

A STUDY ON DIGITAL BANKING IMPACT ON SERVICE QUALITY WITH REFERENCE TO PUBLIC SECTOR BANKS

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Abstract:

In the early days the main banking function of the goldsmiths was to keep in custody other people's money and lending a part of it. Gradually, these functions were extended, and others were added. As a result, the dependence of commerce upon banking has become so great that in the modern money economy, the cessation, even for a day or two, of the banker's activities would completely paralyse the economic life of a nation. Now-a-days, the bankers have to deal with many matters. They serve as custodians of stocks and shares and other valuables. Imports into and exports out of a country are financed by banks and documents relating to the goods so imported and exported, at one time or another, pass through the hands of the bankers. Quality has become a part of our daily lives. It has received high attention by many firms and customers. While customers keep looking and expressing their desires for quality products or services, firms consider quality as a key strategy to develop products and services in order to gain competitive advantages. The present study focusing on digital bank facilities and services provided by public sector banks i.e SBI, Andhra Bank in Hyderabad region including urban & rural and its impact on service quality is measured with 592 sample of respondents with structured questionnaire.

Keywords: Digital Banking, Service, Assurance, Technology, Operations

Introduction:

Internet banking is an electronic payment system that enables customers of a financial institution to conduct financial transactions on a website operated by the institution, such as a retail bank, virtual bank, credit union or building society. Online banking is also referred as Internet banking, e-banking, virtual banking and by some other terms. This new channel has added a new dimension to the concept of customer satisfaction and how it can be affected in a positive way.

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All organizations exist and strive to become an integral part of the lives of their customers and therefore always strive harder to keep satisfying their customers through better channels of delivering their offerings. There are many factors which have an impact on customer satisfaction, one of the most important being service quality. Due to the varying nature of the products offered in manufacturing sector and in the services sector the definition and measurement of service quality, it was seen could not be the same for both. Especially, in the present era, with the emergence of internet as a major channel of service delivery, the need for a scale to measure the service quality in electronic media of services was felt strongly. Hence, service quality was taken up by the research scholars specifically in terms of the e-services which lead to the development of various models that helped in measuring e-service quality in the services sector.



Literature:

In today's constantly changing business environment, providing a superior service quality, through an adequate and a strong focus on customer (Chiara G., 2007), is one of the key factors enabling firms to gain a lasting competitive advantage in winning the market. For this, nowadays marketers, according to R. Ladhari (2011), are trying to focus more on a continuous monitoring and evaluation of service quality, involving various innovative offerings and service developments, which have a direct influence on customers' service experiences. Because, for instance, better service quality increases perceived service value and satisfaction; improves the service provider's customer retention and financial performance; and also enhances a firm's corporate image. (Nguyen and Leblanc, 1998)

Service Quality: refers to (Patrick P. et. al 1996, pp. 62), the „„difference between customers““ expectations for service performance prior to the service encounter and their perceptions of the service received. Service quality theory (Oliver, 1980) predicts that clients will judge that quality

is low if performance does not meet their expectations and quality increases as performance exceeds expectations. Accordingly, customer's expectations serve as the foundation on which service quality will be evaluated by customer. In addition, as service quality increases, satisfaction with the service and intentions to reuse the service increases.

Service quality is antecedent to customer satisfaction (Parasuraman, Berry & Zeithaml 1994, 111-125; Caruana 2002, 811-830). Perceived service quality is a result of individual service encounter between the service provider and the customer, during which the customer evaluates quality and develops satisfaction or dissatisfaction (Bitner et al. 1990, 71-84). The pre-purchase expectations formed by the customers are influenced by intrinsic and extrinsic cues related to a particular experience of previous experiences and other related information sources (Gould-Williams 1999, 97-118). It is difficult to reassure the customers regarding the functional performance of the environmentally friendly products due to the past failure of many of these products (Davis 1993; Ottman 1999, 21).

Methodology:

Objectives:

- 1) To Study digital banking impact on customer satisfaction.
- 2) To identify factors influencing on digital banking efficiency.
- 3) To know digital technology assurance on service quality to customer.

Hypothesis:

Null Hypothesis (Ho1): There is no association between digital banking efficiency and customer satisfaction level.

Null Hypothesis (Ho2): There is no association between income of the respondents and their opinion on digital banking efficiency.

Null Hypothesis (Ho3): There is no association between education and their opinion on technical up gradations in digital banking.

Sample

The total number of selected respondents was 610 out of which 592(296 in Andhra bank and 296 in SBH) were usable. 296 respondents were selected from urban and rural areas where these banks are situated based on representative sampling.

Data Analysis-Tools and Techniques

Appropriate statistical tools and techniques have been used to analyze the data collected like descriptive analysis, Chi-Square Analysis and Factor Analysis.

FACTOR ANALYSIS OF INFLUENCE OF ASSURANCE OF BANKING SERVICES ON CUSTOMER SATISFACTION

The Assurance related to Banking services was calculated and explored based on the responses. In this study it is measured in fifteen response items on the questionnaire.

