

CHAPTER - I

INTRODUCTION

1.1 Background

As early as 1642, the French mathematician and philosopher Blaise Pascal invented the first mechanical adding machine so that figures could be added to provide information. Almost two hundred years later, Charles Babbage, a professor of mathematics at Cambridge University in England, wanted to make a machine that would compute mathematical tables. He attempted to build a computing machine during the 1880s. He failed because his ideas were beyond his technical capabilities, not because the idea was flawed. Babbage is often called the father of the computer. With the advent of the computer, management information systems became automated.

In the late 1890s, because of the efforts of Herman Hollerith, who created a punch-card system to tabulate the data for the 1890 census, it was possible to begin to provide data-processing equipment. The punch card developed by Hollerith was later used to form a company to provide data-processing equipment. This company evolved into International Business Machines (IBM). Mainframe computers were used for management information systems from the 1940s, 50s, 60s, and up until the 1970s. In the 1970s, personal computers were first built by hobbyists. Then Apple computer developed one of the first practical personal computers. In the early 1980s, IBM developed its PC, and since then, the personal computer industry has mushroomed. Almost every management information system revolves around some kind of computer hardware and software.

Management information systems are becoming more important, and MIS personnel are more visible than in the 1960s and 1970s, when they were hidden away from the rest of the company and performed tasks behind closed doors. So remote were some MIS personnel from the operations of the business that they did not even know what products their companies made. This has changed because the need for an effective management information system is of primary concern to the business organization.

At the start, in businesses and other organizations, internal reporting was made manually and only periodically, as a by-product of the accounting system and with some additional statistic(s), and gave limited and delayed information on management performance. Previously, data had to be separated individually by the people as per the requirement and necessity of the organization. Later, data and information was distinguished and instead of the collection of mass of data, important and to the point data that is needed by the organization and was stored.

If the information system does not produce the information necessary for management to handle its operations effectively, an “out-of- control” condition may result and the firm may never recover. An examination of firms that have experienced difficult times over the years will verify this point.

Information, which is essence is the analysis and synthesis of data, is undoubtedly one of the most vital corporate resources. It is structured into models for planning and decision – making. Information is incorporated into measurements of performance and profitability. It is integrated into product design and safety methods. In other words, Information almost recognized and treated as an asset in a modern organization.

1.2 Management Information System Overview

An 'MIS' is a planned system of the collecting, processing, storing and disseminating data in the form of information needed to carry out the functions of management. In a way it is a documented report of the activities those were planned and executed. According to Philip Kotler "A marketing information system consists of people, equipment, and procedures to gather, sort, analyze, evaluate, and distribute needed, timely, and accurate information to marketing decision makers."

Professor Allen S. Lee states that "...research in the information systems field examines more than the technological system, or just the social system, or even the two side by side; in addition, it investigates the phenomena that emerge when the two interact."

According to definition of international Federation for Information processing (IFIP) and British computing society (BCS) in 1885, defined information system as a system which assembles, stores, processes and delivers information relevant to an organization (or to society) in such a way that the information is accessible and useful to those who wish to use it, including managers, staff, clients and citizens an information system is a human activity (social) system which may or may not involve the use of computer systems.

The terms MIS and information system are often confused. Information systems include systems that are not intended for decision making. The area of study called MIS is sometimes referred to, in a restrictive sense, as information technology management. That area of study should not be confused with computer science. IT service management is a practitioner-focused discipline. MIS has also some differences with Enterprise Resource Planning (ERP) as ERP incorporates elements that are not necessarily focused on decision support.

MIS is a system consisting of people, machines, procedures, and database and data models as its elements. The system gathers data from the internal and external sources of an organization process it and supplies MIS to assist managers in the process of decision making. Here, the word “system” implies that MIS follows a system approach, which is based on the concept of synergy, where the output is greater than the sum of its parts. Thus, it clearly indicates that MIS is not a single system rather than it is an integrated system where parts fit into and overall design.

In conclusion, we can say that MIS is a system using formalized procedures to provide management at all levels in all functions with appropriate information, based on data from both internal and external sources, to enable them to make timely and effective decisions for planning, directing, and controlling the activities for which they are responsible. The actual process will involve the collection, organization, distribution and storage of organization wide information for managerial analysis and control. We can combine Management Information System as below :

1.3 A brief introduction of NABIL Bank

NABIL Bank Limited, the first foreign joint venture bank of Nepal, started operations in July 1984. NABIL was incorporated with the objective of extending international standard modern banking services to various sectors of the society. Pursuing its objective, NABIL provides a full range of commercial banking services through its 19 points of representation across the kingdom and over 170 reputed correspondent banks across the globe.

NABIL, as a pioneer in introducing many innovative products and marketing concepts in the domestic banking sector, represents a milestone in the banking history of Nepal as it started an era of modern banking with customer satisfaction measured as a focal objective while doing business.

Operations of the bank including day-to-day operations and risk management are managed by highly qualified and experienced management team. Bank is fully equipped with modern technology which includes ATMs, credit cards, state-of-art, world-renowned software from Infosys Technologies System, Bangalore, India, Internet banking system and Telebanking system.

1.3.1 Management Information System in NABIL Bank

A management information system (MIS) is a system or process that provides the information necessary to manage an organization effectively. MIS and the information it generates are generally considered essential components of prudent and reasonable business decisions. The importance of maintaining a consistent approach to the development, use, and review of MIS systems within the institution must be an ongoing concern of both bank management and OCC examiners. MIS should have a clearly defined framework of guidelines, policies or practices, standards, and procedures for the organization. These should be followed throughout the institution in the development, maintenance, and use of all MIS. MIS is viewed and used at many levels by management. It should be supportive of the institution's longer term strategic goals and objectives. To the other extreme it is also those everyday financial accounting systems that are used to

ensure basic control is maintained over financial recordkeeping activities. Financial accounting systems and subsystems are just one type of institutional MIS. Financial accounting systems are an important functional element or part of the total MIS structure. However, they are more narrowly focused on the internal balancing of an institution's books to the general ledger and other financial accounting subsystems. For example, accrual adjustments, reconciling and correcting entries used to reconcile the financial systems to the general ledger are not always immediately entered into other MIS systems. Accordingly, although MIS and accounting reconciliation totals for related listings and activities should be similar, they may not necessarily balance. An institution's MIS should be designed to achieve the following goals:

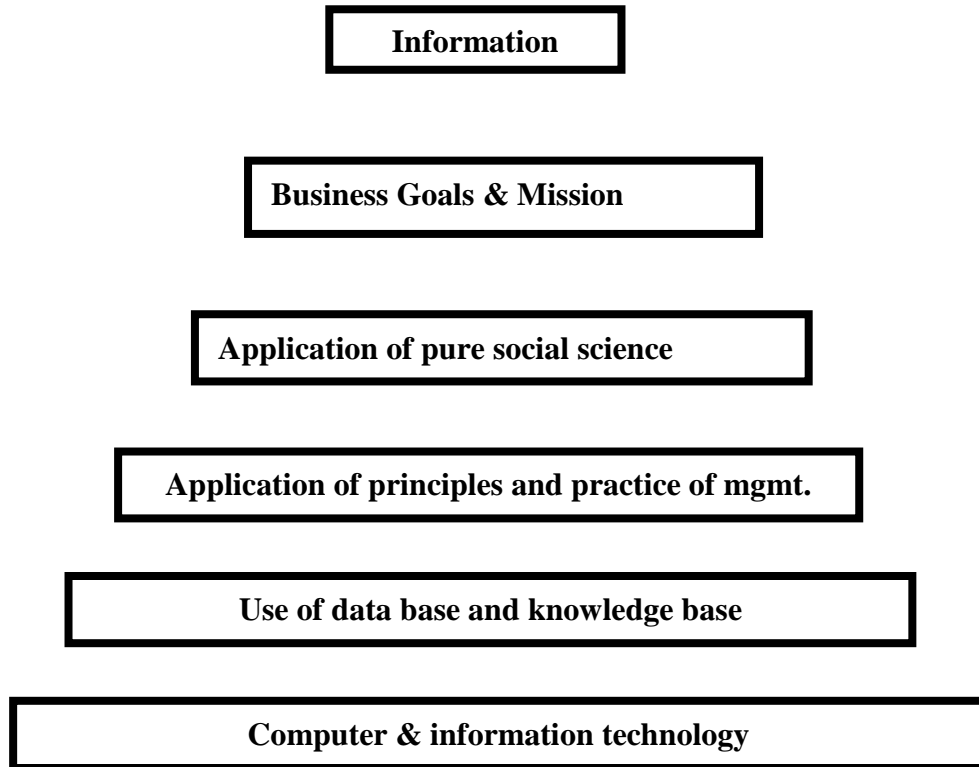
-) Enhance communication among employees.
-) Deliver complex material throughout the institution.
-) Provide an objective system for recording and aggregating information.
-) Reduce expenses related to labor-intensive manual activities.
-) Support the organization's strategic goals and direction.

The different information system which are used in NABIL can be described as below: NABIL Bank offers the acquiring of Visa, MasterCard and other products under their brands. It has ATM network, Point of Sale (POS) terminals network and manual imprints for acquiring of local and international credit and debit cards. The only bank in Nepal to provide the agency support on acquiring of Diners Cards and it share the POS network with Amex Cards.

Payments for the submitted claims are made on the same day due to the good MIS. It credits the accounts of the merchants or provides Managers who do not have accounts with them. If the merchant has USD account and is authorized for foreign exchange transactions, the payment can be made in USD.

1.4 The conceptual View of MIS

Figure 1.1
Conceptual View of MIS



The conceptual views of MIS can be described as information, business goal and mission, application of pure social science, application of principles and practice of management, use of database and knowledge base and computer & information technology which can be seen in the above figure.

This is the age of MIS, it is very important tools for each and every sectors such as hospital, school, college and banks. The development of information technology and their use by the business organization to extend its activities world wide made the organization more competitive than before.

Now these days' different commercial banks have been increasing day by day. So banking information should be up to date to carry well management.

Main focus of this study is how information flow bottom to top in commercial bank like NABIL. So, this research is conducted.

Banking sector is the central point of economic growth. How information flows in organization and good filtration of information is done with the help of MIS.

1.5 Focus of the Study

The study is mainly focused on management information system of NABIL bank. There are so many commercial banks in Nepal and it may be a sample study for information system of commercial bank. So, this study focused what type of information system has been using by NABIL bank, is the system reliable or not and is there any necessity of modification of existing information system? The study mainly focused on how information system arranged in NABIL.

1.6 Statement of the Problem

MIS is the computerized information system. It helps to take decision in faster and quicker way. There are so many people who have been using MIS to take decision. We can say bottom level to top level is the user of MIS. MIS is the heart of organization and flow of data or information is the blood for organization.

NABIL is the main commercial bank of Nepal which has been using MIS from several years but there may be some statement of the problem which can be described as below.

-) Is the current system sufficient to communicate and co-ordinate in various branches of NABIL, although the advanced system.
-) It is very difficult to remove paper based system totally, so traditional paper based system does not affect current information system in NABIL.
-) Whether mishandling and misunderstanding does not affect the management of NABIL?

1.7 Objective of the Study

Without the objectives any study may not be sufficient so we can conclude that there are so many objectives which can be described as below :

- J To examine existing information system of NABIL.
Examination of the current information system of NABIL bank is the first objective of the study.
- J To evaluate technology used in NABIL.
Evaluation of the technology of NABIL is another objectives of the study.
- J To analyze the flow of information in NABIL
How the information flows in an organization like NABIL is another objectives of the study.
- J Detail study, critical analysis, and make recommendation for current MIS in NABIL.

1.8 Limitation of the Study

Each and every research has its own limitation, so this is not out of exception which can be described as below:

- J It is basically focused on secondary data, so it is difficult to find out the main theme which is required for researcher.
- J On the way of researcher some of the staffs of researcher hesitate to provide primary data with saying all the secondary data are available in internet.
- J The sources of secondary data internet, broacher which may not be the sufficient data for complete research task.
- J The lack of proper data for this topic, researcher has consumed more than a year for this thesis.
- J The researcher has focused only the NABIL bank among various commercial bank.

1.9 Significance of the Study

Management information systems are part of an organization's internal control system. Control systems monitor how actual performance compares with targets, and analyze the

factors that caused any deviations. With modern MIS such as ERP systems control can be exercised even over huge enterprises with globally widespread operations.

Significance of the study can be described as below:

-) First of all from this research work organization like NABIL can find out the current advantage and disadvantage of current information system.
-) Researcher got good knowledge about the information system of commercial bank like NABIL. It is a plus point for researcher that he can easily write each and every topics of management information system with the help of this research work.
-) Students of MIS will be directly benefited with the help of this research.
-) The study has been conducted to find out information flow, day to day operation decision making, planning & environment to get information from MIS as well as some factors such as the market forces, technology changes, etc. The significance arises out of the complexity of decision making, the human factor in decision making the organizational & behavior aspects, and then uncertain environments. The MIS design addressing these significant factors turns out to be the best design. Since the MIS satisfies the information need of the people in particulars the design of MIS cannot be common or universal for all the organization. The principles of design & the use of the information concepts in design do not change but when it comes to the applicants, the design had to give a regard to the organization structure, the culture, the attitudes & the beliefs of the people, strengths & the weakness of the organization

1.10 Organization of the Study

Chapter I Introduction

The first chapter deals with background, focus of the study, statement of the problems, objectives of the study, significance of the study, limitation of the study and the organization of the study.

Chapter II Literature Review

The second chapter “Literature review” deals with the review of related literatures and available studies written and prepared by different experts and research in the field of management information system.

Chapter III Research Methodology

The third chapter “Research Methodology” presents the methodology use in the study. It deals with research design, nature and sources of data, collection of data, data processing and methods of data analysis.

Chapter IV Data Presentation and Analysis

The fourth chapter fulfills the objectives of the study by presenting the data and analyzing them with the help of system level DFD and context level DFD. At the last part of this chapter, an explanation of the interview and the major findings of the whole study have been presented.

Chapter V Summary, Conclusion and Recommendations

The fifth chapter summarizes the whole study. Moreover, it draws the conclusions and forwards the commendations for the improvement of NABIL.

CHAPTER - II

REVIEW OF LITERATURE

Review of literature is the bridge of every research work. It shows the way for new research. A literature review is a body of text that aims to review the critical points of current knowledge and or methodological approaches on a particular topic. Literature reviews are secondary sources, and as such, do not report any new or original experimental work.

Most often associated with academic-oriented literature, such as theses, a literature review usually precedes a research proposal and results section. Its ultimate goal is to bring the reader up to date with current literature on a topic and forms the basis for another goal, such as future research that may be needed in the area.

A well-structured literature review is characterized by a logical flow of ideas; current and relevant references with consistent, appropriate referencing style; proper use of terminology; and comprehensive view of the previous research on the topic.

Generally, the purpose of a review is to analyze critically a segment of a published body of knowledge through summary, classification, and comparison of prior research studies, reviews of literature, and theoretical articles.

The researcher use internet, Shankar Dev library, other library, previous thesis, published data as a literature review.

2.1 Conceptual Framework of MIS

Decision-making plays a major role in managerial objectives. Management Information Systems (MIS), a computer-based formal plan which creates, stores, and retrieves information, allow managers to control the amount and quality of information leading to decisions. Presented in this paper are three topics concerning MIS. First, a conceptual framework defines MIS and managerial needs for MIS Then; the impact of such a system

is evaluated in a section on frequent criticisms of MIS. Finally, this paper examines several requirements for successful implementation, including the existence of an adequate systems structure source and the identification of individual needs. MIS, as a primary source of information for managers, serves to refine communication, thereby leading to successful managerial decisions (Journal of Business Communication, 1984: Vol. 21, No. 1, 19-31).

The concept of MIS gives high regard to the individual and his ability to use the information. An MIS gives information through data analysis, while analyzing the data, it relies on many academic disciplines. These include the theories, principles and concepts from management science, management accounting, and operations research, organizational behaviour, Engineering, computer science, psychology and Human behaviour, making MIS an effective and useful tool. These academic disciplines are used in designing the MIS evolving the decision support tools for decision making (Jawadekar, 2000: 7-10).

2.1.1 Concept of MIS

Management Information Systems (MIS), sometimes referred to as Information Management and Systems, are the discipline covering the application of people, technologies, and procedures — collectively called information systems — to solving business problems. Management Information Systems are distinct from regular information systems in that they are used to analyze other information systems applied in operational activities in the organization. Academically, the term is commonly used to refer to the group of information management methods tied to the automation or support of human decision making, e.g. Decision Support Systems, Expert systems, and Executive information systems.

A Management Information System (MIS) is designed by an organization for its smooth functioning. The MIS, a decision-making instrument used by top management, comprises of a set of controls. These controls cover the basic spheres of the business: its people, technologies, policies and procedures. The MIS gathers information on all the important realms of the business tabulates the information and provides meaningful reports.

The management information system presents data such as the organization's processes, operating procedures, internal controls and audit preparation, which the management uses to make effective and efficient decisions. The internal controls for each department contain guidelines for operation. The flow of work assigned to employees, their responsibilities and duties, for example, are listed under internal controls.

An organization benefits immensely by using an MIS. This fully automated system enables the organization to record, process and tabulate all of its business dealings and transactions. Also, the information collected makes it possible to make necessary changes and improvements to the gae y areas. For example, the organization can compare actual and projected sales and take steps to correct any deviations.

