



Accounting Information System in the Digital Economy in Vietnam

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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. 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. That context is posing a requirement to innovate the accounting information system in the digital technology era. Therefore, learning about the impact of the digital economy on the accounting information system: accounting process, accounting human resources, and state management of accounting is essential to ensure the system effective accounting system, helping businesses seize opportunities and overcome challenges.

Introduction

The accounting field is heavily influenced by the Industrial Revolution 4.0 in particular and the trend of the digital economy in general. 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 from the economy. 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. On the other hand, the 4th industrial revolution, whose core is digital transformation, has affected all areas of life, economy and politics.

Accounting is one of the leading fields of information technology application and accounting work is increasingly supported by information technology (IT) (Do Ngoc My, 2017). According to experts' forecasts, in the coming time, with the explosion of digital technology, the accounting field will continue to be deeply computerized (Phan, 2019). 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 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. Country (Huyen, 2019). The article explores the innovation of the accounting information system to take advantage of opportunities as well as overcome challenges in the context of the digital economy. At the same time, it is proposed to renovate the accounting field from the process and preparation of quality personnel to State management in the field of accounting (Nguyen, 2018).

Accounting Information System and Digital Economy

In an enterprise, 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 information 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. .

In fact, accounting is one of the leading fields of information technology application. The work of accountants is computerized, the accounting process will have a fundamental change when most of the accounting practices apply technology. However, there is one problem that every accounting information system always pays special attention to, which is the challenges of information security.

The digital economy is part of the economy. Digital economy development is the use of digital technology and data to create new business models, create digital products and services, or support the provision of digital services for businesses, with the convergence of a series of digital technologies (Teece, 2017). New technologies such as cloud computing, blockchain, artificial intelligence, etc. in the context of revolution 4.0. When operating in the digital economy, businesses will innovate their production and business processes to an ecosystem-based model, linking from production, trade to consumption, etc., contributing to increasing labor productivity. motion. On the other hand, the digital economy 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 process of performing accounting work and the process of organizing financial and accounting information in the enterprise.

Impact of the digital economy on the accounting information system in Vietnam

Accounting Process

Accounting is one of the leading fields of information technology application and accounting work is increasingly supported by information technology (Taipaleenmäki & Ikäheimo, 2013). According to experts' forecasts, in the coming time, with the explosion of digital technology, the accounting field will continue to be deeply computerized. Since then, the accounting process has undergone a fundamental change when most of the accounting practices are applied

In essence, accounting is the process of identifying/identifying, recording, synthesizing and reporting the economic and financial information of a business to decision makers. It is easy to see the breakthrough of technology that significantly affects the accounting process, that is: Artificial intelligence (AI) can replace manual jobs of accountants such as collection, processing . Best. Blockchain technology, from a business perspective, is defined as an open and decentralized ledger. This technology is capable of recording and verifying transactions without trusting an intermediary authority.

The technology itself exists as a file that stores a lot of recorded transactions called a block, making it the perfect asset recording, storage and management system for businesses

(Tapchiketoan, 2016). This technology is designed to disable data modification and is not retroactive. With cloud technology, this is not only a trending and innovative solution, but also a relatively new business model that is suitable for both small and medium-sized companies. When businesses are designed and operated on the basis of cloud technology, data is processed many times faster and more conveniently, and accounting information systems enjoy significant benefits. Changes in the accounting process of an enterprise can be identified when applying new technologies as follows; (1) About the general accounting process: All stages of the accounting process from collecting, processing, analyzing and providing information can be replaced by machines and technology. Simple tasks such as data entry, automatic entry processing, bookkeeping, and financial reporting are automatically replaced by technologies or software. This leads to a change in accounting habits and processes, a more professional number of accounting staff, business leaders, and reduced pressure on costs, human resources, and infrastructure floor; (2) About data collection: Along with the development of the economy, e-commerce is gradually becoming an inevitable trend. The characteristics and fundamental changes of e-commerce compared to traditional commerce have significant effects on the accounting system, from the way it is recorded and the accounting processes. Accounting vouchers are an extremely important means of collecting input data of the accounting information system. With traditional commerce, when the accounting vouchers are usually made of paper and stored manually in accordance with the provisions of the law on accounting vouchers. But with e-commerce, all activities related to accounting documents from making, circulating and storing vouchers are completely digitized and replaced by electronic invoices. With electronic vouchers, the initial recording and accounting is not done on paper at all, but through the data entry process and electronic data transfer system, and the review is done through the electronic documents. by entering passwords or electronic signatures; (3) Regarding data processing: When applying the achievements of the industrial revolution 4.0 such as blockchain technology, it will make a comprehensive change in the way and method of handling the collected accounting data. Blockchain technology is defined as an open and decentralized ledger capable of recording and verifying transactions without trusting an intermediary. The technology itself exists as a file that stores a lot of recorded transactions called a block. This technology allows the use of cryptography and distributed messaging protocols to create messages. detailed accounting information at the request of the accountant. At the same time, when using this technology, the dual-entry bookkeeping system is replaced by a multi-way bookkeeping system. Transactions will be recorded live, creating a system of records that are automatically verified and viewable by every user on that blockchain in real time; (4) Regarding data storage: One of the advantages of the most mentioned new technologies is the benefit of storing accounting data. For data storage, the accounting department of enterprises always has to answer questions, such as: What data needs to be backed up? What is the backup method? What is the media used to back up data? And how secure is the backed up data? All these questions will be solved when businesses apply new technologies such as cloud technology, blockchain, etc. Because cloud technology can simplify the process of backing up and storing data by automatically update copies of data during operation; create copies of data outside the enterprise to protect data from risks such as system failure, hardware failure or system destruction. With blockchain technology, instead of businesses storing and managing independent data records, all transaction information of both parties to the transaction is automatically recorded and stored on a single ledger. public in real time; (5) About providing output information: Digital technology affects the method of providing accounting information to information users. The results of the accounting process can be integrated with many other information to serve the diverse needs of users. For financial accounting information, this process can be fully automated, scientifically implemented and

