

## Effect of Service Quality on Customer Satisfaction: A Study in Ethiopian Electric Utility (EEU), Jimma District

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### Abstract

*The objective of the study is to investigate the effect of service quality on customer satisfaction at Ethiopian Electric Utility (EEU) Jimma District. To meet the objective, Data for this study was collected from 627 respondents through the survey from Ethiopian Electric utility customers of four purposely selected towns, these include Jimma, Agaro, Sokoru and Limmu Genet towns. In addition to survey questionnaire, semi structured interview and different types of secondary data were utilized. .SERVQUAL model with seven dimensions were used to measure service quality of the company. Accordingly, Tangibility, Reliability, Empathy, Security and stability measures were found to significantly determine customer satisfaction but Responsiveness and Assurance were not found to be significantly affecting customer satisfaction. Finally, by identifying the strengths and weaknesses pertaining to the dimensions of service quality, EEU should better allocate resources to provide better service and ultimately bring better satisfaction to its customers. Moreover, since customers' expectations change over time, it is necessary to contact customers regularly and assess their service experiences.*

*Key words: Tangibility, Reliability, Empathy, Security, Stability, Responsiveness Assurance, Customer Satisfaction*

### 1. Background of the Study

Service can be defined as an economic activity that produces time, place, form, or psychological utilities. Services are intangible activities that are the main object of a transaction designed to provide satisfaction to customers. For example, travel agencies, hospitals, financial institutions, entertainment firms, communication organizations, utilities companies and professional services giving firms are prime examples of service giving organizations. Many service firms have become successful by identifying a previously unrecognized or unsatisfied customer wants. A service process links together activities that are required to deliver the whole service package to customers. Some tasks and activities may be located in the back office away from customers while other tasks or activities takes place in the presence of the customer, either in the

organization's front office or in customer's home. Together, these processes created the service experience and the result is the service outcomes (Kotler & Keller, 2006).

Customer satisfaction is defined as the comparison between what was received and what was expected. Satisfaction is the customers' evaluation of a product or service in terms of whether that product or service has met their needs and expectations. Failure to meet needs and expectations is assumed to result in dissatisfaction with the product or service (Zeithaml & Bitner, 2000). Customer satisfaction is a person's feeling of pleasure or disappointment resulting from comparing a product's perceived performance (or outcome) in relation to his or her expectations. If the performance falls short of expectations, the customer is dissatisfied. If the performance matches the expectations, the customer is satisfied. If the performance exceeds expectations, the customer is highly satisfied or delighted (Israel, 2015).

A public utility company is an organization that maintains the infrastructure for a public service often also providing a service using that infrastructure. Public utilities provide services at the consumer level, be it residential, commercial, or industrial consumers. Public utilities are subject to public control and regulation ranging from local community-based groups to state-wide government monopolies. The term utilities can also refer to the set of services provided by these organizations consumed by the public. Electricity, water and sewage, telephone, transportation, broadband internet services (both fixed-line and mobile) are increasingly being included within the definition. Public utility companies are often natural monopolies of the government since the infrastructure required for producing and delivering services such as electricity or water is very expensive to build and maintain. As a result, they are often government monopolies, or if privately owned, the sectors are highly regulated by concerned government organs (Fikre, 2010).

Public utility organizations are typical service providers in developing country like Ethiopia. In the past few decades, there has been a growing emphasis on the need for public organizations to see the public (citizens) as customers. Electric Utility company is among the public enterprises that provide electric power to customers and collecting payment from customers (Fikre, 2010). Also the service delivery of Ethiopian Electric Utility is not as such in a position to satisfy its customers. It justified by studies, Among which Zeritu (2010) reveals out that EEU renders poor service quality to its customers. Hence, this study was conducted aiming at examining the effect of service quality on customer satisfaction at Ethiopian Electric Utility Jimma District.

## **1.2 STATEMENT OF THE PROBLEM**

Quality electricity service delivery has become an issue of great concern to the nation. It has been argued that it is one of the major challenges facing the sector. EEU sells services which are produced and consumed immediately. Due to this, it is difficult to correct any defects on the service before it gets to the final consumer. As per preliminary, discussions made with some customers. It is possible to infer that the power sector is among the top areas where there have been many complaints of ineffectiveness and inefficiency in the service especially in customer service delivery.

