Chapter I

INTRODUCTION

1.1 Background

The Nepalese financial sector is composed of banking sector and non-banking sector. Banking sector comprises Nepal Rastra Bank (NRB) and commercial banks. The non-banking sector includes development banks, micro-credit development banks, finance companies, co-operative financial institutions, Non-Government Organizations (NGOs) performing limited banking activities. Other financial institutions comprise of insurance companies, Employee's Provident Fund, Citizen Investment Trust, Postal Saving Offices and Nepal Stock Exchange. Nowadays, the financial institutions totally depend on information system.

Information system, an integrated set of components for collecting, storing, and processing data and for delivering information, knowledge, and digital products. Business firms and other organizations rely on information systems to carry out and manage their operations, interact with their customers and suppliers, and compete in the marketplace. For instance, corporations use information systems to reach their potential customers with targeted messages over the web, to process financial accounts, and to manage their human resources. Governments deploy information systems to provide services cost-effectively to citizens. Digital goods, such as electronic books and software, and online services, such as auctions and social networking. A combination of hardware, software, infrastructure and trained personnel organized to facilitate planning, control, coordination, and decision making in an organization is an information system.

The largest growth in most economies is coming from 'information' industries. The success of such knowledge-based organizations lies in their information systems. Also, forced by technological change and globalization of markets, many manufacturing industries are also placing increasing emphasis upon information systems. Information systems are more than just computer programs. Though information and communications technologies are playing an increasing role in

meeting organizations' information needs, an information system is a much more general concept. It refers to the wider systems of people, data and activities, both computer-based and manual, that effectively gather, process, store and disseminates organizations' information.

1.1.1 Management Information System

Management Information Systems (MIS) is the term given to the discipline focused on the integration of computer systems with the aims and objectives of an organization.

The development and management of information technology tools assist executives and the general workforce in performing any tasks related to the processing of information. MIS and business systems are especially useful in the collection of business data and the production of reports to be used as tools for decision making.

1.1.2 Applications of MIS

With computers being present everywhere, as they are today, there's hardly any large business that does not rely extensively on their IT systems. However, there are several specific fields in which MIS has become precious.

* Strategy Support: While computers cannot create business strategies by themselves they can assist management in understanding the effects of their strategies, and help enable effective decision-making.

MIS systems can be used to transform data into information useful for decision making. Computers can provide financial statements and performance reports to assist in the planning, monitoring and implementation of strategy. MIS systems provide a valuable function in that they can organize and manage unmanageable volumes of data that would otherwise be broadly useless to decision makers. By studying these researches study decision-makers can identify patterns and trends that would have remained unseen if the raw data were handled manually.

MIS systems can also use these raw data to run simulated – hypothetical scenarios that answer a range of 'what if' questions regarding alterations in strategy. For

instance, MIS systems can provide predictions about the effect on sales that an alteration in price would have on a product. These Decision Support Systems (DSS) enable more informed decision making within an enterprise than would be possible without MIS systems.

* Data Processing: Not only do MIS systems allow for the collation of vast amounts of business data, but they also provide a valuable time saving benefit to the workforce. Where in the past business information had to be manually processed for filing and analysis it can now be entered quickly and easily onto a computer by a data processor, allowing for faster decision making and quicker reflexes for the enterprise as a whole.

MIS provides information which is needed to manage organizations efficiently and effectively. Management information systems involve three primary resources: people, technology, and information. Management information systems are distinct from other information systems in that they are used to analyze operational activities in the organization. Academically, the term is commonly used to refer to the group of information management methods tied to the automation or support of human decision making, e.g. decision support systems, expert systems, and executive information systems.
(www.wikipedia.org)

In one sentence, we can define MIS as a system, using formalized procedures to provide management at all levels in all functions with appropriate information, based on data from both internal and external sources, to enable them to make timely and effective decisions for planning, directing and controlling the activities for which they are responsible. The actual process involves the collection, organization, distribution, and storage of organization wide information for managerial analysis and control.

As per requirement of MIS, we were supposed to prepare a research study regarding a core function of certain organization, for partial fulfillment of Masters of Business Studies (MBS) program. For the preparation of research study I have choose the Citizens Remit product and MIS associated with it of Citizens Bank International, Kamladi Branch (CBIL, Head Office). This research study is based on observation

while working as an employee in the bank. During my working period as an employee at CBIL, I have been handling this software and dealing with problems associated with it. So this research study focuses on the work of department and my experience on the Citizens Remit Software of Citizens Bank International.

It was a great opportunity to work as at CBIL and student of Shanker Dev Campus. This experience has given me an opportunity to link my theoretical knowledge gained in college with the practical experience on working in an organization and utilize conceptual knowledge in specific area of the study. CBIL's culture is highly open and supportive.

1.1.3 Introduction of CBIL and Citizens Remit

Citizens Bank International Limited (CBIL) was established in 8th Baisakh 2064 B.S as an 'A' class institution licensed by Nepal Rastra Bank. CBIL, since its operation, it has been providing financial services to its customers. Within limited span of its operation it has already made a firm stance in the banking sector by providing the excellent service. This bank is emerging as the most dynamic commercial bank that combines thorough knowledge of the special characteristics of the Nepalese market with very high standard. This bank is managed by a team of experienced bankers and professionals with the view of satisfying the customer needs and also with the view of meeting the needs of growing economy with its well equipped services and modern banking practices.

The slogan of the Citizens Banks International Limited is "YOUR PARTNER FOR PROGRESS".

1.1.3.1 Corporate Profile

Massive changes and developments have taken place during the past two decades in the financial sector. Amidst all these changes, for economic growth and development of New Nepal, Liberalization, Privatization and Globalization in this sector has given birth to the largest commercial bank, "Citizens Bank International Ltd". The Bank is located at Sharada Sadan, Kamaladi, Kathmandu, the heart of financial sector of the country. It is promoted by eminent personalities/business and industrial houses and

reputed individuals having high social standing. It is managed by a team of experienced bankers and professionals.

Vision: The corporate vision of the bank is to be the leading bank known for its service excellence in the region.

Mission: The mission of the bank is to be a trustworthy partner for the progress of individuals and institutions by designing, producing and delivering the best financial solution.

1.1.3.2 Product of Citizens Bank International Limited

1. **Deposits**

Likewise any other bank, CBIL accepts deposit from individuals, business organization and other institutions. With easy access and convenience of banking, the Deposit products are developed and modified as per the necessity keeping in mind satisfaction of customer. It offers the following product and services to its customers:

- **Citizens Super Savings Account (CSSA)**

Citizens Super Savings Account is a Saving Deposit Product to be launched for Nepalese citizens of all age groups. There is no restriction on the amount of deposit and withdrawals and free issuance of Citizens Debit Card which is valid in Nepal as well as in India. One can get free statements and cheque book upon request, free ABBS and a charge of NPR 100.00 p.a. for Citizens SMS and Internet Banking.

- **Citizens Sharedhani Bachat Khata (CSBK)**

Citizens Sharedhani Bachat Khata can be opened by the shareholders of our Bank. Account shall be opened only in the name of individual. There is no restriction on the amount of withdrawals as well as free issuance of Citizens Debit Card which is valid in Nepal as well as in India. In this also one can get free statements and cheque book upon request and no charges are taken on inward remittances (domestic as well as international). It takes a charge of NPR 100.00 p.a. for Citizens SMS and Internet Banking.

- **Senior Citizens Savings**

  Senior Citizens Savings can be opened with primary applicant as a Nepalese Citizen (age above or equal to 55 years).It charges NPR 100.00 p.a. for Citizens SMS and Internet Banking. And 25% discount on Good for Payment cheque issuance fee.

- **Citizens Matribhumi Bachat**

  Citizens Matribhumi Bachat can be opened by Nepalese Citizens residing in foreign countries. Those who are in the process of going abroad for foreign employment are also eligible to open this account subject to presentation of a valid Visa. This doesn't require minimum balance to open the account and there is no restriction on the amount of withdrawals. A charge of NPR 100.00 p.a. is taken for Citizens SMS and Internet Banking. Better rate in Exchange Rate shall be provided to account holder while remitting money to Nepal through Citizens Remit.

- **Citizens Mahila Bachat**

  Citizens Mahila Bachat can be opened with primary applicant as a Nepalese Citizen (woman with age above 16 years). Minors are not eligible to open this account. Alien can also open account with valid documentation subject to full compliance of NRB circulars and/or prevailing act/rule. Free Citizens Debit Card valid in Nepal and India. A charge of NPR 100.00 p.a. is charged for Citizens SMS and Internet Banking and 25% Discount on Locker Deposit.

- **Citizens Muna Bachat**

  Citizens Muna Bachat can be opened in the name of their children by guardians (Nepalese Citizens) of children (minor up to 16 years of age). Alien can also open account with valid documentation subject to full compliance of NRB circulars and/or prevailing act/rule. Free Citizens Debit Card valid in Nepal and India and a charge of NPR 100.00 p.a. for Citizens SMS and Internet Banking.

- **Citizens Recurring Deposit**

  Citizens Recurring Deposit can be opened with primary applicant as a Nepalese Citizen. Minors are also eligible to open this account. Alien can also open account with valid documentation subject to full compliance of NRB circulars and/or

prevailing act/rule. Loan facility of 90% of the deposit amount can be enjoyed by the account holder. A charge of NPR 100.00 p.a. for Citizens SMS and Internet Banking.

- **Citizens ZERO Balance Account**

  Any one can open this account which doesn't require any minimum balance for the issuance of cheque book. And free issuance of Citizens Debit Card which is valid in Nepal as well as in India. On demand cash can be withdrawal from any branch. There is also a provision of Locker Services. A charge of NPR 100.00 p.a. for Citizens SMS and Internet Banking.

- **Citizens Saving**

  Citizens Saving is the savings for individuals. It can be opened with zero balance. And it currently provides an interest rate of 6.00% p.a where interest rate is calculated on daily balance and credited quarterly.

- **Citizens Dollar Saving**

  It's a type of saving for individuals whose earnings are in foreign currency or who is a resident abroad. It can be opened with minimum balance of USD 100.00 and provides an interest rate of 0.50%.

- **Citizens Euro Saving**

  Citizens Euro saving is saving for individuals whose earnings are in foreign currency or who is a resident abroad. It provides an interest rate of 0.50%.

- **Citizens GBP Saving**

  Citizens GBP Saving is saving for individuals whose earnings are in foreign currency or who is a resident abroad. It provides an interest rate of 0.50%.

- **Citizens Fixed Deposit**

  Fixed deposit accounts are designed for individuals and corporate houses who qualify for interest earning on the idle funds for a period of time. This account is opened for a fixed period of time. It's a saving for individuals for future benefits.

- **Citizens Call Deposit (NPR)**

  Call deposits have the characteristics of both the current and saving deposits (Hybrid Deposit. This type of account is designed for individuals and institutions and currently provides an interest rate of 3.00% to 10.50%.

- **Citizens Current Account**

  This type of account is designed to cater the need of individuals, business houses and institutions for unlimited access to transactions. It can be opened with minimum balance of NPR 10,000.00.

- **Citizens Rastrasewak Saving**

  It's a savings for Officials of Nepal Government, Private Sector, Semi Government Bodies and Government owned Corporations / Associations / Enterprises and their immediate family members with an interest rate of 7.00% p.a and minimum balance of NPR 0.00.

- **Citizens Bidhyarthi Bachat**

  This type of account is especially designed for students. It's a savings for Nepalese students with minimum age of 16 years and maximum age of 50 years. It provides an interest rate of 6.50% which doesn't require a minimum balance or zero. Interest is calculated on Daily balance and credited quarterly.

- .**Citizens Special Savings**

  This type of is specially made for Nepalese individuals for the savings with an interest rate of 7.00% p.a with minimum balance NPR 1000.00.

- **Citizens Mofashal Bachat Khata**

  It is also made for Nepalese individuals for the savings with an interest rate of 8% p.a. with minimum balance NPR 1000.00.

2. LOANS AND ADVANCES

Corporate & Commercial Finance

Citizen SME Finance

Citizens Auto Loan

Citizens Home Loan

Citizens Mortgage Loan

Citizens Education Loan

Citizens Equipment Financing

Other loan

1.1.3.2 Citizens Remit

Citizens Remit, a premium online customer focused and technology oriented Money Transfer product is brought to you by Citizens Bank International Limited (CBIL), the leading bank of Nepal. CBIL is carrying out its online product from almost 100 payout locations including its branches within the territory of Nepal including in remote areas.

Citizens Remit is a state of art web-based money transfer system. It is easily accessible through the main web domain **https://www.citizensremit.com/**. It can be directly accessed by all the branches and partners thus ensuring prompt execution of the remittance. The product is monitored and serviced 24/7 by our Remittance Service Department dedicated to deliver fast and reliable services to the Customers.

The remitting agency can transfer funds either to the beneficiary against the authorized identification document or can credit the Customer's Account maintained either with CBIL or other local banks of Nepal. The money transferred through this product will be on real time basis. The system will automatically generate RAD number. The RAD number is number generated by the system for each transaction and is unique and this becomes the main basis for payment at the receivers' end.

- The remitter will make request for fund transfer to pre-agreed location against cash deposit and he/ she is required to fill all details i.e. Name, ID number, Currency & Amount etc.
- Based on the information provided by remitter, remitting agent shall transfer the data to the system and upon approval of transfer, RAD number will be generated by the System, which will be provided to the remitter.

- The remitter will have to pass details of RAD number, Amount and nearest location from where money is to be collected to the beneficiary. The beneficiary will go to the pre-arranged payment location and claim the amount. The payment location will be either CBIL or its agent.
- For the payment to be paid from the CBIL branch, the branch, upon confirmation of RAD number and identification of beneficiary, will make the payment.
- For the payment to be paid from other authorized agent, agent shall make payment upon confirmation of RAD number, Identification and after receiving authorization from CBIL.
- For the payment to be credited to the account with CBIL and/ or other banks in Nepal, payment details i.e. beneficiary's name, account number, bank/ branch name and amount etc., will be provided in Citizens Remit. Based on the information in the System, CBIL will arrange to make deposit to the beneficiary's account. CBIL will arrange to make deposit to beneficiary's branch through its branch where CBIL has branch or through its agent, where CBIL does not have its Branch.
- Account credit confirmation will be provided to Remittance Cell by CBIL branch/ paying agent that will be passed on to the Remitting agent.
- The remitter will make request for fund transfer to pre-agreed location against cash deposit and he/ she is required to fill all details i.e. Name, ID number, Currency & Amount etc.
- Based on the information provided by remitter, remitting agent shall transfer the data to the system and upon approval of transfer, RAD number will be generated by the System, which will be provided to the remitter.

1.1.3.3 Special Features of Citizens Remit

The Online Remittance Software:

- Web based technology, direct access from our main web site http://www.citizensremit.com/
- Provide instant updates on remittance request at the receiving end for prompt processing.
- Manage agents and officers through central administration at CBIL.
- Provide a secure and reliable means of remittance information.
- Provide instant updated information to the CBIL agents.

Other Services

- Remittance Services
- Foreign Currency/ Traveler's Cheque Sales/ Purchase
- Locker Facility
- Automated Teller Machine (ATM) Service
- Citizens Internet Banking
- SMS Banking

Different Departments at CBIL

Some of the major departments of CBIL are as follows:

- Customer service department
- Cash department
- Remittance department
- Human resource department
- General service department
- Card department
- Credit control department
- Information Technology or System Department
- Trade and Credit Operation
- Treasury and Finance Department
- Risk Management Department
- Branch Co-ordination Cell
- Internal Audit Department

1.2 Focus of the Study

The role of commercial banks is extremely important for the development of industries, trade, commerce, agriculture of the country. In face, no nation can develop itself without the development of the bank. The study from different development countries have proven that the commercial bank plays a vital role in its economy.

The bank is using PUMORI PLUS version IV as a banking software and online product namely Citizens Remit for its remittance business. As a MIS student, for research study, the researcher had chosen the study of the online product of CBIL's remittance software Citizens Remit. In this research study, author makes an effort to provide a detailed research on its existing system and framework for the improvement of the online product. The author had chosen the centralized International Remittance Cell to study the role of MIS and effectiveness of the online software.

Therefore, this research study mainly focused on the study of current role of Management Information System of the Citizens Remit at Citizens International Bank Limited.

1.3 Statement of the Problem

- There is lack of the published reports and magazines articles about the remittance data and MIS on banks and online products like Citizens Remit.
- In Nepalese Banking Industries there are not fully supported MIS software system because of the complex process, activities and rules of the various departments or functions of the company. Marketing, accounting system are not fully automated which is very difficult to understand. They are sometimes not user friendly. As a result it is difficult to develop fully automated MIS in the financial institutions
- In financial institutions, there are scarcities of human resources having knowledge of MIS for the smoothness in the operation of the daily transaction. As a result they could not convince the system developer.

