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**The Effect of GSM Mobile Service Quality on Customer Satisfaction of Nepal
Telecom in the Kathmandu Valley**

by

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ABSTRACT

The main purpose of this study is to explore the effect of the dimensions of service quality on the perceived performance of Nepal Telecom GSM phone users in Kathmandu valley of Nepal. The study has used the SERVQUAL model of service quality with the application of the five service quality dimensions. These five dimensions of service quality which were developed by Parasuraman namely tangibles, reliability, responsiveness, assurance, and empathy were used to measure the level of customers satisfaction in NT users. Other purposes include how customers perceive service quality; identify service quality dimensions that contribute to higher customer satisfaction, factors hindering customer satisfaction. One of the key challenges of today's market is how they satisfy and retain their customers and also manage service quality, which holds a significant importance to customer satisfaction and their perceived performance. The study uses quantitative approach and done different correlation analysis tools. This research is both descriptive and explanatory type research. A questionnaire was designed and distributed to 200 respondents using a probabilistic sampling technique. According to the findings of the study all the five dimensions of service quality have shown a significant positive effect on customer satisfaction. Pearson correlation analysis was conducted to examine the relationship between service quality dimensions and customer satisfaction and the results shows that all five dimensions have a strong positive relationship, reliability($r=0.587$) and empathy($r=0.556$) are first two dimensions which have strong and positive significant impact on customer satisfaction. From regression analysis, there is a positive and statistically significant ($p < 0.05$, $\beta = 0.1511$) impact between tangibility and customer satisfaction that means a unit increase in tangibility will increase customer satisfaction by 15.11%. Due to the fact that telecom firms do not provide tangible products, their service quality is usually assessed by measures of the service-provider's relationship with customers. Thus, telecom service management should pay attention to staff skill possession, knowledge, network coverage, attention to customers and their needs, offering of fast and efficient services and general attitude to customer services.

Keywords: Service quality, Customer Satisfaction, SERVQUAL model

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LIST OF ABBREVIATIONS

| | |
|-------|---|
| NTC | : Nepal Telecommunication Corporation |
| MSP | : Mobile service provider |
| NT | : Nepal telecom |
| UTL | : United telecom limited |
| GSM | : Global system for mobile communication |
| ISDN | : Integrated Services Digital Network |
| PSTN | : Public Switched Telephone Network |
| CDMA | : Code Division Multiple Access |
| LTE | : Long Term Evolution |
| VoLTE | : Voice over LTE |
| MIS | : Management Information System |
| WiMAX | : Worldwide Interoperability for Microwave Access |
| SMS | : Short message service |
| MMS | : Multimedia messaging service |
| IP | : Internet Protocol |
| SRS | : Simple random sampling |
| SPSS | : Statistical Package for Social Science |
| VAS | : Value added service |
| MTN | : Mobile Telecommunication Network |
| CS | : Customer satisfaction |
| MnCSI | : Minnesota Customer Satisfaction Index |
| STC | : Saudi Telecom services |
| SD | : Standard Deviation |
| r | : Pearson Correlation Coefficient |
| VIF | : Variance Inflation Factor |
| R | : Regression Coefficient |

CHAPTER ONE

INTRODUCTION

In the age of globalization, achieving the higher level of customer satisfaction is the challenging task in the service sector. Therefore, for this challenging task, many organizations have started to improve their service quality and providing better services to their customers. Service satisfactory is one of the serious components in any service sector due to the fact service exceptional facilitates to hold competitive benefits in the market place. Therefore, service quality is the strategic tool to reinforce competitive advantages and increase profitability in business (Tam, 2004) So many service sectors are using this strategic component to attract and retain customers. Hence, carrier excellent is determined through client delight and client satisfaction is decided through customer loyalty. Similarly, in order to provide superior services to the clients, at first service providers must understand how clients perceived and evaluated their services. After that, service providers can assume clients are facilitated by various services provided by service sectors (Zeithaml et al., 2002). Affinity between both service quality and customer satisfaction is highlighted in empirical research (Bitner et al., 1990). Therefore, relationship between customer satisfaction and service quality is very critical in-service sector like telecommunication. The telecommunication industry is undergoing rapid changes through globalization and technological development. On top of that customers have access to all the information they want in just a click so customers cannot be tricked anymore. They can switch their service providers at any point of time if they are not satisfied with their mobile services. Hence, it is very important for telecom industry to maintain their service quality to maintain sustainability for longer period of time. Today, it is crucial for telecommunication sector to focus on those activities that result in meeting or exceeding customer's expectations. Moreover, the forces of liberalization and globalization of telecommunication market have pressurized the companies to maintain their market share by focusing on retaining their current customer (Joshi et al., 2010). The important factor that customer values to become loyal are the quality of service they perceive.

In terms of Nepal, there are two leading telecommunication service providers: NTC as a government body and Ncell operating in a private level. Not to forget about other growing

telecom service providers like UTL and Smart. Sooner or later, the market for telecommunication service providers will get saturated along with more international competitors entering the Nepalese market. It's already a high time that leading companies like Ncell and NTC understand the need of customers and fulfill them so that they become loyal to them for longer period of time.

In the telecommunications industry, price is no longer the sole factor in purchasing decisions; quality is the key. However, information about quality of service is hard to obtain, if it's even available. Customers keep demanding more and expect excellent quality. Monitoring is not enough in today's era. A key element of proactivity means preventing customers from experiencing deterioration of service quality. Hence, this study/research regarding assessing & comparing service quality of NT from customer's aspects will help respective telecoms to know the gap between the quality provided by the telecom and quality as perceived by customers. This study will help in providing insight into customer perception of service quality so that NT can use it as a tool to gain customers satisfaction and loyalty.

1.1 Nepal Telecom (NT)

Nepal Doorsanchar Company Ltd. popularly known as Nepal Telecom is state owned telecommunication service provider in Nepal with 91.49% of the government share. The company was a monopoly until 2003, when the first private sector operator United Telecom Limited (UTL) started providing basic telephony services. The central office of Nepal Telecom is placed at Bhadrakali Plaza, Kathmandu. It has branches, exchanges and other offices in 184 locations inside the country. It is the sole provider of fixed line, ISDN and leased-line services in Nepal. Following the access of Ncell (previously known as Mero Mobile) into Nepal's telecommunications industry in 2005, it is not the most effective provider of GSM mobile service. With greater than 5,400 employees, it is one of the largest corporations of Nepal. It has a total of 262 telephone exchanges in numerous parts of the country, more than 20 million GSM cellular phones and greater than a million CDMA phone line as of September 2019. The company with its long history is on the way of customer service and nation building.

According to recent data of MIS report from Nepal Telecommunication Authority, there are about 23 million users of Nepal Telecom which includes all those of fixed landline, GSM mobile, CDMA and internet service. Nepal Telecom Launched 4G LTE Service. It is the primary operator to offer 4G LTE service in Nepal on technology neutral frequency band of 1800 MHz as widespread for 4G in Nepal. Nepal Telecom has above 20 million subscriber of GSM users and about 50 major cities of Nepal they have expanded the 4G services.

Nepal Telecom has always put its endeavors in providing its valued customers a quality service since its inception. To accomplish this goal, technologies best meeting the interest of its customers has always been selected. The nationwide reach of the organization, from urban areas to the economically non- viable most remote locations, is the result of all these efforts that makes this organization different from others. Definitely Nepal Telecom's widespread reach will support in the socio-economic development of the urban as well as rural areas, as communications is one of the most important infrastructures required for development. Accordingly in the era of globalization, it is felt that milestones and achievements of the past are not satisfactory enough to catch up with the global trend in the development of telecommunication sector and the progress of telecommunication services in the country will be steered by Technology, declining equipment prices, market growth due to rise in standard of life and finally by healthy competition. Converting NT from government owned Monopoly Company to private owned, business oriented, customer focused company in a competitive environment, Nepal Telecom invites its all-probable shareholders in the sacred work of nation building.

Mobile Communication has been established rapidly since last few decades. The growth of the wireless broadband technologies in the modern years was the answer of growing demand for mobile Internet and wireless multimedia application such as live TV, live Movies, video conferencing etc. Mobile communication plays a vital role in telecommunication industry. During a common wide area radio access technology and supple network architecture WiMAX and LTE has facilitate convergence of mobile and fixed broadband network. In 4G mobile technology, promises the high mobility with high level speed of data rates and high capacity IP based services and application (Kumar A.

2013). The mobile and wireless communication technologies have been enhancing rapidly day by day. Gadgets continue to shrivel in size and at the same time rising in processing power. Users generally insist in more sophisticated and worthwhile applications. Hence, capacity improvement is the paramount necessity in wireless communications (Bill 2008). The 4G is the most innovative wireless technology which has substituted the 3G systems. The vital characteristics of the 4G networks include retrieving information with a flawless connection anytime, anywhere with a wide range of services, receiving greater amounts of information, pictures, data, video, and so on. The future 4G network infrastructures assimilate numerous networks employing the use of IP (Internet protocol) as a common protocol to confirm that every user will be able to opt for every application and environment. In this era of emerging trends in mobile and wireless communications, 4G focuses on ensuring a flawless service, have larger bandwidth, higher data rates, and smoother and faster handoff across a wide range of wireless networks and systems. Incorporating the 4G potentials with the existing mobile technologies by the use of improved technologies is the major concept. The major characteristics of 4G services of user interest contain application adaptability and high dynamism which indicates that different services can be delivered and available to users' personal preferences and support the user traffic, air interfaces, quality of service, and radio environment. Effective and efficient connection with the network applications can be accomplished in numerous forms and at different levels(Augustine 2007).Today wireless network has become an vital part of peoples' life in their day to day requirements and is becoming more common by each passing day due to the necessity of mobility along with high speed broadband access. Presently, new and fast emerging technologies are being introduced in the field of wireless networks which allow high speed broadband wireless access. Hence, in a world going digitized and wireless, the technologies with higher throughputs are getting more importance with each passing day. For an accomplished and sophisticated 4G wireless network, coverage and capacity are most vital elements.

1.2 Problem statement

Service quality and customer satisfaction have long been recognized as playing a crucial role for success and survival in today's competitive market. Every operator around the world has

realized that customer is their lifeblood. Customer dissatisfaction can lead customers' churn and recruiting a new customer is difficult and costly in terms of marketing. This is because the two concepts of service quality and customer satisfaction have been linked to customer behavioral intentions like purchase and loyalty intention, willingness to spread positive word of mouth, referral and complaint intention by many researchers (Olsen, 2002). In the competitive Telecommunication industry, customer satisfaction is considered as the essence of success. Organizations operating in service industries should consider service quality a key strategic issue for the business success (Spathis et al., 2004). Those service providers who establish a high level of service quality retain a high level of customer satisfaction; they also obtained a sustainable competitive advantage. Research indicates that companies with an excellent customer service record reported a 72% increase in profit per employee, compared to similar organizations that have demonstrated poor customer service; it is also five times costlier to attract new customers than to retain existing customers (Duncan, 2004). In some earlier studies, service quality has been referred as the extent to which a service meets customer's needs or expectations (Lewis & Mitchell, 1990). Every service industry should be known about the expectation and perception of the customer. Measuring customer's expectation is the key to being able to serve the customer satisfactorily. On the other hand, with better understanding of customer's perceptions, service industry can determine the actions required to meet the customer's needs. In this way they can easily satisfied the customer which is directly impact on the overall performance of the service industry. Customer satisfaction is one of the important tools to run a business and to achieve the mission statement. Indeed, customer satisfaction has great significance for the future of an institution and it is seen as a basis for securing market position and achieving other objectives of the institution. Therefore, achieving high levels of service is one method to keep customers both satisfied and loyal (Perng, 2007).

Every organization including telecom organizations strive for long lasting success through building long and solid relationship with their customers. Meeting customers' expectations is a challenging task for telecom operators of Nepal because of the increment in the number of educated customers. It is highly required that telecom companies reevaluate the level of quality that are offered to customers and understand the critical service quality factors that most effect customer loyalty to accomplish greater benefits and big returns. This complicated

picture needs constant studies by the telecom sector to obtain quantitative results as an output; such results is anticipated to clarify the real picture of the leading operators of Nepal: NTC and Ncell.

From the firm's perspective, it is important to ensure that customers are satisfied with the product they purchase as well as with the way the product is delivered. Customers have specific needs, expectations, and perceptions, but if a company is not able to exceed or at least meet these expectations, the customer becomes dissatisfied and probably does not consider a repurchase (Egena, 2013). One prerequisite for customer satisfaction is, therefore, that the company knows their customer's needs and expectations. Hence, this study is to understand the gap between customer's expectation and perceived quality for telecom industry like NTC.

1.3 Objective of the study

The purpose of this study was to analyze the service quality provided by Nepal Telecom (NT) and relating it to the customer satisfaction. The major objective of this thesis is as follows:

- To investigate the effect of service quality dimensions (tangibility, reliability, responsiveness, assurance and empathy) on customer satisfaction of GSM mobile service of NT using SERVQUAL model.

The specific objectives of this thesis are as follows:

- To examine the correlation between the service quality dimensions.
- To examine the relationship between service quality dimensions and customer satisfaction with NT GSM mobile service.
- To identify the service quality dimensions that has significant effect on customer satisfaction.
- To analyze the satisfaction level of customers with GSM mobile service quality of NT.

1.4 Operational Definition

Service: Goods are most tangible which can be referred as an object that the customer can see, touch or taste while services based on the business perspectives are more of a valuable action, a deed, performance or an effort to satisfy a need and fulfill the demand from the

customer (Rouse,2012). A service provider is any organization that provides goods, facilities or services to the public, whether paid for or free, no matter how large or small the organization is.

Quality: Quality is a complex notion and might mean different things to different people. In simple term, it can define as “degree of excellence” or “conformance to requirements”. According to the American society for quality control, quality is the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs. Hence quality is an integral part of business.

Service Quality: The definition of quality may vary from person to person and from situation to situation. The definitions of service quality vary only in wording but typically involve determining whether perceived service delivery meets, exceeds or fails to meet customer expectations. Parasuraman (1988) define service quality as the degree and direction of discrepancy between the consumer’s perceptions and expectations, or the extent to which a service meets or exceeds customer expectations. So, the service quality is the difference between customer’s expectations and perceptions of services delivered by a service firm. Service quality is defined as the gap between the consumer’s expectations and perceptions. That is, the quality of a service will be rated high when the service delivered exceeds the consumer’s expectations and will be rated low when it falls short of customer’s expectations. If the performance exceeds expectations, the customer is highly satisfied (Kotler 1999).

Customer Satisfaction: Customer satisfaction refers to the extent to which customers are happy with the products and services provided by a business. Gaining high levels of customer satisfaction is very important to a business because satisfied customers are most likely to be loyal and to make repeat orders and to use a wide range of services offered by a business. Gerpott et al. (2001) noted customer satisfaction is measured by that a customer's estimated experience of the extent to which a provider's services fulfill his or her expectations. A number of benefits are associated with customer satisfaction; satisfied customers are lesser price sensitive, buy additional products, are less influenced by competitors and stay loyal longer (Zineldin, 2000).

Customer Loyalty: Customer loyalty is the result of an organization's creating a benefit for customers so that they will maintain and increasingly repeat business with the organization (Anderson, & Jacobsen, 2000). It is a deeply held commitment of customers to prefer brand, products or services of a certain organization in future regardless of any situational constraints or marketing promotions to cause the switching behavior. Moreover, true customer loyalty is created when customers become advocate of an organization without any incentive (Oliver, 1997).

CHAPTER TWO

LITERATURE REVIEW

Service quality is always being considered as one of the important attributes for service providers. Findings about service quality assist service providers to initiate development program to mitigate gap and formulate future planning. To measure the service quality from consumers perspective now a days is one of the tops prioritize construct of study by service providers. Service quality is an indispensable factor for customer satisfaction, cost reduction, customer loyalty, customer relationship and retention, profitability and so on.

According to Lewis (1989), a critical dimension of competitiveness is service quality. Stonebreaker and Leong (1994) defined quality in the way that a total system is required for product or service quality, which can identify requirement of the customers, can design product/service as per those requirements and can create a service delivery or production to produce in conformance with the specifications.

A research was done by Sahoo et al. (2013) to know the existence of significant difference between public and private telecom service providers concerning to customer satisfaction on customer loyalty. The European Journal of Business and Management which has a title “Customer Satisfaction and Loyalty: A Comparative Study in Mobile Telecommunication Industry”. The data for this research was collected through a structured questionnaire from 360 customers selected on stratified random basis from customers of both public sector and private sector mobile telecom service providers. One of the most useful research questions was that the level of customer satisfaction given by public sector and private sector mobile telecom service providers significantly differ or not. Though, on the four parameters the loyalty of the customer with public sector and private sector mobile telecom service providers do not significantly vary. Only the last component “Network Service clearly is able to provide” says it is significantly different with public sector and private sector mobile telecom service providers. This research portrays that the degree of impact of customer satisfaction on customer loyalty is not that high.

Another interesting study was done by Egena in 2013 in a paper named Service Quality and Customer Satisfaction in Nigerian Mobile Telephony: Potential Partners or Distant

Cousins? This research empirically measures customer satisfaction with service delivery of Mobile Telecommunication providers in Nigeria. The data used for this study were obtained using a structured survey questionnaire and the questions were close ended and used a 5-point Likert scale. The sample consists of 532 mobile subscribers in Nigeria, using a simple random sampling technique spread across all the six geo-political zones in the country. The research determined that a relationship exists between service quality/delivery and customer satisfaction, also between SERVQUAL reliability dimension and customer satisfaction and between customer satisfaction and switching intention among mobile phone users in Nigeria. The research result shows that higher customer satisfaction was associated with lower switching intention and a lower customer satisfaction correlates with a higher switching intention among the subscribers.

Al-Zoubi has conducted a research named Service Quality Effects on Customer Loyalty among the Jordanian Telecom Sector "Empirical Study" to analyze the Service Quality Effects on Customer Loyalty in the Jordanian Telecom Sector in 2013. The population of this study is IT and MIS university students. The prime criterions behind it are that these students are a target market for the telecom organizations and more attracted to advertisement and promotional activities. The statistical results of Pearson correlation indicate a strong and positive correlation between SERVQUAL and customer loyalty in the Jordanian telecom market. Also, the Study found that SERVQUAL had a significant impact on customer loyalty in the Jordanian telecom market. Another finding from this research was that there is a significant effect of Empathy, Reliability and Responsiveness on customer loyalty in the Jordanian Telecom market. However, there is no significant effect of Physical Appearance and Assurance on customer loyalty in the Jordanian Telecom market.

Agyapong (2013) had published a journal on the topic "Exploring the Relationship between Customer Satisfaction and Customer Loyalty in the Ghanaian Telecom Industry." This paper examined the relationship between customer satisfaction and customer loyalty in the telecom industry in Ghana. The study adapted the SERVQUAL model as the main framework for analyzing customer satisfaction. Logistic regression analysis was used to examine the relationship between customer satisfaction and customer loyalty. The results

showed an inverse relationship between customer satisfaction and customer loyalty. This inverse relationship indicates that as customer satisfaction decreases, customer loyalty towards the brand still increases. The odds ratio given indicates that the model predicts a probability that based on the current level of satisfaction, the customer will still be loyal. This finding implies that among customers of Vodafone (Ghana), satisfaction is not a basis for loyalty. Some reasons accounting for this result may include the underdeveloped nature of the telecom sector. Also, the other competitive firms have challenges causing dissatisfaction but people are still loyal. So, customers switching is not necessarily because they are satisfied or not. Managers of these firms should therefore focus on improving the quality of service as an effective means to increase customer loyalty.