By using a good MIS, the top management of the organization is able to make informed decisions. The data present in the MIS is studied and analyzed objectively and the organization is able to choose the best trade-off for its operations, sales and other functions. Also they can judge whether their resources are being used correctly.

MIS facilitates a two-communication process in the organization. The top management communicates to its employees what is expected of them and how they must accomplish the tasks entrusted. The employees in turn freely discuss their problems and concerns.

There are four types of MIS. The first one, TPS (Transaction Processing System), is the most elementary. This methodology processes routine, mundane and recurring business transactions. OIS (Operations Information Systems) gathers comprehensive data and tabulates it for operations managers to use and maximize their output and minimize losses.

DSS (Decision Support Systems) and ES (Expert Systems) are the two types of MIS used by the top management to make informed and intelligent decisions. The two types make extensive use of databases and modeling techniques

MIS is heavily technology driven and therefore lacks a human element. The information represented by the MIS is often rich in nature. The expertise of humans is needed to analyze the information presented and to make decisions accordingly.

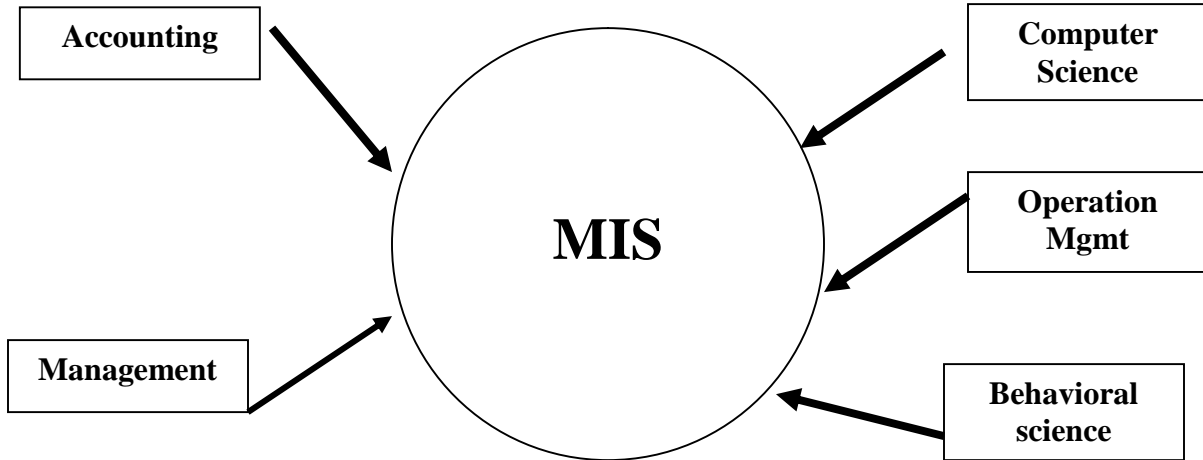
Usually the organization requires the help of a consultant to develop the system, therefore all the organizational procedures and controls have to be carefully and elaborately spelled out to the consultants.

2.1.2 Nature and Scope of MIS

The concept of MIS is inter disciplinary in nature, it has borrowed its concept from a large number of disciplines like accounting, computers, organizations, management, operations, research and behavioral sciences. Etc. (Goyal, 2000:15).

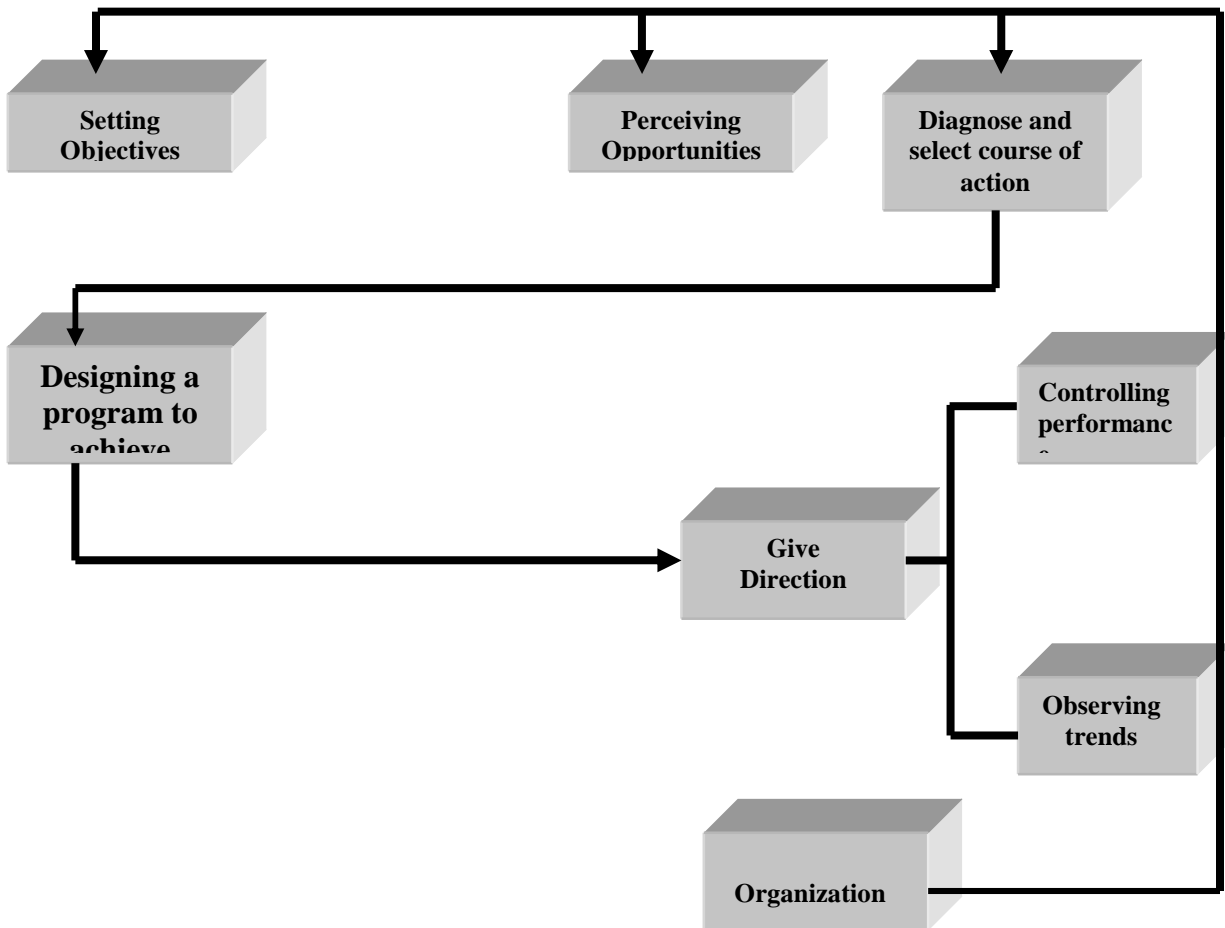
By its very nature, management information is designed to meet the unique needs of individual institutions. As a result, MIS requirements will vary depending on the size and complexity of the operations. For example, systems suitable for community sized institutions will not necessarily be adequate for larger institutions. However, basic information needs or requirements are similar in all financial institutions regardless of size. The complexity of the operations and/or activities, together with institution size, point to the need for MIS of varying degrees of complexity to support the decision-making processes. MIS provides management and directors with the information necessary to guide operations, support timely decision making, and help management monitor progress toward reaching institutional goals and objectives. It encourages management to develop sound information systems, they also should be reasonable in their expectations about what constitutes suitable MIS. The MIS review should occur at both a macro (big picture) level and also at the micro (functional/product oriented view of the business) level. The MIS-review program should look at the useability and effectiveness of the corporate-wide MIS structure.

Figure 2.1
Nature and Scope of MIS



2.1.3 Management Information and System Approach

Figure 2.2
Management Information system



The above figure shows the real MIS approach, system approach is started from setting objectives, perceiving opportunities, diagnose and select course of action. Designing a program to achieve targeted goal and give direction is the part of diagnose and select course of action. After giving the direction controlling performance and observing trends is done.

2.2 MIS and its Evolution

Since the development of BOP system basically connected with those of periodical developments in computer technology, the trend of management has changed drastically in the recent era corresponding to the changing nature of complexities. As such, the modern management is quite related to the availability of data and information for a particular purpose of decision making and in the other extreme mere availability of data and information does not fulfill the managerial objectives, but the reality lies in proper processing of data and information so as to figure out the decision. We see that the processing function of data is, today, accomplished by assistance of the machine. And now it is clear that as the value of data for managerial purpose is quite tremendous, and it is the value inter-linked with the processing and management, today's management is the process of obtaining and maintaining of sufficient data and information for timely and correct decision making. So the evolution of MIS is older not more than by the evolution of computer technology in data processing.

The idea of an information system to support management and decision making is the use of computers, which have extended the organization capabilities for implementing such system. Many of the idea which is part of MIS evolved as part of other discipline. Gordon better Davis had suggested four major areas of concept and systems development which are especially significant in tracing the evolution of the MIS concept – "managerial accounting, management science, management theory, and computer processing." (Davis, 1974:8). According to this idea, the MIS concept may be viewed as a substantial extension of the concept of managerial accounting taking into consideration the ideas and techniques of management science and the behavioral theories of management and decision making. The capabilities of computers have added to the development of the

MIS concept because new hardware in conceptualizing the information system for an organization.

2.3 Designing an effective MIS

We can describe two approaches for designing effective MIS

- i) Top down approach
- ii) Bottom up approach

Top down approach begins by defining the objectives of the organization and constraints. It proceeds to identify activities and decision situations which are followed by determining of information requirements and subsequent development of database and systems. The bottom up approach starts from individual applications and gradually integration takes place and more and more files are added in response to real needs. MIS, in the true sense, can be designed mainly through the top down approach, yet in practice a combination of both the approaches works out satisfactorily.

As defined already, management information system serves and supports the process of managerial activities. With the above concept, the steps involved in the design of MIS can be started as follows:

1. Understanding the management process of an organization. Examining the existing information setup.
2. Conceptualizing the information requirements to support the management process.
3. Identifying the appropriate sources of data/inputs.
4. Determining the methodology/technique of covering the data into information.
5. Deciding appropriate technology (manual/semi-automated/fully automated) for translating data into information.
6. Preparing a master plan outlining the applications, priority, and time-schedule of implementation, resources required and the benefits from the system.
7. Implementation in a phased manner.

"The information we have, is not what we want,
the information we want, is not what we need,
The information we need, is not available" (Prof. Finagle's Law of Information)

2.4 Review of Related Studies

Other related studies are the main bridge to conduct the research work. The researcher used many studies to complete this thesis and it also analyzed the research work, which can be described as below:

Rajib Subba (2003) in his article, "*Developing human Resource in IT*" focus that " in the history of civilization, no work of science and technology had comprehensive impact on the course of human development as information technology (IT). Nothing has influenced human civilization as IT in modern times has, changing almost all aspects of human activity like communication, trade culture, education, entertainment, research, information and knowledge. The advent of ID, which particularly unfolded in the last three decades, is vastly extending men's intellectual power inviting a paradigm shift in how we live in this world.

Only universal literacy and high standard of education can enable people to gather skills to be employed. IT decreases isolation and the divide between the people in rural and urban areas Nepal, which has missed the agriculture and industrial revolution due to historical reasons, can re-cover the lost time and opportunities with IT revolution. For this, Nepal needs a national policy with a national vision, specific goals and strategies to achieve these goals, Nepal's effort should be directed towards capacity building in IT. (www.can.org.np).

The initiatives of the government (to make Nepal 100% literate by 2020 AD) should also include compulsory computer education for all that Nepal will be a 100% computer literate country at least within this time frame. For this a national campaign "Sabaiko lagi computer shikchya" should be launched in the partnership of private sector as well as international donor agencies.

A national educational network "Rastriya Vidhya Merundanda" should be instituted based on modern communication technology by which activities for all the HRD (Human Resource Development) institutions are integrated. For this, a joint venture of the government and industry should be launched. The center node of the network should be an educational information pool "Edu-pool" (Vidhya srot Kendra). This should be able to provide all sorts of information related to IT education.

Last but not least, it is true that the investment made in education do not yield immediate observable dividends but balancing investment in IT HRD with other pressing demands is the key issue to be addressed. It is not only the responsibility of the government but every stakeholder has a role to play for better IT for better Nepal.

Prateek Pradhan (2003), in this article "*Economic Impacts of Information Revolution*", focus that adage "Think globally and act locally" is practiced differently in Nepal, especially information technology sector. We "see globally and relish locally". All our leaders, bureaucrats and entrepreneurs have seen the progress of the whole world due to titanic development of information technology, and believe Nepal to take the same course, without performing anything. Despite IT sector's potentiality, Nepal has been unable to take even minimum benefit from the IT sector for the economic development of the country.

When a few pioneer entrepreneurs introduced the prospects of IT into the country, the country was far ahead than many developed countries around the world, not only south Asia, we also realized the importance of course on computers and information technology along with all other countries of the world. But our lead into IT sector has gone into oblivion in the last half a decade, as we failed to be competitive in rapidly unfolding changes in IT sector.

If all happened basically because the bureaucrats and politicians could not realize the importance of IT sector, they only took IT as the increase in number of computer they never comprehend the importance of computerization for economic development. The

increasing number of computer is not just like increased number of typewriters. In fact the networking computers has evolved a mammoth information society which as turned this whole world into a village. Information technology is important to the nation not only because it's advancement in science and technology and the country's competitiveness but because of its impacts on over all aspects of general public's day today living. The impacts of information technology in our society, economy, and workforce include massive changes in the nature of work, commerce education and training, entertainment, financial management, and quality of life. Understanding these changes will enable rational decisions to be made in government and the private sector in allocation resources and planning policies to take advantage of the opportunities that information technology brings to society. Information technology promises advances in three areas. Firstly, by increasing the power of information storage, retrieval, and processing system it will increase productivity in the service sectors that rely on information. Secondly, the improved communications made available by the internet will increase the extent of the market and enhance competition. In addition, it will allow more geographical distance between parts of a production process. Finally, it offers the possibility of revolutions in education and in innovation, perhaps permanently increasing the rate of technological progress and diffusion. (www.can.org.np)

2.5 Review of Master Degree Thesis

Neupane Durga Prasad (2002) carried out a study on *"MIS- Significant tool for effective management of an organization. A case study in RNABIL"* Naupane carried out the study with the following objectives:

-) To study the practical and theoretical aspect of management information system.
-) To examine the practice of maintaining information system in RNABIL.
-) To study existing information system/ flow of information in different departments, especially in personnel and general service department of RNABIL.
-) To study existing decision making process management system, management process of RNABIL.
-) To find out drawbacks of existing information system and provide recommendations for the betterment, if it is needed.

Based on the above objectives, Neupane found major findings as follows :

-) RNABIL should implement MIS
-) It is essential to provide training of software packages and advance course of computer to all of the staff and executives of this organization to make them competent and able to handle various problems regarding modern IT and MIS.
-) The managers, CEO and all decision making level personnel must use modern MIS and various software regarding DM and problem solving. For this, they need good knowledge of modern management, modern network base and information system and advance computer knowledge to make their decision effective, organizational efficiency and higher productivity.
-) In each modern organization are needs to provide enough training and development opportunities regarding modern IT related fields, i.e. hardware, software, networking and modern management skills to all levels of employees. It leads an organization always towards success and effectiveness.
-) It should make plan of networking the variety of platforms with infrastructure detail name servers, routers, gateways, TCP/IP and networking strategy like LAN/MAN/WAN etc.

Based on the above findings, Neupane give the following conclusion:

-) MIS satisfies the information needs of the people in a particular organization pyramid.
-) Network based computerized information system is the first requirement for this organization to maintain modern information system.
-) There is lack of well trained and skilled IT experts and manpower to maintain computerized information system within the organization and departments.
-) MIS not implemented due to high cost and technical manpower.

Acharya Iswor (2002) carried out a study on “*Implementation of MIS in RNABIL – A case study in Marketing Department*” Acharya carried out the study with the following objectives.

-) To present and analyze existing IS of marketing department of RNABIL.

- J To examine the flow of information to co-ordinate and communicate different divisions and units of marketing department.
- J To provide recommendations on the basis of major findings that has been drawn out in the research study.
- J Based on the above objectives, Acharya found major findings as follows :
- J Should train and develop the capability of human resource to handle sophisticated equipments regarding information technology.
- J Should maintain necessary infrastructure for implementation of MIS in the department.
- J The management of RNABIL must be committed to strictly implement policies, rules and regulation of RNABIL to avoid unnecessary political pressure.
- J Implement a Network based computerized information system.

Based on the above findings, Acharya gave the following conclusion:

- J The implementation of MIS is necessary for the effectiveness of the department
- J The complex organizational structure and multidivisional structure of the marketing department is ambiguous, it is necessary to make clear.
- J The department needs network based computerized information system to eliminate the drawback generated by paper based information system and traditional way of centralizing the information and authority.
- J Need for proper infrastructure for the implementation of MIS in the department.

Lamsal Asim (2003) carried out a study on “*Information system design(A case study of ADB of Nepal)*” Lamsal carried out the study with the following objectives :

- J The specific objective of the study will be how the information system will help to know the situation of the bank & how it helps to raise the overall performance of the bank.
- J To examine practice of maintaining information system in ADB.
- J To find out existing information system/flow of information in different divisions.
- J Examine the flow of information to coordinate & communicate different divisions & units.

