PERCEIVED SERVICE QUALITY AND CUSTOMER SATISFACTION: AN EMPIRICAL STUDY

Ravinarayana K.S. *

Abstract

Customer service is an integral part of any organization especially service organizations like banks. The key success factors lies in customer satisfaction. Because of intense competition the banks are improving their service quality so that they can maximize their profits and increase the market share. Today, the concept of core banking, mobile banking and other facilities have made banking a reality. In this information technology era, the banking services are delivered to the customers with ease. In this scenario this study is conducted to evaluate the service quality SBI bank by identifying the major factors responsible for customer satisfaction. SERVQUAL Model (Parasuraman et al (1988) is used to see the service quality dimensions of SBI bank. The results show that the banks customers are dissatisfied with the empathy dimension which deals with individual attention by the employees of the bank.

Keywords: SERVQUAL Model, Service Quality, Customer Satisfaction, Information Technology, Banking Services.

*Assistant Professor, Dept. of Business Administration, Vijayanagara Sri krishanadevaraya University, Jnana Sagara Campus, Vinayaka Nagar, Cantonment, Bellary

1. Introduction

Every organization considers service quality as a strategic tool to increase market share and return on investment because of increasing competition on international markets. The improved levels of service quality are facilitating the organizations to higher revenues, increased cross-sell ratios and higher customer retention. The service quality can be defined as the difference between customers' expectations for service performance and their perceptions of the service received. The service quality is important for banks since they are service oriented organizations. For banks, customers will be loyal if they receive greater value than from their competitors and on the other hand, bank can earn good profits if they position themselves better than their competitors within a specific market. Therefore, banks need to focus on service quality as a core competitive strategy. Because of information technology the customers are well informed and they evaluate banks' performance based on services provided by them. Today, the banks are gaining the popularity because of the concept of core banking system and "anywhere and anytime" banking. In this scenario the present study aims at to ascertain any actual or perceived gaps between customer expectations and perceptions of the service offered by banks by using SERVQUAL Model. The rest of the paper organized as follows. Section 2 provides literature review; section 3 provides a brief review of the service quality and its dimensions, section 4 presents objectives of the study, section 5 provides sample, data and methodology, section 6 presents the results and discussions and finally conclusion is presented in section 7.

A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories
Indexed & Listed at: Ulrich's Periodicals Directory ©, U.S.A., Open J-Gage as well as in Cabell's Directories of Publishing Opportunities, U.S.A.

International Journal of Management, IT and Engineering
http://www.ijmra.us

460

1. Literature Review

The SERVQUAL Model is extensively used by the researchers to understand the expectations and perceptions of customers regarding services rendered by the organizations. Parasuraman et al. (1985, 1988) developed the Service Quality Model to measure the differences between customers' perception and expectation associated with the service quality. Lewis and Mitchell (1990) found that if expectations are greater than performance, then perceived quality is less than satisfactory and hence customer dissatisfaction occurs. Cronin and Taylor (1992) revealed that perceived service quality has positive effect on satisfaction of customer in four service sector i.e dry cleaning, fast food, pest control and banking. Avikaran (1994) evaluated service quality in Australian Banks and found four dimensions of service quality i.e. communication, credibility, staff conduct and access to teller services. Johnston (1995) found assurance, empathy, responsiveness and reliability dimensions in banking industry. Lee and Ulgado (1997), Mels et al. (1997), Jiang et al. (2000), Cook and Thompson (2001), Van der Wal et al. (2002) and Kilbourne et al. (2004) used SERVQUAL Model for assessing the service quality of repair and maintenance service providing firm, long-distance telephone corporation, telecommunication, credit card company, information system, libraries, insurance, restaurant, health care and retail chains are found significant relationship with all the five dimensions. Bahia and Nantel (2000) developed six dimension scales for evaluating service quality in banks which includes reliability, tangibles, access, effectiveness and assurance, range of services and prices. Othman and Owen (2001) added an extra dimension of "compliance to the Islamic law' to the SERVQAL five dimension scale. Jabnoun and Al-Tamimi (2003) modified SERVQUAL model based on three dimensions i.e. empathy, tangibles and human skill. Aldaigan and Buttle (2002) found significant correlations between overall customer satisfaction and service quality dimensions. Lam (2002) used SERVQUAL in Chinese banking sector and identified six dimensions of service quality i.e. tangibles, reliability, responsiveness, assurance, empathy of understanding of needs and empathy of convenient operating hours. Wong and Hui (2003) found that service quality enhances the customer loyalty and it helps to reach the success in service organizations. Zhou (2004) found that service quality and customer satisfaction in banking sector is strongly influenced by reliability and assurance. Arasli et al. (2005) identified three dimensions influencing the service quality i.e tangibles, reliability, and responsiveness-empathy in Cyprus banking industry. Brady

