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**Factor Affecting Customer Satisfaction in Telecommunication Industry**

**Thesis Report**  
Submitted

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## **DECLARATION**

I declare this thesis,I submit it to Karachi University Business School, University of Karachi for the examination for the award of a higher degree of MBA(MRK) does not incorporate without acknowledgement any material previously submitted for a degree or diploma in any university and that has to be best of my knowledge ,it does not contain any material previously published or written by an other person ,except where due references have been made in the text .I took , enough care to ensure that work is original, and to the best of my knowledge , does not breach copy right law.

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## **CERTIFICATE**

This is to certify that the work incorporated in the thesis “Factors Effecting Telecommunication Industry in Pakistan It is a comparative study on “Telecommunication Industry” submitted by MR.Perkash kumar was carried out by the candidate under my guidance .Some materials has been obtained from other resources have been acknowledged in the thesis.

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## ABSTARCT

The main purpose of this research is to analyze the price war between the two companies. As I have selected three companies Mobilink and Zong .Researchers have filed lawsuit against the telecommrdunications industry, selected companies are Mobilink andZong . I have collected data from 200 students of Hamdard University who use services of other telecommunications companies. The main users are Mobilink and Zong .Overall research has done with customer satisfaction degree and four dependent variables, which is a dependent variable, i.e. the currency range, focuses on service stability, value added service, global use. This study focuses on four major hypotheses. H1: The degree of currency has a positive influence on customer satisfaction. H2: indicates that the VAS product adversely affects customer satisfaction. H3: all usage has a positive impact on customer service. H4: indicates that service reliability has a positive influence on customer satisfaction. The main problem of answering this question relates to the reliability of services, customer satisfaction, overall use, the range of calls to specific communication services derived from the availability of value-added services and research. Such that independent variable is customer satisfication. The value of all variables will be less than the value that explains the null hypothesis accepted and EOC, the overall use will affect the reliability of the service and the impact on the customer satisfaction of the VAS product. In the study we used primary sources of data collection to know the perception of the people about the Zong and Mobilink and Ufone. For Primary Data collection, closed ended questionnaire will be used which will be distributed among the students of Hamdard University main Campus. Manually filled sample has mainly collected from university students, and working class, who uses their

packages or other product. Online filled was collected via Google docs by inviting participants to fill out the form. The data was analyzed quantitatively through SPSS. The records will be analyzing qualitatively with the help of comparing the 4Ps or 7Ps of both the organizations, which will help us to drive the possible outcomes and will enable me to recommend the Zong to implement the few of the strategies to grow their market share.

**Key words:** *Customer Satisfaction, Mobile Cellular, the currency range, focuses on service stability; value added service and global use, Multiple Linear Regressions.*

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## Chapter 1: Introduction

### 1.1 Background of the Study

Currently, the aggressive biosphere of corporate derives establishments to raise their purchaser fulfillment and reliability where the most important firms have knowledgeable about completely of the correlated plans. Enlarged spirited burden forces today's supervisors to appear constantly by multiple conduct to improve and to maintain the feat of organizational. Here is a chance to if the practices of quality managing are applied efficiently the managerial performance claim prove, however the efficiency of these practice be not even. The concept of "quality" do not mention to simple "grace" relatively, it denotes whether a manufactured goods or else deals capable to encounter up the purchaser desires (Nikneshan, 2008).

As a result, perceptive customer wants is a requirement for providing better quality since such necessities signify hidden act values so as to customers utilize in considering the superiority of the merchandise or services (Parasuraman 1998). While an effect, many company include wanted to get better superiority and thus buyer fulfillment, the same as professional show, through assuming the superiority managing performs of sums superiority managing (SSM) (Rajashekhhar, 2009). SSM can be well definite by way of a complete rest of superiority managing practice to be concentrated on buyer pleasure and permanent structural improvement. (YusofAspinwall, 2000).Superiority role positioning remains amongst single of the SSM attire, which have be define through Juran (1989) because an brilliant mold intended for creating the point of purchaser liking by a business's merchandise and facilities. During specific, SRP is a way meant intended for

receiving popular trace by the purchasers well as intended for expending this information toward build up product or services, which gratify the buyer wants (Martins & Aspinwall, 2001).

Capture buyer requirements remains key to ward provided that goods/facilities of extraordinary superiority. During SRP, the information of buyer inclinations remains entitled “the opinion of the buyer”. Currently worldwide companies have started catching distribute of promote although the limited company are trying to hold their presented customers. At the similar point, it has grown to be hard for consumers to decide the diverse type of products being accessible through companies well as toward inferior a superlative well. Five important telecom businesses have occupied in Pakistan: Telenor, Ufone, Mobilink, Warid and Zong. Ufone and Mobilink remain catching the main part of the arcade thus prepaid facilities of Ufone and Mobilink have remained associated. The big share of customers selecting on behalf of prepaid as an alternative of postpaid services then effort has stayed certain to prepaid facilities in this. Records have been placed since the matching towns Rawalpindi and Islamabad of Pakistan. Aims for selecting these towns consist of Islamabad, which is the capital of Pakistan and headquarters of businesses situated trendy that dual municipalities. Next, records would collected in debone headquarters trendy instruction to find the compulsory practical descriptors for combining the buyer opining the facilities delivered. This learning varies starting preceding enquiry in several ideas. Main, it founds a method for put on a SRP matrix of highest period in service zone Pakistan. Then, this learning examines of buyer’s necessities, by judgment purchaser wants, the telecommunication zone of Pakistan; third, this learning finds dire zones of telecommunication businesses, through reading practical

descriptors, of Pakistan for refining consumer provision stages. Fourth part, this investigation will similarly support consumers toward organize the relative survey of the facilities delivered via dissimilar businesses through relating the SRP matrix. Lastly, this one will advise awareness rules for specialists and executives with SRP mostly in the telecom part and usually in further service provided that businesses.

