# CHAPTER-I INTRODUCTION

#### 1.1 Background

Bank, a financial institution, is playing a vital role in the economic development of the country. The function of banks are not only accepting deposits and granting loans but also, including wide range of services to the different strata of society, to facilitate the growth of trade, commerce, industry and agriculture of the national economy. In the absence and insufficiency of banking and financial facilities, the growth of the economic development becomes slow. However, bank is a resource for economic development, which maintains the self-confidence of various segments of society and advances credit to the people.

Commercial banks are the financial institutions which deal in accepting deposit from persons and institutions, provide interest, formulate capitals and grant loans against securities that help to remove the deficiency of capital. They contribute significantly in the formation and mobilization of internal capital and developmental effort. They also furnish necessary working capital according to the requirements for trade, commerce, industry and even to agriculture sectors. They also perform agency function to make life easier and play an important role in credit creation. Besides, they also provide technical and administrative assistance to industries, traders and business enterprises. So they are being the means for the unlitment of society. Their main objectives are to earn reasonable profit as reward for their service by proper mobilization of idle resources collecting them from different scattered sources, in particular productive sectors. They help to reduce the probability of inflations by increasing the interest rate while economy is in boom period and reduce the interest rate so that investors are interested for investment in case of depression period. More specifically, they collect required capital through float (issue) of different types of securities, specially shares and debentures.

According to Nepal Commercial Bank Act 2031 B.S., "A commercial Bank is one which exchanges money, deposits money, accepts deposits, grants loans and performs commercial banking functions and which is not a bank meant for cooperation, agriculture, industries or for such specific purpose" (Nepal Commercial Bank Act, 2031 BS).

Economic liberalization process in Nepal started in 1980s. Competition in the Nepalese banking industry has been fierce since then as the government allowed foreign bank to form joint ventures with local partners. Following this there has been significant increase in the number of financial institutions in Nepal. Now there exist 26 commercial banks, 63 development banks and 77 financial institutions and 15 micro development banks. The mushrooming of the banking sector in such a short period has created tough competition between the banks.

In an intense competition like this, the organization must come with distinct marketing strategies to position its product in the market. As most of the financial institutions are in the market with the similar kind of product offering and to cater the same market, market segmentation can be the best approaches to position its product in the market.

In the market-segmentation approach, the total market is viewed as being made up of several smaller segments, each different from the other. This approach enables businesses to identify one or more appealing segments to which they can profitably target their products and marketing efforts

#### **1.1.1 Consumer Banking**

Among the most important of all financial markets is the markets providing saving instruments and credit to individuals and families, which is also known as consumer banking. It is regarded as one of the most important banking product because every one, regardless of profession or social status, will enter at one time or another during his or her lifetime. The individuals and families are not only the sources of loan able fund flowing in the financial markets but also is one of the largest borrowing groups in the entire financial system.

Retail banking is, quite broad in nature - it refers to the dealing of commercial banks with individual customers, both on liabilities and assets sides of the balance sheet. Fixed, current / savings accounts on the liabilities side; and mortgages, loans (e.g., personal, housing, auto, and educational) on the assets side, are the more important of the products offered by banks. Related ancillary services include credit cards, or depository services. Today's retail banking sector is characterized by three basic characteristics:

- 1. Multiple products (deposits, credit cards, insurance, investments and securities);
- 2. Multiple channels of distribution (call centre, branch, Internet and kiosk); and
- 3. Multiple customer groups (consumer, small business, and corporate).

There is a significant competition in the financial services market as low interest rates have increased the affordability of credit and deregulation has significantly broadened the number of consumer banking product providers.

#### 1.1.2 Retail Banking in Nepal

Retail banking in Nepal is not a new phenomenon. It has always been prevalent in Nepal in various forms. For the last few years it has become synonymous with mainstream banking for many banks. The typical products offered in the Nepalese retail banking segment are housing loans, consumption loans for purchase of durables, auto loans, credit cards and educational loans and various deposits like Saving, current and fixed term deposits. The consumer banking products are marketed under attractive brand names to differentiate the products offered by different banks. As the Report based on unaudited figures submitted by Nepal Rastrya Bank shows that total deposit mobilization of commercial banks till first two months of 2066/67 amount to Rs. 566.91 billion.

Within the retail segment, the housing loans had the least gross asset impairment. In fact, retailing make ample business sense in the banking sector. While new generation private sector banks have been able to create a niche in this regard, the public sector banks have not lagged behind. Leveraging their vast branch network and outreach, public sector banks have aggressively forayed to garner a larger slice of the retail pie. By international standards, however, there is still much scope for retail banking in Nepal.

#### **1.2 Statement of the Problem**

Mass marketing refers to treatment of the market as a homogenous groups and offering the same marketing mix to all customers. Mass marketing allows economies of scale to be realized through mass production, mass distribution and mass communication. The drawback of mass marketing is that customer needs and preferences differ and the same offering is unlikely to be viewed as optimal by all customers. If a firms ignored the differing customer need another firm likely would enter the market with a product that serves a specific group, and the incumbent firms would lose those customers.

Target marketing on the other hand recognizes the diversity of customers and does not try to please all of them with the same offering. The first step in target marketing is to identify different market segment and their needs.

The commercial banks are established with innovation management style but it is still to incorporate the target marketing strategy. The consumers banking product are designed with mass marketing concepts. The product should be segmented specified to meet the customers' requirement. As the different geographic segments differ demographically, the products should also be made accordingly to meet theirs requirement.

The financial products available today in the market are made to cater the same market segments. There exists marginal difference in the products.

### **1.3 Research Question**

The research attempts to answer two questions:

What are the major benefits attributes in consumer banking for benefit wise market segmentation?

Does there exist the market segment that the financial institutions need to cater?

#### **1.4 Research Objectives**

The main objective of this study is to identify the current market segments of the consumers banking. To support its main objectives, the study is proposed to meet the following specific objectives:-

- 1. To examine the market segments in consumer banking.
- 2. To analyze the attributes of segments in consumer banking in brief.
- 3. To identify the new segments.
- 4. To examine the target segments of different commercial banks.

## 1.5 Significance of the Study

The study will be significant:

1. To banks, to design the product and carry out the marketing activities as per the market segments. The research will also be beneficial to improve the service delivery mechanism of the banks.

- 2. To customers, to identify the product that best satisfies their needs.
- 3. To researchers who are interested in this topics.

## **1.6 Limitations of the Study**

No study can be free from its own limitations. So, the present study has also some limitations. Reliability of statistical tools used and lack of research experience are the major limitations and some other limitations can be enlisted as follows:

## 1. Limited Scope of the Study

This study is simply presented to fulfill a partial requirement of M.B.S. programme.

## 2. Coverage of time Period

The study will be confined to current customers of the banks

#### 3. Time constraints

The study was prepared within the time period specified by Tibhuvan University and submitted with in a time constraint.

# 4. Sample size

There are 26 commercial banks in Nepal. Due to time & resource constraints, only few banks and financial institutions have been selected as samples in the study. Thus the finding of this research does not represent the whole banking and financial facts and figures of Nepal.

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

The study is organized into the following five different chapters:

**Chapter-I: Introduction** The first chapter incorporates general background, statement of the problem, objective of the study, significance of the study, research methodology and organization of the study.

**Chapter-II: Review of Literature:** This chapter includes mainly the conceptual and theoretical review and review of related studies. In this aspect it includes review of various acts, rules and regulation on capital market, journals, magazine, articles, unpublished thesis.

**Chapter-III: Research Methodology:** This chapter deals with research methodology used in the study. It includes research design, sources of data, data collection techniques and tools of data analysis.

**Chapter-IV: Data Presentation and Analysis:** This chapter deals with the analysis of primary and secondary data using various tools and techniques.

**Chapter-V: Summary, Conclusion and Recommendation:** This chapter states the summary, conclusion and recommendation of the study.

# CHAPTER-II REVIEW OF LITERATURE

The present research aims to analyze the market segment of the consumer banking products. For this purpose, it needs to review related literatures in this concerned area which will help us to get clear ideas, opinions and other concepts. 'What other has said? What other has done? And what other have written?' These all and other related questions are reviewed which has provided useful inputs in this research work. This chapter emphasizes about the literatures which were concerned in this connections. Therefore, in this chapter conceptual framework given by different authors and intellectuals of this area, books, journals, research works, and previous thesis related to marketing.

#### **2.1 Conceptual Framework**

Market segmentation is one of two general approaches to marketing; the other is mass-marketing. In the mass-marketing approach, businesses look at the total market as though all of its parts were the same and market accordingly. In the market-segmentation approach, the total market is viewed as being made up of several smaller segments, each different from the other. This approach enables businesses to identify one or more appealing segments to which they can profitably target their products and marketing efforts. Market segmentation can be defined as the recognition of the diversity in demand among customers and the clustering or participation of their needs into reasonable homogenous subgroups, as well as the rational alignment of product /services /marketing /delivery channels to meet customer's coherent needs (Thomas Thamara, ABA Bank Marketing, July/August 2008).

### 2.1.1 Bases for Segmentation

## Geographic

Geographic segmentation divides the market into different geographical units for instance nations, states, regions, counties, cities or neighborhoods. Geographic variation in weather, topography, water, soil etc offer segmentation opportunities.

Geographic segmentation dimensions are typically grouped into market scope factors and geographic market measures (Payne, 2004).

Market Scope factors include a consideration of where the markets to be served are located: this may be local, national, regional or global. Geographic market measures include examination of population density, climate-related factors, and standardized market areas. Geographic measures are especially important in the selection of specialized mass communications media. This is used to determine relative sales potential in different geographic areas.

#### Demographic

The variables such as age, family size, family life cycle, gender, income, occupation, education, religion, race, generation, nationality, social class are considered in demographic segmentation, it is the most popular bases for segmenting the market. One reason is that consumers want preferences and usage rates are often associated with demographic variables. Another demographic variable are easier to measure. Even when the target market is described in non demographic terms (say, a personality type), the link back to demographic characteristics is needed in order to estimate the size of the target market and the media that should be used to each it efficiently. (Koter, 2000)

## Economic

Demand results form a combination of ability to buy and willingness to buy. (Buell, 1984). Economic factor or Income the most useful means of segmenting the market. Income wise segmenting the market is practiced in such product and service categories as automobiles, boats, clothing, cosmetics, housing and travel. However Income is not considered as a sole factor while segmenting the market.

#### Social and Psychological

As the people within the same demographic group can exhibit very different psychographic profiles social and psychological segmentation suggests dividing the market into different groups on the basis of lifestyle or personality and values. Martineau found social class to be a better indicator than income for segmenting markets for saving and investment, travel, and home furnishing. (Martineau, 1958). Personality differences account for the great variety in the demand for the items reflecting self expression. Social and psychological segments are easier to identify than they are to measur (Buell, 1984).

#### **Benefit Segmentation**

The market is segmented according to the benefit they seek. The benefit wanted from the product may also differ from people to people. Benefit segmentation assumes that the benefits that people are seeking from a given product or services are the basis reasons why they buy the product. Identifying a segment seeking a common benefit permits the service provider to develop a relevant offering. For example various benefits are sought within the retail banking market. One segment seeks large, well known banks which offer a full range of service for varying needs. Another segment looks for advantageous loans with borrowing easily available at low interest. A third segment may seek high savings interest with quick service and one stop bank with a wide variety of services, convenient hours and quick service. A bank can direct its service to satisfying one or more of these segments and gain a reputation for offering a distinct package (Payne, 2004).

Essentially, this procedure for predicting purchase behavior is based on a theory that holds that an attitude toward a brand is made up of beliefs about the brand's attributes combined with the importance given those attributes. Thus, "a consumer's attitude toward a particular brand in a certain product category is...... hypothesized to be a function of the relative importance of each of the relevant products attributes and the consumer's beliefs about the brand on each attribute" (Fishbein 1967) A score is obtained by scaling the extent to which each brand is perceived as possessing certain characteristics and the importance attached to each by the consumers. Based on the scores for each brand, a prediction is made of the individual's preference ranking.

#### **2.1.2 Selection of best bases for segmentation**

Adrine Payne in his book the Essence of Service Marketing has said the identification of the segmentation bases involves an element of creativity. Those marketing services should constantly be considering alternative ways of segmentation the market and seeking ways in which they can create differential advantage over their competitors. This stage of the segmentation process should result in the selection of the best base for segmentation. The starting point is to list the potentially useful segmentation options. Then the list is to be evaluated and prioritized for detailed analysis. Once prioritized the list of possible bases it should be refined to develop a short list of segmentation bases for further consideration. As a part of the process each segmentation base needs to be broken down into appropriate individual segments.

One approach which he has stated for choosing the best base(s) for segmentation involves listing the key segmentation bases and the various subdivisions into which segments can be broken down and developing a profile of each market segment to identify those areas which are worthy of more in depth investigation. The identification and selection of a particular market segment for targeting with a distinctive service offering may depend on many factors, but the size of the segment, its special needs, the extent to which these needs are already being met by the service company or by competitors, and whether the service company has the resources available to meet the service requirement are particularly important.

Philip kotler has pointed out the following five main criteria for selection of Market segments

- 1. Measurable: the size, purchasing power and the characteristics of the segments can be measures
- 2. Substantial: The segments are large and profitable enough to serve. A segment should be the largest possible homogeneous group worth going after with tailored marketing program.
- 3. Accessible: The segments can be effectively reached and served.
- 4. Differentiable: The segments are conceptually distinguishable and respond differently to different marketing- mix elements and programs.
- 5. Actionable: Effective programs can be formulated for attracting and serving the segment.

### 2.1.3 Segmentation Models

There are two major ways of segmenting a market according to the level of precision you require and the type of data and analysis available about your customers. In finding different market segments it is important to keep in mind that you will have to use the segments. Important question are there how are you going to place customers into each group and how are you going to track and target each group. The two major approaches research designs to identifying and measuring differences between market segments are a priori design and cluster based research design.

### A Priori Segmentation

A priori design starts by selecting the basis for segmentation using such variables as demographics and then proceeds to collect data such as product usage or ownership, media habits and attitudes. The result shows how the segments vary with respect to such variables as purchasing behavior, overall size and worth and media exposure. This segmentation model selects in advance both the basis for segmentation and the set of descriptors to be used. Thus the number and type of segments are predetermined. Further certain assumptions are made about the relationships between the basis for segmentation and the chosen descriptors.

