastriya Banijya Bank. Kathmandu: Shanker Dev Campus, TU.
- Karmacharya, S. (2010). Implementation of Management Information System in Banking System: a case study of Agriculture Development Bank, Branch office Baneshwor.
 Kathmandu: Shanker Dev Campus, TU.
- Maharjan, B. R. (2010). Human Resource Information System: An Analysis of the Existing System and Model Building for Buddha Airways. Kathmandu: Shanker Dev Campus, TU.
- Sharma, V. (2004). A study on International Sales and Reservation and Market Promotion Information System of RNAC. Kathmandu: Shanker Dev Campus, TU.
- Thapa, D. (2010). Future Prospective of Online Banking in Nepal. Kathmandu: Shanker Dev Campus, TU.

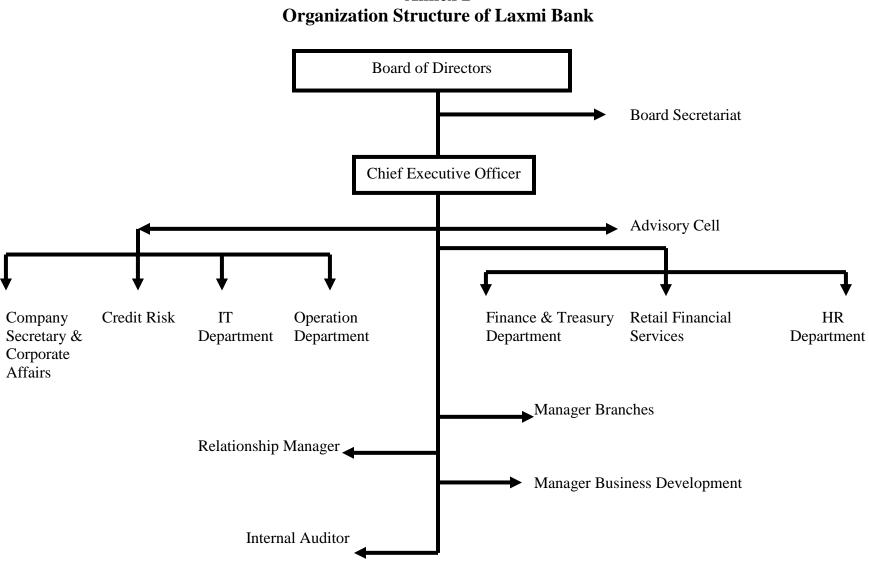
ANNEXURE

Annex 1

List of Commercial Banks in Nepal

-) The Nepal Bank Limited was incorporated in 1937 under the Nepal Bank Act of 1937 with an authorized capital share of Rs 100 lakhs.
-) The central bank **Nepal Rastra Bank** was established in 1956 with the purpose of developing Banking system in the country to promote industry, trade and agriculture as well as to circulate Nepalese currency allover the country.
-) The largest commercial bank **Rastriya Banijya Bank** which plays major role in the economy of the country was established in 2002 BS.
-) The first private commercial bank, **Nabil** (earlier known as Nepal Arab Bank Ltd.) was established in 2041 BS (1984AD).
- Nepal Investment Bank Ltd. (earlier known as Nepal Indosuez bank Ltd.), one of the oldest private joint venture banks started its business in the country around 2042 BS (1985 AD).
- J In 2043 BS (1987 AD), Standard Chartered Bank-Nepal (earlier known as Nepal Grindlays Bank Ltd.) came into existence as joint venture between ANZ Grindlays and Nepal Bank Ltd.
- *Himalayan Bank Ltd.*, a joint venture with Habib Bank of Pakistan, started its operation in 2049 BS (early 1993 AD).
- **Nepal SBI Bank Ltd.** is a joint venture between Employees Provident Fund and State Bank of India, started its operation in 2050 BS.
- **Nepal Bangladesh Bank** was established in 2050 BS (1993 AD) in technical collaboration with I.F.I.C. Bank Ltd. of Bangladesh.
- **Everest Bank Ltd.,** a joint venture with Punjab National Bank of India started its operation in 2051 BS (October 1994).
- **Bank of Kathmandu** was incorporated in 1993 as a joint venture with Syam Bank of Thailand and came into operation in March 1995.

