## **CHAPTER-I**

#### INTRODUCTION

### 1.1 Background of the Study

Financial institutions are those organizations which collects saving from different entities like government, corporate houses, individuals and divert those saving funds into the investments, on the real assets so that it creates a productivity. Financial institutions are the organizations which help in capital creation and fund raising for the borrowers. Financial institutions channel the flow of fund in the economy. Thus, these institutions provide very important role (intermediary service) by matching the demand for and supply of funds between savers and users without which financial market is not possible to function. Mainly it includes commercial banks, development banks, finance companies, cooperatives etc.

Banks are the most important and essential financial institution in any nation. A bank can play an important role in the development of the nation. Without economic development, we cannot get a certain economic growth rate. Bank helps to utilize the capital and provide loan for the business sector. There is no possibility of economic development of a banking system. Therefore, a bank is necessary to make all round economic development.

Tiwari (1982), "A banker or a bank is person firm or company having a place of business where credits are opened by the deposit or collection of money or currency subject to be paid or remitted upon draft cheque or order of where money is advanced or loaned on stocks, bonds, billions of bills of exchange, and promissory notes are received for discount and sale."

A single banking institution cannot offer all the services hence different types of banks, e.g., commercial banks, development bank, merchant bank, industrial bank, insurance company, etc. emerged in the financial institution to concentrating sectors.

Taking the case of our own country, financial system is slowly bringing significant macro-economic policy transformation effect as well as multiplying financial fortunes of the individual investors actively participating in financial markets. Moreover, the government's role is proving vital to the growth of financial institutions and financial market. In our own country, the short financial history shows totally government initiated and to what extent there has been a major dominance of the single commercial bank namely, Nepal Bank Limited for several consecutive years to perform the major banking functions.

A Bank is an institution, which deals with money, receiving it from customers and lending or investing surplus deposits until they are required for payment. At first the Bank word is originated from the French word Banque and Italian word Banca which means a bench for keeping, lending and exchange of money or coin in the market. Firstly, Bank of Venice was founded in 1157. The Nepalese banking industry started with the establishment of the Nepal Bank Limited in 1937 AD as the first commercial bank of Nepal with the joint ownership of the government and public. In these seven decades, since the establishment of Nepal Bank Limited, the Nepalese financial system witnessed major changes in policies and regulations. With economic liberalization, of 1980s, and focus on the private sector development, many foreign banks have established joint venture Banks in Nepal and thus the Nepalese financial system has shown a tremendous growth of banking sector. The financial sector liberalization resulted into entry of many new banks in the domestic market.

Nepal Bank Ltd was the first government Commercial bank in Nepal It was established in 1937 A. D. then after slowly the first joint venture bank, Nepal Arab Bank Limited was established in 1984 which was known as the (NABIL Bank). NABIL bank introduces credits cards in Nepal in early 1990. Then after Himalayan Bank Ltd introduced the Automated Teller Machine (ATM) in 1995. Similarly, the Himalayan Bank Ltd was the first bank to introduce Tele-Banking in 1997 A.D in Nepal. In 2000 IT policy was formulated. Then after the private commercial bank has emerged. Kumari Bank Ltd was the first private commercial Bank in Nepal which was established on 2001 A.D. emerging of new private Commercial bank introduce new technology and software in Nepal. In 2002 Kamari Bank introduce Internet banking services to its customers. Afterward in 2004 again kumara bank launched SMS- Banking (mobile banking) services to its customer. In 2005 Electronic Transactions and Digital Signature Act was launched. Within the time has passed new banks and financial institutions are established to provide various services to its customers. Now the banks have developed new technology like debits card, credits card, Visa cards. Internet banking SMS banking, branchless banking etc.

By the end of mid-January 2017, altogether 209 banks and non- bank financial institutions licensed by NRB were in operation. Out of them, 28 are "A" class Commercial banks, 57 "B" class Development banks, 36 "C" class Finance companies, 48 "D" class Micro-credit development banks, 15 saving and Credit cooperatives and 25 NGOs and, other 10 financial institutions.

In a competitive business environment, all the commercial banks are try to reach their customers in the best possible way and this requires these firms to develop strategies that will create customer satisfaction, value and loyalty (Hugh and Elizabeth, 2006). Increasing usage of electronic banking consumers and the

tendency of more potential users joining the digital age, all commercial banks, development banks and finance companies are using digital marketing to reach their target markets. Indeed, by the end of 2013, the numbers of Internet users around the world were over 2.5 billion and this vast information traffic will continue to double every 1 - 1.5 years (Kaynar and Amichai-Hamburger, 2014). Digital Marketing is the practice of promoting products and services using digital distribution channels and the ubiquitous nature of the Internet and its wide global access has made it an extremely effective mode of communication between businesses and customers (Rowley, 2011). The growth of Internet technology has enormous potential as it reduces the costs of product and service delivery and extends geographical boundaries in bringing buyers and sellers together. The Internet also allows small businesses to access markets and to maintain a presence that helps them to compete against the big players in the industry.

The banking industry in Nepal has in the recent past witnessed drastic changes and one profound change has been the adoption of information technology in their operations due to the demanding customers that have tended to limit their visits to the physical bank branches also because many of the customers tend to prefer to transact with their mobile ATM services. Banks have found it difficult to cope with increasingly competition by relying on the old marketing strategies and with their customer base being technology over time, there has been needing to employ a medium that will reach most of these customers. All commercial banks have embraced internet banking as a medium of serving their customers. According to the annual report of NRB all commercial banks operating in Nepal have adopted the internet banking under which the electronic banking become more useable to all people in their life regularly.

The banking sector is an important element in any economy as it plays the roles of satisfying the needs customers and shareholders. New financial instruments that offer a

wider range of opportunities for risk management and transfer of resources, lowering transactions costs or increasing liquidity by creating financial instruments such as loans and works as the operator of the payment system. Other roles played by the banking sector include the fundamental role in financial intermediation by mobilizing deposits from members of the public and employing such deposits by way of loans and investments. The significance of the banking sector underlines the need for stability in the sector that is vulnerable to financial distortions. Key drivers of stability for any commercial entity are profitability and customer satisfactions. Nepalese Commercial banks are profit-seeking organizations and the ability of a bank and its growth are measured through the financial performance of bank and satisfactions of customers through the services they offered. While evaluating the financial performance and customer satisfactions and business promotions banks are also concerned about electronic banking and profitability of banks. This study shows the relationship between the electronic banking and financial performance commercial banks in Nepal. For the study only five commercial banks have been analyzed. NIC Asia Bank, Sanima Bank, Bank of Kathmandu and Machhapuchchhre Bank and Nepal Bank Ltd. are the main five banks which are studied for the relationship between electronic banking and financial performance of banks in Nepal.

#### 1.2 Statement of the Problem

## **Electronic Banking**

Electronic banking is defined as the automated delivery of new traditional banking products and services directly to customers through electronic, interactive communications channels. The definitions of e-banking vary amongst researchers partially because electronic banking refers to several types of services through which bank customers can request information and carry out most retail banking services via computers, television or mobile phone. Electronic banking can also be defined as

a variety of following platforms Internet banking, telephone banking, Mobile banking and e-banking.

#### **Financial Performance**

Financial performance is a measure of how well a firm can use assets from its primary mode of a business and generate revenues. This term is also used as a general measure of firm's overall financial health over given period of time and it is one of major indicator of organizational performance. Organizational performance encompasses three specific areas of firm output which are: financial performance profits, returns on assets, returns on investment, etc.): product market performance (sales, market shares etc.) and shareholders return (total shareholders return, economic value added, etc.).

Therefore, there is the positive relationship between electronic banking and financial performance of commercial banks. The growth or the effective financial performance of banks shows the increase in the no of ATM machine and the increased in the no of branches whereas the increasing in no of ATM machines as well as the establishment of new branches increased the no of financial transactions in the banks.

What is the financial performance of the NICA, SANIMA, and BOK MBL NBL?

- What is the position of electronic banking systems of NICA, SANIMA, BOK, MBL, & NBL?
- Are the sample bank commercial banks utilizing the available resources properly and efficiently?
- Do there is increase in the number of Electronic Banking?
- Does all commercial bank's electronic banking system increase the financial performance?

### 1.3 Objectives of the Study

The main objective of this study is to examine how electronic banking affects the financial performance of banks. The objectives of this study are as fallow:

- To examine the financial performance of NICA, SANIMA, BOK, MBL& NBL.
- To analyze relationship between financial performance and electronic banking of sample banks.
- To analyze the trend of increasing the no of ATMS machines and the branches establishment of concerned banks.

### 1.4 Significance of the Study

The study can enable the banks executives and indeed the policy makers of the banks and financial institutions to be aware of electronic banking as a product of electronic commerce with a view to making strategic decisions.

