APPLICATION OF QUALITY FUNCTION DEPLOYMENT TO CUSTOMERS SATISFACTION IN NIGERIA INSURANCE COMPANY

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ABSTRACT

Customer satisfaction has become a major factor that determine the level of organizational sustainability in Nigeria business environment. The study applied quality function deployment models to customer satisfaction in Nigeria Insurance company. Survey research design was used and data were collected from 360 respondents in the selected insurance companies (Aiico and Lead Way insurance companies). Multiple Regression analysis was used to analyse the stated hypothesis. The findings showed that (R^2=0.665, $P< 0.000$). The result was statistically significant at 5% level indicating that QFD compliance is very keen factor to customer's satisfaction as it captured the voice of the customers' requirements. Also, Quality Function Deployment variables have positive impact on customer satisfaction in the selected insurance companies. The study recommended that, easy payment of claim structure, voice of customers' requirements should be integrated the more and reviewed from time to time by the management to improve the level of customer's patronage after satisfaction.

Keywords: Quality function Deployment, customer's satisfaction and Voice of customer requirements.

INTRODUCTION

Basically, the inception of Insurance in Nigeria can be traced to the arrival of British Trading firms. These firms had to manage the risks associated with their businesses. During this era, the insurance industry in Nigeria began to grow at a fast rate. But during the 1919's and 20s, it witnessed slow growth because of the impact of the Second World War. There is needs for financial institution and related business to provides the investors adequate need and satisfaction for adequate return in which quality function deployment has the capacity to build up.

Quality function deployment (QFD) is a design put in place or set of connected structure that transform customer necessities into design, production and manufacturing process that meet the needs of the customers. Babatunde el al, (2016). In general, this negative acceptability of insurance products has become a problem not only to the insurance industry, but has also economic development of the country. The problem has existed for a long time and has increased somewhat with the sophistication of the Nigerian society which has grown knowledgeably in recent years (Ibok, 2006). However, the increased importance of insurance as a provider of financial services and of investment funds in the capital market is especially pronounced in developed economies whereas insurance consumption in Nigeria is still very low. Little wonder what will be the future of this all-important industry if these problems continue unabated. On this basis, there is need to gain more understanding of the influence of the factors affecting customer preference for investing in insurance industry in Nigeria

The market demand for insurance product is gradually decreasing due to poor economic situation of the country. Omar (2007) identified poverty, low per capital income, lack of trust and confidence of insurance institution and lack of knowledge of insurance as being responsible for the poor patronages. Despite the role played by insurance industry to individuals, businesses and economic development of the nation, it was discovered that people have poor attitude towards ownership and patronage of insurance policies (Browne & Kim 1993). The management of this sector needs to be at alert to revive the

market with the strategy that can make customers to be more focused and satisfied with their products.

The large variation in insurance consumption across different economies of the world raises some important questions about what are the causes of this variation and thus, what factors have affected insurance consumption? Why is customer not satisfying with the activities and operations of insurance company? More so, empirical studies on insurance quality deployment functions and consumption of insurance products by customer on the other hand in Nigeria appears to be inadequate. Muhammed et al, (2012) investigated Quality function deployment in higher education institutes of Pakistan not in Nigeria. The paper aimed to assess he quality function deployment in higher education institutes of Pakistan. There are even questions of adequacy of such empirical data. Lack of available data and information invariably means lack of awareness and interest on the part of the consuming public. Also, its apparent role of quality function deployment seems relatively few people in Nigeria appear to be appreciating it. Some who buy insurance (especially motor vehicle insurance) do so because it is made compulsory by law. Hence, this study assessing the quality deployment function factors that determine customer loyalty in Nigeria insurance company.

The objective of this study aims to examine the relationship between QDF system and customers' acceptability in Nigerian insurance company.

LITERATURE REVIEW

Quality deployment function exists to bridge the gap between the needs of consumers and organizational design to make the desires achievable. QFD is thus a customer-driven, forward-thinking, and action-oriented strategic planning technique that is applicable to the development of products, services, businesses, and organizations. Before the advent of QFD, quality control (QC) methods were primarily aimed at addressing problems during or after product manufacture using quality standards, operating procedures, and so on to control the manufacturing process. QFD, in effect, takes QC back one step to the design and development of the product, with a view to ensuring that this is done in a manner

that will satisfy the customer (Hofmeister, 1991; Moores, 2006). The aim is to incorporate the customers' preferences (as ascertained through surveys, interviews, and other means) into the various phases of the product development cycle (Buyukozkan, Feyzioglu, & Ruan, 2007; Gustafsson, 1993).

