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The Effects of Service Quality on Customer Satisfaction: A Case Study of AWCC in Balkhab District of Sar-E-Pol Province

Abdul Qayum Shafaq¹, Hameedullah Shuaa²

¹ Economic faculty, Samangan University, Afghanistan. Email: qayum.shafaq@gmail.com
² Economic faculty, Samangan University, Afghanistan. Email: hamidullahshuaa@gmail.com

Abstract
The aim of this study was to examine effects of service quality dimensions on customer satisfaction using SERVQUAL model in Afghan wireless communication company of Balkhab district of Sar-E-Pol province. For this propose 170 questionnaires were used and collect data, in the literature review, generally service quality and its impact on customer satisfaction in developing countries have been greatly examined. In this study service quality dimensions such as tangibility, reliability, responsiveness, assurance and empathy have been taken as independent variables and customer satisfaction as dependent variable. Firstly, in order to assess the internal consistency of the questionnaire Cronbach Alpha has been tested. In addition, in order to know the relationship between customer satisfaction and service quality dimensions Spearman correlation has been analyzed, the result shows that reliability 0.601, empathy 0.560, responsiveness 0.550, assurance 0.515, and tangibility 0.389 have positive relationship with customer satisfaction respectively, except tangibility relationship is in a moderate manner. According to regression analysis, tangibility, reliability and empathy can have significant and positive impact on customer satisfaction of Afghan wireless communication company of Balkhab district.

Keywords: Customer Satisfaction, Service Quality, SERVQUAL Model, Balkhab

Introduction
Customer satisfaction is essential for business life and sustainability. If the customers are satisfied with a service/product they will be inclined to repeat a purchase and/or try a line extension. Therefore, enhancing the level of customer satisfaction is vital for an organization’s success since satisfied customers may bring additional profits to firms, such as satisfied customers sharing positive recommendations by word of mouth (Nurysh, Naghavi, & Chan Yin, 2019).

Today many successful companies and organizations have embraced new marketing concepts and continually pursue new ways of acquiring and keeping customers. Focusing on customer needs and responding appropriately...
to their needs is the most essential task for institutions to achieve their goals. As the main concept in the profitability chain organization; leading organizations have found that even the most creative and unique products will not be requested if it does not meet the needs, wants, and expectations of customers. On average, companies lose about 10 to 30 percent of their customers annually. But often they don’t know which kinds of customers are losing, when, and for what reason. Most companies don’t focus on why they are losing customers, rather they emphasize new customer recruitment (Salarizada, 2015).

18 years ago there were no signs of infrastructure and telecommunications in Afghanistan; war, terror and horror were everywhere. By establishing telecommunication networks in 2002, Afghanistan witnessed unprecedented growth in this regard and the only reasons are the government’s appropriate interventions and organizations’ sound customer satisfaction. The telecommunication industry in Afghanistan has developed in a competitive manner and all telecom companies jostle for the attention of subscribers.

The single most important issue influencing organizational survival is customer satisfaction. It has the biggest impact on retaining customers and customer service quality as a customer satisfaction factor (Ako-Nai, 2011). Recently, the Balkhab district of Sar-e-Pol province has witnessed the Afghan Wireless Communication Company (AWCC) services and the majority of the districts’ people use these services. AWCC and SALAM are the only communication companies that are active in this district, and so far no research and studies have been conducted about the service quality and customer satisfaction of the AWCC network in the targeted area.

The main goal of this study is to determine the factors influencing AWCC customer satisfaction in the Balkhab district. The research aims to identify the service quality dimensions and the level of their influences over customer satisfaction.

(Arokiasamy & Abdullah, 2013) have studied service quality and customer satisfaction in the cellular telecommunication service provider in Malaysia. The researchers have found that all 5 service quality dimensions positively influenced customer satisfaction in terms of loyalty and attitudes. In addition, t-test results showed that there was a significant gap between perceived satisfaction and expectation (P-E) on all of the service quality dimensions.

(Rahhal, 2015) studied The Effects of Service Quality Dimensions on Customer Satisfaction: An Empirical Investigation in Syrian Mobile Telecommunication Services. The finding showed that, the direct significant impact of service quality on customer satisfaction. This effect had appeared through three dimensions (network quality, responsiveness, reliability) and there was no direct effect of other dimensions of customer satisfaction.

