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Applying Digital Tools to the Operations of Vietnamese Businesses

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Abstract

With the trend of an increasingly open economy, Vietnamese businesses have many opportunities but also many challenges. To enhance competitiveness in the market, business administrators are required to digitalize their businesses. Digital transformation is the integration and application of digital technology to improve business efficiency, management efficiency, enhance the capacity and competitiveness of businesses and create new values. This

article surveys 130 Vietnamese enterprises, in order to evaluate the importance of using digital tools in these enterprises, and at the same time evaluate the level of use of digital tools to serve production and business activities. Survey results show that business administrators are aware of the importance of digital tools, and have applied digital tools in their businesses but to different degrees.

Keywords: Digital Tools, Current Situation, Importance

1. Introduction

In the Prime Minister's "National digital transformation program to 2025, orientation to 2030", the vision to 2030 is clearly stated: Vietnam becomes a digital country with the following basic goals: Economy Digital will account for 20% of GDP by 2025 and increase to 30% by 2030; Labor productivity increases at least 7% by 2025 (8% by 2030); The proportion of the digital economy in each industry must reach at least 10% by 2025 (20% by 2030). Vietnamese businesses have been actively participating in digital transformation and more specifically, the Government issued Decision No. 505/QĐ-TTg to set October 10 as "National Digital Transformation Day". Many studies show that Vietnamese businesses are beginning to realize the importance of digital transformation and have applied digital technologies in various stages, such as: Internal management, purchasing, logistics, production, marketing, sales and payments. In the field of internal management, cloud computing is the technical tool most used by many Vietnamese businesses. Next is the online conference system, work and process management system that is also widely used by businesses. However, the perception and actual application of digital tools in production and business activities in different enterprises is different.

From the above reasons, the article aims to learn about the current status of digital tool application in Vietnamese businesses, evaluate the importance of these digital tools to business performance and thereby propose solutions. Recommendations to help improve the efficiency of using digital tools in businesses.

2. Literature Review

Digital transformation can be defined as "the most profound and rapid transformation of operations, processes, capabilities and business models to take advantage of the changes in digital technology and the impact them in a prioritized and strategic way" (Hamidi *et al.*, 2018) [3]. The main goals of digital transformation can be described as customer-centric processes, increased operational flexibility, and reduced costs (Junge, 2019) [6]. The enablers of digital transformation are cloud computing, mobile computing, fog computing, big data, data science, business analytics, social computing, Internet of Things, systems virtual reality.

At the heart of digital transformation are changes within and between organizations and their transformations at different levels including governance, strategy, people, leadership, culture and technology (Heilig *et al.*, 2017) [4]. This 21st century model has brought a new way of thinking about innovation in businesses. Digital transformation connects with digital innovation, in which information technology plays a key role and engages different stakeholders, and in which transformation, knowledge management and demand-driven supply chains are leading characteristics (Bernardi and Exworthy, 2019) [1]. Heinzlmann

(2019) emphasized that digitalization refers to the digital transformation of business operations. The transformation is not only driven by the application of efficient technologies in the organization's work processes (digitizing paper-based work processes, invoices...) but also by the use of new technologies. New breakthroughs in existing business models (Uber, booking.com...). Digital transformation is not just about digitalization, but this process impacts all levels of the business, including customer experience, business operations and internal processes (Sugathan *et al.*, 2018) [8]. Digital transformation is the integration and application of digital technology to improve business efficiency, management efficiency, capacity and competitiveness of businesses and create new values (USAID & Ministry of Planning and Investment, 2021). Furthermore, Kane and colleagues believe that the digital transformation capacity of businesses is reflected in many different ranges of products, business processes, sales channels or supply chains (Kane *et al.*, 2015).

