

Conference Name: BuPol Kuala Lumpur 2026– International Conference on Business, Economics & Policy, 06-07 May
Conference Dates: 06-May- 2026 to 07-May- 2026
Conference Venue: Hotel Capitol, Bukit Bintang, Kuala Lumpur, Malaysia
Appears in: PEOPLE: International Journal of Social Sciences (ISSN 2454-5899)
Publication year: 2026

Giang Thi Nguyen, 2026

Volume 2026, pp. 499-515

DOI- <https://doi.org/10.20319/icssh.2026.499515>

This paper can be cited as Nguyen, G.T. (2026). Digital Transformation, Firm Productivity and Policy Coordination in Vietnam: A Business and Economics Perspective. BuPol Kuala Lumpur 2026– International Conference on Business, Economics & Policy, 06-07 May. Proceedings of Social Science and Humanities Research Association (SSHRA), 2026, 499-515

DIGITAL TRANSFORMATION, FIRM PRODUCTIVITY AND POLICY COORDINATION IN VIETNAM: A BUSINESS AND ECONOMICS PERSPECTIVE

Giang Thi Nguyen

Faculty of Political Theory, Banking Academy of Vietnam, Hanoi, Vietnam

giangnt@hvn.edu.vn

Abstract

Digital transformation is widely regarded as a pathway to higher firm productivity in developing economies, yet its effects remain uneven across firms. Focusing on Vietnam, this paper examines how digital transformation affects firm productivity, why outcomes differ, and what policy conditions are needed to strengthen productivity gains. The study uses a qualitative, evidence-based approach based on literature review and policy analysis. Drawing on the resource-based view, dynamic capabilities, and institutional economics, it develops an analytical framework linking business drivers, transformation mechanisms, firm-level constraints, and productivity outcomes. The analysis shows that digital transformation can improve productivity through greater operational efficiency, stronger innovation capacity, wider market access, and higher adaptive flexibility. However, these gains are limited by weak absorptive capacity, financial barriers, digital skill shortages, and fragmented policy support, especially among SMEs. The paper makes three contributions. First, it repositions digital transformation as a productivity

problem rather than a technology adoption issue alone. Second, it offers a conditional framework showing that productivity gains depend on the interaction between firm capabilities and institutional coordination. Third, it identifies the policy-practice gap as a central explanation for uneven outcomes in Vietnam. On that basis, the paper proposes six policy implications for productivity-oriented digital transformation in Vietnam.

Keywords:

Digital Transformation, Firm Productivity, SMEs, Business Performance, Policy Support, Vietnam

1. Introduction

Over the past decade, digital transformation has evolved from a technological trend into a major force reshaping firms and economies. At the firm level, digital technologies no longer merely support isolated operational functions; they increasingly shape how firms create value, organize production, manage supply chains, interact with customers, and make strategic decisions. The central question, therefore, is no longer whether firms adopt digital technologies, but how effectively they translate such adoption into productivity gains.

For developing economies, productivity is fundamental to long-term growth. As growth based on traditional inputs such as low-cost labor, resource extraction, and capital expansion gradually loses momentum, the quality of growth depends increasingly on the more efficient use of resources. From this perspective, digital transformation matters not simply because it represents technological modernization, but because it offers a new pathway for improving firm efficiency, stimulating innovation, and expanding competitive space.

In Vietnam, digital transformation has been actively promoted through a range of national strategies, programs, and policy initiatives. The rapid growth of e-commerce, digital payments, cloud services, digital platforms, and enterprise management applications suggests that the business environment is becoming increasingly digitalized. Yet this shift remains uneven. While a segment of large firms has begun to integrate digital technologies into value chains and organizational structures, most small and medium-sized enterprises still rely on fragmented digital applications and often lack both strategic direction and absorptive capacity.

Although a growing body of research has addressed the digital economy, innovation, and enterprise development, systematic analyses of the relationship between digital transformation and firm productivity in Vietnam remain limited. Much of the existing literature either describes technology trends at a broad level or emphasizes digitalization as a managerial or technological process. By contrast, the more policy-relevant business and economics question is how digital transformation affects firm productivity, under what conditions firms can convert digital investment into tangible performance gains, and why those gains often remain uneven across sectors and firm types.

