Abstract:

The digital economy is playing an increasingly essential part in each country's economic structure as the Fourth Industrial Revolution continues to develop rapidly. Vietnam is developing a digital economy in tandem with its growth model innovation to boost productivity, quality, efficiency, and competitiveness, resulting in game-changing potential for the rising economy. The digital economy presents numerous obstacles for Vietnamese businesses, particularly conventional industries. To lead in the digital transformation process and respond to the changing business environment, they must be adaptable and quick learners. This paper assesses the effectiveness of the digital economy, identifies the strengths and shortcomings of digital economic development in Vietnam, and suggests some solutions for promoting the digital economy in Vietnam.

Key words: Digital economy, economic development, benefits, solutions

1. Introduction

Vietnam is establishing a digital economy underpinned by an innovative growth model aiming at increasing productivity, quality, efficiency, and competitiveness. The digital economy is rapidly increasing, needing increased proactive behavior from both individuals and businesses in the face of tremendous changes brought about by the era of intelligent industry and modern technology. Enterprises must discover ways to adapt and integrate with current trends, even if it means undertaking thorough reforms, in order to survive and develop.

Decision No. 749/QD-TTg, approving the "National Digital Transformation Program to 2025, with orientations to 2030" by the Prime Minister on June 3, 2020, sets the goal of Vietnam being among the top 50 countries in e-government development, related to the growth of the digital economy and enhancing the competitiveness of the economy. By 2025, the digital economy is predicted to account for 20% of GDP, with each industry contributing at least 10%. By 2030, the digital economy should account for 30% of GDP, with a minimum contribution of 20% in each industry. Similarly, the records of the 13th Party Congress state that by 2025, the digital economy will account for 20% of GDP, and by 2030, it would account for around 30%.
The digital economy is gradually affecting all facets of socioeconomic life. Creating innovative business models with digital technology and data is a key component of developing a digital economy. Businesses in a digital economy reinvent their traditional production and business processes, shifting to ecosystem-based models that connect production, commerce, and usage stages with the goal of increasing business growth and labor productivity. In recent years, Vietnam's digital economy has developed by more than 40% each year, leading the Southeast Asia area.

2. Digital economy

Defining what constitutes the digital economy is a challenging issue as digital technology increasingly penetrates various sectors of society and the economy. Building on previous concepts of the "information economy" and "network economy," the digital economy is derived from digital technology, information networks, and the actions people perform within these networks.

[2] defined the digital economy as "an economy that primarily operates based on digital technology," namely electronic transactions done via the Internet. The digital economy includes all sectors and economies (industry, agriculture, services; production, distribution, products circulation, transportation, logistics, finance and banking, etc.) that use digital technology. Digital technology manifests itself in a variety of ways, including e-commerce websites, online advertising, and food delivery and transportation services that use digital technology to suit the convenience needs of their clients. On a bigger scale, the digital economy makes a substantial contribution to the integration of Vietnamese firms into the global technology chain.

The digital economy is more than just a technology trend; it is also a dynamic convergence of three major processing processes: material processing, energy processing, and information processing. Their interactions result in a novel, inventive, and efficient economic model. Among these, information processing is the most important and easiest to digitize. This model not only influences how firms work, but it also has a significant impact on the structure and quality of the economy, thereby building a creative and evolving economic future.

[6] emphasized that the growing digital economy can be linked with the increased use of advanced robotics, AI, the Internet of Things (IoT), cloud computing, big data analytics, and 3D printing. According to [8], "The digital economy is the communicative environment of economic activities on the Internet, a new model of rapid economic development." In a specific country, the digital economy includes information technology, software, mobile communications, and data transmission. Currently, the digital economy is thriving and emerging as a force driving economic growth in many countries. The level of knowledge, capability, and skills of the populace in digital technology is a crucial factor in spreading and developing these trends across various aspects of public life.
In general, the digital economy refers to economic activities that use digital information and knowledge as primary production factors, the Internet and information networks as operational spaces, and information and communication technology (ICT) to boost labor productivity and optimize the economy. The digital economy is a long-term evolutionary process that involves digital change on a national scale. At various levels, every sector, organization, and individual can use digital technology to improve their work, including making breakthroughs that change the quality of work. The digital economy promotes labor productivity and economic growth. Furthermore, the digital economy fosters long-term and inclusive growth since it is based on knowledge rather than resources; the cost of engaging in the digital economy is cheaper, generating economic opportunities for many individuals and organizations.

