

The Determinants of Digital payment Usage from Consumers’ Perspective: A Literature Review

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Abstract

The proliferation of the internet and mobile phones throughout the world paved the way for the rise of digital payment systems. There has been minimal research on the variables influencing the use of digital payments in developing economies. Therefore, the goal of this study is to provide a comprehensive literature assessment of the elements that influence the usage of Digital Payments in emerging markets. The current study draws on credible resources, including Scopus and Google Scholar, for reviewing the academic publications published between 2010 and 2022. Findings revealed that digital payments are the payments of the new era and are experiencing explosive growth. People are increasingly turning to digital payment methods due to several motivating elements, the most important of which are their perceived usefulness, the simplicity of using these methods, and their convenience. However, the main barriers to the widespread use of digital payment systems are associated with users' concerns over security, privacy, and trust. Based on a thorough evaluation of the literature, a conceptual model of the variables influencing the use of digital payments has been suggested, which will serve as a roadmap for future research. The study will help policymakers, financial institutions, online trading facility suppliers, and application developers build strategies to increase e-payment acceptability and utilization.

Keywords: Digital Payments Acceptance, Electronic Payments, Digital Payments Usage, Drivers, Inhibitors of Digital Payment

Introduction

The term digitalization has entered every phase of life, whether it be communication, transportation, hospitality, education, or the financial sector. The rapid advancement in the technology sector over the past few years has changed the world's picture, making the lives of people simpler, faster, and smarter. Smartphones have done a profound transformation in every corner of the world. High mobile penetration complemented with stable internet connectivity is also a significant facilitator for the adoption of digital payments by a large segment of consumers. The adoption rate of mobile phones is the fastest and the deepest in the history of consumers' acceptance of technology so far (Al-Sabaawi et al., 2021). These handheld devices have enabled the acceptance as well as usage of digital payments to a great extent. In 2019, the global e-payment market was valued at \$388.56 billion, expected to reach \$868.70 billion by 2025 (Motor Intelligence, 2019). Digital payments can be interchangeably termed as “electronic payment, e-payment, or virtual “payments. In digital payment, both parties use electronic means to send and receive funds via the internet. Transactions occur via digital modes like UPI, wallets, cards, Net Banking, POS without involving any physical cash exchange.

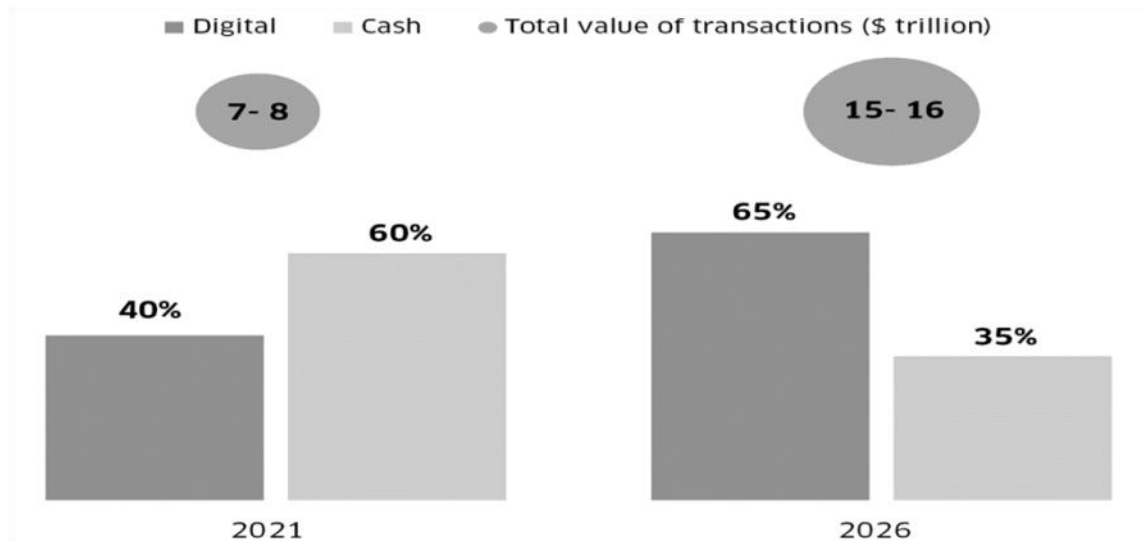
Digital Payments enable effective fund management anywhere, anytime. Users can enquire, send or receive money while carrying out several activities like shopping, paying bills, making transfers, and much more (Brahma & Dutta, 2018). There are a large number of drivers promoting digital payments like 24*7 access, easy to use, attractive discounts, and cash-backs. However, the usage frequency of digital payment is still slow in developing countries like India due to a large number of inhibitors like security and privacy breach issues, poor network connections, lack of awareness, digital illiteracy, etc.

