Educational Administration: Theory and Practice
2023, 29(3), 843 -853
ISSN: 2148-2403
https://kuey.net/

Research Article

Exploring The Factors Influencing Usage Intention For Digital Payment Systems In Mom And Pops Shops In Delhi NCR (National Capital Region In India)

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Citation: Shagun Sharma, et.al (2023), Exploring the factors influencing usage intention for Digital Payment systems in Mom and Pops shops in Delhi NCR (National Capital Region in India), *Educational Administration: Theory and Practice*, 29(3) 843 -853
Doi: 10.53555/kuey.v29i3.7328

ARTICLE INFO

ABSTRACT

This study explores the factors influencing the usage intention of digital payment systems among Mom and Pops shops in the Delhi National Capital Region (NCR) using the Smart PLS4 structural equation modelling technique. The constructs used in this investigation have been extensively validated and shown in several theoretical frameworks, ensuring the strength and dependability of the outcomes. A representative sample of 300 small retail store owners in the Delhi NCR was surveyed, including a wide range of demographics and business characteristics.

The investigation reveals six crucial characteristics that influence the adoption of digital payment systems: trust, transparency, operating cost, habit, pervasiveness, digital literacy, and perceived risk. The findings highlight that trust and transparency are important factors that strongly influence the likelihood of adoption. Additionally, operational cost and habit are also key determinants in the decision-making process. The widespread presence of digital infrastructure and the possession of digital literacy abilities are identified as crucial factors that facilitate progress, whereas the perception of danger has an adverse impact on the acceptance and use of digital technologies. This study provides significant insights to improve the adoption of digital payments among small shops, therefore facilitating the digitalization of retail payments in the Delhi NCR area.

Keywords: Digital Payments Services; Digital Payment methods, Payment Technologies; Mom and Pops shops Delhi (NCR).

Introduction

The use of digital technology to make banking processes more efficient is what is meant when people talk about "digital banking" (Sardana & Singhania, 2020). The term "Digital Payment" refers to transactions that may take place wholly online, in contrast to more conventional means of payment such as cash and cheques (Singh, Supriya, & Joshna, 2016). Digital payments using electronic wallets (e-wallets) are becoming increasingly popular and have become a reliable digital payment method in both developing and developed countries (Abdul-Haim et al., 2022). Over the period of the last several years, India has seen a small but steady increase in the percentage of people using digital payment methods. As a direct result of steps taken by the government of India, such as demonetisation and digital India, a greater number of individuals in India are utilising digital payment methods. The expansion of digital payment methods has been designated as the primary objective by the Indian government. It is important that all people living in India have access to digital payment options that are not only practical but also cheap, quick, and safe Because more people are using the internet, more people have smart phones, and the price of internet data has gone down, the transition toward digital payment methods has proceeded much more quickly. According to estimates provided by BCG, there might be three billion people using mobile internet globally by the year 2020. There were one billion people in India who used mobile phones as of 2016, and it is projected that 520 million of those people would be using smart phones by the year 2020. (BCG, 2016). The ability to send and receive monetary transactions online is essential for the

functioning of online payment systems. A financial transaction is digital when either the payer or the payee employs a digital technique to authorise the transaction. A digital method may be used by either the person making the payment or the person receiving it. The rapid advancement of technology has directly contributed to the emergence of digital ways of payment, which in turn has accelerated the path toward greater financial inclusion (FI) (Tiwari, 2019). There is an availability of digital payment alternatives available in India, which serves a diverse group of customers. Credit and debit cards, the Aadhar Enabled Payment Services (AEPS), the universal payment interface (UPI), point-of-sale terminals, online and mobile banking, the national electronic total collection system, and micro-ATMs are some of the electronic payment alternatives available.