not governed by external factors like when using blockchain technology. For management accounting information, with the ability to collect large data, fast processing speed, the most detailed information is also collected and analyzed, on that basis, it will be provided to enterprise administrators. in a timely manner to make optimal operating decisions in the enterprise. On the other hand, one of the requirements of accounting information to be almost absolutely guaranteed is its availability. These technologies always ensure that information about business operations cannot be interrupted or destroyed for any reason. When any incident occurs, DN always has the timely supplement and replacement of automatic records or data of the whole system stored in the cloud; (6) About control - feedback: One of the concerns of enterprises today when applying new technology to accounting activities is data security. The development of the internet poses challenges of information security, especially management accounting information. For example, when an enterprise applies blockchain technology, when the accountant performs a transaction on the chain, every computer in the network will determine and check whether the user is authorized to transact, thereby ensuring the accuracy of the transaction. integrity of data, improving the safety and security of accounting information.

Accounting Personnel

Because the accounting process is automated, each enterprise and each accountant of each enterprise need to be able to process and analyze information. Basic services such as accounting services, providing basic financial information are no longer the biggest benefits that accounting brings. Advanced and specialized services such as providing data, financial analysis, etc., bring new values and higher profits to businesses. New technology that directly affects the accounting information system of enterprises has established a global market, requiring accountants, besides professional competence, to ensure other necessary skills and professional ethics.

State management of accounting

The explosion of the digital economy raises a lot of problems that need to be solved in the state management of accounting when new business forms and payment methods appear, economic operations are also complicated and complicated. diversity needs to be handled. In addition to the current legal documents related to accounting, legal regulations on accounting in the digital age also need to be issued and adjusted appropriately and timely along with the development of the business. economic.

Some Solutions

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 war. Industry 4.0 will help the Vietnamese economy in general and the finance, accounting and auditing sectors in particular participate effectively in the global value chain, the financial service market, accelerate the industrialization process, modernization, actively contributing to the growth of the country. 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:

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 Industrial Revolution. 4.0. It is necessary to have full awareness and take proactive measures for the effective operation of the financial and accounting systems, convergence and harmony among countries, taking advantage of benefits and limiting adverse impacts. benefit from Industry 4.0. According to experts, for the development of the accounting field in the digital economy era, accountants still play a key role because current machines cannot make professional judgments and professional skepticism.

Continue to improve the legal framework by amending and supplementing current regulations in the accounting field in line with digital technology trends. Currently, the legal framework related to the accounting field of Vietnam is basically quite complete, approaching international standards. However, the problem is that many business models will appear in the digital economy and the law may not be able to cover them all. Therefore, it is urgent to regularly review to edit and supplement to meet the requirements of "life flow".

Promote human resource development in the Finance sector, especially in the field of accounting in association with training high-tech human resources; increase the ability to apply IT to meet the changes of the accounting field and new accounting processes appearing in the digital economy.

Currently, the qualifications of state managers in the field of accounting are still limited. Therefore, in order to meet the requirements of state management for the accounting field in the digital economy, it is necessary to regularly develop training programs on professional knowledge, new development trends in the digital economy. and abroad for this team.

For the business community

Focus on innovating and setting up new accounting processes, from the collection, processing and data entry of accounting documents to the processing and output of information; Improve the usefulness of accounting information through the application of IT in analyzing and evaluating accounting information; Creating favorable conditions for accountants and auditors to exploit and use accounting data sources quickly and effectively.

Focus on developing technology infrastructure to serve the development of products and services of financial institutions and financial institutions; at the same time, develop policies to encourage financial institutions, financial institutions, and accounting service providers to develop financial and accounting products and services based on digital technology.

Pay attention to promoting the development of accounting human resources and consider this a mandatory task because no matter how much technology develops, the leading role is still the human factor. Therefore, it is necessary to combine the training of highly qualified human resources with the application of high technology; Improve your IT skills and grasp new technologies, especially need to learn about Blockchain technology and its applications in accounting and auditing.

In addition, in the context of digital technology, the role and standards of accountants in the context of digital technology are different than today. Specifically, in order to adapt to rapidly and strongly developing technology, accountants in the digital age need to be equipped with

the necessary skill sets, including: Technology skills; receptive to change; communication and proficiency in English along with a set of critical thinking, strategic and analytical skills.

Fully assess the risk of loss of accounting information and data when connecting to the internet. The financial system must be more socially responsible, pay more attention to the safety and privacy of financial and accounting information, and have new defenses to ensure safety, security and privacy network. Financial institutions, accounting and auditing service companies, securities companies, businesses ... in addition to equipping with new security tools and measures, need to pay more attention to building a backup database system and raising awareness of information security and safety in the whole system.

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, these human resources need to have vision, work ethic, creativity, flexibility and sensitivity to change. In addition, accountants also need to improve foreign languages.

Conclusion

Under the impact of the industrial revolution 4.0, with the foundation of digital technology, has opened up a digital economy full of opportunities and challenges for all individuals, organizations and institutions. State management agencies in the field of accounting. The effects of digital technology detailed above are the basis for each enterprise, each accountant, and the state management agency in charge of accounting to actively learn and develop plans and plans. 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.

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