

Dependency of Perceived Service Quality on the Information Technology in Life Insurance Corporation of India in Burdwan



Management

KEYWORDS : Information Technology (IT), Insurance, Perceived Service Quality.

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ABSTRACT

Considering various needs and requirements of the customers, organizations are now concerned in providing quality of services to their customers in order to meet the expectations of the customers. At present, customers are not only very much conscious but also becoming more expecting about the quality of services from their service providers where information technology is playing an important role in providing quality of services to the customers in the life insurance sector. In the modern fast, customers are again becoming highly dependent on the information technology and based on the several factors they are now evaluating the quality of perceived services offered by their insurers. In this paper, researcher tried to observe whether perceived service quality is dependent of the information technology in the life insurance especially in the Life Insurance Corporation of India (LIC) in Burdwan district or not.

INTRODUCTION

In 21st century information technology (IT) has become the backbone of every industry, especially for the service industries, all over the world. Due to the effect of the several factors of the globalization, customers' socio-economic culture have already been changed and become very much dependent on the information technology. Service quality plays an important role in the customization process of service delivery, improvement of the productivity and profitability of the organizations as well as in the satisfaction process of the customers of the organizations. The service industries are now trying to get competitive advantage over their competitors through the use of information technology and information technology enabled services (ITES). After liberalization, Indian insurance market has undergone a dramatic change and also influenced the financial sector as a whole. Along with one and only public sector company namely Life Insurance Corporation of India (LIC), many other private life insurance companies performing their operations in Indian insurance market and offering various types of products to their customers. Organizations now also eagerly want to provide better quality of services with the help of IT to give better satisfaction to the customers than before. In order to survive in future and to achieve maximum growth in the present competitive insurance market, life insurance companies are now dedicatedly involved in the development of new strategies for the purpose of customer satisfaction through proper improvement of service quality with the help of technology in efficient manner. The current study has been conducted on the life insurance customers of all the 17 branches of the LIC located in the district of Burdwan to examine whether perceived service quality is dependent of the information technology in the life insurance especially in the Life Insurance Corporation of India or not.

REVIEW OF LITERATURE

In life insurance industry high quality service (defined as exceeding "customers' expectations") is rare but increasingly demanded by the customers (Sherden, 1987). To investigate the significant relationship between information technology-based services and customer's perceptions of service quality, emphasizing the information technology-based service options the service quality models were suggested by Zhu et al. (2002) and Seth et al. (2008). According to Dabholkar (1996), as a source of service quality, individuals can perceive the use of technology. Pitt et al. (1995) mentioned that as a measure of information technology effectiveness, service quality has been proposed. The studies of Kettinger and Lee (1994); Kettinger et al. (1995); Pitt et al. (1995); Watson et al. (1998); Jiang et al. (2002); Kettinger and Lee (2005) and others adopted customer-oriented view of service quality at the time of investigation of service quality construct in the field of information technology and focused on adapting the SERVQUAL instrument (Parasuraman et al., 1988; 1991; 1993). Rockart (1982); Moad (1989); Kettinger and Lee (1994); Pitt et al. (1995) revealed that over the Internet and within the organization, the information systems service quality has been emerged as a key success factor for the busi-

ness and Brown et al. (1994); Dabholkar (1994); Meuter et al. (2000); Parasuraman et al. (2005) admitted the significant role of the technology in service quality. So, it may be affirmed that "today's information system function includes a large service component, and the SERVQUAL instrument can serve as a useful indicator for information systems managers attempting to identify areas of needed service improvement and to researchers seeking a success measure of information system services" (Jiang et al., 2000). In life insurance industry, the organizational performance in the office operation of systems technology leaders was linked to the level of information technology investment intensity (Harris and Katz, 1991). Charles (1993) revealed that service industries have been identified as the biggest buyers of new information technology. That's why Jen-Her and Yu-Min (2006) and Leslie and Richard (2006) asserted that managers of the insurance companies are able to process work quickly as well as response to their customers has been faster and prompt using the latest information technology system.

METHODOLOGY

For the purpose of the study, researcher has developed following null and alternative hypothesis:

- H_0 : Perceived service quality in life insurance is independent of the information technology.
 H_1 : Perceived service quality in life insurance is dependent of the information technology.

PZB's SERVQUAL model was adapted as the backbone of the survey instrument. To study the relationship between perceived service quality and information technology, first of all the initial questionnaire was developed as a survey instrument where some more items related to information technology were included along with the existing 22 items of SERVQUAL instrument spread over tangibility, reliability, responsiveness, assurance and empathy dimensions. After proper formation of survey instrument for the customers, pilot study was conducted in the district town Burdwan where researcher randomly selected 30 customers (10 from each branch) for this study. After explaining objectives and purpose of the study researcher tried to get valuable feedback from these customers. Based on pilot study, the preliminary analysis established the internal consistency of the items within each dimension and identified three items under Information Technology Enabled Services. The pilot study gave the confirmation of validity and reliability of final survey instrument. Thus, modified SERVQUAL scale was developed as the survey instrument for the customers. This modified SERVQUAL instrument consists of six dimensions named Tangibility, Reliability, Responsibility, Assurance, Empathy and Information Technology Enabled Services where Tangibility contains 5 items, Reliability contains 5 items, Responsibility contains 4 items, Assurance contains 5 items, Empathy contains 3 items and Information Technology Enabled Services contains 3 items. The structure of the questionnaire is both open-ended and close-ended and consisted seven point Likert scale ranging from 1-strongly disagree to 7-strongly agree. After successfully com-