1.4 Objective of the Study

The objective of this research study is to explain core function of Citizens Remit in CBIL. The main objective of this study is to acquire a sound understanding of different practices and policies in the core function of remittance business of CBIL. This study is prepared on the title "Citizens Remit at CBIL," so the objectives of this study are:

a) To introduce functioning of Citizens Remit at CBIL.

b) To introduce the kind of MIS used in Citizens remit.

c) To analyze the problems associated with MIS of Citizens Remit.

d) To provide some of the recommendation regarding the better functioning of the Citizens Remit.

1.5 Limitations of the Study

Major limitations of this research study are:

- The study and results are totally based on the information collected within the organization itself through primary and secondary data collection.
- This new remittance service was just lunched and was under development.
- The reliability of the facts and information depends on the sources of data.
- The recommendation is based on the knowledge gain through the course structure; it is not the expert point of view.

1.6 Methodologies of the Study

The Study focuses on the works done at different department of the GLIC. The methodologies used in the collection of the data for Study are:

a) Sources of Data

Primary Source

- Personal Interview
- Observation

Secondary Source

- Different Annual Reports and old thesis
- Different websites:
- www.wikipedia.com, www.google.com,etc.
- www.nrb.org.np and other published reports/ articles.
- Organization's website : www.ctznbank.com.np

1.7 Organization of the Report

- **CHAPTER I**:

The first chapter of this Study is devoted to introduction of the MIS. That contains background, objectives of the study, methodologies used, organization selection, placement and limitations of the Study.

- **CHAPTER II**:

This chapter contains literate review about the study.

- **CHAPTER III**:

  This chapter contains research methodology about the study.

- **CHAPTER IV**:

  This chapter contains the system analysis, design and data presentation.

- **CHAPTER V**:

  This chapter presents conclusion and recommendations.

Chapter II

REVIEW OF LITERATURE

The review of literature is the study of various literatures related to the topic. This chapter constitutes the review of the literature in two aspects: the conceptual framework, and the related studies from various books, journals, articles, research report and thesis.

2.1 Conceptual Review

Management Information System is that systems which helps to collect information and generates consolidate and comparative reports to facilitate the decision making. It is a tool that provides right information at right time to do right decision on the instruction. Conceptual framework of MIS can be defined as per the figure below:

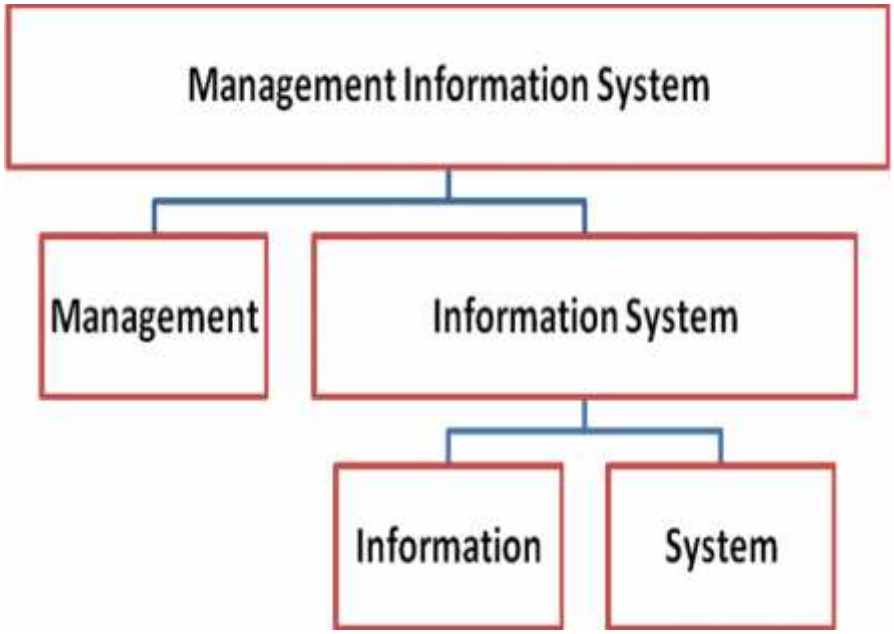


Figure 2.1 Conceptual Reviews of MIS

2.1.1 Management

Management in all business and organizational activities is the act of getting people together to accomplish desired goals and objectives using available resources efficiently and effectively. Management comprises of planning, organizing, staffing, leading or directing and controlling an organization (a group of one or more people or entities) or effort for the purpose of accomplishing a goal. Resourcing encompasses the deployment and manipulation of human resources, financial resources, technological resources and natural resources.

Since organizations can be viewed as systems, management can also be defined as human action, including design, to facilitate the production of useful outcomes from a system. This view opens the opportunity to 'manage' oneself, a pre-requisite to attempting to manage others.

2.1.1.1 Functions of Management

- **Planning**: Deciding what needs to happen in the future (today, next week, next month, next year, over the next five years, etc.) and generating plans for action.
- **Organizing**: (Implementation) pattern of relationships among employees, making optimum use of the resources required to enable the successful carrying out of plans.
- **Staffing**: Job analysis, recruitment and hiring for appropriate jobs.
- **Leading/directing**: Determining what needs to be done in a situation and getting people to do it.
- **Controlling/monitoring**: Checking progress against plans.
- **Motivation**: Motivation is also a kind of basic function of management, because without motivation, employees cannot work effectively. If motivation does not take place in an organization, then employees may not contribute to the other functions (which are usually set by top-level management).

2.1.1.2 Levels of Management

Most organizations have three management levels: Lower (Operational) -level, middle (tactical)-level, and top (strategic)-level managers. These managers are classified in a hierarchy of authority, and perform different tasks. In many organizations, the number

of managers in every level resembles a pyramid. Each level is explained below in specifications of their different responsibilities and likely job titles.

Figure2.2: Level of Management (http://www.managementstudyguide.com)

Top-level managers consist of board of directors, CEOs, management team, etc. They are responsible for controlling and overseeing the entire organization. They develop goals, strategic plans, organizations policies, and make decisions on the direction of an organization. In addition, top-level managers play a significant role in the mobilization of outside resources and are accountable to the shareholders and general public.

Middle-level managers consist of deputy managers, branch managers and department managers or heads. They are accountable to the top management for their department's function. They devote more time to organizational and directional functions. Their roles can be emphasized as executing organizational plans in conformance with the organization policies and the objectives of the top management, they define and discuss information and policies from top management to lower management, and most importantly they inspire and provide guidance to lower level managers towards better performance.

Lower-level managers consist of supervisors, operation level staffs, tellers, etc. They focus on operational level activities and day to day work activities. They usually have the responsibility of assigning employees tasks, guiding and supervising employees

on day-to-day activities, ensuring quality and quantity output, making recommendations, suggestions, and up channeling employee problems, etc.

2.1.1.3 Information System

A System is a set of interacting or interdependent components forming an integrated whole.

A system is a set of elements and relationships which are different from relationships of the set or its elements to other elements or sets. They investigate the abstract properties of systems' matter and organization, looking for concepts and principles that are independent of domain, substance, type, or temporal scale.

The system concept can be generalized as;

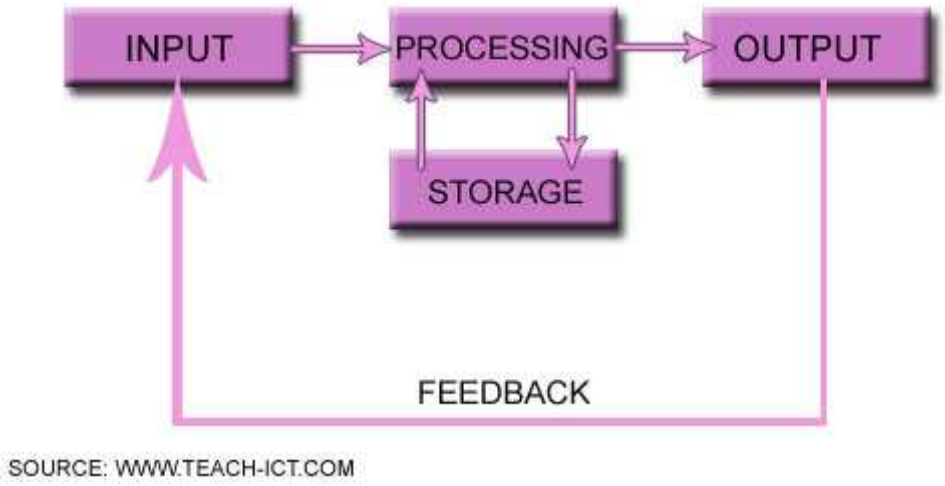


Figure 2.3 System Concept

It has three basic components: **input, processing and output.**

A system, in general, can be defined as a *group of interrelated components working together toward a common goal by accepting inputs and producing outputs in an organized transformation process*.

Information Systems (IS) is an academic/ professional discipline bridging the business field and the well-defined computer science field that is evolving towards a new scientific area of study. An information systems discipline therefore is supported

by the theoretical foundations of information and computations such that learned scholars have unique opportunities to explore the academics of various business models as well as related algorithmic processes within a computer science discipline. Typically, information systems or the more common legacy information systems include people, procedures, data, software, and hardware that are used to gather and analyze digital information. Specifically computer-based information systems are complementary networks of hardware/software that people and organizations use to collect, filter, and process, create, & distribute data.

2.1.1.4 Types of Information System

Information systems differ in their business needs and the information varies depending upon different levels in organization. Information system can be broadly categorized into following:

- Transaction processing system
- Management Information System
- Decision support system

The information needs are different at different organizational levels. Accordingly the information can be categorized into following:

- Strategic information
- Managerial information
- Operational information.

Transaction Processing Systems

1. It processes business transaction of the organization. Transaction can be any activity of the organization. For example, take a railway reservation system. Booking, canceling, etc are all transactions. Any query made to it is a transaction.
2. This provides high speed and accurate processing of record keeping of basic operational processes and includes calculation, storage and retrieval.
3. Transaction processing systems provide speed and accuracy, and can be programmed to follow routines functions of the organization.

Management Information Systems

1. It assists lower management in problem solving and making decisions. They use the results of transaction processing and some other information also.
2. An important element of MIS is database. A database is a non-redundant collection of interrelated data items that can be processed through application programs and available to many users.

Decision Support Systems

1. These systems assist higher management to make long term decisions. These type of systems handle unstructured or semi structured decisions. A decision is considered unstructured if there are no clear procedures for making the decision and if not all the factors to be considered in the decision can be readily identified in advance.
2. A decision support system must very flexible.
3. The user should be able to produce customized reports by giving particular data and format specific to particular situations.

It will be rather more clear and understandable with the help of the figure below:

Figure2.4 Types of Information System

2.1.2 Management Information System

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

The importance of maintaining a consistent approach to the development, use, and review of MIS systems within the institution must be an ongoing concern of both bank management and OCC examiners. MIS should have a clearly defined framework of guidelines, policies or practices, standards, and procedures for the organization. These should be followed throughout the institution in the development, maintenance, and use of all MIS.

MIS is viewed and used at many levels by management. It should be supportive of the institution's longer term strategic goals and objectives. To the other extreme it is also those everyday financial accounting systems that are used to ensure basic control is maintained over financial recordkeeping activities.

Financial accounting systems and subsystems are just one type of institutional MIS. Financial accounting systems are an important functional element or part of the total MIS structure. However, they are more narrowly focused on the internal balancing of an institution's books to the general ledger and other financial accounting subsystems. For example, accrual adjustments, reconciling and correcting entries used to reconcile the financial systems to the general ledger are not always immediately entered into other MIS systems.

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

Effective MIS should ensure the appropriate presentation formats and time frames required by operations and senior management is met. MIS can be maintained and developed by either manual or automated systems or a combination of both. It should always be sufficient to meet an institution's unique business goals and objectives. The effective deliveries of an institution's products and services are supported by the MIS.

These systems should be accessible and useable at all appropriate levels of the organization.

MIS is a critical component of the institution's overall risk management strategy. MIS supports management's ability to perform such reviews. MIS should be used to recognize, monitor, measure, limit, and manage risks.

2.1.2.1 Advantages of MIS

- It facilitates planning: MIS improves the quality of plants by providing relevant information for sound decision - making. Due to increase in the size and complexity of organizations, managers have lost personal contact with the scene of operations.
- In Minimizes information overload: MIS change the larger amount of data in to summarize form and there by avoids the confusion which may arise when managers are flooded with detailed facts.
- MIS Encourages Decentralization: Decentralization of authority is possibly when there is a system for monitoring operations at lower levels. MIS is successfully used for measuring performance and making necessary change in the organizational plans and procedures.
- It brings Co ordination: MIS facilities integration of specialized activities by keeping each department aware of the problem and requirements of other departments. It connects all decision centers in the organization.
- It makes control easier: MIS serves as a link between managerial planning and control. It improves the ability of management to evaluate and improve performance. The used computers has increased the data processing and storage capabilities and reduced the cost.

2.1.2.2 Characteristics of MIS

Management information systems (MIS) is an organized approach to gathering information from company operations and making a strategic management decision. Developing quality characteristics for gathering information is essential to making solid management decisions.

- **Relevance**: Information should be relevant to the strategic decision that company management is currently reviewing. Because companies may review several business opportunities at one time, avoiding information not relating to the decision is essential.

- **Accurate**: MIS information should be accurate and avoid any inclusions of estimates or probable costs. Making decisions based on estimates can lead to cost overruns or lower profits from future operations.

- **Timely**: Many management decisions are based on information from a certain time period, such as quarterly or annual periods. Information outside of the requested time frame may skew information and lead to an improperly informed decision.

- **Exhaustive**: MIS information gathering should resemble an upside-down triangle. The early stages of information gathering should be exhaustive, including all types of company information. As management narrows its decision-making process, the information is refined to include only the most relevant pieces.

- **Cost Effective**: The MIS needs to be a cost-effective and efficient system for gathering information. Most of these systems are developed internally, creating costs that cannot be passed to clients.

2.1.2.3 Objectives of MIS

- Reach an understanding of the relevant processes on the basis of the available historic information. This element forms the basis for the development of models, required for forecasting and simulation.
- Provide information on the current situation, especially for early warning purposes, for instance related to issues impacting on food security, water resources or pest and disease status.
- Forecast changes and impacts, either natural or man-made , as an element in vulnerability assessments.
- Forecast the consequences of policy decisions and measures before they are implemented in reality. This implies evaluating options for several given scenarios

based on the possible results and predicted consequences, and selecting the most acceptable alternative.

2.1.2.4 Limitations of MIS

- MIS incorporates a wide variety of knowledge areas.
- Both technology and technology-related products are evolving at an extremely fast and unpredictable pace.
- Many of the terms used in MIS environments are imprecise and controversial.
- MIS problems often are not east to define or structure.
- The body of knowledge in MIS is relatively recent and scarce.
- A lack of rapport often exists between MIS personnel and management and also between MIS personnel and users.

2.1.3 Concept of Remittance

Remittances are transfers of money by foreign workers to their home countries. Remittances are playing an increasing larger role in the economies of many countries. The World Bank officially estimates that migrants from developing countries in developed countries sent home more than $223 billion to their families in developing countries in 2005 – a figure more than twice the level of international aid. Currently almost 23% of the total GDP is contributed by remittance. Remittance also refers to the accounting concept of a monetary payment transferred by a customer to a business.

Globally, remittances contribute to economic growth and to the livelihoods of needy people. Moreover, remittance transfers can also promote access to financial services for the sender and recipient.

2.1.3.1 Features of Remittance

- Between individuals and/or households.
- Typically transfers from relatively richer to relatively poorer households or individuals.
- Small and frequent.

- Higher and/or more frequent in certain seasons (seasonal patterns vary by migrant group due to cultural or religious dates – e.g. New Year, Dashain, Dipawali, end of Ramadan, Christmas etc)
- Often on a rise in times of economic downturn or of conflict in the receiving area.
- In significant part routed through informal channels.

2.1.3.2 Types of Remittance

- **Workers' Remittances:**

  Remittances are money sent from one individual or household to another. International remittances are those sent be migrant workers who left their home country. Domestic remittances are those sent by migrant workers who left their home village or town to work elsewhere in their home country (e.g. rural-urban migration; sometimes also referred to as national remittances). Typically remittances are in cash rather than goods. Imports or goods purchased on location are, however, also common.

- **Communal or Collective Remittances:**

  Money sent by migrant associations or church groups to their home communities. By being communal or collective, however, these remittances are very different from household or individual remittances both in intended use and in that the volume is very low on a global scale.