Oke, Ofiabulu, Banjo, Akanbi and Oyawale, (2008) their study combined Quality Function Deployment and Pareto analysis for hotel services improvement. The paper was aimed to improve the current quality management practices in hotel services. Pareto analysis method was used as a prioritisation tool for the purpose of financial Investment decision. The result showed that quality function deployment enhanced goodwill of the organisation as well as its profit margin and it also increased customers` patronage in hotel services.

Also, Khare and Sharma (2009) applied quality function deployment in health sector. Survey research design was used and data were collected from 150 respondents. The result showed that customer satisfaction can be achieved by incorporating the voice of customer satisfaction in the process of QDF model. The integration of customers needs to the model of quality function deployment result to perfect implementation of customers satisfaction.

Homkhiew, Ratanawilai and Pochana (2012). The study evaluated quality function deployment technique to design and develop furniture products. Survey method was used in gathering the requisite data for the study. However, about 323 respondents returned the questionnaires which were properly filled. Regression method was used to analyzed the data obtained. It was found that products satisfaction was evaluated by customers composing of group of users and sales agents stores. The results revealed that the average satisfaction value of a new prototype increased from .08 to 2.71 points over the current products. Hypothesis testing of customer satisfaction between the current and the new designs was found to significantly increase with regard to the QFD approach. Muhammed et al, (2012) investigated Quality function deployment in higher education institutes of Pakistan. The paper aimed to assess he quality function deployment in higher education institutes of Pakistan. The study uses QFD as a tool for quality improvement

and benchmarking in higher education institution of Pakistan. A study of 500 respondents were considered as technical describers from six Pakistan national degree awarding Universities. The data were analyzed using the technique of QFD on higher education institutes of Pakistan. The result revealed that quality improvement in teaching and productive results as a result of application of QDF. However, the current study improves on the study of Oke et al (2008) by looking beyond services improvement and integrate voice of customers need that enhance customer's acceptability in the insurance companies.

METHODOLOGY

Descriptive survey was adopted to investigate this study. 360 copies of questionnaire were administered on the customers of two selected leading insurance companies in Nigeria. (AIICO Insurance Plc., Lead way Assurance Company) (www.get insurance company, 2022) Two plants were selected Lagos and Asejire Ibadan Plants, samples were drawn from the respondents of both companies with proportion of 182 and 178 customers from Aiico and Lead Way insurance companies respectively using purposive sampling technique.

Figure 1: **Bar Chart of respondents from the Insurance Companies.**
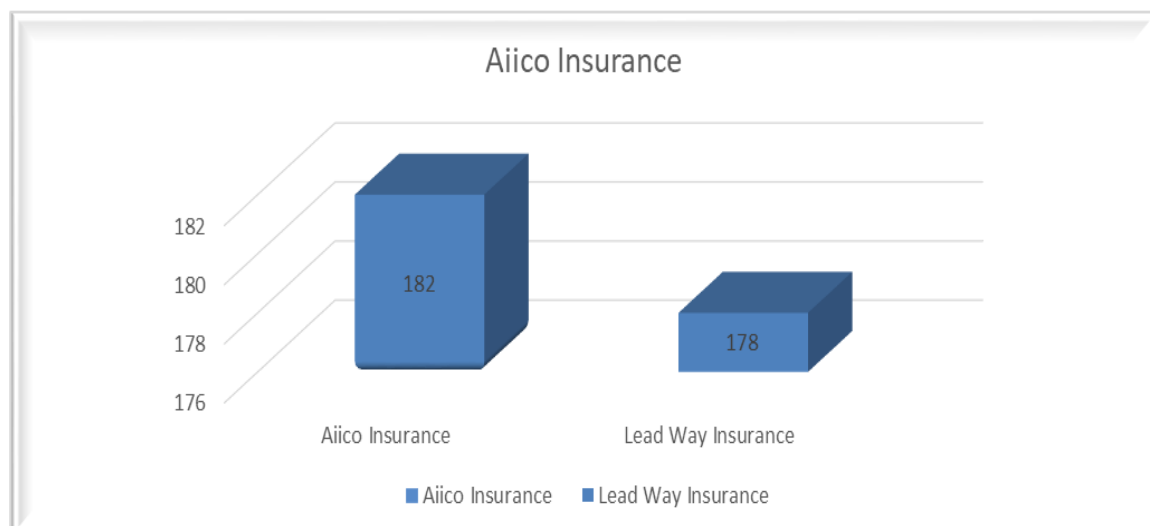
Researcher's computation (2022).

