

Determinants of Digital Payment Adoption and Its Operational Effects on Retail SMEs in India

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Abstract: This study focuses on identifying circumstances where Indian retail SMEs adopt digital payment systems through the convergence of technology perception constructs and their respective performance outcomes. This paper attempts to bridge severe limitations of previous studies to include retail SME-specific questions such as digital divide theory definitions, sociodemographic parameters, psychological adaptation constructs, and trust-specific areas for consideration. The paper does supply there is empirical evidence on the outcome of digital payment system implementation for enhancing revenue and improving operating efficiencies. The paper aims to collect data using a structured questionnaire technique. This paper uses a quantitative method to target 384 retail managers or digital payment implementers. Some of the key parameters found to favourably affect digital payment acceptance parameters include perceived values, usability parameters, and security or trust parameters. By employing validity using Confirmatory Factor Analysis and Structural Equation Model Analysis for this purpose, it aids in adapting parameters to enhance operating efficiency and business performance. In essence, it concludes for digital payment systems to find acceptance among retail SMEs to support both transactional and strategic efficiency parameters. Lastly, this paper on digital payments concludes with suggestions and proposals to respective authorities and Fintech corporations to ease retail usage of digital payment systems among Indian businesses.

Keywords: Digital payments, Operational effects, Retail SME, Digital payment technologies, Business performance, Perceived usefulness.

INTRODUCTION

Digital payments comprise a combination of various electronic payment means, mobile money transfer, digital wallets, and cryptocurrencies. According to an RBI definition, a digital transaction is an act that occurs in a manner in which money is not given and taken in hard cash from and to each party and is done through digital means. The shift from dealing with paper money to financial electronic channels implies a shift in consumer preference and is driven mainly by e-payment technology, which has greatly influenced financial inclusion even in retail segments. Organized entities have increasingly relied on this technology in order to fully benefit from the digital economy, even though limitations to their universal use still persist. Digital payments have influenced consumer attitudes towards cash in India in a way in which cash is increasingly treated and considered an investment instead of an alternative form of money, even though cash is in circulation. The future of money is all about efficiency,

convenience, and competitiveness, which is mainly influenced by innovations in IMPS and UPI technology and has greatly influenced cash retail electronic transactions even after the demonetization process. Digital payment platforms have experienced a 61% compound annual growth rate in terms of volume and 19% in terms of business from 2014 to 2019 (Mahesh & Bhat, 2021b).

As per “The Payments and Settlements System Act, 2007,” the National Payments Corporation of India was used by the Reserve Bank of India and the Indian Banks Association to oversee retail payments in India. This acted as an aid to NPCI for making Unified Payment Interface, or “UPI,” which is an electronic platform for all banking operations and retail payments using mobile applications of member banks (India, 2020). Established by on April 11, 2016, Reserve Bank of India Governor Dr. Raghuram G. Rajan, “Today, we take another step towards building a Less-Cash Economy, by offering to all Indians, through our banks, a system of payments that is secure, fast, and cost-free,” UPI has experienced tremendous growth to support “227 banks and handle 2,807.51 million transactions worth Rs.5,47,373.17 crore per month as of June 2021(UPI Official Website, 2022,” even with the facility of instantly sending money regarding different modes of payments such as AADHAR Card Holder Payments, QR Code-based Payments, and Virtual Payments Address without any costs. As of October 2023, “UPI handled around 17,15,768.34 crore, and is set to reach One Billion daily transactions (Mahesh & Bhat, 2021a).

Small and Medium Enterprises (SMEs) make substantial contributions to the global economy, especially in the region of South-East Asia, as mentioned by the Asian Development Bank. But the impact of Covid-19 pandemic effects has adversely affected international business; however, the mentioned sector is a significant tool for recovery in developing economies. The pandemic impact has also created a result-driven approach towards online payments, where 80% of customers have adopted online payment methods, which resulted in a 15% surge among 54% of mentioned businesses who adopted these methods (Michael et al., 2024).

Advantages:

- SMEs are vital contributors to the global economy, using more than 60% of the labour force and comprising 90% of enterprises.
- They are pivotal in alleviating poverty and fostering sustainable economic development, especially in rural regions.

- SMEs address the needs of marginalized groups, including women, disabled individuals, and uneducated populations, aiding in local development and combating inequality.

Challenges:

- Economic circumstances
- Financial Performance
- Human resources
- Data security and asset management
- Operational performance (Virglerova et al., 2022).

