

PERCEPTION OF CUSTOMERS TOWARDS SERVICE QUALITY: A STUDY OF DIGITAL BANKING PRACTICES

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Abstract:

Intense use of digital technology for delivering banking services is becoming most prevalent because of reduced cost and quick delivery of services. Most frequent use of smart phones and growth of e-commerce lead to the digitalization of banking services. This research paper investigates the role of digital banking in perceived service quality. This is an empirical investigation and a sample of 180 customers from NCR (Delhi, Noida, Gurugram) has been taken for the study. Out of which 130 responses were found correct and are used for further research. The response rate is 72.22%. This study found that all the dimensions of service quality named responsiveness, reliability, assurance, empathy, system availability and privacy are found significant in digital banking but their perceived level of significance is different. The findings of this study might help the banks to improve the digital banking service quality.

Key Words: Customer Perception, Service Quality, Digital Banking Practices.

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INTRODUCTION:

Service sector has a major contribution in economic growth of a country. It has 53.66 % share in gross value added at current price followed by industrial sector (29.02%) and agriculture & allied sector (17.32%) (Statistic Times, 2017). Superior service quality to the customers is the prerequisite for the business for not only survival but also for the success of the organization. It is the delivery of high quality services that leads to success of the organization and helps to differentiate it from others in this competitive environment (Rudie and Wansley1985). Kotler and Armstron (2003) define service as the “any activity or benefit that one party can offer to another that is essentially intangible and does not result in the ownership of anything”. In simple words, services include those economic activities that produce intangible products like Banking, education, entertainment, food and lodging, transportation, insurance, repair and maintenance etc.

Service quality measures how well the delivered service matches the customers’ expectation (Lewis and Booms, 1983). Japanese philosophy explains quality as the zero defects or doing it right the first time (Parasuraman et. al., 1985). Parasuraman et. al. (1985) described service quality as the overall evaluation of the service. They defined perceived service quality as the degree and direction of discrepancy between consumers’ perception and expectations. Holbrook and Corfman (1985) highlighted the two aspects of quality and that aspects are mechanistic and humanistic. Mechanistic aspect of quality deals with the objective aspect and features of a things or event and humanistic aspect deals with the subjective responses of peoples towards the object.

Banking sector has about 7.7%contributionin Gross Domestic Product (GDP)and generated employment 1.5 million (India-banking-sector-report-april-2014). It is expected that it becomes 5th largest industry in the world by 2020 as per the report of KPMG-CII (2016). The Indian Banking industry is currently worth Rs. 81 trillion (US \$ 1.31 trillion) (Business Standard, May 26, 2016). Banking sector is the life line of modern economy and depicts the economic health of the country because banks are the pillars of the financial system which plays a significant role in the success and failure of the economy. Countries that have well developed banking sector grow much faster as compared of weaker one (Pathak, B.V., 2013). Soundness and effectiveness of banking system of a country is a symbol of healthy economy. From last three decades, Indian

banking sector meeting several outstanding achievements. Banking sector not only touched the metro cities but also reached in remote areas of the country (Pathak, B.V., 2011).

Digital banking is more than just going paperless. It is a revolutionary technological transformation that includes the features like anytime anywhere banking, ultra-fast response time (Eistert, T. et. al., 2013). Daniel (1999) defines electronic banking as “the provision of information or services by a bank to its customers via a computer or television”. A report of IRDBT defines Digital Banking “as a new concept in the area of electronic banking, which aims to enrich standard online and mobile banking services by integrating digital technologies, for example strategic analytics tools, social media interactions, innovative payment solutions, mobile technology and a focus on user experience.” Digital modernization gives a second chance to traditional banks and helps in customer satisfaction and loyalty. It is a strategy that builds long term relationship and enhances profitability of the banks (DelaCastro et. al., 2014). Gen Y customers considers the level of digitalization as an important factor during selection of their banking functions (Pwc Survey, 2011).