The research is equally significant to emerging banks because it provides answer to factors militating against with the implementations of electronic banking highlights the areas of banking operations that can be enhanced via electronic banking.

The study adds to existing literature, and individual that wants to know more about electronic banking.

# 1.5 Limitation of Study

None of the study can go beyond the boundary of some limitations and this study is also not an exception. The scope of the present study has been limited in terms of period of study as well as sources and nature of data. The following are the major limitations of the study.

The study analyzes electronic banking and the financial performance of banks.

- The study focuses only five banks, namely NICA, SANIMA, BOK, and MBL & NBL.
- The study has been conducted using secondary data. Further, the validity of the secondary data total depends upon the reliability of the annual reports of the bank.
- The study covers only six fiscal years, i.e. from the fiscal year 2068/69 to 2073/74.

### 1.6 Organization of the Study.

This study is about the electronic banking and financial performance of commercial banks of Nepal with reference to NIC Asia Bank, Sanima Bank, Bank of Kathmandu, Machhapuchchhre Bank, & Nepal Bank Limited. This study was divided into main five chapters. They are as follows:

The first chapter includes background of the study, statement of the problems, objectives of the study, significance of the study and limitation of the study. Second chapter deals with review of various books, previous study; journal published and unpublished reports, articles and newspaper. Third chapter Research Methodology deals with introduction of research design nature and sources of data collection, data collection technique, data processing procedure and analyzing tools. Fourth chapter Data Presentation and Analysis deals with presentation of related data collected from different sources then analysis them to reach closer to the actual result by using financial and statistical tools and techniques. Finally, fifth chapter Conclusion and Recommendation related to the whole study was summarized. Conclusion of the whole study and supply of valuable recommendation for the improvement were done.

#### **CHAPTER-II**

#### **REVIEW OF LITERATURE**

### 2.1 Conceptual Framework

This section attempts to build strong theoretical background through the help of which further search for solutions of the research problems would be easier. Resource mobilization: its theoretical background, academic insights, nature, advantages, importance and other various issues are addressed here in this chapter as contributed by different management experts and others towards this field. While reviewing literature different sources like books, documents bulletins, reports, journals and articles etc. are consulted. The literature of the related documents helps the researcher to reach near his purpose. This chapter highlights upon the existing literature.

Before proceeding to the theoretical literature review I'd like to first define the main variables of this study

#### **2.1.1 Financial Performance**

Financial performance is a subjective measure of how well a firm can use assets from its primary mode of business and generate revenues. The term is also used as a general measure of firms overall financial health over a given period of time, and can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation. There are many different stakeholders in a company, including trade creditors, bond holders, investors, employees and management. Each group has its own interest in tracking the financial performance of a company. Analysts learn about financial performance from data published by the company in Form 10K, also known as the annual report. The 10K is a required

legal document that must be published by all public companies. The purpose of the report is to provide stakeholders with accurate and reliable financial statements that provide an overview of the company's financial performance. In addition, these statements are audited and signed by the leadership of the company along with several other disclosure documents. In this way, the 10K represents the most comprehensive source of information on financial performance made available for investors on an annual basis. Included within the 10K are three financial statements, the balance sheet, the income statement and the cash flow statement.

## 2.1.2 Financial Analysis

According to I.M Pandey, "Financial analysis is the process of identifying the financial strengths and weaknesses of the firm by properly establishing relationship between the items of the balance sheet and the profit and loss account. Management of the firm can undertake it or by parties outside the firm". The focus of the financial analysis is on the key figure contained in the financial statement and significant relationship existed. Management of the firm is generally interested in every aspect of the financial analysis; they are responsible for the overall efficient and effective utilization of the available resources and financial position of the firm

## **2.1.3 Financial Performance Analysis**

Financial performance analysis includes analysis and interpretation of financial statements in such a way that it undertakes full diagnosis of the profitability and financial soundness of the business. The financial analyst program provides vital methodologies of financial analysis.

## 2.1.4 Electronic Banking

Electronic banking is the use of electronic and telecommunication networks to

deliver a wide range of value added products and services to the bank customers. The use of information technology in banking operations is called electronic banking. The use of information technology in banking operations is called electronic banking. Electronic banking is the products of e-commerce in the field of banking and financial services. The applications of information and communications technology concepts techniques, policies and implementations strategies to the banking services has become a subjects of fundamental importance and concerns to all banks and indeed a prerequisite for local and global competitiveness banking. The advancement in technology has played an important role in the improving services delivery standards in the banking industries, in its simplest form, Automated teller Machines (ATM) and deposit machines now allow consumers carry out banking transactions beyond banking hours. With online banking individual can check their account balances and make payments without having to go to the bank hall. This is gradually creating a cashless society where consumer no longer has to pay for all their purchase with hard cash. Bank customer can pay for airline tickets and subscribe the money directly from their accounts or pay for various goods and services by electronic transfer of credit to the seller account.

## 2.1.5 Importance of electronic banking Banks

Electronic banking plays an important role for the better performance and the satisfactions of customer. Electronic banking provides many advantages for banks and customer's e-banking has made life much easier and banking much faster for both customers and banks. It saves time spent in banks. It increases the ways for international banking. Electronic banking provides services banking throughout the year 24/7 days from any place have internet access. There is well organized cash management for internet optimizations. With the help of electronic banking customers take the advantage of integrated banking services, banks may compete in

new markets, can get new customer and grow their market share. It provides some security and privacy to customers by using state- of- the-art- encryption and security technology. In similar manner electronic banking provides convenience in terms of capital, labor, time all the resources needed to make a transaction.

### 2.1.6 Effects of Electronic Banking and financial Performance

Siam (2006) stated that, banks are using the internet as a strategic weapon, leveraging it's as a distributions channels to offers Complex products at the same quality they can provided from their physical branches, at lowest cost, to more potential customers, without boundaries. The online channels enable banks to offer to cross sell products such as credit cards and loans. In saving time and money for users, banks offer online banking as a less expensive alternative to branches banking. In additions on- line banking enables to acquire information's on consumer's habits and preferences, for later marketing purpose. An expanding customer base and transactions cost saving are major benefits for banks. According to Malhatraand Singh (2004), banking through internet has emerged as a strategic resource for achieving higher efficiency, control of operations and reductions of cost by replacing paper based and labor-intensive methods with automated process thus leading to higher productivity and profitability. However, to data researchers have produced little evidence regarding these potential changes. Nonetheless, recent empirical studies indicated that internet banking is not having independent effects on banking profitability, although these findings may change as the use of internet becomes wider spread. More recently, a wider array of financial products and services have become available over internet (Mahotra and Singh, 2004), which has thus become an important distributions channels for a number of banks. Banks boost technology investment spending strongly to address revenue, cost and competitiveness concerns. For more activities, bank hope to see a near-term impacts on profitability. Others investment is motivated more by desire to establish a completive position or avoiding falling behinds the competitions.

Berger 2003, Internets technology holds the potential to fundamentally change banks and banking industry. An extreme view speculates that the internet will destroy old models of bank services is expected affects the mixture of financial services produced by banks, the manners in which banks produces these services and the resulting financial performance of these banks. Whether or not this extreme view proves correct and whether banks take advantage of this new technology will depends on their assessment of the profitability of such a delivery system for their services. In additions, industry analysis outlining the potentials impacts of internet banking on costs saving revenue growth and risk profile of the banks have also generated considerable interest and speculations about the impacts of internet on the banking industry

## 2.1.7 Relationship between Electronic Banking and Financial Performance

There is the positive relationship between the electronic banking and the financial performance of the company. As that the trend of electronic banking was in the developing phase in our country and the technology and equipment based on the electronic banking was not appropriate and developed. The increase in the no. of electronic banking increases the financial transactions. It means that the increased in no of ATMs machine, debit card, credit card, increase each customers transactions day to day. The increased in the no of transactions and the customer satisfactions slowly increased the performance of the company. Electronic banking also plays an important role in the satisfactions of customer. As the customer is the key of each organization. So, the satisfactions of customer are the one of the main objectives of the banks. Electronic banking increased the customer satisfactions so that the

performance of company also increased.

### 2.2 Review of some acts relating to Banking in Nepal

Commercial Bank Act 2031 was formulated to facilitate the smooth run of commercial banks. All the commercial banks are functioning under this act. This act defines the bank as "A commercial bank is one which exchange money, deposit money, accepts deposit, grants loans and perform commercial banking functions and which is not a bank meant for co -operative agriculture, industry or for specific purpose."

The preamble of Nepal Bank Act 1994 clearly states the need of commercial bank in the country. In absence of any bank in Nepal the economic progress of the country was being hampered and causing inconvenience to the people and therefore with the objectives of fulfilling that need by providing services the people and for the betterment of the country, this law is hereby promulgated for the establishment of the banks and its operations.