2.1.3.3 What is a Remittance Transfer ?

A "remittance transfer" refers to the transfer of money from an individual, usually a person who has emigrated from his/her city or country of origin, to another individual, usually a relative who remains at home. Remittance transfers are typically person-to-person payments and of low monetary value. There are two basic categories of remittance transfers: domestic and international. Domestic remittance transfers occur when an individual transfers funds from one location to another within the same country. The predominant pattern within this category is that the individual sending the funds, i.e., the remitter, hails from a rural area and has relocated to an urban center. In contrast, an international remittance transfer involves an immigrant in a new country sending funds to his country of origin, or to individuals (usually family)

in a third country. Frequently, the remitter has moved, for the purpose of employment, from a developing country to an industrialized one. Remittance transfers include neither the international sale and transfer of goods nor the cross-border transfer of funds between businesses. For the purposes of this brief, a remittance transfer will refer only to international remittances.

2.2.3.4 Transfer Systems

Cost, speed, cultural familiarity and service reliability have been identified as the main determinants for choosing transfer systems. However the transfer systems are classified as below:

Formal Transfer Systems: Formal money transfers are offered primarily by banks with account to account transfers such as through SWIFT and by money transfer operators, such as Western Union or Money Gram, and their agents.

Informal Transfer Systems: A range of informal systems exist which include the migrants carrying money themselves or sending it with relatives or friends. There are also a number of informal services, typically operating as a side business to an import-export operation, retail shop, or currency dealership. Most of them operate on the basis of no or very little paper or electronic documentation. The transaction is communicated by phone, fax, or email to the counterpart who will be paying out. The details vary, such as whether there is a password or form of identification or not.

Most publicized and studied are Hawala and Hundi services. Both operate in a very similar fashion and the terms can be used interchangeably though there are geographical links: whereas Hawala is typically used more in the context of the Middle East and Arab countries and migrant populations, Hundi is typically connected with South Asia.

2.2 Review of Articles

2.2.1 Overview of Management Information System (MIS)

Management Information System (MIS) is a general name for the academic discipline covering the application of information technology to support the major functions and activities of either a private sector business or public sector institution. In business, information systems support the process of collection, manipulation, storage,

distribution and utilization of an organization's information resources, business processes and operations.

As an area of study it is also referred to as information technology management. The study of information systems is usually a commerce and business administration discipline, and frequently involves software engineering, but also distinguishes itself by concentrating on the integration of computer systems with the aims of the organization.

The area of study should not be confused with computer science which is more theoretical in nature and deals mainly with software creation, and not with computer engineering, which focuses more on the design of computer hardware. IT service management is a practitioner-focused discipline centering on the same general domain.

Management Information Systems are not just statistics and data analysis, but also assessment of human capabilities. They have to be used as an MBO—Management by Objectives--tool. They help to establish relevant and measurable objectives; monitor results and performances (reach ratios) and send alerts to managers at each level of the organization, on all deviations between results and pre-established objectives and budgets.

The majority of information systems are created for, and operated by, people in functional areas (e.g., manufacturing, human resources, accounting, finance and marketing). MIS professionals must possess a combination of business and technical knowledge to develop information systems that address the needs of the organization. They must comprehend organizational structures, objectives, operations including processes and the flows of data between processes and the financial connotations related to these factors. An MIS professional should interrelate effectively with users and design systems that would support their needs.

MIS managers and professionals should keep themselves updated with evolving information technologies. They should have a solid foundation of technical skills to select appropriate technologies and to implement computer-based information

systems. Thus, MIS people must be well versed in topics such as systems development tools and techniques, information architecture, network configurations, databases, and systems integration.

Administrators, supervisors and managers need information, but they are often overloaded with data. Information management systems sustain these piles of data into comprehensible and concise descriptions and patterns of performance. Information systems are not just technological facilities - such as databases.

They include methods of pondering about your organization that will aid in approaching issues more effectively and efficiently. Management information systems make use of resources that would assist in understanding and making better decisions about the mechanical and personal sides of information systems.

2.2.2 Overview of Management By Objectives (MBO)

Management by objectives (MBO) is a systematic and organized approach that allows management to focus on achievable goals and to attain the best possible results from available resources. It aims to increase organizational performance by aligning goals and subordinate objectives throughout the organization. Ideally, employees get strong input to identify their objectives, time lines for completion, etc. MBO includes ongoing tracking and feedback in the process to reach objectives.

Management by Objectives (MBO) was first outlined by Peter Drucker in 1954 in his book 'The Practice of Management'. In the 90s, Peter Drucker himself decreased the significance of this organization management method, when he said: "It's just another tool. It is not the great cure for management inefficiency. Management by Objectives works if you know the objectives, 90% of the time you don't."

According to Drucker, managers should "avoid the activity trap", getting so involved in their day to day activities that they forget their main purpose or objective. Instead of just a few top managers, all managers should:

- Participate in the strategic planning process, in order to improve the implement ability of the plan, and

- Implement a range of performance systems, designed to help the organization stay on the right track.

This Management by Objectives (MBO) operations is all compatible with empowerment, if you follow the main principle of decentralization: telling people what is to be done, but letting them achieve it their own way. To make the principle work well, people need to be able to develop personally. Further, different people have different hierarchy of needs and, thus, need to be managed differently if they are to perform well and achieve their potential.

Shrestha (2007) *"Fundamentals of Banking"*, the author has highlighted the concept and principles of good lending. In this book the author has said that lending is the fundamental function of commercial banks. The commercial banks fulfill the credit needs of various sectors of the economy as well as the investment on securities, whether it is government or non-government. The lending policies of commercial banks are based on the profit maximizing of the institution as well as the economic enhancement of the country. Out of their total income on an average 60 to 70% of income consists from lending activities which is called as exposure based income because banks are exposed to default risk. Moreover, the writer has mentioned that safety; liquidity, purpose, profitability, spread, security, national income and suitability etc. should be wisely considered by commercial banks for doing lending practices.

The performance of no such sector is as contingent upon the future performance of other enterprises as is that of the financial sector. This contingency is so high that it has always been difficult to the banking industry to pursue the objective of profit maximization as zealously as another industry could afford to. It is this difference, which explains precisely why lenders cannot simply lend to those who are willing to offer the highest price (interest rate).

Radhasawami & Vasudevan (1979),"The mechanism of credit creation is used to expand the business. Fluctuation in the credit facilities granted by banks has an important bearing on the level of economic activity. Expansion of banks credit is

followed by increase in production, employment, sales and prices. In a developing economy the banks offer more and more credit and increase the resources of the industries, thereby causing faster economic development. Banks play a decisive role in the industrial development of the country. The credit facilities extended by banks must be uniform and rational; otherwise there will be haphazard development of country. The flow of credit is very much like smooth and uniform throughout the organs of human body, so also credit should flow steadily and evenly through various sectors of the economy. If credit flow is artificially plugged or arrested, it would be irreparable harm to economy just as clotting of our blood vessels would lead to fatal results."

“Lending is the essence of commercial banking; consequently the formulation and implementation of sound Lending policies are among the most important responsibilities of bank directors and management. Well-conceived Lending policies and careful Lending practices are essential if a bank is to perform its credit creating function effectively and minimizing the risk inherent in any extension of credit.” *(Adhikari,2007)*

“Lending is a form of trade. It means giving up purchasing power now in exchange for power in the future.” *(Kohn; 1996:32)*

“Commercial Banks perform a very important service to all sectors of the economy by providing facilities by lending and investing activities to the people. The primary function of commercial banks is the extension of credit to worthy borrowers. In making credit available, commercial banks are rendering a great social service, through their actions production is increased, capital investments are expanded, and a higher standard of living is realized. Although the investment activities of commercial banks are usually considered separately from lending, the economic effects and social results are the same” *(Reed, Cotter, Gill and Smith; 1980:1-5)*

Bhatta (47th anniversary), In this article ***"Financial policies to Prevent Financial Crisis"***, Nepal Rastra Bank Samachar, the author has suggested that the financial markets have become an exciting, challenging and ever changing sector in the recent years. The emergence of global financial institutions as a result of increased economic

liberalization has raised a host of questions for financial planners and policy makers. TPhe growth of financial markets has caused complexities in the management and if they are not managed and addressed properly with appropriate policies, then the result is the financial crisis. The financial crisis, which took place in Chile in 1992, Mexico in 1994, South Asian countries 1997, Russian Federation in 1998, Ecuador and Brazil in 1999 and Argentina in the late 2001 were the result of an abrupt growth in the size of financial markets posing serious challenges to their management.

According to the author of the article, the financial crisis in most of the markets, particularly in emerging market, undergo several stages. The, initial stage is deterioration' in financial and non-balance sheets and which promotes the second stage that is currency crisis. Due to the currency crises the financial institutions lack capacity of investment which will in third stage makes further determination of financial and non- financial balance sheets. This stage is the one that caused the economy to full- fledged financial crisis with its devastating consequences.

Madhav Lal Pradhan in his articles, ***"The importance of loan information centre and its activities"*** published in NRB annual publication says that the loan information centre was established to fulfil the necessity of a company working in relation to information related to loan. He further adds that the negative, trends like delaying the payments of principal and interest, deficient loan approval procedures, lack of constant inspection of project, lack of coordination between bank and finance companies have aided in the increase of non-performing loans ultimately affecting the national economy negatively. The author recommends the banks and finance companies to help the loan information centre by following the directives of Nepal Rastra bank and utilizing the information obtained from the centre so that positive changes can be witnessed.

Suniti Shrestha in her articles, ***"Lending operation of commercial banks of Nepal and its impact on GDP"*** has presented with the objectives to make an analysis of contribution of commercial banks' lending to the GDP of Nepal. She has set hypothesis that there has been positive impact of lending of commercial banks to the GDP. In research methodology, she has considered GDP as the dependent variable and various sectors of lending Viz. agriculture, industrial, commercial service and general multiple regression technique has been applied to analyse the contribution.

NRB Economic Report (2007/08) is also reviewed about loan and advances and non-performing loan:

It is stated in *9.10*Loans and advances of commercial banks occupied a major share in the total assets. The share of loans and advances in total assets declined to 76.5 present in the review year from 81.0 present in the previous year. Loans and advances of commercial banks increased by 23.5 percent in the review year compared to a growth of 15.9 present in the previous year on account of an increasing private sector credit off-take in the review year.

In *9.11*it is mentioned that ‘‘of the credit aggregates, the credit to the private sector has occupied a major share. Such credit stood at 41.0 percent of GDP and 61.3 percent of total assets and liabilities of commercial banks as at mid-July 2008. Compared to a growth of 17.1 percent in the previous year, private sector credit grew by 26.9 percent in the review year amounting to Rs. 336.8 billion as at mid-July 2008 owing to a higher credit demand in the private sector.’’

In *9.12,* it is stated that the total holding of government securities by commercial banks reached Rs. 72.1billion as at mid-July 2008 from Rs. 65.9 billion in mid-July 2007, with a growth of 9.5percent in the review year compared to a growth of 11.9 percent in the previous year. Similarly, commercial banks' claims on non-financial government enterprises increased by 10.4 percent in the review year compared to a growth of 12.2 percent in the previous year. The claims registered a lower growth on account of a partial loan repayment by Nepal Oil Corporation, National Trading Ltd, Nepal Food Corporation and Nepal Airlines Corporation to the banking sector.

*9.13*Claims on financial institutions increased by Rs. 1.3 billion in the review year compared to an increase of Rs. 381.8 million in the previous year on account of substantial growth of claims on non-government financial institutions. An increase of short-investment to development banks and finance companies by commercial banks contributed to the increase in the claims on financial institutions in the review year.
On *9.14*of the report it is mentioned that ‘‘Liquid funds of commercial banks soared by 21.7 percent in the review year compared to a growth of 5.0 percent in the previous year. A rise in foreign assets of commercial banks owing to an elevated level of

remittance inflows and capital expansion contributed to the higher growth of liquid funds of commercial banks in the review year.''

Khadka (2002) in her article on ***" A comparative study on Investment policy of Commercial Banks"*** in which she has taken NABIL, SCBNL and NIBL banks as commercial banks and taken as average industry to compare with NBL. The specific objective of her study are to evaluate the liquidity, asset management efficiency and profitability position of NBL in comparison to other commercial banks and to find out the relationship between deposits and total investment, deposit and loan & advances and net profit and outside assets. She has found out that there is not much difference between the mean ratio of loan and advances to current assets of NBL and other commercial banks. The mean ratio of NBL is slightly higher than that of other commercial banks. However, NBL's ratios are found to be less uniform in comparison to other banks. It shows that the liquidity position of NBL is comparatively better than that of other banks. In contrast, the rations of NBL are found to be less consistent than that of other commercial banks.

Shrestha (2002) in his thesis ***"A comparative study on Investment Practices of Joint Venture Commercial Banks with Special reference to Nabil Bank Ltd, Standard Chartered Bank Nepal Limited and Nepal SBI Bank Limited",*** has compared the investment policy adopted by Nabil, SBI and SCBNL with each other. The specific objective of his study are to evaluate the liquidity management, asset management efficiency, profitability, risk position and investment practices of Nabil, SBI and SCBNL, to project the deposit and investment trends of the sample organization. He has figured out the problem, conclusion and recommendation as follows:

"Commercial Banks are more emphasized to be making loan on short term basis against movable merchandise. Commercial Banks have a lot of deposits but very little Investment opportunity. They are even discouraging people by very low interest rate and minimum threshold balance.

Commercial Banks invest their funds in limited areas to achieve higher amount of profit. This is regarded as a very risky step, which may lead to lose in profit as well as

principle. The credit extended by Commercial Banks to agriculture and industrial sector is not satisfactory to meet the growing need of the principle.

He has concluded that since the liquidity position on Nabil and SCBNL have not found satisfactory, it is, therefore, suggested them to improve cash and bank balance to meet current obligation. SCBNL's loans and advances to total deposit ratio is lower at all, it is recommended to follow liberal Lending policy for enhancement of fund mobilization. It is recommended to NSBI Bank that it has to enhance off balance sheet transactions, diversifying their investments, open new branches, play merchant banking role and invest their risky assets and shareholder's fund to gain higher profit margin.

Nabil and SCBNL are recommended to increase cash and balance to meet current obligations and loan demand.

A thesis conducted by Joshi (2003) on ***"A study on financial analysis of NIBL".*** The main objectives of her study are to examine the overall financial position of NIBL, to examine liquidity ratio, profitability ratio and ownership ratios of the bank and to analyze the Bankruptcy score of the bank for the period of five Fiscal Years from 1997/98 to 2001/02. She has found that the analysis of the banks shows that the deposit have been increasing gradually during the study period i.e. (2053/054 to 2057/058). However, the rate of increase was comparatively low in the year 1997/98 than in the year 2001/02. Total loans and advances have been also increasing. The total investment of the bank has been increasing over the years, which is mainly due to banks strategy of safe lending and also as a result of increase in customer deposits and limited opportunities for prudent lending. As the loan and advances from the bank is increasing provision for loan loss has also been increasing. The bank has been holding adequate provision for losses over the years and the general loan loss provision was 4% in average of the total risk assets.

In her study she has recommended that the bank should focus more on non-risky lending opportunities such as mortgages, housing loans and personal loans. It should carefully examine safety of principal as well as sources of repayment, capital structure, requirement and credit worthiness of a borrower for providing credits. In

other words, credit manager should evaluate credit risk by considering well-known five C's of credit via character, capacity, capital, collateral and conditions.

Further, she recommends that the bank should invest more in loan and advances and less in government securities. However, she has not explained the relation of investment in government securities in absolute terms.

The financial analysis of NIBL has been analyzed and interpreted in this thesis. Analysis on terms of loan and advances in simply presented with comparison with the previous year data only. On the loans and advances part also, only simple comparison has been done. Whether the loan classification and provisioning of loans, investment in priority and deprived sector loan, investment regulation of NRB's directive has been followed or not has not been explained.

Shrestha (2003) in her thesis paper ***"Impact and Implementation of NRB Guidelines (Directives on Commercial Banks"- A Study on Nabil Bank Limited and Nepal SBI Bank Limited"*** found out that both the Nabil Bank and Nepal SBI Bank have been fully implementing the NRB's directives. The main objectives of her study are to review directives of NRB related to commercial banks. Her study concluded with the broad objective of examining the state of NRB functions in the commercial banks in Nepal. Capital Adequacy Ratio of Nabil and Nepal SBI are 13.40% and 12.86% respectively which are more than 9%. Banks are following the directives but in some cases such like supplementary capital and balance at NRB there is shortfalls. The excess amount of core capital in supplementary capital and 1% excess amount of total deposits in balance at NRB can compensate this shortfall. The banks have categorized the loan amount into four different categories as per NRBs directives. The increasing loan loss-provisioning amount decreases the profit of the banks. The change in the single borrower limit has brought down the limits of the fund based and non-fund based loans which have resulted to reduce loan exposure to banks.

