

# **CHAPTER – I**

## **INTRODUCTION**

### **1.1 General Background**

Nepal is one of the developing countries in the world. The economic growth rate of Nepal is very low and the economic development seems to be much sluggish in comparison to other developing countries. In spite of being rich in natural resources, due to lack of proper management and inadequate capital, such resources have not been utilized properly. Hence the development of Nepalese economy is lagging behind. The economic standard of nation determines the life style of the people. Hence the developing countries like Nepal must pay due attention and make greater effort to uplift economic state of affairs. It is most necessary to carry out the various development steps in various sectors by developing countries. The development of economy basically depends upon the development of financial sectors.

Banking sector is the main element of any financial sectors. So banking sector is also known as backbone of economy, because it helps to formulate capital by collecting scattered amount among people and invest in different infrastructure like transportation, health and other basic needs of development in which private sector does not want to invest. That is why banking sector is a platform through which scattered saving and scares resources can be transferred from the idle sector into productive sectors. This ultimately helps to uplift the economic development of the country. So Nepal needs to emphasize banking among its people in this modern era. Further in this modern century, banking business transaction and personal life have become advanced in Nepal too, so nowadays to make easy business transaction, various types of equipments and new techniques are introduced. As a result of this banking sectors and financial institution provide non banking service beside instructed banking service to move towards modernization. Previously, people used goods for goods to exchange necessary things that they need to survive but it is very difficult to

measure and pay through barter system. That is why money was introduced. Money makes exchange system easy. But at the same time even money is inconvenient because it is uncomfortable to carry huge amount to pay large bills, difficult to protect from theft and pick pocketers and some other drawbacks. So that nowadays, different payments systems have evolved, especially after the revolution in information technology. The growth of technology has changed the payment systems world over during the past two decades. More and more innovations are being introduced in both cash payment systems and non-cash payment systems. Cash in the form of notes and coin was the principal method of payment system before the introduction of Banking Paper instruments such as Cheques. Credit Transfer now has become a part of the payment system with the popularity of banking. With the introduction and implementation of recent technology in banking, electronic devices are making the job of cash payment as well as non-cash payments easy and efficient. The introduction of Automatic Teller Machine (ATMs) and the Plastic Cards have given the banking customers the facility of round the clock (24 hours) banking.

In modern day commerce, Credit cards have acquired a fairly prominent and pervasive role. With the increasing use of the credit cards, the society is moving towards cashless transactions. It is one of the highly used and convenient forms of electromagnetic cards that are available nowadays. It has helped to eliminate drawbacks of cash payment system and made life easy and tension free. A card issued by a financial company giving the holder an option to borrow funds, usually at point of sale. Credit cards charge interest and are primarily used for short-term financing. Interest usually begins one month after a purchase is made and borrowing limits are pre-set according to the individual's credit rating. Credit card is a very convenient way of making purchase on credit without carrying cash. The way a normal credit card works is that the cardholder purchase goods by using his /her credit card and the concerned bank pays bill in the behalf of card user to the merchant, which

provides the product and services. The bank charges certain percentage from the merchant in return for processing the transaction by paying the purchased amount less banks commission to the merchant's account. From the customers' side he is given a loan for that amount, generally the bank gives monthly statement of cardholder's expenses, but the date of statement issue may be different from one bank to another bank. The cardholder will have to pay that amount within the time period given by the bank. If the cardholder does not want to pay the full amount he can pay minimum (printed on the monthly statement) or 5 percent of total expense whichever is high within 15 days of statement issued. Many card issuers being banks also allow withdrawals of cash for emergency purposes and levy a service fee for such withdrawals.

### **1.1.1 Historical Background and Development of Credit Card in the World**

The modern credit card was the successor of a variety of merchant credit schemes. It was first used in the 1920s, in the United States, specifically to sell fuel to a growing number of automobile owners. In 1938 several companies started to accept each other's cards. Western Union had begun issuing charge cards to its frequent customers in 1914. Some charge cards were printed on paper card stock, but were easily counterfeited. The Charga-Plate was an early predecessor to the credit card and used during the 1930s and late 1940s. It was a 2 1/2" x 1 1/4" rectangle of sheet metal, similar to a military dog tag that was embossed with the customer's name, city and state (no address). It held a small paper card for a signature. It was laid in the imprinter first, and then a charge slips on top of it, onto which an inked ribbon was pressed. Charga-Plate was a trademark of Farrington Manufacturing Co. Charga-Plates was issued by large-scale merchants to their regular customers, much like department store credit cards of today. In some cases, the plates were kept in the issuing store rather than held by customers. When an authorized user made a purchase, a clerk retrieved the plate from the store's files and then processed the purchase.

Charge –plates speeded back – office bookkeeping that was done manually in paper ledgers in each store before computers ([wikipedia.org/wiki/creditcards](http://wikipedia.org/wiki/creditcards)).

The concept of paying different merchants using the same card was invented in 1950 by Ralph Schneider and Frank X. McNamara, founders of Diners Club, to consolidate multiple cards. The Diners Club, which was created partially through a merger with Dine and Sign, produced the first "general purpose" charge card, and required the entire bill to be paid with each statement. That was followed by Carte Blanche and in 1958 by American Express which created a worldwide credit card network.

Bank of America created the Bank Americard in 1958, a product which, with its overseas affiliates, eventually evolved into the Visa system. MasterCard came to being in 1966 when a group of credit-issuing banks established Master Charge; it received a significant boost when Citibank merged its proprietary Everything Card, launched in 1967, into Master Charge in 1969. The fractured nature of the U.S. banking system meant that credit cards became an effective way for those who were traveling around the country to move their credit to places where they could not directly use their banking facilities. In 1966 Barclaycard in the UK launched the first credit card outside of the U.S.

There are now countless variations on the basic concept of revolving credit for individuals (as issued by banks and honored by a network of financial institutions), including organization-branded credit cards, corporate-user credit cards, store cards and so on.

The design of the credit card itself has become a major selling point in recent years. The value of the card to the issuer is often related to the customer's usage of the card, or to the customer's financial worth. This has led to the rise of Co-Brand and Affinity cards - where the card design is related to the "affinity" (a

university, for example) leading to higher card usage. In most cases a percentage of the value of the card is returned to the affinity group.

While the plastic card has been the standard for a half century, recent developments show alternative forms of payment rising to prominence, from online services such as Pay Pal to credit card key fobs to chips that can be implanted into cell phones or other devices. But with the sheer volume of devices in use around America whose sole purpose is to read a flat piece of plastic with a magnetic stripe, the "card" in "credit card" is unlikely to pass from the scene any time soon ([wikipedia.org/wiki/creditcards](http://wikipedia.org/wiki/creditcards)).

### **1.1.2 Historical Background of Credit Cards in Nepal**

Credit card is generally associated with a financial institution or bank. However, the history of credit card business in Nepal is associated with a travel agency named Alpine Travel Services private limited (ATS). ATS first obtained the license from VISA and MasterCard International in 1985 A.D. as the representative of the chase Manhattan Bank, NA Singapore. It was horsed to sign up merchant establishment to the various outlets. Now, Alpine accepts credit card service from more than 2000 merchants all over the country. From its association with the Chase Manhattan Bank, Singapore and then in 1993 with the Overseas Union Bank Ltd, Credit Card in Nepal has come a long way.

After ATS, Nepal Grindlays Bank Limited, NGBL, (later named Standard Chartered Bank Nepal Limited, SCBNL) also entered credit card acquiring market in 1989 with Visa and NABIL acquired Master Card. Later, NGBL acquired Master Card in 1990A.D. and JCB in 1992 A.D. It was the Himalayan Bank Limited and NABIL to start the issue of cards in Nepal for the first time in November 1993 A.D. NABIL issued Master Card whereas HBL entered the credit card issuing business with its typical local proprietary card branding "HBL Regular" which is the Nepal's first ever (domestic) Credit Card. In December 1997, HBL improved its technology to issue HBL Gold Card that

was more reliable and safe. These cards become very popular in Nepalese general public, especially in the Katmandu valley. But now HBL Gold is not issuing because of manipulation problem. Himalayan Bank Ltd started to acquire international credit card (Visa) only since 1996. Likewise NGBL started issuing Visa and Master Card in April 1997 A.D. and July 1998 A.D.

This brought about competition in small credit card market of Nepal and of course for the better as it reduced the high commission charges that were enjoyed by the pioneers of credit card introducers and improved the quality of service. In Nepal, however, the use of the credit cards is restricted to small value and mostly personal transactions and in tourism sector. Today Credit card business in Nepal is provided mainly by seven banks; Himalayan Bank, Nabil Bank, SCBNL, NIBL, LAXMI, BOK and GLOBAL IME, these banks are both issuer and acquirer. Credit card is still in initial stage in Nepalese market so it is facing some problems. The major problem with the card business is that most of the people are not aware of its benefit. They are only familiar with the general services provided by the Bank. They don't know what the credit card is, how its operation is carried out, how the entire system works and what are the advantages if one becomes the cardholder. The primary reason behind this may be huge investment to start card business and comparatively very low return due to small market size. Hence this has been one of the problems to tap the foreside business. The main objective of the study is to analyze the trend of card business of Nepal particularly with reference to HBL, NABIL and SCBNL.

### **1.1.3 Players of Credit Cards in Nepal**

Himalayan Bank, Nabil Bank, SCBNL, BOK, Laxmi, Global IME Bank and NIBL, are carrying the credit card business in Nepal. All of these banks are both issuer and acquirer. Types of credit cards they are acquiring and issuing are shown in the following table.

**Table 1.1**  
**Players of Credit Cards in Nepal**

<b>Banks</b>	<b>Cards Issued</b>	<b>Cards Acquired</b>
NABIL	Master cards	MasterCard/Visa/Dinner cards
SCBNL	Master cards/ Visa Cards	Master card/Visa cards/JCB
HBL	Visa cards	Visa Cards
NIBL	Visa cards	Visa Cards
LAXMI	Visa cards	Visa cards
BOK	Visa cards	Visa cards
Global IME Bank	Visa cards	Visa cards

#### **1.1.4 A Brief Introduction to Banks Involved in Credit Cards Business**

In this research only three banks NABIL, SCBNL and HBL are considered as sample bank. The detail information about these banks is mentioned as below.

##### **Standard Chartered Bank Nepal Limited (SCBNL)**

Standard Chartered Bank Nepal Limited has been in operation in Nepal since 1987 when it was initially registered as a joint-venture operation. Today the Bank is an integral part of Standard Chartered Group having an ownership of 75% in the company with 25% shares owned by the Nepalese public. The Bank enjoys the status of being a subsidiary of Standard Chartered Bank, which is one of the leading international banks in the world. Standard Chartered has a history of over 150 years in banking and operates in many of the world's fastest-growing markets with an extensive global network of over 1700 branches (including subsidiaries, associates and joint ventures) in over 70 countries in the Asia Pacific Region, South Asia, the Middle East, Africa, the United Kingdom and the Americas. As one of the world's most international banks, Standard Chartered employs almost 80,000 people, representing over 115 nationalities, worldwide. This diversity lies at the heart of the Bank's values and supports the Bank's growth as the world increasingly becomes one market. With 19 points of representation, 23 ATMs across the country and with more than 400 local staff, Standard Chartered Bank Nepal Ltd. is in a position to serve its customers through an extensive domestic network. In addition, the

global network of Standard Chartered Group gives the Bank a unique opportunity to provide truly international banking services in Nepal. Standard Chartered Bank Nepal Limited offers a full range of banking products and services in Consumer Banking, Wholesale and SME Banking catering to a wide range of customers encompassing individuals, mid-market local corporate, multinationals, large public sector companies, government corporations, airlines, hotels as well as the DO segment comprising of embassies, aid agencies, NGOs and INGOs .The Bank has been the pioneer in introducing ‘customer focused’ products and services in the country and aspires to continue to be a leader in introducing new products in delivering superior services. It is one of the first Banks in Nepal to implement the Anti-Money Laundering policy and apply the ‘Know Your Customer’ procedures. The Bank believes in delivering shareholder value in a socially, ethically an environmentally responsible manner. Standard Chartered throughout its long history has played an active role in supporting those communities in which its customers and staff live. It concentrates on projects that assist children, particularly in the areas of health and education. Environmental projects are also occasionally considered.

The bank issues following credit cards:

### **Rupee Credit Cards (Visa & Master)**

Benefits,

- No need to have an Account at Standard Chartered Bank Nepal Ltd
- Flexible payment option between 5% to 100%
- 100% Cash Advance Facility both in Nepal & India
- Easy to Apply
- Additional Cards for Spouse, Children and Parents with a spending limit per month
- Wide acceptance in India and Nepal
- Special offers and discounts on usage at various shopping outlets, hotels, restaurants etc.

- Discount of 1% on purchase of fuel worth NPR 500/- & above from select Merchant outlets.
- Reward points on retail purchases (except quasi cash transaction)
- e-Statement service
- I-Banking service
- 24 hour support service
- Obtaining Standard Chartered Bank Nepal Visa Classic and MasterCard Gold CREDIT CARD is so simple.

### **USD Credit Card**

Benefits,

- Widely Accepted and Valid Worldwide
- Can Be Utilized for Cash Advance and Retail Purchase
- 100% Repayment Every Month
- SMS Service
- 24 Hour Support Service
- e-Statements Service
- I-Banking Service
- Obtaining Standard Chartered Bank Nepal USD Gold Visa Credit Card is so simple. ([www.standardchartered.com/np](http://www.standardchartered.com/np)).

### **Nabil Bank Limited (NABIL)**

The first commercial joint venture bank of Nepal, Nepal Arab Bank Limited, was established on July 12<sup>th</sup> 1984 under a technical service agreement with Dubai Bank Limited and was renamed as Nabil Bank Limited (NABIL) on 1st January 2002. In the beginning the authorized capital of this bank was Rs.100million and paid up capital was Rs.28 million 400 thousand. The 50% share of NABIL owned by Dubai Bank Limited was transferred to Emirates Bank International Limited, Dubai by virtue of its annexation with the later. Later on, Emirates Bank International Limited sold its entire 50% share to National Bank Ltd, Bangladesh. Now National Bank Limited is managing the

bank in accordance with the Technical Services Agreement signed between it and the bank on June 1995.

The bank introduced an Automatic teller machine (ATM) first time in Nepal, in three places in the valley at Kantipath, New road and Lalitpur. The bank has its corporate head office at Kamladi, Kathmandu. It operates exchange counter at Tribhuwan international airport. Now this counter is restricted in departure lounge and domestic terminal only. Nabil is the pioneer in introducing credit cards in Nepal. The bank is a principal member of Visa and Master Card International since early 1990. It has widest range of services in credit cards which include acquiring of all kinds of cards under Visa and Master Card brands. It also acquires Diners Cards being a sole agent for the country and has arrangement of POS sharing with American Express Cards. The bank issues widest range of credit and debit cards under the brands of visa and master card to accountholders as well as no accountholders. The bank is largest institution in the country with a wide spread merchants. The total number of its branches has reached to 48 ([www.nabilbank.com](http://www.nabilbank.com)).

The bank issues following types of credit cards:

- Local currency Visa credit cards
- MasterCard credit cards(in local currency and us dollar)

### **Himalayan Bank Limited (HBL)**

Himalayan Bank Limited was established on 6th of February 1992 by the distinguished business personalities of Nepal in partnership with Employees Fund and Habib Bank Limited, one of the largest commercial banks of Pakistan. But it actually started its business operation from 18th January. Despite the cut-throat competition in the Nepalese Banking sector, Himalayan Bank has been able to maintain a lead in the primary banking activities- Loans and Deposits. Products such as Premium Savings Account, HBL Proprietary Card and Millionaire Deposit Scheme besides services such as ATMs and Tele-banking

were first introduced by HBL. HBL started its services with 77 employees. Now its employees are over 300. Like any other commercial bank in Nepal, HBL is also engaged in some industrial banking. The bank currently has 40 ATM locations in Kathmandu valley and 26 outside valley. The total number of its branches has reached to 48 ([www.himalayanbank.com](http://www.himalayanbank.com)).

Himalayan Bank issues the following two different types of credit cards (International and Domestic) to its Customers:

### **Visa Gold International and MasterCard International**

This is an international card which can be used anywhere in the world except Nepal and India. Customers having regular income source in foreign currency and maintaining a foreign currency account with any of the Himalayan Bank Branches are eligible to apply for this card.

### **Visa and MasterCard Domestic Card**

The second type of card is the Domestic Card which is issued in two different categories- Visa and MasterCard: Visa Card are again of two types:

- Visa Gold Domestic
- Visa Classic Domestic

There is one type of MasterCard Domestic:

- Master Card Standard

## **1.2 Focus of the Study**

In the context of Nepal, credit card is newly entered area in financial and business sector. That is why credit card concept is quite new for both sector; business and general public. Hence, its business is growing slowly. So the general information and current situation of card business are the subject matter of this study. Also the problems related with the operation of credit card in business as well as individual aspects are also analyzed.

### **1.3 Statement of the Problem**

In 1951, the first bank credit card appeared in New York's Franklin National Bank for loan customers. Only the bank's account holders could use it. Within the several years, nearly 100 other banks across the country were also issuing card. However, in case of Nepal only from 1985 that is after 34 years of inception of card business, credit card business started through the initiative of Alpine Travel Service. In 1993 Himalayan Bank limited and NABIL bank Ltd both started card business at once by issuing different cards domestic credit card and master card respectively. Today credit card has become a synonym for currency notes in foreign countries. In other countries there are cash free zones with all the financial needs being handled by bank cards. But in the context of Nepal it is quite difficult to do so. Card business is fluctuating till now from beginning. Acquiring volume mostly depends upon arrival of tourists but tourism sector in Nepal is very sensitive to the quickly changing political situations of the country to fully rely upon it. So the concerned banks are forced to find domestic internal user.

So the study will focus on the following problems related to the subject chosen:

- What are the positions of different banks involved in credit card business?
- What are the problems that the bank face while transacting credit card?
- What are the trends of credit card users in Nepalese market?
- What are the pros and cons of credit card as viewed by cardholders, concerned banks and merchants?
- What are the problems related to various transaction of credit cards?

### **1.4 Objectives of the Study**

The primary objective of the undertaken research is fulfillment of a course of requirement of the M.B.S program at Tribhuvan University during the thesis year. The specific objectives of the study are as follows:

- To identify the status of credit card business in Nepal.
- To examine the trend of credit card users in Nepal

- To analyze the trend of credit card business in Nepalese banking sector.
- To analyze the strengths and weaknesses related to various transaction of credit card in Nepalese banking sectors.
- To recommend the measures to improve the credit card business of banks and to make aware the general people about the benefits of using the credit cards.

### **1.5 Significance of the Study**

Economic condition of a nation depends upon the development of financial sector. Banking sector is one of the essential components of any nation. The growth of financial and banking sector depends upon reliable services provided by them. Previously banks provided only banking service but nowadays it provides non-banking services also due to the need and demand of customers. Due to this reason credit card system was introduced. But in Nepal, credit card concept has recently entered in banking sector and general public. Card business is still in the growing stage. The usage of credit and debit cards among the bank account holders of Nepal does not portray an encouraging figure. One of the main reasons in such a slow growth was the huge deposit – of up to Rs 50,000 – the bank used to demand to issue such cards. But a paradigm shift in the banks' strategy to issue credit cards to non-account holders without requirement of any cash deposits is expected to attract more people, especially the middle class families. With the increase of awareness and understanding of the advantages of having a credit card coupled with issuance of proprietary debit card by most of the banks. The prospect of plastic money is growing in Nepal and is very good for future too. Hence, the in-depth research on the potentiality of card business is the subject matter of thorough research in the present context.

Therefore, credit card is chosen as the subject matter for this research which is very likely to help different parties like business students who want to know about credit card, lecturer, the bank involved in card business to modify their

card service and in formulating strategy for smooth operation of card and the government who has to make different policies for regulating the business.

### **1.6 Limitation of the Study**

The major limitations of this research are:

- The study is confined to the study of performance of Nabil Bank Limited, Himalayan Bank Limited, and Standard Chartered Bank Nepal Limited towards credit card business in Nepal
- Since, credit card is new concept for Nepalese business; hence it is difficult to find the references and required information. The study covers only a period of 5 years since 2007/2008 – 2011/2012.
- The reliability of the study is heavily dependent on the secondary sources of data collected from Nepal Card Member Forum and from concerned staffs of the bank and primary data collected through survey.
- Non availability of financial and other data due to privacy so a thorough analysis cannot be conducted.
- Research is confined only to analysis of credit card business.

### **1.7 Organization of the Study**

The whole study is divided into five different chapters. Each chapter includes following subject.

#### **Chapter: - I Introduction**

The introduction chapter include background, a brief introduction to banks involved in credit card business, history of credit card in the world, historical background of credit card in Nepal, focus of the study, statement of problem , objective of the study, importance of the study, and limitation of the study and organization of the study.

#### **Chapter: - II Review of Literature**

The review of literature chapter consists of conceptual reviews, review of related study and previous thesis.

**Chapter: - III Research Methodology**

The research methodology chapter include research design, population and sample, sampling procedure, sources of data, data collection techniques and statistical tools.

**Chapter: - IV Data Presentation and Analysis**

The chapter include data presentation, statistical analysis and findings.

**Chapter: - V Summary, Conclusion and Recommendation**

Summary, Conclusion and Recommendation has been presented in the last chapter after data presentation and analysis.

Finally bibliography and appendices have been incorporated at the last of the chapters.

## **CHAPTER – II**

### **REVIEW OF LITERATURE**

Review of literature refers to the reviewing of the past studies in the concerned field. Many researchers have conducted their research in the field of card operation. Besides this, there are some books, articles, dissertation and other relevant study concerned with credit card operation. Some of relevant studies, their objective findings and conclusions and other literature relating to the topics have been reviewed in this chapter. In other words review of literature helps to find what already has been discovered by previous researchers, their findings, research gaps that this study will try to find and foretells the very worthiness of the study being undertaken. The topic credit card in fact is quite a new topic for researcher due to this reason very few reviews are found.

#### **2.1 Conceptual Framework**

This part of literature review focuses on the conceptual review of credit card.

##### **2.1.1 Payment Card**

A payment card is small plastic card, which allows its holder to pay for goods purchased or services available at different outlets or on-line through site. It also allows the holder to withdraw money from the automatic teller machine (A.T.M.) or from the bank. Before proceeding further deep into the intricacies of credit card business, it will be worth noting that credit card is just a line of product of the card payment business. Different banks and credit card companies issue different brands of payment card by forming membership such as Members of Visa International headquartered at Yokohama, Japan issue Visa Branded Payment cards. Till date it is a non-profitable organization run solely by its thousands of members located globally. Members of Master card international, head quartered at St. Louis, USA issue Master card branded payment cards. It is also a non-profitable organization till date run by the members.

American Express Corporation Ltd being a big banking giant itself and head quartered at New York, USA issues American Express(here in after referred as AMEX cards) branded cards. It is a profitable organization. Now all these globally operating institutions, member banks and credit card companies' issues are distinguished from each other by the different features they carry.

### **2.1.2 Credit Card**

It is an instrument of payment used for making payment of services and goods in place of cash or cash items, while repayment can be made after fixed time or over a period of time. It has the option of revolving credit. The cardholders can have the option of partial payment, and on the remaining dues, one has to pay interest. Banks and finance companies issue credit cards carrying the brand of any international payment association such as Visa Card or Master Card. The bank issuing card pays on behalf of card user to the merchant (store) from where the card is used for purchase. A certain percentage is charged from the merchant in return for processing the transaction, crediting the purchased amount less bank's commission to the merchant's account. The amount that the cardholder uses is treated as a loan, if cardholder doesn't pay the amount within the period given by the bank (grace period), usually within 45 days of statement issued, interest is charged.

