

## **The Digital Transformation of Accounting Industry for Small and Medium Enterprises in Vietnam: Challenges and Solutions**

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### **Abstract**

*The industrial revolution 4.0 in general and the trend of the digital economy in particular have affected all aspects of the economy. In the other hand, Digital Technology has the power to impact the strategies and competitiveness of businesses in the market. It is ever evolving and creating a revolutionary stand for different professions as well. Accounting is considered to be one of the oldest and traditional professions. The rules and methodology of this profession has remained uniform for a long period of time. But due to the advent of the digital technology accounting industry is experiencing some great changes. Challenges for the accounting profession are reflected in the need for rapid adaptation and transformation of business practice and business processes. Gradually it was difficult to manage the accounting of large firms without having any machine help. This profession faced a lot of challenges and required the need to adapt technology. The requirements of finance and digital accounting, as well as the requirements of regional and international financial and accounting integration, require proactive preparation, taking full advantage of the advantages as well as limiting the impacts disadvantage. The aim of this paper is to analyze and systematize the key challenges that digitalization brings for accounting industry and propose some solution for digital transformation of accounting industry for Small and Medium Enterprise in Vietnam*

**Keywords:** Accounting, Digital Transformation, Digital Economy, SME.

### **1. Introduction**

Digital transformation (DT) is the process of total and comprehensive change of individuals and organizations in the way of living, working and production methods based on digital technologies [1]. In the other hand, DT is the use of data and digital technology to comprehensively and comprehensively change all aspects of socio-economic life, reshaping the way we live, work and communicate with each other [2]. DT is also a change in the way of operating, processes, procedures, culture, based on digital platforms to achieve more effective goals, and it will certainly change the process the mode of operation of many industries today. Moreover, digital transformation also contributes to changing corporate culture, requiring creativity and process innovation to quickly approach the trend of the times.

In Vietnam, the process of regional and international financial and accounting integration in recent years requires the need to be proactive, take full advantage of the advantages as well as limit the adverse impacts

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from the digital economy. In particular, reality is posing a requirement to renew the accounting process to match the new situation. Vietnam is gradually integrating deeply into the regional and world economy with participation in many free trade agreements and economic cooperation areas. Beside, Accounting is an important economic management tool that has the function of creating an economic - financial - budgetary information system to meet the requirements of the business's economic administration and management. It is necessary to establish a system of synchronous policies to promote comprehensive, transparent, effective and efficient development of accounting activities in a manner consistent with international practices and the country's conditions with digital transformation. Therefore, the Strategy for Accounting and Auditing to 2030, issued together with the Prime Minister's Decision No. 633/QĐ-TTg dated May 23, 2022, has emphasized the goal of implementing DT in accounting field [3]. According to experts' forecasts, in the coming time, with the explosion of digital technology, the accounting field will continue to be deeply computerized [4]. Moreover, accounting is one of the leading fields of information technology application and accounting work is increasingly supported by information technology [5]. Since then, the accounting process has undergone a fundamental change when most of the accounting practices are applied. Proactively preparing the necessary foundations to access the digital economy will help Small and Medium Enterprise (SME) in Vietnam in general and the accounting sector in particular participate effectively in the global value chain, making positive contributions to the growth of the land [6,7]. This article analyzes the challenges of digital transformation for the accounting industry in SME businesses as well as proposes solutions to promote digital transformation for the accounting industry in the context of the digital economy.

## **2. Theories and Research Methods**

### **2.1 Concept of digital transformation in accounting activities**

Digital transformation in accounting and finance refers to the process of incorporating digital technologies into accounting and finance processes and operations. This can include the use of digital tools and platforms for tasks such as record keeping, financial analysis, and reporting. The goal of this transformation is to improve efficiency, accuracy, and access to financial information, as well as to enable new ways of working and collaborating within the accounting and finance departments of organizations [8].

