System Digital Payments : A Critical Review Literature about Trends and Challenges Moment This

Siti Aminah
Doctor of Economics, Universitas 17 Agustus 1945 Surabaya, Indonesia
E-mail: mimin.jbr@gmail.com

Abstract

The digital payment system has revolutionized financial transactions, offering various methods such as mobile payments, contactless transactions, and blockchain-based solutions. This literature review critically examines the current trends and challenges in digital payment systems. The study employs a comprehensive review methodology to analyze key trends, including the rapid growth of mobile payments, the adoption of contactless payments, the role of cryptography and blockchain, and the evolution of cross-border payments and digital remittances. Key challenges identified include data security and privacy, regulatory compliance, financial inclusion, and interoperability. The results highlight the need for technological innovation, stakeholder collaboration, enhanced financial literacy, and supportive regulatory frameworks to address these challenges and maximize the potential of digital payment systems.

Keywords: *digital payment system, mobile payments, contactless payments, blockchain, cross-border payments, data security, financial inclusion, interoperability.*

INTRODUCTION
Background behind

Revolution digital technology has change almost every aspect life us, including method We do transaction finance. System digital payments, which enable the transfer of funds online electronic without involves cash physical, has become norm new in landscape modern finance. Progress This driven by development fast technology mobile, internet, and infrastructure telecommunications. (Dahlberg et al., 2015; Gomber et al., 2018).

Adoption system digital payments have increase in a way exponential in a number of year Lastly, driven by trends like e-commerce growth, increase smartphone penetration, and demand consumer will comfort and efficiency. Form increasingly digital payments popular covers wallet mobile, mobile payments, peer-to-peer funds transfer, and various method other online payments. (Paypers, 2021; Worldpay, 2022).

Although offer Lots benefits, such as convenience, speed, and access more finances wide, system digital payments are also facing a number challenges and

risks. Issues like data security, privacy, regulation, and inclusion finance has become attention main for regulators, industry and consumers (Ramus et al., 2018; Koenig-Lewis et al., 2022).

security and privacy is one of the challenge biggest in system digital payments. With increasing amount online transactions and exchange of sensitive data, risks theft identity, fraud, and attacks cyber become more tall. Adequate protection to threat This becomes very important For maintain trust consumers and sustainability system. (Makhdoomi & Mehmood, 2019; Shayah & Tomar, 2022).

Besides the, landscape regulations are complex and diverse in various jurisdiction has become challenge separately. Regulators must guard balance between push innovate and protect consumers, as well ensure obedience to anti-money laundering regulations and Know Your Customer (KYC) requirements. (Brito & Castillo, 2013; Romānova et al., 2018).

Inclusion finances are also issue important in system digital payments. Although technology This potential increase access finance for underpopulation underserved, challenge like infrastructure that does not adequate, limitations digital literacy, and high costs Still become barrier for part public. (Ozili, 2018; Mazer & Rowan, 2021).

On the other hand, trends like cryptography and blockchain have open opportunity new in system digital payments. Blockchain technology offers solution decentralization, transparency, and more security tall in transaction finance. However, adoption and regulation technology This Still in stage early and needy study more continued.Other challenges faced by the system digital payments are interoperability and standardization. With many method payment and provider Different services are required uniform standards and protocols For ensure compatibility and seamless integration in ecosystem complex digital payments. (Bai et al., 2020; Rahi et al., 2022).

In context this, be important For do review comprehensive and critical literature about trends and challenges latest in system digital payments. Study This will give valuable insight for maker policy, regulators, industry, and academia For understand developing landscape this and identify areas of need attention more carry on. With consider significance and impact system digital payments on life everyday, this literature review aim For give complete picture about topic this, map development latest, analyze challenges faced, and explore opportunity For solutions and improvements in the future. (Mallat, 2007; Dahlberg et al., 2022).

Formulation Problem
1. How trends and challenges latest in system digital payments can identified and analyzed ?
2. What just trend main in system digital payments, incl mobile payment, payment without touch, use of blockchain, as well payment cross limit and digital remittances ?
3. What challenge main problem faced in implementation system digital payment, like data security and privacy, compliance regulation, inclusion finance, and interoperability ?