## **1.2 Problem Statement**

The major problem is that the market share. As I have selected two most running companies which is Mobilink and Zong. Mobilink is having the largest market share and a leading telecom company in Pakistan and the Zong is at the third number after the Ufone, even though the Zong is offering the cheapest packages and call tariffs to its customers but still it has failed to achieve the top position in the telecom Industry. Therefore, this research will investigate that how companies use different factors (i.e. strategies) to grab market share.

## **1.3 Purpose of the study**

The Purpose of this research is to find out the market share of Mobilink and Zong and also the reasons and core issues for why the Mobilnk is at the top and why the Zong is lacking behind despite of providing the cheapest packages and better services.

## **1.4 Significance of the study**

Our research has significance in a sense that findings of this research will help organizations such as mobile cellular companies to determine which factors appeal more to customer to buy a particular company network. Also, this study will recommend some

importance insights about how organization can further improve their quality of service to meet customer demand which will eventually improve customer satisfaction and company's share in the market.

## **1.5 Outline of the Study**

The title of this thesis is, "Improving distributing efficiency: The case of effective logistics of unloading" in which the study had been conducted to know that how and why organization improve or need to improve distribution efficiency. This thesis included 5 parts.

Part one discussed introduction of topic and phenomenon, which further detailed about background, history, objective, and significance of the thesis. Also this part discussed about key definitions used in this thesis.

Part 2 discussed about literature where studies regarding the topic had been analyzed to see what further on this topic could be investigated.

Part three iterated about methodology used to conduct the thesis. It further detailed about data collection and sampling to collect data. Sample size and the most part discuss about statistical techniques to analyze the collected data. The theoretical model was also discussed in this part.

Part 4 provided details about findings and interpretation of the results and hypothesis testing.

Part 5 concluded the overall thesis and compared with other researches of the kind.

## **1.5 Definition of Terms**

**1.5.1 Extent of local call to other network.** The number of calls made by a customer from a particular network to another company's network

**1.5.2 Value Added Usage.** This means values or new packaged added by companies which customers frequently use.

**1.5.3 Service Reliability.** This means service is as good that customer frequently want to use it.

**1.5.4 Overall usage revenue per minute.** This means how much company makes sales in one minute on providing overall services.

## **1.6 Research Questions**

Research questions are as follows:

1. Does extent of local calls to other network significantly affect customer satisfaction?
2. Does Value Added Service significantly affect customer satisfaction?
3. Does Service Reliability significantly affect customer satisfaction?
4. Does Overall Usage Revenue Per Minute Lab significantly affect customer satisfaction?

## **Chapter 2: Literature Review**

Distribution channels are essential to increase product sales of the company. However, improving distribution efficiency where companies have less investment in distribution actions but achieve more results to improve performance of company. Within research for logistics applied to companies, especially in the manufacturing sector, there are many considerations that must be taken into account to achieve this, such as an in-depth analysis of its components, parts or processes, which perhaps the client does not know but he does perceive in the product that he acquires, for example, the customers have a product in the right place, expected quality, quantity and required time, order cycle, transportation costs (De Boer, Labro, & Morlacchi, 2001). But behind that demand there are a lot of activities or procedures in both production and distribution that contribute to maximize response or order cycle flexibility for customers.

### **2.1 Underpinning and Supporting Theories/Models**

Following are theories of satisfaction mainly discussed in literature:

1. The theories include the Expectancy-Disconfirmation Paradigm (EDP),
2. the Value-Precept Theory
3. the Attribution Theory,
4. the Equity Theory,
5. the Comparison Level Theory,
6. the Evaluation Congruity Theory,
7. the Dissonance, and the Contrast Theory

## **2.2 Empirical Review**

### **Customer Satisfaction**

Towards change the customers' product reliability and preserve them, buyer fulfillment is a main factor. Customer fulfillment is necessary for increasing the effectiveness of businesses then realizing buyer points. It is required to know buyer desires and prospects and confirm they have seen to increase buyer satisfaction (Chalmeta, 2006). Buyer satisfaction is mostly a response toward an estimation of observed product or service performance. It has established on buyers' judgments of the value that made for them and result outcome performances such as word-of-mouth, irritable, repurchase intents, and trustworthiness. The effects of trustworthiness and intents stay whatever consumer retaining mentions. Researches drawing on buyer satisfaction have occupied by an idea known as "disconfirmation pattern". This thought states that consumers attain at happiness feelings and judgments because of the judgment among perceived act and specific standards. Further, precisely, the buyer associates an invention's seeming show

