



To study several e-service quality components to Kerala's adoption of internet banking

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Abstract

The banking industry is become quite competitive. Information technology is the use of computers and telecommunications technologies to gather, process, store, and distribute all kinds of information. An integrated framework for purchasing and developing IT to accomplish strategic objectives is known as information technology architecture. Information is input, stored, processed, and communicated via these technologies. Ancillary hardware, software, firmware, and related processes, services, etc. are all included in information technology. Large volumes of gene and protein sequencing, expression, and functional data are available thanks to contemporary high throughput technology. Recent advancements in India's banking industry include the Internet, automated teller machines (ATMs), cash dispensers, electronic clearing services, Bank Net, chip cards, phone banking, tele-banking, internet banking, mobile banking, voice mail, e-banking, and the Society for Worldwide Inter-Bank Financial Telecommunications (SWIFT). Meeting internal requirements, handling data effectively, extending customer services, providing creative support for the development of new products, and assisting non-technical staff in becoming end users are the fundamental needs of information technology (IT) in the banking sector. Outsourcing, integration, distinctive edge, IT as a profit center, and thriving in a down market are some of the newer IT developments in the banking industry. The difficulties that the Indian banking industry faces are Maintaining the current market share in the industry and growing it, satisfying customer expectations regarding the services and facilities provided by the bank, keeping customers, controlling the spread and maintaining operating profit, and completing tasks from other banking industry participants.

Keywords: Banking industry, technologies, software, firmware, sequencing, expression

1. Introduction

The banking industry is committed to improving the customer experience while addressing the financial needs of society. A robust financial system offers a stable and long-lasting foundation for the nation's economic growth. Global financial services have been transformed by the convergence of information technology (IT) and communication technology (CT). Today's enterprises must use information technology as a necessary tool (Grabner-Krauter and Faullant (2008) [8]). In the 1960s, the financial sector, specifically the banking sector, was the first to use IT. Since the Internet's creation in 1969, it has changed from being the exclusive preserve of computer geeks and academics to a widely used medium of communication.

The expansion of banks globally has been facilitated by IT. With the aid of technology, banks can scale their services at a low cost. Technology should improve operational effectiveness and productivity, and banks are now more competitive. The emergence of social media, shifting

regulatory landscapes, and several macroeconomic factors promote technology adoption in the banking industry. Indian banks adopted technology in the same way as international banks, and there is no longer a difference in the adoption of technology between Indian and foreign banks.

The recommendations of the Vasudevan Committee (1993) [4], Saraf Committee (1993) [4], and Second Rangarajan Committee (1989) provided the impetus for IT in the banking sector (1998). Since beginning operations, the new private sector banks have placed more of an emphasis on information and communication technology (ICT). In order to overcome the constraints of having fewer branches and their desire to compete with public sector banks, they use it as their main competitive instrument. The majority of international banks and a small number of older private sector institutions have adopted the same approach as the new private sector institutions. (Vision for Financial Sector Technologies)

Report, 2005). In India, both private and foreign banks have

worked to provide the greatest possible client service in terms of banking hall transactions, ATM, credit cards, internet banking, and mobile banking (MB). Customers that use financial services want banks to provide a higher level of service that includes bundled products, services, and advice, more personalization, cross-channel capabilities that are available around-the-clock, and constant contact. Technology has caused a paradigm shift in how banks operate and how banking services are provided. The fulfilment of customers' dreams of banking anytime, anyplace is made possible through IT.

Technology is regarded as a crucial pillar for achieving the strategic goals of the business, according to CII-PwC (2014). 52 percent of banks anticipate that investments in technology will focus mostly on routine maintenance and infrastructure upgrades. Approximately 38 percent of banks believe that technology has played a significant role in bringing gains in operational efficiency.