A priori segments are easy to define and easy to target with advertising and media. For some sectors, for instance technology, there are such strong relationships between age and use, that a priori segments are all that are needed. A priori segmentation are also the simplest segmentation to apply and use. A database can be flagged or sorted on the pre-existing data and that data used to drive sales and marketing campaigns. In most a priori segmentation studies, the information obtained is relatively useful, easy to obtain and helpful in obtaining a better understanding of the marketplace. It is particularly useful to advertising managers in identifying media vehicles that can best communicate with the firm's most promising customers.

It should be recognized that a priori studies may not reveal in any precise sense the identity of groups that possess different purchase behavior patterns with respect to a particular product. The descriptors used may not explain the variation between the various segments with respect to the data sought.

### **Cluster-Based Segmentation**

When market research is used for usage studies, it is also often accompanied by cluster based segmentation. The cluster analysis groups respondents on the basis of their similarities with reference to some set of selected variable, the most common of which deals with attitudes, needs, benefits wanted and lifestyle. What do customers think or believe about the category in question. This is commonly achieved through banks of agree- disagree scales or ratings out of 5, 7 or 10. The aim of these studies is not just to understand commonalities in opinion, but also what makes one group of users different form another. To understand how attitudes affect purchase statistical techniques such as cluster analysis are used where people with similar attitudes are combined together. For instance grouping those for whom the environment is important separately form those who think price is more important. The information can then be used to target groups by what they think and how they feel, rather that just who they are. This is particularly valuable in determining branding strategies and keeping a brand in tune with consumers.

#### 2.1.4 Approach of Segmentation

#### **Concentration on Larger Segments**

Concentration on larger segments attempts to serve all customer groups with the product. It designs a product and a marketing program that will appeal to the broadest of buyers. It relies of mass distribution and mass advertising. (Kotler 2000). The advantage of concentrating on the larger segments is that it offers the greater sales potential.

#### **Concentration on Secondary or Smaller Segments**

In concentration on secondary or smaller segments a firm attempts to serve all the needs for particular customer group. Concentration on Secondary or Smaller segment offers less potential sales volume, but usually there are fewer competitors. Concentration on single or smaller segments involves higher than the normal risks.

## **Serving Multi Segments**

The firm specializes in making a certain product that it sell to several segments. In serving smaller segments the firm gains a strong reputation. Multi segment strategies are common in the market where the same product is sold to all segments (Buell, 1984)

# 2.2 Review of Related Study Both Nepalese Context and International Context

### 2.2.1 Review of Nepalese Article

In the article Profiling Nepali consumer the writer gives an overview of the Nepali consumers. The writer has started his article by stating Nepal to medium sized country, if not big, with the population of 30 million. He has firstly pointed out the diversity of Nepali market at multiple levels: religious, ethnic and caste differences, religious diversities, rural urban divide, different sources of income (including domestic/foreign) and education level. He has pointed out 8 profiles of the Nepali consumers.

High trail rate: The Nepali consumers are they are very eager to try new products. So launching a product is not a problem: you may have very good sales immediately after the launch of your product. But soon after the launching phase so over the sales are most likely to decline unless you come out with something innovative in the product. Thus, due to this reason the existing players should have the patience to wait for the tide of new entrant to slow down. If you are one of the existing competitors and your rival launches a new product, then it would be a good idea for you to launch a new variant of your product.

Kathmandu Centered: Kathmandu valley has been the centre of attraction for all kinds of marketers as the three districts of the valley capital account for some 3 million people or nearly 10 percent of the total population. The average income level of the people in Kathmandu valley is much higher than that of the average village people. Price Conscious: The writer has termed the Nepali consumer to price conscious by showing the impressive sales of Chinese goods as an example. He has categorized the high income buyers to be price conscious. 80 percent of the consumers are price conscious and 20 percent on the consumers are quality conscious.

Predominantly Urban: The market is Nepal is predominantly urban even though the villages offer very good market in terms of number of consumers as about 84% of the population of the country is living in rural areas because of fact that rural number is not en cashable as it is not cash rich.

Remittance Dependent: More particularly the rural consumers, but to some extent also the urban consumers, of Nepal id dependent heavily on remittance form his/her family members who have gone abroad for work. The remittance dependence is the highest in case of the western development region, which includes Pokhara and around.

Media Influence: The practicing marketers say that the TV has the highest influence in the mind of the Nepali consumer, followed by print media and the word of mouth. Media effectiveness may also have something to do with the literacy rate and education level. TV is effective also for illiterate people. The print ads (including posters and hoardings) presented with the help of impressive, easily recognizable images are equally effective.

Influence of Freebies: The Nepali consumers are very much influenced by the freebies offered. That explains why there is a next scheme introduced immediately after one previous scheme is completed. Products which are quite ordinary can be sold easily if the free gifts is carefully selected looking at the profile of the consumer targeted.

Young: According to the writer 40 percent of the population is age below 14 years and another 19 percent is aged between 15/24 years, according to the 2001 census, 60 percent of Nepal's population is aged less than 25 years. This also shows that products targeted to the young people will have better prospects if presented in a carefully planned manner.

#### **2.2.2 Review of International Journals**

# 2.2.2.1 Benefit Segmentation by Factor Analysis: an Improved Mentor of Targeting Customers for Financial Services by Raj Singh Minhas and Everett M. Jacobs

The research was undertaken to investigate and correct one of the great shortcoming in market segmentation as practiced by bank and building societies: they typically use geographic, demographic, socio-economic and psychographic characteristics to segment their target markets. But these variables have been found to be poor predictors of future buying behaviors; particularly in marketing financial services. They have analyzed both the limitations of traditional methods of market segmentation and the advantages of benefit segmentation.

The data for the study were obtained form a mailed questionnaire to 2000 addresses. In all 408 replies were received ( an effective response rate of 20.4 percent ), and 338 responses were eligible for analysis.

The key assumptions of the research were that the variables analyzed were not inclusive among each factors. It is believed that that the major condition for successful segmentation is that the segmentation criteria must be relevant to the purchase criteria of customers. It is precisely the linking of customer groups with the benefits they seek that makes benefit segmentation such a useful and dynamic marketing technique.

By examining the strengths, the financial institution can pinpoint those benefit markets they are most likely to appeal to. The financial institution can Pinpoint their weakness and they can develop benefits to appeal to previously unreachable markets. By operating in this manne, the financial institutions should be able to market more effectively and efficiently to one or more groups of customers than is possible using more traditional methods of market segmentation.

# 2.2.2.2 Market Segmentation in the Indonesian Banking Sector: the Relationship between Demographics and Desired Customer Benefits by Lizar Alfansi and Adrian Sargeantment

This study was conducted for determining consumer perception of wide range of banking benefits, within the context of the emerging Indonesian economy. The intention of this study is to explore any relationships that might exist between desired banking benefits and demographic characteristics and to explore the implication thereof for the marketing of Indonesian banks. The research was conducted into three stages. In the first stage a comprehensive review of the literature relating to banking benefits was undertaken, the aim of which was to delineate benefit variables that should be included in the subsequent primary study. In the second stage, a series of personal interviews were conducted to determine the extent to which this initial list was appropriate to the Indonesian banking context and whether modification/ additions might be necessary. In depth interviews were conducted to ascertain views in respect of the categories of benefits sought by customers. In the third stage of the study, a quantitative study was initiated to identify any potential linkages between desires consumers benefits and demographic characteristics such as age gender, income and marital status.

The study have shown eight dimensions of the Indonesian banking service viz Core product, augmented product, tangibility, promotional incentives, rates, convenience, security, and technology. The study also reveled three clusters Cluster 1- Relationships Cluster 2-Cost sensitive Cluster 3-Service focused

The study was able to conclude that the knowledge of the benefit bundles demanded may assist in the development of customer retention activity, the opportunity to target consumers in acquisition activity who may be looking for a specific benefit set is minimal. The results suggested that varying promotional message could be targeted at each employment category. The results also suggest that the use of promotional activities to encourage the opening of new accounts could be counter productive. It is interesting to note that consumers driven by the need for promotional rewards would also tend to be those consumers most concerned with service cost. This suggest that while this category of consumer might be tempted into opening accounts by promotional incentives, they are also likely to be the most mercenary thereafter, moving their business around to the provider of lowest cost. The cluster analysis suggests that for the majority of new and existing customers, a high degree of importance would appear to be places on a wide range of variables, such as:

- 1. Reputation
- 2. Speed of delivery
- 3. Accuracy of transactions
- 4. Honesty of staff
- 5. Bank facilities
- 6. The quality of interaction with staff

# 2.2.2.3 Assessing the Implementation of Market Segmentation in Retail Financial Services by Maureen Meadows and Sally Dibb

The research examines the application of market segmentation in business situations has identified significant implication barriers. It has address the underlying cause and question the relationship which this has with implementation difficulties. The research has dealt with the companies approaches to segmentation in qualitative sense, rather than attempt to quantify the variation. The researcher has considered four quite different organization: one traditional high street bank, one non traditional high street bank, one telephone banking operation and one charge card company. The paper begins with market segmentation literature, highlighting the implementation stage of the process.

The analysis was undertaken using a case study approach. This involves the indepth study off a particular subject using a combination of personal observation, interviews and secondary data. The information were most generated broadly form an exploratory and explanatory nature. The secondary data were gathered from a range of general industry reports and a variety of internal documentation form case companies. Four case studies were reported in the research, three of which are from the retail banking sector. The primary data were based on a series of in-depth semi structured interviews with a number of senior managers at major financial service institutions. Although the focus of the research concerns market segmentation of the credit card business, it is also explains the context in which market segmentation takes place.

The broad objectives of the research were to explore whether the number and size of segmentation barriers are consistent for the different organizations and to establish whether the presence of fewer barriers translates into more widespread and sophisticated segmentation activity. In more detail the researches objective were to;

- 1. Consider the manner and degree to which market segmentation is used by case companies, with a particular emphasis on the provision of charge/credit cards.
- 2. Identify barriers which may affect the implantation of market segmentation and to consider how these barriers vary for different businesses.

3. Examine whether the presence of particular barriers impacts on the sophistication of market segmentation application.

The case studies show that all companies taken as a case draw heavily on segmentation ideas in their marketing effort. Most of the bank provide a range of products to their customers, and are therefore looking for a segmentation approach that can be applied to the whole customer relationship, not just to one product or service. The research has also proved that the development of a superior database can apparently impact on the type of segmentation activities. The companies use customers' data to group customers segments to develop and implement a segmentation marketing strategy and identify the potential segments.

# 2.2.2.4 Benefit Segmentation Using Service Quality Dimensions by Gardon H.G McDougall and Terrence J. Levesque

The objective of this research is to attempt to identify segments for financial institutions based on the consumer's perceived importance of the major dimensions of service quality and the other product offerings. The research answers two questions. Can the major service quality dimensions be used to identify segments? If yes what are the profiles of these segments?

For the research a questionnaire was prepared by previous empirical research in service quality and financial institutions. Nine items are used to measure the important attributes of financial institutions from the consumer's view. The nine attributes are as follows

#### Outcome

Perform service right the first time Have competent employees who can perform the services

#### Process

Provide prompt service Provide courteous, friendly service Know consumers and understand their needs

## Tangibles

Provide visually appealing facilities

#### **Competitive interest rates**

Offers competitive interest rates on savings accounts

#### Convenience

Offer convenient branch locations and ATMs Offer convenient hours

The information regarding the performance of and satisfaction with main financial institution: switching attitudes financial product used and demographics were collected.

For the analysis a cluster based and post hoc segmentation was undertaken. A discriminate function has been estimated for evidence concerning the differences between the segments and to identify the most influential ratings among the nine ratings.

In demographic analysis five demographic variables gender, age income, home ownership and education were examined to determine if there is any significant differences between the two segments. The research revealed that only two minor differences were found with respect to age, proportionally younger customer belonged to the convenience segments. With respect to education, proportionally more customers with an undergraduate degree as opposed to any other education qualification belonged to the convenience segment.

Based on importance measures that reflected the outcome and process dimensions, the research identified two distinct segments, the performance segment and convenience segment. The most important factor in the performance segment is got it right the first time and the conveniently location stood as the most important factor in the convenience segment.

# 2.2.2.5 Market Segmentation Strategies of Multi Product Firms by Ulrich Doraszelsk and Michaela Dragansks

In this paper they have investigated how consumer's preferences, firms cost structures and the strategic interaction of firms in the product market together shape firms market segmentation decisions. They have identified four key determinates of market segmentation, namely the degree of fit, the degree of misfit, the intensity of competition and the fixed cost of offering an additional product. They have assumed that the product attributes are given and added two parameters to enable them to capture the tradeoff between general purpose and tailored products. One parameter represents fit, i.e., how much a consumer may gain from market segmentation, the other misfit, i.e., how much the consumer may lose. In the results they have identified four key determinants of market segmentation, namely the degree of fit, the degree of misfit, the intensity of competition, and the fixed cost offering an additional product. They have provided conditions that the market segmentation occurs via niche firms and market segmentation occurs via full line firms.

# 2.2.2.6 Mapping Customer Segments for Personal Financial Services by Tina S. Harrison

The research has started by stating the current situation of financial market. It states that the intense competition has created importance of identifying profitable customer groups and recognizes the importance of concentrating on the needs of homogeneous groups within a larger heterogeneous market.

The researcher has used both the two methodologies of segmentation. The first of these deals with a prior approaches to segmentation whereby a basis for segmentation is chosen, such as product ownership or usage, and results from the survey provide estimates of segment size and the characteristics in terms of demographics, socio-economies etc. The study has also used the second approach, which has gained much less attention, post hoc segmentation. This method involves dividing a heterogeneous market into segments based on their homogeneous respondent to survey.

The research focus on the financial to services customer and the perception, attitudes and motivation he/she has towards financial services. The study has attempted to answer the essential information financial institutions are seeking who are likely to be the profitable customers and how can they be located?

For the study individuals from relatively heterogeneous population were interviewed in detail about a wide range of financial services and products. To test the variable several aspects of consumer buyer behavior have been developed as segmentation variables. Prime variables have been listed below.

- 1. Individuals' own perceived knowledge and understanding of financial services
- 2. Perceived confidence and ability in dealing with financial matters
- 3. Expressed level of interest (involvement) in financial services.

The variables were measured on the basis of the individuals' own selfassessment of how they perceive their levels of knowledge, confidence and interest to be. The rating scale of 1 to 10 is used.