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According to the report, digital transactions account for forty percent of all business conducted in India at the present time, and digital instruments handled three trillion dollars' worth of payments in 2021. PhonePe, a mobile payments platform, and the Boston Consulting Group recently released a study predicting that the Indian digital payments industry will triple to \$10 trillion by 2026.

Figure 1: Estimated growth: Digital Payments expected to overtake cash payments



Source: PhonePe-BCG Report 2021

Acceptance and Usage of Digital Payments

Consumer acceptance and usage of digital payments have sparked a great deal of interest in studies. This results in the development of several theories trying to explain this phenomenon. Technology Acceptance Model (TAM), Unified Theory of Acceptance and Use of Technology (UTAUT), Extended TAM, Theory of Reasoned Action (TRA), and Theory of Planned Behaviour (TPB) are the models studied at the individual level. With the help of these models, various factors have been identified for studying the acceptance and usage level of digital payments of consumers.

Various studies have investigated the adoption level in developed countries. However, the number of studies in developing countries is much less or nil. So, this study attempts to review the most prominent factors affecting the acceptance and usage of digital payments by consumers.

Seeing the robust growth, this sector demands the attention of both the practitioners and industrialists so that improvements can be made and corrective actions would be taken to promote more and more digital culture in our economy (Nandal et al., 2021).

In this era, youth is not only striving for innovative practices in various products and services but also looking forward to innovations in digital payment methods. A number of cashless payment technologies, including as UPI, POS, cards, wallets, AEPS, and USSD have been advocated to meet the demands of various segments of society.

This research is new because it gives new incentives and suggestions for future work to fill in the gaps of studies that have already been conducted. Despite its promising future, there has been a dearth of studies aggregating and analyzing the factors influencing digital payment system usage, adoption, and acceptability.

The present study attempts to answer the following research questions:-

1. To identify the drivers that are motivating people for going cashless.
2. To investigate the inhibitors that are impeding the growth of digital payments in emerging

economies.

3. To construct a conceptual model of variables impacting the usage of Digital payments based on the Literature.

Research Methodology

This research aimed to examine the variables that have contributed to the pervasive acceptance of electronic payment systems and identify the most influential elements. The parameters influencing the adoption and use of digital payments were determined by analyzing research articles from the reputable databases- Scopus and Google Scholar. We have considered empirical investigations beginning in 2010 and continuing through 2022.

We began with a search for recent academic publications in prestigious journals. Following this, we have collected relevant data from each source. Lastly, we have critically evaluated each source to determine how well it addresses our area of study. 46 research articles have been selected after a thorough investigation.

Structure of Paper

The first section introduces digital payments, including a definition and an explanation of the idea. The second section demonstrates the various digital payment options. The third section discusses the many motivators for utilising digital payment, followed by the obstacles. The conceptual model was proposed after extracting significant variables. Discussions and results were reported. Lastly, the article was concluded along with limitations and future recommendations.

Digital Payments: Definition

Table1: Definition of Digital Payments

| Citations | Definition of digital payments |
|----------------------------------|---|
| Payment and Settlement Act, 2007 | As per the Act, Digital payments include electronic fund transfer, initiated by the individual by way of instructions or authorizes the bank to debit or credit the given amount from the account maintained with the bank through electronic means, which includes card transactions and point of sale operations, automated teller machines operations, direct deposits, or fund withdrawals, transfer of funds using the internet, personal computers or mobilephones. |
| RBI Ombudsman Scheme (2019) | Digital payments are electronic transactions that are completed seamlessly without the need for cash either on one side or both sides. |
| Cashlessindia.gov.in | Digital payments are mainly promoted for transforming India into a digitally empowered nation to become a Cashless, faceless, and paperless economy. |

Source: Author’s Creation

Literature Review

The literature review is bifurcated into two categories:

- Review of Literature I - The studies that describe the various modes of digital payment.
- Review of Literature II - digital The studies that indicate the various factors affecting the usage of payments. These factors are further divided into two categories:

