

Cross-Border Trade and Digital Payment: A New Paradigm in Global Business Management

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KEYWORDS <i>Fintech adoption, cross-border commerce, global business, blockchain payments, digital financial inclusion</i>	ABSTRACT Global business management has experienced dramatic transformation with the expedited evolution of electronic payment facilities and growth in cross-border business. Global trade previously relied heavily on conventional banking networks, which were not just time-consuming but also costly and less accessible. Fintech facilities, blockchain technology, and mobile payment applications have transformed digital payments into an integral force behind global commerce. This paper examines the role of electronic payment systems in the development of cross-border trade and how the technologies have put across a new paradigm in international business administration. It aims to highlight opportunities, challenges, and strategic implications of implementing digital payment in overseas markets. Systematic review of literature and secondary data analysis were employed to evaluate global trade flows, fintech adoption patterns, and regulatory problems. Comparative analysis between developed and emerging economies has been presented to understand the different impacts of digital payment solutions. Results show that electronic payments enhance efficiency in international trade since they reduce transaction costs, improve speed, and increase transparency. They also result in higher financial inclusion as SMEs are enabled to participate in global trade. However, regulatory variance, cybersecurity threats, and interoperability issues remain significant impediments. Digital payments are an innovation catalyst for cross-border business management, transforming supply chain efficiency, consumer trust, and cross-border competitiveness. Policy makers and enterprises must collaborate to combat challenges, synchronize rules, and embrace innovation to unlock the full potential of digital payments in cross-border trade.
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1. INTRODUCTION

Background and Context

The global expansion of trade has been one of the most characteristic aspects of modern economic growth. Global trade has developed extremely rapidly during the last century, with a drive provided by technological change, liberalization of trade policy, and greater connectivity across borders. Cross-border trade was historically dependent on conventional banking networks and financial institutions (He *et al.*, 2021). Cross-border money remittances were primarily carried out through avenues such as the Society for Worldwide Interbank Financial Telecommunications (SWIFT) system, correspondent banking relationship, and other institutional mechanisms. Even though these mechanisms were of central significance in the facilitation of cross-border transactions, they were usually inefficient in character, involving considerable transfer fees, delayed settlement, and limited access to small businesses and individuals.

The reliance on physical banking infrastructure and centralized financial intermediaries also kept businesses in emerging and developing economies away. Many small and medium-sized enterprises (SMEs), which are the pillars of employment as well as innovation globally, were deprived of the benefit of international trade because they had limited access to inexpensive financial services. High transaction charges and the extended settlement period deterred small firms from engaging in cross-border trade, thereby restricting their entry into the global market. Moreover, the traditional systems were non-transparent and non-traceable, consequently increasing the risk of fraud, money laundering, and non-compliance failures.

The advent of digital technology and financial innovation has changed all this. Over the past two decades, advancements in financial technology (fintech), mobile communication, and the internet have enabled the emergence of digital payment systems that transcend many of the limitations associated with traditional banking models (Sule *et al.*, 2021). Platforms such

as PayPal, Alipay, WeChat Pay, and more recently blockchain-based solutions like Ripple and Stellar, have transformed the way international transactions are executed. Unlike traditional systems, these electronic payment systems facilitate near-real-time transactions, lower service fees, and greater transparency. Moreover, utilisation of real-time gross settlement systems and increasing use of artificial intelligence (AI) in financial systems have enhanced prevention of fraud, safety, and efficiency in cross-border payments.

Digital payments also take a significant role in financial inclusion, helping underserved communities and small and medium enterprises (SMEs) enter the global trade ecosystems. For instance, mobile money and online banking services provide long-time excluded entrepreneurs with a window to global customers as well as suppliers. This innovation is not only good for economic development but also in harmony with other universal goals like the United Nations' Sustainable Development Goals (SDGs), including those for ending inequalities and promoting innovations (Zetzsche *et al.*, 2021). Hence, cross-border trade is no longer the domain of giant corporations and multinationals; it increasingly includes smaller ones enabled by digital banking platforms.

At the same time, the growth of cross-border e-commerce has promoted the demand for secure and efficient digital payment mechanisms. Individuals want smooth payments across geographical borders, while businesses require low-cost and stable means of International supply chain management. Digital payment platforms are therefore not only transactional tools but strategic enablers of competitiveness in global business management.

Statement of the Problem

Although there has been phenomenal progress in digital payment systems, the adoption of these systems in cross-border business still comes with its challenges. A major challenge is the presence of disparate regulatory environments across different jurisdictions. While some governments have put in place extensive legal and technological infrastructure for enabling digital finance, others fall behind, resulting in its fragmented adoption. Such differences create inefficiencies for multinational business firms, as they deal with reconciling conflicting rules and compliance standards.

