Effect of Attitude on Behavioural Intention to Use Digital Payment Services for Utility Bill Payment: A SEM Analysis

Dr.Jasmine V.M.,

Asst. Professor, PG & Research Department of Commerce, St. Joseph's (Autonomous) College Devagiri

Abstract

Background: The tremendous growth in internet and mobile phone usage in India, coupled with the impact of demonetization and digitalization, has resulted in exponential growth in the use of digital payment platforms and their adoption for bill payments. However, it remains a matter of concern that the educated working class, with regular income and high technological exposure, is still reluctant to embrace digital payment services for utility bills.

Objectives: This study attempts to assess the 'behavioural intention to use' digital services for utility bill payments among salaried employees, based on their attitude towards the technology-enabled payment system.

Methodology: Purposive sampling was employed in this study, with a specific focus on the salaried class. The approach involved selecting individuals employed in either private or government institutions who have access to technology. Data were collected from a sample of 300 respondents residing in India especially Kerala, the most literate state.

Key Findings: The study found that the presence of 'perceived risk' in the TAM model increases the variance explanatory capacity of attitude under Exploratory Factor Analysis (EFA). The Confirmatory Factor Analysis (CFA) established that 'perceived risk' is relevant in determining 'attitude' and the Structural Equation Model analysed a significant positive impact of attitude on 'intention to use' supporting the existing research.

Implications/Significance: The research model developed in this study represents an enhancement to existing technology adoption models by introducing the concept of 'perceived risk.' This addition involves assessing individuals' beliefs regarding potential uncertain and negative outcomes in online transactions as a component of measuring their attitude. This novel approach promises to offer fresh perspectives and a more comprehensive understanding of the 'attitude' construct within the research community. As the increased 'perceived risk' reduces the technology adoption, it is to be seriously addressed by the government and service providers, taking proper safety measures and enhancing awareness among the public.

Keywords: Perceived Usefulness, Attitude, Perceived Ease of Use, Utility Bill Payment,Perceived Risk, Digital Payments, Technology Enabled Payment.

Introduction

The twenty-first century is witnessing the proliferation of Information and Communication Technology (ICT) which has contributed much to the expansion of economies around the world. To leverage the power of emerging technologies for the digital transformation of many industries, governments are promoting technology-enabled services in their respective nations. India is steadily advancing towards becoming a digitally advanced nation, boasting the largest and fastest-growing digital consumer markets, with over half a billion internet subscribers. As per the statistics, India had over 749 million internet users across the country in 2020 and the internet penetration rate went up to nearly 47 per cent in 2021, from 4per cent in 2007(Kaka et al., 2019). The advancement in ICT opened the gateway to the digital payments system and allows individuals and businesses to make payments through digital or online modes (Adeola, 2018). Digital payment services enable the transfer of money or value from the payer's account to the payee's account without any physical exchange of currency between parties (Sumathy, 2017; Sivathanu, 2018).

The government of India made efforts to convert the face of the Indian economy into a digital economy from 2014 onwards. To digitally empower society, the government launched the 'Digital India' programme in 2015 with the slogan "Faceless, Paperless, Cashless" and introduced various modes of digital payments to encourage cashless transactions (Sumathy, 2017). The introduction of technology-grounded payment services like debit and credit cards, prepaid payment instruments, National Electronic Funds Transfer (NEFT), Immediate Payment Service (IMPS), ECS-Electronic Clearing System, Aadhaar Enabled Payment System (AEPS), Unified Payments Interface (UPI), Unstructured Supplementary Service Data (USSD) *99#, E-Wallets and BHIM accelerated the growth of digital payments in India (Gandhi, 2016; Bhagat, 2020; Sivathanu, 2018). Moreover,

India's demonetizationdrivein2016 triggered millions of people to shift and embrace digital payment systems and led to tremendous change in the payment behaviour of people (Yadav and Sinha, n.,d; Bubna et al., al 2019). The Compound Average Annual Growth Rate (CAGR) of digital payments steadily increased by over 28.4 per cent from 2011-12 to 2015-16 and the volume of overall payments shot up by over 56 percent in 2016-17(Singh J., 2019). The COVID-19 pandemic demanded the adoption of digital payments to prevent the spread and transmission of Coronavirus through physical money (Panday and Pal, 2020). The intense market rivalry led to abounding smart phone availability along with high-speed internet at an affordable price, and this major upsurge in digital payments encouraged the rise of India's digital consumer base' faster than many mature and emerging economies. (Kaka et al., 2019).