Agyei et al (2013) conducted a research on the topic, “The Relationship between Service Quality and Customer Loyalty in the Kenyan Mobile Telecommunication Service Industry” to examine the relationship between service quality and customer loyalty in the Kenyan Mobile Telecommunication Service Sector. The SERVQUAL model was adopted in the study. The study shows that service quality has a positive relationship with customer loyalty. These findings hold implications for industry operators on key areas to pay attention to in order to support the quality of services offered so as to guarantee sustained customer loyalty. It is vital to mention that service quality has a role to play so far as customer loyalty is concern. It is also evident from the study that within the Kenyan mobile telecommunication service industry empathy to service quality is what consumers considers most, assurance, responsiveness and reliability follows in that order. The study revealed that empathy is the variable with the highest association to customer loyalty. The results indicated that as service providers increase their service quality levels, the level of customer loyalty increases and it is in line with a similar study by Nukpezah and Nyumuyo (2001) and Boohene and Agyepong (2011). However, the degree of correlation between the indicators differs. While empathy had the highest correlation, reliability had the least. In addition, there was no statistically significant relationship between responsiveness of service quality and customer loyalty in mobile telecommunication service industry in Kenya.

Ojo (2010) has written a journal named “The Relationship Between Service Quality and Customer Satisfaction in the Telecommunication Industry: Evidence from Nigeria” that investigates the relationship between service quality and customer satisfaction in the telecommunication industry with a focus on Mobile Telecommunication Network (MTN) Nigeria. The study on 230 respondents reveals that service quality has effect on customer satisfaction and that there is a positive relationship between service quality and customer satisfaction. This study has made clear that customer service has impact on service quality perception and customer satisfaction. Ojo has concluded that to ensure customer satisfaction level is high, telecom organization must first of all know the expectations of the customers and how they can meet such expectations. Also, it can be concluded from this study that the behavior of customer service personnel instills confidence among customers. The recommendation on following areas by telecom industry has been recommended for high level of customer satisfaction: improvement in care line; knowledgeable staff to address customers’ requests and problems; ability to take inputs and suggestions from customers; and ability of staff to become good listener.

Nimako (2010) conducted a research on the topic, “Overall Customer Satisfaction in Ghana’s Mobile Telecommunication Networks: Implications for Management and Policy” to analyze overall customer satisfaction (CS) with service quality delivered by mobile telecommunication networks (MTNs) in Ghana. It intricates a cross-sectional survey that used a structured questionnaire personally directed to one thousand (1000) individual subscribers nominated from four mobile telecom networks in 2008. The findings specify that irrespective of mobile telecom network in Ghana, CS is low; neither equivalent to nor better than desire and expectation of the customers. This paper sought to assess and analyze customer satisfaction with service quality delivered by Ghana’s Mobile Telecom Networks with respect to and irrespective of mobile telecom network using four measures: The Minnesota Customer Satisfaction Index, MnCSI, desire and expectation disconfirmation measures, and overall satisfaction measures. The study found that irrespective of mobile telecom network in Ghana, all the four tools or procedures pointed that CS is low and not equal to or better than desired or expectation, so the customers are not satisfied with service quality delivered by MTNs in Ghana. Overall customer satisfaction significantly differs among Mobile Telecom Networks in Ghana. Significantly, customers of Company B, C

and D rated their satisfaction higher than those of Company A. Finally, the male respondents or customers are significantly more satisfied with their service providers than the female customers.

Bhagat (2014) conducted a study in an attempt to examine the effect of service quality and customer satisfaction on customer loyalty in mobile telecommunication services in the paper named Effect of Service Quality & Customer Satisfaction on Customer Loyalty of Cellular Service Providers in Ahmedabad. As many as 200 users of GSM services were surveyed. The main focus of this study was to test the effect of service quality and customer satisfaction in customer satisfaction on customer loyalty in cellular services. The data was studied by regression analysis. The study shows that the service quality and customer satisfaction have positive association with customer loyalty. However, the customer satisfaction was found to be the best predictor of customer loyalty. It has been revealed that the customer satisfaction is the most significant predictor of customer loyalty. This paper furnished implications for mobile service providers in order to increase customer loyalty.

“The Effect of Service Quality Dimensions on Customer Satisfaction: A Comparative Analysis of Pakistan Telecom Sector” is the paper published by Arslan et al (2014) with a purpose to create the relationship between service quality and customer satisfaction. Two main dimensions of service quality were taken i.e. reliability and empathy. The sample size was 400 respondents and four main telecom service providers were considered for the study. The results for empathy dimension overall elicit that most responses are in support that the employees give individual attention and also that the complaints and requests are carefully handled. This means that the customers usually contact the service personnel when they are facing any problem and they do get individual attention. However, lowest rates are observed to be for the immediate answer to the call. This means that customers do not immediately get in touch with the service employees and have to wait for their answer. This causes dissatisfaction which means that this aspect of empathy dimension needs to progress. It was resolved that service reliability and service empathy both have an effect on customer satisfaction. It was also determined that some factors were more satisfactory than the others. The findings of study reveal that percentages of customer satisfaction change with the service quality dimensions of reliability and empathy.

Osotimehin (2015) directed a study on the topic “Customers Perception of Service Quality in the Nigerian Telecommunication Sector” to examine the customers’ perception of service quality in the Nigerian telecommunication sector. Data for the study was generated through questionnaire administered on a random sample of 250 undergraduate students spread across two public owned state Universities in Ogun State, South-West, Nigeria. The results of the study revealed that there was a positive and significant relationship between service quality and both, customer satisfaction and customer loyalty, and also service quality is considered as a major factor in choosing telecommunication service provider in Nigeria. Further, the study discovered that the quality of service customers received from their service providers in terms of prompt service delivery, reliability, improved service, availability of effective and efficient customer care to assist customers help in assessing their rate of satisfaction. The outcome of this study has shown that customers put at first, the quality of service they receive from their service providers in assessing their rate of satisfaction, loyalty and choosing their service providers. Delivering prompt reliable and improved service will increase customer’s commitment to services since customers constitute the bedrock of a business.

Hussain et al. (2015) published a paper on the subject, Customer Loyalty Framework of Telecommunication Service Market to investigate the relationship among customer satisfaction, customer trust, switching cost, and customer loyalty in mobile telecommunication service market of Pakistan. The data were collected from 515 customers in mobile telecommunication service market of Pakistan through convenience sampling. Correlation matrix and ordinary least squares regression analyses are used to determine the relationship among the variables. The findings confirm the framework that customer trust partially mediates the relationship of customer satisfaction with customer loyalty. Switching cost has no moderating effect in determining the relationship of customer satisfaction with customer trust and customer loyalty in mobile telecommunication service market of Pakistan. This study addresses the importance of customer satisfaction, customer loyalty, customer trust, and switching cost for the mobile telecommunication service firms. The findings suggest that the firms should improve customer satisfaction in order to gain customer trust and customer loyalty. The significant relationships between the variables suggest that the research framework is applicable to the

firms of mobile telecommunication service market of Pakistan. Further, this is probably among the first studies which look at mobile telecommunication service market of Pakistan in context of customer satisfaction, customer trust, customer loyalty, and switching cost. The most obvious finding to emerge from this study is that customer satisfaction and customer trust are the key determinants in predicting customer loyalty. The finding was unexpected and suggests; that as the switching cost to switch from one mobile telecommunication service provider to another is very low in Pakistan; therefore, it does not have an impact on customer loyalty. However, results support that customer satisfaction is the strongest predictor to determine customer loyalty in mobile telecommunication service market of Pakistan.

A research paper on “The Impact of Service Quality, Customer Satisfaction and Loyalty Programs on Customer’s Loyalty: An Evidence from Telecommunication Sector” was written by Sabir et al (2013) to investigate the impact of service quality, customer satisfaction and loyalty programs on customer loyalty of these telecom service providers companies. The two main objectives of this research were: To investigate the effect of service quality and customer satisfaction on customer loyalty in telecommunication sector of Pakistan and to find out the relationship between loyalty programs and customer loyalty in telecommunication sector. A structured questionnaire was designed and survey was conducted to collect the data from 150 customers from different occupations in areas of Jhang and Okara districts of Punjab having different mobile phone connections of companies operating in Pakistan. As per the result of the study, customers give more importance to service quality in telecom service sector. Similarly, customer satisfaction and loyalty programs also have significant impact on customer loyalty, but in telecom sector in Punjab particularly, customer have little attention toward loyalty programs as all companies are giving almost similar programs, the point of differentiation lies in service quality.

2.1 SERVQUAL Model

The SERVQUAL Model is an empiric model by Zeithaml, Parasuraman and Berry to compare service quality performance with customer service quality needs. SERVQUAL has been widely used in telecommunication industries in different cultural context with

high reliability and validity (Hoffman & Bateson, 2001; Tyran & Ross, 2006; Stafford et al., 1998; Sureschander et al., 2002). The SERVQUAL instrument has become the most dominant instrument for measuring service quality and it originally comprises 10 dimensions with 97 items but later reduced to 5 dimensions with 22 items in 1991. The five dimensions are tangibles, reliability, responsiveness, assurance and empathy.

- **Tangibles:** It is about the physical evidence of the service. Specifically, the concept explores location of the customer care service branches, the appearance of employee, information on recharge cards, transparency on billing method.
- **Reliability:** The service dimension of reliability measures the consistency of performance and the dependability of the service. According to Zeithaml et al. (2006) reliability is “the ability to perform the promised service dependably and accurately” or “delivering on its promises”.
- **Assurance:** Assurance entails the knowledge and courtesy of employees and their ability to convey trust and confidence. It also includes competence, courtesy, credibility and security. Andaleeb and Conway (2006) noted that assurance may not be so important relative to other industries where the risk is higher and the outcome of using the service is uncertain.
- **Responsiveness:** Responsiveness concerns the willingness or readiness of employees to provide service (Parasuraman et al., 1985). This dimension is concerned with dealing with the customer’s requests, questions and complaints promptly and attentively. A firm is known to be responsive when it communicates to its customers how long it would take to get answers or have their problems dealt with.
- **Empathy:** Empathy entails caring and provision of individualized attention to customers by personnel of the firm (Zeithaml et al., 2006). In this respect, the customer feels unique and special. In an attempt to develop empathy, personnel of the firm should endeavor to know the names of their customers, their preferences and needs and take steps to satisfy them.

2.2 Service Quality and Customer Satisfaction

Over the past few years there has been a heightened emphasis on service quality and customer satisfaction in business and academia alike. Sureshchandar et al, (2003) identified

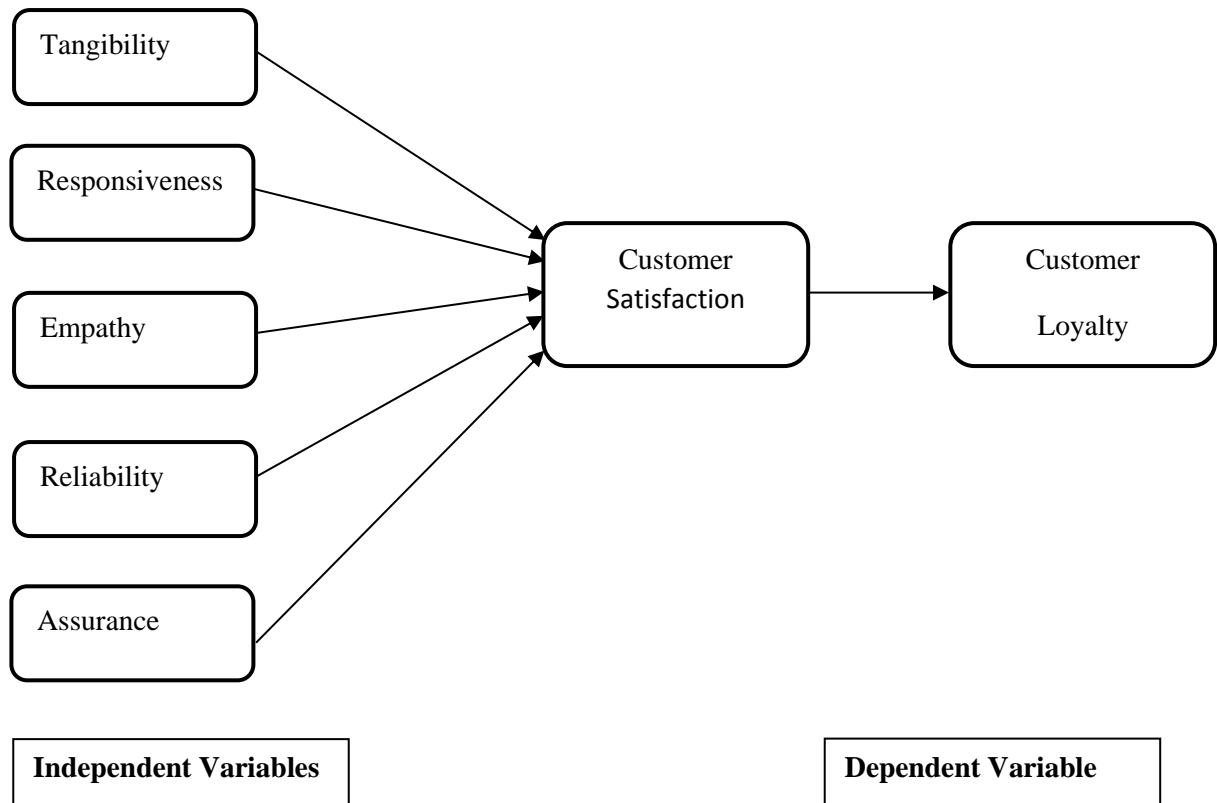
that strong relationships exist between service quality and customer satisfaction while emphasizing that these two are conceptually distinct constructs from the customers' point of view. It is generally accepted that customer satisfaction often depends on the quality of product or service offering (Anderson and Sullivan, 1993; Levesque and McDougall, 1996).

Being able to meet customer's expectation in terms of quality will have a long-term impact on the satisfaction of customers. Atalik & Arslan (2009) found that creating value and offering quality of service offered to customer creates loyal customers. Customer satisfaction and service quality are interlinked and these create value for customer and help him to make decision whether the service justifies the cost of the service. All elements of customer satisfaction have direct bearing on customers satisfaction and value of service (Chau & Kao, 2009). Customer satisfaction enhances customer loyalty along with trust and switching cost. It is evident that in order to retain customers, customers should be satisfied through service quality

Since customer satisfaction has been considered to be based on the customer's experience on a particular service encounter, (Cronin & Taylor, 1992) it is in line with the fact that service quality is a determinant of customer satisfaction, because service quality comes from outcome of the services from service providers in organizations. Su et al., (2002, p.372) carried a study to find out the link between service quality and customer satisfaction, from their study, they came up with the conclusion that, there exist a great dependency between both constructs and that an increase in one is likely to lead to an increase in another.

2.3 Theoretical Framework

A theoretical framework consists of concepts, variables, definitions, and existing theories that are used by researcher for particular study. According to Dr Norzaidi (2013), the selection of variables in a study must have the characteristics that can be measured and it is important especially when creating and designing a questionnaire. Theoretical framework must demonstrate an understanding of theories and concepts that are relevant to the topic of research paper.



Parasuraman (1985)

Figure 2.3.1: Theoretical Framework of Service Quality Dimensions and Customer Satisfaction

The framework above shows proposed framework to serve as foundation of this study. Purpose of this study is to examine the how tangibility, reliability, responsiveness, assurance and empathy of service which are the independent variables can bring impact on the dependent variables, customer satisfaction & customer loyalty towards the service quality of any NT.

CHAPTER THREE

RESEARCH METHODOLOGY

Research Methodology describes the methods and process applied in the entire study. It is a science of studying how research is to be carried out. This chapter entails a discussion of the research method to be used, methods of data collection, sampling method and technique, the data collection process and how data will be analyzed. The source from which the data is gathered is also provided.

3.1 Research Design

A research design provides a framework for the collection and analysis of data. Descriptive (cross-sectional) as well as exploratory research will be carried out to fulfill the objectives of this research. For the research, both primary and secondary source of data will be used in this study. The stakeholders for primary source of data will be NT mobile phone users since they will have direct influence over the objective of this research. Then information will be gathered by using of a standard questionnaire that includes general questions (gender, income, status of employment, age and level of education) and other professional questions related to the research objectives and all the questionnaires are included in ANNEX I.

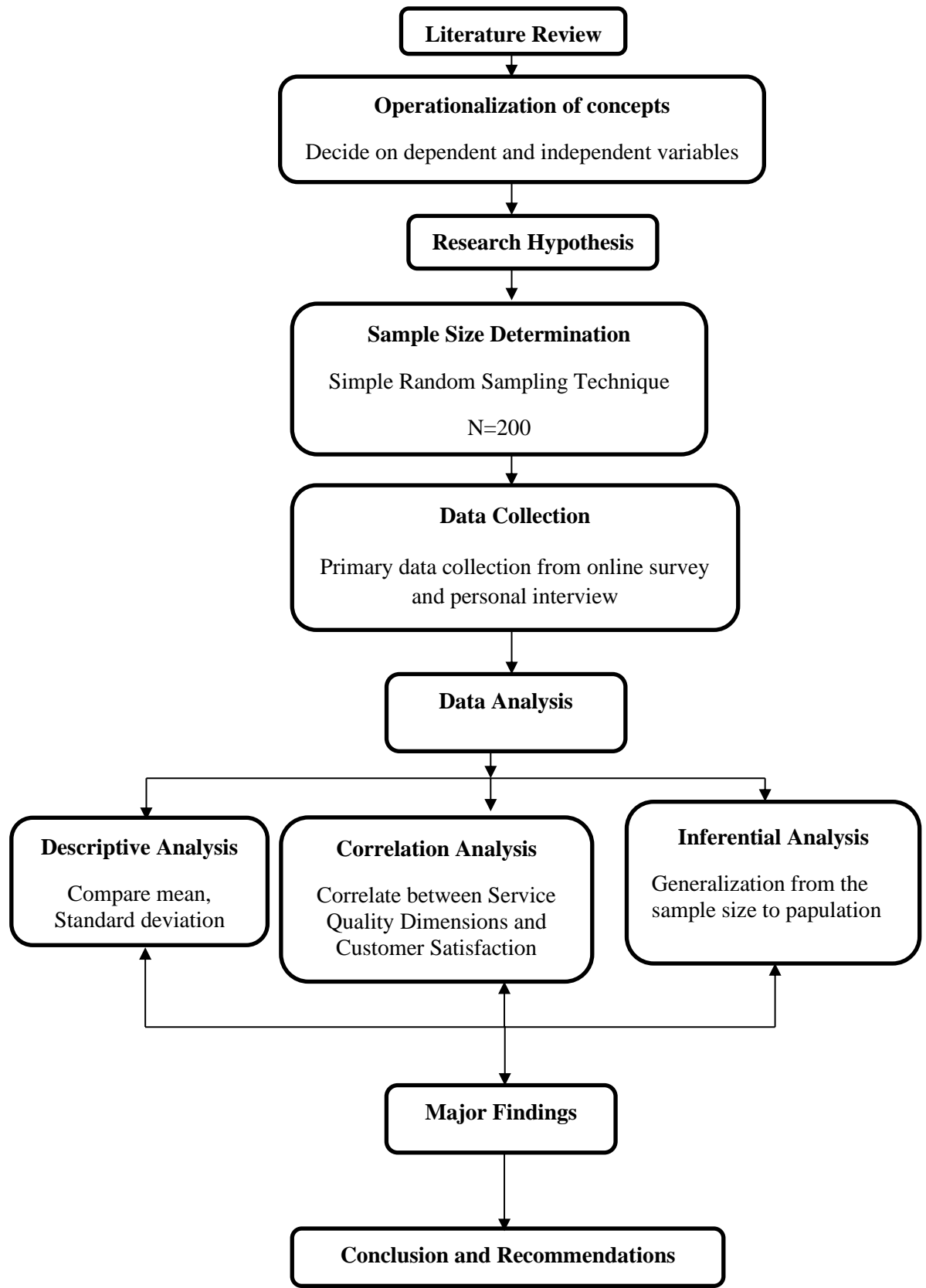


Figure 3.1 Research Methodology Flowchart

3.2 Sample Size Determination

Sampling techniques are either probability or non-probability and for this study simple random sampling technique is being used. And the target population for this study is all the GSM mobile users of Nepal Telecom in the Kathmandu Valley. Determining an appropriate sample size depends on a number of factors, such as, the purpose of the study, population size, level of precision, level of confidence and risk of selecting a bad sample. To determine the sample size,

$$n = \frac{Z^2 pq}{e^2} \dots\dots\dots (Eq. 3.2.1)$$

Here, n is the sample size, Z is the abscissa of the normal curve that cuts off an area at the tails at 95% confidence level, e is the level of precision at 5%, p is 0.5 and q is $1 - p = 1 - 0.5 = 0.5$

By putting the values in the formula, the sample size has been calculated as follows:

$$n = \frac{(1.96)^2 \times 0.5 \times 0.5}{(0.05)^2} \quad n = 385$$

Hence, the sample size for the study as calculated from the use of Cochran's (1963) formula comes to 385. However, due to time limitation only 300 questionnaires were collected and among these some are uncompleted and some are incorrectly filled so filtering all those data only 200 complete questionnaires are analyzed using statistical package for social science (SPSS).