3. Situation of the digital economy in Vietnam

The Resolution of the 13th National Congress of the Communist Party, Resolution 52-NQ-TW dated September 27, 2019, by the Politburo, and the National Digital Transformation Program under Decision 749/QD-TTg dated June 3, 2020, by the Prime Minister all identify digital transformation, digital economy development, and digital society as strategic focal points for Vietnam in the upcoming period. They set out highly ambitious and specific targets for 2025, including: the digital economy accounting for 20% of GDP; the proportion of the digital economy in each sector reaching at least 10%; annual labor productivity increasing by at least 7%; broadband fiber optic infrastructure covering over 80% of households and 100% of communes; universal access to 4G/5G mobile network services and smartphones; more than 50% of the population having electronic payment accounts; Vietnam being among the top 50 countries in the Information Technology Index (IDI) and the Global Competitiveness Index (GCI), among the top 35 in the Global Innovation Index (GII), and among the top 40 in the Global Cybersecurity Index (GCI). To achieve these goals, an average annual growth rate of the digital economy of around 20% is required, which is three times the projected GDP growth (6.5-7% per year).

With the digital economy, for the first time in history, Vietnam is keeping pace with the world in the Fourth Industrial Revolution - the digital transformation revolution. This represents a significant opportunity for Vietnam to reach the development levels of the region and the world. According to international organizations, Vietnam's digital economy has made rapid progress and shows great promise compared to the region and the world. We are also facing tremendous opportunities to develop the digital economy.

4. Benefits of Developing a Digital Economy

Creating a digital economy is not just a new trend, but also a new business model that expands labor opportunities, job prospects, and revenue for individuals, businesses, and the nation, thereby boosting the quality of life-supporting services. The digital economy encourages more sustainable growth by leveraging new resources (digital resources and digital technologies) and successfully addressing environmental pollution concerns. The growth of the digital economy has resulted in beneficial effects and greater efficiency in the following areas:
Firstly, the digital economy helps reduce transaction costs. Transaction costs have significantly decreased in the fintech industry by applying technology to enhance financial operations. Financial transactions that once required a visit to a bank branch can now be completed in seconds on a mobile phone. In recent years, the financial services industry has launched several new projects, facilitating the development of digital payments, new financial service delivery channels, expanded lending models, and credit reporting data solutions, government-to-people (G2P) payment solutions, and e-commerce. Currently, about 32 private service providers are offering digital payment services through bank accounts, including electronic payment services, cash collection, electronic money, and e-wallets. The government's pilot mobile money program, implemented through Decision 316 in March 2021, has supported this trend by targeting a large segment of the Vietnamese population that has not yet used banking services. Thanks to the digital economy, business sectors have become more dynamic, from e-commerce, online advertising on social networks (Facebook, Instagram), entertainment (Netflix, Pinterest), transportation (Uber, Grab, Go Viet) to distribution, wholesale, and retail (Lazada, Shopee), etc. Specifically, the e-commerce market size is about 5 billion USD, while online tourism is about 4 billion USD, online media reaches 3 billion USD, and ride-hailing technology is about 1 billion USD.

Secondly, it minimizes information asymmetry and aligns supply and demand activities more effectively. The ecosystem established by technological activities enables rapid access to a large number of consumers. Data analysis reflecting consumer preferences and targeted service delivery helps reduce information asymmetry and makes supply and demand activities more aligned. According to Modor Intelligence, as of January 2024, Vietnam was recognized as one of the top 10 fastest-growing e-commerce countries globally, leading Southeast Asia. The largest e-commerce platforms in Vietnam are expected to continue robust growth in 2024, with revenue and sales volume exceeding 310 trillion VND (12.5 billion USD), an increase of 35% compared to 2023. Vietnam's e-commerce market is on a strong growth trajectory, driven by increasing internet and mobile penetration. The shift to online shopping and advancements in digital payments will continue to provide growth momentum for the Vietnamese e-commerce market.

Thirdly, it enhances production efficiency. In the manufacturing sector, automation has helped shorten production cycle times, improve quality, and enhance reliability. Digitization reduces intermediary distribution layers, directly linking supply and demand through digital platforms, thereby increasing productivity and enhancing production efficiency. The digital economy also requires a secure and high-performance electronic payment system. Most payment transactions in Vietnam are currently conducted in cash, and access to financial services remains slow. Access to and the development of inclusive finance are particularly limited in rural areas. However, the widespread availability of mobile phones and cheap internet creates significant opportunities for the development of digital banking if Vietnam can bridge the gap in financial inclusion.