The findings highlight four financial services that customer segments based on their level of knowledge and understanding of financial services and on their degree of financial maturity. The segments are labeled financially confused, apathetic minimalists, cautious investors and capital accumulators. Each segment is characterized by particular attitudes towards financial services, perceptions of financial services, financial services behavior and also degree of future orientation. There are also differences in financial objectives and motivation and the implication each segments has for potential profitability. A brief description of each segments characteristics is a follows

Financially confused: This group is characterized by a low level of perceived knowledge and a low level of financial maturity. Thus, individuals in this segment have a nominal involvement with financial services. The majority of products used by this group tend to be foundation products such as cheque accounts, savings, loans and mortgages. The level of interest is very low and they fell they do not need to know very much because they believe that they are unlikely to ever have a need for may financial products.

Apathetic Minimalist: this segment is characterized by a fairly low level of perceived knowledge of financial services, although a quite high level of financial maturity is exhibited. They own fairly complex and high involvement financial services such as stocks and shares and unit trusts.

Cautious Investors: In terms of the use of foundation products there is wide usage by this group, including loans. They are not afraid of loans and have no fear of debt; neither do they have any strong attitudes towards loans and the use of them. This segment would look for the cheapest alternative if they had to borrow money. This would usually involve using interest free credit form a retailer, borrowing form an insurance policy or using a charge card.

Capital Accumulators: This segment is characterized by a very high level of perceived knowledge and understanding of financial services as well as a high degree of financial maturity. Thus the individuals in this segment have complex high involvement financial products such as unit trust about which they fell very knowledgeable and confident. In general, this segment exhibits very selective use of the foundation products with a distinct lack of credit/loan usage. This segment is comprised largely of individuals who are either in or near retirement age, have finished paying their mortgage and have no dependents.

#### 2.3 Review of Bank and Financial Institution Act 2063

The present Bank and Financial Institution Act was enforced in 2063 to regulate the commercial and finance companies under one umbrella act. The act has provided several provisions regarding the functions of the bank and finance company. This act provisioned bank and finance companies to issue not less than 30% of total its equity shares to general public. Different provisions regarding deposits and loans have been made. Following are the key points noted regarding deposits and loans:

- 1. Collect deposit and provide loans with or with out collateral.
- 2. Provide loans as per Nepal Rastrya Bank.
- 3. Provide loans in partnership with other financial institutions after making contract for division of the collateral.
- 4. Can accept deposit by electronic means like telephone, fax, computer or magnetic tape as per instruction by Nepal Rastrya Bank.
- 5. Can accept and issue credit card, debit card, charge card and other electronic cards or appoint an agent as per Nepal Rastrya Bank.

This act has restricted the financial institutions to carry out some of the activities for A B and C category financial institutions. The act mentiones that Nepal Rastrya bank can instruct the financial institution regarding the interest rates on deposits.

### 2.4 Reviews of Nepal Rastra Bank Act 2058

One of the major objectives of the Nepal Rastra Bank Act is to stimulate industrial development by mobilizing capital for the development of the nation. For this purpose this Act has established the Nepal Rastra Bank as a central bank of Nepal in order to regulate banking as well as financial transaction of the country. Different provision relevant to the capital market has been made under this Act. The Act empowers the NRB with approval of Government of Nepal to issue saving certificates, saving stamps and other bonds. It prohibits any person, firm, company or organization from collecting deposits, supplying loans or issuing any kind of debentures without prior approval of the bank. This Act empowers the NRB to prescribe interest rates to be paid on deposits accepted, loan supplied or debentures issued or to be charged on loans granted. Similarly it empowers the bank to inspect, supervise or caused to be inspected every commercial bank and financial institutions. It also empowers the bank to act as an agent of the government for the purpose of selling and purchasing of securities and promissory notes.

Under this act the bank is empowered to provide guarantees for loans obtained by commercial banks, financial institutions and cooperatives societies and also in respect of shares of shares debentures and cash deposits certificates issued by any of these bodies. This Act empowers the bank to impose a variety of sanctions against any commercial banks or financial institution, which contravene the act, or any rules and regulations or directives made under it. Nepal Rastra bank also set capital requirement for various financial institution.

# 2.5 Research Gap

This research is aiming to analyze the market segment of retail banking products. Through this research we are trying to recognize the diversity in demand among customers and clustering on participating their needs into reasonable homogenous subgroups as well as the rational alignment of products and services delivery channel to meet consumer's needs.

So for this research, related literature / studies of both Nepalese and international research and journals have been reviewed and found a research gap.

While reviewing Nepalese articles and researches relating to the tropic we found Nepalese articles which has segmented Nepalese consumes. Researcher/Author has pointed act the diversity of Nepalese market at multi levels i.e religious, ethnic and caste differences, religious diversities, rural urban divide, different sources of income (including domestic/foreign) and education level. The writer has pointed out eight (8) profiles of the Nepali consumers and they are:

- 1. High trail rate
- 2. Kathmandu centered
- 3. Price conscious
- 4. Pre dominantly urban
- 5. Remittance dependent
- 6. Media Influence
- 7. Influences of Freebies
- 8. Young

Though this study has help us in finding out basis of segmenting Nepalese consumer, it fails to segment the banking products/services.

We have also reviewed some international research and journals relating to tropic. Though international researches and journal varies from Nepalese context, it has given the base & foundation for conducting research.

Research done by Raj Singh Minhas and Evereth M Jacobs on benefit segmentation by factor analysis as an improved mentor of targeting customer for financial services investigate and correct one of the greatest short coming in market segmentation as practiced by banks and building societies. They typically use geographic, demographics, socio economic and psychographic characteristics to segment their target market which have been found to be poor predictions of future buying behaviors particularly in marketing financial services. During the research, researches have analyzed both the limitations of traditional methods of market. Segmentation and the advantages of benefit segmentation by collecting data for the study through a mailed questionnaire. The key assumption of the research were that the variable analyzed were not inclusive among each factor. It is believed that segmentation criteria must be relevant to the purchase criteria of customers. It is precisely linking of customer groups with the benefits they seek that makes benefit segmentation such a useful and dynamic marketing technique. The research focus on benefit segmentation based on customers satisfaction.

The study conducted by Lizas Alfansis and Adrian regarding market segmentation in the Indonesian banking sector for determining consumer perception of wide range of banking benefits within the context of emerging Indonesian economy explores the relationship between desired banking benefit and demographic characteristics and to explore the implication there of marketing of Indonesian banks. The researches were conducted into three stages. In the first stage a comprehensive review of literature were under taken. In the second stage, a series of personal interviews were conduct and in the third stage, a quantitative study was initiated. The study have shown eight dimension of the Indonesian banking servicing core product, augmented product, tangibility promotional incentives, rates, reveled three clusters viz relationship, cost sensitive, and service focused. The clusters analysis suggested that for the majority of new and existing customers a high degree of importance world appear to be place on a wide ranges of variable such as Reputation, speed of delivery, Accuracy of transacting Honesty of staff, Bank facility and the quality of interaction with staff. If banks focus on these segmentation they can lure more customer.

The research conducted by Maureen Meadows and Sally Dibb for assessing the implementation of market segmentation in retail financial service examined the application of market segments in business situations and has identified significant implication barriers and has addressed the underlying causes and question relating to implication difficulties. The research has dealt with the companies approaches to segment in qualitative sense, rather than attempt to quantify the variation. The researcher has considered four quite different organization one traditional high street banks, one nontraditional high street banks, one telephone banking operation and one charge case company and come up with four case studies, three of which are from the retail banking sector. The analysis was undertaken using a case study approach. The case studies showed that all companies taken as case draw heavily on segment ideas in their marketing effort. Most of the bank provide a range of product to their customers and are therefore looking for a segmentation approach that can be applied to whole customers relationship not, just to one product or service. The research has also proved that the development of as superior data base can apparently impact on the type of segmentation activities. The companies use customers data to group customers segments, to develop and implement a segmentation marketing strategy and identify the potential segments.

The researcher on Benefit segmentation using service quality dimension by Gardon H.G McDougall and Terrance J Levesque attempt to identify segments for financial institutions based on the consumer's perceived importance of major dimension of service offering and the other product offering Nine items are used to measure the importance attributes of financial institutions from the consumer view viz

- 1. Perform service right the first time
- 2. Have competent employees who can perform the services
- 3. Provide prompt services
- 4. Know consumers and understand their needs
- 5. Provide visually appealing facilities
- 6. Offers competitive interest rates on saving account
- 7. Offers convenient branch location and ATMS
- 8. Offer convenient hours

9. For the analysis, a cluster based and post hoc segmentation was under taken.

Five demographic variable ie gender, age, income, home ownership and education were examined. The research revealed that only two minor differences were found with respect to age, proportionally younger customer belonged to the convenience segment, with respect to education, proportionally more customer with an undergraduate degree as opposed to any other education qualification belonged to the convenience segment. The research identified two distinct segments, the performance segment and convenience segment. The performance segment focus on getting it right the first time and convenience segment focus on the conveniently stood location.

Research done by Ulrich Doraszelse and Michela Drogansks on market segmentation strategy of Multi product firms investigated how consumer's preference, firm cost structures and the strategy interaction of firms on the product market together shape firms market segment decision and come up with four key determinants of market segmentation, viz the degree of fit, the degree of misfit, the intensity of competition and fixed cost offering an additional product.

The research conducted by Tina s Harrison on mapping customers segments for personal financial services started by stating the current situation of financial market. The researcher used two methodologies of segment. First deals with a prior approach to segmentation whereby a basis for segmentation is chosen. The second approach deals with post hoc segmentation. This method involves dividing heterogeneous market into segments based on their homogeneous respondent survey. The research focus on the financial services to customers and the perception attitudes and motivation towards financial services. The finding highlight four financial services that customers segments based on their level of knowledge and understudying of financial services and on the degree of financial maturity. The segments are names as financially confirmed, apathetic minimalists, cautions investors and capital accumulators. Each segment is characterized by particular attitudes towards financial services, perception of financial services, financial services behavior and degree of future orientation.

The above studies and researchers done mainly emphasize on customer benefit and satisfaction and found applying traditional analysis. There are certain gap between the present research and precious research conducted. This study attempts to examine and analyzed the various attributes of market segment in consumer banking and uses descriptive type of research design. Both primary and secondary data are collected and analyzed with advance statistical tools.

# CHAPTER-III RESEARCH METHODOLOGY

The basic objective of this chapter is to provide details of the various methodologies followed during study. The methods that have been used for performing the study are described as follows:

#### **3.1 Research Design**

A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure (Selltiz, 1981). Research design is a plan, structure and strategy of investigation. It is blue print for the collection, measurement and analysis of data.

The key objective of the study is to examine and analyze the various attributes of market segments in retail banking. The research attempts to analyze the opinions of the respondents. Hence a descriptive type of research design has been used. Under this study the research problems have been formulated precisely. To conduct the study various literatures, journals and articles have been reviewed and scheduled questionnaire as well as discussion with the respondents was conducted. All most all the data and information collected are primary in nature but secondary data may be used to get the fact information while conducting research process.

All the collected data and information are generalized and conceptualized precisely by achieving insights into the phenomenon. To meet the objective of the study a survey with scheduled questionnaire among the professional and well-versed people of the various organizations in the field of research is done. In this context the respondents seem widely diversified.

#### **3.2 Source of Data**

To meet the objectives of the study primary as well as secondary source of data have been used. Primary data are collected through scheduled questionnaire survey and discussion with respondents. The secondary data are obtained from various articles and journals information has been collected through desk research of various literatures. Main source is taken as banking professionals and customers. Similarly business persons, students, housewives are also considered as the source of data and information.

### **3.3 Sample and Population**

To make the study feasible, judgment method sampling has been used to select the respondents. Altogether 100 questionnaires were distributed to banking professionals and 220 questionnaires were distributed to customers. In total there were 212 respondents, 60 form the banking professionals and 152 from the customers category. The questionnaire contained 15 different questions regarding benefits segments and various consumers' segments attributes. Respondents were Banking Professionals and Customers (business persons, students, house wives, service holders). The respondent categories are stated below as

1	AGE	Sample Number	Sample Percentage
	Below 30	100	65
	Between 30 to 50	36	24
	50 and above	16	11
	Total	152	100
2	Profession		
	Student	56	36
	Employed	24	16
	<b>Business Persons</b>	72	48
	Total	152	100
3	Education		
	Above Graduate	48	31
	Graduate	80	53
	Below Graduate	24	16
	Total	152	100

# Table 3.1

# **Respondent Categories of Customers**

Source: Survey

# Table 3.2

# **Respondent Categories of Banks**

1	Eduation	Sample Number	Sample Percentage
	Above Graduate	30	36
	Graduate	28	16
	Below Graduate	2	48
	Total	60	100

Source: Survey

#### **3.4 Data Analysis Tools**

#### 3.4.1 The Kolmogorov-Smirnov Two Sample Test

The Kolmogorov-Smirnov two-sample test is a test of whether two independent samples have been drawn from the same population or from populations with the same distribution. This two-tailed test is sensitive to any kind of difference in location or central tendency, in dispersion, in skewness.

The perception of various market segment such as age wise ( above 30 and below 30) and occupation wise ( student, employed and business persons) is tested using K test to analyse that attributes of market This test has allowed us to find out the new segment seeking common benefits.

The Kolmogorov-Smirnov two-sample test focus on, (for two-tailed test)  $D = \text{maximum} [S_{n1} (X) - S_{n2} (X)]$ 

#### Where,

D = Maximum vertical deviation.

 $S_{n1}(X)$  = the observed cumulative step function of one of the samples that is,  $S_{n1}(X)$  =

 $K/n_1$  where, K = the number of scores equal to or less than X and  $n_1 =$  Number of first sample.

 $S_{n2}$  (X) = the observed cumulative step function of other samples that is,  $S_{n2}$  (X) = K/n<sub>2</sub>

Where,

K = the number of scores equal to or less than X and  $n_2 =$  Number of second sample.

In two tailed test it is not necessary to be  $n_1 = n_2$ . There have found the value of 'D' for the observed data using above equation. Then, compare that observed value with the critical one which is obtained by entering the observed values of

 $n_1$  and  $n_2$  in the expression given below, at the level of significance 0.05 i.e. 5%,

Table value of D = 1.36  $\sqrt{\frac{n_1 + n_2}{n_1 n_2}}$ 

If the calculated value of 'D' equal or exceed than table value of 'D', then reject  $H_{0.}$  And if the calculated value of 'D' less than the tabulated value of 'D', then accept  $H_{0.}$ 

The hypothesis to be tested under the Kolmogorov-Smirnov two-sample test is described as under:

Null Hypothesis (H0): There is no significance difference among the......Alternative Hypothesis (H1): There is significance difference among the

. . . . . . . . . . . . .

