



## VALUE ADDED SERVICE QUALITY IN E- BANKING – A CRITICAL ANALYSIS

Jenoba P<sup>1</sup> and Dr.S. Nadarajan<sup>2</sup>

<sup>1</sup>Assistant Professor, NC College,Kaliyakkavilai, Tamil Nadu, India  
(Affiliated to Manonmaniam Sundaranar University, Tirunelveli, Tamil Nadu, India)

<sup>2</sup>Associate prof. & Head , Department of Commerce,St. Judes College,  
Thoothoor(Affiliated to Manonmaniam Sundaranar University,  
Tirunelveli, Tamil Nadu, India)



### ABSTRACT

*The service quality provided by the financial institutions included basic service quality or core service quality value added service quality and critical service quality. The service quality in e-banking is examined by its critical factors which determine the success of the e-banking implemental at commercial banks. The value added service quality in e-banking (VASQ) has been examined under nine dimensions namely ease of use, reliability, privacy, responsiveness, empathy, updation, interaction, price and efficiency.*

**KEYWORDS :** Value Added service quality (VASQ); e-banking; public sector banks ; private sector banks.

### INTRODUCTION

Service quality is a measure of how well the service level delivered matches customer expectations. Delivering quality service means conforming to customers expectations on a consistent basis. India is the largest country in South Asia with a huge financial system characterized by many and varied financial institution and instrument. At the top of the banking system in the RBI and the largest bank is the State Bank of India, Public sectors banks occupy a predominant position in the Indian financial system. The service quality provided by the financial institutions include basic service or core service quality, value added service quality and critical service quality.

The Present study is purely based on primary data collected from the customers of both public and private banks in kanyakumari district. The total number of banks in the district are 270 which consists of 78 and 192 branches in public and private sector banks respectively.257 customer were selected from public sector banks and 391 customers were selected from private sector banks by using fundamental sampling for the purpose of this study. The data were collected through a well structured interview schedule. The Value Added service quality in e-banking is examined by its critical factors which determine the success of the e-banking implementation at commercial banks. The critical factors are namely ease of use, reliability, privacy, responsiveness, empathy, updation, interaction, price and efficiency.

### STATEMENT OF THE PROBLEM

Consequent to the implementation of government policies on globalization and liberalization, the consumers have become more critical of the quality of service. Consumers are now aware of the alternatives available in relation to the service and the provider organization. An improved technologies are resulting in customer service break through that significantly alter customer expectations. The banks are increasing the speed of services, handling very carefully for the e-services to the level of satisfaction of the customers.

## OBJECTIVES

The objective of the present study confined to identify the variables related to Value Added Service Quality in e-banking and analyse the reliability and validity of variables in Value Added Service Quality.

## METHODOLOGY

The Present study is purely based on primary data collected from the customers of both public and private banks in kanyakumari district. The total number of banks in the district are 270 which consists of 78 and 192 branches in public and private sector banks respectively. 257 customer were selected from public sector banks and 391 customers were selected from private sector banks by using fundamental sampling for the purpose of this study. The data were collected through a well structured interview schedule.

## TOOLS

The 't' test has been administrated to findout the significant difference between the public sector banks and private sector banks regarding various aspects in service qualities and Value Added service quality in e-banking.

## VALUE ADDED SERVICE QUALITY IN E-BANKING

In the present study, the value added service quality in e-banking (VASQ) has been examined under nine dimensions namely ease of use, reliability, privacy, responsiveness, empathy, updation, interaction, price and efficiency. The name of the variables included to measure each dimension of VASQ is given in Table 1.1