1. Drivers “affecting the usage of digital payments
2. Inhibitors affecting the usage of digital payments

Table 2: Various Forms of Digital Payment Methods

| Digital Payment Modes | Description | Citations |
|---|--|--|
| Banking Cards | A thin plastic card was introduced for making transactions digitally. A customer need not carry cash while traveling, shopping, booking, paying bills, etc. It can be a “Debit card, Credit card, Prepaid card, or Smart card. | (Malagi & Shelar, 2017) |
| Digital Wallet | A digital wallet is similar to a traditional wallet in that it allows customers to keep money and make payments. This wallet is linked to the customers' bank accounts. They may transfer and load money into the wallet and enter credit/debit card information to make purchases. | (Batra & Kalra, 2016; Rajanna, 2021) |
| Internet Banking <i>NEFT, RTGS, IMPS</i> | Internet “banking enables the transfer of funds from one party to another in no. of forms like: NEFT –It allows a maximum transfer of Rs. 50,000 operating in the form of batches. RTGS- It is a real-time gross settlement system in which funds are transferred immediately, having a minimum limit of Rs 2 lakh. IMPS- It is an Immediate Payment Transfer System. | (Arora & Sandhu, 2014; Nazarithrani & Mashali, 2020) |
| UPI (Unified PaymentInterface) | UPI is an instant means of transferring funds between two bank accounts without disclosing the credentials of the parties like account number and card details. UPI is an improvement over IMPS, launched by NPCI in 2016.It is the fastest means of making payments. | (Kakade & Veshne, 2022; Sharma, 2018) |
| POS Machines | POS (Point of Sale) is a combination of hardware and software used for making digital payments at the retail counter after shopping or making payments for the services availed by swiping/inserting/tapping credit or debit card. | (Joshi, 2017; Kumari &Khanna, 2022) |
| Mobile Banking | It is a “service provided by the banks where the customers can make financial as well as non-financial banking transactions via their mobile phones. | (Shaikh & Karjaluo, 2015) |

Source: Author’s Creation

Factors affecting the Acceptance and Usage of Digital Payments

These factors can be bifurcated into two categories.

1. Drivers:

The term drivers for e-payments refers to the factors influencing consumers' decisions to use electronic payment methods. Customers are encouraged to utilize digital payment methods due to these several variables. Acceptance and adoption of digital payment methods are being driven by a number of factors, including their perceived usefulness, ease of use, convenience, and the speed with which funds may be sent etc.

2. Inhibitors:

Customers' inability to complete financial dealings over digital channels can be hampered by some reasons that fall under the category of inhibitors to using e-payments. It is difficult to accept and use digital payments for various reasons, including but not limited to a lack of confidence, privacy concerns, security concerns, and network connectivity issues.

1. Drivers For using Digital Payment Modes

Perceived Usefulness

Perceived usefulness can be defined as a measure to which a person thinks that using a particular system would be useful for him and will enhance his/her performance (Davis, 1989).

Perceived usefulness is one of the significant influencers in the acceptance and adoption of digital payment networks (Roy & Sinha, 2017). Consumers are using e-payments with the mindset that opting for these payment systems will improve their performance by saving their time, cutting costs, and facilitating efficient management of funds (Alaeddin et al., 2018; Nigam & Kumari, 2018).

Perceived Ease of use

It can be defined as the extent to which the individual feels that using a particular technology would make his/her task easy, free from physical and mental efforts (Kim et al., 2010). Electronic payments or digital payments are gaining popularity because of their easy accessibility (Alaeddin et al., 2018; Siagian et al., 2022). Innovations are taking the space everywhere. Earlier users need to enter their card details such as Username, CVV, etc., but today, the scenario has changed. People can make payments with just one tap or scanning QR code making digital payments easy and quick (Ghosh, 2017; Singh et al., 2019).

Digital payments are gaining acceptance as they are easy to use, complete transactions within a fraction of seconds (Kim et al., 2010; Roy & Sinha, 2017; Widayat et al., 2020). Alayman also can complete the payment process with great ease.

Convenience

Digital payments are driving people crazy. One of the primary reasons behind the worldwide acceptance of e-payment is its convenience factor, where consumers can make any type of payment at any time (Kim et al., 2010; Simatele & Mbedzi, 2021; Widayat et al., 2020). Be it a 10 Rs. or more, any amount of payment can be made within a few minutes. There is no need for carrying massive amounts of cash while shopping traveling as the user can make payments digitally conveniently. It is not necessary to stand in long queues at ATMs or banks to make payments digitally.

Incentives

Digital payments offer various kinds of incentives to their users, influencing people to make payments via digital means.

Amazing Discounts and offers: - Digital payments offer various discounts and offers, making consumers lure for online payments more and more (Brahma & Dutta, 2018; Tripathi & Dixit, 2020).

Cash-back offers: - These offers are mostly given on making initial payments for any service, using the payment app, or paying an enormous amount (Tripathi & Dixit, 2020).

Gift Vouchers and Coupons of various merchandise websites offer services while making payments online (Agarwal & Tuteja, 2018).