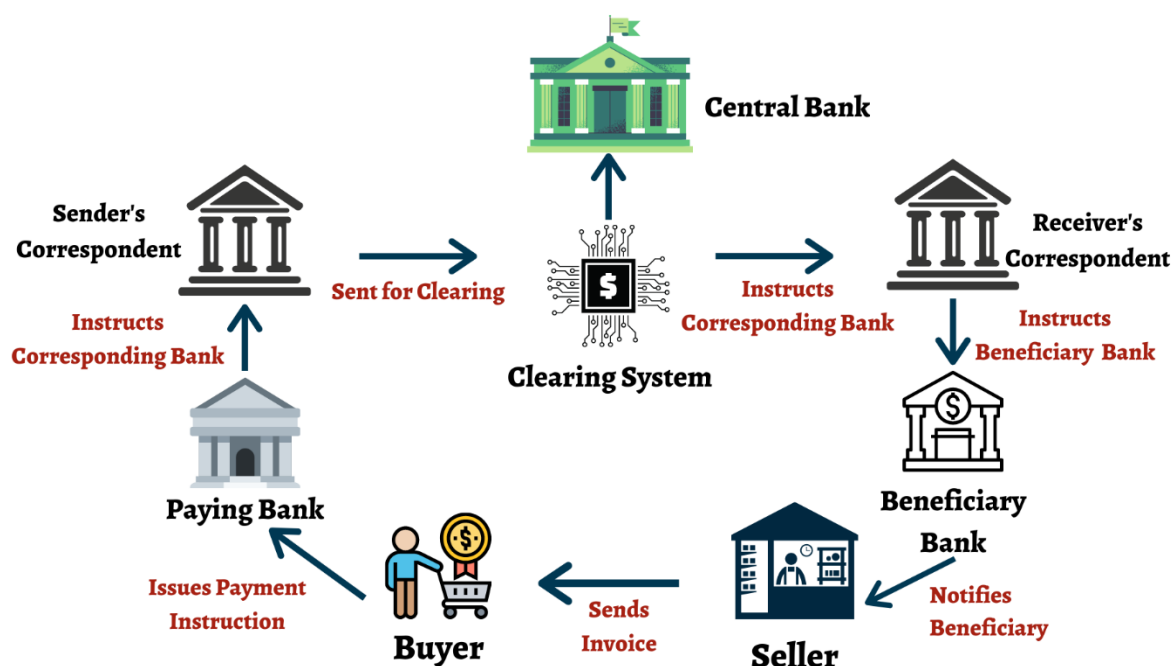


Figure: Cross Border Payments

(Source: thedigitalfifth, 2021)

Cyber security threats are also a major challenge (van der *et al.*, 2021). With transactions online growing by volume and value, they also get more sophisticated targets for cybercriminals. Data breaches, fake transactions, and hack attacks blow digital-platform trust, discouraging mass adoption. Small businesses are also characteristically short of funds to invest in sophisticated cybersecurity, making them extremely vulnerable.

And another problem is that different payment systems are not compatible with one another. While some systems function adequately within some places or countries, integration at the world level is weak. A payment solution widely taken up in China, for example, is incompatible with African or European systems and cannot be applied in truly global trade environments. This discourages global trade transactions because companies must employ intermediaries who re-introduce cost and inefficiency.

To SMEs, access and affordability are still urgent issues. While digital payment systems are said to lower the cost of transactions, numerous small businesses continue to experience challenges accessing good digital trade solutions. Limited digital literacy, insufficient infrastructure, and high onboarding costs in certain areas further hamper adoption. This limits SMEs from optimal use of digital platforms to tap into international markets, sustaining disparities in global trade participation.

2. RESEARCH GAP

While research on digital payments has been growing exponentially in the last few years, the majority of existing research continues to emphasize domestic adoption and consumer behavior rather than its implications for cross-border trade and global business strategy (Islam *et al.*, 2021). Scholars have been examining topics such as mobile wallet adoption in single markets, the use of blockchain in financial inclusion, and the role of fintech in improving domestic banking services. However, few studies are conducted to understand how electronic payment systems reshape cross-border supply chains, alter managerial decision-making, and restructure customer relationships within globalization.

Furthermore, the majority of current studies adopt a technologically or economically based viewpoint but fail to pay attention to the managerially and policy-related dimensions. Few studies offer comprehensive understanding of how firms—especially small and medium-sized enterprises—adapt their global business management policies to incorporate digital payments. For instance, there are concerns regarding the long-term implications of digital payments on risk management, compliance practice, and global competitiveness. Similarly, while policymakers recognize that digital finance is important, there is a lack of consideration on how regulatory harmonization could facilitate greater use of digital payment systems for cross-border trade.

This study therefore intends to bridge the above gaps by critically examining digital payment systems in cross-border trade and their strategic implications on international business management (Wu *et al.*, 2021). By way of exploring opportunities, hurdles, and regulation challenges, this paper intends to provide a general perspective of the new paradigm emerging at the intersection of international trade and digital finance.

Objectives and Research Questions

The study seeks to provide solutions to the following objectives:

1. To examine the impact of digital payments on cross-border trade efficiency and inclusivity.
2. To describe opportunities and challenges related to digital payment adoption in international business.
3. To research regulatory and strategic implications for multinational corporations and small and medium-sized enterprises.

Research Questions:

- In what ways do digital payments transform the character of cross-border trade?
- What are the major hindrances and risks in embracing digital payments for international business?
- How may policymakers and companies utilize digital payments to promote international business management?