As of the 31st of March in 2019, there has been 29,027,86 million digital payments made in India. (RBI, 2019c). All retail electronic payments, including debit and credit card transactions, retail electronic clearing, paper clearing, and prepaid payment instruments, amounted to 28.887.67 million. Furthermore, there were 140.2 billion transactions, which included RTGS, clearing of government securities, and other types of trades. As of March 31st, 2019, the total value of all digital payments made in India was Rs 3,269,487.2 billion (RBI, 2019b). At Rs. 3,88,456.30 billion, retail electronic payments well outpaced the other contributors to the total (the RTGS system, the clearing of government securities, and other variables). Looking at the annualised transaction volume per user is one way to measure the growth of digital payment systems. In India, the average number of annual digital transactions has increased dramatically since 2014. In 2014, there were 2.38 digital transactions completed by each Indian, however it is anticipated that by 2019, that number would have increased to 22.42. This has resulted in an increase in both the frequency of digital transactions in India as well as their value. On the other hand, as compared to other countries, India has a relatively low annual digital transaction volume per capita (BIS, 2019). It is possible that India's low performance might be attributed to a combination of factors, including the country's massive population and the fact that not everyone there makes use of digital payment systems. In this era of digital technology, enterprises have both benefits and drawbacks over larger corporations (Diatha, 2018). The obstacles that prevent individuals in India from using digital payment methods should be removed, since this is one approach to bring India closer to being a digital country (RBI, 2019c). Even the small companies can take digital payments because to the widespread adoption of QR codes and other kinds of lightweight infrastructure (RBI, 2019c).

Literature Survey and Theoretical Framework

An excellent literature evaluation provides context for the planned research and highlights how this study differs from others in the field. Theories like the Theory of Reasoned Action (TRA), the Innovation Diffusion Theory, the Technology Acceptance Models (TAMs), and the Theory of Planned Behaviour all attempt to explain why individuals choose to use certain technologies (Fishbein and Ajzen, 1975) According to the TRA, a person's actions stem from their thoughts and beliefs about the appropriateness of their actions, as well as their own set of internalised standards.

According to the innovation theory known as the diffusion hypothesis, in each social system, not all individuals would instantly adopt a unique concept, pattern of behaviour, or product. As a direct consequence of this, the process of adopting innovations is more of a slow one, with some persons being more open to the change than others. The pace at which an idea spreads is mostly determined by four basic factors: how innovative it is seen to be, the accessibility of various dissemination channels, the passage of time, and the established hierarchy of the social order that is now in place (Rogers, 1962).

According to TAM, when customers are faced with a new piece of technology, before choosing whether to accept it, they take into consideration a range of variables to make their decision. (Venkatesh and Davis 2000) added to TAM, and they called the new version "TAM 2." They investigated how people's brains work and how their social environments affect how they judge something's usefulness and ease of use. TAM2 says that people should decide what to do based on whether the results of their work are in line with the costs of using the system. Researchers came up with the idea of planned behaviour so they could better understand and predict how people act. This theory says that a person's actions are immediately based on their behaviour goals and, in some cases, their sense of whether they oversee their actions.

Digital payment systems provide several advantages for both customers and merchants. The customer base reaps the benefits of enhanced velocity, efficiency, and visibility. Digital payment acceptance allows companies to accept smaller transactions, remove the need to supply clients with their change, increase their financial transparency, reduce the danger of cash theft, and better organise their financial processes (Townsend, 2010).

Trust

Gefen, Karahanna, and Straub (2003a) describe trust as the assumption that others will not exploit situations. Vance, Elie-Dit-Cosaque, and Straub (2008) define institution-based trust. Individual confidence in transactional protections is what they describe it as. Customers depend on trustworthy payment transactions for goods and services. They trust transactions to go through and data to be shared safely (Gefen, Karahanna, and Straub 2003b).

Köster, Matt, and Hess (2016) highlight how mobile payment systems may affect client trust due to their division. They believe service providers' reputations affect users' comfort with these offerings. Zhou (2011) claims that mobile payment channels' security vulnerabilities may lower client trust, hindering their adoption

(Dutta et al. 2023). Thus, mobile payment providers and merchants must understand and address customer trust in these systems to succeed.
H1: Trust has a significant impact on Attitude towards Digital Payment Services.

Transparency
Transparency is a key supply-side driver in Delhi NCR Small family Businesses stores adopting digital payment solutions. Bushman, Piotroski, & Smith (2004) define transparency as the voluntary or mandatory disclosure of shop information to internal and external stakeholders. This notion, extended by Hebb (2006), emphasises the significance of providing information to shop participants, including owners.
Transparency matters for small family businesses contemplating digital payment methods. This includes financial disclosures concerning digital payment system transaction fees and expenses. Performance transparency—including system stability, transaction success rates, and customer service efficacy—is vital to these merchants' view and desire to implement digital payment systems. To understand why Small Family Business's in Delhi NCR are using digital payment methods, transparency must be evaluated and handled.
H2: Transparency has a significant impact on Attitude towards Digital Payment Services.

