

Digital Transformation in Some Countries and Lessons for Vietnam

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Abstract: *Digital transformation plays an important role in the development of countries as well as businesses. Digital transformation has received the attention of many countries and scholars around the world. Based on research and experience of some Asian countries (Malaysia, Thailand, China), this article mainly uses secondary data through selective inheritance of a number of studies related to digital transformation at home and abroad. From there, we provide some reference lessons for Vietnam in the process of digital transformation, as well as training on digital transformation to improve endogenous capacity and promote economic and social development.*

Keywords: Digital transformation, digital transformation experience

1. Research Overview

Currently, there have been a number of studies on digital transformation and digital transformation training for businesses. Thereby, businesses are provided with reference information about awareness, knowledge and skills for digital transformation, typically:

- Internet of Things (IoT): Digitize or Die (Nicolas Windpassinger, 2017). The book's content affirms the importance of IoT and digital transformation in businesses brings value to businesses, helping business managers realize the need to change towards digital transformation to take advantage of their competitive advantage. Nicolas Windpassinger also analyzed the phenomenon of digital transformation from technology to business models, from digital understanding to strategies; At the same time, it has presented potential opportunities in applying IoT, as well as ways to build a successful transformation strategy for businesses.
- Machine, Platform, Crowd: Harnessing Our Digital Future (Andrew McAfee and Erik Brynjolfsson, 2017). The book describes the three great balancing pillars of today's digital era, which are mind and machine; products and platforms; core and crowd. The book's contents provide a guide to what you need to do to master the digital transformation of the future; a blueprint to better understand how the world is working and what organizations need to do to adapt to it; need to be fully equipped with knowledge about machine learning and artificial intelligence to effectively transform digitally. In addition to illustrating how technological advances are reshaping our lives, Andrew McAfee and Erik Brynjolfsson also answer questions about the challenges and opportunities inherent in artificial intelligence in recent decades, such as self-driving cars and 3D printers, online platforms. The lesson from the book is that while technology creates choices, success ultimately depends on how people apply these choices. The success of a business is not about how much technology they have access to, but how they use that technology and the value they bring within the organization.
- Digital transformation: Build your organization's future for the innovation age. The book offers five stages of implementing digital technology for businesses. These stages act as an iterative framework for continuous innovation, allowing for immediate results, as well as incremental change within the business including (ICTvietnam.vn, April 2021): (i) Narrow the gap between inherent differences between businesses and customers and with ongoing changes in the business environment; (ii) Uncover hidden business barriers, useful assets and necessary resources to plan and prioritize routes for digital transformation; (iii) Short iteration cycles, real-world user testing, and driving scalable innovations; (iv) Successful use of leverage will eliminate barriers, access greater resources, and expand influence and scope of operations; (v) Expand innovation and ways of working to adapt and change new types of businesses. Herbert brings his experience in leading innovation programs globally, as well as insights from experts and leaders from organizations such as the International Union for Conservation of Nature, the United Nations High Commissioner for Refugees, American Cancer Society, International Federation for Human Rights, Harvard University, Morgan Stanley and many others.
- Digital Transformation: Survive and Thrive in an Era of Mass Extinction (Thomas M. Siebel, 2019). The book analyzes one of the biggest risks and also the biggest opportunities that any organization in the world will face, which is digital transformation. Thereby, the connotation of digital transformation has been clarified, while analyzing and clarifying the emergence of four types of technology: cloud computing, big data, artificial intelligence and internet of things (IoT)..
- Digital to the Core (Mark Raskino and Graham Waller, 2015). The book presents core digital transformation orientations and methods to improve leadership capacity for industries, businesses and managers themselves; helps business managers understand the impact of the

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digital revolution on their industries, businesses as well as leadership styles and practices (ICTvietnam.vn, April 2021). Based on interviews with more than 30 top senior executives at a number of businesses and organizations including GE, Ford, Tory Burch, Babolat, McDonalds, Publicis, the book provides practical insights from digital leaders, incorporating research from Gartner's annual global survey of CIOs and CEOs, and apply the qualitative knowledge and insights the authors have acquired as practitioners, management researchers, and consultants over decades in business.