- J To find out drawbacks of existing information system & to provide recommendations for the betterment of the existing system & to design the best suited information system on the basis of findings.

Based on the above objectives, Lamsal found major findings as follows :

- J Modify current practice to match the process in the software.
- J Formulate & Publish
 - An It policy
 - Back up & security policy
 - An It contingency plan, and
 - Computer auditing policy & standards
- J MIS divisions should be restructured to have capacity to provide support to branches and other outlets. The divisions should be maintained & staffed to provide installation, training and support services.
- J Continuity of systems – MIS division lacks the manpower, skills, knowledge & exposure to develop new software products to meet the standards of accuracy, speed & integrity now required.
- J Upgrading of MIS systems should be in phases as the current immediate required is to install a complete integrated banking system to suit current requirements.
- J Improve the management information reports to present comparative information that shows the position at the start of the period under reviews the transactions during the period & the closing position.

Based on the above findings, Lamsal gave the following conclusion

- J Provide the clients with high quality & timely services
- J Access information needed for an efficient & effective corporate management.
- J Draw on the information as on the fundamental precondition of a successful decision making.
- J Communicate with other information system (partner banks, customers, statistical office, banking supervision, local & world wide provides of banking and other services 7 information etc.

- J Fully automate repetitive operations & tasks.
- J Handle operations & services based on the effective & fast high volume data processing.
- J Automate administration of delivered products & services with a sufficient scope of information about clients, products & services.
- J Maintain consistency of administered data & facilitate concurrent access from several locations.
- J Archive data & documents and keep them accessible.

Bhattarai Ajit (2003) carried out a study on “*Performance of MIS in Kumari Bank*” with the following objectives:

- J To identify factors affecting performance of MIS.
- J To examine the existing situation of software personnel of the bank.
- J To study the relation of training of end users in the bank for improvement of the performance of MIS.
- J To provide suggestions on the basis of the findings.

Based on the above objectives, Bhattarai found major findings as follows:

- J Majority of the users of the MIS consider MIS to be important.
- J Majority of the users of the MIS consider that MIS helps in decision making.
- J Use of MIS is directed towards extraction of current information rather than historical information.
- J Further improvement in utilization of MIS needs better communication & training between the various stakeholders.
- J MIS users are comfortable using the product and have a good understanding of the system.
- J MIS users are moderately satisfied with the MIS.
- J The factors which will improve the utilization of MIS are “good communication channel, “training to end users,” training to software personnel”.

2.6. Research Gap

In this research work researcher has made an attempt to find out the previous studies and related them to the topic of present study of MIS in NABIL. In this regard researcher studied various previous research work related to commercial bank and other institutions. Following are the major area of which had taken by the previous researcher for research work

Asim Lamsal had tried to study information system design (A case study of ADB of Nepal) Lamsal carried out the study to examine practice of maintaining information system in ADB and to find out existing information system/ flow of information in different divisions. His study focus on the examine the flow of information to coordinate & communicate different divisions & units only.

Ajit P Bhattarai had tried to study performance of MIS in Kumari Bank, Bhattarai carried out the study to identify factors affecting performance of MIS and examine the existing situation of software of bank.

The gap between the time take place different between the research. Many research work has done with the help of secondary data but this research is done with the help of primary data as soon as possible.

CHAPTER - III

RESEARCH METHODOLOGY

3.1 Research Design

A research design is the agreement of conditions for collection & analysis of data in a manner that aim to combine relevance to the research purpose with economy in procedures. Thus it is not possible for the researcher to conduct a research project without research design. The research is designed in such a way that it would be more convenient for the researcher to collect the actual data and information during the course of research study. Since the research study is basically are of two types i.e. descriptive and analytical in nature.

Population

The term “populations” universe for researcher means all the number of any well defined class of people event or objects. In this research work in the NABIL organization under the title “A thesis on Management Information System of commercial bank (A case study of NABIL Bank) has been taken as a research population as a whole NABIL departments and employee’s under all department as research population by the researcher in this present research study.

Sample

Population study means study of the large sector but the sample means the selected study of the population. In this study sample means the study of the NABIL Bank.

3.2 Data and Information Gathering Techniques

Data and information has been classified into two groups:

-) Primary data and information
-) Secondary data and information

A. Primary Data and Information

While collecting primary data and information, different methods have been used. They are as follows:

- a. Interview Method
- b. Questionnaire Method
- c. Observation Method

a) Interview Method

The interview is a face to face method used for collecting the required data. The structured interview conducted with Director of Personnel Department has given a clear picture in analyzing the existing information system of the department as well as that of NABIL. It helped a lot to identify the problems in the existing department.

b) Questionnaire Method

During the course of research study, different questionnaire have been designed as per the requirement of research study. The list of questionnaire and their types are attached in the APPENDIX. The list of questionnaires has been distributed to the head of personnel department.

c) Observation Method

Researcher has spent few more time in the observation of the organization to well understand overall system of different department focusing on the Training and Development Division.

B. Secondary Data and Information

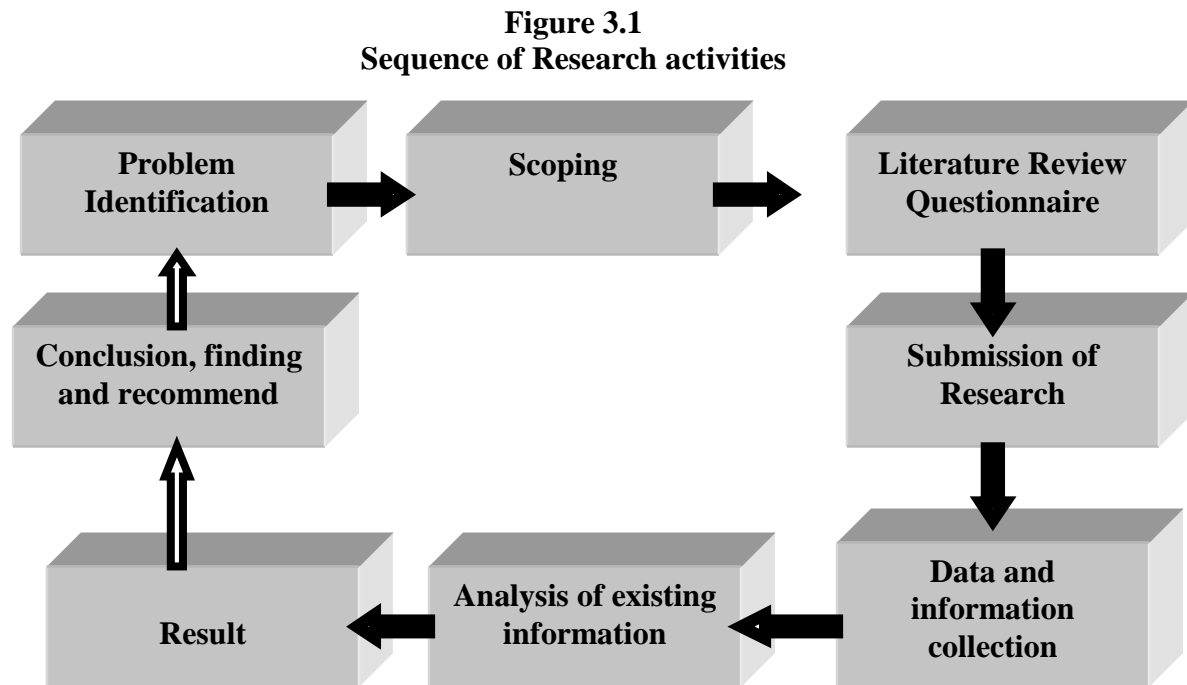
Secondary data is classified as the results and data collected by previous investigators/researchers. It provides the researcher with a considerable amount of useful information. With the reference to the research study, the different secondary information has been collected from different sources. The different sources are:

Information and reports kept by department divisions and units

) Journals

- Profiles
- Magazines
- Newsletter
- NABIL Bank Magazines
- Statistical year book of Nepal
- Etc.

3.2.1 Sequence of Research Work (Activities)



The above figure shows that the total sequence start from problem identification and ends to result, it is just like a trade cycle. First of all problem is identified then after scoping, literature review, submission of research, data and information collection, analysis of existing information, result, conclusion, finding and recommendation then again the research begins.

3.3 Analysis Tools and Techniques Used

With reference to the research methodology, different tools and techniques have been used by researcher to present and analyze Existing Information System.

Use of tools and Techniques

1. Tables and Figures
2. System Approach Method
3. G.S. Model and Data flow diagrams
4. Flow charts
5. E – R diagram

a) Tables and Figures

A table is a presentation of data in columns and row form. Typically, tables are used to present the data and information to make the content clear whereas the term figure usually includes graphs, maps, drawings and charts.

b) System Approach Method

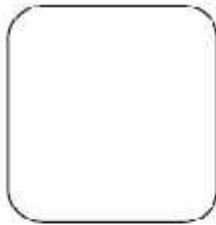
This method includes three steps i.e. Preparation phase, Definition phase and Solution phase. In the preparation step whole organizations i.e. NABIL is analyzed. In Definition step Personnel Department is analyzed and taken. At last the Solution step comes where alternative solution is identified and recommended.

c) GS Model & Data Flow Diagram (DFD)

GS Model gives the brief description about the physical resources that flow through the physical system of the organization.

DFD is a diagrammatic representation of the flow of data through a process/system or sub-system/sub-process. It shows what happens to the data as it goes through a process. Like a flowchart, a DFD also uses standard symbols and notation. The use of specific icons associated with elements depends on Gane/Sarson Symbol, which are as follows:-

3.4 General Symbol Used in Data Flow Diagram



Process

Processor: - It indicates a processing function in which data flowing in are changed in form, value, or location before existing.



Entity

Entity: - It indicates the input or output form of system.



Storage

Storage: - It indicates data store such as a data base file.



Data Flow

Data Flow: - It indicates data flowing through the system.

3.5 Flow Charts

A flowchart is a pictorial presentation of a program that graphically shows each step in elaborating a problem. It is a series of boxes interconnected by arrows; each box represents various kinds of operations needed to perform to reach to the problem in order to solve it. The arrows show the order in which the operations must be carried out.

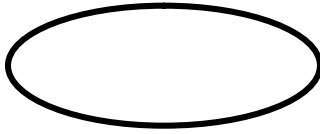
Some convention followed while drawing the flowchart is following:

1. The flow direction should be either top to bottom or from left to right if the flow line do not contain any arrow heads.
2. If the flow line contains arrow heads, then the direction of the flow is indicated by the arrow heads.
3. Each symbol should be interconnected with flow lines.
4. The decision box is connected with one line but it can sprout more than one line.

Benefits of Flowcharts

1. Quicker grasp: Procedures may be understood more rapidly through the use of charts.
2. Effective analysis: The flowchart becomes a model of a program that can be broken down into detailed parts for study.
3. Easily understood : With the help of flow chart every task can be easily understood so it play vital role to the reader.
4. Communication: Flowcharts aid in communicating the facts of a problem to solve whose skills are needed in the solution. The old saying that “a picture is worth a thousand words” contains an element of truth when the pictures happen to be flowchart symbols.

Symbols Used in Flowchart



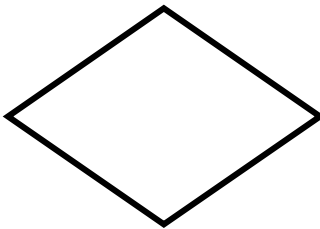
Oval

Termination: The termination symbol, as the name suggests, represent the beginning and the end of a Program.



Rectangle

Processing: The rectangle represents processing operations or action to be under taken.



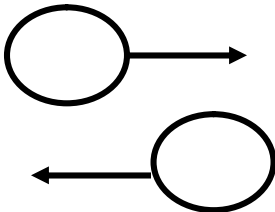
Decisions

Decisions: The diamond shaped symbols have one entrance line and two exist paths. These paths may be determined by Yes or No answers to some stated condition.



Parallelogra

Input/ Output: The input /Output symbol is used to how the data to be entered and the expected output.



Place maker

Place Marker: This is a place marker. If you have to go another line or page with your flowchart, this symbol is numbered and put at the end of the line or page. It is then used at the beginning of the next line or page with the same number so a reader of the chart can follow the path.

3.6 Entity – Relationship Diagram (E – R Diagram)

ER - Stands for entity relationship diagrams. It is the first step in the design of data model which will later lead to a physical database design.

It was originally proposed by Peter in 1976 as a way to unify the network and relational database views.

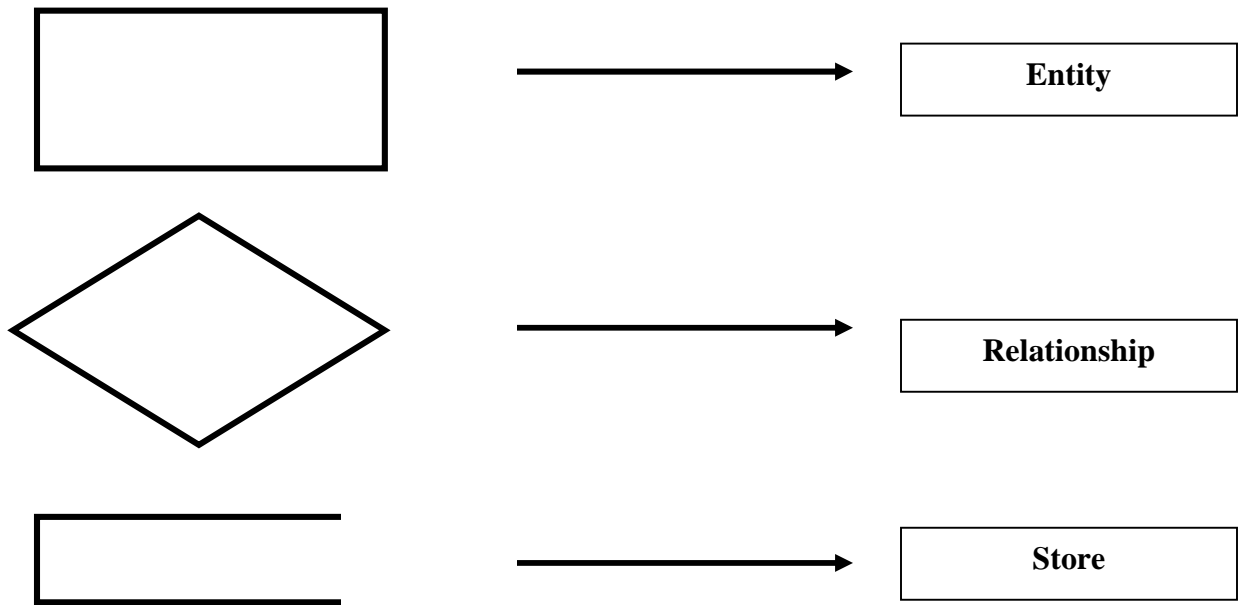
The ER Diagrams is the initial process to analysis a database application and understands the problems related or causes in future with the selected database application in this stage different components are watched and studied by the diagrammatical model is designed by describing entities attributes relationships constraints and some important things related with project data management and data storage there some unique type drawing shapes are used while design the ER- Diagram those shape are defines the various parts of application. It must be designed first before going to start minor to major project of work environment and deeply catch everything and also the future scope of the project application.

Simply stated the ER model is a conceptual data model that views the real world as entities and relationships. A basic component of the model is the Entity-Relationship diagram which is used to visually represent data objects.

It maps well to the relational model. The constructs used in the ER model can easily be transformed into relational tables.

It is simple and easy to understand with a minimum of training. Therefore, the model can be used by the database designer to communicate the design to the end user.

In addition, the model can be used as a design plan by the database developer to implement a data model in specific database management software.



Features:

In E – R model was three features. They are as follows

Entity: which specifies distinct real world item in an application?

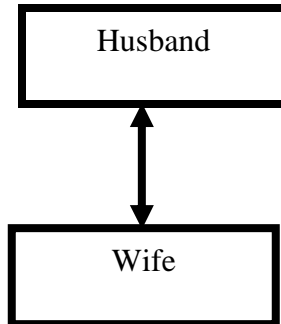
Relationship: which connect entity and represent meaningful dependencies between them.

Attributes: This specifies properties of entities and relationships.

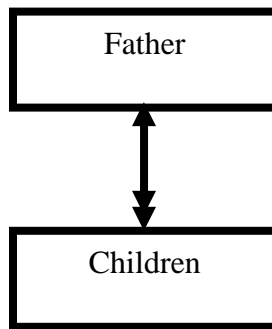
Types of E – R diagram

1. One to one
2. One to many
3. Many to many

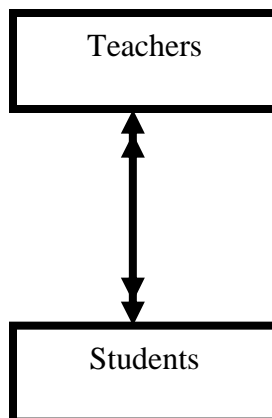
One to one (1:1): It is a relationship is an association between two entities. For e.g. a relationship between husband and wife, where the husband is allowed one wife at a time and vice versa.



One to many (1: M): It is a relationship represents an entity that may have two or more entities associated with it. For e.g. a father may have many children and a state may have many districts but each child has only one father and each district has only one state.



