

**Impact of Electronic Banking on Customer Satisfaction of
Nepalese Commercial Banks**

A Thesis

By

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TRIBHUVAN UNIVERSITY

CENTRAL DEPARTMENT OF MANAGEMENT

Thesis

Office of Head of the Department
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RECOMMENDATION LETTER

It is certified that thesis entitled **Impact of Electronic Banking on Customer Satisfaction of Nepalese Commercial Banks** submitted by **Nikeeta Badu** is an original piece of research work carried out by the candidate under my supervision. Literary presentation is satisfactory and the thesis is in a form suitable for publication. Work evidences the capacity of the candidate for critical examination and independent judgment. Candidate has put in at least 60 days after registering the proposal. The thesis is forwarded for examination.

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APPROVAL SHEET

We, the undersigned, have examined the thesis entitled “**Impact of Electronic Banking on Customer Satisfaction of Nepalese Commercial Banks**” presented by Nikeeta Badu, a candidate for the degree of **Master of Business Studies** (MBS Semester) and conducted the Viva voce examination of the candidate. We hereby certify that the thesis is worthy of acceptance.

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CERTIFICATION OF AUTHORSHIP

I certify that the work in this thesis has not previously been submitted for a degree nor has it been submitted as part of requirement for a degree except as fully acknowledged within the text.

I also certify that the thesis has been written by me. Any help that I have received in my research work and the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the reference section of the thesis.

.....

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Date: 01 Oct. 2018

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ABSTRACT

To compete with the global developments and improve the quality of service delivery, it is in no doubt that banks have invested much on technology, and have widely adopted electronic and telecommunication networks for delivering a wide range of value added products and services. However, the integration of customers into electronic banking is far from been realized.

The general aim of the study was to determine the impact of electronic banking on customer satisfaction of commercial banks of Nepal. The study adopted a descriptive survey research design. The sample size was drawn from only two lead commercial banks of Nepal due to the large number of e-banking register customers. So random sampling technique was used to select a sample size of 150 respondents. Primary data was collected using structured questionnaires addressed to the participants. The researcher conducted initial data analysis using descriptive statistical measures. The study also conducted a regression analysis to establish the relationship between the study variables.

From the findings, the study concluded that quick response of internet banking impact customer satisfaction to a great extent. In addition, many customers use internet banking because it is easy to use and time saving. The study further concludes that secrecy and privacy of internet banking has relatively low impact on customer satisfaction. The study also concludes that mobile banking is cost saving and easy bill payment option system affects customer satisfaction to a great. Further, the study concluded that ease of access of ATM and useful in urgency of cash affects customer satisfaction to a great extent. In addition, convenient location of ATM booths and ATM always found in working order have low impact on customer satisfaction. Finally, it was clear that ATM banking has the highest impact on Customer satisfaction followed by mobile banking while internet banking had the least impact on customer satisfaction. Banking institutions should enhance their internet banking to make it flexible, fast and easy to use. Management of banking institutions should enhance application of mobile banking to increase satisfaction of their customers.

Key Words: E-banking, customer satisfaction, internet banking, automated teller machines, mobile banking.

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Abbreviation

A	:	Agree
ASBA	:	Application Supported by Block Account
ATM	:	Automated Teller Machine
B2C	:	Business to Consumer
CS	:	Customer Satisfaction
D	:	Disagree
E-banking	:	Electronic banking
ECC	:	Excise Control Code
EFT	:	Electronic Fund Transfer
HBL	:	Himalayan Bank Limited
IT	:	Information Technology
KBL	:	Kumari Bank Limited
N	:	Neutral
NBL	:	Nepal Bank Limited
NABIL	:	Nabil Bank Limited
NFC	:	Near Field Communication
NMB	:	National Microfinance Bank
SA	:	Strongly Agree
SD	:	Strongly Disagree
S.D	:	Standard Deviation
SMS	:	Short Message Service
SPSS	:	Statistical Package for Social Science

CHAPTER I

Introduction

1.1 Background of Study

The term Electronic Banking services refer to "the provision of information or services by a bank to its customers, via a Mobile phone, ATM, computer or television"(Allen et al, 2001). The concept of Electronic Banking has been defined in many ways. Daniel (1999) defines Electronic Banking as the delivery of banks' information and services by banks to customers via different delivery platforms that can be used with different terminal devices such as Mobile Banking, ATM, and Online Banking etc. Electronic banking is the use of electronic delivery channels for banking products and services, and is a subset of electronic finance. The most important electronic delivery channels are the Internet banking, Automated Teller Machines (ATMs), and Mobile banking. Electronic banking services are offered in two main ways. Either traditional brick and mortar banks combine traditional and electronic delivery channels (brick and click banks) or banks offer their products and services only- or predominantly through electronic distribution channels without having a branch network. These banks are called "virtually banks", "branchless" or "Internet only" banks. Withdrawal and deposit of funds may be made through ATMs or other remote delivery channels owned by these virtual banks or other institutions.

"E-banking is defined as the automated delivery of new and traditional banking products and services directly to customers through electronic, interactive communication channels." (Shahriari, 2014).

Electronic banking is the new way of doing business without setting foot outside. It is defined as the automated delivery of new and traditional banking products and services directly to customers through personnel computer. When first introduced electronic banking was used as an informational medium to market banking products and services but with the development of new technology bank uses internet banking both for transactional and informational medium. Electronic banking is considered as a new revolution of the traditional banking services which offers customers the greatest expediency for performing banking transactions via electronic. All banks, especially the large banks and mutual banks, have gradually increased their number of

Internet banking services available to customers over the past decades (Momeni, 2013). It is a driving force that is changing the landscape of the banking industry fundamentally, in particular, towards a more competitive industry.

Customer satisfaction is a measure of how products and services supplied by a company meet or surpass customer expectation. In other words, customer satisfaction refers to the extent to which customers are happy with the products and/or services provided by a business. Further definition of customer satisfaction is it is a term generally used to measure a customer's perception of a company's products and/or services. In any “business to customer” (B2C) type of environment, satisfying a customer is the ultimate goal of business. It is an important theoretical as well as practical issue for most marketers and consumer researchers because organizations sometimes do not really understand what actually goes on in customer’s mind (Fournier and Mick, 1999). The concept of customer satisfaction is equally important for service organizations, such as banks, as many of them subscribe to the fact that higher customer satisfaction will lead to greater customer loyalty. The usual measures of customer satisfaction involve a survey with a set of statements using a Likert Technique or scale.

The application of information and communication technology concepts, techniques, policies and implementation strategies to banking services has become a subject of fundamentals importance and concerns to all banks and indeed a prerequisite for local and global competitiveness in banking industry. As a result of this technological improvement business environment in financial sector is extremely dynamic and experience rapid changes and demands banks to serve their customer electronically. The availability of Automated Teller Machines (ATM), cards, telephone banking, personal computer banking and internet banking has been existed nowadays in banking system (Narteh, 2014). The evolution of e-banking started from the use of Automatic Teller Machine (ATM) and Finland is the first country in the world to have taken a lead in e-banking. E-banking has been widely used in developed countries and in developing economies. However, the spread of e-banking is much limited. Today, almost all banks are adopting electronic banking as a means of enhancing service quality of banking services. They are providing electronic banking to their customers to increase customers’ satisfaction in banking service. Electronic banking has

improved as well as changed the aspect of commercial banking through linking and connecting geographical, industrial and regulatory gaps and creating innovative products as well as services for both banks and customers.

1.1.1 Introduction of Commercial bank

Commercial banks are a financial institution which accepts deposits, makes business loans, and offers different services to the customer. Banks also allow for a variety of deposit accounts, such as checking, savings, and time deposit. Banking institutions are run to make a profit and owned by a group of individuals. The dominant privately owned financial institution in Nepal and in the economies of most major countries is the commercial bank. Banks offers the public both deposit and credit services, such as investment advice, security underwriting, selling insurance, and financial planning. Financial activities are run by banks so that their activities should be focused on interest of customers. Banks are putting their focused toward profit. Profit is only possible after delivery of quality service to the customers. Commercial banks are established to improve people's economies welfare and facility, to provide loan to the agriculture, industry and commercial and to offer banking services to the people and the country. There are altogether 28 commercial banks in Nepal.

1.1.2 Introduction of selected banks

Nepal Bank Limited is the first commercial bank of Nepal which was established in 1994 B.S. and marked itself as the beginning of an era of formal banking in Nepal, started its computerization process since 2048 B.S. It had played the dual role of both central and commercial bank until the establishment of Nepal Rastra Bank. NBL has been providing IT enabled services and delivery channels such as ATMs, Online Banking, Debit Cards, Mobile Banking, NFC enabled e-ticketing system for local transportation, ECC, ASBA and more which has bring the concept of anytime and anywhere banking. With the advancement in these technologies new products are gaining more attention amongst customers' reasons being lower cost of operation and easily accessible services.

Nabil Bank Limited is the nation's first private sector commercial bank, commencing its business since July 1984. Nabil was incorporated with the objective of extending

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

1.2 Statement of the Problem

Customer satisfaction is a much sought after phenomenon in today's highly competitive and globalized market place. Today's customers seek more than price bargains and want useful, dependable and reliable technologies. The introduction of electronic banking in to the banking sector is to bring customer satisfaction there by to enhance the banks' profitability. Unless this technology bring increase customer satisfaction than the traditional brick and mortar branches customer may perceive as the same as different branches rather than a new means of delivery channels. Electronic banking is providing the competitive advantage by lowering the cost and providing best satisfaction of customer needs. Many Nepalese banks have exponentially embraced the use of information and communication technologies in their service provision. Huge amounts of money have invested in implementing the self and virtual banking services with the objective of improving the quality of customer service. However, the adoption of e-commerce has been inhibited by the quality, availability and access of telecommunication infrastructures, lack of skilled staff, low internet penetration, low bank account, and lack of timely delivery of product (Jalal, Marzooq & Nabi, 2011). Adoption of technology in the financial sector have been examined in several studies. Sharma (2017) analysis the Electronic Banking Practice and Customer Satisfaction with reference to HBL and KBL. Similarly, Oli (2016) also studied the Factors affecting customer satisfaction from ATM services in Nepalese commercial banks. However, none of the above researchers has studied the impact of electronic banking on customer satisfaction among commercial banks in Nepal. Thus this study sought to fill this research gap. For that, the study was concerned with the following specific research questions:

- i. What is the impact of internet banking on customer satisfaction of Nepalese commercial banks?

- ii. What is the impact of ATM banking on customer satisfaction of Nepalese commercial banks?
- iii. What is the impact of mobile banking on customer satisfaction of Nepalese commercial banks?

1.3 Objectives of the study

Every research needs the objectives. Without the destination, nothing can be achieved. The basic objective of this study is to analyse the impact of E-banking on customer satisfaction of Nepalese commercial banks. Therefore, the researcher was keen interested to meet the following specific objectives:

- i) To analyze the impact of internet banking on customer satisfaction of Nepalese commercial banks.
- ii) To examine the impact of automated teller machines on customer satisfaction of Nepalese commercial banks.
- iii) To examine the impact of mobile banking on customer satisfaction of Nepalese commercial banks.

1.4 Research Hypothesis

A research hypothesis is a specific, clear, and testable proposition or predictive statement about the possible outcome of a scientific research study based on a particular property of a population, such as presumed differences between groups on a particular variable or relationships between variables. So, the researcher set the following hypothesis for this study:

H₀₁: There is no relationship between internet banking and customer satisfaction of Nepalese commercial banks.

H₀₂: There is no relationship between ATM banking and customer satisfaction of Nepalese commercial banks.

H₀₃: There is no relationship between mobile banking and customer satisfaction of Nepalese commercial banks.

H₀₄: There is no relationship between internet, ATM, mobile banking and customer satisfaction of Nepalese commercial banks.

1.5 Significance of the study

The significance of a study may include the meaning of the research work to you personally and should include how your research benefits or impacts others in part or whole. It discusses what people or groups of people might benefit from reading of the research.

- i. First, the study will be useful for Nepalese commercial banks in order to see the impacts of e-banking on customers' satisfaction in comparison with the ordinary mortar and brick banking system.
- ii. It helps in understanding what attitude customers' have towards e-banking and what actions should the banks take in order to benefit from the opportunities and how to overcome the challenges.
- iii. This study can be used for other researcher as a reference who wants to study further in this or related areas or to serve as a reading material for anyone who is interested.
- iv. This research will alert bankers from tomorrow's problems at today in order to get the intended customers satisfaction as this service can be said it is at infant stage in the country.
- v. It also helps to policy maker of banks related with electronic banking.
- vi. Finally, the study will add to literature in the area of marketing, customer satisfaction and quality service delivery in the banking industry.

1.6 Limitation of the study

The basic limitation of this study is that it only considers customers perspective of e-banking and it does not take into consideration what perspective do all bankers employees have on the technology.

