



A CRITICAL EVALUATION OF E-SERVICES PROVIDED BY INDIAN COMMERCIAL BANKS

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Abstract

The Indian banking today has become more advanced and innovative which could not be thought two decades before. The use of technology in delivering the services is becoming predominant as it lead to cost reduction from service providers view and save time from customers view. The main aim of paper is to evaluate the e-service quality of the banks using the SEVQUAL instrument. Five dimensions of service quality such as Reliability, Assurance, Tangibility, Empathy and Responsiveness are considered as a base of this study. Data has been collected by using non-probability convenience sample through 300 valid questionnaires. To find the variability of five dimensions descriptive statistic technique is used and to identify the importance of each service quality, a multivariate technique of Multiple Regression analysis is used. The result of correlation showed a positive relation with dependent and independent variables. The result of regression showed the two dimensions empathy and reliability are crucial for e-service quality followed by Responsiveness, Reliability and tangibility respectively.

Keywords: Reliability, Assurance, Tangibility, Empathy, Responsiveness, Service Quality, Correlation and Multiple Regression Analysis.

INTRODUCTION

Service quality has become an important determinant to measure the performance of a firm. Indian banking industry today is in the middle of an Information Technology revolution. Over past 10 years the advance use of technology has been adopted in the delivery of services, service providers are being persuaded by the industry to make the use of technology so as to survive in this electronic era. The competitive and regulatory pressure has led to greater significance of automating the banking processes. In the post liberalization the Indian banking industry has experienced many great changes, the challenging ongoing economic climate and shrink markets has created an environment of greatly increased competition, so in order to deal with the pressure banks are being forced into a transformation of business by adopting the information technology, how they interact with customers is a prime focus during these transformation. The initial step undertaken by banks in providing the better services is automation of banking transactions which ensures 24*7 hours service to the customers without any interruption. The availability of plastic cards, net banking and mobile banking has bridges the gap between the customers and bank and has made interaction more effective. To enhance the performance and profitability Indian banking industry has geared up for embracement of new technologies. They have extended their boundaries from accepting deposits and lending advances to the needy one to many other services, now the major portion of profit comes from the spread between the deposits and advances; rate of interest. In the rivalry and deregulated environment the spread between two has been reduced to great extent. In order to have improved and quick customer service banks have adopted the technology at par with world class banking, with an aim to expand its ability to reach unbanked.

LITERATURE REVIEW

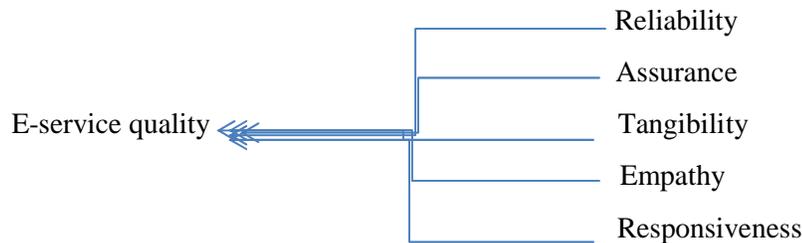
Over the past few years, there has been a substantial research on different dimensions of service quality leading to a sound conceptual base for both practioners and researchers. Parasuraman et al. (1985) has put forward the service quality model to determine the gap between expected and perceived service quality and focuses on the importance of measuring service quality in determining the success of firm. Parasuraman et al., (1988), Later on, service quality has been taken as “consumers’ assessment of the overall distinction or superiority of the service” (Zeithaml et al., 1993).and the banking industry in this case in not exceptional (Hossain & Leo, 2009). Service quality has been widely used to evaluate the performance of banking Services (Cowling & Nwman, 1995). Levesque & McDougall (1996) pointed out that customer satisfaction and retention are critical for retail banks, and investigated the major determinants of customer satisfaction (service quality, service features, situational factors and customer complaint handling), and future intentions in the retail bank sector. The banks identified that customer will be loyal if they provide greater value i.e quality service (Dawes & Swailes, 1999). Hinson, R, Mohammed, A and Mensah, R (2006) through their work on “Determinants of Ghanaian Bank Service Quality in a Universal Banking Dispensation” identified the important factors to improve service quality by comparing service quality of several banks. The study revealed that among all the service quality dimensions, human element of service quality was found to be highly predictive of perceived service quality. Aderonke and Charles (2010) in his research found that people use e-banking because it saves time and convenient but system security and privacy is a major concern for their transaction needs. Jain, V, Gupta, S and Jain, S (2012) in their study “Customer Perception on Service Quality in Banking Sector: With Special Reference to