Operating Cost
Digital payment system adoption and usage incur operating costs. Initial setup, transactional fees, maintenance, and hardware/software upgrades are included. These expenditures are important for small stores, especially Small Family Business's. (Das et al. 2023) found that small enterprises, with limited financial resources and low profit margins, are sensitive to operational expenses. Adoption of digital payment systems depends on their affordability and cost effectiveness. According to (Kaur and Arora 2023), small business owners' adoption of digital payment systems is largely driven by financial repercussions. To attract these shops, system providers must provide competitive and transparent pricing.
In conclusion, small stores' adoption of digital payment systems depends on their operating expenses, emphasising the necessity for cost-effective and transparent solutions.
H3: Operating Cost has a significant impact on Attitude towards Digital Payment Services.

Habit
In small stores, "Habit" is a crucial demand-side indicator of digital payment system use intention. Both customers and store owners have habits and prefer conventional payment options. (Farjoun, et al. 2023) state that cash and credit dependence may hinder digital payment technology adoption. They emphasise that comfort and familiarity with traditional transaction techniques can prevent adoption of innovative digital alternatives.
According to Inder et al. (2022), changing these patterns needs not just the introduction of digital payment alternatives, but also their simplicity of use and clear advantages over older means. This shows that small shop digital payment systems must be user-friendly and provide obvious benefits to succeed.
H4: Habit has a significant impact on Attitude towards Digital Payment Services.

Pervasiveness
In small establishments, "Pervasiveness" is a Factors Determining digital payment system adoption intention. Pervasiveness is how much people use digital payment systems in their everyday lives. (Nguyen, et al 2022) address how digital payment systems' broad use might affect customer preferences. They say that when digital payments are popular, people anticipate and utilise them in tiny shop spaces.
Additionally, (Kaur et al. 2021) emphasise network effects in digital payment systems. These systems become more valuable and useful as more customers and businesses use them, producing a positive feedback loop that stimulates adoption. This shows that small businesses may embrace digital payment methods based on their market dominance.
H5: Pervasiveness has a significant impact on Attitude towards Digital Payment Services.

Digital literacy
In small stores, "Digital literacy" is a factor affecting digital payment system adoption. Digital illiteracy is the inability to utilise digital technology, especially digital payment systems. Digital literacy among business owners and customers might encourage digital payment system adoption, according to (Naeem and Ozuem 2021). (Kumar, Sachan and Kumar 2020) also emphasise digital literacy to help small retailers accept digital payments. They advise that teaching small business owners and consumers about digital payment systems' use, advantages, and security may increase their adoption.
H6: Digital Literacy has a significant impact on Attitude towards Digital Payment Services.

Perceived risk
In small establishments, "Perceived Risk" is a factor impacting digital payment system adoption. Customers and small business owners worry about digital payment techniques' harmful repercussions. Concerns include money losses and privacy intrusions. Johnson and Grayson (2005) found that consumers assess the dangers and advantages of digital payments before making a choice.

Furthermore, (Kumar, Sachan and Kumar 2020) found that perceived security and fraud threats are especially important in small retail contexts. They believe that improving security and educating consumers about safe digital payment practises may boost adoption.
H7: Perceived Risk has a significant impact on Attitude towards Digital Payment Services.

Attitude towards Digital Payment Services

The way small family businesses see digital payment services is crucial to their digital transformation since it affects their interest to use and adopt these services. The possibility of adopting digital payments may be greatly increased by having a favourable attitude, which is influenced by the perceived advantages and convenience of such payments (Choudrie et al., 2018; Slade et al., 2015). Providers of digital payment services may support this process by delivering payment solutions that are easy to use, safe, and efficient, and that respond to the unique requirements of small family businesses. Providers may favourably affect the attitude of business owners towards digital payments by prioritising the enhancement of perceived simplicity of use, usefulness, and security of their services (Zhou, 2013). Consequently, this might result in an increased inclination to use digital payment solutions, thus contributing to the overall digitalization of small family businesses. Therefore, while supporting the digital transformation of small family businesses, digital payment providers must take into consideration how consumers perceive their services.
H8: Attitude towards Digital Payment Services has a Significant impact on Intention to use Digital Payment Services