Fourthly, the human resources do not yet meet the requirements for transitioning to a digital economy. The most crucial factor in the competitiveness and development of the digital economy is the workforce, especially in the field of information technology.
The IT workforce is pivotal, determining the success of the digital economy. Vietnam's IT workforce is still lacking in both quantity and quality.

Meanwhile, Vietnam's education system has not kept pace with the rapid development trends of the digital economy. E-commerce is a major contributor to the digital economy, but the workforce in this field requires both technological knowledge and understanding of commerce to effectively and safely adopt new trends. However, these skills remain weak among Vietnamese workers. Specialized IT skills are difficult to recruit, including skills in utilizing e-commerce applications, management, planning, project implementation, and infrastructure management databases.

Despite some improvements, Vietnam's IT workforce still ranks average in quality, with labor having high professional and innovative capabilities in the digital economy compared to the world. The training rate of the workforce is only 60%, far below the requirements for digital transformation. The shortage of IT workforce in terms of both quantity and quality is considered a major challenge for the development of Vietnam's digital economy.

Fifthly, there is a challenge regarding cybersecurity and information security. A digital economy based on information technology and the Internet always carries significant risks related to security, information safety, financial security, and the privacy of data subjects participating in the digital economy. Vietnam is one of the countries frequently attacked and vulnerable to cyberattacks. Vietnam ranks in the top 3 countries with the most cyberattacks globally, with a total of 70.7 million computers infected with viruses, causing damages of about 24,400 billion VND (in 2021). Over 1.8 million computers have lost data due to the spread of ransomware, including many servers containing data, disrupting the operations of numerous agencies and enterprises. Failing to ensure cybersecurity and information security will hinder the goal of making the digital economy one of the main pillars of the economy.

4. Solutions to develop the digital economy in Vietnam

Developing the digital economy will allow Vietnam to capitalize on chances to close the development gap with the rest of the globe. However, properly capitalizing on these prospects needs coordinated and determined efforts from the entire governmental system, the economic sector, and each individual. Several concerns must be addressed to achieve digital economic development in Vietnam.

*Coordinated national digital and digital society development policies and programs must be developed, enacted, and implemented as soon as possible.* It is critical to energetically implement the national digital transformation program, with a special emphasis on solutions for skill training, building digital human resources, digital enterprise transformation, and fostering the domestic digital marketplace. A thorough awareness of the benefits and limitations of the digital economy is required for maximum progress along this road. In the short term, the government should organize an economic and social task with a reasonable timeframe to form a collaborative group of senior experts from relevant fields (science, technology, economics,
management, social sciences, and so on) to assist in developing a medium-term digital economic strategy. A feasible medium-term plan will serve as the foundation for developing a long-term national digital economic strategy. Members of this collaborative group have the potential to become top-tier digital economy experts.

It is vital that corporate executives improve their digital economic leadership capacity. Vietnam's digital economic development is driven primarily by its firms, particularly small and medium-sized enterprises (SMEs). Enterprise leadership's determination and self-training efforts in digital economics are critical in generating momentum for the implementation and application of digital economic components, assisting enterprises in overcoming a significant barrier to digital transformation, namely Vietnam's low competitiveness. The government, state management agencies, training institutions, and firms must work together to improve enterprise leaders' knowledge and abilities in digital economics. Given Vietnam's low economic basis, there is a scarcity of high-level digital economy professionals capable of guiding national digital economic development. As a result, having a team of digital economy professionals is critical.

To satisfy the demands of the digital economy, human resource development must be prioritized. Creating programs and coordinating training for technology workers, as well as giving basic digital skills training to the general population, is critical for adapting to the digital transformation trend and promoting digital economic development. The digital economy encompasses a wide variety of connected topics, thus appropriate disciplines and knowledge blocks must be considered in order to improve the training of digital economy human resources within the scope of each sector of education. Investing in high-tech and digital economy training for workers should gradually increase over time, and efforts to improve workers' abilities must be defined as a sort of labor within businesses.

5. Conclusion

The digital economy is increasingly establishing itself as a new source of global growth. In Vietnam, the digital economy will be a crucial driver of economic growth in the next years. With a stable and healthy macroeconomic base, a proactive administration, and an increasingly tech-savvy young population, Vietnam's digital economy will continue to make tremendous achievements, cementing its place as a regional leader.

References