## Factor Affecting Customer Satisfaction In Telecommunication Industry.

to a standard or established of values such as what stayed estimated. Uncertainty the important product's performance is seen as like to (approving) what remained estimated, the buyer is happy. If the main brand's performance beats (definitely disconfirming) or decreases small (negatively disconfirming) of prospects, the buyer is very happy or unhappy, respectively, (Flint 1997). Now marketing, buyer completion is single of the best-observed concepts. Buyer satisfaction shows a convex part in economical atmospheres of e-commerce as of that one effect on retentive venerable consumer's then presenting fresh consumers Satisfaction is a main factor happening buyer's choice to remain otherwise stop their link with product or service (Chung & Shin, 2010). Popular a nearby atmosphere, buyer fulfillment is main of important keys, prominent the combined buyer retaining, then long standing development of accessible stores (Chen, 2012) and purpose to repurchase (Yiu 2007). Behavioral intentions are widely used in the technology accommodation model after receiving considerable consideration within several years. Action intent has defined as the purpose of a person performing various behaviors (Ajzen 1991). Khalifa and Liu (2007) empirically legalized the relationship between buyer satisfaction and intention repurchase. (Wang & Head, 2007) pointed out that the achievement has a positive influence on the purpose of repurchasing. Tsai & Huang (2007) established a correlation between consumer satisfaction and purchase in Taiwan. Likewise, the method has defined as active participation in open expenses. People with aggressive attitudes have expected to acquire online.

Pavlou and Fyngenson (2006) emphasize important parts to form attitudes to participate in online shopping. Ha (2010) is also to build customer satisfaction, and suggests a role of positive way. Chen (2012) concluded that a positive way has broad influence on online



gathering. Satisfactory consumers are expecting more purchases among future consumers (Garci, 2012). Therefore, considering the accessible atmosphere, purchasers will implement the purchaser policy development and general part of accumulated mass purchase (2010 Gupta & Kim).

### **Service Reliability**

Service reliability is "Service personnel can complete talent shortage stably and accurately" (Parasuraman, 1988). Secure fast checkout to customers "right" all the items of the company's ability to comply with promises, more decorations, reliability of service to inspect with intelligent Martinelli (Izogo, 2016b 2012) Not only accurate information to provide related promotions and prices. Although the requirement of Parasuraman in their research (1988) is the ratio of the benefits of five common services in general, subsequent studies show that the quality of service level may vary by situation and country will. Izogo (2015b) exempts a successful copy of SERVQUAL original size disclaimer, Izogo and Ogba (2015) confirmed empathy, type, responsiveness, reliability, and delegation as a dimension of quality of service. Chen and Cheng (2012) proposed a two-dimensional model of service quality including collaboration quality and core quality. Davis-Sramek (2009) pointed out that the fulfillment of technology and related requirements is two related dimensions of service quality. In addition, in connection with online financial services Ladhari and Leclerc (2013) considers the quality of service quality, efficiency, information quality, water solubility, and web design as a dimension of service quality. Therefore, research on quality of service should focus on the most appropriate dimensions in department and research situation. This research provides two quality ranges for approval, warranty and reliability. The choice of these two modules in this structure comes from two basic discovery methods, namely other general experiences of quality of service. Since contacting with

less communication facilities, except contact (excluding responsiveness, empathy and tangible assets), less contact facilities are very small of the leading role of services like machinery like human-machine interface Izogo, 2015).

### **Overall Usage**

The reason for choosing this parameter is because the customer is accused based on the tariff concept that affects the customer's use. Currently the plan is paid every second, which means that if the customer uses the service for one minute, it costs 60 cents (\$ 0.008). Customers will divide this into wedges based on revenue (RPM) for each use. Customers using RPM better overall than 75 paise (\$ 0.01) can mix RPM with small customers. To account for flexibility for sensitivity of Churn multiplication, the overall usage RPM choice is better than choosing 75 points (\$ 0.01) instead of 60 points (\$ 0.008). Usage frequency and budget variables have a positive influence on customer behavior prediction (Hsieh 2004 Verhoef&Donkers, 2001). The occurrence variable is the facility usage frequency and related variables. Generally, the higher the occurrence frequency, the more satisfied the customer service, so it can be assumed that the probability of the customer leaving is low. The buyer's monetary variable is the total amount that the purchaser spends on the service during a certain period. For pre-paid users Charging times and total times specify customer changes to service provider's behavior. Therefore, supplements, supplements and total usage time (service usage) are considered covariates of the model.

### **Value added service**

Total used revenue ratio VAS (Value-added services) usage is a network usage indicator

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for currency use. The more VAS is used, the more vulnerable the customer is to create a request for effective use (product core profit) and loss. Please calculate the ratio between total VAS usage income and total used income. If this ratio exceeds 30%, consumers can compare and consider. In the early research of the company, 30% of runners became cut-off points, indicating that customers are 30% tolerable for value-added services and use of total revenue. Therefore, customers who choose 0-30% of imports using VAS and customers who are less likely to be lost by customers and customers whose usage revenue of VAS exceeds 30% are regarded as potential loss customers.