A credit card's grace period is the time the customer has to pay the balance before interest is charged to the balance. Grace periods vary, but usually range from 20 to 30 days depending on the type of credit card and the issuing bank. Some policies allow for reinstatement after certain conditions are met. Usually, if a customer is late paying the balance, finance charges will be calculated and the grace period does not apply. Finance charge(s) incurred depends on the grace period and balance, with most credit cards there is no grace period if there's any outstanding balance from the previous billing cycle or statement (i.e. interest is applied on both the previous balance and new transactions). However,

there are some credit cards that will only apply finance charge on the previous or old balance, excluding new transactions.

Foreign currency credit card can be availed against the passport facility for traveling abroad. Foreign currency account holders also can obtain credit card for hotel and travel expenses. All Credit card or Charge card users have a credit limit up to which one can use the fund to purchase goods or services. Visa or Master card (depending upon the type of card) is responsible for processing and settling the transactions and the card issuing bank is responsible to collect fund from its customers.

### **2.1.3 Debit Card**

Debit card is also a plastic card, an instrument used to pay the price of services and goods in lieu of cash or cash items, where payment is made only against the deposits available in the customer's depository account and payment is effected immediately. It exactly looks like a credit card but the features are completely different .A debit cardholder must have an account with the bank and the moment he makes any purchase, his account gets immediately debited at the point of purchase and hence is called a debit card. The ATM cards that banks issue are the example of debit cards. It can be used in POS (point of sale) machines to make payment on purchase or services.. Debit card users can have direct access to their account but the debit cards issued for a rupee account cannot be used worldwide because of the non-convertibility of Nepalese currency. Member banks and companies of Visa and Master card international issue debit cards.

### **2.1.4 Charge Cards**

Charge card is also a payment card with a pre-set limit. The cardholder does not have the option of revolving credit. The cardholder must pay the entire dues at the end of each month or the billing period.

### **2.1.5 Chip /Smart cards**

A Chip/Smart card is also a payment card and looks like any other plastic card or an ATM with an integrated circuit(IC Chip) installed. The IC contains memory, may contain a processor, and communicates with the external world through contacts on the surface of the card. The size, position and utility of the contacts are specified by an international standard (ISO7810), so that cards can interact with a variety of equipment. There are two main types of smart cards: Intelligent Memory Chip and Microprocessor cards. Payments are made either on-line by connecting to the customers account or off-line through credit card concept and through funds (limit) loaded in the chip. A memory chip has a data storage capability that enables the card to collect every time it is used .The microprocessor chip has additional features such as it can add, delete and manipulate information in its memory. Memory smart cards have been around for several years, being used in pay phones, identification, access control, voting and other applications. Processor smart cards are the most advanced, and are ideally suited for banking and financial applications where use of the card is allowed.

### **2.1.6 Premium Cards**

These cards possess added features such as travel insurance, cardholder assistance and emergency cash advances along with the normal features of conventional credit cards and charge cards.

### **2.1.7 VISA Cards**

Visa international is a membership corporation that is owned by its members. Visa operates the world's largest retail electronic payments network and is one of the most recognized global financial services brands. Visa facilitates global commerce through the transfer of value and information among financial institutions, merchants, consumers, businesses and government entities. Visa offers a range of branded payment product platforms, which its financial

institution clients use to develop and offer credit, charge, deferred debit, prepaid and cash access programs to cardholders.

Visa's card platforms provide consumers, businesses, merchants and government entities with a secure, convenient and reliable way to pay and be paid in 170 countries and territories. Visa's global transaction and information processing network, Visa Net, supports these payment platforms and delivers value-added services, including fraud and risk management, dispute resolution, rewards and other business-enhancing applications. Visa's family of global payment brands, including Visa, Visa Electron, Plus and Interlink, enjoy unsurpassed acceptance at 27 million merchant outlets and 1 million ATMs across the world. It is the world's largest payment system owned by more than 22000 financial institutions worldwide.

Visa provides its member with:

- Payment product
- A global communication network
- Risk control and authorization services
- Clearing and settlement facilities

Visa is also a registered trademark. The blue white and gold band form one of the world's largest recognized brands. Visa assures a high profile for the brand through a number of activities, such as advertising, sponsorship of the Olympics and other promotional events. The trade mark is licensed to members for their use to ensure increasing acceptance of Visa payment cards and services worldwide ([www.visa.com](http://www.visa.com)).

Visa international's mission is to enhance member's profitability and pre-eminence by:

- Enhancing current product (especially deposit access) expanding product offering (commercial & chip cards).
- Strengthening geographic coverage.

- Improving acceptance of the card.
- Increasing brand preference.
- Supporting and enhancing Visa Net systems.
- Continuous improvement of the supporting infrastructure. (For example, in the areas of risk management, standards, corporate governance).

### **2.1.8 Master Cards**

The MasterCard story begins in 1966 when a group of banks created a member-owned association that later became MasterCard. In 1968 the company extended its presence to Mexico, Japan and Europe, marking the start of its commitment to becoming the leading global payments network. Through the 1980s, MasterCard continued to build on this promise, bringing the advantages of electronic payments to new regions and markets around the globe. MasterCard became the first payment card issued in the People's Republic of China, and the company also launched Maestro, the world's first truly global online debit program, in partnership with Euro pay International. The next decade saw electronic payments become even more closely integrated into peoples' lives, a behavioral shift MasterCard capitalized on by developing new technologies that improved convenience, speed and efficiency. MasterCard also launched the "Priceless" ad campaign, elevating its consumer brand and differentiating the company's connection to consumers.

Uncovering new ways to provide value to its customers, MasterCard launched Master Card Advisors in 2001, bringing innovative consulting services to customers and others within the industry. That same year, MasterCard completed a major upgrade of its state-of-the-art network, enhancing its ability to process transactions safely, securely and instantly the world over.

MasterCard also implemented structural changes that reflected a new outlook for the company. MasterCard integrated with Euro pay International in 2002, establishing a unified global corporate structure and also becoming a private share corporation.

By 2005, MasterCard had committed itself to a new, customer-focused strategy that aligned its advisory and processing capabilities with its long-standing role as a franchisor. This three-tiered business model crystallized the company's positioning as a franchisor, processor and advisor, laid the groundwork for its transition to a more transparent governance model and initial public offering in 2006.

Today and beyond, MasterCard Worldwide continues to provide a unique combination of expertise, industry-leading insight, and globally-integrated resources that the company leverages to deliver value to constituents.

Master Card is committed to innovating and growing the range of products and services the company brings to market through its strong partnerships with its customers. MasterCard Worldwide is a driving force at the heart of commerce, enabling global transactions and bringing insight into the payments process to make commerce faster, more secure, and more valuable to everyone involved. As a critical link among financial institutions and millions of businesses, cardholders and merchants worldwide, MasterCard provides services in more than 210 countries and territories. MasterCard advances commerce worldwide by developing more secure, convenient and rewarding payment solutions, processing billions of payments seamlessly across the globe, and building economic connections that accelerate business ([www.mastercard.com](http://www.mastercard.com)).

## **2.1.9 Advantages and Disadvantages of Credit Cards**

### **Advantages of Credit Card to the Cardholders**

Credit Cards have numerous advantages, some of them are mentioned below:

- Safe and secure in comparison to traditional modes of payment like cash, cheques etc.
- Very convenient to carry it instead of bulky cash.
- Wide acceptance.
- Unlike cash it is easy to get replacement.

- A credit card can be used not only for purchases, but also to make cash advances. Hence, it is helpful during shortage of cash and in emergencies.
- In built credit instruments with the privilege of interest free credit period of 45 days maximum to 15 days minimum.
- Facility of revolving credit i.e. option of minimum stated payment on regular.

### **Advantages to the Merchants**

- Merchants need not worry about the payment as the bank is liable for payment and not the cardholder.
- Volume of sales increases as the card encourages consumers for purchases, as they do not have to pay in cash immediately.
- Payment received through credit card is more safe and secure than any other forms payment.

### **Disadvantages of Credit Card**

In spite of being a most extensively used financial tool, credit card has some inconvenience too. They are:

- Sometimes card holders complain their goods are not delivered due to amount altered and transactions not authorized. There exist system errors.
- Sometime merchant can make multiple imprints of the card and sometimes transaction may happen on lost card or counterfeit card etc.
- Processing errors or violation of the rules set out in the Visa / Master card rules like late submission, transaction on expired card, transaction without code, wrong transaction etc.

#### **2.1.10 Parties Involved in Credit Card Business**

There are five parties involved in credit card business that is mentioned below:

##### **1. Issuer**

Any financial or non financial institution, which is authorized to issue cards under the granted license of Visa and Master card international, are called

issuer. Examples of such issuers in Nepal are Nabil Bank Ltd., Himalayan Bank Ltd, Standard Chartered Bank, and Nepal Investment Bank Limited. The issuing bank bills the consumer for repayment and bears the risk that the card is used fraudulently. American Express and Discover were previously the only card-issuing banks for their respective brands, but as of 2007, this is no longer the case.

## **2. Cardholder**

Prospective person or organization (card users), whose cards are issued by the issuer are called cardholder.

## **3. Merchant**

All those outlets which accept these cards as a mode of payment are called merchants. Examples of such merchant are departmental stores, travel agencies, grocery stores, shopping centers, restaurants, hotels, car rental agencies etc. Now days there are many online merchants who have allowed doing transaction on line without the cardholder being present like muncha house, thamel.com.

## **4. Acquirer**

Whenever a card holder makes a transaction the only thing he / she does is sign a sales slip. This sales voucher is then presented to the financial institution, usually a bank which makes the payment to the merchant normally on the same day or the next working day. It further processes it to get the payment from the issuer.

Such institution that accept these transacted sales slips from the merchants are called acquirer. A bank can be both acquirer as well as issuer. For example Nabil Bank issues credit card as well as processes the transactions for its various merchants.

## **5. Clearing and Settlement**

Since a credit card is not a cash purchase and the merchant is paid by its acquirer, it involves a fifth and the most important party called the clearing and settlement bank. Once the acquirer makes the payment to the merchant, it itself needs to get the payment from the bank which has issued the card and it is not possible and feasible to make direct claim as there are hundred or even thousands of such transactions taking places everyday. Hence these claims from all these member institutions are forwarded to the clearing and settlement banks for payment and in the settlement process the actual payments are made. In case of master card this process is conducted by master card international and in case of visa card by visa international.

## **6. Independent Sales Organization**

Resellers (to merchants) of the services of the acquiring bank.

## **7. Merchant account**

This could refer to the acquiring bank or the independent sales organization, but in general is the organization that the merchant deals with.

## **8. Credit Card Association**

An association of card-issuing banks such as Visa, MasterCard, Discover, American Express, etc. that set transaction terms for merchants, card-issuing banks, and acquiring banks.

## **9. Transaction Network**

The system that implements the mechanics of the electronic transaction may be operated by an independent company, and one company may operate multiple networks. Transaction processing networks include: Cardnet, Nabanco, Omaha, Paymentech, NDC Atlanta, Nova, Vital, Concord EFS Net, and Visa Net.

## **10. Affinity Partner**

Some institutions lend their name to an issuer to attract customers that have a strong relationship with that institution, and get paid a fee or a percentage of the balance for each card issued using their name. Examples of typical affinity partners are sports teams, universities and charities.

### **2.1.11 Components of Credit Card**

The component of credit card is as follows:

#### **1. Unique Card Number**

It is the credit card number embossed on the credit card by embossing machine. Card number will be different for different card account. The numbers found on credit cards have a certain amount of internal structure, and share a common numbering scheme.

The card number's prefix, called the Bank Identification Number, is the sequence of digits at the beginning of the number that determine the bank to which a credit card number belongs. This is the first six digits for MasterCard and Visa cards. The next nine digits are the individual account number, and the final digit is a validity check code. The beginning card number differs depending upon the settlement banks. For example Master card number begins with the number 5 and Visa with the number 4.

#### **2. Name of Cardholder**

Name of cardholder is also embossed on the credit card with the embossing machine. Cardholder may be the account holder as well as any third party.

#### **3. Validity Date**

Validity date is also embossed on credit card by embossing machine. It is the date after which the card expires. The expiry month associated with specific year is mentioned on the credit card. Besides, the card may also carry extra codes such as issue numbers and security codes. Not all credit cards have the same sets of extra codes nor do they use the same number of digits.

#### **4. Issuing Bank**

The name of credit issuing bank is printed on the card such as Nabil Bank Ltd, Himalayan Bank Ltd etc.

#### **5. Brand Name**

The brand name of the credit card associated with certain settlement bank is also printed on the credit card. For example Master card, JCB card etc.

#### **6. Magnetic Stripes**

Magnetic stripes will be on the backside of credit card. It is the main part of the credit card. All the data associated with the credit card is mentioned on it. The data can be read with help of specific machine.

#### **7. Photo of the Holder**

A photo of credit card holder may be attested on the backside of credit card. It depends upon the credit card issuing bank. For example a photo is attested in the Visa card issued by Himalayan Bank Limited but it is not attested in the master card issued by Nabil bank ltd.

#### **2.1.12 Basic Eligibility Criteria for Being a Card Holder**

The following criteria must be fulfilled to be a card holder in context of Nepal.

- Age 18 Years above
- Have a regular income sources with annual income more than Rs. 120000/-
- Maintain accounts with any branch of concern bank
- As prescribed under Nepal Rastra Bank regulation( For International Dollar card)

#### **2.1.13 Documents Required**

When once applying for a credit card following documents must be submitted with credit card application form. (Source: Brochure Himalayan bank ltd.)

### **Required Documents for Applying Personal Card**

- Salary certificate/ documentation to prove income source.
- Identification paper ( copy of citizenship certificate / passport)
- Two passport size color photograph.

### **Required Documents for applying a Corporate Card**

- Company/Firm registration certificate
- Income tax registration and tax clearance certificate
- Board resolution authorizing availing of credit card and debiting company account for all charge.
- Letter by authorized management personnel for issuing individual credit card.
- A copy of latest audited balance sheet and statement of profit & loss of the firm along with proof of any other income sources.
- Identification paper (copy of citizenship certificate /passport)
- Two passport size colour photograph.

#### **2.1.14 Application Processing**

Before issuing the card and assigning a number to merchant, the issuing bank analyzes the data and information provided by applicant to minimize the risk in the business. It is called application processing.

#### **Merchant Application**

When a potential merchant submits the merchant application form, the bank asks for all the incorporation documents as mandatory during account opening. An analysis is executed by the representative officer who makes the actual visit at the merchant's location and makes a study on the merchant. On the basis of analysis conducted and history of the merchant, a merchant membership number is assigned called merchant number. The merchant is then either given

an imprinter machine or an electronic terminal depending upon the volume and frequency of transaction.

### **Card Application**

Similarly, when a potential card holder submits the card application form, first a careful study of the form is made in order to have all the relevant and required information. Thereafter, documents to justify the application request are sought after. After analyzing the concerned documents by related officer, card is issued to those who prove to have genuine intention to pay back and have the affordability to avail the card. As every new cardholder account brings new levels of risk to the organization along with benefit, the application provides the issuer with financial profile of the potential cardholder including income level, length of time at present job or business, guarantee letter from employer, home ownership, financial institutions accounts information and credit history. Besides a person or an institution willing to have credit card need to open an account in the bank. After all the necessary analysis, card is issued but it is the right of issuer to issue the card or not and creditworthiness of applicant is the basic requirement for the issuer to decide upon it.

#### **2.1.15 Transaction Process of Credit Cards**

First of all customer apply for credit card and customer will be given a credit card if the issuer found that a customer is a match for card member. The transaction process starts when the cardholder uses the card to buy goods/ services or cash advance from merchant. The merchant prepares a sales draft using an imprinted/ electronic which contains card number, cardholders name, and expiration date of the card, the amount of the card, the amount and the full signature of the holder.

The merchant submits the draft to the acquiring bank and gets reimbursed with the amount on the sales draft deducting agreed discount rate. The discount rate is called Merchant Service Fee (MSF). Then the acquirer sends the data to the

settlement bank by technical line or by processing it through floppy and the settlement bank, Master card and Visa card international reimburse the acquirer who sends the data. The settlement bank charges the issuer and issuer bills to its cardholders who ultimately repays the issuer.

Normally in credit card business there are four parties involved (cardholders, merchant, issuer & acquirer) but some cases only three parties involved when acquirer and issuer are same. In case of cash advance (withdraw) for foreigner, the transaction process starts when card holder goes to the merchant or acquirer or issuer (bank) for cash advance. They act as money provider for the cardholder. In this case first of all money providers have to know that whether the card is genuine or not. For this, money provider takes an authorization number.

In this process firstly money provider has to call to the credit card center, and give details (i.e. card no., expiry date, amount to be advanced etc) and the concerned officer will send telex to the Visa International. He then instantly gets a six- digit authorization no. and that will be provided to the money provider. Then money provider fills up the charge slip along with authorization no. and gets the card holder's signature along with one photocopy of passport. The provider calls his bank of the authorization and imprints the card in the imprinter to print the embossed details of the card on the charge slip and writes down the authorization number given by bank along with sales detail and amount.

The provider has to submit the charge slip to the bank within three days of the sales. Then he fills the summary sheet (2 copies, one for the bank and one for the merchant), attach the respective charge slip to them and submit it to the bank. The bank charges certain percentage to the merchant (provider) depending upon their nature of business and the charge rate vary among the banks.

### **2.1.16 Risk and Fraud in Card Business**

Besides high profitability in credit card business, there occur risks as well in the business such as fraud. Profitability of card business may seriously undermine if losses occur due to fraud. Therefore, minimizing losses due to fraud forms an important responsibility of issuer and acquirer. The largest fraud losses may result from unauthorized use of lost and stolen cards. So, when a card is discovered to be lost or stolen, the cardholder should lodge an FIR with nearest police station as soon as he finds out the card is lost or stolen and immediately inform the concerned bank and send it a copy of the FIR. The issuer should act and quickly and record the lost or stolen card in the authorization file. Any authorization shall be declined and the card will be listed "Pick Up".

The cardholder a/c should be closed and open new a/c in order to segregate genuine transaction and unauthorized transaction. The cardholder a/c should be monitored carefully and the merchant should carefully check warning bulletins before processing a transaction under the merchant floor limit.

#### **a) Magnetic Stripe Fraud**

Magnetic stripe fraud (skimming) is recent and sophisticated fraud technology where the information in the magnetic stripe is re-encoded to the counterfeit or altered cards. The cards look genuine when used in magnetic stripe reading terminals. It is typically an "inside job" by a dishonest employee of a legitimate merchant, and can be as simple as photocopying of receipts. Many instances of skimming have been reported where the perpetrator has put a device over the card slot of a public cash machine (Automated teller machine), which reads the magnetic strip as the user unknowingly passes their card through it. These devices are often used in conjunction with a pinhole camera to read the user's PIN at the same time. Nepali card business also witnessed such fraud very recently particularly with the ATM/Debit cards where few foreign gangs were found involved.

### **b) Card Holder's Fraud**

Card holder's fraud is very difficult to uncover for the issuer. Sometimes, the cardholder may claim about losing his card and meanwhile uses them for services after reporting lost. There is also a Soft fraud which is fraud committed by the customer himself, getting a card and using it with no intention ever to repay the balance. Such customers are called "diabolical" by the credit card companies; they try to avoid them at all cost.

### **c) Lost/Stolen Cards**

The major and the foremost risk associated with card business are with stolen/lost card. If a card is stolen and the cardholder fails to inform the bank on time, then the transactions made before the information is passed to the bank is liable to the cardholder. The bank does fight for their client but if the case is not won, then the liability has to be burdened by the cardholder himself. Carding is a term used for a process to verify the validity of stolen card data. The thief presents the card information on a website that has real-time transaction processing. If the card is processed successfully, the thief knows that the card is still good. The specific item purchased is immaterial, and the thief does not need to purchase an actual product; a Web site subscription or charitable donation would be sufficient. The purchase is usually for a small monetary amount, both to avoid using the card's credit limit, and also to avoid attracting the bank's attention. A website known to be susceptible to carding is known as a card able website. Nowadays, carding is more typically used to verify credit card data obtained directly from the victims by Skimming or Phishing. A set of credit card details that has been verified in this way is known in fraud circles as a phish.

### **d) Splitting of Charge by Merchant**

Sometimes the merchants split one single transaction into number of small transaction and present them without taking the authorization code from the

acquirer. In such case also there is immense risk associated in case the cardholder denies the merchant's transactions or the transaction gets declined.

**e) Alteration of Amount**

In many cases, the merchants with fraudulent intention alter the actual amount of the sales draft and present them to the acquirer. In such cases the cardholder denies the charges and presents his copy of the true amount which makes the merchant at fault and hence, is penalized.

**f) Signature Forgery**

Such type of fraud transaction usually happens in case of lost or stolen cards where the culprit forges the signature at back of the card on the signature panel and presents to the acquirer. Such cases can be won by cardholder or by the merchants also depending upon the availability of the supporting from both ends.

**g) Identified Counterfeit Transaction**

There are several criminal syndicates all around the globe who are engaged in the fraudulent transactions of credit cards. In the identified Counterfeit transaction these syndicates uses the BIN (Bank Identification Number) and manufacture fabricated counterfeit cards and circulates them in the market, which resemble the original cards in every aspects.

**h) Unidentified Counterfeit Transaction**

This is similar to the aforesaid in that the syndicates do not use any BIN to manufacture the counterfeit cards. The BIN used is not a valid one and cannot be traced in the interchange directory.

**I) Transaction of Expired Card**

Suppose if a merchant is making transaction, which is within his floor limit and does negligence on his part to verify the expiry date on the card and makes the

transaction. In such case the acquirer denies to process the transaction and the merchant is at loss. In some cases the draft is sent to the issuer for collection on good faith basis which is fully depended upon the description of the cardholder.

Nepal is just a toddler in the field of card business. The credit card business arena has seen numerous kinds of forgeries and frauds in card businesses which perhaps do not seem to happen in Nepal at the moment. Theft through compromised accounts, mail/internet order fraud, account take over, skimming, phishing and many other frauds are prevalent in the card market worldwide. Several strategies and solutions have been devised by card related people and organization to overcome and prevent such frauds.

The description of all those frauds and measures to overcome them seems to be beyond the scope of this study, hence are not included in this thesis but the common frauds and preventive measures we can take while transacting with cards are here dealt in.

### **2.1.17 Risk Minimize Mechanism**

In order to minimize the risk and losses in fraud cards transaction, the parties involved should keep proper monitoring of sudden high charge transaction. In case of potentially loss cards immediate use of warning bulletins and electronic negative file can be crucial for early detection and to the minimize fraud losses .The card holder should immediately notify the issuer if cards are lost or stolen. Most credit card companies have toll-free numbers and 24-hour service to deal with these emergencies -- they are eager to avoid credit card fraud.

The banks in credit card business should adopt following risk management steps:

- Cardholder application must be carefully screened
- Proper monitoring of card use.
- Judicious collection practices.

- Educating the cardholder
- Responsiveness to risk situation in order to minimize fraud losses.
- The bank should keep proper monitoring for high charge transaction.
- Cardholder in case of lost or stolen should immediately inform the bank
- Credit card customers may find following tips from internet put forth by Audri and Jim Lanford (Issue #79 June 9,2004) useful in combating credit card frauds.

#### Internet Scam Busters' 21 Credit Card Fraud Prevention Tips:

- Keep an eye on your credit card every time you use it, and make sure you get it back as quickly as possible. Try not to let your credit card out of your sight whenever possible.
- Be very careful to whom you give your credit card. Don't give out your account number over the phone unless you initiate the call and you know the company is reputable. Never give your credit card info out when you receive a phone call. (For example, if you're told there has been a 'computer problem' and the caller needs you to verify information.) Legitimate companies don't call you to ask for a credit card number over the phone.
- Never respond to emails that request you provide your credit card info via email -- and don't ever respond to emails that ask you to go to a website to verify personal (and credit card) information. These are called 'phishing' scams.
- Never provide your credit card information on a website that is not a secure site.
- Sign your credit cards as soon as you receive them.
- Shred all credit card applications you receive.
- Don't write your PIN number on your credit card -- or have it anywhere near your credit card (in the event that your wallet gets stolen).
- Never leave your credit cards or receipts lying around.

