Int. j. adv. multidisc. res. stud. 2025; 5(5):1234-1241

Received: 03-09-2025
Accepted: 13-10-2025

International Journal of Advanced Multidisciplinary Research and Studies

ISSN: 2583-049X

Private Sector Development in Vietnam Amid Digital Transformation

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DOI: https://doi.org/10.62225/2583049X.2025.5.5.5100
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Abstract
Vietnam's private sector has become a principal engine of national growth, accounting for roughly half of GDP and over 80% of employment. In recent years, the Vietnamese government has set ambitious targets to further expand the private economy – for example, aiming for private enterprises to contribute 55–70% of GDP by the mid-2020s and reach 2 million registered businesses by 2030. Central to this drive is the ongoing wave of digital transformation. The national *Digital Transformation Program (2020–2025)* targets the digital economy to reach 20% of GDP by 2025 and 30% by 2030, reflecting the view that private firms especially SMEs – must harness digital technologies to scale up and compete globally. This study provides an in-depth analysis of Vietnam's private sector landscape in the digital era. It reviews the current structure of private enterprises (including demographics, contributions to GDP/employment, and composition of firms), examines major digital transformation trends (e.g. growth of e-commerce, fintech, cloud computing), and surveys government strategies and legal frameworks that facilitate (or hinder) business digitization (from national programs to new ICT laws).

Keywords: Private, Development, Vietnam Amid Digital Transformation

1. Introduction

In the decades since the Đổi Mới reforms of the late 1980s, Vietnam's economy has shifted from a state-controlled model to a dynamic market-oriented system. The private sector – once formally recognized only in 1986 – now comprises millions of enterprises and contributes about half of national output. This shift has been instrumental in transforming Vietnam into one of Southeast Asia's fastest-growing economies. As Vietnam pursues a high-income economy by 2045, the growth and modernization of the private sector is a top strategic priority. The 14th National Party Congress and recent government directives have set out targets such as two million private firms by 2030, aiming to expand private-sector GDP share from ~50% (mid-2020s) to around 70% by 2030.

Parallel to the expansion of the private economy, Vietnam is undergoing a rapid digital transformation. The government's *National Digital Transformation Program (2020–2025, vision to 2030)* envisions a digital economy contributing 20% of GDP by 2025 and 30% by 2030. New technologies – mobile internet, cloud computing, AI, big data, and e-payments are proliferating. Vietnam has been identified as the fastest-growing digital economy in ASEAN (growing 28% in 2022 and 19% in 2023). A recent report by Google-Temasek-Bain forecasts Vietnam's e-commerce *gross merchandise value* at about US$36 billion in 2024, driven by surging online retail and travel platforms.

The convergence of these trends private-sector expansion and digitalization – offers significant promise. Digital tools can help Vietnamese SMEs and larger companies increase productivity, cut costs, improve quality, and access new markets. The Vietnamese state has responded with new policies, laws, and institutional support to encourage businesses to go digital. At the same time, serious challenges remain: uneven broadband access, a shortage of qualified IT talent, limited financing for technology upgrades, and concerns about cybersecurity and data governance. This paper examines the current landscape of Vietnam's private sector amid digital transformation, integrating the latest data and literature. It covers the sector's structure and role in the economy, analyzes digital trends and adoption by firms, reviews government strategies and legal frameworks, highlights illustrative case studies of digital innovation in private enterprises, and discusses key challenges. Comparative insights with neighboring economies (e.g. Singapore, Malaysia, Thailand, Indonesia, the Philippines) are drawn where relevant. The article concludes with a look to the future and concrete recommendations for enabling Vietnam's private sector to thrive in the digital age.

2. Literature Review

A growing body of research examines Vietnam's SME sector and digitalization. SMEs (including micro and small enterprises) account for the vast majority of Vietnamese firms often cited at roughly 97–98% of all businesses – and employ the bulk of the workforce. Prior studies highlight the importance of SMEs to Vietnam's socio-economic development (generating around 50% of GDP and nearly half of jobs). However, the productivity of domestic SMEs has traditionally lagged foreign-invested enterprises, pointing to issues in skills, capital access and technology adoption.

Recent academic work on digital transformation in Vietnam notes a clear gap between public commitment and ground-level adoption. For example, Linh (2025) notes that while earlier surveys found most SMEs "unprepared for Industry 4.0," recent results show increased readiness post-COVID, driven by awareness of potential benefits (higher productivity, cost reduction, wider markets). Other analyses find that technological infrastructure, managerial leadership, and clear digital strategies are critical success factors for SME digitization, whereas financial constraints and entrenched business habits remain major obstacles. A World Bank–backed survey (Cirera *et al*., 2021) [15] similarly reports only a small share of firms fully embrace digital transformation, with the manufacturing sector notably trailing due to management and skill gaps.