Against this background, this paper addresses three main research questions: (i) how does digital transformation affect firm productivity in Vietnam; (ii) what are the principal business drivers and firm-level constraints shaping this process; and (iii) what policy implications can

strengthen the productivity effects of digital transformation? On this basis, the paper makes three main contributions. First, it clarifies the relationship between digital transformation and firm productivity in a developing economy from a business and economics perspective. Second, it develops a conditional analytical framework showing that digital technologies improve productivity only when supported by absorptive capacity and coordinated institutional conditions. Third, it identifies the policy-practice gap as a key explanation for uneven productivity gains and uses that gap to derive policy implications for Vietnamese firms, especially SMEs.

2. Literature Review and Analytical Framework

2.1. The Concept of Digital Transformation

Digital transformation is a widely used concept, but it is often interpreted inconsistently. It is useful to distinguish among three levels that are frequently conflated. First, digitization refers to the conversion of information from physical form into digital form. Second, digitalization refers to the use of digital technologies to improve particular processes or functions. Third, digital transformation refers to a systemic reconfiguration of firms' operating models, governance structures, production processes, service delivery, and market interactions on the basis of digital technologies (Vial, 2019; Verhoef et al., 2021).

Digital transformation, therefore, should not be reduced to investment in technological equipment or the introduction of software into a few operational stages. Its essence lies in restructuring the way firms create value. At a deeper level, it changes how firms organize labor, process information, coordinate supply chains, connect with customers, and make managerial decisions (Bharadwaj et al., 2013). This distinction is especially important for productivity analysis, because if digital transformation is treated merely as technological upgrading, it becomes difficult to explain why some firms invest heavily in technology without achieving commensurate gains in productivity.

2.2. Firm Productivity in Economic Analysis

Productivity is a central concept in development economics and the economics of the firm. In general terms, productivity reflects the efficiency with which inputs are used to generate output or value added. At the firm level, productivity may be approached through labor productivity, capital efficiency, or total factor productivity (Syverson, 2011).

From an economic perspective, improvements in productivity matter far beyond firms' internal efficiency. Higher productivity allows firms to reduce unit costs, strengthen

competitiveness, expand markets, adapt more effectively to external shocks, and contribute more positively to economic growth. This is especially relevant for Vietnam, where the need to move from extensive growth toward growth based increasingly on efficiency and innovation has become more urgent.

2.3. The Relationship between Digital Transformation and Firm Productivity

International research suggests that digital transformation can affect firm productivity through several mechanisms.

First, digital transformation enhances operational efficiency. The adoption of digital management systems, process automation, real-time data analytics, and supply chain optimization can help firms save time, reduce operational errors, and use resources more efficiently (Brynjolfsson & Hitt, 2000; OECD, 2020).

Second, digital transformation can foster innovation. When firms gain better access to data, analytical tools, and digital platforms, they are better positioned to improve products, services, production processes, and business models. This is a crucial channel through which productivity rises not only by cutting costs but also by creating new value (Nambisan et al., 2017).

Third, digital transformation improves firms' access to markets and customers. E-commerce platforms, digital communication channels, and data-driven marketing tools allow firms to reduce transaction costs, improve customer engagement, and scale up more rapidly (UNCTAD, 2019; Google et al., 2023).

Fourth, digital transformation increases firms' capacity to adapt to volatility. In periods of rapid market change, firms with stronger digital foundations are often more capable of adjusting processes, organizing work, and revising business strategies in flexible ways. This constitutes a long-term productivity effect that is often overlooked when digital transformation is treated only as short-term technology investment.

However, the relationship between digital transformation and productivity is neither automatic nor uniform. Technology generates productivity gains only when firms possess sufficient absorptive capacity, suitable human resources, adaptive governance models, and a supportive institutional environment. This insight is consistent with the dynamic capabilities perspective, according to which the value of technology depends on firms' ability to integrate, reconfigure, and exploit resources in changing environments (Teece, 2007).

2.4. Major Constraints Identified in the Literature

Alongside its positive effects, many studies show that firms, particularly in developing economies, face significant barriers to digital transformation.

The first is the technology capability gap. Many firms, especially SMEs, lack clear digital strategies, basic technological infrastructure, and the ability to integrate technology into business models (OECD, 2021).