LITERATURE REVIEW

(Hussain, 2025) aimed to identify what all is being hindered by while preventing the usage of DPSs in India by making use of qualitative methods like semi-structured interviews, theme analysis, and more. The outcome obtained has revealed the list of factors, which have been identified under themes, is the Digital Divide (DD), which is linked to accessibility, capability, and innovativeness, and then Socio-Demographic Divide (SD), which is linked to education, geographical, gender, age, and earning, along with psychological factors associated with usability and trust, as well as awareness and financial reliance.

This study was carried out among 403 unorganized retailers and shows that the increased use of digital payment technology will provide a beneficial outcome impact on their revenues. The study showed that current expenditure on technology will improve this impact and that card and internet-based technologies should be included. Both technologies will be able to demonstrate improvements in financial performance. This will improve financial performance by 9.6 percent. It is clear that the study shows the digital technology that unorganized retailers (Adhikary et al., 2021).

(Soormo et al., 2024) examined to understand the factors that influence QR code payment, evaluate the role of the dual-stage SEM & ANN approaches, use a quantitative approach to study the elements which influence QR code payment. They survey owners of 400 Micro, Small, and Medium Enterprise owners in the four main cities of Sindh Province, Pakistan. They

analyze the factors that come under "Performance Expectancy, Price Value, Hedonic Motivation, Habit, Facilitating Conditions, and Social.

(Pare, 2022) aimed to establish the significant factors that contribute to the adoption of digital payments among micro entrepreneurs in India. The comprehension of digital payments was formed is directly proportional to the educational qualifications, technological know-how, and awareness of the people, and higher adoption rates are recorded in regions with better education levels. A larger number of smartphone users also has a positive impact on this adoption. SMEs are a crucial element in the socioeconomic development of countries; the definition differs from country to country based on income, assets, expenditure, or number of employees. Micro, Small, and Medium Enterprises, if considered in the context of India, constitute a major share of the agricultural sector.

(Phatak, 2023) examined the use of finance technology as a part of the business operations, where the use of finance technology has a vast potential for sales turnover enhancement and customer satisfaction. From a structured survey done through questionnaires for 300 entities of the business sector of the city of Pune, Maharashtra, the impact of electronic payment systems brings enhancement in sales turnover, customer satisfaction, decrease in transaction fees and enhancement of company efficiency.

There has been an upward trend in the development of fintech apps, particularly digital payment apps used by MSMEs to perform their business transactions. This research paper has outlined the digital transformation of MSMEs in Blitar City, Indonesia, using a sampling method of 100 respondents drawn from a population of 4,793 MSMEs. SmartPLS analysis using SEM technology indicated that functional barriers created a significant effect on use, value, and risk factors, whereas psychological barriers created an effect on tradition and image. It should be remembered that functional barriers created insignificant effects on use, whereas psychological barriers created a positive effect on digital payment transaction use (Widayani, 2022).

(Jayarathne et al., 2025) analysed the factors which affect the adoption of mobile payments during the early stages of the COVID-19 pandemic from a customer and retail point of view and also from rural and urban areas. The authors concentrated on a mixed methodology of surveys and interviews and discovered that on the customer side, Hedonic Motivation (HM), Performance Expectancy and Facilitating Conditions (PEFC), and Perceived Security of Technology are the constructs. Barriers from the retailer side are unawareness and ignorance

of customers and employees regarding management's orientation and poor computer literacy skills among customers. Although the motivating factors in this research are Performance Expectancy and Facilitating Conditions, they depend on whether it is rural or urban. This particular research work is unique since it compared two environments for the first time in rural and urban areas with all the diversity in research methodology.

Research gap

Despite existing examination of the deployment of digital payment systems in India and emerging nations as a whole means many existing limitations are left unexplored. The existing research has mainly addressed the financial performance aspects of technological innovations such as cards and QR code systems or explored the challenges on the part of the customer and unorganized retailers. There is a major identified deficit in the existing research regarding retail SMEs in the Indian setting as a distinct group in the wake of unique operational challenges and infrastructure constraints. The existing research on the subject also explored the aspects of specific determinants of adoption or operation without a comprehensive framework in which the determinants of adoption are considered in relation to the various major infrastructural aspects of operational performance in terms of cost efficiency, customer contentment, or sales accretions. The research also remained restricted in terms of geographical spread and in turn left the existing research outcomes highly non-generalizable in a geographical context. There also exists a need for rigorous quantitative investigation in terms of the current studies on the impediments and enablers of digital transactions adoption in several facets including as the digital divide and sociodemographic aspects in the specific retail SME context.

