Digital Transformation of Small and Medium-Sized Enterprises in Vietnam

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Abstract
The digital transformation of many countries' economies is taking place strongly in the face of the impact of the 4.0 Industrial Revolution, one of the components of the economy is that businesses are also actively participating in this transition. This article focuses on clarifying the concept of small and medium enterprises, digital transformation in small and medium enterprises; analyzing the situation of digital transformation of small and medium enterprises through the "Vietnam Business White Paper" published by the Ministry of Planning and Investment (General Statistics Office) in 2022, proposing a number of solutions to further accelerate the digital transformation process for small and medium enterprises to meet the requirements of international economic development and integration.

Keywords: Digital Transformation, Small and Medium Enterprises, Digital Transformation of Small and Medium Enterprises, Current Situation, Solutions

1. Introduction
A developed market economy requires the emergence of many different types of enterprises, organizations and companies such as state-owned enterprises, private enterprises, foreign-invested enterprises or joint-stock enterprises... to coexist, cooperate and compete, create motivation as well as promote mutual development.

In Vietnam, the development of a socialist-oriented market economy with a diverse existence in ownership types and corresponding to it are many types of enterprises that have brought important results, contributing to socio-economic development and ensuring national defense, security and foreign affairs for more than 35 years of renovation. Contributing to the development and growth of Vietnam in recent years, there is a great effort of the business community, including the small and medium enterprises.

According to the 2022 Vietnam Business White Paper, as of December 31, 2021, the total number of currently operating enterprises was 857,551, an increase of 5.7% compared to 2020, an increase of 16.7% compared to the average period of 2017-2020. In recent years, the number of private enterprises has increased rapidly over the years, accounting for nearly 97% of the total number of enterprises of the economy, contributing an average of 46% of GDP per year in the period 2016-2021, in 2021, contributing 18.5% of the total budget revenue. The report also shows that among these private enterprises, there are more than 96.4% of small, medium and micro enterprises, of which micro enterprises account for 78.2% but are employing nearly 50% of the total workforce. In order to recognize the contributions and to further promote its role as an important driving force of private enterprises in general and small and medium enterprises in particular, the Government of Vietnam has just announced Resolution 45/NQ-CP dated March 31, 2023 promulgating the Government's Action Program to continue implementing Resolution No. 10-NQ/TW dated June 3, 2017 of the 5th Central Committee Conference XII of the Party on Private Economic Development. In particular, the Government aims to have 1.5 million businesses by 2025, and at least 2 million businesses by 2030. In particular, the private sector contributes 55% of GDP in 2025 and 60-65% of GDP in 2030. Labor productivity increases by about 5%/year; each year, about 35-40% of private enterprises have innovative activities...

Currently, the opportunities brought by the 4.0 industrial revolution as well as the difficulties and challenges that are posed to Vietnamese enterprises, including small and medium enterprises, require this business division to know how to seize opportunities to create breakthrough development as well as timely and flexibly adapt to difficulties and challenges. One of those opportunities is that small and medium enterprises must promote digital transformation in all production and business activities as well as corporate governance.
2. Theoretical Basis
The concept of digital transformation and digital transformation in the enterprise According to Gartner, digital transformation is the use of digital technologies to change business models, create new opportunities, revenue and value. Microsoft believes that digital transformation is about rethinking how organizations bring together people, data, and processes to create new value.

Digital transformation in an enterprise is understood as the integration of digital technologies into all areas of a business, taking advantage of technologies to fundamentally change the way it operates, its business model, providing new values to its customers as well as speeding up its business operations. Digital transformation is also a change in the culture of businesses requiring businesses to constantly change, try new things and be able to accept failures.

Currently, in Vietnam, digital transformation in the enterprise is being understood as the process of changing from the traditional business model to the digital enterprise by applying new technologies such as big data, (IoT), cloud computing... in order to change the way of operating, leadership, work processes and company culture.

From here, we can understand digital transformation in enterprises as the application of digital technology solutions to production, business and corporate governance processes that bring changes from strategy to people, organizational structure to create new values, comprehensive, helping to increase competitiveness, improve product quality, optimize labor productivity, internal connection, promote corporate governance efficiency.

Small and medium enterprises
According to the provisions of Article 5 of Decree 80/2021/ND-CP detailing and guiding the implementation of a number of articles of the Law on Support for Small and Medium Enterprises, the criteria for determining small and medium enterprises are stated as follows:

(1). Micro-enterprises in agriculture, forestry and fisheries; in industry and construction employing laborers with annual average social insurance contribution of no more than 10 people and total revenue of the year of no more than VND 3 billion or total capital of the year of no more than VND 3 billion.