There has been a complaint which is associated with access to electric power service to all citizens. While the Ethiopian government has started to make major investments in the power

sector, many of the country's homes and businesses still lack access to sufficient power supplies for carrying out productive uses, or even for basic services like lighting. New customers are expected to wait for more than 3 years looking for electric service because of having no other option. The people were not able to get the service because of lack of good governance and poor quality of the services provided. The flourishing electricity intensive industries, commercial buildings, businesses, and the widespread utilization of efficient electrical appliances, coupled with the inefficiency of the electricity utility services, not only created a huge gap between electricity demand and supply, but also negatively affected the reliability of supply of electricity to the country. "The actual supply of electricity is not more than 60% to 70% of the total demand and also "the demand for energy is growing at 25% to 32% annually in the country. Actual supply for the whole country amounted to 2300MW in GTP I." (Addis Fortune, 15 June 2015). Huge gap is observed between what is planned and what is achieved in reality in the power sector in terms of access (Aman, 2016).

The service delivery of Ethiopian Electric Utility is not as such in a position to satisfy its customers. Accordingly, Zeritu (2010) reveals out that EEU renders poor service quality to its customers. That means, a reliable service is not delivered, complaints are not well addressed and it is not responsive to the requirements of its customers (Aman, 2011)

Studies conducted in other countries investigated the challenges in customer service delivery including Satapathy (2014) in India, Wattana and Sharma (2011) in Thailand, Delgado *et al.* (2007) in Portugal and Chau (2009) in England. The findings showed that the extents of the problems of service delivery are somehow less compared to Ethiopia. In addition to studies conducted in other countries, different local studies showed that EEU service delivery does not meet customer satisfaction. For instance, Fikre's (2010) study showed that there was poor service quality and poor performance in service processes like new line connection, complaint handling and recovery of service failure. Abdie (2011) also argue that service delivery process and service quality in Ethiopian Electric utility are below the expectation of customers. Teklehaimanot (2007) and Beyene (2016) has also investigated the topic taking Addis Ababa as a case area and reached on the same conclusions.

Though efforts were made by previous researchers to highlight the problems such as: poor service quality, poor complaint handling and recovery of service failure. in Ethiopia as indicated above, to our knowledge most of the studies were conducted in Addis Ababa where there are many media outlets to complain and so many international communities whose voice can be easily listened. Regional towns' including Jimma districts were relatively ignored and the extent of the problems is unknown. On top of this, most of these previous local studies used descriptive mythology that does not clearly indicate the true significance of the problem. But, this study had employed both descriptive and causal research design, besides, it did use the seven factors of the perceived attribute of electricity service (reliability, tangibility responsiveness, empathy, assurance, security and stability) to meet its objective.

### **1.3 Objective of the Study**

The objective of the study is to investigate the effect of service quality on customer satisfaction at Ethiopian Electric Utility (EEU) Jimma District.

### **1.4 Importance of the Study**

The output of this study is expected to have several benefits. First, this study is a demand driven and expected to help officials of EEU Jimma district to understand the status of customer satisfaction and create a means to enhance the customers' satisfaction level. The executive body needs to be aware of the complaints and respond appropriately. Overall service satisfaction is better aided if customer's feedbacks are quickly addressed.

## 2. Literature

### 2.1 Customer Satisfaction

For the question "Who is a customer of an organization?" many people's answer mainly focuses on only at individuals who come to the organization from outside of it in need of its services. However, when we take a closer look at the term customer, the customer is the service seeker (an individual, department, or institution) who comes to buy a service or a product and either to use or sell it to a third party to the facility for transmission in other circumstances (Bekele, 2000).

Quality customer service has become among the hottest and most pressing issues discussed and pursued in the public and corporate arena. Customer satisfaction is the outcome felt by buyers who have experienced a company's performance that has fulfilled expectation. Customers are satisfied when their expectations are exceeded. Satisfied customers remain loyal longer, but more or less price sensitive and talk favorably about the company. Customer satisfaction is the customer's fulfillment response. It is judgment that a product or service feature or the product or service itself provides a pleasurable level of consumption related fulfillment. Satisfaction is customer's evaluation of a product or service in terms of whether that product or service has met their needs expectations. Failure to meet needs and expectation is assumed to result in dissatisfaction with the product or service (Kotler & Keller, 2006).

