

PERCEPTION OF RURAL POPULATION TOWARDS DIGITAL BANKING ADOPTION

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ABSTRACT

The term E- Banking also termed as Digital banking which is very well known now a day. In India Demonetization acted as stimulating agent to adopt E- Banking all over India and then COVID shifted majority of population towards E-Banking. But few regions in rural India are still facing the issues in adoption of E-Banking. This study examines the influence of Demographic factors– age, gender, education level, marital status, and employment status on rural customer's behavior towards adoption of E- Banking among Indian rural population. A sample of 120 was surveyed and analyzed using Analysis of variance & independent t test. Although all variables had a significant impact on adoption of E- banking among rural population but gender, level of education and employment status are major factors influencing adoption of E- Banking.

Keywords: - Digital Banking, E- Banking, Demographics, Analysis of variance, independent t test.

INTRODUCTION

India is emerging as a digital economy. With the introduction of 75 Digital banking units on October 22, it has taken a step ahead towards digital India. Digital Banking is also termed as Internet banking or E- banking or mobile banking when the customer don't have to approach the bank physically, all facilities from opening the bank account to payments and receipts are available using electronic devices 24*7. With this service a customer can save time by carrying out banking transactions at any place and at any time from home or office, all it needs an internet access. In urban areas internet connectivity is in good condition than the rural areas. (Sarel and Marmorstein, 2003) Banks have made significant technology investments over the past two decades to enhance customer experience and save costs. To cut operational costs, boost profitability, and provide consumers with the highest quality services, banks offer a variety of digital channels, including ATMs, internet banking, mobile banking, and digital banking kiosks. To promote the digital India movement and create a cashless economy, Prime Minister Narendra Modi announced the withdrawal of high value currency

notes with the denominations of Rs. 500 and Rs. 1000 on November 8th, 2016. Later in 2020, COVID impacted the whole economy adversely but somehow strengthen the foundation of digital economy as to maintain social distancing digital payments became the highly used and trusted mode of payments. In rural areas people relied on physical currency even during COVID and Demonetization.

Here is RBI report of Digital payment Index till March 2022 with base year 2018.

Period	RBI - DPI Index
March 2018 (Base)	100
March 2019	153.47
September 2019	173.49
March 2020	207.84
September 2020	217.74
March 2021	270.59
September 2021	304.06
March 2022	349.30

REVIEW OF LITERATURE

The governor of the Reserve Bank of India, Shri Shaktikanta Das, attributes the expansion of digital banking to "higher levels of sustainable development and financial inclusion." To a large extent, this burgeoning growth can be attributed to deep telecom penetration, the availability of the internet, and the ready adoption of technology. These factors have initiated credit access and effective payment systems for the now and the future of DB. This change was sped up by the pandemic.

(Niti Ayog, 2021, p 28) Digital Banks means banks as defined in the banking regulation act, 1949 i.e. B.R act. In other words these entities will issue deposits, make loans and offer the suite of services that the BR act empowers them to. DB's will principally rely on the internet and other proximate channel to offer their services and not physical branches.

(Lal, et. al., 2015, p. 27) The government is working hard to promote Aadhar pay, which would let users to conduct financial transactions with just their fingers, in order to inspire the impoverished and uneducated people in rural areas. However, in order to conduct transactions, it requires a PIN and password.(Zhang, et. al., 2013, p. 149-157) The development of the Indian economy has always been significantly influenced by the rural sector. The Indian market experienced a sea change as a result of demonetization, which had a significant impact on market dynamics. The number of digital users using digital payments and POS was expected to increase significantly post-demonetization, in contrast to pre-demonetization. (Singh, Malik, 2019, p. 1-11) Digital payments present a number of difficulties for the rural population, including low per capita income, lack of financial security, internet connectivity, and resistance to new technologies. The majority of transactions take place with cash in villages because residents assume that electronic payments are risky and unreliable. Along with identifying the difficulties the rural economy has, recommendations are also made for how to deal with them, including focusing on raising financial literacy, improving infrastructure, revitalising the rural sector, and fostering public confidence in digital payments. (Shettar, 2019, p. - 1-11) With the advent of digitization, the idea of "Anywhere Banking" emerged. Smart phone usage is expected to rise along with DB, which would free up businesses from having to do financial transactions during regular office hours. (Sharma, Govindaluri, 2014, p. - 155-169) You can predict users' intentions to use the internet banking system by looking at how they feel about utilizing digital banking. This

study proposed an enhanced TAM model to examine the uptake of internet technologies by banking consumers.

