Service Quality Determinants of (DHBS) Electric Company on Customers Satisfaction in Helmand Province, Afghanistan

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ABSTRACT

This research has investigated the Service Quality Determinants of (DHBS) Electric Company on Customers Satisfaction. In order to achieve the objectives of the research, data was collected from (94) customers using questionnaires. Customers have been selected based on convenience sampling method for data collection. The data collected from the customers has been analyzed with SPSS Computer Program. The results of the research show that all variables of service quality such as Reliability have a negative average relationship with customer satisfaction, Assurance has a positive average relationship with customer satisfaction, and Tangibility has a positive average relationship with customer satisfaction. There is an average relationship, Empathy has an average relationship with customer satisfaction, and Responsiveness has an average negative relationship with customer satisfaction. The results of the research have shown that customer satisfaction was high in the service quality dimensions of (Empathy), and on the contrary reliability and responsiveness were the least.

INTRODUCTION

Customer satisfaction is very important, service quality and customer satisfaction have been two important topics for research in the academic world and marketing for over a decade. Attention to these two variables, service quality and customer satisfaction is mainly due to the fierce competition between private companies in the market as well as political factors and public pressures in the public sector. Winning the competitive process is about providing high quality services that will in turn lead to customer satisfaction (Sureshchandar *et al.*, 2002). Service quality can be defined as what the customer expects and what the customer actually experiences. Be concerned. (AL-Jazzazi and Sultan, 2017).

Until 1600 AD years, electricity was one of the things that was only in the mind of man. William Gilbert was able to carry out important research related to electricity and magnetism. After that, Stephen Gray and Robert Boyle continued to research what people are like. These researches continued until the end of the 19th century, which was the greatest development in the field of electrical engineering, and electricity became the driving force after the second industrial revolution. The most important electrical invention is the light bulb. This is an invention that has affected our lives to this day (Wazi, 2018).

Afghanistan Electric Company is an independent and independent company that is established and operates in accordance with the law of the Islamic Republic of Afghanistan on joint stock and limited liability companies. It is related that this company changed to Afghanistan Electricity Company on 15th of August 1387 which corresponds to 4th of May 2008 and took its place as a national electricity company. The Afghanistan Electricity Company organizes and manages the generation, transmission and distribution of electricity commercially throughout the country (DABS, 2023).

Research Problem

Helmand Electricity Company has been operating in Helmand province for many years and provides services for the citizens in various fields, but the problem is that the satisfaction of the customers with the quality of the services of the electricity company in Lashkergah city. It has not been investigated yet and there is no research on it yet. What factors of service quality have a vital role in achieving customer satisfaction, so looking at the value of service quality, we want to determine the factors that determine the quality of service of Helmand Electric Company, which lead to customer satisfaction? Investigate and find out the factors that have a significant relationship with customer satisfaction.

Research Objectives

➢ Expressing the level of customer satisfaction with the services and quality of Helmand Electric Company.

➢ To determine the relationship of service and quality determinants with customer satisfaction.

➢ To analyze the level of dissatisfaction with the services and quality of Helmand Electricity Company in Lashkergah.

MATERIALS AND METHODS

Research Design

Both descriptive research and explanatory research have

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been used in this research and in the research method, the quantitative method has been used to analyze the data collected from the customers. We reasoned that we collect Information from customers of a certain population (Helmand Electric Company) at a certain time. And there is no need to meet the research participants again. And the other reason is that in this design, the different variables are measured in such a way that no changes are made in the variables.

Sampling Technique

In this study, we use the Opportunity Sample method, this method is also called Convenience Sampling. In this sampling method, we randomly select customers. The main reason for choosing this method is that it is accessible and convenient. For example, for those customers who use electricity and have the courage and time to complete the questionnaire, we will complete the questionnaire. In this method, we try to collect information from the customer, who uses electricity and has information about it.

Data Screening

In order to analyze the data, a data screening process should be done first. The normal distribution of the data should be checked, as well as any statistical errors, outliers, and unanswered statements.