- Recognizing the importance of digital transformation in general, and digital transformation in businesses in particular, a number of Vietnamese organizations and researchers have also compiled documents and published handbooks on digital transformation, typically:
 - Digital Transformation Handbook (Ministry of Information and Communications (Vietnam), 2020). The handbook is built on the basis of the practice of those who have directly participated in planning mechanisms, policies, and strategies for digital transformation, with the inheritance of knowledge from many experts, managers, and scientists. and Vietnamese businessmen. The handbook provides the most basic information and knowledge about digital transformation based on questions and answers, presented from the simplest, most concise problems to those that are explained in detail for those who want a deeper interest, and finally some illustrative examples, for those who want a practical connection, thereby, providing suggestions and initial general directions on digital transformation. The content of the Handbook is divided into 4 separate sections including: basic digital conversion; digital transformation for people; digital transformation for businesses (Explain what enterprise digital transformation is? How does a business thinking or distribution channel change? How do customers change? How to change internal management?); digital transformation for state agencies.
 - "Q&A about Digital Transformation" (Ho Tu Bao, Nguyen Huy Dung, Nguyen Nhat Quang, 2020). The authors have clarified issues related to understanding digital transformation for businesses and public organizations. The book's content is designed in a question-and-answer format, including 200 questions, divided into 5 parts (General questions about digital transformation; breakthroughs in AI and digital technology; digital government; digital economy; digital society). Each part is divided into groups of digital transformation issues: what, why, how, when, and who is involved. The book provides knowledge and experience about digital transformation and practical implementation, as well as information that is shared, exchanged, and suggested. From there, each individual, each organization, each business finds its own answers to build a roadmap and action plan towards successful digital transformation.
 - Vietnam in the digital transformation age (Think Tank VINASA, 2019). The book presents perspectives, approaches and insights on the urgent things Vietnam needs to do in digital transformation, focusing on nine groups of issues: (i) developing smart and safe digital infrastructure to create favorable conditions for the digital transformation process and create a new living environment for people; (ii) artificial intelligence is the key digital technology to implement Vietnam's 4.0 industrial revolution; (iii) developing the digital economy is the basis for Vietnam to catch up and advance with the times; (iv) cultural and social issues in the era of digital transformation; (v) building smart urban areas to improve quality of life and create a creative environment; (vi) digital human resources and new labor skills; (vii) promoting entrepreneurship and innovation; (viii) institutional reform, building an effective, rule-of-law state; (ix) practice digital transformation of businesses.
 - Digital Transformation Guidebook for Vietnamese Enterprises (2019). This document was produced with support from the Supporting Enterprises' Digital Transformation from 2021 to 2025 of the Ministry of Planning and Investment and the United States Agency for International Development (USAID) through the The USAID Linkages for Small and Medium Enterprises (LinkSME) project. The document will provide common digital transformation concepts and roadmaps to help businesses clearly understand what digital transformation is; Where is digital transformation implemented in the business model and management; implementation steps; How to assess digital transformation readiness so businesses can understand which step of the roadmap they are at. Along with the steps in the digital transformation roadmap, the document also provides guidance on technology solutions, suppliers on the market and some preliminary analytical information to help businesses with their decisions. initial analysis/assessment. In addition, technology indicators for the manufacturing industry are also analyzed with the aim of providing deeper information for small and medium-sized enterprises in this field. Finally, some questions for common issues in business digital transformation are also listed to help small and medium-sized businesses consider and consider their digital transformation roadmap.
 - Digital transformation: solutions to overcome the covid-19 pandemic and accelerate for business by the Viet Nam Chamber of Commerce and Industry (VCCI) and the Viet Nam Posts and Telecommunications Group (VNPT) (VCCI and VNPT, 2020). The book points out that the Government needs to create a modern economic institutional system, with legal regulations and skills to create an ecosystem for e-commerce and the digital economy. The responsibility of businesses is to innovate their business models, establish a management model based on digital technology, towards creative, sustainable and inclusive development goals.
- In recent times in Vietnam, there have also been a number of training and fostering programs/courses related to digital transformation, some typical training programs/courses include:
- Training program of the Ministry of Planning and Investment (digital.business.gov.vn, 2021). Course objective: Helps students grasp basic knowledge, concepts, benefits, importance, goals, objects, and scope of digital transformation projects. Target audience: Leaders at all levels of management and key officials of the enterprise. Main content: The nature of digital transformation;