METHODOLOGY

Research Design

This research analysed the determinants affecting the adoption of digital payments via a quantitative approach and its functionality effects on retail SMEs in India. In fact, it demands the total sample number 384 retail SME owner/manager and digital payment integrators for conducting data acquisition for this investigation. Data is gathered by administering a questionnaire survey on the specified subject study by virtue of 5-point Likert scale factor involving total constructs on 5 factors – Perceived Usefulness (PU), Peruced Ease Of Use (PEOU), Security / Trust (ST), Digital Payment Adoption (DPA), & Lastly: Operational Efficiency (OE) & Business Performance(BP).

Conceptual framework

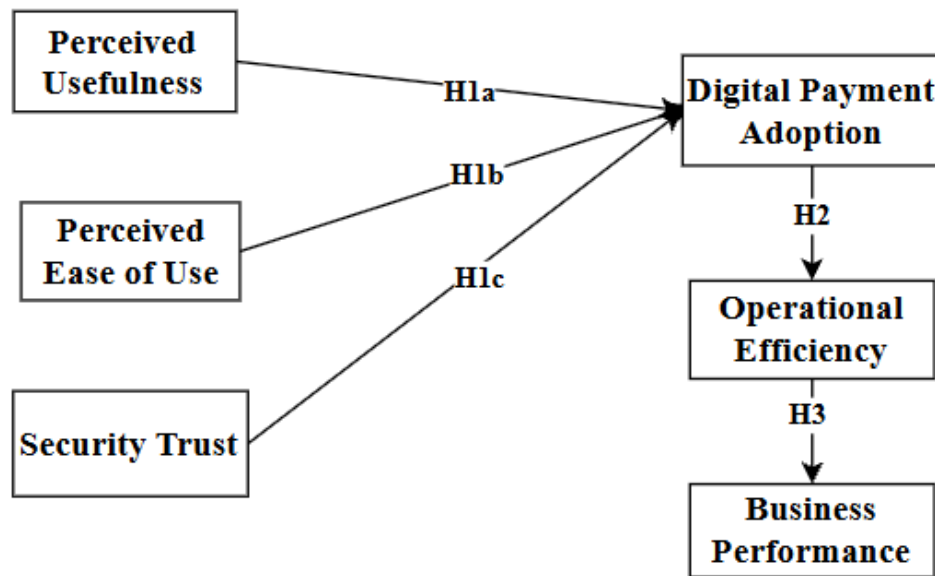


Figure 0.1 Conceptual framework

Research Objectives

- To identify how perceived usefulness, ease of use, and security/trust influence the adoption of digital payments by retail SMEs.
- To examine how digital payment adoption affects the operational efficiency of retail SMEs.
- To determine how operational efficiency contributes to the business performance of retail SMEs.

Hypothesis

- **H1a:** Perceived usefulness has a positive influence on the adoption of digital payments by retail SMEs.
- **H1b:** Perceived ease of use has a positive influence on the adoption of digital payments by retail SMEs.
- **H1c:** Security/trust has a positive influence on the adoption of digital payments by retail SMEs.
- **H2:** Digital payment adoption has a positive effect on the operational efficiency of retail SMEs.

- **H3:** Operational efficiency has a positive impact on the business performance of retail SMEs.

Sample selection and data collection

The research population included shop managers, digital payment integrators, and retail small and medium-sized enterprise owners. A purposive sample technique was used to choose persons meeting the inclusion criteria. A total of 384 individuals were chosen according to statistically determined sample size criteria. The data collection process included securing informed consent and thereafter distributing a self-made survey. The poll included both closed-ended and open-ended questions.

Inclusion and Exclusion Criteria

Inclusion Criteria:

- Indian retail small and medium-sized businesses that either already utilize or may use digital payment systems.
- Payment methods in SMEs are chosen or managed by owners, managers, or important decision-makers.
- Companies that have been in business for a minimum of a year must have enough expertise with payment procedures.

Exclusion Criteria:

- Big businesses or small, unofficial sellers who don't fit within the retail SME category.
- SMEs that don't deal directly with customers (such as business-to-business wholesalers without an online payment system).
- Respondents who do not directly participate in the SME's operational, financial, or payment-related decision-making.

Measures

Data has been collected using a standardised questionnaire. A questionnaire has been formulated with a 5-point Likert scale to elicit respondents' thoughts on different research subjects being examined. The questionnaire has a collection of both open-ended and closed-ended questions. Questions have been meticulously designed to elicit significant information

on specified study factors. The details of the variables and the corresponding measurement items used for the analysis are presented below.