### **Extent of local Calls**

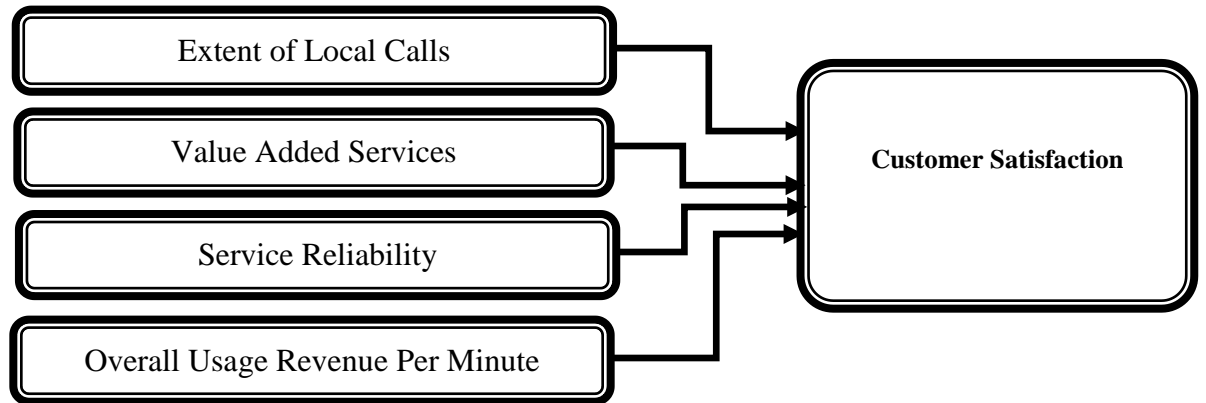
Service usage patterns can be defined by means such as the use and use of records, the total number of other phones with which the user communicated (Wei & Chiu 2002), monthly fee (Buckinx, 2005). Mozer (2000) discovered that periodic charges and usage are related to loss. Total usage represents the nature of the currency. It matches the number of local / paid (or user track dial or STD) calls to the same / different network on the network. Currencies made in the same network have lower costs associated with currencies of other networks. A customer can move to a network that is making more phone calls to other networks. Public information plays an important role affecting operator's network loss. Users tend to upset the network of available facility providers based on previously fulfilled relationships (friends) (Dasgupta, 2008), and the number of other networks. Therefore, usage patterns of different network calls are analyzed. Calls to other networks are relatively expensive compared to calls made in the same network. Consumers are more likely to be able to escape on the network, primarily when using the network when calling other networks instead of telephone to the same network. We

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analyzed the ratio of the total usage time of the local and STD currencies of the total time (minutes) consumed for use of the same network / other network. If other networks have more call rates than similar networks, the chances of losing this customer will be higher. In addition, they are classified as churners and customers with a larger proportion of calls to the same network are classified as non-churners.

## 2.4 Research Framework

*Research Framework for Customer Satisfaction*



## 2.5 Research Hypotheses

Following are the hypotheses of the study:

1. Does Extent of Local Calls to other network significantly affect customer satisfaction?
2. Does Value Added Services significantly affect customer satisfaction?
3. Does Service Reliability significantly affect customer satisfaction?
4. Does Overall Usage Revenue per Minute Lab significantly affect customer satisfaction?

## **Chapter 3: Research Methods**

The chapter three is for methodology of this research project to be carried out. Sources of data collection, sampling, size the sample and theoretical and research model is developed and discussed in this chapter.

### **3.1 Research Approach**

The quantitative research approach for this project has been applied to test the results of the study, because questionnaires' results were quantified in number to measure the results. Where I am comparing and contrasting the two external organizations of telecom Industry, Mobilink and Zong. The reason behind this is to find out that at where the Zong is lacking behind the Mobilink and which strategies is Mobilink working on and what type of Strategies should Zong implement.

### **3.2 Research Design**

The correctional (also called observational study) research designed has been applied to test how the factors mentioned as independent variables are correlated with the customer satisfaction.

### **3.3 Sampling Design**

Convenience sampling design had been chosen for collecting data from relevant people who usually involve in making and receiving calls. As for as sample size was concern, this research project comprised of 200 respondents as per instructions of the supervisor.

### **3.4 Instrument of Data Collection**

A comprehensive research questionnaire was prepared for obtaining views from the people connected to the aforementioned class. The questionnaire included

16 queries prepared on Likert Scale. Questionnaire comprised of two extremes, which are one and two being strongly disagree and disagree while four and five being agree and strongly agree while three referred to neutral.

### **3.5 Procedure of Data Collection**

The data was collected through questionnaire and distributed to the people who are frequently use different cellular networks. The data was then compiled in excel form with all response. Finally statistical test was applied through SPSS to obtain the findings of the study.

### **3.6 Statistical Technique**

Multiple Regression test had been run to analyze the data because we want to predict factors which matter most in satisfying cellular network customers. The purpose to use the regression method is to analyses and identify the impact of any independent variable on dependent variables and this study was concluded to know the impact of Independent Variable on dependent variables customer satisfaction.

## Chapter 4: Results and Findings

This chapter of results contains research project findings and interpretation of the data analysis. In this section we will discuss that how independent variables affect the dependent variables and finally how this study concluded about improving distribution efficiency.

### 4.1 Descriptive Profile of the Data

In this study 4 independent variables such as, Extent of Local Calls Value Added Services, Service Reliability, and Overall Usage Revenue Per Minute Lab, and one dependent variable such as customer satisfaction. The output that was generated through SPSS software is illustrated below.