- Subjects, scope, areas of digital transformation projects; Levels of digital transformation of businesses; Benefits of digital transformation; Models for implementing digital transformation projects; Some examples of digital transformation domestically and internationally.
- Program to support small and medium-sized enterprises in digital transformation chaired by the Ministry of Information and Communications (2021). The program coordinates with the Ministry of Planning and Investment, Vietnam Chamber of Commerce and Industry, and Vietnam Association of Small and Medium Enterprises with dual goals, both socio-economic development and the development of Vietnamese digital technology enterprises. The program emphasizes the list of 12 excellent Make in Vietnam digital platforms that meet all the transformation needs of small and medium-sized businesses, allowing businesses to change their business models and ways of operating, to create new values. Businesses can choose to use the platform to carry out comprehensive digital transformation of their business group. Five supported professional groups include: accounting; advertising, marketing; distribution; Payment and customer care.
- Digital transformation training course: New trends in business operations to breakthrough performance (VCCI, 2020). The goal of the course is to help businesses properly understand domestic and international trends in digital transformation. From there, you can figure out what you should do in the context of the development of the new era of industry 4.0.
- Training program "Disseminating knowledge about digital transformation" for the National Power Transmission Corporation (Kingsman Educational Organization, 2021). The training program will equip EVVNPT staff with the necessary knowledge in digital transformation: Understand how to apply digital transformation 4.0 and help industries improve productivity and efficiency; Thoroughly understand specific industrial 4.0 production systems, creating a smart way of operating; Understand the meaning and necessity of human resources, technology levels and conversion and synchronization goals to deploy into industry 4.0 technology.
- Digital transformation training (Digitech Solutions, 2021). Course objectives help learners: Understand the nature of digital transformation and its levels; Digital transformation models; Necessary knowledge & skills to participate in digital transformation; Transforming awareness and building a culture of digital transformation; Methodology for digital transformation, selection of digital transformation model, key factors for project success; Technologies used in digital transformation (AI, Blockchain, Big data, IoT,...); Practice: Digital Transformation project design + experience on real software and technology.
- Digital transformation program (<http://itplus-academy.edu.vn/>, 2021) with a duration of 30 hours (8 sessions). The goal of the training course is to provide basic concepts and knowledge about digital transformation; Key digital initiatives and activities; New approaches to developing products and services towards digital transformation; Digital transformation approach in internal communications and training; Techniques and

technologies applied in digital transformation and emerging trends; Requirements for building human resources to participate in digital transformation; The role of lecturers in digital transformation.

- Besides that, there are also a number of training and fostering programs of a number of organizations, universities, and research institutes to raise awareness, knowledge, and skills about digital transformation for businesses such as Smartpro Consulting and Training Company deploys a training program package on digital transformation for businesses; Van Lang University in collaboration with the Department of Computerization of the Ministry of Education and Training and Viet Lotus Joint Stock Company organized the opening of the National Digital Transformation Training Program.

Thus, digital transformation and developing training programs and organizing training on digital transformation play an important role in raising awareness and knowledge of businesses, especially in the context of the 4.0 industrial revolution. Digital transformation has helped change the way businesses operate and business models, bringing higher efficiency and improved productivity and quality to businesses. Digital transformation requires businesses not only to raise awareness but also to constantly update, continuously learn from new and modern things and to accept the risks brought by innovation. The benefits that transformation can bring to businesses include increased operational efficiency, reduced operating costs, faster and more accurate decision making by leaders, and optimized labor productivity. Thereby, helping to increase productivity, efficiency, quality of operations and competitiveness of businesses.

2. Research Results

Digital transformation and training on digital transformation have received the attention of many researchers in many countries. The following are experiences of some countries on digital transformation that Vietnam can learn from.

