

Analysis of the Development and Business Opportunities of Digital Business in Indonesia in the Last Five Years

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ABSTRACT

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Indonesia's digital economy has shown rapid growth over the past five years. The e-Conomy SEA 2024 report noted that the gross merchandise value (GMV) of the digital economy increased from US\$27 billion in 2018 to US\$90 billion in 2024, with projections of reaching US\$200–360 billion by 2030. The largest contribution comes from the e-commerce sector, which reached US\$65 billion in 2024. Meanwhile, the adoption of digital payments and fintech is increasing rapidly; Bank Indonesia reported that electronic money transactions increased from 47.2 trillion rupiah in 2018 to 594.2 trillion rupiah in 2024. This article is designed to map trends, analyze opportunities, and link digital business developments in Indonesia to government policies, technological developments, consumer behavior, and the startup and MSME ecosystems. The research will employ a systematic literature review approach and secondary data analysis from government reports, scientific journals, and industry surveys. In addition to examining e-commerce and fintech, the study will also examine the edtech subsector—which is projected to have a market value of US\$3.23 billion in 2024 with a predicted annual growth of 11.79% through and healthtech, with transaction value projected to increase from US\$16 billion in 2023 to US\$34 billion in 2027. Challenges such as digital infrastructure inequality, talent shortages, data privacy and cybersecurity regulations, and funding gaps will also be part of the analysis. This research is expected to provide a comprehensive mapping and strategic recommendations for the government, business actors, and researchers to strengthen Indonesia's digital business ecosystem.

INTRODUCTION

The development of the internet and digital technology has driven a fundamental transformation in global economic activity. In Indonesia, this phenomenon is increasingly relevant due to its large population, young demographic, and increasing internet penetration. The 2024 APJII survey showed that Indonesian internet users reached 221.56 million, with a penetration rate of 79.5%, up from 64.8% in 2018 (Indonesia, 2024).

This trend aligns with the growth of key subsectors of the digital economy. The 2024 e-Conomy SEA Report recorded a gross merchandise value (GMV) of the digital economy of US\$90 billion in 2024, with e-commerce contributing US\$65 billion (Google et al., 2024).

Furthermore, the fintech sector is growing rapidly; QRIS adoption has reached 56.3 million users, with 2.6 billion transactions worth 262.1 trillion rupiah in the first quarter of 2025 (Bank Indonesia, 2025).

Despite significant growth in the digital economy, its contribution to GDP remains limited. The East Ventures–Digital Competitiveness Index (EV-DCI) 2025 shows that Indonesia's digital economy contributes only 4–5% to GDP, while the government is targeting a 20% contribution by 2045 (East Ventures, 2025). This situation indicates a research gap related to mapping cross-subsector trends, contributions to the economy, and analyzing long-term digital business opportunities (Ali & al., 2023).

However, rapid macro growth does not automatically mean that digital economic development is evenly distributed or strategically optimized. Indonesia still faces structural challenges related to unequal internet quality, regional disparities, limited digital capability among smaller firms, and evolving governance in data protection and digital competition. The World Bank has warned that a significant digital divide persists across spatial and socioeconomic groups in Indonesia, while recent Indonesian policy discourse has emphasized the need to strengthen trust and governance in the digital environment through the implementation of personal data protection regulations. This means that digital business growth must be examined not only from the perspective of expansion but also from the perspectives of inclusiveness, readiness, and sustainability.

The Indonesian case is particularly interesting because several digital subsectors have grown simultaneously and interact with each other. Besides e-commerce, digital finance has expanded quickly through QRIS and electronic money adoption. Bank Indonesia reported that by the first half of 2025, QRIS had reached 57 million users and 39.3 million merchants, with 93.16% of those merchants being MSMEs, while transaction volume reached 6.05 billion transactions worth Rp579 trillion. This indicates that digital business in Indonesia is increasingly embedded in everyday commercial activities and that MSMEs are central actors in the transformation. Such a trend makes Indonesia an important setting for analyzing not only market growth but also new business opportunities generated by platform-based ecosystems.

Recent studies also confirm that digital transformation has meaningful implications for Indonesian enterprises. Affandi et al., (2024), using survey data from 5,035 ultra-micro, micro, and small enterprises across 17 major provinces, found that digital adoption in processes such as e-procurement, point of sale (POS), e-marketing, e-commerce, and digital payment is positively associated with business performance and financial literacy. Their findings show that digitalization is not only a technological shift but also an economic capability that can improve firm outcomes. This evidence supports the argument that digital business development in Indonesia should be studied as a strategic driver of competitiveness rather than as a temporary market trend.

Other recent research has expanded the analytical lens by emphasizing the importance of institutional and ecosystem factors. Abdurrahman, (2025) argued that Indonesia's digital economy cannot be adequately explained only through infrastructure, business platforms, consumer interfaces, data ecosystems, and economic context but also requires regulation as a core analytical dimension. The study identified fragmented infrastructure, uneven digital literacy, interoperability problems, and constrained SME participation as major barriers, while also highlighting government incentives and public–private partnerships as important enablers.