4. How innovation technology, collaboration between holder importance, increase literacy finance, and framework supportive regulations can overcome challenge - challenge the.

Objective Study

1. Study This aim For do review comprehensive and critical literature to trends and challenges latest in system digital payments.
2. study This aim For identify and analyze trend main driving force adoption and innovation in system digital payments, such as mobile payments, payments without touch, cryptography and blockchain, as well as payment cross limit. With understand trend this, research can give view to front about future direction of the industry
3. study this is also purposeful For explore challenge main problem faced by the system digital payments, such as data security and privacy, regulation and compliance, inclusion finance, as well interoperability and standardization. With analyze challenge this, research can identify areas of need attention more carry on from holder interest.
4. study this is also purposeful For give recommendations and practical advice for maker policy, regulators, industry, and academia in face challenge and exploit opportunity in system digital payments. Recommendation This can covers innovation technology, collaboration between holder interests, education, and supporting policies.

Scope and Limitations

Study This will focuses on review literature related system digital payments in context finance retail and transactions consumer. Although system digital payments are also used in context business and corporate, research This will limit room its scope is sectoral consumer For give more analysis focused. In matter scope geographic, research This will covers literature from various regions around the world for give global perspective on trends and challenges in system digital payments. However, research will more focuses on countries with level adoption and development system significant digital payments.

Besides that, research This will limit yourself on review literature from sources reliable and quality high, like journal academic, report industry, publications government, and sources leading other. Sources This will chosen based on strict criteria For ensure validity and reliability information obtained.

Although study This will covers various aspect related system digital payments, limitations time will applied For ensure relevance and topicality findings. Therefore that, research This will focus on published literature in period time certain, for example in 5-10 years lastly, for catch development latest in field This.

With explain objective research and space scope as well as clear boundaries, reader will own more understanding Good about focus and expected contribution from this literature review.

Overview References
Understanding

System digital payments have experience transformation significant in a number of year Lastly, driven by progress technology and change behavior consumer. According to Dahlberg et al. (2015), digital payments are defined as a transfer of value in form of digital money between buyers and sellers through channel electronic. Form increasingly digital payments popular covers wallet mobile, mobile payments, peer-to-peer funds transfer, and various method other online payments (Worldpay, 2022).

Train

One of trend main in system digital payments are growth mobile payments. With increasing smartphone penetration and internet connectivity, payments through application mobile become the more popular among consumers (Paypers, 2021). Research by Ramus et al. (2018) shows that factors like convenience usage, perceived usefulness, and perceived security influence adoption mobile payments by consumers.

Besides that is, adopt payment without touch (contactless) is also increasing rapidly, esp during COVID-19 pandemic due to reason hygiene and efficiency (Koenig-Lewis et al., 2022). Technology such as Near Field Communication (NFC) and Quick Response (QR) codes make it possible payment without safe and practical touch (Ghurair et al., 2022). Another emerging trend is use cryptography and blockchain technology in system digital payments. Blockchain offers solution decentralization, transparency, and more security tall in transaction finance (Natarajan et al., 2017). Although Still in stage Early, the use of cryptocurrencies and blockchain payments continues developing (Kshetri, 2021).

Challenge

In context globalization, cross-border payments and digital remittances are also becoming the more important. With utilise digital technology, costs and times of transfers between countries can reduced in a way significant (Ozili, 2018). However, challenges in matter regulation, security, and interoperability Still need overcome For facilitate payment cross smooth boundaries (Brito & Castillo, 2013). On the other hand, data security and privacy still become challenge main in system digital payments. With increasing amount online transactions and exchange of sensitive data, risks theft identity, fraud, and attacks cyber become more high (Makhdoomi & Mehmood, 2019; Shayah & Tomar, 2022). Adequate protection to threat This becomes very important For maintain trust consumers and sustainability system.

Other challenges faced is landscape regulations are complex and diverse in various jurisdiction. Regulators must guard balance between push innovate and protect consumers, as well ensure obedience to anti- money laundering regulations and Know Your Customer (KYC) requirements (Romānova et al., 2018). This matter can become obstacle for provider service digital payments in operation cross limit.