Several studies emphasize that digital transformation is not a single event but an ongoing process involving people, processes, and technology. In Vietnam, SMEs often undertake only incremental steps (e.g. adopting social media marketing or e-commerce) rather than a wholesale overhaul. Qualitative research highlights "resource constraints, resistance to data-driven decision making, and limited digital leadership" as persistent challenges. Yet many authors note that Vietnamese firms increasingly recognize the need to digitize to compete. For example, one review finds that SMEs now see digital tools as necessary to join global value chains.

The policy environment and institutional support for digitization in Vietnam have also been studied. Researchers and development agencies note that the government has launched multiple initiatives (from strategy documents to pilot programs) to accelerate SME digitalization. These include comprehensive national programs (the 2020–2025 Digital Transformation Program), sectoral masterplans (e.g. a 2021–2025 e-commerce development plan), and local projects (digital transformation centers, advisory networks). Analyses by bodies like OECD and World Bank emphasize that policy coherence and regulatory clarity are crucial, and they advocate measures such as tax incentives, technology funds, and skills training to support SMEs in adopting technology (see below). Nonetheless, literature often concludes that research on Vietnam's digital economy is still nascent, particularly concerning systematic assessments of policy impact and long-term outcomes. Much prior work has been descriptive or based on pilot surveys, with limited high-level quantitative data on digital adoption across the economy.

In summary, existing literature establishes that Vietnam's SMEs and private firms are central to the economy and face both opportunities and hurdles in the digital era. While policies are in place and awareness is rising, actual implementation is uneven. This article synthesizes and updates these findings with the latest government statistics, reports and case examples, aiming to provide a comprehensive picture of the interplay between Vietnam's private sector development and digital transformation.

3. Methodology

This research follows a qualitative desk-review methodology, synthesizing up-to-date information from multiple sources. Primary data were drawn from official government documents (laws, decrees, statistical yearbooks), reputable news agencies (e.g. *Vietnam News*, *VietnamPlus*, *Nhan Dan*), international organizations (World Bank, OECD, ADB, etc.), and recent academic and industry studies specific to Vietnam's economy and technology landscape. Where possible, numerical data (enterprise counts, GDP shares, digital economy size, etc.) were verified against official releases or high-quality analyses. Case studies of private enterprises were identified through published articles, company reports, and development agency publications. The focus was on information post-2022 to ensure currency. Key documents included Vietnam's National Digital Transformation Program (Decision 749/QD-TTg, 2020), Ministry of Planning and Investment reports, and recent seminars or resolutions (e.g. Party Congress materials). Citations in the text follow the connected-source format, referencing specific lines of the cited documents. Given the breadth of the topic, this study does not involve primary fieldwork or original surveys; instead, it compiles and interprets the latest secondary data to produce a scholarly overview.

Current Landscape of Vietnam's Private Sector

Vietnam's private economy has grown rapidly since the Đổi Mới reforms. Today it encompasses **millions of business entities** and is integral to national development. According to official sources, as of 2025 there were over *6.1 million* "private economic sector" establishments in Vietnam. Of these, about *940,000* are formally registered enterprises (companies, partnerships, etc.), and the remainder are non-registered household businesses (small family firms and sole proprietorships). Household enterprises – which include everything from small shops to family workshops – number roughly 5.2 million. This breakdown indicates that while Vietnam's count of registered corporations may seem modest relative to large economies, a vast informal micro-enterprise segment exists.

Despite the informality of many private entities, their economic impact is substantial. Official data place the private sector's share of GDP at **around 50%**, a doubling of its mid-2010s level. The private sector also attracts a majority of investment: it accounts for over 56% of total social investment (i.e. non-state investment). Crucially, the private sector is now the largest employer: approximately 82% of Vietnam's workforce is employed in private companies or household enterprises. In short, the private economy drives production, services, and jobs throughout the country. It also contributes substantially to trade: private firms generate about 30% of import-export turnover and roughly 30% of state budget revenue.

Sectoral structure: Within the private economy, micro and small enterprises (particularly household businesses) predominate by number, while medium and large enterprises (the registered companies) dominate output. SME surveys indicate that roughly 97–98% of all Vietnamese enterprises are SMEs. These SMEs span diverse industries: from retail, food processing, textiles and services to low-technology manufacturing. Larger private conglomerates (e.g. in banking, retail, manufacturing) account for a sizable chunk of output but are far fewer in number. According to a recent study, Vietnam's private enterprises (including SMEs) contributed about 46% of GDP and 50% of employment on average in 2021. However, more recent figures (2024–25) from government-affiliated sources place the private sector's GDP share closer to 50%. This growth partly reflects continued state sector reforms (privatization of some SOEs) and rapid small business registration.