- Shield your credit card number so that others around you can't copy it or capture it on a cell phone or other camera.
- Keep a list in a secure place with all of your account numbers and expiration dates, as well as the phone number and address of each bank that has issued you a credit card. Keep this list updated each time you get a new credit card.
- Only carry around credit cards that you absolutely need. Don't carry around extra credit cards that you rarely use.
- Open credit card bills promptly and make sure there are no bogus charges. Treat your credit card bill like your checking account -- reconcile it monthly. Save your receipts so you can compare them with your monthly bills.
- If you find any charges that you don't have a receipt for -- or that you don't recognize -- report these charges promptly (and in writing) to the credit card issuer.
- Always void and destroy incorrect receipts.
- Shred anything with your credit card number written on it.
- Never sign a blank credit card receipt. Carefully draw a line through blank portions of the receipt where additional charges could be fraudulently added.
- Carbon paper is rarely used these days, but if there is a carbon that is used in a credit card transaction, destroy it immediately.
- Never write your credit card account number in a public place (such as on a postcard or so that it shows through the envelope payment window).
- Ideally, it's a good idea to carry your credit cards separately from your wallet -- perhaps in a zippered compartment or a small pouch.
- Never lend a credit card to anyone else.
- If you move, notify your credit card issuers in advance of your change of address.

### **2.1.18 Procedures Following Disputes**

The following procedure has been followed if dispute arises:

#### **A. Chargeback Cycle**

In the event of a chargeback (when there is an error in processing the transaction or the cardholder disputes the transaction), the issuer returns the transaction to the acquirer for resolution. The acquirer then forwards the chargeback to the merchant, who must either accept the chargeback or contest it. A charge back is an electronic message that the issuer sends the acquirer through the system, which shifts the financial responsibility of transaction from an issuer to the acquirer. A charge back is initiated under four areas.

They are:

- Merchant Error
- Acquirer processing error
- Suspect fraud
- Acquirer did not respond to a retrieval request.

The entire process of chargeback cycle begins with retrieval request and proceeds as follows:

#### **Retrieval Request**

The issuer on request of their cardholder may seek copies of transactions slips from the acquirer via Master card/Visa International .The purpose is to verify the transaction which is either being confused or disputed by the cardholder.

#### **Fulfillment**

The acquirer needs to send the copy of the charge slips to the issuer after receiving retrieval request .The function of sending such slips is called fulfillment .Such fulfillment is made through Master Card (Master Card hub site to receive from acquirer and forward to issuer )via fax transfer in case of Master Card and in case of Visa, the image of sales slip is captured through

scanners and sent to Visa System through Visa Online (Internet web site of Visa international), then Visa international forwards it to concerned issuers. The acquirer receives fees ranging from USD 1-8 depending on the submission.

### **First Charge Back**

When the cardholder or the issuer feels that the transaction is not up to their satisfaction, they have right to get back the transaction amount from the acquirer with valid reason and the process of the same is called chargeback. While initiating chargeback, the issuer must mention the reason for such chargeback within the parameter set by Visa/Master Card international along with reason code. Possible chargeback reason could be; late presentation, unauthorized transaction, expire card, credit not processed, listed in warning bulletin etc.

### **Representation**

If the acquirer feels that the transaction was correct and as per the rules of Visa and Master Card International, it can represent the case with supporting logic and document and get back the transaction amount.

### **Second Chargeback**

If the issuer is still not convinced with the logic and supporting documents forwarded by the acquirer, they can initiate second chargeback and again the money .After second chargeback the acquirer will have no right to represent the case.

### **B. Pre-arbitration and Arbitration**

If the acquirer still feels the transaction was valid, it can file case with Master/Visa international for their ruling .Before filing arbitration case, acquirer needs to send pre arbitration to the issuer for their final consideration .If the issuer declines to the pre arbitration request or fails to respond to acquirer within the stipulated period, it submits the arbitration.

Upon receiving the arbitration case, Visa/Master Card makes the final verdict based on the documents submitted by both the parties concerned. The party, which loses the case, needs to pay filing and application fee of USD 500 along with the chargeback amount.

### **C. Compliance**

A merchant (issuer or acquirer) may file a dispute resolution procedure known as compliance when following conditions occur:

- A Visa operating regulation has been broken.
- The filing member has suffered or will suffer a financial loss because the rule has been broken
- No chargeback right exists

The filing member must be able to quote the exact rule from the operating regulation which they believe has been broken or clearly show the financial loss they have or will incur. The arbitration and compliance committee will then decide which party in the dispute should be held liable for the transaction, as well as bear the compliance filing and review fees. Note that a compliance case will be rejected if a chargeback right or any other dispute resolution right exists.

### **D. T and E Resolution**

This dispute resolution procedure can only be filed when the transaction in dispute occurred at a Hotel, or involves a US-based car rental merchant with “Specialized Vehicle Reservation Service” agreement .The dispute concerns a “No Show” transaction. “No-show” transaction occurs when a cardholder makes a guaranteed reservation for a hotel and then fails to arrive for the booking .Under Visa’s Guaranteed Reservation Services, cardholders must cancel their booking within the merchant’s specified time frame ,failing which they will be charged for one night’s stay at hotel.

When a cardholder cancels booking within the specified time frame, the merchant must give the cardholder a cancellation code, with instruction to retain this code in case of dispute. Dispute may arise between merchants and cardholders over cancellations and cancellation codes. Cardholders may claim that he cancelled their reservation within time frame but was not given a cancellation code. The merchant on the other hand, may insist that the cardholder did not cancel in time and must therefore pay the quoted sum.

In such cases, the issuer or acquirer may file for T&E Resolution. Visa will then decide who is at fault –the cardholder or the merchant, however, due to the difficulty of determining which member should be liable for such transaction, Visa Asia-Pacific often funds such disputed transaction on the condition that the issuer educates the cardholder and the acquirer educates the merchant on the correct procedures for canceling guaranteed reservations. There is no filing fee and no review fee for T& E resolutions. Member should note that T&E Resolution case would be rejected if a chargeback or compliance right is or was available.

## **2.2 Review of Related Studies**

The following work papers and abstracts about credit cards are drawn from websites:

### **2.2.1 Review of Articles and Journals**

**Chakravorti (2003)**, entitled "*Business, Card and Network Study in Nepal*" had conducted that the credit cards provide benefits to consumers and merchants not provided by other payment instruments as evidenced by their explosive growth in the number and value of transactions over the last 20 years. Recently, credit card networks have come under scrutiny from regulators and antitrust authorities around the world. The costs and benefits of credit cards to network participants are discussed. Focusing on interrelated bilateral transactions, several theoretical models have been constructed to study the

implications of several business practices of credit card networks. The results and implications of these economic models along with future research topics are discussed.

**Morgenstern (2010),** "*Challenging the Rules for the Credit Industry*, "When it comes to credit cards, we have a tendency to compare things like promotional interest rates, frequent flier points and cash back offers while skimming over the fine print on the back of the contract that generally reads something like this: "We reserve the right to change the APRs, fees and other terms of the account at any time." The risks of ignorance about the fine print might not have been so damaging during flush times, but since the 2008 financial meltdown, millions of Americans have been coming to grips with the ramifications of the terms in their cardholder agreements. Already staggering under the onslaught of a recession, cardholders have opened their mail only to learn that financial institutions hiked interest rates, pumped up minimum payments, applied a smorgasbord of fees, cut credit lines or closed accounts altogether—in some cases even for people who never missed a payment.

Moreover, a customer can have every record of expenses made and the 'buy now pay later' policy of the credit cards allows the cardholder to make any transaction without having cash in hand," says Nakarmi of Himalayan Bank. Experts, however, warn that people who have a history of getting into debt and buying beyond their limits should stick to using cash. "Using plastic cards is convenient and secure as one does not need to carry the cash. But this does not apply to the less disciplined ones" they say. Bankers agree that despite the expensive interest rates, which hover between 27 to 30 percent per annum, the prospect of 'plastic money' in Nepal is bright. "With the increase of awareness and understanding of the advantages of having a credit card coupled with issuance of proprietary debit card by most of the banks, the prospect of plastic money is growing in Nepal and is very good for future too" says Bina Rana of Standard Chartered Bank Nepal (Kathmandu Post - January 22, 2005).

The preference of Nepalese is gradually shifting to electronic mode of payment instead of cash as the use of plastic and mobile money has grown in recent days. In the first five months of the current fiscal year, use of credit cards has increased by 37.4 per cent since the beginning of the fiscal year, according to Nepal Rastra Bank (NRB)'s data. As of mid-December; people have spent Rs 542 million through their credit cards issued by various commercial banks. In the corresponding period a year ago, the amount financed by the banks as credit card loans amounted to Rs 394 million. "Credit cards are less popular than debit cards but the use has definitely been increasing," said manager at the Card Operations of Nabil Bank Niraj Sharma. Nabil Bank has issued about 25,000 credit cards for their clients while number of debit cards issued is double the number. The banks are also trying to make the internet banking more secure so that customers do not have to visit the branches for each transaction. In Nepal also, the growing e-payment and mobile payment portals is trying to replace the need of having cash or card at hand. Kumari Bank's Mobile Cash, Hello Paisa, Fonepay and eSewa are mobile payment service providers that are trying to be established in this untapped sector. "We are trying to bring e-payment in the mainstream so that more dependence of cash can be reduced," said Biswas Dhakal, who is president of F1 Soft International that has powered Fonepay and eSewa. Moreover, even banks are turning towards branchless banking as alternative to brick-and-mortar branches. (The Himalayan Times - January 27, 2013).

### **2.2.2 Review of Thesis**

**Khanal (2008)**, had conducted research on "*An analysis of Credit card in Nepalese Financial Market with reference to Nabil Bank Limited*".

The basic objectives of this research are:

- To make the analysis of the structure and type of credit card and existing terms and condition with it.
- To get overview of the credit card with reference to the selected bank.

- To investigate the effect of modern technology on acquiring credit card.
- To analyze the determinants for credit cards business in Nepalese contest.

The Major Findings of the Study:

- The Nepalese market do not consider credit card as their first priority while making a purchase. They still trust and depend on paper money.
- The interest rate as well as the fees charged by the bank on the credit cards service they provide has great influence on the decision to take credit cards. So, there is need for Nabil to revise its fees and charge to attract new markets segments and retain the old one.
- From the selected customers, most of the customers are availing credit cards are from the private sector working class people regardless of the type the industries they join.
- Among the samples customers, large numbers of customers choose Nabil Bank Credit Card due to its goodwill and at convenient locations.

**Rajbhandari(2008)**, had conducted research on “*Credit Card business in Nepal with reference to Nabil Bank, HBL and SCBL*”.

The main objectives of the research are:

- To get the overview of the credit card business in Nepal.
- To analyze the problems related to various transactions of credit card.
- To identify and assess different untapped segments.
- To recommend and suggest measures to improve card business in Nepal based on the analysis.

The main findings of the study are:

- HBL has highest growth and SCBNL has the lowest growth in case of Issuance or users but in case of merchant NABIL has the highest growth rate and SCBNL has the lowest growth rate.

- 50% would make cash payment even if they did not receive credit facility, while 21.43% customers would also react negatively by going to other merchants and 28.57% customers would make less amount of purchase than that of required.
- The reasons for not installing card facility are low demand, high service charge and difficult process.
- 64% reported significant growth in their business volume while 36% did not notice any remarkable changes after installation of POS.

**Ghimire (2009)**, had conducted research on “*Credit Card Business in Nepal*”.

The main objectives of the research are:

- To analyze the transaction problems of credit card.
- To provide suggestions to improve card business in Nepal based on the basis of findings.
- To study the trend of the credit card business in Nepal.

The main findings of the research are:

- The majority of the card users according to gender are male by 57 percent.
- 56 percent respondents have had VISA card and 44 percent had master card.
- 36 percent cardholders acquired card of Himalayan bank, 30 percent acquired card of SCBNL, 24 percent acquired card of NABIL Bank Limited and 10 percent acquired card of NIBL.
- 30 percent turned out to know about disputes in credit card and the settlement process due to their experience with it and by learning from internet.

**Shrestha (2009)**, had conducted research on “*Credit Card Business in Nepal with reference to Himalayan Bank Limited*”. The main purpose of the study is

to understand the various aspects of credit card.. It also tries to analysis the major problems of Himalayan Bank related to credit card.

The main objectives of Study are:

- To examine the credit card operation in Nepal.
- To analyze the problems and weak points related to various transaction of credit card in Himalayan Bank.
- To analyze the growth of card business of Himalayan Bank.

Major Findings of the Study are:

- The main and major problem of card business is lack of knowledge, awareness, conceptual framework and technique of using card.
- It is because of acceptance of cards only by the big business houses, departmental stores, readymade stores, etc. and most of Nepalese people are shopping in small retail shops where cards are not accepted.
- Concept of credit card has not been developed significantly in our nation. Very minimal growth of acquiring and merchant business in comparison to the growth in our nation.
- Banks are giving certain percent of discount on the usage of credit card of their bank but the customers are not aware about these things.

**Munakarmi (2010)**, in her research “*A Study on Credit card Business in Nepal with reference to NABIL, HBL and SCBNL*” had tried to to find out the situation of credit card in Nepal at that period considering three banks and the leader bank that led the card business and viability of card business in Nepal.

The major objectives of the study are:

- To get the overview of the credit card business in Nepal.
- To analyze the problems related to various transactions of credit card.
- To identify and assess different untapped segments.

The Major Findings of the Research were as follows:

- Based upon the questions asked to the three samples bank as who is the current market competitor of their bank in card business, NABIL takes SCBNL as the market competitor and for SCBNL and HBL their competitor in card business is NABIL.
- NABIL bank is providing credit card facility due to demand of the customers. As per HBL, they provide credit card facility to meet the market competition, while SCBNL provide this facility for the goodwill of the bank.
- NABIL Bank and HBL are introducing new technology in their card system to enhance the quality of its card system. While SCBNL is entering into new areas of cards for enhancement of quality of its card system.

**Adhikari (2010)**, entitled “*Credit Card Performance and Market Opportunities in Nepal*” had mentioned the following objectives:

- To identify the SWOT(strength, weakness, opportunities and threats) of credit card business in Nepal
- To access the situation of credit card market in context of Nepal
- To compare the competitiveness of HBL, SCBNL, NABIL and Nepal Investment bank in card business.

The major findings of the study are highlighted as:

- Most of the credit card holders use Visa cards than Master card.
- About 58 percent of the respondents prefer full payment of credit while 42 percent prefer partial payment of their credit.
- HBL and Nepal Investment bank drawback is their limited experience on visa software operational procedure.
- The credit card market is mostly occupied by SCBNL followed by NABIL,HBL and Nepal Investment bank.

### **2.3 Research Gap**

Credit card business is most popular form of payment among the types of payment due to its special features. But in Nepal the popularity of credit card is quite low due to ignorance about this card business. There are not many researches conducted on this topic and the study which is related to this topic is also unable to brief on the detail meaning and importance of credit card in modern life. The above researches are only based on the secondary data. Hence this research is distinct in the sense of presenting secondary data as well as primary data which shows the concise figure of credit card business in Nepalese market and how it affects modern life. An approach toward finding market scenario, card players, customer behavior, attitude toward card services, attracting future customers and retaining present customers, marketing need for credit cards, possible improvements and role to be played by different parties involved in the business has been taken into in this thesis. The trend of credit card business at present and future are also analyzed in the thesis.

## **CHAPTER - III**

### **RESEARCH METHODOLOGY**

Research in common parlance refers to a search for knowledge. It can also be define as a scientific and systematic search for the pertinent information on a specific topic. In fact, research is an art of scientific investigation. Research Methodology is the way of doing and completing research work. It is the way to solve the research problem systematically. The systematic and well organized way of solving the research problem can be referred to as research methodology. The research methodology methods and techniques are convenient and appropriate for analyzing the data and information collected. This includes personal observation, questionnaire distribution, secondary data collection, annual report, previous study, websites of commercials banks etc. Research methodology depends on the various aspects of research projects. The size of project, the objective of project, impact of project in various aspects of human life etc are the variables that determine the research methodology of the particular projects.

#### **3.1 Research Design**

A research design is a plan or blue print of investigation for the collection and analysis of data .It helps the researcher in the right direction in order to achieve the goal.

This study is based on descriptive analytical research design. Descriptive research is essentially a fact finding approach relative largely to present and abstracting generalizations by cross sectional study of the current situation and diagnostic research design relates to problem and to find out that solution. The research can also be taken as a development approach as it takes the developmental approach in finding out the solution.

The research can also be taken as a development trend of credit card business in Nepal. This research shows trend of credit card business in Nepal.

### **3.2 Population and Sample**

There are thirty-two commercial banks operating in Nepal at present. Population refers to the target group on whom we have conducted our research. Currently there are seven banks providing credit card facility and they are HBL, SCBNL, NIBL, Global IME Bank, Bank of Kathmandu, Laxmi bank and NABIL banks.

### **3.3 Sampling Procedure**

Sampling is the process of selecting the sample from the given population. The method of selecting a sample usually depends upon the nature of the investigation. Under different techniques of sampling, judgmental sampling technique has been used in this study. The sample banks for this study are HBL, SCBNL and NABIL bank.

### **3.4 Sources of Data**

Each field work has its own data needs and data sources. Data for this study has been collected from basic two sources namely primary data and secondary data.

#### **3.4.1 Primary Data**

They are first hand data. They are obtained directly from the source. For primary data collection interview was taken with staffs in the concerned department. Interaction and interviews with card users and merchants were also carried out. Direct interview with the staffs, officers and departmental heads involved in the credit card center was also made.

The officer clarified all the data and gave all the required information in relation to the study. Regular unstructured and structured interviews were conducted with the said groups during the research period.

### **3.4.2 Secondary Data**

Secondary data are those data that has already been generated by others. Sources of secondary data for this study includes sales information, accounting data, internally generated reports which are found within the company and web site of the company and sources refers to books, websites, publication periodicals, data service and computer data banks, reports and statistics gathered and compiled by other prior to study.

Sources for this study have been listed below:

- Data and information relating to Credit card collected from HBL, NABIL, and SCBNL and provided by department head.
- Consolidated report of Nepal card Member forum.
- Publication of HBL, NABIL, SCBNL.
- Annual reports of different years.
- By monthly newsletter of HBL, NABIL, SCBNL.
- Internet articles and previous thesis and project works

### **3.5 Data Collection Procedure**

Both primary and secondary data were used in preparing the research. And data was obtained directly from concerned staffs in the credit card centre of the concerned banks.

Previous theses were also consulted for the consolidated data record from Nepal card member forum.

#### **3.5.1 Structured Questionnaire**

Structured questionnaires were prepared for two different sample groups; Customers (card users)and , Merchants. Few banking staffs and friends working at Alpine Travel Service and various banks with acquaintance of credit card were also consulted.

## **Customers**

This questionnaire was targeted to people regardless of sex, age, education or any other such demographic criteria, the only requirement was that the respondent had to have a credit card of any bank of Kathmandu. This questionnaire was designed so as to focus on specific reason for acquiring credit card and choosing particular banks for doing so. For the credit card holders, the question mainly focused on the types of credit card acquired, means of gathering information about credit card, reasons for acquirement and problems encountered with usage of card, frequency of usage, places of usage, reasons for usage, future plans of termination and reasons for doing so.

## **Merchants**

The merchant's questionnaire was targeted to merchants of different establishment such as departmental stores, restaurants, hotels, travel agents and others such as retail outlets concentrated in Lalitpur, Bhaktapur and Kathmandu. The questionnaire was divided into two portions; one focused on Merchants having credit cards facilities and the other merchants not having the facilities. The first section consists of questions focused on the acquiring bank, reasons for selection of bank, reasons for acquirement of facilities, frequency of usage of credit card and problems encountered with usage of card. The second section comprises of questions regarding reasons for not acquiring credit card facilities, reaction of customers to absence of credit card facility and whether there is planning for installing credit card facility and reasons for doing so or if not then why.

Besides questions were also made to staffs of Alpine Travel Service and few banks for their say on credit cards, the credit cards of their particular bank, problems in marketing frauds and the general awareness and perception on credit card from their side as well as their view on general people thinking on credit cards.

### **3.6 Methods of Data Presentation and Analysis**

As stated earlier, the basic structure of this study is descriptive and analytical as well. In order to make the study more precise, the data are presented in tabular form. Figures and diagrams are used to clarify and verify the data presented.

Various statistical tools are used like mean, standard deviation, covariance and correlation coefficient of sampled banks to evaluate the performance of credit cards business. Card business comparison among Nabil Bank Ltd., Himalayan Bank Ltd., and Standard Chartered Bank Nepal is also made.

### **3.7 Statistical Tools Used**

The following statistical tools are used to evaluate the trends of credit card business in Nepalese banking sector.

#### **Standard Deviation**

The standard deviation measures the absolute dispersion. The chief characteristics of standard deviation are that it is based on mean, which gives uniform and dependable results. A standard deviation is the positive square root of average sum of squares of deviations of observations from the arithmetic mean of the distribution. Karl Pearson introduced the concept of standard deviation in 1823 and denoted it by small Greek letter, called sigma.

$$\sigma = \sqrt{\frac{\sum(X - \bar{X})^2}{n}}$$

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

The standard deviation in the formula gives an absolute measure of dispersion. The C.V. is used for comparing the homogeneity, uniformity, and variability of two or more distributions. Here, where the mean value of the variable is not equal, it is not appropriate to compare two pairs of variables based on standard deviation only. The coefficient of variation measures the relative measures of

dispersion, hence capable to compare two variables independently in terms of their variability.

Coefficient of variation can be expressed mathematically as,

$$\text{Coefficient of variation (C.V)} = \frac{\sigma}{\bar{X}}$$

### **Correlation of Coefficient**

Correlation coefficient may be defined as the degree of linear relationship existing between two or more variables. Two variables are said to be correlated when the change in the value of one variable is accompanied by the change of another variable. It is denoted by small r and is expressed as,

$$\text{Correlation coefficient (r)} = \frac{\Sigma(X-\bar{X})(Y-\bar{Y})}{\sqrt{\Sigma(X-\bar{X})^2(Y-\bar{Y})^2}}$$

### **Trend Analysis/Time Series**

Economists and business experts have often to deal with varieties (quantities) which change in value with time. Variation of such quantities with time can be systematically studied and analyzed by presenting on the Figures. For obtaining knowledge about the nature of variation of a quantity along with time, time series can be used. Hence the time series is used to measure the change of the economical and commercial data like population, sales, productions, exports, and imports over a period of time. When a series of data pertaining to a series of continuing periods should be studied, its characteristics and its future direction is best estimated by the time series. This analysis is a series of data keeping in mind the various short term and long term fluctuations. The data of last five years from FY 2007/2008 to FY 2011/2012 has been used in measuring the trend analysis. The least square method to trend analysis has been adopted to measure the trend behavior of sampled bank.

The straight line trend of series of data is represented by the following formula:

$$Y = a + b x$$

Here Y. is used to designate the trend values to distinguish them from the actual y. value; a. is the „y. intercept of the computed trend figure of the y variables. It is the minimum value of Y when x=0, and b represents the slope of the trend line. It is the regression coefficient of Y on x or rate of change in Y for the unit change in x.

## CHAPTER - IV

### DATA PRESENTATION AND ANALYSIS

#### 4.1 Introduction

This chapter deals with the analysis and interpretation of the data collected from various sources and research methodology. In the course of analysis, data gathered from the various sources has been presented in tabular form. Various tables prepared for the analysis purpose has been shown in the appendix. Data has been analyzed by using financial and statistical tools.