**TABLE 1.1**  
**Variables related to Value added Service Quality in e-banking**

<i>Sl.No.</i>	<i>Variables</i>	<i>Sl.No.</i>	<i>Variables</i>
<b>I</b>	<b>Ease of use</b>	<b>V</b>	<b>Empathy</b>
1	It is easy to look for information	1	Address complaints friendly
2	It is easy to more around the website	2	Consistently courteous
3	It is easy to do what I want to do	3	Personalized service
4	Well organized website	<b>VI</b>	<b>Updation</b>
5	Helpful in navigation	1	Immediate entry of debit and credit
<b>II</b>	<b>Security</b>	2	Fast cleaning and collection facilities
1	No possibility of misuse	3	Updation of information
2	Feeling of safety	<b>VII</b>	<b>Interaction</b>
3	Providing sensitive information	1	Adequate guidelines in the website
4	Personally informative	2	Well informed on all developments
<b>III</b>	<b>Informative</b>	3	Needs are adequately addressed
1	Completeness	4	Bank advice to use online banking
2	Ease of understanding	<b>VIII</b>	<b>Usability</b>
3	Personalisation	1	Nature of use
4	Relevance	2	Number of transactions executed
<b>IV</b>	<b>Accessibility</b>	3	Number of sites visited
1	Available 24 hours	<b>IX</b>	<b>System</b>
2	Available 7 days in a week	1	Adaptability
3	Anytime and anywhere	2	Response time

The customers are asked to rate these variables at five point scale on two dimensions namely expectation and perception. The score of the variables in value added service quality in e-banking have been included for the reliability and validity analysis with the help of Confirmatory Factor Analysis.

**RELIABILITY AND VALIDITY OF VARIABLES IN VASQFS**

The variables included in the VASQFs is varying from 4 to 2. The score of variables in each VASQFs have been included to examine the reliability and validity of variables in each VASQFs. The confirmatory factor analysis has been executed for this purpose. The CFA results in standardized factor loading of variables of VASQFs it is statistical significance, composite reliability and average variance extracted. The overall reliability of each VASQFs has been estimated. The results are shown in Table 1.2

**TABLE 1.2**  
**Reliability and Validity of Variables in VASQFs**

Sl.No.	VASQFs	Range of Standardized factor loading	Range of 't' statistics	Cronbach alpha	Composite reliability	Average variance extracted
1.	Ease of use	0.8868-0.6569	3.8245*-2.5869*	0.7917	0.7716	0.54
2.	Security	0.9039-0.7041	4.1245*-2.7033*	0.8508	0.8264	0.59
3.	Informative	0.8739-0.6408	3.7085*-2.4143*	0.7508	0.7244	0.52
4.	Accessibility	0.9308-0.7447	4.3869*-3.0664*	0.8781	0.8511	0.64
5.	Empathy	0.8668-0.7568	3.9979*-3.2768*	0.8044	0.7845	0.55
6.	Updation	0.9241-0.7244	4.2461*-2.8084*	0.8511	0.8348	0.61
7.	Interaction	0.8446-0.6941	3.3142*-2.9694*	0.7403	0.7262	0.52
8.	Usability	0.8602-0.6886	3.6979*-0.6886*	0.7944	0.7749	0.53
9.	System	0.9086-0.8144	0.9086*-0.8144*	0.8241	0.8089	0.62

The standardized factor loading of variables in VASQFs are greater than 0.60 which reveals the content validity. The significance of 't' statistics of the standardized factor loading of variables in VASQFs reveals the convergent validity. It is also proved by the composite reliability and average variance extracted. Since these are greater than its standard minimum of 0.50 and 50.00 per cent respectively. The cronbach alpha of all five VASQFs are greater than its minimum threshold of 0.60. The results reveal that there is a reliability and validity of variables in each VASQFs.

**LEVEL OF EXPECTATION ON VASQ FACTORS AMONG THE CUSTOMERS:**

The score on the level of expectation on various OBSQ factors have been derived by the mean score of the variables in each factor. The mean score of all OBSQ factors among the customers in private and public sector banks have been computed separately in order to exhibit the level of expectation on OBSQ among the customers in private and public sector banks. The 't' test has been applied to test the significant difference among the two group of customers regarding their level of expectation on VASQ factors. The results are shown in Table 1.3.

