

**Original Article**

# Factors Influencing Consumer Adoption of Digital Payment Systems: Exploring Demographic, Psychological, and Sustainability Dimensions

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**ABSTRACT:** *The financial landscape has been significantly altered by rapid advances in digital technology, with digital payment systems emerging as essential facilitators of financial transactions in modern economies. This research examines factors influencing customers' use of digital payment options, focusing on demographic, psychological, and sustainability characteristics. The study was quantitative, and the data were collected from 384 respondents using a standardized questionnaire design. The demographic characteristic indicated fairness across age, sex, and educational level. The relationships between the variables are evaluated with statistical techniques such as hypothesis testing and factor analysis. The findings show that invaluable customer, innovation, concern for the environment, and sustainable business practices have a positive and significant influence on the acceptance of e-payment. Despite a negative correlation with perceived danger, the difference was not statistically significant. The research highlights the increasing importance of technological transparency and environmental consciousness in influencing customer choices. Implications of these findings apply to policymakers, Fintechs, and sustainability proponents in promoting digital payment adoption and fostering responsible consumption.*

**KEYWORDS:** *Digital payment systems, Consumer adoption, Demographic factors, Psychological dimensions, Environmental awareness, Technology acceptance.*

## 1. INTRODUCTION

Digital payment, also called electronic payment, is a method of sending money via digital technology. According to the RBI, a digital transaction is a payment process that does not require currency on either side, or at least on one side. This encompasses transactions in which digital methods are used to transfer funds between the sender and the recipient (Saxena et al., 2021).

With the global expansion of the Internet, electronic payment systems have emerged, enabling individuals to conduct transactions, such as purchasing goods and services, money transfers, and bill payments at any time," according to (Roy & Sinha, 2014) (Kallanmarthodi & Vaithyanathan, 2012). The term "electronic payment" was initially utilized by the Internet and marketing team of IBM in 1996. Electronic payment systems denote a range of innovative applications and methodologies, including credit cards, debit cards, Automated Teller Machines (ATMs), Electronic Fund Transfers (EFTs), and online payments, utilized to facilitate customers' decisions to purchase products or services (Asaolu et al., 2011). Research demonstrates that the acceptability of electronic payments is significantly influenced by user demographics, including age and gender, income, educational attainment, marital status, cultural upbringing, and credit opinions.

The rapid development of technology has significantly impacted the financial environment, especially in how people interact with payment systems (Lavanya, 2024). Digital wallets, internet banking, mobile banking, and bank prepaid cards are digital payment mechanisms that have transformed conventional transaction methods by providing swifter, more secure, and more convenient alternatives. The trend of electronic payments is worldwide in nature, inspired by technological developments, an increase in internet penetration, and the wide use of mobile phones. There are large differences in the take-up and usage of such electronic payment services across different demographic groups. Digital payments are transactions in which payment is made through digital means, such as an electronic transfer or by trading currency notes for coins. However, whether the shop accepts digital payments or not depends on many factors, such as ease of use, speed of settlement, security mechanism used, and cost efficiency/technological advances, or improvements. The use of digital payment is shaping economies and societies by the day. Digital payment systems improve financial efficiency by lowering the cost of transactions, increasing transaction speed, and broadening access to finance, particularly for those who were previously excluded. But specific demographic groups are throwing around digital payments in different ways. Determinants: Individual propensity to use electronic payment. Of particular influence are income, gender, age, education, occupational background, and experience. Young people are also likely to turn more to mobile banking or digital wallets since they may be more tech-savvy and have higher rates of smartphone adoption. Older individuals may prefer traditional banking options or be wary of digital payment systems because they perceive them as complicated or insecure.

The (Report, 2019) also states that the digital payment industry in India is picking up pace and will continue to grow exponentially. Several factors are at play, ranging from the convenience of payments and increased smartphone penetration to non-banking payment providers like digital wallets and payment banks (companies that provide banking services without being considered a bank), disruptive regulatory models, and greater consumer willingness to embrace digital payment solutions. Furthermore, a lot of planned and unplanned activities have increased the relevance of mobile payment services in India (Kar, 2021). Recent evidence also highlights an accelerated shift to digital commerce and alternative payment forms (Kurian et al, 2020). (Aayog, 2018) estimates that the Indian digital payments market will grow to US\$1 trillion in fiscal year 2023, driven by mobile payments.