et al (2005) and Arsali et al. (2005) reported that there is a direct impact of service quality on customer satisfaction in USA, Netherland, Hong Kong, morocco Australian and Greek banking industry. Bei and Chiao (2006) reported positive influence of perceived service quality on three service providers i.e. petrol station, automobile repair and banking. Nam (2008) evaluated service quality in retail banking in US and South Korea and identified four dimensions of service quality i.e trustworthiness, functionality, appearance and helpful employees. Guo et al. (2008) examine service quality of corporate banking in China was evaluated. The service quality dimensions identified were reliability, technology, communication, technical quality and human capital.

The above literature review shows that the perceived service quality has positive impact on satisfaction of customers and it can be measured by SERVQUAL Model. This study intends to contribute to the existing literature on customers' perceptions of service quality by using the gap analysis.
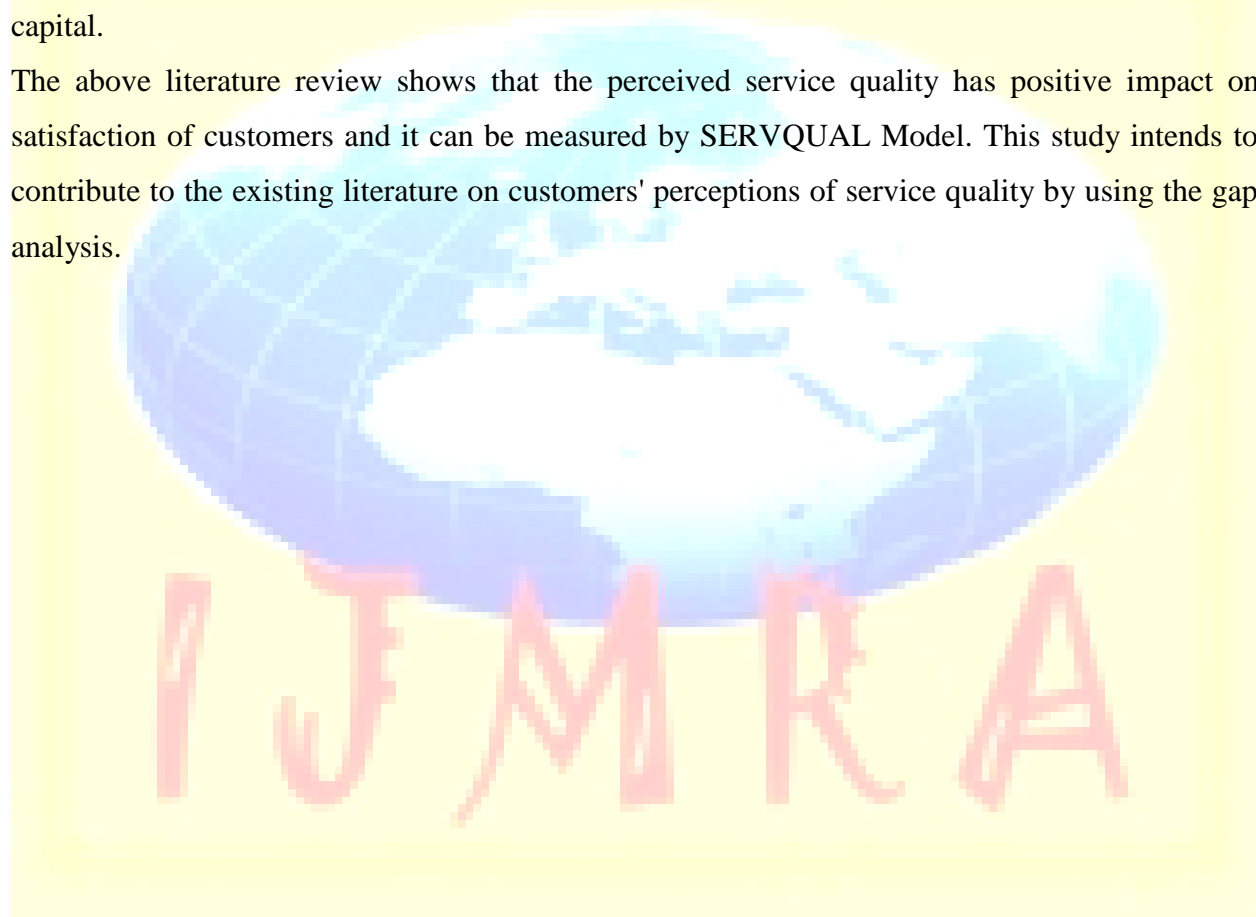
2. Service Quality and Its Dimensions

