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ADOPTION OF MOBILE BANKING SERVICES: AN EMPIRICAL EXAMINATION BETWEEN GENERATION Y AND GENERATION Z IN INDIA

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ABSTRACT

By conducting an empirical investigation on the generational comparison between Gen Y and Gen Z in India, this research aims to identify the key elements that significantly influence the adoption of mobile banking services. In order to evaluate the framework 120 surveys were collected from Gen Y and Gen Z mobile banking users in India for the primary data, which consists of analysis, correlation analysis, collinearity analysis, and multiple linear regression analysis. The findings demonstrate that customer intention to adopt the services is significantly and favourably influenced by compatibility, perceived usefulness, and self-efficacy in both generations. It's interesting to note that only Gen Z has experienced a significant change in the adoption of mobile banking.

KEYWORDS: Mobile Banking, Factors, Adoption, Gen Y, Gen Z, India

INTRODUCTION

Customers may use mobile banking to make financial transactions anywhere, at any time, by using a mobile portable device and data plan. Regular banking tasks like monitoring account balances or moving money between accounts are no longer constrained by time or geography just because of mobile banking facilities. This technical development has evolved into one of the most effective instruments for converting conventional banking services into an online mass market that can reach a larger consumer base. Due to the convergence of the banking and mobile sectors, the majority of clients are anticipated to transact financially using mobile devices. However, the adoption rate of mobile banking services is viewed as being slow as compared to the recent fast increase in mobile devices.

Prior studies on the use of mobile banking services have only looked at the public as a whole, focus groups of early adopters, or a single mobile banking application.

Beyond the restrictions described above, this study intends to analyse and evaluate several aspects impacting consumer adoption in the contemporary Indian market from the perspectives of two generations: generation Y (Gen Y) and generation Z. (Gen Z).

LITERATURE REVIEW

Overview of Mobile Banking

Customers in India

More than ever young Indian clients are receptive to exploring non-conventional options for their financial services. They are also acquiring new banking customers as a result of the large number of new adults joining the consumer society. These younger generations require specialised services since they enjoy trying new things. Additionally, they have a wide variety of expectations for things that will meet their preferences and situations, and they are susceptible to social pressure (Hodgkinson, 2015)[2].

Banks aim to boost the popularity of mobile banking by making it easier for clients to use in order to stay competitive and better establish ties with customers in the digital era. Indian clients now have access to more individualised mobile banking services. Following the government's decision to remove the 500- and 1,000-rupee notes from circulation in November 2016, cashless payments, particularly mobile payments, had their initial big boost. Following demonetization, the temporary money scarcity pushed people toward cashless payment solutions. However, given the current economic slowdown brought on by the new coronavirus epidemic, it seems doubtful that the high growth rates in cashless payments experienced in recent years will occur again[4].

Theoretical Background

Technology Acceptance Model (TAM)

TAM was designed specifically by Davis (Davis, 1989) for examining users' response to the influence of technology adoption, and it is quickly rising to the top of the list of models used to estimate and forecast users' acceptance of cutting-edge information technology. The model suggests that the two main elements influencing a person's attitude toward adopting technology are perceived utility and perceived ease of use of the technology [2]. In the context of mobile banking, the expanded TAM was also investigated in 2005, adding one component based on trust (perceived credibility) and two based on resources (perceived financial cost) [10].

Diffusion of Innovation Theory (DOI)

E.M. Rogers created the concept (1983). The concept describes how an idea or a product gathers momentum and propagates over time within a particular demographic or social system. Relative advantage, compatibility, complexity, trialability, and observability are the five key elements that influence the adoption of an invention. Each of these criteria has a different impact on each of the five adopter types, according to the model [3].

Generational Cohorts

Generation Y (Gen Y)-Generation Y or millennials, also known as Gen Y, were born between 1981 and 1996 according to Beresford research. As of 2022, their age range was 26 to 41. For their age, members of Gen Y are grounded and wise. They are raised in a technologically advanced, wireless society where national borders are more apparent [1].

Generation Z (Gen Z)-

The term "Gen Z" refers to people who were born after 1996 and who, as of 2022, had not yet turned 26. the generation that was born after the Internet (Langford, 2008). Technology is there from birth, and Generation Z grew up with the internet, e-books, and music downloads. They place a lot of value on peer acceptability [15].