Research Problem

Since 2014, there has been a significant rise in the number of people in India who make payments via digital means. This growth is being driven by the introduction of new Digital services, and financial innovations made available by banks and non-banks, as well as improvements to the infrastructure and ecosystem of digital payment systems. In terms of fact, financial institutions in India are teaming up with non-banks to give clients with a one-of-a-kind combination of innovation and security from banks and non-banks (RBI, 2019c).
The fact that consumers have a selection of payment options to choose from is, from the perspective of the vendor, a positive development. Customers that purchase in retail establishments are more likely to pay using digital payment methods due to their convenience, security, and traceability. However, many Indian company owners, particularly owners of small businesses, do not accept digital payments for a variety of reasons. Some of these reasons include the pricing structure of digital payment systems, illiteracy rates, and a lack of available cash. The meaning of the words that came before may be understood without any difficulty (CUTS International, 2018a).
There are several barriers that make it impossible for smaller enterprises in India to implement digital payment systems. This study's objective is to discover the characteristics that motivate independently owned firms in the Delhi-National Capital Region to employ digital payment methods; more specifically, the research will focus on the factors that support digital payment methods. By gaining a knowledge of the elements that affect the decision-making process of those firms who have already made the transition to digital payment services, suppliers of digital payment services may more effectively persuade other small businesses to adopt digital payment services.

Research objectives

The research initiative has defined the following objectives:

- To Examine merchant demographics, shops characteristics and factors for digital payment system adoption.
- To Examine variables affecting digital payment system adoption, including trust, transparency, Operating cost, habit, pervasiveness, digital literacy, and perceived risk.
- To analyse and measure the effects of factors considered on the adoption of digital payment services.