Digital transformation in Thailand

Thailand has developed a centralized system with verification and authentication of connection protocols between state agencies, integrated operating data of government agencies and people, businesses, provided a centralized open data platform to provide effective access to information through a feedback system, proactively meeting the needs of citizens and businesses. With the desire to build an effective digital government, Thailand focuses on developing training programs to improve digital knowledge for public sector employees and businesses. To do this, Thailand has established the Digital Transformation Academy, a facility specializing in training technological knowledge for state civil servants and raising businesses' awareness of digital transformation. In addition, Thailand also aims to improve technical infrastructure with the goal of improving the quality of public services and increasing the satisfaction of people and businesses with government-sponsored training programs.

According to Thailand's Ministry of Digital Economy and Society (MDES, 2022), Thailand is trying to accelerate the

digital transformation process to realize the goal that by 2030, the contribution rate of the digital economy to national GDP will increase to 30%. With a clear awareness of the importance of digital transformation, since 2017, Thailand has launched a 5-year plan to digitally transform the entire public system, from public management to supporting tourism, warning of natural disasters and improving the efficiency of agriculture. First, Thailand implements the e-government development strategy 4.0, aiming to realize four main contents stated in the Digital Government Development Plan, which are: building an integrated Government; smart operations, using information and communication technology; Putting people and businesses at the center of the digital transformation process; drive transformation, focusing on organizational change, targeting human resources, work processes, technology and law. The Digital Government development plan is divided into four implementation phases, including: building a digital platform; digital inclusion; complete digital transformation; global digital leader.

According to Kasitorn Pooparadai (MDES, 2022) of the The Ministry of Digital Economy and Society, Thailand has had a solid start by successfully implementing the first two phases of the plan and the Thai economy is ready to enter the third phase. In 2022, 88% of households in Thailand will have internet access, up from 85.2% a year ago. The ratio of internet users to the total population of Thailand also increased slightly from 84.3% in 2021 to 85% in 2022. The proportion of businesses using online channels to access foreign markets also reached 26.3% in 2022, a sudden increase compared to 3.2% in 2021. In December 2022, Thailand approved a 5-year plan for the period 2023-2027 with the goal of bringing Thailand into the top 30 of the world digital competitiveness rankings, ranked 3rd in ASEAN and brought the contribution of the digital economy to the national GDP to 30%. With the adoption of the above goals, Thailand officially entered the implementation of phase three of the Master Plan for Economic and Social Development to promote national social and digital economic development. During this period, the goal is to fully integrate digital technology into all industries and fields in the Thai economy and society.

To realize the set goals, MDES Thailand has announced eight major digital transformation projects for 2023.

- Project 1: Digital skills training for Government agencies and businesses. This project will implement an additional 70 digital training courses for government officials in addition to the 60 courses already implemented.
- Project 2: Thailand's Digital Transformation Survey. This project is launched to collect important data for the country's digital economic and social development. Thailand will use parameters consistent with guidance issued by the Organisation for Economic Co-operation and Development (OECD) to measure and evaluate Thailand's digital transformation.
- Project 3: Improve the measurement of Thailand's digital economy and its contributions to national GDP, in line with the direction of economic structural change.
- Project 4: Developing a digital volunteer network. This project aims to equip people in residential communities

with digital skills, convincing people to take advantage of digital technology to seize new income generation opportunities.

- Project 5: Promote the application of the 5G ecosystem for commercial purposes. Thailand drafted an action plan to promote 5G technology and guidelines for promoting 5G technology in core industries for the period 2023-2027.
- Project 3: Improve the measurement of Thailand's digital economy and its contributions to national GDP, in line with the direction of economic structural change.
- Project 4: Developing a digital volunteer network. This project aims to equip people in residential communities with digital skills, convincing people to take advantage of digital technology to seize new income generation opportunities.
- Project 5: Promote the application of the 5G ecosystem for commercial purposes. Thailand has drafted an action plan to promote 5G technology and guidelines for promoting 5G technology in core industries for the period 2023-2027.
- Project 6: Developing digital infrastructure and security services. In 2023, Thailand upgraded the services under the Government Data Center and Cloud Services.
- Project 7: Promoting phase two of the digital platform for Thailand's Natural and Cultural Heritage. In which national cultural resources will be displayed in digital format, supporting Thailand in using soft power to gain benefits.
- Project 8: Business support from the Digital Economy and Society Development Funds provides financial support for scientists to promote innovation and national digital transformation. In 2022, Thailand has sponsored about 74.5 million USD for 600 proposed projects, of which 41 projects are eligible for implementation.