Many to many (M: M): It is a relationship describes entities which may have many relationships both ways. For e.g. teachers and students where a teacher teaches many students and a student attends the classes of many teachers.



CHAPTER - IV

DATA PRESENTATION AND ANALYSIS

4.1. Introduction

This chapter deals with the presentation, analysis and interpretation of relevant and available data of NABIL in order to fulfill the objectives of this study. To obtain the best result, the data have been analyzed according to the research methodology as mentioned in third chapter. The data presentation and analysis is the basic organization and classification, which are then used for analysis purpose. After data collection is completed, the data is in raw form so; it is arranged in proper way. Different types of data require different methods of summary and presentation. Here, the arrangement of raw data is presented in three ways. They are:

Tabular Presentation

Diagrammatic Presentation and

Graphic Presentation

4.2 Organization and System Analysis

NABIL Bank Limited, the first foreign joint venture bank of Nepal, started operations in July 1984. NABIL was incorporated with the objective of extending international standard modern banking services to various sectors of the society. Pursuing its objective, NABIL provides a full range of commercial banking services through its 19 points of representation across the kingdom and over 170 reputed correspondent banks across the globe.

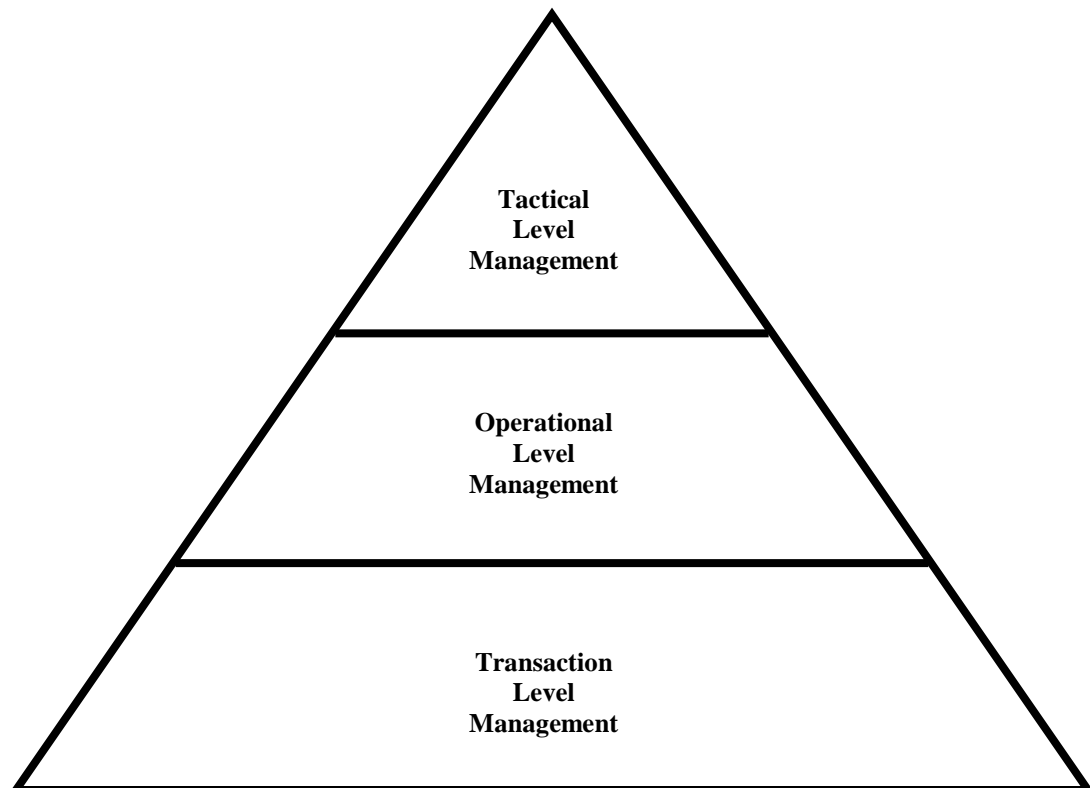
NABIL, as a pioneer in introducing many innovative products and marketing concepts in the domestic banking sector, represents a milestone in the banking history of Nepal as it started an era of modern banking with customer satisfaction measured as a focal objective while doing business.

Operations of the bank including day-to-day operations and risk management are managed by highly qualified and experienced management team. Bank is fully equipped

with modern technology which includes ATMs, credit cards, state-of-art, world-renowned software from Infosys Technologies System, Banglore, India, Internet banking system and Telebanking system.

4.3 Hierarchy of Management

Figure 4.1
Hierarchy of Management



4.4 ATM Services in NABIL Bank

NABIL Bank is committed to provide round the clock service to its customers through a large network of Automated Teller Machines (ATMs).

Locations

Kathmandu Valley (24)

-) NABIL, newroad branch
-) Dharmapath. Newroad
-) Jorpati (gemini supermarket)

-) NABIL, lalitpur branch
-) Atm laungh, kumaripati, lalitpur
-) NABIL, kantipath branch (3 atms)
-) NABIL, head office, kamaladi
-) NABIL, maharajgunj branch
-) Tripureshwor (utwc)
-) Kc verity store, kalimati
-) Soaltee crown plazza, tahachal
-) Us embassy bharna cottage
-) Thamel (thamel supermarket)
-) Thamel (ying yang restaturant)
-) Thamel (bakery café)
-) Thamel branch
-) New baneshwor (bakery café)
-) New baneshwor branch
-) Bhaktapur durbar square
-) Kaushaltar branch
-) Phohara durbar (us mission)
-) Halchowk branch, swayambhu

Outside Katmandu Valley (18)

-) NABIL, birtamod branch
-) NABIL, damak branch
-) NABIL, dharan branch
-) NABIL, bank itahari branch
-) NABIL, biratnagar branch
-) NABIL, birgunj branch
-) NABIL, narayanghat branch
-) NABIL, hetauda branch
-) NABIL, butwal branch

-) NABIL, bhairawaha branch
-) NABIL, lakeside counter, pokhara
-) Chiple dhunga, pokhara
-) NABIL baglung branch
-) NABIL, ghorahi branch
-) NABIL, tulsipur branch
-) NABIL, nepalgunj
-) NABIL, dhangadi branch
-) NABIL, mahendranagar branch

NABIL has following features of Master Card (local)

-) Valid in Nepal and India
-) Can be used for purchases of merchandise / services or cash withdrawal
-) Accepted in over 300,000 POS terminal merchants and paper merchants
-) Competitive interest, late fee and service charges
-) No auto debit reversal fee
-) No compulsion of maintaining account with NABIL Bank
-) Can be used for purchases of merchandise / services or cash withdrawal
-) Accepted in over 300,000 POS terminal merchants and paper merchants
-) Competitive interest, late fee and service charges
-) No auto debit reversal fee
-) No compulsion of maintaining account with NABIL Bank
-) Flexibility of choosing convenient payment option
-) Simplified assessment process
-) Delivery of the card within 5 working days
-) Validity of the card - 1 year
-) Capability of same day card issuance in urgent cases

NABIL has following features of Master Card (International)

-) Valid worldwide except in Nepal and India

-) Can be used for purchases of merchandise / services or cash withdrawal
-) Accepted in millions of POS terminal merchants and paper merchants
-) Issued to USD account holders of NABIL Bank
-) Competitive interest, late fee and service charges
-) No auto debit reversal fee
-) Payment of 100% of billed amount by due date.
-) Simplified assessment process
-) Delivery of the card within 5 working days
-) Validity of the card - 1 year
-) Capability of same day card issuance in urgent cases

In this way MIS has been playing vital role to grow an organization. Major role of MIS in organization can be listed as below:

-) It has important tools to supports, analyses, delivery and adding reliability to any organization.
-) It helps to solve businesses problems.
-) It helps to support for decision making, e.g. Decision Support Systems, Expert systems, and Executive information systems.

4.5 Services and Facilities Provided by NABIL

The services provided by NABIL can be seen as below:

Deposits:

NABIL provides various types of deposits including Savings, Current, Fixed and Call Deposits, Saving Plus, Bal Suraksha Khata (BSK), Mahila Suraksha Khata (MSK) and Jestha Nagarik Suraksha Khata (JNSK)

i. Current Deposit

In current accounts, it can be withdrawn or deposit any amount of cash. However, it would be better if a customer inform the bank prior for presenting the cheque over the counter for bulk cash withdrawals. Customer just need to make sure to maintain the

minimum balance in the account as set by the bank to avoid ledger fees set by the bank. It will be provided with a cheque book containing as many leaves as required by customer depending on their business transactions. Individuals, profit-making business houses, international / national non-government organizations and others open current accounts. This is a non-interest bearing account. Normally statements are provided to customers on a periodic basis. Customers are encouraged to use NABILNet (online banking system) to download statements and view transactions as through the internet.

ii. Call Deposit

Call deposit accounts are those accounts where a customer park high-volume short term deposits. These accounts pay interest to account holders based on the rate negotiated with the bank. Cheque books will be provided to the call account holders to withdraw cash.

iii. Time Deposit

Time deposit accounts are meant for those individuals and corporate houses, who would like to earn interest on the fund not in use otherwise for a period of time. Time deposit accounts are opened for a fixed period of time ranging from 2 weeks to more than a year. These accounts pay interest to account holders at the rates agreed upon with customers at the time of opening time deposits. The interest rate and initial deposit will be fixed for the period as agreed with the bank. In case time deposit holders need fund from the time deposit account prior to its maturity, they can apply for a loan pledging the time deposit certificate on which the bank will have the lien. NABIL open time deposit accounts in Nepali Rupee and various other convertible foreign currencies (list).

iii. Normal Saving Deposit

Savings deposit accounts are meant for those individuals who have a habit of saving money from their earnings so that they can use it when they require. The bank allows holders to withdraw the money as and when they need it. It would be better if a customer inform the bank prior for presenting the cheque over the counter for bulk cash withdrawals. The bank will provide customer with a cheque book for withdrawal of cash. Interest rates in savings accounts are subject to change depending on the market

conditions. Bank will provide statements of transactions on a periodic basis. Customers are encouraged to use NABIL Net to download statements and view their transactions through the internet.

NABIL open normal savings deposit accounts in Nepali Rupee and various other convertible foreign currencies.

iv. NABIL Lok Bachat

NABIL Lok Bachat is a very flexible savings deposit product where a customer can open account at zero minimum balance requirement and still earn interest on the monthly minimum balance above Rs 10,000.

Under the scheme, the customers are required to avail a Visa Electron Debit Card at a discounted rate of Rs 200 while opening the account. NABIL Visa Electron Debit Card will give a customer access to account through large network of ATMs for withdrawals 24 hours a day. A customer can also use the Visa Electron Card to purchase goods and services at Visa accepting outlets both in Nepal and India. If required, Bank also provide Cheque book at a very nominal fee. NABIL Lok Bachat account holders can also enjoy internet banking solution ‘NABIL Net’ and 365 Days Banking with Evening Counters with out any additional cost. NABIL Lok Bachat is most suitable for corporate entities for the salary distribution to their staff members. Prospective share investors who need a bank account compulsorily for investing into an IPO by an amount above a certain sum can also take advantage of very relaxed terms of NABIL Lok Bachat scheme

v. NABIL Bachat

NABIL Bachat is our premium savings deposit product. The minimum balance requirement for this deposit is NPR. 50,000 and the interest rate in this is 6% p.a. for deposits exceeding NPR. 50,000. The product has the following features:

-)] Debit Card (VISA Electron): Free of issuance charge
-)] Anywhere branch banking service (ABBS): Free of charge
-)] Account Statement: Free of charge

- J Stop Payment: Free of charge
- J Good for Payment: Free of charge
- J NABIL Net (Internet Banking System): Free of charge
- J Balance Certificate: Free of charge
- J TC: Free of issuance and purchase charge

vi. NABIL Student Saving

NABIL Student Saving accounts are meant for the students. This product is an amalgamation of a Deposit Product and a Loan Product. Students can open this account with a minimum balance of just NPR 500 and enjoy a host of exclusive facilities, better interest rates, instant access on online banking services, privileged education loans, free cheque books, special discounts on TCs, Bank Drafts Swift Transfer and much more

vii. NABIL Bal Bachat

The product has been designed to promote the habit of savings amongst the parents for a secured future of their children. It has been observed that due to the hectic lifestyles of the parent's today, they tend to ignore the importance of saving for their children. Today's savings in fact can be very precious in the future. The amount can be used later for various purposes viz the educational expenses of the children, investment in fixed assets for the children or for the marriage ceremonies of the children later in future. This account is equally useful to inculcate the banking concept amongst the children from their early ages. 'NABIL Bal Bachat' is aimed at providing a better future for the children populace of today.

The product also has a facility to make a monthly transfer from the account of the parent to the NABIL Bal Bachat account through a 'Standing Instruction' option. The Standing Instruction facilitates the monthly transfers, by an amount decided by the parent without having the parents to come to the Bank and make the monthly transfers by themselves.

The features of the product are as follows:-

Minimum balance requirement: NPR 500 (Minimum balance will be held with us, a condition to that effect will be mentioned in the account opening form).

-)] Interest rate: 3.5% p.a. on daily balance.
-)] Issuance of Visa Electron Debit Card at NPR. 200.
-)] Free issuance of cheque book.
-)] Free NABIL Net.
-)] If Standing Instruction is applicable, monthly minimum transfer not below Rs. 500.
-)] No restriction on deposits
-)] Option to restrict/allow withdrawal remains with the account holder.

viii NABIL Jestha Bachat

NABIL Jestha Bachat is a special savings scheme for the Senior Citizens who belong to the age group of 50 years and above. The scheme offers an interest rate of 5% p.a. on daily balance. Under this scheme, interest is paid every month which helps the senior citizens to manage their monthly expenses more conveniently. The scheme offers the below features which has been introduced for the benefit of the senior citizens.

-)] Minimum balance requirement: NPR 500
-)] Interest rates: 5% p.a. daily balance with monthly interest payment
-)] Free NABIL Net
-)] Unlimited withdrawals & Deposits
-)] Issuance of ATM Card with a charge of NPR. 200 (mandatory)
-)] Free Issuance of Cheque Book
-)] 50% discount on the Issuance of Traveler's cheque, Swift Transfer, Demand Drafts
-)] Free Good for Payment and Stop Payment Service
-)] Free Balance Certificate and Account Statement

ix. NABIL Jestha Muddhati

NABIL Jestha Muddhati is a special Fixed Deposit scheme for the Senior Citizens who belong to the age group of 50 years and above. The scheme offers an interest rate of 7.5% p.a. Under this scheme the interest is paid on a monthly basis which helps the senior citizens to manage their monthly expenses more conveniently and thus makes their lives

more comfortable. The scheme offers the below features which has been introduced for the benefit of the senior citizens.

Minimum Balance: Rs. 500,000

Interest Rate: 7.5% per annum payable on a monthly basis

Tenure: 1 year

Pre-mature liquidation not allowed

Option of 90% OD loan limit with the Bank's prevailing interest rate

Compulsory opening of NABIL Jestha Bachat account (to be used as interest nominated account)

NABIL Bank Limited Retirement Fund (NABILRF) with the approval of His Majesty's Government of Nepal, Department of Inland Revenue and Nepal Rastra Bank, has been managing and operating Retirement Fund of its own employees and the employees of NABIL bank's corporate customers.

The Fund is an independent trust in accordance with the provision of Income Tax Act 2058 of Nepal, which is managed by a separate board and management team.

4.6 Analysis of Existing System

NABIL has been using the FINACLE banking software, the most commonly used banking Software. It offers Any Branch Banking Services (ABBS) within Kathmandu. The Finacle banking software, currently used in the bank, is developed by Infosys. It is prepared for the complete banking solution in this technology driven era.

As stated by the developer, Finacle is an on-line multi-user; multicurrency integrated banking system of international standard developed by Infosys. It integrates all functions of front office and back office as one package. It also takes care of data integrity with its internal design. Finacle encompasses a variety of features and can easily take care of a small financial institute to large-scale banks with international standard.

Finacle has now established itself as the most popular banking software which is now world wide popular with a clientele of more than 40 commercial banks and finance companies in Nepal. The system is totally object-oriented, taking maximum advantage of Relational Database Management System.

Some of the salient features include:

-) Fully integrated system. Customer accounts and General Ledger integrated.
-) Various other modules (Trade Finance, etc) are also integrated.
-) Highly parameterized and flexible in nature.
-) Products definable by the bank.
-) Transactions are on-line and real-time.
-) One button periodic operations (SOD, EOD).
-) Cheque printing and cheque inventory facility.
-) Deposits, loans, financial accounts, off-balance accounts are all covered. Letter of Credit, Letter of Guarantee, Document Negotiation (Export L/C), Bills, Remittances, Credit/Debit/Smart Cards supported.
-) Any Branch Banking Systems (ABBS), tele-banking, SMS banking, on-line voice recording of customer confirmation, on-line image capturing of images, etc are supported.
-) Very strong consolidation and reconciliation module.
-) Multi-lingual support (fields can be added in desired language).
-) Build-in document management system for paperless office automation.
-) Built-in workflow planning.
-) Account balancing can be maintained currency-wise (automated) or can be in local currency. Currency grouping is supported (e.g. many European currencies are grouped into Euro currency).
-) Centralized, distributed or hybrid solutions available.

