



Factors underlying attitude formation towards E-banking in India

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Abstract

The present study focuses on consumer attitudes towards the willingness and usefulness to use of internet banking and factors influencing customers attitude while they use e-banking services. The essential data were collected on a purposive basis from 100 respondents through questionnaire. The factor analysis found that the negative perception of e-banking services, less awareness and familiarity regarding new technologies & their benefits, tendency of people to hold cash component in India, low level of average income per person and therefore, low ability to achieve communication equipment in India, lack of strong trust environment and lack of long-term strategic management, low level of internet penetration due to high costs, resistance of employees and managers regarding new technologies and some clients tend to go to a bank in order to communicate with bank's clerk are highly influenced factors that affect customers attitude while they uses e-banking services.

Keywords: E-banking, internet banking, customer attitude, services

Introduction

Banks are playing a very important role and have a positive effect in contributing the economic development through efficient financial services in a nation. They provide a mechanism to group saving and convert them into investment. From the last few decades, banks have been affected by various changes associated with financial liberalization and globalization (Zahid & Riaz, 2015) [13]. Banks have been significantly affected by those various economical and financial changes. Because of those changes, banks as well as non-banking financial institution expand the choice of services through e-banking offered to the customers and increase their reliance on technology. Banks have been affected by the evaluation of new technology; continuously increases the competition between banks, they forced them to find new market to expand, and the number of financial institutions that offer electronic banking products increased (Mattila, 2003) [9].

Hence, to improve the effectiveness of distribution channels through increasing the speed of services and reducing the transaction cost banks have begun to offer online electronic banking services. Recently, development of banking system through electronic or online banking has become the way for the customers satisfaction, and the role of electronic banking is continuously increasing in many developing and developed countries. It offers opportunities to create new services on lower cost as well as it provides wider possibility and availability to reach more customers (Bashir & Madhavaiah, 2015) [2].

From the customers' point of view, electronic banking allows customers easier access to financial services and time saving in managing their finance. Indeed, the emergence of electronic banking has prompted many banks to develop marketing and information technology strategies in order to stay competitive (Chau & Lai, 2003) [3]. The successful implementation of information systems is dependent on the extent to which such a system is used and eventually adapted by the potential users. Information system implementation is not likely to be considered successful if users are unmotivated to use that type of technology, and

thus it will not bring full benefits to the organization. In order to motivate customers to use electronic banking, banks must make key improvements that address the customers' concerns (Shing *et al.*, 2007) [10]. Therefore, it is necessary to understand the key factors that influence the adoption of electronic banking among the banking customers.

Review of earlier literature

(Karjaluoto *et al.*, 2002) [6] the study explored the effect of different factor affecting attitude formation towards internet banking in Finland. The study collected primary data of 1167 respondents through large survey during the summer of 2000. Structural equation modeling reveals that the demographic factors heavily impact on online banking behavior of customers. (Liao & Cheung, 2002) [8] studied the internet-based e-banking and consumers attitudes in Singapore. The data showed that expectations of accuracy, security, network speed, user friendliness, user involvement and convenience were the most important quality attributes underlying perceived usefulness. Regression discovered that willingness to use depended significantly on the first five factors, allowing the interdependencies or marginal rates of substitution between them to be estimated. Our results draw attention to demand-side changes in explaining the recent slowdown in Internet e-retail banking, and may also be useful for development planning and marketing (Al, 2012) [1] identified the factors that affect customers attitude towards electronic banking services in Jordan. This study integrates technology acceptance model (TAM) with the theory of planned behavior model (TPB) and incorporates five cultural dimensions and perceived risk to propose a theoretical model. The study collected primary data from 387 respondents of 26 licensed banks in Jordan. Multiple regression analysis found that the uncertainty avoidance has a positive and significant impact on perceived ease of use and perceived usefulness. Perceived risk has the stronger impact on customers' attitude, which in turn influences customers' intention to use electronic banking services. (Khare *et al.*, 2012) [7] studied the Indian customers' attitude towards trust and convenience in e-banking financial transactions in India. For data collection, two banks were

identified in four cities. The findings suggest that convenience and trust are important in use of internet banking. Indian customers' use of internet banking is dependent on convenience attributes. The younger customers are likely to find internet banking convenient. Men and women differ in their attitude towards preference to use internet banking. The customers' fears can be addressed by banks and promotions can be devised to assure the customers about the security aspects of internet banking/transactions.