A bank shall be established under the Company Act with the recommendations of the Rastra Bank. The bank may determine the locations of its head office with the approval of the Rastra Bank. The bank shall be an autonomous corporate body with the perpetual succession. It may sue or be sued sell movable and immovable property. Any bank may open or shift the locations of, or, close branches depots or other offices with approval of the NRB.

In case any foreign commercial bank desire to open a branches, representative office or liaison such branch under the Company Act with the approval of NRB, and provisions of the act shall apply to such foreign bank.. The NRB shall obtain the consent of His Majesty's Government before granting approval. While granting

approval, NRB may prescribe conditions according to the need and the foreign bank shall company with the conditions thus prescribed by the NRN.

#### 2.3 Review of Related Articles and Journals

Review of related literature means reviewing research studies or relevant review of book, articles, and regulation and review of thesis work are included. The opinions or views expressed regarding commercial banks and their activities on journals, magazines, etc. are focused as follows

The book of M.Y. Khan and P.K. Jain (1990) is a useful book in the financial management. The modern approach of Khan and Jain views the term financial management in broad sense and provides a conceptual and analytical frame work for financial decision making. According to them, "The finance function covers both acquisition so funds as well as their allocation hence apart from the issues of acquiring external funds, the main concern of financial management is the efficient and wise allocation of funds to various uses.

I.M. Pandey (1997), in his book "Financial Management" defines financial management as that managerial activity which is concerned with the planning and controlling of the firm's financial resources. I.M. Pandey believes that among the most crucial decision of the firm are those, which relate to finance, and an understanding of the theory of financial management provides the conceptual and analytical insights to make the decisions skill fully. I.M. Pandey further identifies two kinds of finance functions: - (a) Routine and (b) Managerial finance functions. The routine finance function does not require a great managerial ability to carry them out and they are chiefly clerical in nature. Managerial finance functions on the other hand are so called because they require skill full planning Control and

execution of financial activities. There are, according to I.M. Pandey four important managerial finance functions: - Investment or long-term assets miss decision, Financing or capital-mix decision, Dividend of profit allocation decision, Liquidity of short-term asset-mix decision. A summary of what the study have reviewed in various books of finance have been highlighted below. Finance is defined as the acquisition and investment of fund for enhancing the value and wealth of an organization. The various finance areas include investments, public finance, corporate finance and financial institutions. The basic function of finance is to manage the firms' balance sheet in most efficient way. The balance sheet reflects how a firm acquired financing through. The objective of the company must be to create value for its shareholders. Market price of company stock represents its value, and this can be maximized by firms' optimum investment, financing and dividend decisions. The capital investment decision is the allocation of the capital to investment proposals whose benefits are to be realized in the future. As the future benefits are not known with certainty, investment proposal necessarily involve risk. Consequently, they should be evaluated in relation to their expected return and risk. In the financial decision, the financial manager is concerned with determining the best financing mix or an optimum,, Capital structure". If a company can change its total valuation by varying its capital 26 structure, an optimal financing would exit, in which market price per share could be maximized.

According to Van Horne (1994), is its Dividend policy. The decision includes the percentage of earnings paid to stock holders in cash dividends. The dividend payout ratio determines the amount of earnings retained in the firm and must be evaluated in the light of the objective of maximizing shareholder's wealth. The Financial management involves the solution of the three major decisions altogether. They determine the value of a company to its shareholders. Van Home believes that the

objective of any firm is to maximize its value, and therefore, the firm should strive for an optimal combination of the three interrelated decisions solved jointly. The main thing is that the financial managers relate each decision to its effect on the valuation of the firm debt and equity resources, and it reflects the disposition of acquired financing among the various asset accounts. The major financial function required for managing the banks' balance sheet are summarized below: -

- a. Analysis and Planning
- b. Financial structure management &
- c. Asset management.

The first function financial analysis and planning is to understand the bank's current financial condition and plan for its future financial requirement in different economic scenarios. After analyzing the financial needs, the second function is to manage the financial structure of the bank, which can be done by optimizing the use of debt and equity in the capital structure.

While deciding about this optimum structure, a financial manager must concentrate in minimization of cost of funds in one hand, and maximization of value of the firm in the other. Moreover, financial structure management for a banking sector includes, a typical treasury function, which is also called funds management this function contributes a significant portion in profits earned by banks.27The final function is the management of asset structure of the bank. Advances of credit and investment in certain portfolios constitute the major portion of the bank "s asset. The major financial function related to assets management is to decide for the least risky and most profitable alternatives of investments. This can be conducted by determining returns and risks associated with the loans and advances made by bank. All the above financial decisions or functions as mentioned by different writers are

instrumental towards effective handling of financial management. Which includes activities beginning from rising or funds to efficient and effective use of funds no matter either it is a baking or non-banking institution.

B.N. Ahuja (1998), "Financial Performance analysis" is a study or relationship among the various financial factor in business a disclosed by a single set of statement and a study of the trend of these fact as shown in a series of statements. By establishing a strategic relationship between the item of a balance sheet and income statements and other operative data, the financial analysis unveils the meaning and signification of such items."

According to R.W. Metcalf and P.H. Tatar (1996), "Financial Performance analysis is a process of evaluating the relationship between components parts of a financial statement to obtain a better understanding of a firm's position and performance". Similarly, Khan and Jain (1990) "The ratio analysis is defined as the systematic use of ratio which has defined to interpret the financial performance so that the strength and weakness of firm as well as its historical performance and current financial condition can be determined.

In the word of Van Horne (1994) "Financial ratio can be derived from the balance sheet and the income statement". They must be analyzed on a comparative basis. Ratio may also be judged in comparison with those of similar firms in the same line of business and when appropriate, with an industry average and we can look to future progress in this regard. "A comparative study of financial performance is a basic process, which provides information on profitability, liquidity position, earning capacity, efficiency in operation, sources and use of capital, financial achievement and status of the companies. This information will help to determine the extent of

efficiency and effectiveness of the company in respect of deploying financial resources in the profitable manner.

Shrestha (2057), in his article "Commercial Banks Comparative Performance Evaluation" concluded that joint venture banks are new operationally more efficient having superior performance while comparing with local banks. Better performance of joint venture banks is due to their sophisticated technology, modern baking method and skill. Their better performance is also due to the government's branching policy in rural areas and financing PEs. Local banks are efficient and expertise in rural sectors but having number of deficiencies. So local banks have faced growing constraints of socio-economic, political system on one hand spectrum and that of the issues and challenges of joint venture banks commanding significant banking business on another spectrum.

Walt (2008), in his article, "Sound practices for Managing Liquidity in Banking Organizations" attributed Liquidity, or the ability to fund increases in assets and meet obligations as they come due, is crucial to the ongoing viability of any banking organization. Sound liquidity management can reduce the probability of serious problems. Indeed, the importance of liquidity transcends the individual bank since a liquidity short fall at a single institution can have system—wide repercussions. For this reason, the analysis of liquidity requires bank management not only to measure the liquidity position of the bank on an ongoing basis but also to examine how funding requirements are likely to evolve under various scenarios, including adverse conditions.

Rehman, R. (2011) "The relationship between liquidity and profitability" revealed that there is a significant impact of only liquid ratio on ROA while insignificant on

ROE and ROI; the results also revealed that ROE is no significant effected by three ratios current ratio, quick ratio and liquid ratio while ROI is greatly affected by current ratios, quick ratios and liquid ratio. The main results of the study explained that each ratio (variable) has a significant effect on the financial positions of enterprises with differing amounts and that along with the liquidity ratios in the first place. Profitability ratios also play an important role in the financial positions of enterprises.

#### 2.4 Review of Previous Thesis

In this section, different types of related research studies have been reviewed because change of duplication will be avoided from present study and some new change can be created for achieving the objective.

Josia Aduda and Nancy Kingoo(2012) " Relationship between e-banking and performance of Kenya" banking system conducted that the established whether there is relationship between the dependent variable i.e. performance measured by return on assets and the independents variables: investment in e-banking number of ATMs and number of debits cards issued to customer as proxy for e-banking. The study used secondary data. The data was collected from the annual report of target banks. The study used both descriptive and inferential statistics in analyzing the data. The study revealed that e-banking has strong and significant marginal effects on the returns on assets in the Kenyan banking industry. Thus, there exist positive relationship between e-banking and bank performance. The electronic banking has made banking transactions to be easier by bringing services closer to its customers hence improving banking industry performance.