#### 4.2 User Trend of Credit Card Business

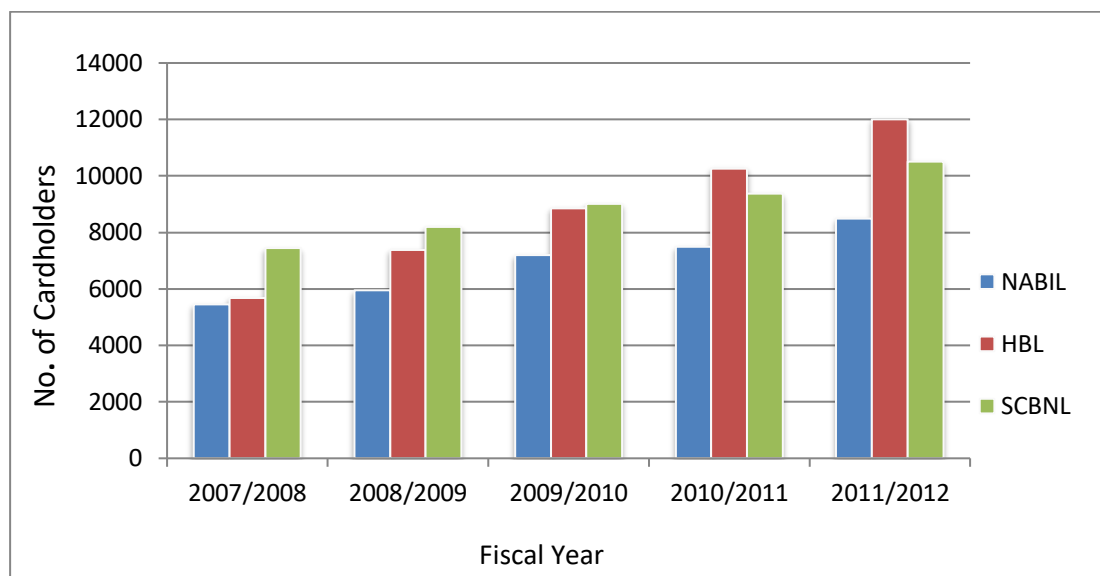
The credit card business is in an initial phase in Nepalese market. Hence, the users of credit card are subsequently low. The following table shows the number of credit card users of the sample banks: NABIL, HBL and SCBNL for the past 5 years.

**Table 4.1**  
**User Trend of Credit Card Business**

<b>Fiscal Year</b>	<b>NABIL (No.)</b>	<b>HBL (No.)</b>	<b>SCBNL (No.)</b>	<b>Industry (No.)</b>
2007/2008	5450	5683	7454	18587
2008/2009	5940	7388	8200	21528
2009/2010	7200	8852	9020	25072
2010/2011	7500	10249	9364	27113
2011/2012	8500	12003	10502	31005
Average	6918	8835	8908	24661
Standard Deviation	1098	2194	1037	4316
Coefficient of variance	15.88%	24.83%	11.64%	17.50%

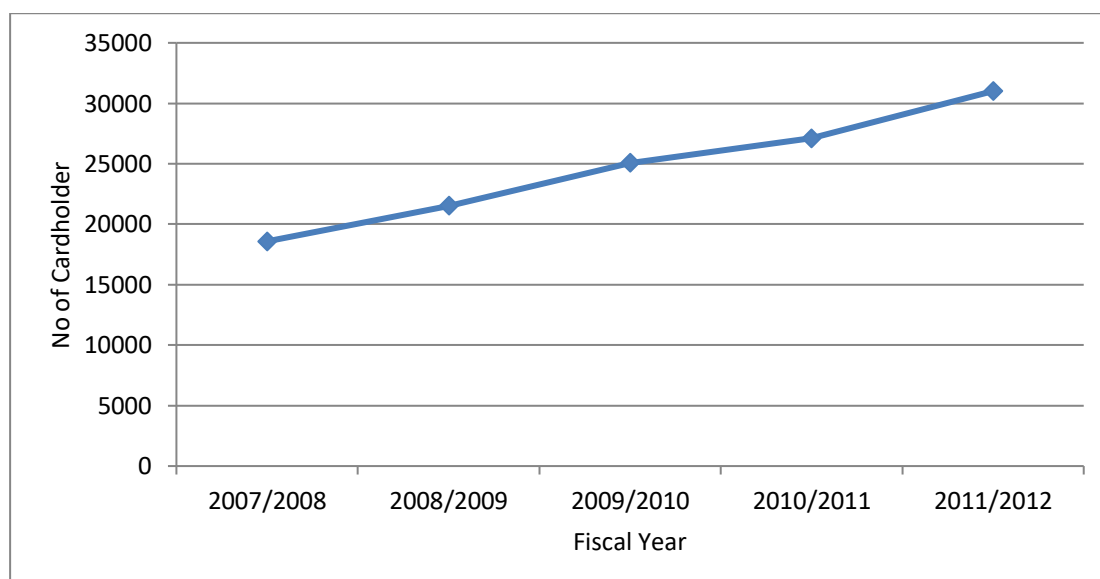
*Source: Consolidated minute of Nepal Card Forum / Appendix I*

**Figure 4.1**  
**User Trend of Credit Card Business of Nepal**



Source: Table 4.1

**Figure 4.2**  
**User Trend of Industry**



Source: Table 4.1

The table no. 4.1 shows the trend of cards users of NABIL, HBL, SCBNL and Industry. The average users of different banks: - NABIL, HBL, SCBNL and Industry are 6918, 8835, 8908 and 34661 respectively. In comparison among the three banks, HBL has the highest number of card users.

Standard deviation shows the volatility of the user trend. From above data, the standard deviation of NABIL, HBL, SCBNL and Industry are 1098, 2194, 1037, and 4316 respectively. While analyzing the volatility of user trend, HBL has the highest volatility among three sample banks but all banks have less volatility than the industry.

The coefficient of variance measures the risk of business, higher the C.V. higher the risk, lower the C.V. lower the risk of business. Form above data, the coefficient of variance of sample banks NABIL, HBL, SCBNL and Industry are 15.88 percent, 24.83 percent, 11.64 percent and 17.50 percent respectively. HBL has the highest C.V. It shows that HBL has higher risk than other banks. Similarly, SCBNL has lowest C.V. and it shows that it has lower risk. In spite of having the highest number of cardholders, HBL has the greatest volatility and risk. SCBNL has relatively lower risk.

### 4.3 Merchant Trend of Credit Cards Business

The acceptance infrastructure plays vital role in boosting the card business. It encourages people to use the card and facilitates payments without immediate cash. The following table shows the merchant trend of credit card business.

**Table 4.2**

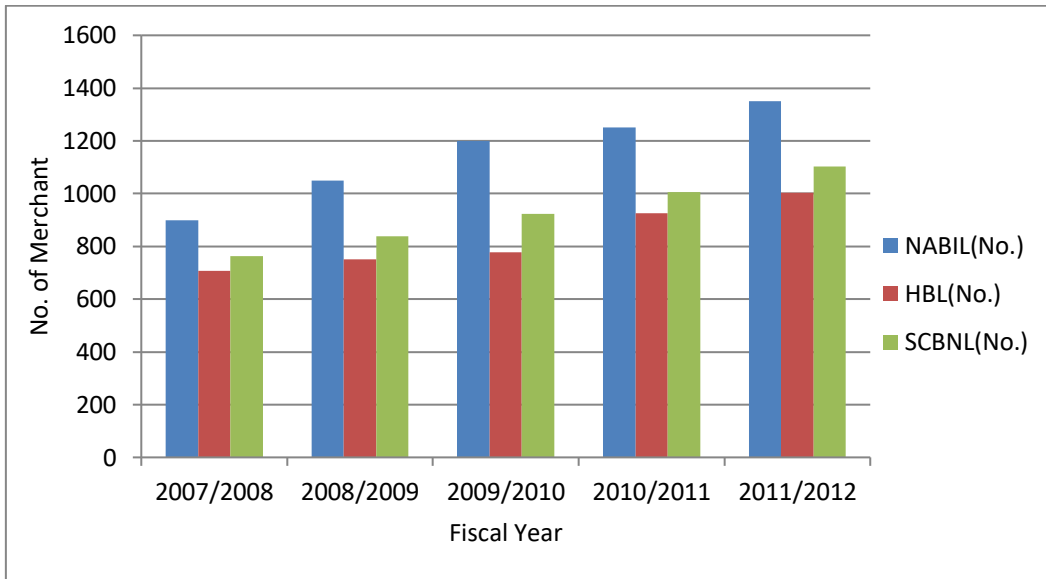
**Merchant Trend of Credit Card Business**

<b>Fiscal Year</b>	<b>NABIL(No.)</b>	<b>HBL(No.)</b>	<b>SCBNL(No.)</b>	<b>Industry(No.)</b>
2007/2008	900	708	762	2370
2008/2009	1050	750	838	2638
2009/2010	1200	777	922	2899
2010/2011	1250	926	1005	3181
2011/2012	1350	1004	1103	3457
Average	1150	883	926	2909
Standard Deviation	158	113	120	384
Coefficient of variance	13.75%	13.53%	12.98%	13.21%

*Source: Consolidated minute of Nepal Card Forum/ Appendix 2*

**Figure 4.3**

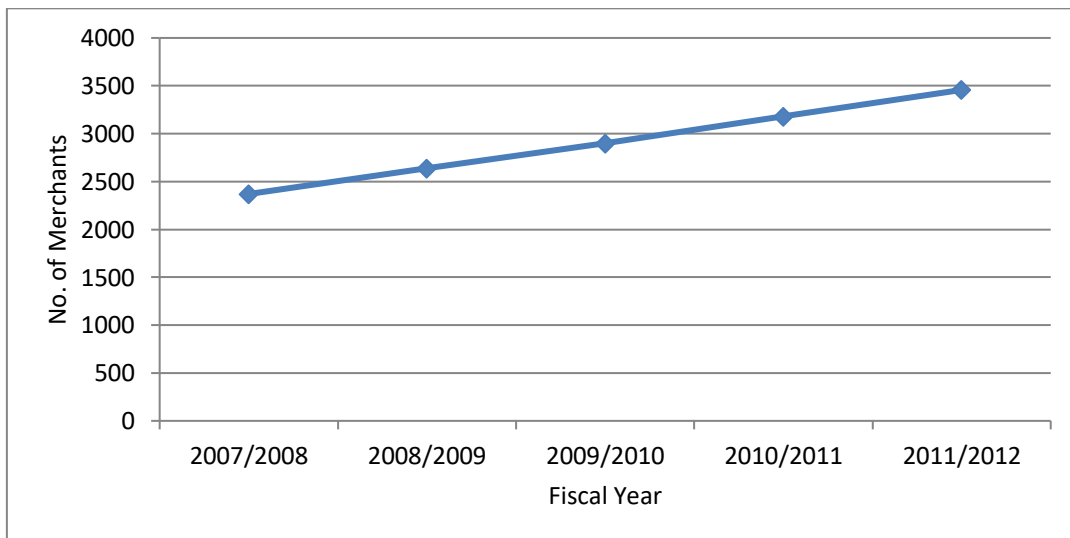
**Merchant Trend of Credit Card Business**



*Source: Table4.2*

**Figure 4.4**

**Merchant Trend of Industry**



*Source: Table 4.2*

The table 4.2 and figure 4.3 and 4.4, show the merchant trend in card business. Among the sampled banks NABIL, HBL, SCBNL and Industry have average number of merchant 1150, 883, 926, and 2909 respectively. NABIL has the highest and HBL has lowest average number of merchant among the sample banks.

Similarly standard deviation of NABIL, HBL, SCBNL and Industry are 158, 113, 120, and 384 respectively. It shows that volatility of merchant of NABIL is highest. All banks have less volatility compared to Industry.

The coefficient of variance of sampled bank NABIL, HBL, SCBNL and Industry are 13.75 percent, 13.53 percent, 12.98 percent, and 13.21 percent respectively. Analyzing these figures, NABIL has the highest risk and SCBNL has lowest risk.

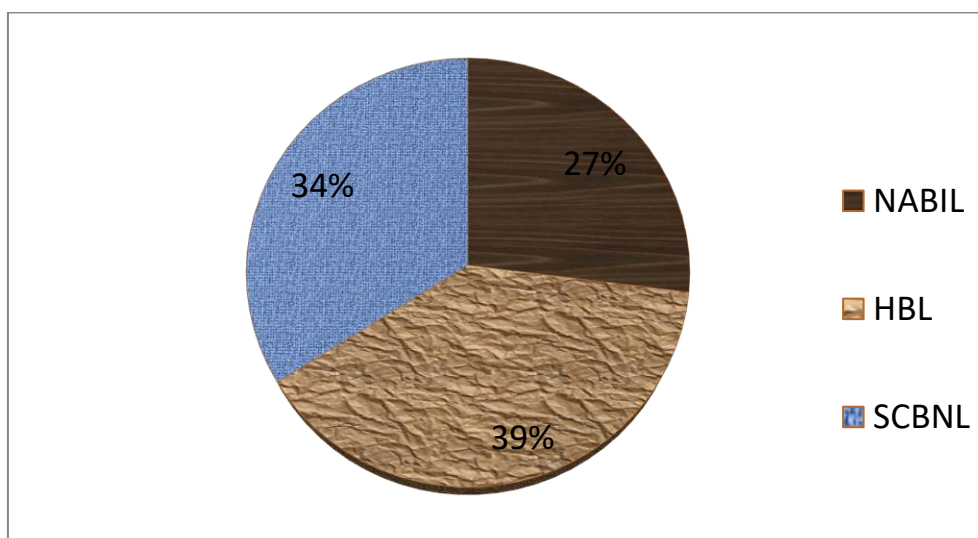
Though NABIL has the highest number of merchant, it has greater volatility and risk among the three banks.

#### 4.4 Present Market Share Hold by Different Banks

In context of Nepalese credit cards business NABIL, HBL, SCBNL, NIBL, Laxmi, BOK and Global IME as well are involved. Since, we are considering only three banks NABIL, HBL, and SCBNL, in the following Figure, market share of sampled banks are presented in case of number of cardholders and merchant.

**Figure 4.5**

#### **Market share of Banks in terms of No. of Cardholders for the Year 2012**

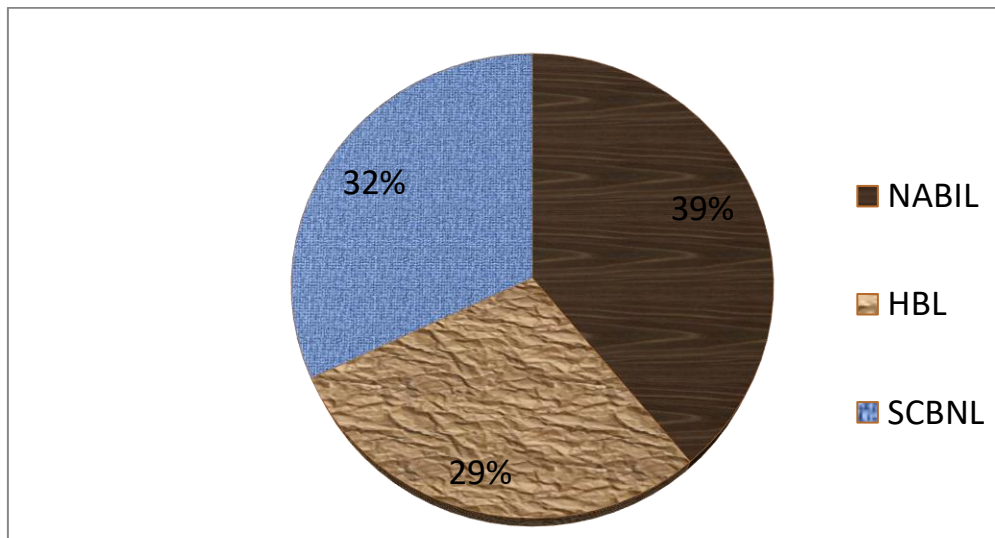


*Source: Consolidated Minute of Nepal Card Forum*

Figure 4.5 shows the market share of different banks involved in credit cards business. In case of number of cardholders or issuance market HBL, SCBNL and NABIL hold 39 percent, 34 percent and 27 percent respectively. HBL has the highest percentage and NABIL has the lowest percentage among three banks regarding card issues.

**Figure 4.6**

**Market Share of Banks in terms of Merchant hold for the Year 2012**



*Source: Consolidated Minute of Nepal Card Forum*

Figure 4.6 shows the market share of number of merchant hold by banks in credit card business. NABIL, HBL and SCBNL hold 39 percent, 29 percent and 32 percent respectively. The figure indicates the highest and lowest share of NABIL and HBL respectively.

Though in terms of issuance HBL has the highest market share, in case of merchant it occupies the lowest market share. Similarly, in terms of issuance, NABIL has the lowest market share but with merchant hold, it almost has the largest market share.

### Measuring Correlation (r)

Correlation coefficient helps to find the relationship between variables and how they move together. In this study, relationship between different banks in case of cardholder and merchant is calculated and found as follows.

**Table 4.3**  
**Correlation Analysis of NABIL Bank**

<b>Tools</b>	<b>NABIL With HBL</b>	<b>NABIL With SCBNL</b>	<b>NABIL with Industry</b>
Correlation (No. of cardholder)	0.986	0.991	0.994
Correlation (No. of merchants)	0.900	0.978	0.981

*Source: Appendix 3*

Table 4.3 shows the correlation between the number of cardholders of NABIL Bank with HBL, SCBNL and Industry are 0.986, 0.991 and 0.994 respectively, and number of merchant are 0.900, 0.978 and 0.981 respectively, which indicate NABIL has positive correlation with HBL and higher and positive degree of correlation with SCBNL and Industry. This means NABIL, SCBNL and HBL move in the same direction. In case of number of merchants, also NABIL has positive and high degree of correlation with other sampled banks and industry.

**Table 4.4**  
**Correlation Analysis of HBL**

<b>Tools</b>	<b>HBL With NABIL</b>	<b>HBL With SCBNL</b>	<b>HBL with Industry</b>
Correlation (No. of cardholder)	0.986	0.994	0.998
Correlation (No. of merchants)	0.900	0.969	0.967

*Source: Appendix 3*

Table 4.4 shows the relationship of cardholders of HBL with NABIL, HBL with SCBNL and HBL with Industry. HBL has positive correlation with

NABIL and a high degree of positive correlation with SCBNL and Industry. In case of number of merchant, also HBL has positive and high degree of correlation with NABIL, SCBNL and Industry.

**Table 4.5**

**Correlation Analysis of SCBNL**

<b>Tools</b>	<b>SCNBL with NABIL</b>	<b>SCNBL with HBL</b>	<b>SCNBL with Industry</b>
Correlation(No. of cardholder)	0.991	0.994	0.997
Correlation(No. of merchants)	0.978	0.969	0.999

*Source: Appendix 3*

Table 4.5, the correlation between the numbers of cardholders of SCBNL with NABIL, SCBNL with HBL and with Industry are 0.991, 0.994 and 0.997 respectively and number of merchants is 0.978, 0.969 and 0.999 respectively. SCBNL has positive and high degree of correlation with all other banks and industry in terms of both card issuance and merchant hold, which indicates that SCBNL is moving in positive direction with other banks and industry.

**4.5 Trend Analysis**

For obtaining knowledge about the nature of variation of a quantity along with time, time series is used. When a series of data pertaining to a series of continuing periods should be studied, its characteristics and its future direction is best estimated by the time series .The most commonly used method to describe the trend is the method of least square which helps us know the movement of variables and by using this tool the future value can be predicted. In this analysis for predicting the future value of new number of cardholder and number of merchant for present year 2013, and future years. Least square method is used and the summarized values are as follows:

**Table 4.6****Projected Values of Different Banks for the Coming Years**

<b>NO. OF CARDHOLDERS</b>	<b>Fiscal Year</b>	<b>NABIL (No.)</b>	<b>HBL (No.)</b>	<b>SCBNL (No.)</b>	<b>Industry (No.)</b>
		2012/013	9216	13485	11086
	2013/014	9982	15035	11812	36829
	2014/015	10748	16585	12538	39871
	2015/016	11514	18135	13264	42913
	2016/017	12280	19685	13990	45955
<b>NO. OF MERCHANTS</b>	2012/013	1480	1064	1181	3725
	2013/014	1590	1141	1266	3997
	2014/015	1700	1218	1351	4269
	2015/016	1810	1295	1436	4541
	2016/017	1920	1372	1521	4813

*Source: Appendix 4*

Table 4.6 show the data for coming fiscal years 2012/013, 2013/014, 2014/015, 2015/016 and 2016/017 respectively.

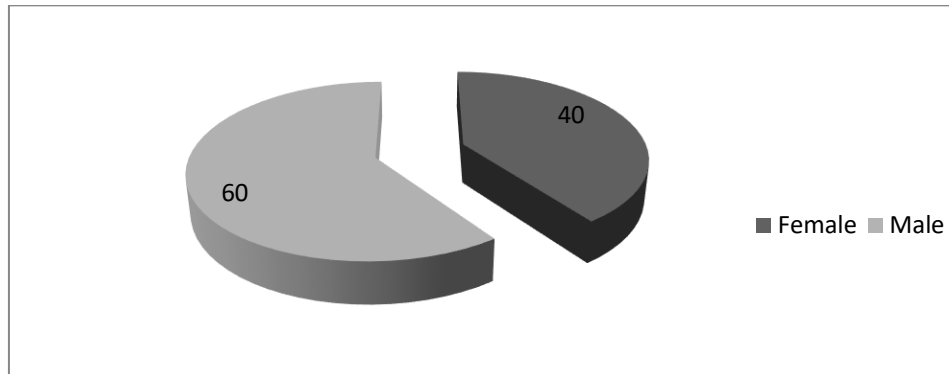
The no. of cardholders for NABIL is 9216, 9982,10748,11514,12280 and the no. of merchants is 1480, 1590, 1700, 1810, 1920. The no. of cardholders for HBL is 13485, 15035, 16585, 18135, 19685 and the no. of merchants is 1064, 1141, 1218, 1295 and 1372. Similarly the no. of cardholders for SCBNL is 11086, 11812, 12538, 13264, 13990 and the no. of merchants is 1181, 1266, 1351, 1436 and 1521.

## 4.6 Result Section of Questionnaire

### Credit Card Customers

**Figure 4.7**

**Gender Distribution of Customers**

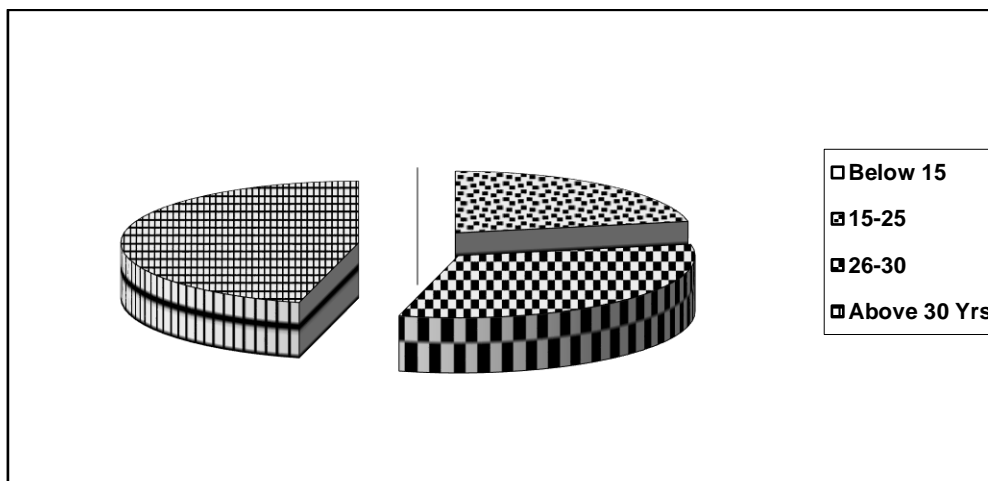


*Source:Field Survey*

As per Figure 4.7, out of 50 respondents (cardholding customers), 60% were male and 40% female.