The Bartlett’s Test of Sphericity gives a higher Chi-square value of 1435.522, indicating that the sample included in the study is statistically found to be adequate ($p < 0.001$). Bartlett’s test of sphericity is significant, thus, the hypothesis that the inter correlation matrix involving these fifteen variables is an identity matrix is rejected. Thus, from the perspective of Bartlett's test, factor analysis is feasible. As Bartlett's test is almost always significant, a more discriminating index of factor analysis ability is the KMO.

For the Influence of Assurance on Customer satisfaction, it is .763, so the KMO also supports factor analysis. Kaiser's rule of retaining factors with eigen values larger than 1.00 was used in this analysis.

Table 1: KMO and Bartlett's Test for Influence of Assurance on Customer satisfaction

Kaiser-Meyer-Olkin Adequacy.	Measure of Sampling	.763
Bartlett's Test of Sphericity	Approx. Chi-Square	1435.522
	Df	105
	Sig.	.000

Table 1.1: shows the Total variance explained

	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sum of Squared loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.556	37.04	37.04	5.556	37.04	37.04	4.149	29.460	29.460
2	2.514	16.76	53.80	2.514	16.76	53.80	3.414	22.760	52.108
3	1.393	9.287	63.087	1.393	9.287	63.087	1.900	10.979	63.087
4	0.995	7.733	70.820						
5	0.984	6.56	77.380						
6	0.898	5.974	83.354						
7	0.664	3.36	86.714						
8	0.474	3.16	89.874						
9	0.397	2.646	92.520						
10	0.257	1.714	94.234						
11	0.281	1.873	96.107						
12	0.19	1.266	97.373						
13	0.165	1.1	98.473						
14	0.143	0.954	99.427						
15	0.086	0.573	100.00						

Further to decide how many factors to extract or retain Monte Carlo parallel analysis is conducted. In parallel analysis, actual Eigen values are compared with random order Eigen values. Factors are retained when actual Eigen values surpass random ordered Eigen values. The above table presents the total variance explained after varimax rotation.

Table reports the rotated component matrix with item/factor correlations for this four factor analysis solution. A total of 15 items, forming three components (Factors) were thereby identified, each item had a minimum item/factor loading of 0.5, which was deemed to be adequate.

Table 1.2: Rotated Component Matrix for Influence of Assurance on Customer satisfaction

	1	2	3
I have selected bank because bank is having strong brand name in the market	.782	.125	.231
Bank is having strong security system in the bank premises	.726	.419	-.224
I feel secure while using bank’s technical services such as NEFT, RTGS, Online Banking etc.	.717	.178	.543
Products of the bank like Fixed Deposit, Certificates are of a good quality	.695	.434	-.342
Bank employees behavior will increase customer’s confident and trust in quality services	.687	-.236	.445
Bank is having well managed web policies for secure online banking	.565	.312	.189
Bank offers locker facility at reasonable price with no hidden charges	.378	.862	.631
Bank provides the service at the time they promise to do so	.238	.623	.325
The behavior of the employees instills confidence in you	.446	.795	-.180
Bank employees will be regularly courteous with customer queries	.415	.612	.223
Bank does regular up gradation in its technology	.317	.784	.661
I believe that bank is ethically managed by the management	.128	.556	.722
Bank maintain confidentially while sending me online user id and password	.187	.341	.683
Bank offers me variety of the financial product like mutual fund, insurance policies other than traditional banking product	.112	.336	.520
Bank employees have a knowledge to answer your questions	-.227	.312	.514

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Table reports the rotated component matrix with item/factor correlations for this three-factor analysis solution. A total of 15 items, forming three components (factors), were thereby identified. Each item had a minimum item/factor loading of 0.5, which was deemed to be adequate.

Exploratory Factor analysis is presented in the table below

Table 1.3: Exploratory factor analysis for Influence of Assurance on Customer satisfaction

Variables	Factor Loading
Factor 1- Service Assurance	
I have selected bank because bank is having strong brand name in the market	.782
Bank is having strong security system in the bank premises	.726
I feel secure while using bank’s technical services such as NEFT,RTGS,Online Banking etc.	.717
Products of the bank like Fixed Deposit, Certificates are of a good quality	.695
Bank employees behavior will increase customer’s confident and trust in quality services	.687
Bank is having well managed web policies for secure online banking	.565
% of Variance	31.66
Factor 2-Security Assurance	
Bank offers locker facility at reasonable price with no hidden charges	.862
Bank provides the service at the time they promise to do so	.623
The behavior of the employees instills confidence in you	.795
Bank employees will be regularly courteous with customer queries	.612
Bank does regular up gradation in its technology	.704
% of Variance	19.88
Factor 3- Ethical Assurance	
I believe that bank is ethically managed by the management	.722
Bank maintain confidentially while sending me online user id and password	.683
Bank offers me variety of the financial product like mutual fund, insurance policies other than traditional banking product	.520
Bank employees have a knowledge to answer your questions	.514
% of Variance	10.666

