The Impact of SERVQUAL Dimensions on Customer Loyalty in Banking Sector, Tamil Nadu, India - An Empirical Study

Dr. A. Vasumathi
VIT Business School,
VIT University, Vellore-14, Tamil Nadu, India
Email: avasumathi@vit.ac.in

Abstract: **In today's global competitive environment in Banking sector which provide excellent service to customers in order to attract customers from competitor banks. Customer satisfaction is the main factor for any bank and it is the aim of this study which examines various dimensions of Service Quality (SERVQUAL) of a Scheduled Bank. An empirical study was done to find out the best SERVQUAL dimension delivered by this bank to foster customer loyalty. Data were collected through a survey research from 250 customers of five district bank branches in Tamil Nadu, India. The findings showed that the customers prefer a particular bank was satisfied with the reliability dimension of SERVQUAL rendered by the staff members than other dimensions of SERVQUAL. The bank plays a less service in Responsiveness dimension of SERVQUAL. The findings reveal that improvement in service quality can enhance customer loyalty. The SERVQUAL dimensions that play a significant role in this equation are reliability, empathy, tangibility and assurance.**

Key words: **SERVQUAL, Customer loyalty, Customer Satisfaction, Dimensions and Business Environment**.

1 INTRODUCTION

The banking industry in India has enormous changes over the last decade with the excellent service provided by private sector banks and foreign banks. The private banks and foreign banks attract the customers with their excellent quality services and quality relationship with the customers that establish customer satisfaction and customer loyalty (Jones, 2002 as cited by Lymperopoulos et al., 2006). Besides customer loyalty, service quality also influence organizational outcomes such as performance superiority (Portela&Thanassolis 2005), increase in sales profit (Levesque & McDougal 1996), Kish, 2000) and Duncan & Elliot, 2002) and market share (Fisher, 2001) that foster corporate image and promote customer loyalty (Newmann, 2001, Szymign & Carrigan 2001 and Caruana 2002). Excellence in service quality is the main attribute for achieving customer loyalty which is the prime goal of any business organization (Ehigie, 2006). In the

present competitive scenario, success and survival of the private banks depends on the provision of quality customer service (Portela&Thanassolis, 2005) that foster customer loyalty. This article focuses on three key concepts viz., Service Quality (SERVQUAL), customer satisfaction and customer loyalty to evolve the impact of Service Quality on Fostering Customer Loyalty.

2 RESEARCH OBJECTIVES AND QUESTION

The study is guided by the following objectives and research question :

- Whether the bank has been able to meet the expectations of the customers with regard to the tangible dimension with reliability dimension?
- Find out the association of income level of the respondents and type of loan availed from the bank (Empathy dimension).
- Know about the main influence of SERVQUAL dimensions of the staff members in rendering service to customers
- Find out the variance between Qualification of the respondents (Empathy dimension) and attitude towards infrastructure facility (tangible dimension) of SERVQUAL.
- Relationship between occupation (Empathy dimension) of the respondents and response towards number of times transacting the ATM (Reliability dimension) of SERVQUAL adopted the staff members for fostering customer loyalty.

3 REVIEW OF LITERATURE

The service sector makes a significant contribution to economic and social development of countries around the world (Daniel and Harrington 2007) and it plays a pivotal role in the wealth creation of a nation which is reflected by such indicators like GDP and added value. Most countries with strong economies are dominated by services, which account for more than 70 per cent of their GDP (OStrom et al, 2010).

(Kumar et al. 2010) conducted a study, which showed that the most heavily used banking channel is Automated Teller Machine (ATM), 94 per cent of the respondents use this channel. The next most preferred channel is branch banking with 75 per cent users. Hence the need for banks to choose their strategies that will distinguish them from other banks in the present competitive environment. This can be achieved by delivering excellent SERVQUAL that promotes customer satisfaction which will significantly lead to customer loyalty (Caruana et al., 2000 ; Caruana,2002).

3.1 Customer Loyalty

Customer Loyalty is the main factor to which a customer exhibits repeats purchasing behavior from a service provider, possesses a positive attitudinal disposition toward the provider, and considers only this provider when a need for this service arise (Gremler& Brown,1996). But according to (Bloemer& Kasper, 1995), loyalty is interpreted as true loyalty than the repeat purchasing behavior, which is the actual re-buying of a brand without any commitment. Loyalty is developed over a period of time from a continuous record of meeting, and often even exceeding customer expectations (Teich,1997). The cost of attracting a new customer may be five times the cost of retaining a current customer happy (Kotler et al., 1999).