Micro-enterprises in the field of trade and services employing laborers with average annual social insurance participation of no more than 10 people and total revenue of the year of no more than VND 10 billion or total capital of the year of no more than VND 3 billion.

(2). Small enterprises in agriculture, forestry and fisheries; in industry and construction employing laborers with annual average social insurance contribution of no more than 100 people and total revenue of the year of no more than VND 50 billion or total capital of the year of no more than VND 20 billion, but not being micro-enterprises as prescribed in Clause 1 of this Article.

Small enterprises in the field of trade and services employing laborers participating in social insurance on an annual average of no more than 50 people and the total revenue of the year of no more than VND 100 billion or the total capital source of the year of no more than VND 50 billion, but not being micro-enterprises as prescribed in Clause 1 of this Article.

(3). Medium enterprises in agriculture, forestry and fisheries; in industry and construction employing laborers with annual average social insurance contribution of no more than 200 people and total revenue of the year of no more than VND 200 billion or total capital of the year of no more than VND 100 billion, but not being micro enterprises or small enterprises as prescribed in Clauses 1 and 2 of this Article.

Medium enterprises in the field of trade and services employing laborers participating in social insurance on an annual average of no more than 100 people and the total revenue of the year of no more than VND 300 billion or the total capital of the year of not more than VND 100 billion, but not being micro enterprises or small enterprises as prescribed in Clauses 1 and 2 of this Article.

Thus, the delineation of the concept of small and medium enterprises is based on criteria and will change in association with changes in the economic development practices of each country.

Digital Transformation in SMEs
From the above basic concepts, it can be understood that digital transformation in small and medium enterprises is the process of applying digital technology solutions to production and business processes as well as management processes to bring about changes from strategy to people, the organizational structure aims to create new and comprehensive values, help to increase competitiveness, improve product quality, optimize labor productivity, internal connection, promote the efficiency of governance of small and medium enterprises.

Thus, digital transformation is an objective necessity but also an internal demand of small and medium enterprises to both adapt to the industrial revolution 4.0 and increase competitiveness in the context of deepening international economic integration in Vietnam.

3. Research method
The article uses the method of studying documents, analyzing, synthesizing and comparing the analytical contents of the digital transformation process of small and medium enterprises. Results from the 2022 Vietnam Business White Paper are used to assess the current situation of digital transformation in small and medium enterprises. The limitation of the article is that digital transformation in small and medium-sized enterprises is associated with the State's support policies to both develop small and medium-sized enterprises and contribute to solving social security issues, employment contributes to the socio-economic development process in Vietnam.

4. Research results
Results of digital transformation of small and medium enterprises in Vietnam in the past period
The commitment and companionship of the Government is realized through a series of mechanisms and policies to support the business community, including small and medium enterprises. The Government has issued timely resolutions to meet the practical requirements of small and medium-sized enterprises, such as: Resolution No. 35/ NQ-CP dated May 16, 2016 and Directive No. 26/CT-TTg dated June 6, 2017 on supporting and developing enterprises until 2020; Resolution No. 75/NQ-Cp dated August 9, 2017 on
reducing costs and expenses for enterprises; Resolution No. 98/NQ-CP dated October 3, 2017 on the Government's action program to implement Resolution No. 10- NQ/TW dated June 3, 2017 of the Party on private economic development; Resolution No. 19/NQ-CP dated May 15, 2018 on improving the business environment and improving national competitiveness. In particular, Decision No. 749/QD-TTg dated June 3, 2020 of the Prime Minister approving the "National Digital Transformation Program to 2025 with orientation to 2030" has strongly promoted organizations, individuals and businesses to participate in digital transformation. Therefore, not only large enterprises but also small and medium enterprises cannot stay out of this game.