(Inegbedion, 2018) [5] examined the factors that influence customers' attitude toward electronic banking in Nigeria. The study collected data from 250 Zenith bank respondent through questionnaire. The research findings showed that customers' knowledge of the Internet, customers' perceived ease of use of the Internet; customers' perceived riskiness of the Internet, and nature of transaction all influence their adoption of electronic banking in Nigeria. (Chauhan *et al.*, 2019) [4] examined the consumers' intention to adopt internet banking. The study adopted the technology acceptance model with additional constructs (i.e. consumer innate innovativeness (II), domain-specific innovativeness (DSI) and perceived security risk (PR). The data were collected through a questionnaire-based survey (487 usable responses) from Indian consumers. A two-step SEM approach (i.e., measurement model and structural model) was used to analyze the data. The study found that the significant positive influence of perceived usefulness, ease of use, attitude, II and DSI on consumer's intention to adopt internet banking. The PR was found to have a significant negative influence on consumers' intention to adopt internet banking, and DSI was found to negatively influence PR.

Research methodology

Descriptive-cum-exploratory research design was adopted for the present study because the study is concerned with describing the attitudes of banking customers and exploring the factors that influence of those customers. The essential data were collected with the help of a questionnaire on a purposive basis from banking customers having account in the bank. The respondents for the study were the banking customers of Sirsa, Haryana. The sample size of the present study is limited to 100 respondents only. The analysis of the data is done by using descriptive as well as inferential statistics. The factor analysis was performed in SPSS to identify the factors that influence the attitude and perception of banking customers.

Profile of sample

The sample was selected of them who are individual investors. The sample size of the present study is limited to 100 respondents only. Most of the respondents belong to the

age group of 25-45, followed by 45-55, and 25-Below. This shows that the Age group of 25 to 45 is highly accountholder in bank. From the total respondents, 62% were males and 38% were females. We can see that the number of males is more compared to the number of female respondents. This reveals the interests of the male respondents in banking activities.

Demographic profile

The respondent's profile has been shown in the following table:

Table 1: Demographic profile of the respondents

Profile		Frequency
Age	Below 25	18
	25-45	50
	45-55	21
	Above 55	11
Gender	Male	62
	Female	38
	Third Gender	00
Educational Qualifications	Final School	14
	Graduate	27
	Post Graduate	40
	Doctorate	03
Occupation	Others	16
	Employee	55
	Businessman	22
	Professional	13
Annual Income	Others	10
	Below 100000	40
	100001 to 200000	42
	200001 to 3000000	11
Monthly Transactions in Bank	Above 3000000	07
	15000 to 50000	46
	50001 to 100000	34
Experiences of Banking	100001 to 200000	20
	Below 2 years	29
	2 years to 5 years	51
	5 years to 10 years	15
	Above 10 years	05

Source: Questionnaire.

Factors influencing the attitude of customers towards e-banking

To identify the factors that influenced the attitude of customers towards E-banking the exploratory factor (EFA) analysis was performed. EFA is multivariate analysis in which variables under investigation are evaluated together to extract the factors (Watkins, 2018) [12]. In order to establish the strength of the factor analysis solution, it is essential to establish the reliability and validity of the obtained factors.

Table 2: KMO and bartlett's test

Kaiser-meyer-olkin measure of sampling adequacy.		.534
Bartlett's Test of Sphericity	Approx. Chi-Square	959.452
	df	406
	Sig.	.000

Kaiser-Mayer-Olkin (KMO) test is a measure of sampling adequacy of test (Shrestha, 2021) [11]. The KMO value of 0.534 which is greater than 0.5 represent that there is an adequate number of factors that can be extracted. The significant value of Bartlett's Test of Sphericity is 0.000 which is <0.001. So, the sample inter-correlation matrix did

not come from a population in which the inter-correlation matrix is an identity matrix. Results from table 3 shows that all the variables have commonalities of more than 0.5 reveals that all variables are significantly loaded on the factor.