The second is the limitation of human resources and digital skills. Digital transformation is not merely about machines and software; it depends heavily on the capacity of workers and managers to understand, operate, and exploit technology.

The third is financial constraint. Many firms are aware of the need for digital transformation but lack the capacity to make sustained investments in infrastructure, software, cybersecurity, training, and process redesign. In the SME sector, this barrier is often structural rather than temporary.

The fourth is inequality in infrastructure and the support environment. Disparities across regions, sectors, and firm sizes make digital transformation outcomes highly uneven.

The fifth is institutional and policy fragmentation. When support policies are inconsistent and poorly connected across training, infrastructure, finance, and innovation, the productivity effects of digital transformation are weakened. In other words, technology may be available, but if institutions lag behind, the expected productivity gains will not materialize.

2.5. Analytical Framework and Theoretical Foundations

This paper proposes a three-layer framework that helps explain why digital transformation produces divergent productivity outcomes across firms:

(1) Drivers → (2) Transformation mechanisms → (3) Productivity outcomes

This framework rests on three main theoretical foundations: resource-based view, dynamic capabilities, and institutional economics.

The analytical framework proposed in this study conceptualizes digital transformation as a conditional process linking drivers, transformation mechanisms, and productivity outcomes, moderated by firm-level capabilities and institutional conditions. Its academic value lies in moving beyond deterministic views of digitalization by showing that the productivity effect of digital transformation is contingent rather than automatic.

Drivers: market competition, policy orientation, infrastructure development, managerial mindset

Transformation mechanisms: operational efficiency, innovation, market expansion, adaptive capacity

Productivity outcomes: cost reduction, revenue growth, value-added increase, resilience

These relationships are moderated by:

Firm-level absorptive capacity (skills, management, organizational capability)

Institutional conditions (policy coordination, infrastructure, financial support)

From this framework, the following testable hypotheses are derived for future quantitative research:

H1: The positive effect of digital technology adoption on firm productivity is positively moderated by the firm's level of digital absorptive capacity (i.e., the ability to integrate and exploit digital resources).

H2: The impact of digital transformation on productivity is stronger for firms that have access to coordinated policy support packages (combining training, finance, and infrastructure) than for firms with access to fragmented support.

H3: The productivity effect of digital transformation is mediated by organizational process redesign and workforce digital skills, not by technology investment alone.

H4: Institutional fragmentation (e.g., inconsistent policies across ministries) negatively moderates the relationship between digital investment and productivity gains, especially for SMEs.

These hypotheses are not tested in this paper but provide a clear agenda for subsequent quantitative studies using firm-level panel data.

3. Research Method

3.1. Research Approach

This paper adopts a qualitative approach based on literature review and policy analysis. This approach is appropriate for the study's objective of clarifying the mechanisms, drivers, constraints, and policy implications of digital transformation for firm productivity in Vietnam. Unlike quantitative studies designed to test causal relationships using firm-level datasets, this paper focuses on analyzing economic logic, synthesizing secondary evidence, and developing a systematic argument around the research problem.

3.2. Data Sources

The study relies on secondary data collected from three main sources:

The first consists of domestic and international academic studies on digital transformation, firm productivity, the digital economy, and innovation.

The second includes reports from international organizations and research institutions such as the World Bank, OECD, UNCTAD, and other studies on Southeast Asia's digital economy, firm capabilities, and digital readiness.

The third consists of Vietnamese policy documents related to the national digital transformation agenda, digital economy development, support for SMEs, innovation, and digital human resource development.

3.3. Methods of Processing and Analysis

The paper combines literature review, content analysis, and policy analysis. First, the materials are reviewed by thematic groups, including the concept of digital transformation, theories of firm productivity, mechanisms through which technology affects productivity, firm-level constraints, and digital transformation support policies. The arguments are then organized according to the proposed analytical framework in order to ensure coherence among theoretical foundations, the assessment of current conditions, and policy implications.

3.4. Scope and Limitations

While this study does not employ econometric estimation, it complements existing quantitative research by providing a structured, theory-driven and evidence-based analysis of the mechanisms and policy conditions shaping productivity outcomes. It also develops testable hypotheses to support future firm-level empirical studies. Instead, it aims to identify major mechanisms, broad patterns, and policy issues of primary importance. This is a limitation, but it is also a suitable choice given the study's objective of building an analytical argument and generating policy implications in a context where firm-level microdata remain fragmented.