Credit packages with a scale of hundreds of trillions of VND are launched by the Government to support groups of small and medium enterprises and large enterprises, corporations and individual customers to overcome difficulties caused by the negative impacts of the Covid-19 epidemic on the business community. The access to the Government's support package has helped small and medium enterprises in the group of enterprises participating in strong digital transformation to have more resilience to boldly move towards successful digitalization. Currently, the Ministry of Planning and Investment has coordinated with the United States Agency for International Development in Vietnam (USAID) through the Project on Promoting Reform and Improving Connectivity Capacity of Small and Medium Enterprises (LinkSME) to implement the "Digital Transformation Enterprise Support Program 2025" to contribute to promoting the digital transformation process implemented under the National Digital Transformation Program to 2025, orientation to 2030. As a result, by the end of 2022, there were nearly 02 million access to program information, more than 01000 enterprises self-assessed their readiness on the Program Portal, more than 500,000 access to training materials and videos, sharing digital transformation instructions, 150 enterprises were supported with 1-1 intensive consulting and training to become typical enterprises on successful digital transformation such as consulting to build a roadmap for digital transformation, transformation, perfecting processes, products, supporting the application of digital transformation solutions...

In Vietnam, many small and medium enterprises are also actively participating in the digital transformation process. Cisco (a global network company) released the report "Digital Development Index of Small and Medium Enterprises in Asia Pacific", which said that small and medium enterprises in Vietnam are investing in cloud technology (18%), information security (12.7%), software and hardware upgrades for digital transformation (10.7%). Many small and medium enterprises have seen the advantages that they will have if they implement digital transformation. According to the report "The situation of digital business transformation in 2018 of IDG Group (USA)", in Vietnam, 55% of startups have used digital technology to operate their businesses effectively, while this rate of traditional enterprises is 38%. This helps businesses increase revenue by 34%. The obvious benefits of digitalization are: no need to set aside a space to store records, papers, documents...-saving space rental costs; saving time on printing and organizing documents and searching is also simpler; Data digitization combined with good security tools can enhance storage safety; easy to control and develop plans...

Small and medium enterprises have seen that digital transformation is an objective necessity. A survey by the Vietnam Association of Small and Medium Enterprises (VINASME) found that more than 80% of professional leaders want digital transformation and 65% of businesses are willing to invest heavily in digital transformation. The report "Digital economy in Southeast Asia in 2019" conducted by Google and Temasek indicates that Vietnam is one of the countries with the most impressive digital economic growth in this region. Vietnam's digital economy was valued at US $12 billion in 2019. Over the past five years, Vietnam's e-commerce market has grown by more than 25% per year. It is forecasted that Vietnam's digital economy will contribute 5% of GDP and will reach US $43 billion by 2025.

The report "Digital growth index of medium and small enterprises in Asia - Pacific region" by Cisco showed that the digitalization process of small and medium enterprises in Vietnam can contribute from $24-30 billion to GDP in 2024 and contribute to the COVID-19 economic recovery.

* Difficulties for small and medium enterprises in implementing digital transformation*

In addition to the achieved results, according to the authors, small and medium enterprises are also facing difficulties in implementing digital transformation such as:

- **Firstly, the digital transformation process in small and medium enterprises is happening slower than expected.** In the period before the Covid - 19 pandemic, only 30% of enterprises started the digital transformation process from research to implementation, leading to the closure of a series of small and medium enterprises due to the failure to adapt to the consumption habits of customers has been changed. According to the 2022 Annual Report on Enterprise Digital Transformation sponsored by the Enterprise Development Agency, the Ministry of Planning and Investment in collaboration with the project to promote reform and improve the capacity of connecting small and medium enterprises (LinkSME) funded by the United States Agency for International Development (USAID), 48.8%/1000 surveyed enterprises have used some digital transformation solutions but are no longer in use because they are not suitable or only used in the context of the Covid - 19 epidemic, but currently there is no demand.

- **Secondly, many small and medium business leaders have not seen the need for digital transformation, most of them think that digital transformation is the work of large enterprises, not small and medium enterprises.** According to many experts, small and medium enterprises often have 4 wrong ways of thinking about the digital transformation process, when they think that this process is only for large enterprises; It costs a lot of money; Digital transformation deploys as much as possible, the process takes place quickly or thinks that only digital transformation is the "magic wand" to help businesses take off. In fact, many activities businesses are doing such as selling on e-commerce platforms, using chatbots or using automation systems... but are not aware that these activities are also digital transformation.

- **Thirdly, many small and medium enterprises are still not properly aware of the role of digital transformation in the face of the great impact of the fourth industrial...**
network. Specifically, according to the Vietnam Chamber of Commerce and Industry (VCCI), Vietnam’s small and medium enterprises account for about 97% of the total number of enterprises, the level of science and technology and innovation is still low, with 80% - 90% of machinery used in Vietnamese enterprises are imported, nearly 80% are old technologies from the 1980s and 1990s. According to Cisco’s report on “Digital Development Index of SMEs in Asia Pacific”, SMEs in Vietnam are facing barriers in the digital transformation process such as lack of digital skills and human resources (17%), lack of strong IT platform to enable digital transformation (16.7%), lack of digital thinking or digital culture challenges in the enterprise (15.7%). These are the difficult challenges to overcome that the fourth industrial revolution affects small and medium enterprises in Vietnam.