THEORETICAL FRAMEWORK

TAM

Based on the aim of the study, conceptual framework for digital marketing is based upon the Technology acceptance model (TAM). This framework is propounded by Davis in 1989 and it includes strategic approach for the data driven decision making. This model has suggested that technology plays a crucial role in the decision making. This model includes attitude and perceived usefulness, behavioral intention of users and perceived ease of use (Davis, 1989). The present study focused on the impact of demographics on adoption of E- Banking among rural population. In brief, TAM model has provided a structure to the firms for improving their digital marketing strategies across customer life cycle.

Objectives

Current Exploratory study has been conducted with the objective of measuring the adoption of digital banking using the TAM model.

Research Methodology

For conducting this particular study Exploratory & descriptive research design is used by taking the Panipat district from Haryana as area for the research. The data was collected from 120 rural residents by using the convenient sampling based on their demographics. For collecting the data, a structured questionnaire based on TAM was used and further the data Analysis was done using the SPSS 16.

Data Analysis

Chronabach Alpha is .892, which is reliable.

Table- 1: Demographic Profile of the Respondents

Particulars	Demographics	Frequency
Age	21-30	35
	31-40	27
	41-50	33
	Above 50	25
Education	Below high school	20
	Higher & Secondary	23
	Under Graduation	27
	Post-graduation	29
	Professional	21
Marital status	Married	90
	Unmarried	30
Gender	Male	70
	Female	50
Employment Status	Employed	41
	Unemployed	29
	Business/ other work	50

1. Gender

- ❖ **H1a:** Perception of male and female differ significantly for acceptance of digital banking
- ❖ **H1a:** Perception of male and female differ significantly for acceptance of digital banking regarding Perceived Usefulness
- ❖ **H1b:** Perception of male and female differ significantly for acceptance of digital banking regarding Perceived Ease of Use
- ❖ **H1c:** Perception of male and female differ significantly for acceptance of digital banking regarding Perceived Social Norms
- ❖ **H1d:** Perception of male and female differ significantly for acceptance of digital banking regarding Attitude Towards Using
- ❖ **H1e:** Perception of male and female differ significantly for acceptance of digital banking regarding Perceived Behavior Control.

Table 2: Perception of respondents on the basis of gender

Factors	male		female		F	Sig (p-value)	Hypothesis
	Mean	SD	Mean	SD			
Perceived Usefulness	3.213	0.539	3.3600	0.500	.654	.133	H1a
Perceived Ease of Use	3.517	0.9340	3.6920	0.8431	.888	.003	H1b*
Perceived Social Norms	3.557	0.9763	3.6500	0.927	.165	.001	H1c*
Attitude Towards Using	3.552	0.7963	3.6867	0.828	.005	.372	H1d
Perceived Behaviour Control	3.552	0.7963	3.6867	0.828	.005	.002	H1e*

Source: Primary Data

*Significant at 5% Level

*SD stands for Standard Deviation

Table 2 shows perception of respondents on the basis of gender towards E – banking. To check the impact of demographics on adoption of E- banking among rural population independent t test has been applied at the 5% level of significance. SPSS 16 is used to perform the analysis. Mean and standard deviation of five factors have been calculated. The results signify that female have high mean value than males and respondents have positive perception towards adoption of E banking. Further f test statistics shows that p- value for perceived usefulness, attitude towards using is greater than .05 then Null hypotheses will be significant and for perceived ease of use of use perceived social norms perceived behavioral norms p value is less than .05 in these cases alternate hypotheses will be more significant.

2. Age

- ❖ **H2:** Perception of Respondents of different age groups differ significantly for acceptance of digital banking
- ❖ **H2a:** : Perception of Respondents of different age groups differ significantly for acceptance of digital banking regarding Perceived Usefulness

- ❖ **H2b:** : Perception of Respondents of different age groups differ significantly for acceptance of digital banking regarding Perceived Ease of Use
- ❖ **H2c:** : Perception of Respondents of different age groups differ significantly for acceptance of digital banking regarding Perceived Social Norms
- ❖ **H2d:** Perception of respondents of different age groups differ significantly for acceptance of digital banking regarding Attitude Towards Using
- ❖ **H2e:** Perception of respondents of different age groups differ significantly for acceptance of digital banking regarding Perceived Behavior Control.