(Amiri Aghdaie & Faghani, 2012) researched Mobile Banking Service Quality and Customer Satisfaction (Application of SERVQUAL Model). They found that the four variables: tangible (0.204), reliability (0.342), responsiveness (0.282), and empathy (0.345) would correlate with satisfaction significantly. However, the assurance factor would have no relationship with CS. The ANOVA test showed that there was a significant correlation between mobile banking service and customer satisfaction.

(Alarussi & Alhkami, 2016) studied Service Quality Dimensions and Customer Satisfaction in Telecommunication Companies. The results showed that the majority of the customers satisfied with services provided by telecommunication companies and all the service quality dimensions are positively and significantly associated with customers’ satisfaction.

In a study of mobile telecommunication in Pakistan, Asif Khan 2010, discovered that adopting SERVQUAL with additional dimensions is a valid instrument to measure service quality in mobile phone services. He found that the dimensions like tangible, assurance, responsiveness, empathy, convenience, and network quality have a positive and significant relationship with mobile phone users’ perceived service quality, network quality, and convenience. He also found convenience and network quality to be the relatively most important dimensions affecting users’ perception. Surprisingly, reliability has no significant effect on customers’ perception of quality.
(Arslan, Ifikhar, & Zaman, 2014) has researched the effects of service quality dimensions on customer satisfaction: a comparative analysis of the Pakistan telecom sector. The findings of the study revealed that percentages of customer satisfaction change with the service quality dimensions of reliability and empathy. Overall, it can be established that there is a significant relationship between customer satisfaction and service quality dimensions of empathy and reliability.

**Methodology**

Figure 1: provides a graphical summary of the conceptual framework that this study examines:

This study is based on Parasuraman et al., (1990). data was collected through a field survey with a standardized questionnaire of five dimensions of service quality (tangibility, assurance, reliability, responsiveness and empathy) with a demographic part. A sample of 170 AWCC users were targeted in this research. SERVQUAL model was conducted for analyzing five dimensions of customer satisfaction so, Cronbach Alpha was computed in order to test the reliability of the instrument. Spearman correlation test employed in order to investigate the relationships between variables. And finally multiple linear regression was conducted in order to find the impacts of service quality dimensions on customer satisfaction.

In 1951 Lee Cronbach developed Cronbach Alpha to assess the internal consistency of a questionnaire (or survey) that is made up of multiple Likert-type scales and items. It is expressed as a number between 0 and 1. Internal consistency describes the extent to which all the items in a test measure the same concept or construct and hence it is connected to the inter-relatedness of the items within the test. Internal consistency should be determined before a test can be employed for research or examination purposes to ensure validity (Tavakol & Dennick, 2011).

Table 1: shows Cronbach’s Alpha internal consistency
Source: (Tavakol & Dennick, 2011)

| Cronbach’s alpha | Internal consistency |
|------------------|----------------------|
| α ≥ 0.9           | Excellent            |
| α ≥ 0.8           | Good                 |
| α ≥ 0.7           | Acceptable           |
| α ≥ 0.6           | Questionable         |
| α ≥ 0.5           | Unacceptable         |

Table 2: shows Cronbach’s Alpha result.

| Scale             | Number of items | Cronbach alpha |
|-------------------|-----------------|----------------|
| Tangibility       | 3               | 0.665          |
| Reliability       | 5               | 0.720          |
| Responsiveness    | 5               | 0.767          |

Electronic copy available at: https://ssrn.com/abstract=3672285
According to the results, the alpha coefficients are 0.902 for customer satisfaction, 0.665 for tangible, 0.720 for reliability, 0.767 for responsiveness, 0.758 for assurance, and 0.715 for empathy. These scores are acceptable which indicates that there is reliability in the item of variables.