- **Fourthly, SMEs are facing difficulties in digital transformation,** such as lack of information on digital technology (30.4%); lack of internal human resources to apply digital technology (32.3%), fear of personal/business data leakage (33.9%); lack of digital technology infrastructure (38.9%), high cost of applying digital technology (55.6%). A survey by the Vietnam Software and IT Services Association (VINASA) also revealed that 69% of businesses do not know which partner to choose to implement digital transformation, 72% do not know how to start from scratch, 92% do not know how to convert the number of needs.

The majority of SMEs are struggling with financial resources when it comes to digital transformation. The capital for data digitization is more or less dependent on each stage of development, the level of available technology as well as the actual needs, but it is still a burden, especially if investing in a complete and modern system can make the cost of building up quite high. Vietnam’s small and medium enterprises are behind both the Philippines and Indonesia in digital transformation because most do not have a strategy to apply digital technologies, are not highly proactive in the face of market reaction or have a digitization strategy to innovate and are mainly facing difficulties due to cost and technology problems.

According to the Annual Report on Enterprise Digital Transformation 2022, when interviewing 1000 enterprises about the Budget to invest in digital transformation, up to 20% of the respondents did not have a financial and investment budget for digital transformation; 43.3% of enterprises had an investment budget for digital transformation but did not meet the actual needs. According to this Report, only 36.7% of surveyed enterprises have the budget to meet the needs of digital transformation from medium to full to receive advice and solutions on digital transformation.

### Table 1: Budget of enterprises to invest in digital transformation

<table>
<thead>
<tr>
<th>Answer</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Always prioritize, fully meet the needs</td>
<td>10</td>
</tr>
<tr>
<td>Relative, almost meeting the requirements as needed</td>
<td>6.7</td>
</tr>
<tr>
<td>Average response</td>
<td>20</td>
</tr>
<tr>
<td>Yes, but not nearly enough</td>
<td>43.3</td>
</tr>
<tr>
<td>Absolutely not</td>
<td>20</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

*Source: Survey by the Enterprise Development Agency, Ministry of Planning and Investment in 2022*

In addition, there is a shortage of human resources to implement digital transformation in small and medium enterprises. This is a barrier on the path of digital transformation of small and medium enterprises as indicated in the Vietnam E-commerce Index Report 2020, which is the rate of enterprises having difficulties in recruiting skilled workers in e-commerce and information technology. Currently, only over 30% of enterprises meet the demand for this human resource. For the use of management software in business-to-business e-commerce transactions, in terms of scale, large enterprises tend to use more than small and medium enterprises. For example, with enterprise human resource management (ERP) software, large enterprises use up to 40% while small and medium enterprises only have about 14%. The survey also showed that large enterprises use 20-50% of total investment capital in e-commerce to invest in building and operating websites or mobile applications, while this figure in small and medium enterprises is only less than 20%.

- **Fifthly, digital transformation can cause a big change in personnel, thereby affecting the stability and situation of production and business, especially the senior or key positions of small and medium enterprises.** In addition, the digital transformation process in the small and medium-sized business sector also entails hot issues of information safety and security because these businesses are one of the targets often targeted by hackers. Because it is lack of strong investment in technological capacity and information security. In general, worries about information security and information security have caused these businesses to falter and lose the benefits of the digital transformation process.

- **Sixthly, the environment for digital startups is still not attractive.** According to the Global Digital Start-up System Index recently released by the Asian Development Bank (ADB) with 113 participating countries, the No. 1 country with a digital environment and support system for startups is Singapore, Malaysia ranked 27th, Thailand ranked 59th and Vietnam ranked 63rd.

The above ranking explains why the trend of young people starting businesses in other countries such as Singapore to register a company is increasing. Singapore has been very proactive in creating resources as well as building an entrepreneurial ecosystem in the past. The Singapore government has especially set up many organizations, investment funds, funding funds, innovation centers... to promptly support startups in many different stages of development. These add-ons are necessary levers for startups to achieve something. And open up opportunities for growth.

