

Framework for Functionality and Customer Satisfaction with Banking Applications Among Indian Investors

Anli Suresh, Jannifer Rani. N

Madras Christian College, University of Madras, Chennai- India

anli.sgain@gmail.com, janujenkeines.jj@gamil.com

Abstract

Internet banking is an electronic payment system that allows customers of a financial institution to make digital payments on a website functioned by the institution, such as a retail bank, computer-generated bank, credit union or building society through banking applications. Online banking is also denoted as Internet banking, e-banking, simulated banking and by some other terms. This new process has added a new measurement to the concept of customer satisfaction and how it can be affected in a good way. Most of the organizations exists and work hard in order to make the digital payments as their part of their lives and also strive hard to satisfy their customers through better ways in delivering the services to attract the customers through their applications. The study is focused on the functionalities of framework with banking applications and the outcomes of the satisfaction. Based on the literature survey the key factors were identified. This paper makes a descriptive study among 200 respondents and the sampling tools used are Structural equation model using SPSS 20 and AMOS 23. Simple random sampling is the sampling method used for the study. The concluding observations of the study are the satisfaction factors constitutes safety, accessibility, convenience and reliability, service quality which are proved to be the good factors to be considered for Framework for Functionality and Customer Satisfaction with Banking Applications Among Indian Investors.

Keywords: Convenience, Reliability, Safety, Satisfaction, Service quality

Introduction

Service quality web design and content, security and privacy, convenience and speed, reliability are the factors which influence the customers towards internet banking through banking applications. Online banking is the practice of making bank dealings via the Internet. It has many advancing features like time consuming, paper-based aspects of usual banking to manage the transactions competently. The major functions of online banking include Paying

bills, Schedule payments in advance, transfer funds, manage all the accounts in one place, View images of your checks online, apply for a loan or credit card, Purchase and manage Collateral Debt accounts, Order traveller's checks through banking applications. The customer satisfaction factor that indicates are reliability, efficiency, responsiveness, communication, security, and privacy have a significant and positive impact on customer purchasing intentions through banking applications. Customer purchasing intentions are significantly increased when the customers are very much satisfied with the E-banking service quality and service responsiveness in their banking applications. Establishing loyalty in this competitive electronic banking is a big challenge. There have been several studies on e-loyalty, e-trust affecting the loyalty of the customer. The quality of facility, electronic satisfaction and trust has a direct impact towards loyalty in electronic systems and plays a major role in satisfying customers. This study focuses on the Framework for Functionality and Customer Satisfaction with Banking Applications Among Indian Investors.

Review of Literature

Ariff, M., Yun, L., Zakuan, N., & Ismail, K. (2023) studied the Impacts of Service Quality and Customer Satisfaction on Customer Loyalty in Internet Banking and their result highlighted that attractiveness and appearance of banks' websites, and the information and guidance provide by the websites are important features to internet banking consumers. This finding echoed that in internet banking, alongside the technical and functionality aspects of banks' websites e-SQ, such as effectiveness, accomplishment and system accessibility, the appealing worth and appropriate direction of the websites are also vital to guarantee superiority of e-SQ that will lead to e-Satisfaction and e-Loyalty. According to **Soheila Ghane, M. Fathian & M. R. Gholamian, (2022)** the e-bankers measures the customer satisfaction and usability through customer loyalty and Word of mouth. Customer Loyalty and positive oral comments are the two traditional goals the management seeks. Also, the satisfaction with earlier interfaces with banking websites had an optimistic result on consumer retention. Usability of the site has a constructive effect on customer satisfaction, and loyalty is largely associated with positive word of mouth. **Navneet Kaur and Ravi Kiran, (2021)** in their research found that an online satisfied customer can be retained by enhancing customer satisfaction. Loyalty is positively partial by confidence, skill adaption, technical expertise of staffs, personal service, account information, channelling the activities and ease of you. The above mentioned constructs leads to satisfaction leading to Loyalty. **Wondwossen Jerene & Dhiraj Sharma, (2020)** studied the Effect of e-Finance Service Quality on Bank Customers'

