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Analysing Dimensions of Service Quality towards Customers Satisfaction in the Algeria Mobile Telecommunications Market Using the SERVQUAL model

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Abstract :

The institutions phone mobile in Algeria have put much effort to attract customers. This research investigated the relationship between two elements core service quality, customer satisfaction by use with the original Parasuraman's SERVQUAL model.

The results revealed that core service quality were the most important driver of customer satisfaction. and A direct link between customer satisfaction and service quality dimensions Specifically.

A major conclusion was that service quality dimensions should be incorporated into customer satisfaction models to provide a more complete picture of the customers satisfaction.

keyword: service quality; customer satisfaction; SERVQUAL model;

JEL classification code : G29, D02

Introduction :

The rapid change and fierce competition in the mobile communications market makes it valuable for mobiles service providers to focus on delivering superior service quality and maintain their competitive position. However, providing a high service quality requires mobile service providers to be knowledgeable about issues and weaknesses related to their performance and how customers perceive the quality of the services offered.

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related to phone service quality, researchers mostly use existing service quality scales for measuring mobile service quality. This is the reason for not having a proper scale to measure mobile service quality directly for a long time. It could have been considered as a lack because mobile services has their own characteristics such as mobility, anytime and anywhere computing, and social conditions. One of the studies to develop service quality scale that they adopted dimensions for mobile service quality from .

1.1.Research Questions :

The main issues we are addressing in this research are service quality and customer satisfaction using the SERVQUAL model in in the Algeria Mobile Telecommunications Market . We are interested in the dimensions of service quality from the consumer's perspective through assessing their expectations and perceptions of service quality. We therefore will like to answer the following questions in our study;

• How do consumers perceive service quality in in the Algeria Mobile Telecommunications Market ?

• Are consumers satisfied with service quality offered by in the Algeria Mobile Telecommunications Market ?

1.2.Research Purpose

The main purpose of this study is to test the SERVQUAL model in the context of the in the Algeria Mobile Telecommunications Market.

in order to know its applicability the measurement of service quality and customer satisfaction. This is will be done by investigating the reliability and validity of the SERVQUAL model in Mobile

Telecommunications Market . This will be a theoretical contribution for better understanding the SERVQUAL model. This study is also aimed at determining the overall service.

1.3.Hypotheses and Research Model

Most of the studies focused on the relationships among two of the variables: service quality, customer satisfaction, and In recent years,

most notably in phone mobile. However, I have seen many research that identifies the interrelationships among all two variables. Based on those studies, I develop the following hypotheses.

In this study service Network quality is considered as technical

dimension for service quality. Based on SERVQUAL, leads to following hypotheses:

H1: Tangibles is positively associated with Customer Satisfaction

H2: Reliability is positively associated with Customer Satisfaction.

H3: Responsiveness is positively associated with Customer Satisfaction.

H4: Empathy is positively associated with Customer Satisfaction.

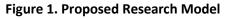
H5: Network quality is positively associated with Customer Satisfaction

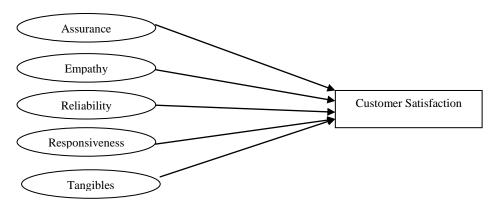
A model that integrates these hypotheses regarding service quality, customer satisfaction,



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is shown in Exhibit 1.





Source: Prepared by the authors.

2. Theoretical Framework:

he study objective steers us to further explore the theoretical structure related to service quality attributes and its impact on customer satisfaction and of in the algeria Mobile Telecommunications Market .

Due to increase in customer demand, and has created a competitive environment for mobile phone where the challenge is to retain the customers and ascertain customer satisfaction. As customer loyalty relates to the satisfaction of the customer, establishing relationship with the service provider.

2.1.Service Quality :

In marketing, the focus of service performance has been on the quality of service, or the evaluation of the performance of service. For decades, the definition and measurement of service quality has occupied a significant position in services.

In general, previous research shows a direct cause-effect relationship between service quality and customer satisfaction Service quality,

Globalization necessitated the telecommunication service providers to deliver high service quality across multiple nations as it serves as key differentiating factor for firms in competitive environment There are many definitions for the term Quality defined by different authors.