Results

Table 3: shows Descriptive Statistics

| Gender     | N   | %    |
|------------|-----|------|
| Male       | 100 | 58.8 |
| Female     | 70  | 41.2 |
| Total      | 170 | 100  |
| Age        |     |      |
| 18-28      | 92  | 54.1 |
| 29-39      | 37  | 21.8 |
| 40-50      | 21  | 12.4 |
| 51-61      | 20  | 11.8 |
| Education level | | |
| Illiterate | 35  | 20.6 |
| Religious studies | 25 | 14.7 |
| High school | 51 | 30  |
| 14 pas     | 31  | 18.2 |
| Bachelor degree | 28 | 16.5 |

Source: (research findings)

Demographic analysis shows that out of 170 valid observations 58.8% were male and 41.2% were female. Interims of age, 54.1% of observations were between 18-28, 21.8% were between 29-39, 12.4% were between 40-50 and the remaining of the respondents were between 51-61 years old. Regarding education level, 20.6% of the respondents were illiterate, 14.7% have studied religious studies, 30% of the respondents were high school graduate, 18.2% had 14 years schooling and the remaining were bachelor degree.

Table 4: spearman correlation coefficient between customer satisfaction and service quality dimensions

|                      | Tangibility | Reliability | Responsiveness | Assurance | Empathy | Customer satisfaction |
|----------------------|-------------|-------------|----------------|-----------|---------|-----------------------|
| Tangibility          | 1.000       |             |                |           |         |                       |
| Reliability          | .376**      | 1.000       |                |           |         |                       |
| Responsiveness       | .216**      | .644**      | 1.000          |           |         |                       |
| Assurance            | .335**      | .612**      | .588**         | 1.000     |         |                       |
| Empathy              | .213**      | .590**      | .692**         | .659**    | 1.000   |                       |
| Customer satisfaction| .389**      | .601**      | .550**         | .515**    | .560**  | 1.000                 |

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

Source: (research findings)
Correlation Coefficient can take any value between $-1 \leq r \leq +1$ (Güriş, Çağlayan, & Güriş, 2013)

If $r = 0$ then there is no relationship between the variables
If $r > 0$ then there is direct relationship between the variables
If $r < 0$ then there is indirect or reverse relationship between the variables

In order to check the relationship between customer satisfaction and service quality dimension spearman correlation was used. By observing the table there is a positive and high significant relationship between customer satisfaction with reliability, empathy, responsiveness and assurance with volume of ($r =0.601, 0.560, 0.550$ and $0.515$). only tangibility has moderate degree of positive correlation with customer satisfaction. In other words, if reliability, empathy, responsiveness and assurance increase; customer satisfaction are affected positively in AWCC of Balkhab district, it can be stated that as tangibility rises, customer satisfaction will moderately have affected.

Regression model are used to predict a variable from one or more than one variables (Dash & Patra, 2014). And specifically the simple (or bivariate) linear regression model is designed to discuss the relationship between a pair of variables that appear in a data set. The multiple LRM is designed to study the relationship between one variable and several of other variables (Campbell & Campbell, 2008).

The regression model is specified as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + e$$

Where,

$Y =$ customer satisfaction (dependent variable).

$X_1...5 =$ independent variables

$\beta_0 =$ The intercept

$\beta_1…\beta_5 =$ estimation Parameters

$e =$ the error term

Table 5: Model Summary (Multiple Regression)

| Model | R       | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|---------|----------|-------------------|---------------------------|
| 1     | .696\(^a\) | .485     | .469              | 3.117                     |

\(^a\) Predictors: (Constant), Empathy, Tangibility, Reliability, Assurance, Responsiveness

Source: (research findings)

The result shows that R square is 0.485 this means that 48.5% of the total variation in customer satisfaction is explained by the variation in the five independent variables (tangibility, reliability, responsiveness, assurance and empathy), 51.5% remains unexplained.

Table 6: ANOVA\(^a\) (Multiple Regression)

| Model     | Sum of Squares | df | Mean Square | F       | Sig.   |
|-----------|----------------|----|-------------|---------|--------|
| 1         | Regression     | 5  | 299.781     | 30.849  | .000\(^b\) |
|           | Residual       | 164| 9.718       |         |        |
|           | Total          | 169|             |         |        |

\(^a\) Dependent Variable: customer_satisfaction

\(^b\) Predictors: (Constant), Empathy, Tangibility, Reliability, Assurance, Responsiveness

Source: (research findings)

According to result a large value of F (30.84) with p-value of (0.00) indicate that most of variation in customer satisfaction is explained by the regression equation and that the model is valid.
In table 7 the result shows that tangibility (beta = 17.6, t = 2.833, p = 0.005), reliability (beta = 25.5, t = 3.064, p = 0.003) and empathy (beta = 29.9, t = 3.335, p = 0.001) have high positive impact on customer satisfaction. But responsiveness (beta = 10, t = 1.14, p = 0.256) and assurance (beta = 6 t = 0.739 p = 0.461) have no impact on customer satisfaction.