### 4.2 Validation of Model

In order to examine the validity of the model, Validity and Reliability Test was applied as follows:

#### 4.4.1 Validity and Reliability Test

Table 4.1

##### *Case Processing Summary*

		N	%
Cases	Valid	200	100.0
	Excluded <sup>a</sup>	0	.0
	Total	200	100.0

a. List wise deletion based on all variables in the procedure.



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The above table 3.1 exhibit summary about how many observations had been used as sample for the analysis of the study and how many cases are valid and excluded. The N in the above table shows the total number of observations included in this study was 200 and only one observation was excluded from the analysis because of the specific reason.

Table 4.2

### *Reliability Statistics*

Cronbach's Alpha	N of Items
.632	16

The Cronbach's Alpha value (0.632) in above table is larger than 50% which indicate the data is valid and reliable for the further analysis. On reliability test score basis and for further analysis, multiple linear regression test will be run to obtain findings of the hypotheses of the research project.

### **4.3 Hypotheses Testing**

To test the hypotheses of the study, the results of the regression test are interpreted as follows:

4.3 *Descriptive statistics*

	N	Minimum	Maximum	Mean	Std. Deviation
GENDER	200	1.00	2.00	1.2900	.45490
AGE	200	1.00	5.00	3.3100	1.10454
Education	200	1.00	5.00	1.6800	.55601
Employment	200	1.00	5.00	2.5050	1.07038
extent to calls	200	1.00	5.00	3.0275	.94003
value added service	200	1.50	5.00	3.0775	.74153
Service reliability	200	1.25	6.25	3.9438	1.07753
SR	200	1.50	4.83	3.2808	.80367
Valid N (list wise)	200				

*Frequency*

Mainly the study has focused to analyze impact of different services and extent of calls of telecommunication industry on the customer satisfaction. Above table 4.1 has shown the Descriptive statistics that have analyzed by applying SPSS on the respondents' responses. As N describe the number of valid observations for the variable. The total number of observations is the sum of N and the number of missing values. Minimum shows the minimum, or smallest, value of the variable. The maximum tells the largest value of the variable. Last one Standard deviation tells the square root of the variance. It measures the spread of a set of observations. The larger the standard deviation is, the more spread out the

observations are and the above results shows of descriptive statistics analyzed that the mean value data is showing high dispersion among the variables.

Table 4.4

*Model Summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.972 <sup>a</sup>	.946	.945	.14439

- a. Predictors: (Constant), Extent of Local Calls Value Added Services, Service Reliability, and Overall Usage Revenue Per Minute Lab
- b. Dependent Variable: Customer Satisfaction

Table 4.4 indicate model summary of study for goodness of the fit model. R value 0.972 in the above table was coefficient of correlation which is more than 50%, that indicated that correlation was statistically strong and significant among variables. The R Square value 0.946 specified that 94.6% of change in dependent variable (i.e. customer satisfaction) is due to these four independent variables (i.e. Extent of Local Calls Value Added Services, Service Reliability, and Overall Usage Revenue Per Minute Lab). R Square value (0.946) was greater than 50%, therefore, the study suggested that model is fit.

Table 4.5

*ANOVA*

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	70.702	4	17.675	847.834	.000 <sup>a</sup>
	Residual	4.065	195	.021		
	Total	74.767	199			

Factor Affecting Customer Satisfaction In Telecommunication Industry.

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	70.702	4	17.675	847.834	.000 <sup>a</sup>
	Residual	4.065	195	.021		
	Total	74.767	199			

a. Predictors: (Constant), Extent of Local Calls Value Added Services, Service Reliability, and Overall Usage Revenue Per Minute Lab

b. Dependent Variable: Customer Satisfaction

Table 4.5 demonstrates (ANOVA). The (0.000) sig value in above table is smaller than 5%, thus, the study accepted alternate hypothesis that all factors such as Extent of Local Calls Value Added Services, Service Reliability, and Overall Usage Revenue Per Minute Lab included in the study as independent variables significantly affected customer satisfaction.

Also, the value of F statistics 847.834 is greater than 2.8, therefore, F value also proved that factors included in the study significantly affect customer satisfaction.

Table 4.6

*Coefficients*

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.160	.058		2.766	.006
Extend of all calls	.278	.014	.427	20.437	.000
Vas Offering	.204	.015	.247	13.792	.000
Service reliability	.420	.011	.738	37.056	.000
Over all usage	-.055	.017	-.071	-3.119	.002

a. Dependent Variable: Customer Satisfaction

**H1: Does Extent of Local Calls to other network significantly affect customer satisfaction?**

The sig value for 1<sup>st</sup> independent variable (i.e. Extent of all calls) in the above table 4.5 is 0.000, which was less than 0.05, therefore, study rejected  $H_0$  null hypothesis and accepted alternate that Extent of Local Calls to other network significantly affect customer satisfaction. The beta value of 0.278 suggested that one unit increase in Extent of Local Calls can positively increase Customer satisfaction by 27.8%. Thus, this research found that Extent of Local Calls should be considered as key factor in determining customer satisfaction.

**H2: Does Value Added Services significantly affect customer satisfaction?**

The sig value for 2<sup>nd</sup> independent variable (i.e. Value Added Services) in the above table 4.5 is 0.000, which was less than 0.05, therefore, study rejected  $H_0$  null hypothesis and accepted alternate that Value Added Services significantly affect customer satisfaction. The beta value of 0.420 suggested that one unit increase in Service Reliability can positively increase Customer satisfaction by 42%. Thus, this research found that Service Reliability should also be considered as key factor in determining customer satisfaction.