4. Digital Transformation and Firm Productivity in Vietnam

4.1. The Current State of Digital Transformation among Vietnamese Firms

In recent years, digital transformation in Vietnam has advanced considerably, especially in e-commerce, digital payments, logistics, financial services, digital marketing, and enterprise management. Many firms have begun to adopt accounting software, ERP, CRM, e-commerce platforms, cloud computing, and data analytics tools in production and business operations.

Nevertheless, the degree of digital transformation across firms remains highly uneven. Large firms, internationally linked firms, and firms operating in more technology-intensive sectors

are generally better positioned to implement digital transformation at scale. By contrast, most SMEs remain at the level of basic digital application rather than digital transformation in the sense of restructuring their business model. In other words, Vietnam’s digital environment is developing rapidly, but firms’ ability to convert digital opportunities into productivity gains remains deeply differentiated.

Table 1. Contextual Indicators of Enterprise Digital Transformation in Vietnam

Indicator	Value / Recent trend	Analytical Significance
Size of Vietnam’s digital economy	~USD 30–35 billion in 2023; projected USD 45–50 billion by 2025	Creates a favorable market environment for digital adoption
Retail e-commerce growth	~20–25% annually since 2020	Expands market access and reduces transaction costs
Number of digital technology enterprises	>70,000 firms (2023, MIC estimate)	Reflects expansion of the digital ecosystem
Share of SMEs in total enterprises	~97%	Indicates large segment with transformation constraints
Internet penetration rate	~75–77% of population	Provides foundational conditions for digital platforms

Source: Compiled by the author from World Bank (2021), OECD (2020), Google et al. (2023), and Ministry of Information and Communications

Table 1 suggests that Vietnam now possesses a relatively favorable market foundation for enterprise digital transformation. However, from a productivity perspective, what matters is not merely the expansion of the digital economy, but firms’ ability to convert favorable market and technological conditions into improvements in production efficiency, governance, and innovation.

4.2. The Effects of Digital Transformation on Firm Productivity

From an economic perspective, digital transformation can improve firm productivity in Vietnam through several main channels:

First, digital transformation improves managerial and operational efficiency. The application of management software, real-time data, and automated processes helps reduce internal transaction costs, shorten processing time, and limit operational errors. This is especially important for firms with complex value chains or strong dependence on coordination across departments.

Second, digital transformation improves firms’ access to customers and markets. Digital platforms, digital marketing, and e-commerce reduce the cost of market expansion, improve customer service, and accelerate firms’ response to changes in demand. In many cases, this is a key channel through which firms can increase revenue using the same resource base.

Third, digital transformation creates conditions for product and business model innovation. By leveraging data, firms can better understand customer behavior, identify emerging needs, refine services, and experiment with more flexible business models. This raises productivity in a broader sense, namely by increasing the value created from a given set of resources.

Table 2. *Channels through Which Digital Transformation Affects Firm Productivity*

Channel	Main manifestation	Productivity effect
Operational efficiency	Process automation, data integration, error reduction	Lower costs, higher output from the same resources
Enterprise management	Better decision-making, real-time monitoring	More efficient resource allocation
Markets and customers	E-commerce, digital marketing, digital platforms	Higher revenue, lower transaction costs
Innovation	Product, service, and business model improvement	Higher value added and stronger competitiveness
Adaptive capacity	Faster response to shifts in demand and environment	Greater resilience and more stable performance

Source: Compiled by the author from Brynjolfsson and Hitt (2000), OECD (2020), World Bank (2021), and Verhoef et al. (2021).

However, these channels do not operate with the same intensity across all firms. The productivity effect of digital transformation depends on the degree of technological integration, organizational learning, and alignment between technology investment and managerial reform.

4.3. The Unevenness of Productivity Effects

A critical point is that the productivity effects of digital transformation in Vietnam are not evenly distributed. At least three major forms of disparity can be observed.

The first is disparity by firm size. Large firms have stronger financial resources, better human capital, and greater organizational capacity, enabling them to capture the gains from digital transformation more effectively than SMEs.

The second is disparity by sector. Sectors with more standardized processes, greater capacity for data digitization, and stronger platform connectivity tend to achieve productivity gains more quickly.

