Effects of Service Quality on Customer Satisfaction in Insurance Company (A Case of Selected Insurance Company Providing Life Insurance, Ethiopia)

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Abstract: This study looks at how three insurance companies that offer life insurance rate their customers' satisfaction with their services. This study also assesses the connection between customer happiness and service quality, including its dimensions. Like many other financial services sectors, the life insurance industry is confronted by a market that is changing quickly, new technologies, uncertain economic conditions, fierce competition, and increasingly demanding clients. For the aim of the study, primary data were gathered using questionnaires with a five-point Likert scale that were built with consideration for all aspects of service quality, including functional dimensions, image, technical quality, and price. Data were collected from samples of 308 consumers using the convenience sampling technique, and STATA version 15 was utilized to analyze the data using descriptive and multiple linear regression statistics. The results of this study show that customer satisfaction is positively and significantly impacted by characteristics of service quality such as image, responsiveness, dependability, and technological quality. On the other hand, assurance and cost have a negative and significant effect on consumer satisfaction. Additionally, customer retention and satisfaction in the chosen insurance firms are related to overall service quality. When creating a firm's strategy, attributes like image, responsiveness, reliability, assurance, and technological excellence should be given priority because they allow a company to increase customer satisfaction.

Keywords: Customer Satisfaction, Service Quality, Service Quality Dimensions

1. Introduction

Like many other financial services sectors, the life insurance industry is confronted by a market that is changing quickly, new technologies, uncertain economic conditions, fierce competition, and increasingly demanding clients as indicated in studies [2, 6]. In addition, the changing climate has created a unique set of challenges. Life insurance firms view their clients as their most valuable resource, just like businesses in other industries do [18]. Service quality has emerged as one of the main reasons behind corporate sustainability and is essential for businesses' success [24, 25, 34, 35, 36]. Every interaction between a customer and a service provider is a crucial one in the world of services. The conventional way to define service quality is in terms of customer satisfaction. Customer retention results from customer pleasure [9, 20, 32]. It is a known fact that customers who are extremely satisfied are roughly six times more likely to be devoted, make repeat purchases, and/or promote a product than customers who are merely content.

Once more, it's claimed that happy consumers refer business to five other individuals, and that a 5% increase in loyalty can boost revenue by 25% to 85%. In contrast, the typical consumer eventually notifies eight to ten (10) other individuals about their issue [22].

Service quality has received a lot of attention from managers and academics since it has a big impact on cost savings and customer satisfaction [8, 15, 16, 28]. There have been numerous studies examining the link between service quality and customer satisfaction, presumably as a result of the idea that delivering better service quality is essential for winning over customers' contentment [12, 28]. Despite the fact that research that was initially conducted in the USA and England has substantially advanced our awareness of the
linkages between service quality & satisfaction, there isn't much work that tackles these topics in the context of Ethiopia [20, 38]. According to academics, there hasn't been much research on customer satisfaction and service quality in Ethiopian insurance, particularly life insurance, to inform stakeholders about the level of customer service provided by insurance businesses [36, 37]. Because there is so little empirical data on customer satisfaction and service quality in Ethiopian life insurance, this study is primarily guided by that fact. Additionally, technical quality, image, and pricing were not considered to be drivers of consumer satisfaction in the insurance tests that were carried out in Ethiopia; only functional quality was considered.

Additionally, a lot of researchers have attempted to investigate customer satisfaction with service quality in a variety of industry contexts [14, 22, 23, 28]; however, only a small number have connected it to the context of life insurance in developing economies. According to the research [1, 4, 5, 7, 22, 29], the aspects of service quality differ by nation, organization, and even culture.

As a result, research on other sectors and insurance-related goods does not adequately capture the context of life insurance in developing nations, particularly Ethiopia and the three chosen insurance companies.

Therefore, the primary issue that drives the researcher's interest is what aspects of service quality, specifically for the three insurance companies, have an impact on customer satisfaction. As a result, the following research questions are developed:

1) What aspects of an Ethiopian insurance company's life insurance services determine customer satisfaction?
2) Which aspects of service quality are most important in evaluating client satisfaction with the Ethiopian insurance company's life insurance service?
3) What associations exist between the customer satisfaction rating and the service quality dimension in the Ethiopian insurance company's life insurance service?