Service quality is increasingly becoming a major strategic variable and the researchers have tried to develop conceptual models to explain the service quality and to measure consumers perceived service quality in different industries. A good operational example of a standardized framework for understanding service quality is the SERVQUAL Model developed by Parasuraman. The researchers discovered five general dimensions with focus group interviews which they labeled: reliability, responsiveness, tangibles, assurance and empathy. Parasuraman et. al (1985, 1988) developed 5 general dimensions of service quality of any service provider. These dimensions include:

1. Tangibility: physical facilities, tools, machines, personnel, materials and communication channels.

2. Trustworthiness: the ability to provide promised services in a proper and reliable way.

3. Accountability: to have the interest in providing appropriate service and generally helping customers.

4. Reliability: knowledgeable and polite personnel and their ability to win customers trust and confidence.

5. Sympathy: taking care and paying attention to individuals

In the present scenario if any bank that fails to surpass customer expectations and meet customer satisfaction will not be able to compete with other banks. It is the most difficult challenge for a bank that its customers transfer their accounts to rival banks because of better services Currently Indian banking industry has a competitive environment. Increasing development of public and private commercial banks and improvements in the kind and way services have been offered, increasing expansion of financial and credential institutions an organs to provide financial and non-financial services, and increasing development of technology in banking industry offers a competitive and special environment to any organization. It requires that active organization in the banking industry of country pay more attention to customer satisfaction. This goal will not be achieved without localized models and indicators through which one can make sure of customer satisfaction. This study aims to estimate and evaluate indicators of Parasuraman model of service quality through a survey from customers of SBI bank

_____

to have a better understanding of these dimensions. We intend to evaluate five dimensions of service quality according Parasuraman SERVQUAL Model.

3. Objectives of the Study

The following are objectives of the study.

- To study dimensions of service quality and to evaluate the effects of these dimensions on satisfaction of SBI bank customers
- To evaluate the perceived service quality of SBI

4. Sample, Data and Methodology

Sample and Data

The study was carried out with an objective to understand the gap of the e-services offered by the SBI banks. The study is based on the primary data collected from the customers who are using e-banking services of State Bank of India (SBI). Data collection was done through survey method. A sample size of 100 respondents who were the customers of SBI banks is selected randomly from Mangalore City. A structured questionnaire is used to collect the data.

Methodology

To find out the perceived service quality, the structured questionnaire is used which was originally developed by Parasuraman et al. (1985, 1988). The SERVQUAL Model consists of two sections i.e. Perception and Expectation. Both sections have five dimensions as Tangibles, Reliability, Responsiveness, Assurance and Empathy. Perceived Service Quality is the difference between Perception and Expectation (P-E). There are also five gaps between each dimensions of service quality i.e. Tangibles Gap= Perceived Tangibles – Expected Tangibles, Reliability Gap = Perceived Reliability- Expected Reliability, responsiveness Gap= Perceived Responsiveness – Expected Responsiveness, Assurance= Perceived Assurance – Expected Assurance and Empathy = Perceived Empathy– Expected Empathy. The questionnaires were given to the customers of the SBI bank to judge their perceived service quality.

A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories
Indexed & Listed at: Ulrich's Periodicals Directory ©, U.S.A., Open J-Gage as well as in Cabell's Directories of Publishing Opportunities, U.S.A.