Research Model And Hypotheses Development

Perceived cost

According to Tornatzky and Klein (1982), perceived cost refers to how much a person thinks they can afford to spend on mobile banking [10]. Users must have a compatible mobile device and internet access in order to utilise mobile banking services, which might be expensive for some. As a result, this study hypothesizes that:

H1A Perceived cost significantly affects the adoption of mobile banking in Gen Y customers of India.

H1B Perceived cost significantly affects the adoption of mobile banking in Gen Z customers of India.

Perceived usefulness

According to Jeong & Yoon (2013), perceived usefulness is "the degree to which an individual feels that he or she would benefit from utilising mobile banking." People use mobile services because they find them beneficial is very predictable [6]. As a result, this study hypothesizes that:

H2A For Indian Gen Y customers, perceived usefulness significantly influences their uptake of mobile banking.

H2B For Indian Gen Z customers, perceived usefulness significantly influences their uptake of mobile banking.

Perceived ease of use

According to Fishbein and Ajzen (1975), perceived ease of use is "the extent to which a person feels that utilising a certain system would be devoid of effort."

According to Karahanna, Agarwal, and Angst (2006), perceived simplicity of use significantly increased potential adopters' intentions to use the programme [8]. In light of this, this analysis hypothesizes that:

H3A For Indian Gen Y customers, perceived ease of use significantly impacts whether or not they utilise mobile banking.

H3B For Indian Gen Z customers, perceived ease of use significantly impacts whether or not they utilise mobile banking.

Perceived risks

According to Pavlou (2001), perceived risks are "the user's subjective anticipation of suffering a loss in pursuit of a desired goal." This covers the possibility of a mobile device being lost or stolen as well as the possibility of losing money while utilising services like halting payments [9]. As a result, this study hypothesizes that:

H4A For Indian Gen Y customers, perceptions of risk have a big influence on whether they use mobile banking.

H4B For Indian Gen Z customers, perceptions of risk have a big influence on whether they use mobile banking.

Compatibility

According to Agarwal and Prasad (1998), individuals are more likely to accept an innovation if they find it compatible with their prior experiences, attitudes, and working habits [7]. It was discovered that compatibility influences usage intention indirectly via perceived usability (Lin, 2005). As a result, this study hypothesized that:

H5A For Indian Gen Y customers, compatibility greatly influences their adoption of mobile banking.

H5B For Indian Gen Z customers, compatibility greatly influences their adoption of mobile banking.

Self-efficacy

Self-efficacy is the conviction that one has the capacity, expertise, and understanding to carry out a certain action (Compeau & Higgins, 1995). According to earlier research [12], someone with poor IT self-efficacy will be more resistant to new technology (Lin, 2005). As a result, this study hypothesizes that:

H6A Self-efficacy significantly influences Indian Gen Y customers' adoption of mobile banking.

H6A Self-efficacy significantly influences Indian Gen Z customers' adoption of mobile banking.

Trialability

Trialability is the capacity for certain technologies to be used experimentally or on a trial basis before acceptance by potential users. Additionally, the trialable service will facilitate users' adoption of new technologies (Akturan & Tezcan, 2010 []. As a result, this study hypothesizes that:

H7A For Indian Gen Y customers, trialability substantially influences the uptake of mobile banking.

H7B For Indian Gen Z customers, trialability substantially influences the uptake of mobile banking.

Social influence

The degree to which a person believes they may be affected by social pressure or peer pressure is known as social influence. According to research, one's inclination to use mobile banking is greatly influenced by the individuals in their immediate environment and social network (Amin, Baba, & Muhammad, 2015; Singh, Tan, & Mookerjee, 2011) [7]. As a result, this study hypothesizes that:

H8A For Indian Gen Y customers, social influence significantly impacts whether they use mobile banking.

H8B For Indian Gen Z customers, social influence significantly impacts whether they use mobile banking.

The perceived usefulness, perceived ease of use, perceived cost, perceived risk, compatibility, self-efficacy, trialability, and social influence are the 8 dependent variables.

The dependent variable is the intention to adopt mobile banking applications and services.