3.2 Service Quality

SERVQUAL is mainly focuses on customers expectations and perception of service (Lehtinen&Lehtinen,1982, Lewis & Booms 1983, Gronroos1984, Parasuraman et. al., 1985 and Caruana, 2002). The definition of service quality was further elaborated as an overall evaluation of a specific service firm that results from comparing that firm's performance with the customer's expectations of how firms in that industry should perform (Parasuramanet.al., 1988).

Male customers are willing to pay a price premium and wait longer if they enjoy assurance and reliability dimensions of SERVQUAL, and if they have good relations with the staff. In contrast, women are less sensitive to factors such as assurance and reliability, ranking price first and access second as the main factors that influence their quality perceptions. It proves gender effects in perception (Spathiset. C et. al., 2004, Kaynaket. al., 1991) conducted a study, which revealed that customers who had more than

secondary education rated convenience in the form of fast and efficient service as most important compared to other factors like knowledge of bank personnel, range of services, friendliness of bank staff and bank location.

Among general instruments, the most popular model used for evaluation of SERVQUAL, a scale developed by (Parasuramanet.al., 1985 & 1988). The attributes of (Parasuraman et. al., 1985), was: tangibles, reliability, responsiveness, competency, courtesy, assurance, credibility, security, access, and understanding. (Parasuramanet. al., 1988) later reduced these ten dimensions into five by using a factor analysis. Based on the five dimensions, a 35-item survey instrument for measuring service quality has been developed by the authors.

These five dimensions are:

(i) Tangibles - Physical facilities, equipment and appearance of personnel.
(ii) Reliability - Ability to perform the promised service dependably and accurately.
(iii) Responsiveness - Willingness to help customers and provide prompt service.
(iv) Assurance (including competence, courtesy, credibility and security) - Knowledge and courtesy of employees and their ability to inspire trust and confidence.
(v) Empathy (including access, communication, understanding the customer) - Caring and individualized attention that the firm provides to its customers.

Although there has been criticism from some other researchers to SERVQUAL instrument (Johnston, 1995), SERVQUAL is the instrument most utilized for its confirmatory factor analyses in most cases. Thus, up to date, SERVQUAL has proven to be a stingy model that has been used in various service organizations and industries to measure service quality including banks (Mc Alexander et. al., 1994, Cowling & Newman, 1996, Levesque & McDougall ,1996, Caruanaet. al., 2000, Caruana,2002, Sureshchandar et. al., 2002. Paswanet. al., 2004, Seth et. al., 2005 and Lymperopouloset.al., 2006).

3.3 Customer Satisfaction

Empathy and tangibles are the important attributes in case of banking services (Kumar et.al., 2010). Empathy is negatively related to customer satisfaction level with banking service (Ahmed et al., 2010) and tangibles do not have any impact on banks customers' satisfaction (Bauman et al, 2007).

According to (Yavaset. al., 1997) an overall service quality leads to customer satisfaction, complaint behavior and commitment. A closer scrutiny of the results showed that tangibles, responsiveness and empathy are significant predictors of consumer satisfaction. Of those three attributes, tangibles and responsiveness are also significant antecedents of commitment. Empathy is the only attribute with a significant relationship with complaint behavior. The more favorable customers perceived bank services and the more satisfied they are, the more loyal they are to their banks (Benjamin Osayawe Ehigie, 2006). The customers who experienced a problem had a significant and dramatic drop in customer satisfaction, willingness to recommend to friend, and,

conversely, an increase in switching. This confirms and reinforces the serious consequences of unsatisfactory customer service (Levesque and McDougall,1996).