This study's main goal is to evaluate customer satisfaction and service quality for life insurance in an Ethiopian insurance business. In more detail, the research's goals are to evaluate the factors that influence customer satisfaction, measure the impact of service quality on customer satisfaction, analyze the link between service quality factors and customer satisfaction, and rank the aspects of service quality that have the greatest impact on customer satisfaction with Ethiopian Insurance Company's life insurance services. The following presumptions serve as the foundation for the hypotheses developed for this study:

1) H1: The Ethiopian Insurance Company's functional quality significantly affects overall satisfaction.
2) H1a: Customer satisfaction and assurance have a positive and significant link.
3) H1b: Customer satisfaction and reliability are positively and significantly correlated.
4) H1c: The association between tangibles and customer satisfaction is positive and significant.
5) H1d: Customer satisfaction and empathy are positively and significantly correlated.
6) H1e: Customer satisfaction and responsiveness are positively and significantly correlated.

2) H2: The technical quality of Ethiopia's Insurance Company will considerably improve overall satisfaction.
3) H3: The total satisfaction level in Ethiopia's Insurance Company will be greatly positively impacted by image quality.
4) In Ethiopia's Insurance Company, the price-quality dimension will have positive impact on overall satisfaction.

2. Method

The study examines customer satisfaction and service quality, focusing on three specific insurance providers of life insurance. The study's focus was narrowed to three insurance companies with headquarters in Addis Ababa that solely offered life insurance.

Additionally, this study did not attempt to evaluate service quality or customer satisfaction with regard to non-life.

Explanatory and descriptive research designs were used in the study. Cross-sectional research and survey techniques are used to gather opinions from a sample or population. A structured questionnaire is used as the research instrument since it is more unbiased.

All of Ethiopian Insurance S. C.'s Addis Ababa head office's life insurance customers comprised the study's target population, which totaled 3071 customers. Of those, 308 customers were chosen as the study's sample size using Yamane's formula [31]. The respondents were chosen using a convenient sampling technique, a non-probabilistic sampling method. For the purpose of completing this study, the researcher combined the use of quantitative and qualitative data types.

A systematic questionnaire was used to gather primary data. The survey questions were taken from other investigations [10, 12, 26]. Questions about overall customer satisfaction and an assessment of service quality dimensions were adapted to fit the insurance sector setting of an Ethiopian insurance business. Respondent identity information, total customer satisfaction with service quality, and perception of service quality are the four primary sections of the questionnaire. To enhance the clarity of the question items, a draft of the questionnaire was pre-tested. A suitable sampling approach was used to choose a sample of thirty (30) life insurance customers, who were then given the questionnaire to read and provide feedback on the relevance of the question items. The recommendation of the scholar [10] as cited in research [27, 39] was that a minimum of ten (10) members was sufficient for pre-testing served as the basis for this size. To improve the instrument, it was wise to run a pilot test. In order to reinforce its reliability, the questionnaire items conducted a pilot test to identify any problematic language and to enhance their clarity. The
secondary information gathered after a thorough literature research. Multiple linear regression and descriptive analysis were used to analyse the data.

3. Conceptual Framework

The study adopted the model from the research [19, 30]; this concept starts with the SERVQUAL assessment scale, which uses a five-dimensional structure to evaluate service quality (responsiveness, assurance, empathy, tangibles, and reliability).

The study also takes into account the SERVQUAL measuring scale's functional quality, technical quality, and the predicted influences of image and pricing on customer satisfaction [13, 32, 40].