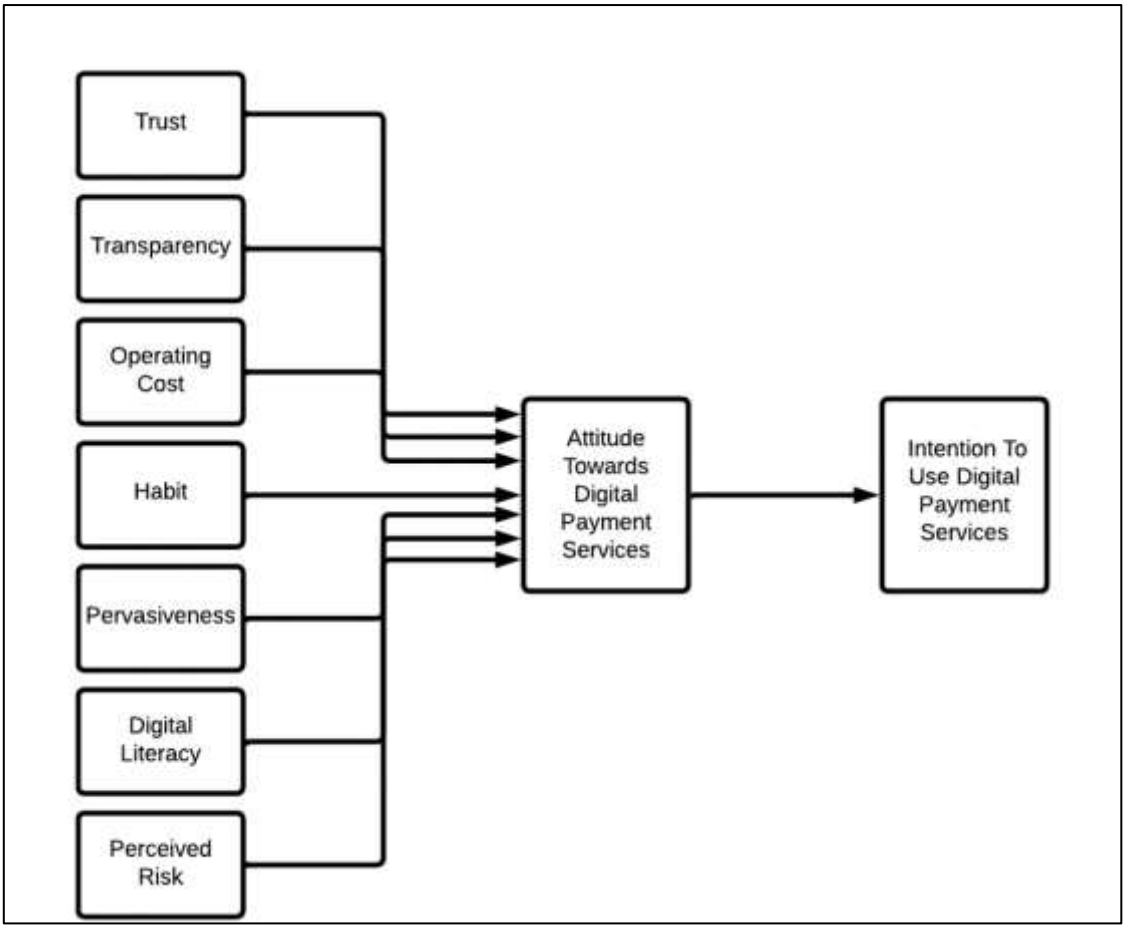

Figure 2: Proposed Research Model

Methodology

This study's objective is to determine the characteristics that affect the possibility of small fixed-location shops in Greater Noida India using digital payment systems. Specifically, the research will focus on India. The study specifically focuses on small retail shops that have a permanent location since these types of businesses have a reduced propensity to adopt digital payment methods.

This research is descriptive in nature and looks at the things that make small, fixed-location retail establishments more or less likely to use digital payment systems. Some of these factors are trust, transparency, operational cost, infrastructure, identity theft, habit, pervasiveness, friction, digital literacy, and perceived risk. This study uses information that was collected and given by real people who took part in the study. A survey was done to get these results. Small business owners or managers who want to take part in the study are signing up on their own Delhi (NCR). The study looked at information gathered from several different areas inside the National Capital Region (NCR) in Delhi, India.

Particulars	**Type**
Purpose	Descriptive
Type of Investigation	Causal study
Method of the study	Survey method
Profile of Respondents	Owners/managers of Small Family Businesses stores
Data type	Primary data
Location	Delhi (NCR)

The objective of this research was to determine the influence of various factors on the adoption of digital payment systems. This inquiry will primarily concentrate on the following aspects of the situation. The elements are shown via an examination of the scholarly research as well as the outcomes of the focus groups.

- There is discussion on problems associated with dependability, routine, openness, ubiquity, difficulty, cost, assistance, risk, and the theft of personal data and identity. There are several elements that might influence the supply side, including trust, openness, the cost of operations, infrastructure. Familiarity, simplicity of use, perceived security, digital literacy, and habits are all examples of demand-side characteristics.
- The demographic features of the interviewees include their gender, age, Income level, and education.

- What they sell, how long they have been in business, and how much money they earn are all indicators of the store's business profile.

Data collection and sampling design

This research specifically obtained data from small c owners in Delhi NCR who are already using digital payment systems, with the aim of exploring the variables that influence their intentions to utilise such systems. It was essential to verify that participants were actively using digital payment methods to ensure their participation in this study (Moulard et al., 2015). The first stage of selecting respondents entailed a screening procedure to verify that only owners of small businesses that actively use digital payment methods were polled. An online survey was used to target a diverse and extensive range of small company owners, capitalising on the growing digital connectedness among this population. Data collection was conducted using a Google Form, which was widely circulated via popular social media platforms such as Facebook and WhatsApp, as well as by email, to actively include the targeted business community. This methodological approach aligns with the suggestions of Sekaran and Bougie (2016) and reflects the methods used in similar studies on digital payment systems (Lee et al., 2022; Abdul Halim et al., 2022). By concentrating on small, independently-owned businesses in a certain geographical region, we can get a comprehensive comprehension of the elements that influence the acceptance and utilisation of digital payment systems in these local retail environments.

A Google Form was used to gather data for the research on the digital transformation of small family usinessses in the Indian environment. The form consisted of two sections: Section A aimed to evaluate the factors of trust, transparency, operational cost, habit, pervasiveness, digital literacy, and perceived danger, while Section B collected demographic information from the participants. The questionnaire included six elements of the study framework. Before the major poll, preliminary research was carried out with 25 owners of small family businesses, resulting in some modifications to the questionnaire to better fit the Indian context. A screening question, "have you installed Digital Payment Apps," was inserted to ascertain if the respondents were using digital payment applications. The questions in Section A were assessed using a five-point Likert scale, with a range from 1 ("Strongly Disagree") to 5 ("Strongly Agree"). This scale allowed for the measurement of the factors that impact the intention to utilise digital payment systems in small family businesses.