3.4 Research Theoretical Model

The theoretical model guiding the investigation is depicted in figure below, adapted from (Aguset.al., 2007), the dimensions of SERVQUAL in Malaysian Public Service Sector. This research will study 5 factors of service quality namely: tangibles, reliability, responsiveness, assurance and courtesy which were adapted from (Aguset.al., 2007).
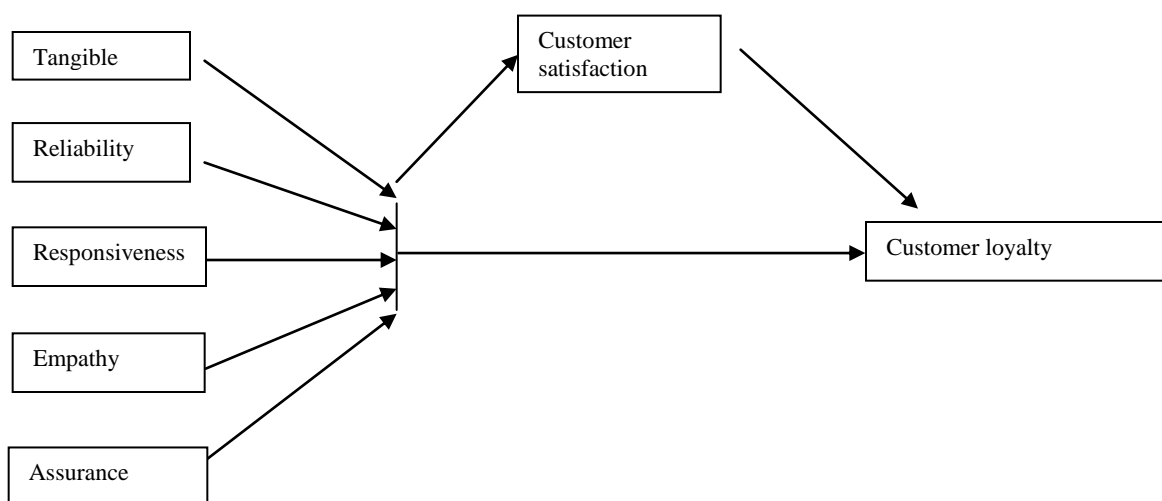
4 RESEARCH METHODOLOGY

4.1 Type Of Research

Descriptive type of research is followed in this study.

4.2 Sample

The sample size of this study is 250 from the five Scheduled Bank branches – Karur, Verrarakium, Namakkal, Erode, and Vellore districts (50 customers in each branch) in Tamil Nadu, India. They were selected using convenience sampling method.

4.3 Research Instrument

The study is purely empirical in nature, hence questionnaire is the sole instrument used for data collection. The rationale behind using questionnaire is its cost effectiveness and convenience. The present research has employed SERVQUAL scale (Parasuramanet.al., 1988) to measure the customers' loyalty apart from the questions developed by the researchers.

4.4 Data Analysis Procedures

The data collected from the questionnaires were keyed-in and analyzed by using SPSS (Statistical Package for Social Sciences) for statistical analysis. Chi-Square test was employed to find out the empathy dimension of SERVQUAL. ANNOVA was used to find out the significance variance in the assurance dimension of SERVQUAL. Through Correlation analysis the tangible dimension of SERVQUAL was analyzed. Using Regression, the number of times transacting in the ATM was found out (Reliability with Empathy Dimension). Discriminant analysis was employed to find out the association between RTGS awareness with age, occupation, qualification and income of the respondents (Assurance with Empathy dimension). Conjoint analysis was used to find out the Responsiveness with empathy dimension of SERVQUAL.

5 DATA ANALYSIS

5.1 Chi-Square Test:

Association between between income level of the respondent and the type of loan in a Scheduled Bank (Empathy dimension of SERVQUAL)

H1: There is a significant association between income level of the respondent and the type of loan from Scheduled Bank.

TABLE 1
CROSS TABULATION

		Income					Total
		<1lac	1lac-3lacs	>3lacs <5lac	>5lacs	nil	
TYLOAN	vehicle loan	2	14	2	1	0	19
	house loan	1	3	1	1	0	6
	personal loan	2	4	0	0	0	6
	others	22	25	6	1	2	56
	vehicle and others	5	2	2	0	0	9
Total		32	48	11	3	2	96

TABLE 2
CHI SQUARE TEST

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	17.367	16	.362
Likelihood Ratio	18.270	16	.308
Linear-by-Linear Association	2.162	1	.141
N of Valid Cases	96		