Indian Private Banks in Moradabad Region” Try to explore the customer satisfaction for private banks and found that all the dimensions of service quality are equally important in private bank service.

OBJECTIVES

- To judge the importance of attributes that influence e-service quality of Indian banks in terms of service dimensions: Reliability, Assurance, Tangibility, Empathy and Responsiveness.
- To find the direction of relationship between each service quality variable.
- To find the impact of each service quality variable on e-service quality of Indian banks.

RESEARCH FRAMEWORK



The RATER Model was given by professors Valarie Zeithaml, A. Parasuraman, and Leonard Berry, and published in their 1990 book, "Delivering Quality Service."

The model highlights five areas that customers generally consider to be important when they use a service. These are:

Reliability – reliability is the ability to provide the service that has been promised consistently, accurately, and on time.

Assurance – assurance is the knowledge, skills, and integrity of staff; and their ability to use this competence to build trust and confidence among customers.

Tangibles – tangibles are the physical evidence or the materials associated with service. This could be offices, machines, employees, and the communication and marketing materials that are used by the service providers.

METHODOLOGY

A cross sectional descriptive research was undertaken to gain an accurate and deep understanding of e-service quality of banks. A generic SERVQUAL instrument, developed by Parasuraman, et al 1985 was used for the research. A structured questionnaire was administered to 300 respondents which were selected on basis of convenience sampling. The SERVQUAL instrument measures the five service dimensions- Reliability, Assurance, Tangibility, Empathy and Responsiveness. The questionnaire was divided into two parts- first part consist of demographic information (age, education, sex, occupation and income) and second part consist of twenty two question on above mentioned service dimensions. The responses were generated on 5 point Likert scale indicated as: 1- Strongly disagree, 2- Disagree, 3- Neutral, 4- Agree, 5- Strongly agree, to measure the expected and perceived service level. To find the variability of five dimensions descriptive statistic technique is used and to identify the importance of each service quality, a multivariate technique of Multiple Regression analysis is used

DISCUSSION AND RECOMMENDATIONS

1. Analysis of Demographic Profiles of Respondent

Table 1 shows the demographic profile of respondent. The sample of Indian bank customers consisted of more males (54 percent) than females (46 percent). 50% of the respondents were in age group of 20-40, 33% were between 41-60 age group and 17 % were above 60. With regards to educational qualifications 45% reported to be post graduates, 40% to be graduates and 45% to be intermediate. In terms of occupational status 33% were businessmen, 40% were service holders and 27% belonged to other category.

2. RELIABILITY ANALYSIS

Table II indicates the reliability and consistency of data, Cronbach's alpha reliability coefficient normally ranges between 0 and 1. There is actually no lower limit to the coefficient. The closer Cronbach's alpha coefficient is to 1.0 the greater the internal consistency of the items in the scale. However, for all the dimensions and for all twenty two items the value of Cronbach's Alpha is greater than 0.77, which shows the internal consistency is good and acceptable.