### 5. Recommendations

Based on the target according to Decision No. 749/QD-TTg dated June 3, 2020 of the Prime Minister approving the "National Digital Transformation Program to 2025 with orientation to 2030": By 2025, the digital economy must reach about 20% of GDP; With the promotion of digital transformation and digital economy development, the growth rate of social labor productivity must reach an average of over 6.5%/year, the contribution of total factor productivity (TFP) to growth must reach about 45%. By 2030, the digital economy will reach about 30% of GDP, the
average social labor productivity growth rate will reach over 6.5%/year, and the contribution of total factors to growth will reach 50%. Simultaneously, Vietnam is among the top 30 countries in information technology, innovation and competitiveness index.

In addition, in order to overcome the negative effects of the Covid 19 epidemic, according to the author, the digital transformation of small and medium enterprises needs to be well and synchronously implemented the following solutions:

**Firstly**, the State needs to continue to improve the legal environment that affects digital transformation activities in the economy. In the past time, many legal documents have been issued to facilitate the application and development of information technology in various fields. Specifically, such as the Law on Information Technology, the Law on Cybersecurity, the Law on information security, the Decrees guiding the implementation... However, the construction of the current legal environment is still very slow, not keeping up with the arising social needs, especially in new fields when implementing digital transformation. Specifically, there is a lack of legal corridors for sharing economy development; sharing and opening data of government agencies and businesses; protection of personal data and private information; rights and ethics issues when applying artificial intelligence... This greatly hinders the digital transformation of the business community in general, including small and medium enterprises.

**Secondly**, the State's preferential and supportive policies on finance, technology... need to stick to the needs and be more practical, which will be the basis for small and medium enterprises to successfully implement digital transformation. The State needs to have attractive support policies for technological innovation activities, thereby promoting and encouraging enterprises to participate in order to improve competitiveness. Support mechanisms and policies for digital transformation of small and medium enterprises must be transparent, thoroughly overcome the "application-approval mechanism", thereby creating motivation for the development and removing the hesitation of this business division when accessing incentives and support from the State.

**Thirdly**, in order to successfully implement digital transformation for small and medium enterprises, the sufficient and correct awareness of leaders is considered a "decisive start". According to Nguyen Kim Hung to implement digital transformation, even in small and medium enterprises, there must be a change in the perception of the whole business, starting from the mindset of the boss. In fact, many small and medium enterprises when implementing the digital transformation process have encountered great obstacles from the thinking of personnel in their enterprises, leading to a difficult application situation. There are cases that the business owner is eager to digital transformation but employees do not understand, have not changed their minds, leading to the implementation but opposing situation.

**Fourthly**, each small and medium-sized enterprise must define a digital transformation strategy roadmap to be able to successfully implement digital transformation. Innovate the business model, establish a digital-based management model, towards creative development goals. Based on the Digital Transformation Framework model for small and medium enterprises, enterprises can build and develop an ecosystem of digital transformation products and services; prioritize the deployment of centralized and shared application platforms, help enterprises improve, optimize and automate operational processes, improve labor productivity and improve working efficiency. Simultaneously, it is willing to abandon traditional business models to establish new business models, reinvent supply chains in the context of the changing economy.

**Fifthly**, promote the training of digital transformation human resources for small and medium enterprises, in addition, build and develop corporate culture. In addition to the support of the Government and from many sides, small and medium enterprises need to make efforts to mobilize themselves, quickly raise awareness, transform thinking through training activities, build digital human resources in various forms such as on the Job Training, e-learning-school training, e-coaching.

Along with that, building and developing corporate culture in small and medium enterprises also needs more attention because this is considered the key to success in the digital age of many businesses. Studies from prestigious organizations such as Deloitte, MIT or Capgemini have shown that: Changing corporate culture to adapt to the digital transformation period is the key to the success in the digital age of many businesses. In fact, many leaders of leading technology enterprises such as Google, Amazon, Microsoft always attach importance to cultural factors in the digital transformation process. A culture aligned with digital transformation will strongly boost employees' ability to produce results. Employees are more empowered and, as a result, faster decision-making. Culture at this stage is seen as a set of rules that guide employees and help them produce fast, productive results. A business that develops a culture aligned with digital transformation is often more likely to attract talent with their promise of a more collaborative, creative and empowering environment. These characteristics of that culture will be especially important in attracting talents with the right strengths and commonalities to contribute to and contribute to the development of small and medium-sized enterprises.

6. References
1. Decision No. 749/QD-TTg dated June 30, 2020 of the Prime Minister on the National Digital Transformation Program to 2025, orientation to 2030.