- i. This study does not include bank customers who do not use the current e-banking which would help to compare the attitude of e-banking users and non-users towards e-banking.
- ii. It is also limited only with two banks customers that started e-banking service but it doesn't fully cover other banks those which do not start it.
- iii. This study was conducted in Kathmandu Valley only.

- iv. This study has been conducted within a certain limit of time period with only selected research methodology.
- v. In this study only sample of 150 respondents is taken which may not be sufficient for this study.

1.7 Organization of the study

The study has divided into five chapters .They are an introduction, literature review, research methodology, presentation and analysis of data and summary, conclusion and recommendation.

Chapter I: Introduction

This chapter deals with introduction which includes background of the study, statement of the problem, objectives of the study, significance of the study, limitation of the study and organization of the study.

Chapter II: Literature Review

The second chapter presents review of previous related research done on e-banking and customer satisfaction, review of related books, journals, articles and previous unpublished master level dissertation etc.

Chapter III: Research Methodology The third chapter explains the research methodology used in the study .It included research design, population and sampling, types and sources of data collection procedure, data analysis tools and techniques, reliability and validity.

Chapter IV: Data Presentation and Analysis

Fourth chapter is Data presentation and analysis. This chapter includes Data presentation, Data analysis and Major finding of the study.

Chapter V: Summary, Conclusion and Recommendation

Ultimately, fifth chapter discusses summary of main findings, recommendations and suggestions further these includes reference books, magazines, newspaper, previous dissertation, etc. are shown under bibliography.

CHAPTER II

Literature Review

The review of related literature is an important and essential for guideline of study. It helps to the researcher to get more information, ideas and identifying what people already have been done? In addition, what we have to find out and tested? "It eliminates the duplication of what has been done and provides useful hypothesis and helpful suggestions for significant investigation" (Best and Kahn, 2012). Therefore, for selecting research design, sample, tools, data collection procedure, analysing data and making decision, it gives instruction and makes a reliable research.

2.1 Conceptual Review

2.1.1 Electronic banking

Electronic banking, also known as electronic funds transfer (EFT), is simply the use of electronic means to transfer funds directly from one account to another, rather than by cheque or cash. It is a product designed for the purposes of online banking that enables you to have easy and safe access to your bank account. It is a safe, fast, easy and efficient electronic service that enables you access to bank account and to carry out online banking services, 24 hours a day, and 7 days a week. With this service you save your time by carrying out banking transactions at any place and at any time, from your home or office, all you need is internet access. The introduction of electronic business, one of the Information Technology applications has changed the traditional way of conducting business transactions in many organizations and as such a growing number organizations launch new Internet-based business lines to improve their businesses. Organizations in the banking industry have also launched an IT application known as electronic banking (e-banking) in order to meet the growing demands of their customers and to also meet the growing trend of technological advancement in recent year E-banking enables the following:

- Accurate statement of all means available in your bank account.
- Statement of current account, credits, overdrafts and deposits.
- Execution of national and international transfers in various currencies.
- Execution of all types of utility bill payments.
- Carrying out customs payments.
- Electronic confirmation for all transactions executed by E-banking.
- Management of credit cards.

2.1.2 E-banking products

The use of information technology in banking operations is called electronic banking. Ovia, (2001) argue that electronic banking is a product of e-commerce in the field of banking and financial services. It can be describe as Business-to-consumer (B2C) domain for balance enquiry, request for cheque books, recording stop payment instruction, balance transfer instruction, account opening and other forms of traditional banking services. Banks are also offering payment services on behalf of their customer who shop in different e-shops. There are numerous of E-banking products provided by the banks. Among them most popular products uses by customers and the researcher has include on this research are of following:

Internet banking

Internet banking is one of the technologies which is fastest growing banking practice now a days. It is defined as the provision of information or service by a bank to its customers over the internet. It is viewed as a supplemental channel used in conjunction with other channels to provide the convenience of banking anytime from one's home or work, without having to incur some of the costs associated with a branch visit like going to the branch or waiting on lines. Online banking eliminates physical and geographic boundaries and time limitations of banking services (Yang et al., 2007). Internet banking allows customers of a financial institution to conduct financial transactions on a secure website operated by the institution, which can be a retail or virtual bank, credit union or society. It may include of any transactions related to online usage. Banks increasingly operate websites through which customers are able not only to inquire about account balances, interest and exchange rates but also to conduct a range of transactions. Unfortunately, data on Internet banking are scarce, and differences in definitions make cross-country comparisons difficult. Also as compared with traditional banking labor is replaced by machine very significantly (computer networks) which is low in cost and is available easily. Internet banking offers many benefits to banks and their customers. The main benefits to banks are cost savings, reaching new segments of the population, efficiency, enhancement of the bank's reputation and better customer service and satisfaction. The more transactions can be converted online, the more money will be saved.

Mobile banking

Mobile banking also known as M-Banking has changed the traditional banking method. It is a term used for performing balance checks, account transactions, payments, credit applications and other banking transactions through a mobile device such as a mobile phone or Personal Digital Assistant (PDA). The earliest mobile banking services were offered over SMS, a service known as SMS banking. Mobile banking is used in many parts of the world with little or no infrastructure, especially remote and rural areas. This aspect of mobile commerce is also popular in countries where most of their population is un-banked. In most of these places, banks can only be found in big cities, and customers have to travel hundreds of miles to the nearest bank. The scope of offered services may include facilities to conduct bank and stock market transactions, to administer accounts and to access customized information.

The use of mobile banking in developed countries are extremely higher than the developing countries due to technological and proper infrastructure development of the country. With the initiation of mobile banking, people's life has been completely changed in sense of financial activities. As mobile banking is always in your pocket wherever you go, the financial activities has become more easily day by day. As mobile banking service is completely in different path in developed countries but the story is quite different in developed countries.

ATM banking

An automated teller machine (ATM) is an electronic banking outlet that allows customers to complete basic transactions without the aid of a branch representative or teller. It 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 also sells recharge cards and transfer funds; it can be accessed 24 hours/7 days with account balance enquiry. It is a computerized machine that permits bank clients who opts to gain access to their accounts with a magnetically encoded plastic card and a code number to transact business with the bank. It enables the bank customers to carry out their transactions without the assistance of a teller; these include pay bills, make deposits, withdraw cash, and obtain bank statements, effect cash transfers.

Customer

A customer is an individual or business that purchases the goods or services produced by a business. Attracting customers is the primary goal of most public-facing businesses, because it is the customer who creates demand for goods and services. Businesses often compete through advertisements or lowered prices to attract an ever-larger customer base. A customer is the recipient of a good, service, product or an idea - obtained from a seller, vendor, or supplier via a financial transaction or exchange for money or some other valuable consideration.

Satisfaction

Satisfaction is the act of fulfilling a need, desire, or appetite, or the feeling gained from such fulfilment. Satisfaction means you've had enough — in a good way. When a product says "Satisfaction guaranteed" it means you'll like it or they'll give you your money back. It is a measure of how products and services supplied by a company meet or surpass customer expectation. It is the pleasure that we feel when we do something or get something that we wanted or needed to do or get. Satisfaction has been considered as one of the most important theoretical as well as practical issue for most marketer and customer researchers. It is in the consumption context as the summary psychological state resulting when the emotion surrounding disconfirmed expectations is coupled with the customer's prior feelings about the consumption experience in other words we may say that satisfaction reflects a post-purchase evaluation of a product quality given pre-purchase expectation.

Customer Satisfaction

Customer satisfaction is a measurement used to quantify the degree to which a customer is happy with a product, service, or experience. It is a critical concept for customer success professionals to understand and live by, and it's actually about more than a money-back guarantee. It is a reflection of how a customer feels about interacting with your brand. Customer satisfaction is the measure of how the needs and responses are collaborated and delivered to excel customer expectation. It can only be attained if the customer has an overall good relationship with the supplier. In today's competitive business marketplace, customer satisfaction is an important performance exponent and basic differentiator of business strategies. Hence, the more is customer satisfaction; more is the business and the bonding with customer. It is a part of customer's experience that exposes a supplier's behavior on customer's expectation. It also depends on how efficiently it is managed and how promptly

services are provided. This satisfaction could be related to various business aspects like marketing, product manufacturing, engineering, quality of products and services, responses customer's problems and queries, completion of project, post delivery services, complaint management etc. Organizations have the desire to maintain their current and existing clientele while targeting non-customers. So, competitive strategies for retaining old customers' are less expensive than those for gaining new customers.

2.1.3 Benefits of E-banking

The benefits of electronic banking cannot be over emphasized. This is to say that it provides a lot of benefits both to the customer and the bank itself. To begin with a foremost benefit e-banking service is competitive branding and as well as better appreciation to the market demands. As such banks that provide services are known to be leaders in technology implementation and advancement. Thus, the better image brand they enjoy. E- Banking provides various benefits to both banks and customers. With electronic banking customers can check accounts, transfer money and can have access to numerous banking products and services. There is no need for Customers to visit banks to make transactions. The other advantages may be measured in terms of money. The primary objective of every institution is to increase profits with which banks cannot be excluded. Many contend that E-banking can do away the hitherto laborious and less viable methods for banking. As indicated by perspectives communicated by Mols (1998) it was opined that the Internet is a revolution that will do away the old request holds much influence. The internet revolution in electronic-banking transaction is much less expensive than branch or even telephone transactions.

2.2 Review of previous work.

The main purpose of the present study is to find out the impact of electronic banking on customer satisfaction of Nepal bank and Nabil bank limited. There are different kinds of literature available on e-banking. Some books, reports, journals, articles, thesis and related websites will be reviewed to attempt the theoretical foundation and analyse how e-banking helps to maintain the satisfaction of customers of the bank. So, researcher was reviewed these studies in order to explain the present problem of the study. They are as follows:

A study carried by Babatunde, M.O. & Salawudeen, M.O. (2017). entitled “Analysis of the Impact of Electronic Banking on Customers’ Satisfaction in Nigeria” to examine the impact of electronic banking in Nigerian banking industry and financial institutions. Researcher used both the primary and secondary data to elicit information from the forty (40) respondents. The primary data were collected through the use of questionnaire, while the secondary data were obtained from the publications of the Central Bank of Nigeria Electronic Banking Guideline, Annual Reports of the CBN and Access Bank Plc. The population selected was designed to obtain adequate and diverse views pertaining to the level and impact of electronic banking in Access Bank. The researcher employs both descriptive and inferential statistics to analyse the data also simple frequency counts, percentages and the Chi-square were used in the data analysis. The study concludes that the adoption of electronic banking has enhanced the bank’s efficiency, making it more productive and effective. The study therefore recommends that the Nigerian banking sector must be focused in terms of their needs and using the right technology to achieve goals rather than acquiring technology of internet banking because other banks have it.

Areeba, & et al., (2016). studied entitled “The Impact of E-Banking on Customer Satisfaction: Evidence from Banking Sector of Pakistan” to investigate the impact of E-banking variables on customer satisfaction in Pakistan. Five service quality dimensions; reliability, responsiveness, assurance, tangibles and empathy, derived from the SERVQUAL model with support of literature review have been selected as forecasters of customer satisfaction in E-banking. Research design of the study is quantitative. Data has been gathered through already tested questionnaire from 264 E-banking users as respondents, from different cities of Pakistan. Results of the study have revealed that there is momentous relationship between service quality dimensions and customer satisfaction in E-banking in Pakistan, with more weightage of reliability, responsiveness and assurance among the five dimensions. Through this study we can conclude that service quality in E-banking leads to satisfied customers and thus banks can gain competitive advantage by offering better-quality services to their customers in today’s emulous world.

Similarly, Senaji, T. A. (2016). entitled “Effect of electronic banking on customer satisfaction in selected commercial banks, Kenya” to determine the effect of electronic banking and customer satisfaction among first tier bank in Nairobi Town. The study was hinged on diffusion innovation theory and contrast theory. The study

adopted a descriptive survey research design. The target population was 262511 customers drawn from 5 first tier banks within Nairobi CBD. Stratified sampling technique was used to select a sample size 225 respondents. Primary data was collected using structured questionnaires addressed to the participants. The researcher conducted initial data analysis using descriptive statistical measures. The study also conducted a regression analysis to establish the relationship between the study variables. From the findings, the study concluded that flexibility of internet banking influence customer satisfaction to a great extent. In addition, many customers use internet banking because it is easy to use while personalized internet banking also affects customer satisfaction to a great extent. The study further concludes that usefulness and friendliness of internet banking has relatively low effect on customer satisfaction whereas, the convenience use of mobile banking and user friendly ATM banking affects customer satisfaction to a great extent because easiness of access and privacy of ATMs affects more customer satisfaction.

Moreover, Bismark & et al., (2015). studied entitled “Electronic banking and customer satisfaction. Empirical evidence from Ghana”. A purposive non-probability sampling technique was utilized in a 150 sample-size selection from e-banking customers of Trust Bank Ghana Limited, Eco bank Ghana Limited and Barclays Bank Ghana Limited (50 from each bank). SPSS Statistics version 21 was used to analyse the primary data. Multiple regression analysis was performed to determine the impact of e-banking service delivery on satisfaction of customers in the selected banks. For this study, a positive correlation between customer satisfaction and e-banking availability, reliability and convenience is established. It is therefore recommended that banks provide customers with uninterrupted, reliable and convenient e-banking services in order to satisfy and retain customers.