In general, the main purpose of institutions measuring customer satisfaction is to understand the level of managerial services and the quality of service providence and suggest points for overall improvement. With this, the institutions engage to adequately meet the needs of their customers. Providing this service also allows them to increase profits and market shares (Anderson *et al.* 1994). Besides, customer satisfaction is not limited to meeting customer benefits, besides, it includes a wide range of social values, such as: customer needs, the cost, and nature of services, protects various interests of customers

Institutions should render services based on transparency and accountability. To do so at least the following basic requirements should be met. These include:, detailed and clear information should be made available to the public. then the service seeker should meet the requirements and then, the service provider should render its services in a way that satisfies the customers (Khatibi, *et al.*, 2002).

Customer satisfaction and service quality are issues at global level that affect all organizations. The interest of institutions in their customers is mainly determined by the recognition that high quality services are related to customer satisfaction and commitment, more inclination to mention to others, reduction in criticisms and increase customer withholding. Two terms are closely related; one is customer satisfaction and other is service quality. Both are directly proportional. If one increases, the other also increases and vice versa. Customer complaints are related with the customer satisfaction. If customer complaints are less, then it means customers

are more satisfied. Service quality can be described as the understanding power of the organization's performance, achievements and efficiency. If perceived service quality is good according to the customer behaviors and intentions, then customers are more satisfied and loyal with their products. If service quality of product is not good, then sales and profits will be reduced and ultimately customers shift towards other competitor's product (Zeithamal, 2003).

There are different models to measure service quality which have been developed by different scholars. Among those, the one which is developed by Parasuraman, *et al.*, (1988) which is SERVQUAL (service quality) is the most applied in most industries. The model encompasses the service quality dimensions such as: responsiveness, tangibles, assurance, empathy and reliability (Parasuraman *et al.*, 1988; Zeithamlet *et al.*, 1990). Also ,Satapathy (2012) included security and stability to this model in his study in Indian electric authority. Therefore, this study measures the service quality of EEU by aforementioned seven dimensions

## **2.2 Analytical Frameworks**

The main objective of the study is to examine the customer service delivery and its effect on customer's satisfaction in Ethiopian electric utility Jimma district. There are different types of analytical models used to investigate service quality. However, SERVQUAL model was selected for study one in order to identify the determinants of service quality and investigate its effect on customer satisfaction. The SERVQUAL framework was developed in 1988 and it is a method which can be used by service industries to evaluate their service quality. At the beginning, SERVQUAL model consists of five dimensions and later two more dimensions were added by Satapathy (2013) that are specifically applicable for utility companies. The seven factors of the perceived attribute of electricity service (reliability, tangibility responsiveness, empathy, assurance, security and stability) lead to the schematic diagram of the model shown below. The model was adopted from a Study by Satapathy (2013) with slight modification to fit with Ethiopia case.