Table 3: Communalities

	Initial	Extraction
The banks possess weak telecommunications	1.000	.843
Software available in our country is not suitable	1.000	.511
Hardware available in our country is not sufficient in the country	1.000	.678
Limited trained Human Resources on E-Banking services	1.000	.678
Improper use of technology in e-banking service implementation	1.000	.627
Lack of technological knowledge (managers, employees, clients)	1.000	.558
There is flaw in design, implementation and monitoring of Bank's information system	1.000	.671
Lack and limitation of regulation and law	1.000	.562
Increased potential of fraud	1.000	.705
Denial of e-documents in courts	1.000	.693
Lacking or weak security measures	1.000	.624
Lack of strong trust environment	1.000	.821
Negative perception of e-banking services	1.000	.885
Less awareness and familiarity regarding new technologies & their benefits	1.000	.741
Illiteracy	1.000	.714
Charging fees is a reason for the loss of customers	1.000	.650
Worry and perception of e-banking as a threat to the bank's employees	1.000	.762
Some clients tend to go to a bank in order to communicate with bank's clerk	1.000	.710
Tendency of people to hold cash component in India	1.000	.855
Peoples' intention to have a physical receipt of transactions is not fulfilled	1.000	.707
English language barrier	1.000	.824
Need for heavy investment regarding new infrastructures	1.000	.778
Low level of internet penetration due to high costs	1.000	.816
Low level of average income per person and therefore, low ability to achieve communication equipment in India	1.000	.827
E-banking poses a number of managerial risks for bank management	1.000	.825
Resistance of employees and managers regarding new technologies	1.000	.738
Lack of adequate coordination, interaction and cooperation between banks and other decision-making centers	1.000	.667
Lack of long-term strategic management	1.000	.713
Transfer of managers and decision makers is an important obstacle	1.000	.582

Extraction Method: Principal Component Analysis.

Table 4: Total variance explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative%	Total	% of Variance	Cumulative%
1	3.311	11.416	11.416	3.311	11.416	11.416
2	2.479	8.548	19.963	2.479	8.548	19.963
3	2.423	8.356	28.319	2.423	8.356	28.319
4	2.220	7.654	35.974	2.220	7.654	35.974
5	2.050	7.070	43.043	2.050	7.070	43.043
6	1.678	5.786	48.829	1.678	5.786	48.829
7	1.602	5.523	54.352	1.602	5.523	54.352
8	1.431	4.933	59.285	1.431	4.933	59.285
9	1.287	4.438	63.723	1.287	4.438	63.723
10	1.181	4.073	67.796	1.181	4.073	67.796
11	1.105	3.812	71.608	1.105	3.812	71.608
12	.949	3.273	74.881			
13	.821	2.831	77.712			
14	.785	2.706	80.418			
15	.720	2.484	82.902			
16	.686	2.366	85.269			
17	.607	2.094	87.363			
18	.545	1.880	89.243			
19	.486	1.676	90.918			
20	.429	1.479	92.397			
21	.422	1.457	93.854			
22	.341	1.176	95.030			
23	.309	1.064	96.094			
24	.266	.917	97.011			
25	.241	.831	97.843			
26	.192	.662	98.505			
27	.162	.559	99.064			
28	.154	.532	99.596			
29	.117	.404	100.000			

Extraction Method: Principal Component Analysis.

In Table 4, the total variance explained output is presented. In the entire data set total 29 items were selected for analysis, which constitutes five components. There are eleven factors from the analysis explaining a total of 71.608 percent of the variation in the entire data set which indicates well. The percentage of the variation is explained by the eleven factors after varimax rotation is performed are 11.416, 8.548, 8.356, 7.654, 7.070, 5.786, 5.523, 4.933, 4.438, 4.073 and 3.812 percent respectively.

