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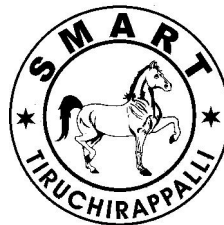
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# THE RELATIONSHIP BETWEEN SERVICE QUALITY AND PROFITABILITY: AN EMPIRICAL STUDY IN BANKING INDUSTRY

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## ABSTRACT

*This paper focuses on the link between customers' satisfaction and organizational performance. Three groups of banks namely, Associates of State Bank of India, Nationalised Banks and Private Sector Banks were included in the study. The empirical data on customer satisfaction on the quality of various services offered by the banks and its business performance were collected through interview schedule. Based on the empirical data, authors identified the important items in the service quality of banks as Empathy, Assurance, Reliability, Tangibles and Responsiveness. The study identifies the positive impact of customer satisfaction on service quality of banks resulting in its net profit. The significant impact on net profit is created by the customers' satisfaction on the service quality factors, namely, Empathy, Assurance and Tangibles. The study concludes that the suitable strategy to increase the profit among the banks is "creating, maintaining and enhancing appropriate service quality to the customers (customer orientation)".*

The increasing competition in the service industry requires higher market orientation among the units in the industry. The market orientation facilitates the delivery of marketing mix packages to the target markets to realize optimal satisfaction of the customers (Shiffman and Kanuk, 1995) and achievement of long term institutional goals through continuous integrated and consistent efforts of the organisation (Kotler 2000). It takes cognizance of target customers' needs (Stanton, Etzel and Walker, 1994) and competitors' strategy (Erris, 1980) so as to effectively meet these unfulfilled requirements sooner and better than the competitors (Kotler, 2000). The customers' satisfaction is one of the integral aspects of market orientation which basically measures the gap between customer's expectations and his actual experience (Kotler, 1996). The link between customer satisfaction and profit of the organisation is very important to the service unit to plan a proper strategy to achieve its corporate goals. Zeithaml (2000) found a direct relationship between customer satisfaction and organisational performance. Lehmann (1994)

identified a significant association between customers' satisfaction and accounting returns on assets. Zeithaml, Berry and Parasuraman (1996) found out that there is a strong correlation between the customer satisfaction and the re-purchase intentions and the willingness to recommend the company also. Ittner and Larchuer (1996) found that shareholder value is highly elastic with respect to customer satisfaction. Hence the present study makes an attempt to study the link between customer satisfaction on the service quality offered by the banks and the performance of the banks.

## Scope of the Study

The study has been undertaken to examine the relationship between the customer satisfaction on service quality offered by commercial banks and its performance. The study has its focus on the three groups of commercial banks, namely, Associates of State Bank of India, Nationalised banks and private sector banks in Madurai district only. The study was conducted among the customers in the

above said three groups of banks during the period of 2003-04.

### **Objectives of the Study**

The specific objectives of the study are:

- i) to identify the nature of service quality offered by the commercial banks,
- ii) to analyse the significant difference among the three groups of banks regarding customer satisfaction,
- iii) to examine the impact of customers' satisfaction on the performance of the banks.

### **Methodology**

An interview schedule has been used to measure customer satisfaction on the service quality offered by the commercial banks.

Twenty two statements related to the service quality in commercial banks [Stafford, Marla Royne (1996) and Verma and Ruchika (2000)] were tested at five-point scale concerning various satisfaction levels. In total, 30 bank branches from Associates of State Bank of India, Nationalised banks and Private Sector banks in Madurai district were selected at random. Again, five customers were selected from each branch as per the judgement of the bank officials. The total sample size of the study was  $(90 \times 5) = 450$  customers. The data related to the customer satisfaction were collected through the interview schedule. The net profits of the selected commercial banks during 2003-04 were also collected for the study.

Initially the data on customer satisfaction were analysed through factor analysis in order to find the underlying concepts or dimensions of customer satisfaction [Parasuraman, Zeithaml and Berry (1998), Ton Van der Wiele, et al., (2003) and Sharma et al., (2001-02)]. The significant difference among the three groups of banks regarding customer satisfaction on the underlying dimensions by factor analysis were

examined with the help of One-way Analysis of Variance. The multiple regression analysis was administered to evaluate the impact of customer satisfaction on the net profit of the commercial banks (Hallowell (1996) and Ittner, C. and Larckner (1996).