- Nepal Credit and Commerce Bank Ltd. As a joint venture of Bank of Ceylon and Nepalese investors, the Nepal Bank of Ceylon was formed in 1997. After Bank of Ceylon's withdrawal, the institution was transformed as the present Nepal Credit and Commerce Bank (NCC Bank) in 2002.
- **J** Lumbini Bank Ltd. was established in 2055 BS in Narayangadh.
- **NIC Bank Ltd.** was incorporated on 30th May 1997 (Jestha 17, 2054) and commenced business on 21st July 1998 (Shrawan 5, 2055).
- **Machapuchre Bank Ltd.** started its operation as a regional bank from Pokhara during the year 2000 AD.
- **Kumari Bank Ltd.** was established in the year 2001 AD.
- **)** Laxmi Bank Ltd. started its operation from April 2002 AD as a regional bank with head office in Birgunj.
- **Siddhartha Bank Ltd.** started its operation from December 2002 AD as the last commercial bank till this date.



Annex 2

Annex 3

Products and Services

Saving Account:	A normal saving account wherein the interest is calculated
	on a monthly minimum balance and credited in the accoun
	semi annually. The stipulated minimum balance requiremen
	may vary between branches.
Laxmi Saving Account:	A saving account wherein the interest is calculated on a
8	daily balance and credited in the account semi annually.
Super Saving Account:	A premium saving account wherein interest is calculated or
• 0	daily balance and credited in the account semi annually. The
	accountholder is provided with a host of additional benefits
	which includes accidental insurance, no restriction on the
	amount of withdrawals, concessional rates on issuance o
	demand drafts and locker facilities and prime rates on
	consumer lending.
Fixed Deposit:	Deposits for 7 days to more than 2 years can be placed
	under fixed deposit. The rates of interest vary as pe
	duration of the deposit and are negotiable. Interest i
	payable at periodic intervals or at the time of maturity along
	with the principal amount as per specific requirements, in
	the client's current/saving account.
Call Account:	Balance exceeding the agreed amount in the non-interest
	bearing current account is transferred to call account on
	daily basis wherein interest is calculated on daily balance
	of the call account. Interest on this account can be pre-
	negotiated.
Sweep facility :	Two or more accounts can be automatically linked with
	each other through a "Sweep-In Sweep-Out" technology
	which is first of its kind in Nepal. Excess of balance in
	certain account can automatically transferred/pulled back in
	a different accounts.
Current Account:	A normal non-interest bearing checking accounts wher
	unlimited withdrawals are allowed. This account can b
	combined with a sweep facility where excess funds can b
	moved to / from interest bearing accounts, as mentioned
	above in Call Account facility.

Specialized Savings Account

Gurkha	A savings account targeted at the Gurkha servicemen and their
Savings:	family, wherein the interest is calculated on a daily balance. This is
	a hybrid savings account wherein the daily applicable interest rate
	on this account changes based on the account balance at the end of
	each day.
Students	A savings account, currently available to Manipal Medical students
Savings:	and Kathmandu University students. Students from other
	educational institutions many be considered in the future. The
	interest on this account is calculated on a monthly minimum
	balance. These students need not maintain any stipulated minimum
	balance in their account. Free ATM cards shall be provided to these
	students for cash withdrawals.

Credit

Overdraft:	Limit is provided to finance working capital. Interest will be	
	charged as per the utilization of the loan.	
Working Capital	Loan for maximum period of one year on a renewable / revolving	
Loan / Demand	basis is provided to finance working capital.	
Loan / Short		
Term Loan:		
Supply Finance:	Instant finance is provided against supply of goods to	
	multinationals and large local corporates. Invoices accepted by	
	the corporates and their undertaking to route payments through us	
	would qualify a supplier to avail this loan across the counter,	
	without having to undergo rigorous credit screening process.	
Term Loan:	Loan is provided to finance long-term investments and capital	
	expenditures.	
SME Loan:	This facility is targeted at Small and Medium Sized Enterprises	
	(SME) to finance working capital or capital expenditures. SMEs	
	can now supplement entrepreneur's investments to start a small	
	business or to achieve growth through this loan. The bank has a	
	full-fledged SME cell to cater to the financing needs of these	
	small business enterprises.	
Trust Receipt /	Loan is provided to finance the goods (for maximum period of	
Importer's	120 days) imported under our letter of credits.	
Loan:		

Packing Credit /	Loan is provided against specific L/C, for specific time period in	
Export Loan:	order to support stock build-ups and payment of creditors before	
	export of the consignment(s).	
Letter of Credit:	Issuance of sight, acceptance L/C is possible to any part of the	
	world at a very competitive rate.	
Bank	Bid bonds, performance bonds or any other types of bank	
Guarantee:	guarantee are issued at ctee:etitive rates and terms.	
Car Loan:	Loan is provided to finance vehicles for either personal or	
	commercial use. Repayment shall be done on an equal monthly	
	installment basis (EMI) or unequal monthly installment basis	
	(UMI), depending on client's requirement, which could last for a	
	maximum period of seven years.	
Home Loan:	The loan consists of financing home – construction, acquisition,	
	renovation or extension. This loan is to be repaid in EMI or UMI	
	basis, depending on client's requirement, which could last for a	
	maximum period of fifteen years.	
Home Equity	Loan is provided for the encashment of investments made in the	
Loan:	residential property of the client. This loan is to be repaid in EMI	
	or UMI basis, depending on client's requirement, which could last	
	for a maximum period of ten years.	
Personal Loan:	A scheme designed for professionals and entrepreneurs to meet	
	varied personal needs like education, travel, social engagements	
	etc.	
Note:	Note: Credit facilities are subject to due diligence and credit	
	analysis.	