Overall, the survey will cover the individuals those who have idea about the importance of telecom services and the ones who are heavy GSM mobile users.

3.3 Data Collection

In this study, both primary and secondary data will be used. The sample mainly consists of data from the primary sources that are utilized for the purpose of this study. This is done by means of administering questionnaires to group of individuals who have subscribed to NT services. The data thus obtained through both primary and secondary sources are analyzed using various statistical tools to arrive to conclusions regarding the topic.

3.3.1 Primary Data

According to Naresh (2010, p. 132), primary data will be organized for the specific purpose of addressing the problem on hand. The primary data that will be used is questionnaire survey whether by online or paper. Questionnaires can be efficient data collection mechanism of what and how to measure the selected variables. Those questionnaires will be administered personally to the respondents. It will have single response questions, multiple response questions, Likert scale questions and many others including rating questions.

3.4 Instrumentation of Data

The data used for this study will be obtained using a structured survey questionnaire designed to evaluate service quality and customer satisfaction of NT subscribers. The questionnaire will be designed to reflect customer satisfaction with the service delivery of Nepal Telecom service. The questions will be closed ended and will also use a 5-point Likert scale to evaluate the level of customer satisfaction with the service quality provided by Nepal Telecom. The questionnaires will be administered both by hand and through online survey. The structured questionnaires will be based on the five dimensions of service quality (tangibility, assurance, reliability, responsiveness and empathy) and will use the five-point Likert scale from 1 strongly disagree to 5 strongly agree. Random sampling approach was used to identify the respondents for the study.

3.5 Data Analysis Tools and Methods

For data management, SPSS 16.0 software will be used. The collected data will be logically and systematically recorded using SPSS software and analysis will be done as per the requirement of study. Descriptive as well as Inferential analysis will be used for analyzing the data. Central tendency, frequency table, chart, graph, and dispersion will be used for descriptive analysis whereas hypothesis testing, chi-square test, f-test, ANOVA tests and other testing will be done for inferential analysis.

3.5.1 Descriptive Analysis

The descriptive statistics explores and presents an overview of all variables used in the analysis. In this section the mean, standard deviation, coefficient of variance, etc. of the variables is produced for the variables under study.

3.5.2 Correlation analysis

This section shows how variables are related to each other. The results of this analysis represent the nature, direction and significance of the correlation of the variables considered under this study.

3.5.3 Inferential Analysis

Inferential Analysis is a technique that allows us to study samples and then make generalizations about the population. Inferential statistics are a very crucial part of scientific research in that these techniques are used to test hypotheses.

3.6 Validity and Reliability

According to George and Mallery (2003), reliability is the degree to which measure are free from error and therefore yield consistent results. The validity and reliability are considered one of the most important tools to find out the right result for effectiveness of the research. Validity is the extent to which a test measures that we actually wish to measure.

Cronbach's alpha is a coefficient of reliability used to measure the internal consistency of a test or scale. For internal reliability (consistency of the research instrument), reliability test for all service quality dimensions was done.

Table 3.6.1: Cronbach's Alpha (Reliability analysis)

| Dimensions | Cronbach's Alpha value | Number of items |
|---------------------------|------------------------|-----------------|
| Tangibility | 0.732 | 5 |
| Reliability | 0.802 | 5 |
| Responsiveness | 0.854 | 5 |
| Assurance | 0.782 | 5 |
| Empathy | 0.77 | 5 |
| Overall scale reliability | 0.934 | 25 |

Therefore, from Table 3.6.1 the overall reliability of the scale was found to be 0.934 which is more than 0.6 which indicates the acceptability of the items.

3.7 Research Hypothesis

The study estimated the following alternative hypotheses:

Tangibility

H₁: There is significant relationship between location of customer service branches and Satisfaction with NT services.

H₂: There is significant relationship between information in recharge card and Satisfaction with NT services.

H₃: There is significant relationship between communication of promotional offer and Satisfaction with NT services.

H₄: There is significant relationship between employee appearances and satisfaction with NT services.

H₅: There is significant relationship between transparent billing and satisfaction with NT services.

Reliability

H₆: There is significant relationship between timely service delivery from NT service and satisfaction of the customer.

H₇: There is significant relationship between solving customer problems from NT service and satisfaction of the customer.

H₈: There is significant relationship between satisfaction and reliable network coverage from NT services.

H₉: There is significant relationship between satisfaction and good voice quality from NT service.

H₁₀: There is significant relationship between satisfaction and delivery of VAS timely from NT service.

Responsiveness

H₁₁: There is significant difference between employees willing to help and satisfaction with NT service.

H₁₂: There is significant difference between attention to customer problem and satisfaction with NT service.

H13: There is significant difference between service provider taking customer feedback and satisfaction with NT service.

H14: There is significant difference between easily accessible helpline and satisfaction with NT service.

H15: There is significant difference between responses by employees to customer request even they are busy and satisfaction with NT service.

Assurance

H16: There is significant difference between trusted employees and satisfaction with NT service.

H17: There is significant difference between customer feeling safe with service provider and satisfaction with NT service.

H18: There is significant difference between protection of customer privacy and satisfaction with NT service.

H19: There is significant difference between employee's skills and knowledge and satisfaction with NT service.

H20: There is significant difference between employee's patience and sincerity to solve the problem and satisfaction with NT service.

Empathy

H21: There is significant difference between activation and recharge periods and satisfaction with NT service.

H22: There is significant difference between service provider working hour and satisfaction with NT service.

H23: There is significant difference between service provider liable for inconvenience caused and satisfaction with NT service.

H24: There is significant difference between employees' knowledge about customer needs and satisfaction with NT service.

H25: There is significant difference between employees' attention to customer and satisfaction with NT service.

Satisfaction analysis

H26: There is significant difference between age group and satisfaction with NT service.

H27: There is significant difference between professions and satisfaction with NT service.

H₂₈: There is significant difference between years of service use and satisfaction with NT service.

H₂₉: There is significant difference between gender of the user and satisfaction with NT service.

H₃₀: There is significant difference between marital status of the users and satisfaction with NT.

H₃₁: There is significant difference between switching intension to other mobile service and satisfaction with NT service.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

This chapter presented the analysis of the data collected for the research. The study used one-way ANOVA and correlation tests among other statistical tests to analyze data. The results from the statistical tests of significance was presented and analyzed in this chapter.

4.1 Descriptive analysis

This section presented the results and analysis of the descriptive statistics of the variables under investigation in tabular and graphical formats. The total number of respondents was 200, and all were mobile users who were associated with NTC operator. The tables of this section provide frequency distribution of the demographic variables of the study population. These variables include gender, age group, profession, education level, marital status, and monthly income of the respondents including monthly expense and NTC usage time period of respondents. The total numbers of respondents are 200. Among them 53% of respondents are female and 47% of respondents are male. From this table we can easily see that among the 200 samples the female population is higher than the male population.

The table 4.1.1 shows that this study includes respondents of age 18 and above. In the sample chosen, highest number of the respondents (41%) belong to age group 26-32 because most of the users with this group might be doing services and businesses and for that purpose their usage of mobile and services will be high as well. The age group 18-25 contains least number of respondents (14%) to this research because this group contains the younger generations who might only be interested in calls and SMS. The number of respondents in the group 33 – 50 years is quite a high (25.5%) because in this age group the users might use mobile for services and business purpose whose frequency of usage of mobile service is high.

Student, who owns business covers 17% of population while respondents who are in service profession cover's 33.5% of the sample. Housemaker and the retired service employee covers 15.5% of the population. So, with this table it is clear that the population of the users with service as profession is quite high.

Table 4.1.1: Descriptive Analysis

| Demography | Count | Proportion |
|---------------------------|-------------------|------------|
| | Gender | |
| Male | 94 | 47.0% |
| Female | 106 | 53.0% |
| | Age | |
| Age between 18-25 years | 28 | 14.0% |
| Age between 26 -32 years | 82 | 41.0% |
| Age between 33 - 50 years | 51 | 25.5% |
| Above 50 years | 39 | 19.5% |
| | Profession | |
| Student | 34 | 17.0% |
| Own Business | 36 | 18.0% |
| Service | 67 | 33.5% |
| House Maker | 32 | 16.0% |
| Retire | 31 | 15.5% |
| | Education Level | |
| High School | 27 | 13.5% |
| Bachelor | 87 | 43.5% |
| Masters and above | 86 | 43.0% |
| | Duration of usage | |
| 1 - 2 years | 11 | 5.5% |
| 2 - 4 years | 22 | 11.0% |
| 4 - 5 years | 30 | 15.0% |
| above 5 years | 137 | 68.5% |

The maximum number of respondents (43.50%) in the research group have bachelor's degree as their educational level whereas very few (13.5%) of respondents have studied till high school. The count of respondents completing master's degree is also quite high in number comprising of 43.0% of the sample of 200.

The table 4.1.1, shows that large numbers of respondents' (i.e. 137 in number, 68.5%) have been using NTC for more than 5 years. Less than 50% of respondents out of total 200 sample size accounts for NTC usage time less than or equal to 4 years. Very few respondents of about 5.5% have been using NTC for less than 2 years which imply two things: For past 5 years, mobile have become basic need among population of Nepal; and Respondent's might have shifted to NTC from some other operators.

4.2 Descriptive Statistics of Service Quality Dimensions

The mean value represents the average of all customer response on certain dimensions while, standard deviation shows how diverse the responses of the respondents are that means if the standard deviation shows smaller number, it indicates that the response of the respondents shows close opinions and when the standard deviation is high, it indicates the response of the respondents shows high variation. According to Zaidatol & Bagheri (2009)

Table 4.2.1 Mean score value table

| Mean Score | Description |
|------------|-------------|
| <3.39 | Low |
| 3.40 -3.79 | Moderate |
| >3.80 | High |

4.2.1 Description of Tangibility

Table 4.2.1.1, shows the descriptive statistics for each factor. Starting from the customer service branches located in convenient places along with the mean and standard deviation values, and ending with the billing methods are transparent and clear. The average mean for tangibility dimension question "whether the customer service branches are located in convenient places" is 3.15 and standard deviation of 1.127 which is below 3.39 that shows

most respondents do not believe that the service branches are at convenient places. Among the five means that used to measure the tangible dimensions of service quality the second factor which is the messages in the recharge card are clear and useful shows the highest mean value represented by (Mean=3.71, SD = 0.995). The next highest mean from tangibility is for billing methods being transparent and clear.

Table 4.2.1.1 Descriptive Results of Tangibility (N=200)

| Items | Mean | St. Deviation |
|---|-------|---------------|
| The customer service branches are located in convenient places. | 3.15 | 1.127 |
| Info/Messages in recharge card are clear and useful. | 3.71 | 0.995 |
| Promotional offers are communicated properly. | 2.89 | 1.151 |
| The employees are well dressed and neat in appearance. | 2.75 | 1.124 |
| Billing methods are transparent and clear. | 3.35 | 1.111 |
| Total Mean Tangibility | 3.169 | 1.102 |

4.2.2 Description of Reliability

Table 4.2.2.1 Descriptive Results of Reliability (N=200)

| Items | Mean | St. Deviation |
|---|-------|---------------|
| NT keeps its promise on timely service delivery and customer support. | 2.89 | 1.122 |
| NT shows a sincere interest in solving customer problems. | 2.81 | 1.078 |
| Network coverage of NT is reliable. | 2.80 | 1.136 |
| Voice clarity in NT is good | 2.83 | 1.077 |
| Delivery of SMS, MMS and other services are timely. | 3.28 | 1.003 |
| Total Mean Reliability | 2.918 | 1.083 |

Table 4.2.2.1, shows descriptive statistics for reliability factors along with mean and standard deviation values. The highest mean or the lowest gap lies on the last reliability question which is “delivery of SMS, MMS and other services are timely” is 3.28 with standard deviation of 1.003. The second highest mean value from reliability is “NT keeps its promise on timely service delivery and customer support” is 2.89 with standard deviation of 1.122.

4.2.3 Description of Responsiveness

As for responsiveness dimension of service quality, five items used to determine customer satisfaction and the result show that respondents average for service quality was satisfied the responsiveness dimensions, and that on average of the five dimensions of responsiveness is rated (mean= 2.832, SD = 1.101). Table 4.2.3.1 shows the descriptive statistics of each factor. Mobile service provider NT helpline is easily accessible, this item came at higher level of (mean = 3.14, SD = 1.110) while NT employee respond to customer requests even if they are busy, comes in low level of (mean = 2.55, SD = 1.088). In summary, customers seem that they have a moderate level of satisfaction with the service quality in terms of responsiveness service.

Table 4.2.3.1 Descriptive Results of Responsiveness (N=200)

| Items | Mean | St. Deviation |
|--|-------|---------------|
| Mobile service provider employees are always willing to help you | 2.99 | 1.125 |
| Mobile service provider gives attention to your problem. | 2.92 | 1.097 |
| Mobile service provider takes in your feedback. | 2.58 | 1.082 |
| Mobile service provider helpline is easily accessible | 3.14 | 1.110 |
| Mobile service provider employees respond to customer requests even if they are busy | 2.55 | 1.088 |
| Total Mean Responsiveness | 2.832 | 1.101 |

4.2.4 Description of Assurance

Table 4.2.4.1 Descriptive Results of Assurance (N=200)

| Items | Mean | St. Deviation |
|---|-------|---------------|
| Mobile service provider employees can be trusted | 3.42 | 0.994 |
| Customer feels safe doing business with mobile service provider. | 3.43 | 0.938 |
| Mobile service provider protects the confidentiality of customer information. | 3.43 | 0.964 |
| Mobile service provider employees have required skill & knowledge to answer your queries. | 3.02 | 1.039 |
| Mobile service provider employees are sincere and patient in resolving your problems. | 2.75 | 1.097 |
| Total Mean Assurance | 3.207 | 1.006 |

Again to be mentioned, in this study five items have been used in order to determine customer satisfaction with the assurance dimension of service quality and the results indicated that the respondents average for service quality was satisfied with the assurance dimension, and that on average of the five dimensions of assurance is rated (mean = 3.207, SD = 1.006). Table 4.2.4.1 shows the descriptive statistics for each factor. Out of the five factors, the item which states that the customer feels safe doing business with NT and NT protects the confidentiality of customer information both are reported at higher level of (mean = 3.43, SD=0.938 and SD = 0.964 respectively) followed by NT employees can be trusted also perceived at moderately higher level(mean = 3.42, SD = 0.994). In general, respondents seem that have a moderately high level of satisfaction with the service quality in terms of assurance service.

4.2.5 Description of Empathy

Table 4.2.5.1 Descriptive Results of Empathy (N=200)

| Items | Mean | St. Deviation |
|--|-------|---------------|
| Mobile service provider has convenient periods and terms for activation and recharge. | 3.63 | 1.025 |
| Working hours of mobile service provider is convenient to customers. | 3.12 | 1.048 |
| Mobile service provider sincerely apologies to customers for the inconvenience caused. | 2.84 | 1.100 |
| Employees know and understand customer needs. | 2.87 | 1.110 |
| Employees provide individual attention to customers. | 2.52 | 1.143 |
| Total Mean Empathy | 2.993 | 1.085 |

Empathy dimension to determine customer's level of satisfaction used five items and resulted that respondent's average for service quality was satisfied with the empathy dimension and is reported on average (mean = 2.993, SD = 1.085). The above table 4.2.5.1 shows the descriptive statistics for each factor, NT has convenient periods and terms for activation and recharge is indicating at higher level of (mean = 3.63, SD = 1.025). The lowest level of satisfaction with service quality in terms of empathy service is (mean = 2.52, SD = 1.143) employees provide individual attention to customers.

4.3 Description of Overall Customer Satisfaction

From table 4.3.1, we can see that 6.5% of the respondents are very satisfied with the service quality they get from Nepal Telecom. 51.0% of the respondents are satisfied and 14.0% are neutral that means they are neither satisfied nor dissatisfied with the service quality given. 24.5% of the respondents are dissatisfied and the remaining 4.0% are very dissatisfied. That means Nepal Telecom can satisfy only 57.5 % of customers which can rate their satisfaction as satisfied and very satisfied.

Table 4.3.1 Frequency distribution of overall customer satisfaction

Overall Customer Satisfaction level with services provided by NT

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------------------|-----------|---------|---------------|--------------------|
| Valid | Very Satisfied | 13 | 6.5 | 6.5 | 6.5 |
| | Satisfied | 102 | 51.0 | 51.0 | 57.5 |
| | Neutral | 28 | 14.0 | 14.0 | 71.5 |
| | Dissatisfied | 49 | 24.5 | 24.5 | 96.0 |
| | Very Dissatisfied | 8 | 4.0 | 4.0 | 100.0 |
| | Total | 200 | 100.0 | 100.0 | |

Table 4.3.2 Overall Customer Satisfaction Statistics

Overall customer satisfaction level of NT service

| | | |
|----------------|---------|-------|
| N | Valid | 200 |
| | Missing | 0 |
| Mean | | 2.69 |
| Std. Deviation | | 1.040 |

Generally, the mean value for customer satisfaction is 2.69 with a standard deviation of 1.040 respectively (Table 4.3.2). The mean value for overall customer satisfaction is low that shows there is a big gap between what it should be and what it actually is.

Table 4.3.3 Descriptive Statistics of grand mean

| Dimensions | N | Mean | Standard Deviation |
|----------------|-----|-------|--------------------|
| Tangibility | 200 | 3.169 | 1.102 |
| Reliability | 200 | 2.918 | 1.083 |
| Responsiveness | 200 | 2.832 | 1.101 |
| Assurance | 200 | 3.207 | 1.006 |
| Empathy | 200 | 2.993 | 1.085 |
| Satisfaction | 200 | 2.69 | 1.040 |
| Total | 200 | 2.968 | 1.070 |

According to the table 4.3.3, it demonstrates that the mean score of assurance is equal to 3.207 and the mean score of tangibility is equal to 3.169. The mean scores on the dimensions of service quality indicates that respondents are more agreed on assurance followed by tangibility.

4.4 Correlation Analysis

Correlation is a statistical technique that can show whether and how strongly pairs of variables are related. For example, height and weight are related; taller people tend to be heavier than shorter people. The main result of a correlation is called the correlation coefficient (r). It ranges from -1.0 to +1.0. The closer r is to +1 or -1, the more closely the two variables are related.

If r is close to 0, it means there is no relationship between the variables. If r is positive, it means that as one variable gets larger the other gets larger. If r is negative it means that as one gets larger, the other gets smaller and often called an "inverse" correlation (Vignaswaran, 2005). As we can see from table 4.4.1 higher correlation value indicates stronger relationship between both sets of data.