This perspective is useful because it shows that digital business opportunities are shaped not only by market demand but also by policy coherence and institutional capacity.

At the firm level, evidence from Indonesian MSMEs also suggests that digital transformation produces value when accompanied by organizational capability. A 2025 study on Indonesian MSMEs found that innovation capability and digital IT capability partially mediate the relationship between business strategy and firm performance, implying that business success in digital environments depends on adaptive capability, not merely on technology adoption alone. This finding is important for the present research because it broadens the discussion from digital market growth to business opportunity formation. In other words, the opportunity side of Indonesia's digital business landscape cannot be understood only by observing aggregate growth indicators; it must also be connected to how firms convert digital change into strategic advantage.

Despite these important contributions, previous studies still leave a clear research gap. Much of the existing literature concentrates on a single dimension of digitalization, such as MSME adoption, fintech use, e-payment behavior, or regulatory barriers. Meanwhile, industry reports tend to describe market expansion but often do not integrate theoretical interpretation, cross-subsector comparison, and strategic implications into one coherent framework. As a result, there is still limited research that comprehensively maps the development of Indonesia's digital business from 2018 to 2024 across major subsectors while simultaneously linking growth patterns to consumer behavior, technological change, policy direction, and the startup–MSME ecosystem. This gap justifies the need for a broader and more integrative study.

Based on that gap, this study offers novelty in two main ways. First, it does not examine digital business in Indonesia through a single-subsector lens but through an integrated mapping of e-commerce, fintech, edtech, healthtech, and MSME-related digital opportunities over the 2018–2024 period. Second, it combines descriptive trend analysis with ecosystem interpretation, so the study not only identifies what has grown but also explains why these opportunities have emerged and how they relate to infrastructure, regulation, digital behavior, and enterprise capability. This integrative approach is expected to produce a more comprehensive understanding of Indonesia's digital business trajectory and to strengthen the analytical value of the study beyond a simple market overview.

Therefore, this research aims to analyze the development trends of digital business in Indonesia during 2018–2024 and to identify the most promising business opportunities emerging from that transformation. More specifically, the study is expected to contribute theoretically by enriching discussion on digital economy development in emerging markets, empirically by synthesizing recent national data and relevant prior studies, and practically by offering strategic insights for policymakers, business actors, startups, and MSMEs. The benefit of this research lies in its potential to support evidence-based decisions for building a more inclusive, innovative, and sustainable digital business ecosystem in Indonesia, especially as the country seeks to increase the contribution of the digital economy to national development in the long term.

METHOD

This study employed a quantitative research approach with a descriptive and explanatory design to analyze the development and business opportunities of digital business in Indonesia

during the 2018–2024 period. The population of this research consisted of secondary data sources related to the digital economy, including official government reports, international publications, and indexed scientific articles. The sample was determined using a purposive sampling technique, where data were selected based on relevance, credibility, and recency, such as reports from APJII, Bank Indonesia, BPS, Google–Temasek–Bain (e-Conomy SEA), East Ventures, and peer-reviewed journals indexed in Scopus and Google Scholar. The research instrument was a data extraction sheet used to systematically record key variables, including digital economy growth indicators, subsector performance, technology adoption trends, and policy factors influencing digital business development.

To ensure data quality, this study applied source triangulation and consistency checks across multiple datasets and publications. Data were collected through documentation and literature review methods, where relevant data were gathered, classified, and organized based on predetermined criteria. The research procedure began with a literature review, followed by data identification and selection based on inclusion criteria (2018–2024 and relevance to digital business sectors), data tabulation, and verification to ensure accuracy and comparability across sources.

The data analysis technique combined descriptive statistical analysis, trend analysis, and thematic analysis. Descriptive analysis was used to present key indicators such as gross merchandise value (GMV), digital transaction values, and user adoption rates. Trend analysis was applied to examine growth patterns of digital business subsectors over time, while thematic analysis was used to interpret relationships between digital business development, government policies, technological advancements, and consumer behavior. The analysis was supported by software tools such as Microsoft Excel for data tabulation and visualization, and NVivo or similar qualitative analysis software for coding and thematic synthesis. Through this integrated analytical approach, the study aimed to produce a comprehensive understanding of digital business trends and emerging opportunities in Indonesia.

RESULT AND DISCUSSION

Trends in Indonesian Digital Business Development (2018–2024)

Based on collected data, the development of digital businesses in Indonesia over the past five years has shown a very significant trend. The Gross Merchandise Value (GMV) of the digital economy increased from US\$27 billion in 2018 to US\$90 billion in 2024. This growth reflects the acceleration of digital transformation driven by increased internet penetration, technology adoption, and shifts in consumer behavior toward digital.