Similarly, Worku G1 & et al., (2016) entitled “The Impact of Electronic Banking on Customers’ Satisfaction in Ethiopian Banking Industry”. This study presents what impact electronic banking has on customer satisfaction in comparing with traditional brick and mortar banking service, its relationship with that of age, occupation and education, its impact on branch visits, the level of customer understanding about e-banking and the opportunities and challenges of e-banking. The paper tried to see all the above among 402 properly filled and returned questionnaires of e-banking customers and interview with four branches of the two commercial banks which have started e-banking service in Gondar city when this

study was conducted. The study used tables, percentages, chi-square independency test to see the relationship between demographic characteristics and e-banking, independency t-test to see the visits of branches before and after e-banking by customers is significant or not and regression analysis test has been conducted to explain the variables which determine customers' satisfaction in e-banking. The results of the study implied that majority of users of e-banking are the young, the educated, salaried and students, business men and women are not actively using the service of e-banking and there is also a relationship between e-banking and demographic characteristics, e-banking currently provided for saving and current accounts holders only, e-banking has improved customer satisfaction, reduced frequency of bank hall for banking service, reduced waiting time for customers, there are customers who don't know the fee charged for being e-banking users, the bank customers' satisfaction increased after being e-banking users, enabled customers to control their account movements and there is high opportunity to expand e-banking service in the city.

Mwanga Mazwile (2014). studied entitled, "The Influence of Electronic Banking on Service Delivery Satisfaction to Customers (The case of NMB Bank in Tanzania)", to investigate the influence of electronic banking on service delivery satisfaction to customers. The study employed a case study design using quantitative i.e. questionnaires and qualitative approach such as interview, focus group and observation. A total of 86 respondents were employed in this study, 83 were customers and 3 were managers. These customers were selected using simple random sampling technique and non-probability sampling method. The findings show that there was a positive perception of the respondents influenced by the establishments of electronic banking products at NMB banks in terms of usage, convenience, time saving and transportation cost as well as quickness of service delivery. Also there was a degree of variation NMB subscribers in terms of age, sex, level of education and longevity of staying with the banks. Lastly the research found that satisfaction of customers on the establishments of electronic banking was not a maximum degree as customers were less dissatisfied with the insufficient of electronic banking products such as online banking system and VISA card, education and training of established system as well as cost charges of electronic banking such as service charges.

Similarly, Erick Ombok (2016). studied entitled, “ Effect of Automation of Bank services on Customers satisfaction at Equity Bank”, to assess the effects of automation of banking services on customer satisfaction a case of Equity bank branch in Uasin Gishu County. The study adopted the SERVQUAL (service quality) model because service industry is concerned with service quality and customer satisfaction and this model provides a better diagnosis of service quality. The study adopted a case study research design. Data was collected through the use of Questionnaires. The total reliability of the questionnaire was a Cronbach's alpha coefficient of 0.816. The target population for the study was 1614 respondents with a sample frame of the Branch manager, sales employees from the Sales section and bank customers and bank agents. The study adopted both Stratified random and purposive sampling technique to identify the 3 key informants. The sample size was 381 respondents. Data was analysed using descriptive and inferential statistics using Statistical Package of Social Sciences (SPSS). From the findings, Automation of banking services dimension such as; Automated Teller Machine usage, mobile banking usage and internet banking usage were found to have a statistically significant ($p < 0.05$) effect on customer satisfaction.

2.2.1 Review of Nepalese studies

Sharma (2017) studied entitled, “Analysis Electronic Banking practice and Customer Satisfaction with reference to HBL and KBL”. The main aim of this study was to analyse the various aspects of electronic banking system. The researcher has used descriptive research design and Convenience sampling technique. Both primary and secondary data has been used for data collection where questionnaire for primary data and use of publication and annual reports for secondary data. Sample customers are 100 of both banks and distributed them questionnaire but only 89 respondents have returned. Cronbach’s alpha has been used to measure the validity and reliability of data. The calculation reveals the value of cronbach’s alpha to be 78.6% which meets the minimum standard of the data being reliable. The result shows that 60% of customers are satisfied with the use of electronic banking products because of time saving, easy access to cash and convenient in use.

Sherpa (2015) studied entitled, “Development and impact of mobile banking in Nepal” to provide information on the status of Mobile Banking in developing

countries like Nepal as well as the impact of mobile banking in Nepalese society. The researcher take an informal interviews with the friends who are currently working in the banking sector in Kathmandu, Nepal were carried out through different media such as Facebook, Viber and Skype. In addition, a questionnaire survey was conducted with a sample size of 500 respondents to support the data collection process. In order to minimize errors in data collection process, the questionnaire was tested with a pilot study and necessary adjustments were carried out. In addition, relevant literature and internet articles were also studied throughout the research process in order to create good theoretical background. The data collected from questionnaire survey were displayed through different graphical figures such as pie chart and table in this thesis. From the outcome of questionnaire survey, it was found that majority of mobile banking users are of young generation. According to survey result, 46.37% of the respondents were mobile banking users. This study helps to provide information on how Nepalese people are reacting towards this new technology of banking facility.

Banstola (2012) conducted a study on, “Prospect and challenges of E-banking in Nepal”. The purpose of the study was to identify the major prospect and challenges of E-banking in Nepal. Five banks were selected as sample for the study using a simple random sampling method. The data were collected from general customers by means of questionnaire sent through email and also via self- administration. From four major cities of Nepal (Pokhara-37, Kathmandu-20, Butwal-33, Biratnagar-10) a total of 100 questionnaire were collected and used in the analysis. The study found that the some banks are in lack of having regular back up of website information and E-banking policy. Nepalese banks are using E-banking for their own convenience and for the purpose of retaining existing customers. The cost analysis of most of the banks in Nepal seems to be neither adequate nor applied due to their narrow space of business transaction or lack of sufficient tools. No significant correlation was found between use of E-banking and gender, marital status or salary of customers. However, use of E-banking significant association was found that the most important factor which influenced customer to use the E-banking service were reliability and ease of use.

Similarly, Oli (2016) studied entitled, “Factors affecting customers satisfaction from ATM services in Nepalese commercial banks”, to examine the factors affecting

customers satisfaction from ATM services in Nepalese commercial banks. The researcher has employed descriptive casual comparative research design. 15 commercial banks has been taken as sample and simple random sampling technique has been used to categorize the bank. Primary data i.e. questionnaire has been used to collect the data. Mean, standard deviation, correlation and regression tools are used to analyse the data collected from the response provided by the respondents. 85 questionnaire has been provided but only 60 respondents' response their opinions. So, study reveals that reasonability of fee charged choice of ATM services have positive and significant relationship with the customer satisfaction in Nepalese commercial banks.

2.3 Research Gap of the study

Electronic banking has blurred the boundaries between different financial institutions, enabled new financial products and services, and made existing financial services available in different packages. But the impact of electronic banking go far beyond this. The developments in electronic banking, together with other financial innovations, are constantly bringing new challenges to finance theory and changing people's understanding of the financial system. These various research studies have been carried out in the field of electronic banking on customers' satisfaction mostly in the foreign countries but less in our country Nepal. As this research is concerned with the impact of e-banking on customer satisfaction of selected commercial banks of Nepal. The study has different methodologically and area of study with study conducted by other researcher. Yet researcher felt a lot of gap prevailing in these various researches carried out. Still researcher can claim that this research will be quite different from these above researches.

A lot of literature surrounds the area of electronic banking; much of what have been discussed is about answering the question of how electronic banking is adopted? In other words, what is level of adoption of electronic banking and factors that influence the adoption of electronic banking? However, few studies have demonstrated the relationship between electronic banking constructs and customer satisfaction. However previous studies have shied away from the impact of internet banking on customer satisfaction of Nepalese commercial banks. This study therefore sought to bridge this gap. Therefore the paramount importance of this study should not be

overstated because it aimed to analyse the impact of electronic banking on customer satisfaction of Nepalese commercial banks using descriptive study approach and 150 sample size neither of the above study has done so.

2.4 Conceptual Framework

A conceptual framework is an analytical tool with several variations and contexts. It can be applied in different categories of work where an overall picture is needed. It is used to make conceptual distinctions and organize ideas. For the purpose of understanding the impact of Electronic Banking towards customer satisfaction, the researcher proposes following conceptual framework. This conceptual framework was developed based on several previous studies relating to Electronic Banking, customer satisfaction and banking application are especially considered.

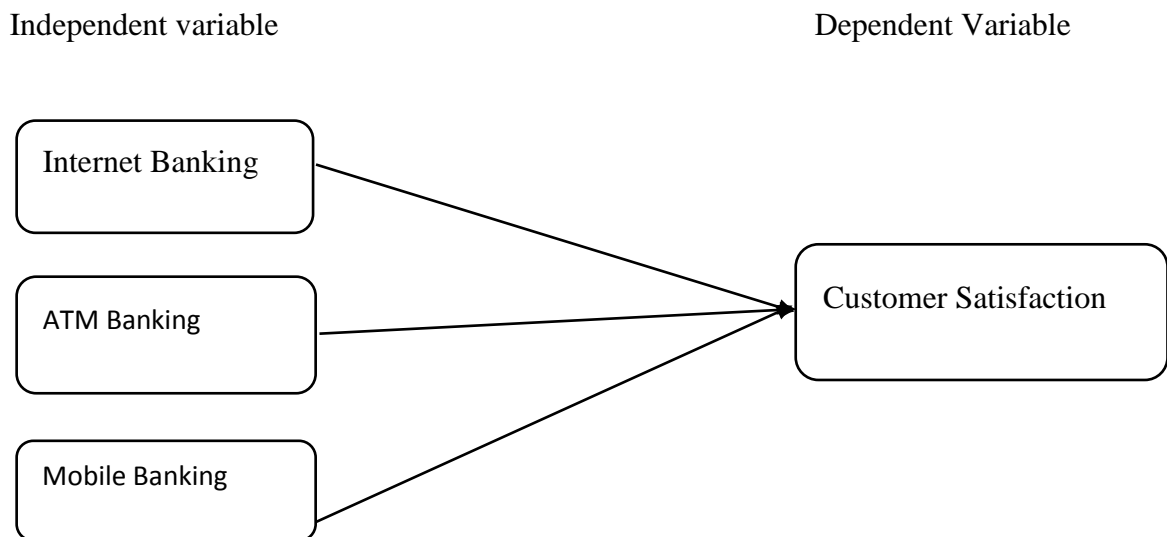


Fig 2.1: Conceptual Framework

This conceptual framework shows a relationship that exist between the variables used in this study to understand the impact of e-banking on customer's satisfaction.

- Dependent Variable (Customer Satisfaction)
- Independent Variable (Internet banking, ATM banking and Mobile Banking)

CHAPTER III

Research Methodology

Methodology is the useful bridge to solve the research problem in systematic way. "Methodology is a technique for scaling objects or statements" (Stephenson, 1953. as cited in Best & Kahn, 2012). The methodology describes the methods and process applied to the entire aspect of the study. This chapter will go through the process of the study and outlines the different methodological approaches that have been employed to the study as well as tools that have been used to gain information about the subject. The researcher has also stated the data collection method used and how data was collected and analysed; reliability and reliability are considered as well. The chapter is divided into six parts: research design, population and sample of the study, tools of data collection, data collection procedures, method of data analysis as well as issues of validity and reliability.

3.1 Research Design

The research design constitutes the blue print for collection, measurement and analysis of data (Kothari, 2004). It is a logical and systematic plan that has been prepared for directing a research study. It specified the objectives of the study, the methodology and techniques adopted in achieving the objectives. The research design helps the researcher for suitable planning and provides guideline for collection of data. The researcher had adopt the descriptive survey design in this study to achieve the objectives. "The survey type research studies with large population or universal setting and studies samples chosen from the population to discover the relative incidence distribution and inter relations of sociological and psychological variable" (Kerlinger, 1973, p.410). Survey research is probably best adopted in obtaining personal and social facts, beliefs, concepts and opinions.

3.2 Population and Sample

Population consists of a large number of people, events of objects. Because of its large size, it is difficult to collect detailed information from each member of the population. So sample should be selected from the large population. Sample is a sub set or some part of the larger population. According to Mueller, (1970), the purpose of sampling is to reduce expenses in term of money, effort and time. Till now there are

twenty eight commercial banks in Nepal among them only two commercial bank i.e. Nepal Bank Limited and Nabil Bank Limited had been taken as the sample for the study because of their similar nature as Nepal bank limited is the first commercial bank and Nabil bank limited is first joint venture commercial bank of Nepal and also due to the huge number of e-banking registered customers and the sample was generalized to represent the characteristics of the 28 commercial banks. Therefore, total customers of commercial banks are the total population and one hundred and fifty customers of both banks who are using e-banking has been taken as the sample of this study in Kathmandu district by using the random sampling method.