3. LITERATURE REVIEW

In a paper by He (2021) delineates the cross-border payment digitalization process and how it can reshape the global financial landscape. The piece is about how digital technology innovations like distributed ledger systems and digital payments platforms have revolutionized the traditional payment system to become more efficient, reduce costs, and reduce settlement times compared to conventional mechanisms. He identifies that digitalization presents the potential for greater financial inclusion, such that small and medium businesses and individuals in the emerging markets can engage with global markets more easily via mobile-based payment systems. The study further considers the role of central banks and multilateral institutions in addressing this change by examining regulatory frameworks, cross-border cooperation, and striking a balance between innovation and financial stability (He *et al.*, 2021). Besides, it explores the challenges of regulating cybersecurity, data privacy, and potential misuse of digital currencies and calls for international collaboration to avert regulatory arbitrage. He argues that although private-sector innovation is driving most of the innovation, there is a need for public institutions to play a critical role in delivering trust, security, and interoperability between payment systems. In summary, the research discovers that digitalization of cross-border payments can make international transactions more inclusive, efficient, and secure, if appropriate governance and regulatory policies are established.

From a research study conducted by Chen (2021), the subject of enhancing cross-border e-commerce payment security through the integration of blockchain finance is mentioned, which can help address the problem of information security in digital transactions. The study points out that while electronic payment systems have brought greater efficiency and convenience to global trade, they are also threatened by risks such as fraud, hacking, and vulnerability in transaction authenticity, which pose threats to business organizations and consumers alike. By presenting a new e-commerce-centric encryption algorithm and its effectiveness through case studies, empirical evidence, and comparative analysis, the research

underscores blockchain technology as an enabler of revolutionary disruption (Chen *et al.*, 2021). Its decentralized and immutable state ensures transparency, deepens trust between parties, and reduces dependence on traditional intermediaries, curbing manipulation and unauthorized access. The study also looks into the extent to which blockchain-based risk management structures can increase financial security, ensure accuracy in cross-border settlements, and induce long-term stability in digital commerce. Moreover, Chen highlights that blockchain adoption not only upgrades the technicalities of payment security but also lifts trust levels among consumers and enterprises and thereby fuels cross-border e-commerce growth. Through enhancing encryption patterns and secure transaction patterns in payment infrastructures, the study envisions a future where digital payments worldwide are more robust, dependable, and adaptive to evolving dangers. Finally, the research concludes that blockchain technology is a necessary enabler of sustainable development in secure cross-border e-commerce, both an implementable framework for risk management and a direction for building more stable and efficient financial systems.

According to the view of Sule (2025) describes the transformative capability of blockchain technology in addressing inefficiencies, high costs, and security challenges in cross-border payment systems by providing a more efficient, secure, and transparent mechanism than traditional mechanisms. The study points out that the traditional cross-border payments are likely to be marred with delays, high costs, and the requirement of multiple intermediaries, thus becoming time-consuming and costly. Through leveraging the decentralized nature of blockchain, the research points out its capacity to do away with middlemen, reduce transaction times significantly, and reduce overall cost, which is beneficial in cross-border trade and international money transfers. Sule demonstrates that blockchain's immutable ledger system enhances transparency and traceability of transactions, thereby reducing the risk of fraud and error as well as enhancing trust among parties (Sule *et al.*, 2021). The article also discusses the application of smart contracts in contracting automation, minimizing human intervention, and making financial processes easier. The research also highlights the significance of integrating digital currencies and stablecoins into blockchain, bringing stability against fluctuating exchange rates and reducing dependence on correspondent banks. Despite acknowledging the challenge of scalability, regulation, and compatibility with existing financial infrastructures, Sule argues that advancements in blockchain protocols and evolving regulatory paradigms are bridging these challenges over time. The study illustrates, through its empirical examples, how blockchain adoption across cross-border payments improves financial inclusion and supports international trade by providing low-cost and reliable transactional platforms. In summary, Sule believes that blockchain has the capability to revolutionize the financial system of the world by making cross-border payment faster, safer, and cheaper and therefore a more efficient and inclusive global payments system.