Data Analysis and Result

Measurement Model

The study used confirmatory factor analysis using Smart-PLS 4.0 to validate the structured construct. The evaluation of model fit included the use of many indicators. The results showed strong construct reliability, shown by Alpha and CR values over 0.7 (Hair et al., 2015), which aligns with the standards set by Nunnally (1978) and Hair et al. (2019). Furthermore, the AVE value of each of them exceeded 0.5. The discriminant validity was confirmed by comparing the square root of the average variance extracted (AVE) with the correlation coefficients between latent variables, as shown in Table 1. Table 2 indicates that the square roots of AVE (Average Variance Extracted) for each latent variable were greater than the correlations between these variables. This research provides evidence for both the convergent and discriminant validity of this assessment approach. This study has confirmed the suitability of the model for further evaluating the results of the structural model.

Table 1: Construct's Reliability and Validity

	CA	rho_a	rho_c	AVE
IDPS	0.841	0.861	0.904	0.759
ADPS	0.943	0.944	0.949	0.555

This table shows IDPS and ADPS reliability and validity metrics. Each metric is analysed:
Cronbach's Alpha (CA): Cronbach's alpha measures scale internal consistency by assessing component correlation. From 0 to 1, numbers closer to 1 indicate reliability.

- IDPS Cronbach's Alpha is 0.841, showing strong internal consistency.
- The ADPS has 0.943 Cronbach's Alpha, indicating strong internal consistency.

Composite reliability (rho_a): It approximates internal consistency better than Cronbach's Alpha. It considers item loading variables.

- IDPS's rho_a is 0.861, indicating high reliability.
- ADPS has excellent reliability with rho_a of 0.944.

Composite Reliability (rho_c): Like rho_a, but determined using confirmatory factor analysis (CFA) factor loadings.

- IDPS has a rho_c score of 0.904, suggesting high reliability.
- The ADPS rho_c value of 0.949 shows strong reliability.

Average Variance Extracted (AVE): The average fraction of variation accounted for by the idea compared to measurement error tests convergent validity. Many consider values over 0.5 adequate.

- IDPS AVE: 0.759, suggesting good convergent validity.
- ADPS AVE: 0.555, slightly over acceptable threshold, indicating satisfactory convergent validity.

IDPS and ADPS exhibit high Cronbach's Alpha, rho_a, and rho_c values, indicating great internal consistency. Both constructs have good convergent validity, although the IDPS construct has a higher AVE than the ADPS construct.

Table 2: Discriminant validity

	IDPS	ADPS
IDPS		
ADPS	0.812	

The table shows a correlation matrix between IDPS and ADPS. Each variable's correlation with itself is always 1 in a correlation matrix's diagonal elements. Different variables are correlated via off-diagonal elements. IDPS-ADPS correlation is 0.812.

- The correlation value of 0.812 indicates an important positive relationship between IDPS and ADPS. As IDPS rises, ADPS rises also, and vice versa.

Remember that correlation does not indicate causation. IDPS and ADPS are closely related, although modifications in one do not affect the other.

R- Square

The R-square values provided for the IDPS construct in the study investigating factors is affecting use intention for digital payment systems in Small Family Business's stores in the Delhi NCR region suggest a significant amount of variation that can be explained. The model's R-square value of 0.541 and modified R-square value of 0.538 indicate that it accounts for roughly 54% of the variability in the attitude towards digital payment systems within this population. The high amount of explained variance indicates that the parameters included in the model are relevant and influential in comprehending the attitudes (Hair et al. 2015) of Small Family Business's store owners in the Delhi NCR region towards the use of digital payment systems. The marginal difference between the R-square and adjusted R-square values also indicates the model's sufficiency in considering the number of predictors used, guaranteeing the model's resilience in terms of its explanatory capability.

Table 3: R-square

	R-square	R-square adjusted
IDPS	0.541	0.538

The table shows the R-square and modified R-square values for a statistical model using IDPS as the dependent variable.

R- squared (R^2): The amount of variability in the dependent variable that the model's independent variables can explain is called "explained variance". From 0 to 1, higher numbers suggest a better model fit.

- IDPS R-square is 0.541. The independent factors in the model explain 54.1% of IDPS variance.

R-square adjusted: It refers to the number of independent variables in the model. It helps prevent R-square values from rising as additional variables are added to the model. Adjusted R-square generally better indicates model fit.

- The corrected R-square for the IDPS is 0.538. The R-square value is close, suggesting that the model is uncomplicated and that independent variables account for the variation in IDPS.