3.3 Sources and tools of data collection

Data is the foundation of the research. Therefore, collection of reliable data is very essential for all kinds of researches. As per the requirement of the study, the researcher had used primary data and the data has been collected through the use of questionnaire as a research tool.

Questionnaire. "Questionnaire is a device consisting of a series of questions dealing with some psychological, social, educational topic sent or gives to an individual or a group of individuals with the object of obtaining data with regarded to some problems under investigation" (Koul, 2000, as cited in Khanal, 2015). The quantitative data of this research study are collected with the help of questionnaire. The questionnaire consists of two section. Section A is of respondent's information and Section B is of respondent's opinion on the statement. The total questionnaire contains of 18 questions for all independent variable from which 6 questionnaire for internet banking, 6 for ATM banking and 6 for mobile banking.

3.4 Data collection Procedure

Data is the foundation and mirror of the research. It shows the opinions, concepts, attitude of the respondents. Therefore, collection of reliable data is very essential for all kinds of researches. For this study, data was obtained from the respondents through a structured questionnaire. The researcher had visited to the sampled banks in Kathmandu. The researcher also met to the Branch manager and customers of the respective banks asking for permission before administering the questionnaire to the customers. The research supervisor, experts and professionals

who are experienced in research were also requested to examine the questionnaire to check whether there are any items that need to be changed or rephrased, as well as the appropriateness of the time set for. This process helped refine the questionnaire, enhance its legibility and minimize the chances of misinterpretation it.

The researcher personally collects the data from the respondents of individual and in groups. While collecting the data the researcher told the title, purpose of research, reasons to select the topic and methods to fill the questionnaire and then distribute the questionnaire to the customers of both banks. Some respondents filled the questionnaire at the same time and rest of the questionnaire is collected after four - five days of distribution.

3.5 Method of data Analysis

The collected data was analysed using quantitative data analysis methods. Descriptive analysis such as frequencies and percentages was used to present quantitative data in form of tables and graphs. Data from questionnaire was coded and entered into the computer using Statistical Package for Social Science (SPSS Version 20.0) for analysis. It gave means, standard deviations, correlations and frequency distribution of each independent and dependent variable. Customer satisfaction was regressed against the three independent variables using the regression model. The mean, percentage and standard deviation are the most commonly used descriptive statistics. Measures of central tendency were used in this study to give a description of the data. Tables and bar graphs were used for further representation.

3.6 Validity and Reliability of data

For the validation of tools researcher had constructed the questionnaire form which was based on conceptual framework. To ensure the validity of the instruments, the researcher consulted with the thesis supervisor. The tools were being fixed for the final study. Reliability can be defined as the degree to which measures are free from error and therefore yield consistent result. For reliability, obtained data were calculated using the Statistical Package for Social Sciences (SPSS) programmer, version 20.0 setting at 0.05.

CHAPTER IV

Data Presentation, Analysis and Interpretation

This chapter presents detail research results related to the research objectives. The main purpose of this study was to analyse the impact of electronic banking on customer satisfaction of commercial banks. This chapter is mainly concerned with the analysis and interpretation of data, which was collected from one hundred fifty customers from Nepal bank limited and Nabil bank limited. The data gathered from different sources were analysed and interpreted under three dimensions: internet banking, ATM banking and mobile banking.

In this chapter, the data collected from the questionnaire for the study were analysed and interpreted. A set of questionnaire which are given in appendix consisting eighteen of closed ended questions was developed as a research tool. The closed ended questions related to the impact of electronic banking with its three dimensions were to be analysed on a 5-point likert scale i.e. Strongly agree, agree, neutral, disagree, and strongly. The data were analysed by using the Statistical Package for Social Sciences (SPSS) programme, version 20.0. The data is presented in tables and bar graph beginning with demographic variables and then research questions that are formulated to guide the research. The first part of the chapter considered the demographic background of the respondents focusing on gender, marital status, age, academic qualification, occupation and per year income. The second part presented the findings from the study in relation to the research question.

4.1. Demographic Characteristics of Respondents

The study collected information on demographic characteristics. Detailed results on each of the demographic characteristics are presented.

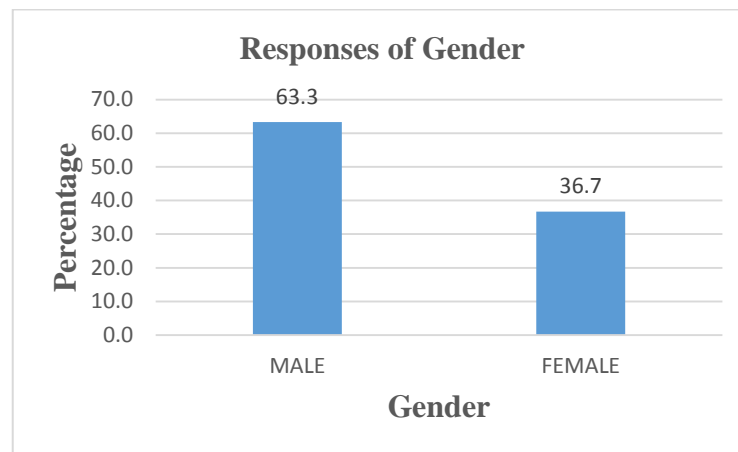
4.1.1. Gender of the Respondents

Table 4.1 Gender of the respondents

GENDER	Frequency	Percent	Cumulative Percent
MALE	95	63.3	63.3
FEMALE	55	36.7	100.0
Total	150	100.0	

In analysing the gender structure majority of the respondents were Male. In particular, the data showed that out of 150 respondents, 95 (63.3%) of the respondents were male while 55 (36.7%) were female which was presented in above table 4.1. We can also see the above tabulated data on bar diagram below:

Figure 4.1. Gender of respondents

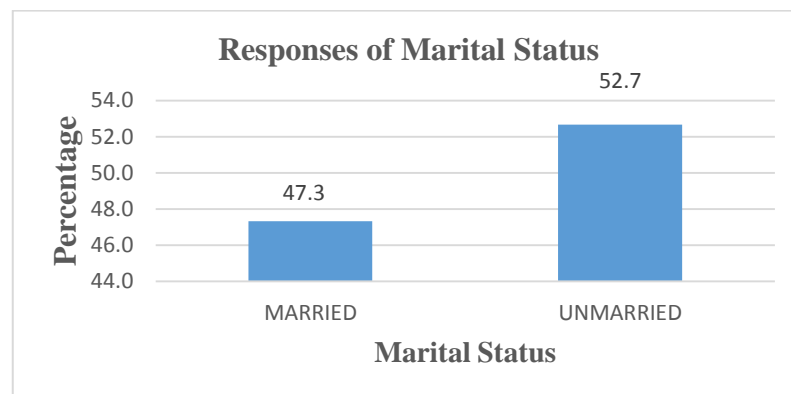


4.1.2. Marital Status of respondents

Table 4.2. Marital Status of respondents

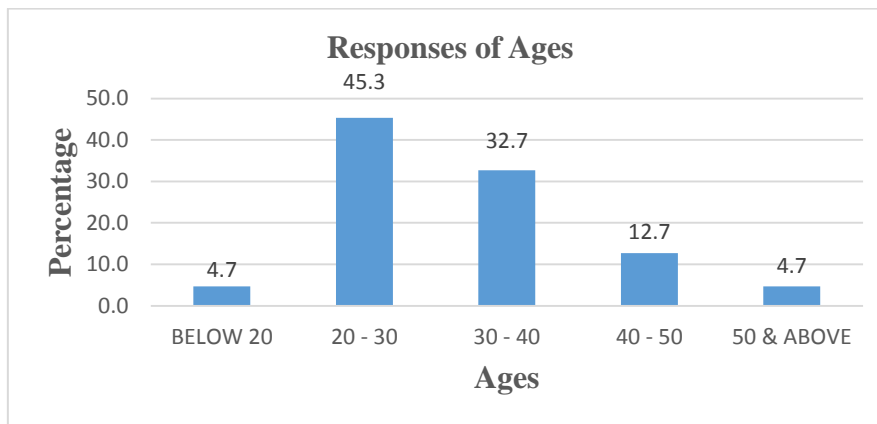
Marital Status	Frequency	Percent	Cumulative Percent
MARRIED	71	47.3	47.3
UNMARRIED	79	52.7	100.0
Total	150	100.0	

The next demographic variable of the respondents was their marital status. It exhibits that out of 150 respondents, 71(47.3%) were married and 79(52.7%) were unmarried. The result showed that most of the respondents were unmarried which was also presented in following bar graph.

Figure 4.2. Marital Status of respondents**4.1.3. Age of the Respondents****Table 4.3. Respondents of Ages**

Age Group	Frequency	Percent	Cumulative Percent
BELOW 20	7	4.7	4.7
20 – 30	68	45.3	50.0
30 – 40	49	32.7	82.7
40 – 50	19	12.7	95.3
50 & ABOVE	7	4.7	100.0
Total	150	100.0	

The demographic variable of the respondents examined was their age. The results showed that, the majority of respondents were in the age bracket of 20 – 30, 68 (45.3%) This was followed by those who aged between 30 – 40 years 49 (32.7%). Followed by 19 (12.7%) were between the ages of 40 - 50 years. And 5(6%) were between the age of 45- 54. Interestingly, the number age below 20 and 50 & above years were only 7 (4.7%) of all respondents. This could be as a result that most of the bank customers are teenagers which was displayed in following bar graph.

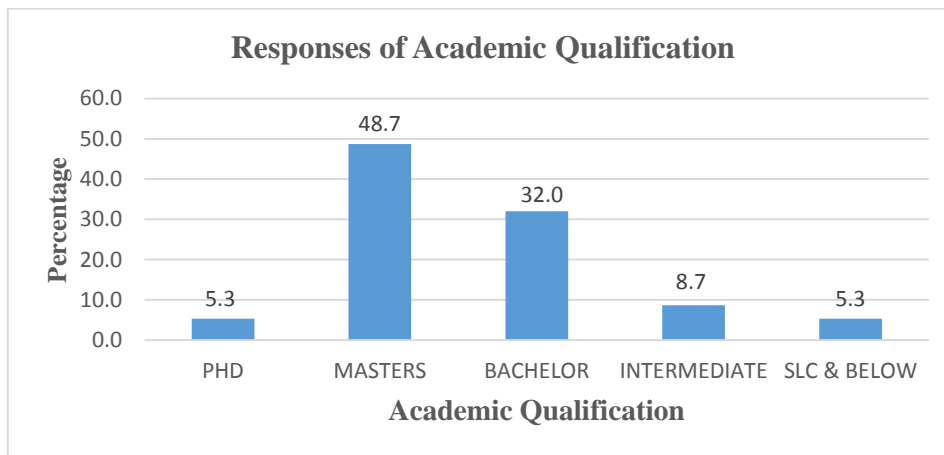
Figure 4.3. Responses of Ages

4.1.4. Academic Qualification of respondents

Table 4.4. Responses of academic qualification

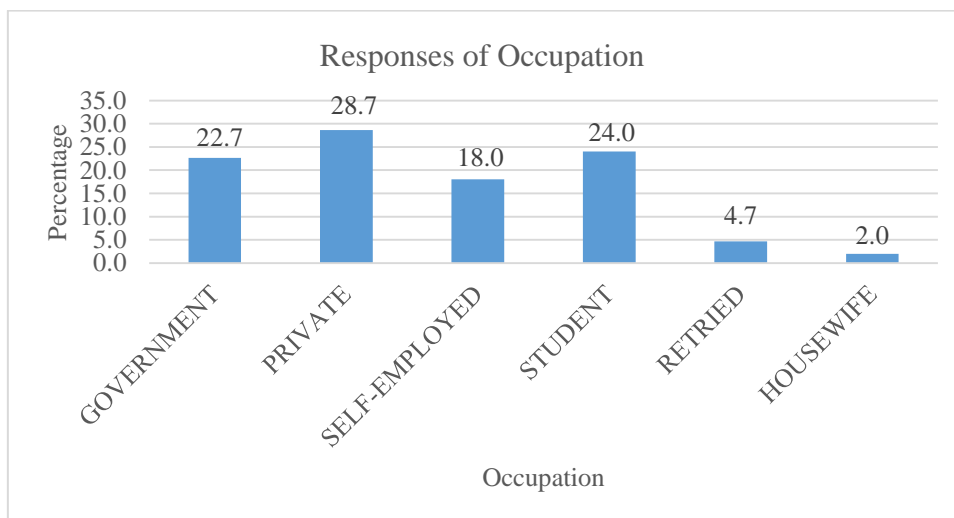
Academic Qualification	Frequency	Percent	Cumulative Percent
PHD	8	5.3	5.3
MASTERS	73	48.7	54.0
BACHELOR	48	32.0	86.0
INTERMEDIATE	13	8.7	94.7
SLC & BELOW	8	5.3	100.0
Total	150	100.0	

The next sample characteristic examined was the educational level of the respondents. Analysis showed that, the majority of the respondents were master's holders. There were 73 (48.7%) masters holders while 48 (32.0%) were bachelor's degree holders, 13 (8.7%) were secondary education leavers and 8 (5.3%) were of PhD holders and SLC & below. For such assessment, the education level of the respondents seemed to be satisfactory. This research study findings show that level of education matters in easy understanding of the technology. Therefore, there is a strong relationship between the factor of level of education and use of technology. The above tabulated data can be seen by following bar graph.