Rathi (2010), "Position in Commercial Banks of Nepal" with special references from

leading five commercial Banks (SCBNL, NABIL, HBL, EBL and NIBL) has summarized the objective to measure the operating efficiency, stability and profitability of Nepalese Commercial Banks along with their financial strength and weakness concludes the findings such as, The liquid asset of SCBNL was highest, and the liquid asset maintained by EBL was lowest in comparison with that maintained by NABIL, HBL and NIBL. In terms of CRR, the liquidity position of NIBL was most satisfactory, and the liquidity position of EBL was worst. Except in NABIL and EBL, the CRR in all the remaining banks CRR was more than that directed by NRB in each fiscal year. The average net profit made by SCBNL was highest, EBL was lowest Similarly, the average net profit margin of SCBNL, NABIL, HBL, EBL and NIBL was 34.90%, 32.68%, 34.90%, 21.24% and 22.27% respectively. In terms of net profit achieved and net profit margin, SCBNL was most efficient. However, HBL was more efficient to optimally mobilize the loan and advances, since the interest income on loan and advances was highest in HBL

Tamang (2009), "Financial Performance Analysis of Commercial Banks of Nepal with reference to NIB and NABIL" has concluded that with the objective to measure the operating efficiency, stability and profitability of NIB and NABIL along with their financial strength and weakness concludes the findings of the liquidity position of NIB is better than that of NABIL. NABIL has utilized more debt than NIB, the profitability ratio of NABIL is better than the of NIB in terms of ROA, The EPS and DPS of NABIL are better than that of NIB, There is positive correlation between total debt and net profit for both the banks etc. Based on his findings, he recommended that both the banks should review their overall capital structure and investment portfolio to make better mix in capital structure. Moreover, he also suggested that both the banks should also give due consideration in improving their liquidity position.

Suvita Jha & Xiaofeng Hui (2012) "A Comparison of Financial performance of commercial banks in Nepal" has summarized that the financial performance of different ownership structured commercial banks in Nepal based on their financial characteristics and identify the determinants performance exposed by the financial ratios, which were based on CAMEL Model. Eighteen commercial banks for the period 2005 to 2010 were financially analyzed. In additions, econometric model (multivariate regression analysis) by formulating two regression models was used to estimate the impacts of capital adequacy ratio, non-performing loan ratio, interest expenses to total loan, net interest margin ratio and credit to deposit ratio on the financial profitability namely return on assets and return on equity of these banks. The result shows that public sector banks are significantly less efficient than their counterpart are; however domestic private banks are equally efficient to foreignowned (joint- venture) banks. Furthermore, the estimated results revel that return on assets was significantly influenced by capital adequacy ratio, interest expenses to total loans and net interest margin, while influenced by capital adequacy ratio, interest expenses to total loan and net interest margin, while capital adequacy ratio has considerable effects on return on equity.

Okiro and Ndungu (2013) investigated the "impact of mobile banking and internet banking on financial performance of financial institutions in Kenya". The study also identifies the extent of use of mobile and internet banking in financial institutions. The population of interest in the study consisted of 61 financial institutions operating in Kenya. The study revealed that among the financial institutions surveyed, commercial banks had the highest usage of internet and mobile banking; SACCOs had the second highest usage whereas none of the microfinance 19 institutions used internet banking. The study found that mobile banking faces various challenges

among them being, system delays by the mobile money transfer service providers, slow processing of transactions especially during the weekends, high transactions costs, limit on the amount of money that can be withdrawn in a day and fraud. It would be important to extent the study to a wider electronic banking and check whether it would have an effect on their financial performance.

Ngango Muteteri Asia(2013) " Electronic banking and financial performance of commercial banks in Rwanda" conducted that examine the contribution of Ebanking towards banking on performance of banking Institutions in Rwanda because according to National bank of Rwanda (NBR Report, 2012) there is delay in payment of checks between banks; time wasted in banks as people line in queue waiting for service, errors as a result of manual work and fraud related cases was common. As a result, some clients complain of the above hence the researcher would like examined the contribution of this system to banking efficiency in Rwanda. The study will be significant to the researcher; Bank of Kigali, Jomo Kenyatta University of Agriculture and Technology and other scholars who have interest in the same area. Literature by different scholars was reviewed especially on the contribution of E-banking towards banking on performance of banking institutions. The researcher will use descriptive method of study based on qualitative and quantitative approach in order to get better analysis of the study. He will use both primary and secondary data collection tools with their relevant tools like questionnaire and documentary analysis in order to come up with required data. In the findings it was established that Electronic banking system like ATM, pay direct, electronic check conversion, mobile telephone banking and E transact has a great impact on bank performance because they increase profitability, reduce bank cost of operations, and increase bank asset and bank efficiency. This means that there is a significant relationship between E banking and Performance of bank of Kigali in

Rwanda. As conclusion E banking contributes to positive performance of banks as witnessed by of bank of Kigali.

Empirical Studies Siam (2006) investigated the "Role of electronic banking services on the profits of Jordanian banks." He investigated the reasons behind providing electronic banking services through the internet and their impact on banking services in general and banks profitability. The study was done in 20 commercial banks operating in Jordan. The sample period was between 2003 to 2006 and they interviewed 98 managers. Accounting data was used to measure banks performance using regression analysis. He concluded that the effect of electronic banking services on banks profitability is negative in the short run because of costs and the investments the bank carry in order to have the technical and electronic infrastructure in place, training the employees to be skilled and competent but will be positive on the long run. Jordanian people are conservative as opposed to Kenyans who are widely known to be technology savvy It would therefore be important to investigate whether many of the innovations in e-banking adopted by commercial banks in Kenya has an effect in their financial performance.

Malhotra and Singh (2009) studied the "Impact of internet banking on bank performance and risk in India." The study was done on 85 commercial banks over the period 1998-2006 which represented nearly 39 percent of total scheduled commercial banks in India. Using information drawn from the survey of 85 scheduled commercial bank's websites, the results showed that nearly 57 percent of the Indian commercial banks are providing transactional Internet banking services. The univariate analysis indicated that internet banks are larger banks and have better operating efficiency ratios and profitability as compared to non-Internet banks. Internet banks 16 rely more heavily on core deposits for funding than non-Internet

banks do. However, the multiple regression results reveal that the profitability and offering of internet banking does not have any significant association, on the other hand, internet banking has a significant and negative association with risk profile of the banks. Since the study was based on only internet banking it's important to extend the study to cover to cover other forms of electronic banking.

Onay (2008) studied the "Impact of internet-banking on banks profitability in Turkey." The analysis covered 13 banks that had adopted online banking in Turkey between 1996 and 2005. By using bank specific and macroeconomic control variables, they investigated the impact of internet banking on the return on assets(ROA) and equity(ROE), the interest spread, overhead expenses and on commission and fee income controlling for systemic bank crises in the country during the timeframe. The study included time-lagged measures of internet banking adoption to exhibit the changes in effect over time. The results showed that internet banking starts contributing to banks' ROE with a time lag of two years confirming the findings of while a negative impact is observed for one year lagged dummy. The results provided some evidence that investment in e-banking is a gradual process. It would important to carry out a similar research in Kenya since Turkey is an advanced economy compared to Kenya.

Sumra, Manzoor and Abass (2011) carried out a study on the "Impact of e-banking on the profitability of Pakistani banks." The study was qualitative in nature assessing the qualitative factors in determining the impact of e-banking. It also discussed the effect of customers' literacy on provision of services from bank's perspective. The study was conducted in 12 Pakistani banks from three cities. The results show that e-banking has increased the profitability of banks; it has enabled the banks to meet their costs and earn profits even in the short span of time. The 17

illiteracies of customers are not regarded as a major impediment in provision of their products and services. For banks, the main motive to adopt e-banking is to increase their clientage and to retain their customers. The profitability of banks has augmented in transitioning to e-banking medium. It would be important to carry out a similar qualitative research in Kenya to determine whether similar results would be obtained.

Njuguna Etal. (2009) conducted "A study on internet banking adoption in Nairobi County, Kenya between 2010 and 2011." The purpose of the study was to establish the factors that influence adoption of internet banking among the individuals who have accounts with commercial banks in Nairobi County; Kenya. Only 24.82% of the respondents use Internet banking services. This is despite the high rate of internet access recorded. They concluded that internet banking is still at its nascent stages as demonstrated by the length of usage response. The results also revealed that perceived usefulness, perceived ease of use, self-efficacy, relative advantage, compatibility, and result demonstrability have a significant association with intention to use internet banking, while risk, visibility and trial ability are not significant. It would be good to find out if there has been any change with the increase uptake and usage of smart phones and tablets by Kenyans.

Kingoo (2011) investigated the "Relationship between e-banking and financial performance of commercial banks in Kenya." The study was conducted in the 43 commercial banks in Kenya. The sample period was between 2006 and 2010 and used both descriptive and inferential statistics to analyze the data. The results indicated that bank performance (measured by return on assets) are explained by independent variable the e banking measured by Investments in e-banking and number of debits cards issued to customers. Thus, there exists positive relationship

between e-banking and bank performance. The study concluded that the adoption of electronic banking has enhanced Kenyan banking industry by making it more productive and effective. Since the study period was a few years ago and financial performance was measured only ROA, it would be important to extent the study with use of other measures of electronic banking like fees and commission which is an indicator of usage by customers.