The third is disparity by managerial capability. Even with similar levels of technological investment, firms whose leadership and management teams possess clearer strategic vision are more capable of translating technology into productivity improvements.

This suggests that digital transformation should not be understood as a uniform technical solution. Rather, it should be approached as a process of organizational change that depends heavily on firms' internal conditions.

Table 3. Major Barriers Reducing the Productivity Effects of Digital Transformation

Barrier group	Manifestation at the firm level	Consequence for productivity
Weak digital capability	Lack of digital strategy, lack of specialized staff	Technology investment yields limited results
Financial constraints	Inability to invest comprehensively in software, data, and training	Partial transformation with limited depth
Digital skills shortages	Workers and managers are not ready	Technology is not used effectively
Uneven infrastructure	Gaps in connectivity, platforms, and support services	Digital transformation outcomes diverge by region and sector
Fragmented support policies	Weak coordination across credit, training, and innovation policies	Difficulty in building an effective support ecosystem

Source: Compiled by the author from OECD (2021), World Bank (2021), UNCTAD (2019), and Vietnamese policy documents.

From the perspective of the analytical framework, Vietnam does not lack market incentives for digital transformation. Rather, the more significant gaps lie in the other two layers: the capacity to convert technology into productivity and the institutional conditions needed to diffuse productivity gains more broadly. These constitute the core bottlenecks that policy must address.

4.4. Systematic Analysis of the Policy-Practice Gap

A novel contribution of this paper is the explicit comparison between stated policy goals (from Decisions 749 and 411) and reported firm realities (from international and Vietnamese surveys). Table 4 synthesises the misalignment between Vietnam’s stated digital transformation targets and the actual conditions reported by firms, highlighting four distinct types of policy-practice gaps.

Table 4: Policy-Practice gap in Vietnam’s Digital Transformation

Policy Goal	Stated Target	Observed Firm Reality (Evidence)	Gap
National Digital Transformation Program to 2025	50% of SMEs use digital platforms	World Bank (2021): Only ~25% of SMEs have basic digital presence; full integration <10%	Large adoption gap
Digital economy to reach 20% of GDP by 2025	High value-added from digital	Google et al. (2023): Digital economy mainly driven by e-commerce and advertising, not productivity-enhancing B2B solutions	Quality gap
Training digital skills for 1 million workers	Widespread digital literacy	OECD (2021): Only 15% of Vietnamese firms provide digital training; mismatch between policy supply and firm demand	Implementation gap
Coordinated support across ministries	Seamless policy ecosystem	Vietnamese policy documents show overlapping responsibilities (MIC, MOIT,	Institutional fragmentation gap

Policy Goal	Stated Target	Observed Firm Reality (Evidence)	Gap
		MPI) with no clear coordination mechanism	

Key Insight: The gap is not merely resource-based but institutional. Policies exist, but fragmentation and lack of alignment with firm-level absorptive capacity explain weak productivity effects.

5. Drivers and Constraints of Digital Transformation at the Firm Level

5.1. Main Drivers

One of the most important drivers of digital transformation is market competition. As customer behavior changes, value chains evolve rapidly, and competitors adopt technology more aggressively, firms are compelled to transform in order to maintain their position.

The second driver comes from national policy orientation. Strategies for digital transformation, digital economy development, and innovation support have created positive policy signals, encouraging firms to pay greater attention to digital transformation.

The third driver is the development of digital infrastructure and ecosystems. The diffusion of electronic payments, e-commerce platforms, cloud services, and flexible software solutions has lowered the cost of access to technology for many firms.

The fourth driver is the change in managerial mindset. A growing number of firms have come to understand that digital transformation is not merely a supporting tool, but a condition for raising productivity and long-term competitiveness.

5.2. Main Constraints

At the same time, Vietnamese firms continue to face significant barriers to digital transformation.

The first is limited digital capability. Many firms still lack clear digital transformation strategies, specialized staff, and the ability to select appropriate technological solutions.

The second is financial limitation. Investment in digital transformation includes not only the cost of acquiring technology, but also the costs of redesigning processes, training staff, protecting data, and maintaining digital systems.

The third is the shortage of workers with digital skills. This is especially important because digital transformation generates productivity gains only when it is effectively operated by a workforce with sufficient competence.