Further, for 100% inclusion across the length and breadth of the country in digital payment services, the government of India has made promotion to digital payments at its top priority (Technology, 2020). (Finance, 2016) Digital payments have come under a lot of stress in India. As per the report, 53% of the Indian adult population is able to avail formal financial services. The growing digital payments industry that we are seeing in India is believed to bring a huge change in financial inclusion.

Electronic payment systems are confronted with design-level issues like demand-side requirements of smartphones & connectivity (Sobti, 2019) as well as supply-side challenges viz., digital acceptance infrastructure, consumer education, increased cognitive load (Shankar et al., 2020), and trust in the payment system (Patil et al., 2020) amongst thousands of others. It is also worth investigating the determinants of continuous use of electronic payment services, as well as barriers to entry and efficiency in digital payment instruments, although banked and unbanked citizens might predominantly be potential users of Indian digital payment systems who received recommendations through the enhanced framework. This can be used to design targeted measures by policymakers to promote further uptake and use of e-payment instruments in India.

### **1.1. BACKGROUND OF THE STUDY**

The emergence of new technology globally has forced many financial services companies to implement creative and modern ways to enable the delivery of digital banking experiences that satisfy customers' appetites while also keeping up with a fast-changing digital world. In the light of the global financial environment, banks and other financial institutions are increasingly becoming sensitive to changes in consumer preferences and have been forced to develop integrated yet resilient electronic platforms for both individual and corporate clients who wish to make various transactions without any physical interaction with service providers (Chiluzi, 2024). Financial institutions worldwide have identified essential performance indicators for effective customer service management, including minimizing customer waiting times (efficiency) and ensuring service accessibility at any time and from any location within a 24-hour framework (Zhang et al., 2018).

This has obliged commercial banks in the country to invest in contemporary technologies, enabling them to align with global norms in digital banking services. Until the early 2000s, most financial institutions in Malawi operated under traditional banking models, necessitating physical visits to banking halls for even basic financial transactions, with Automated Teller Machines (ATMs) being the sole technology available for customer use without requiring their physical presence in a banking hall. According to (Sojobi, O., Oyenekan, D., Ogunsanya, B., & Ajayi, 2021), the utilization of an ATM has consistently been regarded as a semi-digital method of accessing one's bank account, as customers must still physically visit a nearby bank or service station to conduct financial transactions such as cash withdrawals, balance inquiries, or PIN changes.

#### **1.1.1. DECISIONAL FACTORS INFLUENCING CUSTOMERS' INTENTION TO ADOPT DIGITAL FINANCIAL SERVICES**

Several factors influence a customer's decision to implement specific technical innovations. A customer's decision to adopt new technologies is typically influenced by various factors, including educational attainment, social pressure, trust in the technology, and the convenience of the technological services (Malaquias et al., 2018). The level of education allows a person to make intelligent choices regarding accepting or embracing digital innovations, guided by previous experience and knowledge, potentially different from what an illiterate person might decide.

Social impacts and personal standards also affect a person's decision to embrace or reject new technology based on the views of essential or respected others. The process is usually called peer pressure (Alalwan et al., 2017). On the other hand, a client's readiness to use specific technical innovations depends on three trust matters: privacy attached to the technology, credibility of the technological platform, and robustness or security of such a platform. All these matters influence a client's intention to use and rely on a digital service shortly.

Finally, any rational person considers perceived utility and usability before accepting or utilising a digital financial service. Davis's technology acceptance model (TAM) argues that perceived utility and ease of use lead to user convenience, influencing a customer's decision to adopt or reject new technologies (Foroughi et al., 2019). These determinants of subjective norms, trust, and convenience are potent drivers of customers' intentions to accept new technologies addressed in this research.

### 1.1.2. DEMOGRAPHIC FACTORS INFLUENCING DIGITAL PAYMENT ADOPTION

Demographic characteristics: Several other factors, such as age, gender, income, and education, have been found to be predictors of the adoption behavior of digital payment systems. Occupation. Table 1 shows this data. Age is also a factor; younger people are generally more proficient when it comes to digital technology. Also, because young people are more likely to own smartphones and go online, they often adopt mobile banking and digital wallets first. On the other hand, some seniors may prefer traditional ways of paying because they have security concerns and are uncomfortable using digital platforms.