Lucy Nyangate Monyoncho (2015) "Relationship between banking technology and financial performance of commercial banks in Kenya". has summarized that the influence of ATMs on the financial performance of commercial banks in Kenya, to establish the effects of debit and credit cards on the financial performance of commercial banks in Kenya, to determine the effects of Mobil banking on the financial performance of commercial banks in Kenya and to assess the effects of internet banking on the financial performance of commercial banks in Kenya. The study was based on Technology Acceptance Model (TAM), diffusion of innovations theory and resource-based theory. The study populations included all 44 commercials banks licensed by Central Banks of Kenya. Secondary data for fiveyear period was collected from financial statements of commercial banks in line with the specific variables of this study. Descriptive statistics (weighted means, standard deviation) was used to summarize the data using SPSS 21. Pearson moment correlation was conducted to establish the linear relationship between study variables. Regression analysis was conducted to establish the nature of the relationship. The study revealed that recent ATM innovations offer financial institutions the opportunity to transform the ATM from a cash dispenser to a customer relationship management tool, helping to enhance loyalty among all customers. Credit cards are being adopted by the banks to increase income, and to reduce credit and liquidity risks. Mobile banking is likely to have major impacts on the profitability of commercial banks as business operations get smoothen and that internet banking offers the convenience of conducting most of the banking transactions at a time that suits the customer. The study concludes that adoption of E-Banking technologies had a positive influence on the performance of commercial banks in Kenya. The study recommends that commercial banks should continue investing in ICT.

### 2.5 Concluding Remarks

All the above researches made were mainly concentrated on the impacts of electronic banking and the financial performance of commercial banks which is the ultimate goal of each organization. Thus, to fulfill such gap, this study has been carried out. The previous research is only limited to financial and statistical analysis of commercial banks of Nepal. The previous researchers have been incomplete to show the impact of electronic banking on the financial performance it has only explained the trend that has been established between the electronic banking and the financial performance, it has become incomplete to explain the impact over the operational efficiency and the specific problems faced by the banks due to conflicting impact of electronic over financial performance. Therefore, this research is broader and is aimed to analyze the relationship of financial performance and analyzing their trends and using hypothesis to draw the effective conclusion.

#### CHAPTER-III

#### RESEARCH METHODOLOGY

#### 3.1 Introduction

This chapter discusses the research design and methodology of the study; it highlights a full description of the research design, the research variables and provides a broad view of the description and selection of the sample and population. The research instruments, data collection techniques and data analysis procedure have also been pointed out. It is really a method of critically thinking by defining and redefining problems, formulating hypothesis or suggested solution, collecting, organizing and evaluating data, making deductions and making conclusions to determine whether they fit the formulated hypothesis.

Research is a systematic method to find out the solution to a problem whereas research methodology refers to various sequential steps to be adopted by a research in studying a problem with certain objectives in view. In other words, research methodology describes the methods, techniques and process applied in the entire aspects of the study. It is a sequential procedure and method to be adopted in a systematic study.

It has been clear that research methodology is a systematic and scientific method of identifying problems, collecting facts and information tabulating and recording the data, setting hypothesis, analyzing the facts and researching certain conclusion with a view of findings answer to the problems. In fact, research methodology is one of

the crucial aspects of the thesis writing. So, the presented chapters outline the entire research methodology used and followed in this study.

"Research Methodology is a way to systematically solve the research problem" (Kothari; 2000, Pg-10).

"Research methodology is a vital and absolutely indispensable part of social scientific and educational research. Without research methodology modern social scientific and educational research would still be in the dark age" (Kerlinger, 1986).

## 3.2 Research Design

This research work tried to analyze the electronic banking and financial performance of the commercial banks of Nepal. The present study consists of analytical as well as descriptive design. The study was based on secondary data only. Only five commercial banks were considered, which represent almost same strategic groups. Financial as well as statistical tools were used to analyze and interpret.

A descriptive research describes the characteristics of objects, people, groups, organizations, or environments, and tries to "paint a picture" of a given situation, Griffin, Z. (2010). In this case, the relationship between electronic banking and financial performance of sample commercial banks in Nepal will be determined. The dependent variable is profitability as measured through ROA while the independent variable is electronic banking is measured by no of ATM s of commercial banks.

A research design is the arrangement of condition for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure (Selltiz, Jahodo, Deutsch and Cook, 1965).

Research design occupies a key position in the research work. It facilitates the smooth sailing of the various research operations, theory making research as efficient as possible yielding maximal information with minimal expenditure of effort, time and money. In fact, research design has a great bearing on the reliability of the results.

### 3.3 Population and Sample

A population is the complete enumeration or count of the population units for a characteristic. Here, the population refers universe and not the human population only. Census requires more money and manpower and time. There are many instances where it is not practicable to enumerate all the units due to their perishable nature. A census method provides for highest accuracy. All the members are covered by the inquiry; all the characteristics of the universe are maintained in original. This method is free from sampling errors. A population as the group to which a researcher would like the results to be generalizable (Goode & Hatt, 1981).

In the present context, there are 28 commercial banks operating in Nepal. The study of all these banks within this research was almost impossible. Hence, considering these numbers of banks as total population, five commercial banks, namely NIC Asia Bank, Sanima Bank, Bank of Kathmandu, Machhapuchchhre Bank and Nepal Bank Ltd, within from these total population has been taken as sample and tried to achieve the objectives set out by analyzing the data.

#### 3.4 Sources of Data

The collection of data is considered as an integral part of research activity

Data which are not originally collected rather obtained from published or
unpublished sources are called 'secondary data'. Before collecting primary data

regarding any project or problem, it is desirable to go through the secondary data, if available, to get an idea about the possible pitfalls beforehand.

The data used for this study are secondary in nature. Information received through secondary sources is sufficient and useful. Since the study is based on the secondary data, the data were collected from various sources. Mainly the secondary data was collected by reviewing the annual reports, brochures, prospects of the concerned banks and the official websites of the respective banks.

## 3.5 Data Collection Techniques

Once the purpose of statistical investigation has defined, the next step is the collection of the data that are relevant for analysis in a meaningful manner. Thus, collection of data is considered as an integral part of the research activity. The study employed secondary data collection. The study variables were deduced from the audited financial statements of the commercial banks in Nepal (i.e. financial statement of the concerned fiscal years have been collected from the respective banks. Moreover, websites have also been referred for the information.

## 3.6 Data Analysis Tools

Data are collected for analyzing. Collected data are meaningless unless it is analyzed for further meaning. The financial and statistical tools and techniques have been applied in data processing procedure. The data can be analyzed by using various statistical and financial tools. For the analysis of data, appropriate tools are to be utilized to secure the precise finding of the study. All those tools which are utilized for the analysis and interpretation of the data is known as analytical tools. There are two types of analytical tools applied in the study. They are:

## 3.6.1 Descriptive Statistics

### A) Arithmetic Mean

Arithmetic Mean of a given set of observations is the sum of the observation divided by the number of observations. In such as case all the items are equally important. Simple Arithmetic Mean is used in this study as per necessary for analysis.

We have,

$$Mean (\overline{X}) = \frac{\phi x}{n}$$

Where x = sum of all values of the observations

n = Number of observation

x = Value of variables

### **B) Standard Deviation**

The standard deviation usually denoted by the letters  $(\exists)$ . Karl Pearson suggested it as a widely used measure of dispersion and defined as the given observations from their arithmetic mean of a set of value. It is also known as root mean square deviation. Standard deviation, in this study has been used to measure the degree of fluctuation of interest rate and that of other variables as per the necessity of the analysis (*Gupta*, 2002).

We have,

Standard Deviation = 
$$\sqrt{\frac{\phi(x \ Z \ \overline{x})}{n}}$$

## C) Coefficient of Variation (C.V.)

The relative measure of dispersion based on standard deviation is called coefficient of standard deviation and 100-time coefficient of standard deviation is called coefficient of variation. It is denoted by C.V. Thus,

C.V. = 
$$\frac{1}{x} x_{100} \%$$

Where  $\exists$  = Standard Deviation

 $\overline{X}$  = Mean Value of Variables

The distribution having less C.V. is said to be less variable or more consistent. A distribution having greater C.V. is said to be more variable or less consistent.

Financial tools are those which are used for the analysis and interpretation of financial data. Here in this study, the financial tools will include:

### 3.6.2 Correlation Analysis

Levin and David (1994), "The coefficient of correlation is a number, which indicates to what extent two things (variables) are related to what extent variations in one go with the variations in the other." The value of coefficient of correlation as obtained shall always lie between  $\pm 1$ , a value of -1 indicating a perfect negative relationship between the variables, of +1 a perfect positive relationship, and of no relationship when correlation coefficient is zero. The zero-correlation coefficient means the variables are uncorrected.