Finacle development is heading for Enterprise Management of the entire bank or financial institute. Finacle is banking software, which is designed, developed, and maintained by Infosys Office Systems for general use. It is world wide software most of

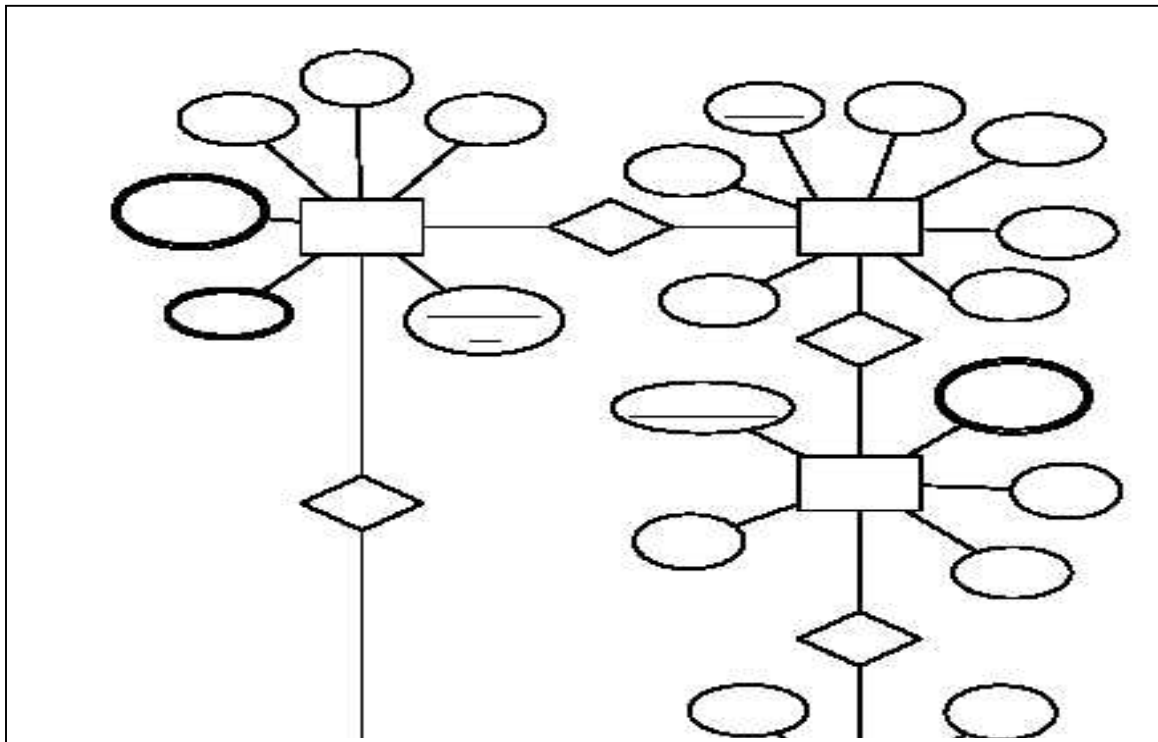
the international banking institution have been using this software. The system is user friendly, easy to maintain and flexible by design so that it is possible to upgrade or to add new modules in future at minimum cost.. Finacle is purely object oriented. (www.infosys.com)

There is separate security policy and some rules and regulation set by the bank regarding password to make the system accessible to unauthorized person. User id is given to employees who use the computer regularly and they set the password themselves for the easy access. Different employee can set same password but the user id cannot be same and is different for each and every employee in the bank.

4.7. ERD of Banking Environment

The figure below shows the simple ER diagram of banking environment. Current information system of the NABIL Bank is also based on similar relation as shown in the diagram. The diagram consists of mainly four entities like Bank, Account, Customer and branch.

Figure 4.2
ERD of Banking Environment



4.8 Data Security

Information is valuable asset of NABIL and it must be preserved and secured carefully. Unlike other assets, information is and can be unlawfully used without depriving the legitimate owner from its possession. In short, information security and its preservation have three aspects Confidentiality, Integrity, and Availability (CIA). In the context of NABIL, the Data and Information Security Policy defines its policy statement as "Access to data residing in systems at NABIL is to be granted only to those individuals who must, in the course of exercising their responsibilities, use the specific information. Access to data will be granted to NABIL employees only with special permission. Auditors and others may access data if the data pertains to the individuals, who are assigned by the management.

Some of the salient features of the password policy of the bank are as follows:

-) Password is corporate property; it cannot be treated as private asset. Never use bad word as a password,
-) Password should not be shared or disclosed unless requested by management,
-) Do not use the common password like "system", " NABIL ", "Administrator", etc.
-) It is of utmost importance that the data at branch offices and various department of the central office must be backed up regularly.

The highlights of data backup procedures are as follows:

-) Data must be backed-up at regular interval,
-) Storage of backup media must be a location remote from the processing center,
-) IT focal point is responsible for carrying out periodic backups,
-) Computer System department will provide necessary technical assistance in the Installation of backup hardware, software and procedures.

A management information system (MIS) is a system or process that provides the information necessary to manage an organization effectively. MIS and the information it generates are generally considered essential components of prudent and reasonable business decisions. MIS is viewed and used at many levels by management. Because MIS

supplies decision makers with facts, it supports and enhances the overall decision making process. MIS also enhances job performance throughout an institution. At the most senior levels, it provides the data and information to help the board and management make strategic decisions. At other levels, MIS provides the means through which the institution's activities are monitored and information is distributed to management, employees, and customers.

Account division sends the regular data to the MIS and Compliance Department. Data are then analyzed, processed and stored in the database. The main function of the MIS and Compliance Department in central branch is to reconcile all data received from other branch and prepare various financial reports, required by the Nepal Rastra Bank. MIS and Compliance Department also provides necessary reports to the management according to their needs. The purpose of research is how and up to what level the modern computer based information technology is being implemented in the bank. During the research it was found that there is not even a separate department like IT or similar, to handle the Information system.

Technology employed in existing information system:

For server

a) Hardware:

1. P-4 Mother Board & Processor 3.0 GHz
2. 1 GB RAM
3. 250 GB Hard disk drive
4. 21`` Color LCD monitor
5. 64 MB AGP Card
6. 56x CD ROM Drive
7. 56 Kbps Modem (external)
8. Multimedia Keyboard
9. Optical Mouse with pad
10. Casing with Power Supply (ATX)
11. UPS-600VA
12. Speaker

For client

1. P-4 Mother Board & Processor 3.0 GHz
2. 256 MB RAM
3. 160 GB Hard disk drive
4. 14`` Color Monitor
5. 1.44 Floppy disk drive
6. 32 MB AGP Card
7. Multimedia Keyboard
8. Optical Mouse with pad
9. Casing with Power Supply (ATX)
10. UPS-600VA

For Networking

1. LAN Card (10/100 Mbps)
2. 16-Port Hub (10/100 Mbps)
3. UTP Cable
4. RJ-45 Jack

Printer

1. Dot matrix LX-300+
2. Canon laser Jet LBP 810
3. HP Inkjet BJC 1000 SP
4. HP laser Jet 1200

4.9 DFD of Existing System

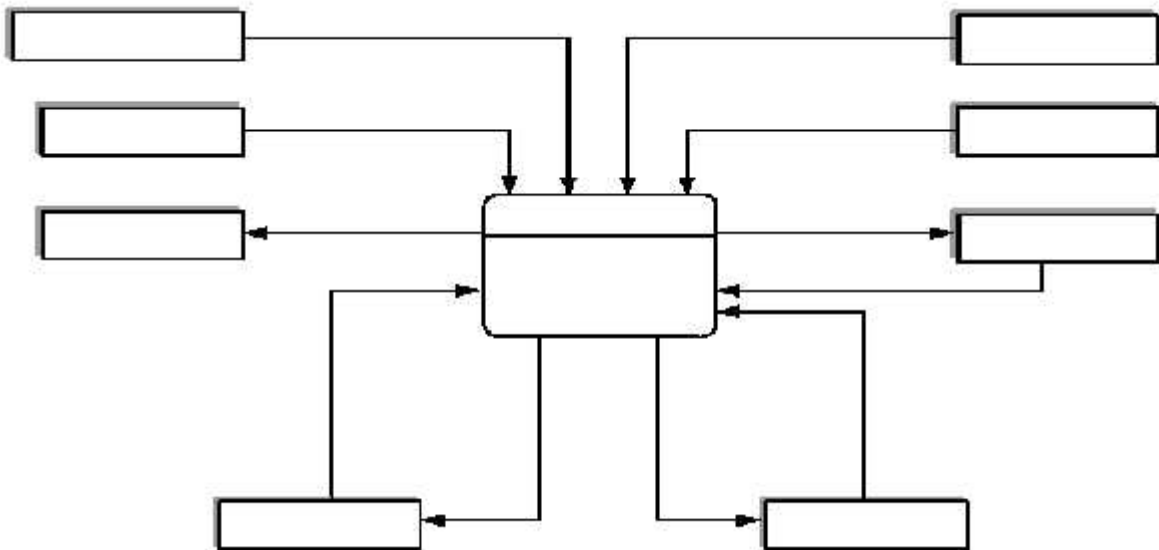
Context level diagram and zero level data flow diagram presented below clearly define the flow of information and data in the MIS and Compliance. The both diagram are drawn by short observation of the organization and interviewing the concerned personnel.

4.9.1 Context Level Diagram of Existing System

There are mainly eight entities to explain the overall information system of the organization. Account Opening Section, Loan section, Human Resource Department,

Remittance Section, Reporting Section, Cash Section and Reconciliation Department are those which uses the system most that is continuously link with the system. Other sections are not directly link with the system.

Figure 4.3
Context Level Diagram of Existing System



Description of the Context Level Diagram

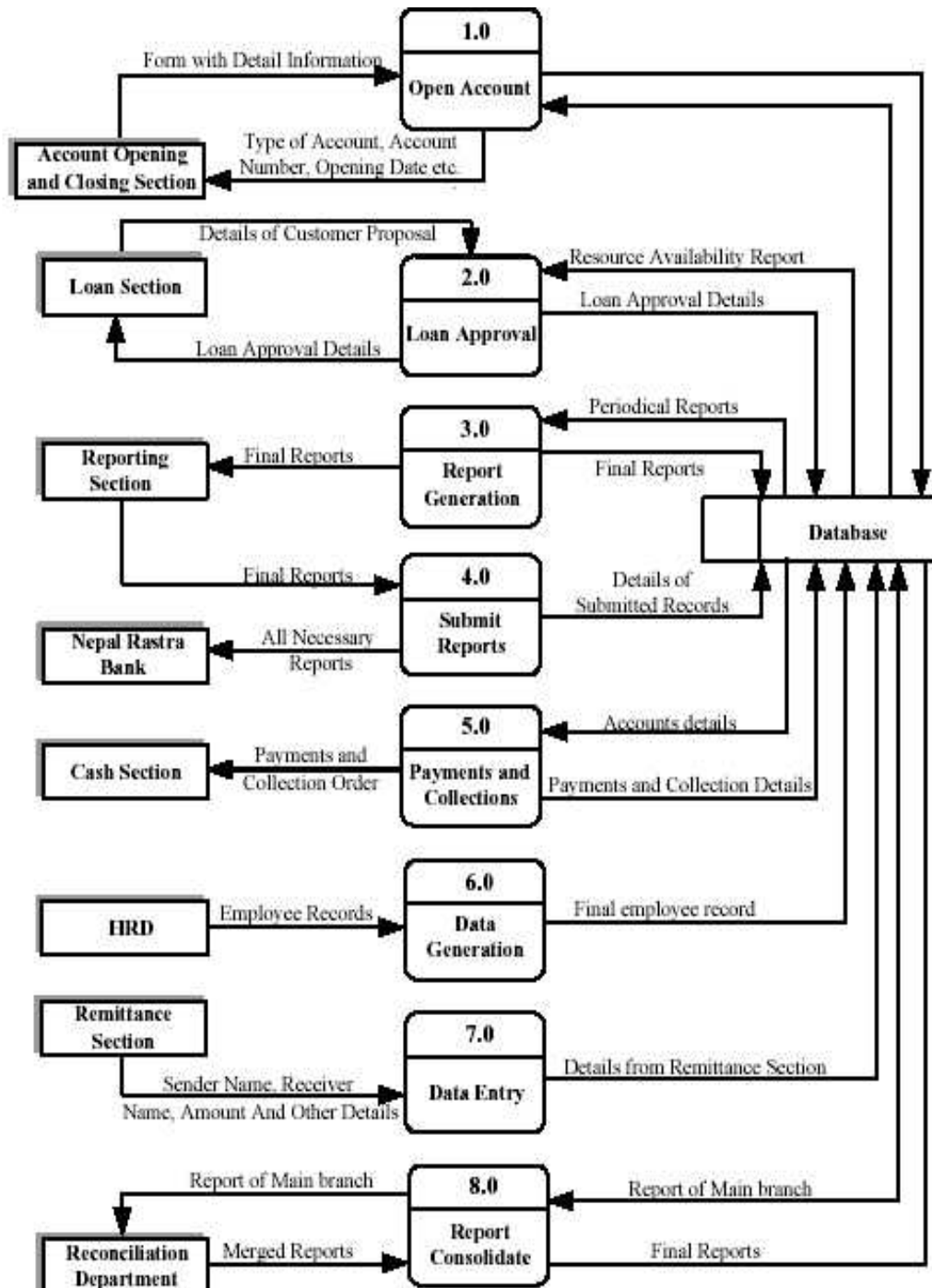
All the details of account opening and closing of the customers are received by MIS and Compliance Department through account opening and closing section. Account number to the customer is given only after the approval of Customer Service Department. Human Resource Department sends all the employee records to the MIS and Compliance department. All the employee records are recorded in MIS department using the human resource software. Loan Section provides all the loan approval detail to the MIS and Compliance Department. Loan products such as Housing Loan, Hire Purchase Loan, Demand Loan, Overdraft, Loan Against Gold, Term Loan, Cash Credit, Export Credit, Consortium Loan, Bridge Gap Loan, Priority Sector Loan, Deprived Sector Loan, Trust Receipt Loan, Bills Purchased, Personal Loan, LC, Guarantee etc. are provided by the NABIL bank.

All details of payments and collection of the cash are given to MIS and Compliance Department by the cash section and these data are recorded on database in MIS and Compliance Department and whenever cash section requires any data regarding cash balance and other detail it retrieves data from database in MIS and Compliance Department and so on. All necessary data are received from remittance section and after collecting all the data MIS and Compliance Department prepares report and submits it to report section for the further process. Report section checks and finalizes the report and then it again submits it to MIS and Compliance Department for record keeping. MIS and Compliance department sends the report to Reconciliation department and further Reconciliation department merges these reports with the report of the other branches and prepares the final report. Final reports are submitted back to the MIS department. The prepared necessary final report is send to the Nepal Rastra Bank or the user groups through MIS and Compliance Department.

4.9.2 Zero Level Diagram of Existing System

Figure 4.4

Hierarchical Chart of MIS Department



4.10 Networking Structure of NABIL Bank

A computer network is an interconnection of various computer systems located at different places. In computer network two or more computers are linked together with a medium and data communication devices for the purpose of communicating data and sharing resources. The computer that provides resources to other computers on a network is known as server. In the network the individual computers, which access shared network resources, are known as workstation or nodes. Computer Networks may be classified on the basis of geographical area in two broad categories and they are Local Area Network (LAN) and Wide Area Network (WAN).

4.10.1 Local Area Network (LAN)

A local area network is usually privately owned and links the devices in a single office, building or campus of up to a few kilometers in size. Depending on the needs of an organization and the type of technology used, a LAN can be as simple as two PCs and printer in someone's whole office or it can extend throughout a company and include voice, sound, and video peripherals. LANs are designed to allow resources to be shared between personal computers or workstations. The resources to be shared can include hardware, software or data. In addition to size, LANs are distinguished from other types of networks by their transmission media and topology. In general, a given LAN will use only one type of transmission medium. Almost all the branches of Kathmandu valley is connected with the fiber-optic cable. The most common LAN topologies are bus, ring, and star. The Kathmandu Main Branch is using the bus star topology which is the combination of the bus and star topologies.