International Journal of Management, IT and Engineering
http://www.ijmra.us

464

5. Results and Discussions

The results of SERVQUAL Model of SBI are presented in table 1, 2, 3 and 4. Table 1 present the average gap score of state bank of India, table 2 present the un-weighted score, table 3 show assigning weights and table4 shows Weighted Score. The average mean score on five dimensions of SBI is presented in figure 1.

Table 1: Average Gap Score of State Bank of India

Expectation			Perception		Gap score
Tangibility	E	**Tangibility**		P	E-P
E1.Excellent banking companies will have modern equipment as well as large e-banking network	5.483	P1.My bank has modern equipment's as well as large e-banking network.		4.317	1.166
E2.Excellent banks have convenient branch locations	5.483	P2.My bank has convenient branch location.		4.733	0.750
E3.Materials associated with the service (such as pamphlets or statements) will be visually appealing at an excellent bank.	4.933	P3.Materials associated with the services (such as pamphlets or statements) are visually appealing at my bank.		4.417	0.516
Total	15.899			13.467	2.432
15.899/3=5.299		**13.467/3=4.489**			
Average Gap Score[Total of E-P/3]		**2.432/3**			**0.811**
Reliability		**Reliability**			
E4.Excellent banks provide accurate information related to e-banking channels and their usage.	5.250	P4.My bank employees provide accurate information related to e-banking channels and their usage		4.100	1.150
E5.When excellent banks promise to do something by a certain time, they do. (dependability)	5.250	P5.When my bank promises to do something be a certain time, it does so(dependability)		4.550	0.700
E6.When a customer has a problem	5.000	P6.When I have a problem while		4.367	0.633

while using E-banking, excellent banks will show a sincere interest in solving it.		using e-channels my bank shows a sincere interest in solving it.(Responsiveness)		
E7.Excellent banks web site will perform the service right the first time as soon as you login.	5.410	P7.While I am using e-banking facility my bank performs the service right the first time as Soon as I login into my bank web site.	4.483	0.927
E8.Excellent banks will implement updated technology regularly to e-banking customers.	5.283	P8.My bank implements the updated technologies regularly to its customers.	4.450	0.833
E9.Excellent banks will not misuse your personal information.	5.717	P9.My bank never misuses my personal information.	4.900	0.817
Total	31.910		26.850	5.060
31.910/6=5.318		**26.850/6=4.475**		
Average Gap Score[Total of E-P/6]		**5.060/6**		**0.843**
Responsiveness		**Responsiveness**		
E10.Employees at excellent banks will inform their customers about the benefits of various E-banking channels.	5.167	P10Employees in my bank will inform its customers about the benefits of various E-banking channels.	4.183	0.984
E11.Employees of excellent banks will provide appropriate technology related information's and prompt service to its customers.	5.217	P11.Employees in my bank will provide appropriate technology related information and prompt service to its customers.	4.300	0.917
E12.Employees of excellent banks will always be willing to help customers while using E-banking technologies.	5.067	P12.Employees in my bank is always willing to help its customers while using e-banking.	4.217	0.850
E13.E-banking facility in excellent bank will provide customer request information's in shorter waiting time.	5.250	P13.While using e-banking facility my bank will provide clear information's in shorter waiting	4.417	0.833

A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories
Indexed & Listed at: Ulrich's Periodicals Directory ©, U.S.A., Open J-Gage as well as in Cabell's Directories of Publishing Opportunities, U.S.A.

International Journal of Management, IT and Engineering
http://www.ijmra.us

466

		time.		
Total	20.701		17.117	3.584
20.701/4=5.175		**17.117/4=4.279**		
Average Gap Score[Total of E-P/4]		**3.584/4**		**0.896**
Assurance		**Assurance**		
E14.The behavior of employees in excellent banks will instills confidence in customers.	5.083	P14.The behaviour of employees in my bank instills confidence in me.	4.383	0.700
E.15Customers of excellent banks will feel safe in transactions.(safety)	5.417	P15.My banks provide me financial security and Confidentiality.	4.683	0.734
E.16The bank web site is secure for your credit card information's.	5.167	P16.My bank web site is secure for our credit card information (safety).	4.567	0.600
E17.Employees of excellent banks will have adequate knowledge to answer customers technology related questions.	5.150	P17.Employees in my bank has adequate Knowledge to answer my technology related questions. (Knowledge).	4.333	0.817
Total	20.817		17.966	2.851
20.817/4=5.204		**17.966/4=4.491**		
Average Gap Score[Total of E-P/4]		**2.851/4**		**0.713**
Empathy		**Empathy**		
E18.Excellent banks will give customers individual attention.	4.967	P18.My bank gives me individual attention to its customers.	3.967	1.000
E19.Excellent banks will have operating hours convenient to all their customers.	5.317	P19.My bank has operating hours convenient to all its customer	3.833	1.484
E.20Excellent banks will have employees who give customers personal attention.	4.767	P20.My bank has employees who give me personal attention.	4.067	0.700
E21.Excellent banks will have their	4.950	P21.My bank has my best interest at	3.833	1.117

