CHAPTER I

INTRODUCTION

1.1 Background

The word “Bank” was brought form French word "Banque" and Italian word “Banca"; which means a bench to advance loan and to exchange money. By given definition of banks, it is clear that the organizations that accepts the deposits and provide the loan, is bank. Bank provide loan not only form deposited amount but also creates the money for loan.

In general "Bank" means the place where transaction of money is dealt. It performs the main task of accepting deposit, honoring customer drawing against such deposit on demand and lending or investing the surplus deposit until they are required for repayment. This is only the part of function performed by modern Banks. Various scholars have differently defined Bank.

Some of them are listed below:

As per US Law "Any institution offering deposit subject to withdrawal on demand and making loan of commercial or business nature is a Bank Definition given above is applicable to all types of financial intermediaries. In fact, 'Bank' now days do large number of financial transaction while 'financial institutions' are authorized to do limited transaction only. Hence the Bank can be defined as a 'financial departmental store', which render s a host of financial services beside taking deposit and giving loans.

As per Kent "Bank is an organization whose principle operation are concerned with accumulation of temporarily idle money of general public for the purpose of advancing to other for expenditure."

As per Banking Regulation Act of India "Banking means accepting for the purpose of lending or investment of deposit of money from the public repayable on demand or otherwise, and withdraw able by cheque, draft or otherwise."

In Nepal three types of banks are running

- Central Bank
- Commercial Bank

- Development Bank

Commercial Bank

A commercial bank is a business organization that receives and holds deposits of funds from others , provides loans or extends credits and transfers funds by written order of deposits. Therefore, a commercials bank is an institution that accepts deposits from the public's and in turn advances loans by creating credit. Commercials banks play vital role in the formations of capitals in favor of economics growth in the country. They assist in making capitals and flow of fund within the country simultaneously.

Commercial Bank Act of Nepal (1974) has defined that "A commercial bank is such, which exchanges money, deposits money, accept deposits, grant loans and performs commercial banking functions and which is not a bank meant for co-operative, agriculture and industries or for such specific purpose".

American Institute of Banking (1972) has defined commercial bank as a corporation, which accepts demand deposits subject to check and makes short-term loans to business enterprise, regardless s of the scope of its other services ."

This act has laid emphases is on the functions of commercial bank while defining it. Commercial banks provide short-term debts necessary for trade and commerce. They take deposits from the public, and grant loans in different forms. They discharge various functions on behalf of their customer s and are paid for their services.

Commercial banks, as financial institutions, perform a number of internal functions. Among them, providing credit is considered as most important one.

According to H.D. Crosse (1963), "Commercial banks are very risky one. For this , commercial banks have to pay due consideration while formulating investment policy regarding loan investment. Investment policy is one facet of the overall spectrum of policies that guide banks investment operations". All of the 29 commercial banks [See Appendix]

Out of above listed Commercial Banks that are operating their activities in Nepal; Siddhartha Bank Limited has been selected for the study.

Management Information System support for information collection and support for the decision making. Management Information System (MIS), is information system, typically computer based, that are used within an organization. We can describe an information system as “A system consisting of the network of all communication channels used within an organization".

MIS is one important supportive part of an organization. Like this way a commercial Bank, Siddhartha Bank Limited using MIS for different purpose but I mention here about loan management.

1.1.1 Management Information System

Whenever we talk about the management information system, generally people in our society think that this is a very complicated system involving computers and much hardware which need many kinds of complicated software to support them. Actually this is not true, the information system can me maintained from the simplest of forms like keeping a particular type of management information in a file or a folder to using automatic software that is particularly designed to support the particular system of an organization. As the name suggests management Information system is just a system of maintaining a record of information in a proper and systematic way so that the information can we used in the future effectively and efficiently to make the right decisions and draw conclusions in making managerial decisions.

Introduction to Management Information System

MIS is a necessity of all the organizations. The concept of the MIS has evolved over a period of time comprising many different facets of the organization functions. It was an evolutionary process than a dramatic overnight change. The evolution started from early 1950’s with data processing system. MIS was evolved as the managers wished to use computers for planning, controlling and decision-making.

In early business organizations, the manager was a generalist, having knowledge about all the activities of the firm. As the size and scope of the business firm increased, general knowledge gave way to specialization. Soon, large organizations became accumulate of specialists, each knowing more about a particular field then any generalist. However, these generalists did not

work together, thus resulting to problems like lack of communication, lack of co-operation and reduction in the effectiveness in the performance.

Thus, this is where the computers came in to support all the resources of the entire organization. Resources not only include the human, material, or financial resources but also information. Information is especially valuable because it represents the other tangible resources.

With computerized MIS, the various data and information systems of the firm are integrated and data and information flow from one area to another. Today, managers make business decisions, access situations, take risks, weigh subjective factors and think creatively.

1.1.2 Introduction to Siddhartha Bank & Loan management system

Siddhartha Bank Limited (SBL) commenced operations in 2002. The Bank is promoted by a group of highly reputed Nepalese dignitaries having wide commercial experience. We provide a full range of commercial banking services through our 35 branches across Nepal.

The environment of Nepalese banking sector is undergoing a rapid transformation. With liberalization in financial markets and integration of domestic market with external markets, bank operations have become more complex and dynamic. We are geared to meet the challenges and keep abreast with the changes.

The Vision statement of the Bank describes the core values and purposes that guide the Bank as well as an envisioned future. Fundamentally, in all dealings SBL earnestly believes in transparency, financial soundness, efficiency and better technology.

SBL's vision is to be financially sound, operationally efficient and keep abreast with technological developments. The Bank firmly believes customer focus is a core value, shareholder prosperity is a prime priority, employee growth is a commitment and economic welfare is a sincere concern.

The Bank wants to be a leader among the banks of its age in Nepal by fulfilling the interest of the stakeholders and also aims to provide total customer satisfaction by way of offering

innovative product and by developing and retaining highly motivated and committed staff. It directs all its efforts to move ahead with increased profits. The following mission statement is a guide to meet the Vision of the Bank

Bank collect money at certain interest rate and intervals at which the interest has to be paid is commonly known a loan. Loan is sum of money to return hormonally with interest. Under this system bank loan management against the pledge of some article or documents on cash browning in this cash, the customer is not allowed to draw money partially. This landing business of commercial bank is very risky. So bank should study the ability and financial condition of the party while giving loan. But this is not possible in least developed countries like Nepal because of absence of scientific mean of investigation. In Nepal bank rates of article and margin rate are the main factors. Which eliminate the risk in lending business of bank.

Bank rate is always lower than market rate for loan. Bank is provided to deposit 4.50% to 11%. Loan is one function of bank marketing. A bank managed under the marketing concept plans organizes coordinate and controls its entire operation as one system directed forwards achieving a single set of goals applicable to the total organization. Bank generate as vaccine and source of credit are concerned with financing bank marketing process are deposit of loan /credit market. Siddhartha Bank limited has been providing wide - range of modern banking services through 34 points of representations located in various urban and semi urban part of the country, 19 outside and 15 inside the valley. The bank is pioneer in providing some of the latest / lucrative banking services like E–Banking and SMS banking services in Nepal. The bank always focus on building sound technology driven internal system to cater the changing needs of the customers that enhance high comfort and value. The adoption of modern Globus Software, developed by Temenos NV, Switzerland and arrangement of centralized data base system enables customer to make highly secured transactions in any branch regardless of having account with particular branch. Similarly the bank has been providing 365 days banking facilities.

Visa debit card, which is accessible in entire VISA linked ATMs (including 23 own ATMs) and POS (Point of Sale) terminals both in Nepal and India, has also added convenience to the customers. The bank has been able to get recognition as an innovative and fast growing institution striving to enhance customer value and satisfaction by backing transparent

business practice, professional management, corporate governance and total quality management as the organizational mission.

The key focus of the bank is always center on serving unfulfilled needs of all classes of customers located in various parts of the country by offering modern and competitive banking products and services in their door step. The bank always prioritizes the priorities of the valued customers.

1.1.2.1 Mission Statement

The Bank wants to be a leader among the banks of its age in Nepal by fulfilling the interest of the stakeholders and also aims to provide total customer satisfaction by way of offering innovative product and by developing and retaining highly motivated and committed staff. It directs all its efforts to move ahead with increased profits.

1.1.2.2 Internet Banking

The first ever commercial bank in the country to provide 'Internet Banking service" to its customers. This service has allowed the bank to streamline the services it offers to customers. It allows customers the flexibility to take control of banking activities via the internet. Further it has enabled our core customers to transact with us from any corner of the world and made their job simpler.

Siddhartha Bank limited started using computerized systems. Siddhartha Bank limited started using these systems to save time and reduce costs. Even though these computerized systems are rather expensive, in the long run they saved companies money. The companies saved money by making or loan of services by a computerized system by reducing paper usage and employee overtime. Since employees did not have to spend their time doing paper work, they could do their jobs faster and more efficient. Siddhartha Bank limited Allows their systems to grow gradually, adding new equipment or software as the need arises. Sometimes different functions, such as marketing and finance, each enter the same or related data into a system separately, duplicating effort.

1.1.2.3 Types of Loan

Working Capital Loan

The purpose of this facility is to finance the working capital requirements of trading, manufacturing and service units/industries. Working capital loans are granted in the form of Overdraft or Demand Loan or Time Loan facility. The working capital loan will help you build up inventories and receivables at a level required to run your business smoothly.

Terms Loan

This facility is provided in the form of medium/ long-term loan for the purchase of capital goods and creation of fixed assets in the form of purchase of land and construction of buildings. The duration of loan is assessed by analysis of cash flow statement and balance sheet.

Import Loan

This facility is made suitable in financing your international and local trade transactions carried out through Letters of Credit. For retirement of L/C bills, import loan is grated in the form of Trust Receipt Loan or Time Loan, which needs to be settled within a specified period.

In case of Time L/C, the bills of exchange is to be accepted by the applicant/importer and thereafter the import documents are released for the clearance of goods. On the date of maturity, reimbursement is made to the negotiating / collecting bank by debiting the account of the importer for equivalent local currency.

Bills Discounting Under Usance Letters Of Credit

The usance bills under import letters of credit opened by us may be discounted in conformity with Nepal Rastra Bank regulations.

Export Loans

The Bank provides export finance by way of pre shipment and / or post shipment loan. Against export letters of credit, pre shipment loan is granted up to 80% of the relative export LC. This facility can be availed in foreign currency as well as local currency. The loan is required to be settled by negotiation of documentary bills under export LC or from the proceeds of documentary collections or post shipment loan.

Home Loan

Take advantage of one of the most convenient ways to borrow Home Loan from Siddhartha Bank. If you want to have a dream home, Siddhartha Bank would like to help you reap the rewards you deserve.

Vehicle Loan:

Siddhartha Bank makes it easy to finance or refinance your vehicle with competitive interest rates and flexible repayment options; we can tailor your loan to meet your individual needs.

Education Loan:

Education expense is an investment for your bright future. Siddhartha Bank makes it easy for you to climb the ladder of academic qualifications by providing variety of financial supports for your college expenses.

Personal Loan

Siddhartha Banks wide range of personal banking products and convenient services gives you the tools you need to manage your finances, grow your investments and borrow for important purchases.

Loan against Fixed Deposit Receipt:

This facility is granted against creation of lien on and pledge of fixed deposit receipt issued by our Bank or any other commercial banks or financial institutions acceptable to us.

1.1.3 Impacts on Customer

In Loan Management System, software base or online banking offers many benefits to banks as well as to customers. However, in global terms the majority of private bankers are still not using loan management software or online banking channel. There are many reasons for this. Customers need to have an access to the Internet and full knowledge of information technology in order to utilize the service. Furthermore, new online customer need to learn how to use the services or bank need to provide the information of loan management system through website.

Second, nonusers often complain that online banking has no social dimension, i.e. you are not served in the way you are in a face-to-face situation at branch. Third, customers have been afraid of security & domination issues when take some kind of loan. However, this situation is changing as the online banking channel has proven to be safe to use. This systems use rich databanks or loan of customer to manage & good relationship with customers; and loan management systems support all stages of the interaction with the customer for e.g. order, delivery and after-loan service. Loan management systems cover online banking, knowledge bases that can be used to generate customer profiles and customer will get personalize services, the generation of automatic response to e-mail, and automatic help through customer vs. bank interaction.

Benefits to Customers

- Interactions with bank and satisfaction easily
- Convenience
- Security & hideout the domination issues.
- Speed of processing the transaction through loan management system.
- Service quality
- Trust & Fast.

1.2 Focus of the Study

1. Effective loan order entry and processing system
2. Strong level of management & team of board of director of Loan.
3. Strong & accurate decision for loan processing.
4. Computerize system which keeps accurate record in the Siddhartha Bank limited each year.

1.3 Statement of the Problem

1. After setting the hypothesis, it is necessary to test the reliability of such statistical statements.
2. It is a statistical statement about the values of one or more parameters of the population.
3. For this purpose, an experiment is conducted by using sample information and the hypothesis is rejected if the results obtained are improbable under this hypothesis.

4. It should be noted that study of a population characteristics of Siddhartha Bank Limited is one of the major problems in practice due to some limitations such as time, money and manpower needed.

It plays important role to take decision. Test of hypothesis is to make decision about the null hypothesis. For this, a representative sample is selected. Based on the observed information, calculate the value of appropriate test statistic. Compare this calculated test statistic with the critical value. Reject null if calculated test statistic is greater than critical value and accept otherwise.

1.4 Objectives of the Study

1. To identify the need of IT for decisions in Siddhartha Bank limited.
2. To analyses the positive and negative impact of decision through using different models.
3. To examine how to convert theoretical aspect of Decision Support System and Management Information System in Siddhartha Bank limited.
4. To find out the implementation area of IT in Siddhartha Bank limited.

1.5 Limitation of the Study

Every things have limit on this world but in case of there is no limitation even if, What I feel while preparing this thesis, Limitation of Time factor, cost factor and lack of understanding the key term of subject matter makes more difficulties to study about any case or research which I mention below in point-wise as much as I fell in difficulties.

- Limitation of Time factor
- Limitation of Cost factor
- Limitation of collecting data not in whole coverage.
- Limitation of collecting data by Primary and secondary method.
- Limitation of understanding of Technical term

1.6 Rational of the Study

This research is different than others due to I prepare it in different pattern, this means I am not unknown about other research how they presented and the pattern of the thesis. I follow the concept of others also a little. Others research is guide line for me that am why this research is different than others. I used same tools but in different ways and newly

1.7 Organization of the Study

This research mainly focused five chapters on the behalves of chapter one - Introduction, chapter two – Review of Literature, chapter three – Research Methodology, chapter four – System Analysis, Design and Data Presentation and chapter five – Recommendations & Conclusion.

Chapter One:	Introduction
Chapter Two:	Review of Literature
Chapter Three:	Research Methodology
Chapter Four:	System Analysis, Design and Data Presentation
Chapter Five:	Recommendations and Conclusion

Chapter – I: Introduction

Introduction includes the background about the organization and location of the organization also includes mission, aim and objectives of the organization. Organization structure and member are also included in this chapter.

Chapter – II: Review of literature

Review of Literature includes about the organizations view of different sight of people or viewed through related person.

Chapter – III: Research Methodology

Research Methodology contains the different types of methods, models and computer network use in Siddhartha Bank Limited for loan order entry and processing system.

Chapter – IV: System analysis, design and data presentation

Regarding the data for loan order entry and processing system, other data and diagrammatically study, analytical view of data are presented in this fourth chapter.

Chapter – V: Recommendations and Conclusion

Recommendations and Conclusion after doing this research and about this title how it is effectible is also presented in this research.

CHAPTER II

REVIEW OF LITERATURE

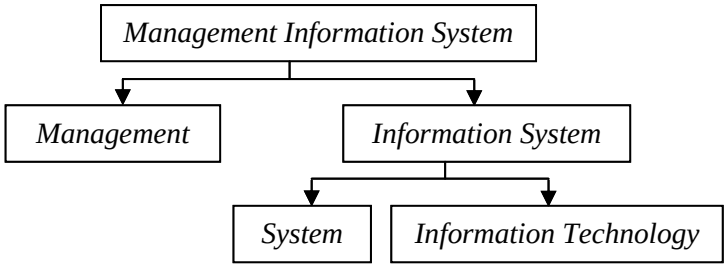
In the chapter review of literature, we review the previous literatures developed in the related subject and topic. Previous thesis, articles, journals etc. are reviewed. From literature review, one should come to know that my topic on problem of research is new one or not, what concepts or ideas have been already found, what type of modification is necessary to the deficiency if it exists to the research etc. Thus, review of literature is essential to develop concepts, information or ideas about the selected topics by studying the relevant materials.