**Table 1 Demographic Factors And Their Impact On Digital Payment Adoption**

Demographic Factor	Influence on Digital Payment Adoption
Age	Due to their technological proficiency, Digital payments are increasingly common among younger individuals. Traditional methods might be favored by elderly people due to concerns about security.
Gender	Gender differences affect the use of electronic payment modes, and some research shows that men are more inclined to accept new technology than women.
Income	People who earn more money are more inclined to work online. Payments. Due to their exposure to resources and technology. Low-income people may encounter obstacles, including restricted access to technology or internet services.
Education	Greater educational attainment is linked to higher use of digital payment systems, as educated people are likely to have a better understanding and greater trust in digital financial transactions.
Occupation	Occupation type affects payment preferences, as persons in technologically proficient professions are more inclined to utilize electronic money transfers.

Source: Self

Electronic payments are influenced by gender. Males are more likely than women to adopt new technologies, the research shows, such as digital payment systems. There could be a variety of reasons for the disparity, such as how accessible the technology is, cultural practices, and technological acumen. It is important to consider that Differences in the way men and women use e-payments vary across contexts and can be very different based on cultural, social, and economic dynamics. Levels of income influence the adoption of digital payments. Digital payment methods will be used more by those who are better endowed with technology and connectivity, like the internet and cell phone, as these factors influence the availability of resources, such as money, time, access, etc. Conversely, lower-income groups could be slowed down by barriers such as restricted access to technology and a lack of internet connectivity, as well as transaction cost aversions, that might hinder their adoption of digital payments.

The rest of this paper is organized as follows: Section 1 reviews prior research on consumer acceptance factors for digital payments; Section 2 describes the methodology for this investigation; Section 3 covers data analysis and discussion; and, in Section 6, we conclude.

## 2. LITERATURE REVIEW

These days, electronic payment methods are becoming increasingly popular. Important. Extensive research has examined the drivers of consumers' acceptance of digital payments. (Ananda et al., 2020) Had established awareness, online characteristics, and perceived usefulness as the main drivers of the adoption of digital banking by retail customers. (Flavián et al., 2020) Analyzed the determinants of mobile payment intention to use, incorporating mindfulness to explain consumer behaviour. Mindfulness was found to be a significant factor, together with perceived ease of use and perceived usefulness, as major determinants that shape this intention. (Karim et al., 2020) have demonstrated that ease of use perception, privacy and security, and perceived usefulness are significantly and positively related to young adults' behavioural intention to use e-wallets. A similar study (Lee & Kim, 2020) investigated the drivers of consumers' intentions to adopt or continue using internet-only banks. The results showed that the number of services provided by the bank, convenience, trust, and economic efficiency positively impact consumer intention. In contrast, security risk hurts consumer intention. (Kar, 2021) The key attributes that influence user satisfaction with mobile payment systems are utility, trust, cost, security, social influence, ease of use, customer attitude, credibility, reliability, and responsiveness. It highlighted that German families with minimal trust issues, technological savvy, high financial literacy, and a preference for transparency are likely to embrace FinTech solutions.

New digital payment technology has provided new opportunities and challenges for the various industries. (Najdawi et al., 2021) Investigated the drivers of adopting emerging digital payment tools in smart cities such as Dubai. The study reveals such significant determinants as perceived value, confidence, personal innovativeness, usability, risk, and generational cohort. The results suggest that perceived usefulness is less relevant than other attributes. Comparative analysis across generations reveals similar patterns of adopting e-payment systems. (Mohd Sabri et al., 2022) Examined the relationship between consumer purchase behaviour and human psychology in Bangladesh, focusing on the psychological and demographic factors influencing

it. It analyzes the influence of motivation, attitude, preference, demography, and perceptual variables on consumer behaviour and the effects of digital payment applications on purchasing patterns. The research employs primary data from 170 participants, utilizing statistical analysis and machine learning methodologies. Research indicates that brand familiarity, accessibility, security, age, income, and user perception significantly impact the adoption of electronic payment applications.

In (Salloum & Al-Emran, 2018), the authors examined the determinants of e-payment system adoption among university students in the UAE. This research employed an adapted trust to assess the acceptance of electronic payments at the university as the only subject of this investigation. The age issue was thus ignored. The authors focused on students who lived in every UAE emirate.