CROSS BORDER PAYMENT PROCESS

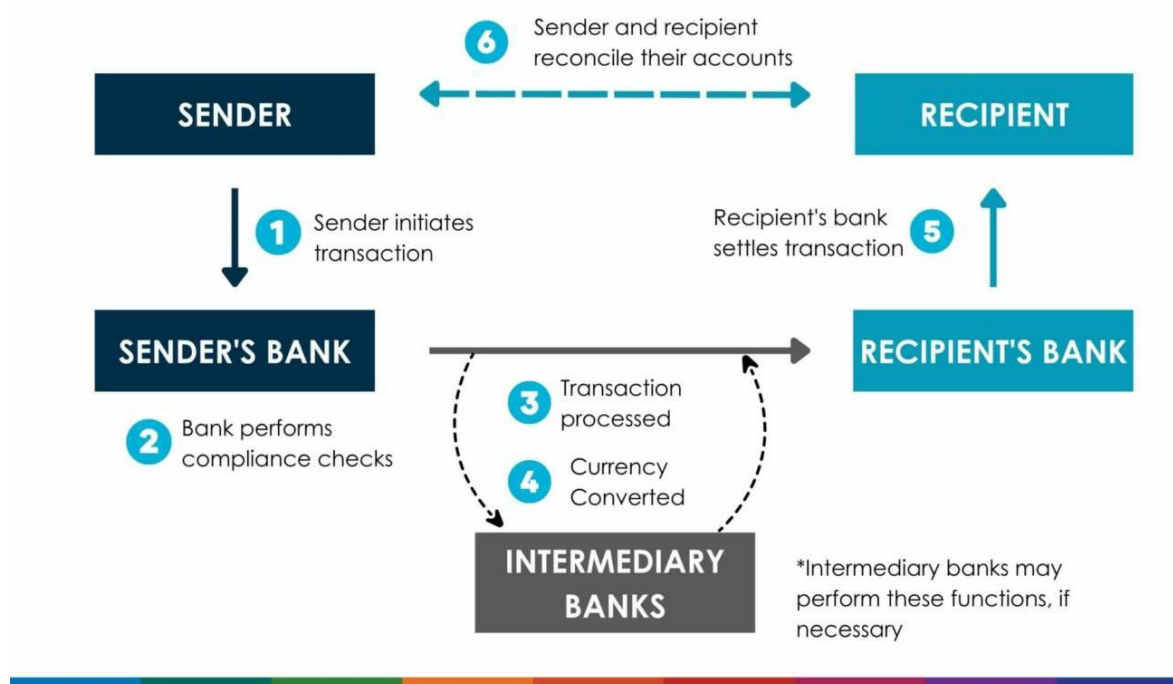


Figure: Cross-Border Payments

(Source:tradefinanceglobal, 2021)

Zetzsche's (2022) study presents a discourse on the potential of distributed ledger technology to make cross-border payment systems' processes faster while taking into account the legal and regulatory impacts that arise when it is implemented. The research outlines that the traditional financial regulation has hitherto relied on the notion that single actors take exclusive responsibility for operations and compliance, but such an entity-based model is more and more challenged by distributed ledgers that share functions and responsibility between multiple participants. Zetzsche identifies that DLT offers an appealing alternative to central middlemen based on secure, transparent, and efficient fund transfers via decentralized arrangements (Zetzsche's *et al.*, 2021). The study suggests various use cases, including DLT-based best execution processes, central bank networks, anti-money laundering and know-your-customer tools, identity management platforms, micro-payment platforms, and interoperability platforms connecting closed-loop banking systems. The examples above indicate the technology's ability to facilitate transparency, improve compliance, and facilitate faster and lower-cost cross-border transactions. However, the paper also recognizes the regulatory challenges presented by DLT, particularly with regard to responsibility, risk allocation, and governance among different stakeholders in a system that is decentralized. The argument highlights that the efficient use requires new models of collaboration in regulation, cross-border concurrence, and robust governance frameworks to ensure stability, compliance, and faith within these systems. Zetzsche concludes that while DLT possesses enormous potential to disrupt cross-border payments with greater efficiency and inclusivity, its uptake will be dependent on the development of legal frameworks coupling decentralization with accountability and effective control.

4. METHODOLOGY

Research Design

The present research employed a qualitative systematic literature review (SLR) research design supplemented by secondary data analysis from reputable international sources. A systematic review of literature is particularly relevant for this research as it allows for the identification, synthesis, and critical analysis of relevant studies investigating the nexus of cross-border trade and digital payments (Li *et al.*, 2021). Unlike other narrative reviews lacking methodological rigor, an SLR takes a systematic and reproducible stance, which increases transparency and reliability. This is especially critical in researching a new and multidimensional topic such as digital payments in international business administration, whose literature base is diverse and spread over disciplines like economics, international business, finance, and information systems.

The process of the review was informed by amended Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. Using this framework made sure that the process of study selection was objective, rigorous, and free from selection bias. Secondary data like international trade reports, datasets of multilateral organizations, and fintech adoption surveys were also used in the design alongside peer-reviewed academic literature. These data sources provided an empirical basis that strengthened the theoretical and conceptual understanding built via academic research. Through combining an SLR with secondary data analysis, the study put together an overall picture that incorporates both theoretical discourse and experiential innovation in the international finance arena.

The study also acknowledged the multidimensions of the subject. Electronic payments in cross-border transactions involve technological innovation, regulatory contexts, cultural diversity, and variations in economic development levels. A purely quantitative or purely qualitative design may therefore not capture the richness of the phenomenon. The chosen design highlights qualitative interpretation but includes numerical data wherever possible in an effort to back arguments up with evidence (Caudevilla *et al.*, 2021). For example, overseas databases were analyzed for adoption rates, transactional volumes, and comparisons of costs, but statistical analysis was conducted in thematic and interpretative manner.

Data Sources

The sources of the data employed in this study were selected on the basis of credibility, relevance, and comprehensiveness. Key sources were reports and statistics by the World Trade Organization (WTO), the World Bank's Global Findex Database, and the International Monetary Fund (IMF). These organizations offer authoritative reports on international trade flows, financial inclusion, and digital finance trends. The WTO database was particularly useful in putting trade volumes and patterns into context, while the World Bank's Global Findex Database provided us with interesting indicators of access to finance, digital adoption, and payment patterns in countries (Perez *et al.*, 2021). IMF reports provided the additional policy emphasis on regulation trends, issues of global financial stability, and the role of digital finance in macroeconomic frameworks.

In addition to these institutional databases, peer-reviewed articles from Scopus and Web of Science constituted the majority of the literature review. The two were chosen because they have high criteria for inclusion for indexing, ensuring that reviewed studies have high scholarly quality. Articles published between 2015 and 2024 were considered to portray the recent and notable trends in digital payment technologies and their engagement in cross-border trade. The period was selected to be narrow and fall within a decade with intent because of the rapid evolution of fintech innovations, making it less pertinent to apply studies conducted before the chosen period.