Despite the rapid expansion of digital technology for cash transfers, people are still sceptical about the adoption of digital payment services for utility bills(Shree et al, 2021). Every household from a different income bracket, regardless of where they live, is required to pay their utility bills. By developing a digital payments culture for utility services, especially for water, gas, electricity, building tax, internet and phone services, they can be brought into the world of technology-based payment systems more easilythan anything. If we consider the routine nature of utility bill payment and the inconvenience of getting it paid directly, there is a high scope for the adoption of technologies for such payments(Jayasimha & Nargundkar, 2006).At the same time, earlier studies have proved that many socioeconomic reasons and ingratiation with cash developed from the habit of using itpull peopleto stick to hard money (Shree et al, 2021).Furthermore, consumers' intention to adopt or non-adopt a technology depends upon their attitude determined by perceived usefulness, ease of use, previous experience and perceived risk regarding the technology (Basuki et al., 2022). If someone has the mindset that using a certain technology is advantageous (perceived as useful) or simple to use (perceived as ease of use), the likelihood of adopting technology-based payment services is found to be higher. At the same time, the perception of risk generated from the fear of bank failures, frauds, counter-party failures, etc. could activate a chain reaction that might ultimately result in the distrust towards digital payment system(Roy & Sahoo, 2016).

Many previous studies have examined the variables influencing and posing obstacles to the adoption of technology for non-repetitive financial transactions, with an emphasis on mobile banking, online banking, etc. This study attempts to fill the gap of technology adoption studies which failed to measure the effect of attitude on intention to use technology-enabled payment services for utility bill payment among the working group. While considering digital payments, in addition to regular banking and ecommerce transactions, utility bill payments are also very important for the public, particularly for working employees. The working class finds it challenging to visit payment centres to physically pay their utility bills because they are constantly occupied with their work schedules. Adopting technical advancements helps people overcome the challenge of taking a break from work, and postpandemic situations necessitate using technology for making such payments. Considering these aspects, this study is an effort to determine how far the perceived usefulness, easiness in usage and risk perceptions are impacting the intention to engage in digital payment services for utility bill payment among the people of India, especially in Kerala state of India.

Review of literature

Awel and Yitbarek (2022) tried to determine the demand for mobile money to pay the utility bill. As per the study demand for mobile money is sensitive to price changes and households are willing to pay more prices to use mobile money for the payment of goods and services.

Abrazhevich (2004) addressed the issue of non -the nonacceptance of electronic payment systems by users on account of mismatching with their expectations and difficulties. The tri-dimensional survey was conducted using a diary study and identified usability, convertibility, privacy, reliability, security, and trust as the variables for the study.

Adeoti, (2012) conducted a descriptive study in Nigeria

with the objective of understanding the payment pattern and factors that motivate in choosing the payment mode. Convenience, accessibility, availability, ease of use, timesaving, security, improved bank service and reduced armed robbery were identified as the attracting factors of digital payments.

Bharadwaj & Baruah, (2018) made an effort to understand the shift in electricity bill payment based on exploratory research, conducted among individual and commercial customers, using electricity from Assam Power Distribution Company Limited (APDC).

Das & Singh, (2010) studied the progress and status of card payment usage and reasons for 'no usage' in a detailed manner. The extent of usage of debit cards for different purposes was analysed using the RBI report.

Islam (2006) discusses the features of utility bills and the relevance of adopting digital payment modes. Technical aspects and the processes involved in the new payment systems were explained conceptually with suitable diagrams.

Kaur & Pathak (2015) explained that electronic payment is a major attraction of online trade. Even though there are many attractions for e-payments other perceptions like security, awareness to use, and intention to use electronic mode of payment may affect the ability to use the epayment facility.