S.No.	Constructs	Statements
1	'Perceived Usefulness'	5
2	Perceived Ease of Use	5
3	Security/Trust	5
4	Digital Payment Adoption	5
5	Operational Efficiency	5
6	Business Performance	5

- **Perceived Usefulness:** The core concept of the model is perceived usefulness. It is explained by the phrase, "an individual's belief that using a particular system will improve their work performance," which is widely regarded as a very important aspect within the framework of technological adoption. For example, e-banking or e-shopping (Noordiana et al., 2020).
- **Perceived Ease of Use:** Perceived absence of mental and physical efforts required in using technology is related to the friendly and usability characteristic of technology or system to produce effective results (Noordiana et al., 2020).
- **Security/Trust:** Security is perceived as a very critical factor for digital payments and is integral for the demonstration of greater confidence and interest among the target customers. Without this security, the clients may be lost due to the obvious preference for more trusted applications over the new entity that could reduce their acceptability for services (Halimatus & Soegoto, 2021).
- **Digital Payment Adoption:** Various digital payment methods exist that involve electronic payment, mobile payment, e-wallet, or QR-based payment methods. Generally, consumer type-based adoption has dominated the growth of these payment methods. The slow pace witnessed in the execution of digital payment systems in impoverished countries may be ascribed to the low internet power infrastructure. (Susanto et al., 2022).

- **Operational Efficiency:** Operational efficiency is concerned with the way managers can turn inputs into products or services. The demands for maximum output at the lowest price need to be fulfilled by the managers. Value-adding processes maximize the value of the organization by utilizing the resource at its optimal utilization (Keya, 2021).
- **Business Performance:** The appearance of opportunities within markets is a result of market nature; hence, entrepreneurs possess the ability to make estimates regarding expectations. Awareness of being entrepreneurs is explained by the following: the alertness to the environment regarding weaknesses in markets, rather than seeking opportunities (Raharja, 2020).

RESULTS

Introduction

The empirical results of the research examining the variables affecting the acceptance of digital payments and their operational ramifications are covered in this part on retail SMEs within an Indian context. Results are presented systematically, commencing with an elucidation of the demographic attributes of the sampled companies, after which confirmatory factor analysis is used to evaluate the measurement model and descriptive statistics, and reliability analysis. Follow-on research includes Kaiser-Meyer-Olkin and Bartlett's test for assessing sampling adequacy and analysis of construct validity based upon AVE and composite reliability estimates. The hypotheses are tested by means of structural equation modeling for determining the relationships between perceived value, perceived usability, security/trust, digital payment adoption, operational efficiency, and company performance. Each set of findings, it is noted, together provide a comprehensive knowledge of how perceived operational and technical competence affects the uptake of digital payment solutions and their consequent performance effects in retail SMEs.

Table 1 Demographic variables

Demographic	Groups	Frequency	Percent
Type of Retail Business	Grocery / Supermarket	116	30.2
	Clothing & Apparel	80	20.8

	Electronics & Mobile Stores	96	25.0
	Pharmacy / Medical Shops	60	15.6
	General & Other Retail Outlets	32	8.3
	Total	384	100.0
Business Experience	Less than 2 years	172	44.8
	2 – 5 years	90	23.4
	5 – 10 years	62	16.1
	Above 10 years	60	15.6
	Total	384	100.0
Number of Employees	1 – 5 employees	84	21.9
	6 – 10 employees	156	40.6
	11 – 20 employees	119	31.0
	More than 20 employees	25	6.5
	Total	384	100.0
Monthly Sales Turnover	Below ₹1,00,000	181	47.1
	1,00,000 – 5,00,000	124	32.3
	5,00,000 – 10,00,000	51	13.3
	Above 10,00,000	28	7.3
	Total	384	100.0
	Less than 1 year	224	58.3

Experience with Digital Payment Usage	1 – 3 years	68	17.7
	3 – 5 years	46	12.0
	More than 5 years	46	12.0
	Total	384	100.0

The demographic makeup of the responders suggests a varied representation of retail SMEs. The grocery/ supermarket stores, on the one hand, topped the list with the highest percentage of 30.2%, followed by electronics & mobile stores with 25.0%, clothing/apparel stores with 20.8%, pharmacies/medical stores with 15.6%, and general/other retail stores with 8.3%. Another notable feature of the sample population was its relatively young age, where a vast majority of respondents have remained in the market for less than two years, that is, 44.8%, followed by those having remained for two to five years, amounting to 23.4%, for five to ten years, comprising 16.1%, and more than ten years, contributing 15.6% of the sample population. Moreover, the sample population was represented by a diverse range of company sizes, with 40.6% of sample population having a company size of 6-10, followed by 11-20, comprising 31.0%, of the sample, of sizes 1-5, contributing 21.9%, followed by more than 20, contributing 6.5% sample population. Moving on, the sample population was observed to be divergent in regard to their financial requirements, where more than half of the sample, that is, 47.1%, of all enterprises have sales turnover below Rs. 100,000, succeeded by Rs. 100,000 to Rs. 500,000, which contributes 32.3%, and then Rs. 500,000-Rs. 1,000,000, consisting 13.3%, followed by more than Rs.10, 00,000, contributing 7.3%, sales turnover. Furthermore, the sample was observed to be divergent in regard to their awareness of the digital payment systems, where a vast segment of a sample population has remained unaware of the said systems for a less period of time, that is, for less than a year, contributing 58.3%, followed by one to three years, comprising 17.7%, followed by three to five years, contributing 12.0%, followed by more than five years, contributing 12.0.