2.1 Conceptual Review

Management Information System is that systems that helps to collects information and generates consolidate and comparatives reports to facilitate the decision making. System that integrated management and information system (hardware, software, database etc.) is called management information system. In another hand MIS is a tools that provide right information at right time to do right decision on the instruction. Conceptual frame work of MIS is presented below (Adhikari, 2010).

Figure 2.1

Conceptual Frame Work of MIS

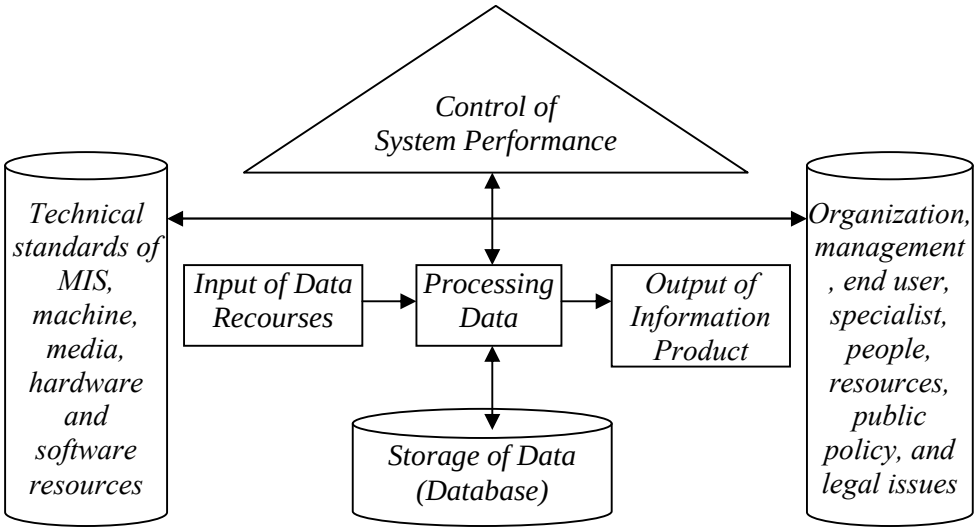


The primary function of MIS is to provide accurate, timely and right information to the decision-makers. There are some features for the appropriate MIS. MIS is an organized or planned effort and not the result of some sporadic attempts. The primary function of the MIS is to provide relevant information that assists managers at different levels in organization in decision-making. MIS is form from number of components including hardware, software,

manual procedures, models and a database. MIS presents information in current, usable and easily understandable format. MIS is a system of users and machines. The users are as important to the system as are machines (Adhikari, 2010).

Figure 2.2

Architectural Framework of Management Information System

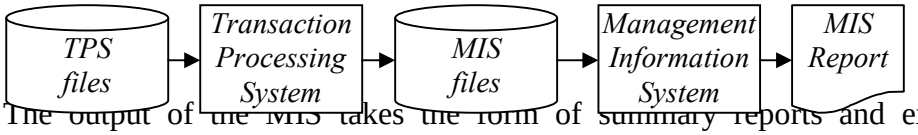


Tactical Information System

Management Information Systems are designed for providing information to important personnel in the organization. These systems make use of the already processed transaction data, which is output from the TPS, and generate information reports after processing data.

Figure 2.3

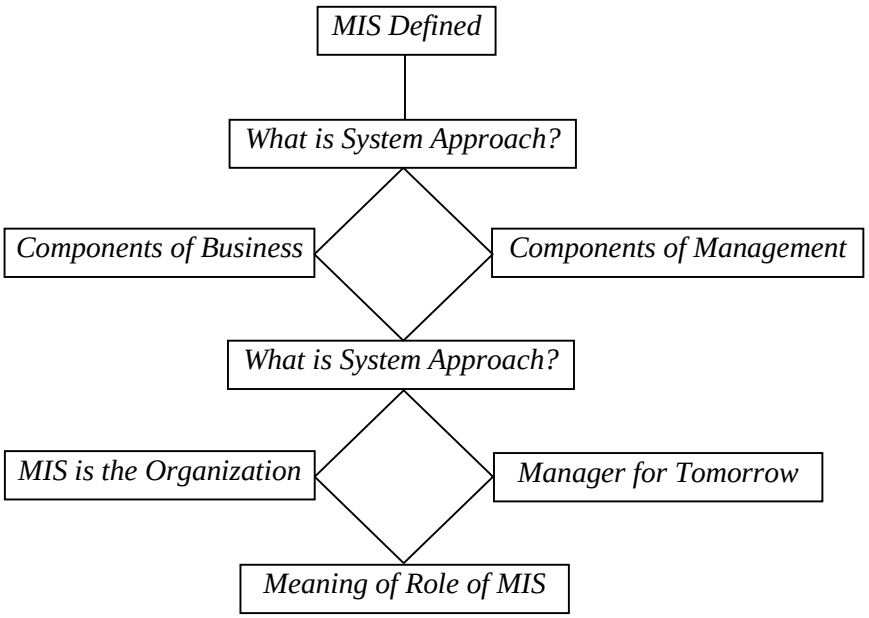
Tactical Information System



The output of the MIS takes the form of summary reports and exception reports. The summary report accumulates data from several transactions and presents the results in a condensed form (Adhikary, 2010).

Figure 2.4

The Meaning and Role of MIS



(Murdick, Ross & Claggett, 1999)

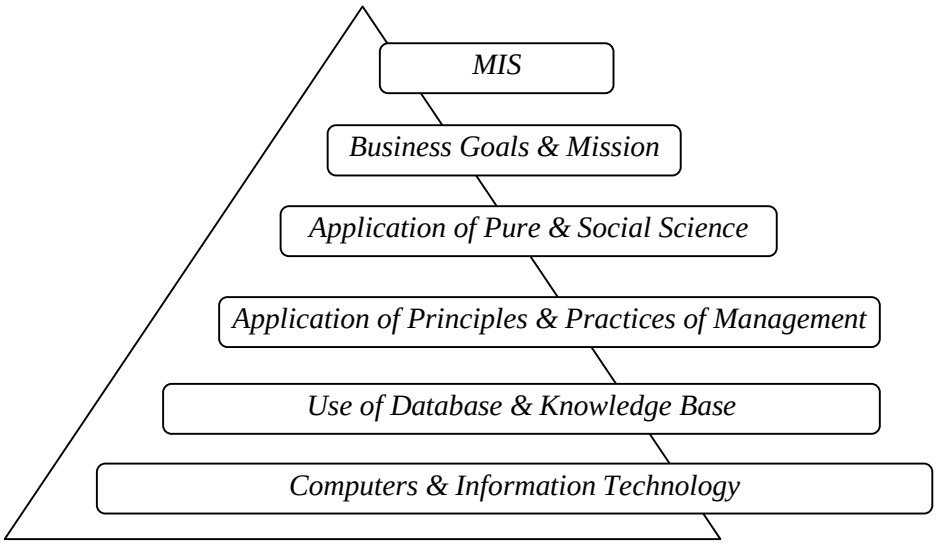
Major Roles of MIS in an Organization

- MIS helps in various systems. i.e., Query system, Analysis system, Modeling system and DSS etc.
- MIS helps in strategic planning, management control, operational control and transaction processing etc.
- MIS plays the role of information generation, communication, problem identification and the process of decision making.
- MIS helps in management, administration and operation of the organization.

The Conceptual View of MIS

Figure 2.5

Conceptual View of MIS



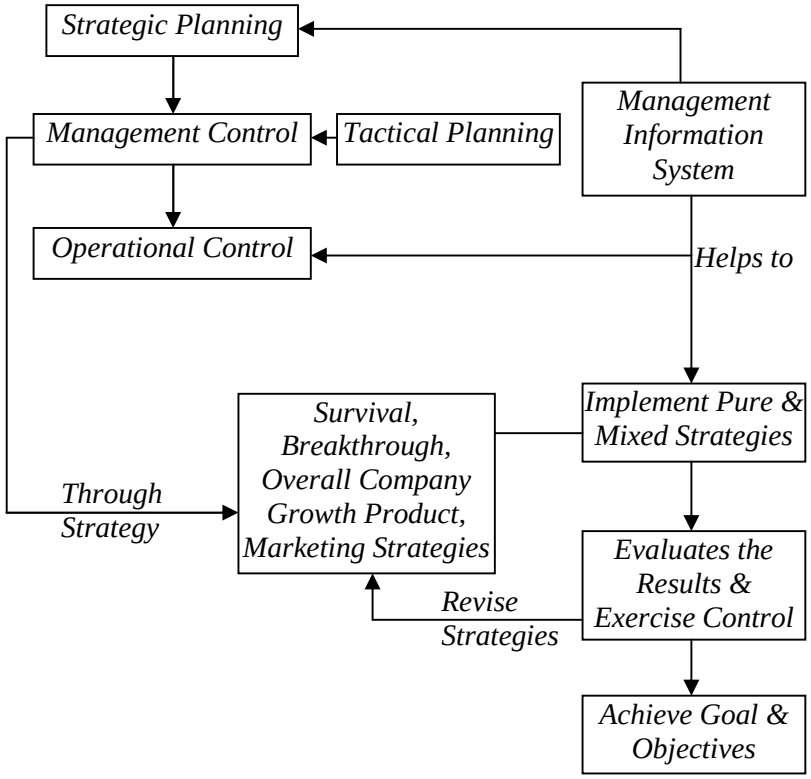
The above figure showed the conceptual view of Management Information System. In the top part Management Information System consists. The operational parts identify the computers and information technology, after this use of Data Base and Knowledge Base, application of principles and practices of Management after the Use of Data Base and Knowledge Base. The system is like hierarchy system.

Application of Pure and social sciences is one of the most important strategies for rational decisions. Beyond the top level Information system Business goal and mission play vital role (Jawadekar, 2002).

MIS and Strategic Management

Figure 2.6

MIS and Strategic Management



In the above diagram the relation between Management Information System and the Strategic Management is shown by figure clearly (Jawadekar, 2002).

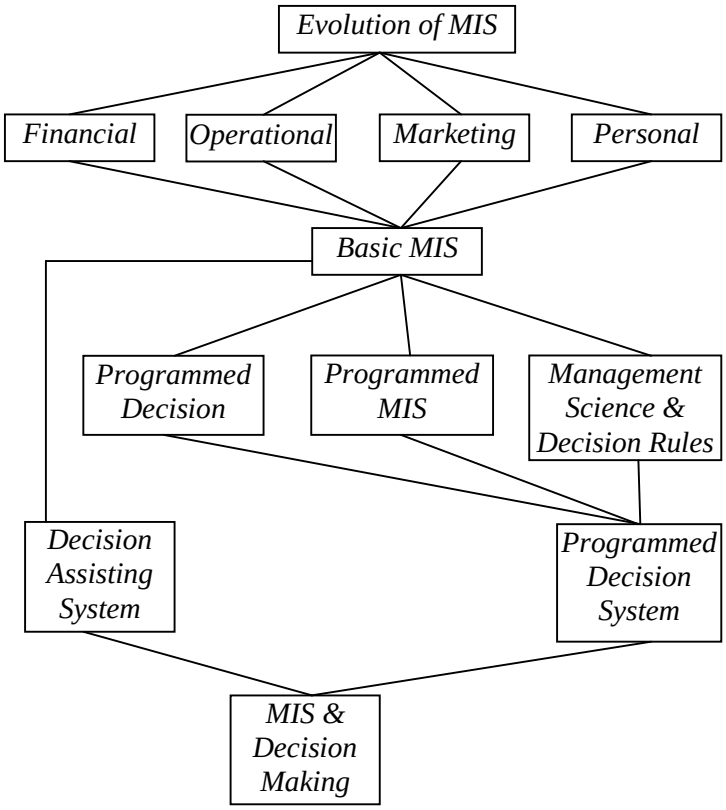
Importance of MIS

Today Nepal too had become the full member of WTO (World Trade Organization) and is talking about the globalization. In today's world any identity cannot remain untouched from the other corner of the world as which is directly or indirectly been influenced. The world has become narrower and narrower as the product or service from one part of the globe takes no time to reach the other part. As we too are talking about the free trade area, it has been very competitive world and one has to increase its efficiency to compete. Multinational company (MNC) has started flowing in Nepal which is equipped with latest technology, qualified manpower. To compete with the domestic as well foreign industries and to survive in this competitive world one has to change is present structure. The fast changing scene of liberalization and globalization a management job has become very complex. And do make any decision, one has to take the up to date and timely information either it may be internal or

external. It has become very complex task to come in the decision. To overcome this management need to be updated with right information at right time to make the effective decision. It is understood that information is compared with the blood of the human body whereas MIS is a heart. In the body, the heart supplies the blood to all the part of the body which carries the oxygen and other vital ingredients to each and every cells of the body without which it cannot remain alive even a minute. Upon, requirement the heart pumps faster and supplies more blood when needed. It regulates and controls the incoming impure blood process it and again resend to the part of the body. The MIS plays the exactly role in the organization which is a must for a management to make righty decision in righty time.

Figure 2.7

Information System for Decision Making



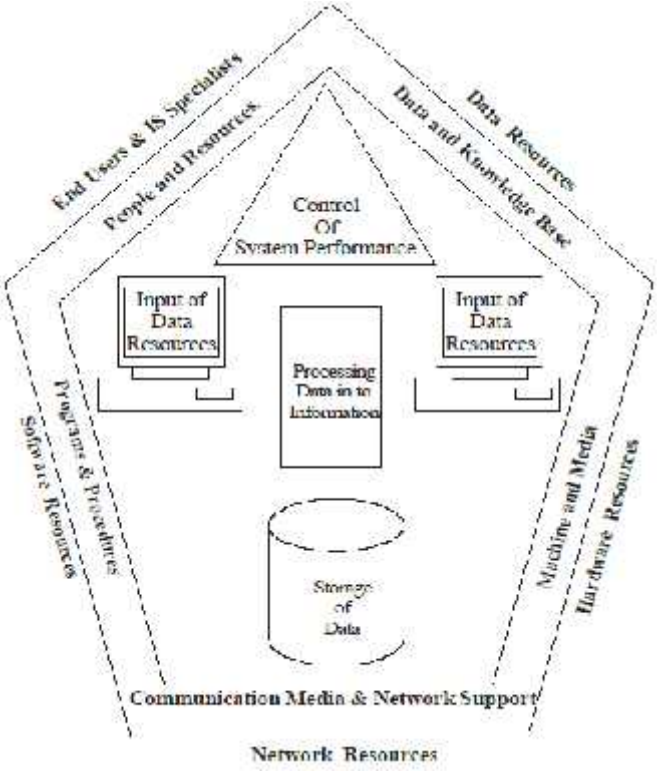
(Murdick, Ross and Claggett: 1999)

MIS provisos relevant information which helps the management for implementation to different business strategies and objectives and helps management to use the different strategies which present industry needs. MIS helps in strategic planning, management control, operational controls and others. Regular supply of information is imperative to assess the present.

Components/ Structure of MIS

Figure 2.8

Components/ Structure of MIS



The above figure illustrates and information system model that expresses a fundamental conceptual framework for the major components and activities of information system (Murdick, Ross and Claggett, 1999).

Hierarchy of Management in Siddhartha Bank

Level of management means the arranged managerial position in an organization as well as it is the system of dividing the authority and responsibility among the various managerial positions. It is concerned with the classification of superior subordinate relationship in an organization. The level of management depends upon the size and nature of the organization. In Siddhartha Bank Limited, the hierarchy of management is divided into four levels.

i. Top level management
ii. Middle level management

iii. Lower level management
iv. Transaction level management

All levels of management are inter-related with each other and are equally important for the smooth operation of management. Even a small mistake of one level can affect the whole management process Decision-making is a process of choosing the best alternatives among the available alternatives for the solution of problem raised in the organization. It is a complex task because of the changing and competitive environment, scare resource & time and due to the organizational goals. It involves the entire process of establishing goals, defining activities, searching for alternatives and developing plans. The figure shows below the hierarchy of management of Siddhartha Bank Limited.