Conceptual Development

Davis, (1989) explained with the Technology Acceptance Model (TAM) that a user's behavioural intention to use a technology depends upon their attitude towards it and attitude is determined by their perceived usefulness and perceived ease of use (Basuki et al., 2022).Perceived usefulness refers to the extent to which an individual believes that using a particular product will assist them in reaching their desired objectives, while perceived ease of use pertains to the degree to which they perceive the system as requiring minimal effort during use. Ramayah and Ignatius, (2005) explored the relationship between the three beliefs regarding online shopping i.e., perceived usefulness, perceived ease of use and perceived enjoyment and finally the influence of these variables on the intention to shop online. As per the study perception regarding the ease of use is identified as the predictor of perception about usefulness. Doll et al. (1998) discussed various incremental cross-validation studies in contrast to the technology acceptance model (TAM) and finally proved that Davis's TAM model framed with six-item perceived usefulness and six-item perceived ease-of-use instruments is a strong model for evaluating and predicting information system applications and in predicting usage.Raza et al., (2017) located variables affecting the intention to continue the use of mobile banking on the basis of TAM and found that 'resistance' is negatively associated with the perceived ease of use while it is positively associated with perceived usefulness. At the same time, perceived risk has a significant positive association with both perceived usefulness and perceived ease of use (Malik et al., 2021).

The possibility to adopt an innovative product or service is more both in the market and in individual customers if they feel it is new. At the same time, there will be a high level of perceived risk (Cunningham, 1967, p. 83) which in turn negatively impacts attitude towards digital services (Polasik and Wisniewski, 2009). Grover et al. (2019) measured the effect of perceived usefulness and perceived ease of use on the user acceptance of blockchain for digital payment and the study revealed that security, privacy, transparency, trust and traceability aspects of blockchain attract the user to adopt it for digital transactions. The above literature reviews reveal that, though there are several empirical studies conducted on technology adoption in different contexts, there are no specific studies made to assess the attitude towards the use of technology-enabled services for utility bill payment among the salaried class and how this may impact their behavioural intention to use the same. Additionally, many studies that employed TAM as the research model failed to take into account perceived risk, one of the key factors influencing technology adoption. Here the researchers attempt to fill this research gap by framing and testing the following objectives and hypotheses.

Objective

1.To assess the dimensions of attitude towards the use of digital payment services for utility bills and for measuring the effect of attitude on behavioural intention to use the same.

Hypotheses

The perceived Usefulness significantly determines attitude towards the use of digital services for utility bill payment.

H2: The Perceived Ease of Use significantly determines attitude towards the use of digital services for utility bill payment.

H3: The Perceived Risk significantly determines attitude towards the use of digital services for utility bill payment.

H4: Attitude has a significant positive influence on behavioural intention to use digital payment services for utility bills.

Conceptual Model



Methodology

Both primary and secondary data were collected, organized and analysed for drawing logical inferences from the same to fulfil the objectives. The working class is always busy with their work schedule and it is found to be very difficult for them to keep away from their offices for paying bills. However, this group is young and may show innovativeness in adopting technological advancements. As this study focuses on the salaried class, purposive sampling has been applied as the sampling method and approached those working in private or government institutions with access to technology. The hypotheses were examined by analyzing data collected from a sample of 300 participants through the distribution of a survey instrument.

Data Collection

The data were collected from the salaried class of people who have access to technology for doing digital payment services. The working employees come in the category of young and it is always noticed that youngsters are early adopters of innovative technologies and this initiative

gradually moves to other groups (Featherman and Pavlou, 2003; Luarn and Lin, 2005).So, a purposive sampling technique has been adopted and working employees who have access to technology were only included in the sample. Data were collected in the month of February 2024 using a questionnaire. The demographic and behavioural information connected to the usage of technology for utility bill payments were collected from the respondents and it is given in table 1.

Measures	Items	Frequency	Percentage	
Gender	Male	231	77	
	Female	69	23	
Occupation	Private	114	38	
	Government	186	62	
Any technology	Never	20	06.67	
used for utility	1-2 times	160	53.33	
bill	More than 2times	120	40.00	

Table 1: Demographic Profile of the sample

Table 1: Demographic Profile of the sample

Results and Discussions

The constructs used for determining the 'attitude' of the current study are those that have been validated by several researchers in their studies. In light of this, the validity and reliability of the data acquired for these aspects were examined (Davis, 1989; Doll et al., 1998). Behavioural intention is measured using a five-point scale from "not very likely" to "very likely" and it is consistent with many of the studies like Kim et al. (2009), Cronin and Taylor (1992), Koenig-Lewis, (2010). Variables used to determine 'attitude' on the basis of perceived usefulness, perceived ease of use and perceived risk were adapted from Davis et al. (1989), Luarn and Lin (2005) and Featherman and Pavlou (2003). All the perception-related variables are assessed using a five-point Likert scale, spanning from 1

(strongly disagree) to 5 (strongly agree). Items were modified to suit the context of digital services for utility bill payment.