**Figure 4.8**

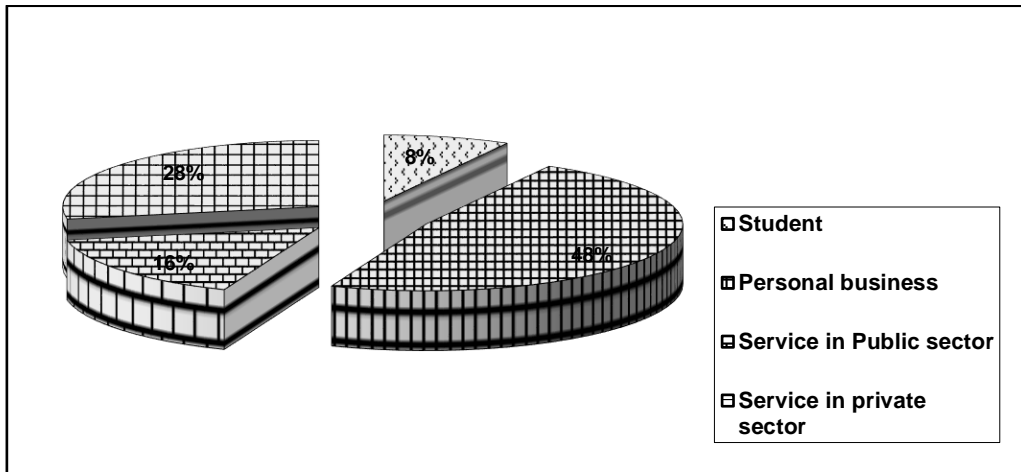
**Age Distribution of Customers**



*Source:Field Survey*

As per figure 4.8, out of 50 customers based on age group, 46% were above 30, 22% were between age 18-25 and 32% were between 26-30 years.

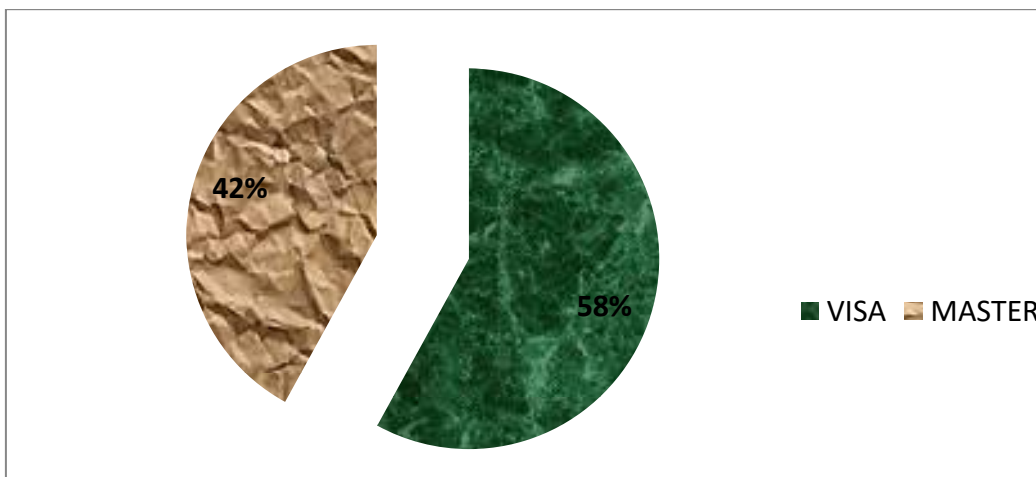
**Figure 4.9**  
**Profession of Cardholders**



*Source:Field Survey*

As per figure 4.9, majority of the respondents surveyed own their own personal business. In fact 48% (24) had business of their own 28 % (14) worked in private sector and student at 8% (4) and public sector employee 16% (8) followed this.

**Figure 4.10**  
**Types of Cards**



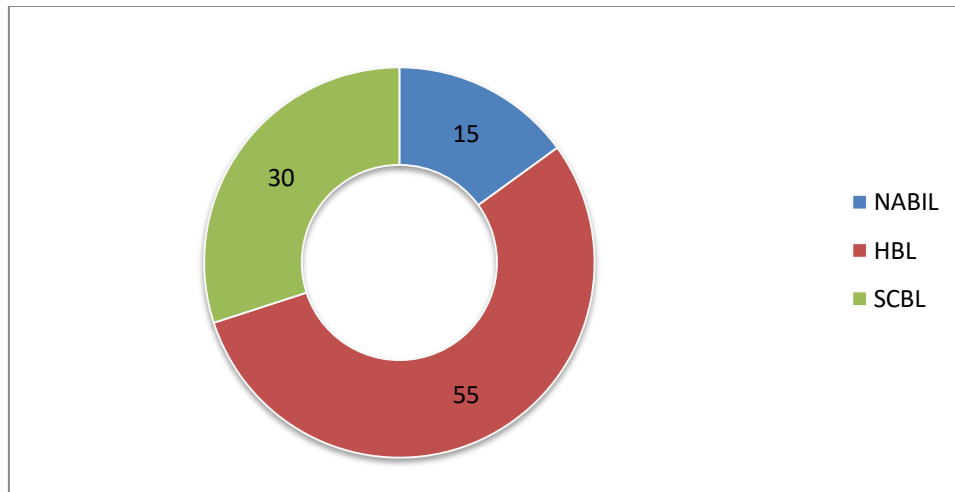
*Source:Field Survey*

As per figure 4.10, out of 50 respondents, 58% respondents have had VISA card and 42% had master card. Hence, we have found that customers are simultaneously using VISA card and Master Card. None of the respondents

possessed JCB, Diners, American Express and other cards. Tourists and foreigners mostly hold these cards and the acceptance infrastructure for these cards is slowly growing. These cards are accepted in few departmental stores, merchants (travel agency and hotels only).

**Figure 4.11**

**Cards Acquired of Different Banks**

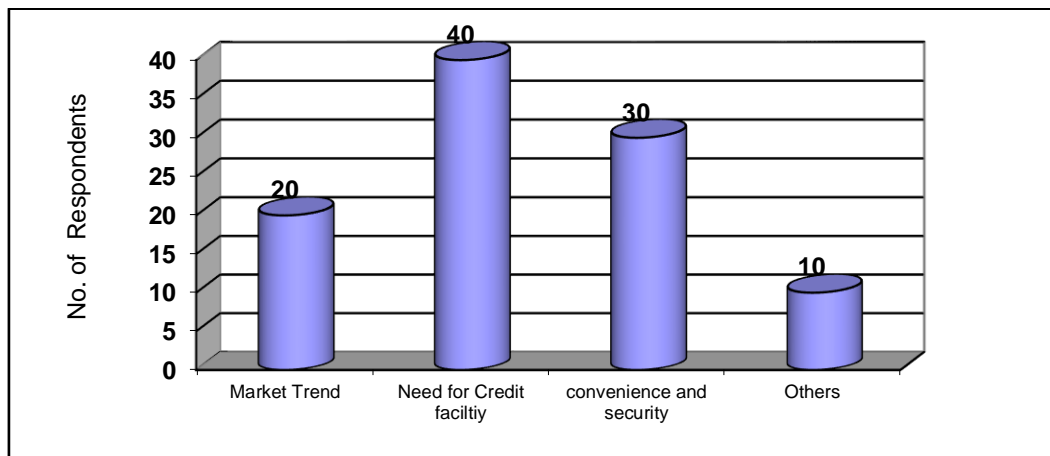


*Source:Field Survey*

As per figure 4.11, among the sample banks, it is seen that most of the customers have acquired credit card of Himalayan Bank Limited. 55% cardholders acquired card of Himalayan bank, 30% acquired card of SCBNL, 15% acquired card of NABIL Bank Limited.

**Figure 4.12**

**Reasons for Acquiring Credit Card**

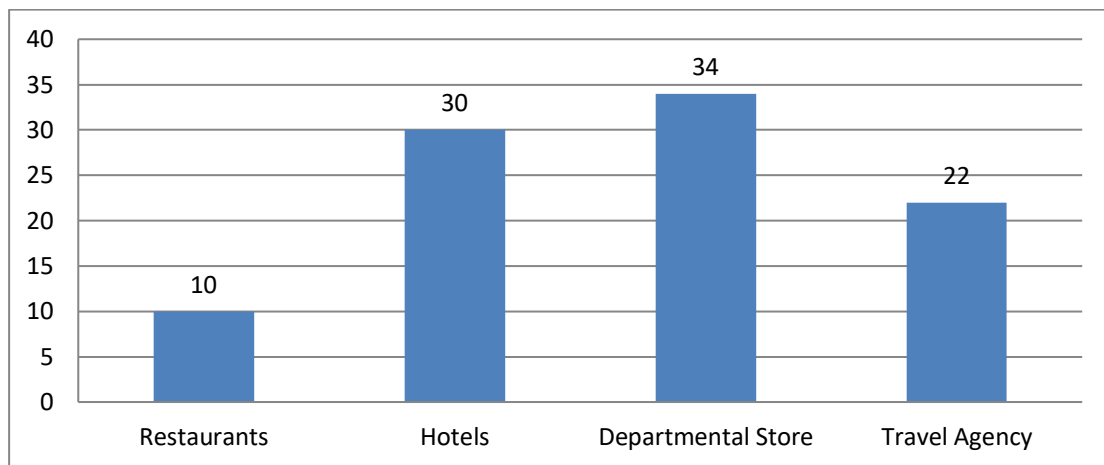


*Source:Field Survey*

As per figure 4.12, out of 50 respondents, 20% decided to acquire credit card because of increasing market trend, 40% decided to acquire card because they needed credit facilities, 30% decided to acquire card because of convenience and security and 10% acquired card for various other reasons. Hence, we can see that majority of customers acquired card for credit facility as well as to keep up with market trend, convenience and security.

**Figure 4.13**

**Places of Usage of Credit Card**

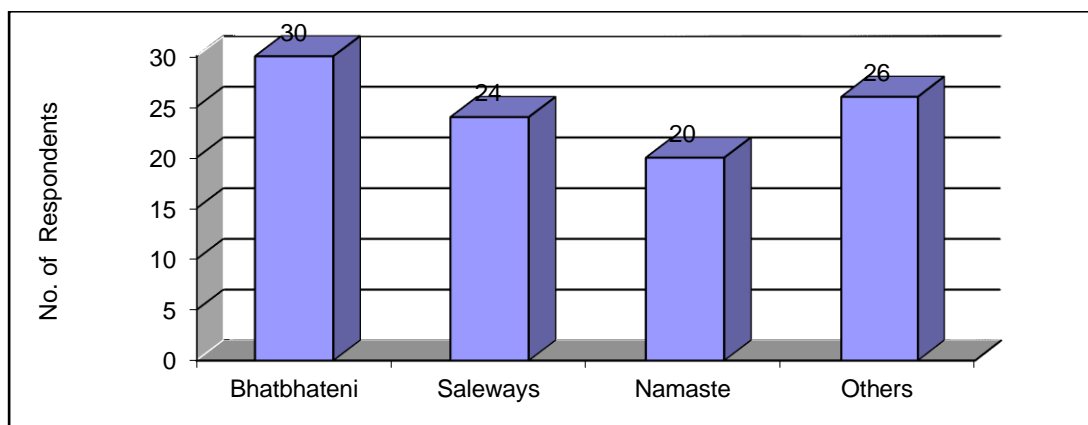


*Source: Field Survey*

As per figure 4.13, out of 50 customers, 10% use credit card in restaurant, 30% of them use at the hotel and 34% of them use at departmental stores. Likewise, 22 % of them use credit card at travel agency.

**Figure 4.14**

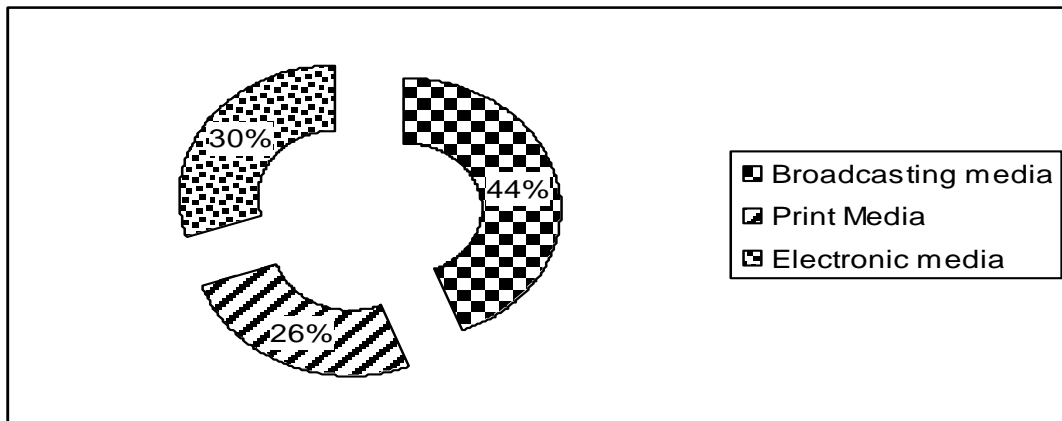
**Buying Nature of Customers**



*Source: Field Survey*

As per figure 4.14, out of 50 customers having credit card, 30% of them use their card at Bhatbhateni Supermarket, 24% of them use card in Saleways Supermarket, and 20% at Namaste Supermarket, 26% of them use their credit card at other supermarkets and stores.

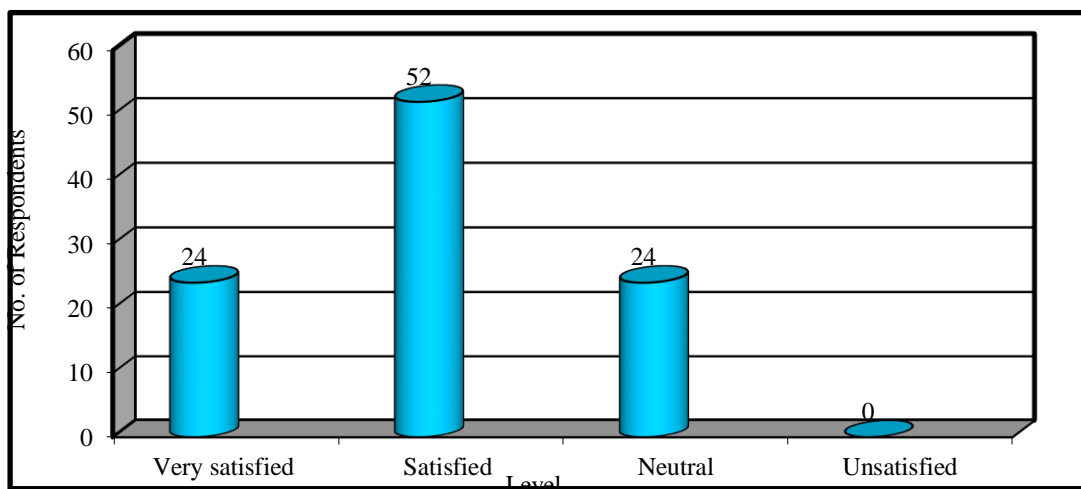
**Figure 4.15**  
**Appropriate Media**



*Source: Field Survey*

As per figure 4.15, from the sample size of 50, it was seen that most of the customers, 44%, were acquainted with credit card through broadcasting media like, TV, radio and the next effective media from which they came to know about the credit card were electronic media and print media, which comprised of 30 % and 26% respectively.

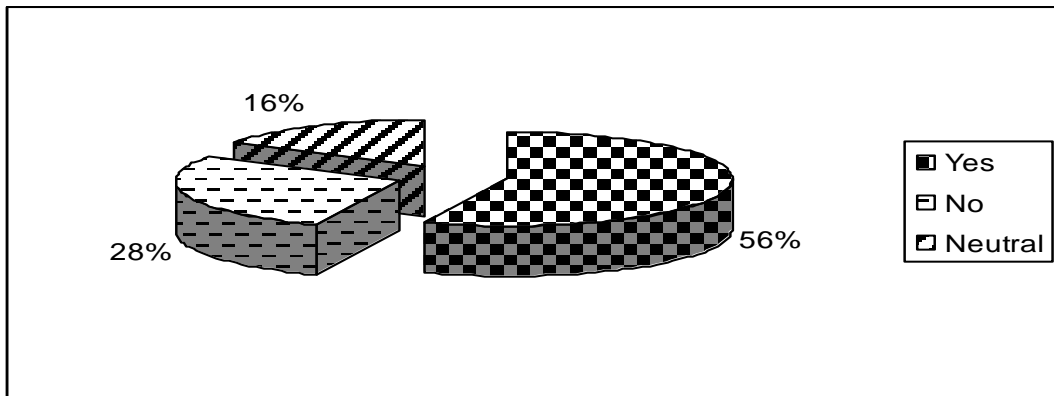
**Figure 4.16**  
**Level of Satisfaction**



*Source: Field Survey*

As per figure 4.16, out of 50 customers, 24 % of them possessing card were very satisfied, where as 52 % of them said they were satisfied and 24 % of them were neutral while no one felt they were unsatisfied by the credit card they availed.

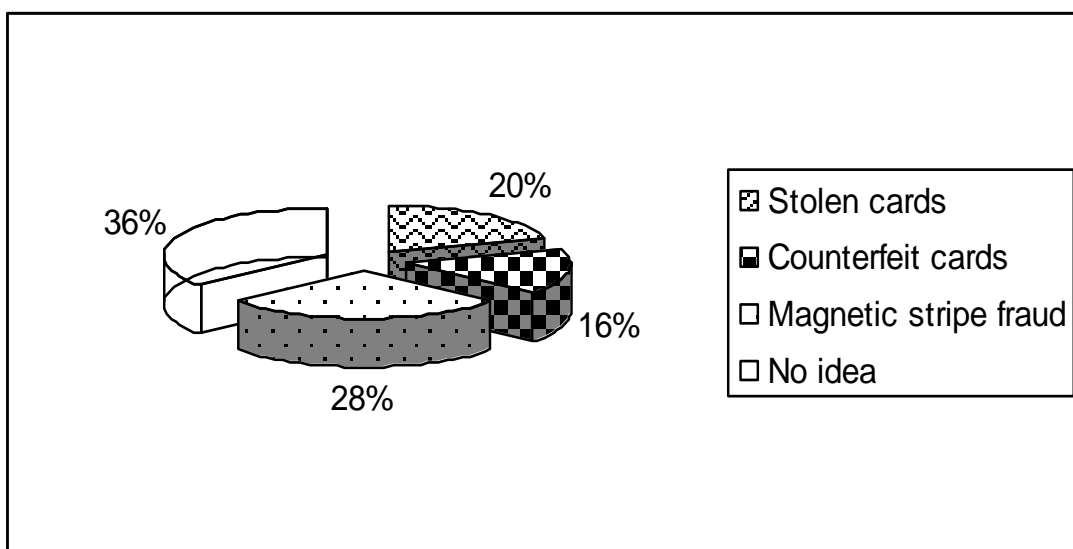
**Figure 4.17**  
**Satisfaction in Limit made by Bank**



*Source: Field Survey*

As per figure 4.17, out of 50 customers, 56% were satisfied with the limit made by the bank where as 16 % were not satisfied with the limit and similarly 28% of them were neutral about the limit made by the bank.

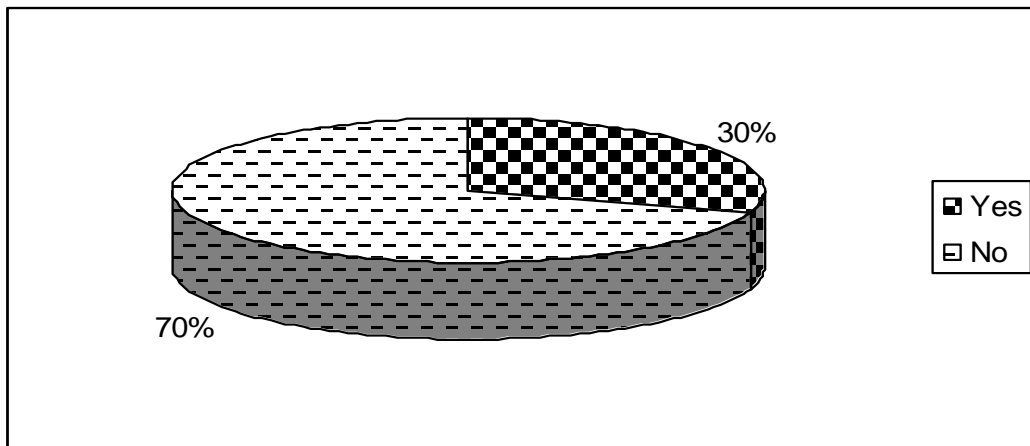
**Figure 4.18**  
**Knowledge on Card Frauds**



*Source: Field Survey*

As per figure 4.18, out of 50 respondents, almost 36% had no idea on credit card frauds, 20% were aware on risk of cards stolen, 16 % knew about counterfeit card frauds and 28% knew about magnetic stripe fraud due to recent happening of such frauds in ATMs and POS machines.

**Figure 4.19**  
**Knowledge on Credit Card Disputes**

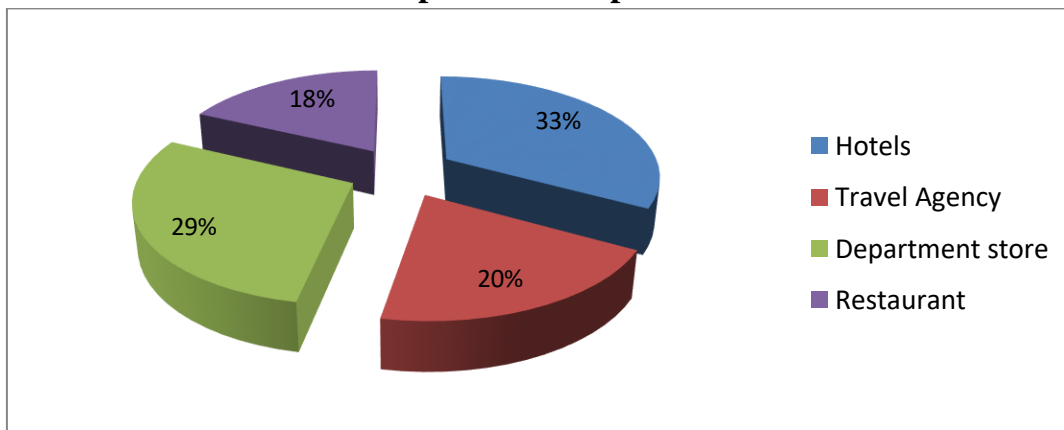


*Source:Field Survey*

As per figure 4.19, out of 50 respondents, only 30% turned out to know about disputes in credit card and the settlement process due to their experience with it and by learning from internet. However, 70% showed no familiarity with the process.

**Merchants**

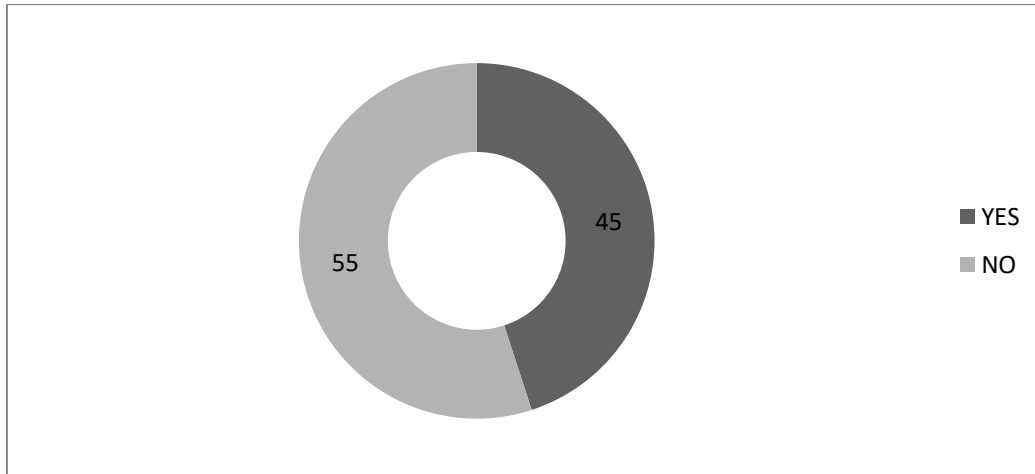
**Figure 4.20**  
**Sample Size Composition**



*Source:Field Survey*

As per figure 4.20, out of the sample size of 20 respondents, 33% were hotels, 20% were travel agency, 29% were departmental store and 18% were restaurants.