Foreign-invested enterprises (FDI firms) occupy a special niche. By some accounts, FDI firms account for around 17–22% of GDP. They are legally considered separate from the "domestic private sector" but often operate jointly in supply chains. In terms of capital, Vietnam has attracted over $300 billion of FDI stock (approximately two-thirds of GDP), with new registered projects hitting record highs in 2023. Nonetheless, foreign firms generally focus on exports, and linkages with local suppliers remain limited: one report noted that only about 5,000 Vietnamese SMEs are engaged in the global value chain (merely 0.001% of all enterprises). Strengthening SME linkages to foreign firms is an ongoing policy goal.

Policy emphasis and trends: Reflecting the private sector's critical role, Vietnam's leadership has repeatedly reaffirmed support for business growth. The Party and government resolutions underscore that the private sector "activates public resources" and should be a "breakthrough driving force" for prosperity. At a national steering committee meeting in March 2025, Deputy PM Nguyễn Chí Dũng highlighted that the aim is to make the private sector "a cornerstone" of industrialization and modernization. In concrete terms, policy targets include *expanding private firms from ~940,000 to 1.5 million by 2025, and to 2 million by 2030*, while boosting the private sector's GDP share to 55% by 2025. To achieve high-income status by 2045, the private sector will need to lead innovation and productivity improvements.

In summary, Vietnam's private sector is large and growing. It includes a multitude of small firms and an increasing number of medium/large companies. It now accounts for roughly half of economic output and an even larger share of employment. This sector's future expansion and modernization – including through digitalization – are seen as vital to Vietnam's aspirations. However, the existing composition (with many micro enterprises and low-productivity businesses) also suggests that challenges in firm capabilities and scale will need addressing. The next sections examine how digital trends are affecting these firms and what policy steps are being taken.

4. Digital Transformation Trends in Vietnamese Private Enterprises

Vietnam's private businesses are experiencing a rapid transition due to emerging digital technologies. This section surveys key trends in digital adoption and the growth of the broader digital economy.

Digital Economy Growth

Vietnam's digital economy (broadly defined as GDP from digital sectors or e-commerce, online services, etc.) has been growing at double-digit rates. According to industry reports, Vietnam's digital economy expanded by 28% in 2022 and 19% in 2023, making it the fastest-growing in Southeast Asia. In absolute terms, e-commerce and online services are now booming. Google-Temasek-Bain's *e-Conomy SEA 2024* report projects Vietnam's e-commerce gross merchandise value (GMV) at about US$36 billion in 2024, up 16% year-on-year. Within that, online travel services are expected to reach ~$5 billion (16% YOY growth), and online media (streaming, advertising, gaming) ~$6 billion in 2024. Even ride-hailing and food delivery (transport) are significant, with a GMV ~ $4 billion in 2024. Notably, overall profitability in these sectors has also improved – the SEA region saw profits triple from $4 billion in 2022 to $11 billion in 2024, reflecting more sustainable business models.

Government statistics echo these rapid growth rates. The Ministry of Information and Communications estimated the digital economy at 16.5% of GDP in 2023, surpassing the official 12% figure reported by the GSO (the discrepancy likely reflects differing definitions). Nevertheless, both sources confirm a strong upward trajectory. Trade-sector projections anticipate Vietnam's digital economy market could reach around US$45 billion by 2025, potentially rising to $90–200 billion by 2030.

Contributing factors include mobile and internet penetration. Vietnam has over 70 million smartphone users (expected 96.9% of Internet users by 2026), and mobile-broadband coverage has expanded even in rural areas. Private consumer adoption of e-payments (e-wallets like MoMo, ZaloPay) and online services (banking apps, e-commerce platforms) is becoming pervasive. Business-to-consumer and business-to-business e-commerce have grown accordingly: recent forecasts show Vietnam among ASEAN countries expected to more than double e-commerce volumes by 2030. The country's transition to 4G/5G networks and the introduction of a National Payment Corporation (NAPAS) have catalyzed digital transactions and fintech.

Enterprise Digital Adoption

Within the private sector, large firms and conglomerates tend to lead in formal digitization initiatives. Sectors such as banking, retail, telecom, and manufacturing have seen widespread adoption of cloud computing, ERP systems, online sales channels, and data analytics. For example, major banks in Vietnam have rolled out advanced mobile apps and e-banking platforms, while retailers and restaurants introduced online ordering and inventory management systems (many accelerated by COVID-19). Telecom companies (VNPT, Viettel, MobiFone) are themselves digital services providers and have invested in IoT and AI solutions for internal use and for their enterprise customers. Cloud service firms (like FPT Smart Cloud, Viettel Cloud) actively market digital transformation solutions to businesses. The January 2024 digital transformation workshop cited above underscored how tech companies are packaging SMEs-specific support (e.g. consulting bundles by MobiFone, FPT, CMC, etc.).