Figure 4.5
Local Area Network (LAN) of Branch office

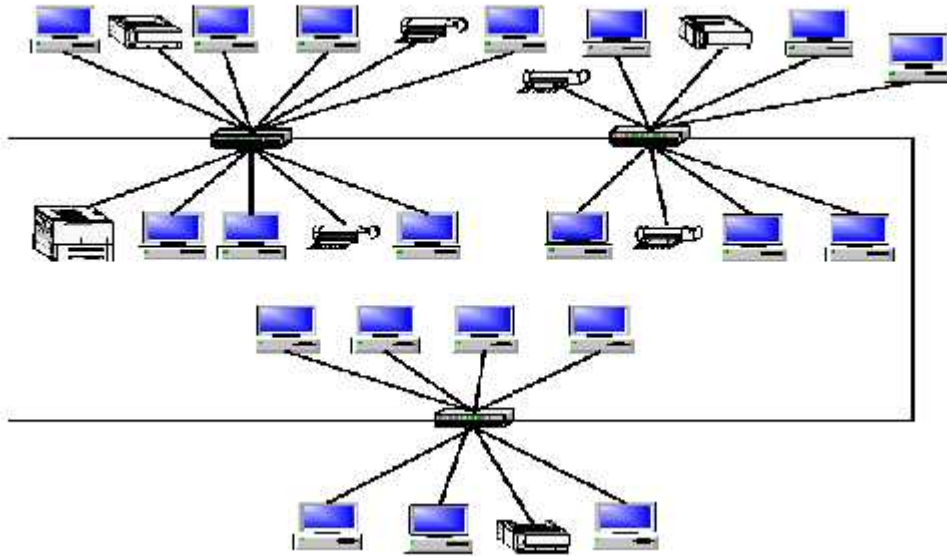
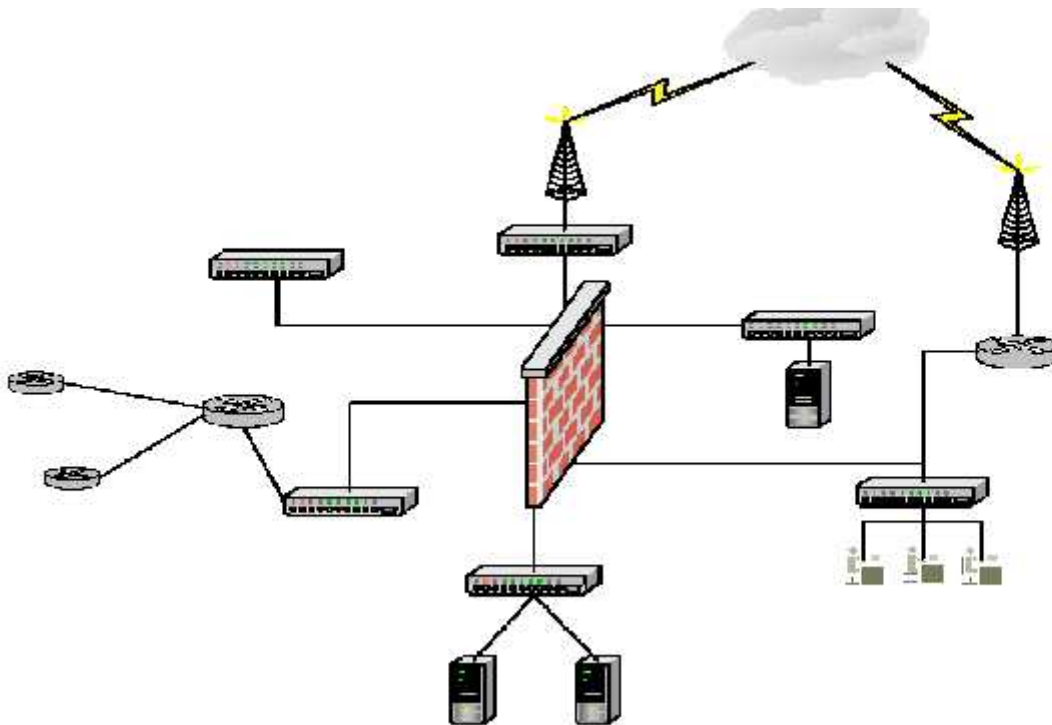


Figure 4.6
Local Area Network (LAN) of Corporate office



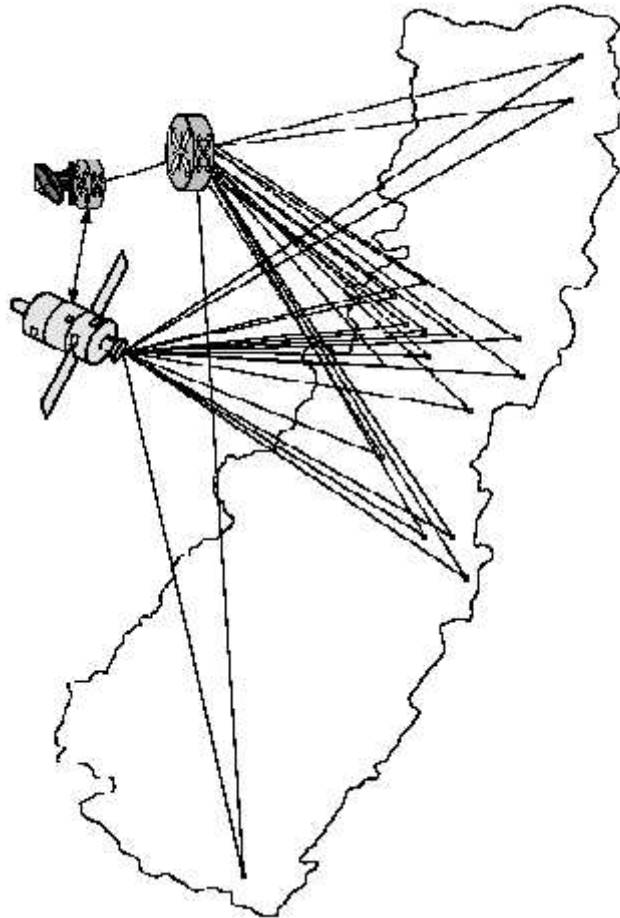
4.10.2 Wide Area Network (WAN)

Computer networks which connect two or more local area networks and span a large geographical area are known as Wide Area Network (WAN). The available media for WAN connectivity in Nepal are different types of leased lines, radio link, fiber optics, ISDN and VSAT. Main station is in Kathmandu, which synchronizes the radio link, ISDN and router. Router integrates through radio link and ISDN plays a vital role through the satellite. The NABILB branch offices are situated in different geographical regions of Nepal. The goal of NABIL Bank is to provide a wide range of banking services and products in the emerging socio-economic environment within and outside the country maintaining high standards of integrity and efficiency with excellence.

The following diagram shows the wide area network of NABIL Bank:

Figure 4.7

Wide Area Network (WAN) of Branch office



4.11 Card and ATM

NABIL Bank is the pioneer in introducing credit cards in Nepal. We are a principal member of Visa and MasterCard International since early 1990. NABIL Bank is proud to be the bank having the widest range of services in cards which includes acquiring of all kinds of cards under Visa and MasterCard brands. We also acquire Diners Cards being a sole agent for the country and have arrangement of POS sharing with American Express Cards. Similarly, we issue the widest range of credit and debit cards under the brands of Visa and MasterCard to our account holders as well as non-account holders. NABIL Bank has the state of art technology in cards to provide online services.

ATM

NABIL Bank is committed to providing round the clock service to its customers through a large network of Automated Teller Machines (ATMs). ATMs have been installed all over Nepal, NABIL Bank Provides Debit Card which is the easiest way to carry cash. Using NABIL Debit Card customers can withdraw cash as well as purchase goods from several merchants. Customers can use this card at any ATM/POS terminal that is under SCT network and can withdraw up to Rs. 25,000/- at a time. It provides secured transaction with no queue hassle at Bank.

4.12 Global Connection

NABIL Bank has strategic alliance with ICICI Bank, which facilitates customers to remit their money to more than 670 locations of India through ICICI Bank branches and their correspondent Banks in India. Customers of the bank can affect their money transfer to India either through Speed Transfer Arrangement or through Demand Draft Arrangement. Under Speed Transfer Arrangement, money can be credited on-line to the beneficiary's account at more than 400 branches of ICICI Bank, India. Under Demand Draft Arrangement, the Bank can issue draft payable at more than 670 locations in India. NABIL Bank is globally connected through various prominent Banks in Asia, Europe and North America like American Express Bank, Standard Chartered Bank, UBAF etc. The services of the bank across the globe include remittance, draft arrangement, import and export business, guarantee etc.

4.12.1 International Network

NABIL Bank has a huge international network. It provides various currencies' draft for customers' convenience. They can transfer their university fees, business transfers and other transfers via swift at any corner of the world.

Table 4.1
International Network

S.No.	Nostro Bank	Swift Code	Currency
1	Standard Chartered Bank, New York	SCBLUS33	US Dollar
2	CITIBANK N.A, New York	CITIUS33	US Dollar
3	JP Morgan chase, NY	CHASUS33	US Dollar
4	Kookmin Bank, South Korea	CZNABILKRSE	US Dollar
5	Standard Chartered Bank, Kolkatta, India	SCBLINABILB	Indian Rupee
6	ICICI BANK LIMITED, Mumbai, India	ICICINABILB	Indian Rupee
7	CITIBANK, Mumbai, India	CITIINABILX	Indian Rupee
8	BANK OF AMERICA, Mumbai, India	BOFAIN4X	Indian Rupee
9	CENTRAL BANK OF INDIA, Raxaul, India	CBININABILB	Indian Rupee
10	BANK OF INDIA, Mumbai, India	BKIDINABILB	Indian Rupee
11	Axis Bank, Siliguri, India	AXISINABILB	Indian Rupee
12	Standard Chartered Bank, Singapore	SCBLSGSG	Singapore

Source: www.NABILbankBbank.com.np

4.13 FCY Draft Arrangement

NABIL Bank can issue drafts in the following currencies: USD, GBP, EUR, SGD, AUD & CAD, drawing on the following banks:

Table 4.2
FCY Draft Arrangement

S.No.	Bank	Currency
1	Standard Chartered Bank	US Dollar
	New York	
2	Standard Chartered Bank	Singapore Dollar
	Singapore	
3	Standard Chartered Bank	Euro
	Frankfurt	
4	Standard Chartered Bank	St. Pound
	London	
5	Royal Bank of Canada	Canadian Dollar
	Toronto, Canada	

4.14 Import LC Advising Bank

To advise import LC, we use the following banks and a host of other banks depending on the customers' requirements.

-) Standard Chartered Bank
-) Mashreq Bank
-) Axis Bank
-) ICICI Bank
-) Saudi Hollandi Bank
-) Citi Bank

4.15 Limitation of Existing System

The Branch is using the FINACLE banking software, the most commonly used software in banking sector in Nepal. Though the system is satisfactory and many Nepalese banking institutions are using it but the main problem of Infosys is after sales service, which is often comes in media. The banks, using the Finacle software, often complaint about lack of maintenance support from the supplier. Although the system is old and is in testing

period, researcher draws out some limitation from personal observation and with the help of interview with various concerned personnel.

-) In comparison to paper based system, the new system performs better but it still has long procedures. User get bored with this long procedure and working performance may also decrease.
-) Security is the vital element of the bank, there is no doubt on that. But the system doesn't provide full and unbreakable security for the bank's data and information.
-) Lack of regular support from vendor.
-) Finacle does not give ready to use report so it has to be checked and prepared by the reporting section, which is the waste of time.
-) Finacle is for only banking transaction it doesn't provide any solution for pension and human resource system so the bank is using different system for pension and human resources.
-) There was no cost and benefit analysis done to implement the Finacle, it was introduced to the bank because World Bank finance the project.

4.16 Feasibility Analysis of Existing System

Management Information System department needs coordination of every department to develop the complete and up-to-date database. Feasibility is considered in the following aspects. Feasibility study uses three major yardsticks to measure, or predict a system's success: the economic feasibility, technological feasibility, and operational feasibility. The current information system consist simple information systems for capturing, storing, analyzing, and reporting each and every information related to management with an integration with every departments of bank.

Operational Feasibility

The manpower and other support required are available. The technology is locally developed. Thus the cost of maintenance is very less and also the information exchange is too fast for the staff working inside which proves to be operationally feasible.

Technical Feasibility

CBIS is the best solution to proliferate the speed of the work and to obtain precise information, which is needed for both current and future use. As the system is already computerized and there is MIS department it is technically feasible.

Economic Feasibility

The system is economically feasible as per the importance in such development of the organization.

4.17 Analysis of Primary Data

4.17.1 Public Opinion Survey Data Analysis

The data table below is the primary data collected from the public to survey how they perceive the computer based management information system in NABIL Bank. Respondent who often visit the Bag Bazaar branch for different purpose is chosen as per judgmental sampling. The respondents are from different profession like businessman, students, social workers, office employees, housewives etc. Detail of question and the multiple choices of question are given in Appendix IV at the end of this research study. At least 30 individuals were interviewed to take their opinion on different five questions. The summarized data table is given below.

4.18 Major Findings

The research findings regarding the role of MIS in NABIL Bank Limited are descriptive in nature. Due to the nature of the study, it could not be shown in quantitative value that the management information system is widely useful and highly appreciable in NABIL Bank, regarding its safety and smooth operation, however opinion survey of general public and staff have been made to reveal necessity, importance and usefulness of the management information system in the bank. The findings are based on the review of the literatures, researcher own experiences, researcher visit and observation and interaction with concerned personnel of Jorpati and Kantipath branch. Further, the researcher made opinion survey of staff of the bank and general public who often visits the bank.

Here findings are summarized in two topics viz.:

- a. Findings based on the review of literatures and experience of author
- b. Findings based on the surveyed opinions , visit and observations

a. Findings based on the review of Literatures and Experience of Author

Banks are among the most important financial institutions in the economy and essential business in thousands of local towns and cities. Thus, the banking sector is one of the most significant service industries. It plays a vital role in the economic development and financial health of any country. An effective banking system leads to the effective mobilization of source like saving and investment, which in turn leads to the sound economy health of the country. Bank offers various types of services to its customer to facilitate the economic transaction. Therefore, customer satisfaction highly depends upon the quantity and quality of services offered by the bank. Regarding the use of computer based information system, NABIL Bank has already introduced a computer based information system (CBIS) and is providing its services through fully computerized branches and 260 well trained personnel. After the restoration of democracy, the Government of Nepal launched an economical liberalization policy. This has led to an increasing number of commercial banks in the country, due to such increment of commercial banks, competition also increased among them, which have resulted in enhanced services to the customers getting more competitive advantage. This is only possible through proper information technology.

It provides banking facilities and services to rural and urban areas of the country through its various branches. The Bank strives to enhance shareholders' wealth acting as a catalyst to facilitate rapid economic growth and socio economic development of the nation by identifying strength, weakness, opportunity and threats (SWOT analysis), providing excellent customer oriented services. The Bank has developed corresponding agency relationship with more than 170 International Banks having worldwide network. NABIL Bank is managed by a professional management team. The members of the management have proven track record in the banking sector. NABIL Bank has been trying to enhance the personal competencies of the officials of the Bank on the one hand and to improve the capabilities of the Bank on the other with a view to arouse interest

among staff members and existing and potential customers and corporate so that they will be able to update their knowledge about the financial sector and NABIL Bank. At present, the Branch is using the FINACLE banking software, the most commonly used software in banking sector of Nepal and offers Any Branch Banking Services (ABBS) within Kathmandu. Although the computerization process is in high speed but it does not cover all the necessary area banking process, many branches using current information system to perform limited activities like for transaction task only.

b. Findings based on the Surveyed Opinions, Interview, Visit and Observations

Survey result shows that most of the public, who visits the bank, is positive towards the current management information system in the bank. And the result also shows that need of the computerized information system in the bank are high. Respondents also agree that computerized information system ultimately enhance the performance of the bank.. Therefore, NABIL realizes that it is always easy to start with simple information system before applying a vast and multi module information system in the bank. Finacle is the infosys made banking software to suit the commercial banking activities. As Finacle is updated version of Finacle software, it includes almost all the modules that required for the commercial bank. However, there are few constraints regarding the Finacle despite being the old version. The features of the Finacle do not totally suit the NABIL need. Every organization faces problems while introducing a computerized information system in their organization and NABIL is not the exception. In addition, there are many problems regarding the implementation of information system in NABIL, for instance, training of the staff, acceptance of new system, motivation towards new working process, software and hardware maintenance, lack of trained technician within the bank etc. On top of that, in this modern era of Fast Growing Information Technology there has been various Advance Banking technologies introduced and are being implemented in Banks all over the Globe, to satisfy their Customers. “Internet Banking”, “Mobile Banking”, “Credit /Debit Card” are some of the Most Demanding facilities that the customers seek from their bank. With these technologies in hand, banks can benefit in various aspects like worldwide network of its own, worldwide customers, Better Management, on top of that Customer Satisfaction. Implementation of these Technologies will help and lead the Bank to be Worldwide competitive.

CHAPTER - V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

Management information system has been emerged as a new concept in the field of management to solve the problems generated by complex organizational structure and increased complexities of management due to industrial and technological revolution. MIS is defined as a computer-based information system, which provides information support of decision-making in the organization. MIS gives information through data analysis. After the restoration of democracy, the Government of Nepal launched an economical liberalization policy. This has led to an increasing number of commercial banks in the country, due to such increment of commercial banks, competition also increased among them, which have resulted in enhanced services to the customers getting more advantage that is competitive. This is only possible through proper information technology. Management Information System is the backbone on which logical business decisions are made in all types of business organizations. Applying this same logic to a bank, we can safely say that a bank must have good Management Information System as a minimum to survive and prosper in this exceedingly competitive world. The Kathmandu Main Branch is a fullfledged Branch of the Bank and is providing full array of Banking Services. NABIL Bank has already introduced a computer based information system (CBIS) and is providing its services through fully computerized branches and 300 well trained personnel. NABIL using FINACLE banking software, the most commonly used software in banking sector of Nepal and offers Any Branch Banking Services (ABBS) within Kathmandu. In Kantipath branch, MIS and Compliance Department is under the Account Division purely for the purpose of collecting, storing, processing and disseminating of overall banks information. Moreover, there is a separate department like IT or similar, to handle the Information System. Besides the IT department, there is another separate Computer System department that handles all the hardware and software need of the bank. The MIS plays the vital role in the organization as heart plays in body. The system ensures that an appropriate data is collected from the various sources, processed, and sent further to all the needy destinations. The system is expected to fulfill

the information needs of an individual, a group of individuals, the managers and the top management. The MIS satisfies the diverse needs through a variety of systems such as Query Systems, Analysis Systems, Modeling Systems, and DSS and also helps in Strategic Planning, Management Control, Operational Control, and Transaction Processing. MIS is viewed and used at many levels by management. Because MIS supplies decision makers with facts, it supports and enhances the overall decision making process. MIS also enhances job performance throughout an institution. In NABIL Bank at the most senior levels, it provides the data and information to help the board and management make strategic decisions. At other levels, MIS provides the means through which the institution's activities are monitored and information is distributed to management, employees, and customers.