Instant Transfer of funds

Digital payment promotes instant transfer of funds where the sender can send the amount within a few seconds, with just one tap or scan or by entering the receiver's mobile number (Chaveesuk et al., 2022; Klapper & Singer, 2022; Widayat et al., 2020). IMPS, mobile wallets, UPI, and POS machines are the primary modes that facilitate the speedy transfer of funds, thus proving to be helpful in providing a seamless experience to the consumers (Franciska & Sahayaselvi, 2017).

Reduced Risk of Theft

Digital transactions reduce cash dependency, reducing the need to carry cash (Tripathi & Dixit, 2020). With the advent of digital payments, the risk of theft has been reduced to a great extent. Various studies showed that digital payments had reduced the inconvenience as well as the insecurity of carrying cash which leaves the consumers unafraid (Roy & Sinha, 2017; Singh et al., 2019).

Complete Record of Transactions

Payments made with electronic means can be traced back as these payment systems maintain a complete record of transactions from where one can check, trace and control their spending as per their budget. It also provides proof of the transaction that can be produced as evidence in case of conflict (Gupta et al., 2020; Makanyeza & Mutambayashata, 2018; Tripathi & Dixit, 2020).

2. Inhibitors of Digital Payment

Security

It can be defined as a mechanism, series of procedures, and computer programs for authenticating the source of data and ensuring its authenticity and integrity to prevent data privacy breach (Oney et al., 2017). Security issues have become one of the major inhibitors in the adoption of digital payment systems by consumers (Alaeddin et al., 2018; Simatele & Mbedzi, 2021). Despite the well-developed systems, a large segment of the population still hesitates to transact a large sum of money through a mobile phone or over the internet due to security reasons (Siagian et al., 2022).

Trust

Trust can be defined as the confidence a person resides in other parties. It is essential for those activities which are exposed to high risk, and digital payments are one of them (Liao et al., 2021; McCole et al., 2020). India's population has adopted digital payments at a very fast pace, especially after demonetization. However, this pace is slower in comparison to other advanced countries. The answer to this query is the 'lack of trust' in the payment system (Garg et al., 2019; Joshi, 2017). Trust is as crucial as security because if the payment terminal is secure, but users do not trust its mechanism, they will not initiate the payment process no matter how secure the platform sounds (Oney et al., 2017). Ensuring security in the payment system can help build consumers' trust while making payments digitally (Rajendran et al., 2018).

Privacy

Westin (1967) described information privacy as the regulations to restrict the acquisition and usage of individual's personal information. Privacy issues encompass unauthorized sharing of sensitive, confidential, and personal information and disclosing the patterns of customer shopping behavior of online platforms (Dimitrova et al., 2021). With the rise in the usage of the internet in everyone's life, the privacy of consumers has always been a major issue since then (Rajendran et al., 2018). Consumers are exposed to no. of operators and websites. They are unaware of the type of information and the extent to which they are allowing these websites to access by agreeing with their terms and conditions or accepting their policies (Godwin, 2017).

Network Connectivity

In a country like India, poor network connectivity discourages consumers from making payments (Brahma & Dutta, 2018). They face many issues while making payments. Often, the payment does not confirm, the amount gets debited multiple times, and the receiver does not get the notification of the amount being credited, leaving the parties disappointed. A stable Internet connection is a prerequisite for making payments digitally (Abirami & Kumar, 2016; Franciska & Sahayaselvi, 2017; Panhwer et al., 2020).

The Habit of Using Cash

Habit can be defined as the tendency of the human being to behave in a particular manner due to past learnings and experiences (Sahi et al., 2021). Adoption of digital payments is being resisted on the grounds of using cash as a payment method because of habit and past experiences (Chattopadhyay et al., 2018). Consumers, especially the X generation (1965-1980), make payments via cash (Tripathi & Dixit, 2020). They are not habitual to digital modes of payment because of the lack of knowledge and fear of unknown technology (Oney et al., 2017).