### 3.4.2 Z-test

The perceptual differences between bank and financial institutions and customers are tested using Z test This test has allowed us to find out the target segments of financial institutions. This has also allowed us to find out if the financial institutions are providing the benefits that are wanted by the customers

The formula for Z is:

$$\mathbf{Z} = \frac{\overline{X_1} - \overline{X_2}}{\sqrt{\frac{(t_1)^2}{n_1} - \frac{(t_2)^2}{n_2}}}$$

Where,

 $\overline{X}_1$  = mean of first sample

 $\overline{X}_2$  = mean of second sample

 $n_1 =$ first sample size

 $n_2$  = second sample size

- $\dagger_1$  = Standard deviation of first sample
- $\dagger_2$  = Standard deviation of second sample

It is tested at 5 % significance level. Test: if the calculated t is greater than the tabulated value of t then  $H_0$  is rejected.

#### 3.4.3 Coefficient of Variation

The coefficient of dispersion based on standard deviation multiplied by 100 is known as the coefficient of variation. If  $\bar{x}$  be the arithmetic mean and  $\dagger$ , the standard deviation of the distribution, then the C.V. is defined as

Coefficient of variation =  $\frac{\dagger}{\overline{X}}$ 

It is independent of unit. So, two distributions can bitterly be compared with the help of C.V. for their variability. Less the C.V., more will be the uniformity, consistency etc. and more the C.V. less will be the uniformity, consistency etc.

#### **3.4.4 Standard Deviation**

Standard deviation (s.d.) is defined as the positive square root of the mean of the square of the deviations taken from the arithmetic mean.

Standard Deviation  $\dagger = \sqrt{\text{variance}}$ 

#### 3.4.5 Mean Analysis

Arithmetic mean or simply a mean of a set of observations is the sum of all the observation divided by the number of observations.

$$Mean = \frac{\sum fx}{\sum f}$$

#### 3.4.6 Variance

The square of the standard deviation is known as the variance.

Variance 
$$\dagger^2 = \frac{\sum fx^2}{\sum f} - \left(\frac{\sum fx}{\sum f}\right)^2$$

# CHAPTER-IV DATA PRESENTATION AND ANALYSIS

This chapter deals with the relevant and available primary and secondary data, which had been taken as sample from the 212 respondents from various categories. They have been analyzed to find out the perception of Banks and Financial institutions and customers about various segments attributes in the consumer banking. Further, data have been analyzed to identify the new and the untapped segments in the consumer banking. Appropriate statistical tools have been used to conduct the analysis as described in the research methodology section of this study.

4.1 Mean Comparison between the Perception of Financial Institutions and Customers Regarding Segmentation Variables of the Consumer Banking Loans to Identify the Benefit Segments Targeted by the Financial Institutions.

### Table 4.1

		Banks and Finance Institution	Customers
Collateral Value	Mean	4.633333333	4.421053
	Variance	0.298888889	0.401662
	St.dev	0.546707316	0.633768
	C.V	0.117994385	0.143352
Geographic Location	Mean	3.9666666667	3.868421
	Variance	0.565555556	1.377424
	St.dev	0.752034278	1.173637
	C.V	0.189588473	0.303389
No of Dependents	Mean	3.733333333	3.684211
	Variance	0.995555556	1.32133
	St.dev	0.997775303	1.149491
	C.V	0.267261242	0.312005
Qualification	Mean	3.233333333	3.026316
	Variance	1.245555556	2.183518
	St.dev	1.116044603	1.477673
	C.V	0.345168434	0.488275

## Mean, Variance, Standard Deviation and Coefficient of Variation

(*Refer annexure no. 5*) Source: Survey

It is seen from the above table that the customers and financial institutions give the almost equal importance to the value of the collateral. Regarding geographic location of the applicant it is moderately important to the financial institution and the customers. Number of dependants of the applicant doesn't play important role in applying and providing loans by the customers and financial institutions respectively. Qualification also plays a moderate role for applying for the loans in the banks and financial institutions and it is seen that the customers are also aware of this fact.

4.2 Mean comparison between perception of the financial institutions and customers regarding benefits segments variables of the Deposit to identify the benefit segments targeted by the financial institutions.

## Table 4.2

# Mean, Variance, Standard Deviation and Coefficient of variation on

Deposit	
Deposit	

		<b>Banks and Finance Institution</b>	Customers
Performance of Staffs	Mean	4.4	4.552632
	Variance	0.44	0.93144
	St.dev	0.663324958	0.965112
	C.V	0.150755672	0.21199
Courteous and Friendly	Mean	4.566666667	4.473684
	Variance	0.445555556	0.512465
	St.dev	0.66749948	0.715867
	C.V	0.146167769	0.160017
interest rates of deposits	Mean	4.433333333	4.605263
	Variance	0.378888889	0.449446
	St.dev	0.61553951	0.670407
	C.V	0.138843499	0.145574
e banking facility	Mean	4.3	4.026316
	Variance	0.4766666667	0.972992
	St.dev	0.690410506	0.986403
	C.V	0.160560583	0.244989
convenient hr banking	Mean	4.566666667	4.473684
	Variance	0.378888889	0.512465
	St.dev	0.61553951	0.715867
	C.V	0.134789674	0.160017
branch location	Mean	4.333333333	4.5
	Variance	0.55555556	0.618421
	St.dev	0.745355992	0.786398
	C.V	0.172005229	0.174755
ATM location	Mean	4.3	4.552632
	Variance	1.01	0.668283
	St.dev	1.004987562	0.817486
	C.V	0.233718038	0.179563

(Refer annexure no. 6) Source: Survey

Regarding the deposit collection customers have given high importance to the performance of the staffs while considering a bank. It is seen that banks is also working towards improving the quality of the performance of their staffs. Courteous and friendly relation of the staffs is also seen as the important factor while considering the bank by the customers.

## 4.3 Hypothesis Testing on Different Benefits Variables Regarding Value of the Collateral

Non of the banks flow credit without having sufficient collateral value. The bank must recover theirs debts by selling the collateral if the customers fails to repay the debt. Thus following hypothesis has been tested about the perceptual variation regarding collateral value

## 4.3.1 Z test to find the Perceptual Differences between the Financial Institutions and Customers Regarding Value of Collateral

The perception of the respondents (Banking and Financial Institution and Customer) regarding the collateral value may vary. To find out who among Customers and Financial institution gives more importance to Collateral value following hypothesis is formulated and tested as follows

- Null Hypothesis (H<sub>0</sub>): Level of importance given by Customers is greater or equal than that the level of importance given by bank and financial Institutions
- Alternative Hypothesis (H<sub>1</sub>): Level of importance given by Customers is less than that the level of importance given by bank and financial Institutions

Calculated value of Z = = 2.43Level of significance ( ) = 5% = 0.05 Then, the tabulated value of Z at 5% level of significance is 1.645 Since the calculated value of Z (2.43) is greater than the table value of Z (1.645), the null hypothesis is rejected and the alternative hypothesis is selected. Therefore, it is concluded that the level of importance given by customers is less than the level of importance given by the bank and financial Institutions (*Refer annexure no.* 7).

The customers willing to take loans are not in position to apply for it because they require strong collateral. If the banks and financial institution can be flexible or more liberal regarding the collateral requirement they have new customers to attract.

4.3.2 Hypothesis Testing on occupational segment about Perception Regarding Collateral Value using the Kolmogorov-Smirnov Two Sample Test

The perception of the respondents (Students and Business persons, Students and employed, Business persons and employed) regarding the Collateral Value may vary. Hypothesis to be tested in this regard are:

- Null Hypothesis (H<sub>0</sub>): There is no significance difference between the perception of Students and Business persons regarding Collateral Value
- Alternative Hypothesis (H<sub>1</sub>): There is significance difference between the perception of Students and Business persons regarding Collateral Value.

Calculated Higher absolute difference  $|D|_{max} = 0.1190$ Then at 5% level of significance table value of

$$D = 1.36 \sqrt{\frac{n_1 + n_2}{n_1 n_2}}$$
$$= 0.3318$$

Since the calculated value of  $|D|_{max}$  (0.1190) is less than the table value of D (0.3318), the null hypothesis H<sub>0</sub> is accepted and hence alternative hypothesis H<sub>1</sub> is rejected. Therefore, it is concluded that there is no significant difference between the perception of Students and Business Persons regarding Collateral Value while applying for loan (*Refer annexure no.8*).

- Null Hypothesis (H<sub>0</sub>): There is no significance difference between the perception of Students and Employed regarding Collateral Value.
- Alternative Hypothesis (H<sub>1</sub>): There is significance difference between the perception of Students and Employed regarding Collateral Value.

Calculated Higher absolute difference  $|D|_{max} = 0.1111$ Then at 5% level of significance table value of

$$D = 1.36 \sqrt{\frac{n_1 + n_2}{n_1 n_2}}$$
$$= 0.2423$$

Since the calculated value of  $|D|_{max}$  (0.1111) is less than the table value of D (0.2423), the null hypothesis H<sub>0</sub> is accepted and hence alternative hypothesis H<sub>1</sub> is rejected. Therefore, it is concluded that there is no significant difference between the perception of Students and Employed persons regarding the Collateral Value while applying for loan. (*Refer annexure no. 9*)

- Null Hypothesis (H<sub>0</sub>): There is no significance difference between the perception of Business persons and Employed regarding Collateral Value
- Alternative Hypothesis (H<sub>1</sub>): There is significance difference between the perception of Business persons and Employed regarding Collateral Value

Calculated Higher absolute difference  $|D|_{max} = 0.4444$ Then at 5% level of significance table value of

$$D = 1.36 \sqrt{\frac{n_1 + n_2}{n_1 n_2}} = 0.3205$$

Since the calculated value of  $|D|_{max}$  (0.4444) is greater than the table value of D (0.3205), the null hypothesis H<sub>0</sub> is rejected and hence alternative hypothesis H<sub>1</sub> is accepted. Therefore, it is concluded that there is significant difference between the perception of Business persons and Employed regarding Collateral value while applying for loans (*Refer annexure no. 10*).

From the above analysis, it is clear that if the financial institutions are to introduce the product based on collateral then a single product can be made and marketed to cater students and employed segments or students and Business persons segments. But a product based on collateral value has the possibility of failing if made to cater Business persons and employed segments.

## 4.3.3 Hypothesis Testing on age Wise Segment about Perception of Collateral Value using the Kolmogorov-Smirnov Two Sample Test

The perception of the respondents (Below 30 and Above 30) regarding the Collateral Value may vary. Hypothesis to be tested in this regard are:

- Null Hypothesis (H0):There is no significance difference between the<br/>perception of respondents below the age of 30<br/>and above the age of 30 regarding Collateral Value
- Alternative Hypothesis (H<sub>1</sub>): There is significance difference between the perception of respondents below the age of 30 and above the age of 30 regarding Collateral Value.

Calculated Higher absolute difference  $|D|_{max} = 0.058$ Then at 5% level of significance table value of

$$D = 1.36 \sqrt{\frac{n_1 + n_2}{n_1 n_2}}$$
$$= 0.2325$$

Since the calculated value of  $|D|_{max}$  (0.0.058) is less than the table value of D (0.2325), the null hypothesis H<sub>0</sub> is accepted and hence alternative hypothesis H<sub>1</sub> is rejected. Therefore, it is concluded that there is no significant difference between the perception of respondents below the age of 30 and above the age of 30 regarding Collateral Value (*Refer annexure no. 11*).

Collateral value factor is given the same preference by the age groups below 30 and above 30. If the financial institution makes any alteration in the collateral value it will affect the both segments. For example if the financial institution decreases the value of collateral required there is possibility of increase in demand in both the age wise segments.

#### 4.4 Hypothesis Testing Regarding Perception on Geographic Location

Location of the applicant may influence the banks and financial institutions decision to provide the Loans as the income of the applicant differs according to the geographic region. Thus following hypothesis about the perceptual variation regarding collateral value has been tested.

# 4.4.1 Z test to find the perceptual differences between the financial institutions and customers regarding Geographic Location

To check whether the customer's perception regarding the geographic location differs to that of the Banks and financial institution the following hypothesis is formulated and tested.

Null Hypothesis (H<sub>0</sub>): There is no significance difference between the perception customers and Banks and financial

institution regarding the geographic location of the applicant.

Alternative Hypothesis (H<sub>1</sub>): There is no significance difference between the perception customers and Banks and financial institution regarding the geographic location of the applicant

Calculated value of Z = 0.72Level of significance ( ) = 5% = 0.05 Then, the tabulated value of Z at 5% level of significance is 1.96.

Since the calculated value of Z (0.72) is less than the table value of Z (1.96), the alternative hypothesis is rejected and the null hypothesis is selected. Therefore, it is concluded that there is no significant difference between the perception of Banks and Financial Institutions and customers regarding value of the geographic location of the applicant . (*Refer annexure no. 12*)

This means that the customers are fully aware that the banks and financial institutions makes no discrimination to its customers upon the geographic location. The financial institution provides the same facility to all its customers. It makes no difference to the bank even if they come form rural areas.

**4.4.2 Hypothesis Testing on Occupational Segment about Perception of Geographic Location using the Kolmogorov-Smirnov Two Sample Test** The perception of the respondents (Students and Business persons, Students and employed, Business persons and employed) regarding the Geographic Location may vary. Hypothesis to be tested in this regard are:

Null Hypothesis (H<sub>0</sub>): There is no significance difference between the perception of Students and Business persons regarding Geographic Location Alternative Hypothesis (H<sub>1</sub>): There is significance difference between the perception of Students and Business persons regarding Geographic Location

Calculated Higher absolute difference  $|D|_{max} = 0.2857$ Then at 5% level of significance table value of

$$D = 1.36 \sqrt{\frac{n_1 + n_2}{n_1 n_2}}$$
$$= 0.3318$$

Since the calculated value of  $|D|_{max}$  (0.2857) is less than the table value of D (0.3318), the null hypothesis H<sub>0</sub> is accepted and hence alternative hypothesis H<sub>1</sub> is rejected. Therefore, it is concluded that there is no significant difference between the perception of Students and Business persons regarding the Geographic location. (*Refer annexure no. 13*)

Null Hypothesis (H0):There is no significance difference between the<br/>perception of Students and Employed regarding<br/>Geographic Location.