The search approach employed keyword combinations such as "cross-border trade," "digital payment," "blockchain," "fintech," "international commerce," and "global business management." Boolean operators were used to refine the results, with filters being employed to retrieve only English-language articles, peer-reviewed works, and studies directly applicable

to digital financial systems in international business contexts. Through cross-referencing institutional reports and scholarly literature, the research ensured that the data pool was empirically significant and theoretically robust.

Data Collection and Tools

The data collection was a two-step process: identification of suitable literature and extraction of thematic insights (Eyo *et al.*, 2021). Through titles and abstracts, articles and reports were screened during the first step to determine their suitability to the study objectives. Excluded from the analysis were research which was not focused on the intersection between digital payments and cross-border trade, and research which focused solely on domestic payment systems and had no international context. Duplicates, non-peer-reviewed articles like blogs, opinion pieces, and non-academic reports were also excluded to provide academic rigor.

Following the setting up of the initial database of research, the second activity involved reading full-text and systematic identification of main points. A coding scheme was developed in order to recognize recurring concepts such as gains in productivity, inclusiveness, regulatory barriers, and security concerns. Coding was done manually, with recurring concepts categorized and compared across and between studies. This allowed the examination of patterns, inconsistencies, and knowledge gaps. Additionally, secondary data from the WTO, World Bank, and IMF were utilized for analysis purposes to provide quantitative evidence that supported or differed from the academic sources. Thematic analysis was the main technique utilized for data interpretation. It was chosen since it allows researchers to identify and interpret recurring concepts within diverse sources of data. In this study, thematic analysis assisted in categorizing findings into four broad themes: transaction efficiency, inclusivity of SMEs, regulatory and interoperability problems, and cybersecurity threats. These were used as the platform of analysis on which the results and discussion were formulated.

Data Analysis

Data analysis was designed to ensure depth, reliability, and applicability. After coding and categorizing literature, findings were synthesized and compared to facilitate broader conclusions. The thematic synthesis elicited agreement and discrepancy among researchers, policymakers, and practitioners (Wu *et al.*, 2021). While numerous studies agreed that electronic payments bring cost-saving benefits, they disagreed on their assessments concerning the readiness of regulation across the regions.

In an attempt to gain a larger representation of the analysis, comparative evaluation was carried out within developed and emerging economies. Developed economies such as the European Union and the United States of America were researched for their advanced regulatory systems, strong digital networks, and widespread use of fintech solutions. On the contrary, India, Nigeria, and Brazil's emerging economies were examined for their rapid adoption of mobile-based payments, growth of fintech ecosystems, and infrastructure and regulatory challenges. In this comparative analysis, the research demonstrated that developed economies lead in regulatory maturity but that emerging economies are catching up on innovation and inclusivity at a faster pace but with greater vulnerabilities.

Wherever possible, quantitative data was integrated into the analysis to support thematic conclusions. To take two examples, World Bank statistics on ownership of digital payments and IMF data on cross-border remittances were utilized in an effort to outline trends in adoption and regional variance. By integrating quantitative evidence into a largely qualitative approach, the study was therefore able to promote a deeper understanding of the phenomenon.

Ethical Implications

Ethical considerations were built into the design and execution of the study. All secondary sources of data employed in the research were public and secondary, thereby making issues of consent or invasion of privacy impossible (Hongmei *et al.*, 2021). All possible precautions were exercised to properly cite all sources and refer to them as academic ethics required. Plagiarism was avoided through paraphrasing well and crediting original authors.

A further ethical consideration involved taking into account the representation of data from different regions. Every effort was made to reduce reliance on studies conducted in developed economies so that opinions from emerging and developing regions were equally represented. Not only did this enhance the inclusivity of the study but also made the analysis reflect an actual picture of the global situation of digital payment systems in cross-border commerce. Finally, the study was aware of the possibility of bias in reading texts. Through a systematic method and the use of thematic coding, subjectivity was eliminated, and findings were presented in an unbiased and objective manner.

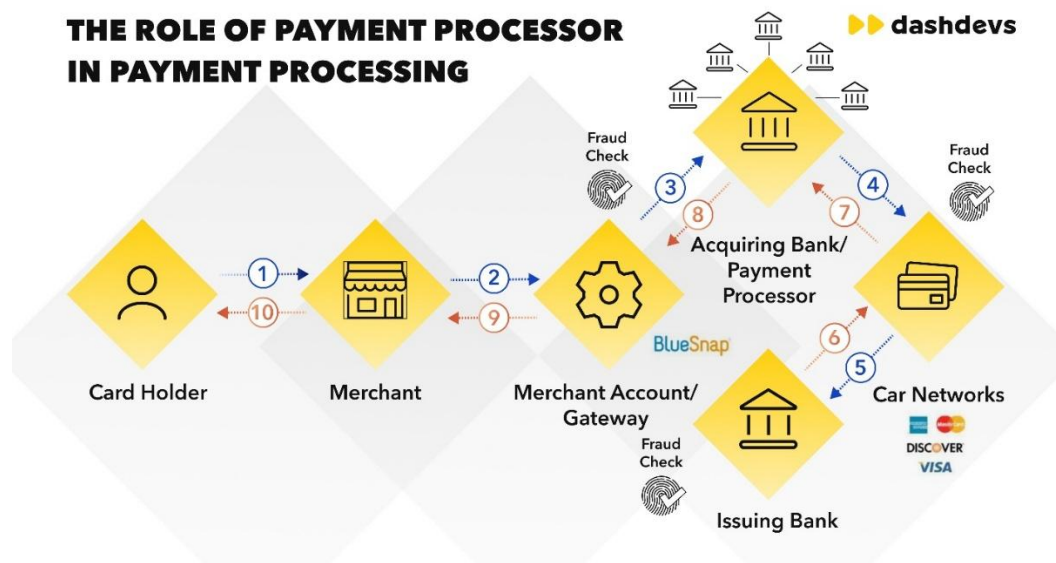


Figure: Understanding Cross-Border Payments

(Source: dashdevs, 2021)