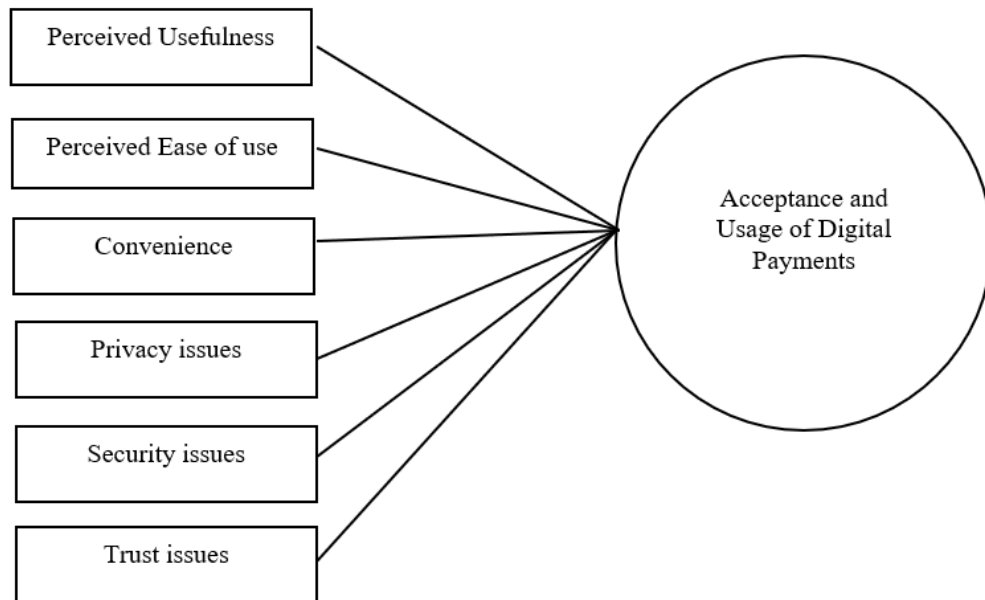
Tax Transparency

Digital payment offers a transparent platform for making payments in which all transactions of the users are recorded, which may be perceived by Indians as an invitation to more taxes (Tripathi & Dixit, 2020). A large number of merchants have still not welcomed digital payments wholeheartedly for accepting and making payments in their daily business cycle due to transparency issues (Nargunde, 2022). Cash does not leave a digital footprint which makes evasion of taxes easier (Malagi & Shelar, 2017; Mukhopadhyay, 2016).

Conceptual Model Development for the Acceptance and Usage of Digital Payment

Based on the review, digital payments appear to be the future wave. In the not-too-distant future, they'll be indispensable to regular living. Digital payments are primarily driven by perceived usefulness, ease of use, convenience, incentives offered, instant transfer of funds, effective fund management by keeping full record of transactions, reduced risk of theft. However, the main barriers to the widespread use of digital payment systems are associated with users' concerns over security, privacy, poor connectivity and trust issues, and stickiness to cash usage as reported by researchers. The majority of the research employed TAM and UTAUT to examine factors influencing the desire to use digital payment systems in developed and developing economies. We also found that a single theory or model does not adequately explain the effect, thus it is important to take into account all of the factors that have a significant bearing on people's propensity to use digital payment systems.

There are a total of 13 variables that may have an impact on the adoption of digital payment methods, but we have narrowed it down to 6. The top six most significant variables that are highly cited from both the categories (Drivers and Inhibitors) have been considered in order to arrive at a conclusion of constructing a conceptual model.

Figure 2: Conceptual model from the Review

Source: Author's own construction

According to the model shown above, these six aspects have been singled out as having a significant impact on consumers' propensity to make use of digital payment methods. It is crucial to emphasize these aspects. This research may help researchers determine what variables to include when analyzing consumer propensity for adopting and using digital payment systems. The model might potentially be used in further studies to determine the individual and combined effects of these parameters on the acceptance and utilization of digital payment methods.

Discussion and Results

In this section, we've summed up our current study and given the answers to our research questions. The quantity of empirical research has increased dramatically in recent years, yet there have been surprisingly few assessments of qualitative literature. Therefore, this article aims to provide readers with the most recent findings from consumer-focused studies of digital payment systems. We anticipate that our research will provide a foundational piece toward a complete comprehension of the consumer experience in digital payment as it exists now.

The following is a concise summary of the findings:

RQ(1) outlines the factors that drive individuals to use digital payments. It is clear from the results that many different variables have been found that encourage people to abandon cash. Convenience, rewards, quick transfer of funds, lowering the danger of theft, and efficient handling of money by documenting all purchases are factors that contribute to the rise of cashless transactions. According to the majority of literature reviewed, these criteria have a substantial influence on digital payment usage and acceptability. TAM framework's perceived simplicity of use and usefulness were shown to be crucial elements in the study's conclusions. This is similar with the prior study done by Patil et al., 2017 which underlined the relevance of TAM in their research effort. The aforementioned literature from various authors like Simatele & Mbedzi (2021), Klapper & Singer (2022), Tripathi and Dixit (2020), Widayat et.al (2020) reveals that as time has passed, other variables have also been considerably impacting the use of digital "payments."