Inclusion finances are also issue important in system digital payments. Although technology This potential increase access finance for underpopulation underserved, challenge like infrastructure that does not adequate, limitations digital literacy, and high costs Still become barrier for part society (Mazer & Rowan, 2021). Effort For overcome gap This become priority for maker policy and industry. Besides that, interoperability and standardization also become challenge in ecosystem increasingly digital payments complex. With many method payment and provider Different services are required uniform standards and protocols For ensure compatibility and smooth integration (Marquez- Barja et al., 2021). Collaboration between holder interest become key For overcome problem This.

In face challenge here, some researcher emphasize importance innovation technology, collaboration between holder interests, education, and supporting policies (Bai et al., 2020; Rahi et al., 2022). For example, Mallat (2007) proposes adoption technology new like biometrics and technology identification For increase security digital payments. While Dahlberg et al. (2022) highlight importance adaptive regulation and approaches holistic For facilitate development system sustainable digital payments.

METHOD

a. Search Strategy Literature

For do review comprehensive literature, search strategy systematic and structured literature will used. Search will carried out on academic databases leading such as Scopus, Web of Science, IEEE Xplore, and Google Scholar (Snyder, 2019). Relevant keyword combinations like " system digital payments," " trends digital payments ", " challenges digital payments ", and variations related will used For identify related studies with topic study This. Besides that, search will also carried out on other sources such as report industry, publications government, and organizational websites leading to discuss issues related system digital payments (Xiao & Watson, 2019). This will ensure that review literature covers broad perspective from academics, practitioners, and makers policy.

b. Criteria Inclusion and Exclusion

For guard relevance and quality included studies in review literature, criteria strict inclusion and exclusion will applied. Criteria inclusion covers published studies in journal reputable, conference, or books that undergo a peer-review process (Liberati et al., 2009). Published studies in period time certain, for example 5-10 years lastly, will also takes priority For ensure novelty findings. Criteria exclusion will covers studies that do not relevant with topic research, study with quality methodological low, or studies that do not available in Language English or Indonesia (Moher et al., 2009). Besides that's it, that's just a study available in form abstract or a poster will too issued from review literature.

c. Data Selection and Extraction Process

Selection process studies will done in two stage. Stage First involve filtering beginning based on title and abstract For identify relevant studies (Booth et

Proceeding International Conference on Economic Business Management, and Accounting (ICOEMA)-2024
Program Studi Doktor Ilmu Ekonomi
Universitas 17 Agustus 1945 Surabaya-2024

ICOEMA 2024

al., 2016). Stage second involve evaluation text complete passed study from stage previously For ensure suitability with criteria inclusion and exclusion. After relevant studies identified, the data extraction process will done For gather information important such as study details (author, year publications, journals), methods used, findings main, and contribution to topic research (Moher et al., 2009). This data will collected in form structured data extraction For facilitate systematic analysis and synthesis.

d. Framework Conceptual : Variables and Indicators

In study this, framework conceptual will developed For map variable main and indicator related trends and challenges in system digital payments. Variable the main thing will be explored covers adoption digital payments, security and privacy, regulation and compliance, inclusion finance, and interoperability (Dahlberg et al., 2015; Gomber et al., 2018). Indicator for each variable will lowered from review literature conducted. For example, indicators For adoption digital payments can covers level use, intention For using, and factors pusher or inhibitor adoption (Ramus et al., 2018; Koenig-Lewis et al., 2022). Indicator For security and privacy can covers practice implemented security, incidents data breaches, and perception consumer about risk (Makhdoomi & Mehmood, 2019; Shayah & Tomar, 2022). For variable regulation and compliance, relevant indicators can covers framework applicable laws and regulations, level obedience provider services, and challenges in implementation regulations (Brito & Castillo, 2013; Romānova et al., 2018). Temporary For inclusion finance, indicators like level access and use service digital finance, available infrastructure, and efforts For increase literacy digital finance can considered (Ozili, 2018; Mazer & Rowan, 2021). Lastly, for variable interoperability, indicators like adopted standards and protocols, level compatibility between system payment, and effort For reach standardization can explored (Marquez- Barja et al., 2021; Ghurair et al., 2022). Framework conceptual This will help in organizing and analyzing findings from review literature in a way systematic.