TABLE 3
DIRECTIONAL MEASURES

			Value	Asymp. Std. Error	Approx. T	Approx. Sig.
Nominal by Nominal	Lambda	Symmetric	.034	.033	1.005	.315
		TYLOAN Dependent	.000	.035	.000	1.000
		INCOME Dependent	.063	.053	1.142	.254
	Goodman and Kruskal tau	TYLOAN Dependent	.051	.024		.247
		INCOME Dependent	.071	.034		.041

TABLE 4
SYMMETRIC MEASURES

		Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.391	.362
N of Valid Cases		96	

In the cross tabulation, the relationship between income level (independent variable) and type of loan (dependent variable) is being narrated. It can be observed from the table that as income of the respondent increases, the percentage of people acquiring loan decreases. The chi-square test reveals that there is no association between level of income and type of loan. At 95% confidence level, the significance level is 0.05, the output is giving a significance level of .362 which is greater than 0.05. Thus, the alternative hypothesis is accepted. So, there is a significant association between the income level

5.2 ANOVA:

Variance between the qualification of the respondents (Empathy) and attitude towards infrastructure facilities (Tangibility)

of the respondent and the type of loan. The contingency coefficient value is .391. There is moderate level of association between income level and type of loan as the value is closer to 0 rather than 1. The lambda value is .000. The lambda value tells us that there is 0% error reduction in predicting the type of loan if the income level of the respondent is known. Thus, we can conclude that income level of the respondent does not help in predicting the type of loan.

H2: There is a significant variance between the qualification of the respondents and attitude towards infrastructure facilities

TABLE 5

DESCRIPTIVES

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
SSLC	54	4.4630	.53950	.07342	4.3157	4.6102	3.00	5.00
+2	28	4.3214	.61183	.11563	4.0842	4.5587	3.00	5.00
DIPLOMA	19	4.1053	.73747	.16919	3.7498	4.4607	2.00	5.00
UG	87	4.2989	.59288	.06356	4.1725	4.4252	3.00	5.00
PG	37	4.2162	.58382	.09598	4.0216	4.4109	3.00	5.00
<10TH GRADE/ILLITERATE	25	4.4000	.57735	.11547	4.1617	4.6383	3.00	5.00
Total	250	4.3200	.59584	.03768	4.2458	4.3942	2.00	5.00

TABLE 6
ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.577	5	.515	1.465	.202
Within Groups	85.823	244	.352		
Total	88.400	249			

At 95% confidence level, the significance level is 0.05; the output is giving a significance level of .202 which is greater than 0.05. Thus, accept the alternative hypothesis. So, there is a significant association between the qualification of the respondents and attitude towards infrastructure facilities.

5.3 Correlation Analysis:

Relationship between Occupation of the respondent (Empathy dimension) and response towards number of times transacting ATM Service (Reliability dimension of SERVQUAL)

TABLE 7

CORRELATIONS

		Occup	Atmtime
Occup	Pearson Correlation	1	-.202
	Sig. (2-tailed)	.	.005
	N	250	190
Atmtime	Pearson Correlation	-.202	1
	Sig. (2-tailed)	.005	.
	N	190	190

Since the correlation value -.202 is between -0.25 and .0, there is low negative correlation between occupation of the respondent and number of times transacting in ATM.

6 FINDINGS AND CONCLUSIONS

The researchers found that the Income level of the respondents is high (Empathy Dimension), the type of preferred loan is House loan when compared to other low income group of respondents. Hence, the bank should educate the customer to avail different kind of loan. The bank should not consider only the income level of the respondents, should consider the repaying capacity to settle loans. There is a significant variance between qualification of the respondents and attitude towards infrastructure facilities available in the bank. The researchers found that the highly qualified (Empathy dimension) respondents were happy with the infrastructure facilities (Tangible Dimension) available in the bank when compared to less qualified respondents. The authors found that there is a negative correlation between occupation (Empathy dimension) of the respondents and response towards number of time transacting the ATM. It proves from the study that the customer with occupation (Empathy dimension) as Business man was transacting more number of times ATM (Reliability dimension) when compared to customers with student as occupation. Hence, the staff members can pay some extra attention to all the customers to know about their banking services (Responsiveness dimension). If proper implementation of the above mentioned dimensions of SERVQUAL is made then it would pave way for improving the various services provided in the bank and that in turn would lead to satisfied and loyal customers.