Sampling Technique and Size

In this study, we plan to calculate the sample size for customers of Helmand Electric Company based on the formula proposed by (Yamane, 1967), while our confidence level is 95% and we consider the expected error rate (0.10), and calculate the sample size for the research as follows:

$n = N / 1+N (e) 2$

In the above formula, n is the sample size, N is the population size, and e is the precision and reliability level.

When we apply this formula, it will give us the sample size:

$n = 24757 / 1+24757(0.10)2$

$n = 24758 / 247.58$

$= 100$

Data Source and Data Collection Technique

To achieve the research objectives, we use primary data. Primary data will be obtained through a questionnaire. The questionnaire will be distributed to customers of Helmand Electricity Company. And variables will be measured using (Likert Scale) with five answers such as (strongly disagree, disagree, I have no opinion, agree & strongly agree).

Research Variables
Dependent Variable
➢ Customer Satisfaction

Independent Variables
➢ Tangibility
➢ Reliability
➢ Responsiveness
➢ Assurance
➢ Empathy

Data Analysis

For the analysis of this research data, we will use the statistical package of social sciences (SPSS) and some tests of this software such as Reliability Test, Regression and Correlation.

RESULTS AND DISCUSSION
Socio-Economic Characteristics of the Respondents

We distributed 100 questionnaires to customers of Helmand Electricity Company, of which 94 questionnaires were answered accurately and the researchers received them (Table 1).

Table 1: Socio-Economic Characteristics of the Respondents

Description	Frequency	% Percentage
Age	94	100%
18-29	91	96.8%
30-39	3	3.2%
40-50	0	0%
Education Level	94	100%
High School	34	36.2%
Bachelor	58	61.7%
Master	2	2.1%

Skewness and Kurtosis

For a normal distribution, the level of (Skewness) should be around positive/negative 3 and (Kurtosis) should be between positive/negative 5 (Hair *et al.*, 2015).

Table 2: Skewness and Kurtosis Result

Descriptive Statistics					
	N	**Skewness**		**Kurtosis**	
	Statistic	**Statistic**	**Std. Error**	**Statistic**	**Std. Error**

TAN	94	-.619	.249	-.549	.493
REL	94	-.016	.249	-.398	.493
RES	94	.037	.249	-.564	.493
EMP	94	-.228	.249	-.695	.493
ASU	94	.229	.249	-.259	.493
CS	94	-.142	.249	-.341	.493
Valid N (listwise)	94				

Reliability Test

We have made hypotheses in which the variables are not measured independently, and such variables are called (Latent Variables). So, in order to measure our variables, we use a scale. This (Scale) is a set and group of questions, and each individual question in this group is called Item (Table 3). Now the goal is that the answers given to these question should have internal consistency at a high level, so this (Internal Consistency) is measured based on (Cronbach's Alpha).

Correlation

Based on (Correlation), the linear relationship between the variables is shown. Based on this analysis, we know what kind of relationship two variables have between themselves, usually there are two relationships between variables, such as (Positive Correlation) that when one variable increases, the other variable also increases (Negative Correlation). As one variable increases, the other variable decreases. In our research, we determine the relationship between the determinants of service quality and customer satisfaction (Table 4).

Table 3: Reliability Result

Reliability Statistics	
Cronbach's Alpha	N of Items
.770	6

Table 4: Correlation Result

Variables	Reliability	Assurance	Tangibility	Empathy	Responsive	Satisfaction
Reliability	1.000					
Assurance	.462	1.000				
Tangibility	.526	.343	1.000			
Empathy	.528	.451	.402	1.000		
Responsiveness	.734	.459	.432	.527	1.000	
Customer Satisfaction	-.031	.228	.156	.025	-0.008	1.000

Regression

It is the analysis based on which we can predict the change in one variable in advance of the change in another variable. Based on this analysis, these results are obtained. The first is how the change made in one variable affects the other variable and the second is that it is used to predict another variable based on one variable. In our research, we use (Regression) to investigate the effect of service quality determinants on customer satisfaction (Table 5, 6, 7).