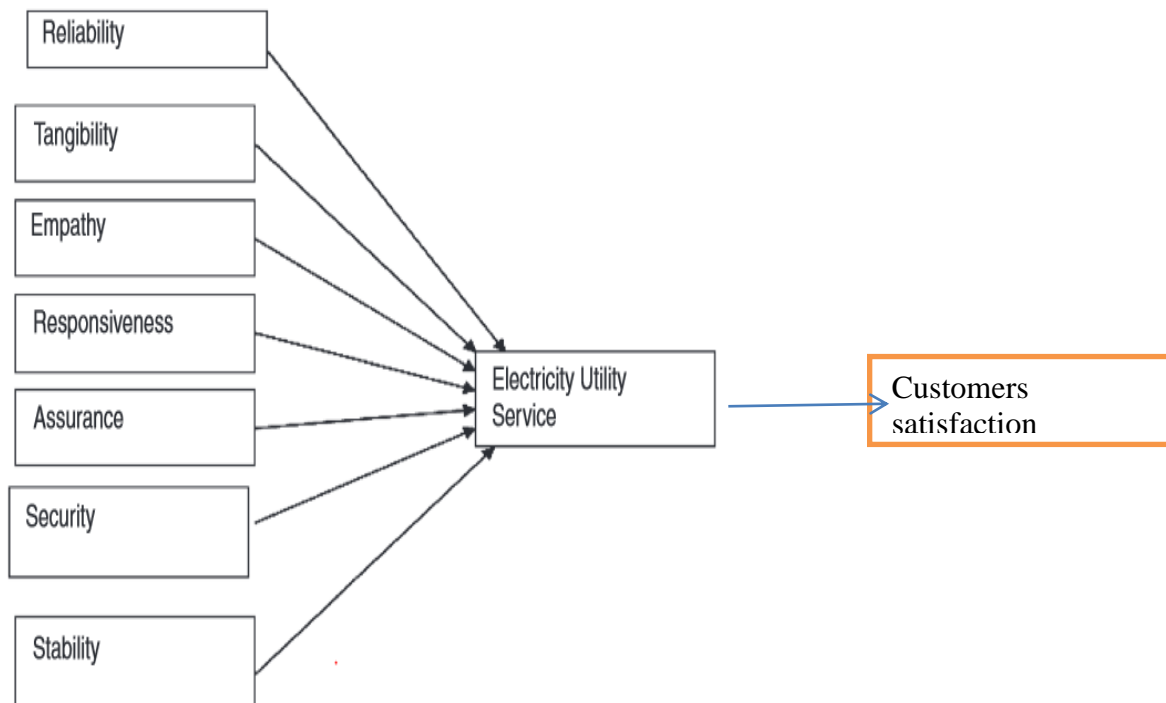


Figure 3: Analytical framework for Study  
 Source: Satapathy (2013)

The multiple regression model involving the dependent and seven independent variables is formulated as follows

$$CMSF = \beta_0 + \beta_1 RBLT + \beta_2 TANGB + \beta_3 EMPT Y + \beta_4 RSPNS + \beta_5 ASSUR + \beta_6 SECR T + \beta_7 STBLTY$$

Where : *RBLT*- reliability, *TANGB*- tangibility, *EMPT Y*- empathy, *RSPNS*- responsiveness, *ASSUR*- assurance, *SECR T*- security, *STBLTY*-stability

### 3. RESEARCH DESIGN AND METHODOLOGY

Thus, the study used both descriptive and causal research design. The rationale for the choice of descriptive survey method for this study is provided by Van Dalen (1979) who explains that it is used to: collect factual information that would explain existing situations; make comparisons and evaluations; identify special problems or justify existing conditions or practices; and to determine what other people are doing about similar problems and to make suggestions for future courses of action. Descriptive research uses people, documents and other written sources of information to describe, clarify, and interpret aspects of a situation as they presently exist. Data for this study was collected through the survey of Ethiopian Electric utility customers and subjected to descriptive analysis for the purpose of examining their perceptions of the challenges associated to customer's service delivery system. Further, explanatory design was used to investigate the effect of customers' service management of the utility on customers' satisfaction.

In addition, the researchers used methods of collecting and analyzing data using both quantitative and qualitative approaches.

The target population of this study was made up of the different groups of customers of Ethiopian Electric utility. This includes individual householder consumers, commercial consumers and industrial consumers of Ethiopian Electric utility, Jimma district.

About 29,060 customers have made their bill payment in the month of October 2020 and this was taken as estimated population for the study. Once the population is identified, it is possible to determine the sample size for the study. In order to determine sample size, the following estimates were made. In business research, researchers usually take significance level of 10% (Zukmand, *et al.*, 2009). Therefore, this value is also taken for this study so as to determine the sample size. The acceptable error is estimated to be  $\pm 3\%$  from the mean for this study. P value of 50% is assumed for this study as this provides the maximum possible sample size. Hence, the q value will be 50%. Using these estimated values, the sample size for both studies is determined using the following formula (Kothari, 2004).

$$n = \frac{z^2 x N x p x q}{E^2 x (N - 1) + z^2 x p x q}$$

$$n = \frac{1.64^2 x 29,060 x 0.5 x 0.5}{0.03^2 x (29,060 - 1) + 1.64^2 x 0.5 x 0.5}$$

$$n = 728$$

In order to compensate possible non response, 10% of 728 were added to it. Therefore, the total sample size for this study is 800. After determining the total sample size as shown above, four relatively big towns whose populations are relatively high were selected for data collection. These include Jimma, Agaro, Sokoru and Limmu Genet towns. In addition to survey questionnaire, semi structured interview was conducted in order to triangulate the findings.