Table 4.4.1 Correlation value of coefficient

| Value of coefficient | Relation between variables |
|----------------------|----------------------------|
| 0.70 - 0.90 | Very strong association |
| 0.50 - 0.69 | Substantial association |
| 0.30 - 0.49 | Moderate association |
| 0.10 - 0.29 | Low association |
| 0.01 - 0.09 | Negligible association |

Source: Alwadael (2010)

As shown in the objective and conceptual framework of this study, to test the relationship between service quality dimensions and customer satisfaction, the following correlation analysis is performed. As we can see it on table 4.4.2 all the service quality dimensions have a significant positive relationship with customer satisfaction. The results indicate that, there is positive and substantial relationship between reliability and customer satisfaction ($r = 0.587, < 0.01$), empathy and customer satisfaction ($r = 0.556, P < 0.01$), tangibility and customer satisfaction ($r = 0.529, p < 0.01$) and there is substantial positive correlation among responsiveness and customer satisfaction ($r = 0.526, p < 0.01$) and finally there is a moderate positive correlation among assurance and customer satisfaction ($r = 0.457, P < 0.01$). Among these five service quality dimensions, reliability has a very strong positive correlation with customer satisfaction which is 0.587.

Table 4.4.2 Correlation Matrix of all service quality dimensions with customer satisfaction

| SERVQUAL items | | Customer Satisfaction |
|----------------|--------------------|-----------------------|
| Tangibility | Person Correlation | 0.529 |
| | Sig. (2-tailed) | .000 |
| Reliability | Person Correlation | 0.587 |
| | Sig. (2-tailed) | .000 |
| Responsiveness | Person Correlation | 0.526 |
| | Sig. (2-tailed) | .000 |
| Assurance | Person Correlation | 0.457 |
| | Sig. (2-tailed) | .000 |
| Empathy | Person Correlation | 0.556 |
| | Sig. (2-tailed) | .000 |

Now to examine the correlation between the service quality dimensions we have to correlate each factors of the service quality dimensions so for the tangibility, reliability, responsiveness, assurance and empathy dimension the correlations are on ANNEX II and they are all positively correlated with each factor.

4.5 One-way ANOVA and cross tabulation

The One-Way ANOVA compares the means of two or more independent groups in order to determine whether there is statistical evidence that the associated population means are significantly different. One-Way ANOVA is a parametric test. The F test indicates whether the model is significant overall. This means that at least one of the means is different from the others. However, it does not indicate which mean is different. The test statistic for a One-Way ANOVA is denoted as F. For an independent variable with k groups, the F statistic evaluates whether the group means are significantly different.

Table: 4.5.1 Sample table for One-Way ANOVA

| | Sum of Squares | Df | Mean Square | F |
|------------------|-----------------------|-----------------|--------------------|----------|
| Treatment | SSR | df _r | MSR | MSR/MSE |
| Error | SSE | df _e | MSE | |
| Total | SST | | | |

Where,

SSR = the regression sum of squares

SSE = the error sum of squares

SST = the total sum of squares

(SST = SSR + SSE)

df_r = the model degrees of freedom

(equal to df_r = k - 1)

df_e = the error degrees of freedom

(equal to df_e = n - k - 1)

k = the total number of groups

(levels of the independent variable)

n = the total number of valid observations

MSR=SSR/df_r

=the

regression

mean square

$MSE = SSE/df_e$ = the mean square error

Cross-tabulation is one of the most useful analytical tools and is a main-stay of the market research industry. A cross-tabulation is a two (or more) dimensional table that records the number (frequency) of respondents that have the specific characteristics described in the cells of the table. Cross-tabulation tables provide a wealth of information about the relationship between the variables.

Tangibility

Statement H₁: There is significant relationship between location of customer service branches and Satisfaction with mobile services.

Table 4.5.2: Comparison between Satisfaction with NT Services and customer service branches location

| Customer service branches located at convenient place | Satisfaction level with services provided by NT | | | | | |
|---|---|---------------|--------------|--------------|-------------------|----------------|
| | Very Satisfied | Satisfied | Neutral | Dissatisfied | Very Dissatisfied | Total |
| Strongly Disagree | 0 0.00% | 1 12.50% | 0 0.00% | 5 62.50% | 2 25.00% | 8 100.00% |
| Disagree | 0 0.00% | 24 34.80% | 9 13.00% | 31 44.90% | 5 7.20% | 69 100.00% |
| Neutral | 2 6.70% | 16 53.30% | 8 26.70% | 3 10.00% | 1 3.30% | 30 100.00% |
| Agree | 6 8.30% | 47 65.30% | 11 15.30% | 8 11.10% | 0 0.00% | 72 100.00% |
| Strongly Agree | 5 23.80% | 14 66.70% | 0 0.00% | 2 9.50% | 0 0.00% | 21 100.00% |
| Total | 13 6.50% | 102 51.00% | 28 14.00% | 49 24.50% | 8 4.00% | 200 100.00% |

From the above table 4.5.2, it is seen that customers who agree and disagree that NT's customer service branches are located in convenient place is almost equal in number. i.e. 72 and 69 out of total of 200 respondents. Within the group of respondents agreeing with the convenient customer service branch location of NT, most of the respondents are satisfied with the NT. The least satisfied group of respondents are the ones who believe

customer service branch is not located in convenient place with the percentage of 25.0% within its group.

About 51.0% of the respondents are satisfied with services provided by NT while 24.5% of respondents are dissatisfied with NT. Respondents who agree that NT has convenient location for its customer service branch are found to be more satisfied with NT services.

Performing the cross tabulation of all the items of service quality dimensions the result is as follows and details of cross tabulation of all service quality dimensions are in ANNEX II:

Table 4.5.3 Cross tabulation of Tangibility

| Factors / Satisfaction Level | Strongly Disagree (4.0%) | Disagree (24.5%) | Neutral (14.0%) | Agree (51.0%) | Strongly Agree (6.5%) |
|--|--------------------------|------------------|-----------------|---------------|-----------------------|
| 1) The customer service branches are located in convenient places. | 8 | 69 | 30 | 72 | 21 |
| 2) Info/Messages in recharge card are clear and useful. | 7 | 22 | 28 | 108 | 35 |
| 3) Promotional offers are communicated properly. | 18 | 74 | 36 | 56 | 16 |
| 4) The employees are well dressed and neat in appearance. | 26 | 70 | 41 | 54 | 9 |
| 5) Billing methods are transparent and clear. | 14 | 36 | 38 | 90 | 22 |

From the table 4.5.3 we can see that maximum respondents are satisfied with the items of tangibility that is three items they are the location of customer service branches, clear and useful information in recharge card, transparency in billing method. But respondents are dissatisfied in factors like promotional offers are communicated properly and employees' attire.

Table 4.5.4 Cross Tabulation of Reliability

| Factors /Satisfaction Level | Strongly Disagree (4.0%) | Disagree (24.5%) | Neutral (14.0%) | Agree (51%) | Strongly Agree (6.5%) |
|--|-----------------------------|---------------------|--------------------|----------------|--------------------------|
| 1) NT keeps its promise on timely service delivery and customer support. | 23 | 61 | 40 | 68 | 8 |
| 2) NT shows a sincere interest in solving customer problems. | 21 | 71 | 39 | 64 | 5 |
| 3) Network coverage of NT is reliable | 29 | 61 | 37 | 68 | 5 |
| 4) Voice clarity in NT is good | 19 | 72 | 41 | 61 | 7 |
| 5) Delivery of SMS, MMS and other services are timely. | 10 | 44 | 32 | 108 | 6 |

In the dimension reliability we can see from table 4.5.4 that most of the respondents are satisfied in three items they are timely service delivery and customer support, network coverage is reliable, and timely delivery of SMS, MMS. The respondents are dissatisfied in two items they are Employee shows sincere interest in solving customer problems and voice clarity.

Table 4.5.5 Cross Tabulation of Responsiveness

| Factors /Satisfaction Level | Strongly Disagree (4.0%) | Disagree (24.5%) | Neutral (14.0%) | Agree (51.0%) | Strongly Agree (6.5%) |
|--|-----------------------------|---------------------|--------------------|------------------|--------------------------|
| 1) NT employees are always willing to help customer. | 20 | 57 | 38 | 75 | 10 |
| 2) NT employee gives attention to customer problem. | 17 | 68 | 40 | 65 | 10 |
| 3) NT employee takes in customer feedback. | 32 | 76 | 42 | 45 | 5 |
| 4) NT helpline is easily accessible | 14 | 57 | 29 | 88 | 12 |
| 5) NT employees respond to customer requests even if they are busy | 33 | 81 | 34 | 48 | 4 |

From the table 4.5.5 it is clear that in responsiveness most of the respondents are dissatisfied that is in three items they are employee gives attention to customer problem, employee takes feedback of customer and employee respond to customer request even if they are busy. Only two items respondents are satisfied employees are willing to help and helpline is easily accessible.

Table 4.5.6 Cross Tabulation of Assurance

| Factors /Satisfaction Level | Strongly Disagree (4.0%) | Disagree (24.5%) | Neutral (14.0%) | Agree (51.0%) | Strongly Agree (6.5%) |
|---|-----------------------------|---------------------|--------------------|------------------|--------------------------|
| 1) NT employees can be trusted. | 7 | 40 | 29 | 111 | 13 |
| 2) Customer feels safe doing business with NT service | 5 | 34 | 45 | 102 | 14 |
| 3) NT protects the confidentiality of customer information. | 6 | 30 | 51 | 93 | 18 |
| 4) NT employees have required skill & knowledge to answer customer queries. | 12 | 63 | 42 | 76 | 7 |
| 5) NT employees are sincere and patient in resolving customer problems. | 23 | 72 | 47 | 48 | 10 |

From the table 4.5.6 it is obvious that most of the respondents are satisfied in this group that is four items they are employees can be trusted, safe doing business, protects confidentiality of customer information and employee have skill and knowledge. The respondents are only dissatisfied in one item that is employees are sincere and patient in resolving customer problem.

Table 4.5.7 Cross Tabulation of Empathy

| Factors /Satisfaction Level | Strongly Disagree (4.0%) | Disagree (24.5%) | Neutral (14.0%) | Agree (51.0%) | Strongly Agree (6.5%) |
|---|--------------------------|------------------|-----------------|---------------|-----------------------|
| 1) NT has convenient periods and terms for activation and recharge. | 6 | 28 | 36 | 95 | 35 |
| 2) Working hours of NT is convenient to customers. | 7 | 64 | 42 | 73 | 14 |
| 3) NT employee sincerely apologies to customers for the inconvenience caused. | 16 | 80 | 35 | 58 | 11 |
| 4) Employees know and understand customer needs. | 20 | 69 | 38 | 64 | 9 |
| 5) Employees provide individual attention to customers. | 40 | 74 | 35 | 44 | 7 |

In Empathy dimension from the table 4.5.7 the most of the respondents are dissatisfied that is three items they are employee sincerely apologies to customer for the inconvenience, employee understand customer needs and employee provide individual attention to customer. In two items the respondents are satisfied they are convenient periods and terms for activation and recharge and working hours is convenient to customer.

So, from the result of above tables we can say that most of the respondents are more satisfied in the assurance service quality dimensions followed by tangibility and reliability. Now the one-way ANOVA test is calculated for each research hypothesis.

Table 4.5.8: ANOVA – Satisfaction with NT Services and customer service branches location

| | Sum of Squares | Df | Mean Square | F | P- Value |
|----------------|----------------|-----|-------------|--------|----------|
| Between Groups | 59.016 | 4 | 14.754 | 18.426 | 0 |
| Within Groups | 156.139 | 195 | 0.801 | | |
| Total | 215.155 | 199 | | | |

To test the significant difference between satisfaction with NT Services and convenient customer service branches location, the F-value and p – value are 18.426 and 0.000 respectively. Here, from table 4.5.8 the P-value (0.000) obtained is less than significance value (0.05), hence we accept alternative hypothesis H₁ i.e. there is significant difference between satisfaction with NT Services and convenient customer service branches location. Likewise, from one-way ANOVA and cross tabulation all the thirty-research hypothesis were tested and arranged in ANNEX III. The results of the tests are tabulated as follows:

Table 4.5.9 Pearson's correlation matrix: Dimensions of service quality and customer satisfaction

| Service Quality Dimensions | Scale p- value | Alternative Hypothesis | |
|--|-------------------|------------------------|--------|
| | | Accept | Reject |
| Tangibility | | | |
| Customer service branches are located in convenient places | 0.000 | H ₁ | |
| Info/Messages in recharge card are clear and useful. | 0.000 | H ₂ | |
| Promotional offers are communicated properly | 0.000 | H ₃ | |
| Employees are well dressed and neat in appearance | 0.000 | H ₄ | |
| Billing methods are transparent and clear | 0.001 | H ₅ | |
| Reliability | | | |
| NT keeps its promise on timely service delivery and customer support | 0.000 | H ₆ | |
| NT service shows a sincere interest in solving customer problem | 0.000 | H ₇ | |
| Network coverage of Mobile operator is reliable | 0.000 | H ₈ | |
| Voice clarity is good | 0.000 | H ₉ | |
| Delivery of SMS, MMS, and other services are timely | 0.000 | H ₁₀ | |
| Responsiveness | | | |
| Employees are always willing to help | 0.000 | H ₁₁ | |
| NT operator gives attention to your problem | 0.000 | H ₁₂ | |
| NT operator takes in feedback | 0.000 | H ₁₃ | |
| NT helpline is easily accessible | 0.000 | H ₁₄ | |
| Employees respond to customer requests even if they are busy | 0.000 | H ₁₅ | |
| Assurance | | | |
| Employees can be trusted | 0.000 | H ₁₆ | |

| | | | |
|---|-------|-----------------|-----------------|
| Customer feels safe doing business with mobile operator | 0.000 | H ₁₇ | |
| NT operator protects the confidentiality of customer information | 0.001 | H ₁₈ | |
| Employees have required skill and knowledge to answer your queries | 0.000 | H ₁₉ | |
| Employees are sincere and patient in resolving your problems | 0.000 | H ₂₀ | |
| Empathy | | | |
| NT operator has convenient periods and terms for activation and recharge | 0.000 | H ₂₁ | |
| Working hours is convenient to customers | 0.000 | H ₂₂ | |
| NT operator sincerely apologies to customers for inconvenience caused | 0.000 | H ₂₃ | |
| Employees know and understand customer needs | 0.000 | H ₂₄ | |
| Employees provide individual attention to customers | 0.000 | H ₂₅ | |
| Satisfaction Analysis | | | |
| Satisfaction with NT services Vs Age Group | 0.145 | | H ₂₆ |
| Satisfaction with NT services Vs Profession | 0.142 | | H ₂₇ |
| Satisfaction with NT services Vs duration of usage | 0.003 | H ₂₈ | |
| Satisfaction with NT services Vs Gender | 0.723 | | H ₂₉ |
| Satisfaction with NT services Vs Marital Status | 0.204 | | H ₃₀ |
| Satisfaction with NT service Vs Switching intension to other mobile service | 0.000 | H ₃₁ | |

From the table 4.5.9 we can see that all the items of five service quality dimensions have significant relationship between customer satisfaction plus there was significant relationship between years of using NT service, switching intension to other mobile service and satisfaction level. But there is no significant relationship between age group, profession, gender, marital status of respondents and satisfaction level with services provided by NT service.

4.6 Regression Analysis

Basically, regression analysis is carried out in order to test the extent of the impact of independent variables on dependent variable. But before regression analysis is formulated,

we have to take the collinearity test and check the VIF (variance inflation factor) and degree of tolerance. Thus, this collinearity analysis is performed to address the problem.

Table 4.6.1 Regression Estimates Multi Collinearity Statistics

| | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. | Collinearity Statistics | |
|---------------------|-----------------------------|------------|---------------------------|--------|--------|-------------------------|--------|
| | B | Std. Error | Beta | | | Tolerance | VIF |
| (Constant) | 1.2903 | 0.2625 | | 5.0195 | 0.0000 | | |
| Mean Tangibility | 0.1511 | 0.0649 | 0.1609 | 2.3037 | 0.0772 | 0.7207 | 1.4012 |
| Mean Reliability | 0.1484 | 0.0706 | 0.1550 | 2.0388 | 0.1612 | 0.5902 | 1.7168 |
| Mean Responsiveness | 0.1169 | 0.0820 | 0.1243 | 1.3743 | 0.3644 | 0.5135 | 2.0554 |
| Mean Assurance | 0.1214 | 0.0816 | 0.1181 | 1.4858 | 0.3552 | 0.6570 | 1.5235 |
| Mean Empathy | 0.1350 | 0.0738 | 0.1418 | 1.8093 | 0.1505 | 0.6368 | 1.6195 |

Multi-co-linearity is the situation in which the independent variables are highly correlated. According to (Ho, et, al. 2006), if tolerance values are above 0.1 and variance inflation factor, which is 1/tolerance is less than 10, thus it's possible to construct a regression model. As we can see it from table 4.6.1, the tolerance value for all service quality dimensions are above 0.1 and the VIF is less than 10, thus we can conclude that there is no multi-co-linearity problem so that we can run regression model. Simple regression model is performed to address the service quality dimensions have a strong positive impact on customer satisfaction. The equation can be as follows

$$Y = B_0 + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + B_5X_5 + e \dots\dots\dots(\text{Eq. 4.6.1})$$

Where, Y= customer satisfaction (the dependent variables)

B_0 = the constant

$B_1 - B_5$ = the Beta coefficients for their respective variables

$X_1 - X_5$ = the independent variables

Thus: Customer Satisfaction = 1.2903 + 0.1511(Tangibility) +0.1484 (Reliability) + 0.1169(Responsiveness) + 0.1214 (Assurance) + 0.1350(Empathy) + e(Eq. 4.6.2)

4.6.1 Simple Regression of Tangibility

To assess the extent of impact of Tangibility on customer satisfaction, simple regression analysis was carried out. The result of the regression model shown in Table 4.6.1.1 indicates the value of the regression coefficient (R= 0.588, R- square = 0.346 and adjusted R- square = 0.329 and the model F= 20.554 and significance level of P=.000) for customer satisfaction indicates that the model is significant at p<.001, 2-tailed. Thus, the aggregated effect of tangibility on customer satisfaction is explained by the value of the R square, which indicates that 34.6% of tangibility in Nepal Telecom service is accounted specifically for customer Satisfaction. It also means that 34.6% of the change in customer satisfaction is explained by tangibility.

Table 4.6.1.1 Model Summary of Mean of Tangibility and customer satisfaction

| Model | R | R Square | Adjusted R Square | F | Sig. |
|-------|-------|----------|-------------------|--------|------|
| 1 | 0.588 | 0.346 | 0.329 | 20.554 | .000 |

Coefficients

| Model | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|------------------|-----------------------------|------------|---------------------------|--------|-------|
| | B | Std. Error | Beta | | |
| (Constant) | 0.952 | 0.274 | | 3.471 | 0.001 |
| Mean Tangibility | 0.1511 | 0.0649 | 0.1609 | 2.3037 | 0.007 |

The beta coefficient of the model in Table 4.6.1.1 which indicates the beta value of the constant is 0.952 for customer satisfaction whereas; the beta value for the predictor variable (Tangibility) is 0.1511 for customer satisfaction. The t-value of 2.3037 for customer satisfaction with the p-value of .000 indicates the model is significant at p<.001. Therefore, the beta coefficient (Beta=0.1511) implies a unit increase in tangibility will result in 15.11 % increase in customer satisfaction.

4.6.2 Simple Regression of Reliability

To assess the extent of impact of reliability on customer satisfaction, simple regression analysis was carried out. The result of the regression model shown in Table 4.6.2.1

indicates the value of the regression coefficient (R= 0.623, R- square = 0.388 and adjusted R- square = 0.372 and the model F= 24.596 and significance level of P=0.000) for customer satisfaction indicates that the model is significant at $p < .001$, 2-tailed. Thus, the aggregated effect of reliability on customer satisfaction is explained by the value of the R square, which indicates that 38.8% of reliability in Nepal Telecom service is accounted specifically for customer Satisfaction. It also means that 38.8% of the change in customer satisfaction is explained by reliability.