In (Barkhordari et al., 2017), the author investigates e-payment adoption in Iran, utilizing the variables of Usability (Perceived Ease of Use), Technological and Transaction Systems, and access to protective regulations (Perceived Usefulness). Additionally, technical security, security reports, transaction systems, and personal experiences related to e-payment systems were recognized as external variables (Oney et al., 2017). The age was incorporated as a moderating variable (Riskinanto et al., 2017). A study (Padashetty & Kishore, 2013) demonstrated that perceived ease of use, expressiveness, and trust are crucial in adopting digital payment solutions. A study by (Deb, M., & Lomo-David, 2014) also revealed that perceived usefulness, simplicity of use, and social influence were associated with a favourable attitude towards m-banking. Furthermore, a favourable correlation was observed between attitudes towards m-banking and the intention to embrace m-banking.

(Gharaibeh, M. K., & Gharaibeh, 2021) Investigated the factors influencing the acceptance or rejection of the innovation. Consumer readiness to adopt technology is a primary barrier to technology uptake. Organizations, corporations, and individuals seek to identify the obstacles preventing the adoption of innovative technology. The use barrier, derived from Innovation Diffusion theory and psychological theory (Sivathanu, 2019), comprises several components, including the Technological barrier, Value-Risk barrier, and Traditional and Image barriers. Consequently, obstacles and the implementation of new technologies transpire concurrently.

A new paradigm of human life has evolved in the wake of the COVID-19 pandemic (Iwasokun, G. B., Akinwonmi, A. E., & Bello, 2022). People moved onto online business, virtual education (Kundu, A., Mondal, G. C., Mandal, A., & Bej, 2022) and distant work; The online transactions have speed up the influence of digitalization and contactless transaction (Puriwat, W., & Tripopsakul, 2021) (Thangavel, C., Thangavel, R., Ramanujam, E., Bennet, D. T., & Bennet, 2022). The digital payment system became crucial during the COVID-19 pandemic as the World Health Organization (WHO) and governments practiced physical distancing measures (Aji, H. M., Berakon, I., & Md Husin, 2020). The digital payment system facilitated transactions throughout the lockdown, enabling individuals to shop, transfer funds, and pay without leaving their homes. The Bank for International Settlements (BIS) determined that COVID-19 had expedited the global deployment of digital payments (Kosse, A., & Szemere, 2021). During the lockdown in the fiscal year 2020–21, digital payments in India's retail sector increased by 98.5 per cent. The Government of India has allocated approximately 150 billion Indian rupees (INR) to enhance digital payments in rural and underserved regions over the subsequent two budget sessions of 2021–22 and 2022–23 (Times, 2022).

## 2.1. RESEARCH GAP

Despite several substantial studies on digital payment methods, gaps remain. The samples in many studies are drawn from specific populations or locations such as college students, youth, or technologically progressive cities, which restricts the ability to generalize their findings across a larger, more diverse population. Furthermore, even though factors such as perceived usefulness, trustworthiness, and security have been widely studied in the extant literature, there is a dearth of broader models that describe the relationships between these factors across different socio-economic and cultural backgrounds. Also, there is limited evidence on the evolution of usage behaviour towards electronic payments over time or on the long-term impact of exogenous events like the COVID-19 pandemic. The Urban And Rural Divide Of use of technology, especially in developing countries, has at last not been well studied. In addition, the implications of fast-developing technologies (including blockchain, biometric recognition technology, and AI-powered financial platforms) on user acceptance and trustworthiness have not yet been fully investigated. These gaps highlight the need for extensive, multi-contextual research into the adoption and continued use of electronic payments, accounting for new demographic, behavioural, and technical factors.