![Figure 1. Conceptual Framework.](image)

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Dependent Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>▶ Functional quality</td>
<td>Customer Satisfaction</td>
</tr>
<tr>
<td>✓ Tangibility</td>
<td></td>
</tr>
<tr>
<td>✓ Responsiveness</td>
<td></td>
</tr>
<tr>
<td>✓ Empathy</td>
<td></td>
</tr>
<tr>
<td>✓ Reliable</td>
<td></td>
</tr>
<tr>
<td>✓ Assurance</td>
<td></td>
</tr>
<tr>
<td>▶ Technical quality</td>
<td></td>
</tr>
<tr>
<td>▶ Reputation/Image quality</td>
<td></td>
</tr>
<tr>
<td>▶ Price</td>
<td></td>
</tr>
</tbody>
</table>

Source: Developed by researcher, 2022

4. Findings and Discussion

This study's main goal was to assess how satisfied customers were with the life insurance services provided by an insurance firm in Ethiopia. In addition, it is necessary to evaluate and rate the factors that influence consumer satisfaction with the life insurance service provided by an insurance firm in Ethiopia.

Table 1. Descriptive Statistics for Dimensions of Service Quality.

<table>
<thead>
<tr>
<th></th>
<th>Sample (n)</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tangibles</td>
<td>308</td>
<td>3.94</td>
<td>0.135</td>
</tr>
<tr>
<td>Reliability</td>
<td>308</td>
<td>3.96</td>
<td>0.095</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>308</td>
<td>3.93</td>
<td>0.099</td>
</tr>
<tr>
<td>Empathy</td>
<td>308</td>
<td>3.96</td>
<td>0.071</td>
</tr>
<tr>
<td>Assurance</td>
<td>308</td>
<td>3.98</td>
<td>0.031</td>
</tr>
<tr>
<td>Price</td>
<td>308</td>
<td>4.01</td>
<td>0.002</td>
</tr>
<tr>
<td>Technical quality</td>
<td>308</td>
<td>3.97</td>
<td>0.040</td>
</tr>
<tr>
<td>Image</td>
<td>308</td>
<td>4.02</td>
<td>0.057</td>
</tr>
</tbody>
</table>

Source: computed by Researcher

Table 1’s findings reveal that respondents are happy with all aspects of service quality (tangibles, reliability, image, empathy, assurance, price, technological quality, and responsiveness), as they outperformed expectations in every area. The mean score for the dimension of "image" is the highest, followed by the dimensions of "price," "assurance technical quality," "empathy," "reliability," "tangibles," and "responsiveness," in that order. The average of the overall service quality dimensions, or the overall mean score of service quality (table 2), shows that consumers almost always receive the best services from their insurer, exceeding their expectations in terms of meeting their diverse demands.

Table 2. Mean and standard deviation (SD) scores for the dependent and independent variables.

<table>
<thead>
<tr>
<th></th>
<th>Sample (n)</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall service quality</td>
<td>308</td>
<td>3.97</td>
<td>0.032</td>
</tr>
<tr>
<td>Customer satisfaction</td>
<td>308</td>
<td>4.01</td>
<td>0.778</td>
</tr>
</tbody>
</table>

Source: computed by Researcher

The value of chronbach alpha (Table 3) result was used to confirm the validity of each questionnaire item's reliability and consistency. Therefore, the information gathered from respondents is accurate and consistent with the scale.

Table 3. Analysis of Reliability.

<table>
<thead>
<tr>
<th>Multidimensional Items</th>
<th>Number of Items</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tangibles</td>
<td>4</td>
<td>.975</td>
</tr>
<tr>
<td>Reliability</td>
<td>5</td>
<td>.983</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>5</td>
<td>.986</td>
</tr>
<tr>
<td>Empathy</td>
<td>7</td>
<td>.992</td>
</tr>
<tr>
<td>Assurance</td>
<td>4</td>
<td>.992</td>
</tr>
<tr>
<td>Technical Quality</td>
<td>6</td>
<td>.976</td>
</tr>
<tr>
<td>Price</td>
<td>2</td>
<td>.985</td>
</tr>
<tr>
<td>Image</td>
<td>4</td>
<td>.991</td>
</tr>
<tr>
<td>All Service Quality Items</td>
<td>36</td>
<td>.998</td>
</tr>
<tr>
<td>Customer Satisfaction</td>
<td>4</td>
<td>.961</td>
</tr>
<tr>
<td>All items</td>
<td>40</td>
<td>.998</td>
</tr>
</tbody>
</table>

Source: computed by Researcher
The Bartlett's test of sphericity and the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (Table 4) based on the KMO test, it may be concluded that the sample is adequate to run factor analysis and that the research data are suitable for structure detection.