Thus, Thailand is one of the countries in Southeast Asia that is making great efforts to accelerate the digital transformation process to realize the goal of economic and social development based on digital transformation.

Digital transformation in Malaysia

Malaysia is strongly promoting digital transformation with four main pillars: industry 4.0, smart tourism, smart education and safe cities. This is considered the main driving force for development, towards the goal of reaching the top 20 economies in the world by 2050. Currently, Malaysia is the country with the third largest GDP in Southeast Asia, ranked 33rd. in the world and 12 in Asia with GDP reaching 365.3 billion USD. According to a Google study on Southeast Asia, Malaysia's digital economy grew by 68% in 2021 thanks to e-commerce. Malaysia's GDP has grown strongly, more than 14.2% in the third quarter of 2022.

Recognizing the importance of digital transformation in economic development, the Malaysian Government has implemented many initiatives and strategies to promote digital transformation in all fields. In particular, the Malaysia Digital Economy Blueprint initiative has been being promoted to take advantage of all opportunities of digital transformation and aim for a leading country in the digital economy. According to AlphaBeta (2021), digital technology could create an annual economic value of 257.2

billion MYR (61.3 billion USD) by 2030, equivalent to about 17% of Malaysia's GDP in 2020.

Malaysia's digital economic development relies on creating a system of mechanisms and policies to improve digital economic infrastructure. Malaysia enacted the Data Protection Act. The Government proposes to implement projects to help improve digital economic infrastructure such as the High Speed Broadband (HSBB) project for the period 2015 - 2025; Sub – Urban Broadband (SUBB) project period 2015 – 2019; Deploying the 5G Task Force project; implementing the “MSC Malaysia” Program (MSC),... In addition, the Malaysia Digital Economy Corporation (MDEC) announced a national initiative called Malaysia Digital (MyDigital) to further encourage digital adoption and opportunities in the digital economy.

To improve the quality of human resources to promote the national digital transformation process, Malaysia has implemented a digital training and fostering program since 2017. This is a training program with the purpose of transmitting business knowledge to rural areas and businesses in the agricultural sector. Farmers participating in the program will be taught how to apply communication skills to advertise, increase sales, and increase existing income. Malaysia has built the GovTech and MyGovCloud Programs to improve human resource quality and encourage digital adoption among businesses and citizens nationwide through open source code.

Malaysia is creating an ecosystem, focusing on key economic sectors such as chemicals, medical equipment and small and medium-sized economies such as textiles, rubber, food and other manufacturing activities. Malaysia plans to build and improve infrastructure, knowledge, capacity, and human resources to prepare for the 4.0 technology revolution. By 2025, Malaysia will strive to achieve four national goals including: increasing labor efficiency, increasing investment contributions to GDP, improving innovation capacity and have more human resources with higher skills.

Thus, Malaysia is strongly promoting the digital transformation process with four pillars, which are industry 4.0, smart tourism, smart education and safe cities. Thereby, helping Malaysia accelerate its development, aiming to be in the group of 20 developed economies by 2050.

Digital transformation in China

According to China Academy of Information and Communications Technology (CAICT, 2023), the scale of China's digital economy in 2022 will reach 50.2 trillion yuan (about 7.25 trillion USD), an increase of 10.3% over the same period last year, ranked second in the world for many years. The growth of China's digital economy is accompanied by the expansion of digital infrastructure construction. Accordingly, China has policies to promote the rapid development of 5G technology. By the end of 2022, China had a total of 2.31 million 5G base stations and more than 1 billion 5G users. China also possesses one of the largest and most advanced network infrastructures in the world. China has promoted the integration of big data, cloud computing and artificial intelligence. It is forecast that by

2025, China will account for nearly 30% of the world's total data volume with many rich types of data. Data has become a key factor for the development of China's digital economy.