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Figure 2.9

Hierarchy of Management in Siddhartha Bank

The hierarchy of management is divided into four levels for performing decisions –making functions. They are strategic planning levels, management controls operation controls level and transaction processing levels (Siddhartha Bank, Annual Report: 2010).

i) Top Levels Management

The strategic planning level of management of the Siddhartha Bank Limited consists of board of directors or the directors. It involves in formulating the plans and policies, setting the objectives of the company and decision making on different issues. The success or the failure of the activities of the company depends on the decision of the strategic planning level of management. There will be C.E.O., president, vice –president using different intelligence support system like Decision Support System, Executive Support System, Expert System, & Artificial Intelligence (A.I).

ii) Middle Levels Management

The management controls level of management is involves in the implementation of the plans and policies prepared by the top level management. It consists of department heads such as departmental directors. This level of management is responsible for the activities performed by each of their department. There will be Director, Manager using different intelligence support system like Management Information System (M.I.S). (Siddhartha Bank, Annual Report: 2010)

iii) Lower Levels Management

The operation control level of management plays the role of bridge between management control level management and the transaction level of management and performs the controls function. Departmental admin, supervisors etc. performs the operational control level management in Siddhartha Bank Limited. It control the day-to day operations of the transaction level, keeps the record and provides the relevant date to support the management controls level for decision- making. There will be coordinator, supervisor, team leader using different intelligence support system like Knowledge Works System (K.W.S) & Office Automation System(O.A.S) (Siddhartha Bank, Annual Report: 2010)

iv) Transaction Levels Management

The transaction level of management is considered on the day-to-day operations, such as production of goods and providing services to the clients. The maintenance supports to the

client by the hardware personals, the records of daily transaction, etc tasks are performed to meet the organizational goals / objective.

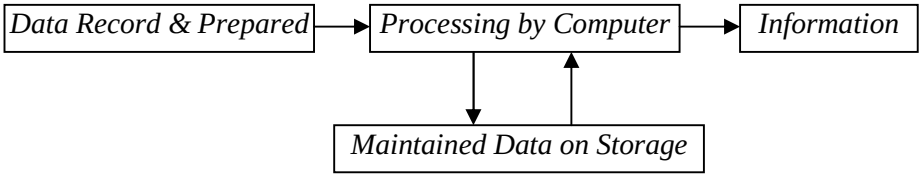
There will be Operational Sales Representative, Accountant, Clerk, Financial Analysis, Teach support Representative , Product Workers, Retail Association, Administrative Assistant using different intelligence support system like Transaction Process System(T.P.S) To have deep insight of card business of Siddhartha, firstly types of card their provisions and steps involved in card management process are discussed. Then trend analysis related to different aspect of Siddhartha is done (Siddhartha Bank, Annual Report: 2010).

Data Processing

It is the term given to the process of collecting data together and converting them into information. The way of doing is manual, semi manual, mechanical or electronic. Electronic data processing can be done by the use o computer. It is mostly associated with business and commercial work. Features of EDP cycle are given below.

Figure 2.10

Data Processing



On above EDP, a company might hold details of its employees, name, address, rates etc. On backing storage, data are maintained and updated for the processing. By using the newly input data of data from the storage are processed and produce a set of information in terms of pay slips (Adhikary, 2010).

Online Processing

Early computer systems relied mainly on batch processing, but the vast majority of systems today use online processing. An online system handles transactions when and where they occur and provides output directly to users. Because it is interactive, online processing avoids

delays and allows a constant dialog between the user and the system. An airline reservations system is a familiar example of online processing.

In online transaction processing, the term online means that the data input device is directly linked to the transaction processing system and the data are processed as soon as it enters into the system. The input device may be at a remote location and be linked to the system by networks or by telecommunication systems. Here, the information is always current since there is little or no time lag between data creation and data processing. Some examples are Information about the loan transaction, railway reservations etc.

Online processing is possible because of storage media such as disks that process data in a random order.

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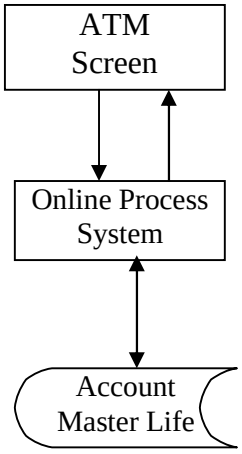
Online processing also can be used with file – oriented systems. Figure below shows what happens when a customer uses an ATM to inquire about an account balance.
Online processing systems have four typical characteristics:

- The system processes transactions completely when and where they occur.
- Users interact directly with the information system.
- Users can access data randomly.
- The information system must be available whenever necessary to support business functions (Adhikary, 2010).

Figure 2.11

Online Processing System of Bank ATM



Step 1: Customer enter their account number and request an account balance / withdrawn amount

Step 2: Retrieves current account balance.

Step 3: Verify bank account number and display balance on ATM screen or withdrawn money from ATM machine.

Online Processing systems have four typical characteristics:

- The system processes transactions completely when and where they occur.
- Users interact directly with the information system.
- Users can access data randomly.
- The information system must be available whenever necessary to support business functions.

Batch Processing--

In a batch processing system, data is collected and processed in groups, or batches. Although online processing is used for interactive business systems that require immediate data input and output, batch processing can handle other situations more efficiently (Adhikary, 2010).

Siddhartha Bank and Loan Management System

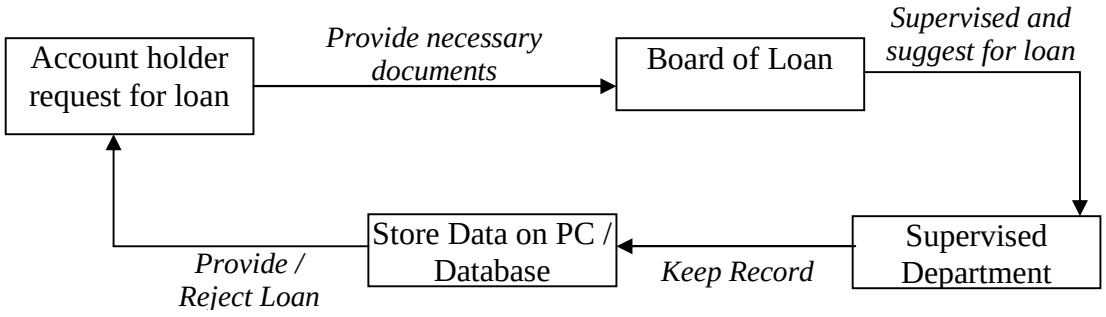
Siddhartha has very strong and exclusive network branching system within the County. It one of the bank in Nepal to introduce modern computerized services. It has ABBS (Any Branch Banking System) which facilitates cash and cheque transaction from any of the Siddhartha Branches within the valley. It has its own accounting software system. It provides tele-banking facility to its customer and other branches. It also has an esteemed and extensive correspondent/agency banking relationship with most of the leading banks of the world like

Citibank, Amex etc. It also provides International level of services. So, Siddhartha Bank's Banking technology is computerized and of quick service.

In keeping with the Bank's tradition of providing superior services to its customers as well as to increase its shareholder's return on investment in the long term, Siddhartha has already commenced the implementation of a world class banking software developed by a renowned software company. With the activation of this system in all the branches by April 2005, the Bank will be able to further enhance its operating efficiency and offer customer data access and offsite services equal to that offered anywhere.

Figure 2.12

Loan Management system of Siddhartha Bank



2.2 Review of Articles

2.2.1 REMITTANCE

Siddhartha Bank Limited (SBL) provides a wide range of remittance services to its customers, some of which are as follows:

Demand Draft

Demand draft is a cheque drawn by a bank on its own branches or on its correspondent banks' branches. At SBL, customers can easily remit funds to beneficiaries outside Nepal through demand drafts. Customers may choose drafts of American Express (AMEX) or Standard Chartered Bank (SCB) for remitting US Dollars to almost any country in the world and

Commerz Bank for Euro. Customers may use drafts of AMEX, SCB or ICICI bank for remitting funds in Indian Rupees to almost every corner of India.

Telegraphic Transfer (TT)

Telegraphic Transfer (TT) is a method where two banks exchange test keys to ensure authenticity of the messages between them. SBL has test key arrangements with various international banks. At SBL, customers may use this service to remit/ receive funds.

SWIFT

Society for Worldwide Interbank Financial Telecommunication (SWIFT) is the safest and most secured method of sending/receiving messages from different banks across the globe. SBL has a wide SWIFT arrangement with renowned banks such as AMEX, SCB, ICICI, Mashreq, and Commerz, just to name a few. At SBL, customers may use this service to remit and/or receive funds, efficiently and securely, to/from various parts of the globe. This is the most trusted and widely used method of correspondence among banks.

Western Union Money Transfer

Western Union Money Transfer is one of the most accepted methods of remitting funds by Nepalese working outside the country. SBL is also a service provider of Western Union. At SBL, all customers, a/c holders or none, can receive funds remitted by their relatives and friends from different parts of the world within minutes without any hassle.

Sale/Purchase of Foreign Currency

At SBL, all customers, a/c holders or none, can sell or purchase major foreign currencies namely US Dollars, Euro, and Pound at the prevailing exchange rates.

Travelers Cheques

Traverles Cheques (TCs) are cheques of well-known international financial institutions, which are easily accepted in hotels, shops, restaurants, banks and universities all over the world. TCs are considered safer than money, therefore, are very popular among international travelers. Some of the well-known issuers of TCs include AMEX, SCB, Visa, Mastercard,

and Citicorp. At SBL, customers can purchase TCs of AMEX. We, at SBL, purchase and sell TC at very competitive rate.

Managers Cheques

Managers Cheques, which are issued for local payments, are widely accepted. At the request of our customers, we issue Managers Cheques to make payment locally.

2.2.2 DEPOSIT

Super Salary Account

Reduce your transactional hassle; open your staff's salary account with us. On top of reduction of your hassle, You can safely deposit your funds with us and we also provide your staff with the much required banking service with added benefits.

Jestha Nagarik Bachat

You are thinking of your retirement plans and you are above 50 years old; our Jestha Nagarik Bachat may just be what you are looking for. This product is meant for 50-year olds and above and has been designed with special privileges.

Sarvottam Bachat

You have liquid fund and are looking for saving with higher returns. Open Siddhartha Sarvottam Bachat account.

Nari Bachat

Designed especially for women, this account boasts of a relatively higher interest rate and is bundled with an insurance scheme.

Bal Bachat

You don't need to worry about your children's' future. You can plan your impending expenses related to your children using our Bal Bachat that has been designed to suit your child's future plans.

Opening Bal Bachat account in your child's name would inculcate a saving habit in an early age and help in making them understand value for money.

Siddhartha Mega Saving

You have funds with you but do not want to park it in fixed deposit. Open Mega Saving with us and earn interest as in line with your deposit volume - the more you deposit, the more you earn.

Investors' Savings

Investor saving account is an account for you if you want to easily transact when investing in share market.

Remit Account

Open account with us prior going abroad; we provide you with attractive facility. Your family members who receive remittance can also open remit account.

Siddhartha Bachat

Mother of all savings, Siddhartha Bachat is for someone who intends to bank with Siddhartha Bank without much of a hassle and cost.

Siddhartha Bishesh Bachat

A special product to cater to your saving needs and insure your life at the same time.

2.3 Review of Related Research Studies

One important factor underlying systems is that information is a corporate asset and should be recognized as such. In classical economic terms the factors of imports were viewed as land, labor and capital in the modern age, there have become the five M'S: man, money, machine, material and management. To integrate these factors successfully, it is necessary to use information as a sixth factor of imports of petroleum. Although MIS tried to integrate an organization's resources together in a coherent and effective manner, there were shortcomings.

A definition of decision - making activity is often taken for granted and is associated with making a choice among alternatives. Decision – making is the process by which the decision maker moves from a current position to the position in which she or he wants to be. So Decision – making process can be defined as a series of steps that start with an analysis of the

information and ultimately culminate in a resolution a selection from the several available alternatives and verification of this selected alternative to solve the problem understudy (Er. Shankar Nath Adhikary, 2067).

Levels of Decisions

Fundamentally managerial activities and decisions can be segregated in to three categories: those that relate to Top, Middle and Lower. Managerial Decision managing at these levels of management has varying degrees in futurity, Strategic Planning, Management Planning and Operational Palling. Because the output of and information system is directed toward assisting management in planning and controlling organization activities, it is beneficial to relate the following types of information:

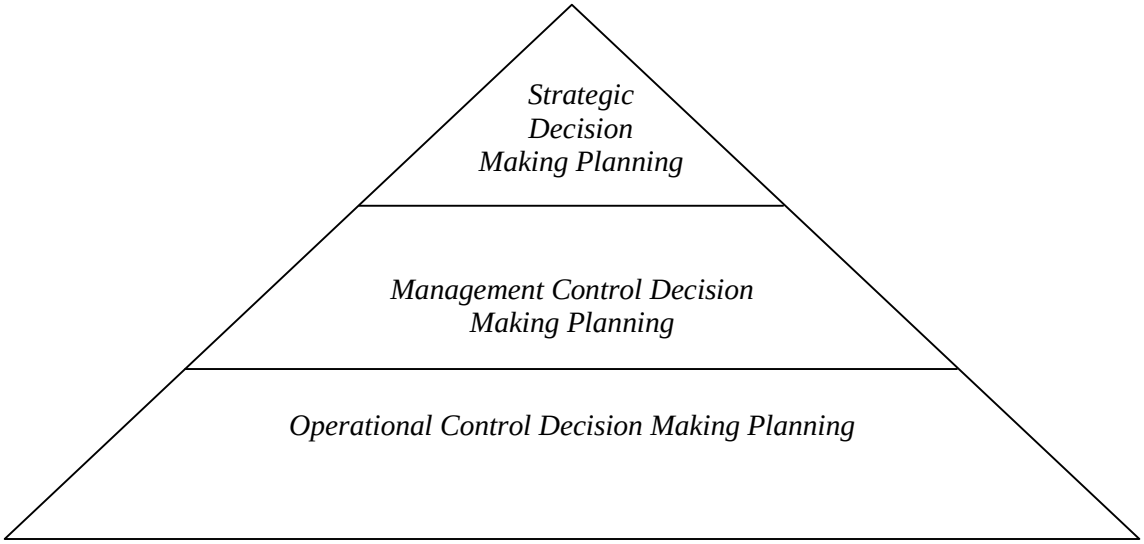
- Strategic
- Tactical
- Operational

To the managerial levels for decision making. Generally, Lower management concerned with operational informational for decision making, while tactical information and strategic information are useful to middle and top management, respectively, for making decision.

The type of information supplies has to do with the activities with which the information is concerned to internal environment of the organization and the external environment which the organization operates.

Figure 2.13

Levels of Decisions in Siddhartha Bank

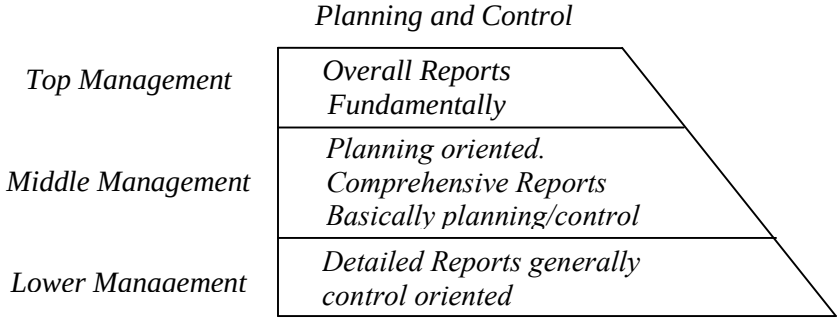


Information need for Decision

It is general fact that internal information should be more and more summarized as the level of management for which it is prepared rises in the hierarchical structure, with top management receiving overall reports operations for future planning.

Figure 2.14

Types of Information Reports needed by Management Levels



On the other hand, lower levels of management, being control oriented, receive the most detailed reports. Between Top and Lower Management is middle management, which is

planning oriented. All three levels of informational need are illustrated in figure above. The relationship of types of decisions to the managerial Level – support functions.

Figure 2.15

Examples that depict the relationships of types of decisions to the Managerial Level – Support Function

Managerial Level: Support Function	*Types of Decision*	*Examples*
Top Management: concerned with strategic planning	*Structured Semi-structured Unstructured*	*Plant & warehouse locations Mergers and acquisitions future products*
Middle management: concerned with managerial control.	*Structured Semi-structured Unstructured*	*Flexible budgets and cost analysis forecasting and sales promotion subcontracting and motivation of personnel*
Lower management: concerned with operated control.	*Structured Semi-structured Unstructured*	*Accounts payable and payroll preparation accounts receivables & purchasing customer waiting lines and situations involving group behavior*

(Source: Robert J. Thieauf, Ph.D, Xavier University)

Types of Decision

Earlier we have mentioned that decision-making activity is associated with making a choice among alternatives- in fact-making a reasoned choice among alternatives. This activity consists of series of steps that starts with an analysis of the information and ultimately culminates in a resolution i.e. making a selection among available alternatives.