**H3: Does Service Reliability significantly affect customer satisfaction?**

The sig value for 3<sup>rd</sup> independent variable (i.e. Service Reliability) in the above table 4.5 is 0.000, which was less than 0.05, therefore, study rejected  $H_0$  null hypothesis and accepted alternate that Service Reliability significantly affect customer satisfaction. The beta value of 0.204 suggested that one unit increase in Value Added Services can positively increase Customer satisfaction by 20.4%. Thus, this research found that Value

Added Services should also be considered as key factor in determining customer satisfaction.

**H4: Does Overall Usage Revenue Per Minute Lab significantly affect customer satisfaction?**

The sig value for 4<sup>th</sup> independent variable (i.e. Overall Usage Revenue Per Minute Lab) in the above table 4.5 is 0.002, which was less than 0.05, therefore, study rejected H<sub>0</sub> null hypothesis and accepted alternate that Overall Usage Revenue Per Minute Lab significantly affect customer satisfaction. The beta value of -0.055 suggested that one unit increase in Overall Usage Revenue Per Minute Lab can negatively affect Customer satisfaction by 5.5%.

**4.4 Hypotheses Assessment Summary**

Table 4.7

*Hypotheses Assessment Summary*

S. No	Hypothesis	Test Specification		Empirical Conclusion
		T values	Sig Value	
1	H1: Does Extent of Local Calls to other network significantly affect customer satisfaction?	20.437	.000	Accepted
2	H2: Does Value Added Services significantly affect customer satisfaction?	13.792	.000	Accepted
3	H3: Does Service Reliability significantly affect customer satisfaction?	37.056	.000	Accepted
4	H4: Does Overall Usage Revenue Per Minute Lab significantly affect customer satisfaction?	-3.119	.002	Accepted

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## **Chapter 5: Conclusion, Discussions, Implications Limitations and Recommendations**

### **5.1 Conclusion**

The study concluded that:

The main objective of this study is to analyze the price war between two companies. The researcher has studied telecommunication industry and the selected companies were Mobilink and Zong. The researcher has collected data from the 200 students of Iqra University who are using services of different telecommunication companies. The mainly focused users were Mobilink and Zong. The complete study revolves around one dependent variable customer satisfaction and four independent variable that is the extent of calls, service reliability, VAS offering and the overall usage. This study has focused on the four main hypotheses.

For 1<sup>st</sup> independent variable and hypothesis (i.e. Extent of Local Calls), the study concluded that Extent of Local Calls significantly affect customer satisfaction, because the sig value 0.000 was less than 0.05. The beta value of 0.278 suggested that one unit increase in Extent of Local Calls can positively increase customer satisfaction by 27.8%. Thus, this research found that Extent of Local Calls should be considered as key factor in determining performance of the firm.

For 2<sup>nd</sup> independent variable (i.e. Value Added Services), the study concluded that Value Added Services significantly affect customer satisfaction, because the sig value (i.e. 0.000) is smaller than 5%, thus, thesis rejected  $H_0$  and accepted alternate hypothesis.



For 3<sup>rd</sup> independent variable (i.e. Service Reliability) the study concluded that Service Reliability significantly affect customer satisfaction, because the sig value 0.000 was smaller than 0.05. Moreover, beta coefficient of 0.420 suggested that 1 unit increase in Service Reliability can affect customer satisfaction by 42%.

For 4<sup>th</sup> independent variable (i.e. Overall Usage Revenue Per Minute Lab) the study concluded that Overall Usage Revenue Per Minute Lab significantly affect customer satisfaction, because the sig value 0.002 was smaller than 0.05. Moreover, beta coefficient of -0.055 suggested that 1 unit increase in Overall Usage Revenue Per Minute Lab can affect customer satisfaction by -5.5%.

## **5.2 Discussions**

Khalifa and Liu (2007) empirically legalized the relationship between buyer satisfaction and intention repurchase. Wang and Head (2007) pointed out that the achievement has a positive influence on the purpose of repurchasing. Tsai & Huang (2007) established a correlation between consumer satisfaction and purchase in Taiwan is significant. Likewise, the method has defined as active participation in open expenses. People with aggressive attitudes has expected to acquire online. Pavlou and Fygenson (2006) emphasizes important parts to form attitudes to participate in online shopping.

The objective of the thesis was to highlight that which factors affect most to for customer satisfaction in cellular network. To achieve objective, a comprehensive questionnaire was prepared to obtain reviews from people who are directly or indirectly exposed to using mobile networks. This study comprised of 200 respondents, taken as sample size. The test of reliability was performed to validate survey questionnaire. The Cronbach's Alpha value (0.632) was higher than 50% that means data is valid and reliable for further analysis.

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Multiple Linear Regression test had been applied for investigating factors used as variable mentioned above to find authentic results. The study suggested that factors such as Extent of Local Calls Value Added Services, Service Reliability, and Overall Usage Revenue Per Minute significantly affect customer satisfaction.