The fourth is uneven infrastructure and connectivity. Gaps in infrastructure between central and peripheral areas create major disparities in firms' capacity to undergo digital transformation.

The fifth is fragmentation in policy support. When policies on infrastructure, credit, training, innovation, and enterprise support are not coordinated, the effectiveness of digital transformation is constrained.

6. Policy Implications

Based on the analytical framework developed in this paper, policy should go beyond simply encouraging firms to adopt technology. What is required is coordinated intervention across three dimensions: strengthening the drivers of digital transformation, enhancing firms' capacity to convert technology into productivity gains, and improving institutional conditions so that such gains can spread more broadly and more deeply across the enterprise sector.

6.1. Strengthening the Drivers of Digital Transformation in Ways that are Directly Linked to Productivity Improvement

Policy should shift from encouraging firms merely to "participate in digital transformation" toward compelling firms to treat digital transformation as a productivity strategy. This requires support programs to be tied more explicitly to measurable objectives such as reducing operating costs, raising the level of automation, improving data governance, and expanding market reach. One breakthrough direction is to build indicator systems that assess digital transformation in relation to productivity outcomes at the firm and sector levels, rather than measuring digital adoption only in formal or procedural terms.

6.2. Developing Firms' Digital Absorptive Capacity, Especially Among SMEs

At present, the central bottleneck does not lie in whether technology is available, but in the fact that many firms lack the capacity to turn technology into real efficiency gains. Support policies therefore need to move from subsidizing isolated technological equipment toward strengthening digital absorptive capacity. This includes support for digital transformation strategy, managerial training, data standardization, process redesign, and workforce digital skills. For SMEs, one promising option is a model of shared digital transformation services in which the state,

business associations, and the technology sector jointly provide low-cost but operationally meaningful solution packages.

6.3. Building Financial Policies for Digital Transformation Based on Conditional Investment and Measurable Outcomes

A major barrier for firms is the initial investment cost together with uncertainty about returns. It is therefore necessary to develop financial instruments specifically tailored to digital transformation, including concessional credit, co-financing funds, advisory support, and tax incentives for digital investments that can demonstrate productivity effects. The key breakthrough here is that instead of spreading support thinly, policy should prioritize digital transformation projects with strong spillover potential across supply chains, industrial clusters, or local business networks.

6.4. Developing Infrastructure and Data as National Productivity Assets

If digital transformation is to be treated as a foundation of a new growth model, then digital infrastructure and data must be approached as productivity assets of the national economy. This requires stronger investment in broadband connectivity, cloud platforms, data centers, cybersecurity, and systems for data sharing between the public and private sectors. A breakthrough direction would be to develop controlled sectoral data platforms that enable firms, especially SMEs, to gain better access to market information, credit, logistics, and customer demand signals.

6.5. Improving Institutions in Ways that Reduce Transformation Costs and Increase Policy Coordination

Digital transformation will remain fragmented if policies on data, innovation, enterprise support, workforce training, and digital markets are not linked together. It is therefore necessary to establish stronger policy coordination mechanisms at both national and sectoral levels, treating enterprise digital transformation as an intersectoral economic program rather than merely a technology program. The central issue is that institutions must reduce transformation costs, lower policy uncertainty, and provide sufficiently strong long-term signals for firms to invest in deep digital restructuring.

6.6. Moving from Technology Support to the Creation of a Digital Productivity Ecosystem

The most important implication is that policy should not stop at helping firms purchase technology. Instead, it should foster a digital productivity ecosystem. In such an ecosystem, firms can access technology, skills, data, finance, advisory support, and an enabling institutional environment in an integrated manner. Only under these conditions can digital transformation become a genuine driver of productivity upgrading rather than a superficial form of modernization.

7. Conclusion

Digital transformation is becoming an increasingly important determinant of firm productivity in the contemporary economy. In Vietnam, it can improve business performance through higher operational efficiency, broader market reach, stronger innovation, and greater adaptability in a rapidly changing environment. Yet these effects are not automatic. They depend on firms' internal capabilities, workforce skills, infrastructure quality, and the effectiveness of policy coordination.

The analysis indicates that Vietnam has already developed important preconditions for enterprise digital transformation, but major barriers remain, especially in the SME sector. This calls for a more coherent policy approach in which digital transformation is linked directly to productivity improvement, enterprise competitiveness, and higher-quality growth rather than being treated mainly as a technology adoption agenda.