China's digital transformation not only brings opportunities to people within its borders but also to businesses around the world. China's rise is setting the stage for Asia, but businesses are still finding ways to enter world markets. The Chinese market is undergoing rapid digital transformation, understanding this massive shift and how to exploit it will be important for businesses around the world. Much of this growth is focused on consumers, as they spend more online at e-commerce stores. During the digital transformation process in China, 6 major trends can be seen: retail integration, (ii) virtualization of services, (iii) mobility revolution, (iv) digitalization of social life association, (v) industrial IOT/supply chain digitalization, (vi) digital urbanization.

While market forces may dictate the success of China's digital economy, the government also plays an essential role. Pioneers have plenty of time to experiment with new business models, with regulators only implementing safeguards once scale is achieved and negative impacts are identified. China's digital economy has become one of the dominant economic forces after years of exponential growth. Because of this, China has made digital transformation a key part of its national development strategy and has developed a detailed roadmap and incentives to strengthen the sector.

China's digital transformation is a long and gradual process. Policy documents have been issued in turn to serve digital transformation:

- 1994: the National Computer Networking Facility Project of China;
- 2000: main networks were deployed including CSTNET, CHINANET, CERNET, CHINAGBNET to make connections; The birth of China's Mobile Internet;
- 2009: The birth of the “3G” Era; “Internet of Things” strategy;
- 2013: "China Broadband" Strategy; The birth of the “4G” era;
- 2015: Government's "Internet Plus" Strategy;
- 2017: The State Council launched the "AI Development Plan".
- Tháng 2 năm 2021, Cục Quản lý Nhà nước về Điều tiết Thị trường (SAMR) đã công bố các hướng dẫn chống độc quyền mới nhằm hạn chế các hành vi độc quyền của các nền tảng internet khổng lồ và tăng cường giám sát các thị trường thương mại điện tử. Các quy tắc nhằm khuyến khích cạnh tranh công bằng và bảo vệ người tiêu dùng.
- In February 2021, the State Administration for Market Regulation (SAMR) announced new antitrust guidelines aimed at curbing monopolistic practices by giant internet platforms and strengthening supervision of e-commerce market,
- The rules are intended to encourage fair competition and protect consumers:
- In June 2021, the Data Security Law (DSL) took effect as a new pillar in China's legal framework for information security and data privacy protection. The

law focuses on data localization, data export and data protection requirements.

- November 2021, the Personal Information Protection Law (PIPL), together with the Data Privacy and Cybersecurity Law, further strengthens the legal field of security and protection of personal information.
- In January 2022, the Cyberspace Administration of China (CAC) published the revised Administrative Provisions on the Management of Mobile Internet Applications' Information Services, which emphasized China's commitment to regulating mobile app privacy and security.
- In January 2022, the People's Bank of China (PBOC) announced the Fintech Development Plan for 2022-2025, aiming to promote digital transformation in the financial sector in the country over the next four years.
- In February 2022, China announced detailed implementation plans for the "Eastern Data, Western Computing" simulation, creating four regional hubs that will address supply and demand imbalances computing capacity and improve the country's overall computing capacity.
- In July 2022, the CAC published measures detailing the requirements for security assessments of cross-border data transfers, titled "Data Export Security Assessment Measures". In the 14th Five-Year Plan on socio-economic development and digital economic development, there is a detailed roadmap and incentive measures to strengthen this field.

Accordingly, China will enhance its capabilities in "strategic fields," such as sensors, quantum information, communications, integrated circuits and blockchain, as well as promoting technologies such as 6G; facilitate the digital transformation of supply chains to better utilize data sources and improve governance of the digital economy; The goal is to increase the output of core sectors in the digital economy to 10% of national GDP by 2025, up from 7.8% in 2020.