REFERENCE

Ahmed, I., Nawaz, M., Usman, A., Shaukat, M., Ahmad, N., and Iqbal, H. (2010). Impact of
   Service Quality on Customers' Satisfaction: Empirical evidence from telecom sector of
   Pakistan. *Interdisciplinary Journal of Contemporary Research in Business,* 1(12), 98-113.

Agus, A., Barker, S., and Kandampully, J. (2007). An exploratory study of service quality in
   the Malaysian public service sector. *International Journal of Quality & Reliability
   Management,* 24(2), 177-190.

Benjamin OsayaweEhigie (2006), "Correlates of customer loyalty to their bank: a case study
   in Nigeria", *International Journal of Bank Marketing*, 24(7), 494-508

Bitner, M. J. (1990). Evaluating service encounters the effects of physical surroundings and
   employee responses. *Journal of Marketing*, 52(2), 69-82.

Bloemer, J.M.M., and Kasper, H.D.P. (1995). The complex relationship between consumer
   satisfaction and brand loyalty. *Journal of Economic Psychology*, 16, 311-329.

Caruana, A. (2002). Service loyalty. The effects of service quality and the mediating role of
   customer satisfaction. *European Journal of Marketing*, 36(7/8), 811-828.

Caruana, A., Money, A.H. and Berthon, P.R. (2000). Service quality and satisfaction- the
   moderating role of value. *European Journal of Marketing*, 34(11/12), 1338-1352

Charalambos Spathis, Eugenia Petridou, Niki Glaveli, (2004) "Managing service quality in
   banks: customers' gender effects", *Managing Service Quality*, 14 (1), 90 - 102

Colgate, M., Stewart, K., and Kinsella, R. (1996). Customer defection: a study of the student
   market in Ireland. *International Journal of Bank Marketing*, 14(3), 23-29.

Cowling, A., and Newman, K. (1996). Service quality in retail banking: the experience of
   two British clearing banks. *International Journal of Bank Marketing*, 14(6), 3-11.

Daniel, P.W., & Harrington, J.W (2007), "Services and Economic Development in the Asia-
   Pacific", *Ashgate.*

Duncan, E., and Elliot, G. (2002). Customer service quality and financial performance among
   Australian retail financial institutions. *Journal of Financial Services Marketing*, 7(1), 25-
   41.

Ehigie, B. O. (2006). Correlates of customer loyalty to their bank: a case study in Nigeria.
   International Journal of Bank Marketing, 24(7), 494-508.

Ennew, C.T., and Binks, M.R. (1996). The impact of service quality and service
   characteristics on customer retention: small businesses and banks in the UK. *British

Journal of Management, 7, 219-230.

Gremler, D.D., and Brown, S.W. (1996). Service loyalty: its nature, importance and
   implications. *Proceedings American Marketing Association*, 171-180.

Gronroos, C. (1984). A service quality model and its marketing implications. *European
   Journal of Marketing,*18(4), 36-44.

Kandampully.J (1998),"Service quality to service loyalty: a relationship which goes beyond
   customer services", *Total Quality Management*, 9(6), 431-444.

Kumar, M., F.T. Kee, V. Charles, 2010. Comparative Evaluation of Critical Factors in
   Delivering Service Quality of Banks: An Application of Dominance Analysis in Modified
   SERVQUAL Model. *International Journal of Quality & Reliability Management*, 27(3):
   351-377.

Kaynak, E., Kucukemiroglu, O. and Odabasi. Y. (1991), "Commercial bank selection in
   Turkey." *International Journal of Bank Marketing*, 9(4), 30- 39.

Kish, J. (2000). Before your customers leave. *Bank Marketing,* 32(2), 30.

Kotler, P., Ang, S.H., Leong, S.M., and Tan, C.T. (1999). *Marketing Management: An Asian
   Perspective.* New Jersey: Prentice Hall Inc.

Lam, R., and Burton, S. (2006). SME banking loyalty (and disloyalty): a qualitative study in
   Hong Kong. *International Journal of Bank Marketing*, 24(1), 37-52.

Lehtinen, U., and Lehtinen, J.R. (1982). Service quality- a study of dimensions. unpublished
   working paper, *Service Management Institute*, Helsinki, 439-460.