Fundamentally, the decision-making Process can be viewed from two major perspectives

- Quantitative Approach
- Qualitative Approach

Quantitative Framework

In this, the stress is on determining specific values of all parameters of the problem and solving for a specific value or range of values

Qualitative Framework

State the factors in general term and solve the problem on that basis no attempts to quantify the factors. Both approaches have their own merits and demerits and importance in decision-making. The fundamental approaches of viewing decision-making processes, viz. quantitative and qualitative, can be discussed on three different viewpoints.

Systematic –Intuitive Approach

Thinking – Feeling Approach

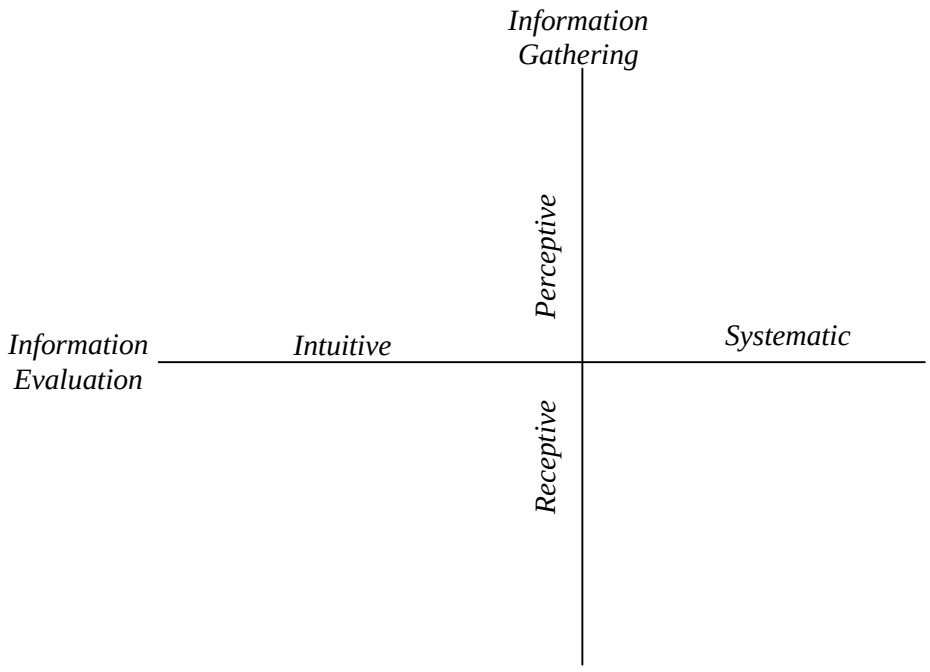
Normative – Descriptive Approach

2.3.1 Systematic –Intuitive Approach

Problem solving and Decision making can be viewed in terms of processes through which individuals organize the information they perceive in their environment, bringing to bear habits and strategies of thinking.

Figure 2.16

Systematic –Intuitive Approach



James McKenney and Peter Keen's this view of decision-making is based on: Information gathering and Information evaluation.

2.3.2 Thinking – Feeling Approach

This second way of viewing decision-making approach is by C. G. Jung Thinking types base their decision logical modes of reasoning. In effect, they do not feel comfortable unless they

have an analytical, mathematical basis for decision-making. Feeling types make their decision based on extremely personal considerations – their feeling about a particular situation. Thinking types want to depersonalize every situation, objects and person by "explaining them, where as Feeling type want to personalize every situation by stressing their individuality. An individual takes in data by intuition or sensations. The person may come to conclusion about the data by either a logical, impersonal analysis – thinking, or by subjective, personal process- feeling. Combining the two input modes with two decision-making modes we get four Jungian personality types which are mentions below:

Sensing – thinking types,

Sensing - feeling types,

Intuitive - thinking Type,

Intuitive – feeling type,

Each type depicts a different mode of operation regarding decision-making process.

2.3.3 Normative- Descriptive Approach

The third approach of viewing decision-making is based in terms of two general types of decision models. These two decision models are now commonly in use. These are normative Model and descriptive model. The normative framework describes the traditional decision making situation in which a decision maker faces a known set of alternatives and selects a course of action by a rational selection process.

This approach presumes, a decision maker is objectively optimizing a quantifiable measure of decision quality. (This may be a statistical measure because future is never completely known). There is, in other words, a normed scale against which decision can be measured - and it is often assumed, unlimited time and resources to devout to analyzing the decision.
The descriptive framework incorporates adaptive or learning features and the act of choice spans many dimension of behavior, rational as well as non- rational.

Descriptive models, by contrast, attempts to describe the way people really do make decisions. We don't always have agreed upon measures of decision quality, we don't usually have unlimited time and resources to devout to analyze a decision and we often have motivations that can be hard to explain or justify.

2.4 Approaches to Problem Solving

Traditional Problem Solving Steps are

Step 1: Observation

Step 2: Definition of the Problem

Step 3: Formulation of Hypothesis

Step 4: Experimentation

Step 5: Verification

Herbert Simon's three steps of Problem Solving

Step 1: Intelligence

Step 2: Design

Step 3: Choice

2.5 Approaches to Decision Making

There exist several approaches to decision making. Instead of exploring and comparing each one of them we mainly focuses on two approaches viz. Quantitative Approach to decision Making and Decision centered Approach to decision making

Quantitative Approach to Decision Making

Step 1: Observation

Step 2: Definition of the real problem

Step 3: Development of alternative solutions

Step 4: Selection of optimum solution using experimentation

Step 5: Verification of optimum solution through implementation

Step 6: Establishment of proper control over solution

Decision Centered Approach to Decision-making

Step 1: Intelligence

Step 2: Design

Step 3: Choice

Step 4: Implementation

Step 5: Control

(Class Hands Out From Thapa, DSS)

2.6 Review of other Thesis

There are various researches held on lending or loan practices using management information system of commercial bank. In past years, many researches had done study on lending practices of commercial banks with MIS and also on loan collection and disbursement of commercial banks. Here, some of the similar dissertations written in past have been reviewed which are close to the topic under study;

Sharma (2008), in his study on, "**Loan Management of Agricultural Development Bank Limited**" focused the efficiency and effectiveness of loan recovery of the bank, has the objective to evaluate the loan disbursement and collection procedure of ADBL. The study has involved other objectives as follows;

- To examine the loan disbursement and collection procedure of ADBL
- To evaluate the trend of loan investment, collection and outstanding.
- To show achievement of purpose wise and term wise loan disbursement, collection and outstanding.
- To study lending policy, loan recovery procedure, interest berate and discount, interest change by ADBL.
- To suggest some remedies for improving loan disbursement and collection procedure of ADBL.

The researcher has made various statistical and financial analyses, according to which some findings are made as follows;

- The trend of total investment of development financing has increasing with average growth rate 10.43%.
- The trend of total collection of development financing has also increasing with average growth rate14.22%.
- The trend of outstanding of development financing also increasing with growth rate 9.53%
- The term wise loan disbursement, collection and outstanding is in fluctuating trend with varying average growth rates.

With the above finding the researcher has concluded that the bank should examine the past repayment records in case of borrowers who are unable to repay loan back and take corrective action immediately. He has figured out that weak supervision, high interest rate and other charges charged by the bank, political interferences and poor liquidity of borrowers

are the poor recovery. Hence he has suggested that the bank must provide strict supervision during loan utilization, supervisor need to visit field to make fair eyes on the borrower's loan utilization for the concerned purpose and motivate the borrower to make full utilization of loan amount.

Mandal (2010), has conducted a thesis on "*Role of Management Information System in Commercial Banks*" with the objectives as follows:

- To analyses the positive and negative impact of decision through using different models.
- To identify the need of IT for decisions in Kumari Bank limited.
- To examine how to convert theoretical aspect of Decision Support System and Management Information System In Kumari Bank limited.
- To find out the implementation area of IT in Kumari Bank limited.

He has carried out the research work with help of secondary data obtained from annual reports and other secondary sources. In order to carry out the research, various financial and statistical tools are used, on the basis of which following finding are made;

- The trend of total deposited amount of kumari bank financing has increasing with average growth rate 29.23%.
- The trend of total loan and borrowing of kumari bank financing has also increasing with average growth rate 26.72%.
- The trend of work completion of kumari bank financing also increasing with growth rate 49.45%

From the study, the researcher has concluded that along with increment in deposit, the loan and advances of the kumari bank are increasing. On the basis of finding, the researcher has recommended that the banks should user management information system for the loan management system, capital, management and capability information of customer as primary factor and external environment and collateral as secondary factor before taking lending decision.

Lekhak (2010), in his study on, "*A Case Study on Loan Management of Agricultural Development Bank Limited* " focused the efficiency and effectiveness of loan recovery of the bank, has the objective to evaluate the loan disbursement and collection procedure of ADBL. The study has involved other objectives as follows;

The research study under the topic “Loan management of the Agricultural Development Bank Limited” is concentrated on following objectives:

- To examine the total amount of loan disbursed with respect to total deposit within selected time period.
- To examine the loan disbursed under various heading.
- To measure the percentage of performing and non-performing loan to total loan
- To analyze the total loan recovery with respect the total loan disbursed and outstanding loan.
- To provide the recommendation and suggestions to the organization under study on the basis of the findings

The researcher has made various statistical and financial analyses, according to which some findings are made as follows;

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2.7 Research Gap

Going through the above study, it can be said that loan management system is an important element for every commercial banks. Various researches have been found relating to the Loan Management System, but all the previous research works were fully focused on the loan disbursement, collection and outstanding.

This research is slightly different then other research due to I use here different types of tools like ERD and DFD and model for linear programming which helps to forecast the maximum profit or minimum cost for any company when we take quick decision. All other reaming parts of researches are same except above mention some particular tools.

CHAPTER III

RESEARCH METHODOLOGY

3.1 Research Design

Research Methodology is a dynamic and systematic way to solve the research problems. It describes the procedure and method applied in the entire aspects of the study. It refers to the various sequential steps (along with a rational of each step) to be adopted by a researcher in studying a problem with certain goals in view. Thus the overall approach to the research is presented in this chapter. This chapter contains the research design, sample size, sample selection procedure, data collection procedure, data processing tool and techniques, variables etc

Research methodology possess to the various sequential steps to be adopted by researcher in studying a problem with certain objectives of view. It describes the methods and process applied in the entire subject of the study. It is the way to systematically about the research problem. (Kothari; 2001: 39)

Research methodology is the plan, structure and strategy of investigations conceived to answer the research question or test the research hypothesis. (Wolfand Pant; 2002; 51)
Human beings cannot remain satisfied with the same things for a long time. They are always curious to learn more and do something new and special by raising questions like why, how, when, where, what etc. To answer these questions, they should gather information and analyze them to achieve their goals or satisfaction. The research for gaining the knowledge about method of goal achievement, which we desire, is known as research methodology (Joshi; 2001: 12-13).

Thus, research design is an overall plan or frame work for the collection and analysis of data which provides the frame work for the study, guidelines for the collection and analysis of data.
I designed the research by the help of IT and Loan Department of Siddhartha Bank Limited and Annually Report 2009/2010. I collected knowledge of venture of Siddhartha Bank Limited detail data flow diagram and module of forecasting Loan flow secondary data.

Others more information I collected from authorized dealer, SBL website (www.siddharthabank.com) & from head office.

3.2 Population and Sample

Total Commercial banks are in Nepal are approximately 29 out of them Siddhartha Bank Which I selected for the loan management. The loan flow of Siddhartha Bank which is already mentioning in chapter two also, but the loan system and the computerized system is quite different of Siddhartha Bank Limited.

3.3 Sources of Data

I collected data from different places and differences sources like, visiting on its office, Website, Primary sources and also secondary sources which all are listed below on point wise. The data and information have been collected from different sources. The sources of data and information used in this study are as follows. Without any data, nothing can be studied. So, for any statistical investigation, the collection of data is most important. The importance of data collection lies in the following facts that collected numerical facts can be utilized to examine the problems concerning a field of enquiry in their true prospective, to find out the cause of change and to estimate their probable effects, The statistical methods are also employed as a tool for the comparison between past and present events to throw light on the reason of change on the social system and for future plans and programmers.

3.3.1 Primary Data Collection

The data which are originally collected by an investigator or an agent for the first time for the purpose of statistical enquiry are known as primary data. The data is thus original in character. These types of data are obtained in the survey and enquiries conducted by government, some individuals, institutions and research bodies.

Data Collected Methods

- Observations
- Questionnaires
- Interview etc.

3.3.2 Secondary Data Collection

The main difference between primary and secondary data is only of degree one. Data which are originally collected but obtained from some published or unpublished sources are secondary data. Annual Report 2009/2010, Authorized Web site: www.siddharthabank.com case study Primary Sources: According to Siddhartha Bank Limited primary data are collected by different related sources like opinion poll, sampling, visiting, accuracy study. Primary Sources: Internal sources, Data are found within a Siddhartha Bank Limited. External sources, Collected from sources outside the corporation.

3.4 Analytical Tools and Technology

Out of so many tools and technology some appropriated tools and technology I used in this research which I presented below with diagrams and names. Data are collected by using different tools and technique like flow chart, Data flow, Entity relationship etc. For the programmed presentation we can use some tools which are mention below.

i. Algorithm
ii. Pseudo code/ structured English
iii. Flow chart
iv. Data flow diagram

Algorithm

Manually use tools are algorithm. Step – by – step method of program is called algorithm.

Pseudo Code

To represent the program by using English with some logical expression like the programs. For an example; If condition, loop streak, etc.

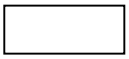
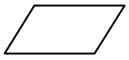
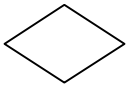
Flow Chart

Program are reported in diagrammatically by using standard symbols is called flow chart. This provides the skeleton of the programmers. The rectangular box represents the process of

the flow chart or the system. Circular shape or oval shape represent the Start or end the process or the system of flow chart.

Parallelogram type symbol represent the input or output of data. Similarly the kite symbols represent the Decision. On this way the flow chart is planned by the information manager or IT manager or engineer. The symbols of Flow charts are presented below:

The Symbols of Flow Charts

Symbol	
Process	
Start / End	
Decision	
Input / Output	

Data Flow Diagram (DFD)

Diagram that represent the flow of information from external entity to the system and vice-versa.

i. Context level DFD
ii. Physical level DFD
    a) 0 level DFD
    b) 1 level DFD

Context Level DFD

This is one of the most important technique or tools for data collection methods. While preparing this project work or models, I use interviews, questionnaires, and other techniques to gather facts about the system, and they learned how the various people, department, data, and processes fit together to support business operations.

The first step is constructing a set of DFDs is to draw a context diagram. A context diagram is a top-level view of an information system that shows the system's boundaries and scope. To draw a context diagram, I start by placing a single process symbol in the center of the page. The symbol represents the entire information system, and you identify it as process 0.

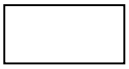
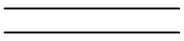
Then I place the internal entities around the perimeter of the page and use data flows to connect the entities to central process. I do not show any data stores in a context diagram because data stores are the internal system. How do I know what internal entities and data flow to place in the context diagram? I begin by reviewing the system requirements to identify all internal data source and destination. During that process, I record the name of the entities the name and the context of the data flows, and the director of the data flow. If I do that carefully, and I do the good job of fact-finding in the previous stage.

Zero Level Data Flow Diagram

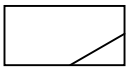
A context diagram provides the most generals view of an information system and contain a single process symbol, which is like a black box. To show the detail inside the black box, I create DFD diagram 0. Diagram 0(the digit 0, and not the letter0) zoom in on a context diagram and show major processes, data flow, and data stores. Diagram 0 also represents the eternal entities and data flow that appear in the context diagram.

Process Symbol

A process receives input data and product output that has a different content, form, or both. For instance, the process for calculating pay users two inputs (pay rate and hours worked) to produce one output (total pay). Processes can be very simple or quite complex. In a typical company, processes might include calculating sales trends, filing online insurance claims, ordering Inventory from a supplier's system, or verifying e-mail address for web costumers. Processes contain the business logic, also called business rules that transform the data and produce the required results. The process name identifies specifies function and consists of a verb (and an adjective, if necessary) followed by a singular noun.

Symbol	
Entities	
Process	
Storage	
Data Flow (unidirectional)	

Bi-directional 

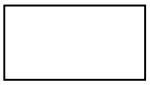
Duplicate Entry 

Entity Relationship Diagram (ERD)

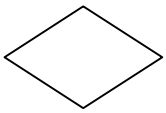
Diagram that represents entity set at single entity diagram that perform the object modeling. (Entity = Objective). In the given table below represents the name of entity and comments. This in one most important technique for data collection which is use in widely in Management Information System. To understand the relationships concepts, we have to understand the terms used in explaining the same. They are: entity, attributes, values, key attributes and records.