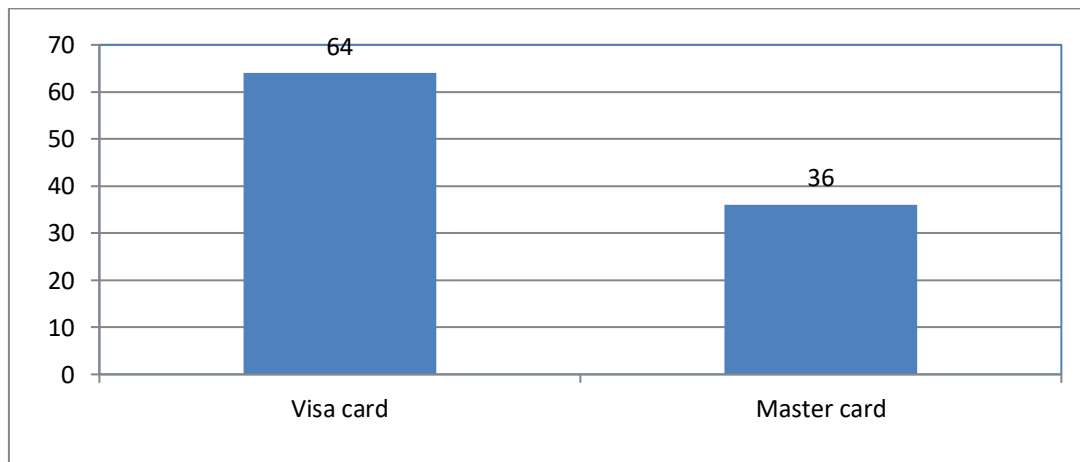
**Figure 4.21**  
**Merchants using Credit Cards**



*Source: Field Survey*

As per figure 4.21, out of the sample size of 20 respondents, 45%(9) had installed credit card facility, while 55%(11) had rather decided not having it.

**Figure 4.22**  
**Types of Card Accepted**

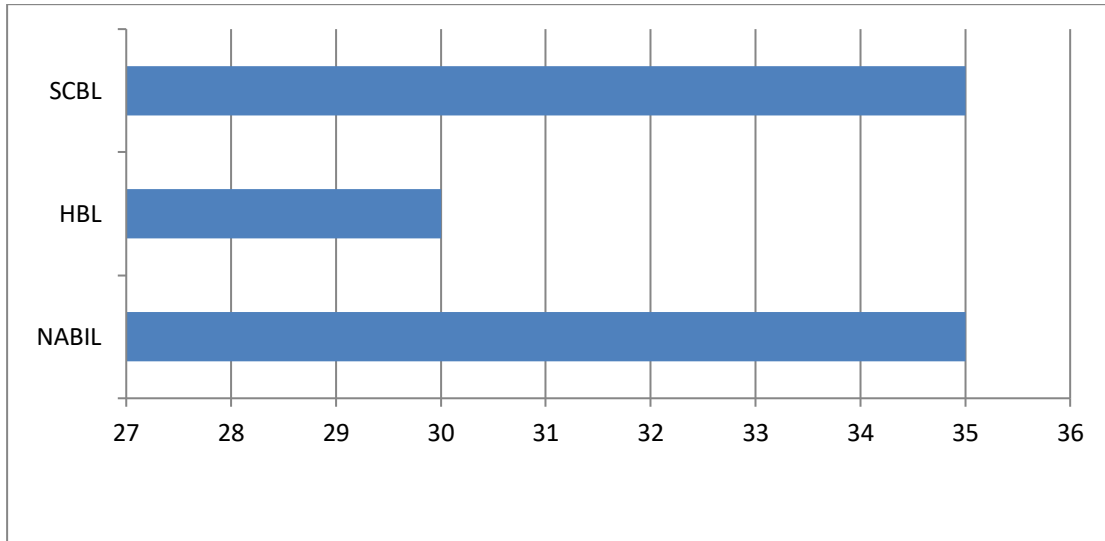


*Source: Field Survey*

As per figure 4.22, out of 45% respondents obtained from 20 merchants (who installed credit card facility) 64% accept Visa card, while 36% accept master

card. Among them were also those who accept both card types (Visa and Master card) and few merchants, particularly the travel agents accept other cards as well like American express and JCB cards.

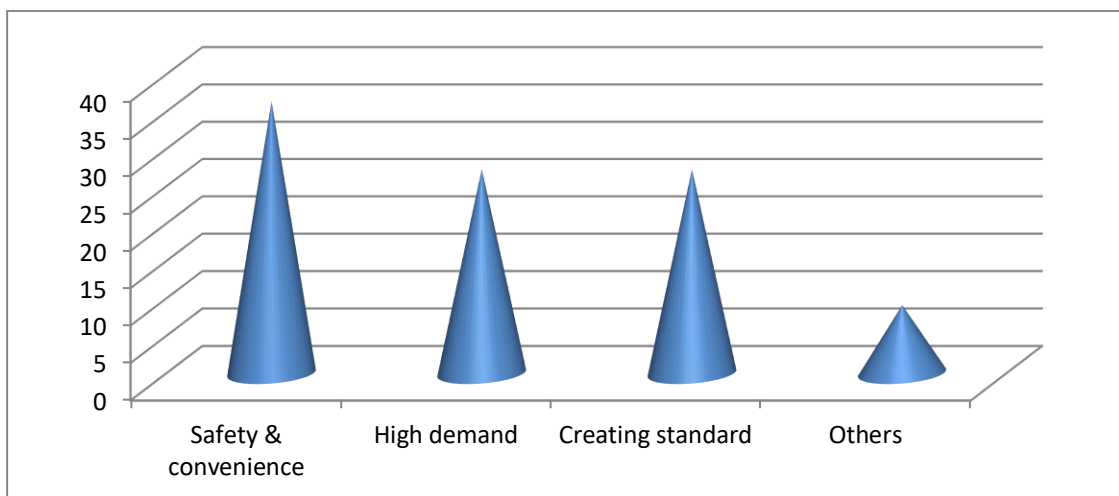
**Figure 4.23**  
**Acquiring Bank**



*Source: Field Survey*

As per figure 4.23, out of 9 respondents, who had installed credit card facility 35% had acquired the service from SCBNL and the same percentage acquired it from NABIL banks while 30% had acquired it from HBL.

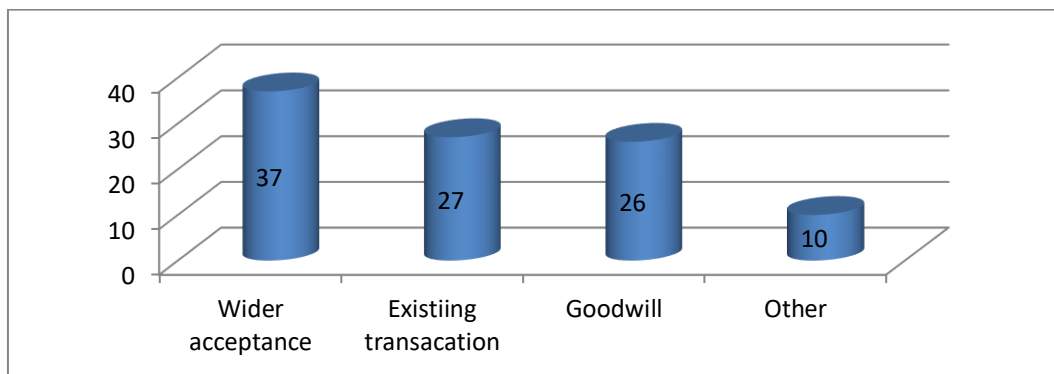
**Figure 4.24**  
**Reasons for Acquiring**



*Source: Field Survey*

As per figure 4.24, out of 9 respondents having credit card facility, a majority 36.36% cited safety (from bad debts as well as social evils) and convenience as a crucial reason for installing it, while 27.27% to high demand for credit and the same percentage also for creating standards. Similarly, 9.09% had other reasons for the same, for example, competition, customer satisfaction, prestige and status issue etc.

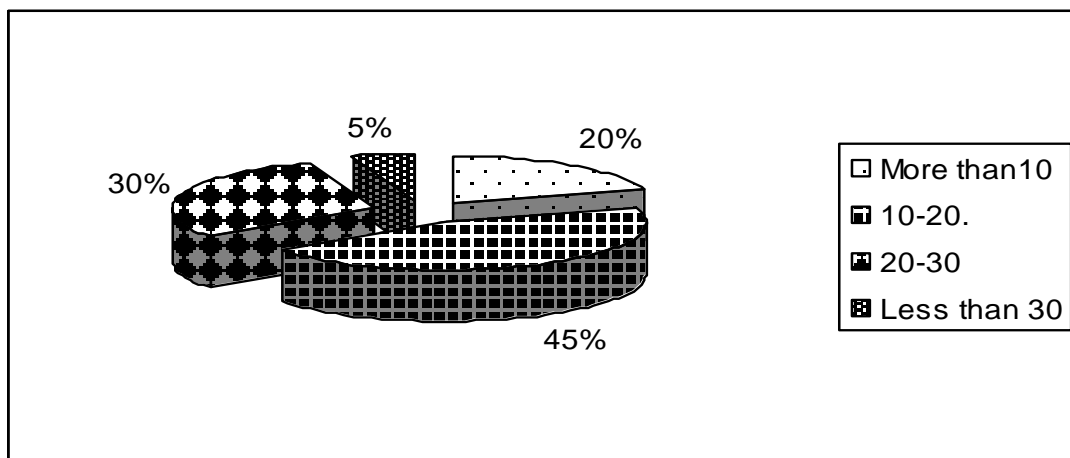
**Figure 4.25**  
**Reasons for Selection**



*Source: Field Survey*

As per figure 4.25, out of 9 respondents having credit card facility 37% had selected particular bank for wider acceptance of the bank's service, 27% for their existing transaction and relationship with banks, 26% for goodwill of banks and 10% for other reasons.

**Figure 4.26**  
**Frequency of Credit Card Users**

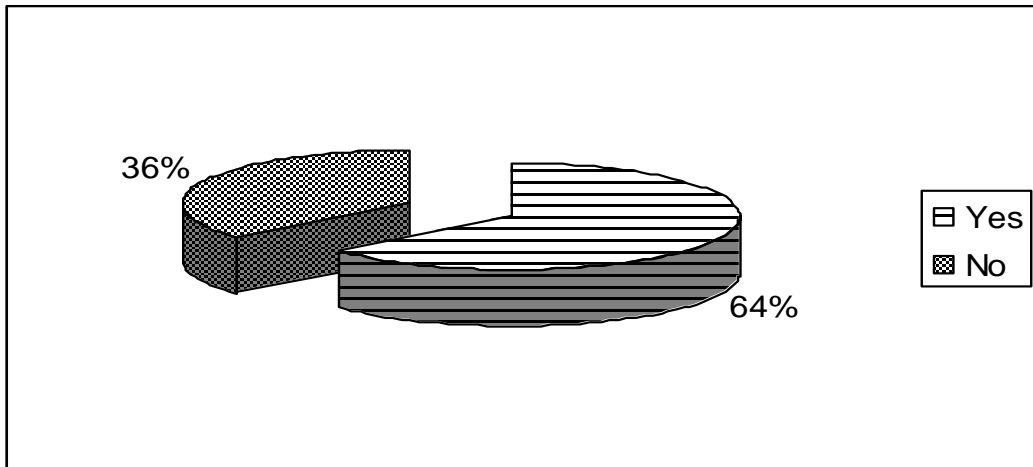


*Source: Field Survey*

As per figure 4.26, regarding the frequency of credit card users, 20% replies were for less than 10 customers, 45% for between 10-20 customers, 30% for between 20-30 customers and only 5% for above 30 customers.

**Figure 4.27**

**Growth of Business after Using Card**

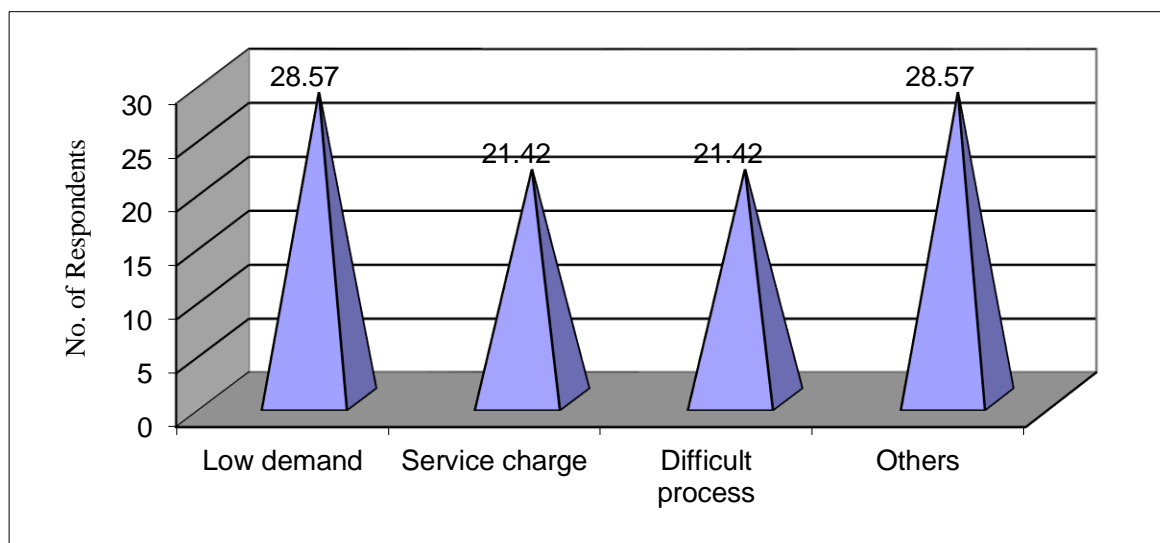


*Source:Field Survey*

As per figure 4.27, out of 9 respondents having credit card facility, 64% reported significant growth in their business volume while 36% did not notice any remarkable changes.

**Figure 4.28**

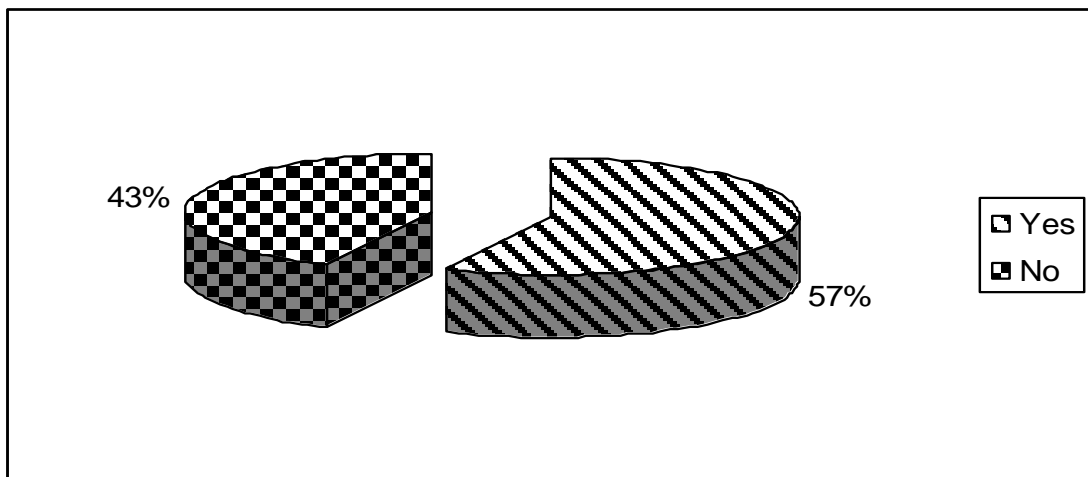
**Reasons for Not Providing Card Facility**



*Source:Field Survey*

As per figure 4.28, out of 11 respondents not having credit card facility.28.57% cited low demand for credit as reason for not installing credit facility and 21.42% cited the higher service costs (including higher limit, fees and commissions) as a crucial reason for not installing credit card. The same percentage claimed tedious process as reason for not installing and again 28.57% cited other reasons like lack of information, very few credit card users coming in their shops, their nature of business, difficulty in bargaining and no fixed price etc for not installing credit card facility.

**Figure 4.29**  
**Plan to Acquire Credit Card Facility**



*Source: Field Survey*

As per figure 4.29, out of 11 merchants not having credit card facilities, 57% still have no plans of installing credit card while 43% were interested in installing credit card facility in their shops in near future.

Of those planning to extend credit card facility, several factors were motivating them like increasing card users and enquiry from customers, increasing trend, expansion plans, creating standards ,marketing effort from banks and other factors.

#### 4.7 Major Findings of Primary Data Study

The main findings of the study have been derived on the basis of questionnaire and financial data.

Major Findings on Credit Card Customers:

- Out of 50 respondents (cardholding customers), 60 percent were male and 40 percent female and on the basis of age group, 46% were above 30, 22% were between age 18-25 and 32% were between 26-30 years as well on the basis profession of cardholders 48% (24) had business of their own 28 % (14) worked in private sector and student at 8% (4) and public sector employee 16% (8) followed this.
- □ Among of 50 respondents, 58% respondents have had VISA card and 42% had master card. Hence, we have found that customers are simultaneously using VISA card and Master Card. None of the respondents possessed JCB, Diners, American Express and other cards. Tourists and foreigners mostly hold these cards and the acceptance infrastructure for these cards is slowly growing. These cards are accepted in few departmental stores, merchants (travel agency and hotels only).
- Among the sample banks, it is seen that most of the customers have acquired credit card of Himalayan Bank Limited. 55% cardholders acquired card of Himalayan bank, 30% acquired card of SCBNL, 15% acquired card of NABIL Bank Limited. 20% decided to acquire credit card because of increasing market trend, 40% decided to acquire card because they needed credit facilities, 30% decided to acquire card because of convenience and security and 10% acquired card for various other reasons. Hence, we can see that majority of customers acquired card for credit facility as well as to keep up with market trend, convenience and security.
- □ It was found that 10 % use credit card in restaurant, 30 % of them use at the hotel and 34 % of them use at departmental stores. Likewise, 22 % of them use credit card at travel agency. Out of 50 customers having credit

card, 30 % of them use their card at Bhatbhateni Supermarket, 24% of them use card in Saleways Supermarket, and 20 % at Namaste Supermarket, 26 % of them use their credit card at other supermarkets and stores.

- □ It was seen it was seen that most of the customers, 44%, were acquainted with credit card through broadcasting media like, TV, radio and the next effective media from which they came to know about the credit card were electronic media and print media, which comprised of 30 % and 26% respectively and, 24 % of them possessing card were very satisfied, where as 52 % of them said they were satisfied and 24 % of them were neutral while no one felt they were unsatisfied by the credit card they availed.
- Regarding the limit provided by the bank, 56% were satisfied with the limit made by the bank where as 16 % were not satisfied with the limit and similarly 28% of them were neutral about the limit made by the bank.
- Out of 50 respondents, almost 36% had no idea on credit card frauds, 20% were aware on risk of cards stolen, 16 % knew about counterfeit card frauds and 28% knew about magnetic stripe fraud due to recent happening of such frauds in ATMs and POS machines. Similarly only 30% turned out to know about disputes in credit card and the settlement process due to their experience with it and by learning from internet. However, 70% showed no familiarity with the process.

#### Major Findings on Merchants:

- Out of the sample size of 20 respondents, 33% were hotels, 20% were travel agency, 29% were departmental store and 18% were restaurants. Also among them 45%(9) had installed credit card facility, while 55%(11) had rather decided not having it.
- Out of 9 respondents obtained from 20 merchants (who installed credit card facility) 64% accept Visa card, while 36% accept master card. Among them were also those who accept both card types (Visa and Master card) and few merchants, particularly the travel agents accept

other cards as well like American express and JCB cards. Likewise who had installed credit card facility 35% had acquired the service from SCBNL and the same percentage acquired it from NABIL banks while 30% had acquired it from HBL.

- Among 9 respondents having credit card facility, a majority 36.36% cited safety (from bad debts as well as social evils) and convenience as a crucial reason for installing it, while 27.27% to high demand for credit and the same percentage also for creating standards. Similarly, 9.09% had other reasons for the same, for example, competition, customer satisfaction, prestige and status issue etc.
- Regarding the selection of the bank out of 9 respondents having credit card facility 37% had selected particular bank for wider acceptance of the bank's service, 27% for their existing transaction and relationship with banks, 26% for goodwill of banks and 10% for other reasons.
- Regarding the frequency of credit card users, 20% replies were for less than 10 customers, 45% for between 10-20 customers, 30% for between 20-30 customers and only 5% for above 30 customers. Out of 9 respondents having credit card facility, 64% reported significant growth in their business volume while 36% did not notice any remarkable changes.
- Out of 11 respondents not having credit card facility 28.57% cited low demand for credit as reason for not installing credit facility and 21.42% cited the higher service costs (including higher limit, fees and commissions) as a crucial reason for not installing credit card. The same percentage claimed tedious process as reason for not installing and again 28.57% cited other reasons like lack of information, very few credit card users coming in their shops, their nature of business, difficulty in bargaining and no fixed price etc for not installing credit card facility. Among 11 merchants not having credit card facilities, 57% still have no plans of installing credit card while 43% were interested in installing credit card facility in their shops in near future.

#### 4.8 Major Findings of Secondary Data Study

The main findings derived from the study of secondary data and analysis:

- The average users of different banks: - NABIL, HBL, SCBNL and Industry are 6918, 8835, 8908 and 34661 respectively. In comparison among the three banks, HBL has the highest number of card users.
- Standard deviation shows the volatility of the user trend. From above data, the standard deviation of NABIL, HBL, SCBNL and Industry are 1098, 2194, 1037, and 4316 respectively. While analyzing the volatility of user trend, HBL has the highest volatility among three sample banks but all banks have less volatility than the industry.
- The coefficient of variance measures the risk of business, higher the C.V. higher the risk, lower the C.V. lower the risk of business. From above data, the coefficient of variance of sample banks NABIL, HBL, SCBNL and Industry are 15.88 percent, 24.83 percent, 11.64 percent and 17.50 percent respectively. HBL has the highest C.V. It shows that HBL has higher risk than other banks. Similarly, SCBNL has lowest C.V. and it shows that it has lower risk. In spite of having the highest number of cardholders, HBL has the greatest volatility and risk. SCBNL has relatively lower risk.
- The sampled banks NABIL, HBL, SCBNL and Industry have average number of merchant 1150, 883, 926, and 2909 respectively. NABIL has the highest and HBL has lowest average number of merchant among the sample banks.
- Similarly standard deviation of NABIL, HBL, SCBNL and Industry are 158, 113, 120, and 384 respectively. It shows that volatility of merchant of NABIL is highest. All banks have less volatility compared to Industry.
- The coefficient of variance of sampled bank NABIL, HBL, SCBNL and Industry are 13.75 percent, 13.53 percent, 12.98 percent, and 13.21 percent respectively. Analyzing these figures, NABIL has the highest risk and SCBNL has lowest risk. Though NABIL has the highest number of merchant, it has greater volatility and risk among the three banks.

- Correlation between the number of cardholders of NABIL Bank with HBL, SCBNL and Industry are 0.986, 0.991 and 0.994 respectively, and number of merchant are 0.900, 0.978 and 0.981 respectively, which indicate NABIL has positive correlation with HBL and higher and positive degree of correlation with SCBNL and Industry. This means NABIL, SCBNL and HBL move in the same direction. In case of number of merchants, also NABIL has positive and high degree of correlation with other sampled banks and industry.
- Correlation between the number of cardholders of HBL Bank with NABIL, SCBNL and Industry are 0.986, 0.994, and 0.998 respectively, and number of merchant are 0.900,0.969 and 0.967 respectively. HBL has positive correlation with NABIL and a high degree of positive correlation with SCBNL and Industry. In case of number of merchant, also HBL has positive and high degree of correlation with NABIL, SCBNL and Industry.
- Correlation between the numbers of cardholders of SCBNL with NABIL, SCBNL with HBL and with Industry is 0.991, 0.994 and 0.997 respectively and number of merchants is 0.978, 0.969 and 0.999 respectively. SCBNL has positive and high degree of correlation with all other banks and industry in terms of both card issuance and merchant hold, which indicates that SCBNL is moving in positive direction with other banks and industry.
- The trend analysis shows the future value of no. of cardholders for NABIL is 9216, 9982,10748,11514,12280 and the no. of merchants is 1480, 1590,1700,1810,1920. The no. of cardholders for HBL is 13485, 15035, 16585, 18135, 19685 and the no. of merchants is 1064, 1141, 1218, 1295 and 1372. Similarly, the no. of cardholders for SCBNL is 11086, 11812, 12538, 13264, 13990 and the no. of merchants is 1181, 1266, 1351, 1436 and 1521.