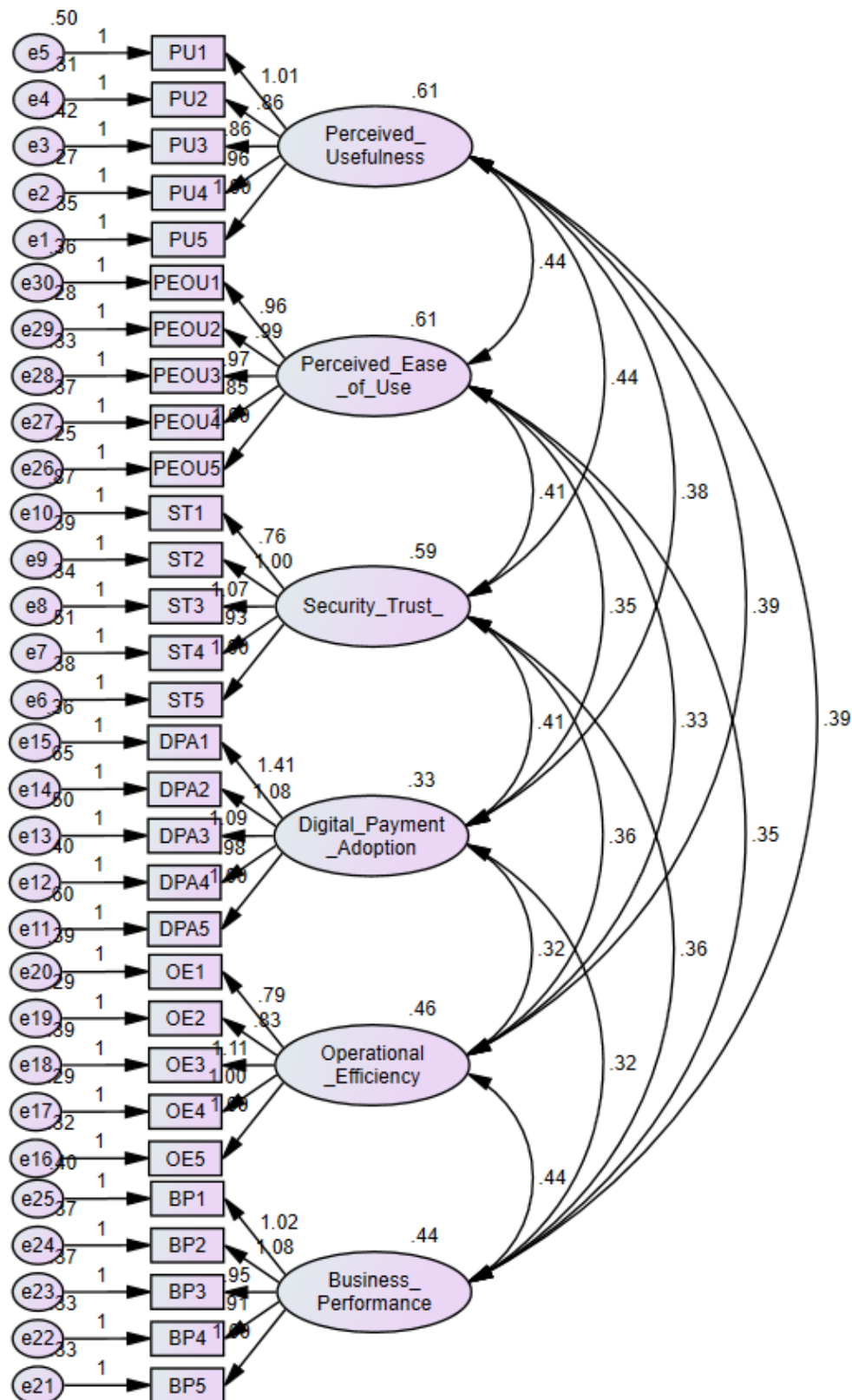


Figure 0.1 CFA model

The measurement model for confirmatory factor analysis offers sound psychometric evidence for constructs of Perceived Usefulness, Perceived Ease of Use, Security/Trust, Digital