Table 3: Perception of respondents on the basis of Age

Factors	21 - 30		31 – 40		41-50	51-60		F		Sig (p-value)	Hypothesis
	Mean	SD	Mean	SD	Mean	SD	Mean	SD			
Perceived Usefulness	3.3571	.51194	3.2037	.38001	3.2929	.52379	3.2100	.67961	.582	.028	H2a*
Perceived Ease of Use	3.7029	.89623	3.5259	.72356	3.6424	.89129	3.6424	.89129	.519	.670	H2b
Perceived Social Norms	3.8000	.85061	3.5741	.76841	3.5909	.97991	3.3400	1.19652	1.144	.013	H2c*
Attitude Towards Using	3.7143	.71007	3.6173	.67750	3.6061	.87184	3.4533	.99014	.501	.683	H2d
Perceived Behaviour Control	3.7143	.71007	3.6173	.67750	3.6061	.87184	3.4533	.99014	.501	.017	H2e*

Source: Primary Data

*Significant at 5% Level

*SD stands for Standard Deviation

Table 3 shows perception of respondents on the basis of Age towards E – banking. To check the impact of demographics on adoption of E- banking among rural population one way ANOVA has been applied at the 5% level of significance. SPSS 16 is used to perform the analysis. Mean and standard deviation of five factors have been calculated. The results signify that respondents from all age groups have positive perception towards adoption of E banking. Further f test statistics shows that p- value for perceived usefulness, perceived social norms and perceived behavioral control is less than .05 then alternate hypotheses will be significant and for perceived ease of use & Attitude towards using, p value is greater than .05 in these cases null hypotheses will be more significant.

3.Level of education

- ❖ **H3:** Perception of Respondents of different level of education differ significantly for acceptance of digital banking
- ❖ **H3a:** : Perception of Respondents of different age groups differ significantly for acceptance of digital banking regarding Perceived Usefulness
- ❖ **H3b:** : Perception of Respondents of different level of education differ significantly for acceptance of digital banking regarding Perceived Ease of Use
- ❖ **H3c:** : Perception of Respondents of different level of education differ significantly for acceptance of digital banking regarding Perceived Social Norms
- ❖ **H3d:** Perception of Respondents of different level of education differ significantly for acceptance of digital banking regarding Attitude Towards Using
- ❖ **H3e:** Perception of Respondents of different level of education differs significantly for acceptance of digital banking regarding Perceived Behavior Control.

Table 4: Perception of respondents on the basis of level of education

Factors	Below high school		Higher school and secondary		Under graduate		Post graduate		Professional		F	Sig (p-value)	Hypothesis
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD			
Perceived Usefulness	3.1750	.57411	3.4348	.50123	3.1759	.46417	3.3851	.53239	3.1667	.54962	1.512	.203	H3a
Perceived Ease of Use	3.4600	1.04247	3.7391	.70951	3.6222	.73868	3.6414	1.00482	3.4381	1.00920	.437	.001	H3b*
Perceived Social Norms	3.5500	1.02470	3.7609	.82393	3.7593	.71213	3.4483	1.12872	3.4524	1.04767	.667	.016	H3c*
Attitude Towards Using	3.4667	.92654	3.7391	.83458	3.6543	.64372	3.7011	.82781	3.4127	.84921	.721	.580	H3d
Perceived Behaviour Control	3.4667	.92654	3.7391	.83458	3.6543	.64372	3.7011	.82781	3.4127	.84921	.721	.030	H3e

Source: Primary Data

*Significant at 5% Level

*SD stands for Standard Deviation

Table 4 shows perception of respondents on the basis of Age towards E – banking. To check the impact of demographics on adoption of E- banking among rural population one way ANOVA has been applied at the 5% level of significance. SPSS 16 is used to perform the analysis. Mean and standard deviation of five factors have been calculated. The results signify that respondents from all age groups have positive perception towards adoption of E banking. Further f test statistics shows that p- value for perceived usefulness, attitude towards using and perceived behavioral control is greater than .05 then null hypotheses will be

significant and for perceived ease of use, perceived social norms & Attitude towards using, p value is less than .05 in these cases alternate hypotheses will be more significant.

4. Marital status

- ❖ **H4:** Perception of married & unmarried respondents differ significantly for acceptance of digital banking
- ❖ **H4a:** Perception of married & unmarried respondents differ significantly for acceptance of digital banking regarding Perceived Usefulness
- ❖ **H4b:** Perception of married & unmarried respondents differ significantly for acceptance of digital banking regarding Perceived Ease of Use
- ❖ **H4c:** Perception of married & unmarried respondents differ significantly for acceptance of digital banking regarding Perceived Social Norms
- ❖ **H4d:** Perception of married & unmarried respondents differ significantly for acceptance of digital banking regarding Attitude Towards Using
- ❖ **H4e:** Perception of married & unmarried respondents differs significantly for acceptance of digital banking regarding Perceived Behavior Control.