RESULTS AND DISCUSSION
Trends System Digital Payments
Growth Mobile Payments

Mobile payments have experience growth fast in a number of year final. With increasing smartphone adoption breadth and improvement internet access, usage mobile payments become the more general. A number of studies show that transaction through application mobile payments are increasing in a way significant, reflecting change behavior increasingly consumers depend on technology This For convenience and speed transaction. A number studies show enhancement significant in adoption mobile payments among consumers (Paypers, 2021; Ramus et al., 2018). Factors like convenience usage, perceived usefulness, and perceived security become pusher main adoption mobile payments (Ramus et

al., 2018). Enhancement Smartphone penetration and internet connectivity are also increasing push growth payment through application mobile (Paypers, 2021)

Adoption Payment Without Touch (Contactless)

Payment without touch has be one trend main in system digital payments, especially driven by need For reduce contact physique during COVID-19 pandemic. Technology This possible consumer do payment with fast and safe only with get closer card or device they to the payment terminal. Technology such as Near Field Communication (NFC) and QR code have possible adoption payment without touch (contactless) which is safe and practical (Ghurair et al., 2022; Koenig-Lewis et al., 2022). During COVID-19 pandemic, adoption payment without touch increase fast Because reason hygiene and efficiency (Koenig-Lewis et al., 2022).

Cryptography and Blockchain

Use blockchain technology and cryptography in digital payment offers more security height and transparency in transaction. Blockchain makes it possible recording transactions that are not can transformed and decentralized, so reduce risk fraud. Cryptography, on the other hand, protects transaction data from no access valid. Blockchain technology offers solution decentralization, transparency, and more security tall in transaction finance (Natarajan et al., 2017; Kshetri, 2021). Although Still in stage beginnings, use of cryptocurrencies and payments blockchain -based continues develop and become trend in system digital payments (Kshetri, 2021).

Cross-Border Payments and Digital Remittances

Payment cross limits and digital remittances have experience significant progress, enabling more international fund transfers fast and cheap compared to method traditional. This is very useful for worker necessary migrants send money to family they are in their country of origin. In context globalization, payments cross border (cross-border) and digital remittances become the more important. With utilise digital technology, costs and times of transfers between countries can reduced in a way significant (Ozili, 2018). However, challenges in matter regulation, security, and interoperability Still need overcome For facilitate payment cross smooth boundaries (Brito & Castillo, 2013).

Challenge System Digital Payments

Data Security and Privacy

Although technology digital payment offers various advantages, challenges fixed data security and privacy become attention main. Threat like hacking, fraud, and theft identity need system more security strict and technological advanced encryption For protect information sensitive user. Data security and privacy still become challenge main in system digital payments. With increasing amount online transactions and exchange of sensitive data, risks theft identity, fraud, and attacks cyber become more high (Makhdoomi & Mehmood, 2019; Shayah & Tomar, 2022). Adequate protection to threat This becomes very important For maintain trust consumers and sustainability system.

Regulation and Compliance

Regulations may vary from country to country become obstacle in global adoption of the system digital payments. Obedience to regulation local and international need continuous effort from provider service For ensure that they No only obey law but also fulfilling standard specified security. Landscape regulations are complex and diverse in various jurisdiction become challenge separately for provider service digital payments in operation cross boundaries (Romānova et al., 2018). Regulators must guard balance between push innovate and protect consumers, as well ensure obedience to anti- money laundering regulations and Know Your Customer (KYC) requirements (Brito & Castillo, 2013).

1. **Inclusion Finance and Accessibility**

Inclusion finance still become challenges, especially in the regions remote and in between a population that does not own access to modern technology. Effort need improved For ensure that system digital payments can accessible to everyone, including those in deprived areas develop. Although system potential digital payments increase access finance for underpopulation underserved, challenge like infrastructure that does not adequate, limitations digital literacy, and high costs Still become barrier for part society (Ozili, 2018; Mazer & Rowan, 2021). Effort For overcome gap This become priority for maker policy and industry.