Among SMEs, the picture is more mixed. Many micro-enterprises still rely on basic digital tools (social media for marketing, simple accounting software) but lack comprehensive digital strategies. Surveys before 2020 often showed low readiness, but anecdotal evidence suggests a *pandemic-driven acceleration* in adoption. Businesses that required remote work or online sales during lockdowns began exploring digital channels. However, quantitative data indicate that a significant portion of SMEs have yet to fully embrace digital transformation. For instance, a World Bank pilot program found that although 80% of participating SMEs used a cloud ERP system after training, usage fell to only 35% after 18 months pointing to implementation challenges (discussed later).

In summary, Vietnam's private enterprises are gradually digitizing, but to varying degrees. Large firms often lead the way, while many SMEs are still at early stages. The overall trend, though, is upward: digital sales channels (e-commerce, online travel), digital payments, and use of cloud/AI are becoming increasingly common. The government's data on the number of "digital technology companies" (over 50,000 firms in 2023, +8% YOY) reflects this momentum. In the years ahead, we can expect more businesses to follow suit, spurred by market competition and policy incentives.

Government Strategies, Policies and Legal Frameworks

Vietnam's government has proactively developed a comprehensive policy ecosystem to foster digitalization of businesses. This section outlines the key strategies, programs, and legal measures currently in place.

National Digital Transformation Program

In 2020, the Prime Minister approved *Decision No. 749/QĐ-TTg (2020)*, establishing Vietnam's National Digital Transformation Program through 2025 (with vision to 2030). This program, spearheaded by the Ministry of Planning and Investment, sets out three pillars: *Digital Government, Digital Economy, and Digital Society*. For businesses, the program emphasizes building digital infrastructure and platforms, and promoting enterprise digitization to boost competitiveness. Importantly, it sets concrete targets: the digital economy should reach 20% of GDP by 2025 and 30% by 2030. It also calls for streamlined tax and financial mechanisms to support innovation, and the creation of a national digital government service portal. The Program assigns roles to ministries, provinces, and private sector partners. For example, telecom firms are designated to develop core infrastructure and ensure cybersecurity, while tech companies are tasked to build platforms and applications. Overall, Decision 749 provides an official roadmap, signaling the high-level commitment to digitalization.

SME-Focused Initiatives

Recognizing SMEs' lagging position, the government and affiliated bodies have launched targeted measures:

Agency for Enterprise Development (AED) programs: AED (under MPI) conducts workshops across all provinces to raise awareness of digital tools among SMEs, training thousands of firms. Since 2021, AED has directly trained over 14,000 businesses in 63 provinces and built a network of 150+ digital transformation consultants. These consultants advise SMEs on technology adoption.

Public-Private Partnerships: In October 2024, AED facilitated an MoU between five tech firms (MobiFone, MISA, FPT, CMC, 1C Vietnam) to create "support packages" specifically for SMEs. These packages include discounted software services (e.g. cloud accounting, management systems) and consulting, aimed at lowering costs for SME digitization.

Training and Education: Local governments and industry groups have organized digital literacy training. For instance, Hanoi's digital transformation center and HCMC's similar bodies hold seminars encouraging firms to use AI and advanced analytics. International partnerships (e.g. Google, AI Singapore) are funding vocational training (the HCMC digital economy plan funds a $15 million project to train 72,000 workers in AI skills by 2030).

Financing Support: The State Bank and credit institutions have introduced credit lines and grant schemes for technology upgrades. For example, a 2025 government decree (210/2025) simplifies procedures and provides incentives for investment into innovative SMEs, including those adopting new technologies. Banks have also pledged to not only lend but also mentor SME clients, acknowledging that lack of collateral and business plans is a barrier.

Legal Simplification: On the regulatory side, efforts like Resolution 84/NQ-CP (May 2020) and later resolutions aim to cut red tape and remove "conditional business" fields that hinder SMEs. Digitally, the government has made progress on e-governance (e.g. 100% of tax declarations now online) to facilitate business processes.

Laws and Regulations

Key legal developments in recent years have reshaped the digital landscape:

Law on Electronic Transactions (No. 20/2023/QH15, enacted June 2023): This replaces the 2005 law and addresses e-commerce, electronic signatures, data messages, etc. Notably, it introduces requirements for e-signature providers (including local presence rules) and tighter identity verification for digital contracts. It is intended to ensure the legal validity and security of electronic deals as the economy digitizes. Implementing decrees are being drafted by the Ministry of Information and Communications (MIC).