### **Analysis of the Data**

The factor analysis on the score of 22 items related to the service quality of commercial banks are consolidated into five factors. The factor loading of the items in service quality with the factors and its eigen value are shown in **Table 1**. The items related to the service quality in commercial banks are clustered into five factors, namely, Empathy, Assurance, Reliability, Tangibles and Responsiveness. The above said five factors explain the 22 items in service quality of commercial banks to the extent of 73.56 per cent.

The caring individualized attention paid by the commercial banks to their customers are grouped into a factor, namely, 'empathy' which explains the variables included in the service quality of commercial banks to the extent of 22.86 per cent. The eigen value of this empathy factor is 4.3296. It consists of procedure to operate accounts, operating hours, personal attention by the employees, parking space, location of the bank and understanding the customers' specific needs with the reliability coefficient of 0.8124.

The next two important factors in the service quality of commercial banks identified by factor analysis are Assurance and Reliability since their eigen values are 3.0918 and 2.3282 respectively. The extent of variance explained by the above said two factors are 17.33 and 14.28 per cent respectively. The 'assurance' consists of competencies of employees and officers, courteous employees, trustworthiness among employees, safe and sound feeling at transaction time and attending to customers' queries with the reliability coefficient of 0.7214.

The third important factor 'reliability' consists of punctuality in opening the bank, accurate record keeping, sufficient cash counter and locker service with the reliability coefficient of 0.7336.

The other two important factors in the service quality of commercial banks are tangibles and responsiveness. The eigen values of these two factors are 1.8641 and 1.3262 respectively. The 'tangible' factor consists of physical facilities at bank, neat and tidy employees, supply of stationery and modern equipment with the reliability coefficient of 0.6091 whereas the 'responsiveness' factor consists of prompt services, readiness of employees towards delivery of service and upkeep of the service time with the reliability coefficient of 0.8414.

The factor analysis results in the narration of 22 items in the service quality of commercial banks through five important factors for further analysis. The customers' attitude score on the factors are drawn from the attitude score on the items in each factor. The mean score of the attitude towards factors among the customers in the three groups of banks and the 'F' statistics are computed and presented in Table 2.

Among the customers in the Associates of SBI, the highly satisfied service quality factors are 'tangibles' and 'reliability' since their mean scores are 3.8616 and 3.4162 respectively whereas among the customers in nationalized banks, it is 'reliability' since the mean score is 3.9818. Among the customers in private sector banks, the highly satisfied service quality factors are 'responsiveness' and 'tangibles' since their mean scores are 4.0267 and 3.9213 respectively. Regarding the customers' satisfaction, the significant difference among the customers in the three groups of banks are identified in the case of 'assurance' and 'responsiveness' since the respective 'F' statistics are significant at five per cent level.

### **Relationship between Customer's Satisfaction on Service Quality and Business Performance**

The causal relationship between the customer satisfaction on service quality factors in commercial banks and the net profit of the banks are analysed with the help of multiple regression analysis. The attitude score on five service quality factors in each bank are drawn from the score on various items in each factor. From the scores of five service quality factors among the customers in the particular bank, the mean score of each service quality factor in each bank is drawn. The net profit of the banks are treated as dependent variable whereas the scores on customers' satisfaction on the factors in service quality of the banks are treated as the independent variables. The fitted regression model is:

$$Y = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + b_5 X_5 + e$$

Where,

- Y = Net profit of the banks,
- X<sub>1</sub> = Attitude score on empathy,
- X<sub>2</sub> = Attitude score on assurance,
- X<sub>3</sub> = Attitude score on reliability,
- X<sub>4</sub> = Attitude score on tangibles,
- X<sub>5</sub> = Attitude score on responsiveness,

b<sub>1</sub>, b<sub>2</sub>, ... b<sub>5</sub> = Regression coefficients of independent variables.

- a = Intercept and
- e = Error term.

The resulted regression coefficient of the customers' attitude on the service quality factors in the three groups of banks and also for pooled data are analysed and shown in Table 3.