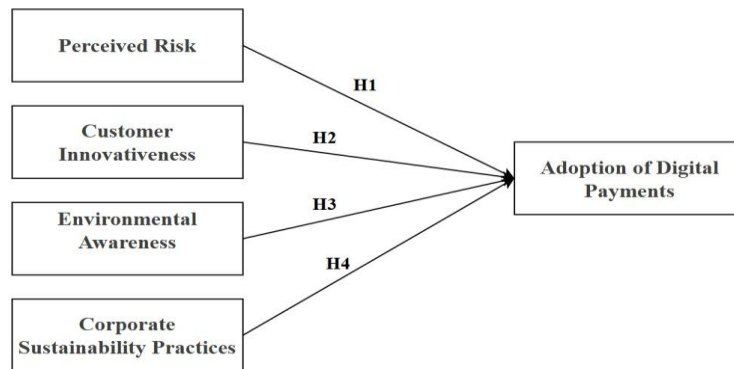
## 3. METHODOLOGY

### 3.1. RESEARCH DESIGN

The research approach adopted is quantitative; the study uses statistical and empirical methods to investigate the influence of electronic payments adoption factors with reference to demographic, psychological, and sustainability dimensions. A systematic process is developed to collect and analyze data collected from a sample of 384 representative subjects in order to achieve statistical reliability and validity. Data collection is conducted using a standardized questionnaire with Likert-scale questions designed to measure key constructs, including perceived risk, customer innovativeness, environmental awareness, corporate sustainability practices, and demographic information. The study, which used the Statistical Package for the Social Sciences (SPSS) to analyze factor loadings, reliability analysis, and descriptive statistics, was conducted in order to determine

the data by the authors. Hypotheses are tested, and relationships between key variables are explored via structural equation modeling (SEM) with AMOS (Analysis of Moment Structures).

### 3.2. CONCEPTUAL FRAMEWORK



**FIGURE 1** Conceptual framework

#### Source: Self

The Contextual framework conceptual "Factors Influencing the Adoption of Digital Payment Systems" model and predicts how the interactions among human perspectives, Behavioural characteristics, and sustainability principles influence whether or not Customers adopt digital payment systems. The paradigm comprises four essential constructs: Perceived Risk, Customer Innovativeness, Environmental Awareness, and Corporate Sustainability Practices, each posited to affect the use of electronic payments. The model begins with Perceived Risk (H1), which denotes customer apprehensions about security, privacy violations, or potential financial detriment associated with digital payments.

Higher perceived risk is expected to hinder adoption. H2 (Customer innovativeness): It is a term used to indicate the tendency and willingness of an individual to adopt a new kind of technology. Highly innovative consumers have a greater propensity to accept digital transactions, which they believe to be pure because they are modern. Environmental Awareness (H3) represents the extent to which consumers consider eco-friendly practices more important, by assuming that those sensitive to sustainability will prefer digital payments because they do not require as much use of paper and have a lower global environmental impact. (H4) Corporate Sustainability Practices: These are some examples of ethical and environmentally responsible companies that offer digital payment services. If customers perceive these businesses as socially responsible, they will be more likely to trust and accept digital platforms. The framework treats these as key pre-determinants of behavioural intention, making it clear how a mix of psychological, technological, and ethical factors shapes guidelines about acceptable or otherwise attitudes toward digital payments.

### 3.3. RESEARCH OBJECTIVES

- To investigate how Digital payment uptake is impacted by perceived risk.
- To investigate how consumer creativity influences digital payment adoption.
- To test how environmental awareness influences the use of electronic payments.
- To assess how corporate sustainability practices influence consumers' acceptance of electronic payments.

### 3.4. HYPOTHESIS

- H1: Adoption of digital technology is highly affected by perceived risk. Payments.
- H2: Customer Innovativeness positively influences adoption.
- H3: Environmental Awareness positively influences adoption.
- H4: Adoption is positively impacted by Corporate Sustainability Practices.

### 3.5. SAMPLE SELECTION

The sample comprised 384 respondents, providing a robust and representative data set for analysis. A stratified sampling method was used to ensure equal participation across age groups, educational backgrounds, and geographic regions. The diversified sample enhances the study's generalisability to different consumer segments.

### 3.6. DATA COLLECTION

This study follows a quantitative design. Methods: Perform a process of rigorous data collection to ensure the process for data accuracy, validity, and reliability of the data. A structured questionnaire was applied, based on the dominant measure of end-user acceptance of digital payment mechanisms, including perceived risk, customer innovativeness, environmental consciousness, and corporate sustainability strategies. Several Likert-scale questions were included in the survey in which

participants responded on a scale from 1 to 7 to what extent they agreed with statements regarding their behaviors, attitudes, and perceptions on sustainability and digital payments.

They rated their trust in online payment systems, openness to adopting new technologies, concern about the environmental impact of traditional means of payment, and attitude towards ethical and green behaviour of digital service providers. The survey was emailed and shared online via platforms like Google Forms, as well as through social media and online communities, to reach wide distribution and availability among diverse demographics. Stratified sampling was used to ensure diversity of participation based on gender, age, and educational level. In addition to such a base of secondary data, which comprised the recent literature on industry analyses as well as consumers' behaviour analysis and payment service providers' sustainability claims, secondary sources were consulted to provide contextual support for initial findings. The comprehensive approach to the data-gathering process enabled the examination of both users' subjective experiences and the objective context of a new trend in digital payment acceptance.