According to the table 4.1.3 customer, satisfaction is the key successive tool for the companies for doing sustainable business. On the other hand, price and customer satisfaction has direct relations each other. The firms having low prices and doing extra efforts in the form of value-added services overall usage gain more attention of the customers who are the backbone of the organizations. The telecommunication industry nowadays is fighting for the increasing sale and revenues because it becomes the highly competitive market having many customers, although the number of telecommunication firms is very few the price war is very high for grabbing more number of customers. It highlighted and concluded that the impact of extent of calls on customer satisfaction will be high. The customer loyalty of Warid will increase if the firm will provide high and good quality call the customers. It has been further evaluated from the study that extent of calls on another network will increase the customer satisfaction. According to the table 4.3 service quality is another factor that gave the competitive advantage to the firms and the firms especially telecommunication sector achieved high benefits for this factor. The customer satisfaction and the service reliability have the high relation. It has been further, evaluated by the results that firms gave good and distorted free calls and the good customer services make their customer happy and have good relationships with the customer satisfaction. According to the table 4.3 advancements has made life busy and customers need the value-added services that create easiness in their day-to-day activities

and especially the business sector. VAS offerings are valuable for the firms and by providing different applications with the telecommunication. It is evaluated from the results that long needs to increase the value-added services for making the economic development and for increasing customer satisfaction. Customer satisfaction and financial resources have the deep connection with each other. Customers always want to have valuable services within the financial range and the firms who gave fewer call tariffs are always preferable for the customers.

### **5.3 Implications**

This study focused on different aspects of customer satisfaction. After detailed analysis, we found that factors such as Extent of Local Calls Value Added Services, Service Reliability, and Overall Usage Revenue Per Minute significantly affect customer satisfaction. This study is very beneficial for the management of telecommunication firms, the engineering sector, and software departments. The managers of telecommunication companies could have the deep understanding of the customer satisfaction and they need to think big based on the findings. The managers can use this study for increasing the sale and by using different strategies regarding the price. The decision made on the application of four Ps and the management can think big regarding customer services and increasing customer number and satisfaction. This study is valuable for the managers in a sense of making different software, the management rethinks about the beneficial aspects of high-quality services from customer perception and they can easily meet the customer decrease by analyzing different aspects like VAS offerings and call traffic. The extent of variable made them accessible to the customers

who need to do the calls to clients and required different strategies making their business easy and under financial resources.

#### **5.4 Limitations**

The basic limitation that researcher faced while completing this study is the time. This study based on the cross-sectional period and so access to a large number of respondents was not easy. The researcher could only lead to quantitative data and due to time constraint, access to qualitative data was not possible. The second constraint is the financial resources that mostly resist and not in the researcher control. The other sources of data like experiment and telephone interviews are not easily accessible by the researcher so it has done the complete study only based on the primary data and survey. The accuracy and reliability of data, while doing the survey many respondents are not willing and dedicatedly fill the questionnaire so this factor affects the reliability of the data.

#### **5.5 Recommendations**

We recommend that:

1. Companies must look at more factors which may work close determine customer satisfaction.
2. Companies must frequently change rates and package which truly suit customer of different kinds
3. The speed and rates of internet packages must be as lowest as to achieve more customer share.

#### **5.6 Future Research**

Managers redevelop the strategies regarding the extent of calls and the call tariffs. The managers need to focus on the four Ps for increasing the customer satisfaction. It is

very important for the Zong that they need to attract the customer's beads on different and unique promotions and offer different services for grabbing the customers.

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## Appendix

### SPSS Data View

SPSS Statistics Data Editor - Data Set 1

Gender Age educationlevel Employment Netwrok EOC1 EOC2 EOC3 EOC4 VAS1 VAS2 VAS3 VAS4 SR1