Telecommunications Law (No. 24/2023/QH15, effective 2024–25): Passed in Nov 2023 and coming into effect in stages, this law broadens the scope of telecom regulation to explicitly include OTT (over-the-top) services, cloud computing, data centers, IoT, and other "non-traditional" servicestrade.gov. For example, companies that provide cloud hosting or online streaming services will now fall under licensing and data regulations. This reflects a move to regulate digital infrastructure and services more comprehensively. The law is being implemented by MIC and includes phased transition periods (e.g. full provisions on data centers start in 2025).

Law on Digital Technology Industry (Draft, 2024–25): In mid-2024, MIC proposed a new *Digital Technology Industry Law* to regulate subsectors such as AI, big data, blockchain, robotics, etc. The draft law (released July 2024) classifies AI systems by risk level, prohibits certain uses (e.g. social scoring), and requires labeling of AI-generated content. It also offers tax incentives for digital tech products and targets building 150,000 digital startups by 2030 (according to press reports). Expected to be approved by 2025, this law is intended to position Vietnam as a global hub for digital industries.

Personal Data Protection Decree (No. 13/2023/ND-CP, Apr 2023): Vietnam issued its first comprehensive data privacy regulation, setting principles for lawful data processing (consent, purpose limitation, etc.) and penalties for misuse. It compels firms to appoint data officers and implement basic safeguards. SMEs must upgrade their data handling to comply, which the government acknowledges is challenging.

Cybersecurity Decree (Decree 53/2022/ND-CP): Supplementing the 2018 Cybersecurity Law, this decree requires data localization for certain online services and services providers in Vietnam. Firms offering telecom or internet services must store user data locally upon request by authorities. It also envisions future penalties for non-cooperation. While aimed at national security, this imposes cross-border data constraints that affect companies with global cloud services.

E-Commerce Master Plan (Decision 645/QĐ-TTg, 2020): A government roadmap to develop e-commerce by 2025, focusing on digital payments, logistics, and digital literacy. It set targets for increasing businesses selling online (e.g. reach 150,000 by 2025) and consumer uptake.

Institutional Frameworks

Implementing these strategies involves multiple agencies. The National Digital Transformation Committee (chaired by the PM) coordinates across ministries. Ministries like MIC, Industry & Trade (MoIT), Planning & Investment (MPI), Science & Technology (MOST), and Finance have specific roles. MPI's Agency for Enterprise Development (AED) is the main conduit to businesses. Local authorities (e.g. city planning committees) also have discretion to fund tech parks or local innovation hubs. International cooperation has been leveraged too: development partners (World Bank, GIZ, UNDP) have supported capacity-building programs for SMEs' digitization, and trade agreements (like CPTPP, EVFTA) include chapters that encourage digital services and e-commerce.

Summary of Policy Impact

The Vietnamese government's approach is multi-pronged: *setting ambitious targets*, *providing technical and financial support*, and *modernizing the legal environment*. Early evidence suggests rising business awareness: surveys and workshop feedback indicate enterprises are increasingly recognizing digital transformation as necessary. The expansion of e-government platforms (tax, customs, licensing) is also facilitating digital transactions. Nonetheless, as will be discussed, gaps remain between policy intent and firm-level execution. In particular, enforcement of new laws and the capacity of small firms to adapt are key issues.

5. Case Studies of Digital Adoption in Vietnamese Private Enterprises

Examining real-world examples helps illustrate how Vietnamese companies are digitizing and what results they achieve. This section highlights a few representative case studies from the private sector.

5.1 Rang Dong Lighting - From Traditional Manufacturer to Smart IoT Ecosystem

Background: Rang Dong is a 60-year-old Vietnamese joint-stock company known for manufacturing light bulbs, LED products, and thermos. Traditionally a hardware manufacturer, Rang Dong sought to transform itself by leveraging Internet of Things (IoT) and cloud technologies. Their vision was to evolve from making stand-alone products to providing integrated smart solutions for homes and agriculture (the "RalliSmart" platform).

Digital Strategy: Starting in 2020, Rang Dong partnered with TechX Corporation (an AWS Premier partner) and Amazon Web Services (AWS) to redevelop its platform on the cloud. They engaged in an "open innovation" model, collaborating with experienced engineers and international tech partners. Key elements of the strategy included: deploying IoT-enabled smart lighting and sensor devices ("Smart Home" products); aggregating data in cloud back-end systems; and building analytics/automation for customers. TechX led in technical design, notably implementing an auto-scaling cloud architecture on AWS to handle large data flows.