In her thesis study she has recommended that both Nabil and SBI banks to increase its supplementary capital as it has shortfall in comparison with NRB guidelines and to meet the supplementary capital adequacy ratio even though it can be compensated by the excess amount of core capital. The supplementary capital needs to be increased by

Rs.122.74 million in Nabil Bank and Rs.125.57 Million in Nepal SBI Bank. She says liquidity and profitability are like two wheels of one cart so banks cannot run in the absence of any one of them. One can be achieved only at the cost of the others. Only liquid banks can attract lower core deposits, which helps in reducing interest expenses and give loan to good customer at lower rate, which results in requirement of less provision and high net profit. So banks should increase their primary reserve now to maintain the liquidity risk due to scrap out the secondary reserves. On the basis of finding, Nabil Bank has shortfall of Rs.140.74 million thus it has to increase its balance at NRB by such amount for better performance even after adding 1% excess amount of cash of total deposit.

Primary data has been used in order to get the view of bankers on the directives issued by NRB. Questionnaire related to NRB Directives (1-5) are used to collect data for the study and implementation of directives by commercial bank. Secondary data are also used for the analysis. On this study the general directives are taken as guidelines. So all directives are not considered for study- only the directives issued in 2001 and 2002 are considered for the study.

Bista (2004), in this thesis paper *"**NRB directives implementation and impact on selected commercial bank in Nepal"*** analysed whether the sample banks have been41 following the NRB directives related to commercial banks and its impact on their operation. The major objectives of the study were:

- To examine whether the banks have been following the directives provided by NRB
- To analyse the impact to the changes in the NRB Directives on the performance of the commercial banks
- To inspect whether NRB has been regularly monitoring the activities of commercial banks.

The study concluded that some directives of NRB should be revised which would help to bring prosperity not only to the shareholders but also to the depositors, the employees and the economy of the country as a whole. It also suggested that commercial banks have to come up with a stronger internal audit department to make

sure that the directives are properly implemented. Banks need to give priority in Human Resource Development to monitor and collect already disbursed loans. Also, NRB should be more practical while issuing the directives which should not be issued to meet the international standard only but they need to be applicable in the context of Nepal as well.

Shahi (2005), in this thesis paper, ***"Lending Operation and Practice of joint Venture Banks in Nepal"***, has examined the lending operation and practice of joint venture banks.

The main objectives of the research were:

- To determine the liquidity position
- To measure the banks' lending strength
- To analyse the portfolio behaviour of lending and measuring the ratio and volume of loans and advances made in agriculture, priority and productive sector.

This research has concluded that the high volume of liquidity shows the high degree of lending strength. The situation has been prevailing in all of the banks taken into consideration for the study. The lack of reliable lending opportunities and fear of losing the principal in rural sector has been keeping the sample banks to less orient towards the lending functions. Hence, the government should take appropriate actions to initiate these banks to attract to flow credit in rural economy.

Maharjan (2006) has carried out research on ***"Loan Management of Nepalese Commercial Banks"*** in which he examined the loan management of the commercial banks in Nepal.

The main objectives of the study were:

- To determine how far the banks are investing in the priority sector and the deprived sector.
- To determine the trend of the deposit and the loan
- To determine the loan loss provision made by banks

The researcher concluded that loan and advances are the profitable assets for the banks and it is very risky too. Due to this reason, the loans and advances should be effectively managed and controlled. The study suggested that the banks should follow the NRB directives strictly for effectiveness and better financial status of the banks.

Thakur, Ashwini Kumar(2066) wrote an article in *Nepal Rastra Bank Samachar 2066* on *"Management Information System in NRB"*, pointed out that the main characteristics of effective management information system is made available at the most opportune time in the right quantity, at the required level of accuracy, at optimum cost. According to him MIS is dominated most by the manual system in the central bank.

Shrestha, Shivaraj (2067) wrote an article in *Nepal Rastra Bank Samachar 2067* on *"IT management in NRB and challenges"*, has mentioned about the overall situation of IT in the central bank. According to him the implementation of IT in NRB is not systematic. Most of the software used are based on the old programming language. If IT could be implemented well then the work can be made faster and more efficient. There is lack of IT policy and thus there is lack of support for IT from the top level management.

2.3 Review of Related Research Studies

Literature studies include searching and gathering of secondary information of a defined research area from; research reports, presentation material, information from databases, dictionaries and published books (Merriam, 1994).

Business, these days, has become complex task as it is influenced by many internal and external factors. New challenges are emerging every moment and those challenges are to be coped with the strength an organization possesses. Also, it is said that, only that business can survive in this dynamic world, which really adjust all the things according to change in externalities. In no contradiction, but internal affairs of the organization are also equally considered or should be. Therefore business environment deals with all those external factors (Existed behind the four walls of organization) and internal factors (existed within the four walls of organization),

which influence organizational activities oriented toward goals and objectives accomplishment.

The business environment, therefore, is composed of internal environment and external environment. Thus, environmental analysis has become regular and compulsory effort of a manager to dig out problems and disclose prospects of organization. Managers make strategic position analysis, prepare alternative strategy, make a choice strategy, implement strategy and assess the performance hovering around the business environment. In this regard, study of business environment has become a part of total management in modern organization.

Things which you see today may not be same tomorrow. Society is changing faster, cross-cultures are expanding day by day, economic scope has become across the national boundary, political revolution becomes non-predicting, technology changes in no time, ecological components are dramatic, legal reforms and constraints in new field are being volatile; under these condition, no doubt, business have no alternative rather than adjusting these changes and building a mechanism to update with these. That is why we say, without knowing business environment, business at this very moment is impossible.

The internal affairs in other hand should be given equal emphasis. The goal, mission and objectives formulated once may not be viable all the times, the structure you designed earlier might have to be manipulated, the resource you use may demand for reforms, the relation and cohesiveness with stakeholders some time needed review, management efficiency and capability is to be assessed; why ? The easy answer may be; to adjust the business as business environment desires.

Keeping all these views into consideration, it can be said that all forces either came from externality or from internal scope of organization, form business environment. The internal environment provides strength and weakness and external environment offers opportunity and threats. The effective strategy could be used to cash strength and opportunity; also it could be used to cope with weakness and threats respectively.

Business Environment is all the forces within the organization and beyond the organization that have impact on performance, operation and outcomes of business. So, there are basically two components of business environment as:

Internal: Size/nature/state of business, Organizational culture, Management style, Resources (physical, human, financial, informational), Technology used/market covered.

External: Political, Economic, Socio-cultural, Technological, Ecological, Legal, Global business environment.

Different scholars have discussed Business Environment in various ways but having the same sense. For e.g.:
Keith Davis has **defined** ***"Business Environment is the aggregate of all conditions, events and influences that surround and affect it."***

According to K.Aswathappa, ***"Environment refers to all external forces which have a bearing on functioning of business."*** Those external forces are PESTEL. But business environment cannot discard internal forces like size and nature of organization, organizational culture and so on.

In sum, Business Environment is composed up of all internal, external and even global forces that have impact on all the aspects of an organization. Those organizations are successful which can identify key environmental factors, make a SWOT Analysis and accordingly plan for future operation of business.

Gathering of secondary information was performed by searching keyword regarding a range of subjects included in IT and IT-management area. Printed and electronically published theories were gathered from available library resources, course material and databases by systems accessed sources. Original sources have been applied when possible, if not, references to sources discussing and using original sources are stated.

Some Researcher has carried out in connection with MBO, which is as follows:

While MIS systems are extremely useful in generating statistical reports and data analysis they can also be of use as a Management by Objectives (MBO) tool.

MBO is a management process by which managers and subordinates agree upon a series of objectives for the subordinate to attempt to achieve within a set time frame. Objectives are set using the SMART ratio: that is, objectives should be Specific, Measurable, Agreed, Realistic and Time-Specific. The aim of these objectives is to provide a set of key performance indicators by which an enterprise can judge the performance of an employee or project. The success of any MBO objective depends upon the continuous tracking of progress. In tracking this performance it can be extremely useful to make use of an MIS system. Since all SMART objectives are by definition measurable they can be tracked through the generation of management reports to be analyzed by decision-makers.

The method of collecting data where there has already been some previous research or study so as to provide information to its readers or researchers who are working to gather information about the similar subject. If there has been any kind of research done in previous years then the data and information gathered from such a source is termed review of previous study. Unfortunately, it was not possible to get convincing samples of previous research/study.

Decision Making

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 and verification of this selected alternative to solve the problem understudy (Er. Shankar Nath Adhikari, 2066)

Levels of Decisions in commercial banks

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 palling, Management Palling 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

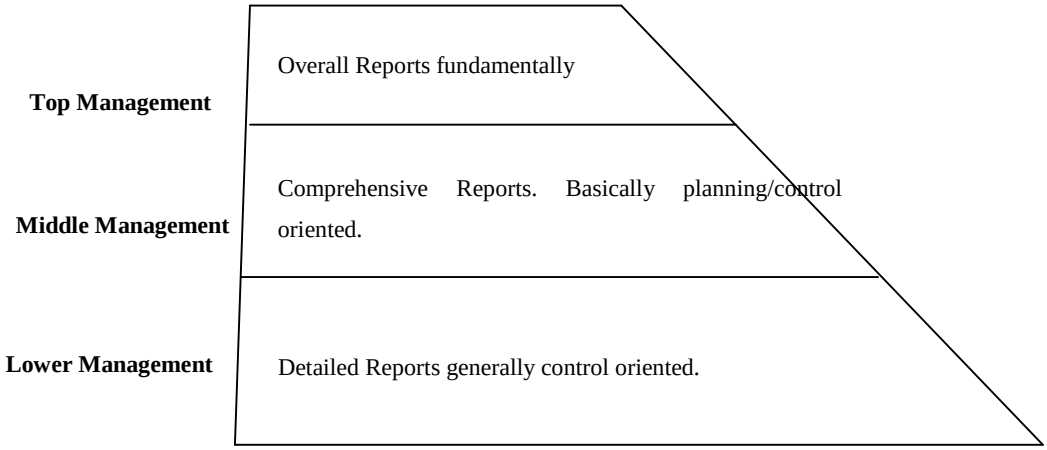
To the managerial levels for decision making, generally, Lower management concerned with operational informational for decision making, while tactical information and strategic information are useful to middle and top management, respectively, for making decision. The type of information supplies has 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 2.5: Levels of Decisions in Commercial 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.

Types of information reports needed by management levels for Planning and Control



On the other hand, lower echelons of management, being control oriented, receive the most detailed reports. Between top and low 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.

Table 1

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	Plant and warehouse locations Mergers and acquisitions Future produces.
Middle management: concerned with managerial control.	Structured semi structured	Flexible budgets and cost analysis Forecasting and sales promotion Subcontracting and motivation of personnel
Lower management: concerned with operational control.	Structured semi structured	Accounts payable and payroll preparation Accounts receivables and purchasing Customer waiting lines and situations involving group behavior.

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

B. Ghimire, Shubhash (2009) has conducted a research study entitled *"MIS in NRB (An approach towards Integrated Financial management Information System)"*. He carried out the research studies with the following objectives:

- Study and analyze the present status of IT used by the bank.
- Study hardware and network infrastructure.
- Study confidentiality, integrity and availability issues for safekeeping of information and communication infrastructure and information assets.
- Find out problems faced by bank in implementing IT.
- Find out the dependency of bank on information system.

His major findings are as follows:

- Most of the softwares are developed in DOS based dbase IV.
- There is lack of complete functionality in many of these software applications.
- There are few inbuilt Quality Assurance (QA) functions in the software.
- Most of the PC workstations are assembled computers.
- Data backup is done periodically but not on real-time.
- The IT staff profile is promising.
- Lack academically qualified technical manpower.
- Bank has not formulated information security policy.

The researcher is able to find out the objectives mentioned in the study.

2.4 Research Gap

There is a certain gap between the present research and past research. Previous research conducted generally on MIS used in certain commercial banks of one or two banks. In some cases, there was also found the technical structure of banks. Those analyses expressed all items in the statement in the form of amount. The previous researchers did not disclose the technical structure, which is practiced by the commercial banks. Thus to fulfill this gap the present research is conducted. It covers all commercial banks. The analysis based on expressing all items in the statement as a percentage. It is modern approach to evaluate the technical structure practices.

Most important point to remember about technical policy is that every financial measure should be compared across time and across over same line of companies to be meaningful. Prior research has been conducted on the basis of information system practices. The value of the approach was quantitative relations. The world is becoming more dynamic and subject to rapid changes. This research will be based upon the modern approaches to information system practices; which includes comparable group approach and consideration of economic and strategic factors where feasible. Thus, the research will be an interest to a wide range of its stakeholders and other government regulatory interests. This may be the first effort to performance evaluation of all commercial banks with sufficient time frame in a systematic manner.

Chapter III

RESEARCH METHODOLOGY

Research methodology is the description of the procedures followed while collecting the necessary data and information needed for the research work. It is a process of systematic and in-depth study of particular subject or topic, backed by the collection, competition, presentation and interpretation of relevant data. For the collection of data different activities were performed; Informal Interview, Observation of the work, study of the related documents and published materials were analyzed. To make the presentation more clear and attractive tabulation and DFD are used.

3.1 Research Design

"Research design is a plan, structure and strategy of investigation conceived so as to obtain answer to research question and to control the variance" (Kerlinger, 1999). Thus, research design is an overall pan 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. Research design is the process of arriving to the solution of the problem through planned and systematic dealing with the collection, analysis and interpretations of facts and figures. A well-set research design is necessary to fulfill the objectives of any research work.

I designed the research by the help of Remittance Department & IT department of Citizens Bank International Limited and Annual Magazines and data from the department. I collected knowledge of Citizens Remit data flow diagram and Module of forecasting for maximization profit or minimization of cost, secondary data of Citizens Bank International. I collected other information from branches and head office.

3.2 Population and Sample

Out of 31 commercial Bank in Nepal, Citizens Bank International is one of them "Ka" class Bank. The population sizes of commercial Bank are 31 and Sample size is one.

All these banks and other financial institutions are governed by the central bank of Nepal, Nepal Rasta Bank.

3.3 Sources of Data

Without any data, things will be difficult for study. Therefore, for the statistical investigation, the collection of data is important. Collection of data is defined as the methods that are to be used for getting the necessary information from the units under investigation. In the course of study, the sources of data collected are mainly of two types. They are as follows:

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. The data that are originally collected by an investigator for the first time for the purpose of statistical inquiry is known as primary data. Therefore, primary data collection includes survey, inquiries and questionnaires. Some of the primary sources of the data for this report are the various questions put forward to the manager of the bank as well as the information provided by the actual beneficiary of the remittance from abroad. Direct interview taken on January 2nd, 2012 with Mr. Roshan Manandhar; the Branch Manger of Kamladi Branch of Citizens Bank International Limited has been the primary source of data for this report.

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. Authorized Web site, Case study of Primary Sources is secondary data. As per Citizens Bank International primary data are collected by

different related sources like opinion poll, sampling, visiting, accuracy study. Primary Sources: Internal sources Data are found within Citizens Bank International. External sources, Collected from sources outside the Corporation. Data, which are already collected but obtained from some, published or unpublished sources, are known as secondary data. Data, which are primary in the hands of one, becomes secondary in the hands of other. This study is based on the data collected from the annual report of Citizens Bank International & balance sheet of the bank. This type of data is extensively used for the preparation of this report.

Data Collected Methods

- Authorized Web site
- Annual report 2008/2009.

3.4 Analytical Tools and Technology

For the preparation of this fieldwork study data are collected from various sources. The data are collected through questionnaire / interview and observation. The achieved data were analyzed, processed and are presented with the help of graphical tool, DFD.

Out of so many tools and technology some appropriated tools and technology I had used in this research are 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(DFD)

i. Algorithm

Manually a use tool is algorithm. Step – by – step method of program is called algorithm.

ii. Pseudo Code

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

iii. 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. Flowchart depicts the logical flow of the process. It is a pictorial representation of the program or an algorithm. It indicates the various steps involved in designing a system. A flowchart consists of a set of 'flowchart symbols' connected by arrows. Each symbol contains information about what must be done at that point & the arrow shows the 'flow of execution' of the algorithm i.e. they show the order in which the instructions must be executed. The purpose of using flowcharts is to graphically present the logical flow of data in the system and defining major phases of processing along with the various media to be used. Some of the notations/ symbols used for flowchart are following as below:

Symbol Used	**Description**
Document	Groups of program instruction, which perform a Processing function of the program.
Input/output	Any function of an input/output device (making information available for processing, recording, Processing information, tape positing, etc.)
Process	A rectangle can represent a single step or an entire sub Process within a larger process.