## **CHAPTER - V**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Summary**

A credit card is a card or mechanism which enables to purchase goods, travel and dine in a hotel without making immediate payments. The holders can use the cards to credit from banks upto 45 days. The credit card relieves the consumer from the hassles of cash and ensures safety. It is a convenience of an extended credit without formality. Thus, credit card is a passport to, safety, convenience, prestige and credit.

Credit cards are accepted worldwide, and are available with a large variety of credit limits, repayment arrangement, and other perks (such as rewards schemes in which points earned by purchasing goods with the card can be redeemed for further goods and services or credit card cash back). In most of the big hotels and restaurants of the developed nations, credit card holders are materialistically valued more than those who produce hard cash. In many cases, hotels even hesitate to check-in those without payment cards. Credit cards are not only used to make purchase but a range of other services are also available, to a name a few are cash advances, making a utility payments, securing all the security data, privilege award etc, and most importantly, above all, it is very helpful to cope with emergency situations. From a merchant's points of view, it will increase the sales of the merchant as the trend today is of plastic money and he gets rid from taking collected money to banks for deposits. Everything happens electronically and the merchants account is credited very shortly after every purchases. In addition, it provides him safety from thefts by its own employee as well as looters.

The card business in Nepal has not gained its momentum as it has in other nations although it has so many advantages. Credit card business prospers in a volume driven nation where consumer financing plays a vital role to boost the

economy of the nation. As stated earlier Nepalese populace have not yet developed their banking habit, they are mostly happy with hard cash and in most of the cases, even our highly educated ones, do not at all have the sagacity regarding credit cards.

The research has been undertaken to determine ways of retaining present customers while attracting future customers as well. The present condition in terms of card issuance and merchant hold of the selected banks NABIL, HBL and SCBNL are analyzed in this research. Nepal Investment Bank, Global IME Bank Limited, Bank of Kathmandu Limited and Laxmi Bank have not been included in the analysis, which is new in the credit card market though it is the market leader in the debit card market. For the analysis of data standard deviation, correlation, and trend analysis are used as statistical tools. However, direct interviews and questionnaires were also held and the outcomes are displayed which reveals the current situation and future prospects of card business in Nepal as well as the problems facing credit card market are also analyzed.

The credit card industry has not been able to fully penetrate the market although the credit card business started in Nepal for more than a decade. Credit card remains the niche area in banking which only few banks have managed to take up. The acquiring side has been badly hurt by the on going slump in the tourism sector and particularly the instable political front. However, the recent market growth of banks in terms of Credit cards and increased banking practice reveal the trend of credit card is increasing .

## **5.2 Conclusion**

For the most part, proper marketing plan, a better strategy and a smooth implementation are the basic ingredients of any successful business. Therefore, to operate any profitable business, lots of homework should be done. Various studies revealed that credit card business is very profitable and is carried out in

very monitored and controllable manner. Though it has been many years since credit card business started in Nepal, it has not been able to take much pace but the growth rate has been satisfactory considering the various situations in the country. The profitability of card business in Nepal cannot be undermined. Due to banks and organizations focusing on cultivating the banking habits for their employees by making salary payments through bank account opening which is a rather win-win situation for all. With it the infrastructure is also building and POS machines are also increasing. Banking habit among people is increasing and debit card market is expanding.

The statistical analysis and outcomes of questionnaire also reveals that credit card business is in optimistic track. The trend of credit card is increasing which becomes evident with the steady and positive growth rate that the banks involved in card business have been able to maintain amidst all the happenings in the country. All banks are increasing the number of their cardholders and merchants so there is high prospect and growing market for credit card business especially acquiring business nowadays. People are being aware on the advantages of holding a credit card, which is gradually progressing in industrialization process and increasing income level among the higher and middle class society. Therefore, the possibilities of other banks or financial institutions entering in this field cannot be underlined.

Risk is the major element of any kind of business. Card business is also a risky business. Though profitability is very high, the default chances from cardholder is also very high because cards are issued merely on the basis of salary sheet and few identification documents unlike in foreign countries where people can be easily traced by their Identification Number or Tax Code. Among the three banks, HBL has the highest risk in case of issuance but in case of merchant NABIL has highest risk in comparison to other banks. Will the card market keep up to current growth rate in terms of card users and merchant or not is predicted through time series analysis by using least square method and the

result shows optimistic results. All the banks show increased number of card users and merchants than previous year.

Therefore, in conclusion, the trend of credit card business in Nepal shows the satisfactory condition and its future prospective are also high.

### **5.3 Recommendations**

#### **5.3.1 Recommendations to the Banks**

Through the research questionnaire asked to different authorized staffs of different outlets and credit cardholder, the following strategies and changes should be adopted by the concerned banks to boost the credit card business in the Nepal.

- In the context of Nepalese banking sectors, banks have not really made any effort on advertisement regarding credit card. Mainly advertisement done through mouth-to-mouth which of course are the right ways to market technical products but the effect of advertisement in this modern era cannot be understated. Therefore, it is high time that bank take up to aggressive advertising, as the awareness level on credit card is very low. People still do not have confidence in cashless transactions.
- Frequent flier points, gift certificates, or cash back as an incentive can be launched for using the card. Rewards are generally tied to purchasing an item or service on the card, which may or may not include balance transfers, cash advances, or other special uses. Networks like Visa or MasterCard have increased their fees to allow issuers to fund their rewards system. However, most rewards points are accrued as a liability on a company's balance sheet and expensed at the time of reward redemption. Discounts for using cards at merchant will also help merchants with their bargaining.
- All the forgeries regarding the card fraud should be understood and bank should educate cardholders and merchant about and the preventive measures that can be taken. Similarly, the banks also must keep abreast of

all sorts of forgeries happening in credit cards around the world and their remedies and solutions.

- Regular trainings for the staff are necessary which the card associations like Visa and Master cards often give. Besides everyone should know the rules and regulations laid out by the card associations.
- Banks need to focus on improving their acceptance infrastructure and provide immediate support in case of problems. After all, these things add to the goodwill of bank, which was also the major reason for cardholders and merchants to acquire credit cards of particular banks.
- Banks need to seriously plan to install POS machine to be widely accepted, though POS system requires heavy investment. Hotels restaurants and travel agencies are also growing business in Nepal, so it is advisable to do immense promotion for the acceptance of credit card and put machine there. As far as cash advance is concerned, each bank needs to install ATM machines that are compatible to accept the globally branded cards. Cash advance facility is a plus to the credit card users and banks are able to take fees for this as well.
- Banks have to introduce more flexible limit cards to reach to larger populace. Banks need to maintain a healthy competition regarding service fees, commissions etc. In credit card, business fees can be levied for almost anything but in doing this the incentive to change cards from the cardholder should not be ignored. Cardholders are very sensitive to the various fees, interest rates and promotions from the findings of this study.
- Banks should study the feasibility of credit card usage in new areas and segments. Innovations and researches needs to be carried out. The strategy and planning department should be the one working more on credit card promotions and business development in Nepal. Banks should take a step ahead in promoting card business in Nepal. For instance, national delegates on official tours, say for instance on regional or international sports events, conferences etc. can be provided with credit cards for the length of stay abroad. Such arrangements will have to be made on an

official basis and the same needs to be communicated to the public thus aiding in gaining goodwill and publicity for the bank.

### **5.3.2 Recommendations to the Merchants**

Merchants should follow these strategies to expand the credit card business in Nepal.

- Advertising is key of success any business. So merchant should advertise a lot. Due to unknowing most people does not go for shopping by using the credit card. Merchant should provide frequent flier points, gift certificates, or cash back as an incentive can be launched for using the card.
- Merchant should provide quality service by providing quick service and should not take unnecessary charges to the cardholders. Merchant should maintain faith with cardholder. Merchant should not manipulate the currency, amount and other manipulation related with card user.
- Sometime there are chances of using fake credit cards or outdated credit cards. Thus merchants should careful while doing credit card business. They should inform to the concern banks about the outdated credit cards in time.
- The merchant may be instructed to call the bank for verification, to decline the transaction, or even to hold the card and refuse to return it to the customer in case of forgery in card.

### **5.3.3 Recommendations to the Cardholders**

To use a credit card in a better way cardholder should consider these factors:

- The cardholders should utilize the credit card properly and should take precautions regarding card fraud.
- According to survey, all the banks provide different types of services such as credit availability, low interest rate and cash advance services. Hence cardholders should be able to grab such opportunities offered by the bank for their own betterment and development.

- The cardholder should provide correct information about self-financial condition. Some banks face non-repayment problems. Hence cardholders should avoid such problem by regular and timely payment of balance.
- If the cardholders lose their card then they should inform the concerned bank in time so that the card will save from the misused.

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## APPENDICES

### Appendix-1

#### Calculation of Standard Deviation and C.V. of Nabil Bank (Card Users)

Fiscal Year	No. Of cardholders(X)	X- $\bar{X}$	(X- $\bar{X}$ ) <sup>2</sup>
2007/2008	5450	-1468	2155024
2008/2009	5940	-978	956484
2009/2010	7200	282	79524
2010/2011	7500	582	338724
2011/2012	8500	1582	2502724
	$\sum X=34590$		$\sum (X- \bar{X})^2=6032480$

$$\text{Mean } (\bar{X}) = \frac{\sum X}{n} = 6918$$

$$\text{Standard Deviation } (\sigma) = \sqrt{\frac{\sum (X-\bar{X})^2}{n}} = 1098$$

$$\text{Coefficient Variance (CV)} = \frac{\sigma}{\bar{X}} = 15.88\%$$

#### Calculation of Standard Deviation and C.V. of HBL Bank (Card Users)

Fiscal Year	No. of cardholders(X)	X- $\bar{X}$	(X- $\bar{X}$ ) <sup>2</sup>
2007/2008	5683	-3152	9935104
2008/2009	7388	-1447	2093809
2009/2010	8852	17	289
2010/2011	10249	1414	1999396
2011/2012	12003	3168	10036224
	$\sum X=44175$		$\sum (X- \bar{X})^2=24064822$

$$\text{Mean } (\bar{X}) = \frac{\sum X}{n} = 44175$$

$$\text{Standard Deviation } (\sigma) = \sqrt{\frac{\sum (X-\bar{X})^2}{n}} = 2194$$

$$\text{Coefficient Variance (CV)} = \frac{\sigma}{\bar{X}} = 24.83\%$$

#### Calculation of Standard Deviation and C.V. of SCB Bank (Card Users)

Fiscal Year	No. Of cardholders(X)	X- $\bar{X}$	(X- $\bar{X}$ ) <sup>2</sup>
2007/2008	7454	-1454	2114116

2008/2009	8200	-708	501264
2009/2010	9020	112	12544
2010/2011	9364	456	207936
2011/2012	10502	1594	2540836
	$\Sigma X=44540$		$\Sigma(X-\bar{X})^2=5376696$

$$\text{Mean } (\bar{X}) = \frac{\Sigma X}{n} = 8908$$

$$\text{Standard Deviation } (\sigma) = \sqrt{\frac{\Sigma(X-\bar{X})^2}{n}} = 1037$$

$$\text{Coefficient Variance (CV)} = \frac{\sigma}{\bar{X}} = 11.64\%$$

#### Calculation of Standard Deviation and C.V. Of Industry (Card Users)

Fiscal Year	No. Of cardholders(X)	X- $\bar{X}$	(X- $\bar{X}$ ) <sup>2</sup>
2007/2008	18587	-6074	36893476
2008/2009	21528	-3133	9815689
2009/2010	25072	411	168921
2010/2011	27113	2452	6012304
2011/2012	31005	6344	40246336
	$\Sigma X=123305$		$\Sigma(X-\bar{X})^2=93136726$

$$\text{Mean } (\bar{X}) = \frac{\Sigma X}{n} = 24661$$

$$\text{Standard Deviation } (\sigma) = \sqrt{\frac{\Sigma(X-\bar{X})^2}{n}} = 4316$$

$$\text{Coefficient Variance (CV)} = \frac{\sigma}{\bar{X}} = 17.50\%$$

## Appendix-2

### Calculation of Standard Deviation and C.V. Of Merchant of Nabil Bank

Fiscal Year	No. Of Merchant (X)	X- $\bar{X}$	(X- $\bar{X}$ ) <sup>2</sup>
2007/2008	900	-250	62500
2008/2009	1050	-100	10000
2009/2010	1200	50	2500
2010/2011	1250	100	10000
2011/2012	1350	200	40000
	$\sum X = 5750$		$\sum (X - \bar{X})^2 = 125000$

$$\text{Mean } (\bar{X}) = \frac{\sum X}{n} = 1150$$

$$\text{Standard Deviation } (\sigma) = \sqrt{\frac{\sum (X - \bar{X})^2}{n}} = 158$$

$$\text{Coefficient Variance (CV)} = \frac{\sigma}{\bar{X}} = 13.75\%$$

### Calculation of Standard Deviation and C.V. Of Merchant of HBL Bank

Fiscal Year	No. Of Merchant (X)	X- $\bar{X}$	(X- $\bar{X}$ ) <sup>2</sup>
2007/2008	708	-125	15625
2008/2009	750	-83	6889
2009/2010	777	-56	3136
2010/2011	926	93	8649
2011/2012	1004	171	29241
	$\sum X = 4165$		$\sum (X - \bar{X})^2 = 63540$

$$\text{Mean } (\bar{X}) = \frac{\sum X}{n} = 833$$

$$\text{Standard Deviation } (\sigma) = \sqrt{\frac{\sum (X - \bar{X})^2}{n}} = 113$$

$$\text{Coefficient Variance (CV)} = \frac{\sigma}{\bar{X}} = 13.53\%$$

### Calculation of Standard Deviation and C.V. Of Merchant of SCB Bank

Fiscal Year	No. Of Merchant (X)	X- $\bar{X}$	(X- $\bar{X}$ ) <sup>2</sup>
2007/2008	762	-164	26896
2008/2009	838	-88	7744
2009/2010	922	-4	16
2010/2011	1005	79	6241

2011/2012	1103	177	31329
	$\Sigma X=4630$		$\Sigma(X-\bar{X})^2=72226$

$$\text{Mean } (\bar{X}) = \frac{\Sigma X}{n} = 926$$

$$\text{Standard Deviation } (\sigma) = \sqrt{\frac{\Sigma(X-\bar{X})^2}{n}} = 120$$

$$\text{Coefficient Variance (CV)} = \frac{\sigma}{\bar{X}} = 12.98\%$$

**Calculation of Standard Deviation and C.V. Of Industry( Merchant)**

Fiscal Year	No. Of Merchant (X)	X - $\bar{X}$	(X - $\bar{X}$ ) <sup>2</sup>
2007/2008	2370	-539	290521
2008/2009	2638	-271	73441
2009/2010	2899	-10	100
2010/2011	3181	272	73984
2011/2012	3457	548	300304
	$\Sigma X = 14545$		$\Sigma(X-\bar{X})^2 = 738350$

$$\text{Mean } (\bar{X}) = \frac{\Sigma X}{n} = 2909$$

$$\text{Standard Deviation } (\sigma) = \sqrt{\frac{\Sigma(X-\bar{X})^2}{n}} = 384$$

$$\text{Coefficient Variance (CV)} = \frac{\sigma}{\bar{X}} = 13.21\%$$

### Appendix-3

#### Calculation of Correlation between NABIL and HBL (Cardholder)

<b>Fiscal Year</b>	<b>NABIL(X)</b>	<b>HBL(Y)</b>	<b>X-<math>\bar{X}</math></b>	<b>Y-<math>\bar{Y}</math></b>	<b>(X-<math>\bar{X}</math>)<sup>2</sup></b>	<b>(Y-<math>\bar{Y}</math>)<sup>2</sup></b>	<b>(X-<math>\bar{X}</math>) (Y-<math>\bar{Y}</math>)</b>
2007/2008	5450	5683	-1468	-3152	2155024	9935104	4627136
2008/2009	5940	7388	-978	-1447	956484	2093809	1415166
2009/2010	7200	8852	282	17	79524	289	4794
2010/2011	7500	10249	582	1414	338724	1999396	822948
2011/2012	8500	12003	1582	3168	2502724	10036224	5011776
	<b><math>\Sigma X=34590</math></b>	<b><math>\Sigma Y=44175</math></b>			<b><math>\Sigma(X-\bar{X})^2=6032480</math></b>	<b><math>\Sigma(Y-\bar{Y})^2=24064822</math></b>	<b><math>\Sigma(X-\bar{X})(Y-\bar{Y})=11881820</math></b>

$$\text{Correlation coefficient (r)} = \frac{\Sigma(X-\bar{X})(Y-\bar{Y})}{\sqrt{\Sigma(X-\bar{X})^2 \Sigma(Y-\bar{Y})^2}} = 0.986$$

#### Calculation of Correlation between NABIL and SCBNL (Cardholder)

<b>Fiscal Year</b>	<b>NABIL(X)</b>	<b>SCBNL(Y)</b>	<b>X-<math>\bar{X}</math></b>	<b>Y-<math>\bar{Y}</math></b>	<b>(X-<math>\bar{X}</math>)<sup>2</sup></b>	<b>(Y-<math>\bar{Y}</math>)<sup>2</sup></b>	<b>(X-<math>\bar{X}</math>) (Y-<math>\bar{Y}</math>)</b>
2007/2008	5450	7454	-1468	-1454	2155024	2114116	2134472
2008/2009	5940	8200	-978	-708	956484	501264	692424
2009/2010	7200	9020	282	112	79524	12544	31584
2010/2011	7500	9364	582	456	338724	207936	265392
2011/2012	8500	10502	1582	1594	2502724	2540836	2521708
	<b><math>\Sigma X=34590</math></b>	<b><math>\Sigma Y=44540</math></b>			<b><math>\Sigma(X-\bar{X})^2=6032480</math></b>	<b><math>\Sigma(Y-\bar{Y})^2=5376696</math></b>	<b><math>\Sigma(X-\bar{X})(Y-\bar{Y})=5645580</math></b>

$$\text{Correlation coefficient (r)} = \frac{\Sigma(X-\bar{X})(Y-\bar{Y})}{\sqrt{\Sigma(X-\bar{X})^2 \Sigma(Y-\bar{Y})^2}} = 0.991$$

**Calculation of Correlation between HBL and SCBNL (Cardholder)**

Fiscal Year	HBL(X)	SCBNL(Y)	X- $\bar{X}$	Y- $\bar{Y}$	(X- $\bar{X}$ ) <sup>2</sup>	(Y- $\bar{Y}$ ) <sup>2</sup>	(X- $\bar{X}$ )(Y- $\bar{Y}$ )
2007/2008	5683	7454	-3152	-1454	9935104	2114116	4583008
2008/2009	7388	8200	-1447	-708	2093809	501264	1024476
2009/2010	8852	9020	17	112	289	12544	1904
2010/2011	10249	9364	1414	456	1999396	207936	644784
2011/2012	12003	10502	3168	1594	10036224	2540836	5049792
	$\Sigma X=44175$	$\Sigma Y=44540$			$\Sigma (X-\bar{X})^2$ =24064822	$\Sigma (Y-\bar{Y})^2$ =5376696	$\Sigma (X-\bar{X})(Y-\bar{Y})$ =11303964

$$\text{Correlation Coefficient (r)} = \frac{\Sigma(X-\bar{X})(Y-\bar{Y})}{\sqrt{\Sigma(X-\bar{X})^2(Y-\bar{Y})^2}} = 0.994$$

**Calculation of Correlation Coefficient between NABIL with Industry  
(Cardholder)**

Fiscal Year	No. Of cardholder NABIL(X)	No. Of cardholder Industry(A)	X- $\bar{X}$	(A- $\bar{A}$ )	(X- $\bar{X}$ ) <sup>2</sup>	(A- $\bar{A}$ ) <sup>2</sup>	(X- $\bar{X}$ )(A- $\bar{A}$ )
2007/2008	5450	18587	-1468	-6074	2155024	36893476	8916632
2008/2009	5940	21528	-978	-3133	956484	9815689	3064074
2009/2010	7200	25072	282	411	79524	168921	115902
2010/2011	7500	27113	582	2452	338724	6012304	1427064
2011/2012	8500	31005	1582	6344	2502724	40246336	10036208
	$\Sigma X$ =34590	$\Sigma A=$ <b>123305</b>			$\Sigma (X-\bar{X})^2$ =6032480	$\Sigma (A-\bar{A})^2$ =93136726	$\Sigma (X-\bar{X})(A-\bar{A})$ = 23559880

$$\text{Correlation Coefficient (r)} = \frac{\Sigma(X-\bar{X})(Y-\bar{Y})}{\sqrt{\Sigma(X-\bar{X})^2(Y-\bar{Y})^2}} = 0.994$$

**Calculation of Correlation Coefficient between HBL with Industry(Cardholder)**

Fiscal Year	No. Of cardholder HBL(Y)	No. Of cardholder Industry(A)	$X - \bar{X}$	$(A - \bar{A})$	$(X - \bar{X})^2$	$(A - \bar{A})^2$	$(X - \bar{X})(A - \bar{A})$
2007/2008	5683	18587	-3152	-6074	9935104	36893476	19145248
2008/2009	7388	21528	-1447	-3133	2093809	9815689	4533451
2009/2010	8852	25072	17	411	289	168921	6987
2010/2011	10249	27113	1414	2452	1999396	6012304	3467128
2011/2012	12003	31005	3168	6344	10036224	40246336	20097792
	$\sum X$ =44175	$\sum A =$ <b>123305</b>			$\sum (X - \bar{X})^2$ =24064822	$\sum (A - \bar{A})^2$ =93136726	$\sum (X - \bar{X})(A - \bar{A})$ =47250606

$$\text{Correlation Coefficient (r)} = \frac{\sum(X - \bar{X})(Y - \bar{Y})}{\sqrt{\sum(X - \bar{X})^2(Y - \bar{Y})^2}} = 0.998$$

**Calculation of Correlation Coefficient between SCBNL with Industry(Cardholder)**

Fiscal Year	No. Of cardholder SCBNL(X)	No. Of cardholder Industry(A)	$X - \bar{X}$	$(A - \bar{A})$	$(X - \bar{X})^2$	$(A - \bar{A})^2$	$(X - \bar{X})(A - \bar{A})$
2007/2008	7454	18587	-1454	-6074	2114116	36893476	8831596
2008/2009	8200	21528	-708	-3133	501264	9815689	2218164
2009/2010	9020	25072	112	411	12544	168921	46032
2010/2011	9364	27113	456	2452	207936	6012304	1118112
2011/2012	10502	31005	1594	6344	2540836	40246336	10112336
	$\sum X$ =44540	$\sum A =$ <b>123305</b>			$\sum (X - \bar{X})^2$ =5376696	$\sum (A - \bar{A})^2$ =93136726	$\sum (X - \bar{X})(A - \bar{A})$ =22326240

$$\text{Correlation Coefficient (r)} = \frac{\sum(X - \bar{X})(A - \bar{A})}{\sqrt{\sum(X - \bar{X})^2(A - \bar{A})^2}} = 0.997$$