Table 5: Perception of respondents on the basis of marital status

Factors	married		Unmarried		F	Sig (p-value)	Hypothesis
	Mean	SD	Mean	SD			
Perceived Usefulness	3.6638	.93651	3.4902	.84220	.699	.405	H4a*
Perceived Ease of Use	3.7638	.95651	3.5902	.86220	.709	.507	H4b
Perceived Social Norms	3.6522	.97884	3.5196	.92174	.160	.690	H4c
Attitude Towards Using	3.6425	.78240	3.5621	.84981	.878	.351	H4d*
Perceived Behaviour Control	3.6525	.88240	3.6621	.87981	.898	.361	H4e*

Table 5 shows perception of respondents on the basis of marital status towards E – banking. To check the impact of demographics on adoption of E- banking among rural population independent t test has been applied at the 5% level of significance. SPSS 16 is used to perform the analysis. Mean and standard deviation of five factors have been calculated. The results signify that respondents from all age groups have positive perception towards adoption of E banking. Further f test statistics shows that p- value for perceived usefulness, attitude towards using and perceived behavioral control is less than .05 then alternate hypotheses will be significant and for perceived ease of use, perceived social norms p value is greater than .05 in these cases null hypotheses will be more significant.

Employment level

- ❖ **H5:** Perception of employed/ unemployed/ others respondents differ significantly for acceptance of digital banking
- ❖ **H5a:** Perception of employed/ unemployed/ others respondents differ significantly for acceptance of digital banking regarding Perceived Usefulness

- ❖ **H5b:** Perception of employed/ unemployed/ others respondents differ significantly for acceptance of digital banking regarding Perceived Ease of Use
- ❖ **H5c:** Perception of employed/ unemployed/ others respondents differ significantly for acceptance of digital banking regarding Perceived Social Norms
- ❖ **H5d:** Perception of employed/ unemployed/ others respondents differ significantly for acceptance of digital banking regarding Attitude Towards Using
- ❖ **H5e:** Perception of employed/ unemployed/ others respondents differs significantly for acceptance of digital banking regarding Perceived Behavior Control.

Table 6: Perception of respondents on the basis of employment level

Factors	unemployed		Employed		other		F	Sig (p-value)	Hypothesis
	Mean	SD	Mean	SD	Mean	SD			
Perceived Usefulness	3.6114	.86900	3.6426	.90883	3.5053	.92851	.256	.774	H5a
Perceived Ease of Use	3.6314	.86920	3.7426	.90983	3.5353	.91851	.276	.786	H5b
Perceived Social Norms	3.6429	.98198	3.5957	.90071	3.5526	.91202	.080	.923	H5c
Attitude Towards Using	3.7496	.79784	3.6516	.90837	3.6430	.93690	.278	.937	H5d
Perceived Behaviour Control	3.6476	.78774	3.6312	.80827	3.5439	.84690	.178	.837	H5e

Table 6 shows perception of respondents on the basis of marital status towards E – banking. To check the impact of demographics on adoption of E- banking among rural population one way ANOVA has been applied at the 5% level of significance. SPSS 16 is used to perform the analysis. Mean and standard deviation of five factors have been calculated. The results signify that respondents from all age groups have positive perception towards adoption of E banking. Further f test statistics shows that p- value for perceived usefulness, attitude towards using, perceived behavioral control, perceived ease of use and perceived social norms p value is greater than .05 in these cases null hypotheses will be more significant.

CONCLUSION

The success of UPI payments and QR codes is being paved by the Indian banking sector, which is serving as a blueprint for future banking. Digital banking is starting to gain some popularity among rural residents, although this is primarily because of a lack of resources, such as knowledge and reliable internet connectivity. These factors are preventing the rural populace from embracing e-banking. Age, gender, education level, and income level are some demographic variables that have a big impact on whether or not rural people use online banking. TAM (Technology Acceptance Model) was used to conduct the questionnaire. Perceived utility, perceived usability, perceived social norms, attitude towards use, and perceived behavioural control are among the elements that TAM claims are taken into account for.

LIMITATIONS

This study had following limitations

1. As the area of study is limited to Panipat district only, other rural areas may possess different kind of adoption behavior towards digital banking.
2. Limited time had also acted as a limitation
3. With the use of convenient sampling, there occur some chances of sampling error.

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