5.2 Conclusion

The continually changing business dynamics in the new age economy requires banks to respond with a high degree of agility. Today technology has emerged as both the key enabler and driver of change. Therefore, bank need system that are not only functionally rich and technically robust and scalable, but they also need a new generation architecture based on the web paradigm, true 24x7 solution and straight-through-processing infrastructure which provide market advantage and business agility to gain and retain competitive leadership in the consumer banking space. Need of computerized information system with ease of handling security is the must for any banking institution. NABIL extended its branch network almost every part of the country. The Bank has developed corresponding agency relationship with more than 170 International Banks having worldwide network. The banking software currently used in the bank is **Finacle** , has many function and suitable for internet and mobile banking and it is a very useful system to start computerized information system in manual working branch. To enter this globally expanded market and to provide 365 days of banking with 24 hours service to its customer. Hence, the bank has to go for the better training rather than to implement the less advance system. There is no doubt that, implementation of Latest Advanced Banking System in the bank will enhance the overall performance of the bank. It is sure that the system will reduce the long queue in front of teller and staffs do not have to search in pile

of files to make a single report. The NABIL Bank faced the difficult challenge of maintaining profitability in an unpredictable global economy. It needed to increase profits through better management of resources and by cutting costs. To realize operational savings, it has to manage core business processes in finance, payroll, human resources, and procurement by choosing the software, which provides all the solutions and services with ease of use. And the result will have to be: reduced costs, integrated information, and standardized processes across the organization.

5.3 Recommendation

Although NABIL Bank is performing serious activities in the field of implementing information technology in current days, but there are number of thing that has to be consider seriously while implementing new system and number of thing that has to be done to implement the new system successfully. There is also need to make some changes in systems that NABIL Bank is using currently.

With the researcher perspective view, following recommendation are purposed:

-) The main objective of the project should not be only installing hardware and software in various branches but also to attain measurable and well controlled IT department through IT service management and process, people and technology integration.
-) There is no doubt that implementation of MIS is mere beginning rather than end, so continuous study should be done to improve the overall use of information system in the organization.
-) Providing training only with no supervision is waste of time and money, so effective supervision should be done while training and implementation of the system.
-) Support of all staff is necessary to implement new computerized information system successfully in the bank. So, bank need to motivate all staff toward information technology through staff awareness, general meeting, basic training program etc.
-) As NABIL Bank is going to provide mobile and internet services, card services towards its customer, NABIL Bank should design and conduct some program in

rural side of the country about advantages and procedure of using new facilities provided by the bank.

-) There are some big as well as small problems existed in existing information system, so they have to be fixed.
-) Though Finacle is the well acceptable system for the banking process, users have to perform a lengthy process to perform a small activity in the system.
-) In current period the bank's IT organization consisted of silos of functionally separated groups of technologies. There were no common standards, no cross functional cooperation, which IT staff could follow to complete tasks. The paradox of the situation was in a huge gap dividing the excellent technical skills of IT staff and to leverage them in the absence of effective IT management. Along with the reorganization of IT, it was necessary to revise IT's role in the bank's business as a whole. IT department, being one of the bank's business units, had to provide the required level of support for the bank's business strategy. Further research should be made in this area to see the effectiveness of the Finacle in the NABIL Bank Limited (NABIL).

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Raju Raut

Feb, 2010

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LIST OF ABBREVIATIONS

ABBS	Any Branch Banking System
ATM	Automated Teller Machine
BIOS	Basic Input Output System
BOD	Board of Director
BSK	Bal Suraksha Khata
CBIS	Computer Based Information System
CEO	Chief Executive Officer
CIA	Confidentiality, Integrity, and Availability
CVC	Central Vigilance Commissioner
DBS	Database System
DFD	Data Flow Diagram
DOS	Disk Operating System
DSS	Decision Support System
ECS	Electronic Clearing Services
ERD	Entity Relationship Diagram
FRFD	Floating Rate Fixed Deposit
HRD	Human Resource Department
IBM	International Business Machines
ICICI	Industrial Credit and Investment Corporation of India
ICT	Information and Communication Technology
IRS	Information Retrieval System
ISDN	Integrated Services Digital Network
IT	Information Technology
JNSK	Jestha Nagarik Suraksha Khata
LAN	Local Area Network
MIS	Management Information System
MSK	Mahila Suraksha Khata
MTCN	Money Transfer Control Number
NABILOC	Nepal-Bank of Ceylon Limited

NABIL NABIL Bank

NABIL National Computer Center

OLE Object Linking Embedded

SCT Smart Choice Technology

SMS Short Messaging Service

SWOT Strength, Weakness, Opportunity and Threats

TU Tribhuvan University

USA United States of America

UK United Kingdom

VSAT Virtual Satellite

WAN Wide Area Network

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APPENDIX

APPENDIX-1

Questionnaire

Dear Sir / Madam,

As a partial fulfillment of the requirements for the MBS degree from Tribhuvan University, I am conducting a study in the Management Information System(MIS) I have chosen my subject matter of study and statement of problem in relation to MIS and its application in organizations. My Thesis is titled “ MANAGEEMNT INFORMATIN SYSTEM (A CASE STUDY OF NABIL BANK) “. So , I would therefore like to request you to a kindly spare a few minutes to complete the questionnaire. Thank you in advance for your kind cooperation.

Your response will be kept confidential and will be used only for the purpose of this study.

Name -----

Designation -----

Organization -----

Organization Type -----

Address / Telephone no. -----

Email Address -----

Please put a cross () as you feel appropriate the following queries.

1. MIS and information system is the basic need of every organization.

a. Strongly agree

b. Agree

c. Neither agree nor disagrees

d. Disagree

2. Why do you think that each organization should use MIS and computer system?

- a. To maintain an effective information system
- b. To survive in competitive environment
- c. Ensure effective management of organization
- d. To reduce cost and increase Productivity

3. In Which Level of management, do you think it needs more support of MIS?

- a. Top levels of management
- b. Middle level management
- c. Operational levels (lower level) of management
- d. In all levels

4. Please mention in which management function, MIS plays vital role as information support and decision making.

- a. Planning
- b. Organizing
- c. Staffing
- d. Direction
- e. Co – ordination
- f. Controlling

5. After application of micro computers in work, the productivity and efficiency in that field is increasing by:

- a. 1 to 20 % increased
- b. 21 to 41 % increased
- c. 41 to 61 % increased
- d. 61 to 81 % increased
- e. 81 to 100 % increased

6. In the Management Information System (MIS) used in all the organization division / departments to make decision and update information flow within the organization?

- a. Software unavailability / High cost of software
- b. Lack of It expert and software engineers
- c. High cost to implement MIS
- d. Not enough training to use software and Hardware

Appendix -2

Account Opening Form (Personal - Single / Joint)		NABIL BANK নাবিল বँক লিমিটেড
(Please complete all sections the application form in CAPITAL letters)		Date _____
Please open my / our account with your Bank as follows:		
Existing Account No.: (1 any) _____		Branch: _____
Account Type: <input type="checkbox"/> Current <input type="checkbox"/> Saving <input type="checkbox"/> Others _____ (Specify)		
Currency: <input type="checkbox"/> NPR <input type="checkbox"/> USD <input type="checkbox"/> Others _____ (Specify)		
Customer Name: Mr./Mrs./Ms. _____ (First name) (Middle name) (Last name)		
For Joint Account:		
Name 1: Mr./Mrs./Ms. _____ (First name) (Middle name) (Last name)		
Name 2: Mr./Mrs./Ms. _____ (First name) (Middle name) (Last name)		
Required for Minor Account		
Guardian Name _____ (First name) (Middle name) (Last name)		
Guardian Relationship: _____		Phone: _____
Guardian Address: _____		
Other Details		
Marital Status: <input type="checkbox"/> Married <input type="checkbox"/> Single		Date of Birth _____ (mm/dd/yyyy)
Nationality: _____		Citizenship No./Place of issue: _____
Passport No./Place of Issue: _____		
Passport Issue Date: _____		Passport Expiry Date: _____
Occupation: _____		Native Language (Mother Tongue): _____
Name of Family Members		
Grand Father: _____		
Father: _____		
Mother: _____		
Spouse: _____		
Address		
Communication / Present Address _____		
P.O.Box: _____ City: _____ District: _____ Country: _____ Phone1: _____ Phone2: _____		
Fax/Swift No. _____ Mobile No. _____ Email / Website: _____		
Permanent Address _____		
P.O.Box: _____ City: _____ District: _____ Country: _____ Phone1: _____ Phone2: _____		
Employers Name & Address _____		
P.O.Box: _____ City: _____ District: _____ Country: _____ Phone1: _____ Phone2: _____		
Required for Non Resident Customer		
Local Contact Person _____ (First name) (Middle name) (Last name)		
Local Contact Address: _____		
City: _____		Phone No.: _____

GENERAL RULES FOR CURRENT / SAVINGS ACCOUNT

1. Initial deposit as decided by the Bank must be made to open the Account(s). The minimum balance needs to be maintained in the Account as fixed by the Bank from time to time. Any balance below minimum will be liable to incidental charges as decided by the Bank from time to time and in Savings Account no interest will be given for the period if balance is maintained less than the amount specified by the Bank as minimum balance.
2. Cheque(s) should be signed as per specimen signature supplied to the Bank and any alteration in the cheque must be authenticated by the drawer's full signature.
3. The account holders, as far as possible shall withdraw sums from his/her/their account by using the cheque supplied to him / her/hem by the Bank for that particular account.
4. Post dated and stale cheques shall not be paid.
5. Cheques issued by the Bank are the property of account holder(s) and they should take utmost care and keep in safe place under lock. The account holder(s) shall not hold the Bank liable if such cheques are misplaced, stolen or encashed in any way by fraudulent signature.
6. The Bank will register instructions from the drawer of a cheque for its payment, but the Bank can not accept any responsibility in case such instructions are overlooked.
7. Collections are undertaken at the risk of the account holder(s) only. The Bank should endeavour to collect the cheques and the items as promptly and carefully as possible, but it can accept no responsibility in case of any delay or loss. All cheques and other instruments should be crossed before they are paid-in for credit of accounts. Unclear items though credited in the account, shall not be available for withdrawal. The Bank shall have right to debit the customer's account, if they are not realised.
8. The Bank will take care to see that credit and debit entries are correctly recorded in the accounts of the account holder(s). In case of any error, the Bank shall be within its rights to make the correct adjusting entries without notice and recover any amount due from the account holder(s). The Bank shall not be liable for any damage, loss, etc., to account holder(s) due to such errors.
9. Any change in the address or constitution of the account holder(s) should be immediately communicated to the Bank. The post office and other Agents for delivery shall be considered Agents of the account holder(s) for all delivery of letters, remittances, etc., and no responsibility can be accepted by the Bank for delay, non delivery, etc.
10. In the absence of contract to the contrary the credit balance in any account in the names of two or more persons, on the death of one or more of them, shall be payable to survivor or lawfully appointed nominee(s) of the deceased and if there is a debit balance, the survivors and the estates of deceased account holder(s) shall be jointly and severally liable for repayment thereof.
11. In case of death of an individual Account holder, the credit balance in the account of the deceased shall be payable to the nominated willer(s) and if no willer is nominated or nominated willer(s) has also died the balance shall be payable to the next kins of the deceased account holder in accordance with the law prevailing then.
12. A receipt of moneys, cheques, securities, etc., on behalf of the Bank is valid only if signed by duly authorised officer(s).
13. The Bank reserves the right to add or alter any or all of the rules after not treat on and such altered or additional rules shall immediately thereafter be deemed to be binding on all account holder(s).
14. The Bank reserves the right to close (without prior notice) any account which, in its opinion, is not satisfactorily operated or for any other reason whatsoever which shall not be incumbent on the Bank to disclose to the constituent(s).
15. A distinctive number is allotted to each account which should be quoted in all correspondence relating to the account and when making deposits or withdrawals.
16. Periodic statement of accounts shall be considered correct unless we receive from you in writing to the contrary within fifteen (15) days after dispatch thereof by us.
17. Interest will be charged in overdrawn Current Account(s) on daily products at the prevailing rates.
18. Interest will be calculated and credited to depositor's Saving Account on minimum monthly balance on half yearly basis or as decided by the Bank from time to time.

Appendix - 3



Other Services Details

Services Sought: Internet Banking Tele Banking Other (Specify): _____

Account Statement Printing Calendar: Nepali English Chequebook: Yes No

Statement Frequency: Monthly Quarterly Half Yearly

Account Statement Delivery: Post Special Delivery Courier Collect

I / We hereby certify that the authority for account operation as above have been given in terms of our board resolution dated _____

Organization Seal

Signature

I / We have read and understood and hereby agree to the terms and conditions governing Customer Account Opening at NABIL BANK LTD. Information provided herein are correct and true. I/We hereby agree to accept, abide and be bound to present and future rules, terms and conditions of the Bank governing Customer Account Opening. In the event I/we fail to abide by such terms and conditions, I/we shall bear the damage and/or penalties as a consequence thereof. I/We agree and fully bear for such kind of consequences.

Signature Signature Signature Signature

Introduced By

Name: _____

Account No. _____

 Signature of Introducer

Documents Required (Certified Copies)

- | | | | |
|---|---|--|--|
| 1. Proprietorship Account: | [a] Registration Certificate | [b] PAN Certificate | [c] Citizenship Certificate/Passport |
| 2. Partnership Account: | [a] Registration Certificate | [b] PAN Certificate | [c] Registered Partnership Deed |
| | [d] Citizenship Certificate/Passport (of Partners) | [d] Board Resolution | [e] Citizenship/Passport of Authorized Signatories |
| 3. Corporate Account: | [a] Registration Certificate | [b] PAN Certificate | [c] Memorandum & Articles of Association |
| | [d] Board Resolution | [e] Citizenship/Passport of Authorized Signatories | |
| 4. Account of Institutions/Associations/Societies: | [a] Registration Certificate | [b] Constitution & By-Laws | [d] Citizenship/Passport of Authorized Signatories |
| | [c] Board resolution to open and operate account(s) | [e] PAN Certificate (if applicable) | |

(Originals to be presented for verification)

For Bank's Use Only

Account No. _____

Customer ID: _____

Amount Deposited: _____

Nation: Cust. TP: A/C Status: FRC:

Introducer's Signature, Name and A/C No. (Verified): Yes No If No, reason: _____

Other Comments: _____

Signature scanned by: _____ Date: _____

Prepared/Confirmed By _____

Checked/Verified By _____

Authorized By _____

GENERAL RULES FOR CURRENT / SAVINGS ACCOUNT

1. Initial deposit as decided by the Bank must be made to open the Account(s). The minimum balance needs to be maintained in the Account as fixed by the Bank from time to time. Any balance below minimum will be liable to incidental charges as decided by the Bank from time to time and in Savings Account no interest will be given for the period if balance is maintained less than the amount specified by the Bank as minimum balance.
2. Cheque(s) should be signed as per specimen signature supplied to the Bank and any alteration in the cheque must be authorized by the drawer's full signature.
3. The account holder(s), as far as possible shall withdraw sums from his/her/their account by using the cheque supplied to him / her/them by the Bank for that particular account.
4. Post dated and stale cheques shall not be paid.
5. Cheques issued by the Bank are the property of account holder(s) and they should take utmost care and keep in safe place under lock. The account holder(s) shall not hold the Bank liable if such cheques are misplaced, stolen or encashed in any way by fraudulent signature.
6. The Bank will register instructions from the drawer of a cheque for its payment, but the Bank can not accept any responsibility in case such instructions are overlooked.
7. Collections are undertaken at the risk of the account holder(s) only. The Bank should endeavour to collect the cheques and the items as promptly and carefully as possible, but it can accept no responsibility in case of any delay or loss. All cheques and other instruments should be cleared before they are paid-in for credit of accounts. Uncleared items though credited in the account, shall not be available for withdrawal. The Bank shall have right to debit the customer's account, if they are not realised.
8. The Bank will take care to see that credit and debit entries are correctly recorded in the accounts of the account holder(s). In case of any error, the Bank shall be within its rights to make the correct adjusting entries without notice and recover any amount due from the account holder(s). The Bank shall not be liable for any damage, loss, etc., to account holder(s) due to such errors.
9. Any change in the address or constitution of the account holder(s) should be immediately communicated to the Bank. The post office and other Agents for delivery shall be considered Agents of the account holder(s) for all delivery of letters, remittances, etc., and no responsibility can be accepted by the Bank for delay, non-delivery, etc.
10. In the absence of contract to the contrary the credit balance in any account in the names of two or more persons, on the death of one or more of them, shall be payable to survivor as lawfully appointed nominee(s) of the deceased and if there is a debit balance, the survivors and the estates of deceased account holder(s) shall be jointly and severally liable for repayment thereof.
11. In case of death of an individual Account holder, the credit balance in the account of the deceased shall be payable to the nominated willor(s) and if no willor(s) nominated or nominated willor(s) has a so died the balance shall be payable to the next kins of the deceased account holder in accordance with the law prevailing then.
12. A receipt of moneys, cheques, securities, etc., on behalf of the Bank is valid only if signed by duly authorized officer(s).
13. The Bank reserves the right to add or alter any or all of the rules after notification and such altered or additional rules shall immediately thereafter be deemed to be binding on all account holders(s).
14. The Bank reserves the right to close (without prior notice) any account which, in its opinion, is not satisfactorily operated or for any other reason whatsoever which shall not be incumbent on the Bank to disclose to the constituent(s).
15. A distinctive number is allotted to each account which should be quoted in all correspondence relating to the account and when making deposits or withdrawals.
16. Periodic statement of accounts shall be considered correct unless we receive from you in writing to the contrary within fifteen (15) days after dispatch thereof by us.
17. Interest will be charged in overdrawn Current Account(s) on daily products at the prevailing rates.
18. Interest will be calculated and credited to depositor's Saving Account on minimum monthly balance on half-yearly basis or as decided by the Bank from time to time.