3. CORRELATION ANALYSIS

Correlation coefficients are used in statistics to measure the direction of relationship i.e positive or negative relationship. The value of correlation lies between -1 to +1. Value close to -1 shows strong negative correlation whereas; value close to +1 shows strong positive correlation among variables. The quantity r , called the linear correlation coefficient, measures the strength and the direction of a linear relationship between two variables. To know the nature and direction of relationship among the variables bivariate correlation is used. The results of table III shows that the correlation between reliability and assurance indicates negative correlation between two variables with coefficient correlation $r = -.032$ at $p < 0.00$ level. The correlation between reliability and tangibility indicates that there is significant correlation between two variables with coefficient correlation $r = .232$ at $p < .000$ level. The correlation between reliability and empathy indicates that there is a significant correlation between two variables with coefficient correlation $r = .387$ at $p < .000$ level. The correlation between reliability and responsiveness indicated significant relationship between two variables with coefficient correlation $.265$. Similarly the correlation between assurance and tangibility indicates significant relationship with coefficient correlation $.006$ at $p < .000$. The correlation between assurance and empathy indicates significant relationship with coefficient correlation $.087$ at $p < .000$. The correlation between assurance and responsiveness indicates significant relationship with coefficient correlation $.141$ at $p < .000$. The correlation between tangibility and empathy indicates significant relationship with coefficient correlation $.527$ at $p < .000$. The correlation between tangibility and responsiveness indicates significant relationship with coefficient correlation $.235$ at $p < .000$. The correlation between empathy and responsiveness indicates significant relationship with coefficient correlation $.367$ at $p < .000$. This shows that there is a positive correlation among all service dimensions except reliability and assurance.

4. MULTIPLE REGRESSION ANALYSIS

Regression model is used to test the hypothesis. Five independent and one dependent variable was undertaken and the impact of each independent variable on dependent variable is identified. The multiple regressions using the following model is run:

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

Where, Y = Overall e-service quality, X_1 = Reliability, X_2 = Assurance, X_3 = Tangibility, X_4 = Empathy, X_5 = Responsiveness.

4.1 Model Summary

Predictors: (Constant), Reliability, Assurance, Tangibility, Empathy, and Responsiveness

From table IV, it has been found that R value is 0.977. Therefore, R value (.997) for the overall service quality dimensions suggested that there is a strong impact of these five independent variables on service quality of e-services provided by Indian banks. It can also observed that the coefficient of determination i.e. the R -square (R^2) value is 0.955, which representing that 95.5% variation of the dependent variable (Average e-service quality) is due to the independent variables (Reliability, Assurance, Tangibility, Empathy and Responsiveness), which in fact, is a strong explanatory power of regression.

4.2 ANOVA

Predictors: (Constant), Reliability, Assurance, Tangibility, Empathy, and Responsiveness

From the table V, it is predicted that the value of F -stat is 342.591 and is significant as the level of significance is less than 5% ($p < 0.05$). This indicates that the overall model was reasonable fit and there was a statistically significant association between service quality dimension and e-service quality of Indian banks.

4.3 Coefficient Table

Dependent Variable: e-service quality

In table VI, unstandardized coefficients show the variation of dependent variable with independent variables. The beta coefficients indicate that how and to what extent SERVQUAL dimensions such as reliability, assurance, tangibility, empathy and responsiveness influence e-service quality of a bank. It has been found that, empathy ($\beta = .433$, $t = 19.50$, $p < 0.000$) and reliability ($\beta = .421$, $t = 15.714$, $p < 0.000$) have the greatest impact or significant impact on e-service quality of banks whereas, responsiveness ($\beta = .294$, $t = 14.538$, $p < .000$), assurance ($\beta = .263$, $t = 11.25$, $p < .000$) and tangibility ($\beta = .176$, $t = 9.77$, $p < .000$), respectively have a relatively lower impact on e-service quality of banks.

Then the fitted Regression Model is:

$$\text{Overall e-service quality (Y)} = 0.503 + 0.220 (\text{Reliability}) + 0.180 (\text{Assurance}) + 0.176 (\text{Tangibility}) + 0.234 (\text{Empathy}) + 0.189 (\text{Responsiveness}).$$



RECOMMENDATIONS

- A strong infrastructure of providing executive/professional training including knowledge, capabilities and attitudes is required to encourage employees to become more accountable, so that they can exactly identify customers' needs and gain work satisfaction by providing coordinated services.
- Moreover, Indian banks should pay particular attention to customer needs, for which an interchange of information is essential to understand changing customer needs and behaviors so that corporations can customize their products according to the need of customers.
- Indian Banks have to protect customer privacy and avoid revealing any data to marketers. In order to retain the existing customers and to improve service quality, the bank should continuously maintain error-free and secure transactions, since bank accounts and figures are very sensitive for each and every customer.
- In order to satisfy the customer's expectation individual attention should be given to customers so that Indian banks can better understand their needs of customers and better satisfy them.
- Regular research activities should be conducted in order to keep track on customers' satisfaction and their expectations about various service aspects.
- In order to attract and retain customers Indian banks are required to improve e-service quality by providing error free transactions and safety to customers.
- Regular research should be done to measure the expectation and perception of customers.