Figure 4.4. Responses of academic qualification**4.1.5. Occupation of respondents****Table 4.5. Respondents of Occupation**

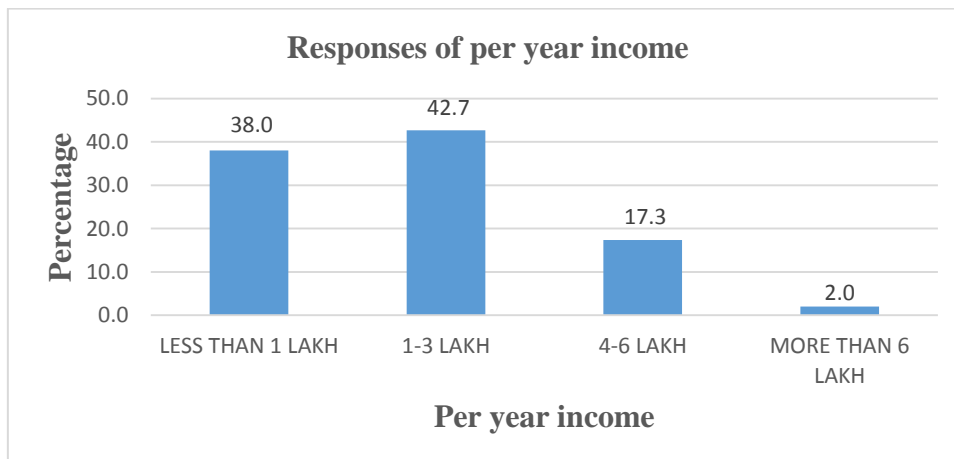
Occupation	Frequency	Percent	Cumulative Percent
GOVERNMENT	34	22.7	22.7
PRIVATE	43	28.7	51.3
SELF-EMPLOYED	27	18.0	69.3
STUDENT	36	24.0	93.3
RETRIED	7	4.7	98.0
HOUSEWIFE	3	2.0	100.0
Total	150	100.0	

The demographic characteristic was the occupation of the respondents. From the above table we can see that the highest respondents are from the group of private employees that is 43 which means 28.7% and lowest respondents are from the group of housewife is 3 i.e. 2.0% of the respondent. Besides that 36(24.0%) are of students, 34(22.7%) are of government employees, 27(18.0%) are of self-employed and 7(4.7%) are of retired employees respectively. We can see the above tabulated data in the bar diagram below:

Figure 4.5. Respondents of Occupation**4.1.6. Per year income of respondents****Table 4.6. Respondents of per year income**

PER YEAR INCOME	Frequency	Percent	Cumulative Percent
LESS THAN 1 LAKH	57	38.0	38.0
1-3 LAKH	64	42.7	80.7
4-6 LAKH	26	17.3	98.0
MORE THAN 6 LAKH	3	2.0	100.0
Total	150	100.0	

The last sample characteristic examined was per year income of the respondents. From the above table we can see it highest respondents are from the annual income from 1-3 lakh which is 64(42.7%) of the total sample. Similarly, annual income less than 1 lakh is the second highest respondents which is 57(38.0%) of total sample size and annual income range between 4-6 lakh were of 26(17.3%) of respondent. In contrast, least respondents are from group 6 lakh above where only 3(2.0%) respondents occupied. We can see the bar diagram of the above tabulated data which is shown below:

Figure 4.6. Respondents of per year income

4.2. Descriptive Analysis

Descriptive statistics are used to describe the basic features of the data in a study. They provide simple summaries about the sample and the measures. Together with simple graphics analysis, they form the basis of virtually every quantitative analysis data. Descriptive statistics are used to present quantitative descriptive in manageable form. It helps us to simplify large amount of data in a sensible way. Each descriptive statistic reduces lots of data into a simpler summary. Here descriptive analysis incorporates calculation of statistical measure such as mean, standard deviation, and correlation. It's presented logically as per the study objectives. All the questionnaires were measured on five point Likert scale and anchored by "strongly agree" = 1, to "strongly disagree" = 5. These values help the researcher to analyse the data with respect to frequencies and percentage relating to research questions and variables in order get better insight to the respondent's behaviour cross-tabulation of different variable was analysed.

4.2.1 Responses of respondent on electronic banking products

The researcher in this section wants to find out the responses of respondent on electronic banking products through the data collected from questionnaire during the research process. Here, descriptive analysis incorporates calculation of statistical measures such as frequency, mean and standard deviation. Questions dealt with ranking system on five point Likert scale anchored "Strongly Agree" = '1', "Agree" = '2', "Neutral" = '3', "Disagree" = '4' and "Strongly Disagree" = '5.'

4.2.1.1 Frequency and Percentage of internet banking on customer satisfaction

This section deals with the responses of respondent based on the use of internet banking and their satisfaction. On the basis of respondent's satisfaction on internet banking, frequency and percentage is tabulated below:

Table 4.7 Frequency and Percentage of internet banking on customer satisfaction

Particulars	SA	A	N	D	SD
The use of internet banking is time saving.	79 (52.7%)	66 (44%)	3 (2%)	1 (.7%)	1 (.7%)
I can easily access my account and make balance enquiry.	18 (12%)	102 (68%)	26 (17.3%)	4 (2.7%)	0
The use of internet banking is secure for me.	18 (12%)	52 (34.7%)	52 (34.7%)	22 (14.7%)	6 (4%)
I can easily request my account statement by email.	10 (6.7%)	88 (58.7%)	42 (28%)	10 (6.7%)	0
Response of service through internet banking is very prompt and quick.	47 (31.3%)	68 (45.3%)	25 (16.7%)	7 (4.7%)	3 (2%)
I am satisfy with the use of internet banking.	11 (7.3%)	119 (79.3%)	10 (6.7%)	7 (4.7%)	3 (2%)

The above table presents the frequency and percentage of respondents on the use of internet banking with its basic statements. On the first statement, out of 150 respondents most of the respondents i.e. 79(52.7%) are strongly agree that the use of internet banking is time saving. 66(44%) of the respondents are agree, 3(2%) seems to be neutral on the statement. They are neither agree nor disagree with the statement. 1(.7%) of the respondents are both disagree and strongly disagree with the statement that internet bank is time saving. On the second statement, most of the respondents 102(68%) are agree with the statement that they can easily access their account and make balance enquiry. 26(17.3%) of respondents remains neutral, 18(12%) of respondents were strongly agree with the statement. 4(2.7%) seems disagree but neither of respondents are strongly disagree with the statement. On the third

statement, 52(34.7%) of the respondents were both agree and remains neutral with the statement that the use of internet banking is secure for them. Only 18(12%) were strongly agree, 22(14.7%) were disagree and 6(4%) were strongly disagree with the statement. This shows that respondents feel slightly insecure on using internet banking. On the fourth statement, 88(58.7%) were agree with the statement that they can easily request their account statement by email. Only 10(6.7%) were strongly agree, 42(28%) are neutral and 10(6.7%) were disagree but there are neither of respondents are strongly disagree with the statement. From this all analysis we can conclude that most of the respondents are agree and satisfy with the use of internet banking.

4.2.1.2 Frequency and Percentage of ATM banking on customer satisfaction

This section deals with the responses of respondent based on the use of ATM banking and their satisfaction. On the basis of respondent's satisfaction on ATM banking, frequency and percentage is tabulated below:

Table 4.8 Frequency and Percentage of ATM banking on customer satisfaction

Particulars	SA	A	N	D	SD
The location of ATM booths are convenient for me.	20 (13.3%)	76 (50.7%)	16 (10.7%)	27 (18%)	11 (7.3%)
I have always found ATM booths in working order.	8 (5.3%)	42 (28%)	40 (26.7%)	44 (29.3%)	16 (10.7%)
The process of applying for ATM card is easy.	9 (6%)	115 (76.7%)	21(14%)	5(3.3%)	0
Service charge for ATM banking is reasonable.	19 (12.7%)	91 (60.7%)	32(21.3%)	3(2%)	5 (3.3%)
The use of ATM card helps me in the situation of urgency of cash.	45 (30%)	67 (44.7%)	28 (18.7%)	6 (4%)	4 (2.7%)
I am overall satisfy with the use of ATM banking.	77 (51.3%)	69 (46%)	3 (2%)	1 (0.7%)	0

The above table presents the frequency and percentage of respondents on the use of ATM banking with its basic statements. On the first statement, out of 150 respondents most of the respondents 76(50.7%) are agree with the statement that the location of ATM booths are convenient for them. Only 20(13.3%) were strongly agree, 16(10.7%) were neutral but 27(18%) of the respondents were disagree and 11(7.3%) were strongly disagree with the statement. This implies that location of ATM booths was satisfactory for the respondents.

On the second statement, most of the respondents 44(29.3%) were disagree with the statement that they have always found ATM booths in working order. Only 42(28%) are agree and 8(5.3%) are strongly agree with the statement. 40(26.7%) were neutral and 16(10.7%) of the respondents were strongly disagree with the statement. This statement shows that respondents are not very satisfactory with the ATM booths.

On the third statement, most of the respondents 115(76.7%) were agree with the statement that the process of applying for ATM card is easy for them. 21(14%) were neutral, 9(6%) were strongly agree, 5(3.3%) of respondents were disagree with the statement but neither of respondents were strongly disagree. This shows that respondents were happy with process of applying ATM card is easy for them.

On the fourth statement, most of the respondents 91(60.7%) were agree with statement that service charge of ATM banking is reasonable for them. 19(12.7%) were strongly agree, 32(21.3%) were neutral but only 3(2%) were disagree and 5(3.3%) of the respondents were strongly disagree with the statement. It means ATM charge is reasonable for the respondents.

On the fifth statement, most of the respondents 67(44.7%) were agree and 45(30%) were strongly agree with statement that the use of ATM card helps them in the situation of urgency of cash. 28(18.7%) were neutral, only 6(4%) were disagree and 4(2.7%) were strongly disagree with the statement.

On the sixth statement, most of the respondents 77(51.3%) were strongly agree and 69(46%) were agree with the statement that they are overall satisfy with the use of ATM banking. Only 3(2%) were neutral and 1(.7%) was disagree but there were no any respondents of strongly disagree with the statement. As per the analysis we can conclude that majority of the respondents were satisfy with the use of ATM banking.

4.2.1.3 Frequency and Percentage of Mobile banking on customer satisfaction

This section deals with the responses of respondent based on the use of mobile

banking and their satisfaction. On the basis of respondent's satisfaction on mobile banking, frequency and percentage is tabulated below:

Table 4.9 Frequency and Percentage of Mobile banking on customer satisfaction

Particulars	SA	A	N	D	SD
The use of mobile banking is cost saving.	29(19.3%)	101(67.3%)	11(7.3%)	9(6%)	0
The bill payment service offered by bank through mobile banking system is easy.	14(9.3%)	58(38.7%)	65(43.3%)	11(7.3%)	2(1.3%)
I always get detail of my account through SMS/Email on my cellular phone.	90(60%)	40(26.7%)	10(6.7%)	6(4%)	4(2.7%)
Mobile banking system provides anywhere bill payment options.	11(7.3%)	73(48.7%)	33(22%)	23(15.3%)	10(6.7%)
The uses of mobile banking is secure.	13(8.7%)	56(37.3%)	34(22.7%)	34(22.7%)	13(8.7%)
The overall satisfaction with mobile banking system of bank is satisfactory.	15(10%)	127(84.7%)	6(4%)	1(.7%)	1(.7%)

The above table presents the frequency and percentage of respondents on the use of mobile banking with its basic statements. On the first statement, out of 150 respondents most of the respondents 101(67.3%) were agree and 29(19.3%) were strongly agree with the statement that the use of mobile banking is cost saving. 11(7.3%) were neutral and 9(6%) were disagree but there were no any respondent of strongly disagree. This implies that mobile banking is cost saving for the respondents.

On the second statement, most of the respondents 65(43.3%) are neutral on the statement that the bill payment service offered by bank through mobile banking system is easy. 58(38.7%) are agree and 14(9.3%) are strongly agree but only

11(7.3%) are disagree and 2(1.3%) are strongly disagree with the statement.

On the third statement, most of the respondents 90(60%) are strongly agree and 40(26.7%) were agree with the statement that they always get detail of their account through sms/email on their cellular phone. Only 10(6.7%) are neutral, 6(4%) are disagree and 4(2.7%) were strongly disagree with the statement.