Table 5: Component Matrix^a

Component										
1	2	3	4	5	6	7	8	9	10	11
-.385	-.009	-.203	-.456	.327	-.282	-.128	.406	.236	.042	.142
.198	.380	-.145	-.384	-.043	-.123	.051	-.100	-.026	.358	-.004
-.294	-.232	-.009	.374	.283	-.079	-.043	-.323	-.040	.409	-.190
.062	-.191	-.052	.002	.415	-.064	.200	.065	-.378	.354	.382
-.255	.136	-.188	.436	-.379	-.082	-.081	.337	.117	-.142	-.119
-.189	-.238	.046	-.072	.362	.213	.465	.103	.143	-.179	.051
.177	.317	.050	.175	-.454	.033	.168	-.037	.288	-.077	.425
-.171	.044	.336	.000	.444	.091	.414	-.065	-.065	.152	-.099
-.191	-.345	.250	.272	.102	.458	-.300	.246	.080	.093	.164
.272	.085	-.085	.188	.346	-.078	.467	.193	-.175	-.382	.107
-.182	-.003	-.306	-.457	-.153	.088	.196	.237	.042	.381	-.125
.166	.289	.738	.025	.155	-.255	-.125	.116	-.039	.112	.179
.638	.400	-.337	.164	.320	.087	-.141	.153	.127	.006	.090
.668	-.428	.120	-.033	-.019	-.043	.035	.228	.184	-.032	.084
-.257	.096	.302	-.071	-.377	-.304	.219	.082	-.112	.091	.482
.066	.128	.251	-.179	-.070	-.112	-.023	-.425	.556	.162	.012
.061	.380	.141	-.444	-.291	.486	.196	.144	-.122	.035	.038
.267	-.139	.036	-.125	.109	-.009	.508	-.090	.539	.007	-.181
.598	-.538	.114	.064	-.228	-.035	.115	.277	-.052	.167	-.126
.380	.504	-.387	.287	.073	-.109	-.028	.030	-.087	.206	-.087
.453	.413	-.240	.220	.363	.340	-.147	.093	.183	.136	.113
.194	.290	.731	.038	.091	-.088	-.195	.159	-.038	.140	-.145
-.506	.183	-.043	.542	-.131	-.153	.230	.291	.044	.133	-.182
.538	-.522	-.066	-.009	-.328	-.067	-.051	.250	-.007	.282	-.069
-.356	.039	-.068	-.423	.319	-.256	-.332	.422	.213	-.091	-.061
-.308	-.187	.162	.112	.072	.650	-.212	.003	.199	.110	.211
-.416	.178	-.092	.377	-.127	.054	.303	.238	.217	.308	.053
.121	.288	.625	.060	.047	.067	.078	.239	.006	-.084	-.378
-.055	.262	-.042	-.366	-.199	.461	.086	.090	-.261	.008	-.197

Extraction Method: Principal Component Analysis.

a. 11 components extracted.

The study uses the rotated component matrix for factor loading and, in this way, the study gets 11 factors. Factor 1 comprises five variables namely Negative perception of e-banking services, less awareness and familiarity regarding new technologies & their benefits, Tendency of people to hold cash component in India, Low level of average income per person and therefore, low ability to achieve communication equipment in India which are the very highly influential factor that affects the customers attitude while they use e-banking services. Factor 3 comprises two variables namely Lack of strong trust environment and Lack of long-term strategic management is a highly influential factor that affects the customers attitude while they use e-banking services. Factor 4 comprises one variable namely Low level of internet penetration due to high costs and Factor 6 comprises one variable namely Resistance of employees and managers regarding new technologies is a highly influential factor that affects the customers attitude while they use e-banking services. Factor 7 comprises one variable namely Some clients tend to go to a bank in order

to communicate with bank’s clerk is a highly influential factor that affects the customers attitude while they use e-banking services.

Conclusions

The analysis of the data reveals that negative perception of e-banking services, less awareness and familiarity regarding new technologies & their benefits, tendency of people to hold cash component in India, low level of average income per person and therefore, low ability to achieve communication equipment in India, lack of strong trust environment and lack of long-term strategic management, low level of internet penetration due to high costs, resistance of employees and managers regarding new technologies and some clients tend to go to a bank in order to communicate with bank’s clerk highly influenced factors that affect customers attitude while they uses e-banking services.

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