2. Statement of the problem

The banking industry is extremely competitive as a result of changes in the external environment that affect banks, such as globalisation and deregulation. Banks must look for alternative methods to keep consumers because they find it difficult to compete on pricing. Banks must seriously examine the use of technology to address their increasingly sophisticated consumers' constantly shifting needs. Yet, the current situation in India demonstrates that the rate of client utilisation does not correspond with the rate at which technology in Internet banking is developing. Although banks are more interested in implementing new technology to set themselves apart in a crowded market, they are not seeing the ROI they had hoped for. So, is this a problem with the technology itself, or with how the public perceives it? Is it a result of a lack of ability or will? Customers' attention might be piqued by providing them with basic software that updates their technical abilities. Nonetheless, his education level, culture, religion, and gender will all play a significant role in determining his interest and desire. This might alter how he views online banking.

- The research project aims to respond to the following questions:
- Are there any differences between the various IB adoption components?
- Do the various E-service quality components differ from one another when it comes to IB adoption?
- Is there a difference in the perceived risks that Keralan banks consider to be intrinsic and extrinsic?
- What are the key variables that affect how risks in IB are mitigated?
- In terms of the adoption's effects, are the customers content with the IB?

What issues come up when performing IB services? It is required to conduct a research of IB users as a result. The purpose of the study is to compare the impact of intrinsic and extrinsic risks, identify risk mitigation strategies, forecast IB satisfaction levels in relation to adoption effects, and identify and isolate IB problems. It also aims to examine the involvement of various components in the adoption of IB in Kerala. The issue is titled "Adoption of Internet Banking: A Customer-Centric Research of Public

and Private Sector Banks in Kerala" despite the fact that there aren't many studies conducted globally, particularly in Kerala.

3. Review of Literature

By examining the determinants of internet banking acceptance in Brazil, Hernandez, JosAs Mauro C.; Mazzon & JosAs Afonso (2007) ^[20] present a novel way to research adoption of new technologies. Relative advantage of control, lifestyle compatibility, image, subjective norm, self-efficacy, relative advantage of security and privacy, results demonstrability, and trial ability were the eight variables taken into account for the study. The results demonstrate that the factors influencing actual adoption are not the same as those influencing the desire to use or continue using IB. IB adoption is affected by an individual's traits, whereas the intention to use IB is only driven by people's ideas about IB. In order to investigate empirically the relationship between trust and some of the characteristics of the theory of Diffusion of Innovation (IDT), Khalil Md Nor and J Michael Pearson (2007) ^[11] undertook a study. The findings demonstrate that attitudes for using Internet banking are significantly influenced by trust, relative advantage, and trial ability. As a result, attitude has a big impact on whether or not someone plans to use technology.

South Korea's mobile banking service acceptance was influenced by a number of factors, according to Ki Soon Lee, Hyung Seok Lee, and Sang Yong Kim's 2007 study. By adapting the idea of a Technology Acceptance Model (TAM) within the context of mobile banking, the study focused attention on perceived risk, perceived usefulness, and trust in the adoption of mobile banking. It included "perceived risk" and "trust" to a model that was suggested in order to take into account consumers' needs for mobile banking. According to the study, the adoption of mobile banking was significantly influenced by both perceived utility and trust. The adoption behaviour of the mobile banking service was directly influenced by consumer trust and perceived utility. Nonetheless, despite having a negligible direct association with adoption behaviour, perceived risk has an indirect impact on adoption behaviour. Research proved that only trust could have an indirect impact on adoption behaviour due to perceived risk. In other words, the consumer's use of mobile banking is significantly influenced by their level of trust in the bank, telecom provider, and wireless Internet. As a result, trust has a greater impact on adoption behaviour than the typical TAM variable's perceived utility.

Gibson Chunwen, N N O Ndu, and Petrus Guriting (2007) ^[21] investigate the impact of Computer Self-Efficacy (CSE) on the uptake of online banking at three different levels of user perception (low, mid, and high). The expanded Technology- Acceptance Model (TAM) is used as the theoretical foundation for this investigation. According to the data gathered, it was discovered that perceived utility and perceived usability were significant predictors of behaviour intention to embrace internet banking. For low and moderate levels of PU and PEOU, CSE was more significant than at high levels of perception.