Table 4.6.2.1 Model Summary of Mean Reliability with customer Satisfaction

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | F | Sig. |
|------------------|-----------------------------|------------|---------------------------|----------------------------|--------|-------|
| 1 | 0.623 | .388 | .372 | .824 | 24.596 | 0.000 |
| Coefficients | | | | | | |
| Model | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. | |
| | B | Std. Error | Beta | | | |
| Constant | 1.195 | .228 | | 5.246 | 0.000 | |
| Mean Reliability | 0.1484 | 0.0706 | 0.1550 | 2.0388 | 0.001 | |

The beta coefficient of the model in Table 4.6.2.1 which indicates the beta value of the constant is 1.195 for customer satisfaction whereas; the beta value for the predictor variable (Reliability) is 0.1484 for customer satisfaction. The t-value of 5.246 for customer satisfaction with the p-value of 0.000 indicates the model is significant at $p < .001$. Therefore, the beta coefficient (Beta=0.1484) implies a unit increase in reliability will result in 14.84 % increase in customer satisfaction.

4.6.3 Simple Regression of Responsiveness

To assess the extent of impact of responsiveness on customer satisfaction, simple regression analysis was carried out. The result of the regression model shown in Table 4.6.3.1 indicates the value of the regression coefficient (R= 0.529, R- square = 0.280 and adjusted R- square = 0.261 and the model F= 15.093 and significance level of P=0.000) for customer satisfaction indicates that the model is significant at $p < .001$, 2-tailed. Thus, the

aggregated effect of responsiveness on customer satisfaction is explained by the value of the R square, which indicates that 28.0% of responsiveness in Nepal Telecom service is accounted specifically for customer Satisfaction. It also means that 28.0% of the change in customer satisfaction is explained by responsiveness.

Table 4.6.3.1 Model Summary of Mean Responsiveness with Customer Satisfaction

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | F | Sig. |
|---------------------|-----------------------------|------------|---------------------------|----------------------------|--------|-------|
| 1 | 0.529 | .280 | .261 | .894 | 15.093 | 0.000 |
| Coefficients | | | | | | |
| Model | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. | |
| | B | Std. Error | Beta | | | |
| Constant | 1.598 | .224 | | 7.134 | .000 | |
| Mean Responsiveness | 0.1169 | 0.0820 | 0.1243 | 1.3743 | 0.003 | |

The beta coefficient of the model in Table 4.6.3.1 which indicates the beta value of the constant is 1.598 for customer satisfaction whereas; the beta value for the predictor variable (Responsiveness) is 0.1169 for customer satisfaction. The t-value of 7.134 for customer satisfaction with the p-value of 0.000 indicates the model is significant at $p < .001$. Therefore, the beta coefficient (Beta=0.1169) implies a unit increase in responsiveness will result in 11.69 % increase in customer satisfaction.

4.6.4 Simple Regression of Assurance

To assess the extent of impact of assurance on customer satisfaction, simple regression analysis was carried out. The result of the regression model shown in Table 4.6.4.1 indicates the value of the regression coefficient (R= 0.458, R- square = 0.210 and adjusted R- square = 0.189 and the model F= 10.293 and significance level of P=0.000) for customer satisfaction indicates that the model is significant at $p < .001$, 2-tailed. Thus, the aggregated effect of assurance on customer satisfaction is explained by the value of the R square, which indicates that 21.0% of assurance in Nepal Telecom service is accounted specifically for customer Satisfaction. It also means that 21.0% of the change in customer satisfaction is explained by assurance.

Table 4.6.4.1 Model Summary of Assurance with Customer Satisfaction

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | F | Sig. |
|----------------|-----------------------------|------------|---------------------------|----------------------------|--------|------|
| 1 | 0.458 | .210 | .189 | .936 | 10.293 | 0 |
| Coefficients | | | | | | |
| Model | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. | |
| | B | Std. Error | Beta | | | |
| Constant | 1.398 | .310 | | 4.504 | .000 | |
| Mean Assurance | 0.1214 | 0.0816 | 0.1181 | 1.4858 | 0.002 | |

The beta coefficient of the model in Table 4.6.4.1 which indicates the beta value of the constant is 1.398 for customer satisfaction whereas; the beta value for the predictor variable (Assurance) is 0.1214 for customer satisfaction. The t-value of 4.504 for customer satisfaction with the p-value of 0.000 indicates the model is significant at $p < .001$. Therefore, the beta coefficient (Beta=0.1214) implies a unit increase in assurance will result in 12.14% increase in customer satisfaction.

4.6.5 Simple Regression of Empathy

To assess the extent of impact of empathy on customer satisfaction, simple regression analysis was carried out. The result of the regression model shown in Table 4.6.5.1 indicates the value of the regression coefficient (R= 0.530, R- square = 0.281 and adjusted R- square = 0.263 and the model F= 15.175 and significance level of P=0.000) for customer satisfaction indicates that the model is significant at $p < .001$, 2-tailed. Thus, the aggregated effect of empathy on customer satisfaction is explained by the value of the R square, which indicates that 28.1% of empathy in Nepal Telecom service is accounted specifically for customer Satisfaction. It also means that 28.1% of the change in customer satisfaction is explained by empathy. The beta coefficient of the model in Table 4.6.5.1 which indicates the beta value of the constant is 1.309 for customer satisfaction whereas; the beta value for the predictor variable (Empathy) is 0.1350 for customer satisfaction. The t-value of 4.744 for customer satisfaction with the p-value of 0.000 indicates the model is significant at $p < .001$. Therefore, the beta coefficient (Beta=0.1350) implies a unit increase in empathy will result in 13.5% increase in customer satisfaction.

Table 4.6.5.1 Model Summary of Empathy with Customer Satisfaction

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | F | Sig. |
|--------------|-----------------------------|------------|---------------------------|----------------------------|--------|------|
| 1 | 0.530 | .281 | .263 | .893 | 15.175 | 0 |
| Coefficients | | | | | | |
| Model | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. | |
| | B | Std. Error | Beta | | | |
| Constant | 1.309 | .276 | | 4.744 | .000 | |
| Mean Empathy | 0.1350 | 0.0738 | 0.1418 | 1.8093 | 0.001 | |

4.6.6 The effect of service quality dimensions on overall customer satisfaction

Table 4.6.6.1 indicates that about 29.7% ($R^2=0.2977$) of the variance in the overall customer satisfaction is explained by the service quality dimensions. In addition, the results demonstrate that there is positive and statistically significant ($p<0.05$, $sig=0.000$) relationship between service quality dimensions and overall customer satisfaction. Therefore, all the service quality dimensions are significant positive impact on customer satisfaction of Nepal Telecom Service.

Table 4.6.6.1 Model Summary of overall SERVQUAL Dimensions on customer satisfaction

| Model | R | R Square | Adjusted R Square | F | Sig. |
|---------------------|-----------------------------|------------|---------------------------|--------|-------|
| 1 | 0.5456 | 0.2977 | 0.2830 | 17.142 | 0.000 |
| Coefficients | | | | | |
| | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
| | B | Std. Error | Beta | | |
| (Constant) | 1.2903 | 0.2625 | | 5.0195 | 0 |
| Mean Tangibility | 0.1511 | 0.0649 | 0.1609 | 2.3037 | 0.000 |
| Mean Reliability | 0.1484 | 0.0706 | 0.155 | 2.0388 | 0.000 |
| Mean Responsiveness | 0.1169 | 0.082 | 0.1243 | 1.3743 | 0.000 |
| Mean Assurance | 0.1214 | 0.0816 | 0.1181 | 1.4858 | 0.000 |
| Mean Empathy | 0.135 | 0.0738 | 0.1418 | 1.8093 | 0.000 |

As shown on the table the service quality dimensions separately have different significant levels. This indicates that they have a different impact on customer satisfaction. When we look at them one by one there is a positive and statistically significant ($p < 0.05$, $\beta = 0.1511$) impact between tangibility and customer satisfaction that means a unit increase in tangibility will increase customer satisfaction by 15.11 %. Therefore, from regression analysis the service quality dimension that affect the most on customer satisfaction from this study is found to be Tangibility followed by reliability and empathy. The service quality dimension assurance and responsiveness have the least effect on customer satisfaction.

4.7 Expert Opinion

After doing the descriptive analysis, correlation analysis, regression analysis and cross tabulation analysis the result has given different values. From the mean score value, we can see that the customers are more agreed on assurance and from Pearson Correlation coefficient value we found that there is strong and positive relationship between reliability and customer satisfaction. And from cross tabulation analysis we can clearly see that respondents are more satisfied with assurance. From regression analysis, there is a positive and statistically significant impact between tangibility and customer satisfaction. Though from two analysis it is found that respondents are satisfied more on assurance and is the strong service quality dimension but we cannot conclude that has greater impact on customer satisfaction so in this case expert opinion is considered. A small survey was done with twelve staffs of Nepal Telecom which includes senior engineers, engineers and senior technicians and weightage average is calculated.

Weightage average = (Number of votes *weighting for strongly disagree)+(Number of votes*weighting for disagree)+(Number of votes *weighting for neutral)+(Number of votes *weighting for agree)+(Number of votes *weighting for strongly agree)/ Total number of votes(Eq. 4.7.1)

$$\text{Weightage average} = (0 \times 1 + 0 \times 2 + 2 \times 3 + 7 \times 4 + 3 \times 5) / 12 = 4.083$$

Table 4.7.1 Weightage average of expert opinion for tangibility dimension (n=12)

| Factors | Strongly Disagree (1) | Disagree (2) | Neutral (3) | Agree (4) | Strongly Agree (5) | Weightage Average |
|--|---------------------------------|------------------------|-----------------------|---------------------|------------------------------|--------------------------|
| 1) The customer service branches are located in convenient places. | 0 | 0 | 2 | 7 | 3 | 4.083 |
| 2) Info/Messages in recharge card are clear and useful. | 0 | 0 | 1 | 7 | 4 | 4.250 |
| 3) Promotional offers are communicated properly. | 0 | 1 | 2 | 6 | 3 | 3.917 |
| 4) The employees are well dressed and neat in appearance. | 0 | 0 | 1 | 9 | 2 | 4.083 |
| 5) Billing methods are transparent and clear. | 0 | 0 | 1 | 5 | 6 | 4.417 |

Table 4.7.2 Weightage average of expert opinion for reliability dimension (n=12)

| Factors | Strongly Disagree (1) | Disagree (2) | Neutral (3) | Agree (4) | Strongly Agree (5) | Weightage Average |
|--|---------------------------------|------------------------|-----------------------|---------------------|------------------------------|--------------------------|
| 1) NT keeps its promise on timely service delivery and customer support. | 0 | 2 | 3 | 6 | 1 | 3.500 |
| 2) NT shows a sincere interest in solving customer problems. | 0 | 1 | 2 | 7 | 2 | 3.833 |
| 3) Network coverage of NT is reliable | 0 | 1 | 1 | 5 | 5 | 4.167 |
| 4) Voice clarity of NT service is good | 0 | 0 | 0 | 7 | 5 | 4.417 |
| 5) Delivery of SMS, MMS and other services are timely. | 0 | 0 | 1 | 6 | 5 | 4.333 |

Table 4.7.3 Weightage average of expert opinion for responsiveness dimension (n=12)

| Factors | Strongly Disagree (1) | Disagree (2) | Neutral (3) | Agree (4) | Strongly Agree (5) | Weightage Average |
|--|-----------------------|--------------|-------------|-----------|--------------------|-------------------|
| 1) NT employees are always willing to help you. | 0 | 0 | 2 | 7 | 3 | 4.083 |
| 2) NT gives attention to your problem. | 0 | 0 | 2 | 9 | 1 | 3.917 |
| 3) NT takes in your feedback. | 0 | 3 | 4 | 4 | 1 | 3.250 |
| 4) NT helpline is easily accessible | 0 | 2 | 5 | 4 | 1 | 3.333 |
| 5) NT employees respond to customer requests even if they are busy | 0 | 3 | 6 | 3 | 0 | 3.000 |

Table 4.7.4 Weightage average of expert opinion for assurance dimension (n=12)

| Factors | Strongly Disagree (1) | Disagree (2) | Neutral (3) | Agree (4) | Strongly Agree (5) | Weightage Average |
|--|-----------------------|--------------|-------------|-----------|--------------------|-------------------|
| 1)NT employees can be trusted. | 0 | 0 | 0 | 6 | 6 | 4.500 |
| 2) Customer feels safe doing business with NT service. | 0 | 0 | 1 | 5 | 6 | 4.417 |
| 3)NT protects the confidentiality of customer information. | 0 | 0 | 1 | 2 | 9 | 4.667 |
| 4)NT employees have required skill & knowledge to answer your queries. | 0 | 0 | 1 | 5 | 6 | 4.417 |
| 5) NT employees are sincere and patient in resolving your problems. | 0 | 0 | 1 | 10 | 1 | 4.000 |

Table 4.7.5 Weightage average of expert opinion for empathy dimension (n=12)

| Factors | Strongly Disagree (1) | Disagree (2) | Neutral (3) | Agree (4) | Strongly Agree (5) | Weightage Average |
|--|-----------------------|--------------|-------------|-----------|--------------------|-------------------|
| 1) NT has convenient periods and terms for activation and recharge. | 0 | 0 | 1 | 4 | 7 | 4.500 |
| 2) Working hours of NT is convenient to customers. | 1 | 0 | 2 | 7 | 2 | 3.750 |
| 3) NT sincerely apologies to customers for the inconvenience caused. | 1 | 2 | 4 | 3 | 2 | 3.250 |
| 4) Employees know and understand customer needs. | 0 | 0 | 5 | 5 | 2 | 3.750 |
| 5) Employees provide individual attention to customers. | 0 | 1 | 7 | 2 | 2 | 3.417 |

After taking the expert opinion and calculating the weightage average the result is as follows:

Table 4.7.6 Comparison of weightage average of expert opinion (n=12)

| Service Quality Dimensions | Weightage Average |
|----------------------------|-------------------|
| Tangibility | 4.15 |
| Reliability | 4.05 |
| Responsiveness | 3.52 |
| Assurance | 4.40 |
| Empathy | 3.73 |

From the table 4.7.6 we can see that assurance have the highest weightage average that is 4.40 following by tangibility 4.15 and reliability 4.05. The weightage average of empathy is 3.73 and the least value is responsiveness that is only 3.52. So, from the weightage

average of expert opinion we can say that assurance service quality dimension is the factor which impact more on customer satisfaction of Nepal Telecom service.

4.8 Summary

The service quality was measured using the five service quality dimensions (tangibles, reliability, responsiveness, assurance and empathy) and the satisfaction level of respondents was measured using a five-point Likert scale ranging from strongly agree (1) to strongly disagree (5). In the analysis descriptive statistics, correlation analysis and crosstabulation was performed.

The demographic variables for the study intended to cover all variations in the population who were active Nepal Telecom mobile users. Majority of respondents are female comprising of 53% of total sample size of 200. Most of the respondents fall into age group of 26-32 (41.0%). There is variable percent of respondents in each profession in total of five professions identified for this study. There are very few respondents who have been using NT service for 1 to 2 years and maximum number of respondents (68.5%) have been using MSP for more than 5 years. Majority of respondents spend more than Rs.500 every month for their mobile services while average number of respondents spend Rs.100 – Rs.500 each month.

The descriptive finding of the study shows that all the five dimensions of service quality has a positive relation with overall service quality and customer satisfaction but responsiveness and reliability has a low mean value. Assurance has the highest mean value among the other dimension and its 3.207. Regarding customer satisfaction level (according to 200 sample survey) of GSM service quality 6.5% of respondents are very satisfied, 51.0% satisfied, 14.0% are neutral, 24.5% are dissatisfied and 4.0% are very dissatisfied. From Pearson Correlation coefficient value, we found that there is strong and positive relationship between reliability and customer satisfaction whose value is $r= 0.587$ and next is empathy $r= 0.556$ and then tangibility $r= 0.529$. From cross tabulation analysis it is clearly found that respondents are more satisfied with assurance.

From the analysis, it was seen that there is no significant relationship between age group, profession, gender, marital status of respondents and satisfaction level with services

provided by NT service. Further, there was significant relationship between years of using NT service, switching intention to other mobile service and satisfaction level with services provided by NT service. From regression analysis, it is found that there is a positive and statistically significant ($p < 0.05$, $\beta = 0.1511$) impact between tangibility dimension and customer satisfaction that means a unit increase in tangibility will increase customer satisfaction by 15.11 %. From the weightage average value of expert opinion, it was found that assurance has the highest value that is 4.40 followed by tangibility 4.15 and reliability 4.05.

4.9 Suggestions to Nepal Telecom

In sum, the present findings contribute to our understanding of the effects of service quality of mobile service provider Nepal Telecom (NT) of Nepal, on the customer's satisfaction, commitment and trustworthiness of NT subscribers towards its operator.

Results of this research are favorable and will help the telecom service providers to shape their products and pricing policies in such a way that they could maximize customer satisfaction and maintain their customers in order to achieve higher market share. The results showed that all the service quality items were good predictors of customer satisfaction.

The following are recommendations for NT based on the research done for the relationship between service quality of NT and customer satisfaction:

- NT must pay attention on service quality and its five key dimensions: reliability, responsiveness, empathy, assurance and tangibles. Due to the fact that telecom do not provide tangible products, their service quality is usually assessed by measures of service-provider's relationship with customers. Thus, NT should pay attention to staff skill possession, knowledge, attention to customers and their needs, offering of fast and efficient services and general attitude to customer services.
- Customer care is an important area and produces direct impact on customer satisfaction. NT should take efforts for better customer care.

- NT should improve its care line, since it is the most preferred form of customer service.
- Customer stays happy with the availability of value-added services along with good network coverage.
- NT should also ensure that staffs are knowledgeable of customers' requests and problems.
- NT staff should encourage and welcome suggestions on improving customer satisfaction
- NT staff should always listen to what customer wants because customers don't buy products or services, they sometimes buy solutions to their problems.
- NT employees can be trained on relationship marketing skills, such training would build a customer-oriented climate in which contact employee can deliver service efficiently and effectively, acknowledging that acquiring and retaining customers is the very essence of marketing.

Further, the results of research show that Customer satisfaction depends on customer care services, promotion schemes and service quality. The main factors of customer satisfactions are coverage of network, promotion and value-added schemes, SMS & MMS quality, customer care services. The main recommendation of the research is that the telecom companies can attract more customers by launching promotion schemes especially for teenagers, businessman and students as they are more frequent mobile users.

Policymakers for the company should therefore see to customer satisfaction based on these measures. The training and performance measurement of customer service agents needs to include relational elements allowing them to realize and articulate client needs. From the above result we have already found that empathy and responsiveness is the two-service quality dimension which has least value of satisfaction so to improve the service quality of NT service they should focus more on these areas to have more customer satisfaction.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusion

The aim of the study was to identify the effect of service quality on customer satisfaction of Nepal Telecom. On the review of theoretical, conceptual related literature of the study, the five service quality dimensions have a significant impact on customer satisfaction.

Firstly, we correlate all the service quality dimension with each other and found that they are positively correlate with each other. Then we correlate each service dimension with customer satisfaction level and the result from Pearson Correlation coefficient value, we found that there is strong and positive relationship between reliability and customer satisfaction whose value is $r= 0.587$.

From cross tabulation analysis and one-way ANOVA, it is clearly found that respondents are more satisfied with assurance and all the service quality dimensions has positive significant effect on customer satisfaction. It was also found that customers of NT Company are satisfied irrespective of their age group, gender, profession and marital status. Hence, it is not necessary to launch offers keeping in view of age group, gender and marital status.

Regarding customer satisfaction level of service quality 6.5% of respondents are very satisfied, 51.0% satisfied, 14.0% are neutral, 24.5% are dissatisfied and 4.0% are very dissatisfied. The mean value for overall customer satisfaction is low that shows there is a big gap between what it should be and what it actually is.

The results from the regression analysis shows that there is positive and statistically significant ($p<0.05$, $\text{sig}=0.000$) relationship between service quality dimensions and overall customer satisfaction. Therefore, all the service quality dimensions are significant positive impact on customer satisfaction of Nepal Telecom service. And from this study it is found that Tangibility impact the customer satisfaction the most followed by reliability and empathy.