MATERIALS AND METHODS

In India, there are approximately 13 million mobile banking users and this figure is expected to grow rapidly (Dr Parul Deshwal,2015) [6]. The sample size was determined using the Yamane formula (Yamane, 1967) based on the total population of Indians who use mobile banking in Generations Y and Z, which comprises more than 100,000 samples. 120 respondents were included in the sample using a 95 % confidence level and

a 5 % sampling error. The reliability of the questionnaire was examined in a pilot study with 30 Gen Y and Gen Z respondents . In December 2022, the surveys were distributed through an online google form. There were a total of 120 completed surveys, with 60 coming from Gen Z and 60 from Gen Y.

Research Instrument and Variable Measurement

Before releasing full samples, the internal consistency of each variable was measured using Cronbach's alpha to assess the reliability of the questionnaire. According to table 1, an alpha greater than 0.7 denotes satisfactory dependability.

Variable	Cronbach's alpha
Perceived Usefulness	0.744
Perceived Risk	0.795
Perceived Ease of Use	0.872
Perceived Cost	0.760
Compatibility	0.871
Self-efficacy	0.704
Trialability	0.786
Social Influence	0.789

Table 1 Reliability Analysis

Validity

The validity of the constructs is assessed by looking at a factor analysis. Hair, Black, Babin, Anderson, and Tatham (2006) proposed using a cut-off factor loading of 0.50. Following data analysis, it was discovered that all eight variables influencing customers' inclination to utilise mobile banking services had loading factors over 0.5 and eigenvalues above 1.0, as shown in Table 2. These results demonstrate that all of the items used to operationalize the particular construct are loaded onto a single factor and that the dataset is unidimensional and factorially cTABLE 2

RESULTS

(SPSS) Statistical Package for Social Science is used to analyse primary data from questionnaires.

Descriptive Statistics

Male responders make up about 60% of the sample. There are 60 members of Gen Y and 60 members of Gen Z who responded. The means and standard deviation for each independent variable are displayed in Table 4. For Gen Y, perceived usefulness has the greatest mean, but for Gen Z, compatibility has the highest mean. The mean ratings for perceived cost are the lowest among both generations.

	GENERATION Y		GENERATION Z	
VARIABLES	**MEAN**	**STD. DEVIATION**	**MEAN**	**STD. DEVIATION**
PU	4.276	0.617	4.012	0.523
PE	3.927	0.815	3.891	0.582
PC	2.453	0.846	2.635	0.712
PR	2.944	0.624	2.726	0.625
CT	4.063	0.64	4.107	0.671
SE	4.028	0.675	3.928	0.799
TL	3.442	0.757	3.437	0.703
SI	2.943	0.796	3.593	0.898

TABLE 3

PU = perceived usefulness,

PE = perceived ease of use,

PC =perceived cost,

PR = perceived risk,

CT = compatibility,

SE = self-efficacy,

TL = trialability, and

SI = social influence

Demographic Profile

DEMOGRAPHIC PROFILE	**NUMBER**	**PERCENTAGE**
GENDER		
MALE	**69**	**57.5**
FEMALE	**51**	**42.5**
GENERATION		
GEN Y	**60**	**50**
GEN Z	**60**	**50**

TABLE 4

Correlation Analysis

Pearson's product-moment correlations were examined before the hypothesis test. The study demonstrates how the various variables are related. An overview of the association between eight factors from respondents in Generations Y and Z is shown in Tables 5 and 6. All of the correlations between the independent variables are under 0.7.

	PU	PE	PC	PR	CT	SE	TL	SI	IA
PU	1	0.57	-0.15	0.30	0.48	0.35	0.18	0.12	0.49
PE		1	-0.14	0.26	0.51	0.38	0.18	0.17	0.42
PC				0.03	-0.15	-0.08	0.12	0.14	0.11
PR				1	0.20	0.16	0.12	0.29	0.28
CT					1	0.52	0.25	0.05	0.66
SE						1	0.11	0.08	0.47
TL							1	0.34	0.24
SI								1	0.14
IA									1

TABLE 5 Correlation among variables for Gen Y

	PU	PE	PC	PR	CT	SE	TL	SI	IA
PU	1	0.12	-0.25	-0.06	0.26	0.25	0.08	0.20	0.33
PE		1	-0.07	0.19	0.41	0.36	0.23	0.23	0.38
PC				0.32	-0.06	-0.09	0.11	0.11	-0.07
PR				1	-0.02	-0.05	0.05	0.04	-0.02
CT					1	0.38	0.23	0.32	0.56
SE						1	0.25	0.33	0.50
TL							1	0.23	0.22
SI								1	0.43
IA									1

TABLE 6 Correlation among variables for Gen Z

Collinearity Diagnostics Test

By determining the tolerance value and the variance inflation factor (VIF), the collinearity diagnostics test was carried out to validate the variables and uncover any multicollinearity issues (Ruangkanjanases & Sahaphong, 2015).