Alternative Hypothesis (H<sub>1</sub>): There is significance difference between the perception of Students and Employed regarding Geographic Location.

Calculated Higher absolute difference  $|D|_{max} = 0.2301$ Then at 5% level of significance table value of

$$D = 1.36 \sqrt{\frac{n_1 + n_2}{n_1 n_2}}$$
$$= 0.2423$$

Since the calculated value of  $|D|_{max}$  (0.2301) is less than the table value of D (0.2423), the null hypothesis H<sub>0</sub> is accepted and hence alternative hypothesis H<sub>1</sub> is rejected. Therefore, it is concluded that there is no significant difference

between the perception of Students and Employed regarding Geographic Location (*Refer annexure no. 14*).

- Null Hypothesis (H<sub>0</sub>): There is no significance difference between the perception of Business persons and Employed regarding Geographic Location
- Alternative Hypothesis (H<sub>1</sub>): There is significance difference between the perception of Business persons and Employed regarding Geographic Location

Calculated Higher absolute difference  $|D|_{max} = 0.0555$ Then at 5% level of significance table value of

$$D = 1.36 \sqrt{\frac{n_1 + n_2}{n_1 n_2}}$$
$$= 0.3205$$

Since the calculated value of  $|D|_{max}$  (0.0555) is less than the table value of D (0.3205), the null hypothesis H<sub>0</sub> is accepted and hence alternative hypothesis H<sub>1</sub> is rejected. Therefore, it is concluded that there is no significant difference between the perception of Business persons and employed regarding the Geographic Location (*Refer annexure no. 15*).

From the above analysis it is clear that Banks and financial institutions can come up with single product for all the occupational segments of different geographic location. A single product will satisfy students, business persons and employed persons form different geographic location

## 4.5 Hypothesis Testing Regarding Perception on No. of Dependents

The disposal income of a person may vary according to the number of dependents. Person with less number of dependents will have more savings to pay the installments. Thus following hypothesis about the perceptual variation regarding No. of dependents has been tested.

## 4.5.1 Z test to Find the Perceptual Differences Between the Financial Institutions and Customers Regarding No. of Dependents

The perception of the respondents ( Banks and Financial institutions and Customers) regarding the influence of number of dependents while applying loans may vary. Thus following hypothesis is formulated and tested.

Null Hypothesis (H<sub>0</sub>): There is no significance difference between the perception of Customers and Financial Institutions regarding Number of Dependents of applicants

Alternative Hypothesis (H<sub>1</sub>): There is no significance difference between the perception of Customers and Financial Institutions regarding Number of Dependents of applicants

Calculated value of Z = 0.31

Level of significance () = 5% = 0.05

Then, the tabulated value of Z at 5% level of significance is 1.96.

Since the calculated value of Z (0.31) is less than the table value of Z (1.96), the alternative hypothesis is rejected and the null hypothesis is selected. Therefore, it is concluded that there is no significant difference between the perception of Banks and Financial Institutions and customers regarding value of the number of dependents of the applicant (*Refer annexure no. 16*).

It shows that the number of dependents of the applicant is given least priority by the banks which considering the application for loans. It makes no differences as long that the customers have the disposable income to repay his/her installments. From the above calculation it is also clear that the customers are also aware of this.

## 4.5.2 Hypothesis Testing on Occupational Segment about Perception of No of Dependents using the Kolmogorov-Smirnov Two Sample Test

The perception of the respondents (Students and Business persons, Students and employed, Business persons and employed) regarding the No of Dependents may vary. Hypothesis to be tested in this regard are:

- Null Hypothesis (H<sub>0</sub>): There is no significance difference between the perception of Students and Business persons regarding Number of Dependents
- Alternative Hypothesis (H<sub>1</sub>): There is significance difference between the perception of Students and Business persons regarding Number of Dependents

Calculated Higher absolute difference  $|D|_{max} = 03333$ Then at 5% level of significance table value of

$$D = 1.36 \sqrt{\frac{n_1 + n_2}{n_1 n_2}} = 0.3318$$

Since the calculated value of  $|D|_{max}$  (0.3333) is greater than the table value of D (0.3318), the null hypothesis H<sub>0</sub> is rejected and hence alternative hypothesis H<sub>1</sub> is accepted. Therefore, it is concluded that there is significant difference between the perception of Students and Business persons regarding the No. of dependents that the applicant have while applying for loans (*Refer annexure no.17*).

- Null Hypothesis (H<sub>0</sub>): There is no significance difference between the perception of Students and Employed regarding Number of Dependents
- Alternative Hypothesis (H<sub>1</sub>): There is significance difference between the perception of Students and Employed regarding Number of Dependents

Calculated Higher absolute difference  $|D|_{max} = 0.2222$ 

Then at 5% level of significance table value of

$$D = 1.36 \sqrt{\frac{n_1 + n_2}{n_1 n_2}}$$
$$= 0.2423$$

Since the calculated value of  $|D|_{max}$  (0.2222) is less than the table value of D (0.2423), the null hypothesis H<sub>0</sub> is accepted and hence alternative hypothesis H<sub>1</sub> is rejected. Therefore, it is concluded that there is no significant difference between the perception of Students and Employed regarding Number of Dependents that the applicant have while applying for loans. *(Refer annexure no. 18)* 

Null Hypothesis (H<sub>0</sub>): There is no significance difference between the perception of Business persons and Employed regarding Number of Dependents

Alternative Hypothesis (H<sub>1</sub>): There is significance difference between the perception of Business persons and Employed regarding Number of Dependents

Calculated Higher absolute difference  $|D|_{max} = 0.1667$ Then at 5% level of significance table value of

$$D = 1.36 \sqrt{\frac{n_1 + n_2}{n_1 n_2}} = 0.3205$$

Since the calculated value of  $|D|_{max}$  (0.1667) is less than the table value of D (0.3205), the null hypothesis H<sub>0</sub> is accepted and hence alternative hypothesis H<sub>1</sub> is rejected. Therefore, it is concluded that there is no significant difference between the perception of Business persons and employed regarding the

number of dependents applicants have while applying for loans (Refer annexure no. 19).

From the above analysis it is clear that the respondents groups students and employed, business persons and employed persons have the similar perception regarding no of dependents. Thus a product introduced based on number of dependents can satisfy the market segments students and employed or employed and business persons. However if a single product based of number of dependents is made to cater students and business persons segments at once have the possibility of being fail in the market as their perceptions differs.

### 4.6 Hypothesis Testing Regarding Qualification

Income of a person is directly related to the Qualification. People with higher qualification earn more. While providing loans the Banks and financial institution considers the qualification of the applicants. They look for qualified applicants so that they can pay the installments. Thus following hypothesis about the perceptual variation regarding qualification has been tested.

## 4.6.1 Z test to find the Perceptual Differences between the Financial Institutions and Customers Regarding Qualification

The perception of the respondents (Customers and Banks and financial institution regarding the impact of qualification while providing loans may vary. To check their perceptional difference the following hypothesis is formulated and tested.

- Null Hypothesis (H<sub>0</sub>): There is no significance difference between the perceptions of Customers and Financial Institutions regarding the impact of qualification while applying for Loans
- Alternative Hypothesis (H<sub>1</sub>): There is no significance difference between the perceptions of Customers and Financial

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Institutions regarding the impact of qualification while applying for Loans

Calculated value of Z = 1.10

Level of significance ( ) = 5% = 0.05Then, the tabulated value of Z at 2% level of significance is 1.96.

Since the calculated value of Z (1.10) is less than the table value of Z (1.96), the alternative hypothesis is rejected and the null hypothesis is selected. Therefore, it is concluded that there is no significant difference between the perception of Banks and Financial Institutions and customers regarding value of the qualification of the applicant

From the above calculation it is clear that both the respondents (Customers and Bank and Financial Institutions) gives equal level of importance to the qualification. The banks and financial institution hopes that theirs customers to be educated and the customers are also seems to be aware of this fact (*Refer annexure no. 20*).

# 4.6.2 Hypothesis Testing on Occupational Segment about Perception Regarding Qualification Value using the Kolmogorov-Smirnov Two Sample Test

The perception of the respondents (Students and Business persons, Students and employed, Business persons and employed) regarding the Qualification may vary. Hypothesis to be tested in this regard are:

Null Hypothesis (H<sub>0</sub>): There is no significance difference between the perception of Students and Business persons regarding Qualification.

Alternative Hypothesis (H<sub>1</sub>): There is significance difference between the perception of Students and Business persons regarding Qualification.

Calculated Higher absolute difference  $|D|_{max} = 0.2380$ Then at 5% level of significance table value of

$$D = 1.36 \sqrt{\frac{n_1 + n_2}{n_1 n_2}} = 0.3318$$

Since the calculated value of  $|D|_{max}$  (0.2380) is less than the table value of D (0.3318), the null hypothesis H<sub>0</sub> is accepted and hence alternative hypothesis H<sub>1</sub> is rejected. Therefore, it is concluded that there is no significant difference between the perception of Students and Business persons regarding Qualification (*Refer annexure no. 21*).

Null Hypothesis (H<sub>0</sub>): There is no significance difference between the perception of Students and Employed regarding Qualification.

Alternative Hypothesis (H<sub>1</sub>): There is significance difference between the perception of Students and Employed regarding Qualification.

Calculated Higher absolute difference  $|D|_{max} = 0.3730$ Then at 5% level of significance table value of

$$D = 1.36 \sqrt{\frac{n_1 + n_2}{n_1 n_2}} = 0.2423$$

Since the calculated value of  $|D|_{max}$  (0.3730) is greater than the table value of D (0.2423), the null hypothesis H<sub>0</sub> is rejected and hence alternative hypothesis H<sub>1</sub> is accepted. Therefore, it is concluded that there is significant difference

between the perception of Students and Employed regarding Qualification (*Refer annexure no. 22*).

Null Hypothesis (H<sub>0</sub>): There is no significance difference between the perception of Business persons and Employed regarding Qualification.

Alternative Hypothesis (H<sub>1</sub>): There is significance difference between the perception of Business persons and Employed regarding Qualification.

Calculated Higher absolute difference  $|D|_{max} = 0.2777$ Then at 5% level of significance table value of

$$D = 1.36 \sqrt{\frac{n_1 + n_2}{n_1 n_2}} = 0.3205$$

Since the calculated value of  $|D|_{max}$  (0.2777) is less than the table value of D (0.3205), the null hypothesis H<sub>0</sub> is accepted and hence alternative hypothesis H<sub>1</sub> is rejected. Therefore, it is concluded that there is no significant difference between the perception of Business persons and Employed regarding Qualification. (*Refer annexure no. 23*)

From the above calculation it is clear that if financial institution is to introduce a product based on qualification requirement then a single product can be made and marketed to cater either students and business persons or Business and employed persons. However a single product made to cater students and employed persons segments have the possibility of being fail as the perception of students and employed persons is different.

#### 4.7 Hypothesis Testing Regarding Interest Rates

Interest is regarded as the most important factor on the consumer banking. Most of the financial institutions compete in this factor. Thus following hypothesis about the perceptual variation regarding interest rate has been tested.

# 4.7.1 Hypothesis Testing on Occupational Segment about Perception Regarding Interest Rates using the Kolmogorov-Smirnov Two Sample Test

The perception of the respondents (Students and Business persons, Students and employed, Business persons and employed) regarding the interest rates may vary. Hypothesis to be tested in this regard are:

- Null Hypothesis (H<sub>0</sub>): There is no significance difference between the perception of Students and Business persons regarding interest rates
- Alternative Hypothesis (H<sub>1</sub>): There is significance difference between the perception of Students and Business persons regarding interest rates.

Calculated Higher absolute difference  $|D|_{max} = 0.1190$ Then at 5% level of significance table value of

$$D = 1.36 \sqrt{\frac{n_1 + n_2}{n_1 n_2}}$$
$$= 0.3318$$

Since the calculated value of  $|D|_{max}$  (0.1190) is lesser than the table value of D (0.3318), the null hypothesis H<sub>0</sub> is accepted and hence alternative hypothesis H<sub>1</sub> is rejected. Therefore, it is concluded that there is no significant difference between the perception of Students and Business persons regarding interest rates factors while applying for loans (*Refer annexure no. 24*).

Alternative Hypothesis (H<sub>1</sub>): There is significance difference between the perception of Students and Employed regarding interest rates.

Calculated Higher absolute difference  $|D|_{max} = 0.2142$ Then at 5% level of significance table value of

$$D = 1.36 \sqrt{\frac{n_1 + n_2}{n_1 n_2}}$$
$$= 0..2423$$

Since the calculated value of  $|D|_{max}$  (0.2142) is less than the table value of D (0.2423), the null hypothesis H<sub>0</sub> is accepted and hence alternative hypothesis H<sub>1</sub> is rejected. Therefore, it is concluded that there is no significant difference between the perception of Students and Employed persons regarding interest rates while applying for loan. (*Refer annexure no. 25*)

- Null Hypothesis (H<sub>0</sub>): There is no significance difference between the perception of Business persons and Employed regarding interest rates
- Alternative Hypothesis (H<sub>1</sub>): There is significance difference between the perception of Business persons and Employed regarding interest rates.

Calculated Higher absolute difference  $|D|_{max} = 0.3333$ Then at 5% level of significance table value of

$$D = 1.36 \sqrt{\frac{n_1 + n_2}{n_1 n_2}}$$
$$= 0.3205$$

Since the calculated value of  $|D|_{max}$  (0.3333) is greater than the table value of D (0.3205), the null hypothesis H<sub>0</sub> is rejected and hence alternative hypothesis H<sub>1</sub> is accepted. Therefore, it is concluded that there is significant difference between the perception of Business persons and Employed regarding interest rates while applying for loans (*Refer annexure no. 26*).

From the above analysis it is clear that a single financial product based on interest rates can be introduced and marketed to students and employed persons or students or business persons but a single product cannot satisfy business persons or employed persons. The financial institution must introduce different product with different interest rates if it have to cater business and employed persons. For example, product with less interest rates for business persons and high interest rates for employed person.