### **2.2 Research Methods**

This paper use qualitative research methods, collects data from reports of the National Digital Transformation Program period 2021-2025, Agency Enterprise Development, Ministry of Planning and Investment and Departments of Planning and Investment of provinces and cities. In addition, it is also combined with interviews with questionnaires of 120 SMEs operating in the fields of manufacturing, trade and services.

## **3. Difficulties and challenges for Digital transformation in Accounting Industry for SME in Vietnam**

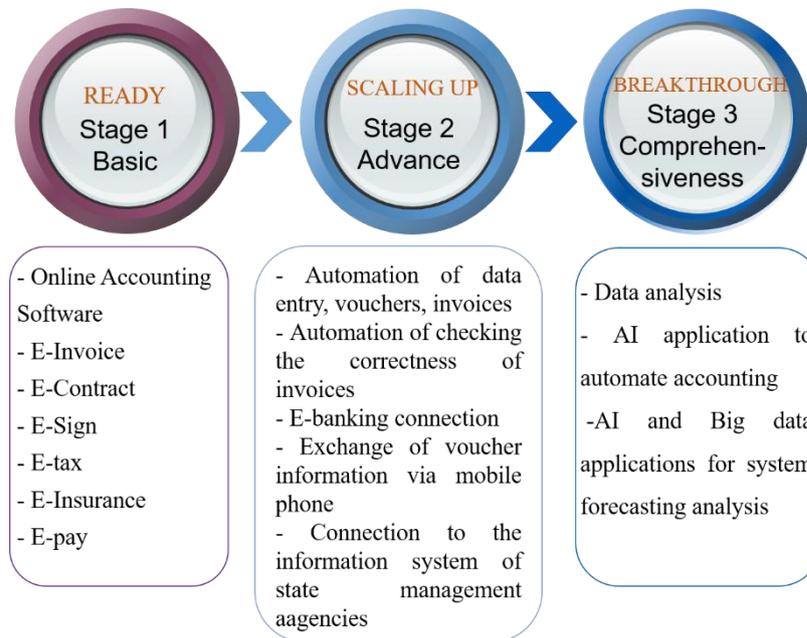
In SME enterprises, there is always a management information system to provide information for the management of the unit. This system includes people, equipment and processes to collect, analyze, evaluate and provide necessary and timely information for decision makers related to the business. The accounting system has three main functions:

Firstly, collect, record and store data about the daily activities of enterprises. Second, transform the data

into information that administrators inside and objects outside the business can use to make decisions related to the business. Third, provide appropriate control points to ensure that the resources of the enterprise, including accounting data, ensure that accounting information is provided objectively, reliably and ready to use when needed.

At present, accounting is one of the leading fields of information technology application. Furthermore, accounting is one of the fields that are greatly affected by the industrial revolution 4.0 in general and the trend of DT in particular. DT in the field of accounting can be understood simply as the application of digital technologies to accounting operations, helping accounting operations to be implemented quickly and efficiently. more efficient but still optimally saving human resources, time and costs for businesses. Accordingly, accounting practice at enterprises in the world and in Vietnam in the context of DT application is generalized through 5 technologies: Internet of Things (IoT), Artificial Intelligence (AI), Big Data (Big Data), Cloud Computing (Cloud), Blockchain. These are all technologies that make the accounting process real-time, fast, anytime, anywhere and more secure, the accounting organization in the business also becomes more flexible and the financial reports provide valuable multidimensional information. However, accountancy and its functions remain the same but most accountants might disappear sooner than one can imagine. Klaus Schwab says that automation is a substitute for human labor and can create inequalities in the world economy with regard to the labor market. This inequality and disruption can upset the order of creating capital gains and create a gap [9]. The work of accountants is computerized, the accounting process will have a fundamental change when most of the accounting practices apply technology.