To provide the control and work with multiple fields certain relationship are generated and present with a diagram called the entity relationship diagram.

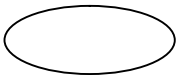
Symbols

BOX 

(It is used for entity representation. It contains objects used in relational database.)

DIAMOND 

(Diamond represents relationship.)

OVAL 

(The oval or ellipse is used to represent attributes of entities.)

LINE

(It is used to link attributes to entity sets and entity set to relationship.)

There are three types of relationships between entities. They can be shown in and entity-relation diagram also known as E-R diagram.

- One – To – One
- One – To – Many

- Many – To – Many

3.4.1 Tables and Figures

Some tables and figures are so important for the correct evaluation of the business or the position about the corporation if they are correct. Some important tables and figures are presented here. Which are so important for the decision making or this research.

Decision Tables

A decision table shows a logical structure, with all possible combinations of conditions and resulting actions. Analysts often use decision tables, in addition to structured English, to describe a logical process and ensure that they have not overlooked any logical possibility.

To create a decision table, follow these steps:

- Place a heading at the top left that names the table.
- Enter the conditions under the heading, with one condition per line, to represent the customers' status and availability of products.
- Enter all potential combinations of Y/N (for yes and no) for the conditions. Each column represents a numbered possibility called a rule.
- Place an X in the action entries area for each rule to indicate whether to accept or reject the order.

Table 3.1

Decision Table

Subject Title	1	2	3	4
Subject 1	Y	Y	N	N
Subject 2	Y	N	Y	N

On this way decision table is created by computerized system

CHAPTER IV

SYSTEM ANALYSIS, DESIGN AND DATA PRESENTATION

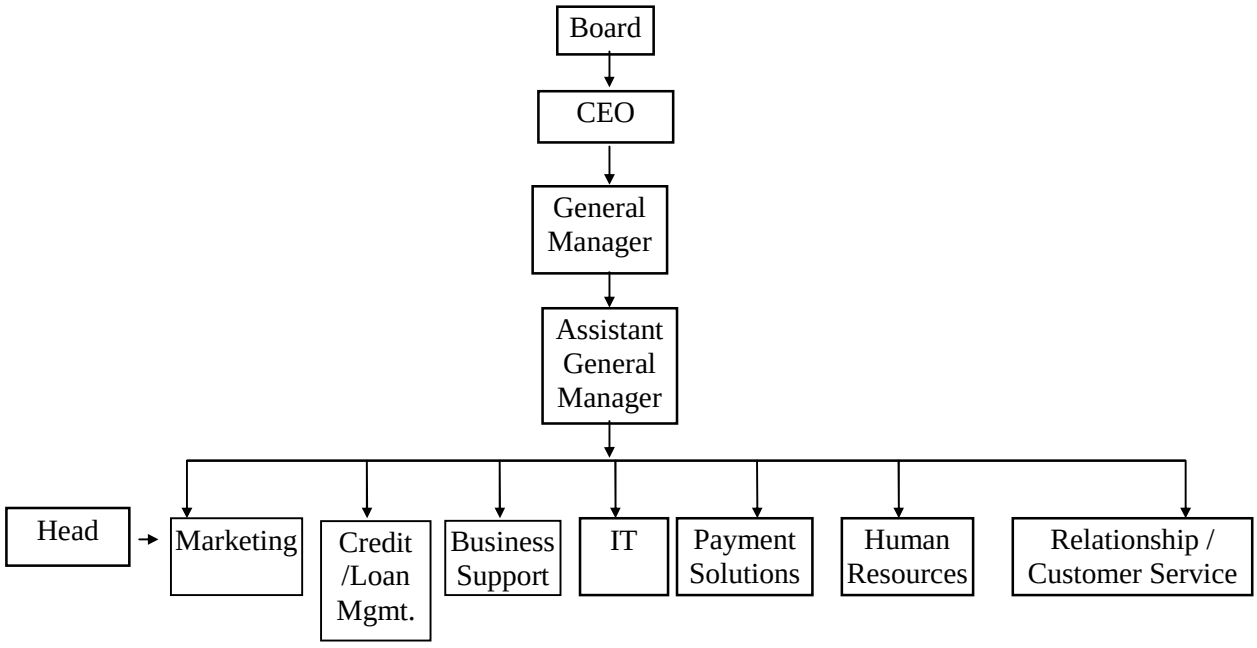
4.1 Organization Structure

Every organization is run under one kind of system. System is managed by the organization itself. System is one kind of Mechanism which bound the organization. Under this one important system is Organization chart. Which classified the chart of work and also known as work Division, Which is also known as Organization Chart?

Siddhartha Bank consisting chairman and directors or Board of Directors. The major policy is used to be formed by the board of the bank. Chief Executive Officer delegates his/her power to deputy general manager, departmental chiefs and regional managers.

Figure 4.1

Organization Structure of Siddhartha Bank



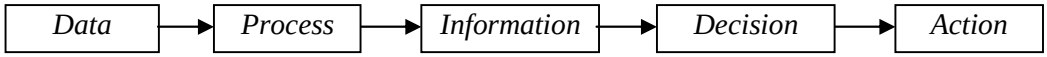
Note: Matrix relation to head office departments

4.2 Sources of Information

Information can be defined as the data, which can be organized and presented so that the decision maker may take the necessary action. In other word, information is the result of processing data. The conversion process of data into decision is shown in the figure below:

Figure 4.2

Sources of Information



From the above figure, it is clear that information consists of data that has been retrieved, processed or otherwise used, for informative purposes. Information contains an element of surprise, reduces uncertainty and triggers off action. The main sources of information are primary information and secondary information which is listed in below:

Primary Information

Such information which I collected from different sources without direct visiting is primary information.

Secondary Information

That information which is collected through directly visited to the related office is secondary information. No of cards issued through direct Enquire.

For Unaudited Financial Result (1^{st} quarter & 2^{nd} Quarter) of the Fiscal Year 2067/68, see appendix 2 & 3.

4.3 DFD of Existing System

During the systems analysis phase, we learn how to create a visual model of the information system using a set of data flow diagrams. A data flow diagram (DFD) shows how data moves through an information system but does not show program logic or processing steps. DFDs represent a logical model that shows what the system does, not how it does it. That distinction is important because focusing on implementation issues at this point would restrict your search for the most effective system design. The main process of existing Data Flow Diagram

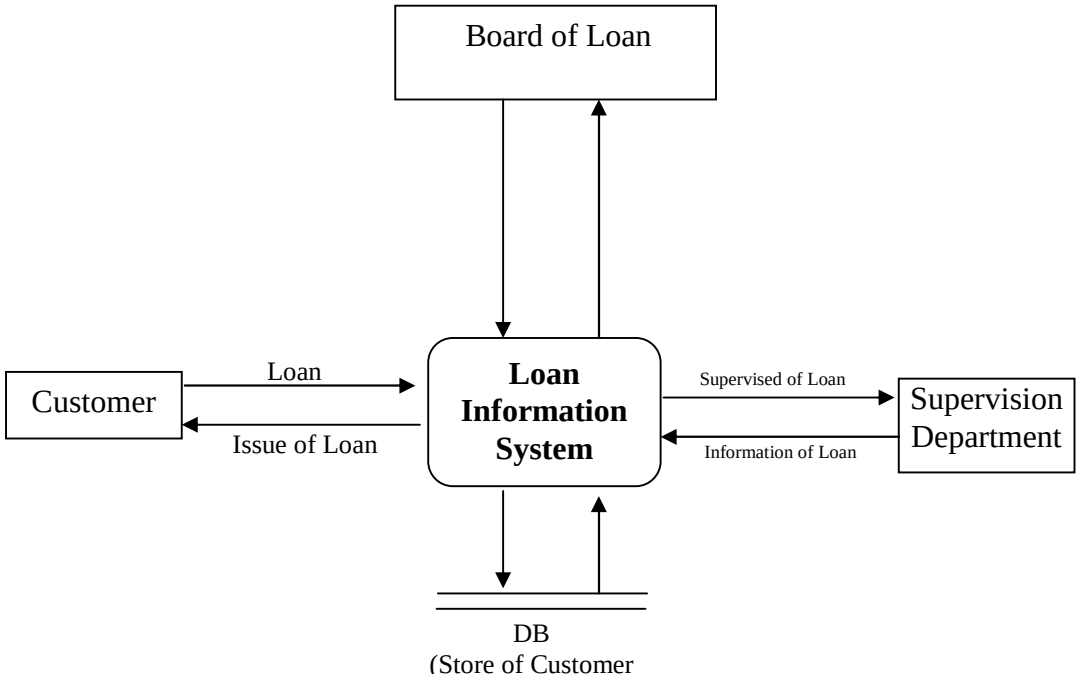
is Loan Department Management. Here are mainly two entities they are Client and Account holder. There is relation between Process and entity.

4.3.1 Context Level DFD

The first step in constructing a set of DFDs is to draw a context diagram. A contest diagram is a top - level view of an information system that shows the system's boundaries and scope. The main process of existing Data Flow Diagram is Loan Department Management. Here are mainly two entities they are Clients & issuer and Account holder. There is relation between Process and entity.

Figure 4.3

Context Level DFD of Loan Department Management



4.3.2 System Level

To show the detail inside the black box, I create DFD diagram 0. Diagram 0(the digit 0, and not the letter0) zoom in on a context diagram and show major process, for the application of the Loan membership first of all applicant should fill a form and submitted to the related department.

The database management provides eligibility for this and applicant is granted for the Loan after verifying all necessary documents. Second process for the card granted is after verifying

the card. It should be issued by the bank and at last applicant can use of this Loan according to his bank balance he or she can withdraw Loan.

In this System level diagram there are one external entity and four processes. These four processes covering four databases file. These all data base file store the detail record and if necessary they collect the require information.

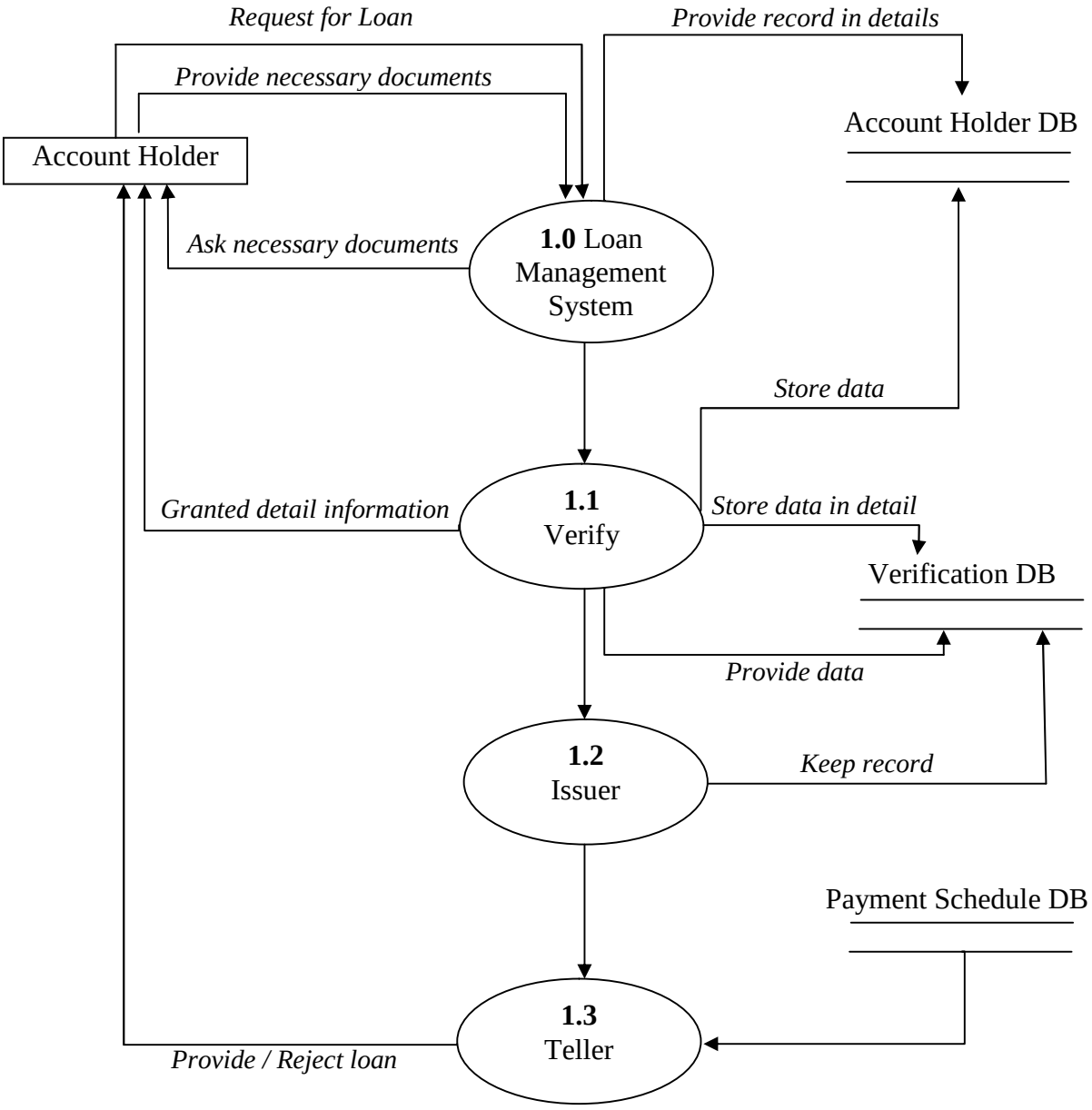
The applicant or the account holder collect loan at last through teller after verifying and issuing data base file. These all data base file correlated data and make easy to work.

This is the beneficial of the computer in this era. The function of Data Base File is data flow, and data stores. Diagram 0 also represents the eternal entities and data flow that appear in the context diagram. A context diagram provides the most generals view of an information system and contain a single process symbol, which is like a black box.

System Level Diagram is the second process of the Data Flow Diagram. System Level Diagram is deeply then context level diagram. The loan Management system of Siddhartha Bank Limited is detailed in system level diagram which is represented below:

Figure 4.4

System Level DFD



In this context level diagram there are one external entity and four processes. These four processes covering four data file. These all data base file store the detail record and necessary they collect the require information. The applicant or the account holder collect loan at last through teller after verifying and issuing data base file. These all data file correlated data and make easy to work. This is the beneficial of the computer in this era. The function of data Base File is data flow and data stores. Diagram 0 also represents the eternal entities and data

flow that appear in the context diagram. A context diagram provides the most generals view of an information system and contain a single process symbol, which is like a black box.

4.4 Analysis of Existing Technology

Technological innovation can take several forms. However Siddhartha Bank Loan is using different technologies which help to gets the advantages in a particular way.

Supplier – Technology

This technology gives knowledge on how these new technologies might transform business processes in their part of the value chain. This remains the current challenge for organizations in many different sectors in exploiting computer hardware and software developments. Supply is focused on Loan Management.

Scale – Technology

Advantages are gained from economies of scale and learning results from that scale. This Siddhartha Bank Limited sells the service. The loan providing is one of the most important selling service which is measurable in terms of feasibility if the candidate is eligible for it.

Information – Technology

Such as in financial services, retailing or transporting – where the exploitation of IT is the central strategic issue.

Science – Based Technology

It is still important in many sectors such as pharmaceuticals, electronics, materials and engineering. The strategic challenges are to monitor academic research, develop imports and acquire the resources to achieve commercial – scale production.

Service – Technology

This type of technology is rigid in nature providing standardized service to customer. The main focus of this technology is development and scheduling of human resources for provident service to customer.

Computer technology is most important technology which is used in this corporation.

- Personal computers
- Software
- Communication networks greatly effective for the corporation.

Siddhartha Bank paying 7,50,000 for the price determination software technology to the plats on net software.

4.5 Limitation of Existing System

Some limitations are mentioned as point based below:

- This technology cannot reduce costs expenses.
- This technology cannot match the equilibrium point with customers.
- Influences by the politics.
- This technology cannot predict the actual shrinkage, leakage and loss quantity.