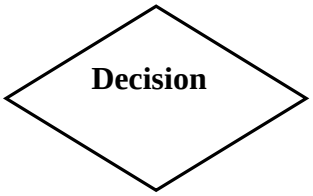
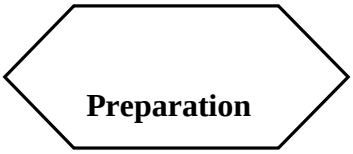
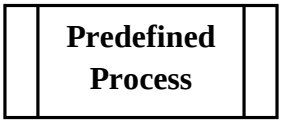
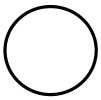
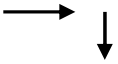
	The decision function used to document points in the program where a branch to alternate paths is possible based upon variable conditions.
	An instruction or group of instructions, which changes the program.
	A group of operations not detailed in the particular set of flowcharts.
 **Connector**	The beginning, end, or a point of interruption in a Program.
	The direction of processing or data flow.
	Summing Junction

Table 3.1: Flowcharts Object Symbols and Description

Data Flow Diagram (D.F.D.)

Diagrams that represent the flow of information from external entity to the system and vice-versa are Data flow diagram (D.F.D).

i. Context level DFD

ii. DFD systematic flow level.

- Zero level DFD
- First level DFD

i. Context level DFD

This is one of the most important technique or tools for data collection method. While preparing this research study or models, I had used 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 DFD's 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 had not shown 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.

ii. DFD systematic flow level.

- **Zero Level Data Flow Diagram**

A context diagram provides the most general view of an information system and contains a single process symbol, which is like a black box. To show the detail inside the black box, I had created a 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 that 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 a specific function and consists of a verb (and an adjective, if necessary) followed by a singular noun.

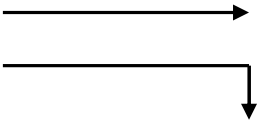
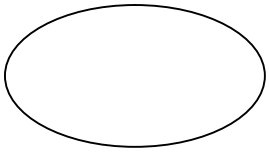
Objects	Symbol Used	Description
External Entity		It is a person or group, which interacts with the system, something outside the system. It is not a user. e.g., Customer, Supplier, Government Agency, Accounting Department, Human Resources System, etc.
Data Flow		It is the directional movement of data to and from External Entities, the process and Data Stores. In the physical model, when it flows into a data store, it means a write, update, delete etc. Flows out of Data Stores mean read, query, display, select types of transaction.
Data Store		It is a repository of information. In the physical model, this represents a file, table, etc. In the logical model, a data store is an object or entity.
Process (Activity, Function)		Depending on the level of the diagram, it may represent the whole system as in a Context (level 0) diagram or a business area, process (activity), function, etc. in lower levels.

Table 3.2: DFD Object Symbols and Description

A brief description of the above components is given as hereunder:

- **External Entities: -** External entities represent the source of data as input to the system. They are also the destination of system data. External entities can be called data stores outside the system. These are represented by squares.
- **Data Flows: -** Data flows represent the movement of data from one component to the other. An arrow identifies data flow – data in motion. It is a pipeline through which information flows. Data flows are generally shown as one-way only. Data Flows between external entities are shown as dotted lines.
- **Data Stores: -** Data stores represent stores of data within the system. Examples: computer files or databases. An open-ended box represents a data/store – data at rest or a temporary repository of data.
- **Process: -** Process represents activities in which data is manipulated by being stored or retrieved or transferred in some way. In other words we can say that process transforms the input data into output data. A rounded rectangle stands for a process that converts data into information.

Entity Relationship Diagram (ERD)

Diagram that represents entity set at single entity. The diagram that performs the object modeling is ERD. (Entity = Objective). In the given table below, it represents the name of entity and comments .This is one of the most important techniques for data collection which are used 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.

S.N	Symbols	Comments
1.	**Box**	It is used for **entity** representation. It contains objects used in relational database.

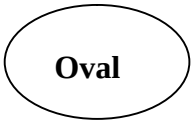
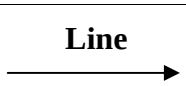
2.		Diamond represents **relationship.**
3.		The oval or ellipse is used to represent **attributes** of entities.
4.		It is used to **link** attributes to entity sets and entity set to relationship.

Table 3.3 Symbols of ERD

There are three types of relationships between entities. They can be shown in and entity-relation diagram. They are 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 the possible combination of condition and resulting action. Analysts often use decision tables, in addition for 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 customer's 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.

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

Table 3.4 Decision Table

In this way, decision table is created by computerized system.

CHAPTER IV

SYSTEM ANALYSIS, DESIGN AND DATA REPRESENTATION

4.1 Organization structure

Organizations are formal social units devoted to the attainment of specific goals. Organizations used certain resources to produces outputs and thus meet their goals. A sound organization facilitates administration, promotes specialization, encourages growth, and stimulates creativity. Thus, a sound organization can contribute to the success of an enterprise.

Effective organization can provide a number of benefits which are as follows:

- The process of organization helps to clarify the specialized tasks and performance expectations for each person.
- It produces appropriate authority structure with accountability to support planning and control throughout the organization.
- It creates channels of communication that support decision-making and control.
- The organizing process establishes a logical flow of work that can be comfortably performed by individuals and work groups.
- It develops a division of labour that avoids the misuse of resources, conflict, and duplication of effort.
- It creates coordinating mechanisms that produce harmony among organizational members in diversified activities.

Thus, from above it makes clear that organization involves: identification and grouping of work, defining responsibility, delegation of authority, establishment of structural relationships, and coordination of interrelated activities.

For achieving the targeted objectives any organization needs to utilise its resources in an effective way. For the effective work process the organization's main resource HR should be managed well by classifying their work and giving them authority and responsibility. Hence to achieve organizational objectives the structure made by

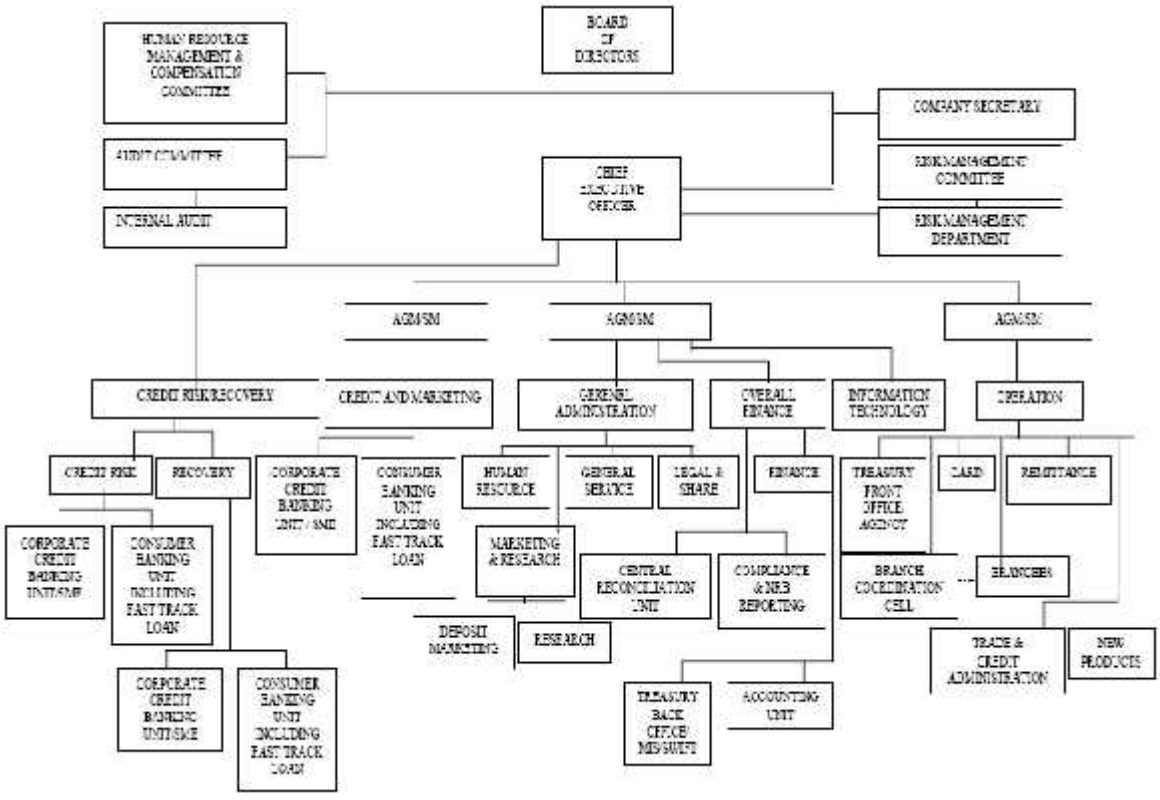
defining the roles, responsibility and authority of the respective human resource is called organizational structure. Structure is the way the activities are organized. It is a means to implement strategy. It is reflected in the organization chart. It defines the levels and roles in an organization. Structure is matched with strategy. Structure should be strategy-friendly. It involves:

a. Job Design: Contents of jobs required to implement strategy are defined.

b. Grouping of Jobs: Jobs are grouped in departments. Various bases for grouping can be: function, division, territory, customer or matrix. Jobs are assigned to people and positions.

c. Establishing Reporting Relationships: Authority and responsibility relationships are established. They establish hierarchy. They specify who reports to whom.

The organization Structure of Citizens Bank International Ltd. is as follows:



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

- **Primary Methods**

The information presented in this report is obtained primarily from the remittance department of Citizens Bank International Limited by interview and questionnaire method. The main difficulty in this type of data collection is that the staffs are not interested in answering the questions which were not benefited to them.

Presentation of primary data

The primary data were collected by distributing the questionnaire to the users of remittance software who are in the normal operations of the business. The primary data facilitates us to know the different view and hypothesis of the users of the information required in the organization. Analysis of primary data deals with the qualitative aspects of information and MIS. The analysis is based on the opinion of the respondents.

The response from the responded in the query is mentioned and analyzed here point wise as per the questionnaire distributed.

- To what degree is the bank using proven technologies to enhance performance?
- Are there any technologies not deployed that would have a significant, positive effect on performance?
- What level of specialized training has been received by the staffs and employees assigned to selecting, deploying, and managing technology?
- What level of systems training has been provided to other officers and employees?
- How effective are the systems that are being used?
- Is Management monitoring the evolution of remittance technologies and planning for the future?

Secondary Information

That information which is collected through directly visited to the related office is secondary information. A search of the banking literature reveals that banks are moving rapidly to take advantage of recent and new customer service and cost reduction opportunities that new technologies offer. A sampling is in the table below:

Technology	Current Use	Use in Next 3 Years.
Infrastructure		
PC Networks: Tellers	95%	100%
Remittance Inflow Software	44%	80%
Relational Data Base	36%	76%
Automate Credit Scoring	8%	48%
E-mail	60%	95%
Equipment Management Software	33%	57%
Transactions	52%	72%
Imaging Documents	7%	45%
Delivery Systems		
Internet Banking Home Page	3%	25%

Internet Electronic Office	1%	15%
Telebanking	56%	88%
Smart Cards Debit Cards	35%	70%
Electronic Banking	12%	76%

- **Secondary Methods**

Some information was obtained from the books, website, journals published by different Commercial banks and NRB and remittance related articles. The data used in this thesis which is analyzed is obtained from the annual report.

4.3 DFD of Existing System

- **DFD**

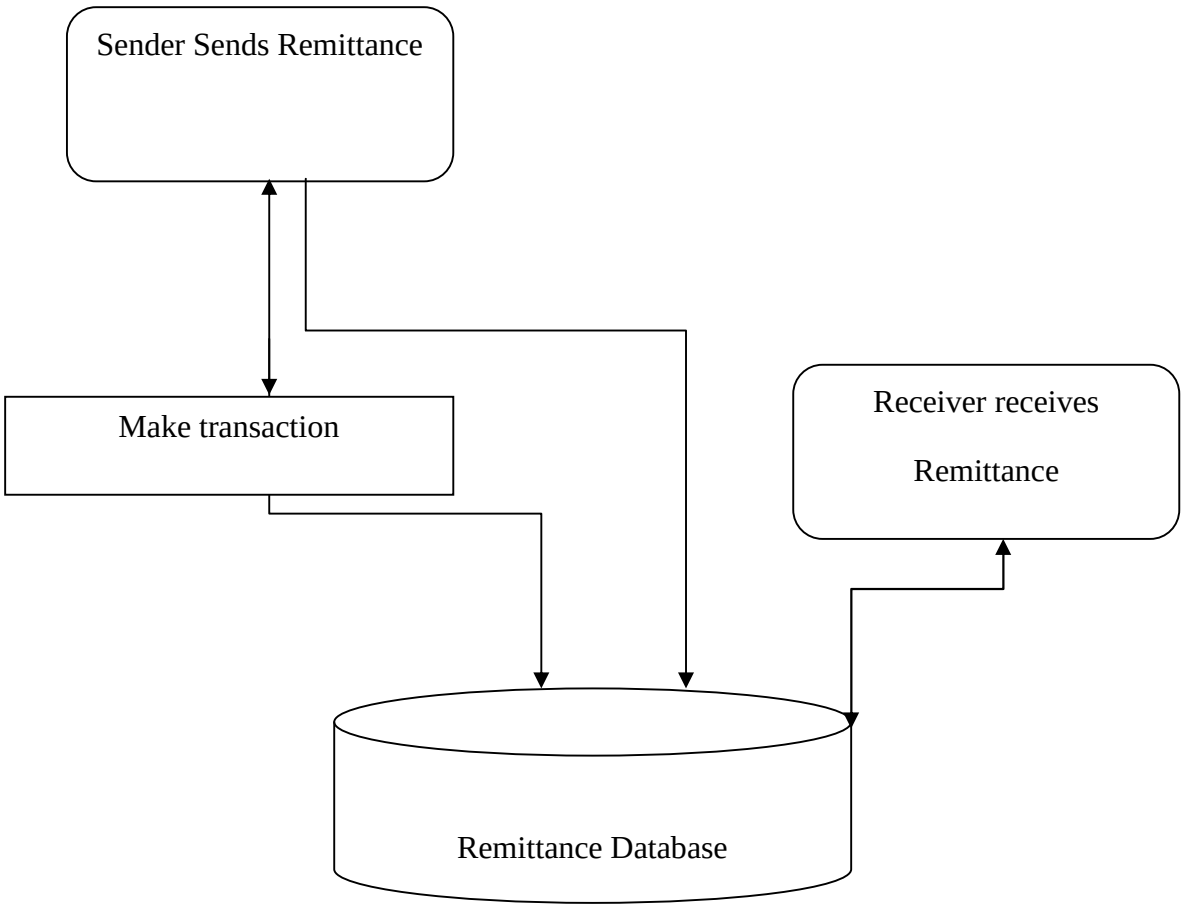


Figure 4.1: DFD of Remittance Transactions

DFDs depict the flow of data and its transformation. Through decomposition, greater detail is revealed and in layers of DFDs. A numbering system is used to hierarchically relate the process layers. Data stores are also numbered so they can be traced to date models. There are four diagram components: processes, date stores, external entities, and data flows.

Process has at least one input and one output. The process is usually symbolized by a “bubble” or similar figure. The process is what transforms the data; functional primitives are at the lowest level of the DFDs and can be decomposed no further. You know you have gone past the functional primitive when the result sounds like program logic.

Date stores are used to represent date structures or logical data files. They are often represented as open-ended shapes.

External entities represent interfaces external to the system. These are often represented as a small shape, such as a diamond.

Data flows represent the exchange of data between processes, processes and data processes and external entities. The direction of the data flow defines how data flows through the system. Data flow direction is represented by arrows. Inputs from external entity: the system shall receive DFD data name from DFD entity name.

Outputs to external entity: the system shall produce DFD output name to DFDs entity name.

Process: the system shall DFD process name

Internal inputs and outputs can also specify.

Outputs to internal entity: the system shall produce DFD data name to DFD entity name.

Data from store: the system shall retrieve DFD data name from DFD store name.

Data to stores: the system shall store DFD data name in DFD store name.

Review and edit the requirements if they are unclear.

Review and edit the requirements if they are unclear. DFDs were not worded to be extracted into text. Use the DFD hierarchy to organize the requirements: higher-level processes are the parents of the primitives. Establish traceability using the DFD numbering scheme.

That distinction is important because focusing on implementation issues at this point would restrict your search for the most effective system design. During the systems analysis phase, we learn how to create a visual model of the information system using a set of data flow diagrams.