The findings of RQ(2) investigated the major inhibitors while "using digital payments. Users' worries about their personal information being stolen or misused, the potential for fraud, the inherent unpredictability of online transactions, and a lack of reliable network connections were identified as important barriers in the acceptance and usage of digital payment systems in this research. Tax

transparency and habit of using cash emerged as a distinct and intriguing aspect that stands as a key impediment to the broad adoption of digital payments among Indian consumers and enterprises (Malagi & Shelar, 2017; Mukhopadhyay, 2016; Nargunde, 2022). After exhaustive investigation, it was concluded that privacy, security, and trust issues had the most detrimental effect on the widespread adoption of digital payments.

In order to answer our RQ(3), we developed a conceptual model by extracting the most influential drivers and inhibitors in the acceptance and usage of digital payments. This model will guide various practitioners in better understanding of the consumer attitudes regarding adoption of digital payments and their intentions to use them. The research has simply provided a descriptive overview of the relevant components. The model may be strengthened with the help of future studies using qualitative analytical techniques, such as SLR, meta analysis etc.

Conclusion

Global Economy is on the path of a digital revolution where there is no scope of turning back. 4G/5G internet speed and smartphone penetration act as a catalyst for promoting digital payments. The government also plays an influential role by providing the required infrastructure and services. People are becoming aware and gradually shifting to cashless payment modes; digital payment is now the new normal. RBI has rightly said, "Cash is king, but Digital is divine." The aforementioned causes are unquestionably fueling the expansion of digital transactions in developing economies like India. For "this expansionary trend to continue, it will be crucial that any obstacles be removed swiftly and that the government and financial regulators keep pushing for greater digital literacy & financial inclusion. Keeping in mind challenges relating to security, privacy breach, and other impediments, the officials and fintech companies "must adopt decisive and effective measures to push digital payments across the world.

Limitations and Recommendations for Future

The review reveals that empirical studies have been the primary focus of researchers. In the majority of the research publications, the methods of analysis utilized are SEM, followed by CFA. In the future, qualitative investigations should also be prioritized for their potential to yield innovative results. The study's reliance on customer perceptions of e-payments is another limitation. Future consideration should also be paid to the merchant's standpoint. The results show that a single model can't explain electronic payment adoption's complexity. Existing models can't account for social and cultural factors in new technology adoption. Future study on new technologies and their adoption might benefit from a multi-method approach that uses qualitative/mixed methodologies to capture the entire description and fresh insights. References from academic papers found in Scopus and Google Scholar were used for this analysis. As a result, some relevant research from other databases might left out. Therefore, in the future, it is possible to expand the scope of the assessment to include more databases.

Despite the aforementioned caveats, our review work does a commendable job of elucidating the research on digital payment and would be incredibly helpful to both researchers and industry professionals. This will aid in the further development and expansion of the study of this subject.

References

- Abirami, P., & Kumar, S. (2016). Electronic Payment Systems- Technical and Strategic Issues. *Handbook of Computer Networks*, 3(2), 869–888. <https://doi.org/10.1002/9781118256107.ch56>
- Agarwal, R., & Tuteja, S. (2018). Paytm's wallet business: on a growth trajectory or suicide mission? *The CASE Journal*, 14(1), 112–138. <https://doi.org/10.1108/tcj-07-2017-0063>