pletion of the pilot study, considering the different demographic profile of the respondents and using random sampling technique, along with the other items the researcher collected data about the quality of services perceived by the LIC customers and the importance of having information technology in the LIC. Selecting all the 17 LIC branches located in the Burdwan district, total 350 questionnaires were distributed among the customers where 289 customers were agreed to give response and finally obtained 221 usable responses which were considered as the sample size for this study. According to Hair et al. (1992), for multivariate analysis the sample size should be at least 5 times the number of parameters in the model. As the proposed model of this study consists of 25 parameters, the minimum response necessary would be $(25 \times 5) = 125$. Thus, the sample size of this research, i.e., 221 is far in excess of the Hair et al.'s recommendation as well. Here, statistical package SPSS 16 was used to perform the analyses.

RESULTS AND DISCUSSIONS

The demographic data of the customers which was collected through cross-sectional survey for the purpose of the study is given below:

Table 1: Demographic profile of the customers

Demographic Variable	Demographic Characteristics	Frequency
Gender	Male	192 (86.9)
	Female	29 (13.1)
Age	≤ 30 years	51 (23.1)
	31 - 40 years	66 (29.9)
	41 - 50 years	38 (17.2)
	51 - 60 years	49 (22.2)
	≥ 60 years	17 (7.7)
Income	≤ Rs.14999.00	30 (13.6)
	Rs.15000.00 -Rs.24999.00	102 (46.2)
	Rs.25000.00 -Rs.44999.00	70 (31.7)
	≥ Rs.45000.00	19 (8.6)
Occupation	Salaried	174 (78.7)
	Business	15 (6.8)
	Professional	11 (5.0)
	Retired	18 (8.1)
	Housewife	3 (1.4)
Educational Qualifications	High school	14 (6.3)
	Graduate	56 (25.3)
	Post-graduate	38 (17.2)
	Professional	98 (44.3)
	Any other	15 (6.8)
Locality of Living	Center of the town	144 (65.2)
	Outskirts of the town	30 (13.6)
	Rural areas adjoining town	47 (21.3)
Modern Aids	Mobile Phone	64 (29.0)
	Combination of mobile & internet	157 (71.0)

* **Percentage (%) in parenthesis**

To realize the strength of the relationship of perceived service quality and information technology, simple regression analysis was performed to predict the dependent variable from the independent variable (predictor) where perceived service quality (which is the mean score of all the customers' perception of service quality) was considered as a dependent variable and the information technology was considered as an independent variable for the study. The results of simple regression analysis are given below in the following tables:

Table 2: Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	INFORMATION TECHNOLOGY ^a	.	Enter

- a. All requested variables entered.
- b. Dependent Variable: PERCEIVED SERVICE QUALITY

Table 3: Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.542 ^a	.293	.281	.72351

- a. Predictors: (Constant), INFORMATION TECHNOLOGY
- b. Dependent Variable: PERCEIVED SERVICE QUALITY

Table 4: Result of ANOVA ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.648	1	.648	10.238	.005 ^a
	Residual	59.152	219	.523		
	Total	59.800	220			

- a. Predictors: (Constant), INFORMATION TECHNOLOGY
- b. Dependent Variable: PERCEIVED SERVICE QUALITY

Table 5: Regression Coefficients Coefficients^a

Model	B	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		Std. Error	Beta			
1	(Constant)	4.623	.168		27.552	.000
	INFORMATION TECHNOLOGY	.128	.115	.304	9.113	.005

- a. Dependent Variable: PERCEIVED SERVICE QUALITY

The result of simple regression analysis indicates that dependent variable perceived service quality has a strong relationship with the independent variable information technology, i.e., prediction of dependent variable has successfully been done by the independent variable. In ANOVA result of Table 4, the value of $F = 10.238, p \leq 0.001$ established the significance of the relationship between perceived service quality and information technology. The result of regression coefficients in Table 5 shows that the standardized coefficient $\beta = 0.304, t = 9.113, p < 0.001$ which also proved that there exists positive and strong relationship between dependent variable perceived service quality and the independent variable information technology in the present study. So, the null hypothesis is rejected here and alternative hypothesis "Perceived service quality in life insurance is dependent of the information technology" is accepted.

CONCLUSIONS

The basic objective of the present study was to observe whether perceived service quality is dependent of the information technology in the life insurance especially in the Life Insurance Corporation of India in Burdwan district or not and to do this initially researcher formulated null and alternative hypothesis for this study and performed regression analysis which revealed the rejection of null hypothesis and acceptance of the alternative hypothesis. The acceptance of alternative hypothesis not only describes the perfect positive linear relationship of dependent and independent variables of the study but also established the dependency of perceived service quality on the information technology in the present context. In another way, it can be explained that in the modern age of the society just like a catalyst the information technology has a strong influence in the improvement of the quality of services provided by the life insurers. As service quality, the key differentiator, is now

emerged as the important element of the business strategy of the insurance companies and playing a significant role in day to day business activities of the companies so considering the wide usefulness of information technology the Life Insurance Corporation of India should continuously involve in IT investment in their business in order to offer better quality of services to their customers with the help of information technology in efficient and effective way in the present competitive life insurance market.

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