Conclusion

This study examined effects of service quality dimensions on customer satisfaction of Afghan Wireless communication company in Balkhab district of Sar-e-Pol province by using SERVQUAL model. We used 170 sample with the contribution of 100 males and 70 females. by testing Cronbach Alpha, it’s found that there is reliability in the item of variables. According to correlation test it is observed that there is significant and positive relationship between service quality dimensions and customer satisfaction in AWCC of Balkhab district, it means that if reliability, empathy, responsiveness, assurance and tangibility increase; customer satisfaction affected positively. Regarding the impacts of service quality dimensions on customer satisfaction and regression analysis it shows that tangibility, reliability and empathy have high positive and significant impact on customer satisfaction, in other words, if tangibility change 100% in AWCC of Balkhab district it leads to 17.6% change in customer satisfaction level, correspondingly, 100% change in reliability aspects will lead 25.5% change in customer satisfaction level, and finally 100% changes in empathy aspects leads to 29.2% changes in customer satisfaction level.

References

Ako-Nai, E. (2011). EFFECT OF CUSTOMER SERVICE ON CUSTOMER SATISFACTION, A CASE STUDY OF FIDELITY BANK, ADUM, KUMASI. Institute Of Distance Learning, Kwame Nkrumah University Of Science and Technology.

Alarussi, A., & Alhkami, A. (2016). Service Quality Dimensions and Customer Satisfaction in Telecommunication Companies. Asian Journal of Business and Management, 117-126.

Amiri Aghdaie, S., & Faghan, F. (2012). Mobile Banking Service Quality and Customer Satisfaction (Application of SERVQUAL Model). International Journal of Management and Business Research, 351-361.

Arokiasamy, A., & Abdullah, A. (2013). SERVICE QUALITY AND CUSTOMER SATISFACTION IN THE CELLULAR TELECOMMUNICATION SERVICE PROVIDER IN MALAYSIA. Journal of Arts, Science & Commerce, 1-9.

Arokiasamy, A., & Abdullah, A. (2013). SERVICE QUALITY AND CUSTOMER SATISFACTION IN THE CELLULAR TELECOMMUNICATION SERVICE PROVIDER IN MALAYSIA. Journal of Arts, Science & Commerce, 1-9.
Arslan, M., Ifikhar, M., & Zaman, R. (2014). Effect of Service Quality Dimensions on Customer Satisfaction: A Comparative Analysis of Pakistan Telecom Sector. *Revista de Management Comparat Internațional*, 440-460.

Campbell, D., & Campbell, S. (2008). Introduction to Regression and Data Analysis. *StatLab Workshop Series 2008*.

Dash, A., & Patra, S. K. (2014). Service quality and customer satisfaction: an empirical investigation on public sectors banks in Odisha. *Journal of research on marketing*, 113-118.

Güriş, S., Çağlayan, E., & Güriş, B. (2013). *EViews ile Temel Ekonometri*. Istanbul: Der Yayınları.

Kotler, P., & Armstrong, G. (2010). *Principles of Marketing*. London: Pearson.

Nurysh, N., Naghavi, N., & Chan Yin, B. (2019). Study on Factors Affecting Customer Satisfaction in Mobile Telecommunication Industry in Malaysia. *International Journal of Recent Technology and Engineering (IJRTE)*, 299-306.

Rahhal, W. (2015). The Effects of Service Quality Dimensions on Customer Satisfaction: An Empirical Investigation in Syrian Mobile Telecommunication Services. *International Journal of Business and Management Invention*, 81-89.

Salarizada, E. (2015). Investigating the factors affecting customer satisfaction in national bank of Kerman, Iran. *Iran Ganj*.

Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach’s alpha. *International Journal of Medical Education*, 53-55.