## 4.7.2 Hypothesis Testing on age wise segment about perception Regarding Interest Rates using the Kolmogorov-Smirnov Two Sample Test

The perception of the respondents (Below 30 and Above 30) regarding the interest rates may vary. Hypothesis to be tested in this regard are:

- Null Hypothesis ( $H_0$ ): There is no significance difference between the perception of respondents below the age of 30 and above the age of 30 regarding interest rates.
- Alternative Hypothesis (H<sub>1</sub>): There is significance difference between the perception of respondents below the age of 30 and above the age of 30 regarding interest rates..

Calculated Higher absolute difference  $|D|_{max} = 0.083$ Then at 5% level of significance table value of

$$D = 1.36 \sqrt{\frac{n_1 + n_2}{n_1 n_2}}$$
$$= 0.2325$$

Since the calculated value of  $|D|_{max}$  (0.0.083) is less than the table value of D (0.2325), the null hypothesis H<sub>0</sub> is accepted and hence alternative hypothesis H<sub>1</sub> is rejected. Therefore, it is concluded that there is no significant difference between the perception of respondents below the age of 30 and above the age of 30 regarding interest rates (*Refer annexure no. 27*).

Interest rate factor is given the same preference by the age groups below 30 and above 30. If the financial institution makes any alteration in the interest rate it will affect the both segments. For example if the interest rates is decreased there is possibility of increase in demand in both the age wise segments.

### 4.8 Hypothesis Testing Regarding Performance of Staffs

The performance of the staffs at the counter plays a vital role for attracting the customers. The staffs of the banks should be competent enough to perform theirs duty fast and efficiently with minimum errors. Thus following hypothesis about the perceptual variation regarding performance of staffs has been tested.

## 4.8.1 Z test to Find the Perceptual differences between the Financial Institutions and Customers Regarding Performance of Staffs

The perception respondents (Banks and Financial institutions and Customers) regarding the impact of performance of Staffs in increasing the deposits may vary. To check their perceptional differences following hypothesis is formulated and tested

- Null Hypothesis (H<sub>0</sub>): There is no significance difference between the perceptions of Banks/Financial Institutions and customers regarding the impact of Performance of the staffs in increasing deposits
- Alternative Hypothesis (H<sub>1</sub>): There is significance difference between the perceptions of Banks/Financial Institutions and customers regarding the impact of Performance of the staffs in increasing deposits

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Calculated value of Z = 1.31Level of significance () = 5% = 0.05 Then, the tabulated value of Z at 5% level of significance is 1.96.

Since the calculated value of Z (1.31) is less than the table value of Z (1.96), the alternative hypothesis is rejected and the null hypothesis is selected. Therefore, it is concluded that there is no significant difference between the perception of Banks and Financial Institutions and customers regarding performance of staffs in increasing deposits. (*Refer annexure no. 28*)

The above calculation shows that the customers consider the performance of the staffs while considering a bank. The financial institutions are also aware of this fact thus we see efficient employees in the serving and customers care department.

# 4.8.2 Hypothesis Testing on Occupational Segment about Perception Regarding Performance of Staffs using the Kolmogorov-Smirnov Two Sample Test

The perception of the respondents (Students and Business persons, Students and employed, Business persons and employed) regarding the Performance of the staffs may vary. Hypothesis to be tested in this regard are:

- Null Hypothesis ( $H_0$ ): There is no significance difference between the perception of Students and Business persons regarding Performance of the staffs .
- Alternative Hypothesis (H<sub>1</sub>): There is significance difference between the perception of Students and Business persons regarding Performance of the staffs.

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Calculated Higher absolute difference  $|D|_{max} = 0.3571$ Then at 5% level of significance table value of

$$D = 1.36 \sqrt{\frac{n_1 + n_2}{n_1 n_2}}$$
$$= 0.3318$$

Since the calculated value of  $|D|_{max}$  (0.3571) is greater than the table value of D (0.3318), the null hypothesis H<sub>0</sub> is rejected and hence alternative hypothesis H<sub>1</sub> is accepted. Therefore, it is concluded that there is significant difference between the perception of Students and Business persons regarding the performance of the staffs for increasing the deposits. (*Refer annexure no. 29*)

- Null Hypothesis (H<sub>0</sub>): There is no significance difference between the perception of Students and Employed regarding Performance of the staffs.
- Alternative Hypothesis (H<sub>1</sub>): There is significance difference between the perception of Students and Employed regarding Performance of the staffs.

Calculated Higher absolute difference  $|D|_{max} = 0.0317$ Then at 5% level of significance table value of

$$D = 1.36 \sqrt{\frac{n_1 + n_2}{n_1 n_2}}$$
$$= 0.2423$$

Since the calculated value of  $|D|_{max}$  (0.0317) is less than the table value of D (0.2423), the null hypothesis H<sub>0</sub> is accepted and hence alternative hypothesis H<sub>1</sub> is rejected. Therefore, it is concluded that there is no significant difference between the perception of Students and Employed regarding the performance of staffs for increasing the deposits. (*Refer annexure no. 30*)

- Null Hypothesis (H<sub>0</sub>): There is no significance difference between the perception of Business persons and Employed regarding Performance of the staffs.
- Alternative Hypothesis (H<sub>1</sub>): There is significance difference between the perception of Business persons and Employed regarding Performance of the staffs.

Calculated Higher absolute difference  $|D|_{max} = 0.3333$ Then at 5% level of significance table value of

$$D = 1.36 \sqrt{\frac{n_1 + n_2}{n_1 n_2}} = 0.3205$$

Since the calculated value of  $|D|_{max}$  (0.3333) is greater than the table value of D (0.3205), the null hypothesis H<sub>0</sub> is rejected and hence alternative hypothesis H<sub>1</sub> is accepted. Therefore, it is concluded that there is significant difference between the perception of Business persons and Employed persons regarding the performance of the staffs for increasing deposits. (*Refer annexure no. 31*)

From the above analysis it is clear that a single product can satisfy the students and employed segments but a single product made to cater either students and employed or business or employed persons have the possibility of not being successful in the market as there exists perceptual differences between student and employed segments and business persons and employed persons segments

## 4.8.3 Hypothesis Testing on Age wise Segment about Perception Regarding Performance of Staffs using the Kolmogorov-Smirnov Two Sample Test

The perception of the respondents (Below 30 and Above 30) regarding the Performance of the staffs may vary. Hypothesis to be tested in this regard are:

- Null Hypothesis (H<sub>0</sub>): There is no significance difference between the perception of respondents below the age of 30 and above the age of 30 regarding Performance of the staffs
- Alternative Hypothesis (H<sub>1</sub>): There is significance difference between the perception of respondents below the age of 30 and above the age of 30 regarding Performance of the staffs

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Calculated Higher absolute difference  $|D|_{max} = 0.3333$ Then at 5% level of significance table value of

$$D = 1.36 \sqrt{\frac{n_1 + n_2}{n_1 n_2}}$$
$$= 0.2325$$

Since the calculated value of  $|D|_{max}$  (0.3333) is greater than the table value of D (0.2325), the null hypothesis H<sub>0</sub> is rejected and hence alternative hypothesis H<sub>1</sub> is accepted. Therefore, it is concluded that there is significant difference between the perception of respondents below the age of 30 and above the age of 30 regarding Performance of the staffs. (*Refer annexure no. 32*)

Form the above calculation it is clear that there exists a perceptual differences in the age groups below 30 and above 30 regarding performance of the staffs. This means any decisions made regarding location of performance of staffs will affect only one segment. For example decrease in performance in the staffs might increase the demand in the segment below 30 but the demand in segment above 30 may remain constant or decrease.

# 4.9 Hypothesis Testing Regarding Courteous and Friendly Relation the Staffs.

The courteous and Friendly relation of the staffs at the counter plays a vital role for attracting the customers. The staffs of the banks should be create a homely environment in the office and create a good relation with the customers. Thus following hypothesis about the perceptual variation regarding courteous and friendly relation has been tested.

# 4.9.1 Z test to find the Perceptual Differences Between the Financial Institutions and Customers Regarding Courteous and Friendly Relation of Staffs

The perception of respondents (Banks and Financial institutions and Customers) regarding the impact of courteous and friendly relation of the Staffs in increasing the deposits may vary. To check their perceptional differences following hypothesis is formulated and tested

- Null Hypothesis (H<sub>0</sub>): There is no significance difference between the perceptions of Banks and Financial Institutions regarding the impact of courteous and friendly relation of the staffs in increasing deposits
- Alternative Hypothesis (H<sub>1</sub>): There is significance difference between the perceptions of Banks and Financial Institutions regarding the impact of courteous and friendly relation of the staffs in increasing deposits

Calculated value of Z = 0.89

Level of significance () = 5% = 0.05

Then, the tabulated value of Z at 5% level of significance is 1.96.

Since the calculated value of Z (0.89) is less than the table value of Z (1.96), the alternative hypothesis is rejected and the null hypothesis is selected. Therefore, it is concluded that there is no significant difference between the perception of Banks and Financial Institutions and customers regarding impact of courteous and friendly relation of staffs in increasing deposits (*Refer annexure no. 33*).

The above calculation shows that the customers consider the courteous and friendly relation of the staffs while considering a bank. The financial institutions are also aware of this fact thus we see similar kinds of staffs with outgoing personality in the serving and customers care department

#### 4.10 Hypothesis Testing Regarding Interest Rates on Deposits

Interest rates on deposits are the key factor analyzed by the customers while considering the bank. The banks interest rates also vary according to the market segments targeted. Thus following hypothesis about the perceptual variation regarding interest rates on deposits has been tested.

# **4.10.1** Z test to find the perceptual differences between the financial institutions and customers regarding Interest rates on deposits

The perception of respondents (Banks and Financial institutions and Customers) regarding the impact of Interest rates in the deposits increasing the deposits may vary. To check their perceptional differences following hypothesis is formulated and tested

- Null Hypothesis (H<sub>0</sub>): There is no significance difference between the perceptions of Banks and Financial Institutions regarding the impact of interest rates on deposits in increasing deposits
- Alternative Hypothesis (H<sub>1</sub>): There is significance difference between the perceptions of Banks and Financial Institutions regarding the impact of interest rates on deposits in increasing deposits

Calculated value of Z = 1.78

Level of significance () = 5% = 0.05

Then, the tabulated value of Z at 5% level of significance is 1.96.

Since the calculated value of Z (1.78) is less than the table value of Z (1.96), the alternative hypothesis is rejected and the null hypothesis is selected. Therefore, it is concluded that there is no significant difference between the perception of Banks and Financial Institutions and customers regarding impact interest rates in increasing deposits. (*Refer annexure no. 34*)

Both the Financial institutions and Customers give equal importance to the interest of deposits. The customers choose the bank which offers highest rate of interest on deposits. The bank and financial institution are also aware of this thus they offer high rate of interest as possible.

# 4.10.2 Hypothesis Testing on Occupational Segment about Perception Regarding Interest Rates on Deposits Using the Kolmogorov-Smirnov Two Sample Test

The perception of the respondents (Students and Business persons, Students and employed, Business persons and employed) regarding the Interest Rates on Deposits may vary. Hypothesis to be tested in this regard are:

Null Hypothesis (H0):There is no significance difference between the<br/>perception of Students and Business persons<br/>regarding Interest Rates on Deposits

Alternative Hypothesis (H<sub>1</sub>): There is significance difference between the perception of Students and Business persons regarding Interest Rates on Deposits

Calculated Higher absolute difference  $|D|_{max} = 0.35714$ Then at 5% level of significance table value of

$$D = 1.36 \sqrt{\frac{n_1 + n_2}{n_1 n_2}} = 0.3318$$

Since the calculated value of  $|D|_{max}$  (0.3571) is greater than the table value of D (0.3318), the null hypothesis H<sub>0</sub> is rejected and hence alternative hypothesis H<sub>1</sub> is accepted. Therefore, it is concluded that there is significant difference between the perception of Students and Business persons regarding Interest rates on Deposits for increasing deposits. (*Refer annexure no. 35*)

regarding Interest Rates on Deposits

Calculated Higher absolute difference  $|D|_{max} = 0.1111$ Then at 5% level of significance table value of

$$D = 1.36 \sqrt{\frac{n_1 + n_2}{n_1 n_2}} = 0.2423$$

Since the calculated value of  $|D|_{max}$  (0.1111) is less than the table value of D (0.2423), the null hypothesis H<sub>0</sub> is accepted and hence alternative hypothesis H<sub>1</sub> is rejected. Therefore, it is concluded that there is no significant difference between the perception of Students and Emplyed persons regarding Interest rates . (*Refer annexure no. 36*)

- Null Hypothesis (H<sub>0</sub>): There is no significance difference between the perception of Business persons and Employed regarding Interest Rates on Deposits
- Alternative Hypothesis (H<sub>1</sub>): There is significance difference between the perception of Business persons and Employed regarding Interest Rates on Deposits

Calculated Higher absolute difference  $|D|_{max} = 0.3889$ Then at 5% level of significance table value of

$$D = 1.36 \sqrt{\frac{n_1 + n_2}{n_1 n_2}} = 0.3205$$

Since the calculated value of  $|D|_{max}$  (0.3889) is greater than the table value of D (0.3205), the null hypothesis H<sub>0</sub> is rejected and hence alternative hypothesis H<sub>1</sub> is accepted. Therefore, it is concluded that there is significant difference between the perception of Business and Employed persons regarding the interest rate on deposits(*Refer annexure no. 37*).

From the above calculation it is clear that business persons do not give preferences to the interest rates on deposits as given by students and employed persons. The financial product with low interest rate will be successful in business persons and students segments. However the financial product with higher interest rates might only be successful in the business persons segments.

# 4.10.3 Hypothesis Testing on age wise segment about perception regarding Interest Rates on Deposits using the Kolmogorov-Smirnov Two Sample Test

The perception of the respondents (Below 30 and Above 30) regarding the Interest Rates on Deposits may vary. Hypothesis to be tested in this regard are:

Null Hypothesis (H<sub>0</sub>): There is no significance difference between the perception of respondents below the age of 30 and above the age of 30 regarding Interest Rates on Deposits

Alternative Hypothesis (H<sub>1</sub>): There is significance difference between the perception of respondents below the age of 30 and above the age of 30 regarding Interest Rates on Deposits.