CONCLUSION

With stiff competition, it is very important to deliver superior quality of service to the customers in present business environment. The ability to provide high service not only strengthens the image but also lead to more attraction and retention of customers. The study examined e-service quality of Indian banks with the help of SERVQUAL format through five dimensions: Reliability, Assurance, Empathy, Tangibility and Responsiveness by identifying the impact of each dimension on service quality. The result of correlation has showed a positive direction of relationship among each dimension. Also the result of multiple regression has determined that empathy and reliability has greatest impact on e-service quality followed by responsiveness, assurance and tangibility. Hence in order to provide better service Indian banks need to understand the specific needs of customers and give individual attention to each customer, also keep records accurately and deliver the service right from the first time.

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TABLES

Table I: Demographic Profile of Respondents

| Demographic variable | Category | Frequency |
|----------------------|---------------|-----------|
| Gender | Male | 160 |
| | Female | 140 |
| Age | 20-40 | 150 |
| | 41-60 | 100 |
| | Above 60 | 50 |
| Education | Post graduate | 135 |
| | Graduate | 120 |
| | Intermediate | 45 |
| Occupation | Service | 120 |
| | Business | 100 |
| | Others | 80 |

Table II: Reliability Test

| Cronbach's Alpha | Reliability | Assurance | Tangibility | Empathy | Responsiveness | Total Items |
|------------------|-------------|-----------|-------------|---------|----------------|-------------|
| | 0.79 | 0.89 | 0.760 | 0.83 | 0.77 | 0.80 |

Table III: Correlation Table

| Correlations | | | | | |
|----------------|-------------|-----------|-------------|---------|----------------|
| | Reliability | Assurance | Tangibility | Empathy | Responsiveness |
| Reliability | 1 | | | | |
| Assurance | -.032 | 1 | | | |
| Tangibility | .232** | .006 | 1 | | |
| Empathy | .387** | .087 | .527** | 1 | |
| Responsiveness | .265** | .141* | .235** | .367** | 1 |

Table IV: Model Summary

| Model | R | R Square | Adjusted R Square | Standard Error of the estimates | Change Statistic | | | | |
|---------|-------|----------|-------------------|---------------------------------|------------------|----------|-----|-----|------------|
| | | | | | R Square Change | F Change | df1 | df2 | Sig Change |
| Model 1 | 0.977 | 0.955 | 0.955 | 0.10679 | 0.052 | 342.591 | 1 | 294 | .000 |

Table V: ANOVA

| Model | | Sum of Square | Df | Mean Square | F | Sig |
|-------|------------|---------------|-----|-------------|---------|------|
| | Regression | 71.956 | 5 | 17.989 | 342.591 | .000 |
| | Residual | 3.365 | 294 | .011 | | |
| | Total | 75.320 | 299 | | | |

Table VI: Coefficient Table

| Model | Unstandardized Coefficient | | Standardized coefficient | T | Sig |
|----------------|----------------------------|----------------|--------------------------|--------|------|
| | B | Standard Error | Beta | | |
| Constant | .503 | .030 | | 16.766 | .000 |
| Reliability | .220 | .014 | .421 | 15.714 | .000 |
| Assurance | .180 | .016 | .263 | 11.25 | .000 |
| Tangibility | .176 | .018 | .233 | 9.77 | .000 |
| Empathy | .234 | .012 | .433 | 19.50 | .000 |
| Responsiveness | .189 | .013 | .294 | 14.538 | .000 |