## 4. RESULT AND DISCUSSIONS

### 4.1 Characteristics of the Respondents

Before going in to the detail, it is essential to describe the characteristics of the respondents. “To this end, the characteristics of the respondents in terms of towns, age, gender, occupation, type of service requested and number of times the respondents visited the customer service centers” are described as follows.

“The respondents for this study were selected from five customer service centers found in four relatively big towns under EEU Jimma district”. The number of respondents from each town was summarized in table 4.1:

Table 4.1: Towns of the Respondents

| Frequency | Percent | Valid Percent | Cumulative Percent |
|-----------|---------|---------------|--------------------|
|-----------|---------|---------------|--------------------|

|        |     |       |       |       |
|--------|-----|-------|-------|-------|
| Sokoru | 78  | 12.4  | 12.4  | 12.4  |
| Jimma  | 227 | 36.2  | 36.2  | 48.6  |
| Agaro  | 169 | 27.0  | 27.0  | 75.6  |
| Limu   | 153 | 24.4  | 24.4  | 100.0 |
| Total  | 627 | 100.0 | 100.0 |       |

Source: survey, 2021

At the beginning, 800 interview questionnaires were distributed to respondents but only 627 useful questionnaires were collected back which provides a response rate of 78.38%. Baruch and Holtom (2008) suggest a minimum response rate of above 50% is required to start analysis, but the response rate for this specific study is above this minimum requirement and analysis can be done with the data at hand. Further, as can be seen from table 4.1, over one-third of the respondents were from Jimma town and Agaro and Limmu towns accounts for about a quarter of the respondents each respectively. In addition, the characteristics of the respondents in terms of age, gender and occupation were summarized as shown table 4.2..

**Table 4.2 : Demographic Characteristics of the Respondents**

| a. Age Category |                  | Frequency | Percent |
|-----------------|------------------|-----------|---------|
|                 | <18              | 39        | 6.2     |
|                 | 18-30            | 196       | 31.3    |
| Valid           | 31-45            | 311       | 49.6    |
|                 | Above 45         | 77        | 12.3    |
|                 | Total            | 623       | 99.4    |
| Missing         | System           | 4         | .6      |
| Total           |                  | 627       | 100.0   |
| b. Gender       |                  | Frequency | Percent |
|                 | Male             | 382       | 60.9    |
| Valid           | Female           | 233       | 37.2    |
|                 | Total            | 615       | 98.1    |
| Missing         | System           | 12        | 1.9     |
| Total           |                  | 627       | 100.0   |
| c. Occupation   |                  | Frequency | Percent |
|                 | Student          | 92        | 14.7    |
|                 | Self-employed    | 40        | 6.4     |
| Valid           | Public-employee  | 257       | 41.0    |
|                 | Private-employee | 131       | 20.9    |
|                 | Unemployed       | 101       | 16.1    |
|                 | Total            | 621       | 99.0    |
| Missing         | System           | 6         | 1.0     |
| Total           |                  | 627       | 100.0   |

Source: Survey, 2021

As can be seen from table 4.2, about half of the respondents are aged between 31 -45 years. Moreover above 87% of the respondents are aged less than 45 years old. This implies the majority of the respondents are in the active age group which further indicates that they can precisely evaluate the service quality of Ethiopian Electric Utility.



With respect to gender, table 4.2, further illustrates that about 61% of the respondents are male and the remaining are females. This might be due to the fact that the responsibility of requesting service from Ethiopian electric utility rests on male. Males are the heads of household in a cultural society like Ethiopia and they are the major decision makers in the family.

Based on the occupation of the respondents, above 62% of the respondents are employees of public and private institutions and the rest are either unemployed, self-employed or students.

In general, the demographic characteristics above shows that the different groups of respondents were well represented in the sample which in turn is expected to provide genuine opinion about the customer service management practice at EEU.