Since different analysis gave different conclusion and so the expert opinion was included in this study and the result of the weightage average of expert opinion it was found that assurance has the highest value that is 4.40.

So, from all the above discussion and the result of these analysis it is concluded that the most effective and impactful service quality dimension is assurance and it has a positive and strategically significant effect on customer satisfaction of Nepal Telecom service. The importance of assurance in influencing customer satisfaction suggests that strong relationship between the management and customers should be emphasized for long term sustainability.

Consumers' perception is widely varied in accordance with the communication quality, call service, facilities, customer care and service provider's quality. Hence, from the result of the study, it can be deliberately concluded that service quality has significant positive impact on consumer perception choice in selecting telecommunication service provider and becoming loyal to its operator.

5.2 Limitations of the study

There are some limitations associated with this study that need to be discussed. Although the research findings provide some new insights to researchers, these findings should be viewed in light of some limitations. 200 samples from NT users may not be large enough to represent accurately the whole population's attitude towards customer satisfaction in the cellular telecommunication service provided in Nepal. There can also be other dimensions of service quality rather than used in this research; so, further research can be conducted to measure those dimensions.

Some people might not be able to respond to all the items in questionnaires which will make them invalid; therefore, they will have to be excluded from the data. The data collection will be done based on the availability of the respondents; hence, the findings should not be generalized for all the subscribers of the entire country. The present study has examined customer satisfaction only through service quality. However, satisfaction also depends on a number of factors including price, trust, and loyalty. Since the results from the analysis have different service quality dimensions and to choose one of the best

options multi criteria method will be the best but due to time constrain and extensive process it is avoided and expert opinion was included in this study.

5.3 Recommendation for Future Study

This research is based on quantitative methods so in future more research could use qualitative methods to understand the service quality and customer satisfaction. During the data collection the questionnaire should be developed both English as well as in Native language in more understandable and simple words. Similarly, only SERVQUAL dimensions are used in this research but in future it would be interesting if other dimensions like situational and control variables are also added. In this study, only the perceived service quality has included but in future we could include the expected service quality and find the gap between expected and perceived service quality determining by gap analysis. Moreover, we can even investigate the levels of service quality and customer satisfaction among itself and its main competitors using other service quality measurement tools. Since this study focus only on the relationship between service quality and customer satisfaction, further researchers may include other factors that can have a big impact on customer satisfaction and do a survey.

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ANNEX I: Questionnaire on Service Quality of NT service and Customer Satisfaction

Q1. Profession

- 1) Student
- 2) Business
- 3) Service
- 4) House maker
- 5) Retiree

Q2. Gender

- 1) Male
- 2) Female

Q3. Age Group

- 1) 18-25 yrs
- 2) 26-32 yrs
- 3) 33-40 yrs
- 4) 41-50 yrs
- 5) Above 50 yrs

Q4. Marital Status

- 1) Single
- 2) Married
- 3) Widower
- 4) Separated

Q5. Permanent Address

- 1) Kathmandu Valley
- 2) Outside KTM valley

Q6. Educational Level

- 1) High school
- 2) Bachelor level
- 3) Masters level
- 4) Above master level

Q7. Monthly income

- 1) Less than Rs. 25,000
- 2) Rs. 25000-40000
- 3) Rs.410000-55000

- 4) Above 55000

Q8. How long have you been using NT service?

- 1) 1 to 2 years
- 2) 2 to 4 years
- 3) 4 to 5 years
- 4) Above 5 years

Q9. What's your monthly average expenditure in mobile?

- 1) Less than Rs.50
- 2) Rs.50 – Rs.100
- 3) Rs.100 – Rs.300
- 4) Rs.300 – Rs.500
- 5) Above Rs.500

Q10. Which type of service do you prefer?

- 1) Prepaid Services
- 2) Postpaid Services

Q11. What is your satisfaction level with the services provided by NT operator?

- 1) Very Satisfied
- 2) Satisfied
- 3) Neutral
- 4) Dissatisfied
- 5) Very Dissatisfied

Q12. Rank the following service quality factors of telecom as 1, 2, 3, 4 and 5 according to your preference (Where 1 denotes most preferable and 5 denotes least preferable)

- 1) Network Quality _____
- 2) Customer Service _____
- 3) Products and Offers _____
- 4) Price _____
- 5) Distribution _____

Q13. To what extent has NTC met your expectations by its overall services?

- 1) Better than Expectation
- 2) Equal to Expectation

3) Does not meet the Expectation

Q14. What are the services of NT operator that you use? (Can Tick More Than One)

- 1) Local Calls
- 2) International Calls
- 3) SMS Service
- 4) Internet Service
- 5) Roaming Service
- 6) Caller Ring Back Tones
- 7) Friends and Family Service
- 8) Balance Transfer Service
- 9) MMS Service
- 10) Offerings and Packages

Q15. To what extent do you agree on following statements related to Tangibility of NT operator? (Tick on appropriate box).

| Factors | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|--|-------------------|----------|---------|-------|----------------|
| 1) The customer service branches are located in convenient places. | | | | | |
| 2) Info/Messages in recharge card are clear and useful. | | | | | |
| 3) Promotional offers are communicated properly. | | | | | |
| 4) The employees are well dressed and neat in appearance. | | | | | |
| 5) Billing methods are transparent and clear. | | | | | |

Q16. To what extent do you agree on following statements related to Reliability of NT operator? (Tick on appropriate box)

| Factors | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|--|--------------------------|-----------------|----------------|--------------|-----------------------|
| 1) NT keeps its promise on timely service delivery and customer support. | | | | | |
| 2) NT shows a sincere interest in solving customer problems. | | | | | |
| 3) Network coverage of NT is reliable | | | | | |
| 4) Voice clarity of NT service is good | | | | | |
| 5) Delivery of SMS, MMS and other services are timely. | | | | | |

Q17. To what extent do you agree on following statements related to Responsiveness of NT operator? (Tick on appropriate box)

| Factors | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|--|--------------------------|-----------------|----------------|--------------|-----------------------|
| 1) NT employees are always willing to help customer. | | | | | |
| 2) NT gives attention to customer problem. | | | | | |
| 3) NT takes in customer feedback. | | | | | |
| 4) NT helpline is easily accessible | | | | | |
| 5) NT employees respond to customer requests even if they are busy | | | | | |

Q18. To what extent do you agree on following statements related to Assurance of NT operator? (Tick on appropriate box)

| Factors | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|--------------------------|-----------------|----------------|--------------|-----------------------|
| 1) NT employees can be trusted. | | | | | |
| 2) Customer feels safe doing business with NT service. | | | | | |
| 3) NT protects the confidentiality of customer information. | | | | | |
| 4) NT employees have required skill & knowledge to answer customer queries. | | | | | |
| 5) NT employees are sincere and patient in resolving customer problems. | | | | | |

Q19. To what extent do you agree on following statements related to Empathy of NT operator? (Tick on appropriate box)

| Factors | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|--|--------------------------|-----------------|----------------|--------------|-----------------------|
| 1) NT has convenient periods and terms for activation and recharge. | | | | | |
| 2) Working hours of NT is convenient to customers. | | | | | |
| 3) NT sincerely apologies to customers for the inconvenience caused. | | | | | |
| 4) Employees know and understand customer needs. | | | | | |
| 5) Employees provide individual attention to customers. | | | | | |

ANNEX II: Correlation of each factors of service quality dimensions

Correlation between Tangibility Factors of NT

| | | | | | | |
|---|---------------------|---|--|---|--|--|
| | | The customer service branches are located in convenient places. | Info/Messages in recharge card are clear and useful. | Promotional offers are communicated properly. | The employees are well dressed and neat in appearance. | Billing methods are transparent and clear. |
| The customer service branches are located in convenient places. | Pearson Correlation | | 0.508 | 0.431 | 0.421 | 0.272 |
| | Sig. (2-tailed) | | 0.000 | 0.000 | 0.000 | 0.000 |
| Info/Messages in recharge card are clear and useful. | Pearson Correlation | | | 0.314 | 0.267 | 0.288 |
| | Sig. (2-tailed) | | | 0.000 | 0.000 | 0.000 |
| Promotional offers are communicated properly. | Pearson Correlation | | | | 0.445 | 0.321 |
| | Sig. (2-tailed) | | | | 0.000 | 0.000 |
| The employees are well dressed and neat in appearance. | Pearson Correlation | | | | | 0.268 |
| | Sig. (2-tailed) | | | | | 0.000 |
| Billing methods are transparent and clear. | Pearson Correlation | | | | | |
| | Sig. (2-tailed) | | | | | |

Correlation between Reliability Factors of NT

| | | NT keeps its promise on timely service delivery and customer support. | NT shows a sincere interest in solving customer problems. | Network coverage of NT is reliable. | Voice clarity in NT is good | Delivery of SMS, MMS and other services are timely. |
|---|---------------------|---|---|-------------------------------------|-----------------------------|---|
| Mobile service provider keeps its promise on timely service delivery and customer support | Pearson Correlation | | 0.659 | 0.340 | 0.399 | 0.310 |
| | Sig. (2-tailed) | | 0.000 | 0.000 | 0.000 | 0.000 |
| Mobile service provider shows a sincere interest in solving customer problems. | Pearson Correlation | | | 0.419 | 0.459 | 0.422 |
| | Sig. (2-tailed) | | | 0.000 | 0.000 | 0.000 |
| Network coverage of mobile service provider is reliable. | Pearson Correlation | | | | 0.537 | 0.443 |
| | Sig. (2-tailed) | | | | 0.000 | 0.000 |
| Voice clarity in mobile service provider is good | Pearson Correlation | | | | | 0.501 |
| | Sig. (2-tailed) | | | | | 0.000 |
| Delivery of SMS, MMS and other services are timely. | Pearson Correlation | | | | | |
| | Sig. (2-tailed) | | | | | |

Correlation between Responsiveness Factors of NT

| | | NT employees are always willing to help you | NT gives attention to your problem. | NT takes in your feedback. | NT helpline is easily accessible | NT employees respond to customer requests even if they are busy |
|---|---------------------|---|-------------------------------------|----------------------------|----------------------------------|---|
| NT employees are always willing to help you | Pearson Correlation | | 0.724 | 0.645 | 0.443 | 0.612 |
| | Sig. (2-tailed) | | 0.000 | 0.000 | 0.000 | 0.000 |
| NT gives attention to your problem. | Pearson Correlation | | | 0.613 | 0.352 | 0.590 |
| | Sig. (2-tailed) | | | 0.000 | 0.000 | 0.000 |
| NT takes in your feedback. | Pearson Correlation | | | | 0.391 | 0.565 |
| | Sig. (2-tailed) | | | | 0.000 | 0.000 |
| NT helpline is easily accessible | Pearson Correlation | | | | | 0.455 |
| | Sig. (2-tailed) | | | | | 0.000 |
| NT employees respond to customer requests even if they are busy | Pearson Correlation | | | | | |
| | Sig. (2-tailed) | | | | | |

Correlation between Assurance Factors of NT

| | | NT employees can be trusted | Customer feels safe doing business with NT. | NT protects the confidentiality of customer information. | NT employees have required skill & knowledge to answer your queries. | NT employees are sincere and patient in resolving your problems. |
|--|---------------------|-----------------------------|---|--|--|--|
| NT employees can be trusted | Pearson Correlation | | 0.482 | 0.382 | 0.349 | 0.451 |
| | Sig. (2-tailed) | | 0.000 | 0.000 | 0.000 | 0.000 |
| Customer feels safe doing business with NT. | Pearson Correlation | | | 0.486 | 0.323 | 0.369 |
| | Sig. (2-tailed) | | | 0.000 | 0.000 | 0.000 |
| NT protects the confidentiality of customer information. | Pearson Correlation | | | | 0.410 | 0.410 |
| | Sig. (2-tailed) | | | | 0.000 | 0.000 |
| NT employees have required skill & knowledge to answer your queries. | Pearson Correlation | | | | | 0.523 |
| | Sig. (2-tailed) | | | | | 0.000 |
| NT employees are sincere and patient in resolving your problems. | Pearson Correlation | | | | | |
| | Sig. (2-tailed) | | | | | |

Correlation between Empathy Factors of NT

| | | NT has convenient periods and terms for activation and recharge. | Working hours of NT is convenient to customers. | NT sincerely apologies to customers for the inconvenience caused. | Employees know and understand customer needs. | Employees provide individual attention to customers. |
|---|---------------------|--|---|---|---|--|
| NT has convenient periods and terms for activation and recharge. | Pearson Correlation | | 0.448 | 0.192 | 0.238 | 0.279 |
| | Sig. (2-tailed) | | 0 | 0.007 | 0.001 | 0 |
| Working hours of NT is convenient to customers. | Pearson Correlation | | | 0.352 | 0.398 | 0.458 |
| | Sig. (2-tailed) | | | 0 | 0 | 0 |
| NT sincerely apologies to customers for the inconvenience caused. | Pearson Correlation | | | | 0.484 | 0.47 |
| | Sig. (2-tailed) | | | | 0 | 0 |
| Employees know and understand customer needs. | Pearson Correlation | | | | | 0.657 |
| | Sig. (2-tailed) | | | | | 0 |
| Employees provide individual attention to customers. | Pearson Correlation | | | | | |
| | Sig. (2-tailed) | | | | | |

ANNEX III: Cross Tabulation and one-way ANNOVA test of research hypothesis

Comparison between Satisfaction with NT Services and Information in recharge card are clear and useful Hypothesis (H₂)

| Info/Messages in recharge card are clear and useful. | Satisfaction level with services provided by NT | | | | | |
|--|---|---------------|--------------|--------------|-------------------|----------------|
| | Very Satisfied | Satisfied | Neutral | Dissatisfied | Very Dissatisfied | Total |
| Strongly Disagree | 0 0.00% | 1 14.30% | 1 14.30% | 2 28.60% | 3 42.90% | 7 100.00% |
| Disagree | 0 0.00% | 6 27.30% | 4 18.20% | 11 50.00% | 1 4.50% | 22 100.00% |
| Neutral | 0 0.00% | 16 57.10% | 4 14.30% | 8 28.60% | 0 0.00% | 28 100.00% |
| Agree | 6 5.60% | 58 53.70% | 14 13.00% | 26 24.10% | 4 3.70% | 108 100.00% |
| Strongly Agree | 7 20.00% | 21 60.00% | 5 14.30% | 2 5.70% | 0 0.00% | 35 100.00% |
| Total | 13 6.50% | 102 51.00% | 28 14.00% | 49 24.50% | 8 4.00% | 200 100.00% |

ANOVA – Satisfaction with NT Services and Information in recharge card are clear and useful

| | Sum of Squares | Df | Mean Square | F | P- Value |
|----------------|----------------|-----|-------------|-------|----------|
| Between Groups | 34.782 | 4 | 8.696 | 9.401 | 0.000 |
| Within Groups | 180.373 | 195 | 0.925 | | |
| Total | 215.155 | 199 | | | |

Comparison between Satisfaction with NT Services and promotional offer are communicated properly Hypothesis (H₃)

| Promotional offers are communicated properly. | Satisfaction level with services provided by NT | | | | | |
|---|---|---------------|--------------|--------------|-------------------|----------------|
| | Very Satisfied | Satisfied | Neutral | Dissatisfied | Very Dissatisfied | Total |
| Strongly Disagree | 0 0.00% | 1 5.60% | 2 11.10% | 12 66.70% | 3 16.70% | 18 100.00% |
| Disagree | 1 1.40% | 38 51.40% | 10 13.50% | 21 28.40% | 4 5.40% | 74 100.00% |
| Neutral | 2 5.60% | 20 55.60% | 10 27.80% | 4 11.10% | 0 0.00% | 36 100.00% |
| Agree | 4 7.10% | 36 64.30% | 6 10.70% | 9 16.10% | 1 1.80% | 56 100.00% |
| Strongly Agree | 6 37.50% | 7 43.80% | 0 0.00% | 3 18.80% | 0 0.00% | 16 100.00% |
| Total | 13 6.50% | 102 51.00% | 28 14.00% | 49 24.50% | 8 4.00% | 200 100.00% |

ANOVA – Satisfaction with NT Services and promotional offer are communicated properly

| | Sum of Squares | Df | Mean Square | F | P- Value |
|----------------|----------------|-----|-------------|--------|----------|
| Between Groups | 44.403 | 4 | 11.101 | 12.677 | 0.000 |
| Within Groups | 170.752 | 195 | 0.876 | | |
| Total | 215.155 | 199 | | | |

Comparison between Satisfaction with NT Services and employees’ attire Hypothesis (H₄)

| Services and employees’ attire. | Satisfaction level with services provided by NT | | | | | |
|---------------------------------|---|---------------|--------------|--------------|-------------------|----------------|
| | Very Satisfied | Satisfied | Neutral | Dissatisfied | Very Dissatisfied | Total |
| Strongly Disagree | 0 0.00% | 2 7.70% | 3 11.50% | 17 65.40% | 4 15.40% | 26 100.00% |
| Disagree | 2 2.90% | 36 51.40% | 11 15.70% | 18 25.70% | 3 4.30% | 70 100.00% |
| Neutral | 6 14.60% | 21 51.20% | 7 17.10% | 6 14.60% | 1 2.40% | 41 100.00% |
| Agree | 3 5.60% | 38 70.40% | 7 13.00% | 6 11.10% | 0 0.00% | 54 100.00% |
| Strongly Agree | 2 22.20% | 5 55.60% | 0 0.00% | 2 22.20% | 0 0.00% | 9 100.00% |
| Total | 13 6.50% | 102 51.00% | 28 14.00% | 49 24.50% | 8 4.00% | 200 100.00% |

ANOVA – Satisfaction with NT Services and employee attire

| | Sum of Squares | Df | Mean Square | F | P- Value |
|----------------|----------------|-----|-------------|--------|----------|
| Between Groups | 51.587 | 4 | 12.897 | 15.375 | 0.000 |
| Within Groups | 163.568 | 195 | 0.839 | | |
| Total | 215.155 | 199 | | | |

**Comparison between Satisfaction with NT Services are transparent and clear billing
Hypothesis (H₅)**

| Billing method clear and transparent. | Satisfaction level with services provided by NT | | | | | |
|---|---|---------------|--------------|--------------|----------------------|----------------|
| | Very Satisfied | Satisfied | Neutral | Dissatisfied | Very Dissatisfied | Total |
| Strongly Disagree | 0 0.00% | 3 21.40% | 4 28.60% | 5 35.70% | 2 14.30% | 14 100.00% |
| Disagree | 2 5.60% | 11 30.60% | 9 25.00% | 13 36.10% | 1 2.80% | 36 100.00% |
| Neutral | 0 0.00% | 23 60.50% | 7 18.40% | 8 21.10% | 0 0.00% | 38 100.00% |
| Agree | 4 4.40% | 54 60.00% | 7 7.80% | 21 23.30% | 4 4.40% | 90 100.00% |
| Strongly Agree | 7 31.80% | 11 50.00% | 1 4.50% | 2 9.10% | 1 4.50% | 22 100.00% |
| Total | 13 6.50% | 102 51.00% | 28 14.00% | 49 24.50% | 8 4.00% | 200 100.00% |

ANOVA – Satisfaction with NT Services are transparent and clear billing

| | Sum of Squares | Df | Mean Square | F | P- Value |
|----------------|-------------------|-----|----------------|-------|----------|
| Between Groups | 20.793 | 4 | 5.198 | 5.215 | 0.001 |
| Within Groups | 194.362 | 195 | 0.997 | | |
| Total | 215.155 | 199 | | | |