A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories
Indexed & Listed at: Ulrich's Periodicals Directory ©, U.S.A., Open J-Gage as well as in Cabell's Directories of Publishing Opportunities, U.S.A.
International Journal of Management, IT and Engineering
http://www.ijmra.us

467

customer's best interest at heart.		heart		
E22.The employees of excellent banks will understand the specific needs of their customers.(Ability to understand)	5.033	P22.The employees of my bank understand my specific needs.	3.883	1.150
Total	25.034	**Total**	19.585	5.451
25.034/5=5.007		**19.585/5=3.917**		
Average Gap Score[Total of E-P/5]		**5.451/5**		**1.090**

Table 2: Un-Weighted Score

The un-weighted score was calculated to normalize the total average score of each dimensions.

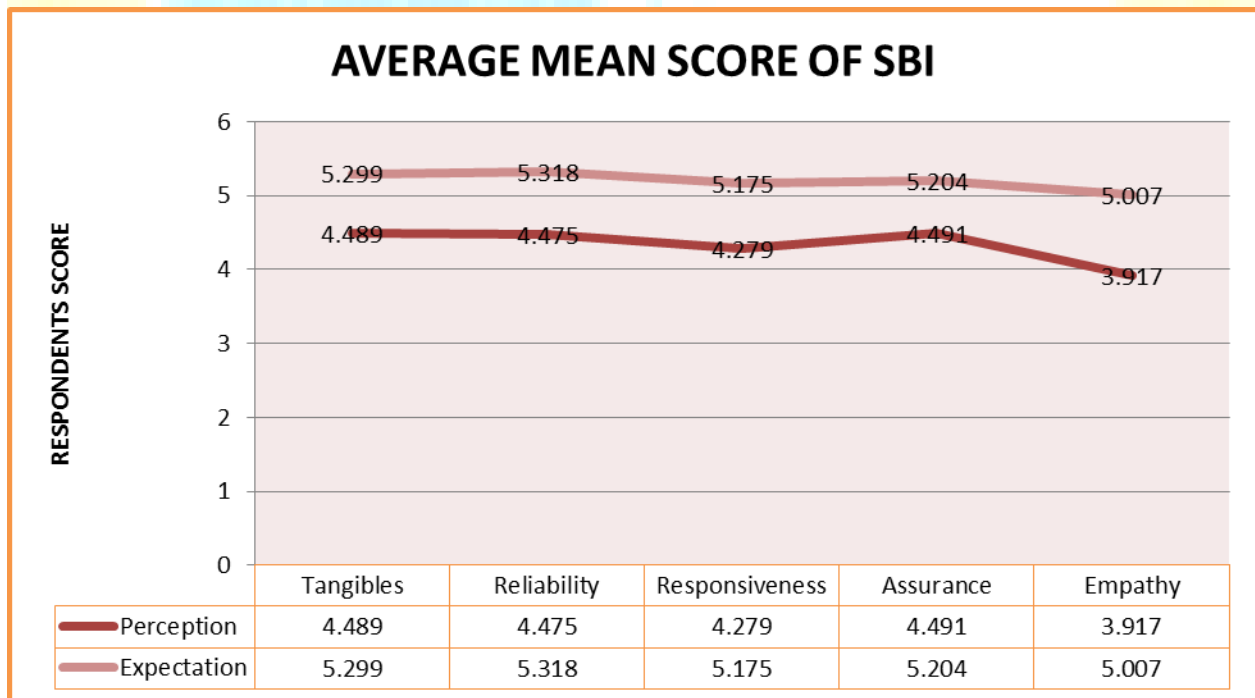| Sl. No	Categories	Gap Score
1	Average gap score for tangibles	0.811
2	Average gap score for Reliability	0.843
3	Average gap score for Responsiveness	0.896
4	Average gap score for Assurance	0.713
5	Average gap score for Empathy	1.090
Total		**4.353**
	Un-weighted score [Average(Total/5)]	0.871