3. Conclusion and Recommendation

Based on studying the experiences of Malaysia, Thailand and China, lessons can be drawn for Vietnam in the digital transformation process as follows:

Firstly, the digital transformation strategy models in different countries are built in many different ways. In general, the strategic models of each country are based on a basic structural framework including: vision of digital transformation; specific goals on digital transformation; corresponding solutions and resources for digital transformation; specific programs and actions.

Secondly, the digital transformation process of all countries has in common the basic pillars, including: Government, businesses and people with key factors as the foundation to promote digital transformation, typically: institutions and policies; digital infrastructure; Digital government and online public services; digital human resources; digital economy; network security.

Thirdly, solutions to promote digital transformation need to first focus on perfecting institutions, especially perfecting the operating mechanism of the Digital Government and

enhancing digital skills for workers. These are two prerequisite factors to form the basis for implementing digital transformation.

Fourthly, develop documents and organize training to improve digital transformation capacity for businesses. Vietnam is gradually building and applying a system of policies suitable to the trend of digital transformation in businesses. In addition, encourage businesses to apply digital transformation, build and promote the implementation of national digital transformation strategies, determine the content of digital transformation in each industry, each field, and each business, contributing to promoting industrialization and restructuring the economy.

In addition, it is necessary to prioritize investment in focused digital transformation. This is an investment for change, from awareness, strategy, human resources, infrastructure to technology solutions; At the same time, the State needs to encourage the application of a number of model models of digital transformation businesses, prioritizing a number of areas that the State has chosen in the national digital economic development strategy such as agriculture, processing industry, trade, tourism and logistics.

References

- [1] National Agency for Science and Technology Information (Vietnam) (2023), Current status and trends of digital transformation in China, Hanoi.
- [2] The Ministry of Information and Communications (Vietnam) (2020), Digital Transformation Handbook, Information and Communications Publishing House
- [3] The Ministry of Planning and Investment (Vietnam) (2019), The guide for digital transformation for SMEs, Hanoi
- [4] The Ministry of Science and Technology (2021), Digital transformation from the perspective of science, technology and innovation: <https://www.most.gov.vn/vn/tin-tuc/19943/chuyen-doi-so-tu-goc-nhin-khoa-hoc--cong-nghe-va-doi-moi-sang-tao.aspx>
- [5] The Prime Minister (2020), Approving the national digital transformation program through 2025, with orientations toward 2030 (Decision No. 749/QD-TTg).
- [6] The Prime Minister (2020), Approving the national program to support businesses to improve productivity and quality of products and goods in the 2021-30 period (Decision No. 1322/QD-TTg).
- [7] Ho Tu Bao, Nguyen Huy Dung, Nguyen Nhat Quang (2020), Q&A about Digital Transformation, Information and Communications Publishing House.
- [8] Nguyen Manh Hung (2021), Experience in developing digital economy in some countries and reference value for Vietnam, Hanoi.
- [9] Nguyen Huu Xuyen (2021), Patent and technology management, Science and Technology Publishing House.
- [10] Cisco. (2019). Cisco APAC SMB Digital Maturity Index. USA: Cisco

- [11] David L. Rogers (2016), *The Digital Transformation Playbook: Rethink Your Business for the Digital Age*, Columbia Business School Publishing
- [12] Digital transformation (DX) – guide to digital business transformation: <https://www.i-scoop.eu/digital-transformation/>
- [13] Mark Raskino và Graham Waller (2015). *Digital to the Core: Remastering Leadership for Your Industry, Your Enterprise, and Yourself*
- [14] What is digital transformation?: <https://enterpriseproject.com/what-is-digital-transformation>.
- [15] Phung Trang (2023), Thailand strives to accelerate the digital transformation process <https://special.nhandan.vn/thai-lan-no-luc-day-nhanh-qua-trinh-chuyen-doi-so/index.html>
- [16] An Analysis of the Status of China's Digital Economy and Infrastructure, LiChunzhi, 12/2022;
- [17] China Digital Transformation Index 2021, Accenture Research;
- [18] The Future of Digital Innovation in China, McKinsey Digital, 10/2021