**Comparison between Satisfaction with NT Services and timely service delivery and
customer support Hypothesis (H₆)**

| Timely service delivery and customer support. | Satisfaction level with services provided by NT | | | | | |
|---|---|---------------|--------------|--------------|----------------------|----------------|
| | Very Satisfied | Satisfied | Neutral | Dissatisfied | Very Dissatisfied | Total |
| Strongly Disagree | 0 0.00% | 6 26.10% | 2 8.70% | 12 52.20% | 3 13.00% | 23 100.00% |
| Disagree | 1 1.60% | 21 34.40% | 9 14.80% | 26 42.60% | 4 6.60% | 61 100.00% |
| Neutral | 3 7.50% | 22 55.00% | 12 30.00% | 3 7.50% | 0 0.00% | 40 100.00% |
| Agree | 7 10.30% | 49 72.10% | 5 7.40% | 6 8.80% | 1 1.50% | 68 100.00% |
| Strongly Agree | 2 25.00% | 4 50.00% | 0 0.00% | 2 25.00% | 0 0.00% | 8 100.00% |
| Total | 13 6.50% | 102 51.00% | 28 14.00% | 49 24.50% | 8 4.00% | 200 100.00% |

ANOVA – Satisfaction with NT Services and timely service delivery and customer support

| | Sum of Squares | Df | Mean Square | F | P- Value |
|----------------|----------------|-----|-------------|--------|----------|
| Between Groups | 53.01 | 4 | 13.252 | 15.938 | 0.000 |
| Within Groups | 162.145 | 195 | 0.832 | | |
| Total | 215.155 | 199 | | | |

Comparison between Satisfaction with NT Services and interest in solving customer problems Hypothesis (H₇)

| NT services and interest in solving customer problem. | Satisfaction level with services provided by NT | | | | | |
|---|---|---------------|--------------|--------------|-------------------|----------------|
| | Very Satisfied | Satisfied | Neutral | Dissatisfied | Very Dissatisfied | Total |
| Strongly Disagree | 0 0.00% | 3 14.30% | 1 4.80% | 14 66.70% | 3 14.30% | 21 100.00% |
| Disagree | 0 0.00% | 22 31.00% | 15 21.10% | 29 40.80% | 5 7.00% | 71 100.00% |
| Neutral | 5 12.80% | 25 64.10% | 7 17.90% | 2 5.10% | 0 0.00% | 39 100.00% |
| Agree | 6 9.40% | 51 79.70% | 5 7.80% | 2 3.10% | 0 0.00% | 64 100.00% |
| Strongly Agree | 2 40.00% | 1 20.00% | 0 0.00% | 2 40.00% | 0 0.00% | 5 100.00% |
| Total | 13 6.50% | 102 51.00% | 28 14.00% | 49 24.50% | 8 4.00% | 200 100.00% |

ANOVA – Satisfaction with NT Services and interest in solving customer problems support

| | Sum of Squares | Df | Mean Square | F | P- Value |
|----------------|----------------|-----|-------------|--------|----------|
| Between Groups | 85.851 | 4 | 21.463 | 32.367 | 0.000 |
| Within Groups | 129.304 | 195 | 0.663 | | |
| Total | 215.155 | 199 | | | |

**Comparison between Satisfaction with NT Services and reliable network coverage
Hypothesis (H₈)**

| NT services and reliable network coverage. | Satisfaction level with services provided by NT | | | | | |
|--|---|---------------|--------------|--------------|-------------------|----------------|
| | Very Satisfied | Satisfied | Neutral | Dissatisfied | Very Dissatisfied | Total |
| Strongly Disagree | 0 0.00% | 5 17.20% | 4 13.80% | 16 55.20% | 4 13.80% | 29 100.00% |
| Disagree | 1 1.60% | 32 52.50% | 9 14.80% | 18 29.50% | 1 1.60% | 61 100.00% |
| Neutral | 3 8.10% | 19 51.40% | 10 27.00% | 4 10.80% | 1 2.70% | 37 100.00% |
| Agree | 8 11.80% | 42 61.80% | 5 7.40% | 11 16.20% | 2 2.90% | 68 100.00% |
| Strongly Agree | 1 20.00% | 4 80.00% | 0 0.00% | 0 0.00% | 0 0.00% | 5 100.00% |
| Total | 13 6.50% | 102 51.00% | 28 14.00% | 49 24.50% | 8 4.00% | 200 100.00% |

ANOVA – Satisfaction with NT Services and reliable network coverage

| | Sum of Squares | Df | Mean Square | F | P- Value |
|----------------|----------------|-----|-------------|--------|----------|
| Between Groups | 39.964 | 4 | 9.991 | 11.121 | 0.000 |
| Within Groups | 175.191 | 195 | 0.898 | | |
| Total | 215.155 | 199 | | | |

**Comparison between Satisfaction with NT Services and voice clarity in mobile services
Hypothesis (H₉)**

| NT services and voice clarity in mobile service. | Satisfaction level with services provided by NT | | | | | |
|--|---|---------------|--------------|--------------|-------------------|----------------|
| | Very Satisfied | Satisfied | Neutral | Dissatisfied | Very Dissatisfied | Total |
| Strongly Disagree | 2 10.50% | 0 0.00% | 2 10.50% | 14 73.70% | 1 5.30% | 19 100.00% |
| Disagree | 2 2.80% | 30 41.70% | 10 13.90% | 26 36.10% | 4 5.60% | 72 100.00% |
| Neutral | 3 7.30% | 25 61.00% | 10 24.40% | 2 4.90% | 1 2.40% | 41 100.00% |
| Agree | 3 4.90% | 44 72.10% | 5 8.20% | 7 11.50% | 2 3.30% | 61 100.00% |
| Strongly Agree | 3 42.90% | 3 42.90% | 1 14.30% | 0 0.00% | 0 0.00% | 7 100.00% |
| Total | 13 6.50% | 102 51.00% | 28 14.00% | 49 24.50% | 8 4.00% | 200 100.00% |

ANOVA – Satisfaction with NT Services and voice clarity in mobile services

| | Sum of Squares | Df | Mean Square | F | P- Value |
|----------------|----------------|-----|-------------|--------|----------|
| Between Groups | 42.02 | 4 | 10.5051 | 11.832 | 0.000 |
| Within Groups | 173.135 | 195 | 0.888 | | |
| Total | 215.155 | 199 | | | |

Comparison between Satisfaction with NT Services and delivery of VAS services Hypothesis (H₁₀)

| NT services and delivery of VAS services. | Satisfaction level with services provided by NT | | | | | |
|---|---|---------------|--------------|--------------|-------------------|----------------|
| | Very Satisfied | Satisfied | Neutral | Dissatisfied | Very Dissatisfied | Total |
| Strongly Disagree | 2 20.00% | 0 0.00% | 1 10.00% | 5 50.00% | 2 20.00% | 10 100.00% |
| Disagree | 0 0.00% | 13 29.50% | 8 18.20% | 21 47.70% | 2 4.50% | 44 100.00% |
| Neutral | 0 0.00% | 18 56.00% | 9 28.10% | 5 15.60% | 0 0.00% | 32 100.00% |
| Agree | 10 9.30% | 68 63.00% | 10 9.30% | 16 14.80% | 4 3.70% | 108 100.00% |
| Strongly Agree | 1 16.70% | 3 50.00% | 0 0.00% | 2 33.30% | 0 0.00% | 6 100.00% |
| Total | 13 6.50% | 102 51.00% | 28 14.00% | 49 24.50% | 8 4.00% | 200 100.00% |

ANOVA – Satisfaction with NT Services and delivery of VAS services

| | Sum of Squares | Df | Mean Square | F | P- Value |
|----------------|----------------|-----|-------------|-------|----------|
| Between Groups | 30.635 | 4 | 7.659 | 8.094 | 0.000 |
| Within Groups | 184.52 | 195 | 0.946 | | |
| Total | 215.155 | 199 | | | |

**Comparison between Satisfaction with NT Services and employees are willing to help
Hypothesis (H₁₁)**

| NT services and employees are willing to help. | Satisfaction level with services provided by NT | | | | | |
|--|---|---------------|--------------|--------------|-------------------|----------------|
| | Very Satisfied | Satisfied | Neutral | Dissatisfied | Very Dissatisfied | Total |
| Strongly Disagree | 1 5.00% | 2 10.00% | 3 15.00% | 11 55.00% | 3 15.00% | 20 100.00% |
| Disagree | 0 0.00% | 20 35.10% | 11 19.30% | 22 38.60% | 4 7.00% | 57 100.00% |
| Neutral | 3 7.90% | 22 57.90% | 6 15.80% | 7 18.40% | 0 0.00% | 38 100.00% |
| Agree | 7 9.30% | 52 69.30% | 8 10.70% | 7 9.30% | 1 1.30% | 75 100.00% |
| Strongly Agree | 2 20.00% | 6 60.00% | 0 0.00% | 2 20.00% | 0 0.00% | 10 100.00% |
| Total | 13 6.50% | 102 51.00% | 28 14.00% | 49 24.50% | 8 4.00% | 200 100.00% |

ANOVA – Satisfaction with NT Services and employees are willing to help

| | Sum of Squares | Df | Mean Square | F | P- Value |
|----------------|----------------|-----|-------------|--------|----------|
| Between Groups | 51.685 | 4 | 12.921 | 15.413 | 0.000 |
| Within Groups | 163.47 | 195 | 0.838 | | |
| Total | 215.155 | 199 | | | |

**Comparison between Satisfaction with NT Services and attention to customer problem
Hypothesis (H₁₂)**

| NT services and gives attention to customer problem. | Satisfaction level with services provided by NT | | | | | |
|--|---|---------------|--------------|--------------|-------------------|----------------|
| | Very Satisfied | Satisfied | Neutral | Dissatisfied | Very Dissatisfied | Total |
| Strongly Disagree | 1 5.90% | 0 0.00% | 3 17.60% | 10 58.80% | 3 17.60% | 17 100.00% |
| Disagree | 0 0.00% | 25 36.80% | 12 17.50% | 27 39.70% | 4 5.90% | 68 100.00% |
| Neutral | 3 7.50% | 24 60.00% | 6 9.20% | 5 12.50% | 1 2.50% | 40 100.00% |
| Agree | 8 12.30% | 47 72.30% | 6 9.20% | 4 6.20% | 0 0.00% | 65 100.00% |
| Strongly Agree | 1 10.00% | 6 60.00% | 0 0.00% | 3 30.00% | 0 0.00% | 10 100.00% |
| Total | 13 6.50% | 102 51.00% | 28 14.00% | 49 24.50% | 8 4.00% | 200 100.00% |

ANOVA – Satisfaction with NT Services and attention to customer problem

| | Sum of Squares | Df | Mean Square | F | P- Value |
|----------------|----------------|-----|-------------|--------|----------|
| Between Groups | 62.434 | 4 | 15.608 | 19.929 | 0.000 |
| Within Groups | 152.721 | 195 | 0.783 | | |
| Total | 215.155 | 199 | | | |

Comparison between Satisfaction with NT Services and takes in feedback Hypothesis (H₁₃)

| NT services and take in your feedback. | Satisfaction level with services provided by NT | | | | | |
|--|---|---------------|--------------|--------------|-------------------|----------------|
| | Very Satisfied | Satisfied | Neutral | Dissatisfied | Very Dissatisfied | Total |
| Strongly Disagree | 1 3.10% | 5 15.60% | 7 21.90% | 15 46.90% | 4 12.50% | 32 100.00% |
| Disagree | 0 0.00% | 43 56.60% | 7 9.20% | 22 28.90% | 4 5.30% | 76 100.00% |
| Neutral | 5 11.90% | 23 54.80% | 8 19.00% | 6 14.30% | 0 0.00% | 42 100.00% |
| Agree | 6 13.30% | 29 64.40% | 6 13.30% | 4 8.90% | 0 0.00% | 45 100.00% |
| Strongly Agree | 1 20.00% | 2 40.00% | 0 0.00% | 2 40.00% | 0 0.00% | 5 100.00% |
| Total | 13 6.50% | 102 51.00% | 28 14.00% | 49 24.50% | 8 4.00% | 200 100.00% |

ANOVA – Satisfaction with NT Services and takes in feedback

| | Sum of Squares | Df | Mean Square | F | P- Value |
|----------------|----------------|-----|-------------|--------|----------|
| Between Groups | 38.958 | 4 | 9.74 | 10.779 | 0.000 |
| Within Groups | 176.197 | 195 | 0.904 | | |
| Total | 215.155 | 199 | | | |

**Comparison between Satisfaction with NT Services and helpline is easily accessible
Hypothesis (H₁₄)**

| NT services and helpline is easily accessible. | Satisfaction level with services provided by NT | | | | | |
|--|---|-----------------------|----------------------|----------------------|--------------------|------------------------|
| | Very Satisfied | Satisfied | Neutral | Dissatisfied | Very Dissatisfied | Total |
| Strongly Disagree | 1 7.10% | 2 14.30% | 2 14.30% | 7 50.00% | 2 14.30% | 14 100.00% |
| Disagree | 2 3.50% | 19 33.30% | 14 24.60% | 20 35.10% | 2 3.50% | 57 100.00% |
| Neutral | 2 6.90% | 15 51.70% | 9 31.00% | 3 10.30% | 0 0.00% | 29 100.00% |
| Agree | 6 6.80% | 60 68.20% | 3 3.40% | 15 17.00% | 4 4.50% | 88 100.00% |
| Strongly Agree | 2 16.70% | 6 50.00% | 0 0.00% | 4 33.30% | 0 0.00% | 12 100.00% |
| Total | 13 6.50% | 102 51.00% | 28 14.00% | 49 24.50% | 8 4.00% | 200 100.00% |

ANOVA – Satisfaction with NT Services and helpline is easily accessible

| | Sum of Squares | Df | Mean Square | F | P- Value |
|----------------|----------------|------------|-------------|-------|----------|
| Between Groups | 22.784 | 4 | 5.696 | 5.774 | 0.000 |
| Within Groups | 192.371 | 195 | 0.987 | | |
| Total | 215.155 | 199 | | | |

Comparison between Satisfaction with NT Services and employee responds to customer request in busy time Hypothesis (H₁₅)

| NT services and employee responds to customer request in busy time. | Satisfaction level with services provided by NT | | | | | |
|---|---|-----------------------|----------------------|----------------------|--------------------|------------------------|
| | Very Satisfied | Satisfied | Neutral | Dissatisfied | Very Dissatisfied | Total |
| Strongly Disagree | 1 3.00% | 8 24.20% | 4 12.10% | 15 45.50% | 5 15.20% | 33 100.00% |
| Disagree | 3 3.70% | 35 43.20% | 17 21.00% | 23 28.40% | 3 3.70% | 81 100.00% |
| Neutral | 5 14.70% | 24 70.60% | 3 8.80% | 2 5.90% | 0 0.00% | 34 100.00% |
| Agree | 4 8.30% | 33 68.20% | 4 8.30% | 7 14.60% | 0 0.00% | 48 100.00% |
| Strongly Agree | 0 0.00% | 2 50.00% | 0 0.00% | 2 50.00% | 0 0.00% | 4 100.00% |
| Total | 13 6.50% | 102 51.00% | 28 14.00% | 49 24.50% | 8 4.00% | 200 100.00% |

ANOVA – Satisfaction with NT Services and employee responds to customer request in busy time

| | Sum of Squares | Df | Mean Square | F | P- Value |
|----------------|----------------|-----|-------------|-------|----------|
| Between Groups | 42.952 | 4 | 10.738 | 12.16 | 0.000 |
| Within Groups | 172.203 | 195 | 0.883 | | |
| Total | 215.155 | 199 | | | |

Comparison between Satisfaction with NT Services and trust in employees Hypothesis (H₁₆)

| Mobile service provider employees can be trusted | Satisfaction level with services provided by NT | | | | | |
|--|---|--------------|--------------|--------------|-------------------|----------------|
| | Very Satisfied | Satisfied | Neutral | Dissatisfied | Very Dissatisfied | Total |
| Strongly Disagree | 1 14.30% | 0 0.00% | 1 14.30% | 3 42.90% | 2 28.60% | 7 100.00% |
| Disagree | 2 5.00% | 11 27.50% | 9 22.50% | 16 40.00% | 2 5.00% | 40 100.00% |
| Neutral | 1 3.40% | 14 48.30% | 8 27.60% | 6 20.70% | 0 0.00% | 29 100.00% |
| Agree | 4 3.60% | 71 64.00% | 10 9.00% | 22 19.80% | 4 3.60% | 111 100.00% |
| Strongly Agree | 5 38.50% | 6 46.20% | 0 0.00% | 2 15.40% | 0 0.00% | 13 100.00% |
| Total | 13 6.10% | 89 49.40% | 28 13.90% | 49 26.10% | 8 4.40% | 200 100.00% |

ANOVA – Satisfaction with NT Services and trust in employees

| | Sum of Squares | Df | Mean Square | F | P- Value |
|----------------|----------------|-----|-------------|-------|----------|
| Between Groups | 24.507 | 4 | 6.127 | 6.267 | 0.000 |
| Within Groups | 190.648 | 195 | 0.978 | | |
| Total | 215,155 | 199 | | | |

Comparison between Satisfaction with NT Services and customers feel safe for doing business Hypothesis (H₁₇)

| Customer feels safe doing business with mobile service provider. | Satisfaction level with services provided by NT | | | | | |
|--|---|-----------------------|----------------------|----------------------|--------------------|------------------------|
| | Very Satisfied | Satisfied | Neutral | Dissatisfied | Very Dissatisfied | Total |
| Strongly Disagree | 1 20.00% | 0 0.00% | 0 0.00% | 3 60.00% | 1 20.00% | 5 100.00% |
| Disagree | 0 0.00% | 9 26.50% | 6 17.60% | 13 38.20% | 6 17.60% | 34 100.00% |
| Neutral | 5 11.10% | 18 40.00% | 11 24.40% | 11 24.40% | 0 0.00% | 45 100.00% |
| Agree | 4 3.90% | 68 66.70% | 9 8.80% | 20 19.60% | 1 1.00% | 102 100.00% |
| Strongly Agree | 3 21.40% | 7 50.00% | 2 14.30% | 2 14.30% | 0 0.00% | 14 100.00% |
| Total | 13 6.50% | 102 51.00% | 28 14.00% | 49 24.50% | 8 4.00% | 200 100.00% |

ANOVA – Satisfaction with NT Services and customers feel safe for doing business

| | Sum of Squares | Df | Mean Square | F | P- Value |
|----------------|----------------|------------|-------------|-------|----------|
| Between Groups | 33.138 | 4 | 8.284 | 8.875 | 0.000 |
| Within Groups | 182.017 | 195 | 0.933 | | |
| Total | 215.155 | 199 | | | |

Comparison between Satisfaction with NT Services and protects customer privacy Hypothesis (H₁₈)

| Mobile service provider protects the confidentiality of customer information. | Satisfaction level with services provided by NT | | | | | |
|---|---|-----------------------|----------------------|----------------------|--------------------|------------------------|
| | Very Satisfied | Satisfied | Neutral | Dissatisfied | Very Dissatisfied | Total |
| Strongly Disagree | 1 16.70% | 1 16.70% | 0 0.00% | 3 50.00% | 1 16.70% | 6 100.00% |
| Disagree | 0 0.00% | 11 34.40% | 3 9.40% | 12 46.90% | 3 9.40% | 30 100.00% |
| Neutral | 6 11.80% | 23 45.10% | 11 21.60% | 9 17.60% | 2 3.90% | 51 100.00% |
| Agree | 4 4.30% | 57 61.30% | 10 10.80% | 20 21.50% | 2 2.20% | 93 100.00% |
| Strongly Agree | 2 11.10% | 10 55.60% | 4 22.20% | 2 11.10% | 0 0.00% | 18 100.00% |
| Total | 13 6.50% | 102 51.00% | 28 14.00% | 49 24.50% | 8 4.00% | 200 100.00% |

ANOVA – Satisfaction with NT Services and protects customer privacy

| | Sum of Squares | Df | Mean Square | F | P- Value |
|----------------|----------------|-----|-------------|-------|----------|
| Between Groups | 19.512 | 4 | 4.878 | 4.862 | 0.001 |
| Within Groups | 195.643 | 195 | 1.003 | | |
| Total | 215.155 | 199 | | | |