"Quality can be defined broadly as superiority or excellence" (Parasuraman, 1988)

Service quality is considered as an essential element to establish and maintain costeffective customers (Zeithaml, 1996)

Lewis and Booms (1983) define service quality as "a measure of how well the service delivered matches customer expectations. Delivering service quality means conforming to customer expectations on a consistent basis."

Service quality is an abstract concept, difficult to define and often interchangeably used with satisfaction (Lien, 2001)

2.2.The SERVQUAL Model:



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Many studies have employed the SERVQUAL scale, although (Cronin, 1992) argued that service quality is an attitudinal construct based on the accumulated outcomes of all the service encounters with a particular provider. In that view, the service quality measurement method can either be incident-based or attribute-based (Stauss, 1997)

The SERVQUAL instrument developed by (Berry, 1991)

has proved popular, being used in many studies of service quality. This is because it has a generic service application and is a practical approach to the area. A number of researchers have applied the SERVQUAL model to measure service quality

The SERVQUAL instrument consists of 22 statements for assessing consumer perceptions and expectations regarding the quality of a service. Respondent are asked to rate their level of agreement or disagreement with the given statements on a 5-point Likert scale. Consumers' perceptions are based on the actual service they receive, while consumers' expectations are based on past experiences and information received. The statements represent the determinants or dimensions of service quality. Refinement of his work reduced the original service dimensions used by consumers to judge the quality of a service from ten to five.

The five key dimensions (Parasuraman A., 1994) that were identified are as follows:

1. Assurance – the knowledge and courtesy of employees and their ability to convey trust and confidence.

2. Empathy – the provision of caring, individualized attention to consumers.

3. Reliability – the ability to perform the promised service dependably and accurately.

4. Responsiveness – the willingness to help consumers and to provide prompt service.

5. Tangibles – the appearance of physical facilities, equipment, personnel and communications materials.

One of the purposes of the SERVQUAL instrument is to ascertain the level of service quality based on the five key dimensions and to identify where gaps in service exist and to what extent.

The gaps are generally defined as:

• **Gap 1** (positioning gap) – pertains to managers' perceptions of consumers' expectations and the relative importance consumers attach to the quality dimensions.

• **Gap 2** (specification gap) - is concerned with the difference between what management believes the consumer wants and what the consumers expect the business to provide.

• Gap 3 (delivery gap) - is concerned with the difference between the service provided by the employee of the business and the specifications set by management.



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• **Gap 4** (communication gap) – exists when the promises communicated by the business to the consumer do not match the consumers' expectations of those external promises.

• **Gap 5** (perception gap) – is the difference between the consumers' internal perceptions and expectations of the services (Zeithaml et al., 1990).

Moreover, service quality is considered indispensable in customer-oriented market, since it acts as a major determinant for customers' satisfaction which serves as a key tool for firms to achieve their goals.

2.3. Customer Satisfaction:

Customer Satisfaction has been a central concept in marketing literature and is an important goal of all business activities. Today, companies face their toughest competition, because they move from a

product and sales philosophy to a marketing philosophy, which gives a

company a better chance of outperforming competition (Kotler, 2000)

Since customer satisfaction has been considered to be based on the customer's experience on a particular service encounter, it is in line with the fact that service quality is a determinant of customer satisfaction (Cronin J. J., 1992)

This led to a lot of studies on customer satisfaction from 1970 onwards.

Though studies state that service quality acts as a major determinant for customer satisfaction, there still exist arguments stating that service quality is the predetermining factor for customer satisfaction on the one hand and on the other hand customer satisfaction is the antecedent for service quality

This theory claims that customer satisfaction is the customer's comparison between his/ her expectation and perception of a product or service (Cardozo, 1965)

n other words, satisfaction is the customer's overall judgment of the service provider (McDougall & Levesque, 2000).

satisfaction can be interpreted in two ways: as an outcome and as a process .

This definition is based on the disconfirmation model since it compares customer expectation with perception to determine customer satisfaction .

(Oliver, 1980) defined satisfaction "as a summary of psychological state resulting when the emotion surrounding disconfirmed expectations is coupled with the consumer's prior feelings about the consumption experience" (Oliver R., 1981)

(Kotler, 2000) defined satisfaction as: "a person's feelings of pleasure or disappointment resulting from comparing a product perceived performance (or outcome) in relation to his or her expectations".