On the fourth statement, 73(48.7%) were agree, 11(7.3%) were strongly agree with the statement that mobile banking system provides anywhere bill payment options. 33(22%) were neutral, 23(15.3%) were disagree and 10(6.7%) were strongly disagree about the statement.

On the fifth statement, 56(37.3%) of the respondents were agree and 13(8.7%) were strongly agree with the statement that the uses of mobile banking is secure for them. 34(22.7%) were remains both neutral and disagree but 13(8.7%) were strongly disagree with the statement.

On the sixth statement, most of the respondents 127(84.7%) were agree and 15(10%) were strongly agree with the statement that the overall satisfaction with mobile banking system of bank is satisfactory. Only 6(4%) were neutral but 1(.7%) were both disagree and strongly disagree with the statement. This analysis concludes that most of the respondents are satisfactory with the use of mobile banking.

4.2.1.4 Frequency and Percentage of electronic banking on Customer satisfaction

Table 4.10 Frequency and Percentage of electronic banking on Customer satisfaction

Particulars	SA	A	N	D	SD
I am overall satisfy with use of electronic banking.	25(16.7%)	117(78%)	8(5.3%)	0	0
My expectation meets with the use of electronic banking.	17(11.3%)	114(76%)	16(10.7%)	2(1.3%)	1(.7%)

The above table presents the frequency and percentage of respondents on the use of overall electronic banking with its basic statements. On the first statement, out of 150 respondents most of the respondents 117(78%) were agree and 25(16.7%) were strongly agree with the statement that they are overall satisfy with the use of

electronic banking. 8(5.3%) were neutral about the statement. But there was no any response on disagree and strongly disagree with the statement. The analysis concludes that majority of the respondents were satisfy with the use of electronic banking.

On the second statement, majority of the respondents 114(76%) were agree and 17(11.3%) were strongly agree with the statement that their expectation meets with the use of electronic banking. 16(10.7%) of the respondents were neutral, but only 2(1.3%) were disagree and 1(.7%) were strongly disagree with the statement.

4.2.2 Mean and Standard deviation of internet banking

Table 4.11 Mean and Standard deviation of internet banking

Particulars	Mean	S.D
The use of internet banking is time saving.	1.53	0.642
The use of internet banking is secure for me.	2.64	1.005
I can easily access my account and make balance enquiry.	2.11	0.625
I can easily request my account statement by email.	2.35	0.705
Response of service through internet banking is very prompt and quick.	2.01	0.923
I am satisfy with the use of internet banking.	2.15	0.699

It exhibits the descriptive statistics that which effective internet banking depends on the customer satisfaction which is affected by the services provide by the bank to its customer. The table 4.11 shows the response of respondent on the first statement showed that the use of internet banking is time saving with the lower mean of 1.53. This statement had high agree response from the respondent which shows that they are highly satisfy with the use of internet banking as per the view of time saving. The second statement i.e. use of internet banking is secure for them had least response on agree and strongly agree which results the higher mean of 2.64. As per this results we can conclude that most of the respondents feel not more secure or they are not fully assure about their secrecy with the use of internet banking as they are fear of their data loss.

4.2.3 Mean and Standard deviation of ATM banking on customer satisfaction

Table 4.12 Mean and Standard deviation of ATM banking

Particulars	Mean	S.D
The location of ATM booths are convenient for me.	2.55	1.150
I have always found ATM booths in working order.	3.12	1.099
The process of applying for ATM card is easy.	2.15	.560
Service charge for ATM banking is reasonable.	2.23	.820
The use of ATM card helps me in the situation of urgency of cash.	2.05	.944
I am overall satisfy with the use of ATM banking.	1.52	.576

The above table 4.12 shows the response of the respondents towards the satisfaction of using ATM banking. Sixth statement has higher response with lower mean of 1.52. This result reveals that respondents are highly satisfy with the use of ATM banking. On the other hand, respondents are slightly dissatisfied with the first and second statement with the higher mean of 2.55 and 3.12. This results conclude that ATM booth are not in the convenient location for the respondents and not in working order every time. But in aggregate of responses, the use of ATM card helps them in the urgency of cash at any time even if out of office time. The process of applying for ATM card is also easy and reasonable for the respondents and they are satisfy with this services.

4.2.4 Mean and Standard deviation of Mobile banking on customer satisfaction

Table 4.13 Mean and Standard deviation of mobile banking

Particulars	Mean	S.D
The use of mobile banking is cost saving.	2.00	.714
The bill payment service offered by bank through mobile banking system is easy.	2.53	.817
I always get detail of my account through SMS/Email on my cellular phone.	1.63	.966
Mobile banking system provides anywhere bill payment options.	2.65	1.043

The uses of mobile banking is secure.	2.85	1.132
The overall satisfaction with mobile banking system of bank is satisfactory.	1.97	.477

The above table 4.12 shows the response of the respondents towards the satisfaction of using mobile banking. Third statement has higher positive response with least mean of 1.63. This shows that respondents were satisfy with the use of mobile banking and they always get detail of their account through sms/email on their cellular phones. Whereas, fifth statement has higher negative response with the higher mean of 2.85. It shows that the uses of mobile banking is not much secure for respondents. They feel fear of insecure. Similarly, forth statement has also higher mean of 2.65 which means that respondents are not much satisfy with the service of mobile banking system provides anywhere bill payment options. Similarly, the bill payment service by bank through bank is also not so easy for the respondents which also results the higher mean 2.53. But in overall results respondents were satisfactory with the use of mobile banking with perspectives of cost and time saving.

4.2.5 Mean and Standard deviation of electronic banking on customer satisfaction

Table 4.14 Mean and Standard deviation of electronic banking.

Particulars	Mean	S.D
I am overall satisfy with the use of electronic banking.	1.89	.457
My expectation meets with the electronic banking.	2.04	.578

The above table 4.12 shows the response of the respondents towards the satisfaction of using overall electronic banking. First statement has high positive response rate with lower mean of 1.89. It means respondents were highly satisfy with the statement and overall electronic banking. Second statement has also positive response rate with mean of 2.04. Respondent's expectation was also met with the use of electronic banking.

4.3 Inferential Analysis

Inferential statistics analysis is procedures that use to allow researcher to generalized observation made with sample to the larger population from which they are selected. It enables use of one or more samples of observation to infer values of a population.

Inferential analysis test hypothesis to determine if observed difference between group variables real or occur simply by chance. It produces new information by making prediction and generalization based on samples.

4.3.1 Correlation Analysis

Correlation analysis between Variables was studied to find relations among them. Pearson's correlation was carried for variables. This section deals with the what extent variables under study are correlated to each other. A positive correlation reveals that the direction of relationship is positive with one increasing in action to other increase. Meanwhile, a negative correlation reveal an inverse of above; an increase in one when the other decreases.

4.3.1.1 Correlation between internet banking and customer satisfaction

Table 4.15 Correlation between internet banking and customer satisfaction

		Internet banking	Customer satisfaction
Internet banking	Pearson Correlation	1	.073**
	Sig. (2-tailed)		.000
	N	150	150
** correlation is significant at the 0.01 (2-tailed)			

The above table 4.16 shows the correlation between internet banking and customer satisfaction. In performing the analysis, Pearson Correlation was computed to establish the relationship between uses of internet banking and customer satisfaction. From the correlation analysis, the result revealed a significant positive relationship between internet banking and customer satisfaction [$r=0.073$, $n=150$, $p<0.01$]. The data shows that there is significant correlation between the variables. This means that service delivery for customer satisfaction has improved significantly as usage of internet banking services.

4.3.1.2 Correlation between ATM banking and customer satisfaction

Table 4.16 Correlation between ATM banking and customer satisfaction

		ATM banking	Customer satisfaction
ATM banking	Pearson Correlation	1	.072**
	Sig. (2-tailed)		.000
	N	150	150
** correlation is significant at the 0.01 (2-tailed)			

The above table 4.17 shows the correlation between ATM banking and customer satisfaction. In performing the analysis, Pearson Correlation was computed to establish the relationship between uses of ATM banking and customer satisfaction. From the correlation analysis, the result revealed a significant positive relationship between ATM banking and customer satisfaction [$r=0.072$, $n=150$, $p<0.01$]. The data shows that there is significant correlation between the variables. This means that service delivery for customer satisfaction has improved significantly as usage of ATM banking services.

4.3.1.3 Correlation between mobile banking and customer satisfaction

Table 4.17 Correlation between mobile banking and customer satisfaction

		Mobile banking	Customer satisfaction
Mobile banking	Pearson Correlation	1	.011**
	Sig. (2-tailed)		.000
	N	150	150
** correlation is significant at the 0.01 (2-tailed)			

The above table 4.18 shows the correlation between mobile banking and customer satisfaction. In performing the analysis, Pearson Correlation was computed to establish the relationship between uses of mobile banking and customer satisfaction. From the correlation analysis, the result revealed a significant positive relationship between mobile banking and customer satisfaction [$r=0.011$, $n=150$, $p<0.01$]. The data shows that there is significant correlation between the variables. This means that service delivery for customer satisfaction has improved significantly as usage of mobile banking services.

4.3.2 Regression Analysis

In order to test the statistical significance and robustness of the results, this study relies on primary data analysis based on the regression model specified in the chapter three. It basically deals with regression results from various specifications of the model to examine the estimated relationship of customer satisfaction as dependent variable and internet banking, ATM banking and mobile banking as independent variables. The regression results have been presented in tables below.

4.3.2.1 Regression analysis of electronic banking on customer satisfaction

Table 4.18 Regression Model Output

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.097 ^a	.09	-.011	.459

a. Predictors: (Constant), Mobile banking, Internet banking, Atm banking

Coefficients

Regression Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.529	.361		4.233	.000
Internet banking	.099	.126	.066	.786	.433
Atm banking	.085	.110	.066	.771	.442
Mobile banking	.020	.103	.016	.192	.848

a. Dependent Variable: customer satisfaction

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.292	3	.097	.462	.709 ^b
	Residual	30.781	146	.211		
	Total	31.073	149			

a. Dependent Variable: customer satisfaction

b. Predictors: (Constant), Mobile banking, Internet banking, Atm banking

Source SPSS Output

From table 4.19, it is observed that the beta for internet banking is .099, ATM

banking is .085, and mobile banking is .020. The negative sign in front of the beta of these variables signify an indirect relationship between the explained variables whereas positive sign signify a proportional relationship between the explained variables. From the above table we can say that there is positive relationship between internet banking, ATM banking and mobile banking with customer satisfaction. Internet banking, ATM banking and Mobile banking is statistically significant at 0.000 which are less than the alpha significance level equal to 0.05.

Further, for the customer satisfaction, descriptive statistics represented by R^2 equal to 0.09 which suggest that using internet banking, ATM banking and mobile banking, the independent variable accountable for 91% in explaining the variation in the dependent variable. This implies that 9% of the changes in decision are not accounted for by the explanatory variables. It suggest that explanatory variables are the sound and predictors for the customer satisfaction. The p-value for the F-statistics being equal to 0.000 implies that with regard to customer satisfaction, the independent variable in the model demonstrate significant influence on customer satisfaction of the bank.

4.3.2.2 Regression analysis of overall satisfaction of electronic banking on customer satisfaction

Table 4.19 Regression Output of overall satisfaction of electronic banking on customer satisfaction

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	1.570	.354		4.438	.000
	satisfaction	.142	.158	.074	.899	.370

a. Dependent Variable: customer satisfaction

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.074 ^a	.05	-.001	.457

a. Predictors: (Constant), satisfaction

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.169	1	.169	.807	.370 ^b
	Residual	30.905	148	.209		
	Total	31.073	149			

a. Dependent Variable: customer satisfaction

b. Predictors: (Constant), satisfaction

Source SPSS Output

From table 4.20, it is observed that the beta for overall satisfaction of electronic banking is .142. The negative sign in front of the beta of these variables signify an indirect relationship between the explained variables whereas positive sign signify a proportional relationship between the explained variables. From the above table we can say that there is positive relationship between the overall satisfactions of electronic banking with customer satisfaction. The overall satisfactions of electronic banking is statistically significant at 0.000 which are less than the alpha significance level equal to 0.05.

Further, for the customer satisfaction, descriptive statistics represented by R^2 equal to 0.05 which suggest that using electronic banking, the independent variable accountable for 95% in explaining the variation in the dependent variable. This implies that 5% of the changes in decision are not accounted for by the explanatory variables. It suggest that explanatory variables are the sound and predictors for the customer satisfaction. The p-value for the F-statistics being equal to 0.000 implies that with regard to customer satisfaction, the independent variable in the model demonstrate significant influence on customer satisfaction of the bank.