#### 4.2 Effect of Service Quality on Customer Satisfaction

The following table deals with the descriptive statistics of the dimensions under study

**Table 4.3: Descriptive Statistics of Variables under study**

| Variables             | N   | Minimum | Maximum | Mean   | Std. Deviation |
|-----------------------|-----|---------|---------|--------|----------------|
| Tangibility           | 616 | 1.00    | 5.00    | 2.5231 | .99724         |
| Reliability           | 623 | 1.00    | 5.00    | 2.4968 | 1.06274        |
| Responsiveness        | 622 | 1.00    | 5.00    | 2.5470 | 1.08463        |
| Assurance             | 614 | 1.00    | 5.00    | 2.5183 | 1.02685        |
| Empathy               | 613 | 1.00    | 5.00    | 2.5706 | 1.04709        |
| Security              | 609 | 1.00    | 5.00    | 2.3885 | .99614         |
| Stability             | 612 | 1.00    | 5.00    | 2.3650 | 1.04154        |
| Customer Satisfaction | 604 | 1.00    | 5.00    | 2.4825 | .98861         |

Source: Survey, 2021

As can be seen in table 4.3, the mean score of all the variables is below three which shows there is disagreement or dissatisfaction among customers in terms of these variables.

Multiple regression analysis was used to test the effect of the seven service quality dimensions on customer satisfaction. Assumptions tests of regression analysis such as large sample size and multicollinearity were tested and presented as follows.

Different authors tend to give different guidelines concerning the number of samples required for multiple regressions. Stevens (1996), recommended that for social science research, about 15 subjects per independent variable are required for a reliable result. That means, for seven independent variables used in this study, the minimum required sample size should be 105 (15 x 7). Tabachnick and Fidell (2001), again gave another alternative formula for calculating sample size required, taking into account the number of independent variables to be used:  $N > 50 + 8m$  (where  $m$  = number of independent variables). Applying this formula and using seven independent variables, the number of required samples should be a minimum of 106 (50 + 8x7). Nunnally (1978), contends that a ratio of at least five cases for each independent variable is

necessary for any type of multiple regression technique. Hence, the minimum sample size using the seven independent variables is 35. The 627 responses used in this study are well above the minimum required under the three formulas and satisfies sample size requirement for this specific study.

Another assumption is absence of multicollinearity which refers to the relationship among the independent variables. Since regressions don't like multicollinearity, checking this assumption is important before starting the analysis (Pallent, 2005). In order to check existence of multicollinearity problem, correlation coefficients among the variables were calculated and presented in a matrix as shown in table 4.4.

**Table 4.4: Correlation matrix among the seven service quality dimensions**

|                | Tangibilit<br>y | Reliabilit<br>y | Responsiveness | Assurance | Empath<br>y | Security | Stability |
|----------------|-----------------|-----------------|----------------|-----------|-------------|----------|-----------|
| Tangibility    | 1               |                 |                |           |             |          |           |
| Reliability    | .677**          | 1               |                |           |             |          |           |
| Responsiveness | .687**          | .836**          | 1              |           |             |          |           |
| Assurance      | .665**          | .757**          | .785**         | 1         |             |          |           |
| Empathy        | .663**          | .761**          | .791**         | .839**    | 1           |          |           |
| Security       | .637**          | .719**          | .738**         | .725**    | .768**      | 1        | *         |
| Stability      | .637**          | .696**          | .711**         | .672**    | .700**      | .774**   | 1         |

Source: SPSS Computations

Per Pallent (2005), multicollinearity is suspected when the independent variables are highly correlated ( $r = 0.9$  and above). As it is shown in the correlation matrix presented in table 4.4, all the correlation coefficients among the variables are less than 0.9 which implies multicollinearity is not a problem.

Other regression assumptions include: Test of Normality, Linearity, Homoscedasticity and Independence of Residuals. One of the ways that these assumptions can be checked is by inspecting the residuals normal distribution curve, scatterplot and the Normal Probability Plot of the regression standardized residuals that are presented in figures below.