**TABLE 1.3**  
**Level of expectation on Value Added Service Quality Factors in e-banking**

Sl.No.	Factors	Mean score among customers in		t – statistics
		PUSBs	PRSBs	
1	Ease of use	3.3844	3.9845	2.3084*
2	Security	3.1089	3.7021	2.4186*
3	Informative	3.2646	3.8667	2.5099*
4	Accessibility	3.0139	3.6023	2.4027*
5	Empathy	3.1083	3.7449	2.6609*
6	Updation	3.2921	3.6227	1.2334
7	Interaction	3.2097	3.7343	1.9032
8	Usability	3.1544	3.6086	1.7586
9	System	3.4449	3.8809	1.8407

\*Significant at five per cent level.

The highly expected VASQ factors among the customers in private sector banks is easy of use and system since its mean scores are 3.9845 and 3.8809 respectively. Among the customers in public sector banks, these are system and ease of use since its mean scores are 3.4449 and 3.3844 respectively. Regarding the level of expectation on VASQ, the significant difference among the two group banks have been noticed in the case of ease of use, security, informative, accessibility and empathy since their respective 't' statistics are significant at five per cent level.

### CUSTOMERS PERCEPTION ON VASQ FACTORS

The customer perception on value added service quality factors in e-banking has been computed by the mean score of the variables in each VASQ factor. The mean score of each VASQ factor among the customers in private and public sector banks have been computed separately in order to exhibit the level of customers perception on VASQ factors. The 't' test has been executed to find out the significant difference among the two group of customers regarding their level of perception is searched. The results are given in Table 1.4

**TABLE 1.4**  
**Level of perception on VASQ factors**

Sl.No.	Factors	Mean score among customers in		t – statistics
		PUSBs	PRSBs	
1	Ease of use	2.6562	3.1142	-2.0246*
2	Security	2.3845	3.0665	-2.5841*
3	Informative	2.7661	3.2716	-2.0096*
4	Accssibility	2.3344	3.0114	-2.6082*
5	Empathy	2.8145	3.1386	-1.4433
6	Updation	2.6508	2.9145	-1.6676
7	Interaction	2.5661	3.0241	-2.0117*
8	Usability	2.4246	2.9091	-1.7392
9	System	2.7336	3.1772	-1.8089

\* Significant at five per cent level.

The highly perceived VASQ factors among the customers in private sector banks is system and informative since their mean scores are 3.1772 and 3.2716 respectively. Among the customers in public sector banks, these two VASQ factors are empathy and informative since its mean scores are 2.8145 and 2.7661 respectively. Regarding the perception on VASQ factors, the significant difference among the two group of banks have been noticed in the ease of use, security, informative, accessibility and interaction since their respective 't' statistics are significant at five per cent level.

### DISCRIMINANT VASQ FACTORS EXPECTED BY CUSTOMERS IN PUBLIC AND PRIVATE SECTOR BANKS

The degree of expectation on VASQ factors among the customers in public and private sector banks may be differ in different degree. It is imperative to identify the important discriminant VASQ factors among the two group of customers for some policy implications. Initially, the mean difference in each VASQ among the two group of customers, and its statistical significance have been computed. The discriminant power of each VASQ factors have been computed by its Wilk's Lambda. The results are given in Table 1.5

**TABLE 1.5**  
**Mean difference and Discriminant Power of Expectation on VASQ Factors**

Sl. No.	VASQ Factors	Mean score among customers in		Mean difference	t – statistics	Wilk's lambda
		PUSBs	PRSBs			
1	Ease of use	3.3844	3.9845	0.6001	2.3084*	0.2361
2	Security	3.1089	3.7021	0.5962	2.4186*	0.1408
3	Informative	3.2646	3.8667	0.6021	2.5099*	0.1236
4	Accessibility	3.0139	3.6083	0.5944	2.4027*	0.1831
5	Empathy	3.1083	3.7449	0.6366	2.6609*	0.1503
6	Updation	3.2921	3.6227	0.3306	1.2334	0.4117
7	Interaction	3.2097	3.7343	0.5246	1.9032	0.3087
8	Usability	3.1544	3.6086	0.4542	1.7586	0.3896
9	System	3.4449	3.8809	0.4360	1.8407	0.4539

\* Significant at five per cent level.