4.3.3 Hypothesis Result

Hypothesis testing is done to check the relationships between the internet banking, ATM banking and mobile banking to customer satisfaction and the results are shown in the table:

Table 4.20 Hypothesis Result

S.N	Null Hypothesis	Results	Tool (p-value)
1	There is no relationship between internet banking and customer satisfaction of Nepalese commercial banks.	Reject	0.000
2	There is no relationship between ATM banking and customer satisfaction of Nepalese commercial banks.	Reject	0.000
3	There is no relationship between mobile banking and customer satisfaction of Nepalese commercial banks.	Reject	0.000
4	There is no relationship between internet, ATM, mobile banking and customer satisfaction of Nepalese commercial banks.	Reject	0.000

4.4 Findings

This chapter presented the primary data collected by use of questionnaires and granted by customers of Nepal bank limited and Nabil bank limited and it has been discussed side by side relying on the research objectives and research questions. The basic objective of this study is to analyse the impact of E-banking on customer satisfaction of commercial banks. The analysis revealed that a number of electronic banking products have been introduced by commercial banks. But the researcher has only considers the three dimensions of electronic banking i.e. internet banking, ATM banking and mobile banking. From the analysis, these are the most widely patronized products by the customers. This results was presented in above tables.

The findings of this study revealed that there were 55% male and 45% were female. It was observed that the highest levels were master's degree and lowest number were of housewife. These findings show that customers differ in education level from those with high level of education to lower ones. Most user of e-banking in Kathmandu are students and which are of age between 30-40 years. The analysis was based on 150 questionnaires which were properly filled by the customers of two lead commercial

banks. This was accounted for 100% response rate. The respondents were asked to rate statements on a 5 point likert scale ranging from 1 to 5 with 1 being 'Strongly Agree', 2 being 'Agree' 3 being 'neutral', 4 being 'disagree' and 5 being 'Strongly Disagree'.

From the first objective of study, majority of the respondents indicated that due to the time saving internet banking influenced customer satisfaction to a great extent as shown by a mean score of 1.53, they use internet banking more frequently because it's response of service is very prompt and quick as shown by a mean score of 2.01, security of use of internet banking had a mean score of 2.11, overall satisfaction with internet banking has mean score of 2.15 while easy request of customers account statement by mail and easiness of use of internet banking were seen to have relatively low effect on customer satisfaction with a mean score of 2.35 and 2.64 respectively. The standard deviations of between 0.625 and 1.005 indicated that there was a small variation in the responses.

The second objective of study revealed that the overall satisfaction with the use of ATM banking, uses of ATM helps in the situation of urgency and easiness in process of applying for ATM card affected customer satisfaction to a great extent as shown by a mean score of 1.52, 2.05 and 2.15 respectively. Whereas, service charge of ATM banking is reasonable and convenient location of ATM booths were shown to have moderate effect on customer satisfaction with a mean score of 2.23 and 2.55 respectively. Respondents indicated that they have not always found ATM booths in a working order and had a low effect on customer satisfaction with a mean score of 3.12. These findings imply that Customer-focused ATM delivery systems that fulfil their needs and maximize operational performance are essential dimensions for banks to achieve and sustain competitive advantage.

The third objective revealed that the customers always get detail of their account through sms/email on their cellular phone, overall satisfaction of mobile banking and uses of mobile banking is cost saving affected customer satisfaction to a great extent as shown by a mean score of 1.63, 1.97 and 2.00. Whereas, easiness of the bill payment service offered by bank through mobile banking and mobile banking system provides anywhere bill payment options had moderate effect on customer satisfaction with a mean score of 2.53 and 2.65 respectively. But uses of a mobile banking account is secure had little effect on customer satisfaction with a mean score of 2.85.

CHAPTER V

Discussions, Conclusions and Implications

After the analysis and interpretation of collected data as per the design of study, this is the concluding chapter an attempt has been made to drive conclusion. This chapter deals with the conclusion and implication derived from the study, impact of E-banking services on customer satisfaction of commercial banks of Nepal. It consists of three sections. First section provided the discussion of the study, second section draws the conclusion of the study and final section consists of the implication to solve the problem observed during the study.

5.1 Discussions

Electronic banking is the delivery of banks' information and services by banks to customers through different delivery channels that can be used with different electronic devices such as computer and a mobile phone with browser software, telephone or digital television. Electronic banking as an "internet portal, by which customers can use different kinds of banking services ranging from bill payment to making investments". Apart from withdrawals of cash, it gives customers access to distinctive sorts of banking transaction just by the snap of a mouse. The accessibility and bank operations have been made much easier since the introduction of information technology where automated banking services have been made successful with the usage of Automated Teller Machine, mobile banking and internet banking where consumers are able to transact business without visiting the bank premises (Solomon, 2010). In fact the use of electronic banking as an option for the dissemination of financial institutions has turned into a competitive tool rather than only an approach to accomplish competitive advantage of preference with the appearance of globalization and fiercer rivalry. In Nepal, the concept of E-banking services is growing over the past few years and more and more customers are getting involved in using this services. But still the use of e-banking is low and in the developing state and it has still a long way to go.

In order to discussion the whole study in a manner of the academic research this study follows the conventions of the methodologies set by the university.

The first chapter of the study deals with introduction which includes background of the study, statement of the problem, objectives of the study, significance of the study, limitation of the study and organization of the study.

The second chapter presents review of E-banking, history of e-banking in Nepal, types of e-banking, features of e-banking, customers satisfaction, E-banking and customer satisfaction.

The third chapter explains the research methodology used in the study .It included research design, population and sampling, types and sources of data collection procedure, data analysis tools and techniques, reliability and validity.

The fourth chapter is the results which is the major part of the study. In this chapter, interpretation of data has been attempted with in the frame of the methodology insisted in the chapter research methodology.

The final chapter is discussion, conclusion and implications. In this chapter, discussions of the whole study conclusions derived out of the study and the implications to solve the problem identified have been presented.

As per the purpose set earlier, the use of e-banking and customer satisfaction has been analysed and presented by the use of set of questionnaires based on three dimensions of e-banking i.e. internet banking, ATM banking and mobile banking.

5.2 Conclusion

The chapter outlined the objectives and the research questions that were proposed and answered by the evidence gathered through the data collected and analysed. The findings significantly, indicate that electronic banking products have impacted positively on the customer satisfaction of commercial banks of Nepal. Through existing marketing literature, empirical evidence and multiple regression analysis, the study concludes that commercial bank customers are satisfied with use of the e-banking services i.e. internet banking, ATM banking and mobile banking.

In the first objective of the study was on the impact of internet banking usage on customer satisfaction, it has proved that internet banking plays a vital role in stoking customer satisfaction. The research on internet banking usage also revealed that the transaction process is first besides it performs the services right the first time. From the findings, the study concludes that internet banking is time saving, response service is also very prompt and quick which influence customer satisfaction to a great extent. In addition, many customers use internet banking because it is easy access the account

and easily request the statement by email. However there was no absolute agreement that it provides security for transaction data and privacy of internet banking which has relatively low effect on customer satisfaction.

Concerning the second objective, which is the impact of Automated Teller Machine on customer satisfaction, the study results have indicated that ATM has a positive and significant correlation with and predictor of customer satisfaction. Therefore, the study concludes that ATM usage remains one of the key elements of E-banking services, which affects customer satisfaction. This means that the banking sector should pay high premiums on the efficiency and accessibility of Automated Teller Machine services in order to enhance customer loyalty and satisfaction. The study concluded that use of ATM card helps in the situation of urgency of cash, reasonable service charge of ATMs and easiness of applying for ATM card affects customer satisfaction to a great extent. In addition, convenient location of ATM booths for using ATM cards of bank have moderate effect on customer satisfaction. But ATM booths always in working order has low impact on customer satisfaction.

The third objective sought to find out the effects of mobile banking usage on customer satisfaction. Responses from the respondent's points to the fact that mobile banking engenders high customer satisfaction however the organization should focus on the service quality so as to ferment even high customer satisfaction. From the findings the study therefore concludes that mobile banking usage was the greatest contributor to customer satisfaction amongst the key dimensions of automation of banking services and significantly affecting customer satisfaction. The study also concludes that, convenience of mobile banking, cost saving and always get detail of account through sms/email on cellular phone affects customer satisfaction to a great extent. Similarly, easiness and anywhere of bill payment service offered by bank have a moderate effect to customers. But uses of mobile banking has a low impact on customer satisfaction.

5.3 Implications

In view of the findings of the study and the guidance from the literature review, it is apparent that e-banking services is important ingredient to satisfy the various needs of the customers and in return eliciting high customer satisfaction. While there are other factors crucial for customer satisfaction but from the results, the banks should pay more attention in addressing efficiency and reliability of internet banking, ATM banking and mobile banking usage in order to increase customer satisfaction. In this

regard, the current study makes the following implications:

- i. This study recommends that banking intuitions should enhance their internet banking to make it flexible, fast and easy to use.
- ii. Secrecy and privacy in use of internet banking had relatively low effect on customer satisfaction. This study therefore recommends that the management of commercial banks should justify investment in new technology of internet banking as far as practicable.
- iii. The study also recommends that, the government and its agencies should formulate policies that enhance application of internet banking across all financial institutions in Nepal. This may include legislations on how to curb cyber-crime.
- iv. There is the need to educate majority of the banking population on internet banking. This is not because most of the customers administered with the questionnaires rejected or refused to answer the questionnaire because they did not know of the services nor had minimal education of internet banking services.
- v. It is important for these banks offering services electronically to differentiate themselves from competitors. They need to provide information for customers on various competing services.
- vi. Authorities of banking services should acquire high customer satisfaction by ensuring convenience in the use of Automated Teller Machine services.
- vii. Transactions and withdrawals are made every now and then thus additional Automated Teller Machine may be installed in order to minimize customers transaction time and if possible increase cash withdrawal limits per day.
- viii. The Banks should frequently inspect the ATM machine, it is helpful to avoid breakdown of ATM machine and also provide security guards to improve the safety and security in ATM services particularly at night.
- ix. The bank should establish more user friendly machines in order to reduce the Machine complexity and establish ATM in different locations in order to meet the customer needs.
- x. Mobile service providers in conjunction with banks should develop more friendly and easy to use and efficient applications for bank customers.
- xi. The bill payment service offered by bank through mobile banking system should have to make easy for the customers and make anywhere bill payment

- options.
- xii. Mobile banking services is efficient enough to bring about high customer satisfaction. However the bank should assure customers of the security and privacy of mobile banking services so as to maximize on customer satisfaction.
 - xiii. It is important to highlight for banks to focus on the value than the customer generates, rather than the value that banks can offer to their customers by making customers aware of the information and relative advantages of e-banking services.
 - xiv. The bank management should build strong system security to attract customers and develop their trust by ensuring that they meet all the promises delivered to customers during marketing advertisements.
 - xv. Since quick response can increase customer satisfaction, personal contact can establish good relationship and trust with customer. So banks should provide live support over the internet instead of support through emails.

5.4 Research Implications

Electronic banking services have become one of the mainstream banking strategies globally. In spite of its numerous dimensions and advantages there have been some challenges which hinders it optimum usage both to the public and the bank themselves. The complexities associated with e-banking patronage are so large that a single study could not discover all. Again, due to limited resources and time this study could only sample two branches of two selected bank even though the study could have covered a wide setting. In view of the above, the researcher recommends that funds be made available for the study to be replicated in the other banks since the findings of the current study indicated that there are varied challenges as well as advantages with electronic banking services. Implications from such a study would lead to a much better administration and patronage of electronic banking product for economic growth and development. Future studies should also be done to a large sample of customers in order to determine the impact of E-banking on the customer satisfaction and the constraints, methods and procedures that must be taken to reduce these obstacles.

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Appendix

Questionnaire of Electronic banking on customer satisfaction

Dear Respondent,

I am Nikeeta Badu, final year student of Tribhuvan University conducting a purely academic research study on “**Impact of electronic banking on customer satisfaction of Nepalese Commercial Banks**” to meet the partial fulfillment of the requirements for the Master’s Degree in Business Studies (MBS), Tribhuvan University. The major objective of this study is to examine the impact of e-banking on customer’s satisfaction of commercial banks. Your responses will be maintained absolutely confidential and used for only academic purposes. Your participation in the study is anonymous, voluntary and will be very much appreciated.

Section A: Respondent’s Information

Name of Bank:

Gender: Male [] Female []

Marital Status: Married [] Unmarried []

Age: Below 20 [] 20 to 30 [] 30 to 40 [] 40 to 50 [] 50 to above []

Academic Qualification: PhD [] Masters [] Bachelor [] Intermediate [] SLC and below []

Occupation: Government [] Private [] Self-employed [] Student [] Retired [] Housewife []

Per year income: less than 1 lakh [] 1-3 lakh [] 4-6 lakh [] More than 6 lakh []

Section B: Respondent’s Opinion

This questionnaire is about impact of e-banking on customer’s satisfaction which consists of 18 statements including Internet banking, ATM banking and Mobile banking. Please read each statement then indicate your reaction to each of the

following statements by ticking (√) in an appropriate choice for the statements which represents your level of agreement or disagreement with it. Make sure to respond to every statement.