After financial crisis in 2007-08, digital banking has come up as cure for that crisis. In the market of Asia, about one fourth of customers are using mobile phones and computers for their banking functions (Barquin and HV, V. 2015). Customers are more willing to go to digital banking from their computers, smartphones and tablets rather than going personal visit to the bank branch. There are about 700 million customers are digital consumers across Asia (McKinsey Asia personal Financial Services Survey, 2014).

As per the survey conducted by the Accenture (2015) it is found that majority of customers (81%) will not switch to other bank if the local branch of their bank is closed. RBI released its vision 2018 in June 2016 that is aimed to increase the usage of digital channels by avoiding or bringing down the paper based transactions. Now, the locations of bank have least significance because of digital banking.

Developments of computer technology and telecommunication forced many new approaches to service delivery. Innovation of smart mobile phones and PDAs (personal digital assistance),

voice recognition technology, smart cards etc. makes the delivery of services easy and convenient. Banking services can be delivered remotely via computer or mobile phone, voice response system, call center, automatic teller machines and through other digital modes (Lovelock et. al., 2010). Main focus of this study is to investigate the contribution of digital banking for improving the level of service quality.

REVIEW OF LITERATURE

Concept of Service Quality:

Service quality becomes a various growing research topic among the researchers because of high revenues, increased cross sell ratios, higher customer retention, purchasing behaviors (Cronin and Taylor 1994). Parasuraman, Zeithamal& Berry (1985)analysis of service quality literature found that it is more difficult to assess the service quality as compared of tangible product quality. Service quality evaluation is not only made on the basis of service outcome but process of service delivery also matters.

Service quality is the difference between the customers' expectations about service and perceived service. If expectations are greater than the perception than service quality is less satisfactory that results customers dissatisfaction (Lewis and Mitchell, 1990). In simple words service quality shows the extent up to which service meets the expectations and needs of customers (Wisniewski and Donnelly, 1996; Lewis and Mitchell, 1990).

Dimensions of Service quality:

It is not possible to measure the service quality easily just like of product quality because of intangibility, heterogeneity and inseparability of production and consumption features (Parasuraman et.al., 1985). Product quality can be measured easily by durability and number of defects indicators (Crosby, 1979 and Garvin, 1983). But in case of service quality this is not possible. Because of this, there is a need of an appropriate approach for measuring service quality.

A model named SERVQUAL was developed by Parasuramanet. al. (1985)to measure the quality of service. This model consists of ten components named tangibles, reliability, responsiveness, communication, credibility, competence, courtesy, understanding and knowing the customers,

and access. Parasuraman et al. (1988) tested this measure among a sample of Bank, Credit- Card Company, Repair and Maintenance service and Telephone Company and reduced 10 dimensions into five dimensions named reliability, assurance, tangibles, empathy and responsiveness. Assurance and empathy are the new dimensions identified under this new scale.

Parasuraman et al. (1991) replicated the Parasuraman et al. (1988) scale among three types of services named telephone repair, retail banking and insurance. This measure for service quality is a universal measure and can be applied among various fields with little modification. Various researchers used the Parasuraman et al. (1988) measure for assessing the service quality (Brooks et al., 1999; Edvardsson et al., 1997, Lings and Brooks, 1998; Sahney et al., 2004). Parasuraman et al. (2005) developed another measure for checking the service quality of digital services. This measure is divided into two scales. First scale measures the basic service quality of digital media and includes dimensions named efficiency, fulfillment, system availability and privacy. Other scale is related with E-RecS-QUAL that includes three dimensions responsiveness, compensation and contact. Shahin, A. (2004) highlighted the gap between expectations and perception of service quality. Customers' expectations versus management perceptions, customers' expectations and perception of the service delivered, discrepancy between customers' expectations and employees' perceptions are major service quality gaps. Luk, S. and Layton, R. (2002) identified the perception gaps related with the customers expectation by management and service providers perception. This study argued that existence of these gaps negatively impacts the service quality.