It is defined by Karl Pearson as:

$$r = \frac{N \sum XY - \sum X \cdot \sum Y}{\sqrt{N \sum X^2 - (\sum X)^2} \sqrt{N \sum Y^2 - (\sum Y)^2}}$$

# **3.6.2** The Model (Regression Analysis)

Literal meaning of regression is stepping or returning to the original position. Regression analysis is used as a tool of determining the strength of relationship between two variables. Thus, it is a statistical device with the help of which we can estimate or predict the value of one variable when the value of another variable is known. The unknown variable which we must predict is called dependent variable and the variable whose value is known is called independent variable. Regression analysis clearly indicates the cause and effect relationship between two variables. In this study following Ordinary Least Squared Regression Model has been used. Regression Equation to be shown in Research Methodology Section is:

$$NIM_{it} = 0 + 1 NATM_{it} + 2 NBRA_{it} + e_{it}$$

Where:

$$\begin{split} NIM_{it} &= Net\ Interest\ Margin\ \%\ of\ i^{th}\ bank\ at\ t\ year \\ &_0 = Constant \\ NATM_{it} &= Number\ of\ ATM\ of\ i^{th}\ bank\ at\ t\ year \\ NBRA_{it} &= Number\ of\ Branches\ of\ i^{th}\ bank\ at\ t\ year \end{split}$$

1, 2 = Slopes of regression equation

 $e_{it} = Error term$ 

# 3.7 Study Variables and Definition

Profit is the ultimate output of a company and its existence is not justified if it fails to make sufficient profit. Therefore, the company should continuously evaluate the efficiency of the company in terms of profit. The profitability ratios are calculated to measure the operating efficiency of the company. Following variable are considered for the study

## (A)Dependent Variable

## Net interest margin

NIM is a measure of the difference between the interest income generated by banks and the amount of interest paid out to their lenders relative to the amount of their assets. Net interest margin measures the gap between the interest income the bank receives on loans and securities and interest cost of its borrowed funds. Net interest margin is focused on the profit earned on interest activities (Berger, 1995). There is a negative relationship between net interest margin and funding liquidity risk.

Net Interest Margin = Net Interest Income /Net interest expenses

# (B)Independent Variable

### **Electronic Banking (No of ATMS)**

Electronic banking is those developed technology from which the banking transactions become easier and fast through the days and night. Electronic banking transactions are done through the off hours so that through the use of electronic banking it increases the financial transactions of the bank.

An **automated teller machine** (**ATM**) is an electronic telecommunications device that enables customers of financial institutions to perform financial transactions, such as cash withdrawals, deposits, transfer funds, or obtaining account information, at any time and without the need for direct interaction with bank staff. It is calculated by the no of ATMS machine established by the bank different locations.

## (b) Bank Size (No of Branches)

The banks established its wings or branches on the needs and demand of transactions of commercials Banks. Branches are established for the decentralizations of work. It is calculated by the establishment of new branches on the behalf of their headquarters and provided competitive and excess services to the customers.

#### CHAPTER-IV

#### DATA PRESENTATION AND ANALYSIS

#### Introduction

After collecting and organizing the data, the next step is to present them systematically so that they can be presented in various forms such as tabular form, diagrammatical form, graphical form, etc. After presentation, the next step is to analyze the data with the help of financial and statistical tools that is concerned about comparative analysis and interpretation of available

The analysis of data consists of organizing, tabulating, and performing statistical analysis. The main purpose of analysis of the data is to change it from an unprocessed form to an understandable presentation.

The main purpose of this study is to find out actual financial position of BOK, MBL, SANIMA, and NBL & NICA with the help of ratios. The presentation and analysis of data in this study have been done through the help of financial statements of the year from FY 2068/69 to FY 2073/74.

This chapter provides a mechanism for meeting the basic objectives as stated earlier in the first chapter of the study. The study has followed the methodology as described in the third chapter to attain the objectives. Data collected for the analysis of relationship between electronic banking and financial performance of SANIMA, BOK, MBL, NBL, & NICA are presented in the form of tabular and diagrammatic

form and are analyzed with the help of widely accepted tools of financial ratios. But it is notable that all types of financial ratios are not studied under this chapter. Only those ratios are calculated, analyzed and presented which are very significant to pasteurize the study. Moreover, statistical tools such as, average mean, standard deviation, co-efficient of variation, correlation co-efficient, regression analysis, hypothesis (t-test) and ANOVA test have been used to analyze the data.

A bank basically deals with two conflicting goals namely, electronic banking and financial performance. Managers of bank can obtain the trade-off between electronic banking and financial performance by following the method of cash planning, managing cash flow, managing optimum cash level and investing idle funds in suitable assets. Since, electronic banking and financial performance both are important aspect for the bank, thus, bank can't ignore any of them, and in fact the bank should go side by side with both the concept.

A balance should always be maintained between financial performance and electronic banking hence, the bank should follow certain principles of financial performance.

## 4.1 Profitability Position of Selected Commercial Banks (NIM)

NIM is a measure of the difference between the interest income generated by banks and the amount of interest paid out to their lenders relative to the amount of their assets.

Table 4.1

Profitability (NIM %) Position of Selected Commercial Banks

Year	Commercial Bank				
	NBL	BOK	MBL	SANIMA	NICA
2068/69	3.16	3.93	1.75	3.05	3.17
2069/70	3.57	3.78	3.12	2.98	2.71
2070/71	3.53	3.12	2.74	2.79	3.49
2071/72	3.84	1.89	2.78	2.83	2.61
2072/73	4.33	1.94	3.09	3.06	2.46
2073/74	5.98	2.97	3.38	3.20	2.83
Mean	4.07	2.94	2.81	2.99	2.88
Std.	1.01	0.87	0.57	0.15	0.38
Deviation					
Skewness	1.72	-0.26	-1.54	-0.04	0.83
Kurtosis	3.16	-1.85	2.88	-0.97	-0.33
Range	2.82	2.04	1.63	0.41	1.03
Minimum	3.16	1.89	1.75	2.79	2.46
Maximum	5.98	3.93	3.38	3.20	3.49

Source: Annual report of selected banks and results were drawn using SPSS-16.

The table 4.1 represents the NIM of five commercial banks during the six years of time from FY 2068/69 to FY 2073/74. The minimum value of NBL for six years period was 3.16 whereas the maximum value was 5.98%. The average mean was 4.07% and standard deviation was 1.01%. The minimum value of NIM of BOK was 1.89% and maximum value was 3.93%. The average mean was 2.94% and standard deviation was 0.87%. The average NIM value of MBL was 2.81%.MBL has minimum 1.75% and maximum 3.38%. And standard deviation was 0.57%. In case of SANIMA the minimum NIM was 2.79% and maximum value 3.20%. Its average mean was 2.99% and standard deviation was 0.15%. At last the minimum and maximum value of NICA was 2.46% and 3.49% respectively. Its average mean was 2.88% and standard deviation was 0.38%.

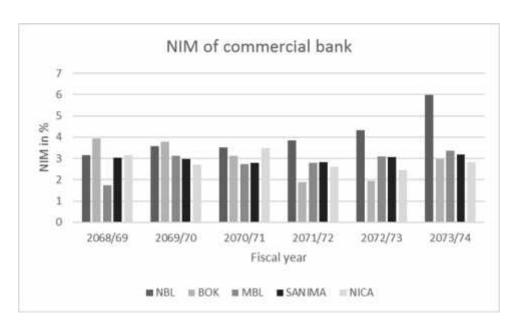


Figure 4.1 % NIM of Commercial Bank

The Figure 4.1 explains the Net interest margin of five sample commercial banks of six fiscal year period from FY 2068/69 to FY 2073/74. NIM is a measure of the difference between the interest income generated by banks and the amount of interest paid out to their lenders relative to the amount of their assets. In an average the NBL has highest NIM in FY 2073/74. On the same way MBL has the lowest NIM. It represents that the NBL in FY 2073/74 has lend the more loan to its customer than it collects the deposit. Highest NIM shows the good financial performance of commercial banks in earning the profit. It means the income generated from interest was highest than the interest expenses paid to its depositors.

## 4.2 Electronic Banking(Number of ATMs Installed by commercial bank)

The electronic banking i.e. the no of ATMS machine established by the bank for the increment of the financial transactions at any time.