- Alaeddin, O., Rana, A., Zainudin, Z., & Kamarudin, F. (2018). From Physical to Digital: Investigating Consumer Behaviour of Switching to Mobile Wallet. *Polish Journal of Management Studies*, 17(2), 18–30. <https://doi.org/10.17512/pjms.2018.17.2.02>
- Al-Sabaawi, M. Y. M., Alshaher, A. A., & Alsalem, M. A. (2021). User Trends of Electronic Payment Systems Adoption in Developing Countries: An Empirical Analysis. *Journal of Science and Technology Policy Management*, 12(3), 1–25. <https://doi.org/10.1108/JSTPM-11-2020-0162>
- Arora, S., & Sandhu, S. (2014). Electronic Banking Adoption: What Role Does Technology Actually Play? *Apeejay Journal of Management & Technology*, 9(2), 24–35.
- Batra, R., & Kalra, N. (2016). Are Digital Wallets the New Currency? *Apeejay Journal of Management and Technology*, 11(1), 1–12.
- Brahma, A., & Dutta, R. (2018). Cashless Transactions and its Impact-A Wise Move Towards Digital India. *International Journal of Scientific Research in Computer Science, Engineering and Information Technology* © 2018 IJSRCSEIT, 3(3), 4–28.
- Chattopadhyay, S., Gulati, P., & Bose, I. (2018). Awareness and Participation of Small Retail Businesses in Cashless Transactions: An Empirical Study. *Management Dynamics in the Knowledge Economy*, 6(2), 209–225. <https://doi.org/10.25019/mdke/6.2.02>
- Davis, F. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, 13(3), 319–340. <https://doi.org/10.5962/bhl.title.33621>
- Dimitrova, I., Öhman, P., & Yazdanfar, D. (2021). Barriers to Bank Customers' Intention to Fully Adopt Digital Payment Methods. *International Journal of Quality and Service Sciences*, 14(5), 16–36. <https://doi.org/10.1108/IJQSS-03-2021-0045>.
- Franciska, M., & Sahayaselvi, D. S. (2017). An Overview on Digital Payments. *International Journal of Research*, 04(07), 2101–2111. <https://doi.org/10.36106/gjra/8906567>.
- Garg, S., & Kaur, S. (2019). A Comparative Study: Digital Payment Modes vs. Cash on Delivery. *Zenith International Journal of Multidisciplinary Research*, 9(5), 40–45. <http://www.indianjournals.com/ijor.aspx?target=ijor:zijmr&volume=9&issue=5&article=005>.
- Ghosh, A. (2017). Turning India into a Cashless Economy: The Challenges to Overcome. *SSRN Electronic Journal*, 2012. <https://doi.org/10.2139/ssrn.2989290>
- Godwin, J. U. (2017). Privacy and Security Concerns as Major Barriers for E-Commerce: A Survey Study. *Information Management and Computer Security*, 9(4), 165–174. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.107.6887&rep=rep1&type=pdf>
- Gupta, R., Kapoor, C., & Yadav, J. (2020). Acceptance Towards Digital Payments and Improvements in Cashless Payment Ecosystem. *IEEE Explore*, 5(7), 1–9. <https://doi.org/10.1109/INCET49848.2020.9154024>
- Gupta, S., & Kumar, D. (2020). Upi - An Innovative Step for Making Digital Payment Effective and Consumer Perception on Unified Payment Interface. *The International Journal of Analytical and Experimental Modal Analysis*, 12(1), 2482–2491.
- Joshi, M. C. (2017). Digital Payment System: Before, During and After Demonetisation. *International Journal of Banking, Accounting and Finance*, 2(December 2017), 1–14. <https://www.researchgate.net/publication/331001070>
- Kakade, R., & Veshne, N. (2022). Unified Payment Interface: A Step Towards a Cashless Economy. *International Research Journal of Engineering and Technology (IRJET)*, 4(11), 762–766.

- Kim, C., Mirusmonov, M., & Lee, I. (2010). An Empirical Examination of Factors Influencing the Intention to Use Mobile Payment. *Computers in Human Behavior*, 26(3), 310–322. <https://doi.org/10.1016/j.chb.2009.10.013>
- Klapper, L., & Singer, D. (2022). The Opportunities and Challenges of Digitizing Government-to-Person Payments. *World Bank Research Observer*, 32(2), 211–226.
- Kumari, N., & Khanna, J. (2022). Cashless Payment: A Behavioral Change to Economic Growth. *Qualitative and Quantitative Research Review*, 2(2), 82–103.
- Liao, C., Liu, C. C., & Chen, K. (2021). Examining the Impact of Privacy, Trust and Risk Perceptions Beyond Monetary Transactions: An Integrated Model. *Electronic Commerce Research and Applications*, 10(6), 702–715. <https://doi.org/10.1016/j.elerap.2011.07.003>
- Makanyeza, C., & Mutambayashata, S. (2018). Consumers' Acceptance and Use of Plastic Money in Harare, Zimbabwe: Application of the unified theory of acceptance and use of technology 2. *International Journal of Bank Marketing*, 36(2), 379–392. <https://doi.org/10.1108/IJBM-03-2017-0044>
- Malagi, R., & Shelar, H. (2017). Increasing the Trend of Shopping Because of Plastic Money in Western Maharashtra. *International Journal for Innovative Research in Science & Technology (IJIRST)*, 3(08), 72–77.
- McCole, P., Ramsey, E., & Williams, J. (2020). Trust Considerations on Attitudes Towards Online Purchasing: The moderating Effect of privacy and security concerns. *Journal of Business Research*, 63(9–10), 1018–1024. <https://doi.org/10.1016/j.jbusres.2009.02.025>
- Motor Intelligence (2019). Digital Payments Market: Growth Trends and Forecast (2020- 2025).
- Mukhopadhyay, B. (2016). Understanding Cashless Payments in India. *Financial Innovation*, 2(1), 1–26. <https://doi.org/10.1186/s40854-016-0047-4>
- Nandal, N., Nandal, N., Mankotia Kirti, & Jora, N. (2021). Investigating Digital Transactions in the Interest of a Sustainable Economy. *International Journal of Modern Agriculture*, 10(1), 1150–1162.
- Nargunde, A. (2022). Digital Payments In India. *Journal of East China University of Science and Technology*, 65(3), 350–365.
- Nazaritehrani, A., & Mashali, B. (2020). Development of E-banking Channels and Market Share in Developing Countries. *Financial Innovation*, 6(1), 1–19. <https://doi.org/10.1186/s40854-020-0171-z>
- Nigam, A., & Kumari, S. (2018). Adoption of United Payment Interface Application: An Empirical Investigation Using TAM Framework. *Apeejay Journal of Management & Technology*, 13(1), 21–28.
- Oney, E., Guven, G. O., & Rizvi, W. H. (2017). The Determinants of Electronic Payment Systems Usage from Consumers' Perspective. *Economic Research-Ekonomska Istrazivanja*, 30(1), 394–415. <https://doi.org/10.1080/1331677X.2017.1305791>
- Panhwer, P., Pitafi, A., Memon, M. S., & Memon, A. (2020). Awareness and Reason towards Slow Adoption of E-Payment System: Study of Hyderabad. *Annals of Contemporary Developments in Management & HR*, 2(1), 6–21. <https://doi.org/10.33166/acdmhr.2020.01.002>
- Patil, P. P., Dwivedi, Y. K., & Rana, N. P. (2017). Digital Payments Adoption: An Analysis of Literature. *IFIP International Federation for Information Processing*, Springer, 61–70. <https://doi.org/10.1007/978-3-319-68557-1>
- Rajanna, K. (2021). Perception and Awareness of Consumer Towards Mobile Wallet : A Case Study. *Science , Technology and Development*, X(Vii), 121–128.