The digital transformation process is very complex and has an impact on all business activities. Therefore, building and implementing a digital transformation strategy has become a key concern for many businesses before implementing digital transformation, and a systematic approach is a decisive factor for success (Hess *et al.*, 2016 [5]; Schulz & Tungseth, 2018). Digital transformation strategy refers to the business strategy applied to all digital transformation initiatives, including the entire process: Gathering all the necessary information, planning, recognizing risks, opportunities and maintaining digital transformation strategies (Rausser, 2016) [7]. The Ministry of Science and Technology of Vietnam has proposed a draft of 41 key technologies of the 4.0 technology revolution in accordance with Vietnam's socio-economic development strategy and plan for the 10 years from 2021 to 2030 (Ministry of Science and Technology, 2020). Digital technology includes all tools, electronics, systems, devices, software and resources to create, process or store information in different fields (Ho Tu Bao & Nguyen Nhat Quang, 2022). Key digital technologies of the 4.0 Industrial Revolution: Automatic robots; Simulation; Horizontal and vertical system integration; Internet of Things (IOT); Network security; 3D printing; Augmented Reality (AR) & Virtual Reality (VR); Big data and analytics; Cloud computing; Blockchain; Artificial intelligence.

3. Research Method

Quantitative research to evaluate the level of use of digital tools in production and business activities of Vietnamese enterprises, carried out through the following 3 steps:

Step 1: We build a questionnaire on Google Forms, send it to accountants and business managers via email using a convenient sampling method, and send it to friends, relatives, and partners. ...

Step 2: The number of survey questionnaires distributed was 140, sent to 140 enterprises, and the number of votes collected was 130 from 130 enterprises, reaching 92.9%. All receipts meet the required information requirements.

Step 3: We analyze the data on SPSS 22 software with the following tools: Frequency statistics, average statistics.

The questions in the survey apply the 5-point Likert scale: 1- Strongly disagree; 2 - Disagree, 3 - Normal, 4 - Agree, 5- Strongly Agree.

4. Results

Enterprise scale

The author sent 140 votes to 140 businesses, and received information from 130 businesses with 130 votes.

Table 1: Characteristics of surveyed enterprises

Characteristics		N = 130	Percentage (%)
Type	Joint Stock Company	55	42.3%
	Limited liability company	75	57.7%
Number of employees	< 10 persons	5	3.8%
	10- 200 persons	75	57.7%
	200-300 persons	30	23%
	> 300 persons	20	15.5%
Capital	< 20 billion VND	75	57.6%
	20 – 100 billion VND	34	26.2%
	> 100 billion VND	21	16.2%

According to survey results, of the 130 responding businesses, 57.7% are joint stock companies and 42.3% are limited liability companies.

Regarding the results of business capital, the number of enterprises with capital under 20 billion accounts for a large proportion (57.6% of enterprises), enterprises with capital scale from 20 billion to 100 billion have 34 enterprises with capital scale of 20 billion to 100 billion. 26.2%, businesses with capital over 100 billion account for 16.2%.

Regarding the number of employees, 3.8% of companies have less than 10 employees, 57.7% of companies have 10-200 employees, 23% of companies have 200-300 employees, and only 15.5% has a workforce of over 300 people.

In terms of business size, the author found that there are similarities in survey results between the two groups of businesses. The group of businesses with a capital scale of less than 20 billion (accounting for 57%), similar results to the group of businesses with the number of employees under 200 people (accounting for 62%). Similarly, the group of businesses with large capital of over 20 billion (41%) is similar to the group of businesses with more than 200 employees (39%).

The importance of digital tools in Vietnamese businesses

Survey results show that Vietnamese businesses are much interested in digital tools in business, including Human Resources Management System; Mobile application for remote employees; Online Learning; Internal approval system; Cloud computing services: file/data sharing (eg Google Drive...); Advanced accounting software & Consolidated financial reporting system; Timekeeping and salary calculation system; Software to support tax and social insurance reporting; Knowledge management system, internal social network; Financial and accounting software. Among them, business administrators believe that the internal approval system is the most important digital tool with a mean of 4.60. Next are digital tools such as mobile applications for remote employees, human resources management systems and cloud computing services. For applications of reporting support software, social insurance support software, internal social network systems, and financial accounting software, the evaluation is lower but still at a high level with a mean of 4.40.