**Comparison between Satisfaction with NT Services and Required Skills in Employees
Hypothesis (H₁₉)**

| Employees have required skill & knowledge to answer your queries. | Satisfaction level with services provided by NT | | | | | |
|---|---|---------------|--------------|--------------|-------------------|----------------|
| | Very Satisfied | Satisfied | Neutral | Dissatisfied | Very Dissatisfied | Total |
| Strongly Disagree | 1 8.30% | 1 8.30% | 0 0.00% | 8 66.70% | 2 16.70% | 12 100.00% |
| Disagree | 3 4.80% | 27 42.90% | 6 9.50% | 24 38.10% | 3 4.80% | 63 100.00% |
| Neutral | 3 7.10% | 24 57.10% | 11 26.20% | 3 7.10% | 1 2.40% | 42 100.00% |
| Agree | 5 6.60% | 49 64.50% | 9 11.80% | 12 15.80% | 1 1.30% | 76 100.00% |
| Strongly Agree | 1 14.30% | 1 14.30% | 2 28.60% | 2 28.60% | 1 14.30% | 7 100.00% |
| Total | 13 6.50% | 102 51.00% | 28 14.00% | 49 24.50% | 8 4.00% | 200 100.00% |

ANOVA – Satisfaction with NT Services and Required Skills in NT Employees

| | Sum of Squares | Df | Mean Square | F | P- Value |
|----------------|----------------|-----|-------------|-------|----------|
| Between Groups | 28.716 | 4 | 7.179 | 7.509 | 0.000 |
| Within Groups | 186.439 | 195 | 0.956 | | |
| Total | 215.155 | 199 | | | |

Comparison between Satisfaction with NT Services and sincere and patience employees to solve customer problem Hypothesis (H₂₀)

| Employees are sincere and patience in resolving your problems. | Satisfaction level with services provided by NT | | | | | |
|--|---|-----------------------|----------------------|----------------------|--------------------|------------------------|
| | Very Satisfied | Satisfied | Neutral | Dissatisfied | Very Dissatisfied | Total |
| Strongly Disagree | 1 4.30% | 6 26.10% | 1 4.30% | 12 52.20% | 3 13.00% | 23 100.00% |
| Disagree | 3 4.20% | 29 40.30% | 12 16.70% | 23 31.90% | 5 6.90% | 72 100.00% |
| Neutral | 5 10.60% | 24 51.10% | 10 21.30% | 8 17.00% | 0 0.00% | 47 100.00% |
| Agree | 2 4.20% | 38 79.20% | 4 8.30% | 4 8.30% | 0 0.00% | 48 100.00% |
| Strongly Agree | 2 20.00% | 5 50.00% | 1 10.00% | 2 20.00% | 0 0.00% | 10 100.00% |
| Total | 13 6.50% | 102 51.00% | 28 14.00% | 49 24.50% | 8 4.00% | 200 100.00% |

ANOVA – Satisfaction with NT Services and sincere and patient employees to solve customer problem

| | Sum of Squares | Df | Mean Square | F | P- Value |
|----------------|----------------|------------|-------------|-------|----------|
| Between Groups | 33.925 | 4 | 8.481 | 9.126 | 0.000 |
| Within Groups | 181.23 | 195 | 0.929 | | |
| Total | 215.155 | 199 | | | |

Comparison between Satisfaction with NT and activation, recharge periods Hypothesis (H₂₁)

| Mobile service provider has convenient periods and terms for activation and recharge. | Satisfaction level with services provided by NT | | | | | |
|---|---|-----------------------|----------------------|----------------------|--------------------|------------------------|
| | Very Satisfied | Satisfied | Neutral | Dissatisfied | Very Dissatisfied | Total |
| Strongly Disagree | 0 0.00% | 1 16.70% | 0 0.00% | 5 83.30% | 0 0.00% | 6 100.00% |
| Disagree | 2 7.10% | 10 35.70% | 4 14.30% | 9 32.10% | 3 10.70% | 28 100.00% |
| Neutral | 2 5.60% | 14 38.90% | 13 36.10% | 5 13.90% | 2 5.60% | 36 100.00% |
| Agree | 1 1.10% | 56 58.90% | 10 10.50% | 25 26.30% | 3 3.20% | 95 100.00% |
| Strongly Agree | 8 22.90% | 21 60.00% | 1 2.90% | 5 14.30% | 0 0.00% | 35 100.00% |
| Total | 13 6.50% | 102 51.00% | 28 14.00% | 49 24.50% | 8 4.00% | 200 100.00% |

ANOVA – Satisfaction with NT Services and activation and recharge periods

| | Sum of Squares | Df | Mean Square | F | P- Value |
|----------------|----------------|-----|-------------|-------|----------|
| Between Groups | 22.038 | 4 | 5.51 | 5.563 | 0.000 |
| Within Groups | 193.117 | 195 | 0.99 | | |
| Total | 215.155 | 199 | | | |

**Comparison between Satisfaction with NT Services and service provider working hour
Hypothesis (H₂₂)**

| Working hours of mobile service provider is convenient to customers. | Satisfaction level with services provided by NT | | | | | |
|--|---|---------------|--------------|--------------|-------------------|----------------|
| | Very Satisfied | Satisfied | Neutral | Dissatisfied | Very Dissatisfied | Total |
| Strongly Disagree | 0 0.00% | 3 42.90% | 2 28.60% | 2 28.60% | 0 0.00% | 7 100.00% |
| Disagree | 2 3.10% | 21 32.80% | 7 10.90% | 30 46.90% | 4 6.20% | 64 100.00% |
| Neutral | 1 2.40% | 24 57.10% | 13 31.00% | 3 7.10% | 1 2.40% | 42 100.00% |
| Agree | 6 8.20% | 47 64.40% | 5 6.80% | 12 16.40% | 1 2.40% | 73 100.00% |
| Strongly Agree | 4 28.60% | 7 50.00% | 1 7.10% | 2 14.30% | 0 0.00% | 14 100.00% |
| Total | 13 6.50% | 102 51.00% | 28 14.00% | 49 24.50% | 8 4.00% | 200 100.00% |

ANOVA – Satisfaction with NT Services and service provider working hour

| | Sum of Squares | Df | Mean Square | F | P- Value |
|----------------|----------------|-----|-------------|-------|----------|
| Between Groups | 28.537 | 4 | 7.134 | 7.455 | 0.000 |
| Within Groups | 186.618 | 195 | 0.957 | | |
| Total | 215.155 | 199 | | | |

Comparison between Satisfaction with NT Services and service provider liable for inconvenience caused Hypothesis (H₂₃)

| Mobile service provider sincerely apologies to customers for the inconvenience caused. | Satisfaction level with services provided by NT | | | | | |
|--|---|---------------|--------------|--------------|-------------------|----------------|
| | Very Satisfied | Satisfied | Neutral | Dissatisfied | Very Dissatisfied | Total |
| Strongly Disagree | 0 0.00% | 2 12.50% | 3 18.80% | 9 56.20% | 2 12.50% | 16 100.00% |
| Disagree | 0 0.00% | 40 50.00% | 10 12.50% | 25 31.20% | 5 6.20% | 80 100.00% |
| Neutral | 6 17.10% | 16 45.70% | 9 25.70% | 3 8.60% | 1 2.90% | 35 100.00% |
| Agree | 5 8.60% | 39 67.20% | 5 8.60% | 9 15.50% | 0 0.00% | 58 100.00% |
| Strongly Agree | 2 18.20% | 5 45.50% | 1 9.10% | 3 27.30% | 0 0.00% | 11 100.00% |
| Total | 13 6.50% | 102 51.00% | 28 14.00% | 49 24.50% | 8 4.00% | 200 100.00% |

ANOVA – Satisfaction with NT Services and service provider liable for inconvenience caused

| | Sum of Squares | Df | Mean Square | F | P- Value |
|----------------|----------------|-----|-------------|-------|----------|
| Between Groups | 34.003 | 4 | 8.501 | 9.151 | 0.000 |
| Within Groups | 181.152 | 195 | 0.929 | | |
| Total | 215.155 | 199 | | | |

Comparison between Satisfaction with NT Services and employee knowledge about customer needs and satisfaction Hypothesis (H₂₄)

| Employees know and understand customer needs | Satisfaction level with services provided by NT | | | | | |
|--|---|---------------|--------------|--------------|-------------------|----------------|
| | Very Satisfied | Satisfied | Neutral | Dissatisfied | Very Dissatisfied | Total |
| Strongly Disagree | 0 0.00% | 3 15.00% | 5 25.00% | 12 60.00% | 0 0.00% | 20 100.00% |
| Disagree | 0 0.00% | 29 42.00% | 7 10.10% | 25 36.20% | 8 11.60% | 69 100.00% |
| Neutral | 3 7.90% | 21 55.30% | 9 23.70% | 5 13.20% | 0 0.00% | 38 100.00% |
| Agree | 8 12.50% | 44 68.80% | 7 10.90% | 5 7.80% | 0 0.00% | 64 100.00% |
| Strongly Agree | 2 22.20% | 5 55.60% | 0 0.00% | 2 22.20% | 0 0.00% | 9 100.00% |
| Total | 13 6.50% | 102 51.00% | 28 14.00% | 49 24.50% | 8 4.00% | 200 100.00% |

ANOVA – Satisfaction with NT Services and employee knowledge about customer needs and satisfaction

| | Sum of Squares | Df | Mean Square | F | P- Value |
|----------------|----------------|-----|-------------|--------|----------|
| Between Groups | 51.739 | 4 | 12.935 | 15.435 | 0.000 |
| Within Groups | 163.416 | 195 | 0.838 | | |
| Total | 215.155 | 199 | | | |

Comparison between Satisfaction with NT Services and employee attention to customer Hypothesis (H₂₅)

| Employees provide individual attention to customers | Satisfaction level with services provided by NT | | | | | |
|---|---|---------------|--------------|--------------|-------------------|----------------|
| | Very Satisfied | Satisfied | Neutral | Dissatisfied | Very Dissatisfied | Total |
| Strongly Disagree | 0 0.00% | 9 22.50% | 7 17.50% | 20 50.00% | 4 10.00% | 40 100.00% |
| Disagree | 3 4.10% | 37 50.00% | 10 13.50% | 20 27.00% | 4 5.40% | 74 100.00% |
| Neutral | 4 11.40% | 19 54.30% | 8 22.90% | 4 11.40% | 0 0.00% | 35 100.00% |
| Agree | 4 9.10% | 34 77.30% | 3 6.80% | 3 6.80% | 0 0.00% | 44 100.00% |
| Strongly Agree | 2 28.60% | 3 42.90% | 0 0.00% | 2 28.60% | 0 0.00% | 7 100.00% |
| Total | 13 6.50% | 102 51.00% | 28 14.00% | 49 24.50% | 8 4.00% | 200 100.00% |

ANOVA – Satisfaction with NT Services and employee attention to customer

| | Sum of Squares | Df | Mean Square | F | P- Value |
|----------------|----------------|-----|-------------|--------|----------|
| Between Groups | 45.474 | 4 | 11.369 | 13.065 | 0.000 |
| Within Groups | 169.681 | 195 | 0.87 | | |
| Total | 215.155 | 199 | | | |

Comparison between Age Group and Satisfaction with NT Services Hypothesis (H₂₆)

| Age Group | Satisfaction level with services provided by NT | | | | | |
|----------------|---|---------------|--------------|--------------|-------------------|----------------|
| | Very Satisfied | Satisfied | Neutral | Dissatisfied | Very Dissatisfied | Total |
| 18-25 | 0 0.00% | 10 35.70% | 7 25.00% | 10 35.70% | 1 3.60% | 28 100.00% |
| 26-32 | 7 8.50% | 39 47.60% | 14 17.10% | 20 24.40% | 2 2.40% | 82 100.00% |
| 33-50 | 1 2.00% | 31 60.80% | 5 9.80% | 11 21.60% | 3 5.90% | 51 100.00% |
| Above 50 years | 5 12.80% | 22 56.40% | 2 5.10% | 8 20.59 | 2 5.10% | 39 100.00% |
| Total | 13 6.50% | 102 51.00% | 28 14.00% | 47 24.50% | 8 4.00% | 200 100.00% |

ANOVA -Test for Age Group and Satisfaction with NT Services

| | Sum of Squares | Df | Mean Square | F | P- Value |
|----------------|----------------|-----|-------------|------|----------|
| Between Groups | 5.83 | 3 | 1.943 | 1.82 | 0.145 |
| Within Groups | 209.325 | 196 | 1.068 | | |
| Total | 215.155 | 199 | | | |

Comparison between Profession and Satisfaction with NT Services Hypothesis (H₂₇)

| Profession | Satisfaction level with services provided by NT | | | | | |
|--------------|---|---------------|--------------|--------------|-------------------|----------------|
| | Very Satisfied | Satisfied | Neutral | Dissatisfied | Very Dissatisfied | Total |
| Student | 1 2.90% | 11 32.40% | 8 23.50% | 12 36.40% | 2 5.90% | 34 100.00% |
| Own Business | 2 5.60% | 19 52.80% | 5 13.90% | 8 24.20% | 2 5.60% | 36 100.00% |
| Service | 5 7.50% | 33 49.30% | 12 17.90% | 14 26.90% | 1 1.50% | 67 100.00% |
| House Maker | 1 3.10% | 22 68.80% | 2 6.20% | 6 18.80% | 1 3.10% | 32 100.00% |
| Retiree | 4 12.90% | 17 54.80% | 1 3.20% | 7 22.60% | 2 6.50% | 31 100.00% |
| Total | 13 6.50% | 102 51.00% | 28 14.00% | 49 24.50% | 8 4.00% | 200 100.00% |

ANOVA Test for Profession and Satisfaction with NT Services

| | Sum of Squares | Df | Mean Square | F | P- Value |
|----------------|----------------|-----|-------------|-------|----------|
| Between Groups | 7.432 | 4 | 1.858 | 1.744 | 0.142 |
| Within Groups | 207.723 | 195 | 1.065 | | |
| Total | 215.155 | 199 | | | |

Comparison between duration of usage of NT service and Satisfaction with NT Services

Hypothesis (H₂₈)

| Duration of usage of NT services | Satisfaction level with services provided by NT | | | | | |
|----------------------------------|---|---------------|--------------|--------------|-------------------|----------------|
| | Very Satisfied | Satisfied | Neutral | Dissatisfied | Very Dissatisfied | Total |
| 1 to 2 years | 0 0.00% | 3 27.30% | 2 18.20% | 4 36.40% | 2 18.20% | 11 100.00% |
| 1 to 4 years | 0 0.00% | 9 40.90% | 1 4.50% | 11 50.00% | 1 4.50% | 22 100.00% |
| 4 to 5 years | 1 3.30% | 19 63.30% | 1 3.30% | 6 20.00% | 3 10.00% | 30 100.00% |
| Above 5 years | 12 8.80% | 71 51.80% | 24 17.50% | 28 20.40% | 2 1.50% | 137 100.00% |
| Total | 13 6.50% | 102 51.00% | 28 14.00% | 49 24.50% | 8 4.00% | 200 100.00% |

ANOVA Test for duration of usage of service and Satisfaction with NT Services

| | Sum of Squares | Df | Mean Square | F | P- Value |
|----------------|----------------|-----|-------------|-------|----------|
| Between Groups | 14.826 | 3 | 4.942 | 4.835 | 0.003 |
| Within Groups | 200.329 | 196 | 1.022 | | |
| Total | 215.155 | 199 | | | |

Comparison between Gender of users and Satisfaction with NT Services Hypothesis (H₂₉)

| Gender of the users | Satisfaction level with services provided by NT | | | | | |
|---------------------|---|---------------|--------------|--------------|-------------------|----------------|
| | Very Satisfied | Satisfied | Neutral | Dissatisfied | Very Dissatisfied | Total |
| Male | 8 8.50% | 43 45.70% | 14 14.90% | 26 27.70% | 3 3.20% | 94 100.00% |
| Female | 5 4.70% | 59 55.70% | 14 13.20% | 23 21.70% | 5 4.70% | 106 100.00% |
| Total | 13 6.50% | 102 51.00% | 28 14.00% | 49 24.50% | 8 4.00% | 200 100.00% |

ANOVA Test for Gender of the users and Satisfaction with NT Services

| | Sum of Squares | Df | Mean Square | F | P- Value |
|----------------|----------------|-----|-------------|-------|----------|
| Between Groups | 0.137 | 1 | 0.137 | 0.126 | 0.723 |
| Within Groups | 215.018 | 198 | 1.086 | | |
| Total | 215.155 | 199 | | | |

Comparison between Marital status of users and Satisfaction with NT Services Hypothesis (H₃₀)

| Marital status of the users | Satisfaction level with services provided by NT | | | | | |
|-----------------------------|---|---------------|--------------|--------------|-------------------|----------------|
| | Very Satisfied | Satisfied | Neutral | Dissatisfied | Very Dissatisfied | Total |
| Single | 2 3.10% | 27 42.20% | 11 17.20% | 23 35.90% | 1 1.60% | 64 100.00% |
| married | 11 8.80% | 68 54.40% | 16 12.80% | 23 18.40% | 7 5.60% | 125 100.00% |
| widower | 0 0.00% | 6 66.70% | 1 11.10% | 2 22.20% | 0 0.00% | 9 100.00% |
| separated | 0 0.00% | 1 50.00% | 0 0.00% | 1 50.00% | 0 0.00% | 2 100.00% |
| Total | 13 6.50% | 102 51.00% | 28 14.00% | 49 24.50% | 8 4.00% | 200 100.00% |

ANOVA Test for Marital status of the users and Satisfaction with NT Services

| | Sum of Squares | Df | Mean Square | F | P- Value |
|----------------|----------------|-----|-------------|-------|----------|
| Between Groups | 4.967 | 3 | 1.656 | 1.544 | 0.204 |
| Within Groups | 210.188 | 196 | 1.072 | | |
| Total | 215.155 | 199 | | | |

**Comparison between switching intension to other mobile service and Satisfaction with NT
Services Hypothesis (H₃₁)**

| Switching intension to other mobile service | Satisfaction level with services provided by NT | | | | | |
|---|---|---------------|--------------|--------------|-------------------|----------------|
| | Very Satisfied | Satisfied | Neutral | Dissatisfied | Very Dissatisfied | Total |
| No | 13 9.50% | 90 65.70% | 17 12.40% | 16 11.70% | 1 0.70% | 137 100.00% |
| Yes | 0 0.00% | 12 19.00% | 11 17.50% | 33 52.40% | 7 11.10% | 63 100.00% |
| Total | 13 6.50% | 102 51.00% | 28 14.00% | 49 24.50% | 8 4.00% | 200 100.00% |

**ANOVA Test for switching intension to other mobile service and Satisfaction with NT
Services**

| | Sum of Squares | Df | Mean Square | F | P- Value |
|----------------|----------------|-----|-------------|--------|----------|
| Between Groups | 69.702 | 1 | 69.702 | 94.882 | 0.000 |
| Within Groups | 145.453 | 198 | 0.735 | | |
| Total | 215.155 | 199 | | | |

ANNEX IV: List of Experts

| S.N. | Post | Department |
|------|-----------------------------|-----------------------------------|
| 1 | Senior Engineer | Backbone transmission directorate |
| 2 | Senior Engineer | Backbone transmission directorate |
| 3 | Senior Engineer | Backbone transmission directorate |
| 4 | Assistant Technical Officer | Backbone transmission directorate |
| 5 | Engineer | Backbone transmission directorate |
| 6 | Engineer | Backbone transmission directorate |
| 7 | Senior Engineer | CCSI Nepal Pvt. Ltd. |
| 8 | Engineer | CCSI Nepal Pvt. Ltd. |
| 9 | Senior Technician | Backbone transmission directorate |
| 10 | Senior Technician | Backbone transmission directorate |
| 11 | Engineer | Backbone transmission directorate |
| 12 | Engineer | Backbone transmission directorate |

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