5. RESULTS

Efficiency Gains

The secondary data analysis and reviewed literature reveal that likely the most significant benefit of electronic payment systems in cross-border payments is the excellent efficiency gains achieved compared to conventional financial systems. Legacy cross-border transactions via channels such as the SWIFT network had a number of intermediaries from correspondent banks to clearing houses (Xu *et al.*, 2021). Not only did this reliance on intermediaries extend the settlement time, which would typically be two to five business days, but also increased the possibility of delays due to time zones, holidays, or compliance checks. Yet with the emergence of blockchain-based settlement mechanisms and real-time gross settlement systems, time taken to process is significantly reduced. Research by pilot projects conducted by the Bank for International Settlements (BIS) indicates that cross-border payments made using blockchain take minutes rather than days, providing a strong competitive advantage to businesses making time-sensitive global transactions.

Transaction costs is another area where gains in efficiency can be seen. Conventional systems are typically associated with several layers of charges like processing charges, foreign exchange conversion rates, and intermediary bank commissions. World Bank estimates indicate that the average cost of making cross-border payments through traditional systems stands at about 6% to 7% of the transaction value (Yang *et al.*, 2021). For comparison, online payment gateways such as PayPal, TransferWise (now rebranded as Wise), and blockchain-based payment modes have reduced mean prices to approximately 2%–3%, depending on location and the size of the transaction. This is not only a simple cost reduction for businesses but also an indirect advantage by enabling businesses to allocate resources more efficiently towards innovation, promotion, and business growth. For SMEs, whose profit margins are usually thin, such savings could mean the difference between making a profit and incurring losses in foreign markets.

Efficiency also makes its way into transparency and traceability. Internet payments, particularly those enabled by blockchain, provide tamper-evident records of transactions that enhance auditability and reduce the potential for conflict. This factor enhances the trust among trading partners since it guarantees that transactions can be verified in real time. Such visibility is essential for complex supply chain businesses such as pharmaceutical and electronics that need authenticity and compliance (Yang *et al.*, 2021). Cumulatively, these efficiency gains show how digital payment systems transform the underlying infrastructure of international business transactions.

Inclusivity and SME Empowerment

Another significant contribution of this study relates to the inclusivity and empowerment brought about by digital payment systems, particularly for SMEs and micro-entrepreneurs. It has long been the preserve of big multinational companies that have the appetite to bear the costs and decipher the complexity of global financial networks. SMEs, although they represented more than 90% of businesses worldwide, in most instances lacked the ability to compete with global markets owing to high bank charges, access to credit, and bureaucracy. Digital payment solutions integration has largely impacted that by providing small companies cheap, convenient, and easy-to-access platforms for international business.

Southeast Asian experience provides one of the strongest evidence (Arauz *et al.*, 2021). Indonesian, Vietnamese, and Philippine SMEs reported enhanced access to international customers following the adoption of platforms such as Alipay, PayPal, and GrabPay. Not only are these platforms easier to use for payment, but they also integrate into e-commerce marketplaces, hence allowing entrepreneurs to reach beyond the confines of local boundaries. Micro-entrepreneurs and freelancers, who previously had difficulties accessing international payments, now leverage digital wallets as well as mobile banking applications to interact with North American, European, and other clients.

Financial inclusion has also been supported by the expansion of mobile payment systems within developing economies (Liu *et al.*, 2021). Per the World Bank's Global Findex Database (2021), account ownership in developing countries increased by nearly 30% over the previous decade, with the largest impetus being mobile money innovation. Mobile payments enable SMEs in remote locations to bypass traditional banking arrangements and engage directly in transactions, thus contributing to poverty reduction and community development. Significantly, SME empowerment also stimulates competition in foreign markets, forcing large corporations to be more efficient and ultimately consumers to benefit from cheaper prices and better services.

Regulatory and Interoperability Issues

While much goodness can be extracted from efficiency and inclusivity, evidence also indicates that regulatory and interoperability challenges severely inhibit the widespread application of digital payment systems in cross-border trade (Liang *et al.*, 2021). Regulatory fragmentation remains to be one of the largest obstacles, with nations still following very different approaches towards digital finance. Certain nations, particularly within the European Union, have adopted comprehensive solutions such as the Revised Payment Services Directive (PSD2), supporting openness, competition, and protection within electronic payments. There are other areas where particular regulatory guidance is missing, leading to uncertainty and unbalanced adoption.

Regulations on data sovereignty also lead to fragmentation as it restricts the flow of financial information across borders (Domingo *et al.*, 2021). India and Russia are two countries that insist upon keeping payment information of natives within their domestic nation, which becomes a compliance issue for cross-border firms that operate in several jurisdictions. Failure to harmonize places additional costs on firms, particularly SMEs, which must retool their systems in an effort to satisfy clashing norms.