4.6 Major Finding of the Existing System

Table 4.1

Deposited Amount of Siddhartha Bank

(In Rs.10 lac)

Years	***2061/62***	***2062/63***	***2063/64***	***2064/65***	***2065/66***
Deposited	*4,500*	*6,800*	*9,500*	*13,000*	*16,500*

Figure 4.5

The Bar Diagram of Deposited Amount in Siddhartha Bank Limited

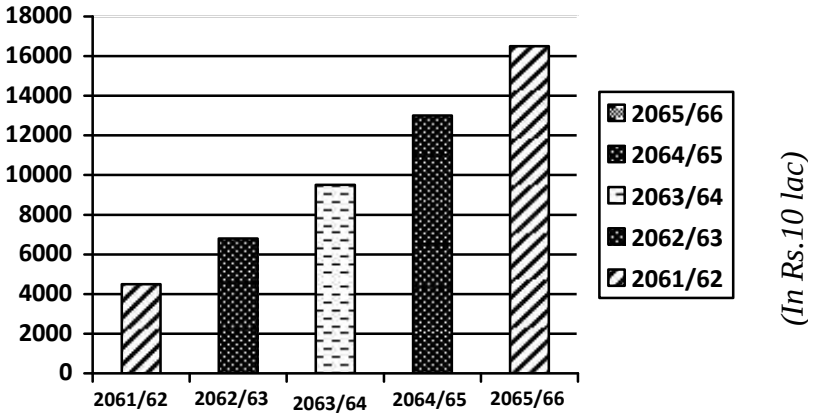


Table 4.2

Loan & Borrowing Amount of Siddhartha Bank

(In Rs.10 lac)

Years	***2061/62***	***2062/63***	***2063/64***	***2064/65***	***2065/66***
Deposited	*4,000*	*6,100*	*8, 000*	*12,500*	*16,000*

Figure 4.6

The Bar Diagram of Loan & Borrowing Amount in Siddhartha Bank Limited

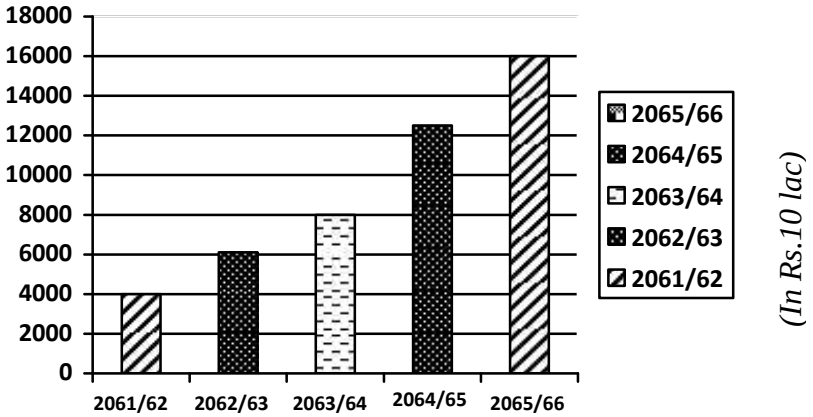


Figure 4.7

Pie Chart of Loan & Borrowing Amount in Siddhartha Bank Limited

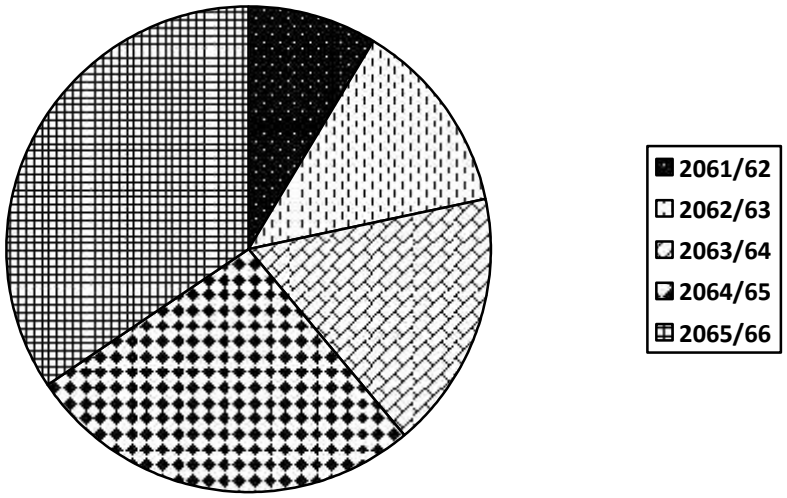


Figure 4.8

Line Graph of Loan & Borrowing Amount in Siddhartha Bank Limited

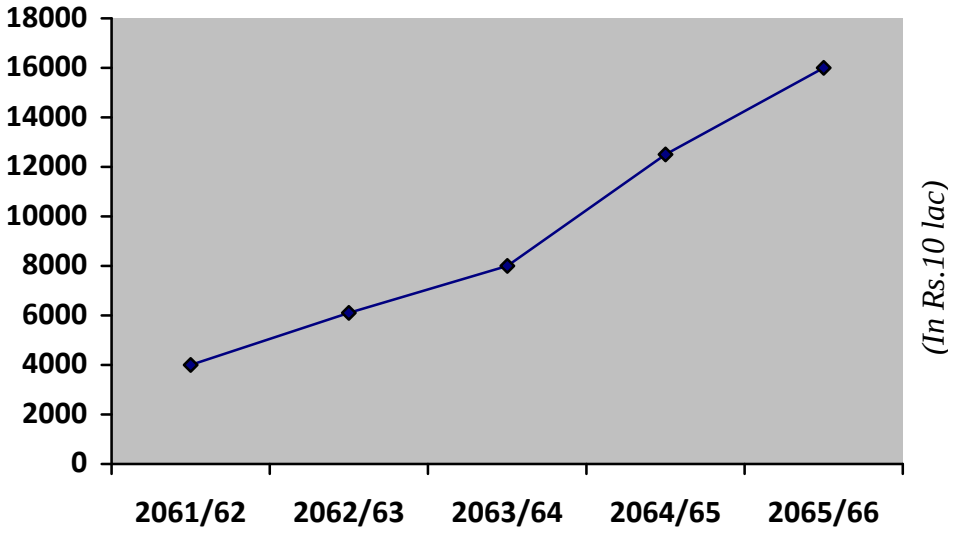
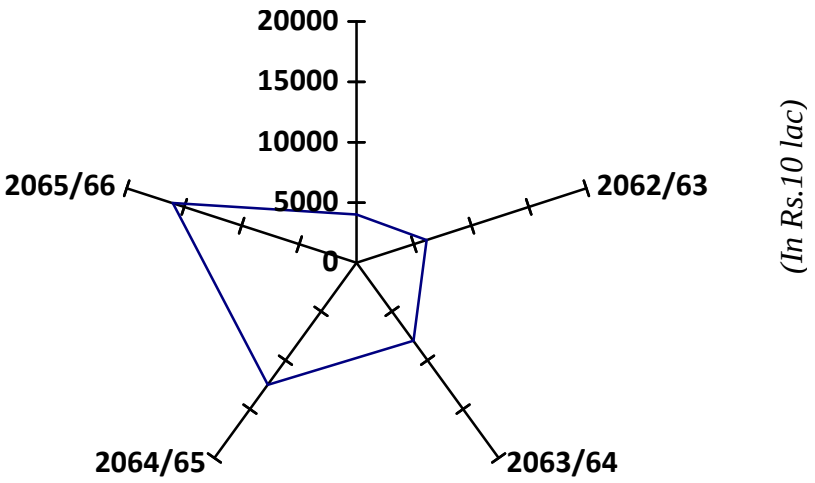


Figure 4.9

Rader Diagram of Loan & Borrowing Amount in Siddhartha Bank Limited



Customer Impacts / Satisfaction Chart of Customer:

In Loan Management System, software base or online banking offers many benefits to banks as well as to customers. In global terms the majority of private bankers are using loan management software or online banking channel. For this service every customers need to have an access to the Internet and full knowledge of information technology in order to utilize the service. Impacts or satisfaction for online user customer's comparison chart is given below:

Table 4.3

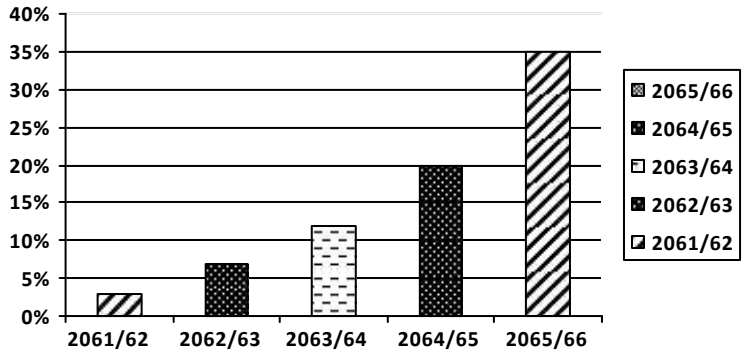
Online Users / Internet Customer in Siddhartha Bank Limited

(In Rs.10 lac)

Years	***2061/62***	***2062/63***	***2063/64***	***2064/65***	***2065/66***
Users	*3%*	*7%*	*12%*	*20%*	*35%*

Figure 4.10

The Bar Diagram of Online Users in Siddhartha Bank Limited



4.7 Concept of New System or Modify the System

In this new system clients can deposit their money from anywhere. The loan management provides loan for deposit amount in figure. In this new system there is no additional external entity and more effort to collect loan. There is no qui system. This system protects the time factor and provides the board facilities of wide technology.

4.8 Comparison between New and Existing System

There is huge comparison between new system and existing system. Existing system can only possible for withdraw money but the new system can receive money also. It is quite good for daily saving but may problem for huge deposit.

The existing system is traditional system but the new system is worldwide system. In development countries using this system.

Figure 4.11

Cash Receipt of Existing System

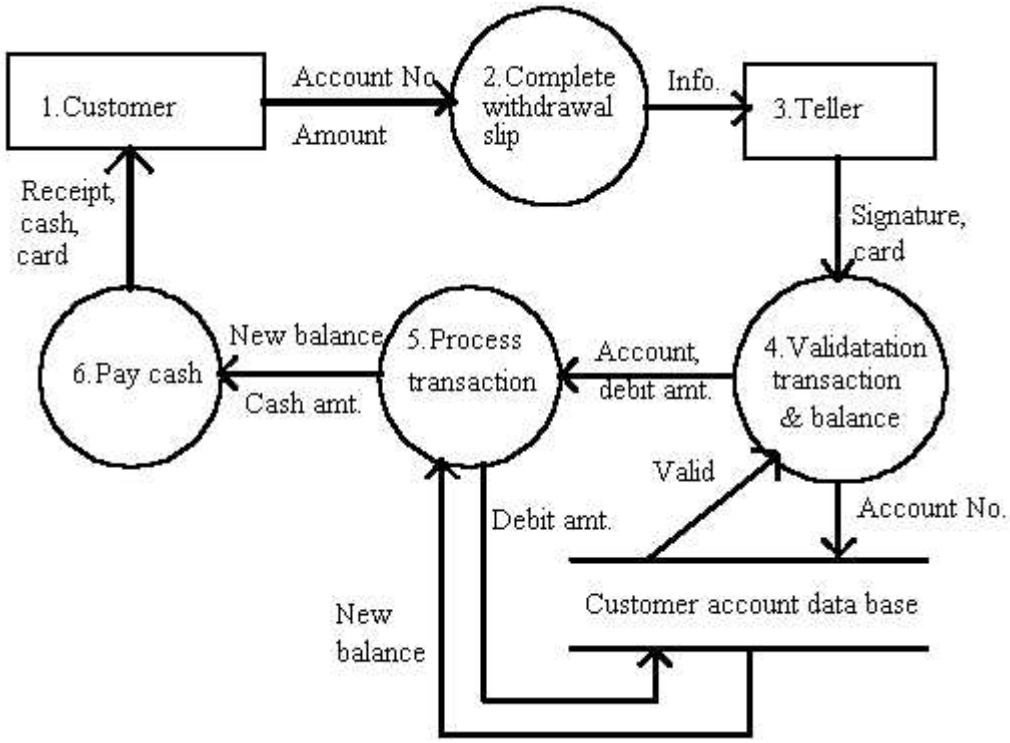
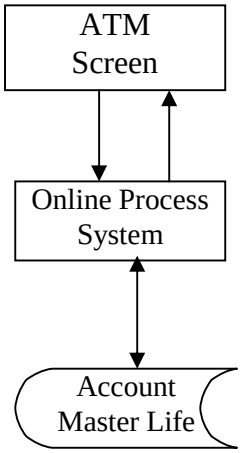


Figure 4.12

Cash Receipt / transfer to another account of New System



Step 1: Customer enter their account number and request an account balance / withdrawn amount

Step 2: Retrieves current account balance.

Step 3: Verify bank account number and display balance on ATM screen or withdrawn money from ATM machine.

Transfer amount to another account through online software / iConnect:

1. Customer/ User login through iConnect software with userID and Password.
2. Check the current balance.
3. Go to amount sender menu and enter the account number, required amount etc.

4. Check the enter information deeply and click on Confirm button.
5. At last, logout from iConnect system.

4.9 Application Modeling

To estimate the value of economic variable trend line can be use in terms of mathematics form i.e.,

Where,

Y = unknown economic variable

a & b = constant

b = trend line

a = intercept of y

x = Known time variable.

We can use least square method in equation

$\Sigma y = na + b\Sigma x$……(i)

$\Sigma xy = a\Sigma x + b\Sigma x2$ ……(ii)

As $\Sigma x = 0$,

$a = \frac{\Sigma y}{n}$

$b = \frac{\Sigma xy}{x^2}$

On this way we can determine the value of a and b and substitute the value of a and b in to the y = a + bx equation and we can forecast the value of required time period. I represent here a mathematical model related to this trend line projection or time line, which is belongs to the total loan flow in 2011AD. This is trend line projection which forecast the total loan in 2011AD.

Table 4.4

Forecasting Model of Loan withdrawer in 2011 AD Siddhartha Bank

Years (X)	Loan Flow(Y)	x = X – 2007	X^2	Xy	y_c
2006	4000	-2	4	-8000	6440
2007	6100	-1	1	-6100	7880
2008	8000	0	0	0	9320

2009	12500	1	1	12500	10760
2010	16000	2	4	16000	12200
Total	ΣY=46600	Σx=0	Σx^2= 10	Σxy =14400	

Let the trend time be

Y = a + bx……(i)

As Σx = 0

a = $\frac{\Sigma y}{n}$ = 46600/5 = 9320 Therefore, a = 9320

b = $\frac{\Sigma xy}{x^2}$ = 14400/10=1440, Therefore, b = 1440

From the trend line Y = a + bx

Y = 9320+1440 (-2) = 6440

= 9320+1440 (-1) = 7880

= 9320+1440 (0) = 9320

= 9320+1440 (1) = 10760

= 9320+1440 (2) = 12200

= 9320+1440 (4) = 15080

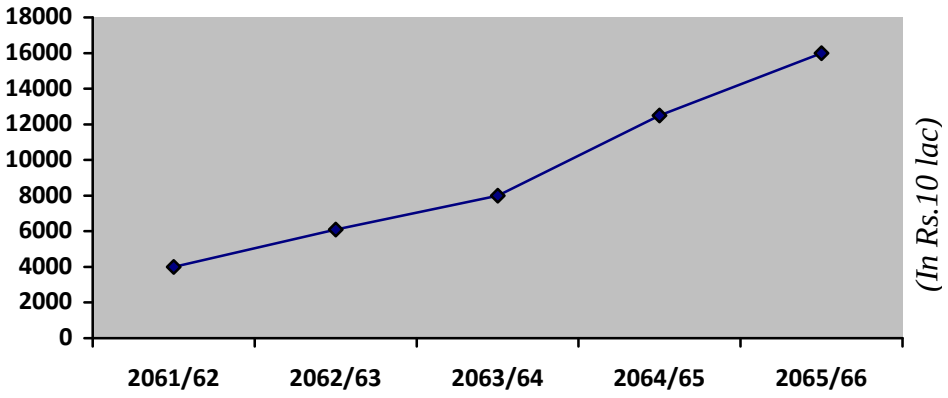
Now for the 2011 A.D. Loan flow up to = 9320+1440 (4) = 15080.

In term of ten lacs the loan flow up 2011 AD to Rs. 150,800,000,000

The line graph forecast the Loan flows in 2011 AD. Total 150,800,000,000 use loan for different Purpose. The trend line Projection clearly showing the Values of Loan flows in 2011AD. This is one important model for forecasting the values. The given model is prepared on Excel sheet. This is given below.