SA- Strongly Agree, A- Agree, N- Neutral, D- Disagree, SD- Strongly Disagree

S.N	Statement	SA	A	N	D	SD
Internet Banking						
1	The use of internet banking is time saving.					
2	I can easily access my account and make balance enquiry.					
3	The use of internet banking is secure for me.					
4	I can easily request my account statement by email.					
5	Response of service through internet banking is very prompt and quick.					
6	I am satisfy with the use of internet banking.					
ATM Banking						
7	The location of ATM booths are convenient for me.					
8	I have always found ATM booths in working order.					
9	The process of applying for ATM card is easy.					
10	Service charge for ATM banking is reasonable.					
11	The use of ATM card helps me in the situation of urgency of cash.					
12	I am overall satisfy with the use of ATM banking.					
Mobile banking						
13	The use of mobile banking is cost saving.					
14	The bill payment service offered by bank through mobile banking system is easy.					
15	I always get detail of my account through SMS/Email on my cellular phone.					
16	Mobile banking system provides anywhere bill payment options.					
17	The uses of mobile banking is secure.					
18	The overall satisfaction with mobile banking system					

	of bank is satisfactory.					
	Customer Satisfaction					
19	I am overall satisfy with the use of electronic banking.					
20	My expectation meets with the electronic banking.					

Impact of Electronic Banking on Customer Satisfaction of Nepalese Commercial Banks

A Thesis Proposal

By

Nikeeta Badu

Central Department of Management

Roll No. : 753/16

T.U. Regd. No.: 7-2-177-127-2012

Submitted in partial fulfillment of the requirement for the degree of

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Kirtipur, Nepal

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Chapter I

Introduction

1.1 Background of Study

The term Electronic Banking services refer to "the provision of information or services by a bank to its customers, via a Mobile phone, ATM, computer or television" (Allen et al, 2001). Electronic banking is the use of electronic delivery channels for banking products and services, and is a subset of electronic finance. The most important electronic delivery channels are the Internet banking, Automated Teller Machines (ATMs), and Mobile banking. The term transactional e-banking is also used to distinguish the use of banking services from the mere provision of information. Electronic banking services are offered in two main ways. Either traditional brick and mortar banks combine traditional and electronic delivery channels (brick and click banks) or banks offer their products and services only- or predominantly through electronic distribution channels without having a branch network (other than a physical presence as an administrative head office or non-branch facilities such as kiosks or ATMs). These banks are called "virtually banks", "branchless" or "Internet only" banks. Withdrawal and deposit of funds may be made through ATMs or other remote delivery channels owned by these virtual banks or other institutions.

"E-banking is defined as the automated delivery of new and traditional banking products and services directly to customers through electronic, interactive communication channels." (Shahriari, 2014).

Electronic banking is the new way of doing business without setting foot outside. It is defined as the automated delivery of new and traditional banking products and services directly to customers through personnel computer. When first introduced electronic banking was used as an informational medium to market banking products and services but with the development of new technology bank uses internet banking both for transactional and informational medium. Electronic banking is considered as a new revolution of the traditional banking services which offers customers the greatest expediency for performing banking transactions via electronic. All banks, especially the large banks and mutual banks, have gradually increased their number of

Internet banking services available to customers over the past decades (Momeni, 2013).

Customer satisfaction is a measure of how products and services supplied by a company meet or surpass customer expectation. In other words, customer satisfaction refers to the extent to which customers are happy with the products and/or services provided by a business. Further definition of customer satisfaction is it is a term generally used to measure a customer's perception of a company's products and/or services. It's not a straight forward science however, as customer satisfaction will vary from person to person, depending on a whole host of variables which may be both psychological and physical. The usual measures of customer satisfaction involve a survey with a set of statements using a Likert Technique or scale.

The application of information and communication technology concepts, techniques, policies and implementation strategies to banking services has become a subject of fundamentals importance and concerns to all banks and indeed a prerequisite for local and global competitiveness in banking industry. As a result of this technological improvement business environment in financial sector is extremely dynamic and experience rapid changes and demands banks to serve their customer electronically. The evolution of e-banking started from the use of Automatic Teller Machine (ATM) and Finland is the first country in the world to have taken a lead in e-banking. E-banking has been widely used in developed countries and in developing economies. However, the spread of e-banking is much limited. Today, almost all banks are adopting electronic banking as a means of enhancing service quality of banking services. They are providing electronic banking to their customers to increase customers' satisfaction in banking service.

1.1.1 Introduction of selected commercial banks

Nepal Bank Limited was the first commercial bank of Nepal which was established in 1994 B.S. and marked itself as the beginning of an era of formal banking in Nepal, started its computerization process since 2048 B.S. It had played the dual role of both central and commercial bank until the establishment of Nepal Rastra Bank. NBL has been providing IT enabled services and delivery channels such as ATMs, Online Banking, Debit Cards, Mobile Banking, NFC enabled e-ticketing system for local

transportation, ECC, ASBA and more which has bring the concept of anytime and anywhere banking. With the advancement in these technologies new products are gaining more attention amongst customers' reasons being lower cost of operation and easily accessible services.

Nabil Bank Limited is the nation's first private sector commercial bank, commencing its business since July 1984. Nabil was incorporated with the objective of extending international standard modern banking services to various sectors of the society. Nabil, as a pioneer in introducing many innovative products and marketing concepts in the domestic banking sector represents a milestone in the banking history of Nepal as it started an era of modern banking with customer satisfaction measured as a focal objective while doing business.

1.2 Statement of the Problem

Customer satisfaction is a much sought after phenomenon in today's highly competitive and globalized market place. Today's customers seek more than price bargains and want useful, dependable and reliable technologies. The introduction of electronic banking in to the banking sector is to bring customer satisfaction there by to enhance the banks' profitability. Unless this technology bring increase customer satisfaction than the traditional brick and mortar branches customer may perceive as the same as different branches rather than a new means of delivery channels. Electronic banking is providing the competitive advantage by lowering the cost and providing best satisfaction of customer needs. Many Nepalese banks have exponentially embraced the use of information and communication technologies in their service provision. Huge amounts of money have invested in implementing the self and virtual banking services with the objective of improving the quality of customer service. However, the adoption of e-commerce has been inhibited by the quality, availability and the cost of accessing telecommunication infrastructures, lack of skilled staff, low internet penetration, low bank account, and lack of timely delivery of physical goods.

1.3 Objectives of the study

- i) To analyze the impact of internet banking on customer satisfaction of Nepalese commercial banks.

- ii) To analyze the impact of automated teller machines on customer satisfaction of Nepalese commercial banks.
- iii) To analyze the impact of mobile banking on customer satisfaction of Nepalese commercial banks.

1.4 Significance of the study

- i. First, the study will be useful for Nepalese commercial banks in order to see the impacts of e-banking on customers' satisfaction in comparison with the ordinary mortar and brick banking system.
- ii. It helps in understanding what attitude customers' have towards e-banking and what actions should the banks take in order to benefits from the opportunities and how to overcome the challenges.
- iii. This study can be used for other researcher as a reference who wants to study further in this or related areas or to serve as a reading material for anyone who is interested.
- iv. This research will alert bankers from tomorrow's problems at today in order to get the intended customers satisfaction as this service can be said it is at infant stage in the country.
- v. It also helps to policy maker of banks related with electronic banking.

1.5 Limitation of the study

The basic limitation of this study is that it only considers customers perspective of e-banking and it does not take into consideration what perspective do all bankers employees have on the technology.

- i. This study does not include bank customers who do not use the current e-banking which would help to compare the attitude of e-banking users and non-users towards e-banking.
- ii. It is also limited only with two banks customers that started e-banking service but it doesn't fully cover other banks those which do not start it.
- iii. This study will conduct in Kathmandu Valley only.
- iv. This study will conduct within a certain limit of time period with only selected research methodology.

1.6 Organization of the study

The study will be divided into five chapters .They are an introduction, literature review, research methodology, presentation and analysis of data and summary, conclusion and recommendation.

Chapter I: Introduction

This chapter deals with introduction which includes background of the study, statement of the problem, objectives of the study, significance of the study, limitation of the study and organization of the study.

Chapter II: Literature Review

The second chapter presents review of previous related research done on e-banking and customer satisfaction, review of related books, journals, articles and previous unpublished master level dissertation etc.

Chapter III: Research Methodology

The third chapter explains the research methodology used in the study .It included research design, population and sampling, types and sources of data collection procedure, data analysis tools and techniques.

Chapter IV: Data Presentation and Analysis

Fourth chapter is Data presentation and analysis. This chapter includes Data presentation, Data analysis and Major finding of the study.

Chapter V: Summary, Conclusion and Recommendation

Ultimately, fifth chapter discusses summary of main findings, recommendations and suggestions further these includes reference books, magazines, newspaper, previous dissertation, etc. are shown under bibliography.

Chapter II

Literature Review

The review of related literature is an important and essential for guideline of study. It helps to the researcher to get more information, ideas and identifying what people already have been done? In addition, what we have to find out and tested? "It eliminates the duplication of what has been done and provides useful hypothesis and helpful suggestions for significant investigation" (Best and Kahn, 2012, P. 39). Therefore, for selecting design, sample, tool, data collection procedure, analysing data and making decision, it gives instruction and makes a reliable research.

There are different kinds of literature available on e-banking. Some books, reports, journals, articles, thesis and related websites will be reviewed to attempt the theoretical foundation and analyse how e-banking helps to maintain the satisfaction of customers of the bank. So, researcher will review these studies in order to explain the present problem of the study. They are as follows:

A study carried by Babatunde, M.O. & Salawudeen, M.O. (2017) entitled "Analysis of the Impact of Electronic Banking on Customers' Satisfaction in Nigeria" to examine the impact of electronic banking in Nigerian banking industry and financial institutions. Researcher used both the primary and secondary data to elicit information from the forty (40) respondents. The primary data were collected through the use of questionnaire, while the secondary data were obtained from the publications of the Central Bank of Nigeria Electronic Banking Guideline, Annual Reports of the CBN and Access Bank Plc. The population selected was designed to obtain adequate and diverse views pertaining to the level and impact of electronic banking in Access Bank. The researcher employs both descriptive and inferential statistics to analyse the data also simple frequency counts, percentages and the Chi-square were used in the data analysis. The study concludes that the adoption of electronic banking has enhanced the bank's efficiency, making it more productive and effective. The study therefore recommends that the Nigerian banking sector must be focused in terms of their needs and using the right technology to achieve goals rather than acquiring technology of internet banking because other banks have it.

Similarly, Areeba, & et al., (2016) studied entitled “The Impact of E-Banking on Customer Satisfaction: Evidence from Banking Sector of Pakistan” to investigate the impact of E-banking variables on customer satisfaction in Pakistan. Five service quality dimensions; reliability, responsiveness, assurance, tangibles and empathy, derived from the SERVQUAL model with support of literature review have been selected as forecasters of customer satisfaction in E-banking. Research design of the study is quantitative. Data has been gathered through already tested questionnaire from 264 E-banking users as respondents, from different cities of Pakistan. Results of the study have revealed that there is momentous relationship between service quality dimensions and customer satisfaction in E-banking in Pakistan, with more weightage of reliability, responsiveness and assurance among the five dimensions. Through this study we can conclude that service quality in E-banking leads to satisfied customers and thus banks can gain competitive advantage by offering better-quality services to their customers in today’s emulous world.

These various research studies have been carried out in the field of impact of e-banking on customers’ satisfaction. Yet researcher felt a lot of gap prevailing in these various researches carried out. Still researcher can claim that this research will be quite different from these researches. Present research will be also similar with them in a sense that all of these researches including mine are concerned with the impact of e-banking on customer satisfaction.

Chapter III

Research Methodology

Research Design

The research design helps the researcher for suitable planning and provides guideline for collection of data. The researcher will adopt the descriptive survey design in this study to achieve the objectives.

Population and Sample

Till now there are 28 commercial banks in Nepal among them only two commercial banks i.e. Nepal Bank Limited and Nabil Bank Limited will be taken as the sample banks for the study because of their similar nature as Nepal bank limited is the first commercial bank and Nabil bank limited is first joint venture commercial bank of Nepal and also due to the huge number of e-banking registered customers and the sample was generalized to represent the characteristics of the 28 commercial banks. Therefore, total customers of commercial banks are the total population and one hundred and fifty customers of both banks who are using e-banking will be taken as the sample of this study in Kathmandu district by using the random sampling method.

Sources of data

Data is the foundation of the research. Therefore, collection of reliable data is very essential for all kinds of researches. As per the requirement of the study, the researcher will use primary data and data will be collected through questionnaires after visit to the sample banks of Nepal Bank Limited and Nabil Bank Limited.

Method of Analysis

The collected data will be analyse by using various statistical tools like frequency, percentage, mean, standard deviation, correlation and regression to achieve the research objectives.

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Related Websites:

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