Table 3: Assigning Weights

The weights are assigned by the respondents to identify the level of importance given to each dimensions

Sl no	Dimensions	Weights
1	The appearance of the banks physical facilities, equipment, personnel and communication materials.	2.183
2	The banks' ability to perform the promised service most dependably and accurately.	2.067
3	The banks willingness to help customers and provide prompt service.	2.133
4	The knowledge and courtesy of the banks employees and their ability to convey trust and confidence.	1.817
5	Banks provide caring and individual attention to its customer.	1.767
Total		**10**

A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories
Indexed & Listed at: Ulrich's Periodicals Directory ©, U.S.A., Open J-Gage as well as in Cabell's Directories of Publishing Opportunities, U.S.A.
International Journal of Management, IT and Engineering
http://www.ijmra.us

468

Table 4: Weighted Score

Dimensions	Un-Weighted Score	Assigning Weights	Weighted Score
Tangibles	0.811	2.183/10	0.177
Reliability	0.843	2.067/10	0.174
Responsiveness	0.896	2.133/10	0.191
Assurance	0.713	1.817/10	0.130
Empathy	1.090	1.767/10	0.192
Total			**0.864**

Fig. 1 Average Mean Score on Five Dimensions of SBI.

AVERAGE MEAN SCORE OF SBI

	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Perception	4.489	4.475	4.279	4.491	3.917
Expectation	5.299	5.318	5.175	5.204	5.007

The above results show that the level of perception regarding the service quality is positive for all the five dimensions. This implies that the respondents rated these dimensions between 'agree' and 'partially disagree' for the service rendered by the SBI. The mean gap score analysis is done which shows that all the dimensions with positive scores i.e. tangibility gap score is 0.811, reliability is 0.843, responsiveness is 0.896, assurance is 0.713 and empathy is 1.090. All gaps

have positive values with highest being empathy followed by responsiveness and the lowest is tangibility. The SERVQUAL Model states that the larger the gap score is the more is the dissatisfaction (Parasuraman (1988)). Since the gap score is minimum in tangibility, it reveals that customers are highly satisfied with physical facilities, tools, machines, personnel, materials and communication channels associated with the service of SBI. Empathy has maximum average gap score of 1.090 which is higher than other four dimensions, implying dissatisfaction of customers. Empathy means taking care and paying attention to individuals. Therefore, the banker should take adequate measures to pay attention on individuals to understand their requirements and respond them positively. Further the results also shows that the SBI is are not exceeding customer expectations in all the five dimensions of SERVQUAL Model.

6. Conclusion

The Service quality is used as a strategic tool to get a competitive advantage over the competitors in every organizations including banking sector. The level of competition in banking industry is increasing because of globalization and information technology. The core banking system, mobile banking, internet banking and other facilities of banks attracted many customers and increased the banking activities and business turnover. Analyzing the service quality is important for every bank to sustain in a competitive environment. Analysis of gap score of SBI reveals that 'Empathy' has maximum average score among other four dimensions. Our results also shows that the SBI is are not exceeding customer expectations in all the five dimensions of SERVQUAL Model. Therefore the banks should implement those strategies which help the bank to reach the customer expectations. The bank should have positive approach towards customers and require individual attention which helps the bank to improve their image in the mind of the customers.

A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories
Indexed & Listed at: Ulrich's Periodicals Directory ©, U.S.A., Open J-Gage as well as in Cabell's Directories of Publishing Opportunities, U.S.A.

International Journal of Management, IT and Engineering
http://www.ijmra.us

470

References

1. Aldlaigan, A. & Buttle, F. A., 2002. SYSTRA-SQ: A new measure of bank service quality. *International Journal of Service Industry Management,* Vol. 13, pp. 362-81.

2. Arasli, H., Mehtap, S. S. & Katircioglu, S., 2005. Customer service quality in the Greek Cypriot banking industry. *Managing Service Quality,* Vol. 15, pp. 41-56.