The results of the Monte Carlo parallel analysis yielded three-factors. The above three factors were mainly extracted for Influence of Assurance on Customer satisfaction component accounting for a total variance of 63.087% of all items. The three factors are “Service Assurance, Security Assurance and Ethical Assurance”. The Service Assurance (Factor 1) has six variables. They are I have selected bank because bank is having strong brand name in the market, Bank is having strong security system in the bank premises, I feel secure while using bank’s technical services such as NEFT,RTGS,Online Banking etc., Products of the bank like Fixed Deposit, Certificates are of a good quality, Bank employees behavior will increase customer’s confident and trust in quality services and Bank is having well managed web policies for secure

online banking which showed 25.996% of the variance. The Security Assurance (Factor 2) has five variables. They are Bank offers locker facility at reasonable price with no hidden charges, Bank provides the service at the time they promise to do so, The behaviour of the employees instils confidence in you, Bank employees will be regularly courteous with customer queries and Bank does regular up gradation in its technology which exhibited 12.988% of variance. Ethical Assurance (Factor 3) has four variables. They are I believe that bank is ethically managed by the management, Bank maintain confidentially while sending me online user id and password, Bank offers me variety of the financial product like mutual fund, insurance policies other than traditional banking product, and Bank employees have a knowledge to answer your questions that explains 11.283% of variance.

Hypothesis Testing

Null Hypothesis (Ho1): There is no association between digital banking efficiency and customer satisfaction level.

Table No. 2: Results of Chi-Square Tests-Professional Background and Responsiveness

	SBH			ANDHRA BANK		
	Value	Df	Asymp.Sig (2-sided)	Value	Df	Asymp.Sig (2-sided)
Pearson Chi-Square	153.72 ^a	16	.000	178.92 ^a	16	.000
N of Valid Cases	592			592		

The Chi-square test was performed at 5% level of significance.

Inference:

The results of Chi-square test on Andhra bank and SBH Customers; the Pearson Chi-square significance value is 0.000 for degree of freedom is 16. Therefore, null hypothesis is rejected and hence, it is found that there is an association between digital banking efficiency have much impact on customer satisfaction level.

Null Hypothesis (Ho2): There is no association between income of the respondents and their opinion on digital banking efficiency.

Table No. 3: Results of Chi-Square Tests-Professional Background and Assurance

	SBH			ANDHRA BANK		
	Value	Df	Asymp.Sig (2-sided)	Value	Df	Asymp.Sig (2-sided)
Pearson Chi-Square	258.72 ^a	16	.000	243.62 ^a	16	.000
N of Valid Cases	592			592		

The Chi-square test was performed at 5% level of significance.

Inference:

The results of Chi-square test on Andhra Bank and SBH Customers; The Pearson Chi-square significance value is 0.000 for degree of freedom is 16. Therefore, null hypothesis is rejected and hence, it is found that there is an association between Income level of respondents and their opinion on digital banking efficiency. Generally premier customers with large amount of transactions are frequent users of digital banking.

Null Hypothesis (Ho3): There is no association between education and their opinion on technical up gradations in digital banking.

Table No. 4: Results of Chi-Square Tests-Professional Background and Empathy

	SBH			ANDHRA BANK		
	Value	Df	Asymp.Sig (2-sided)	Value	Df	Asymp.Sig (2-sided)
Pearson Chi-Square	302.82 ^a	16	.000	316.02 ^a	16	.000
N of Valid Cases	592			592		

The Chi-square test was performed at 5% level of significance.

Inference:

The results of Chi-square test on Andhra bank and SBH Customers; the Pearson Chi-square significance value is 0.000 for degree of freedom is 16. Therefore, null hypothesis is rejected and hence, it is found that there is an association between customer education level and his/her proficiency and technical expertise for digital operations have positive impact.

Discussion of Results:

The results of the descriptive statistics show that respondents were influenced by the Assurance. On an average the respondents are influenced by assurance. The result of the Cronbach's reliability analysis establishes a significant assurance between the variables tested. The results of the factor analysis yielded three factors namely service assurance, security assurance and ethical assurance, the significance influence of which have shown higher factor loadings. For Andhra Bank, the three factors extracted out of 15 variables evolved to be contributing 63.087 % of variance. Out of which Service Assurance contributed to 37.04 % of variance is found to be major impacting factor for customer satisfaction. For SBH, customers, the three factors extracted out of 15 variables evolved to be contributing 62.206 % of variance. Out of which Service Assurance contributed to % 35.573 of variance is found to be major impacting factor for customer satisfaction.

As per survey analysis, the respondents are felling some technical deficiencies with reference to digital banking operations and some of them required assistance to complete digital banking process. The study also revealed that, the respondents are worried about security of transactions due to recent cyber crimes. Some rural customers are not aware regarding digital banking process where bank need to educate by advertisements or camps on usage on digital services offered by banks. The users in city area are satisfied with digital operations and also worried about safety and security made them to restrict number of digital transaction per month. Overall all the customers are expressed positive opinion towards digital banking provided that simplification of process.

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