Calculated Higher absolute difference  $|D|_{max} = 0.0831$ Then at 5% level of significance table value of

$$D = 1.36 \sqrt{\frac{n_1 + n_2}{n_1 n_2}} = 0.2325$$

Since the calculated value of  $|D|_{max}$  (0.0831) is less than the table value of D (0.2325), the null hypothesis H<sub>0</sub> is accepted and hence alternative hypothesis H<sub>1</sub> is rejected. Therefore, it is concluded that there is no significant difference between the perception of respondents below the age of 30 and above the age of 30 regarding Interest Rates on Deposits (*Refer annexure no. 38*).

Interest on deposits factor is given the same preference by the age groups below 30 and above 30. If the financial institution makes any alteration in interest on deposits it will affect the both segments. For example if the financial institution decreases the value of interest rates on deposits there is possibility of decrease in demand in both the age wise segments

#### 4.11 Hypothesis Testing Regarding E- Banking Facility

E-banking facility has been an essential factor in the banking sector. Most of the corporate clients prefer banking electronically. The new coming banks are coming with the latest technology to capture this segment of the market. Interest. Thus following hypothesis about the perceptual variation regarding ebanking facility has been tested.

## 4.11.1 Z test to find the Perceptual Differences Between the Financial Institutions and Customers Regarding E- Banking Facility

The perception of respondents (Banks and Financial institutions and Customers) regarding the impact of E banking facility in increasing the deposits may vary. To find out who among Customers and Financial institution gives more importance to e-banking facility following hypothesis is formulated and tested as follows

Null Hypothesis (H<sub>0</sub>): Level of importance regarding e banking facility given by Customers is greater or equal than that the level of importance given by bank and financial Institutions Alternative Hypothesis (H<sub>1</sub>): Level of importance regarding e-banking facility given by Customers is less than that the level of importance given by bank and financial Institutions.

Calculated value of Z = 2.29

Level of significance () = 5% = 0.05

Then, the tabulated value of Z at 5% level of significance is 1.645.

Since the calculated value of Z (2.29) is greater than the table value of Z (1.645), the null hypothesis is rejected and the alternative hypothesis is selected. Therefore, it is concluded that the level of importance regarding e-banking facility given by Customers is less than the level of importance given by bank and financial institutions. (*Refer annexure no. 39*)

The customers seem to be unaware of the e-banking facility of the bank. They have not given much importance to the e-banking facility while considering the bank. The level of importance given by bank is greater than the level of importance given by customers. It seems that the bank and financial institutions must give awareness to their clients before launching the e banking facility.

# 4.11.2 Hypothesis Testing on Occupational Segment about Perception Regarding E-Banking Facilities using the Kolmogorov-Smirnov Two Sample Test

The perception of the respondents (Students and Business persons, Students and employed, Business persons and employed) regarding the e- banking facility may vary. Hypothesis to be tested in this regard are:

Null Hypothesis (H<sub>0</sub>): There is no significance difference between the perception of Students and Business persons regarding e- banking facility

Alternative Hypothesis (H<sub>1</sub>): There is significance difference between the perception of Students and Business persons regarding e- banking facility

Calculated Higher absolute difference  $|D|_{max} = 0.5476$ Then at 5% level of significance table value of

$$D = 1.36 \sqrt{\frac{n_1 + n_2}{n_1 n_2}} = 0.3318$$

Since the calculated value of  $|D|_{max}$  (0.5476) is greater than the table value of D (0.3318), the null hypothesis H<sub>0</sub> is rejected and hence alternative hypothesis H<sub>1</sub> is accepted. Therefore, it is concluded that there is significant difference between the perception of Students and Business persons regarding e-banking facility(*Refer annexure no. 40*).

Alternative Hypothesis (H<sub>1</sub>): There is significance difference between the perception of Students and Employed regarding e-banking facility

Calculated Higher absolute difference  $|D|_{max} = 0.4365$ 

Then at 5% level of significance table value of

$$D = 1.36 \sqrt{\frac{n_1 + n_2}{n_1 n_2}}$$
$$= 0.2423$$

Since the calculated value of  $|D|_{max}$  (0.4365) is greater than the table value of D (0.2423), the null hypothesis H<sub>0</sub> is rejected and hence alternative hypothesis H<sub>1</sub> is accepted. Therefore, it is concluded that there is significant difference

between the perception of Students and Employed regarding e- banking facility (*Refer annexure no. 41*).

- Null Hypothesis (H<sub>0</sub>): There is no significance difference between the perception of Business persons and Employed regarding e- banking facility
- Alternative Hypothesis (H<sub>1</sub>): There is significance difference between the perception of Business persons and Employed regarding e- banking facility

Calculated Higher absolute difference  $|D|_{max} = 0.3333$ Then at 5% level of significance table value of

$$D = 1.36 \sqrt{\frac{n_1 + n_2}{n_1 n_2}} = 0.3205$$

Since the calculated value of  $|D|_{max}$  (0.3333) is greater than the table value of D (0.3205), the null hypothesis H<sub>0</sub> is rejected and hence alternative hypothesis H<sub>1</sub> is accepted. Therefore, it is concluded that there is significant difference between the perception of Business persons and Employed regarding e-banking facility (*Refer annexure no. 42*).

From the above calculation it is clear that all three segments students, business persons and employed persons have different perceptions regarding e-bamking facility of the bank. Thus the financial institution must come with different product with different e-banking facility to cater the three market segment. A single product, based on e-banking facility, made to cater all three segments have the possibility of being not being successful.

# 4.11.3 Hypothesis Testing on age wise segment about perception regarding E-Banking Facilities using the Kolmogorov-Smirnov Two Sample Test

The perception of the respondents (Below 30 and Above 30) regarding the ebanking facility may vary. Hypothesis to be tested in this regard are:

- Null Hypothesis ( $H_0$ ): There is no significance difference between the perception of respondents below the age of 30 and above the age of 30 regarding e- banking facility
- Alternative Hypothesis (H<sub>1</sub>): There is significance difference between the perception of respondents below the age of 30 and above the age of 30 regarding e- banking facility

Calculated Higher absolute difference  $|D|_{max} = 0.2892$ Then at 5% level of significance table value of

$$D = 1.36 \sqrt{\frac{n_1 + n_2}{n_1 n_2}} = 0.2325$$

Since the calculated value of  $|D|_{max}$  (0.2892) is greater than the table value of D (0.2325), the null hypothesis H<sub>0</sub> is rejected and hence alternative hypothesis H<sub>1</sub> is accepted. Therefore, it is concluded that there is significant difference between the perception of respondents below the age of 30 and above the age of 30 regarding e- banking facility(*Refer annexure no. 43*).

Form the above calculation it is clear that there exists a perceptual differences in the age groups below 30 and above 30 regarding e- banking facility. This means any decisions made regarding location of e- banking will affect only one segment. For example decrease in e- banking facility might increase the demand in the segment below 30 but the demand in segment above 30 may remain constant or decrease.

## 4.12 Hypothesis Testing on Different Benefits Variables Regarding Convenient Hour Banking

Today, convenient hour banking has been introduced by every bank. Especially the business persons like to bank at evening and off day counters.

## 4.12.1 Z test to Find the Perceptual Differences Between the Financial Institutions and Customers

The perception of respondents (Banks and Financial institutions and Customers) regarding the impact of Convenient Hour Banking in increasing the deposits may vary. To check their perceptional differences following hypothesis is formulated and tested

- Null Hypothesis (H<sub>0</sub>): There is no significance difference between the perceptions of Banks and Financial Institutions regarding the impact of convenient hour in increasing deposits
- Alternative Hypothesis (H<sub>1</sub>): There is significance difference between the perceptions of Banks and Financial Institutions regarding the impact of convenient hour in increasing deposits

Calculated value of Z = 0.94

Level of significance () = 5% = 0.05

Then, the tabulated value of Z at 5% level of significance is 1.96.

Since the calculated value of Z (0.94) is less than the table value of Z (1.96), the alternative hypothesis is rejected and the null hypothesis is selected. Therefore, it is concluded that there is no significant difference between the perception of Banks and Financial Institutions and customers regarding impact of convenient hour banking in increasing deposits. (*Refer annexure no. 44*)

The bank and financial institutions have effectively captured this segments. They have the same perceptions as of customers. Thus, nowadays most of the banks have 365 days and evening counters.

# 4.12.2 Hypothesis Testing on Occupational Segment about Perception Regarding Convenient Hour Banking using the Kolmogorov-Smirnov Two Sample Test

The perception of the respondents (Students and Business persons, Students and employed, Business persons and employed) regarding Convenient Hour Banking may vary. Hypothesis to be tested in this regard are:

Null Hypothesis (H<sub>0</sub>): There is no significance difference between the perception of Students and Business persons regarding Convenient Hour Banking

Alternative Hypothesis (H<sub>1</sub>): There is significance difference between the perception of Students and Business persons regarding Convenient Hour Banking

Calculated Higher absolute difference  $|D|_{max} = 0.1667$ Then at 5% level of significance table value of

$$D = 1.36 \sqrt{\frac{n_1 + n_2}{n_1 n_2}}$$
$$= 0.3318$$

Since the calculated value of  $|D|_{max}$  (0.1667) is less than the table value of D (0.3318), the null hypothesis H<sub>0</sub> is accepted and hence alternative hypothesis H<sub>1</sub> is rejected. Therefore, it is concluded that there is significant difference between the perception of Students and Business persons regarding Convenient Hour Banking. (*Refer annexure no. 45*)

Alternative Hypothesis (H<sub>1</sub>): There is significance difference between the perception of Students and Employed regarding Convenient Hour Banking

Calculated Higher absolute difference  $|D|_{max} = 0.2381$ Then at 5% level of significance table value of

$$D = 1.36 \sqrt{\frac{n_1 + n_2}{n_1 n_2}}$$
$$= 0.2423$$

Since the calculated value of  $|D|_{max}$  (0.2381) is less than the table value of D (0.2423), the null hypothesis H<sub>0</sub> is accepted and hence alternative hypothesis H<sub>1</sub> is rejected. Therefore, it is concluded that there is no significant difference between the perception of Students and Employed regarding Convenient Hour Banking (*Refer annexure no. 46*).

Null Hypothesis (H<sub>0</sub>): There is no significance difference between the perception of Business persons and Employed regarding Convenient Hour Banking

Alternative Hypothesis (H<sub>1</sub>): There is significance difference between the perception of Business persons and Employed regarding Convenient Hour Banking

Calculated Higher absolute difference  $|D|_{max} = 0.1667$ Then at 5% level of significance table value of

$$D = 1.36 \sqrt{\frac{n_1 + n_2}{n_1 n_2}}$$
$$= 0.3205$$

Since the calculated value of  $|D|_{max}$  (0.1667) is less than the table value of D (0.3205), the null hypothesis H<sub>0</sub> is accepted and hence alternative hypothesis H<sub>1</sub> is rejected. Therefore, it is concluded that there is no significant difference between the perception of Students and Employed regarding Convenient Hour Banking (*Refer annexure no. 47*).

From the above calculation it is clear that if a financial institution is to make a product based of convenient hour banking a single product can be introduces if it were to target the students and employed or Business and employed persons segments. As there lies a perceptual differences between students and business persons a single product will not to able to satisfy the students and business persons together. It should come up with two different product.

#### 4.13 Hypothesis Testing Regarding Branch Location

To make the banking facility accessible to many customers we now see many branches of a single bank in every area of Kathmandu. The banks are also going to rural area to expand its market share. Thus following hypothesis about the perceptual variation regarding branch location has been tested.

## 4.13.1 Z test to Find the Perceptual Differences Between the Financial Institutions and Customers Regarding Branch Location

The perception of respondents (Banks and Financial institutions and Customers) regarding the impact of Branch Location in increasing the deposits may vary. To check their perceptional differences following hypothesis is formulated and tested

Null Hypothesis (H<sub>0</sub>): There is no significance difference between the perceptions of Banks and Financial Institutions regarding the impact of Branch Location in increasing deposits

Alternative Hypothesis (H<sub>1</sub>): There is significance difference between the perceptions of Banks and Financial Institutions regarding the impact of Branch Location in increasing deposits

Calculated value of Z = 1.44

Level of significance () = 5% = 0.05

Then, the tabulated value of Z at 5% level of significance is 1.96.

Since the calculated value of Z (1.44) is less than the table value of Z (1.96), the alternative hypothesis is rejected and the null hypothesis is selected. Therefore, it is concluded that there is no significant difference between the perception of Banks and Financial Institutions and customers regarding impact of branch location in increasing deposits. (*Refer annexure no. 48*)

The perception of the Customers and Banks and financial institutions is the same. Thus knowing the customers perceptions the banks also try to have as many branches as possible.