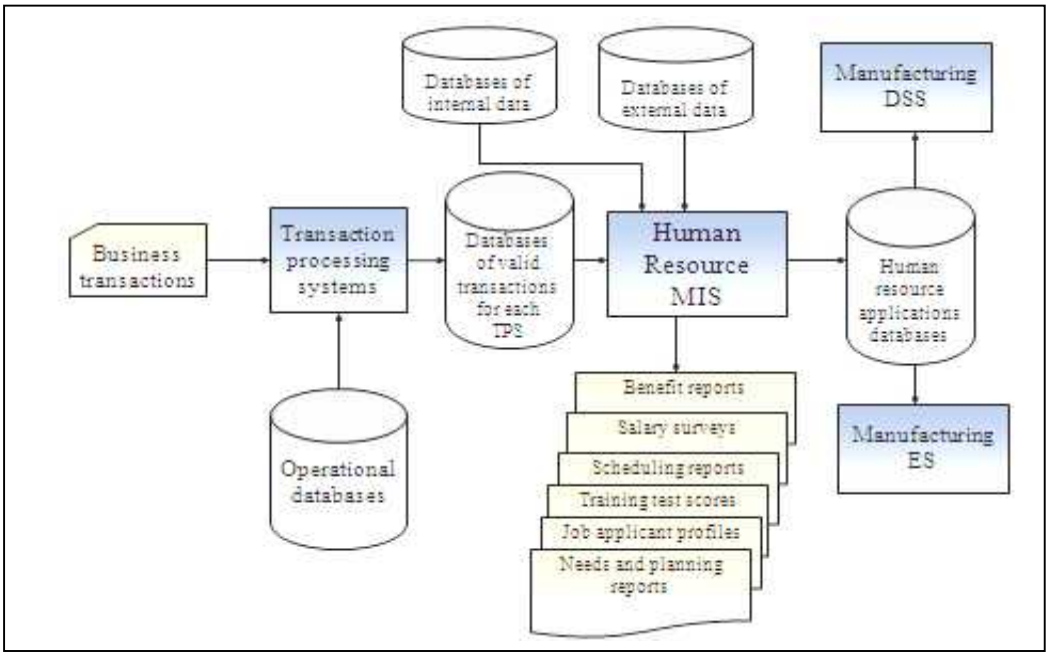


Figure 4.2: Flow of system in Citizens Bank International Limited.

4.3.1 Context Level

In citizens remit there are mainly three parties involve: applicant, bank and the beneficiary. Here customer could either be applicant or Beneficiary of any remittance. To send or receive any remittance unique code generated from the bank software is must from which both sender or receiver identifies the remittance.

Remittance sender

Auto number

Name

Address

Contact no

Amount to remit

Beneficiary

Auto number

Beneficiary Name

Address

Contact no

Amount receive

Transaction

Auto Number

Beneficiary id

Amount

- **Conceptual design:**

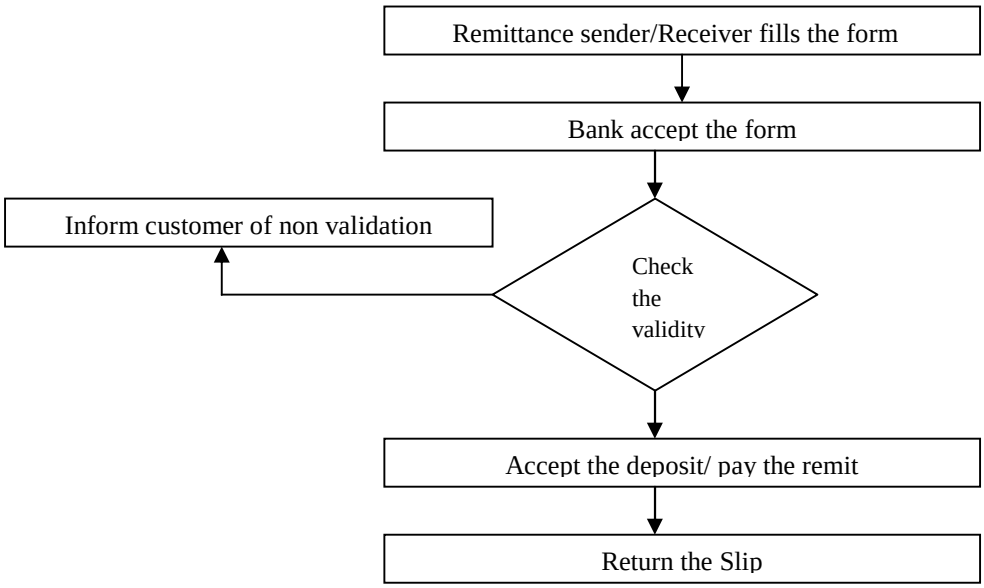


Figure 4.3: Conceptual design of Citizens Remit

- **Logical design**:

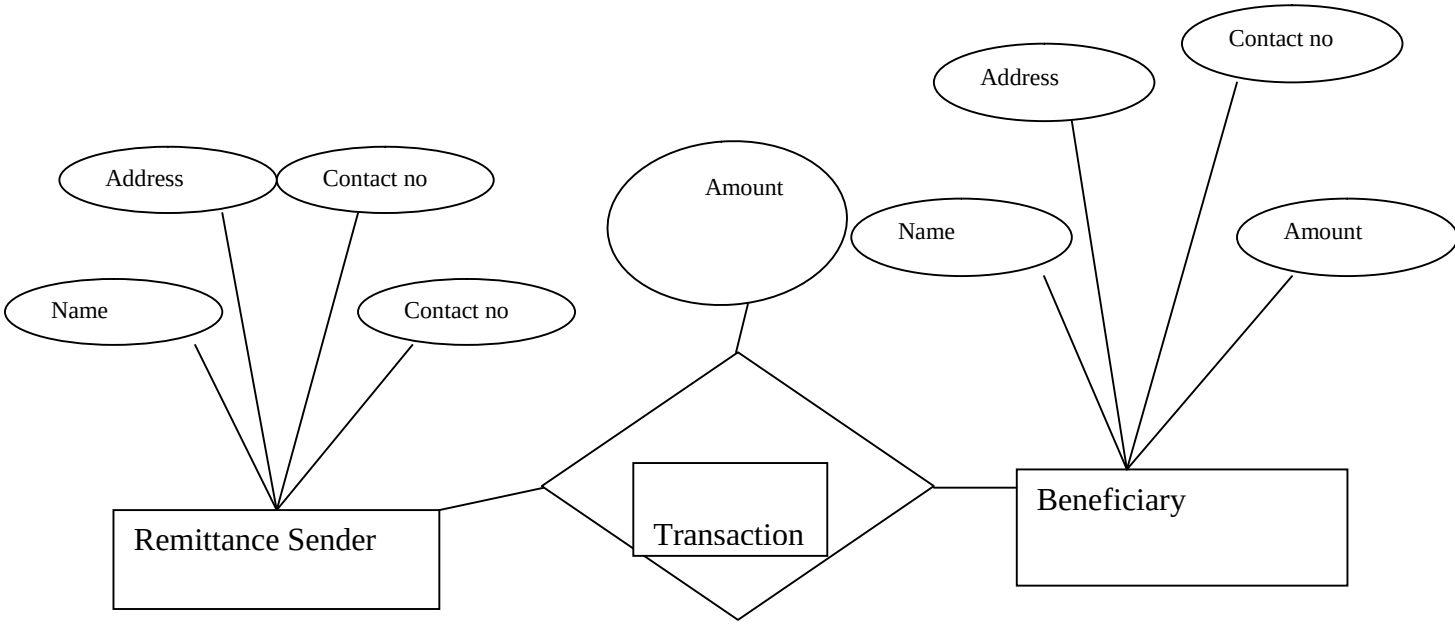


Figure 4.4: Logical design

- **Physical Design**:

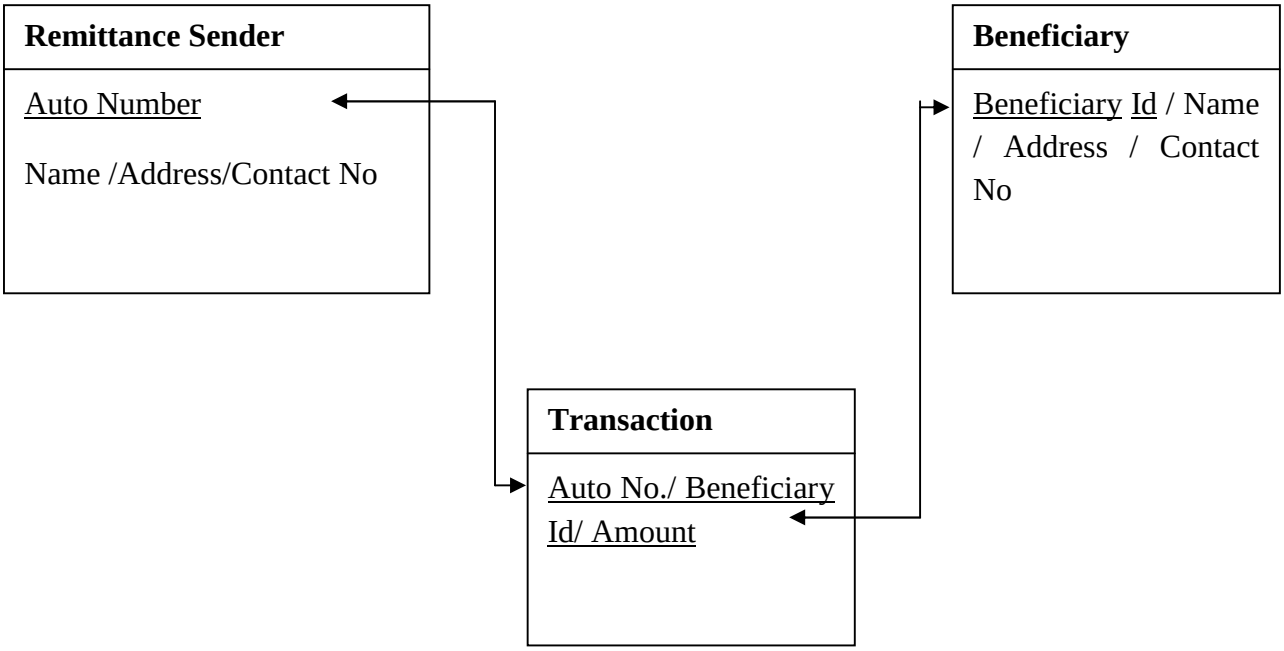


Figure 4.5: Physical design

4.3.2 System Level

Since we are in remittance business most important hardware required are computer and printer. All Digital certificates created for both paying and sending users should have computer and for the printing of both computer generated receiving and paying vouchers, printer is the most. General micro computers are enough for the purpose. Some of the specific hardware used is:-

Database Server

- Operating System Windows 2003 or Redhat Linux EX
- Standard Edition Ver. 3.0
- Processor Dual processor 2 GB (upgradeable to 12
- GB) - 2xIntel Xeon CPU 3.0 GHz /512
- Kb Cache per processor
- RAM 2 GB – recommended
- Hard Disk 5x40 GB – recommended

- Floppy Drive 1.44 MB FDD
- DAT Drive 20/40 GB – Recommended
- Monitor 15”/17” color monitor, std keyboard and mouse

Application Server

- Operating System Windows 2003
- Processor Intel Xeon 2.8 GHz /512 Kb Cache, One
- standard CPU, Dual Processor Supported
- RAM 1 GB – recommended
- Hard Disk 2x40 GB – recommended
- Floppy Drive 1.44 MB FDD
- DAT Drive 20/40 GB – Recommended
- Monitor 15”/17” color monitor, std keyboard and mouse

Terminals

- Operating System Windows 2000 / XP Pro
- Processor Intel Pentium IV @ 2.8 GHz Intel i865
- Chipset /533 MHz FSB
- RAM 256 MB DDR Sync PC2100 Memory
- Hard Disk 80 GB S.M.A.R.T. III ULTRA ATA HDD
- Monitor 15”/17” color monitor

4.4 Analysis of Existing Technology:

The “Citizens Remit” Remittance software has been developed based on Oracle Suite products such as Oracle 9i Forms/Reports, Oracle 9i Application Server and Oracle 9i Database.

The *Oracle 9i Forms/Reports* will be hosted on *Oracle 9i Application Server* and hence the forms and reports will be accessed through a client’s *Web Browser*. The application extensively uses facilities provided by Oracle 9i database server

Figure 4.6: Application Software

4.4.1 Application Architecture

The Citizens remit Application Architecture is as follows.

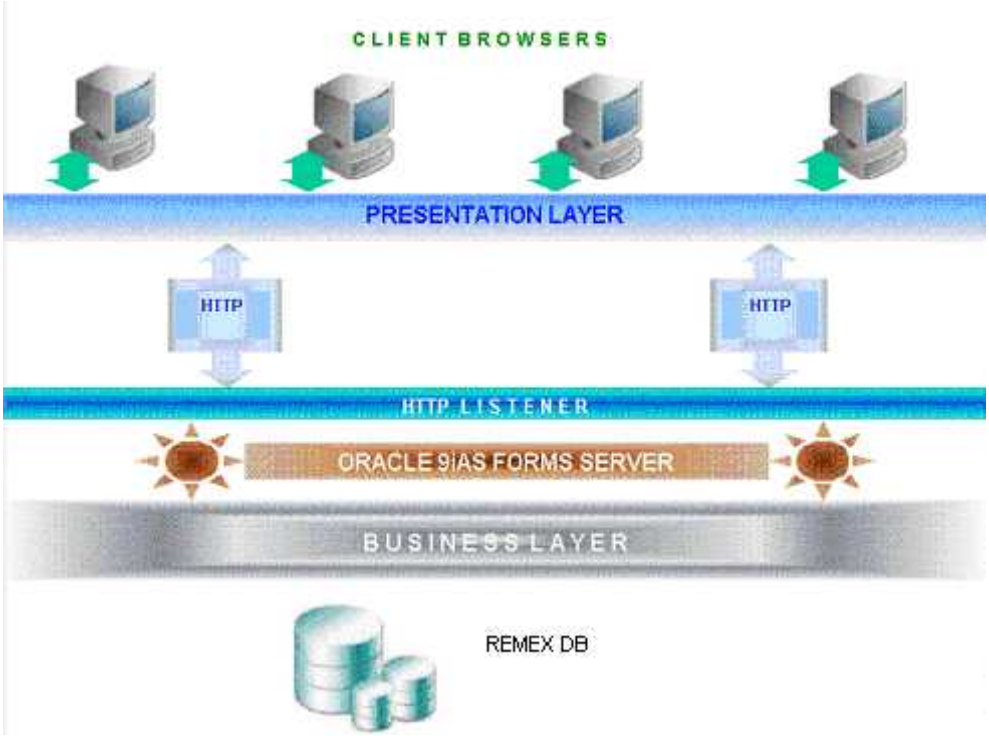


Figure 4.7: Application Architecture

The application architecture comprises largely the following:
The **presentation layer** consists of Oracle 9i ***Forms*** developed for various modules in the system. These forms are designed in such a way to reflect ***Web look*** and ***feel***. Also, this layer support printing of application reports developed using Oracle 9i

4.4.2 Reports of the Existing Technology

Citizens Remit System has a ***custom toolbar***. The toolbar consists of buttons for various pertinent activities that a user can perform on any given form. Also, the users can navigate through the main modules available in the system by selecting the appropriate module in a ***dropdown*** of *main modules* provided on the toolbar.

Based on the module selection, the respective module's *sub modules* get populated. The application's module level menu system is organized as a *hierarchical tree structure*. The users can navigate through the tree structure to select a specific option in the selected module.

The tree structure is populated with menu items based on the user's *roles, privileges* and the *main module* selected by the user. These may vary based on the agents and agreement made with them.

Depending on the continuous development, operational environment and budgets a suitable deployment and design is done continuously.

The modules can be broadly classified into Head office operations and Branch office operations. These modules help perform the various activities.

The system comprises the following modules

- Remittance System
- Currency System
- MIS Reports
- User Management
- Agents Management

Only remittance system and MIS Reports is available in paying and receiving agents. Rest modules are available with the Admin Users. Admin user is responsible for all the management of the remittance software and the agents associated with it.

4.4.3 Enterprise Resource Management:

For Customer Relation Management (CRM), we use extensively: Email, Fax, internet and telephone. These are main communication media used to be intact with the customer and the clients. Admin users are responsible in the management of the payment and the settlement details. Not only this Admin user also responsible for the generation of all kind of report required for the reconciliation o the data and settlement of the payment done by the different agents.

4.4.4 Supply Chain

For the supply chain management also we use extensively emails with our software vendors. As per the specification given by the end users the changes requires in our software is studies by the remittance cell and it is then forward to the software vendor for the further development.

4.5 Limitation of Existing System

- Still in this software, generation of report is difficult. Specific reports right is only with the admin users so agents have only limited information regarding various reports like TDS, settlement dates, additions in paying agents, peoples information associated with the different users etc. Information is highly centralized creating high pressure to the admin user.

- Despite of relational database, it cannot be linked with the operating software pumori used in the bank. This has created confusion regarding the entries in the remittance software and banking entries in the banking software.

- Manual reconciliation is required for the verification in the software and entry in the banking software. Since entries in these two interrelated software is done separately , there is high chances of human error like creation of the transaction in the software but nonpayment in the banking system, payment in the software but nonpayment of transaction, more or less amount entries in the

banking software than in the software etc. Such human error can only be identified with the reconciliation of both data.

- Normally in the remittance business the customers are the same which is sign of retention of the customer. This software has the drawbacks that it does not store the customer detail that is once feed in the software. This creates duplication of work each time and also time consuming as each time same data need to be feed in the system. So this also creates difficulty in the identification of the regular customer.