Reliability and Validity Tests

To analyse the effect of attitude on intention to use digital payment services for utility bills, the variables of attitude have been tested for the Reliability test (Cronbach's alpha) and Validity test. Variables are reduced and grouped under Exploratory Factor Analysis (EFA) and confirmation is also done with CFA- Confirmatory Factor Analysis. Using EFA, we calculated factor loadings and with the help of Excel calculated Convergent Validity, Average Variance Extracted (AVE) and Discriminant Validity. The reliability of data collected for determining the attitude is tested and the result it is given in Table 2.

Table 2 Reliability							
Items	Cronbach's Alpha						
Perceived Usefulness	.921						
Perceived Ease of Use	.880						
Perceived Risk	.881						

Source: Primary Data Analysis

Cronbach's Alpha used to check the agreement among five measuring statements towards perceived usefulness showed a .921 alpha value. The rest four statements measure perceived ease of use at .880 and the balance four measure perceived risk at .881. Thirteen variables measuring attitude towards digital payment services for utility bill payments collectively and separately crossed the criteria of .70(Alpha). In addition to this, .890 is the highest value even if deletes any item of attitude.

Table 3 Convergent Validity

Latent variables	AVE
Perceived Usefulness	0.690805
Perceived Ease of Uses	0.680233
Perceived Risk	0.674844

Source: Primary Data Analysis

Both convergent and discriminant validities were tested to ensure the validity. Table 3 shows the convergent validity of variables of 'attitude' and Table 4 shows the discriminant validity of the same. For convergent validity, the Average Variance Extracted must be more than 0.5. Here this has been achieved and the constructs have convergent validity also.

Table 4 Discriminant Validity

Latent Variable	Perceived Usefulness	Perceived Ease of Uses	Perceived Risk
Perceived Usefulness	0.831		
Perceived Ease of Uses	0.248	0.824	
Perceived Risk	0.314	0.593	0.821

Source: Primary Data Analysis

The criterion for discriminant validity is that the squareroot value of Average Variance Extracted (AVE) is required to be more than the latent variable correlation. Here the square root value for 'Perceived Usefulness' (0.831147), 'Perceived Ease of Use' (0.824762) and 'Perceived Risk' (0.821489) are higher than latent variable correlation values i.e., .248, .314 and .593. Therefore, these constructs have discriminant validity. Exploratory Factor Analysis done on thirteen variables forming 'attitude' towards the digital payment system for utility bill payment, extracted three factors. In factor analysis, the Principal Component Method was performed. KMO and Bartlett's Test is given in Table 5 and the total variance percentage is given in Table6 below.

Table 5 KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measur	.839			
Bartlett's Test of Sphericity	Bartlett's Test of Sphericity Approx. Chi-Square			
	df	78		

Source: Primary Data Analysis

The above Table 5 shows sampling adequacy as .839 and Batlett's Test of Sphericity with a chi-square value of 2960.506 is statistically significant at 5% level significance. This explains that all the variables for the

study of attitude are normally distributed and suitable for grouping. The commonalities of attitude indicated that 13 variables have extracted have a range value from .804 to .632 and it expresses that the variables' range is within the

limit of 80.4%% to 63.2%. This leads to the extraction of variables. The extraction method used Principal Component Analysis with rotated varimax and maximum iteration for convergence fixed as by default value 25. In the

descriptive option, 'KMO' was selected and in extraction 'Principal component' option with Eigen value greater than '1' was opted. In the first run, it generated three factors.