Implementation: Between 2020 and 2022, Rang Dong gradually digitized its operations and product line. The old IT infrastructure was revamped: new servers, network connectivity, and monitoring dashboards were set up (e.g. 20 real-time indicators with alerts). The company adopted cloud-based development pipelines to allow continuous updates of their RalliSmart system. Importantly, they also invested in human capital: Rang Dong staff received training from TechX on cloud operations and digital product management.

Results: The transformation yielded impressive outcomes. Rang Dong reports that its new smart products enabled it to enter high-growth markets (smart homes, smart cities, precision agriculture) that were inaccessible before. As a result, the company achieved an average annual growth rate of 20% from 2020 to 2022, double its pre-digital era growth pace. In other words, digitalization helped "turn existing challenges into opportunities," effectively doubling the business growth trajectory. Rang Dong also cites significant cost savings: by optimizing cloud resources, it reduced infrastructure costs by 20% while maintaining performance. These gains have strengthened the company's competitive position and earned it recognition as a digital pioneer in Vietnam's manufacturing sector.

Key takeaways: Rang Dong's case underscores several points: (a) even traditional manufacturers can successfully adopt advanced digital tech (IoT, cloud) to transform their business model; (b) strategic partnerships (with tech firms and platforms like AWS) and organizational learning are critical; (c) the gains can be substantial in terms of productivity, product innovation, and market expansion. It also highlights the importance of investing in infrastructure and talent to support new digital systems.

5.2 Tech SME ERP Pilot (World Bank Study) - SME Adoption Challenges

The World Bank partnered with a Vietnamese software firm to launch a "Digital SME" program in 2021, providing free access to a cloud-based enterprise resource planning (ERP) platform. This initiative, covering internal communications, HR, and CRM modules, was offered to hundreds of SMEs as a field experiment. The platform was designed for ease of use (accessible via smartphone/web, cost ~US$84/month normally) and targeted small firms (average ~40 employees).

Findings: Initial uptake was high: 605 firms enrolled in the program, and after training, nearly 80% of the "Digital Express" group used the ERP platform regularly. However, sustained usage dropped sharply over time. At the 18-month mark, only about 35% of those firms were still actively using the system. Qualitative follow-up revealed the reasons: many SMEs cited *time constraints* (they were too busy managing day-to-day operations to continue integrating the new software) and *staff issues* (lack of a dedicated "champion" to drive implementation, or loss of the champion). Firms that had a strong internal advocate and immediate pain points (like high paperwork costs) managed to keep using the system. Larger firms were initially slower to adopt (finding change more difficult), but once onboarded, they showed more intense usageblogs.worldbank.org.

Implications: This case study reveals that subsidizing digital tools alone is not enough; firms need not only technology access but also organizational capacity and motivation to change. Even with free software and support, many SMEs fell back to old habits. It highlights that human factors – management commitment, change leadership, and clear short-term ROI – are crucial. Training alone does not guarantee adoption. The experiment suggests that booster strategies (ongoing tech support, peer learning networks, linkage to financing or regulation benefits) may be needed to sustain digital transformation in small firms.

5.3 Digital Financial Services in Banking (Sectoral Example)

The financial sector in Vietnam has seen extensive digital adoption, with spillover benefits for SMEs and consumers. Major banks (e.g. Vietcombank, VietinBank, Techcombank) launched comprehensive digital banking platforms, mobile wallets, and e-KYC (electronic know-your-customer) processes. As a result, digital transactions have surged: by mid-2024, cashless payment use (cards and e-wallets) exceeded 40% of all payments, up from ~20% in 2018. While this example is at the industry level rather than one private company, it illustrates how a key private sector industry (finance) is actively using technology to reach customers and improve efficiency. The banks' digital services enable small businesses to manage accounts, apply for loans, and conduct international transactions online, thereby lowering operational hurdles.

Another private enterprise example is **MobiFone** (formerly a state-owned telecom arm but operating competitively) which has partnered with tech firms to offer e-wallets, digital signature services, and IoT connectivity packages to businesses. Similarly, **FPT Corporation** (a large private tech conglomerate) provides SMEs with software-as-a-service (e.g. cloud ERP, digital transformation consulting) and has examples of helping clients migrate to cloud infrastructure.

5.4 E-Commerce Platforms and Retailers

Vietnamese e-commerce players like Tiki, Sendo, and the local arm of Shopee have revolutionized retail for SMEs and consumers alike. These platforms allow small manufacturers and stores to sell nationwide with minimal upfront investment. During the COVID-19 crisis, many firms went online for the first time, leveraging e-marketplaces. For instance, GoViet (ride-hailing) and Grab integrated food & goods delivery, helping small restaurants and shops reach customers. Similarly, digital log-house firms now track supply chains with RFID and blockchain, improving transparency. These changes, although diffuse, collectively demonstrate how B2C and B2B digital platforms are transforming traditional business models in Vietnam.