94 people with intellectual disabilities and 53 carers were surveyed in a 2007 study by Susan C. Hayes and Fiona B. Martin to learn how they perceived their encounters with

financial service providers. Many bank-related issues were brought up by customers and carers. There was a clear "digital gap," with few people having access to telephone or online banking. It has been claimed that programmes for educating people with intellectual disabilities about electronic banking are necessary.

4. Objectives of the study

1. To assess the contribution of various elements to Kerala's adoption of online banking.
2. To assess the contribution of several E-service Quality components to Kerala's adoption of Internet banking.

5. Research Methodology

Studying the adoption of Internet banking: A customer-focused research of public and private sector banks in Kerala is the goal of the current investigation. By surveying clients who have accounts with the banks and use their Internet banking services, the current investigation aims to identify a variety of issues that Keralan banks are facing with the implementation of Internet banking. As a result, the current research study was designed to be an explanatory study, and the Normative Review Method (NRT) was regarded as the appropriate method for gathering the necessary data for the study.

It has long been known how to take samples from a population that sufficiently represents the wider population from which it is drawn. When the data set is quite large, sampling can be necessary. In order to learn more about the entire population or universe from which it was chosen, sampling is the process through which a relatively small number of people, or a process of people, objects, or actions, is highlighted or analysed in sequence. The population of the current study consists of all of the bank's Internet banking users in Kerala.

Respondents from the three sectors-Public Sector Banks (PSBs), Old Private Sector Banks (OPBs), and New Generation Banks-will be identified for this purpose (NGBs). State Bank of India (SBI), Canara Bank (CB), and Union Bank (UB) are chosen among the PSBs for in-depth analysis. Federal Bank (FB), South Indian Bank (SIB), and Catholic Syrian Bank (CSB) are chosen from the Old Private Banks. Three banks will be chosen among the New Generation Banks: ICICI, HDFC, and Axis Bank.

The districts of Kerala are typically split into three regions based on their physical, historical, and cultural significance.

South Kerala, Central Kerala (Thrissur, Ernakulam, Kottayam, Idukki), and North Kerala (Kasaragod, Kannur, Wayanad, Malappuram, Palakkad) are some examples (Thiruvananthapuram, Kollam, Alappuzha, Pathanamthitta). At the second stage of sample selection, one district from each region was chosen to account for geographic relevance; as a result, North Kerala is represented by Kozhikode, Central Kerala by Ernakulum, and South Kerala by Thiruvananthapuram.

The researcher used the following information to determine the precise sample size. The sample size is determined using the sample size calculator. The following sample size was calculated to represent the population for a level of significance of 5%, a confidence interval of 8%, a confidence level of 95%, and a Z-score of 1.96.

6. Results and Data Interpretation

Table 1: Evaluation of perceived ease of use

Sub Variable	Category of banks	N	Mean	Std. Deviation	Std. Error	Mean Rank
Perceived Ease of use	Public sector	150	4.954***	.7399	.1447	599.35
	Old Private sector	100	4.092***	.8600	.1523	638.41
	New Generation	200	4.067***	.8467	.1402	664.45
	Total	450	4.037***	.8229	.1332	
	Jonckheere-Terpstra Test					3.056
Sig. value					0.114	
Result					Significant	

Source: Field survey; ***-High

According to the aforementioned data, consumers of public sector banks awarded a mean value of perceived ease of use of 4.9541.739, whereas customers of old private sectors assigned a mean value of 4.0921.860. Corresponding to this, the new generation banks' clients assigned a mean value of 4.0671.846 to perceived ease of use. Customers of public sector banks have higher mean values across all bank categories and lower standard errors, which results in more consistent response levels. The Jonckheere-Terpstra test was carried out to determine the variation in average value and rank among the category of banks. It is noticed that test value is 3.056 and Significance value is 0.114, the result is significant at 5%. This demonstrates that, in relation to the subvariable Perceived Ease of Use, there are differences in the mean value and rank among the category of banks.