		Initial Eigen Val	ues	Rotation Sum of Squared loadings			
Component	Total	%of Variance	Cumulative %	Total	% of Variance	Cumulative %	
1	5.648	43.443	43.443	3.862	29.708	29.708	
2	2.835	21.807	65.249	3.105	23.882	53.590	
3	1.443	11.103	76.353	2.959	22.763	76.353	

Table: 6 Percentage of Variance

Source: Primary Data Analysis

		Compone	ent
Items measuring attitude	1	2	3
APU Any time anywhere I can pay	.875		
APU No delay in payment	.866		
APU offers discounts and cash back	.864		
APU No need to take a break from work	.864		
APU Soft copies are available whenever required	.848		
APEU Even digital illiterates can operate		.865	
APEU Net and electronic devices can be easily accessed		.835	
APEU System can be easily used		.806	
APEU E-Payments are easy to learn		.759	
APR There is no risk of carrying cash			.860
APR Copies of bills can be saved to avoid missing			.853
APR E-payments are secured with password and OTP			.852
APR ensures Transparency and Accountability			.681

Table 7 Rotated Component Matrix

Source: Primary Data Analysis

The percentage of variance for attitude towards the use of digital technology for utility bill payment in Table 6, shows that three component factors with more than '1 initial Eigen value cumulatively contribute 76.35%. These three components were named "Perceived Usefulness" and formed with five statements (Soft Copy Availability, Discount Facility, no need to take break from work, Payment at any time and no time delay), Perceived Ease of Use with four statements (Ease of use, Ease of learning, Usable to digital illiterates and Ease of Access) and Perceived Risk with four statements (No risk of cash, No Risk of transparency, OTP reduce risk and facility of saving

soft copy of bill) and it is given in Table 7. The influence of identified variables on various constructs was confirmed using CFA. The perception of respondents regarding the attitude and its dimensions were determined based on the following hypothesis. The regression coefficient of CFA is given in Table 9 and the CFA is shown in Figure 2.

H1: Perceived usefulness towards digital payment services for utility bill

- H1_a: Availability of soft copy influences perceived usefulness
- H1_b: Availability of discount facility influences perceived usefulness

- H1_c: Facility of no need to take a break from work influences perceived usefulness
- H1_d: Facility of doing payment at any time influences perceived usefulness
- H1_e: Facility of payment without delay influences perceived usefulness.
- H2: Perceived ease of use towards digital payment services for utility bill
- H2_a: Easiness of using technology-enabled payment system influences perceived ease of use
- $H2_{b}$: Easiness in learning influences perceived ease of use
- H2_e: Usefulness of illiterates influences the perceived ease of use
- $H2_{d}$: Easiness of access influences the perceived ease of use

H3: Perceived risk towards digital payment services for utility bill

- H3a: The facility of saving of copy of the bill influences the perceived risk
- H3_b: Risk of OTP influences the perceived risk
- H3_c: Risk of transparency influences the perceived risk.
- H3_d: No risk of carrying cash influences the perceived risk.

The Confirmatory Factor Analysis was done to check the hypothesised relationships among multiple variables and CFA was found very suitable to assess this (Anderson and Gerbing, 1988; Gallagher et al., 2008). The data were analysed using AMOS16. Here we studied scale validity from the measurement model using CFA and then focused on testing hypotheses framed to test the effect of attitude on behavioural intention to use using the structural model.

Table 8 Model Fit Summary

	Chi- square	DF	P value	Chi- square Value/D F	GFI	AGFI	NFI	CFI	RMR	RMSEA
Obtained value	184.77	57	.000	3.342	.917	.868	.939	.956	.019	.087
Suggested Value	-	-	<.05	<5	> 0.90	> 0.90	> 0.90	> 0.90	< 0.08	< 0.08

Source: Primary Data Analysis

The model fit values obtained from the CFA analysis have been shown in Table 8 and from the result, Chi-square/DF value less than 5 (p-value less than .05) and GFI, NFI, and CFI have values higher than .90 (Hair et al., 1998; Hu and Bentler, 1999; Daire et al., 2008). The RMR also fulfils the criteria (Hair et al. 2006). Only AGFI and RMSEA show as light difference from the suggested Value (Hair et al. 2006). So, the model can be treated as a fit.