# 4.13.2 Hypothesis Testing on Occupational Segment about Perception Regarding Location Branch using the Kolmogorov-Smirnov Two Sample Test

The perception of the respondents (Students and Business persons, Students and employed, Business persons and employed) regarding Branch Location may vary. Hypothesis to be tested in this regard are:

- Null Hypothesis (H0):There is no significance difference between the<br/>perception of Students and Business persons<br/>regarding Branch Location
- Alternative Hypothesis (H<sub>1</sub>): There is significance difference between the perception of Students and Business persons regarding Branch Location

Calculated Higher absolute difference  $|D|_{max} = 0.2381$ Then at 5% level of significance table value of

$$D = 1.36 \sqrt{\frac{n_1 + n_2}{n_1 n_2}}$$
$$= 0.4217$$

Since the calculated value of  $|D|_{max}$  (0.2381) is less than the table value of D (0.3318), the null hypothesis H<sub>0</sub> is accepted and hence alternative hypothesis H<sub>1</sub> is rejected. Therefore, it is concluded that there is no significant difference between the perception of Students and Business persons regarding Branch Location. (*Refer annexure no. 49*)

Null Hypothesis (H<sub>0</sub>): There is no significance difference between the perception of Students and Employed regarding Branch Location

Alternative Hypothesis (H<sub>1</sub>): There is significance difference between the perception of Students and Employed regarding Branch Loation

Calculated Higher absolute difference  $|D|_{max} = 0.2142$ Then at 5% level of significance table value of

$$D = 1.36 \sqrt{\frac{n_1 + n_2}{n_1 n_2}}$$

= 0.2423

Since the calculated value of  $|D|_{max}$  (0.2142) is less than the table value of D (0.2423), the null hypothesis H<sub>0</sub> is accepted and hence alternative hypothesis H<sub>1</sub> is rejected. Therefore, it is concluded that there is no significant difference between the perception of Students and Employed regarding Branch Location. (*Refer annexure no. 50*)

Alternative Hypothesis (H<sub>1</sub>): There is significance difference between the perception of Business persons and Employed regarding Branch Location

Calculated Higher absolute difference  $|D|_{max} = 0.3333$ Then at 5% level of significance table value of

$$D = 1.36 \sqrt{\frac{n_1 + n_2}{n_1 n_2}}$$
$$= 0.3205$$

Since the calculated value of  $|D|_{max}$  (0.3333) is greater than the table value of D (0.3205), the null hypothesis H<sub>0</sub> is rejected and hence alternative hypothesis H<sub>1</sub> is accepted. Therefore, it is concluded that there is significant difference between the perception of Business persons and Employed regarding Branch Location. (*Refer annexure no. 51*)

# 4.13.3 Hypothesis Testing on age wise Segment about Perception Regarding Location of Branch using the Kolmogorov-Smirnov Two Sample Test

The perception of the respondents (Below 30 and Above 30) regarding Branch Location may vary. Hypothesis to be tested in this regard are:

Null Hypothesis (H<sub>0</sub>): There is no significance difference between the perception of respondents below the age of 30 and above the age of 30 regarding Branch Location Alternative Hypothesis (H<sub>1</sub>): There is significance difference between the perception of respondents below the age of 30 and above the age of 30 regarding Branch Location Calculated Higher absolute difference  $|D|_{max} = 0.1692$ Then at 5% level of significance table value of

$$D = 1.36 \sqrt{\frac{n_1 + n_2}{n_1 n_2}} = 0.2325$$

Since the calculated value of  $|D|_{max}$  (0.1692) is less than the table value of D (0.2325), the null hypothesis H<sub>0</sub> is accepted and hence alternative hypothesis H<sub>1</sub> is rejected. Therefore, it is concluded that there is no significant difference between the perception of respondents below the age of 30 and above the age of 30 regarding Branch Location (refer appendice no 52)

Branch location is given the same preference by the age groups below 30 and above 30. If the financial institution makes decisions regarding branch location then it will affect the both segments.

#### 4.14 Hypothesis Testing Regarding ATM Location

Automatic Tell Machine is preferred by everyone today, it have made the banking facility available everywhere and anywhere. In addition it has decreased the time taken to withdraw the cash. Some of the banks have also started with the deposit facility in ATM machines. Thus following hypothesis about the perceptual variation regarding ATM location has been tested.

## 4.14.1 Z test to Find the Perceptual Differences Between the Financial Institutions and Customers Regarding ATM Location

The perception of respondents (Banks and Financial institutions and Customers) regarding the impact of ATM Location in increasing the deposits may vary. To find out who among Customers and Financial institution gives more importance to Collateral value following hypothesis is formulated and tested as follows Null Hypothesis (H0):Level of importance given by Customers to ATMlocation is greater or equal than that the level ofimportance given by bank and financial Institutions

Alternative Hypothesis (H<sub>1</sub>): Level of importance given by Customers to ATM location is less than that the level of importance given by bank and financial Institutions

Calculated value of Z = 1.73

Level of significance () = 5% = 0.05

Then, the tabulated value of Z at 5% level of significance is 1.645.

Since the calculated value of Z (1.73) is grater than the table value of Z (1.645), the null hypothesis is rejected and the alternative hypothesis is selected. Therefore, it is concluded that the level of importance given by customers to ATM location is less than the level of importance given by bank (*Refer* annexure no. 53).

Thus the bank must consider other benefits more than the ATM location. The ATM location makes little differences in the selection of financial institutions.

# 4.14.2 Hypothesis Testing on age wise Segment about Perception of ATM's Location using the Kolmogorov-Smirnov Two Sample Test

The perception of the respondents (Below 30 and Above 30) regarding Branch Location may vary. Hypothesis to be tested in this regard are:

Null Hypothesis (H<sub>0</sub>): There is no significance difference between the perception of respondents below the age of 30 and above the age of 30 regarding ATM's Location Alternative Hypothesis (H<sub>1</sub>): There is significance difference between the perception of respondents below the age of 30 and above the age of 30 regarding ATM's Location Calculated Higher absolute difference  $|D|_{max} = 0.2462$ Then at 5% level of significance table value of

$$D = 1.36 \sqrt{\frac{n_1 + n_2}{n_1 n_2}} = 0.2325$$

Since the calculated value of  $|D|_{max}$  (0.2462) is greater than the table value of D (0.2325), the null hypothesis H<sub>0</sub> is rejected and hence alternative hypothesis H<sub>1</sub> is accepted. Therefore, it is concluded that there is significant difference between the perception of respondents below the age of 30 and above the age of 30 regarding ATM's Location

Form the above calculation it is clear that there exists a perceptual differences in the age groups below 30 and above 30 regarding ATM's location. This means any decisions made regarding location of ATM will effect only one segment. For example ATM machine shifted from one location to another might increase the demand in the segment below 30 but the demand in segment above 30 may remain constant or decrease (*Refer annexure no. 54*).

#### **CHAPTER-V**

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter presents the overall summary of the study and conclusions drawn from the analysis of the study. This also includes the recommendations about the upcoming market segments.

#### 5.1 Summary

The main purpose of the study is to identify the current market segment of the retail banking. It also aimed to examine the market segment in consumer banking and analyze the attributes of the segments. The study have also attempted to identify the new segment

The study is based mainly on the primary data. In addition, secondary data have also been used to fulfill the objectives of the study.

The data for this study were obtained from a questionnaire distributed to altogether 400 respondents out of which 250 questionnaire was distributed to the consumers and 150 questionnaire was distributed to the banking professionals especially staffs and managers of the banks. The sample was drawn on a simple random basis. In all, 212 replies were received (an effective response rate of 53 percent). Almost all the questionnaire received had opened ended answered but few of the respondents fail to answer the open ended questions. The response rate, although not disappointing, may have adversely affected by the respondents personal purchasing behaviour and attitudes. The primary data was collected by using the questionnaire and observation surveys. The questions were related to either related to the prominent segments or to the benefits of the product for the benefit segment analysis. By ascertaining the level of importance customers attached to various accounts and services offered by Banks and financial institutions, the questionnaire was designed to

discover what particular benefits customers sought. A five point rating scale (from "not important to very important") employed.

The researcher tries to identify the perception of respondents (Consumers and Banking) regarding the market segment and its benefits. Similarly the researcher tries to find out if there are any differences in the benefits wanted by the consumers with different education, profession and age.

The collected answers to the questionnaires were then analyzed by using different statistical tools viz. Kolmogorov-Smirnov two sample tests, and Z-tests. In addition, Mean, Standard Deviation and Coefficient of variation is also used.

The major findings of the study are briefly summarized as follows:

- 1. There exist no perceptual differences regarding importance of geographic location, number of dependents, and qualification of the applicants while applying for loans.
- 2. The importance to the collateral value given by customers is less than the importance given by banks and financial institutions.
- 3. There exist no perceptual differences regarding performance of staffs, courteous and friendly relation of the staffs, interest rate, convenient hour banking branch location and ATM's location. The perceptions of customers and financial institution regarding role played by the above mentioned factors for increasing deposits is same.
- 4. The importance to the e- banking facility given by customers is less than the importance given by banks and financial institution.

#### **5.2** Conclusion

This study was conducted to examine the market segments in consumer banking especially the perceptual differences between financial institution and customers in term of benefits wanted by the customers. The study has also examined the age wise and occupational wise perceptual differences. Further the purpose was to examine the target segments of financial institutions.

Mostly, the collateral value is given the equal importance by customer and financial institution. Geographic location of the applicant and qualification is given moderate consideration by the customers and financial institutions. The applicant's number of dependents is given nominal consideration by both of the respondents.

Interest on deposits is considered the most important factor by customers while opening a bank where as e- banking facility is given the least importance while opening a bank by the customers.

Perception of financial institution and customers is similar regarding geographic location, number of dependents, qualification by there exists difference regarding the collateral value. Perception of financial institution and customers is similar for performance of staffs, courteous and friendly relation of staffs, interest rates of deposits, convenient hour banking, ATM location. The analysis also revealed that there exist perceptual differences regarding e-banking facility

There are no dramatic differences in the benefits wanted by different occupational groups except of few benefits. The also found out that a single product will not satisfy all the segments.

#### 5.3 Recommendation

On examination of occupational segments it is recommended that the

1. Financial product based on interest rates targeted to business and employed persons require some alternation.

- 2. A financial product with qualification requirement may be successful only in students and Business persons segment or Business and employed segments.
- 3. A deposit product with less interest rate may be successful in Business persons segment but however a deposit product must have high interest rate if the target groups are students and employed persons.
- 4. Convenient hour banking is mostly preferred by business persons. If the target groups are business persons the financial product must have convenient hour banking

After the examination of the age wise market segments it is recommended that

- 1. Alternation in required in financial product in performance of staffs, interest rates on deposit, e-banking facilities, ATM location if the target groups ages is different.
- 2. No alternation is required in financial product in convenient hour banking and branch location is required if the target groups age is different.
- 3. Interest rates and collateral value is crucial factor in financial product. It will affect all the age groups. The financial institution must give high level of consideration while making financial products

Upon analysis of benefits attributes of segments in consumer banking following recommendations have been that

- 1. The financial institutions give the highest importance to the collateral value. Thus whenever applying for loans the applicant must have a strong collateral value. Failing to provide so may reject the application by financial institutions.
- 2. The financial institutions have a concept that there will be an increase in the deposits if e-banking facility is provided to the customers. But the banks should give maximum consideration to the interest rate on deposits.
- 3. Being flexible in the collateral requirement the financial institutions will be able to attract new customers.

- 4. The financial institution should give some consideration to the number of dependents of the applicants as the disposable incomes decreased if the applicants have many number of dependents.
- 5. More customers can be attracted by providing efficient staffs having friendly and courteous relation.
- 6. The customers don't seem to be using the e-banking facility provided by financial institution. Financial institution must make their customer aware regarding the e-banking facility.
- 7. Having good networks of its own ATM can increase deposits.

Regarding identification of new segments it is recommended that the bank and financial institution should consider the clients without having sound qualification for providing loans. By giving minimum consideration to the qualification of the customers the bank and financial institution will be able to target small and medium entrepreneurs who have established their organization without having formal and higher education. There exists a segments who prefers using the banks own ATM for cash withdrawals as there will be no extra charges for the cash withdrawal. Thus to attract this segment the bank will have to have a good networks of its own ATM's machine. It is also identified that the financial product based on e-banking facility will be successful in all the market segments. There exists a market segment who doesn't have high level of education. The bank should consider the clients without having high level of qualification while providing loans. By giving minimum consideration to the qualification of the customers the bank will be able to target small and medium entrepreneurs who doesn't have high level of degree.

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## **QUESTIONNAIRE**

Dear Respondents,

As the part of the study on "Segment Analysis of Retail Banking", I have developed following questions in order to validate the findings of this study.

The main focus of this questionnaire is on the problems identified during the course of the study. However, some other relevant questions for practical information are also involved. Your cooperation in this regard will be of immense value for me.

I shall be highly obliged for your prompt response as far as possible.

Thanking you.

Sandeep Dhawa (Researcher) Shakver Dev Campus Putalisadak, Kathnamdu.

Name of Respondent:			
Name of Organization:			•••
Designation:			
Qualification:	Above Graduate Graduate below Graduate	( )	

#### **Respondent Category**

Banks and Financial Institutions

**Instruction:** Please tick (J) in appropriate place and put your views in open-ended questions.

## **Questions:**

- 1. How important is Income factor while providing Loans?
  - [ ] Very Important
  - [ ] Important
  - [ ] Moderately Important
  - [] Nominally Important
  - [ ] Not Important
- 2. How important is Age factor while providing Loans?
  - [ ] Very Important
  - [ ] Important
  - [ ] Moderately Important
  - [ ] Nominally Important
  - [ ] Not Important
- 3. How important is the value of collateral while providing Loans?
  - [ ] Very Important
  - [ ] Important
  - [ ] Moderately Important
  - [ ] Nominally Important
  - [ ] Not Important
- 4. How important do you give geographic location while providing Loans?
  - [ ] Very Important
  - [ ] Important
  - [ ] Moderately Important
  - [ ] Nominally Important
  - [ ] Not Important
- 5. What role do number of dependents of the applicant play while providing Loans?
  - [ ] Very Important
  - [ ] Important
  - [ ] Moderately Important
  - [ ] Nominally Important
  - [ ] Not Important
- 6. What role do Qualification of the applicant play in providing loans?.
  - [ ] Very Important
  - [ ] Important
  - [ ] Moderately Important

- [ ] Nominally Important
- [ ] Not Important
- 7. What is the rejection Rate of Loans?
  - [ ] Below 40%
  - [ ] 40% to 80%
  - [ ] 80% and above
- 8. In your opinion how much role do Performance of the Staff play in increasing the

deposit?

- [ ] Very Important
- [ ] Important
- [ ] Moderately Important
- [ ] Nominally Important
- [ ] Not Important
- 9. In your opinion what role does the courteous and friendly relation of the staff at the

counter play in increasing the no. of customers?

- [ ] Very Important
- [ ] Important
- [ ] Moderately Important
- [ ] Nominally Important
- [ ] Not Important
- 10. In your opinion what role Interest rates of deposit play in increasing number of customers?.
  - [ ] Very Important
  - [ ] Important
  - [ ] Moderately Important
  - [ ] Nominally Important
  - [ ] Not Important
- 11. Does your bank have e-banking facilities?
  - []Yes []No
- 12. How important is e-banking facilities to the banks?
  - [ ] Very Important
  - [ ] Important
  - [ ] Moderately Important
  - [ ] Nominally Important
  - [ ] Not Important
- 13. Does your bank have convenient hour Banking facilities?
  - [ ] Yes [ ] No

- 14. How important is convenient hour banking facilities?
  - [ ] Very Important
  - [ ] Important
  - [ ] Moderately Important
  - [ ] Nominally Important
  - [ ] Not Important
- 15. How important role does location of branch play?
  - [ ] Very Important
  - [ ] Important
  - [ ] Moderately Important
  - [ ] Nominally Important
  - [ ] Not Important
- 16. How important role does ATM's location play?
  - [ ] Very Important
  - [ ] Important
  - [ ] Moderately Important
  - [ ] Nominally Important
  - [ ] Not Important
- 15. In your opinion do you see any segments that are yet to be tapped in consumer

banking?

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