Other Services

Demand Drafts:	The bank at present has draft drawing arrangements with various banks in India and abroad. The bank currently provides drafts on ICICI Bank in India and Standard Chartered Bank, NY USA and American Express Bank, NY USA.
Locker:	Lockers of various sizes are available at reasonable rates in few of the bank's branches.
Funds	The bank's international network of correspondent banks
Transfer/	facilitates the execution of all outward/inward remittances and
Remittance:	their fast receipt by their beneficiaries. Apart from demand
	drafts, SWIFT transfers, American Express travelers' cheques and manager's cheques, the bank has made special arrangements through a host of key international banks and money transfer agents, including Western Union Money Transfer.
Clearing / Collection:	The bank provides clearing and collection of cheques and bills drawn on local banks as well as foreign banks. The bank is also a member of local clearing house managed by Nepal Rastra Bank, wherein all outstation cheques of Laxmi Bank can be locally cleared in Kathmandu itself; whereby delays in payment and extra charges is avoid by the clients.
Foreign	The bank provides full range of foreign exchange services
Exchange:	applicable in the Nepalese market. The bank has installed "Telerate", formerly known as "Bridge", to access up-to-date knowledge on foreign exchange markets and currency movements. This system also provides the bank with the latest information on commodity prices in the world market, which are useful for various businesses.
Financial	The bank provides its expertise advices in the management of
Advisory:	the client's financial affairs. The bank may also consider providing training to the client's staff in the field of banking and finance.
Internet	Through this channel, clients will be able to view their account
Banking/Online	balance, transfer funds, stop cheque payments, send
Payment :	instructions etc. to the bank online, 24 hours a day, 7 days a
	week, thus empowering the client's to manage their financial affairs on a click of the mouse in the highest degree of security and speed. Bill payment is an added feature whereby clients have the option of paying their bills of various service providers through the internet.

Extended	Clients can enjoy the flexibility of conducting banking
Banking:	transactions in the late afternoon/evening hours as well.
0	Presently, Laxmi Bank is the only bank that credits the
	respective account on the transaction day, thus minimizing any
	possible interest loss to the customers. Presently, this service
	is available in few branches of the bank.
ATM/ Debit	The bank has joined hands with Smart Choice Technologies to
Card:	access a network of about 20 ATM, and over 200 Point of
	Sales (PoS) terminals located in all major urban centers of the
	country. Currently, Bank of Kathmandu, Everest Bank and
	Himalayan Banks are the other members of this shared
	network.
Payroll	The bank manages staff accounts of institutional/corporate
Management:	clients, with value additions to the accounts maintained under
1. Innugement.	this scheme.
NRN Cell:	The bank has a dedicated NRN cell to cater to the needs of and
	requirement of the non-resident Nepalese (NRN) and has
	customized its product to suit their needs. NRN can open an
	· · ·
	account, transfer funds between accounts and constantly keep
	track of their funds through the online services of the bank.

Annex 4

Questionnaire

This Questionnaire is prepared for research work in partial fulfillment of the requirements of degree of Masters of Business Studies. The respondents are requested to feel free to answer as it will be highly confidential.

Q.1)	Does the traditional banking system comfort you?
Q.2)	What are the difficulties with the traditional banking system?
Q.3)	Time Cost Reliability All of above How do you rate the understanding of Management Information System?
	Full understanding Good understanding
	Partial understanding Do not understand
Q.4)	How important is the Management Information system in the banking sector?
	Very High High Moderate Low
Q.5)	Do you agree Management Information system enhances the management functions
	(Planning, Organizing, Decision Making, Staffing, Communicating, Motivating,
	Leading and Controlling) successfully?
	Yes No

Q.6) Do you agree that Information Technology supports Information System?

Yes No

To analyze the past data To get current information
For projection of future situation Others
Q.8) Is Management Information System practiced in your Bank?
Yes No
Q.9) If yes, Does the current system fulfills your information needs?
Yes No
Q.10) What factors do you think will increase the use of Information System in your
organization?
Further training to end users Further training to software personnel
Separate Information Department Better communication

Q.7) Please rank the purpose of using Management Information System officially.