According to O'Brien (2007), variables that have a tolerance value of less than 0.20 or a VIF of more than 5 are at risk of becoming multicollinear. Tables 7 and 8 of the collinearity data demonstrate that all variables have

tolerance values over 0.2 and VIF values below 5. As a result, multicollinearity is not a hazard for any of the variables.

VARIABLE	TOLERANCE	VIF
Perceived usefulness	0.602	1.662
Perceived Ease of use	0.579	1.726
Perceived cost	0.922	1.085
Perceived Risk	0.835	1.197
Compatibility	0.558	1.792
Self-efficacy	0.707	1.414
Trialability	0.812	1.232
Social Influence	0.798	1.254

Table 7 Collinearity Statistics of Gen Y

VARIABLE	TOLERANCE	VIF
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TABLE 8 Collinearity Statistics of Gen Z

Stepwise Multiple Regression Analysis and Hypothesis Test

According to Table 9, Gen Y's desire to utilise has a favourable significant influence on compatibility (= 0.485, p = 0.000), perceived usefulness (= 0.206, p = 0.001), and self-efficacy (= 0.148, p = 0.014). The three factors (adjusted R 2 = 0.483) account for 48.3% of the variation in the desire to utilise mobile banking services. Intent to use is positively impacted by self-efficacy (= 0.263, p = 0.000), social influence (= 0.202, p = 0.001), perceived utility (= 0.126, p = 0.025), and compatibility (= 0.362, p = 0.000), according to Table 10. The four factors (adjusted R 2 = 0.45) account for 45 % of the variance in the intention to utilise mobile banking services.

	Variables	B	β	t	Sig	R	R2	Adj. R2	Overall F
Criterion	Intention to adopt					0.701	0.491	0.483	153.074
Predictor	Compatibility	0.524	0.485	7.577	0.000				
	Perceived usefulness	0.231	0.206	3.517	0.001				
	Self-efficacy	0.152	0.148	2.467	0.014				

Table 9 Stepwise Multiple Regression for Gen Y

	Variables	B	β	t	Sig	R	R2	Adj. R2	Overall F
Criterion	Intention to adopt					0.679	0.461	0.450	41.723
Predictor	Self-efficacy	0.232	0.263	4.446	0.000				
	Social Influence	0.158	0.202	3.521	0.001				
	Perceived Usefulness	0.170	0.126	2.265	0.025				
	Compatibility	0.380	0.362	6.128	0.000				

Table 10 Stepwise Multiple Regression for Gen Z

The outcome is consistent with hypotheses i.e. it supports H1a, H5, H6, H1b, H5, H6, and H8b. The outcome contradicts hypotheses H2a, H3a, H4a, H7, H8a, H2b, H3b, and H7.

CONCLUSIONS

According to the multiple regression analysis summaries, Gen Y's readiness to adopt products appears to be significantly influenced by compatibility, perceived usefulness, and self-efficacy. This indicates that people utilise mobile banking services as a result of the services' suitability for their demands and way of life. They undoubtedly have the skills to use it as well.

Figure 3's summary of the Gen Z results, on the other hand, demonstrates that compatibility, self-efficacy, social impact, and perceived usefulness are the key drivers of service adoption for this generation. Gen Z chooses the services mostly based on their self-efficacy, followed by social impact and the utility of the services, whereas Gen Y chooses the services primarily based on compatibility.

Compatibility, self-efficacy, and perceived usefulness are the variables that both Gen Y and Gen Z are affected by. Because mobile banking services fit their demands and way of life/working, both Gen Y and Gen Z plan to use them. They are confident in their capacity and technological know-how to utilise mobile banking services and recognise the offerings' value and advantages. However, societal impact, which affects Gen Z but not Gen Y, is the key difference between Gen Y and Gen Z. This indicates that because Gen Z was raised in a social environment and was raised with technology, their decision-making is more impacted by their social environment, including social media, advertising, trends, and the people around them. They also heavily rely on their family and friends while making purchases or deciding whether to try something new. Gen Z is more socially and digitally connected than Gen Y.

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