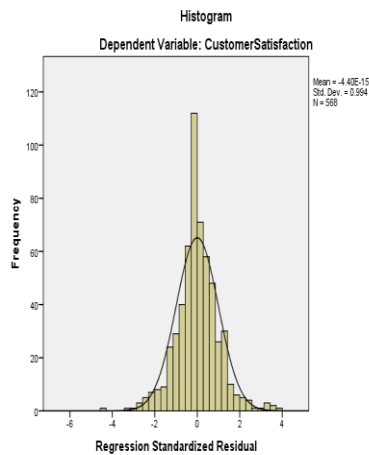


Figure 1: Normal Curve

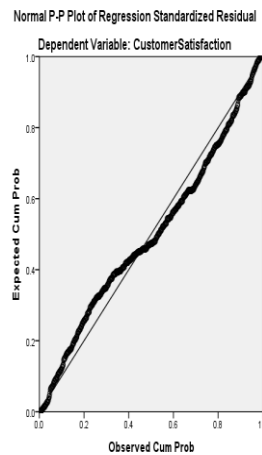


Figure 2: P-P Plot

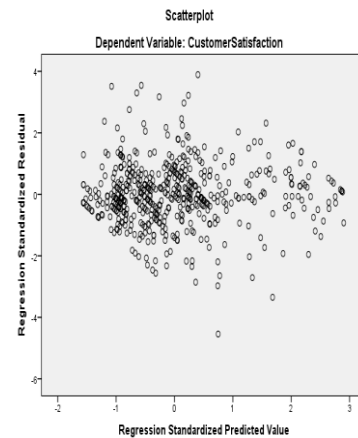


Figure 3: Scatter Plot

In the normal distribution curve in figure 1, the curve is bell shaped which shows normality assumption is not violated. In addition, in the P-P Plot, one can see that most points lie in a reasonably straight diagonal line from bottom left to top right. This would suggest no major deviations from linearity. In the Scatter plot of the standardized residuals, we can see that the residuals have roughly rectangular distribution, with most of the scores concentrated in the center (along the 0 point). What we don't want to see is a clear or systematic pattern to the residuals (e.g. curvilinear, or higher on one side than the other). Deviations from a centralized rectangle suggest some violation of the assumptions and further diagnostic test are required in such a case. After checking the relevant assumptions, regression analysis was conducted and the result is presented as follows. The following multiple linear regression result shows the effect of the seven service quality variables on customer satisfaction.

**Table 4.5: Model Summary**

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|-------|-------------------|----------|-------------------|----------------------------|---------------|
| 1     | .881 <sup>a</sup> | .776     | .774              | .46664                     | 1.955         |

Source, SPSS computation

Table 4.5 reveals that the dependent variable “Customer satisfaction” and the seven independent variables including : “Tangibility, Reliability, Empathy, Responsiveness, Assurance, Security, and Stability” were significantly correlated as a whole with the correlation coefficient  $R = .881$ . Also it illustrates, the model has the coefficient of determination  $R^2 = .776$ , which indicates that 77.6% of the variation in customer satisfaction for the sample of 627 respondents can be explained by the changes in the seven service quality dimension variables all together while 22.4% remains unexplained.

**Table 4.6: ANOVA Table**

| Model |            | Sum of Squares | Df  | Mean Square | F       | Sig.              |
|-------|------------|----------------|-----|-------------|---------|-------------------|
| 1     | Regression | 423.391        | 7   | 60.484      | 277.768 | .000 <sup>b</sup> |
|       | Residual   | 121.941        | 560 | .218        |         |                   |
|       | Total      | 545.332        | 567 |             |         |                   |

Source, SPSS computation

In addition, table 4.6, indicates the summary of Analysis of Variance and F-statistics, which reveals the value of  $F = 277.768$  is significant at  $P < 0.01$  level of significance. The value of F is large enough to conclude that the set of independent variables as a whole are contributing to the variance of customer satisfaction. The next step in the interpretation of regression result is to estimate contribution of each independent variable.