Payment Adoption, Operational Efficiency, and Business Performance. All correlated observables show substantial loading on their corresponding latent constructs. The values for standardized factor loading for all observables are for the most part well above 0.60. This therefore supports sound convergent validity for measurement models. The values for inter-construct correlation show substantial and positive values among all constructs. The existence of considerable associations among constructs is evident. The values for constructs of Perceived Usefulness, Perceived Ease of Use, and Security/Trust have significant and positive correlations with Digital Payment Adoption. Consequently, it demonstrates significant backing from favourable opinions and trust about the implementation of electronic payment systems by small enterprises. The Digital Payment values acceptance show substantial and favorable associations with constructs for Operational Efficiency and Business Performance. Therefore, it is proof that there is substantial support from digital payment system-based companies whose efficiency is highly high and whose performance is highly superior. The measurement model structure supports all theoretical propositions. The refinement of patterns for loadings and constructs supports reliability and validity. The model is therefore sound for further hypotheses testing. This is for accompaniment of structural equation modeling.

Table 2 Descriptive Statistics, Reliability, and Inter-Variable Correlations

Variables	Mean	Percei ved Usefu lness	Perceive d Ease of Use	Secur ity Trust	Digital Payment Adoption	Operatio nal Efficienc y	Business Perform ance
Perceive d Usefulne ss	3.607 3	.849					
Perceive d Ease of Use	3.703 1	.639	.891				
Security Trust	3.683 3	.653	.639	.831			
Digital Payment Adoption	3.644 8	.711	.668	.774	.798		
Operatio nal	3.755 7	.633	.551	.595	.703	.818	

Efficiency							
Business Performance	3.8005	.650	.589	.614	.709	.855**	.820

** . Correlation is significant at the 0.01 level (2-tailed).

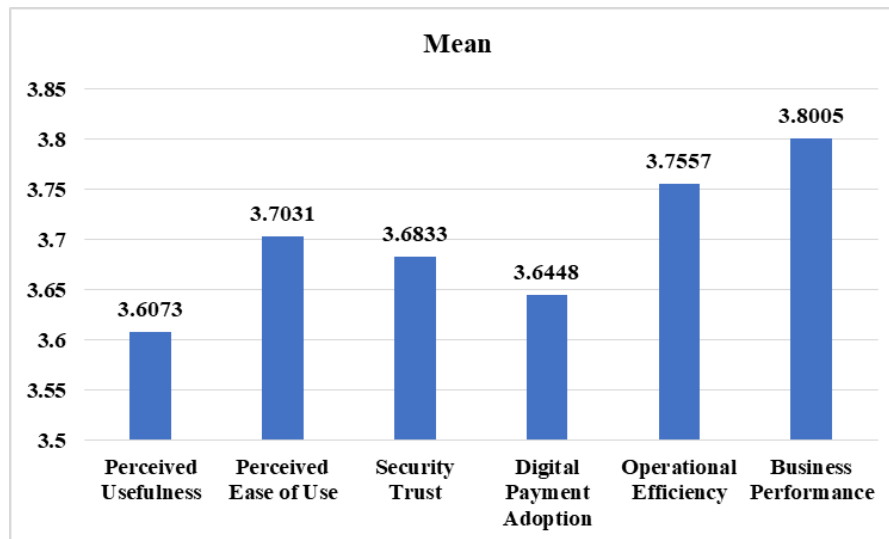


Figure 4.2: Descriptive Statistics, Reliability, and Inter-Variable Correlations

The descriptive statistics and results of the correlation analysis, it is observed that there exist strong correlations among the major variables related to retail SMEs' adoption and operation of digital payments. All the average scores of the variables lie between 3.60 and 3.80, indicating that all the respondents generally hold positive views about USEFULNESS of information and communication technology (ICT), CONVENIENCE of usage of ICT, SECURITY of financial transactions using ICT, ADOPTATION of digital payments, OPERATIONAL EFFICIENCY of digital payments, and BUSINESS PERFORMANCE of the business. The alpha reliabilities of all the variables are found to be very high, having a value of 0.849 for digital payments' perceived usefulness and perceived usability are 0.891 and 0.891, in that order 0.831 for Security Trust of the proposed digital payments system, and 0.798 for adoption of digital payments. This yields a near perfect internal validity, indicating a high degree of accuracy. Results of the correlation analysis show strong and positive correlations among all the variables at significance levels of 0.01, indicating a high dependence on all the variables. For instance, PERCEIVED USEFULNESS is positively correlated with digital payment adoption, with a correlation value of .711, while adoption and

security trust have a strong relationship of the proposed digital payments system, having a correlation coefficient of 774. The positively correlated implementation of digital payments with OPERATIONAL EFFICIENCY, having a correlation coefficient of 703, and adoption of digital payments with overall BUSINESS PERFORMANCE of organisation/enterprise, having a correlation coefficient of 709, indicate a very crucial and pivotal role played by the proposed digital payments system. OPERATIONAL EFFICIENCY is positively correlated with overall BUSINESS PERFORMANCE with a very high dependence, having a correlation coefficient of 855.