Comparative Perspective on Challenges

These obstacles are not unique to Vietnam, but the context shapes their severity. Compared to Singapore or Malaysia, Vietnam lags in infrastructure quality and regulatory maturity. For instance, Singapore consistently scores highest in ASEAN on digital readiness indices, whereas Vietnam is still building those foundations. In relative terms, Vietnam does outpace countries like Indonesia or the Philippines in digital growth rates, but it also started from a lower baseline. Thailand and Malaysia have similar issues with rural connectivity and skills, but generally have more developed capital markets and enterprise support schemes. ASEAN peers also grapple with data protection rules, but Vietnam's early adoption of a PDP decree (2023) is ahead of some neighbors, although practical implementation still needs development.

In sum, while Vietnamese businesses have access to expanding digital opportunities, the journey is hampered by practical barriers. According to industry experts, continuing to remove these bottlenecks is essential. As Coc Coc executive Mai Thi Thanh Oanh observes, the government must "remove legal barriers and ensure fair competition" while investing in workforce development. Similarly, business advocates emphasize dismantling institutional hurdles and improving access to capital and technology. The next section discusses how Vietnam's situation compares regionally and the global implications.

6. Comparative Insights with Southeast Asia

In the regional context of Southeast Asia, Vietnam's private sector and digital transformation exhibit both parallels and divergences with its neighbors.

Digital Economy Growth: Vietnam's digital economy growth outpaces most ASEAN peers. As noted, Vietnam saw 19–28% growth rates recently, faster than the regional average. In 2022–23 it was projected to remain the fastest-growing ASEAN digital economy. In absolute terms, however, Vietnam's digital market is still smaller than that of Indonesia (Southeast Asia's largest economy) and somewhat behind Malaysia and Singapore. For example, Indonesia led SEA's internet economy (~$82B in 2023), largely due to its population size, whereas Vietnam's was lower. Trade projections indicate Vietnam's e-commerce market will more than double by 2030, a steep rise but from a smaller base than countries like the Philippines or Thailand. Singapore and Malaysia have higher digital GDP shares (often cited ~20–30%), partly reflecting their advanced finance and tech sectors. Thus, Vietnam's targets (30% of GDP by 2030) aim to catch up with these levels.

Private Sector Composition: Many ASEAN nations have a larger formal SME base. For instance, Thailand and Indonesia also have millions of SMEs, but often also significant investment from conglomerates. Vietnam's distinctive reliance on small household businesses (5.2M out of 6.1M entities) implies a more fragmented private economy than, say, Singapore's. This fragmentation means Vietnam's challenge of upgrading productivity is arguably more acute. On the other hand, the share of GDP from private/domestic enterprises in Vietnam (~50%) is now higher than in most ASEAN countries (except Singapore where almost all activity is private) and is converging to levels seen in Malaysia or Thailand.

Digital Infrastructure: Relative to some neighbors, Vietnam's digital infrastructure is moderate. Singapore leads regionally in broadband quality and ICT adoption indices; Malaysia and Thailand also have high 4G/5G coverage. Vietnam's telecom networks are expanding fast but still have rural gaps. On cybersecurity regulation, Vietnam's comprehensive laws (PDPD, Cybersecurity Decrees) are among the more stringent in ASEAN, perhaps on par with China or India. This creates a unique business climate: foreign and local firms must comply with local data rules, similar to Indonesia's data localization laws, but unlike more liberal Singapore or Malaysia (though they have their own compliance requirements).

SME Support Mechanisms: Many ASEAN governments have SME financing and tech adoption programs. For instance, Singapore provides grants (like PSG vouchers) and Malaysia runs a Smart Automation Scheme (SME digital incentives). Vietnam is ramping up its own supports (AED training, tech packages, credit lines), but as of 2025 these are still building up. Vietnam's dual focus on *digitalization + sustainable development* (the "double transformation" policy) is shared by others like Thailand (which has launched a "Thailand 4.0" digital strategy) but Vietnam distinguishes itself by integrating green growth with tech adoption in some policies.

In sum, **Vietnam is often the fastest climber but from behind**. Its growth rates exceed most peers, and government ambition matches regional digital agendas. Yet gaps in capacity and infrastructure compared to the region's best present competitive challenges. Internationally, Vietnam's private sector development amid digitalization can be seen as part of the broader "ASEAN digital economy" trend, where all governments recognize that SMEs are the backbone and are striving to bring them online. Vietnam's particular strength is in its speed of adoption and scale of ambition; its weakness lies in the structural constraints (capital, skills) it must overcome to realize that ambition.