Latent Variables	Variable		Code	Unstandardiz ed coefficient	C.R	Р	Standardized coefficient
	Soft Copy	<	APU	1.000			.710
A	Discount	<	APU	1.744	15.305	< 0.001	.966
Attitude determined by	Break from Work	<	APU	1.434	15.333	< 0.001	.882
Perceived Usefulness	Anytime	<	APU	1.208	13.661	< 0.001	.858
	No Delay	<	APU	.932	20.797	< 0.001	.709
	Ease of use	<	APEU	1.000			.788
Attitude	Easy to learn	<	APEU	1.241	13.546	< 0.001	.761
Perceived Ease of Use	Useful to illiterate	<	APEU	1.663	15.644	< 0.001	.879
	Ease of access	<	APEU	1.388	13.924	< 0.001	.865
Attitude determined by Perceived Risk	Facility of bill saving	<	APR	1.000			.797
	OTP	<	APR	1.304	18.325	< 0.001	.928
	Transparency	<	APR	.753	13.580	< 0.001	.734
	Risk of cash	<	APR	.795	15.603	< 0.001	.815

Table 9- The regression Co-efficient

Source: Primary Data Analysis

Structural Equation Modeling (SEM) has been applied to test the hypothesised relationship between attitude construct and the behavioural intention variable. SEM completes two level functions in a single analysis i.e., measurement model function as well as assessment of directional effect and the result of current research is given in Figure3. As behavioural intention consists of one variable, there is no need to doa confirmatory factor analysis for it. Thus, after doing CFA for attitude construct moved to SEM analysis with attitude and behavioural intention. The effect of attitude on behavioural intention to use is hypothesised as

H4: Attitude towards digital payment services for utility bills has an influence on behavioural intention to do the same.

The model found with adequate to fit indices values. It is noticed with Normed chi-square CMIN/DF (1.14) value<3, RMSEA (.017) <.05, GFI(.941), CFI (.911), NFI (.921) TLI(.964) and IFI (.934) which are >.90. Table 10 shows the hypothesis testing



Hypothesis	β	P value	Result
H ₀ : Attitude towards digital payment services for utility billshas no significant	.12	.003	Reject H ₀
influence on behavioural intention to do the same.			

Table 10 Result of hypothesis testing: Research Model

Source: Primary Data Analysis

Conclusion

The technological advancements in every sphere of life are compelling the adoption of digital payment services. At the same time, a person's intention to use a technology depends on how they feel about it. Against this backdrop, the current study is an effort to determine the behavioural intention to use digital services for utility bill payment among the salaried class residing in India. Here the researchers took the initiative to improvise the Technology Acceptance Model (TAM) with perceived risk while assessing the adoption of technology for this unique bill payment and adding this to the existing literature.

The behavioural intention to use digital services for utility bill payment is conducted among the working class, which consists of individual households who have difficulty paying routine utility bills by visiting payment centres directly. By analysing the behavioural intention to use technology for utility bill payment among this digitally exposed group, researchers were able to depict the extent of digital payment culture in society. Again, the most wellknown theory, the TAM, only considers two crucial factors when figuring the attitude: perceived usefulness and perceived ease of use. At the same time, many empirical studies have demonstrated the role of perceived risk in explaining behavioural intention and the measurement of it varies depending on the psychological and environmental aspects of an individual(Chang and Chen, 2008; Polasik and Wisniewski, 2009). The developed model of this research is an improvement to the existing technology adoption model since it incorporates 'perceived risk', the belief about the ambiguous and adverse effects of the online transaction, in measuring the attitude. This will provide new insight as well as a better understanding of the construct 'attitude' for the research community. By incorporating respondents' risk perceptions, the refined model, was found successful in extracting a variance of 75.35% for the construct 'attitude' and it is quite higher than studies on the adoption of technology, particularly TAM, which have a normal range of deviation of only 40% (Venkatesh and Davis, 2000). The respondent's agreement with the perceived risk variable is a clear indication of the relevance of measuring the TAM model's added

contribution to "perceived risk" in the context of digital payments for utility services.

Confirmatory Factor Analysis (CFA) analysis shows that the identified thirteen variables measuring attitude have a significant influence on 'perceived usefulness' 'perceived ease of use' and 'perceived risk' and this in turn collectively defines the construct 'attitude'. Similarly, the attitude reflected a positive impact (0.12) on the behavioural intention to use digital services for utility bill payments and it was able to prove that attitude influences and fuels intention to use technology among the studied group and is found consistent in line with the existing literature (Ahmad et al, 2013; Koenig-Lewis et al, 2010; Liao et al, 1999). Further, we observe that most respondents believe that payments made through technology are useful, but only very few have the opinion that carrying cash poses no risks. Again, the majority of respondents showed that they "strongly agree" with the attitude of 'ease of use' and it reveals that users of technology-enabled payment services have a feeling of 'easiness' in paying utility bills. The results also indicate a positive attitude towards technology usage among the male respondents and government employees. Thus, to mitigate the risk perceptions towards technologyenabled payments among the general public and to enhance the usage of such services, the government and service providers have to implement proper safety measures and improve awareness among the public.