Table 3 KMO and Bartlett's Test

KMO and Bartlett's Test		
‘Kaiser-Meyer-Olkin Measure of Sampling Adequacy’		0.958
‘Bartlett's Test of Sphericity’	‘Approx. Chi-Square’	7864.197
	df	435
	Sig.	0

The Kaiser-Meyer-Olkin test and Bartlett's Test of Sphericity were used to assess the appropriateness of the data for factor analysis. 0.958 is the Kaiser-Meyer Olkin value is outstanding; hence, it gives a set of variables whose correlation is strong enough to give trustful factor extraction. A relatively higher value in KMO indicates that the correlation structure is more convergent, thus very suitable for factor analysis. A statistically significant result with a Chi-Square value is obtained from the Bartlett's Test of Sphericity of roughly 7864.197 and 435 with a predetermined significance threshold of fewer than degrees of freedom $p < 0.001$. From this, the huge significance makes rejection of the null hypothesis crystal clear, which states that the correlation matrices are all equal, thus showing strongly associated inter-variables. Overall, the findings provide substantial evidence to substantiate the adequacy of furthering factor analysis on the given dataset.

Table 4 Reliability Validity Test

Variables	AVR	CR
Perceived Usefulness	0.722	0.845
Perceived Ease of Use	0.794	0.868

Security Trust	0.692	0.834
Digital Payment Adoption	0.638	0.810
Operational Efficiency	0.670	0.824
Business Performance	0.673	0.826

The constructs exhibited adequate reliability and validity, demonstrating acceptable internal consistency and convergent validity across all variables. Perceived Usefulness had an AVE of 0.722 and a CR of 0.845, reflecting very good dependability. Perceived Ease of Use had equally strong results, with an AVE of 0.794 and a CR of 0.868, showing a significant level of uniformity among its measurement items. Security Trust had an AVE of 0.692 and a CR of 0.834, thus showing satisfactory convergent validity. The adoption of digital payments had an AVE of 0.638 and a CR of 0.810, meeting the criteria on construct dependability. Operational Efficiency had an AVE of 0.670 and a CR of 0.824 while Business Performance had an AVE of 0.673 and a CR of 0.826, indicating adequate reliability and validity. Because all AVE scores were above the acceptable threshold of 0.50, and all CR scores were above 0.80, the constructs used in this investigation are both trustworthy and valid to be taken into further analysis.

Hypothesis implementation

S. No	Hypothesis	Co-efficient Value	P-value	Results
H1a	“Perceived usefulness has a beneficial impact on the adoption of digital payments by retail SMEs”	0.840	***	Hypothesis Accepted
H1b	“Perceived simplicity of use positively impacts the uptake of digital payments by retail SMEs”	0.788	***	Hypothesis Accepted
H1c	“Security/trust has a favourable impact on has a positive influence on the adoption of digital payments by retail small and medium-sized enterprises (SMEs)”	0.952	***	Hypothesis Accepted
H2	“The implementation of digital payments positively impacts the operational efficiency of retail SMEs”	0.813	***	Hypothesis Accepted

H3	“Operational efficiency has a positive impact on the business performance of retail SMEs”	0.982	***	Hypothesis Accepted
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H1a: The hypothesis test findings indicate a robust and significant Correlation with perceived utility and the use of digital payment systems by small and medium-sized enterprises retail organisations. The strength of influence 0.840 shows a strongly positive influence, which shows it is more beneficial for retail SMEs to comprehend digital payment systems, and the probability or likelihood of them adopted significantly increases. Another point to be noted is regarding the significance level of p (<0.001), which is marked as *** and shows a strongly significant influence on the result. From the strongly significant influence and high level of significance, it is concluded that Hypothesis H1a is accepted and it strongly confirms that perceived utility is a critical element exerting a major effect on the implementation of digital payment systems among small and medium firms in the retail sector.