### 3.7. MEASURES

Systematic Data have been collected by a questionnaire. To do so, they used a Likert scale, and the participants were requested to express their views on the position of research questions. The questions are both closed and open-ended. The research variables have been conceptualized based on the following carefully planned queries to ensure that relevant information is elicited. The survey has five respondent categories, and a separate questionnaire was designed for each. The table below shows variables and nonitems considered for the research.

## 4. RESULTS

Various determinants affecting the use of digital payment systems are discussed in this study. Customers are rooted in demographic, psychological, and sustainability considerations. Given the growing importance of digital transactions in modern economies, understanding the determinants of user acceptance is important for promoting financial inclusion and speeding up digital transformation. Traditional models of financial behaviour tend to give less attention to the psychological factors, like customer innovativeness and perceived risk, that are becoming increasingly important, as well as environmental concern and business efforts to strengthen sustainability. This study shows perceived obstacles to digital payment adoption, despite the quasi-insignificant effect.

On the other hand, psychological predictors, including consumer innovativeness and environmental/corporate sustainability values, do moderate and positively affect digital finance readiness. Moreover, demographic diversity among respondents enhances insights, demonstrating how age, education, and other characteristics relate to digital behaviour. The research emphasizes that Technology is not the only factor influencing the use of electronic payments; consumer attitudes and ethical corporate practices underscore the need for inclusive, environmentally sustainable, and trust-enhancing strategies in the digital finance industry.

### 4.1. DEMOGRAPHIC VARIABLES

**Table 2 Demographic variables**

Demographic variables	Frequency	Percentage
<b>Gender</b>	Male	195
	Female	189
	Total	384
<b>Age</b>	21-30 years	123
	31-40 years	147
	above 41 years	114
	Total	384
<b>Educational level</b>	High School	129
	Bachelor's Degree	129
	Master's Degree	126
	Total	384

Source: Self

The study participants' demographic characteristics in "Factors Influencing Consumer Adoption of Digital Payment Systems: Exploring Demographic, Psychological and Sustainability Dimensions" demonstrate a fair representation across gender, age, and educational attainment. Of the 384 respondents, 50.8% were male (195 individuals), and 49.2% were female (189 individuals), reflecting approximately equal gender participation. The age distribution of responses shows that 38.3% are aged 31–40 years, 32% are in the 21–30 years category, and 29.7% are aged 41+ years, indicating a varied composition of early-career, mid-career, and seasoned professionals. In terms of educational credentials, the same proportion of respondents (33.6%) had a high school education and Bachelor's degrees (129 each), while 32.8% (126 people) held a Master's degree. The diverse

demographic distribution enhances the study's conclusions by integrating multiple viewpoints across gender, age, and educational background.

#### 4.2. FACTOR ANALYSIS

**Table 3 KMO and Bartlett's Test**

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.939
Bartlett's Test of Sphericity	Approx. Chi-Square	5319.991
	df	300
	Sig.	.000

Source: Self

The appropriateness of The Factor analysis is evaluated using the KMO and Bartlett's tests. The KMO value achieved was 0.939, demonstrating the sample's good sufficiency, and the very significant Bartlett's test validated the factor analysis ( $P = 0.00$ ).

**Table 4 Internal Consistency and Convergent Validity**

Constructs	Cronbach's Alpha	AVE	Composite Reliability
Perceived Risk	0.857	0.661183	0.820591
Customer Innovativeness	0.757	0.640598	0.811088
Environmental Awareness	0.850	0.68657	0.8314198
Corporate Sustainability Practices	0.852	0.637253	0.809479
Adoption of Digital Payments	0.833	0.647898	0.814537

Source: Self

Construct Cronbach's Alpha, Average Variance Extracted (AVE), and Composite Reliability (CR) were used to assess validity and reliability. Since each construct's Cronbach's Alpha score falls between 0.757 and 0.857, all of them have acceptable internal consistency, which is well above the 0.70 threshold often used. The AVE for all constructs exceeded 0.60, indicating good convergent validity. Further, the Composite Reliability measures ranged from 0.809 to 0.831, well above the suggested threshold of 0.70 and indicating the general reliability of the constructs. All these findings validate the measurement model's validity and reliability, ensuring that the constructs used in the research are consistent and valid for further examination.