**Calculation of Correlation Coefficient of NABIL with HBL (Merchant)**

Fiscal Year	NABIL(X)	HBL(Y)	X- $\bar{X}$	Y- $\bar{Y}$	(X- $\bar{X}$ ) <sup>2</sup>	(Y- $\bar{Y}$ ) <sup>2</sup>	(X- $\bar{X}$ )(Y- $\bar{Y}$ )
2007/2008	900	708	-250	-125	62500	15625	31250
2008/2009	1050	750	-100	-83	10000	6889	8300
2009/2010	1200	777	50	-56	2500	3136	-2800
2010/2011	1250	926	100	93	10000	8649	9300
2011/2012	1350	1004	200	171	40000	29241	34200
	<b>∑X=5750</b>	<b>∑Y=4165</b>			<b>∑(X-<math>\bar{X}</math>)<sup>2</sup>=125000</b>	<b>∑(Y-<math>\bar{Y}</math>)<sup>2</sup>=63540</b>	<b>∑(X-<math>\bar{X}</math>)(Y-<math>\bar{Y}</math>)=80250</b>

$$\text{Correlation Coefficient (r)} = \frac{\sum(X-\bar{X})(Y-\bar{Y})}{\sqrt{\sum(X-\bar{X})^2 \sum(Y-\bar{Y})^2}} = 0.900$$

**Calculation of Correlation Coefficient of NABIL with SCBNL (Merchant)]**

Fiscal Year	NABIL(X)	SCBNL(Y)	X- $\bar{X}$	Y- $\bar{Y}$	(X- $\bar{X}$ ) <sup>2</sup>	(Y- $\bar{Y}$ ) <sup>2</sup>	(X- $\bar{X}$ )(Y- $\bar{Y}$ )
2007/2008	900	762	-250	-164	62500	26896	41000
2008/2009	1050	838	-100	-88	10000	7744	8800
2009/2010	1200	922	50	-4	2500	16	-200
2010/2011	1250	1005	100	79	10000	6241	7900
2011/2012	1350	1103	200	177	40000	31329	35400
	<b>∑X=5750</b>	<b>∑Y=4630</b>			<b>∑(X-<math>\bar{X}</math>)<sup>2</sup>=125000</b>	<b>∑(Y-<math>\bar{Y}</math>)<sup>2</sup>=72226</b>	<b>∑(X-<math>\bar{X}</math>)(Y-<math>\bar{Y}</math>)=92900</b>

$$\text{Correlation Coefficient (r)} = \frac{\sum(X-\bar{X})(Y-\bar{Y})}{\sqrt{\sum(X-\bar{X})^2 \sum(Y-\bar{Y})^2}} = 0.978$$

**Calculation of Correlation Coefficient of HBL with SCBNL (Merchant)**

Fiscal Year	HBL(X)	SCBNL(Y)	X- $\bar{X}$	Y- $\bar{Y}$	(X- $\bar{X}$ ) <sup>2</sup>	(Y- $\bar{Y}$ ) <sup>2</sup>	(X- $\bar{X}$ )(Y- $\bar{Y}$ )
2007/2008	708	762	-125	-164	15625	26896	20500
2008/2009	750	838	-83	-88	6889	7744	7304
2009/2010	777	922	-56	-4	3136	16	224
2010/2011	926	1005	93	79	8649	6241	7347
2011/2012	1004	1103	171	177	29241	31329	30267
	<b>∑X=4165</b>	<b>∑Y=4630</b>			<b>∑(X-<math>\bar{X}</math>)<sup>2</sup>=63540</b>	<b>∑(Y-<math>\bar{Y}</math>)<sup>2</sup>=72226</b>	<b>∑(X-<math>\bar{X}</math>)(Y-<math>\bar{Y}</math>)=65642</b>

$$\text{Correlation Coefficient (r)} = \frac{\sum(X-\bar{X})(Y-\bar{Y})}{\sqrt{\sum(X-\bar{X})^2 \sum(Y-\bar{Y})^2}} = 0.969$$

### Calculation of Correlation Coefficient of NABIL with Industry (Merchant)

Fiscal Year	No. Of merchant NABIL(X)	No. Of merchant Industry(A)	$X - \bar{X}$	$(A - \bar{A})$	$(X - \bar{X})^2$	$(A - \bar{A})^2$	$(X - \bar{X})(A - \bar{A})$
2007/2008	900	2370	-250	-539	62500	290521	134750
2008/2009	1050	2638	-100	-271	10000	73441	27100
2009/2010	1200	2899	50	-10	2500	100	-500
2010/2011	1250	3181	100	272	10000	73984	27200
2011/2012	1350	3457	200	548	40000	300304	109600
	$\sum X = 5750$	$\sum A = 14545$			$\sum (X - \bar{X})^2 = 125000$	$\sum (A - \bar{A})^2 = 738350$	$\sum (X - \bar{X})(A - \bar{A}) = 298150$

$$\text{Correlation Coefficient (r)} = \frac{\sum (X - \bar{X})(A - \bar{A})}{\sqrt{\sum (X - \bar{X})^2 \sum (A - \bar{A})^2}} = 0.981$$

### Calculation of Correlation Coefficient of HBL with Industry (Merchant)

Fiscal Year	No. Of merchant HBL(X)	No. Of merchant Industry(A)	$(x - \bar{x})$	$(A - \bar{A})$	$(x - \bar{x})^2$	$(A - \bar{A})^2$	$(x - \bar{x})(A - \bar{A})$
2007/2008	708	2370	-125	-539	15625	290521	67375
2008/2009	750	2638	-83	-271	6889	73441	22493
2009/2010	777	2899	-56	-10	3136	100	560
2010/2011	926	3181	93	272	8649	73984	25296
2011/2012	1004	3457	171	548	29241	300304	93708
	$\sum X = 4165$	$\sum A = 14545$			$\sum (X - \bar{X})^2 = 63540$	$\sum (A - \bar{A})^2 = 738350$	$\sum (X - \bar{X})(A - \bar{A}) = 209432$

$$\text{Correlation Coefficient (r)} = \frac{\sum (X - \bar{X})(A - \bar{A})}{\sqrt{\sum (X - \bar{X})^2 \sum (A - \bar{A})^2}} = 0.967$$

### Calculation of Correlation Coefficient of SCBNL with Industry (Merchant)

	No. Of merchant SCBNL(X)	No. Of merchant Industry(A)	$(x - \bar{x})$	$(A - \bar{A})$	$(x - \bar{x})^2$	$(A - \bar{A})^2$	$(x - \bar{x})(A - \bar{A})$
2007/2008	762	2370	-164	-539	26896	290521	88396
2008/2009	838	2638	-88	-271	7744	73441	23848
2009/2010	922	2899	-4	-10	16	100	40
2010/2011	1005	3181	79	272	6241	73984	21488
2011/2012	1103	3457	177	548	31329	300304	96996
	$\sum X = 4630$	$\sum A = 14545$			$\sum (X - \bar{X})^2 = 72226$	$\sum (A - \bar{A})^2 = 738350$	$\sum (X - \bar{X})(A - \bar{A}) = 230768$

$$\text{Correlation Coefficient (r)} = \frac{\sum(X-\bar{X})(A-\bar{A})}{\sqrt{\sum(X-\bar{X})^2(A-\bar{A})^2}} = 0.999$$

#### Appendix-4

### Calculation of Projected Value of the Cardholders and Merchants for the Different Banks Involved in Card Business

#### Calculation of Projected Value of Cardholders for the NABIL

Year(X)	No. Of cardholder(y)	x=X-2010	x <sup>2</sup>	xy
2007/2008	5450	-2	4	-10900
2008/2009	5940	-1	1	-5940
2009/2010	7200	0	0	0
2010/2011	7500	1	1	7500
2011/2012	8500	2	4	17000
	$\sum y = 34590$	$\sum x = 0$	$\sum x^2 = 10$	$\sum xy = 7660$

Since  $\sum x = 0$ ,

$$\text{Now } a = \frac{\sum y}{n} = \frac{34590}{5} = 6918$$

$$\text{And } b = \frac{\sum xy}{x^2} = \frac{7660}{10} = 766$$

Substituting the value of a and b in the required line then the equation is

$$Y = a + bx = 6918 + 766x$$

When X=2013, then x=X-2010=3

$$Y \text{ for } 2013 = 6918 + 766 \times 3 = 9216$$

Hence the projected value for 2013 of NABIL is 9216.

When X=2014, then x=X-2010=4

$$Y \text{ for } 2014 = 6918 + 766 \times 4 = 9982$$

Hence the projected value for 2014 of NABIL is 9982.

When X=2015, then x=X-2010=5

$$Y \text{ for } 2015 = 6918 + 766 \times 5 = 10748$$

Hence the projected value for 2015 of NABIL is 10748.

When X=2016, then x=X-2010=6

$$Y \text{ for } 2016 = 6918 + 766 \times 6 = 11514$$

Hence the projected value for 2016 of NABIL is 11514.

When X=2017, then x=X-2010=7

$$Y \text{ for } 2017 = 6918 + 766 \times 7 = 12280$$

Hence the projected value for 2017 of NABIL is 12280.

**Calculation of Projected Value of Cardholders for the HBL**

Year(X)	No. Of cardholder(y)	x=X-2010	x <sup>2</sup>	xy
2007/2008	5683	-2	4	-11366
2008/2009	7388	-1	1	-7388
2009/2010	8852	0	0	0
2010/2011	10249	1	1	10249
2011/2012	12003	2	4	24006
	$\sum y=44175$	$\sum x=0$	$\sum x^2=10$	$\sum xy=15501$

Since  $\sum x=0$ ,

$$\text{Now } a = \frac{\sum y}{n} = \frac{44175}{5} = 8835$$

$$\text{And } b = \frac{\sum xy}{\sum x^2} = \frac{7660}{10} = 1550$$

Substituting the value of a and b in the required line then the equation is

$$Y = a + bx = 8835 + 1550x$$

When X=2013, then  $x = X - 2010 = 3$

$$Y \text{ for } 2013 = 8835 + 1550 \times 3 = 13485$$

Hence the projected value for 2013 of HBL is 13485.

When X=2014, then  $x = X - 2010 = 4$

$$Y \text{ for } 2014 = 8835 + 1550 \times 4 = 15035$$

Hence the projected value for 2014 of HBL is 15035.

When X=2015, then  $x = X - 2010 = 5$

$$Y \text{ for } 2015 = 8835 + 1550 \times 5 = 16585$$

Hence the projected value for 2015 of HBL is 16585.

When X=2016, then  $x = X - 2010 = 6$

$$Y \text{ for } 2016 = 8835 + 1550 \times 6 = 18135$$

Hence the projected value for 2016 of HBL is 18135.

When X=2017, then  $x = X - 2010 = 7$

$$Y \text{ for } 2017 = 8835 + 1550 \times 7 = 19685$$

Hence the projected value for 2017 of HBL is 19685.

**Calculation of Projected Value of Cardholders for the SCBNL**

Year(X)	No. Of cardholder(y)	x=X-2010	x <sup>2</sup>	xy
2007/2008	7454	-2	4	-14908
2008/2009	8200	-1	1	-8200
2009/2010	9020	0	0	0
2010/2011	9364	1	1	9364
2011/2012	10502	2	4	21004
	$\sum y=44540$	$\sum x=0$	$\sum x^2=10$	$\sum xy=7260$

Since  $\sum x=0$ , now  $a = \frac{\sum y}{n} = \frac{44540}{5} = 8908$

And  $b = \frac{\sum xy}{\sum x^2} = \frac{7260}{10} = 726$

Substituting the value of a and b in the required line then the equation is

$$Y = a + bx = 8908 + 726 \times x$$

When X=2013, then  $x = X - 2010 = 3$

$$Y \text{ for } 2013 = 8908 + 726 \times 3 = 11086$$

Hence the projected value for 2013 of SCBNL is 11086.

When X=2014, then  $x = X - 2010 = 4$

$$Y \text{ for } 2014 = 8908 + 726 \times 4 = 11812$$

Hence the projected value for 2013 of SCBNL is 11812.

When X=2015, then  $x = X - 2010 = 5$

$$Y \text{ for } 2015 = 8908 + 726 \times 5 = 12538$$

Hence the projected value for 2015 of SCBNL is 12538.

When X=2016, then  $x = X - 2010 = 6$

$$Y \text{ for } 2016 = 8908 + 726 \times 6 = 13264$$

Hence the projected value for 2016 of SCBNL is 13264.

When X=2017, then  $x = X - 2010 = 7$

$$Y \text{ for } 2017 = 8908 + 726 \times 7 = 13990$$

Hence the projected value for 2017 of SCBNL is 13990.

**Calculation of Projected Value of Industry (Cardholders)**

Year(X)	No. Of cardholder(y)	x=X-2010	x <sup>2</sup>	xy
2007/2008	18587	-2	4	-37174
2008/2009	21528	-1	1	-21528
2009/2010	25072	0	0	0
2010/2011	27113	1	1	27113
2011/2012	31005	2	4	62010
	$\sum y=123305$	$\sum x=0$	$\sum x^2=10$	$\sum xy=30421$

Since  $\sum x=0$ , now  $a = \frac{\sum y}{n} = \frac{123305}{5} = 24661$

And  $b = \frac{\sum xy}{\sum x^2} = \frac{30421}{10} = 3042$

Substituting the value of a and b in the required line then the equation is

$$Y = a + bx = 24661 + 3042 \times x$$

When X=2013, then  $x = X - 2010 = 3$

$$Y \text{ for } 2013 = 24661 + 3042 \times 3 = 33787$$

Hence the projected value for 2013 of credit card Industry is 33787.

When X=2014, then  $x = X - 2010 = 4$

$$Y \text{ for } 2014 = 24661 + 3042 \times 4 = 36829$$

Hence the projected value for 2014 of credit card Industry is 36829.

When X=2015, then  $x = X - 2010 = 5$

$$Y \text{ for } 2015 = 24661 + 3042 \times 5 = 39871$$

Hence the projected value for 2015 of credit card Industry is 39871.

When X=2016, then  $x = X - 2010 = 6$

$$Y \text{ for } 2016 = 24661 + 3042 \times 6 = 42913$$

Hence the projected value for 2016 of credit card Industry is 42913.

When X=2017, then  $x = X - 2010 = 7$

$$Y \text{ for } 2017 = 24661 + 3042 \times 7 = 45955$$

Hence the projected value for 2017 of credit card Industry is 45955.

### Calculation of Projected Value of Merchants for the NABIL

Year(X)	No. Of cardholder(y)	x=X-2010	x <sup>2</sup>	xy
2007/2008	900	-2	4	-1800
2008/2009	1050	-1	1	-1050
2009/2010	1200	0	0	0
2010/2011	1250	1	1	1250
2011/2012	1350	2	4	2700
	$\Sigma y=5750$	$\Sigma x=0$	$\Sigma x^2=10$	$\Sigma xy=1100$

Since  $\Sigma x=0$ , now  $a = \frac{\Sigma y}{n} = \frac{5750}{5} = 1150$

And  $b = \frac{\Sigma xy}{\Sigma x^2} = \frac{1100}{10} = 110$

Substituting the value of a and b in the required line then the equation is

$$Y = a + bx = 1150 + 110 \times x$$

When X=2013, then  $x = X - 2010 = 3$

$$Y \text{ for } 2013 = 1150 + 110 \times 3 = 1480$$

Hence the projected value for 2013 of NABIL is 1480.

When X=2014, then  $x = X - 2010 = 4$

$$Y \text{ for } 2014 = 1150 + 110 \times 4 = 1590$$

Hence the projected value for 2014 of NABIL is 1590.

When X=2015, then  $x = X - 2010 = 5$

$$Y \text{ for } 2015 = 1150 + 110 \times 5 = 1700$$

Hence the projected value for 2015 of NABIL is 1700.

When X=2016, then  $x = X - 2010 = 6$

$$Y \text{ for } 2016 = 1150 + 110 \times 6 = 1810$$

Hence the projected value for 2016 of NABIL is 1810.

When X=2017, then  $x = X - 2010 = 7$

$$Y \text{ for } 2017 = 1150 + 110 \times 7 = 1920$$

Hence the projected value for 2017 of NABIL is 1920.

### Calculation of Projected Value of Merchants for the HBL

Year(X)	No. Of cardholder(y)	x=X-2010	x <sup>2</sup>	xy
2007/2008	708	-2	4	-1416
2008/2009	750	-1	1	-750
2009/2010	777	0	0	0
2010/2011	926	1	1	926
2011/2012	1004	2	4	2008
	$\sum y=4165$	$\sum x=0$	$\sum x^2=10$	$\sum xy=768$

Since  $\sum x=0$ , now  $a = \frac{\sum y}{n} = \frac{4165}{5} = 833$

And  $b = \frac{\sum xy}{\sum x^2} = \frac{768}{10} = 77$

Substituting the value of a and b in the required line then the equation is

$$Y = a + bx = 833 + 77 \times x$$

When X=2013, then  $x = X - 2010 = 3$

$$Y \text{ for } 2013 = 833 + 77 \times 3 = 1064$$

Hence the projected value for 2013 of HBL is 1064.

When X=2014, then  $x = X - 2010 = 4$

$$Y \text{ for } 2014 = 833 + 77 \times 4 = 1141$$

Hence the projected value for 2014 of HBL is 1141.

When X=2015, then  $x = X - 2010 = 5$

$$Y \text{ for } 2015 = 833 + 77 \times 5 = 1218$$

Hence the projected value for 2015 of HBL is 1218.

When X=2016, then  $x = X - 2010 = 6$

$$Y \text{ for } 2016 = 833 + 77 \times 6 = 1295$$

Hence the projected value for 2016 of HBL is 1295.

When X=2017, then  $x = X - 2010 = 7$

$$Y \text{ for } 2017 = 833 + 77 \times 7 = 1372$$

Hence the projected value for 2017 of HBL is 1372.

**Calculation of Projected Value of Merchants for the SCBNL**

Year(X)	No. Of cardholder(y)	x=X-2010	x <sup>2</sup>	xy
2007/2008	762	-2	4	-1524
2008/2009	838	-1	1	-838
2009/2010	922	0	0	0
2010/2011	1005	1	1	1005
2011/2012	1103	2	4	2206
	$\sum y=4630$	$\sum x=0$	$\sum x^2=10$	$\sum xy=849$

Since  $\sum x=0$ , now  $a = \frac{\sum y}{n} = \frac{4630}{5} = 926$

And  $b = \frac{\sum xy}{\sum x^2} = \frac{849}{10} = 85$

Substituting the value of a and b in the required line then the equation is

$$Y = a + bx = 926 + 85 \times x$$

When X=2013, then  $x = X - 2010 = 3$

$$Y \text{ for } 2013 = 926 + 85 \times 3 = 1181$$

Hence the projected value for 2013 of SCBNL is 1181.

When X=2014, then  $x = X - 2010 = 4$

$$Y \text{ for } 2014 = 926 + 85 \times 4 = 1266$$

Hence the projected value for 2014 of SCBNL is 1266.

When X=2015, then  $x = X - 2010 = 5$

$$Y \text{ for } 2015 = 926 + 85 \times 5 = 1351$$

Hence the projected value for 2015 of SCBNL is 1351.

When X=2016, then  $x = X - 2010 = 6$

$$Y \text{ for } 2016 = 926 + 85 \times 6 = 1436$$

Hence the projected value for 2016 of SCBNL is 1436.

When X=2017, then  $x = X - 2010 = 7$

$$Y \text{ for } 2017 = 926 + 85 \times 7 = 1521$$

Hence the projected value for 2017 of SCBNL is 1521.

**Calculation of Projected Value of Industry (Merchant)**

Year(X)	No. Of cardholder(y)	x=X-2010	x <sup>2</sup>	xy
2007/2008	2370	-2	4	-4740
2008/2009	2638	-1	1	-2638
2009/2010	2899	0	0	0
2010/2011	3181	1	1	3181
2011/2012	3457	2	4	6914
	$\sum y=14545$	$\sum x=0$	$\sum x^2=10$	$\sum xy=2717$

Since  $\sum x=0$ , now  $a = \frac{\sum y}{n} = \frac{14545}{5} = 2909$

And  $b = \frac{\sum xy}{\sum x^2} = \frac{2717}{10} = 272$

Substituting the value of a and b in the required line then the equation is

$$Y = a + bx = 2909 + 272 \times x$$

When X=2013, then  $x = X - 2010 = 3$

$$Y \text{ for } 2013 = 2909 + 272 \times 3 = 3725$$

Hence the projected value for 2013 of Industry (merchant) is 3725.

When X=2014, then  $x = X - 2010 = 4$

$$Y \text{ for } 2014 = 2909 + 272 \times 4 = 3997$$

Hence the projected value for 2014 of Industry (merchant) is 3997.

When X=2015, then  $x = X - 2010 = 5$

$$Y \text{ for } 2015 = 2909 + 272 \times 5 = 4269$$

Hence the projected value for 2015 of Industry (merchant) is 4269.

When X=2016, then  $x = X - 2010 = 6$

$$Y \text{ for } 2016 = 2909 + 272 \times 6 = 4541$$

Hence the projected value for 2016 of Industry (merchant) is 4541.

When X=2017, then  $x = X - 2010 = 7$

$$Y \text{ for } 2017 = 2909 + 272 \times 7 = 4813$$

Hence the projected value for 2017 of Industry (merchant) is 4813.

## **APPENDIX-5**

### **Questionnaire 1**

For the Card Members

Please tick mark on the following question answers

Q.1. Gender:

- Male
- Female

Q.2. Age:

- below 18
- 18-25
- 26-30
- above 30

Q.3. Profession:

- Students
- Personal Business
- Service in Public Sector
- Service in private sector

Q.4. What kind of credit card do you acquire?

- VISA
- Master Card
- Diners
- JCB
- Others (*Please specify*)

Q.5. Which of the following bank card do you acquire?

- Standard Chartered Bank
- Himalayan Bank Limited
- Nabil Bank Limited

Q.6 .Why did you choose to acquire a credit Card?

- Market trend
- Need for credit facility
- Convenience and safety
- Others (*Please Specify*)

Q.7. Where do you usually use your Credit Card?

- Restaurant
- Hotel
- Departmental Store
- Travel Agency

Q.8. Which of the following Departmental stores do you usually transact at? (With your credit card)

- Bhatbhateni
- Sale ways
- Namaste Supermarket
- Others

Q.9. How do you come to know about credit card?

- Print Media
- Electronic Media
- Broad casting Media

Q.10. How much satisfied are you with the credit card you possess?

- Very satisfied
- Satisfied
- Neutral
- Unsatisfied

Q.11. Are you satisfied with the limit provided by bank on your credit card?

- Yes
- No
- Neutral

Q.12 .Do you have any idea about fraud in credit card? If yes please tick mark on the types of fraud known to you?

- Stolen cards
- Counterfeit cards
- Magnetic Stripe fraud
- No Idea

Q.13. Do you know about the dispute settlement process in credit cards and the process following disputes?

- Yes
- No

## Questionnaire - 2

For The Merchants

Please tick mark on the following question answers:

Q.1. Type of business:

- Department store
- Restaurant
- Hotel
- Travel Agents

Q.2. Do you have credit card facility?

- Yes
- No

(If yes go to question no. 3 to 8 and if no please go to question no. 9 and 10)

Q.3. What kind of credit card do you accept?

- VISA
- Master card
- Diners
- JCB

Q.4. Who is your acquiring bank?

- Standard Chartered Bank
- Himalayan Bank Limited
- Nabil Bank

Q.5. Why have you chosen to acquire credit card facilities? (You can check more than one option)

- Safety and convenience
- High Demand
- Creating Standard
- Others ( Please specify)

Q.6. What were the reasons for selecting the particular bank? (You can check more than one option)

- Goodwill or the good market position of the bank
- Broad acceptance of card associated acquiring bank
- More existing transactions with the bank
- Others (Please Specify)

Q.7. What is the daily frequency of usage of credit cards?

- < 10 Customers
- 10-20 Customers
- 20-30 Customers
- > 30 Customers

Q.8. Have the business grown after installing credit card facilities?

- Yes
- No

Q.9. If you do not provide credit card facility, what are the reasons for not choosing?

*(You can check more than one option)*

- No or low demand for credit
- High service charge (fees, limit and commissions)
- Long and difficult process of settlement
- Others (Please Specify)

Q.10. Do you have plans of providing credit card facilities?

- Yes
- No

**Thank You !**