Fintech e-Loyalty: Evidence from Ethiopia and their result revealed that both in normal operations of e-finance service and recovery services, the quality of service positively influences bank customers' satisfaction and their e-loyalty. **V iktorija S & Kvarciany, (2019)** reveals that the e-banking system comprises of the factors like perceived benefits client's internal motivation, satisfaction with the system and fairness. The website variables comprise of security, Ease of use and privacy. Bank variable includes competence, goodwill, Reputation, integrity, shared value and image. Information comprises of reliability, Transparency and Quality. Assurance fulfilment, efficiency- system availability, privacy, contact responsiveness and website aesthetics are the service quality contributing for e-banking satisfaction. **S. Iswarya and Dr.S. Preetha, (2018)** in their study the effect of service quality is studied under the dimensions of stability, consistency, efficiency and design. The stability, consistency, efficiency and design of the site had an optimistic result on customer satisfaction. **Adekannbi Jo and Aje Mo, (2018)** in their study Efficacy, accessibility, Realization, Confidentiality, Openness and contact on customer satisfaction and loyalty intention is inspected among the undergraduate students. Among the measurements of Electronic Service quality dimensions, the findings inferred are efficiency and responsiveness have influence on customer satisfaction, while the fulfilment dimension of service quality in electronic service lead to Loyalty among the undergraduate students of Nigeria.

Research Gap

Review of literature suggests that many numbers of studies have been carried out to study the internet banking and its impacts. Researchers have also analysed the monetary factors and emotional aspect. Many research studies have focused on the internet banking applications in devices for other uses but very little research study has been done on satisfaction outcomes and its functionality framework. This study has looked into the consumer's satisfaction outcomes and also on the functionality framework of those outcomes.

Objectives of the Study

To identify the final customer satisfaction outcomes and also the trends from internet banking functionalities and services with Banking Applications Among Indian Investors.

Hypothesis for the Study

H₀: The model is not a good fit in the functionality and consumer's satisfaction outcomes on the services of the internet banking with Banking Applications Among Indian Investors.

Research Methodology

Table-1 Research methodology	
Research Design	Descriptive Study
Sampling area	Chennai city
Sampling method	Simple random sampling
Sample Size	200
Research Instrument	Self-designed structured questionnaire with scored using a five - Point Likert scale was circulated through Google forms
Collection of Data	Primary data- Questionnaire; Secondary data- Journals, articles, web blogs, Reviews
Period of Study	December 2022 – February 2023
Statistical Techniques	Reliability Analysis, SEM model
Statistical Tool	SPSS 20 and Amos 23 software

Interpretation: Table 1 consists about research methodology framework, type of sampling used for research, specific unit of study, sample size taken for Research analysis, mode of study to collect information and the analysis tools and techniques used for the Research purpose.

Data Analysis and Interpretation

Table-2 Demographic profile of the Respondents		
Age of the respondents		
Variables	Frequency	Percent
20-25 years	46	23.0
26-30	54	27.0
31-35	20	10.0
36-40	36	18.0
Above 40 years	44	22.0
Total	200	100.0
Gender of the Respondents		
Female	152	76.0
Male	48	24.0
Total	200	100.0
Educational Qualification of the Respondents		
UG	66	33.0

PG	52	26.0
Diploma	42	21.0
Doctorate	40	20.0
Total	200	100.0
Occupation of the Respondents		
Student	24	12.0
House wife	12	6.0
own business	36	18.0
Public sector	32	16.0
Private sector	96	48.0
Total	200	100.0
Monthly Income of the Respondents		
25000-30000	72	36.0
31000-35000	42	21.0
36000-40000	36	18.0
Above 40000	50	25.0
Total	200	100.0
Source: Primary Data Analysis		

Interpretation: Table 2 shows that out of total 200 respondents in which 23% fall under the age group of 20-25 years where as 27% fall under the age group of 26-30 years, 10% of the respondents belong to 31-35 years, 18% of the respondents belong to the age group of 36-40 years and the remaining respondents are from the age group of above 40 years. The study is conducted with 24% male respondents taken for the study and 76% of the study is done with female respondents. Out of 200 respondents, 33% belong to under graduation, 26% is from post-graduation, and 21% belong to Diploma and the remaining respondents are Doctorates. The majority of the respondents are working in the private sector. 12% of the respondents are students, 6% of the respondents are house wife, 18% of the respondents are having own business, 16% of the respondents are working in public sector. Out of 200 respondents, 36% of the respondents have monthly income of Rs.25000-Rs.30000, 21% of the respondents have Rs.31000-Rs.35000, 18% of the respondents have Rs.36000-Rs40000 and 25% of the respondents have a monthly income of above Rs.40000.