Digital banking:

DelaCastro et al. (2014) highlighted that digital banking benefits the customer segment in form of convenience, self -service, trust and liquidity. It is the digital technology that gives confidence to banks to draw attention of customers again after financial crisis 2007-08. Barquin, S. and HV, V. (2015) conducted a research on digital banking in Asia market and found that in developed Asian market, more than 80% of the customers preferred to shift some of their holdings to a bank that offers them digital proposition. In the emerging Asian market this ration is about 50%. They are willing to shift their 35-40% stake to such banks that are digitalized. They highlighted the reasons for the growth of digital banking. Those are:

- Rapid increase in smart phones adoption
- Growth of e- commerce
- Development of technology

Kwarteng, P.A. ,(2015) conducted a study in banking sector in Ghana found that 92.8% of customers are aware of electronic banking. Eistertet. al. (2013) highlighted the benefits of digital banking in form of new consumer experience on the outside and efficient and effective operating model inside. In other words externally, digital banking benefits the outsider customers by providing fair prices with transparency and comparability, high quality interaction, fast and secures processing. Internally, digital banking leads to fast processing, integrated IT infrastructure, and enhanced revenue etc. This survey investigated the most prominent used digital banking modes are mobile apps, e-wallet solutions and personal financial management tools. As per the Pwc survey (2011) internet is most widely used mode of digital banking and mobile is still in infancy stage. In India 70% of customers' uses internet facility and about 55% uses mobile phones for buying financial products. Mckinsey Asia personnel financial service survey (2014) highlighted that smart phones and internet banking are the major source for digital banking. Their share in digital banking is 92 % and 61% in developed Asia and 26% and 28% respectively in emerging Asia in year 2014 as compared of 19% and 58% in developed Asia and 5 % and 10% respectively in emerging Asia.

Digital Banking and Service Quality:

Mckinsey Asia personnel financial service survey (2014) also finds that while selecting digital banking option consumer are interested not only in superior digital channel experience but other attributes like basic products, services, and trust in institution also important. Customer experience with digital banking is also a significant contributor for selecting digital banking option.

AkhavanSaffar and MohammadzadehMoghadam (2012) highlighted that quality of service provided through the e- banking portals impacts significantly to the customers. Trustworthiness, accessibility, privacy/ security, accountability and task performance dimensions of service quality satisfied the customers. Bebli, R.S. (2012) conducted study to check the impact of service

quality of internet banking on customer satisfaction and found that speed of delivery, ease of use, reliability, enjoyment, privacy, security and control improves the service that significantly influences the customer satisfaction. Roozbahani et al. (2015) found that there is a positive relation between e-payment tools and e-banking functions on customer satisfaction. E-Payment variables named speed; efficiency, security, trust, accountability and information have a significant impact on customer satisfaction.

There are many dimensions used by various researchers for measuring the service quality of electronic services. But, after a pilot study conducted among the customers of digital banking and bankers following dimensions are considered for measuring service quality of digital banking services.

1. **Reliability:**

Bebli, R.S. (2012) stated that reliability dimension represent the dependability and uniformity in performance. A service is said to be reliable if it honors its promises. Parasurama et al. (1988) defined reliability as the “ability to perform the promised service dependably and accurately”. Reliability dimension of service quality includes the variables like companies interest in customers’ problems, timely delivery of service, supply of error free records, guidance to customers etc.” It is a universal dimension for measuring service quality (Parasurama et al., 1985; 1988; 1991; Lings and Brooks, 1998; Sahney et al., 2004; Shahin, A., 2004). Reliability also termed as fulfillment and is an important determinant for customer satisfaction during the online activities (Wolfenbarger and Gilly, 2003). Digital banking considered reliable on the ground that it supplies required information with minimum efforts of customers. Technology is considered associated with risk, because of this reason a customer is always concerned about the reliability of the technology (Shamdasani et al., 2008). For evaluating the service quality of digital banking reliability is considered as an important dimension (Van Gorder, 1990). Reliability and accountability of e-banking and e-payment practices influences the satisfaction of customers (Bebli, R.S., 2012; Roozbahani et al., 2015).

On the basis of above review, following hypothesis can be proposed:

H01: There is no significant contribution of reliability on digital banking service quality.

Ha1: There is a significant contribution of reliability on digital banking service quality.