Levesque, T.J., and McDougall, G.H.G. (1993). Managing customer satisfaction: the nature
   of service problems and customer exit, voice and loyalty. *Asia Pacific Journal of Quality
   Management,* 2(2), 40-58.

Levesque, T.J., and McDougall, G.H.G. (1996). Determinants of customer satisfaction in
   retail banking. *International Journal of Bank Marketing,* 14(7), 12-20.

Lewis, R.C., and Booms, B.H. (1983). The marketing aspects of service quality. *Emerging
   Perspectives in Service Marketing*, in Berry, L.L., Shostack, G. and Upah, G. (Eds)
   American Marketing Association, Chicago, IL 99-107.

Lymperopoulos, C., Chaniotakis, I.E., and Soureli, M. (2006). The importance of service
   quality in bank selection for mortgage loans. *Managing Service Quality*, 16(4), 365-379.

Manandhar, R., and Tang, J.C.S. (2002). The evaluation of bank branch performance using

data envelopment analysis. A framework. *Journal of High Technology Management Research,* 13, 1-17.

McAlexander, J.H., Kaldenberg, D.O., and Koenig, H.F. (1994). Service quality measurement. *Marketing Health Services,* 14(3), 34-40.

Mukesh Kumar, Fong Tat Kee and AmatTaapManshor (2009), "Determining the relative importance of critical factors in delivering service quality of banks An application of dominance analysis in SERVQUAL model", *Managing Service Quality,*19(2),211-228.

Mwita, JI. (2000), "Performance management model", *The International Journal of Public Sector Management,* 13 (1):19-37.

Newman, K. (2001). Interrogating SERVQUAL: a critical assessment of service quality measurement in a high street retail bank. international *Journal of Bank Marketing,* 19(3), 126-139.

Ostrom, A., Bitner, M., et al. (2010), Moving forward and making a difference: Research priorities for the science of service. *Journal of Service Research,* 13(1), 4-36.

Parasuraman, A., Zeithaml, V. and Berry, L. (1985), ``A conceptual model of service quality and its implications for future research'', *Journal of Marketing,* Vol. 49, pp. 41-50.

Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1988). SERVQUAL: a multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), Spring.

Parasuraman, A., Zeithaml, V.A., and Berry, L.L. (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing,* 49, Fall.

Paswan, A.K., Spears, N., Hasty, R., and Ganesh, G. (2004). Search quality in the financial services industry: a contingency perspective. *Journal of Services Marketing,* 18(5), 324- 338.

Portela, M.C.A.S., and Thanassoulis, E. (2005). Profitability of a sample of Portuguese bank branches and its decomposition into technical and allocative components. *European Journal of Operational Research,* 162(3), 850-866.

Seth, N.S., Deshmukh, S.G., and Vrat, P. (2005). Service quality models: a review. *International Journal of Quality & Reliability Management,* 22(9), 913-949.

Sureshchandar, G.S., Rajendran, C., and Anantharaman, R.N. (2002). Determinants of customer-perceived service quality: a confirmatory factor analysis approach. *Journal of Services Marketing,* 16(1), 9-34.

Szymigin, I., and Carrigan, M. (2001). Wherefore customer loyalty? *Journal of Financial Services Marketing,* 6(2), 6-8.

Teich, I. (1997). Holding on to customers: the bottom-line benefits of relationship building. *Bank Marketing*, 29(2), 12-13.

Teich, I. (1997). Holding on to customers: the bottom-line benefits of relationship building. *Bank Marketing*,29(2), 12-13.

UgurYavas, Martin Benkenstein and UweStuhldreier (2004)," Relationships between service quality and behavioral outcomes A study of private bank customers in Germany", *The International Journal of Bank Marketing,* 22(2), 144-157.

UgurYavas, ZeynepBilgin, and Donald J. Shemwel (1997),"Service quality in the banking sector in an emerging economy: a consumer survey", *International Journal of Bank Marketing,*15(6).

Wu, D.D., Yang, Z., and Liang, L. (2006). Using DEA-neural network approach to evaluate branch efficiency of a large Canadian bank. *Expert Systems with Applications*, 31, 108- 115.

Zeithaml, V.A., Berry, L.L., and Parasuraman, A. (1996). The behavioral consequences of service quality. *Journal of Marketing*, 60, 31-46.