**Table 4.7: Coefficients in the Regression Result**

| Model |                | Unstandardized Coefficients |            | Standardized Coefficients | t      | Sig. |
|-------|----------------|-----------------------------|------------|---------------------------|--------|------|
|       |                | B                           | Std. Error | Beta                      |        |      |
| 1     | (Constant)     | .171                        | .059       |                           | 2.887  | .004 |
|       | Tangibility    | .083                        | .030       | .082                      | 2.749  | .006 |
|       | Reliability    | .175                        | .037       | .187                      | 4.717  | .000 |
|       | Responsiveness | .020                        | .039       | .022                      | .519   | .604 |
|       | Assurance      | -.056                       | .039       | -.058                     | -1.452 | .147 |
|       | Empathy        | .133                        | .040       | .140                      | 3.309  | .001 |
|       | Security       | .225                        | .038       | .225                      | 5.988  | .000 |
|       | Stability      | .376                        | .033       | .391                      | 11.359 | .000 |

Source, SPSS computation

Table 4.7, indicates that the five service quality dimension including tangibility, reliability, empathy, security and stability significantly determine customer satisfaction at  $P < 0.05$ . Responsiveness and assurance were not found to be significantly affecting customer satisfaction.

The coefficients of tangibility indicate that a one percent increase in tangibility measure leads to 0.083 Percent increase in customer satisfaction. The coefficient of reliability indicates that a one percent increase in reliability measure leads to 0.175 percent increase in customer satisfaction. The coefficient for empathy measure indicates one percent increase in empathy will lead to .133 percent increase in customer satisfaction. The coefficient for security indicates that one percent increase in security leads to 0.225% increase in customer satisfaction. And finally, the coefficient of stability indicates, 1percent increase in stability leads to .376 present increases in customer satisfaction, while other things remain constant.

### 4.3 Discussions

Despite the effort made to enhance customer service management, the survey result in this study showed that the service quality in terms of seven dimensions including tangibility, reliability, responsiveness, assurance, empathy, security and stability are still very low. Customers are still complaining about the prevailing poor customer management at EEU specifically, Jimma

district. This implies there is much to be done by the utility company in order to further enhance its service quality provision.

Electric services are exclusive to EEU as the organization is a monopolistic provider of electric energy in the country. Of course, EEU has prepared citizen chart and striving to enhance quality of services provided to its customers. Specific standards were prepared to each and every services provided by the organization. However, since it is the sole electric power service provider throughout the country in general and Jimma district in particular, customers don't have an alternative source of consumption. This in turn limits the options of the public not to source their supply in their convenient time and place from another supplier. This is, due to the fact that EEU is the only supplier of power in the country. Hence, this prohibits competition and results in inefficiencies in rendering quality services to the public..

According to Israel (2015), it is attested that the service quality plays a decisive factor in customer satisfaction in service rendering industries as a whole. The conclusion from this causal relationship is that it is possible to enhance customer's satisfaction by working on this service quality dimensions. Also Satapathey S. (2014) indicates that electricity service has a direct relationship with the dimensions of reliability, tangibility, empathy responsiveness, assurance, security and stability. In additions, except for the dimensions of assurance and responsiveness, the finding is consistent with Mekonnen (2016) , which reveals that there is strong correlation between assurance and customer satisfaction. Also, there is moderate correlation in between service quality dimensions (such as: tangibility, responsiveness, reliability and empathy) with that of customer satisfaction.

## **5. Conclusion and Recommendation**

SERVQUAL model was used to evaluate the service quality of EEU, Jimma district. Accordingly, Tangibility, Reliability, Empathy, Security and stability measures were found to significantly determine customer satisfaction but Responsiveness and Assurance were not found to be significantly affecting customer satisfaction

Assessing service quality and better understanding on how various dimensions affect overall service quality would enable EEU to efficiently design the service delivery process. By identifying the strengths and weaknesses pertaining to the dimensions of service quality, EEU should better allocate resources to provide better service and ultimately bring better satisfaction to its customers. Moreover, since customers' expectations change over time, it is necessary to contact customers regularly and assess their service experiences. With the knowledge of the service quality dimensions, EEU should judge how well employees performed on each dimension and decision makers could identify the weakness in order to make improvements

EEU should start to develop strong customer relationships by creating personal relationships, customer intimacy, integrated information system, and continuous relationship that will encourage long-term devotion, prompt service so as to enhance customer

satisfaction. In short, make the system fully customer -centric approach; one in which the customer becomes the focus of the entire business.

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