7. Future Outlook and Recommendations

Vietnam's trajectory suggests that digital transformation will increasingly shape private sector development. Under current plans, the digital economy could contribute 30% of GDP by 2030 (target) and over half by 2045. The integration of **AI and automation** is already on the agenda: Vietnam's National Strategy on AI (2021) and ongoing experiments with AI in banking, education and healthcare indicate that more advanced technologies will diffuse into enterprises. Ho Chi Minh City's goal of making 25% of its GRDP digital by 2030, supported by a \$15 M AI skills program. exemplifies how local governments are preparing for an "AI-powered future". If these efforts succeed, we can expect Vietnamese firms to gradually move beyond basic e-tools to data-driven business models and smart manufacturing.

However, for this future to materialize broadly, key issues must be addressed. Based on the analysis above, the following recommendations emerge:

Invest in Digital Infrastructure: Continue expanding high-quality broadband (fiber and 5G) nationwide. The government's plan to universalize internet access and upgrade rural connectivity should be accelerated. Public-private partnerships for rural broadband, and incentives for cloud service providers to set up local data centers, would reduce latency and costs for businesses. Strengthening national infrastructure (e.g. an expanded.vn domain network and cybersecurity infrastructure) will build confidence for firms to go online.

Enhance Skills and Human Capital: A concerted push for digital skills is crucial. This includes integrating ICT training into school curricula, expanding vocational training (e.g. code academies, maker spaces), and subsidizing SMEs that hire tech graduates. Partnerships between industry and universities should be deepened (e.g. internship programs, joint R&D). The HCMC/Google AI training initiative is a model; similar schemes could target other sectors (finance, manufacturing) and regions. Additionally, awareness campaigns must reach small business owners to correct misconceptions about digitalization (one SME expert advises overcoming myths that "digital is only for large firms").

Facilitate Access to Finance: Develop specialized credit instruments and grants for digitalization. For example, introduce a "Digital Transformation Fund" offering subsidized loans or equity to SMEs adopting approved technologies. Tax breaks or accelerated depreciation for digital capital spending could improve ROI. Strengthen linkages between development banks (e.g. VDB) and fintech lenders to channel funding into tech upgrades. The banking sector itself should expand business advisory services to guide SMEs through investment planning, as SHB's chairman suggests. Public credit guarantee schemes could reduce collateral barriers.

Strengthen Cybersecurity and Trust: Provide SMEs with low-cost cybersecurity tools and guidelines. The government could offer free risk assessments or a "cyber voucher" program to help small businesses audit and secure their systems. Clear, consolidated regulations are needed: as one business leader noted, Vietnam's legal framework "has yet to catch up". Authorities should clarify overlapping decrees (e.g. on data localization) and publish easy-to-follow compliance guides. Accelerating the enactment of technical standards and procedures will reduce uncertainty (endorsing suggestions in). Also, fostering a national cyber-awareness campaign can elevate the importance of data protection culture among companies and customers alike.

Enable Fair Competition and Ecosystem Development: The government should ensure domestic firms are not disadvantaged by overly restrictive regulations when competing with foreign digital platforms. At the same time, removing unnecessary barriers (e.g. simplifying licensing for tech businesses) will foster entrepreneurship. Encouraging "Queen Bee" anchor firms can attract SME participation: for instance, promoting partnerships between large exporters and local suppliers for digital training (as recommended by experts). Integration into global supply chains should be boosted through certifications and digital marketplaces.

Promote Collaborative Innovation: Public and private stakeholders should co-invest in technology incubators and accelerators. For example, industry associations (e.g. Vietnam E-commerce Association, Tech SMEs association) can form alliances with research institutes to pilot new digital solutions for traditional industries. Government grants could target joint projects between academics and SMEs (the Coc Coc executive urges partnerships between businesses and academia). Such collaboration helps transfer cutting-edge practices to the grassroots level.

Leverage International Cooperation: Vietnam should continue partnering with global organizations to import best practices. Participation in ASEAN digital economy initiatives, collaborations with South Korea (widely seen here as a model for SME digitization), and technical assistance from the World Bank/ADB can all accelerate learning. For example, utilizing ASEAN frameworks to standardize e-invoicing could ease cross-border trade for Vietnamese exporters.

8. Conclusion

Vietnam's journey from a centrally planned economy to a market-driven, technology-oriented one has been remarkable. The private sector has become the backbone of growth, contributing roughly half of GDP and employing the majority of the workforce. Simultaneously, the digital revolution is sweeping the nation: from bustling tech startups in Ho Chi Minh City to digitized factories in industrial parks. The government's clear vision – digital economy at 30% of GDP by 2030, 2 million enterprises by 2030 – underscores how central digital transformation is to Vietnam's development strategy.

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