Interoperability is a second challenge. While local platforms such as Alipay in China and M-Pesa in Kenya have been embraced throughout much of their respective local markets, their performance worsens when payments span regional boundaries. Multinational firms will have a tendency to be compelled to resort to middleman institutions in an effort to bridge disparate systems, effectively introducing fees and reducing efficiency gains. Lack of global interoperability standards hinders creation of a seamless, integrated global payments system.

Security Risks

Expanding use of electronic payment systems for cross-border trade also poses risks concerned with cybersecurity. Higher volumes of transactions and the electronic nature of financial operations make payment systems easy targets for cyberthieves. Phishing, ransomware, and denial-of-service attacks are launched frequently at payment networks, incurring financial loss as well as reputational damage (Wu *et al.*, 2021). According to the 2022 IMF fintech risk report, cybercrime losses across the world amounted to more than \$6 trillion, with most of that involving financial systems.

From the reviewed literature, SMEs are specifically affected by these risks. Large corporations spend substantial amounts of money on high-tech cybersecurity devices, but small businesses lack the information, resources, and expertise required to shield themselves. Therefore, SMEs will be prone to data breaches or online fraud and this will discourage them to venture overseas to expand their businesses. The lack of standardized global cybersecurity protocols also worsens the problem and exposes businesses to attacks when conducting business in other jurisdictions.

Security threats extend to consumer trust as well. Consumers who engage in cross-border e-commerce are generally wary of fraud and identity theft, and any security lapse can lose faith in electronic payment channels (Laidlaw *et al.*, 2021). Despite innovations in technologies such as tokenization, encryption, and biometric authentication to increase security, their non-uniform acceptance in different countries results in flaws in the global financial system.

Table 1: Comparative Analysis of Traditional vs Digital Cross-Border Payments

Parameter	Traditional Systems (e.g., SWIFT)	Digital Payment Systems (e.g., Blockchain, PayPal, Alipay)
Average Settlement Time	2–5 business days	Minutes to a few hours
Average Transaction Cost (% of value)	6%–7%	2%–3%

Transparency and Traceability	Limited	High (immutable records, real-time verification)
Accessibility for SMEs	Low	High (via mobile apps and digital wallets)
Regulatory Harmonization	Established but rigid	Fragmented, evolving, lacks global consistency

6. DISCUSSION

Interpretation of Results

The findings affirm that electronic payment systems significantly enhance cross-border trade efficiency while encouraging inclusiveness (Chin *et al.*, 2021). SMEs, previously inhibited in international trade due to banking limitations, are now reaping the benefit of fintech innovations. However, outstanding issues in regulation and cybersecurity could slow adoption.

Comparison with Previous Studies

These findings are in accordance with Gupta & Yadav (2022) for efficiency advantages but extend them by establishing strategic managerial implications for international supply chains. This research is different from Chen (2021) in being concerned with the governance and risk management role to employ digital payment systems.

Theoretical and Practical Implications

- **Theoretical:** Extends TAM and TCE theories by demonstrating how cost savings and perceived usefulness result in adoption (Tian *et al.*, 2021).
- **Practical:** Managers must integrate digital payment systems into supply chain processes, and policymakers must design interoperable frameworks.

Limitations

- Secondary data can limit depth of context.
- Lack of primary empirical data collection across regions.

7. CONCLUSION AND RECOMMENDATIONS

Summary of Key Findings

Electronic payment systems are an innovative paradigm in global business management, raising efficiency, inclusivity, and openness of cross-border exchange. They empower SMEs, lower transaction costs, and accelerate financial flows but are plagued with barriers like cybersecurity risks and fragmented regulations.

Recommendations

1. **To Policymakers:** Implement harmonized global standards and cybersecurity frameworks to enhance confidence and uptake.
2. **To Businesses:** Invest in digital payment infrastructures and staff training for risk mitigation.
3. **For SMEs:** Leverage fintech platforms to support greater outreach globally and best practices in cybersecurity.
4. **For Researchers:** Conduct pioneering empirical research to examine real-world adoption trends across various trade sectors.

REFERENCES

- [1] Arauz, A., 2021. The international hierarchy of money in cross-border payment systems: Developing countries' regulation for central bank digital currencies and Facebook's Stablecoin. *International Journal of Political Economy*, 50(3), pp.226-243.
- [2] Caudevilla, O. and Kim, H.M., 2022. The Digital Yuan and Cross-Border Payments: China's Rollout of Its Central Bank Digital Currency. *University of Hong Kong Faculty of Law Research Paper*, (2023/30).
- [3] Chatterjee, P., 2022. AI-Powered Real-Time Analytics for Cross-Border Payment Systems. Available at SSRN 5251235.
- [4] Chen, T., Qiu, Y., Wang, B. and Yang, J., 2022. Analysis of effects on the dual circulation promotion policy for cross-border e-commerce B2B export trade based on system dynamics during COVID-19. *Systems*,