<table>
<thead>
<tr>
<th>Kaiser-Meyer-Olkin Measure of Sampling Adequacy</th>
<th>.966</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bartlett's Test of Sphericity</td>
<td></td>
</tr>
<tr>
<td>Approx. Chi-Square</td>
<td>45096.963</td>
</tr>
<tr>
<td>Df</td>
<td>780</td>
</tr>
<tr>
<td>Sig.</td>
<td>.000</td>
</tr>
</tbody>
</table>

Source: computed by Researcher

Regression Analysis: Several Regression Assumptions

Before interpreting the results of the regression analysis, it is important to ensure that the assumptions of the multiple regressions are met. Therefore, before attempting to address the research problems, the researcher examined the following pre regression assumptions, including linearity, homoscedasticity, and normality on the basis of residuals. The assumption results are shown on the accompanying figure. In order to check whether the assumptions of random errors and homoscedasticity have been met, we first plot *ZRESID (Y-axis) versus *ZPRED (X-axis) on SPSS [11]. An analysis using multiple linear regression (MLR) was used to look into how customer satisfaction is impacted by service quality. According to research of the scholars [16, 17], the coefficient of determination-R2 is a measurement of how much of the variance of a dependent variable with respect to its mean is explained by independent or predictor variables. Greater explanatory power of the regression equation is represented by a higher R2 value.

![Figure 2. Analysis of Standardized Residuals.](image)

![Figure 3. Normal Probability Plot: Standardized Residuals.](image)
According to the model summary for multiple regression, there is a positive, strong association between the independent variables (service quality dimension) and customer satisfaction, with a correlation coefficient (R) of 0.976, which is significant at the 0.05 level. Also, it indicates customer satisfaction as a function of responsiveness, tangibility, assurance, reliability, empathy, technical quality, price & image. The dependent variable was explained by the independent factors by 0.952, according to the R square value. According to this finding, 95.2% of the variation in customer satisfaction may be attributed to service quality. Therefore, it can be argued that service quality factors account for 95.2% of any potential change in the degree of customer satisfaction at Ethiopia Life Insurance Company.

**Table 5. Summary of the Model (Independent variables as predictors to customer satisfaction).**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
<th>F Change</th>
<th>df1</th>
<th>df2</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.976</td>
<td>.952</td>
<td>.951</td>
<td>.17214</td>
<td>.952</td>
<td>747.465</td>
<td>8</td>
<td>299</td>
<td>.000</td>
</tr>
</tbody>
</table>

Predictors: (Constant), Image, Tangibles, Assurance, Price, Empathy, Technical quality, Reliability, Responsiveness

b. Dependent Variable: customer satisfaction

Source: computed by Researcher

ANOVA test shows the acceptance of customer satisfaction on independent variables are statistically significant, while the F-value is statistically significant, (F = 747.465), and the P-value is smaller than 0.05 (P=0) which means that at least one of the eight predictor variables can be used to model customer satisfaction.

**Table 6. An ANOVA (Independent variables as predictors to Customer Satisfaction).**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Regression</td>
<td>187.199</td>
<td>8</td>
<td>22.150</td>
<td>747.465</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>8.860</td>
<td>299</td>
<td>.030</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>186.059</td>
<td>307</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Customer satisfaction

b. Predictors: (Constant), Image, Tangibles, Assurance, Price, Empathy, Technical quality, Reliability, Responsiveness

Source: computed by Researcher

The coefficients of the independent variables (image, responsiveness, price and technical quality) have a positive...
sign and $P<0.05$; this result shows that service quality variables such as image $B=0.494$, $P=0.000$, responsiveness $B=0.902$, $P=0.000$, price $B=0.209$, $P=0.010$ and technical quality $B=0.372$, $P=0.004$ have a positive and significant effect on customer satisfaction.