Structural Equation Model

The variables used in the structural equation model are

I: Observed, endogenous variables

Convenience, Safety, Service Quality

II. Observed, exogenous variables

Access, Reliability

II. Unobserved, exogenous variables

e1: Error term for Convenience

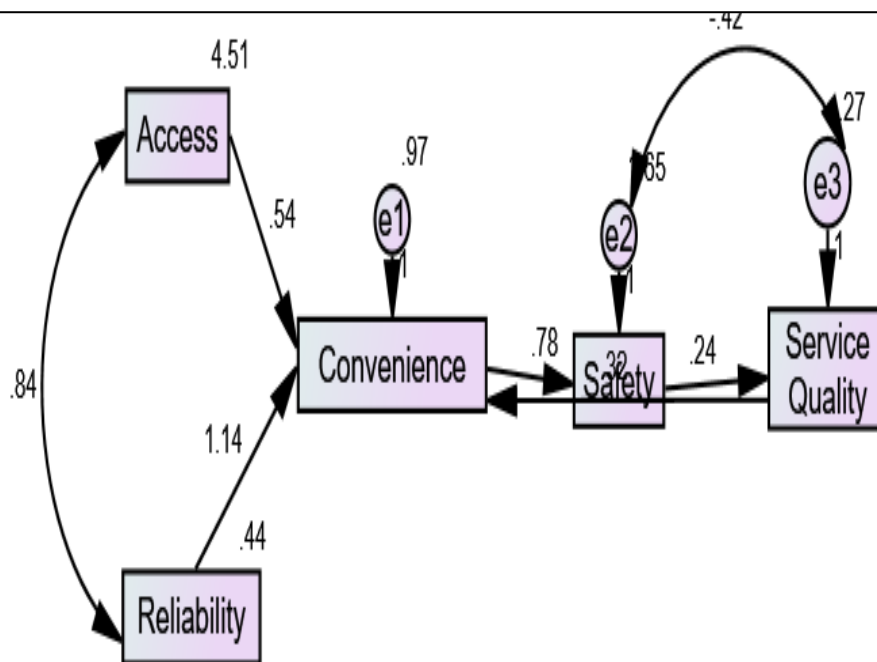
e2: Error term for safety

e3: Error term for Service quality

Therefore, the number of variables in the SEM is

Table -3 Number of variables	
Number of variables in the model:	8
Number of observed variables:	5
Number of unobserved variables:	3
Number of exogenous variables:	5
Number of endogenous variables:	3

Structural Equation Model (SEM) based on Standardised Coefficient



Estimates

In order to test the model, fit, null hypothesis and alternative hypothesis are framed.

Null hypothesis: The hypothesized model has not a good fit.

Alternative hypothesis: The hypothesized model has a good fit.

Variables			Unstandardize d co-efficient (B)	S.E of B	Standardi zed co- efficient β	t value	P value
Convenience	<--	Access	0.544	.046	.548	11.934	***
Convenience	<--	Reliability	1.141	.137	.360	8.315	***
Safety	<--	Convenience	0.781	.043	.789	18.023	***
Service Quality	<--	Safety	0.239	.025	.858	9.719	***
Convenience	<--	Service Quality	0.317	.188	.087	1.686	.092

Source: Primary Data Analysis

Interpretation: From the above table, unstandardized coefficient of access on Convenience is 0.544 represents the partial effect of access on Convenience, holding the other path variables as constant. The estimated positive sign implies that such effect is positive that convenience would increase by 0.544 for every unit increase in access and this coefficient value is significant at 1% level. Unstandardized coefficient of **reliability on Convenience is 1.414** represents the partial effect of reliability on Convenience, holding the other path variables as constant. The estimated positive sign implies that such effect is positive that convenience would increase by 1.414 for every unit increase in reliability and this coefficient value is significant at 1% level. Unstandardized coefficient of **Convenience on safety is 0.781** represents the partial effect of Convenience on safety, holding the other path variables as constant. The estimated positive sign implies that such effect is positive that safety would increase by 0.781 for every unit increase in convenience and this coefficient value is significant at 1% level. Unstandardized coefficient of **safety on service quality is 0.239** represents the partial effect of safety on service

quality, holding the other path variables as constant. The estimated positive sign implies that such effect is positive that service quality would increase by 0.239 for every unit increase in safety and this coefficient value is significant at 1% level. Unstandardized coefficient of **service quality on Convenience is 0.317** represents the partial effect of service quality on Convenience, holding the other path variables as constant. The estimated positive sign implies that such effect is positive that convenience would increase by 0.781 for every unit increase in service quality and this coefficient value is significant at 1% level. Based on Standardised coefficient, safety on service quality (0.858) is most influencing path in this SEM model, followed by convenience on safety (0.789), access on convenience (0.548), reliability on convenience (0.360) and service quality on convenience (0.087).