- Since there is a time lap between the paying and receiving agents, fluctuation in the international rate affects in the transaction number. Since all change in rate is done centrally by Citizens Bank International Ltd., Head Office, Kamladi within the office period time is generally seems to be poor exchange rate than other remittance company who have their representative abroad.

- In citizens remit, there is no tracking facilities in the paying agent's options. Unit the auto generated number and the amount send does not match the remit details cannot be track. It has restricted the search of information from another means rather than these two information. So paying agents are mostly unknown about the remit they receive.

- Lack of IT policy for the implementation of the MIS system systematically in the organization.

- List of the banks hardware used are non-brand, locally assembled. They range from old 386 processor computers to new Pentium IV computers.

- All of the computers are not protected by the uninterruptible power supply (UPS) system.

- Strong security features are not implemented in the system.

- No information security plans and policies are formulated.

- Lack of audit trails in software

- Lack of software documentation
- Lack of one window policy

4.6 Major Finding of the Existing System

The use of remittance software is gradually increasing and the process of installing the MIS in the organization is going on. Most of the software developed is based on the old programming language. They are not user friendly hence they are not increasing the working efficiency. It lacks the genuine branded international software which is reliable to use. There are still some departments which don't have any software so all the processes are based on manual systems. There is lack of concept of integrated management information system.

The system administration process is spread up into different department and the database management system is also centralized.

The sharing of the networking resources (VSAT, Fiber, Radio Link, Subisu, Mercantile) among the different branch is centralized in head office through which communication is done. Most of the computers used are assembled hence they affect in terms of data security and speed. Network backbone of the central office is on fiber optics. At present there is enough technical manpower that is young and energetic and can contribute a lot for IT department of the bank. Strong support and commitment for the development of remittance department is lacking from the top level management. It is because remittance related persons are not in the important and powerful positions. There is a lack of qualified technical manpower at high level management. Basic long term plans and policies are lacking which are very necessary as they work as the guidelines for the development of remittance department.

4.7 Concept of New System or Modify the System

The 21st century will bring about an all-embracing convergence of computing, communications, information and knowledge. This will radically change the way we live, work, and think. The growth of high speed networks, coupled with the falling cost of computing power, is making possible applications undreamed of in the past.

Voice, data, images, and video may now be transferred around the world in micro-seconds. This explosion of technology is changing the banking industry from paper and branch banks to' digitized and networked banking services. It has already changed the internal accounting and management systems of banks. It is now fundamentally changing the delivery systems banks use to interact with their customers. All over the world, banks are still struggling to find a technological solution to meet the challenges of a rapidly-changing environment. It is clear that this new technology is changing the banking industry forever. Banks with the ability to invest and integrate information technology will become dominate in the highly competitive global market. Bankers are convinced that investing in IT is critical. Its potential and consequences on the banking industry future is enormous.

All of this is carried out by **systems analysts** who produce **data flow** diagrams to picture the company's operations.

The analysts also consider the **costs and benefits implications**. They also consider the way the project will be implemented:

- Will it be done in-house or using consultants?
- What hardware would be used?
- What software could be used?

Finally a report is written with a recommendation to proceed or abandon the project.

The next stage is the **system design**:

Hardware profile, including the technical data of the machines on which the programs will be run.

Software profile, including the programming language, packages, and database management systems;

- **Inputs**, including entry screens;
- **Outputs**, such as reports;
- The **user interface**.

The modular design structure for the program: The program is built up in discrete sub-units and put together;

- **Test plan** and data;
- **Conversion plan**;
- **Documentation**

Then there's the **implementation**, where the system is coded and tested. Also Hardware is installed, ready to convert from the old system to the new.

Hardware is installed, which may need extensive work on cabling and/or redesigning offices; Users are trained; Conversion of master file or creation of new master file.

There are several ways of conversion:

Direct changeover, in which the old is topped and the new is introduced. Usually this is over a weekend or some other slack time. The advantage is that there is a minimum of duplication. The drawback is there can be serious disruption if the new system has errors in it.

Parallel conversion: where the two systems are run alongside each other, minimising disruption due to error. However this does involve duplication of the work.

Phased conversion: where bits of the new system are introduced, one at a time.

Pilot conversion: where the system is implemented initially in a few branches.

Once the system is up and running, there is a **post-implementation review**. It is usually in the first few weeks and months that errors become apparent.

So **system maintenance** may be needed:

Perfective maintenance – although the system is running well, there may be room for improvement;

Adaptive maintenance – where new functions are added to take into account the changing needs of the company;

Corrective maintenance is to get rid of errors.

4.8 Comparison between New and Existing System

Remittance software is getting more sophisticated. They have given banks a potential they could only dream about and have given bank customers high expectations. The changes that new technologies have brought to remittance software are enormous in their impact on officers, employees, and customers of banks. Advances in technology are allowing for delivery of remittance products and services more conveniently and effectively than ever before - thus creating new bases of competition. Rapid access to critical information and the ability to act quickly and effectively will distinguish the successful banks of the future. The bank gains a vital competitive advantage by having a direct marketing and accountable customer service environment and new, streamlined business processes. Consistent management and decision support systems provide the bank that competitive edge to forge ahead in the remittance marketplace.

Major applications: The advantages accruing from computerization are three-directional - to the customer, to the bank and to the employee.

For the customer: Banks are aware of customer's need for new services and plan to make them available: Remittance software has increased the level of competition and forced them to integrate the new technologies in order to satisfy their customers. They have already developed and implemented a certain number of solutions among them:

Self-inquiry facility: Facility for logging into specified self-inquiry terminals at the branch to inquire and view the transactions in the account.

As information is centralized and updates are available simultaneously at all places, single-window service becomes possible, leading to effective reduction in waiting time.

- For the bank: During the last decade, banks applied IT to a wide range of back and front office tasks in addition to a great number of new products. The major advantages for the bank to implement IT are:

Availability of a wide range of inquiry facilities, assisting the bank in business development and follow-up.

Immediate replies to customer queries without reference to ledger-keeper as terminals are provided to Managers and Chief Managers.

Automatic and prompt carrying out of standing instructions on due date and generation of reports.

Generation of various MIS reports and periodical returns on due dates.

Fast and up-to-date information transfer enabling speedier decisions, by interconnecting computerized branches and controlling offices.

- For the employees: IT has increased their productivity through the followings:

Accurate computing of cumbersome and time-consuming jobs such as balancing and commission calculations on due dates.

Automatic printing of detailed agent wise reports, their sharing commissions, freeing the staff from performing these time-consuming jobs, and enabling them to give more attention to the needs of the customer.

Avoidance of duplication of entries due to existence of single-point data entry.

4.9 Application modeling

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

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)

$\Sigma xy = a\Sigma x + b\Sigma x^2$ ……(ii)

As $\Sigma x = 0$,

a =

b =

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.

Here a mathematical model related to this trend line projection or time line, which is belongs to the total investment for Remittance software Structure of Citizens Bank International Limited have been represented. The models forecast the amount of investment for Remittance Software Structure in 2013/14.

Years (X)	**investment for Remittance Software Structure (y)**	**x=X-3**	**x^2**	**xy**	**y_c**
2006/07(1)	142	-2	4	-284	117
2007/08(2)	165	-1	1	-165	176
2008/09(3)	207	0	0	0	235
2009/10(4)	281	1	1	281	294
2010/11(5)	380	2	4	760	353
Total	**ΣY= 1175**	**Σx=0**	**Σx^2 =10**	**Σxy =592**	

Table 4.1 Forecasting model of investment for Remittance Software Structure

Let the equation of the trend line be

Y = a + bx……(i)

As Σx = 0.

a = = = 235,

b = = = 59.2, approximately b = 59.

From the trend line Y = a + bx

y_c = 235+59(-2) = 117

= 235+59(-1) = 176

=235+59(-1) = 235

=235+59(-1) = 294

=235+59(-1) =353

Now, For the year 2013/14 AD = 235 + 59 (6) = 589

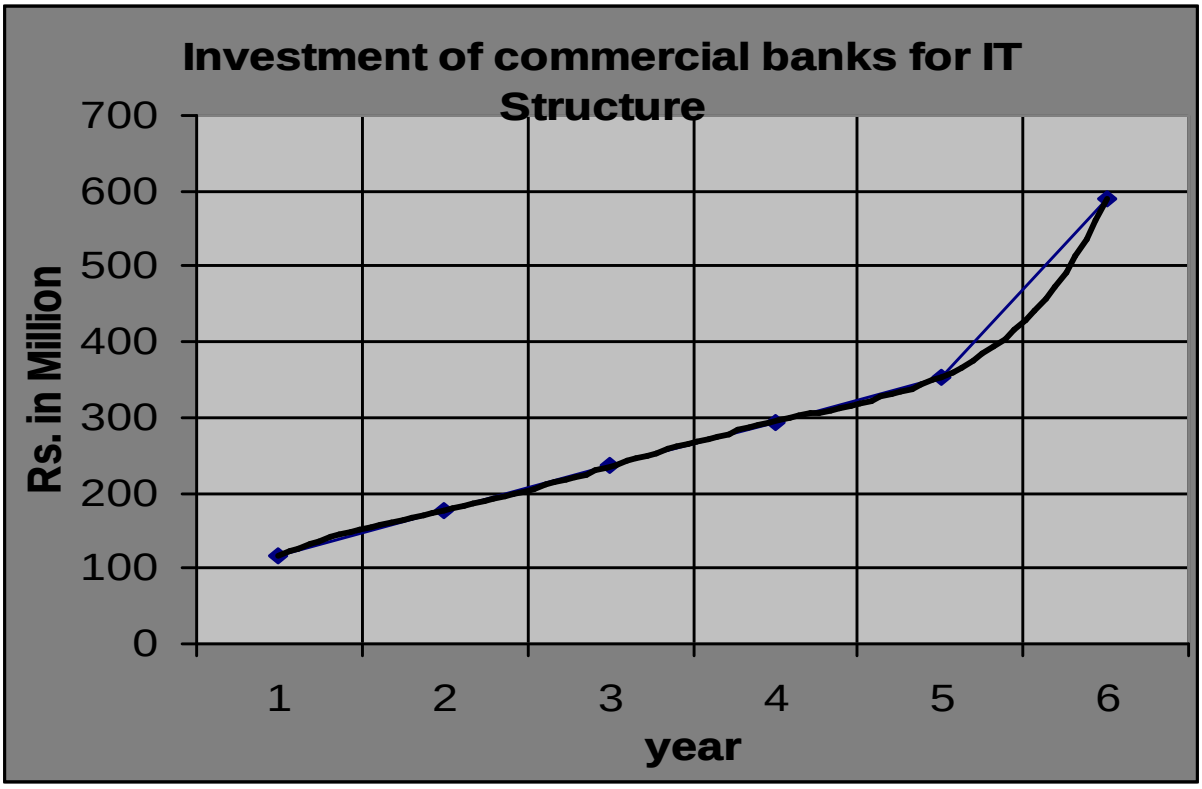


Figure 4.8: The trend line graph for the forecasting of investment for Remittance Software structure of Citizens Bank International for the fiscal year 2013/14

4.10 DFD, DD, ERD for New System

4.10.1 DFD

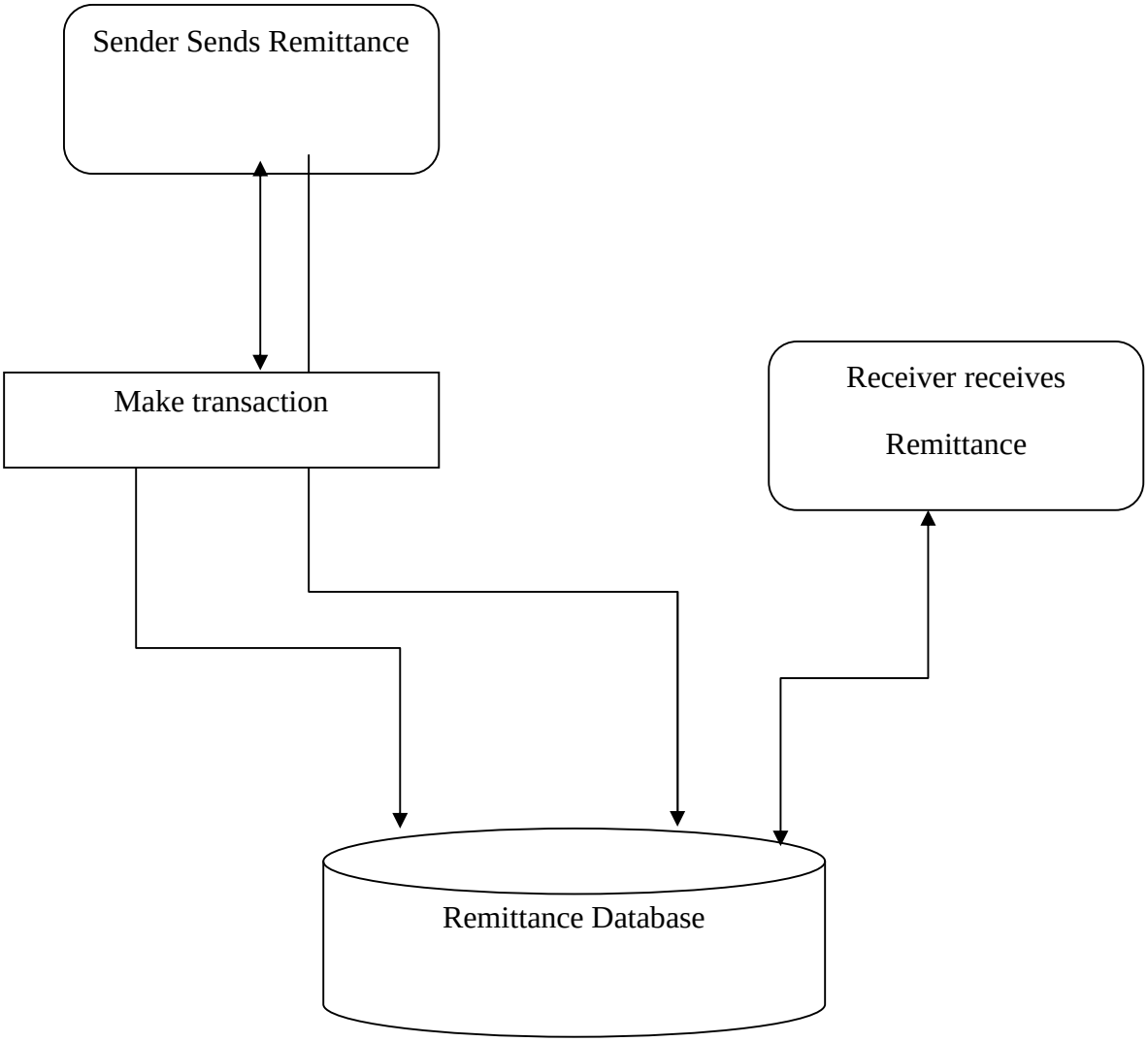


Figure 4.9: DFD of Remittance Transactions

4.10.2DD Table

A database schema is specified by a set of definitions expressed by a special language called a data definition language (DDL). The result of compilation of DDL statements is a set of tables that is stored in a special file called data dictionary, of data directory.

A data dictionary is a file that contains metadata- that is, data about data. This file is consulted before actual data are read or modified in the database system.