Table 5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.327[a]	.107	.056	.77125

a. Predictors: (Constant), ASU, TAN, EMP, RES, REL

Table 6: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.253	5	1.251	2.102	.073[b]
	Residual	52.344	88	.595		
	Total	**58.597**	**93**			

a. Dependent Variable: CS
b. Predictors: (Constant), ASU, TAN, EMP, RES, REL

Table 7: Coefficients Result

Coefficients^a								
Model		Unstandardized Coefficients			t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.206	.407		5.423	.000		
	TAN	.221	.110	.244	2.014	.047	.700	1.428
	REL	-.194	.147	-.216	-1.321	.190	.387	2.584
	RES	-.022	.139	-.025	-.161	.872	.431	2.321
	EMP	-.030	.108	-.035	-.273	.785	.640	1.563
	ASU	.247	.111	.248	2.214	.029	.819	1.221

a. Dependent Variable: CS

DISCUSSION

The results of the research showed that in general based on the determination of the service quality of the electricity company (42.2%) customers were satisfied, (12.8%) customers did not have an opinion about satisfaction, (45%) customers were not satisfied. (Olayinka *et al.*, 2018) investigated service quality and customer satisfaction by the Ibadan Electricity Distribution Company or (IBEDC). Finally, it was found that five independent variables related to customer satisfaction of the SERVQUAL model are related to customer satisfaction. But the customers were not satisfied with the quality of the service because based on the information of the customers, the employees of the company failed to perform or deliver the services that they had promised and research has proven that the company's physical facilities as well as the company's staff are poor and inefficient in service delivery hence this research finding are similar to my results.

A research was conducted by (Jaber, 2015) on customer satisfaction with the service quality of Dhaka Electricity Supply Company or (DESCO) in Bangladesh. From the result it is clear that the customer satisfaction of this company regarding the quality of service is low. So this research is similar to my research findings.

A study was investigated by (Degage, 2023) on customer satisfaction with the service quality of the electronic convenience center in Ethiopia. The result of this research showed that more than 64.87% of the respondents were not satisfied with the services provided by the company thus the result of this research is similar to my research.

A research was conducted on customer satisfaction with the service quality of the Electricity Company of Ghana (ECG) (Arthur *et al.*, 2016). Data were analyzed using SPSS and Excel programs. The result of this study was shown by SPSS regression test that all five dimensions of service quality have a negative effect on customer satisfaction and customers were not satisfied with the company's services hereafter the findings of this research is also comparable to my research results.

CONCLUSION

This study was conducted in order to investigate the effects of service quality determinants on customer satisfaction of Helmand Electric Company. In order to achieve this goal, the researchers collected data from 94 customers using a standardized questionnaire. Collected, from the results of the identification of the respondents, it is known that all the respondents (100%) were male (96.8%) aged 18-29 years, and the remaining 3 (3.2%) percentage was 30-39 years old. Looking at the education levels, 34 (36.2%) had graduated from the 12th grade, 58 (61.7%) had studied at the bachelor's level, and 2 (2.1%) had studied at the master's level have done. The results of the research have shown that the customers of Helmand Electric Company were satisfied with three variables out of (5) variables of service quality. Customers were more satisfied with the company's empathy in terms of service quality determinants, while at the same time they were not satisfied with responsiveness and reliability. According to the results of correlation, three dimensions of service quality (RATER) such as (Assurance, tangibility, empathy) have a positive and significant relationship with customer satisfaction. (42.2%) customers from the said company were satisfied with the service quality of the said company and (44.93%) customers were not satisfied. The research results also showed that assurance has a positive and significant effect on customer satisfaction as an important factor among the dimensions of service quality. Also five dimensions of service quality (RATER) can explain (10.7%) variation in customer satisfaction.

RECOMMENDATIONS

• Reliability is one of the most important factors that has a positive and significant effect on customer satisfaction, but in this regard, the satisfaction level of Helmand Electric Company's customers was low. To solve this problem, Helmand Electric Company employee must perform the services on time, and provided the services without defects.

• Responsiveness is also one of the important factors that affect customer satisfaction, but in this regard, the level of customer satisfaction of Helmand Electric Company was low hence delivery of services to customers in an urgent and quick manner and respond to customers' questions in a timely manner would be efficient.

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