The e-commerce sector is a major contributor to this growth, with a value reaching US\$65 billion in 2024. This indicates that Indonesians are increasingly accustomed to conducting online transactions, supported by easy access to marketplaces and digital payment systems.

Furthermore, the fintech sector has also experienced a significant surge. The value of electronic money transactions increased dramatically from 47.2 trillion rupiah in 2018 to 594.2 trillion rupiah in 2024. The adoption of QRIS, which has reached tens of millions of users, demonstrates that digital financial inclusion is increasingly widespread across all levels of society.

On the other hand, the edtech and health-tech subsectors are starting to show promising growth. Edtech is growing in line with the need for digital learning, while health-tech is increasing due to the demand for technology-based healthcare services, especially post-pandemic.

Analysis of Growth Drivers

The rapid growth of digital businesses in Indonesia is influenced by several key factors:

a. High Internet Penetration

The number of internet users has reached more than 221 million people, with a penetration rate of nearly 80%, which is the main foundation of the digital ecosystem.

b. Changes in Consumer Behavior

Consumers increasingly prioritize convenience, speed, and efficiency in transactions, thus shifting to digital platforms.

c. Government Policy Support

Programs such as Making Indonesia 4.0 and the digital economy roadmap demonstrate the government's commitment to driving national digital transformation.

d. Technological Developments

The adoption of technologies such as AI, big data, and mobile computing is accelerating digital business innovation.

Digital Business Opportunities in Indonesia

Based on existing trends, there are several highly promising digital business opportunities:

a. Digitalization of MSMEs

MSMEs have significant opportunities to grow through digital platforms, both in marketing and operations.

b. Fintech and Digital Payments

The growth of digital transactions opens up opportunities for innovation in financial services such as lending, payment gateways, and e-wallets.

c. Edtech and Health-tech

The need for digital-based education and healthcare services will continue to grow.

d. Digital Marketing and Social Commerce

The increasing use of social media opens up significant opportunities in digital marketing and social commerce.

Synthesis with Theory

The results of this study align with the Technology Acceptance Model (TAM) and UTAUT theories, where technology adoption is influenced by perceived ease and usefulness. Furthermore, Schumpeter's concept of creative destruction is clearly evident in the disruptions occurring in various economic sectors due to digitalization.

Dynamics of Indonesia's Digital Economy Growth

Indonesia's digital economy growth from 2018–2024 shows an exponential trend, reflecting the acceleration of digital transformation across various sectors. The increase in GMV from US\$27 billion to US\$90 billion indicates a fundamental shift in the national economic structure. This growth is influenced not only by technological factors but also by socio-economic changes in society, which are increasingly adapting to digital innovation.

E-commerce, as a key sector, demonstrates strong dominance due to its ability to integrate producers and consumers on a single digital platform. Marketplaces function not only as a means of transaction but also as an ecosystem that supports logistics, payments, and marketing. This creates a significant multiplier effect on digital economic growth.

Transformation of Consumer Behavior and Its Implications

Changes in consumer behavior are a key factor in driving digital business growth. Today's consumers are no longer merely passive users but also play an active role in the digital ecosystem through interactions on social media, product reviews, and participation in social commerce. This phenomenon demonstrates that digitalization is not only technological but also social.

Furthermore, growing trust in digital payment systems is an important indicator of fintech development. The adoption of QRIS and e-wallets demonstrates that people are increasingly comfortable using cashless transactions. This has implications for increased financial inclusion, especially for those previously excluded from conventional banking services.

The Role of Government Policy in the Digital Ecosystem

The government plays a strategic role in creating a conducive digital ecosystem. Various policies, such as Making Indonesia 4.0 and the digital economy roadmap, demonstrate the government's commitment to driving national digital transformation. These policies focus not only on infrastructure development but also on human resource development and regulations that support innovation.

However, the effectiveness of these policies still faces various challenges, particularly in implementation at the regional level. The disparity in internet access between urban and rural areas is a major obstacle to equitable distribution of the digital economy. Therefore, a more inclusive policy approach based on local needs is needed.

CONCLUSION

Digital business development in Indonesia grew rapidly during the 2018–2024 period and became a key driver of national economic transformation, with e-commerce and fintech serving as its core pillars, while edtech and health-tech demonstrated strong future potential. This growth was driven by increasing internet penetration, shifts in consumer behavior, supportive government policies, and advances in digital technology; however, challenges such as infrastructure inequality, limited digital talent, regulatory issues, and funding constraints remained significant. Addressing these issues requires coordinated efforts among government, businesses, and academia to strengthen the digital ecosystem through improved infrastructure, digital literacy, talent development, and adaptive policies. Future research should focus on

firm-level and regional analyses to better understand how different actors and areas can effectively leverage digital transformation for inclusive and sustainable economic growth.

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