H1b: The hypothesis test findings demonstrate that Perceived Ease of Use significantly influences the uptake of digital payments positively by retail SMEs, evidenced by a high coefficient value of 0.788. This illustrates that as digital payment methods are more comprehensible and manageable for shops, their propensity to embrace these systems rises markedly. The association is statistically significant, as shown by the p -value of *** ($p < 0.001$), demonstrating that the effect is unlikely to be attributable to chance. Consequently, H1b is validated, confirming Perceived Ease of Use as a significant predictor influencing digital payment acceptance among retail SMEs.

H1c: The results for this model show that Security/Trust has a considerable influence on the acceptance of digital payment methods for SME retail businesses. Indeed, the hypothesis H1c predicted that an improvement would provide a beneficial influence on the comprehensive acceptance of digital payment systems, as well as the outcomes strongly support this hypothesis. The coefficient of 0.952 represents an extremely positive correlation and shows that with an improvement in perceptions of security and trust, there is an increased significant probability of adopting digital payment systems. Further, with the p -value represented by *** it shows that it is significant at its most extreme level. Therefore, it confirms that Security/Trust is a significant aspect that favourably influences the implementation of digital payment systems by small and medium-sized retail organisations.

H2: The findings from the regression study provide robust empirical evidence for Hypothesis H2, which posits the use of digital payments enhances operational efficiency of small and medium retail firms. The coefficient value of 0.813 indicates a significant positive impact, implying that increased digital payment acceptance is closely linked to improved operational efficiency. Furthermore, the p-value denoted by *** verifies that this association is statistically significant at standard significance thresholds. Consequently, Hypothesis H2 is affirmed, substantiating the conclusion the digital payment solutions substantially growing the operational efficiency of retail small and medium-sized organisations.

H3: The research indicated that Operational Efficiency substantially improves the Business Performance of retail SMEs, as evidenced by a high coefficient value of 0.982. This illustrates that advancements in operational efficiency are intricately linked to significant increases in business performance. Moreover, the association is statistically significant, as indicated by the *** p-value, which provides robust evidence against the null hypothesis. Consequently, Hypothesis H3 is accepted, substantiating the assertion that operational efficiency significantly contributes to enhancing the overall performance outcomes of retail SMEs.

DISCUSSION

This study indicates that multiperception and operational skills profoundly influence the implementation and efficacy of digital payment systems in small and medium-sized organisations retailers is extremely important. The positive support for the perceived usefulness construct (H1a) indicates that, being capable in terms of operational, strategic values through digital technology, SME retailers can easily adopt digital payments. Moreover, the support for the ease of use construct (H1b) indicates that simple digital interfaces are important in terms of the success of digital payments, reducing resistance stemming from the complexity of the technology itself. Furthermore, the importance of security, trust, and critically valued digital financial processes (H1c) support views that reliant, trustworthy, and safe digital financial processes are preferred by SME retailers, thus using digital payments when trusted to be secured. Besides that, support for H2 indicates that implementing digital payments can enhance operational efficiencies in SME retailers in respect to efficient digital payment implementation that can reduce human efforts through accurate threshold values. Additionally, support for H3 indicates that the creation of operational efficiencies can lead to improvements in terms of businesses, thus implying that efficient businesses are accurately linked with improved conditions of businesses or businesses in terms of great prosperity.

Overall, all findings support that SME retailers have a strong performance-technology linkage in ensuring improved conditions of businesses through successful digital payments stimulated by positive-attitude valued constructs.

CONCLUSION

The findings of this research consist of substantial empirical proof that digital payments offer a fundamental motivator for operational improvement in retail SMEs in India. From the population demographics, it is seen to comprise mainly young SMEs of different experience backgrounds in digital payments, indicating that this young and emerging population is slowly and steadily prepared for technological advancements in this new realm of digital payments. The testing for measures on CFA, Reliability, KMO, and Bartlett's Test shows the acceptance that all variables considered and used for analysis in this study are valid, reliable, and of significant goodness for Structural Equation Modelling. The testing of this hypothesis is extremely supportive of this structure, accentuating that basic mastery perceptions of utility, user-friendliness, and security or trust of systems and solutions have significant milestones in making this hypothesis and resultant proposal acceptable for consideration in this analysis. Digital payments have actually made operations simple and efficient and hence have significantly improved business performance. The significance, power, and/or value of coefficients covary in firm beliefs that opinions and related operational improvements from technology have addressed an important aspect in making an operational difference for SMEs. The beliefs of this study probate that digital payments are acting and working as operational managers to further enhance an operational improvement in generalized business performance in retail SMEs. These online payments have enhanced from being a mere operation solution process, as they are operating in a totally different new environment of being efficient and effective. The implementation of secure, easy, and fruitful online payments for SME retail businesses can enable and empower them to have improved operations for complete customer bliss and happiness in the ever-growing.

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