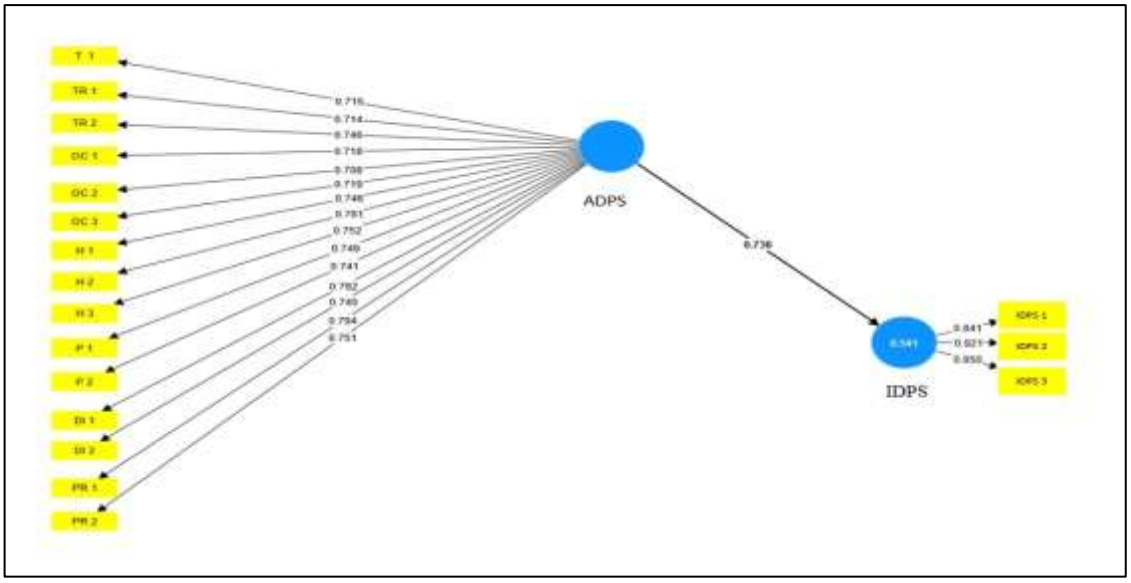

Figure 2: Structural Model

To conclude, the IDPS model fits well, explaining 54% of IDPS variance. The adjusted R-square implies this accuracy is not due to overfitting with too many independent variables.

The representation depicts a route analysis conducted inside a Structural Equation Modelling (SEM) framework, especially using Partial Least Squares (PLS). Below is an explanation of its component parts:
The model consists of two primary components, namely ADPS (Adoption of Digital Payment Services) and IDPS (Intention to use Digital Payment Services), which represent latent variables. Each of them is denoted with a blue circle. The path coefficients represent the hypothesised link between ADPS and IDPS, indicating that ADPS is expected to have a positive impact on IDPS. The value on this route (0.736) represents the path coefficient, which quantifies the magnitude and direction of the connection. The figure of 0.736 indicates a significant and favourable impact of ADPS on IDPS.
The R^2 value of 0.541 in the IDPS construct shows that about 54.1% of the variation in Intention to use Digital Payment Services can be accounted for by the model, especially by the ADPS construct.

Indicator Variables: The yellow boxes correspond to the observed indicator variables for the ADPS construct. Each indicator variable is assigned a loading value, ranging from 0.714 to 0.794, which quantifies the extent to which the indicator accurately reflects the underlying variable. All loadings above the 0.7 criterion, indicating that they serve as reliable markers of ADPS.
The concept of IDPS may be divided into three distinct sub-constructs or dimensions, which are visually represented by yellow boxes labelled as IDPS 1, IDPS 2, and IDPS 3. These variables are not directly linked to the ADPS variable in the model, but they seem to be a result of IDPS, as shown by their respective path coefficients (0.841, 0.921, 0.850) presented next to the arrows pointing to them. The coefficients have a significant magnitude, suggesting a robust correlation between ADPS and each of the aspects of IDPS.
The adjusted R-square for IDPS is not explicitly shown in the model, but it would be somewhat lower than the R^2 value, since it considers the number of predictors in the model.
The purpose of this structural model is to validate a theory that proposes Attitude towards adoption of Digital Payment Services (ADPS) as a major determinant of the Intention to use Digital Payment Services (IDPS) of small businesses to adopt digital payment systems. Furthermore, this strongly affects their intention to use digital payment systems (IDPS). The strong path coefficients and the considerable R^2 value suggest that the model is reliable and the constructs are well defined and influential in explaining the adoption of digital payment systems in the described scenario.