In the Associates of SBI, significant service quality factors on net profit are Empathy, Assurance and Responsiveness. A unit increase

in the above said factors results in an increase in net profit of the banks by 0.1817, 0.2308 and 0.1736 units respectively. The significant service quality factors in nationalized banks are also the same factors but a unit increase in the above said factors result in an increase of net profit in nationalised banks by 0.1702, 0.1967 and 0.2033 units respectively. In the case of private sector banks, these factors are 'Assurance' and 'Responsiveness' since their regression coefficients are significant at five per cent level. In total, the regression model concludes that the increase in customers' satisfaction on empathy, assurance and responsiveness result in an increase in the net profit of commercial banks. The change in customers satisfaction on five different factors in service quality of commercial banks explain the change in the net profit of the commercial banks to the extent of 87.13 per cent. The significant 'F' statistics in regression analysis indicates the viability of the fitted regression models.

### Concluding Remarks

The present study concludes that the service quality in commercial banks is narrated through Empathy, Assurance, Reliability, Tangibles and Responsiveness. The higher satisfaction among the customers in the Associates of SBI, Nationalized banks and Private sector banks are identified in the service quality factors, namely, Tangibles, Reliability and Responsiveness respectively. There is a significant difference among the customers belonging to the three groups of banks, especially in the attitude on few service qualities, namely, Assurance and Responsiveness. Since the significantly influencing service qualities on net profit of the banks are Empathy, Assurance and Responsiveness, the banks should pay more attention to the above said factors. Moreover, the scope of increase in net profit of the Associates of SBI and Nationalised Banks are higher than in the private sector banks through

the delivery of better service quality to their customers. Therefore, it is advised to increase customers' satisfaction by providing more appropriate service quality to the targeted customers in order to increase the net profit of the banks.

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**Table- 1**  
**Factor loadings and variance explained by the Service Quality in Commercial Banks**

Factor	Variables	Factor Loading	Cronbach alfa	Eigen Value	Percent of Variance Explained
Empathy	Procedure to operate accounts	0.9107	0.8124	4.3296	22.86
	Operating hours	0.8812			
	Personal attention by the employees	0.8264			
	Parking space	0.7716			
	Location of the bank	0.7029			
	Understanding the customers' specific needs	0.6314			
Assurance	Competences of employees and officers	0.8829	0.7214	3.0918	17.33
	Courteous employees	0.8147			
	Trust worthiness among employees	0.7626			
	Safe and sound feeling at transaction time	0.7112			
	Attending to customer's queries	0.5606			
Reliability	Punctuality in opening of the bank	0.9021	0.7336	2.3282	14.28
	Accurate record keeping	0.7962			
	Sufficient cash at counter	0.6014			
	Locker service	0.5943			
Tangibles	Physical facilities at bank	0.8814	0.6091	1.8641	10.47
	Neat and tidy employees	0.6323			
	Supply of stationery	0.6017			
	Modern equipment	0.5223			
Responsive-ness	Prompt services	0.9393	0.8414	1.3262	8.62
	Readiness of employee towards delivery of service	0.8362			
	Upkeep of service time	0.7174			

**Table- 2**  
**Significant difference among the Banks regarding Customers**  
**Satisfaction on Service Quality**

Sl. No.	Factors in Service Quality	Mean Score of Satisfaction			F-Statistics
		Associates of SBI	Nationalised Banks	Private Sector Banks	
1.	Empathy	3.0086	3.1774	3.7026	1.0863
2.	Assurance	2.9068	3.0128	3.8627	7.8626*
3.	Reliability	3.4162	3.9818	3.2468	1.2733
4.	Tangibles	3.8616	3.0861	3.9213	1.4086
5.	Responsiveness	2.7969	2.8124	4.0267	6.3308*

\* Significant at 5 per cent level.

**Table –3**  
**Impact of Customers' Attitude on Service Quality and Business Performance**

Sl. No.	Independent Variables	Regression Coefficients			
		Associates of SBI	Nationalised Banks	Private Sector Banks	Pooled
1.	Empathy	0.1817*	0.1702*	0.1133	0.1308*
2.	Assurance	0.2308*	0.1967*	0.1887*	0.1908*
3.	Reliability	0.1133	0.0962	0.0433	0.0731
4.	Tangibles	0.0927	0.1034	0.0824	0.0882
5.	Responsiveness	0.1736*	0.2033*	0.2123*	0.1868*
6.	Constant	1.2672	1.0169	2.3382	1.4048
	R <sup>2</sup>	0.7901	0.8202	0.6847*	0.8713
	F-Statistics	11.3314*	9.8603*	13.0834*	15.2787
	Number of Observations	30	30	30	90

\* Significant at 5 per cent level.