The biggest Standardized coefficient (Beta) is matched by responsiveness which is equal to (1.075) with largest t-statistic (6.883), and significant p-value of (0.00), it illustrates that one standard deviation increase in responsiveness is followed by 0.902 unstandardized coefficient B increases in customer satisfaction. It can be explained for the other three independent variables in the same way. Thus, we accept hypotheses of H2, H3, H4, and H1e.

The coefficient of assurance has negative sign and $P<0.05$; this result shows that assurance, $B=-0.399$, $P=0.001$ has a negative significant effect on customer satisfaction. Thus, we reject hypothesis (H1a) which proposed as Assurance has a positive and significant relationship with customer satisfaction.

### Table 7. Coefficients (Independent variables as predictors to customer satisfaction) Coefficients *

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.811</td>
<td>.053</td>
<td>15.407</td>
<td>.000</td>
</tr>
<tr>
<td>Tangibles</td>
<td>.027</td>
<td>.024</td>
<td>.032</td>
<td>1.133</td>
</tr>
<tr>
<td>Reliability</td>
<td>.185</td>
<td>.133</td>
<td>.212</td>
<td>1.386</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>.902</td>
<td>.131</td>
<td>1.075</td>
<td>6.883</td>
</tr>
<tr>
<td>Empathy</td>
<td>.021</td>
<td>.138</td>
<td>.025</td>
<td>.156</td>
</tr>
<tr>
<td>Assurance</td>
<td>-.399</td>
<td>.114</td>
<td>-.434</td>
<td>-3.496</td>
</tr>
<tr>
<td>Price</td>
<td>.209</td>
<td>.150</td>
<td>.226</td>
<td>2.609</td>
</tr>
<tr>
<td>Technical quality</td>
<td>.372</td>
<td>.128</td>
<td>.433</td>
<td>2.898</td>
</tr>
<tr>
<td>Image</td>
<td>.494</td>
<td>.173</td>
<td>.605</td>
<td>6.740</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Customer satisfaction
Source: computed by Researcher

Results generally show that tangibility, reliability, and empathy did not significantly affect customer satisfaction. This suggests that tangibility, reliability, and empathy changes did not affect the research area's consumer satisfaction levels.

5. Conclusions

The following conclusions are drawn based on the results of descriptive and multiple regression analysis.

1) According to the mean score value, respondents are most satisfied with the image, which is followed by the following factors: pricing, assurance, technical quality, empathy, reliability, tangibles, and responsiveness. Customers almost got the best quality services from their insurer to meet their numerous demands better than they expected, according to the mean service quality score, which is an average of all service quality characteristics. As a result of the relatively low standard deviation of service quality replies and improved overall reliability of the score, there is less response variability.

2) The value of the chronbach alpha result was proven the consistency & reliability for each questionnaire item. Therefore, the information gathered from respondents is reliable and in line with the scale.

3) According to the results of the ANOVA test, at least one of the eight predictor factors can be utilized to model customer satisfaction. This suggests that the acceptance of customer satisfaction on independent variables is statistically significant.

4) The results demonstrate a positive and significant relationship between customer satisfaction and aspects of service quality, including image, responsiveness, price, and technical quality. However, customer satisfaction is negatively and significantly impacted by assurance. As a result, we disprove hypothesis (H1a), which claimed that customer satisfaction and assurance have a positive and significant link.

5) The results also show that tangibility, reliability, and empathy did not significantly affect customer satisfaction. This suggests that changing tangibility, reliability, and empathy did not significantly change customer satisfaction in the research area.

6. Limitations of the Study

Future research should be undertaken due to the limitations of this study. At the Ethiopian insurance company, it was restricted to customers of insurers that solely offer life insurance. Additionally, it was restricted to the level of the company headquarters. Therefore, further research on non-life insurance services should be done in order to produce conclusions that can be more broadly generalized. Additionally, a longitudinal research strategy was not taken into account; instead, data collected at a particular point in time was explored. Because of this, it is highly challenging to identify the causes of the study's variables. Comparative analysis between insurers' branches or between life and non-life insurance must be conducted in empirical study.
References