Conclusion

In conclusion, this research has thoroughly examined the many elements that influence the desire to utilise digital payment systems in small, local businesses in the Delhi NCR region. The results of our research suggest that the adoption of these systems is substantially influenced by variables such as operating expenses, perceived risk, digital illiteracy, habit, and pervasiveness. Small businesses are carefully considering the financial consequences of adopting digital payment methods in relation to their restricted budgets, since operational expenses have become a significant worry. The perception of risk, especially in terms of security and privacy, significantly influenced the decision-making process. Furthermore, the presence of digital illiteracy has emphasised the need for specific educational programmes aimed at improving the comprehension and proficiency of both store owners and consumers in regards to digital technology. The consistent use of old

payment methods was a major obstacle, highlighting the need of clearly demonstrating the advantages and simplicity of digital systems to promote a change in user behaviour. Furthermore, the study revealed that the widespread presence of digital payment systems in the market had a beneficial impact on their adoption. This indicates the significance of having a broader acceptability and the influence of network effects. These valuable observations are essential for stakeholders, such as digital payment service providers and policy makers, to develop effective policies that promote the use of digital payment systems among small shops. Customised strategies that target these characteristics may enhance the process of adopting digital ways, hence promoting the primary goal of achieving digital financial inclusion in the area.

Result and Discussion

The findings of this study suggest that there are numerous important elements that significantly influence the process of digital transformation in small family businesses, namely in their willingness to use digital payment systems. Trust plays a crucial role, since businesses are more inclined to use digital payments when they have faith in the security and dependability of these systems (Kim et al., 2010). The finding emphasises the significance of digital payment systems implementing strong security measures to promote confidence among small business owners.

Transparency in the transaction process and fee structures is a crucial element that increases confidence and decreases perceived risk (Kailani and Kumar 2011). Transparent and unambiguous information about transaction procedures and fees may reduce worries and promote the acceptance and use of a service or product. Moreover, the financial burden associated with the operation of digital payment systems is a crucial factor that small family businesses must consider. The adoption of cost-effective solutions is increasingly possible, emphasising the need for digital payment choices that are both economical and value-oriented (Mittal & Kumar, 2018).

The continuation of usage of digital payments is also determined by habitual use. The regular and favourable encounters with digital payments might result in the formation of a habit of using them, highlighting the need of user-friendly and dependable systems (Han et al., 2016). The pervasiveness of digital payments, referring to their broad availability and acceptability, serves as a strong incentive for firms to incorporate these systems into their operations (Zhou, 2011).

Digital literacy in digital technology is crucial for the acceptance and use of digital payment methods. Businesses that possess a greater degree of digital literacy are more likely to use digital payment technology. This suggests that there is a need for training and assistance to improve the digital literacy of small family businesses (Deursen & Dijk, 2016). lastly, perceived risk particularly about security and privacy, might hinder the acceptance and use of anything. It is crucial to address these concerns by implementing safe and privacy-conscious digital payment systems to promote their adoption (Featherman & Pavlou, 2003).

To summarise, the process of digitization in small family businesses requires a comprehensive strategy that tackles issues such as trust, transparency, operating costs, habit, pervasiveness, digital literacy, and perceived risks. Digital payment providers can help small family businesses through a digital transition by emphasising these characteristics and facilitating the adoption and ongoing usage of digital payment solutions.

Limitation

Several important variables must be considered while addressing the limitations of our research on the factors impacting digital payment system adoption intention in Small Family Business's shops in Delhi NCR.

- The research is limited to the Delhi NCR, which may not completely reflect retail conditions throughout India. Our results may not apply to other locations due to Delhi NCR socio-economic and cultural aspects.
- The research focuses on small, independent retailers. The viewpoints and experiences of bigger stores, chains, and franchises, which may vary greatly, were not examined.
- Our rigorous research technique may not fully capture digital payment adoption variables. This research did not include qualitative insights from in-depth interviews or focus groups, which might give a deeper perspective.
- Though the research addresses some significant elements, it may not cover all variables that potentially affect small store digital payment system adoption. Government legislation, provider marketing methods, and technical advances may also be relevant and demand more examination.

These limitations must be acknowledged to appropriately understand the study's results and guide future research.

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