The key concept of customer satisfaction is based on the 'Expectancy-Disconfirmation' theory proposed by Lewin (1938)

(Lewin, 1938) expectancy-disconfirmation theory proposes that customers compare their experience of consuming the product or service to their expectations. If their experiences exceed their expectations, customers are more likely to experience satisfaction.



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Developing an understanding on customer satisfaction is crucial for marketers since it serves as one of the major drivers of repeat purchase behavior .

3. Methodology:

3.1. Research methodology :

The third chapter presents the methodology used to conduct the research. Research approaches are discussed. Qualitative approach is used for this study. Also it explains which, sources are used to collect the data and what procedure is applied to analyse the data. Furthermore interview design, advantages of interview along with some information about the interviewees is discussed. The validity and reliability of this study.

3.1.1. Data Collection :

There are different sources and methods of collecting the data. The two main sources which are generally used are primary and secondary. For this research

, Interview and questionnaires method is used as a source of collecting the primary data whereas secondary data is collected through the literature review

3.1.2. Research Method :

Both primary and secondary data sources will be used to answer research questions. Primary data will mainly be obtained through the administering of questionnaires and Interviews while secondary sources like past studies and archives will be accessed from various databases to obtain some reliable literature and empirical findings that can be applied in order to have a better understanding the service quality construct and how the SERVQUAL model can be used to measure it. Based on this model, the research aims to answer two questions: (1) what are the roles customer satisfaction, and the effect of service quality phone Mobil on customer satisfaction in the Algeria? a To address these question, I designed a two-part questionnaire. Section 1 contained five sets of questions related to a total of fifteen items addressing the model's five constructs. Following Hinkin's (1998) example, the questions used a 5-point Likert-type scale, anchored by strongly disagree and strongly agree.

Respondents are asked to answer these questions based on their last experience at a Algeria–market phone mobile.

Section 2 elicited general contextual background information and experiences in Algeria–market phone mobile

3.2. Statistical Analysis Methods :

has analyzed the data collected through questionnaires using SPSSv 23 program, and has used a number of statistical methods in data analysis contained by questionnaires to test hypotheses. These methods were

as follows:

a) The arithmetic mean.

b) Cronbach's alpha reliability coefficient.

c) Pearson correlation coefficient to determine the association between independent variables and dependent variable.



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d) Simple regression to determine the relationship between independent variables and dependent variable and to determine the variance ratio which can be explained in the dependent variable by the independent variables.

3.2.1.Reliability of the Questionnaire :

Reliability of the questionnaire means that it will give the same result if it is redistributed more than once under the same circumstances and conditions, or in other words, it means consistency of the results of the questionnaire and that they do NOT change significantly if re-distributed to sample individuals several times during certain time periods. To test the Reliability of the tool used (the questionnaire), alpha Cronbach consistency coefficient (Alpha) was used, where this coefficient measures the internal consistency of the questionnaire paragraphs and their ability to give consistent results of the respondents responses to the paragraphs of the questionnaire.

The value of alpha coefficient ranges between (0-1) and it would be statistically acceptable if it is more than (0.7), (Nunnally and Bernstein, 1994) (Hair, 1998.) and this means that the tool consistency is good and therefore results can be generalized.

Table (1) shows Alpha Cronbach test results, for each of the dimensions of the various scales, where noted that the value of alpha for all scales ranges to (0.927). this ratio is considered high and acceptable and therefore we can rely on the credibility of the measurement tool and generalize the results of this study.

Statistiques de fiabilité				
Alpha de Nombre				
Cronbach d'éléments				
,927 6				
Source: The authors.				

Table (1) Alpha Reliability test results

3.2.2. Analysis and Testing :

3.2.2.1.Sample :

In this study, we aim to determine the dimensions of mobile service quality and analyze whether they have positive influence on customer satisfaction specifically in mobile services.

A self-report questionnaire was distributed to a randomly selected

group of 135 students and faculty members Tech. Using six listservs in the university, an e-mail survey was sent to respondents.

Out of the 135 questionnaires distributed, 132 responses were collected



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3.2.2.2. Demographics Statistics :

	Frequency	Percentage
Gender		
Male	75	56.81
Female	57	43.18
Total	132	100%
Total	152	100%
Age		
Below 20 years	4	3.03
20-30 Years	53	40.15
30–40 Years	47	35.60
Above 40 Years	28	21.21
Total	132	100%
Qualification		
Licence	27	20.45
master	30	22.72
M.Phil	40	30.30
Ph.D	15	11.36
had another	20	15.15
Total	132	100%
Monthly income		
Less than 20,000	25	18.93
20,000-30,000	31	23.48
30,000-40,000	29	21.96
40,000-50,000	29	21.96
Above 50,000	18	13.63
Total	132	100%

Source: The authors.