Table 2: Evaluation of perceived cost

Sub Variable	Category of banks	N	Mean	Std. Deviation	Std. Error	Mean Rank
Perceived Cost	Public sector	150	4.536***	.8028	.1534	570.50
	Old Private sector	150	4.685***	.7855	.1477	636.63
	New Generation	150	4.791***	.7074	.1481	684.75
	Total	450	4.660***	.8411	.1337	
	Jonckheere-Terpstra Test					5.741
Sig. value					0.111	
Result					Significant	

Source: Field survey; ***-High

According to the aforementioned data, clients of public sector banks assigned a mean value of perceived cost of 4.5361.802, whereas consumers of old private sector banks assigned a mean value of 4.6851.785. Corresponding to this,

the next generation banks' clients assigned a mean value of 4.7911.707 for perceived cost. Customers of the older private sector banks had higher mean values across all bank categories and lower standard errors, which results in more

consistent response rates. The Jonckheere-Terpstra test was carried out to determine the variation in mean value and rank among the category of banks. It is observed that the test value is 5.741, the significance value is 0.111, and the result is significant at 5%. This demonstrates that, in relation to the subvariable Perceived Cost, there are differences in the mean value and rank among the category of banks.

Table 3: Evaluation of perceived privacy and security

Sub Variable	Category of banks	N	Mean	Std. Deviation	Std. Error	Mean Rank	
Perceived Privacy and Security	Public sector	150	4.886***	.6608	.1300	616.45	
	Old Private sector	150	4.889***	.6417	.1399	619.18	
	New Generation	150	4.965***	.6650	.1306	665.96	
	Total	450	4.914***	.6505	.1281		
	Jonckheere-Terpstra Test					3.328	
	Sig. value					1.138	
	Result					Significant	

Source: Field survey; ***-High

According to the above data, clients of public sector banks given a mean score of 4.8861.660 for perceived privacy and security, whereas those of the former private sector gave a score of 4.8891.641. Corresponding to this, the mean score given by consumers of new generation banks for perceived privacy and security is 4.9651.665. Customers of the older private sector banks had higher mean values across all bank categories and lower standard errors, which results in more consistent response rates. The Jonckheere-Terpstra test was carried out to determine the variation in mean value and rank among the category of banks. It is noticed that test value is 3.328, significance value is 1.138, and the result is significant at 5%. According to the sub variable Perceived Privacy and Security, this demonstrates that there are differences in the mean value and rank among the category of banks.

7. Conclusion

Self-service banking technology (SSBT) and non-SSBT are the two categories into which technological applications in the banking sector fall. Non-SSBTs include MICR, Cheque truncation, Fake Note Detector, etc. Under SSBT, the delivery methods for banking services including ATMs, Internet banking, and mobile banking are compiled. Customers are expected to undertake some operations in order to use SSBT services, and these actions call for a basic understanding of operation.

Internet banking refers to financial services accessed through the World Wide Web on the Internet. An internet bank doesn't have any physical branch locations; it solely exists online, on the global network of computer networks. Internet banking refers to a bank's provision of banking services via the internet, including account opening, loan applications, account balance inquiries, fund transfers, etc. Online banking has developed into a single-step information and service unit that offers significant advantages to both banks and customers.

The success or usefulness of revolutionary technology is now largely determined by user acceptance of the technology. Throughout the past 20 years, revolutionary advancements in information and communication technology (ICT) have had a significant impact on both

people and enterprises. A revolutionary technology advancement that has the potential to alter the structure and function of banking is internet banking. More and more banks are switching from their conventional strategy of bricks and mortar to clicks and mortar in order to maintain economic competitiveness. Client loyalty and satisfaction are becoming more and more important success elements in e-banking. There haven't been many empirical research on what is preventing customers from accepting IB, despite the fact that customer acceptance is a major factor in determining the rate of change in the financial sector. Recently, attention has also been drawn to how consumers see and assess services that are offered electronically. To quantify the impact of e-service on consumer perceptions of service quality and satisfaction, more study is required. IB has expanded quickly, but there isn't enough proof that consumers accept it.

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