Digitization is not only a technological innovation but also includes the way that companies and enterprises manage production and business processes in their units. Accounting work at economic units focuses on activities, including activities of collecting, processing, examining, analyzing and providing economic and financial information. The arrival of Industry 4.0 is predicted to create significant impacts on the accounting field. Specifically, the Internet will be used as a means of communication for the exchange of accounting information, and at the same time, accounting processes will be redesigned through the use of electronic networks and digital information [10]. On the other hand, the application of digital technology will completely change the channels and methods of capital mobilization and distribution, access to capital, and access to financial-accounting products and services, thereby directly affecting the business process. The digital transformation roadmap for the accounting industry in SME enterprises in Vietnam is proposed as shown in Fig. 1.



**Figure 1. Roadmap of Digital Transformation in Accounting Industry**

The roadmap includes 3 stage. Stage 1 is the basic DT with ready level including online accounting software, e-invoice, e-sign, e-pay... Stage 2 is the advanced DT with scaling up level including automation of data entry, automation of checking the correction of invoices, e-banking connection... Stage 3 is the comprehensive DT with breakthrough level including application of AI into automatic accounting process, application of AI and Big data for system forecasting analysis. Currently, most SME businesses have completed the DT process for the accounting industry in stage 1 and are moving to stage 2. However, the process of digital transformation from step 1 to step 2 encounters some difficulties and challenges as follows

### **2.1 Lacking of information technology infrastructure, low security**

Investment in IT infrastructure in the field of accounting of Vietnam has not kept pace with new trends and has not been paid adequate attention to investment. The advent of technologies in the industrial revolution 4.0 has completely changed the current accounting method and process: all data is digitized... If there is a security policy or measure, it is easy to disclose information and steal information. This is the problem for businesses in terms of upgrading infrastructure, improving the quality of information technology systems, as well as finding reputable partners to improve the safety of data.

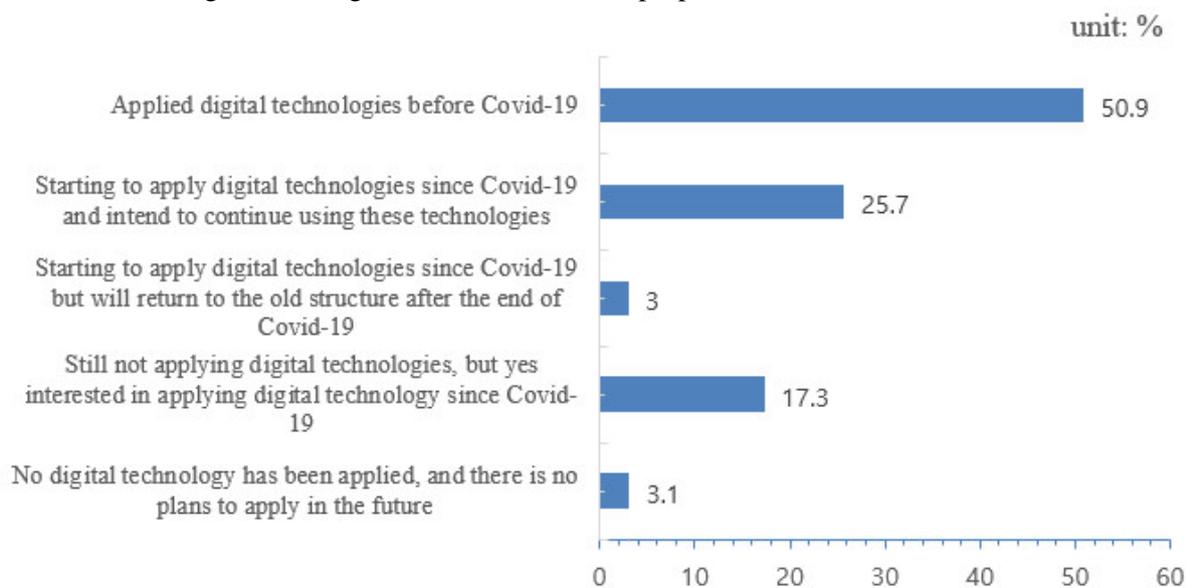
### **2.2 Lacking of high-quality finance and accounting personnel**