Figure 4.13

Trend line projection of Loan flow up to 2011 AD



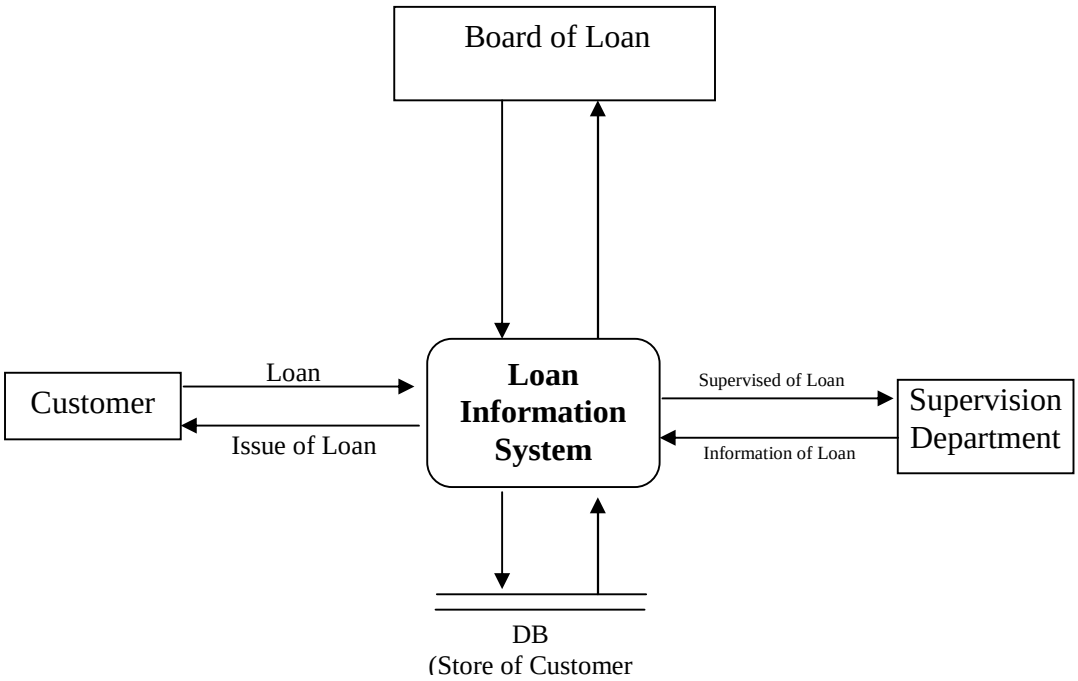
4.10 DFD, DD, ERD for New System

The DFD of New system is presented below both context level and system level diagram.

Context Level DFD of New System

Figure 4.14

Context Level DFD of New Loan Management



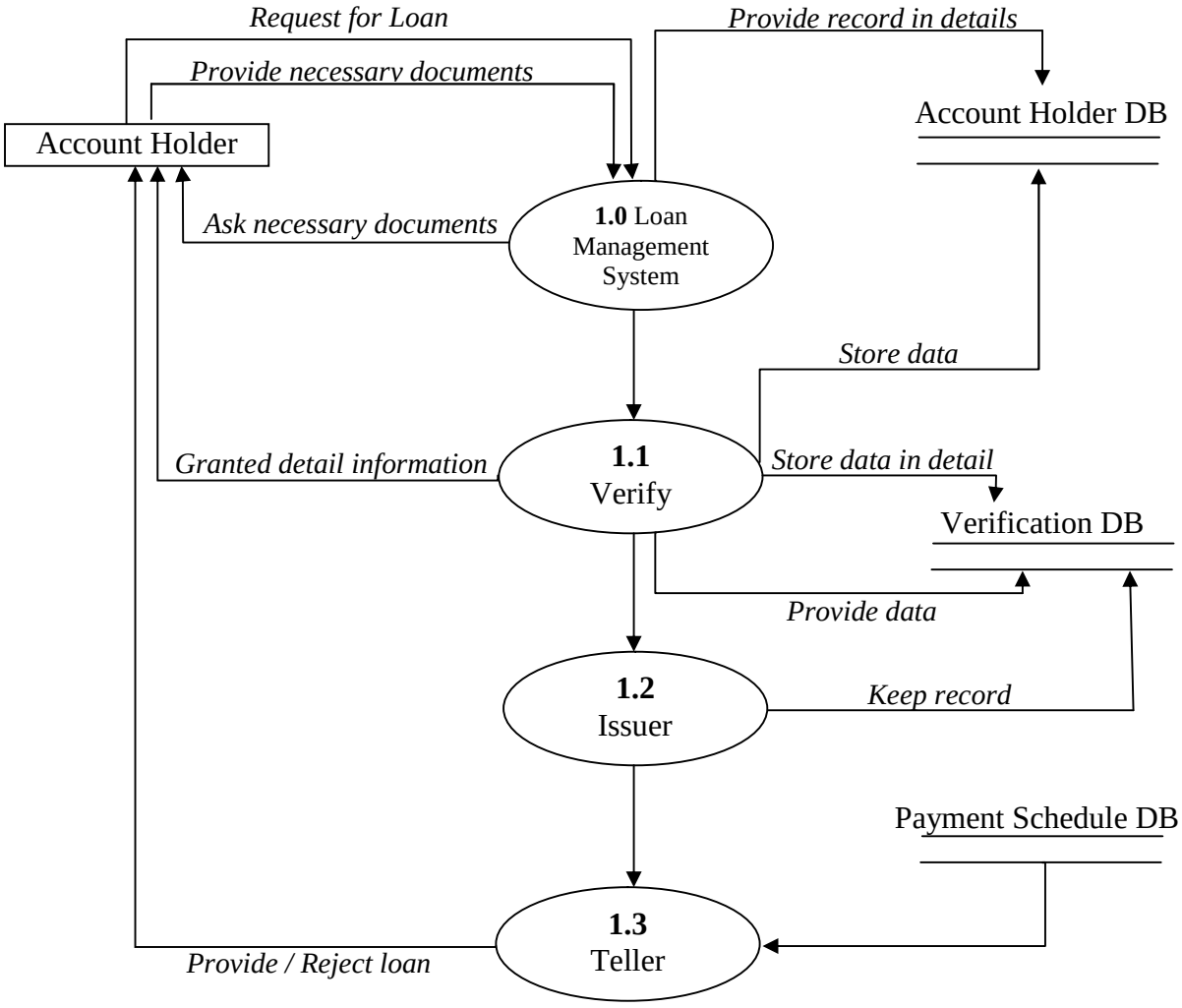
In this system Account holders can fill form in on line system. He or she also granted for the record for deposit money. Systematically it is given as above. In this system the online loan form will be valuable for the time save and far away from the queue system.

System Level DFD of New System

The system level DFD is same as the existing system except the Loan form fulfillment through online which protect the time of account holder and bank. The new system is representing below.

Figure 4.15

System Level DFD of New System



There are relation to the Loan managements and account Holder. Which is external entity of the Siddhartha Bank Limited to the update data for the deposited money and withdraw loan from online system. The update deposited amount added system provide record to the

Payment scheme data base file. And the data base file provide records to Query system levels and this levels provide correct information to the withdraw and deposited department. On this way the new system keep actual record for the deposited and withdraw of cash.

Data Dictionary

The data dictionary serves as the central storehouse of documentation for an information system. In addition to describing each data element, data flow, data store, record, external entity, and process, the data dictionary documents the relationships among these components. I can obtain many valuable reports from a data dictionary, including the following:

An alphabetized list of all data elements by name

i. A report by user departments of data elements that must be updated by each department
ii. A report of all data flows and data stores that use a particular data element.
iii. Detailed reports showing all characteristics of data elements, records, data flows, processes, or any other selected item stored in the data dictionary.

Some attributes use and their variable are given below.

Table 4.5

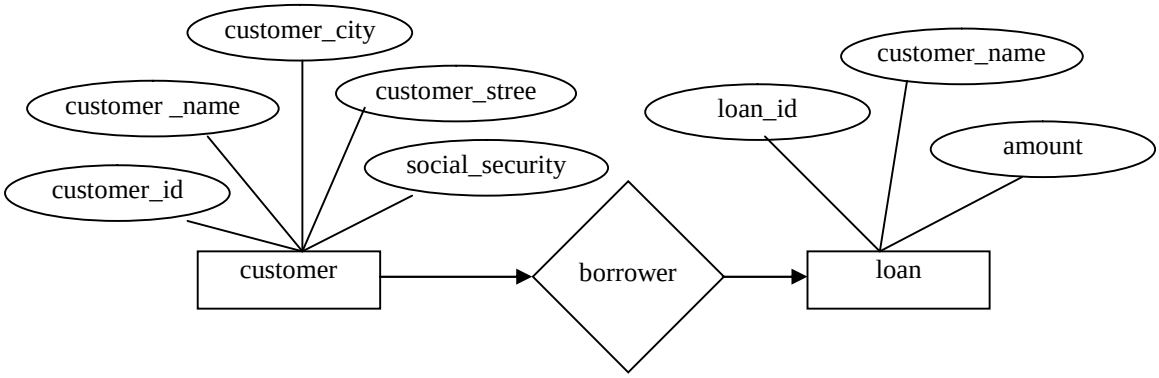
Data Dictionary

Attributes	**Variables**
Customer_id, loan_id	Number(10)
Customer_name	Character (40)
Customer_city	Character (40)
Customer_street	Character (40)
Social_security	Text
Amount	Number(100)

ERD for Applicant and loan department

Figure 4.16

ERD for Applicant and Loan Department



A customer is associated with at most one loan via the relationship borrower and a loan is associated with at most one customer via borrower.

In the one-to-many relationship, a loan is associated with at most one customer via borrower; a customer is associated with several (including 0) loans via borrower
In the many-to-one relationship, a loan is associated with several (including 0) customers via borrower; a customer is associated with at most one loan via borrower.

A customer is associated with several (possibly 0) loans via borrower. A loan is associated with several (possibly 0) customers via borrower. Each entity may result in a relation whose attributes are the properties for the entity .Each relationship may result in a relation whose attributes link the entities described in the relationship

Weak Entity Sets: A weak entity is an entity that cannot be uniquely identified by its own attributes alone.

An entity set that does not have a primary key is referred to as a weak entity set. Has no key attributes.

The existence of a weak entity set depends on the existence of a strong entity set; it must relate to the strong set via a one-to-many relationship set.

The discriminator (or partial key) of a weak entity set is the set of attributes that distinguishes among all the entities of a weak entity set. (Or Set of attributes that uniquely identify weak entities related to same owner entity).

The primary key of a weak entity set is formed by the primary key of the strong entity set on which the weak entity set is existence dependent, plus the weak entity set's discriminator. (Primary key of weak entity: identifying owner's primary key + partial key).

Know Your Customer (KYC)

KYC enables banks to know/understand their customers and their financial dealings to be able to serve them better and prudently manage the risks of Money Laundering and Financing of Terrorism.

KYC need to establish the identity of the client. This means identifying the customer and verifying his/her identity by using reliable, independent source documents, data or information.

For individuals, Bank will obtain identification data to verify the identity of the customer, his address/location and also his recent photograph. This will be done for the joint holders and mandate holders, as well.

For non-individuals, Bank will obtain identification data to :

1) Verify the legal status of the legal person/entity
2) Verify identity of the authorized signatories and
3) Verify identity of the beneficial owners/controllers of the account.

KYC requirements have always been in place and Banks have been taking KYC documents in accordance with the guidelines issued by SBL from time to time. SBL has revisited the KYC guidelines in the context of the recommendations made by the Financial Action on Anti Money Laundering Measures and Combating Financing of Terrorism and enhanced the KYC Standards in line with international benchmarks.

KYC will be carried out at the following stages:

- Opening a new account.
- Opening a subsequent account where documents as per current KYC standards have not been submitted while opening the initial account.
- Opening a Locker facility where these documents are not available with the bank for all the Locker facility holders.
- When the bank feels it necessary to obtain additional information from existing customers based on conduct of the account.
- When there are changes to signatories, mandate holders, beneficial owners etc. KYC will also be carried out in respect of non-account holders approaching the bank for high value one-off transactions.

Documents of Accounts of Individuals.

Legal name and any other names used & Correct permanent address.

(i)Passport (ii)Driving License (iii)Identity card iv)Telephone bill (v) Bank account statement (vi) Letter from any recognized public authority (vii) Electricity bill (viii) Letter from employer (subject to satisfaction of the bank *(any one document which provides customer information to the satisfaction of the bank will suffice)*

Documents of Accounts of Companies.

Name of the company Principal place of business Mailing address of the company Telephone/Fax number

(i) Certificate of incorporation and Memorandum & Articles of Association (ii) Resolution of the Board of Directors to open an account and identification of those who have authority to operate the account (iii) Power of Attorney granted to its managers, officers or employees to transact business on its behalf (iv) Copy of PAN allotment letter (v) Copy of the telephone bill.

Documents of Accounts of Partnership Firms.

Legal Name, Address, Names of all partners and their addresses, Telephone numbers of the firm and partners

(i) Registration certificate, if registered (ii) Partnership deed (iii) Power of Attorney granted to a partner or an employee of the firm to transact business on its behalf (iv) Any officially valid

document identifying the partners and the persons holding the Power of Attorney and their addresses (v) Telephone bill in the name of firm/partners.

4.11 Input, Database and Output Design

The objective of statistical process controls to closely monitor imports units at various stages of the imports process, identifying potential problems before they result in defects and adjusting the imports process accordingly through observations. Another promising role for the computer in quality controls is in the area of vision inspection systems, whiter robotics eyes replace humans in the quality control inspection process.

4.12 Justification of the New System

What about an overall strategy for developing a set of DFD's? A set of DFD's is a graphical, top-down model, so most analysts first create the context diagram, then diagram 0, then all the child diagrams for diagram0, and so on. Other analysts, however, follow an alternative bottom – up strategy. With a bottom – up strategy, we first identify all functional primitives, data stores, external entities, and data flows. Then we group processes with others related symbols to develop the lowest – level diagrams. Next, we group those diagrams in a logical way to form the next higher level. You continue to work our way up until we reach diagram.

Regardless of which strategy we use, we should apply the suggestions and guidelines. The main objective is to ensure that our model is accurate and easy to understand. Reviewing data and process models with users allows us to obtain their feedback and approval for the logical design of the systems. This new system work on the basis of above description and can predict the actual loss of units while the time of supply and while the time of cells. It predicate the Figure of withdraw and deposited.

4.13 Cost benefits analysis and feasibility analysis of New System

Cost-benefits analysis is the process of comparing the anticipated costs of an information system to the anticipated benefits. Cost-benefit analysis is performed throughout the SDLC to determine the economic feasibility of an information system project and to compare alternative solutions. Many cost- benefit analysis techniques exist. This section covers discussion of only the three most common methods:

i. Payback analysis.

ii. Return on investment analysis.

iii. Present value analysis.

Each of the approaches analyses cost-benefits figures differently, but the objective is the same: to provide reliable information for making decisions.

Payback Analysis

This is the traditional but important method of screening the projects. Normally, investor thinks that when it will receive its investment and compares the period required receiving the investment with project life. Sometime, investor itself set the period within which it had to recover the investment. In the case of debt financing, investor may consider the maturity period of debt as the period within which has to recover the investment. Thus, the payback period is the expected number of years required to recover the investment of the project.

$$PB = \frac{I}{CF_A}$$

Where,

I = investment cash outlay

CF_A = annual cash flow

PB = payback period

Return on Investment

Return on investment is book rate of return on investment. It is based on the average accounting profit and average investment and it is calculated by dividing the average accounting profit by average investment. It is calculated as:

$$ARR = \frac{\overline{EAT}}{\bar{I}}$$

Where,

$$\overline{EAT} = \frac{\sum_{t=1}^{n} EAT_t}{n}$$

$$\bar{I} = \frac{I_0 + I_n}{2}$$

$$\overline{EAT} = Average\ Income$$

$$\bar{I} = Average\ Investment$$

n= Project Life

EAT_t = Earnings after Tax for t number of years.

I_0 = Book Value of the investment at the beginning

I_n = Book Value of the investment at the end of n number of years.

Net Present Value

This is widely used discounted cash flow technique of capital budgeting. The previously discussed methods – payback period and accounting rate of return, takes the time value of money in to consideration. But this technique does. While evaluating the capital projects , in this technique, benefits of the project measured in term of cash flow is discounted, in this technique, benefits of the project measured in project is deducted. The remaining value is known as net present value. More precisely net present value of the project is the difference between present value of cash inflow and outflow. Mathematically, it is given by:

$$NPV = \frac{CF_1}{(1+K)^1} + \frac{CF_2}{(1+K)^2} + \frac{CF_3}{(1+K)^3} + \cdots\cdots\cdots\cdots\cdots + \frac{CF_n}{(1+K)^n} - CF_0$$

Where,

NPV = Net present value.