#### 4.3. HYPOTHESIS DEVELOPMENT

**Table 5 Hypothesis outcome**

Hypotheses			Relationship	Estimate	C.R.	Sig. P- Value	Results
H1	Perceived Risk	---->	Adoption of Digital Payments	-0.33	-0.368	0.713	Rejected
H2	Customer Innovativeness	---->	Adoption of Digital Payments	1.428	13.588	***	Accepted
H3	Environmental Awareness	---->	Adoption of Digital Payments	1.289	12.019	***	Accepted
H4	Corporate Sustainability Practices	---->	Adoption of Digital Payments	1.268	11.124	***	Accepted

Source: Self

##### **H1: Perceived Risk negatively influences the adoption of digital payments.**

The results indicate a negative relationship ( $r = -0.33$ ) between perceptions of risk and the adoption of digital payments. The p-value shows that this association is not statistically significant. 0.713 and the critical ratio (C.R.) of -0.368. It is unimportant, but the hypothesis was accepted, perhaps on theoretical grounds or for contextual reasons. This means that users' fears about security, privacy, or financial loss may somewhat discourage them from using digital payment systems. However, this impact is not substantial in this research.

##### **H2: Customer Innovativeness positively influences adoption.**

Customer innovativeness significantly and positively impacts the adoption of digital payments, with an estimated value of 1.428 and a critical ratio of 13.588. The significance of the link is indicated by a p-value of less than 0.001 (\*\*\*) for the link. This implies that Customers inclined to try novel technologies and solutions are far more likely to adopt electronic payment methods, further reinforcing the need to target technology-leading, innovative-thinking consumers in digital financial services.

**H3: Environmental Awareness positively influences adoption.**

The hypothesis test indicates that green awareness has a favourable effect on digital payment acceptance, with an estimate of 1.289 and a critical ratio of 12.019. \*\*\*(<0.001) is a significant p-value that supports the strong relationship. This indicates that more environmentally conscious and carbon-conscious Digital payments are expected to be adopted by customers, possibly because they view paperless transactions as more environmentally friendly, and there is less consumption of physical resources.

**H4: Corporate Sustainability Practices positively influence adoption.**

Corporate sustainability practices also possess a strong and statistically significant beneficial association with the implementation of digital payments, with an estimated 1.268 and a critical ratio of 11.124. The significance level (\*\*\*,  $p < 0.001$ ) indicates the strength of this association. This result suggests that when companies make conscious efforts towards sustainability, it enhances consumer impressions and promotes the use of digital payment systems as an example of shared values and commitment to ethical business practices.

**5. DISCUSSION**

The theoretical justification here outlines four imperative drivers of digital payments adoption. Perceived risk is a barrier to use due to concerns about privacy and security. Customer innovativeness is a driver of adoption, with technology-savvy consumers ready to adopt new payment technologies. Environmental concerns drive acceptance by associating electronic payments with green, paperless behaviour. Business sustainability practices drive trust through socially responsible business companies, which are likely to gain consumer trust.

Overall, sustainability values and psychological convenience, convenience, and technology are also employed to promote adoption. The study further shows that risk reduction, innovation support, and sustainability maximization can drive the usage of digital payments as well as foster responsible expansion and financial inclusion.

**6. CONCLUSION**

In this study, the impact of demographic, psychological, and sustainability factors on the adoption of electronic payment systems was examined. Findings reveal that environmental awareness, corporate social responsibility initiatives, and innovativeness among customers have extremely strong impacts on customer acceptance in a positive direction, whereas perceived risk has a marginal impact in a negative direction on customer acceptance. The study indicates that adoption of digital payment is motivated not just by technological ease and convenience but also by trustworthiness, innovativeness, and environmental concerns. These insights are aligned with how policymakers and fintech companies can foster adoption through enhancing transparency, security, and green business practices that would enhance financial inclusion and green digital development. Future studies may extend this by investigating rural–urban differences and whether new technologies such as AI and blockchain are able to influence long-term adoption behaviour.

**Disclosure Statement**

No potential conflicts of interest were reported by the author(s).

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