Data were collected through the research instrument and analyzed using Statistical Packages for Social Sciences (SPSS version 20). Descriptive analysis was used to analyze demographic characteristics of respondents. Keiser-Meyer-Olkin (KMO) and Cronbach's Alpha were used to measure data adequacy and validity of the instrument respectively. Regression analysis was used to achieve the stated.

Models Specification.

The hypothesis tested in this study include:

- H0: Quality Function Deployment (Voice of Clients integration, accessibility of claim, payment structure, service charge) does not have significant impact on customer's satisfaction.

$CSa = \beta_0 + \beta_1 QDF + \varepsilon$ since objective here is to examine the influence of QFD system and customers Loyalty in the selected insurance companies.

Whzere CSa = Customer Satisfaction.

QDF = Quality Function Deployment ((Voice of Clients integration, accessibility of claim, payment structure, service charge)

$CSa = \alpha + \beta_1 ACC1 + \beta_2 PAS2 + \beta_3 VCI3 + \beta_4 SEC4 + \varepsilon$

Where; CSa = Customers' Satisfaction

ACC1 = Accessibility of Claim.

PAS2 = Payment Structure

VCI3 = Voice of Client Integration SEC4

= Service Charge

α…… constant; β1, β2…. Estimate of parameters; ε… Error Term

RESULTS AND DISCUSSION

Table 1: Cronbach's Alpha of the variables measured

Cronbach's Alpha	0.884
Number of Items	5
Kaiser-Meyer-Olkin Measure of Sampling Adequacy. KMO	0.796

Author's computation, (2022).

Kaiser-Meyer-Olkin (KMO) value of 0.796 indicate sampling adequacy in the Table 1. The result of KMO test confirms (0.884) that the sample size used in this study is adequate.

Hypothesis Testing.

H01: Quality Function Deployment (Voice of Clients integration, accessibility of claim, payment structure, service charge) does not have significant impact on customer's satisfaction

Table 2: Quality Function Deployment and customers' Satisfaction

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.815[a]	.664	.661	.810

F = 257.911, Sig. = 0.000

a. Predictors: (Constant), Quality Function Deployment (ACC1, PAS2, VCI3 and SEC4)

b. Dependent Variable: Customers Satisfaction

Source: Author's Computation (2022).

Tables 2, it was found that significant positive interaction exist between the quality function deployment model and customer's satisfaction. i.e ACC1, PAS2, VCI3 and SEC4 and Customer Satisfaction in the selected Insurance companies. (R2 =0.66). Thus 66% of level of customer's satisfaction is attributed to insurance company's ability to integrate quality function deployment model into their operations. Quality Function Deployment used is highly significant in predicting the level of customer satisfaction, $F_{(5, 457)}$ > 257.911, sig.000, $p < 0.05$.

CONCLUSION AND RECOMMENDATION

The study concluded that the component of QDF modelled in this study (Accessibility of Claim, Payment Structure, Voice of Client Integration, Service Charge are statistically significant in predicting customer's satisfaction in the selected insurance companies. The

study supported the conclusion of Muhammed et al (2012). These results indicate that application of QDF without integrating these components are meaningless and it may have little or no impact on the customers' satisfaction. The result also demonstrated that the Quality Function Deployment has strong impact on customers' satisfaction Thus, to increase customer level of satisfaction in insurance companies in Nigeria, management should therefore focus on improving these attributes that have been identified as key success factors that can in turn enhance profitability level of the insurance companies in Nigeria.

Also, management of this company should develop a deep model that will make the payment of claim for the customers easier and subrogation principle a reality. When customer derives adequate satisfaction, then they become referral and continue to patronize the company.

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