The mean difference is identified in the case of expectation on empathy, informative and ease of use since its mean difference is -0.6366, -0.6021 and -0.6001 respectively. The significant mean differences are noticed in the case of ease of use, security, informative, accessibility and empathy since their respective 't' statistics are significant at five per cent level. The higher discriminant power is noticed in the expectation in the informative and security since their respective Wilk's lambda are 0.1236 and 0.1408.

#### CUSTOMER OVERALL ATTITUDE TOWARDS VASQ IN E-BANKING

The customers overall attitude towards the value added service quality in e-banking is computed by the mean score all variables included in nine VASQ factors. Before summarizing the score of all variables in VASQ factors, the overall reliability have been tested with the help of Cronbach Alpha. The score of VASQ is confined to less than 2.00; 2.01 to 3.00; 3.01 to 4.00 and above 4.00. The distribution of customers on the basis of their score on online banking service quality (SOVASQ) is presented in Table 1.6

**TABLE 1.6**  
**Score on Value Added Service Quality (SOVASQE) among Customers**

Sl.No.	SOVASQ	Number of customers in		Total
		PUSBs	PRSBs	
1	Less than 2.00	11	60	71
2	2.00 – 3.00	71	115	186
3	3.01 – 4.00	246	44	290
4	Above 4.00	63	38	101
	Total	391	257	648
Overall Cronbach Alpha: 0.8143		AVE = 0.6097		

The variables in VASQ explain it to the extent of 81.43 per cent since its Cronbach Alpha is 0.8143. The important SOVASQ among the customers is 3.01 to 4.00 and 2.00 to 3.00 which constitutes 44.75 and 28.70 per cent to the total respectively. The important SOVASQ among the customers in private sector banks is 3.01 to 4.00 and 2.00 to 3.00 which constitutes 62.92 and 18.16 per cent to its total respectively. Among the bank in public sector banks, these two are 2.00 to 3.00 and less than 2.00 which constitutes 44.75 and 23.35 per cent to its total respectively.

## LIMITATIONS OF THE STUDY

The present study is subjected with the following limitations. The primary data were collected from the respondents are subjected with value judgement of the respondents as well as the researcher and the bank manager. The descriptive variables in the present study are connected with quantitative variables. The present research included aspects in service qualities are core, basic, value added and critical service quality in banking and electronic banking. These are the important limitations of the research area.

## FINDINGS

The VASQE is examined under nine dimensions namely ease of use, security, informative, accessibility, empathy, updation, interaction, usability and system. The highly expected VASQF factors by the customers in PUSBs and PRSBs are system and ease of use respectively. The significant difference among the customers in PUSBs and PRSBs have been noticed in their view level of expectation on 5 out of nine VASQE factors.

The highly perceived VASQE factors by the customers in PUSBs and PRSBs are empathy and informative respectively. The significant difference among the customers in PUSBs and PRSBs have been noticed in their perception on five out of nine factors. The important discriminant VASQFs based on its perception among the customers in PRSBs and PUSBs are accessibility and empathy which are highly perceived by the customers in PRSBs compared to the customers in PUSBs.

## CONCLUSION

The VASQE is examined under nine dimensions namely ease of use, security, informative, accessibility, empathy, updation, interaction, usability and system. The highly expected VASQF factors by the customers in PUSBs and PRSBs are system and ease of use respectively. The significant difference among the customers in PUSBs and PRSBs have been noticed in their view level of expectation on 5 out of nine VASQE factors. The important discriminant VASQE factors based on its expectation among the customers in PUSBs and PRSBs are empathy and security which are higher expected by the customers in PRSBs compared to customers in PUSBs.

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