Table 4.2

Electronic Banking (Number of ATMs) of Selected Commercial Banks

Year	Commercial Banks					
	NBL	BOK	MBL	SANIMA	NICA	
2068/69	22	27	60	11	37	
2069/70	28	34	64	18	48	
2070/71	32	44	69	27	61	
2071/72	38	57	70	38	68	
2072/73	44	59	72	47	69	
2073/74	54	66	74	53	74	
Mean	36.33	47.83	68.17	32.33	59.50	
Std.	11.55	15.35	5.23	16.51	14.24	
Deviation						
Skewness	0.46	-0.30	-0.75	-0.04	-0.87	
Kurtosis	-0.42	-1.76	-0.52	-1.73	-0.61	
Range	32.00	39.00	14.00	42.00	37.00	
Minimum	22.00	27.00	60.00	11.00	37.00	
Maximum	54.00	66.00	74.00	53.00	74.00	

Source: Annual report of selected banks and results were drawn using SPSS-16.

The table 4.2 shows the no of ATMS machine installed by the five commercial banks during the six years of period from FY 2068/69 to FY 2073/74. According to the table NBL has highest no of ATMS machine in FY 2073/74 and lowest in FY 2068/69. All the five commercial banks increased the no of ATMs machine in each fiscal year. The increase in the no of ATMs machine increased the no of transactions evens in off office hours.

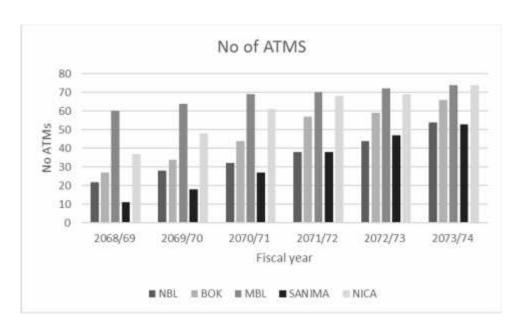


Figure 4.2 No of ATMs machine.

Figure 4.2 represent the no of ATMS machine installed by the five sample commercial banks from FY 2068/69 to FY 2073/74. Above chart shows that the no of ATMs machine of all commercial banks was in increasing trend it means that all commercial banks increased their business as through the increased in the no of ATMs machine. The increased in the no of ATMS machine increased the no of financial transactions. Customers increased their transactions through using the ATMs machine with and within off office hours.

## 4.3 Bank Size (Number of Branches) of Commercial Banks

Bank size it means that the number of branches expansions or the establishment for the business expansions and promotions of the business. All the branches are established for the decentralizations of the works as well for better performance in competitive environment.

Table 4.3
Bank Size (Number of Branches) of Selected Commercial Banks

Year	Commercial Banks				
	NBL	BOK	MBL	SANIMA	NICA
2068/69	74	41	45	22	36
2069/70	82	45	57	24	53
2070/71	94	50	57	28	67
2071/72	98	50	56	38	67
2072/73	112	65	56	40	67
2073/74	135	74	55	46	119
Mean	99.17	54.17	54.33	33.00	68.17
Std.	21.93	12.67	4.63	9.70	27.76
Deviation					
Skewness	0.77	0.87	-2.31	0.16	1.33
Kurtosis	0.30	-0.65	5.45	-2.02	2.95
Range	61.00	33.00	12.00	24.00	83.00
Minimum	74.00	41.00	45.00	22.00	36.00
Maximum	135.00	74.00	57.00	46.00	119.00

Source: Annual report of selected banks and results were drawn using SPSS-16.

The table 4.3 represents the no of branches established by the banks. The table shows that there is increased in no. of branches each year. The average mean of NBL, BOK, MBL, SANIMA, and NICA was 99, 54, 54, 33, and 68 respectively. The table shows that NBL and NICA were more active in expanding their business transactions through increased in no of branches.

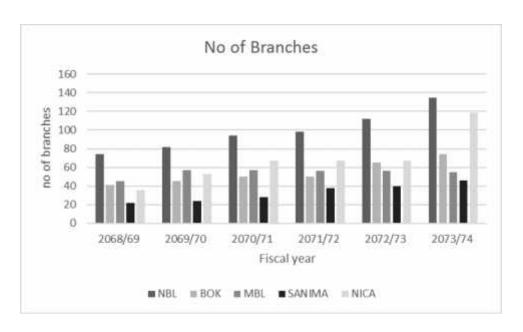


Figure 4.3 No of Branches

The table 4.3 represents the no of branches established by the bank from FY 2068/69 to FY 2073/74. The trend shows that the no of branches was in increasing trends. All five commercial banks increased the no of branches for the business promotions and the satisfactions of the customers. In similar manner the increased in no of branches increased the transaction and business of the sample commercial banks. From above figure we concluded that NBL and NICA were more active in increasing the no of branches and SANIMA bank was slow in the branch expansions.

# 4.4 Descriptive Statistics of Variables

Descriptive statistics are used to present quantitative descriptions in a manageable form. It simply helps researcher to simplify large amount data in a sensible way to reduce lots of data into a simple summary.

Table 4.4

Descriptive Statistics of Study Variables

Variable Mean	Maan	Mann Std.	Classes	V	Minima	Maxim	Percentiles		
	Deviation	Skewness	Kurtosis	Minimum	um	25	50	75	
NIM	3.14	0.79	1.43	5.07	1.75	5.98	2.77	3.08	3.50
NATM	48.83	18.44	-0.32	-1.05	11.00	74.00	33.50	50.50	66.50
NBRA	61.77	27.49	1.03	0.83	22.00	135.00	44.00	56.00	74.00

Source: Annual report of selected banks and results were drawn using SPSS-16

The Table 4.4 shows the Mean, Standard deviations, Minimum Maximum no skewness and Kurtosis of NIM, No of ATMs and No of Branches. According to the table the minimum and maximum value of NIM was 1.75% and 5.98% respectively. The average mean was 3.14% and standard deviation was 0.79%. Similarly, based on ATMs its average mean was 48.83 and standard deviations was 18.44%. The minimum no of ATMs machine established by the bank was 11 and maximum 74 no of ATMs. The banks established the more branches for increasing the business promotions and performance. The minimum no of branches expand by five commercial banks during certain time was 22 and maximum was 135th branches. Its average mean was 61.77 and standard deviation was 27.49.

## 4.5 Correlation Analysis

To analyze the nature of the correlation between the dependent and independent variables Pearson correlation coefficient has been computed.

Table 4.5

Pearson Correlation Coefficients (n=30)

Variable	NIM	NATM	NBRA
NIM	1		
NATM	239	1	
NBRA	.529**	.288	1

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed). Source: Annual report of selected banks and results were drawn using SPSS-16.

The correlation matrix that is shown in Table 4.5 shows the relationship between E- banking and Performance of commercial banks in Nepal where by the respondent N is 30 and the significant level is 0.01, the result indicates that the independent variable no of Branches has high positive correlations variable equal to 0.529. Similarly, there is negative relationship between independent variable No of ATMS equal to 0.239. From the above table it shows that NIM is positively co related with NBRA and negatively correlated with NATMS.

## 4.6 Regression Analysis

Table 4.6

Regression Coefficients (n=30)

Variable				Collinearity Statistics		
	Coefficients	t- statistics	P-Value	Tolerance	VIF	
Constant	2.872	7.893	.000			
NATM	018	-2.858	.008	.917	1.090	
NBRA	.019	4.363	.000	.917	1.090	
	$R^2 = .447$ , Adj. $R^2 = .406$ , F-statistics = 10.917, F-sig. = .000, DW=					
	1.044					

Source: Annual report of selected banks and results were drawn using SPSS-16.

In Table 4.6, the regression results of dependent variable NIM and independent variable NATM and NBRA are shown. There is significant positive relation between NIM and NBRA equal to Likewise, there is negative relation between NIM and independent variable NATM. The beta coefficients of NBRA are positive and statically significant with NIM which is like prior hypothesis. However, the beta coefficient NATM is negative and statically insignificant with NIM which is contrary to prior hypothesis.

### 4.7 Major Findings

This study is conducted to identify the practical applicability of some of the theories in the context of Nepal. The research objective is to explore the determinations of financial performance in commercial banks in Nepal. From the study, the following major findings are obtained.

- 1. The average NIM of five commercial banks during the six fiscal year i.e. from FY 2068/69 to FY 2073/74 was 4.07%, 2.94%, 2.81%, 2.99%, and 2.83% of NBL, BOK, MBL, SANIMA and NICA respectively. Comparing the five-commercial bank NBL has the highest NIM which represent that the income earned was highest than its expenses. Similarly, the MBL has lowest NIM it represents that banks can't not able to control its cost.
- 2. The no. of ATMS machine of five commercial banks from FY 2068/69 to FY 2073/74 was in the increasing trend. Comparing the five commercial banks MBL has the highest 68 no of ATMS whereas the SANIMA has lowest 32 no. of ATMS machine in an average which represent that the development of electronic banking was high in MBL and SANIMA also is in developing phase. The increased in no of ATMs increased the no of financial transactions.