3. Arasli, H., Mehtap-Smadi, S. & Katircioglu, S., 2005. Customer service quality in the Greek Cypriot banking industry. *Managing Service Quality,* Vol. 15, pp. 41-56.

4. Avkiran, N., 1994. Developing an instrument to measure customer service quality in branch banking. *International Journal of Bank Marketing,* Vol. 12, pp. 10-18.

5. Bahia, K. & Nantel , J., 2000. A reliable and valid measurement scale for the perceived service quality of banks. *International Journal of Bank Marketing,* Vol. 18, pp. 84-91.

6. Bei, L. & Chiao, Y., 2006. The determinants of customer loyalty: an analysis of intangible factors in three service industries. *International Journal of Commerce and Management,* Vol. 16, pp. 162-77.

7. Brady, M., Knight, G., Cronin, J. & Tomas, G., 2005. Removing the contextual lens: a multinational, multi-setting comparison of service evaluation models. *Journal of Retailing,* Vol. 81, pp. 215-30..

8. Cook, C. & Thompson, B., 2001. Psychometric properties of scores from the web-based LibQualþstudy of perceptions of library service quality. *Library Trends,* Vol. 49, pp. 585-604.

9. Cronin, J. & Taylor, S., 1992. Measuring service quality: a re-examination and extension. *Journal of Marketing,* Vol. 56, pp. 55-68..

10. Guo, X., Duff, A. & Hair, M., 2008. Service quality measurement in the Chinese corporate banking market. *International Journal of Bank Marketing,* Vol. 26, pp. 305-27.

11. Jabnoun, N. & Al-Tamimi, H., 2003. Measuring perceived service quality at UAE commercial banks. *International Journal of Quality & Reliability Management,* Vol. 20, pp. 458-72.

12. Jiang, J., Klein, G. & Crampton, . S., 2000. A note on SERVQUAL reliability and validity in information system service quality measurement. *Decision Sciences,* Vol. 31, pp. 725-44.

13. Johnston, R., 1995. The determinants of service quality: satisfiers and dissatisfiers. *International Journal of Service Industry Management,* Vol. 6, pp. 53-71.

14. Kilbourne, W., Duffy, . J., Duffy, M. & Giarch, G., 2004. The applicability of SERVQUAL in cross-national measurements of health-care quality. *Journal of Services Marketing,* Vol. 18, pp. 524-33..

15. Lam, T., 2002. Making sense of SERVQUAL's dimensions to the Chinese customers in Macau. *Journal of Market-focused Management,* Vol. 5, pp. 43-58.

16. Lee, M. & Ulgado, F., 1997. Consumer evaluations of fast-food services: a cross-national comparison. *Journal of Services Marketing,* Vol. 1, pp. 39-50.

17. Lewis , B. & Mitchell, V., 1990. Defining and measuring the quality of customer service. *Marketing Intelligence & Planning,* 8(6), pp. 11-17.

18. Mels, G., Boshoff, C. & Deon, N., 1997. The dimensions of service quality: the original European perspective revisited. *The Service Industries Journal,* Vol. 17, pp. 173-89.

19. Nam, S., 2008. Service quality in retail banking. *The Journal of American Academy of Busines,* Vol. 13, pp. 223-30..

20. Othman, A. & Owen, L., 2001. Developing an instrument to measure customer service quality SQ in Islamic banking. *International Journal of Islamic Financial Services,* Vol. 3, pp. 1-26.

21. Parasuraman, A., Zeithaml, V. & Berry, . L., 1985. A conceptual model of service qualityand its implications for future research. *Journal of Marketing,* Vol. 49, pp. 41-50.

22. Parasuraman, A., Zeithaml, V. & Berry, . L., 1988. SERVQUAL: a multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing,* Vol. 64, pp. 12-40.

23. Van der, W., Pampallis, A. & Bond, . C., 2002. Service quality in a cellular telecommunications company: a South African experience. *Managing Service Quality,* Vol. 12, pp. 323-35.

24. Wang, T. & Hui, Y., 2003. The antecedents of service quality and product quality and their influences on bank reputation: evidence from the banking industry in China.. *Managing Service Quality,* Vol. 13, pp. 72-83.

25. Zhou, L., 2004. A dimension-specific analysis of performance-only measurement of service quality and satisfaction in China's retail banking. *Journal of Services Marketing,* Vol. 18, pp. 534-46.