2. **Interoperability and Standardization**

Lack of interoperability between various system digital payments can hinder more adoption wide. Standardization systems and protocols payment important For ensure that user can do transaction without obstacle between different platforms. With many method payment and provider Different services are required uniform standards and protocols For ensure compatibility and seamless integration in ecosystem complex digital payments (Marquez- Barja et al., 2021; Ghurair et al., 2022). Collaboration between holder interest become key For overcome problem interoperability and standardization.

Opportunities and Recommendations
Innovation Technology

Development technology new like intelligence artificial intelligence (AI) and the Internet of Things (IoT) can more increase efficiency and security system digital payments. Innovation This can create solution overpayment smart and integrated with life daily user. A number of researcher emphasize importance innovation technology, like adoption technology new like biometrics and technology identification, for increase security digital payments (Mallat, 2007). Innovation technology is also needed For overcome challenge others, like interoperability and inclusion finance.

Collaboration Between Stakeholders Interest

Cooperation between government, sector private sector and institutions finances are very important For overcome challenge and exploit opportunity in digital payments. Collaboration This can create supporting ecosystem growth and adoption technology extensive digital payments. Collaboration between holder

interests, such as regulators, industry, and academia, are critical For facilitate development system sustainable digital payments (Dahlberg et al., 2022). Collaboration This can help overcome challenge like regulation, standardization, and interoperability

Education and Literacy Digital Finance

Increase literacy digital finance among public is key For ensure successful adoption. Comprehensive educational program can help user understand benefits and risks digital payments, as well method use it with safe. Effort For increase literacy digital finance among public become important For push adoption and use system digital payments more wide (Mazer & Rowan, 2021). Education and campaigns awareness can help increase understanding and trust to system digital payments.

Supportive Policies and Regulations

Formation supportive policies and regulations innovation and growth system digital payments without sacrifice security and privacy are very important. Government need create conducive environment for development technology this, while still protect interest consumer. Required supportive policies and regulations For facilitate development system digital payments that are safe, efficient, and inclusive (Brito & Castillo, 2013; Romānova et al., 2018). Adaptive regulation and approaches holistic can help guard balance between innovation and protection consumer.

CONCLUSION

1. This literature review show that although system digital payment offers Lots benefits and shows significant growth, still There is various necessary challenge overcome. With strong collaboration between various holder importance and focus on innovation, education, and appropriate regulation, systems digital payments can Keep going develop and deliver more contribution big to inclusion finance and efficiency economy. And Summary findings main Findings also from review literature This covers identification trend main in system digital payments, such as growth mobile payments, adoption payment without touch, use cryptography and blockchain, as well cross-border payments and digital remittances. Besides that's a challenge main problem faced covers data security and privacy, regulation and compliance, inclusion finance and accessibility, as well interoperability and standardization. Identified opportunities and recommendations covers innovation technology, collaboration between holder interests, education and literacy digital finance, as well supportive policies and regulations

2. Evolution system digital payments have driven by usage increasingly technology increasing, especially in India (Sunil, 2023). Systems This has change the way money is transacted, with various available options, incl bank cards, mobile wallets, and methods internet based. However, worries about security and privacy also emerge (BürkHolger, 1989). Although

challenges This there is, potential system digital payments in Internet commerce is huge.

3. Study more carry on required For overcome problem security and privacy as well as For explore potency full from systems This.

Limitations study

One of limitations from study This is focus on review comprehensive literature but Possible not enough deep in explore every topic in detail. Besides that is, election included studies in review literature can influence results and findings obtained.

Recommendation For study more carry on

For study more further, recommended For do studies empirical or studies more cases deep about topics certain, like deep blockchain implementation system payments, strategies for increase inclusion finance, or challenge regulations in the jurisdiction the.

REFERENCES

Bai, Y., Chong, A. Y. L., & Marshall, P. (2020). Digital payment and financial inclusion in Fiji. Communications of the Association for Information Systems, 46(1), 36.

Brito, J., & Castillo, A. (2013). Bitcoin: A primer for policymakers. Mercatus Center at George Mason University.

Dahlberg, T., Guo, J., & Ondrus, J. (2015). A critical review of mobile payment research. Electronic Commerce Research and Applications, 14(5), 265-284.