According to research survey as depicted in Table (2),

56.81 percent were males and 43.18 percent were females.

With regard to the age of respondents, 3.03 percent were aged Below 20 years years, 40.15 percent were aged 20-30 Years, 35.60 percent were aged between 30-40 Years , and 21.21 years percent were aged 40 years or older.

While evaluating income of the respondents, 18.93 percent had an income range less than 20,000 DA, 23.48 percent had an income range 20,000-30,000DA, 21.96 percent had an income rangebetween 30,000 and 40,000 DA, 21.96 percent had an income range between 40,000 and 50,000 DA, and 13.63 percent of the respondents had an income range above 50,000 DA.



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With regard to the education of respondents, 20.45 percent were licence degree 22.721 percent were master degree, 30.30 percent were M.Phil., and 11.36 percent were Ph.D. holders and 15.15 percent respondents had another degree.

3.2.2.3. Test of hypotheses :

A regression analysis and The Pearson correlation was used in testing the hypotheses. regression is often used to describe the relationship between a categorical response variable and a set of independent variables.

A categorical response variable, which is the dependent variable, in the five hypotheses is "customer satisfaction" whereas the independent variables are reliability, responsiveness, assurance, empathy and tangibility. The analysis was carried out using the Forward

a) Correlation Coefficients:

The Pearson correlation coefficient was calculated for the average of clients views in the study regarding the quality of service provided to them and the Customer Satisfaction.

the Tables displays correlation coefficients for in the study

regarding the quality of service provided and the Customer Satisfaction.

The first hypothesis:

"There is a statistically significant effect of the the Tangibles to and the of Customer Satisfaction."

To test this hypothesis, correlation coefficients have had been used as follows:

Table (3): Pearson correlation between the Tangibles to and the of Customer Satisfaction.

Correlations		Tangibles	Customer satisfaction
Tangibles	Pearson Correlation	1	.704**
	Sig. (2-tailed)		.000
	Ν	132	132
Customer satisfaction	Pearson Correlation	.704**	1
	Sig. (2-tailed)	.000	
	Ν	132	132

**. Correlation is significant at the 0.01 level (2-tailed).

Source: The authors.

The table shows that correlation coefficients between the Tangibles to and the of Customer Satisfaction. are high, where value for the correlation coefficient between "Tangibles" and the level of Customer Satisfaction is (0.704**) which shows that there is strong positive correlation between the two variables, and it is significant at the significance level of 1%.

The secend hypothesis:

"There is a statistically significant effect of the the Relability to and the of Customer Satisfaction."

To test this hypothesis, correlation coefficients have had been used as follows:



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Table (4): Pearson correlation between the Relability to and the of Customer Satisfaction.

Correlations		Customer satisfaction	Reliability
Customer satisfaction	Pearson Correlation	1	.797**
	Sig. (2-tailed)		.000
	Ν	132	132
Relability	Pearson Correlation	.797**	1
	Sig. (2-tailed)	.000	
	Ν	132	132

**. Correlation is significant at the 0.01 level (2-tailed).

Source: The authors.

The table shows that correlation coefficients between the Relability to and the of Customer Satisfaction. are high, where value for the correlation coefficient between "Relability " and the level of Customer Satisfaction is (0.797**) which shows that there is strong positive correlation between the two variables, and it is significant at the significance level of 1%.

The third hypothesis:

"There is a statistically significant effect of the the Responsiveness to and the of Customer Satisfaction."

To test this hypothesis, correlation coefficients have had been used as follows:

Table (05): Pearson correlation between the Responsiveness to and the of Customer Satisfaction.

Correlations		Customer satisfaction	Responsiveness
Customer satisfaction	Pearson Correlation	1	.845**
	Sig. (2-tailed)		.000
	Ν	132	132
Responsiveness	Pearson Correlation	.845**	1
	Sig. (2-tailed)	.000	
	N	132	132

**. Correlation is significant at the 0.01 level (2-tailed).

Source: The authors.

The table shows that correlation coefficients between the Responsiveness to and the of Customer Satisfaction. are high, where value for the correlation coefficient between "

Responsiveness " and the level of Customer Satisfaction is (0.845^{**}) which shows that there is strong positive correlation between the two variables, and it is significant at the significance level of 1%.