2. **Responsiveness:**

Responsiveness is a universal measure of service quality that shows the organization's willingness to help customers and quick response on customers' request. It includes variables named prompt and quick delivery of service, time line for performing the task, availability of time to help customers etc. (Parasurama et. al., 1988; 1985). Electronic banking service is said to be responsive if it provides transaction slip immediately, quick call back to customer, gives prompt service (Bebli, R. S., 2012). Customers are more interested in speed of service delivery or responsiveness (Bateson, 1985). Prompt delivery of service positively influence the attitude of customer to use service again and again i.e. rapid service delivery results, positive assess of service (Dabholkar, 1996). Customers prefer electronic baking on the ground of speedy delivery of service. Customers consider some of the banking services as safe and secure (Kwarteng, P.A. , 2015).

To save time and getting quick response is the basic purpose for using electronic banking (Ledingham, 1984). DelaCastro et. al. (2014) argued that digital transformation of banking functions increases the responsiveness rate of banks. Digital banking helps to bank employees to serve their customers at right time with right level of service at right cost. Bebli, R.S. (2012) conducted study to check the impact of service quality of internet banking on customer satisfaction and found that speed of delivery or responsiveness rate influences the customer satisfaction. Roozbahani et. al. (2015) found that e-payment delivery speed influences the customer satisfaction. It is an important contributor for increasing the level of customer satisfaction through digital banking practices among public sector bank (Kaushal, Robin, 2012)
From the above discussion, it can be hypothesized that:

H02: There is no significant contribution of responsiveness on digital banking service quality.

Ha2: There is a significant contribution of responsiveness on digital banking service delivery.

3. **Empathy:**

Empathy dimension is considered a significant dimension for measuring the online service quality of internet banking (Zeithaml et al. 2000, 2002). Empathy represents the “Understanding the customers’ personal needs, taking care of them individually and showing them all sorts of sympathy and affection, looking at them as close friends and distinguished clients” Sathyan, L. and Raj, J. M. (2015). Empathy represents the caring nature of organization and individualized attention that is provided by the organization to its customers. This dimension includes the variable like specific attention to customers, convenient operating hours, attention to customers need etc. (Parasurama et. al., 1991; 1988; 1985). Parasurama et. al., (1988) refine the scale of Parasurama et. al (1985) and frame a new scale for measuring service quality. Under this scale understanding/ knowing customers dimension is renamed as Empathy dimension. Understanding of the customers decides the level of customer satisfaction through digital banking among public sector banks (Kaushal, Robin, 2012). Empathy dimension found significant dimension of online service quality measurement that influences the satisfaction level of customers (Doost and Ashrafi, 2014).

Thus, following hypothesis can be proposed from the above review:

H03: There is no significant contribution of empathy on digital banking service quality.

Ha3: There is a significant contribution of empathy on digital banking service quality.

4. **Assurance:**

According to Sathyan, L. and Raj, J. M. (2015) assurance reflects the “workers’ knowledge and experience and their ability to build self- confidence as well as confidence in the customers themselves.” Parasurama et. al. (1988) defined Assurance as the “knowledge and courtesy of employees and their ability to inspire trust and confidence”. Assurance dimension combines communication, credibility, security, competence and courtesy variables (Parasurama et. al., 1988; 1985). Level of service quality is improved through e- banking practices by increasing competence, communication. Increase in credibility is least in electronic banking. Credibility, communication and access dimensions are significant in private sector banking and security and competence are significant in public sector digital banking practices (Kaushal, Robin, 2012). Ariff, M. et. al. (2013) investigated that internet banking has a positive relationship with

assurance features of service quality. Delvin, (1995) highlighted that customers has less time to visit banks that's why they wants convenience, accessibility, security and easy communication with bank that leads to digital banking adoption by customers.

On the basis of above review, following hypothesis can be proposed:

H04: There is no significant contribution of assurance on digital banking service quality.

Ha4: There is a significant contribution of assurance on digital banking service quality.