CF_1, CF_2, CF_3 are expected cash flows in first years, second years and third years respectively.

K = cost of capital.

n = project life.

CHAPTER V

RECOMMENDATIONS AND CONCLUSIONS

5.1 Recommendations

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. Management Information Systems are of vital importance for all kinds of organizations. All managerial functions are performed through decision making; for taking rational decisions management information is essential and is procured through the Management Information Systems (MIS) set up by the organization. The term Management Information System is composed of three elements viz., Management, Information and System.

Management is the process of getting things done through and with people. It includes Planning, Organizing, Staffing, Directing and Controlling. Information is data that is processed in a form which helps the management to take decisions. A System is a set of elements joined together to achieve a common objective(s). A business organization is the systems where the divisions, departments, function units are the subsystems.

Management information system is a system having a combination of persons, machines, procedures and data-base, as its elements, which gather data from the intra and extra sources of an organization: and after processing these data, supply management information to the managers in an organization, to support the decision-making process of the management.

According to W.S. Jawadekar, "MIS is defined as integrated system of man and machine for providing the information to support the operations, the management and the decision making function of the organization."

So we can see MIS as a process in which data are acquired, analyzed, evaluated, stored and disseminated to the appropriate person of an organization for supporting the decision making process. MIS provides the information as per the requirement of different levels of organization. It makes the smooth flow of right information to the right person at right time and guards from the bombarding of data and information in the organization.

Siddhartha Bank limited providing different type of loans. Account holders are granted for the loan but the client which is shown in Data Flow Diagram (DFD) first should come to the account holder and the loan management department verify for the eligible for the loan. The providing loan is the long process in generally but the new system which is managed here is very eligible and easy to handle. Where the loan form is fill on online basis, which make easy to take loan and simple.

In this new system clients can deposit their money from anywhere. The Loan Management provides Loan for deposit amount in figure. In this new system there is no additional external entity and more effort to collect loan. There is no qui system. This system protects the time factor and provides the board facilities of wide technology.

Siddhartha Bank Limited (SBL) commenced operations in 2002. The Bank is promoted by a group of highly reputed Nepalese dignitaries having wide commercial experience. It provides a full range of commercial banking services through our 35 branches across Nepal. Authorized Capital - Rs. 1,600,000,000.00, Issued & Paid-Up Capital - Rs. 1,304,935,920.00. The bank has paid up capital of Rs. 1,304,935,920.00 of which 70% is contributed from promoters and remaining from public. Siddhartha Bank Ltd has been providing wide – range of modern banking services through 35 points of representations located in various urban and semi urban part of the country. The bank is pioneer in providing some of the latest / lucrative banking services like E-Banking and SMS Banking services in Nepal. The bank always focus on building sound technology driven internal system to cater the changing needs of the customers that enhance high comfort and value. The adoption of modern Globus Software, developed by Temenos NV, Switzerland and arrangement of centralized data base system enables customer to make highly secured transactions in any branch regardless of having account with particular branch. Similarly the bank has been providing 365 days banking facilities, extended banking hours till 7 PM in the evening, Utility Bill Payment Services, Inward and Outward Remittance services, Online remit Services and various other banking services. Visa Electron Debit Card, which is accessible in entire VISA linked ATMs and POS (Point of Sale) terminals both in Nepal and India, has also added convenience to the customers. The bank has been able to get recognition as an innovative and fast growing institution striving to enhance customer value and satisfaction by backing transparent business practice, professional management, corporate governance and total quality management as the organizational mission. The key focus of the bank is always center on

serving unfulfilled needs of all classes of customers located in various parts of the country by offering modern and competitive banking products and services in their door step. The bank always prioritizes the priorities of the valued customers.

5.2 Conclusion

Siddhartha Bank Limited and Management Information System are co-related to each other. By the Management Information system Siddhartha Bank takes strategic and modelic decision. SBL has a robust, instant, secure and reliable banking solution for its clients.

Services Offers:

- Current balance in your account on real time basis
- Transaction search
- Checking daily transaction in account
- Cheque book replenishment request
- Transfer within own accounts or within group accounts
- Future dated payment instructions within own accounts or within group accounts
- Demand Draft pay order request
- Statement download
- Limit facility request
- Stop payment instructions
- Standing order instructions
- Loan information

All we need from your side is to fill in an application form for online banking service to acquire your user ID, subsequent to which your password will be given at SBL offices personally. Our Marketing Department will be pleased to provide further information. MIS are not just statistics and data analysis. They have to be used as a MBO / Management by objectives tool. They help:

- To establish relevant and measurable objectives.
- To monitor results and performances
- To send alerts, in some cases daily, to managers at each level of the organization, on all deviations between results and pre – established objectives and budgets.

MIS playing vital role for loan management in Siddhartha Bank Limited. By the help of MIS it collects information and gets decision. At Siddhartha, our mission has always been to be the preferred financial partner, by continuing to deliver innovative products and services to our customers, while cultivating an environment that promotes good corporate governance, proactive risk management practices, and corporate social responsibility. Our mission is achieved through the knowledge and dedication of our people, leading to superior results for our stakeholders, while contributing to our nation's financial sector and to its economic welfare.

We finance capital expenditures of Small / Medium / Large-scale companies in the form of Term Loan for periods in excess of 1 year. All loans for tenures above one year are generally secured by first charge on fixed assets or current assets of the borrower with an acceptable asset cover.

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http://en.wikipedia.org.wiki/know_your_customer

http://www.southindianbank.com

APPENDIX

Appendix 1

List of Licensed Commercial Banks in Nepal

S.No	Name of Bank	Operation Date
1	Nepal Bank Ltd	1937/11/15
2	Rastriya Banijya Bank Ltd	1966/01/23
3	Agricultural Development Bank Ltd	1968/01/02
4	NABIL Bank Ltd	1984/07/16
5	Nepal Investment Bank Ltd	1986/02/27
6	Standard Chartered Bank Nepal Ltd	1987/01/30
7	Himalayan Bank Ltd	1993/01/18
8	Nepal SBI Bank Ltd	1993/07/07
9	Nepal Bangladesh Bank Ltd	1993/06/05
10	Everest Bank Ltd	1994/03/12
11	Bank of Kathmandu Ltd	1995/03/12
12	Nepal credit and Commerce Bank Ltd	1996/10/14
13	NMB Bank Ltd	1996/11/26
14	Lumbini Bank Ltd	1998/07/17
15	Nepal Industrial and Commerce Bank Ltd	1998/01/21
16	Machapuchhre Bank Ltd	2000/10/03
17	Development Credit Bank Ltd.	2001/01/23
18	Siddhartha Bank Ltd	2001/04/03
19	Laxmi Bank Ltd	2001/04/03
20	Sidhartha Bank Ltd	2002/12/24
21	Global Bank Ltd	2010/01/02
22	Citizen Bank International Ltd	2010/06/21
23	Prime Commercial Bank Ltd	2010/09/24
24	Sunrise Bank Ltd	2010/10/12
25	Bank of Kathmandu	2010/10/12
26	KIS T Bank Ltd	2010/05/07
27	Janata Bank Ltd.	2010
28	Mega Bank Ltd.	2010
29	Commerce & Trust Bank Ltd.	2010

Appendix 2

Unaudited Financial Result (1st Quarter) of the Fiscal Year 2067/68

Siddhartha Bank Limited
Hattisar, Kathmandu
Unaudited Financial Results (Quarterly)
As at 1st Quarter (17/10/2010) of the Fiscal Year 2067/68

Rs.in '000

S.N.	Particulars	This Quarter Ending 17.10.2010	Previous Quarter Ending 16.07.2010	Corresponding Previous Year Quarter Ending 17.10.2009
1	Total Capital and Liabilities (1.1 to 1.7)	22,396,587	22,772,378	18,603,217
1.1	Paid Up Capital	1,561,048	1,310,436	1,087,204
1.2	Reserve and Surplus	500,355	471,957	395,746
1.3	Debenture and Bond	227,770	227,770	227,770
1.4	Borrowings	734,550	345,000	650,000
1.5	Deposits (a+b)	18,907,002	20,196,940	15,005,000
	a. Domestic Currency	17,922,051	19,091,083	15,008,375
	b. Foreign Currency	985,551	1,102,857	796,513
1.6	Income Tax Liability	38,364	0,304	32,114
1.7	Other Liabilities	366,308	250,880	304,992
2	Total Assets (2.1 to 2.7)	22,396,587	22,772,378	18,603,217
2.1	Cash and Bank Balance	1,107,402	2,377,373	835,185
2.2	Money at Call and Short Notice	757,750	699,042	141,193
2.3	Investments	2,057,107	2,452,720	2,107,540
2.4	Loans and Advances (a+b+c+d+e+f)*	16,638,826	16,653,852	14,785,301
	a. Real Estate Loan	3,339,261	3,309,035	2,275,549
	b. Home/Housing Loan	748,209	770,825	718,315
	c. Margin Type Loan	537,342	506,013	443,360
	d. Term Loan	3,425,901	3,389,735	2,677,334
	e. Overdraft Loan/ TR Loan/ WC Loan	7,178,307	7,121,791	7,435,470
	f. Others	1,458,756	1,531,548	1,235,365
2.5	Fixed Assets	393,971	396,931	122,685
2.6	Non- Banking Assets	-	-	-
2.7	Other Assets	491,561	252,151	451,211
3	Profit and Loss Account	Up to this Quarter	Up to Previous Quarter	Up to corresponding Previous Year
3.1	Interest Income	602,502	2,010,290	401,120
3.2	Interest expenses	449,713	1,406,540	271,924
	A. Net Interest Income (3.1 -3.2)	152,049	611,750	129,203
3.3	Fees, Commission and Discount	13,751	42,750	10,345
3.4	Other Operating Income	15,709	50,806	18,581
3.5	Foreign Exchange Gain/Loss (Net)	1,410	12,100	10,003
	B. Total Operating Income (A+3.3+3.4+3.5)	213,767	717,406	168,132
3.6	Staff Expenses	29,993	103,681	19,549
3.7	Other Operating Expenses	52,201	174,900	31,707
	C. Operating Profit Before Provision (B-3.6-3.7)	131,623	438,854	116,375
3.8	Provision for Possible Losses	12,554	65,322	17,106
	D. Operating Profit (C-3.8)	119,069	373,532	99,770
3.9	Non- Operating Income/Expenses (Net)	-	10,859	-
3.10	Write Back of Provision for Possible Loss			
	E. Profit from Regular Activities (D+3.9+3.10)	119,069	384,391	99,770
3.11	Extraordinary Income/Expenses (Net)	-	-	-
	F. Profit Before Bonus and Taxes (E+3.11)	119,069	384,391	99,770
3.12	Provision for Staff Bonus	10,824	34,945	9,070
3.13	Provision for Taxes	32,473	111,204	27,210
	G. Net Profit/Loss (F- 3.12 3.13)	75,772	238,242	63,490
4	Ratios	At the end of This Quarter	At the end of Previous Quarter	At the end of corresponding Previous Year
4.1	Capital Fund to RWA	12.16%	11.05%	11.20%
4.2	Non- Performing Loan (NPL) to Total Loan	1.00%	0.50%	0.40%
4.3	Total Loan Loss Provision to Total NPL	150.63	270.57%	280.91%
4.4	Cost of Funds	8.77%	7.38%	8.50%
4.5	Credit to Deposit Ratio (Calculated as per NRB Directive)	84.88%	81.21%	90.09%
	Additional Information			
a	Average Yield	12.86%	10.90%	9.37%
b	Average Cost	8.33%	8.28%	6.00%
c	Net Interest Spread	2.86%	2.62%	2.36%
d	Return on Equity	14.00%	14.42%	10.01%
e	Return on Assets	1.30%	1.10%	1.32

* Loan & Advances figures are net of Loan Loss Provision.

Appendix 3

Unaudited Financial Result (2nd Quarter) of the Fiscal Year 2067/68

SiddharthaBank
Hattisar, Kathmandu
Unaudited Financial Results (Quarterly)
As at 2nd Quarter (14/01/2011) of the Fiscal Year 2067/68

Rs. in '000

S.N.	Particulars	This Quarter Ending 14.01.2011	Previous Quarter Ending 17.10.2010	Corresponding Previous Year Quarter Ending 14.01.2010
1	Total Capital and Liabilities (1.1 to 1.7)	24,742,444	22,366,597	20,993,466
1.1	Paid Up Capital	1,561,048	1,561,048	1,087,204
1.2	Reserve and Surplus	432,864	500,336	455,211
1.3	Debenture and Bond	227,770	227,770	227,770
1.4	Borrowings	1,714,550	784,550	1,450,000
1.5	Deposits (a+b)	20,374,807	18,967,802	17,504,532
	a. Domestic Currency	19,256,202	17,922,051	16,631,105
	b. Foreign Currency	1,118,605	985,551	873,425
1.6	Income Tax Liability	3,793	36,964	3,982
1.7	Other Liabilities	427,612	366,308	237,766
2	Total Assets (2.1 to 2.7)	24,742,444	22,366,597	20,993,466
2.1	Cash and Bank Balance	1,827,472	1,797,432	1,553,600
2.2	Money at Call and Short Notice	1,699,667	767,750	402,500
2.3	Investments	2,918,824	2,857,107	2,019,258
2.4	Loans and Advances (a+b+c+d+e)*	17,596,273	16,668,826	16,425,877
	a. Real Estate Loan	4,235,460	4,087,490	4,273,753
	1. Residential Real Estate Loan	772,567	766,511	
	2. Business Complex & Residential Apartment Construction Loan	1,766,426	1,611,843	
	3. Income generating Commercial Complex Loan	234,694	245,802	
	4. Other Real Estate Loan (Including Land purchase & plotting)	1,461,773	1,463,271	
	b. Margin Type Loan	515,560	537,642	441,930
	c. Terms Loan	3,491,987	3,405,601	2,867,442
	d. Overdraft Loan/ TR Loan/ WC Loan	7,663,994	7,179,337	7,407,160
	e. Others	1,689,251	1,458,756	1,373,582
2.5	Fixed Assets	393,101	393,921	139,847
2.6	Non- Banking Assets	-	-	-
2.7	Other Assets	307,107	491,591	425,373

S.N.	Profit and Loss Account	Up to this Quarter	Up to Previous Quarter	Up to corresponding Previous Year Quarter
3.1	Interest Income	1,261,990	632,562	859,704
3.2	Interest Expenses	902,482	449,710	570,926
	A. Net Interest Income (3.1 -3.2)	359,508	182,849	288,778
3.3	Fees, Commission and Discount	26,035	13,701	10,485
3.4	Other Operating Income	33,844	15,778	35,900
3.5	Foreign Exchange Gain/Loss (Net)	10,145	1,418	15,668
	B. Total Operating Income (A+3.3+3.4+3.5)	429,531	213,747	352,850
3.6	Staff Expenses	87,117	29,893	42,965
3.7	Other Operating Expenses	113,771	52,251	66,305
	C. Operating Profit Before Provision (B-3.6-3.7)	248,643	131,603	243,581
3.8	Provision for Possible Losses	29,023	12,554	41,391
	D. Operating Profit (C-3.8)	219,620	119,069	202,190
3.9	Non- Operating Income/Expenses (Net)			
3.10	Write Back of Provision for Possible Loss	-	-	-
	E. Profit from Regular Activities (D+3.9+3.10)	219,620	119,069	202,190
3.11	Extraordinary Income/Expenses (Net)	-	-	-
	F. Profit Before Bonus and Taxes (E+3.11)	219,620	119,069	202,190
3.12	Provision for Staff Bonus	19,965	10,824	18,381
3.13	Provision for Taxes	59,896	32,470	55,143
	G. Net Profit/Loss (F- 3.12-3.13)	139,758	75,772	128,665

S.N.	Ratios	At the end of This Quarter	At the end of Previous Quarter	At the end of corresponding Previous Year Quarter
4.1	Capital Fund to RWA	11.30%	12.16%	11.62%
4.2	Non- Performing Loan (NPL) to Total Loan	0.95%	1.00%	0.43%
4.3	Total Loan Loss Provision to Total NPL	160.08%	150.83%	307.28%
4.4	Cost of Funds	5.78%	5.77%	5.65%
4.5	Credit to Deposit Ratio (Calculated as per NRB Directive)	84.17%	84.09%	91.70%
	Additional Information			
a	Average Yield	12.31%	12.58%	9.78%
b	Net Interest Spread	3.53%	3.91%	3.13%
c	Return on Equity	13.02%	14.60%	18.53%
d	Return on Assets	1.18%	1.35%	1.27%

* Loan & Advances figures are net of Loan Loss Provision.