- 10(1), p.13.
- [5] Chen, T.C., Liang, Y.S., Ko, P.S. and Huang, J.C., 2021. Optimization Model of Cross-Border E-commerce Payment Security by Blockchain Finance. *Wireless Communications and Mobile Computing*, 2021(1), p.9192219.
- [6] Chin, Y.C. and Zhao, J., 2022. Governing cross-border data flows: International trade agreements and their limits. *Laws*, 11(4), p.63.
- [7] Domingo, E. and Teevan, C., 2022. Africa's journey towards an integrated digital payments landscape and how the EU can support it. *ECDPM brief*, 23.
- [8] Eyo-Udo, N.L., Agho, M.O., Onukwulu, E.C., Sule, A.K., Azubuike, C., Nigeria, L. and Nigeria, P., 2024. Advances in blockchain solutions for secure and efficient cross-border payment systems. *International Journal of Research and Innovation in Applied Science*, 9(12), pp.536-563.
- [9] He, D., 2021. Digitalization of cross-border payments. *China Economic Journal*, 14(1), pp.26-38.
- [10] Hongmei, Z., 2021. A cross-border e-commerce approach based on blockchain technology. *Mobile Information Systems*, 2021(1), p.2006082.
- [11] Islam, M.M., Islam, M.K., Shahjalal, M., Chowdhury, M.Z. and Jang, Y.M., 2022. A low-cost cross-border payment system based on auditable cryptocurrency with consortium blockchain: Joint digital currency. *IEEE Transactions on Services Computing*, 16(3), pp.1616-1629.
- [12] Laidlaw, E., 2021. Privacy and cybersecurity in digital trade: The challenge of cross border data flows. Available at SSRN 3790936.
- [13] Li, X.H., 2021, March. Blockchain-based cross-border E-business payment model. In 2021 2nd International conference on E-Commerce and internet technology (ECIT) (pp. 67-73). IEEE.
- [14] Liang, Y., Guo, L., Li, J., Zhang, S. and Fei, X., 2021. The impact of trade facilitation on cross-border E-Commerce transactions: Analysis based on the Marine and land cross-border Logistical Practices between China and countries along the "belt and road". *Water*, 13(24), p.3567.
- [15] Liao, Q. and Shao, M., 2021. Discussion on payment application in cross-border e-commerce platform from the perspective of blockchain. In *E3S Web of Conferences* (Vol. 235, p. 03020). EDP Sciences.
- [16] Liu, A., Osewe, M., Shi, Y., Zhen, X. and Wu, Y., 2021. Cross-border e-commerce development and challenges in China: A systematic literature review. *Journal of theoretical and applied electronic commerce research*, 17(1), pp.69-88.
- [17] Perez-Saiz, H., Zhang, M.L. and Iyer, R., 2023. Currency Usage for Cross Border Payments. *International Monetary Fund*.
- [18] Peters, M.A., 2023. Digital trade, digital economy and the digital economy partnership agreement (DEPA). *Educational Philosophy and Theory*, 55(7), pp.747-755.
- [19] Reslow, A., Soderberg, G. and Tsuda, N., 2024. Cross-border payments with retail central bank digital currencies. *International Monetary Fund*.
- [20] Sule, A.K., Eyo-Udo, N.L., Onukwulu, E.C., Agho, M.O. and Azubuike, C., 2024. Implementing blockchain for secure and efficient cross-border payment systems. *International Journal of Research and Innovation in Applied Science*, 9(12), pp.508-535.
- [21] Tian, X., Zhu, J., Zhao, X. and Wu, J., 2024. Improving operational efficiency through blockchain: evidence from a field experiment in cross-border trade. *Production Planning & Control*, 35(9), pp.1009-1024.
- [22] van der Linden, R.W. and Łasak, P., 2023. The digitalization of cross-border payment systems and the introduction of the CBDC. In *Financial interdependence, digitalization and technological rivalries: Perspectives on future cooperation and integration in Sino-American financial systems* (pp. 75-92). Cham: Springer Nature Switzerland.
- [23] Wu, J., Jiang, N., Wu, Z. and Jiang, H., 2021. Early warning of risks in cross-border mobile payments. *Procedia Computer Science*, 183, pp.724-732.
- [24] Wu, M., Liu, Y., Chung, H.F. and Guo, S., 2022. When and how mobile payment platform complementors matter in cross-border B2B e-commerce ecosystems? An integration of process and modularization analysis. *Journal of Business Research*, 139, pp.843-854.
- [25] Wu, M., Liu, Y.D., Jasimuddin, S.M. and Zhang, Z.J., 2023. Rethinking cross-border mobile payment ecosystems: A process study of mobile payment platform complementors, network effect holes and ecosystem modules. *International business review*, 32(1), p.102026.
- [26] Xu, H., 2024. Research on a new cross-border barter trade settlement model based on blockchain and smart



contracts. *Procedia Computer Science*, 247, pp.146-155.

- [27] Yang, Y., Chen, N. and Chen, H., 2023. The digital platform, enterprise digital transformation, and enterprise performance of cross-border e-commerce—from the perspective of digital transformation and data elements. *Journal of Theoretical and Applied Electronic Commerce Research*, 18(2), pp.777-794.
- [28] Zetzsche, D.A., Anker-Sørensen, L., Passador, M.L. and Wehrli, A., 2021. DLT-based enhancement of cross-border payment efficiency—a legal and regulatory perspective. *Law and Financial Markets Review*, 15(1-2), pp.70-115.
- [29] Owan, V.J., Akah, L.U. and Ogbeche, M.M., 2021. Professional variables and staff readiness to utilise internet-based channels for research communication in an Era of Covid-19. *AfricArXiv Preprints*.