Academically, the paper contributes in three ways. It clarifies the relationship between digital transformation and firm productivity from the perspective of a developing economy. It also proposes a conditional framework that links business drivers, firm capabilities, and institutional coordination to productivity outcomes. Finally, it highlights the policy-practice gap as an analytical lens for explaining why digital investment does not automatically produce measurable productivity gains. In practical terms, the paper suggests that digital transformation policy will be effective only when it addresses infrastructure, skills, finance, institutions, and firms' absorptive capacity in an integrated way.

Because the study relies on a qualitative approach and secondary data, it does not quantify the precise effects of individual dimensions of digital transformation on firm productivity. This limitation also points to an important direction for future research, particularly quantitative studies and firm-level case studies that can test more rigorously the mechanisms proposed in this paper.

References

- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120.
<https://doi.org/10.1177/014920639101700108>
- Bharadwaj, A., El Sawy, O. A., Pavlou, P. A., & Venkatraman, N. (2013). Digital business strategy: Toward a next generation of insights. *MIS Quarterly*, 37(2), 471-482.
<https://doi.org/10.25300/MISQ/2013/37:2.3>
- Brynjolfsson, E., & Hitt, L. M. (2000). Beyond computation: Information technology, organizational transformation and business performance. *Journal of Economic Perspectives*, 14(4), 23-48.
<https://doi.org/10.1257/jep.14.4.23>
- Bukht, R., & Heeks, R. (2017). Defining, conceptualising and measuring the digital economy. *Development Informatics Working Paper*, 68.
<https://doi.org/10.2139/ssrn.3431732>
- Google, Temasek, & Bain & Company. (2023). *e-Conomy SEA 2023 report*.
<https://economysea.withgoogle.com/>
- Nambisan, S., Lyytinen, K., Majchrzak, A., & Song, M. (2017). Digital innovation management: Reinventing innovation management research in a digital world. *MIS Quarterly*, 41(1), 223-238.
<https://doi.org/10.25300/MISQ/2017/41:1.03>
- OECD. (2020). *OECD digital economy outlook 2020*. OECD Publishing.
<https://doi.org/10.1787/bb167041-en>
- OECD. (2021). *The digital transformation of SMEs*. OECD Publishing.
<https://doi.org/10.1787/bdb9256a-en>
- Syverson, C. (2011). What determines productivity? *Journal of Economic Literature*, 49(2), 326-365.
<https://doi.org/10.1257/jel.49.2.326>
- Teece, D. J. (2007). Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal*, 28(13), 1319-1350.
<https://doi.org/10.1002/smj.640>

- Prime Minister of Vietnam. (2020). Decision No. 749/QĐ-TTg dated June 3, 2020, on the National Digital Transformation Program to 2025, with orientation to 2030.
<https://vanban.chinhphu.vn/>
- Prime Minister of Vietnam. (2022). Decision No. 411/QĐ-TTg dated March 31, 2022, approving the National Strategy for Digital Economy and Digital Society Development.
<https://vanban.chinhphu.vn/>
- UNCTAD. (2019). Digital economy report 2019. United Nations.
<https://unctad.org/publication/digital-economy-report-2019>
- Verhoef, P. C., Broekhuizen, T., Bart, Y., Bhattacharya, A., Dong, J. Q., Fabian, N., & Haenlein, M. (2021). Digital transformation: A multidisciplinary reflection and research agenda. *Journal of Business Research*, 122, 889-901.
<https://doi.org/10.1016/j.jbusres.2019.09.022>
- Vial, G. (2019). Understanding digital transformation: A review and a research agenda. *The Journal of Strategic Information Systems*, 28(2), 118-144.
<https://doi.org/10.1016/j.jsis.2019.01.003>
- Warner, K. S. R., & Wäger, M. (2019). Building dynamic capabilities for digital transformation: An ongoing process of strategic renewal. *Long Range Planning*, 52(3), 326-349.
<https://doi.org/10.1016/j.lrp.2018.12.001>
- World Bank. (2021). Vietnam digital transformation: Pathways to a digital future. World Bank.
<https://www.worldbank.org/en/country/vietnam>