Model fit

Table-5 Table showing model fit for the functionality and service on internet banking applications		
Indices	Value	Suggested value
Chi-square value	13.142	-
DF	3	-
P value	0.004	> 0.05 (Hair et al., 1998)
Chi-square value/DF	4.381	< 5.00 (Hair et al., 1998)
GFI	0.975	> 0.90 (Hu and Bentler, 1999)
AGFI	0.925	> 0.90 (Hair et al. 2006)
NFI	0.982	> 0.90 (Hu and Bentler, 1999)
CFI	0.986	> 0.90 (Daire et al., 2008)
RMR	0.079	< 0.08 (Hair et al. 2006)
RMSEA	0.040	< 0.08 (Hair et al. 2006)
Source: Primary Data Analysis		

Interpretation: From the above table it is found that the calculated P value is 0.004 which is less than 0.05 which indicates perfectly fit. Here Goodness of Fit Index (GFI) value (0.975) and Adjusted Goodness of Fit Index (AGFI) value (0.925) is greater than 0.9 which represent it is a good fit. The calculated Normed Fit Index (NFI) value (0.982) and Comparative Fit Index (CFI) value (0.986) indicates that it is a perfectly fit and also it is found that Root Mean Square Residuals (RMR) and Root Mean Square Error of Approximation (RMSEA) value is 0.079 and 0.040 respectively which is less than 0.08 which indicated it is perfectly fit.

Findings from the Study

Demographic profile: The majority of the respondents are female respondents from the age group of 26-30 years having completed their under-graduation and working in the private sector with the monthly income of Rs.25000-Rs.30000.

SEM model: The model is perfectly fit with the satisfaction factors being the safety, convenience and service quality as the dependent variables and access and reliability as the independent variables and the null hypothesis is rejected. Hence, the model is a good fit in the functionality and consumer's satisfaction outcomes on the services of the internet banking with Banking Applications Among Indian Investors.

Concluding Observation and Suggestions

An online banking service has become important phenomenon in the banking industry and it will continue with progress in information communication technology. Bank should motivate the age group of 31 to 60 years to use online banking application services for their banking purposes through their applications. Bank should adopt some new policies and incentives to the online banking customers for making large number of transactions through banking applications. Bank should provide more facilities like training program, awareness camps to all types of customers for constant use of their applications for better satisfactory functional outcomes. Bank should make collaboration with other financial institution to collect their bill payment premium and other finance related matter online through their banking applications for better Framework for Functionality and Customer Satisfaction with Banking Applications Among Indian Investors.

Scope for Future Research

This study has identified the major factors in determining the satisfaction on digital payments through bank applications. The future researchers can identify the risks involved for the merchants in providing the service and also the factors for using the digital sources for payments and transactions. The study has focused only on the e-payments and its factors towards the satisfaction through bank applications. The future researchers can focus on the other areas like scope of the digital payments and also the merits of the digital transactions through bank applications in the economy.

References

- Adekannbi Job (2018) factors influencing customer satisfaction and loyalty to internet banking services among undergraduates of a Nigerian university, *journal of internet banking and commerce*, April 2018, vol. 23, no. 1.
- Ariff, M., Yun, L., Zakuan, N., & Ismail, K. (2023). The Impacts of Service Quality and Customer Satisfaction on Customer Loyalty in Internet Banking. *Procedia - Social and Behavioral Sciences*, 81, 469-473. doi: 10.1016/j.sbspro.2013.06.462.
- Kaur, N., & Kiran, P. (2021). Customer Satisfaction and Customer Loyalty in E-Banking in India: The Intricacies of Relationship. *IOSR Journal of Business and Management*, 16(9), 06-13. doi: 10.9790/487x-16960613.
- Iswarya, S & Dr.S. Preetha, (2018), "Social Engineering Attacks in Online Banking- Analysis of Trends and Prevention", *Eurasian J Anal Chem* 2018;13 (Engineering and Science SP): emEJAC181261.
- Soheila Ghane, M. Fathian, M. R. Gholamian, (2022) full relationship among e-satisfaction, e- trust, e-service quality, and e-loyalty: the case of Iran e-banking *journal of theoretical and applied information technology* 15th November 2022. vol. 33 no.1.
- Skvarciany, V., & Jurevičienė, D. (2019), Factors Influencing Individual Customers Trust in Internet Banking: Case of Baltic States. *Sustainability*, 10(12), 4809. doi: 10.3390/su10124809.
- Wondwossen Jerene & Dhiraj Sharma, (2020) The Effect of e-Finance Service Quality on Bank Customers' Fintech e-Loyalty: Evidence from Ethiopia: *International Journal of E-Business Research* Volume 16 Issue 2 Apr 2020 pp 69–83 <https://doi.org/10.4018/IJEBR.2020040105>.