5. **System availability:**

System availability dimension shows the availability of site and smooth functioning of web site. If a web site doesn't crash frequently and don't freeze after entering information then the availability of system will be considered as good (Parasurama et. al., 2005). Availability of equipment and physical facilities for non- digital transaction considered necessary for measuring service quality, similarly web site or system availability considered a significant dimension for measuring service quality of digital services (Parasurama et. al., 1985; 1988; 1991; 2005; Zavareh et. al., 2012; Ariff et. al., 2012). Ariff, M. et. al. (2013) investigated that internet banking has a positive relationship with attractiveness and appearance of web sites. This study highlighted that appearance and beauty of the site and way through which online content and information is structured helps the customers to perform the internet banking functions smoothly.

Thus, following hypothesis can be proposed:

H05: There is no significant contribution of system availability on digital banking service quality.

Ha5: There is a significant contribution of system availability on digital banking service quality.

6. **Privacy:**

Privacy dimension considered a significant dimension of e- banking service quality (Parasurama et. al., 2005; Zavareh et. al., 2012; Ariff et. al., 2012). Chiu et. al. (2009) explained the privacy concept as the degree to which the web site is considered safe by the customers and protects the customers' information. Bart et al., (2005) stated privacy as the protection of personal and financial information over the internet. Ariff et. al. (2012) defined privacy dimension in digital

banking practices as the “internet banking transactions are saved and secured and customers’ information is protected”.

Privacy dimension also termed as security dimension is a vital factor to determine the online service quality of banks (White & Nteli, 2004). Privacy factor improves the service quality of electronic banking that further improves the customer satisfaction of bank customers (Bebli, R.S., 2012).

Following hypothesis is proposed on the basis of above review:

H06: There is no significant contribution of privacy on digital banking service quality.

Ha6: There is a significant contribution of privacy on digital banking service quality.

OBJECTIVES OF THE STUDY:

1. To study the perception of customers towards the dimensions of service quality.
2. To measure the relative importance of these dimension of service quality in digital banking.

RESEARCH METHODOLOGY:

Research Design:

Research design provides a direction to the researcher for conducting their research in an efficient manner. It is a blue print or detailed plan that helps the researcher to complete their study. Exploratory research design has been used in this study. Exploratory research design is used to explore the new insights and ideas related to the concerned area.

Sample Design:

It is not possible to study the census because of limitation of time and resources. Because of that, a sample is drawn from the population that represents the entire population. A sample of 180 customers who were familiar with digital banking has been drawn from the population of NCR (Delhi, Gurgaon, and Noida). There purposive sample design was used for the study. Out of 180 distributed questionnaires 140 responses were collected out of which 130 questionnaires found

correct for further research. Average response rate of these respondents is 77.78% and correct response rate out of total distributed questionnaires was 72.22%.

Data Collection:

Primary data has been used for the study. Questionnaire and personal interview methods were used for primary data collection. Questionnaire was divided into two sections. Section A seeks information about the demographics. Section B includes statements related with the service quality. Questionnaire was based on five point likert scale Along with primary source data collection, secondary sources like journals, books, websites and articles were also used for the study.

Statistical tools used:

One sample t-test and Descriptive statistics (mean and standard deviation) were used for analyzing the data.

DATA ANALYSIS:

Table 1 depicts the t- test results. Observed t statistic for each dimension is depicted by “t” column in table. It is the ratio of mean difference divided by the standard error of the sample mean. "df" column represents the degree of freedom. On the basis of t test it is concluded that all dimension of service quality are significant at 95 percent level of significance in digital banking. The dimensions are significant if their significance value is less than 0.05. From the table, it becomes clear that all the dimensions have sig. value less than 0.05. Hence, all dimensions named responsiveness, reliability, assurance, empathy, system availability and privacy are significant and null hypothesis Ho1, Ho2, Ho3, Ho4, Ho5, Ho6 are rejected.