- Rajendran, B., Pandey, A. K., & Bindhumadhava, B. S. (2018). Secure and Privacy Preserving Digital Payment. *IEEE*, 1(2), 1–5. <https://doi.org/10.1109/UIC-ATC.2017.8397623>
- Roy, S., & Sinha, I. (2017). Factors Affecting Customers' Adoption of Electronic Payment : An Empirical Analysis. *IOSR Journal of Business and Management*, 19(12), 76–90. <https://doi.org/10.9790/487X-1912017690>
- Sahi, A. M., Khalid, H., Abbas, A. F., & Khatib, S. F. A. (2021). The Evolving Research of Customer Adoption of Digital Payment: Learning from Content and Statistical Analysis of the Literature. *Journal of Open Innovation: Technology, Market, and Complexity*, MDPI, 7(4), 1–24. <https://doi.org/10.3390/joitmc7040230>.
- Shaikh, A.A., Karjaluo, H. (2015). Mobile Banking Adoption: A Literature Review. *Telematics Inform*, 53(2), 129–142.
- Sharma, A. (2018). Unified Payments Interface: The Recent Indian Financial Innovation Demystified. *Apeejay Journal of Management & Technology*, 11(2), 17–27. <https://doi.org/10.29385/aapeejay.11.2.2016.21-33>
- Siagian, H., Tarigan, Z. J. H., Basana, S. R., & Basuki, R. (2022). The Effect of Perceived Security, Perceived Ease of Use, and Perceived Usefulness on Consumer Behavioral Intention through Trust in Digital Payment Platform. *International Journal of Data and Network Science*, 6(3), 861–874. <https://doi.org/10.5267/j.ijdns.2022.2.010>
- Simatele, M., & Mbedzi, E. (2021). Consumer Payment Choices, Costs, and Risks: Evidence from Zimbabwe. *Cogent Economics and Finance*, Taylor & Francis, 9(1), 1–23. <https://doi.org/10.1080/23322039.2021.1875564>
- Singh, N. K., Sahu, G. P., Rana, N. P., Patil, P. P., & Gupta, B. (2019). Critical Success Factors of the Digital Payment Infrastructure for Developing Economies. *IFIP Advances in Information and Communication Technology*, 5(3), 113–125. https://doi.org/10.1007/978-3-030-04315-5_9
- Tripathi, S., & Dixit, P. (2020). A Study on Adoption of Digital Payment through Mobile Payment Application with Reference to Gujarat State. *International Journal of Trend in Scientific Research and Development*, 4(3), 1110–1115.
- Westin, A.F.(1967). Privacy And Freedom. *Washington and Lee Law Review*, 25(2), 165-170.
- Widayat, W., Masudin, I., & Satiti, N. R. (2020). E-Money Payment: Customers' Adopting Factors and the Implication for Open Innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, 6(3), 1–14. <https://doi.org/10.3390/JOITMC6030057>