According to experts, with the development of science and technology in the 4.0 era and the global economic downturn affecting industries, accountants will face many difficulties and challenges to face. In fact, accounting personnel are redundant in quantity but lacking in quality. The majority of graduates currently do not meet the increasing requirements of the market, industry and employers. It is the lack of professional knowledge, information technology level, even soft skills. According to Vietnam Association of Certified Public Accountants [11], up to 2/3 of graduates majoring in Accounting and Auditing have not met the needs of employers in many aspects.

### **2.3 Awareness of businesses SME in the application of digital technology**

Traditional thinking strategies are no longer suitable for firms. Business leaders need to change their

thinking to have an effective digital operating strategy, creating initial experiences in the business development strategy process. On the other hand, culture is a big contributor to the success of digital transformation. A new culture in the organization must be established, ensuring that employees believe in the potential of digital transformation and agree to change towards the common purpose of the business.



**Figure 2. Enterprises' attitudes and perceptions towards digital technology**

(source: Business survey, VCCI, 2020)

According to a business survey by the Vietnam Chamber of Commerce and Industry (VCCI) [12], there is still a large percentage of businesses (20%) that are not really interested in applying digital technology after Covid-19 (figure.2).

### 3. Solutions to promote the Digital Transformation of Accounting Industry for SME in Vietnam

In the context that Vietnam is deeply integrating into the world economy and the region when participating in many free trade agreements, it is necessary to proactively prepare the necessary foundations to access new technological achievements from the world. Industry 4.0 in particular and the trend of the digital economy in general have been changing the approach to science and accounting profession on a global scale and increasingly evident in Vietnam. In order to take advantage of the advantages brought by integration and to innovate the accounting process in the digital age, it is necessary to pay attention to implementing the following solutions:

#### 3.1 For the governing body

Continue to raise awareness in association with further strengthening the propagation and dissemination of knowledge about financial and accounting activities in the market economy and international economic integration in the context of the onset of the Industry 4.0. Establishing a legal corridor for digital authentication and authentication on all transactions performed in the network environment in order to facilitate the implementation of digital application in SMEs.

Establishing a legal corridor in digital implementation and application for the unit's operations, especially

applying digital technology in SMEs to create a playing field with fair competition and fair competition among firms participating in the economy.

Establishing a legal framework for sharing, exploiting, using and reusing data, storing (storage form, storage time) of data, and data security for digital technology application

### **3.2 For the SME enterprise**

Firstly, SMEs need a change in thinking and awareness concerning the role of digital transformation, specifically the implementation of digital transformation in their units. Accordingly, SMEs need to be aware that the application of digital technology is a decisive factor for their success in the context of Industry 4.0. SME enterprises need to develop a strategy to apply digital technology in accordance with the provisions of law and the actual situation at the unit. In the process of digital transformation, effective cost control is always a top concern of SMEs. Therefore, SMEs need to have a strategy to allocate all resources appropriately. In addition, it is necessary to develop a number of performance indicators to evaluate the results achieved in the process of applying digital technology to promote the achievements as well as solutions to overcome the arising limitations within the process of implementing the application of digital technology.

Secondly, SMEs need to focus on information safety and security associated with network security against the threat of cybercriminals. The risk of theft of accounting information is very present in the network environment. This is a big risk that SMEs need to be aware of and be prepared for when adopting new technologies. Therefore, it is necessary to focus on building a network security system, ensuring the high security of accounting data information for businesses.