- 3. All commercial banks increased their branches in from FY 2068/69 to FY 2073/74. In an average the no of branches from FY 2068/69 to FY 2073/74 was 99, 54, 54, 33 and 68 of NBL, BOK, MBL, SANIMA and NICA respectively. NBL has the highest no of branches which represent that it expands its business and increased the financial transactions. Similarly, the NICA was in second positions to establish its branches. Whereas SANIMA has lowest no of branches which shows that the SANIMA was unable to expands its business and get better performance.
- 4. The installations of no of ATMS machine and the establishment of new branches both are in increasing trend.
- 5. The average mean of NIM is 3.14, standard deviations is 079. The minimum value of NIM was 1.75 and maximum value was 5.98. Similar the average NATM is 48.83. The minimum number of ATM of commercial banks during curtained time period was 11 and maximum was 74. In this way in an average no of branches was having 22 minimum and 135 maximums.
- 6. Based on pearson correlations coefficient there is positive relations between NIM and NBRA and negative correlations with the NIM and independent variable NATM.
- 7. Regressions result shows that the dependent variable NIM is positively related with NBRA whereas negatively related with independent variable NATM.
- 8. From the above analysis it shows that the trend of electronic banking has been developing each year so that there is better financial performance.

### CHAPTER - V

### SUMMARY, CONCLUSION AND RECOMMENDATIONS

### **5.1 Summary**

The banking in Nepal is still facing with various problems like strong unorganized sector, weak position and unhealthy competition, lack of proper technology, weakness of proper regulations of Nepal Rastra Bank, lack of research, training & development etc. However, current political and economic scenario of the country coupled with prudential norms of Nepal Rastra Bank and stiff competition may make the entrepreneurs give a second thought to the idea to establishing banks. Electronic banking is directly affected by the unbalance competition and the lack of development of information technology. Similarly, expansion of business was through the increased in the no. of branches. Even though, electronic banking is not a new term in the banking sector and it still in the developing phase, it is still unpredictable as it was and is most crucial for the better financial performance. Such stage can be reduced by proper policy decision taken by understanding the depth and breadth electronic banking. The meaningful solution itself generates a lot of benefits.

The introducing of electronic banking has improved banking efficiency in rendering services to customer. The applications of information and communication technology concepts techniques, policies and implementations strategies to banking services has become a subject of fundamental importance and concerns to all banks and indeed a pre-requite for local and global competitiveness banking. The advancement in technology has played an important role in improving services delivery standards in the banking industry. In its simplest form, Automated Teller

Machines (ATMs) and deposit machines now allow customer carry out banking transactions beyond banking hours. The establishment of more and more branches provides better services. Through the establishment of more branches branchless banking service and cashless transactions are easy and faster. On With online banking, individuals can check their account balances and make payments without having to go to the bank hall. This is gradually creating a cashless society where consumers no longer have to pay for all their purchases with hard cash. Bank can pay for airline tickets and subscribe to initial public offerings by transferring the money directly from their accounts or pay for various goods and services by electronic transfers of credit to the sellers account.

The main objective of this study is to analyze the relationship between electronic banking and financial performance of commercial Banks in Nepal. However, the study of all the commercial banks was almost impossible and thus only five banks, namely Nepal Bank Limited, Bank of Kathmandu Limited, Machhapuchchhre Bank Limited Sanima Bank Limited and NIC Asia Bank Limited were taken as sample. To achieve the objectives set out, different financial tools like Net interest margin, No of branches, No of ATMS, Debit card, credit card e banking and profitability others and were analyzed. The data that have been analyzed by such financial and statistical tool includes from FY 2068/69 to FY 2073/74. For the systematic analysis of study, chapter plan has been made.

In the first chapter, the background and subject matter of the study consisting statement of the problem, significance and limitations of the study has been dealt. In the second chapter, the relevant review of literature has been made in terms of theoretical background of banking principles. Third chapter deals with the research methodology that has been used to evaluate the electronic banking and financial

position of sample banks under study. In the fourth chapter, the data and information are presented, analyzed and interpreted by the help of financial and statistical tools. Finally, in the fifth and last chapter, summary, conclusion and recommendations have been made regarding the entire study.

## **5.2 Conclusion**

The growth of financial sector in Nepal is much better compared to the other sectors in the country. The decade long conflict has had its toll on every sector including the financial sector. Despite the conflict, private commercial banks continued growing in comparisons to government bank. It is this very growth and many other reasons that have attracted investors towards the financial sector. There are a sizeable number of commercial banks, development banks, finance companies and cooperative banks operating in the country although bulk increased in no of ATMS machine, expansions of branches and development of technology and services provided to customer remains with private sector commercial banks.

The study shows that the bank performance measured by net interest margin explained by dependent variable and the electronic banking (i.e. No of ATMS, No of branches). This indicates that the electronic banking has strong and significant and positive relationship in the net interest margin in the banking sectors in Nepal. Thus, there exist positive relationship between electronic banking and banks performance. The adoption of electronic banking has enhanced in Nepalese banking industry by making its more productive and effective. Electronic banking also has a strong positive relationship on the overall banking performance by making workers performance more effective and efficiency. The adaptations of electronic banking have enhanced the fortune of Nepalese commercial banks. This is especially achieved through the increased in the no of ATMS machines, and the increased in

the no of ATMS machine. The electronic banking has improved the bank customer relationship by rendering effectives services though the expansions of branches in the different place out the day and night in every time. Customers can now have access to their account outside working hours to make withdrawal to attend to their needs. The electronic banking guideline introduced by NRB strongly helps in the effective electronic banking system. Withdrawal can be made anywhere at any time and using any bank of ATM machine. Customer cannot withdraw more than 30000 at one time.

Based on NIM the NIM positions of all commercial banks was positive. The NIM represents the financial positions of the sample banks. NIM refers the profitability of the commercial Banks in Nepal. IT measure the differences in the interest amount that they paid to the investors than that they collect from the depositors. Comparing the five commercial banks NBL has increasing trend and highest NIM whereas the MBL has lowest NIM.

Based on Electronic banking there is the pace development in the electronic banking. The no of ATMs machine established by Banks was in increasing trend it shows that the no of ATMs machine increased every year which increase the financial transactions day to day. Similarly, in five year the no of branches of all commercial banks increased rapidly. The expansions of branches provide better services to the customer and provide better financial performance. The increased in the no of branches and the no of ATMS machine increased the financial transactions of the bank. NBL has highest no of branches and MBL has highest no of ATMs Machine. In other hand SANIMA banks was slow in the increased in no of ATMS machine and no of branches.

#### **5.3 Recommendations**

The study recommended that the all commercial bank should continue in increasing and developing the new technology in ATMs as this was found to have positive influence on the financial performance. The evident that electronic banking increase the banks performance. To give growing trends of information's and communications technology which involves electronic banking and e-commerce banks a vision in the right directions. It is also vital that financial institutions intensify to ensure equity in distributions of ATMs machine and the establishment of branches to ensure better customer service. The banking institutions should consider intensifying the internet banking as well as more branches this will ensure services accessibility by customer and thus improving financial performance. Commercial banks should be adopting and using the better cards in their operations because the number of people with access to different cards is increasing every day.

There is a direct effect of current state of political instability of our country in the field of commercial and financial situation. Due to the violating environment in the country, people have not been able to mobilize and utilize the resources. Most of the commercial banks have been struggling against the economic crisis. Credit crunch and proper development of electronic banking. Despite such conditions, it is found that the banks under this study are running profit and good financial performance from the period 2068/69 to 2073/74. Thus, all these banks should be appreciated for their banking transactions inspire of the present critical situation. Based on the major findings drawn on the previous chapter and the conclusion made in this chapter, the following recommendations have been given for the enhancement of the banks on the electronic banking and financial performance of the sampled bank.

The NIM of commercial banks having highest is more effective for the better

financial performance. It would be better that the banks having more than 200 % on return on NIM would be better of financial performance. So, the MBL has to increase the ROA in average.

It would be better if all the banks focus on increasing the NIM which helps to achieve the better financial performance.

To retain the existing customers and fascinate the potential customer, SANIMA need to establish more no of ATMS machine and as well as increased the no of branches

ATM should be put in different locations easily accessible by customer, so that quick services and convenience is maintained hence improving bank operations, at the same time constantly serviced should be ensured to provide reliability of the services.

Branches should be established in customer demanded area. All commercial banks tried to provide better services for customer satisfactions.

The bank should subscribe to reliable internet providers for effective and efficient service delivery.

The bank should keep on upgrading their electronic banking technology to have an up to date system for effective services delivery.

All these banks are suggested to come up with other kinds of modern and latest facilities and services to attract for the financial transactions rather than conducting reward programs.

All these banks under study are, suggested to concentrate more on their

performance, business growth rate, asset quality and governance practices. Apart from these, market reputation, diversified service range and rate of customer satisfactions should also be considered by the banks so, that it not only be beneficial for the bank but also will play a vital criteria or tool in regarding a reward as one of the best banks of the nation.

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