Reference

- Abrazhevich, D. (2004). Electronic Payment Systems: AUser-Centred Perspective and Interaction Design.
- Adeoti, O. O., Osotimehin, K. O., & Olajite, O. T. (2012). Consumer Payment Pattern and Motivational Factors for Using DebitCards in Nigeria. Medwell Journal, 352-355.
- Ahmad, F., Nasr, M., Safwat, E., Gaber, E., & Ahmed, A. (2013). A Proposed E-Government Framework Utilities Payment: A Case Study for Electricity Utility. Ubiquitous Computing and Communication Journal, 6(2), 821-.
- Awel, Y., & Yitbarek, E. (2022). Mobile money demand in utility bill payments: A WTP estimate from Ethiopia.

Journal of Development Effectiveness, 14(1), 56-75.

- Basuki, R., Tarigan, Z., Siagian, H., Limanta, L., Setiawan, D., & Mochtar, J. (2022). The effects of perceived ease of use, usefulness, enjoyment and intention to use online platforms on behavioural intention in online movie watching during the pandemic era. International Journal of Data and Network Science, 6(1), 253-262.
- Bhagat, S. (2020). A study on E-wallet adoption among customers and businesses in Delhi (Doctoral dissertation, Dublin, National College of Ireland).
- Bharadwaj, B., & Baruah, U. K. (2018, July). Digital Payment of Electricity Bill: A Study among Consumers under Narengi Electrical Subdivision of Assam. International Journal of Management Studies, 3(5), 94-100. doi:10.18843/ijms/v5i3(5)/14, :http://dx.doi.org/10.18843/ijms/v5i3(5)/14
- Bubna, R., Raveendran, J., Kumar, S., Duggirala, M., & Malik, M. (2019). A partially grounded agent-based model on demonetisation outcomes in India. In Summer of Simulation (pp. 247-275). Springer, Cham.
- Chang, H. H., & Chen, S. W. (2008). The impact of online store environment cues on purchase intention: Trust and perceived risk as a mediator. Online information review.
- Cronin Jr, J. J., & Taylor, S. A. (1992). Measuring service quality: a reexamination and extension. Journal of Marketing, 56(3), 55-68.
- Cunningham, M. S. (1967). The major dimensions of perceived risk. Risk-taking and information handling in consumer behaviour.
- Das, A., & Singh, R. (2010). Cashless Payment System in India- A Roadmap. Indian Institute of Technology, Mathematics. Research Gate. Retrieved from http://dspace.library.iitb.ac.in/jspui/handle/10054/173 2
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Quarterly, 319-340.
- Doll, W. J., Hendrickson, A., & Deng, X. (1998). Using

Davis's perceived usefulness and ease-of-use instruments for decision making: a confirmatory and multigroup invariance analysis. Decision Sciences, 29(4), 839-869.