	Gender	Age	educationlevel	Employment	Netwrok	EOC1	EOC2	EOC3	EOC4	VAS1	VAS2	VAS3	VAS4	SR1
1	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	2.00	5.00	2.00
2	2.00	2.00	4.00	2.00	1.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	4.00	1.00
3	2.00	2.00	3.00	2.00	1.00	3.00	2.00	2.00	2.00	2.00	2.00	1.00	2.00	2.00
4	2.00	4.00	5.00	2.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00
5	2.00	1.00	1.00	2.00	1.00	2.00	4.00	4.00	4.00	4.00	2.00	1.00	1.00	1.00
6	1.00	3.00	3.00	2.00	1.00	4.00	4.00	4.00	4.00	4.00	1.00	3.00	1.00	1.00
7	2.00	1.00	1.00	2.00	1.00	4.00	4.00	4.00	4.00	4.00	1.00	1.00	1.00	3.00
8	1.00	2.00	2.00	2.00	3.00	4.00	4.00	4.00	4.00	4.00	1.00	2.00	2.00	4.00
9	1.00	2.00	1.00	3.00	3.00	4.00	4.00	4.00	4.00	4.00	4.00	2.00	3.00	5.00
10	1.00	4.00	5.00	3.00	3.00	4.00	3.00	3.00	3.00	3.00	4.00	3.00	3.00	3.00
11	1.00	4.00	4.00	1.00	2.00	3.00	2.00	2.00	2.00	2.00	4.00	1.00	3.00	1.00
12	1.00	4.00	4.00	2.00	1.00	2.00	2.00	3.00	1.00	2.00	4.00	3.00	3.00	2.00
13	1.00	3.00	5.00	3.00	1.00	3.00	2.00	3.00	3.00	2.00	4.00	1.00	3.00	2.00
14	1.00	4.00	4.00	1.00	1.00	3.00	2.00	3.00	3.00	2.00	4.00	2.00	3.00	4.00
15	1.00	4.00	4.00	4.00	2.00	3.00	2.00	1.00	2.00	2.00	5.00	3.00	3.00	4.00
16	1.00	4.00	5.00	5.00	2.00	2.00	3.00	1.00	2.00	2.00	5.00	2.00	3.00	4.00
17	1.00	4.00	4.00	2.00	2.00	2.00	2.00	1.00	4.00	4.00	5.00	3.00	3.00	4.00
18	1.00	3.00	4.00	1.00	2.00	4.00	2.00	1.00	4.00	4.00	5.00	1.00	4.00	4.00
19	1.00	3.00	2.00	3.00	2.00	4.00	4.00	1.00	4.00	4.00	5.00	1.00	4.00	3.00
20	1.00	1.00	1.00	2.00	3.00	4.00	4.00	1.00	4.00	4.00	5.00	1.00	4.00	2.00
21	1.00	2.00	2.00	1.00	5.00	4.00	4.00	4.00	4.00	4.00	5.00	1.00	1.00	1.00
22	1.00	3.00	4.00	4.00	5.00	4.00	4.00	4.00	3.00	3.00	5.00	1.00	1.00	2.00
23	1.00	4.00	4.00	5.00	5.00	3.00	4.00	4.00	2.00	2.00	1.00	3.00	1.00	4.00
24	1.00	2.00	3.00	2.00	5.00	2.00	3.00	3.00	1.00	3.00	5.00	3.00	1.00	2.00
25	1.00	4.00	4.00	1.00	5.00	3.00	2.00	2.00	1.00	3.00	5.00	2.00	2.00	1.00





## SPSS Output

### Reliability Statistics

Cronbach's Alpha	N of Items
.632	4

### Gender

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid male	142	71.0	71.0	71.0
Female	58	29.0	29.0	100.0
Total	200	100.0	100.0	

### Age

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Below or 18 years	16	8.0	8.0	8.0
18-28 years	34	17.0	17.0	25.0
19-39 years	40	20.0	20.0	45.0
40-49 years	92	46.0	46.0	91.0
50 or above	18	9.0	9.0	100.0
Total	200	100.0	100.0	

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**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.972 <sup>a</sup>	.946	.945	.14439

**ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	70.702	4	17.675	847.834	.000 <sup>a</sup>
	Residual	4.065	195	.021		
	Total	74.767	199			

**Coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.160	.058		2.766	.006
	Customer Satisfaction	.278	.014	.427	20.437	.000
	Vas Offering	.204	.015	.247	13.792	.000
	Service reliability	.420	.011	.738	37.056	.000
	Over usage	-.055	.017	-.071	-3.119	.002

## **Questionnaire**

### **Factor Affecting Customer Satisfaction In Cellular Network Industry**

#### **Demographic**

##### **Gender**

- Male
- Female

##### **Age**

- Below or 18 years
- 18-28 years
- 19-39 years
- 40-49 years
- 50 or above

##### **Education**

- Graduate
- Postgraduate
- Doctorate
- Diploma

##### **Employment**

- Below or 1 years
- 1-5 years
- 5-10 years
- 10-15 years
- 16 or above

##### **Telecommunication network**

- Zong
- Mobilink

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**Extent of local calls**

SR. No.	QUESTIONS	STRONGY AGREE	AGREE	NEUTRAL	DIS AGREE	STRONGLY DISAGREE
1	My network is providing more minutes than others are for local services.					
2	I paid a limited amount for local calls.					
3	There is no distortion while doing the local calls.					
4	Before acquiring this network, I got trouble for my calls.					

**Value-added services**

SR. No.	QUESTIONS	STRONGY AGREE	AGREE	NEUTRAL	DIS AGREE	STRONGLY DISAGREE
1	I got very low call services on this network.					
2	I am highly satisfied by the WhatsApp call facility have given by my network.					
3	It is a good source of getting promotional advertisement.					
4	The internet services are very fast and safe.					

SR No.	QUESTIONS	STRONGY AGREE	AGREE	NEUTRAL	DIS AGREE	STRONGLY DISAGREE
1	My network delivered the commitment what they have done.					
2	High-quality standards have used by my network for smooth and high-quality services.					
3	24 hours customer services option is a relief for me.					
4	My network provides timely services.					

## Factor Affecting Customer Satisfaction In Telecommunication Industry.

### Service Reliability

#### Overall usage

SR No.	QUESTIONS	STRONG Y AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE
1	This network declines my overall usage prices as compared to the prior services.					
2	The prices of network usage are very low and easily bearable for me.					
3	I saved my money by using different packages for call and internet.					
4	I can easily manage my monthly income due to the services and packages have given by network.					

### Schedule for Completion/ Gantt Chart

I expect to complete this project in two months from the date of obtaining approval for the project proposal. Specific milestones in the project are as follows:

Approval of project proposal received	
Literature review commences	
Literature review concludes	
Submission of draft project report	
Data collection commences	
Data collection concludes	
Submission of project report (final)	