Table 1: Analysis of significance of various dimension of service quality in Digital banking on the basis of One Sample T test

S.no.	Dimension name	t	df	Sig. (2 tailed)	Mean difference
D1	Responsiveness	35.205	129	.000	1.86923
D2	Reliability	39.482	129	.000	1.73231
D3	Assurance	37.734	129	.000	1.83077

D4	Empathy	35.413	129	.000	1.81538
D5	System availability	46.873	129	.000	1.57692
D6	Privacy	44.475	129	.000	1.69038

Source: Primary data

Table 2 depicts the mean value and standard deviation of various dimensions of service quality that are found significant in digital banking practices. Mean value represents the level of significance and standard deviation shows the variability in responses. As the table depicts, responsiveness dimension found most significant in digital banking with mean value 1.8692. Assurance is the second most contributing dimension with mean value 1.8308 followed by empathy (1.8154) and reliability (1.7323). Customers perceive privacy and system availability dimension as the least significant dimension of service quality in case of digital banking with mean value 1.6904 and 1.5769 respectively.

Table 2 also depicts that responsiveness has highest variability because of highest value of standard deviation i.e. 0.60538 followed by empathy (0.58448), assurance (0.55319), reliability (0.50027), privacy (0.4335). System availability dimension shows the highest consistency and lowest variability in responses with standard deviation value (0.38359)

Table 2: Analysis of level of significance of various dimensions of service quality on the basis of mean value and Standard Deviation

S.no.	Dimension Name	N	Mean	Std. Deviation	Std. Error Mean
D1	Responsiveness	130	1.8692	.60538	.05310
D2	Reliability	130	1.7323	.50027	.04388
D3	Assurance	130	1.8308	.55319	.04852
D4	Empathy	130	1.8154	.58448	.05126

S.no.	Dimension Name	N	Mean	Std. Deviation	Std. Error Mean
D1	Responsiveness	130	1.8692	.60538	.05310
D2	Reliability	130	1.7323	.50027	.04388
D3	Assurance	130	1.8308	.55319	.04852
D4	Empathy	130	1.8154	.58448	.05126
D5	System availability	130	1.5769	.38359	.03364
D6	Privacy	130	1.6904	.4335	.03801

Source: Primary data

DISCUSSION

This study investigated that all the dimensions of service quality are significant in case of digital banking. But the level of significance of these dimensions is different. So that a bank frame strategies for digital banking by considering the importance level of these dimensions. Customers perceive responsiveness dimension most significant. So that, major concern of a bank is to improve the responsiveness service quality by providing quick and prompt responses, instant reply on customers' request etc. Digital banking practices should also give proper concern to assurance. This can be done by providing safe and secure transaction, making transparency in their practices and supplying up to date information to their customers. Empathy and reliability in digital banking practices also have a significant importance. Banks in their digital banking practices should focus on individual attention to customers, concern regarding customers specific requirement, customer specific web site design, providing timely and proper guidance, perform the services timely, providing error free information at right time etc. It is also important to save and secure the information provided by customer during digital transactions. In case of digital banking practices, customers have least concern about the system availability feature of service quality. But it doesn't mean that it doesn't matter in delivery of services. It is equally important to provide advanced information technological infrastructure for digital banking, appealing and attractive web site, smooth functioning of web site etc.

CONCLUSION:

In this paper we examined the perceived importance level of various dimensions of service quality in digital banking among the eyes of customers. It is found that all the dimensions named responsiveness, reliability, assurance, empathy, system availability and privacy found significant in case of digital banking practices. Responsiveness dimension is the strongest contributor in digital banking service quality followed by assurance, empathy, reliability, privacy and system availability. This study helps the bank to improve the service delivery of digital banking. Because of digital transformation quality of digital banking service delivery has a major role in increasing the reputation and attractiveness among the customers. Good service delivery through digital banking helps the bank in obtaining its target timey and customer satisfaction.

There could be many dimensions that can measure service quality of digital banking. But this paper considered only a limited number of dimensions. That acts as a limitation for the study. Limited no. of respondent generates a difficulty to generalize the results of the study. Scarcity of financial resources and availability of limited time also acts as a limiting factor for the study.

SCOPE FOR FURTHER STUDY:

Further research can be conducted by considering other measures of service quality like Quality Function Deployment (QFD) model. Quality Function Deployment (QFD) considers customers' needs during design, development and delivery of new products and services. There are other dimensions of service quality like communication, credibility, competence, privacy, security etc. that can also be considered for measuring service quality of digital banking. A comparative study of the different existing service quality measurement tools can further helps in identifying the most appropriate tools for different areas of study.

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