Appendix - 4

INR Draft Arrangement

NABIL Bank can draw INR drafts on the following branches of ICICI Bank and Standard Chartered Bank in India.

Branches of ICICI bank, India				
S.No	Branch Code	Branch Name	City	State
1	8	Khairatabad	Hyderabad	Andhra Pradesh
2	60	Vishakapatnam	Vishakapatnam	Andhra Pradesh
3	201	Warangal	Warangal	Andhra Pradesh
4	6306	Vijayawada	Vijaywada	Andhra Pradesh
5	6307	Guntur	Guntur	Andhra Pradesh
6	6308	Secunderabad	Secunderabad	Andhra Pradesh
7	6309	Tirupathi	Tirupathi	Andhra Pradesh
8	6310	Nellore	Nellore	Andhra Pradesh
9	6315	Rajhamundry	Rajahmundry	Andhra Pradesh
10	6313	Eluru	Eluru	Andhra Pradesh
			Andhra Pradesh Count	10
11	6343	Guwahati	Guwahati	Assam
			Assam Count	1
12	89	Jamshedpur	Jamshedpur	Bihar
13	6259	Patna	Patna	Bihar
			Bihar Count	2
14	161	Raipur	Raipur	Chattisgarh
15	186	Bhilai	Bhilai	Chattisgarh

			Chattisgarh Count	2
16	15	Panaji	Panaji	Goa
17	23	Margao	Margao	Goa
18	30	Mapusa	Mapusa	Goa
19	210	Ponda	Ponda	Goa
20	226	Vasco	Vasco	Goa
			Goa Count	5
21	3	Vadodara	Vadodara	Gujarat
22	24	Ahmedabad	Ahmedabad	Gujarat
23	51	Moti Kavdi	Jamnagar	Gujarat
24	52	Surat	Surat	Gujarat
25	68	Valsad	Valsad	Gujarat
26	85	Vallabh Vidya Nagar	Vallabh Vidyanagar	Gujarat
27	86	Bhuj	Bhuj	Gujarat
28	153	Rajkot	Rajkot	Gujarat
29	207	Porbandar	Porbandar	Gujarat
30	178	Bharuch	Bharuch	Gujarat
31	179	Vapi	Vapi	Gujarat
32	205	Jamnagar	Jamnagar	Gujarat
33	206	Navsari - Sayaji Library	Navsari	Gujarat
			Gujarat Count	13
34	21	Gurgaon	Gurgaon	Haryana
35	83	Faridabad	Faridabad	Haryana
36	172	Hissar	Hissar	Haryana

37	168	Rohtak	Rohtak	Haryana
38	173	Karnal	Karnal	Haryana
39	174	Panipat	Panipat	Haryana
			Haryana Count	6
40	6353	Shimla	Shimla	Himachal Pradesh
			Himachal Pradesh Count	1
41	175	Ranchi	Ranchi	Jharkhand
42	196	Dhanbad	Dhanbad	Jharkhand
			Jharkhand Count	2
43	2	M.G.Road	Bangalore	Karnataka
44	14	Mangalore	Mangalore	Karnataka
45	72	Manipal	Manipal	Karnataka
46	152	Mysore	Mysore	Karnataka
47	157	Hubli	Hubli	Karnataka
48	170	Dharwad	Dharwad	Karnataka
49	84	Bidadi *	Bidadi	Karnataka
50	176	Belgaum	Belgaum	Karnataka
			Karnataka Count	8
51	10	Kochi	Kochi	Kerala
52	215	Chengannur*	Chengannur	Kerala
53	216	Pathnamthitta*	Pathnamthitta	Kerala
54	217	Irinjalakkuda*	Irinjalakkuda	Kerala
55	218	Perintalmanna*	Perintalmanna	Kerala
56	219	Tirur*	Tirur	Kerala

57	220	Kasargode*	Kasargode	Kerala
58	221	Vadakara*	Vadakara	Kerala
59	222	Manjeri*	Manjeri	Kerala
60	223	Muvattupuzha*	Muvattupuzha	Kerala
61	6262	Thiruvananthapuram	Thiruvananthapuram	Kerala
62	6265	Kozhikode	Kozhikode / Calicut	Kerala
63	6266	Kollam	Kollam	Kerala
64	6267	Kottayam	Kottayam	Kerala
65	6271	Changanabhilherry	Changanabhilherry	Kerala
66	6348	Karunagapally	Karunagapally	Kerala
67	180	Thrissur (Trichur)	Thrissur / Trichur	Kerala
68	181	Kannur (Cannanore)	Kannur / Cannanore	Kerala
69	6264	Edapally (Ernakulam)	Ernakulam	Kerala
70	6272	Kumbanad	Kumbanad	Kerala
			Kerala Count	20
71	41	Indore	Indore	Madhya Pradesh
72	55	Bhopal	Bhopal	Madhya Pradesh
73	197	Gwalior	Gwalior	Madhya Pradesh
74	198	Jabalpur	Jabalpur	Madhya Pradesh
			Madhya Pradesh Count	4
75	166	Kolhapur Rajarampuri	Kolhapur	Maharashtra
76	199	Solapur	Solapur	Maharashtra
			Maharashtra Count	2
77	4	Nariman Point	Mumbai	Maharashtra

78	5	Bund Garden	Pune	Mahrashtra
79	27	Nashik	Nashik	Mahrashtra
80	44	Aurangabad	Aurangabad	Mahrashtra
81	49	Dahanu	Dahanu	Mahrashtra
82	59	Nagpur	Nagpur	Mahrashtra
83	62	Palghar	Palghar	Mahrashtra
84	63	Boisar	Boisar	Mahrashtra
			Mahrashtra Count	8
85	7	Connaught Place	New Delhi	New Delhi
			New Delhi Count	1
86	61	Bhubaneswar	Bhubaneswar	Orissa
87	194	Sambhalpur	Sambhalpur	Orissa
88	195	Rourkela	Rourkela	Orissa
89	6342	Cuttack	Cuttack	Orissa
			Orissa Count	4
90	56	Mission Street	Pondicherry	Pondicherry
91	6213	Villupuram	Villupuram	Pondicherry
			Pondicherry Count	2
92	13	Chandigarh	Chandigarh	Punjab
93	17	Ludhiana	Ludhiana	Punjab
94	66	Amritsar	Amritsar	Punjab
95	79	Nurmahal	Jallandar	Punjab
96	80	Nakodar	Jallandar	Punjab
97	81	Nawanshahar	Nawanshahar	Punjab
98	82	Jallandhar	Jallandar	Punjab

99	162	Patiala	Patiala	Punjab
100	163	Batindha	Bathinda	Punjab
101	6321	Phagwara	Phagwara	Punjab
			Punjab Count	10
102	12	Jaipur	Jaipur	Rajasthan
103	45	Udaipur	Udaipur	Rajasthan
104	167	Jodhpur	Jodhpur	Rajasthan
105	184	Kota	Kota	Rajasthan
106	185	Ajmer	Ajmer	Rajasthan
			Rajasthan Count	5
107	9	Nungambakkam	Chennai	Tamil Nadu
108	16	Trichy Road	Coimbatore	Tamil Nadu
109	25	Gobichettipalayam	Gobichettipalayam	Tamil Nadu
110	156	Hosur	Hosur	Tamil Nadu
111	6003	Madurai Main*	Madurai	Tamil Nadu
112	6044	Alangudi	Alangudi	Tamil Nadu
113	6047	Arantangi	Arantangi	Tamil Nadu
114	6048	A. Thekkur	A. Thekkur	Tamil Nadu
115	6049	Attur	Salem	Tamil Nadu
116	6052	Bhuvanagiri	Bhuvanagiri	Tamil Nadu
117	6054	Devakottai	Devakottai	Tamil Nadu
118	6056	Dharapuram	Dharapuram	Tamil Nadu
119	6057	Dharmapuri	Dharmapuri	Tamil Nadu
120	6058	Dindigul	Dindigul	Tamil Nadu
121	6060	Elathur	Elathur	Tamil Nadu

122	6061	Eriyur	Eriyur	Tamil Nadu
123	6062	Erode	Erode	Tamil Nadu
124	6064	Idappadi*	Idappadi	Tamil Nadu
125	6065	Kallal	Sivagangai	Tamil Nadu
126	6066	Kancheepuram	Kancheepuram	Tamil Nadu
127	6067	Kandanur	Kandanur	Tamil Nadu
128	6068	Kandavarayanpatti	Kandavarayanpatti	Tamil Nadu
129	6069	Karaikudi	Karaikudi	Tamil Nadu
130	6072	Karur	Karur	Tamil Nadu
131	6074	Kodumudi	Kodumudi	Tamil Nadu
132	6075	Konapet	Konapet	Tamil Nadu
133	6076	Konerirajapuram	Konerirajapuram	Tamil Nadu
134	6078	Kottaiyur	Kottaiyur	Tamil Nadu
135	6079	Kulipirai	Kulipirai	Tamil Nadu
136	6081	Kumbakonam	Kumbakonam	Tamil Nadu
137	6086	Melasivapuri	Melasivapuri	Tamil Nadu
138	6087	Mannargudi	Mannargudi	Tamil Nadu
139	6088	Mayiladuthurai	Mayiladuthurai	Tamil Nadu
140	6091	Melur	Melur	Tamil Nadu
141	6092	Muthupet	Muthupet	Tamil Nadu
142	6093	NABILhandupatti	NABILhandupatti	Tamil Nadu
143	6094	Nagapattinam	Nagapattinam	Tamil Nadu
144	6095	Nagercoil	Nagercoil	Tamil Nadu
145	6096	Nattarsankottai	Nattarsankottai	Tamil Nadu
146	6097	Neyveli-2	Neyveli	Tamil Nadu

147	6098	Neyveli-3	Neyveli 3	Tamil Nadu
148	6100	O. Siruvayal	O. Siruvayal	Tamil Nadu
149	6102	P. Alagapuri	P. Alagapuri	Tamil Nadu
150	6103	Paganeri	Paganeri	Tamil Nadu
151	6105	Palani	Palani	Tamil Nadu
152	6107	Paramakudi	Paramkudi	Tamil Nadu
153	6109	Pattukottai	Pattukottai	Tamil Nadu
154	6110	Pennadam	Pennadam	Tamil Nadu
155	6112	Pollachi	Pollachi	Tamil Nadu
156	6113	Ponnamaravathy	Ponnamaravathy	Tamil Nadu
157	6114	Pudukottai	Pudukottai	Tamil Nadu
158	6115	Rajapalayam	Rajapalayam	Tamil Nadu
159	6116	Ramanathapuram	Ramanathapuram	Tamil Nadu
160	6117	Rangeim	Rangeim	Tamil Nadu
161	6118	Rayavaram	Rayavaram	Tamil Nadu
162	6119	Salem	Salem	Tamil Nadu
163	6122	Sholavandan	Sholavandan	Tamil Nadu
164	6123	Singampuneri	Singampuneri	Tamil Nadu
165	6124	Sivaganga	Sivaganga	Tamil Nadu
166	6126	Sundarapandiapuram	Sundarapandiapuram	Tamil Nadu
167	6128	Tanjore	Tanjore	Tamil Nadu
168	6129	Tenkasi	Tenkasi	Tamil Nadu
169	6131	Tindivanam	Tindivanam	Tamil Nadu
170	6132	Trichy Main	Trichy	Tamil Nadu
171	6134	Thillainagar	Trichy	Tamil Nadu

172	6135	Tirunelveli Junction	Tirunelveli	Tamil Nadu
173	6136	Tirupatur	Tiruppattur	Tamil Nadu
174	6137	Tirupattur	Tirupattur	Tamil Nadu
175	6139	Tuticorin	Tuticorin	Tamil Nadu
176	6143	Vellore	Vellore	Tamil Nadu
177	6144	Vettaikaranpudur	Vettaikaranpudur	Tamil Nadu
178	6146	Virapandiapatnam	Virapandiapatnam	Tamil Nadu
179	6148	Achampathu	Achampathu	Tamil Nadu
180	6149	Cuddalore	Cuddalore	Tamil Nadu
181	6150	Tiruvalam	Tiruvalam	Tamil Nadu
182	6151	Chidambaram	Chidambaram	Tamil Nadu
183	6153	Kayalpattinam	Kayalpattinam	Tamil Nadu
184	6154	Tiruppur	Tiruppur	Tamil Nadu
185	6155	Athikkadai*	Athikkadai	Tamil Nadu
186	6157	Puliyur	Puliyur	Tamil Nadu
187	6161	Valoothoor	Valoothoor	Tamil Nadu
188	6164	Reddiarchatram	Reddiarchatram	Tamil Nadu
189	6167	Kavalkinaru	Kavalkinaru	Tamil Nadu
190	6169	Pulankurichi	Pulankurichi	Tamil Nadu
191	6170	Panaikulam	Panaikulam	Tamil Nadu
192	6172	Sivakasi	Sivakasi	Tamil Nadu
193	6178	Poolampatti	Poolampatti	Tamil Nadu
194	6180	Vellalore	Vellalore	Tamil Nadu
195	6181	Vanavasi	Vanavasi	Tamil Nadu
196	6183	Tirumangalam	Tirumangalam	Tamil Nadu

197	6186	Porto Novo	Porto Novo	Tamil Nadu
198	6189	Virdhachalam	Virdhachalam	Tamil Nadu
199	6196	Thiruvannamalai	Thiruvannamalai	Tamil Nadu
200	6197	Sithilingamadam (Operational Once a week)*	Sithilingamadam	Tamil Nadu
201	6212	Annamalainagar	Chidambaram	Tamil Nadu
202	6214	Thirumuruganpoondi	Thirumuruganpoondi	Tamil Nadu
203	6215	Udumalpet	Udumalpet	Tamil Nadu
204	6222	Namakkal	Namakkal	Tamil Nadu
205	6225	Theni	Theni	Tamil Nadu
206	6226	Sathyamangalam	Sathyamangalam	Tamil Nadu
207	6227	Koothanallur	Koothanallur	Tamil Nadu
208	6228	Lalpet	Lalpet	Tamil Nadu
209	6269	Thiruvalla	Thiruvalla	Tamil Nadu
210	6051	Avinipatti	Avinipatti	Tamil Nadu
211	6077	Kothamangalam	Kothamangalam	Tamil Nadu
212	6082	Koppanapatti	Koppanapatti	Tamil Nadu
213	6089	Mahipalanpatti	Mahipalanpatti	Tamil Nadu
214	6090	Melapavoor	Melapavoor	Tamil Nadu
215	6099	Nemathanpatti	Nemathanpatti	Tamil Nadu
216	6106	Panayapatti	Panayapatti	Tamil Nadu
217	6111	Peralam	Peralam	Tamil Nadu
218	6140	Vadakkankulam	Vadakkankulam	Tamil Nadu
219	6147	Chatrapatti	Chatrapatti	Tamil Nadu

220	6168	Mallikapuram	Mallikapuram	Tamil Nadu
221	6171	Devipattinam	Devipattinam	Tamil Nadu
222	6194	Ramapattinam	Ramapattinam	Tamil Nadu
223	6203	Siruvachoor	Siruvachoor	Tamil Nadu
224	6205	Keelavalavu	Keelavalavu	Tamil Nadu
225	6209	Karaiyur *	Karaiyur	Tamil Nadu
			Tamil Nadu Count	119
226	31	Noida	Noida	Uttar Pradesh
227	6281	Lucknow	Lucknow	Uttar Pradesh
228	6282	Allahabad	Allahabad	Uttar Pradesh
229	6283	Varanasi	Varanasi	Uttar Pradesh
230	6285	Meerut	Meerut	Uttar Pradesh
231	6286	Ghaziabad	Ghaziabad	Uttar Pradesh
232	6287	Agra	Agra	Uttar Pradesh
233	6288	Kanpur	Kanpur	Uttar Pradesh
234	190	Moradabad	Lucknow	Uttar Pradesh
235	191	Saharanpur	Saharanpur	Uttar Pradesh
236	192	Bareilly	Bareilly	Uttar Pradesh
			Uttar Pradesh Count	11
237	164	Dehradun	Dehradun	Uttaranchal
			Uttaranchal Count	1
238	6	Kolkata	Kolkata	West Bengal
239	188	Durgapur	Durgapur	West Bengal
240	208	Siliguri	Siliguri	West Bengal
241	6354	Darjeeling	Darjeeling	West Bengal

			West Bengal Count	4
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