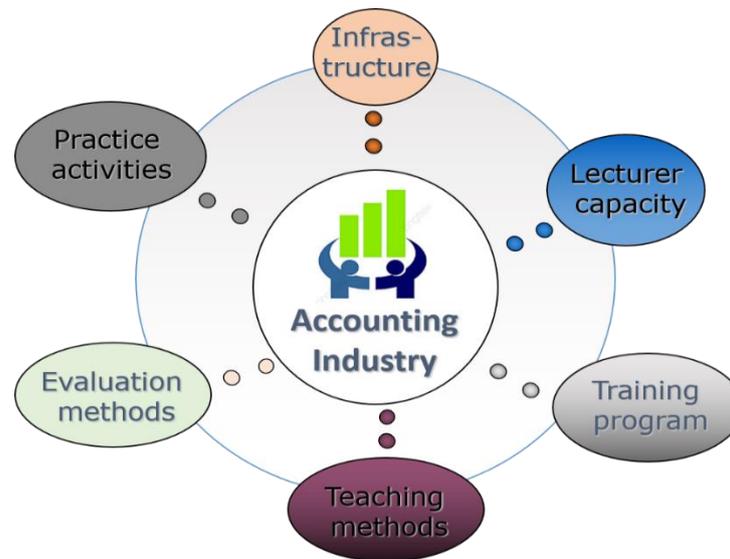
Thirdly, SMEs need to change their perception of the impact of digital technology in general and Industry 4.0 in particular on accounting activities. DT for Vietnam's accounting sector is a mandatory. It is important that the DT process for the accounting industry will become the driving force to help businesses grasp and change timely to adapt to new technology, improve labor productivity and work quality.

### **3.3 For accounting personnel**

Human resources who work as accountants in a digital context, along with professional knowledge, need to be able to use technology for their work. Moreover, accountant need to realize that the implementation of the application of digital technology is an objective necessity of the enterprise. In addition to specialized knowledge in accounting, accountants also need skills and knowledge in law, information technology, communication and management.

### **3.4 For Educational institutions**

Based on the analysis of the shortcomings and difficulties in accounting training activities due to the DT process at universities in Vietnam [13-15], the author proposes some recommendations to improve the profession factors affecting accounting training in the DT process as shown in Figure.3



**Figure 3. Factors affecting accounting training activities due to the impact of DT process**

+ *Infrastructure*

Educational institutions need equip for students with digital signatures (usb tokens) to practice digitally signing on all reports sent to relevant agencies such as monthly, quarterly, and annual tax reports; Declaration of participation, adjustment of information on social insurance and health insurance, customs declaration,...

+ *Lecturer capacity*

For practical courses on accounting and taxation, the educational institutions need to arrange qualified and experienced lecturers to teach or invite experts from businesses, tax authorities and Association of Accountants.

+ *Training program*

Educational institutions need to organize practical programs to help students have early access to accounting practice at enterprises; organizing seminars, sharing experiences between lecturers and experts in accounting practice at many enterprises, especially those operating in the field of accounting software business, accounting data mining

+ *Teaching method*

The lectures need to innovate the teaching process, from the traditional way of teaching to a modern teaching method suitable for the digital age. Innovate by moving from imparting knowledge to shaping the qualities and developing the capabilities of students, maximizing students' potential.

## 4. Conclusion

Under the impact of the industrial revolution 4.0, with the foundation of digital transformation has opened up a digital economy full of opportunities and challenges for organizations and SME enterprises. This paper analyzed the difficulties and challenges for digital transformation in accounting industry and proposed solution for digital transformation in accounting industry that are the basis for each enterprise, each accountant, and the state management agency in charge of accounting to actively learn and develop plans as well as specific actions to be ready to meet the requirements of the new trend. Thereby contributing to adding value to enterprises, improving the quality of accounting human resources, and ensuring the sustainable development of enterprises. However, the survey of enterprises in this study is limited, so it is not possible to comprehensively assess the current difficulties of enterprises in digital transformation digital transformation

process of the accounting industry. It is necessary to survey a variety of subjects to make an overall assessment of the challenges in the digital transformation process of the accounting industry to come up with an effective roadmap.

## Acknowledgement

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