- Featherman, M. S., & Pavlou, P. A. (2003). Predicting eservices adoption: a perceived risk facets perspective. International journal of human-computer studies, 59(4), 451-474.
- Gandhi, R. (2016, Oct 22). Evolution of Payment Systems in India: Or is it a Revolution?
- Grover, P., Kar, A. K., Janssen, M., & Ilavarasan, P. V. (2019). Perceived usefulness, ease of use and user acceptance of blockchain technology for digital transactions-insights from user-generated content on Twitter. Enterprise Information Systems, 13(6), 771-800.
- Islam, K., Ferdaus, H., & Rahman, S. (2006, January). Automation of Utility Bill Payment Using Telecom. 307-311. doi:10.13140/2.1.5009.2164
- Jayasimha, K. R., & Nargundkar, R. (2006). Adoption of Self Service Bill Payment Technologies (Ssbpts): A Conceptual Model. Journal Of Services Research, 6(2).
- Kaka, N., Madgavkar, A., Kshirsagar, A., Gupta, R., Manyika, J., Bahl, K., & Gupta, S. (2019, March). Digital India: Technology to transform a connected n a t i o n . R e t r i e v e d f r o m https://www.mckinsey.com/capabilities/mckinseydigital/our-insights/digital-india-technology-totransform-a-connected-nation
- Kaur, K., & Pathak, A. (2015, February). E-Payment System on E-Commerce in India. Int. Journal of Engineering Research and Applications, 5(2), 79-87.
- Kim, G., Shin, B. and Lee, H.G. (2009), "Understanding dynamics between initial trust and usage intentions of mobile banking", Information Systems Journal, Vol. 19 No. 3, pp. 283-311.
- Koenig-Lewis, N., Palmer, A., & Moll, A. (2010). Predicting young consumers' take-up of mobile banking services. International journal of bank marketing.
- Liao, S., Shao, Y. P., Wang, H., & Chen, A. (1999). The

adoption of virtual banking: an empirical study. International journal of information management, 19(1), 63-74.

- Luarn, P., & Lin, H. H. (2005). Toward an understanding of the behavioural intention to use mobile banking. Computers in human behavior, 21(6), 873-891.
- Malik, A. N. A., & Annuar, S. N. S. (2021). The effect of perceived usefulness, perceived ease of use, reward, and perceived risk toward e-wallet usage intention. In Eurasian Business and Economics Perspectives (pp. 115-130). Springer, Cham.
- Pandey, N., & Pal, A. (2020). Impact of digital surge during Covid-19 pandemic: A viewpoint on research and practice. International journal of information management, 55, 102171.
- Polasik, M., & Wisniewski, T. P. (2009). Empirical analysis of Internet banking adoption in Poland. International Journal of Bank Marketing.
- Ramayah, T., & Ignatius, J. (2005). Impact of perceived usefulness, perceived ease of use and perceived enjoyment on intention to shop online. ICFAI Journal of Systems Management (IJSM), 3(3), 36-51.
- Roy, D., & Sahoo, A. (2016). Payment Systems in India: Opportunities and Challenges. Journal of Internet Banking and Commerce, 21(2). Retrieved from http://www.icommercecentral.com
- Roy, S., & Sinha, I. (2014, January-). Determinants of Customers' Acceptance of Electronic Payment System in Indian Banking Sector – A Study. International Journal of Scientific & Engineering Research,, 5(1).
- Roy, S., & Sinha, I. (2017). Factors affecting Customers' adoption of Electronic Payment: an Empirical Analysis. IOSR Journal of Business and Management (IOSR-JBM), 19(12), 76-90.
- Raza, S. A., Umer, A., & Shah, N. (2017). New determinants of ease of use and perceived usefulness for mobile banking adoption. International Journal of Electronic Customer Relationship Management, 11(1), 44-65.

- Shree, S., Pratap, B., Saroy, R., & Dhal, S. (2021). Digital payments and consumer experience in India: a survey based empirical study. Journal of Banking and Financial Technology, 5(1), 1-20.
- Sivathanu, B. (2018). Adoption of digital payment systems in the era of demonetization in India: An empirical study. Journal of Science and Technology Policy Management.
- Singh, J. (2019, July). Digital Payment Trends, Issues And Opportunities.
- Singh, S., & Rana, R. (2017, December). Study of Consumer Perception of Digital Payment Mode. Journal of Internet Banking and Commerce, 22(3), 1-14. Retrieved from http://www.icommercecentral.com
- Sumathy, M., & Vipin, K. P. (2017). Digital payment systems: Perception and concerns among urban consumers. IJAR, 3(6), 1118-1122.
- Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. Management Science, 46(2), 186-204.
- Yadav, P., & Sinha, M. V. Paradigm Shift Of Digital Payments In India (The Covid-19 Case).
- Webliography
- https://www.un.org/en/un75/impact-digitaltechnologies
- https://www.mckinsey.com/capabilities/mckinseydigital/our-insights/digital-india-technology-totransform-a-connected-nation
- http://searchcio.techtarget.com/definition/ICTinformation-and-communications-technology-ortechnologies;
- https://www.statista.com > Internet > Demographics & Use