The Fourth hypothesis:

"There is a statistically significant effect of the the Assurance to and the of Customer Satisfaction."

To test this hypothesis, correlation coefficients have had been used as follows:



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Table (06): Pearson correlation between the Assurance to and the of Customer Satisfaction.

Correlations		Customer satisfaction	Assurance
Customer satisfaction	Pearson Correlation	1	.839**
	Sig. (2-tailed)		.000
	Ν	132	132
Assurance	Pearson Correlation	.839**	1
	Sig. (2-tailed)	.000	
	Ν	132	132

**. Correlation is significant at the 0.01 level (2-tailed).

Source: The authors.

The table shows that correlation coefficients between the Assurance to and the of Customer Satisfaction. are high, where value for the correlation coefficient between "Assurance " and the level of Customer Satisfaction is (0.839**) which shows that there is strong positive correlation between the two variables, and it is significant at the significance level of 1%.

The Fifth hypothesis:

"There is a statistically significant effect of the the Empathy to and the of Customer Satisfaction."

To test this hypothesis, correlation coefficients have had been used as follows: Table (07): Pearson correlation between the Empathy to and the of Customer Satisfaction.

Correlations		Customer satisfaction	Empathy	
Customer satisfaction	Pearson Correlation	1	.826**	
	Sig. (2-tailed)		.000	
	Ν	132	132	
Empathy	Pearson Correlation	.826**	1	
	Sig. (2-tailed)	.000		
	Ν	132	132	

**. Correlation is significant at the 0.01 level (2-tailed).

Source: The authors.

The table shows that correlation coefficients between the Empathy to and the of Customer Satisfaction. are high, where value for the correlation coefficient between "Empathy " and the level of Customer Satisfaction is (.826) which shows that there is strong positive correlation between the two variables, and it is significant at the significance level of 1%.

b) Gradual Regression:

Table displays gradual regression model estimates of the regression of dependent variable (average of sample views about the quality of service level provided to clients.



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Coefficient of	F	Estimates of regression model			
determinatio n R2	(sig.)	Predictors	β	Т	Sig
		Constant	292-	-2.970-	004
	433.187	Tangibles	.123	4.895	.000b
	(0.000)	Relability	.156	3.803	.000
		Responsiveness	.259	6.339	.000
		Assurance	.423	15.105	.000
		Empathy	.114	3.610	.000

Table (08): estimates of regression model

Source: The authors.

The table(08)shows the significance of the estimated regression model through the values of F (433.187), and (sig= 0.000) value. Significance of regression coefficient and the constant at the significance level of 5% is evident. independent variables (Tangibles, Relability, Responsiveness, Assurance, Empathy) affects the dependent variable (the level of the Customer Satisfaction as the value of the coefficient of determination is (0.972), indicating that the independent variables in the model explains 97% of the changes that occur in the dependent variable" the Customer Satisfaction"

4.Study Results :

The present study aimed to reveal the extent of application of policies and programs of services marketing and to find out the relationship and the impact of the actual practices of the strategies, policies, and programs of services marketing on the level of the quality of service provided to clients.

It also aimed to detect the impact relationship between the level of

the quality of service provided to clients and satisfaction and to detect the relationship and the impact of the actual practices of the strategies, policies, and programs of service marketing on clients satisfaction.

Finally, it aimed to reveal the impact of service quality on the satisfaction.

Based on the previous statistical analysis, the following Results of this study indicated that there is a strong Positive relationship between most of the dimensions of the level of the quality of service provided to clients and satisfaction, and it is significant at significance level of 1%.

5.Conclusion :

Service was focussed. For determining consumer behaviour, customer satisfaction and loyalty were considered. Different service quality dimensions (reliability, fulfilment, ease of use, convenience security and privacy and responsiveness) were taken to assess customer satisfaction, which leads to loyalty. An adapted 5-point Likert-type scale questionnaire was used for the data collection. In total, 132 usable



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responses were gathered. Different statistical techniques such as Reliability, content validity were also examined.

According to the results of The Pearson correlation, consumers get satisfied by the service if it is reliable in terms of consistent service. Fulfilment and ease of use are also found to be the key factor, which helps in gaining satisfied customers. Consumers want to feel secure and want privacy while doing transactions; therefore, if the firm provides secure transaction facility, it can easily be able to get the satisfied customer.

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