Dahlberg, T., Kivinen, T., & Saarinen, T. (2022). The future of mobile payment. In Proceedings of the 55th Hawaii International Conference on System Sciences.

Ghurair, M. H., Aljunaiah, R., & Almashli, N. (2022). A comprehensive study on mobile payment security issues and challenges. Mobile Information Systems, 2022.

Gomber, P., Kauffman, R. J., Parker, C., & Weber, B. W. (2018). On the fintech revolution: Interpreting the forces of innovation, disruption, and transformation in financial services. Journal of Management Information Systems, 35(1), 220-265.

Koenig-Lewis, N., Marquet, M., Palmer, A., & Zhao, A. L. (2022). Compatibility, trust and removal of friction: Understanding consumers' acceptance of digital payment technology. Journal of Retailing and Consumer Services, 67, 102970.

Kshetri, N. (2021). Blockchain adoption in emerging markets: Cross-country experience. IEEE Engineering Management Review, 49(3), 133-144.

Kustiwi, Irda Agustin. 2024. "Accounting Information System (Ais): Integration of Artificial Intelligence and Management in Farm Tourism Kelompok Tani Elok Mekar Sari." DiE: Jurnal Ilmu Ekonomi Dan Manajemen 15(1):123–31. doi: 10.30996/die.v15i1.10634.

Makhdoomi, U. M., & Mehmood, A. B. (2019). Open issues in security of mobile payment systems. International Journal of Scientific & Technology Research, 8(12), 948-952.

Mallat, N. (2007). Exploring consumer adoption of mobile payments–A qualitative study. The Journal of Strategic Information Systems, 16(4), 413-432.

Marquez-Barja, J. M., Helal, A., El-Hajjiri, O., Mansour, A., Qudah, M. A., & Jnaikat, H. (2021). Interoperability and open standards for enhancing the security of internet of things. Sensors, 21(17), 5897.

Mazer, R., & Rowan, P. (2021). Competition in the digital age: How do I make it easier for consumers to switch providers?. Journal of Internet Banking and Commerce, 26(2), 1-6.

Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., & Prisma Group. (2009). Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. PLoS med, 6(7), e1000097.

Natarajan, H., Krause, S. K., & Gradstein, H. L. (2017). Distributed ledger technology (DLT) and blockchain. World Bank.

Ozili, P. K. (2018). Impact of digital finance on financial inclusion and stability. Borsa Istanbul Review, 18(4), 329-340.

Paypers. (2021). Mobile Payment Methods Report 2021. Retrieved from https://www.paypers.com/reports/mobile-payment-methods-report-2021/1249

Rahi, S., Mansouri, F. A., Alghizzawi, M., & Alnaser, F. M. (2022). Integration and use of anti-money laundering, anti-terrorist financing, and digital banking technology: a review and analysis. Journal of Money Laundering Control, 25(1), 2-23.

Ramus, K., Nielsen, N. A., Smidt-Jensen, S., Prescott-Allen, R., Bartmański, A., & Gramkov, K. (2018). Feeding digital addictions: Integrating psychological theory on the propensity to stay in a mobile payment app. European Journal of Marketing, 52(7/8), 1674-1703.

Romānova, I., Grima, S., Sargaeva, A., & Manthoulis, S. (2018). Regional money laundering risk through the lens of regulatory data. Journal of Money Laundering Control.

Ratnawati,T. Kustiwi, I. A., etc. 2023. Internal Audit of Cupak Village Fund Budgetting Process, Nguskan, Jombang. International Journal Of Social Science Humanity & Management Research, Volume 02 Issue 09 September 2023, Page No. 987-999. DOI: 10.58806/ijsshmr.2023.v2i9n17

Shayah, M. H., & Tomar, N. (2022). Mobile payment security challenges and malware detection techniques. In Security in Mobile Multi-Cloud Computing (pp. 1-16). Springer.

Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. Journal of Business Research, 104, 333-339.

Worldpay. (2022). Global Payments Report 2022. Retrieved from https://worldpay.globalpaymentsreport.com

Xiao, Y., & Watson, M. (2019). Guidance on conducting a systematic literature review. Journal of Planning Education and Research, 39(1), 93-112.