Table: Remittance Sender

Field name	Data type
Receiver ID	Number
Receiver Name	Text
Receiver Address	Text
Receive Type	Text
Tran Amount	Currency

Table: Remittance Transaction

Field name	Data type
Sender ID	Number
Sender Name	Text
Sender Address	Text
Tran Amount	Currency

T able: Remittance Receiver

Field name	Data type
Transaction ID	Number
Sender ID	Text
Tran Date	Date/Time
Tran Amount	Currency
Receiver ID	Number

4.10.3 E-R Diagram

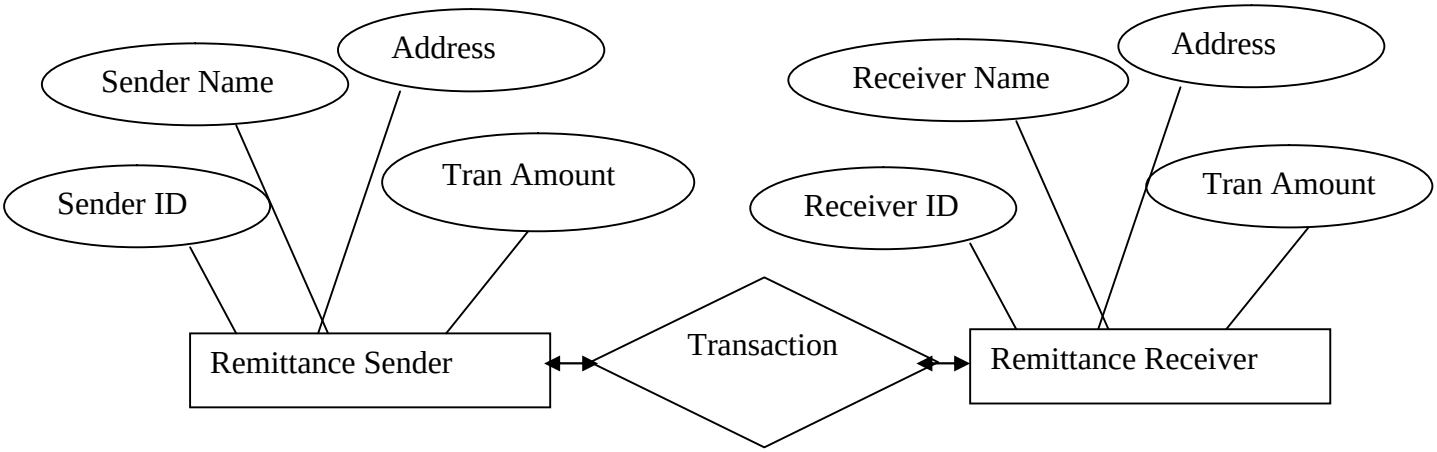


Figure 4.10: E R Diagram of Remittance Transactions

- **Relational Data Model**

The relational database model represents the database as a collection of tables. Although tables are simple, intuitive notation, there is a direct correspondence between the concepts of table and the mathematical concept of a relation. A relational database consists of a collection of tables i.e. in the model. Table represents all entity sets and relationships. A row in a table represents a relationship among a set of values. Since a table is a collection of such relationships, there is a close correspondence between the concepts of a table and the mathematical concept of a relation, from which the relational data model takes it name. In a relational model, a database schema is a collection of relation schemes. A relation scheme is a list of attributes and corresponding domains. It is convenient to give a name to a relation scheme. A database is represented by a set of relations. A relational formally represents a database.

- **Entity Relationship Model**

The E-R data model is based on the real world as a collection of basic objects called entities and the relationships among the objects. An entity is objects that exists and is distinguishable from other objects. The distinction is accomplished by associating with each entity a set of attributes, which describes the object.

The overall logical structure of a database can be expressed graphically by an E-R diagram. The attributes of the following Entity used for the above Diagram are shown:

ENTITY	ATTRIBUTES
1. CUSTOMER: -	cSecurity (primary key), cName, cAddress, cType.
2. LOAN: -	lNo(primarykey), lAmount.
3. EMPLOYEE: -	eName, eAddress, eStartDate, eId(primarykey), eSocialSecurity.
4. ACCOUNT: -	aBalance, aType, aNumber(primary key)
5. PAYMENT: -	pNumber, pDate, pAmount, pAccount(primary key).
6. BRANCH: -	bCity, bAssets,bBranchName/ID(primary key).

4.11 Input, Database and Output Design

The input is the initial raw data which needs to go under process and after processing the final data is stored in the database management system and finally the output of the result will be obtained. The input, database and output design of the system show the overall design of the new system that works in the organization. Here I have design out the input and output design which helps the reader to understand the overall design of the new system.

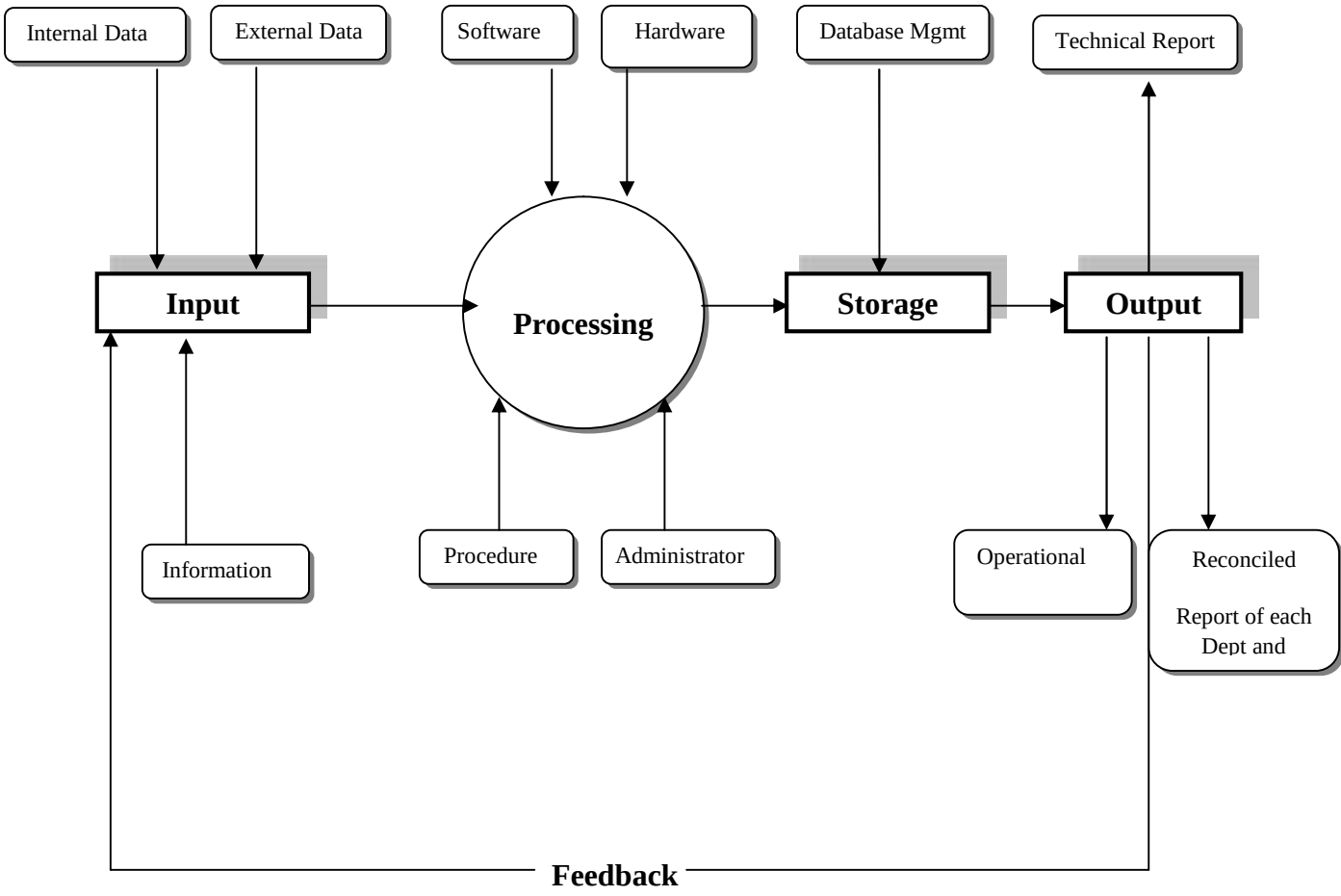


Figure 4.11: Input, database and output design.

4.12 Justification of the new system

At initial stage there is need of little investment. Even though investment amount is greater, the benefits are more. The present system hence should be modified with the proposed system. It is the demand of time that we continuously go on changing the techniques that we are using and move with the available technology in the market. The investment in the technology at an initial stage seems to be greater but its benefits are more qualitatively and quantitatively.

4.13 Cost benefit analysis and feasibility analysis of new system

A cost benefit analysis is done to determine how well, or how poorly, a planned action will turn out. Although a cost benefit analysis can be used for almost anything, it is most commonly done while implementing the proposed system. the cost benefit

analysis relies on the addition of positive factors and the subtraction of negative ones to determine a net result, it is also known as running the numbers.

4.13.1 Cost

The cost is one of the important factors that are responsible for whether to install the new system or continue of the new system. So by the analysis of the proposed system the cost incurred in the new system will be low and economical. As there needs to be add the reconcile section in the system department to handle all the queries regarding system administration so the cost incurred will be not much as anyone thinks about.

4.13.2 Benefits

There will be no question of developing new system if there are no benefits so the advantages that we can gain from the implementation of the new system is basically called as benefits of implementing a proposed system. Some benefits can be traced out from the following points.

- The modified system will reduce the data redundancy and data integrity significantly
- Accuracy of data in report which will reduce ambiguity.

- The system administration process will become easy and take a small time as a result there will be no conflict.
- The New system is economical and effective efficiency in work will increase significantly.
- The implementation of New System will make Management information system easy.

4.13.3 Feasibility Analysis

A feasibility analysis is an important tool which helps to assess the viability of starting a new system, or re-organizing or expanding an existing system. It provides important information needed to make the critical decision of whether to go forward with a development of new system or not. The need for system modification of the new system is feasible and suitable only if it can be successfully implemented. Any

system which cannot be implemented is just a waste of time and resources and it will be definitely not feasible for the organization.

Hence, all system requests though worthy and valuable, should be first analyzed for its feasibility before proceeding to system development or modification. The consideration of 3 types of feasibility should be considered for any proposed system.

4.13.4 Technical Feasibility

Technological feasibility is carried out to determine whether the company has the capability, in terms of software, hardware, personnel and expertise, to handle the proposed system so the proposed system is can be easily modified in the existing system of the Citizens Bank International Limited. As part of the present investigation, it was found that no extra technical support is required from the modification of the existing system.

4.13.5 Economic Feasibility

The proposed system can be developed with the minimum investment and maximum output. By the economic analysis of the existing system the new system is economically feasible for the implementation. Hence, the budget allocated by Citizens Bank International Limited is enough for the proposed project and does not face any problems in its making process. The economic feasibility can be measured by cost benefit analysis that means how much cost is required for the installation of the proposed system and the benefit that can be made after its implementation.

4.13.6 Operational Feasibility

In the existing system administrator face a lot of problem regarding the data collection and recording and reports preparation for the system administration thus in the new system the big effort of the existing system has been reduced by the installation of the reconcile department. Thus the implementation of the proposed system will be effectively operated.

Cost-benefits analysis is the process of comparing the anticipated costs of an information system to the anticipated benefits. Cost-benefit analysis is performed 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.

4.13.6.1 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

4.13.6.2 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:

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

Where,

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

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

$\overline{EAT}$ = Average Income

= Average Investment

n = Project Life

EAT_t = Earning 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.

4.13.6.3 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 – co not 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:

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

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.

4.14 SWOT Analysis of Remittance before and after using Information Technology

1. Strength

- Enthusiastic and Inspiring
- Creative/ innovative
- Outgoing and Competitive
- Sees the big picture
- Good at working alone
- Flexible
- Excellent Communication Skill
- Good People/ Delegation of authority
- Cooperative and Collaborative
- Thorough subject preparation/research
- Mature, experienced

2. Weakness

- Poor paperwork/personal organization
- Poor detailed planning skills
- Poor typing/computer skills
- Can be difficult to manage
- Easily bored with routine work

3. Opportunities

- New career directions
- New challenges
- Wider career prospects
- Experience in a different environment
- Fewer restraints
- No rigid career progression
- Better earnings prospects
- More autonomy

4. Threats

- No specific training qualifications
- Little experience of training adults
- No commercial experience
- No experience of private sector
- No management experience
- Unused to working in a variety of environments

Chapter V

CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

During whole period of preparation of this report I have learnt a lot about the banking sector and banking operation, about CBIL in particular. The preparation of report has been fruitful in many ways for me. It has helped me a lot to learn more about the work environment and the culture that is required to be in an individual. This report in particular has focused on core function Citizens Remit of the Remittance Department of CBIL to the other banking units.

During preparation of report I have learnt a lot of other aspects other than the banking as to socialize with the people, to deal with the senior staffs, and to deal with the intern colleague so as to make the working environment cozier and friendlier. I have also learnt that the behavioral issues are most important inside the organization. Customer feel satisfied when they are behaved properly. Their queries are needed to be answered in a friendly way so as to retain them in the organization.

I found out that a good support unit helps the organization grow; here Clearing and Remittance department provides all the remittance facilities with a gentle smile to the customer. All the functions are carried out in a reasonably systematic manner. Files are maintained for all the transactions taking place which serves as the knowledge management for the future. CBIL pays major focus on customer satisfaction and reduces services delivery time by large. The bank really feels that customer is the king. It is blessed with team of young, energetic and qualified staffs who are always working day and night long for the pride of the bank.

Lastly, I want to conclude that CBIL is excellent in term of their services despite with some pros and cons with the issue related to customer satisfaction. CBIL today is one of the most promising banks and undoubtedly the best present in market. By overcoming their weakness and playing with their strength the bank can meet its strategic intent i.e., to be the best bank in this region.

5.2 Recommendation

- Remittance Reports should includes all these, Various MIS Reports, Exchange Gain & Loss Report; Maintain the Pending Transaction, Printing of Receipt. Reports to Government Authorities, Funds Acceptance Summary, Funds Remitted Summary for the effective transaction.

- Since till date there is only alliance with one remitting agents, it is recommended to increase alliance with others agents in other to increase inward remittance. Depending to only one agent can decrease performance.
- Increase in outlet of paying agent can help organization to spread its wings to the part of country where there is no branch.
- Separate department should be created so that employee can focus on betterment of client relationships.
- Since customer are very vital for the banking transaction, getting same information regularly can doctorate the customer relation. So there should be the provision of creation of database of customer so that once entered the information it will not needed to enter again.
- Manual reconciliation is not possible when there is heavy transaction. So there should be the link between both banking software and remittance software. It will create the accuracy of the information and can reduce the human interdependency.
- There should be the outlet of bank in the receiving agent country so that from that place the exchange rate can be updated regularly minimizing the interest rate fluctuation.

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APPENDIX

1) Is the Hardware / Software rights currently that you have been provided enough for your job?

Particulars	Response	Percentage (%)
High	4	20%
Medium	12	60%
Low	4	20%

It means that 60% users satisfied in their rights and h/w, and only 20% users is fully satisfied and consider this as a vital element for decision making or in normal operation of the remittance business.

2) When printing for the reports route to:

Dot Matrix [ ]

Laser Printer [X]

Screen printing [ ]

Spreadsheet [X]

Fax [X]

E-mail [X]

Any other [ ] (Like XML, Database, ASCII)

3) Are there any drawings or descriptions of the technical environment available **with you**? Are there any flowcharts, diagrams, user manuals, online help etc… of your critical operations ?

Particulars	Response	Percentage (%)
Yes	4	20%
No	16	80%

It means that 20% users are facilitated from all types of technology and 80% users are limited by the resources and technology.

b) Conversions

4) Identify all the data that needs to be converted to generate required formats and reports and where data is located, i.e. Remittance software, spreadsheets, Queries or database. Which data should be manually entered because of re-design, amount of data (only a few entries) , time taken to complete the task ?

Particulars	Response	Percentage (%)
High	2	20%
Medium	10	50%
Low	8	40%

It means that 20% users face to problem due to low infrastructure and software whereas 50% users are satisfied.

c) Overview

5) What do you know about the remittance current system?

Particulars	Response	Percentage (%)
Yes	18	90%
No answer	2	10%

It means 10% users partially unknown about their system.

6) How much problem face by you with the remittance system processes?

Particulars	Response	Percentage (%)
High	5	25%
Medium	12	60%
Low	3	15%

It means only 15% users not face the big problem other 60% are partial satisfied and 25% users are not satisfied in the current system.

7) What task do you most dread (What task / transactions / operations you feel it is dangerous and you feel self insecurity or insecurity / threat to Bank?)

8) What are your major concern about the current system and any specific requirements of yours that should be addressed by remittance software for ease of your work?

Particulars	Response	Percentage (%)

Yes	10	50%
No	10	50%

It means that 50% users are facilitated from all rights and other 50% users are limited rights for their normal operation of the business.

e) Training

9) In which areas of the business did you undergo Remittance software Training well?

Particulars	Response	Percentage (%)
Business area	18	90%
Extra training	2	10%

On the basis of above figure almost users have on the job training only 10% users have taken the extra training.

10) In which areas of the business, did you undergo SOFTWARE related training **"NOT"** so well?

(Instructions, please mention the module and areas of modules that you have not taken up training for your job profile. Do you require some extra training for your job profile and apart from your work area?)

Business area	Why?

Business area	Why?
Remittance	For the new technology and software. (50%)
Swift	For the new features and functions available in newer version (50%)
IT	For the new technology and software. (50%)

11) When was your last training? Was any extra training run currently?

Put tick marks or put "Y" in the box available

	To cater for those who couldn't attend previous courses
	To cater for particular business unit needs (eg. more relevant exercises)
	To compensate for previous training considered inadequate
	Process changes within Banking Software
	Organizational changes
	Other: please describe

Particulars	Response	Percentage (%)
Other	2	10%
Remittance software	2	10%
None	16	80%

10% users taken the training for Remittance software, 80% users answered no; Training for banking software has not been taken till date. And remaining 10% has taken other system software.