Table 2: The importance of digital tools

Digital tools	Mean
Human resource management system	4.53
Mobile application for remote employees	4.58
Online Learning	4.45
Internal approval system	4.60
Cloud computing services: file/data sharing (eg Google Driver...)	4.47
Advanced accounting software & Consolidated financial reporting system	4.45
Timekeeping and salary calculation system	4.45
Software supporting tax and social insurance reporting	4.40
Knowledge management system, Internal social network	4.40
Financial and accounting software	4.40

Level of use of digital tools by business size

To evaluate the difference in the level of use of digital tools in large-sized enterprises and small-medium-sized enterprises, the author conducted a group comparison. The survey results are shown in Table 3. According to the survey results on the current status of applying digital tools compared to business size, there are differences between businesses of different sizes. Businesses with 200 or more employees have a higher level of adoption of digital tools than businesses with less than 200 employees. For businesses with over 300 people, the level of using estimates is almost 100%, especially tools for human resource management system, internal approval system, cloud computing services, timekeeping system, salary calculation.

Table 3: Current status of digital tool application compared to the number of employees

Digital tools	Number of employees	N	Mean
Human resource management system	< 10 persons	5	3.50
	10- 200 persons	75	4.00
	200-300 persons	30	4.70
	> 300 persons	20	4.90
Mobile application for remote employees	< 10 persons	5	2.77
	10- 200 persons	75	3.55
	200-300 persons	30	4.21
	> 300 persons	20	4.38
Online Learning	< 10 persons	5	2.55
	10- 200 persons	75	3.02
	200-300 persons	30	4.20
	> 300 persons	20	4.50
Internal approval system	< 10 persons	5	1.40
	10- 200 persons	75	1.99
	200-300 persons	30	4.55
	> 300 persons	20	4.90
Cloud computing services: file/data sharing (eg Google Driver...)	< 10 persons	5	3.50
	10- 200 persons	75	3.98
	200-300 persons	30	4.95
	> 300 persons	20	5.00
Advanced accounting software & Consolidated financial reporting system	< 10 persons	5	2.36
	10- 200 persons	75	3.91
	200-300 persons	30	4.40
	> 300 persons	20	4.70
Timekeeping and salary calculation system	< 10 persons	5	3.35
	10- 200 persons	75	4.23
	200-300 persons	30	4.78
	> 300 persons	20	4.90
Software supporting tax and social insurance reporting	< 10 persons	5	3.55
	10- 200 persons	75	4.32
	200-300 persons	30	4.78
	> 300 persons	20	4.90
Knowledge management system, Internal social	< 10 persons	5	2.32
	10- 200 persons	75	2.88

network	200-300 persons	30	4.35
	> 300 persons	20	4.90
Financial and accounting software	< 10 persons	5	3.02
	10- 200 persons	75	3.78
	200-300 persons	30	4.35
	> 300 persons	20	4.90

5. Conclusion

Through research results, the author found that Vietnamese businesses are aware of the importance of digital tools in business. Administrators are aware that digital tools will help businesses with the following contents: Human resource management system; Mobile application for remote employees; Online Learning; Internal approval system; Cloud computing services: file/data sharing (eg Google Driver...); Advanced accounting software & Consolidated financial reporting system; Timekeeping and salary calculation system; Software to support tax and social insurance reporting; Knowledge management system, internal social network; Financial and accounting software. However, the level of use of digital tools in businesses of different sizes is different. Most large-scale businesses can implement all digital tools to serve production and business activities. Small and medium enterprises have also implemented digital tools, however the level of use of digital tools is different. There are many digital tools that are hardly used by administrators of small and medium-sized garment enterprises.

Digital transformation is an inevitable trend and an important solution to help businesses in general and Vietnamese businesses in particular develop quickly and sustainably in the context of the current situation. This explains why there is a need for businesses to enhance their digital capabilities and consider their economic, environmental and social impacts to survive the digital revolution, meeting expectations of the market and building a smart and comprehensive society. Based on the awareness of digital transformation and the relationship with the sustainable development strategy of businesses, the Government, ministries, branches, localities and businesses need to jointly deploy synchronous solutions to accelerate the process. Digital transformation in businesses.

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