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DEVELOPMENT ORIENTATIONS FOR ACCOUNTING AND AUDIT IN THE CONTEXT OF INDUSTRIAL REVOLUTION 4.0

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Abstract
The industrial revolution 4.0 has had a great impact on all economic and social fields. The revolution brings many opportunities but also poses many challenges for fields and industries. In particular, the field of accounting and auditing also needs to clearly identify the impact of this fourth industrial revolution in order to have an appropriate development direction to improve the quality and efficiency of operations, contributing to general development of the country.

Keywords: Development, accounting, auditing, industrial revolution 4.0.

General overview of the industrial revolution 4.0

Industry 4.0 comes from the concept of 'Industrie 4.0' in Germany since 2013. At that time, people talked about high-tech strategies, artificial intelligence, cloud computing... without the involvement of humans. After that, Industry 4.0 has gone beyond the German national scale, with the participation of many countries and having global influence. This revolution has a great influence, affecting all aspects of economic and social life in order to transform the entire real world into the digital world.

The degree of influence and pervasiveness of the industrial revolution 4.0 takes place on a global scale, at a faster rate than what has happened so far and is expected to change the entire production system, management and administration around the world. It will create many opportunities in improving technology level, improving production capacity and competitiveness, creating attractive and potential investment opportunities in the industry. Industry 4.0 networks affect all aspects of economic and social life, creating many opportunities for the economy but also posing many difficulties and challenges. That requires industries, businesses and individuals to make constant efforts to adapt to the changes brought about by the industrial revolution. The Industrial Revolution 4.0 brings fundamental changes in most fields and industries, including accounting and auditing. According to experts, the Industrial Revolution 4.0 is at the beginning stage but surely in the not too distant future will create great turning points for the field of accounting and auditing.

Impact of the industrial revolution 4.0 on the accounting and auditing field in Vietnam

Some opportunities that the industrial revolution 4.0 brings to the field of accounting and auditing

The Industrial Revolution 4.0 brings many opportunities to Vietnam's accounting and auditing fields.

Firstly, the fourth industrial revolution brings opportunities for Vietnam to access international accounting and auditing technology. The influence of the industrial revolution 4.0, namely the Internet, Internet of Things (Internet of Things), large-scale data storage (Big Data), cloud computing, the development of artificial intelligence systems, Everything connected around the world... will open up good opportunities for the accounting and auditing fields to access convenient and cost-effective accounting software. From there, it helps to effectively use resources, save time and human resources, and access international accounting and auditing systems. Through the use of modern digital equipment, programs and technologies, accountants and auditors can collect information and data that were previously difficult to obtain.

Second, the Industrial Revolution 4.0 sets requirements for organizations and businesses to adapt to modern science and technology, which will also promote management agencies and businesses in the accounting field. Accounting and auditing must invest and apply strong technology.

Third, thanks to the industrial revolution 4.0, the information technology system has been deeply and widely applied to most financial operations, becoming an indispensable blood vessel in the management and administration of the household budget; Management of state budget revenues and expenditures; Electronic payments and government bond management; Implement electronic tax, electronic customs, one-stop shop; Public

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debt management, pricing, public asset management... That helps auditors to exploit data and information sources quickly and effectively.

Fourth, advances from the industrial revolution 4.0 are the driving force to help individuals, businesses and organizations operating in the field of accounting and auditing in the country develop in the context of timely grasping and changing to adapt to new technology. The industrial revolution 4.0 affects the awareness and actions of each officer and employee in the field of accounting and auditing, encouraging individuals to make efforts to study to improve their science, technology, and application skills, technical advances in professional work, thereby improving labor productivity and work quality.

Fifthly, thanks to the construction of big data centers (Big data) that help the science of data analysis and management in the field of accounting and auditing, there are more and more advantages. The collection, analysis and processing of big data will create new knowledge, support quick and effective decision making, thereby contributing to reducing costs and creating competitive advantages for businesses. Business, especially accounting and auditing work will become much easier.

Sixth, accounting and auditing is one of the leading fields of information technology application. The accounting process has and will have a fundamental change when most of the accounting practices apply information technology, including bookkeeping and financial reporting. Big data technology allows quick and simple processing of accounting practices, allowing quick access to data in a short time.

Seventh, the industrial revolution 4.0 brings many job opportunities in the field of accounting and auditing. The achievements of the industrial revolution 4.0 with wireless networks and digitized data will help accounting and auditing work not be limited by geographical distance. Accordingly, accountants and auditors in Vietnam can perform accounting and auditing tasks in any country around the world. Thus, thanks to the industrial revolution 4.0, the scope of work of Vietnamese accountants and auditors is expanded.

Eighth, the industrial revolution 4.0 is based on a digital technology platform, integrating smart technologies to optimize production processes, business processes, business processes, production methods, in which has a process to process and provide information to the accounting and auditing departments.

Ninth, the industrial revolution 4.0 has a great impact on the field of accounting and auditing in Vietnam, not only as a tool to help accounting and auditing firms improve the quality and service but also to expand the market to other countries thanks to internet connection.

Tenth, the industrial revolution 4.0 also facilitates data mining and improves the reliability of reporting through automated systems of auditing and on-demand accounting. It is forecasted that in the next 3 - 10 years, intelligent software and systems will replace manual work, automate complex and multi-faceted processes, and support service outsourcing and reuse trends inside some other services.

Challenges for Vietnam's accounting and auditing field from the 4.0 industrial revolution The Industrial Revolution 4.0 creates many opportunities for Vietnam's accounting and auditing fields, but also poses many challenges. Some of the major challenges facing the accounting and auditing field are as follows:

Firstly, the industrial revolution 4.0 poses a big challenge in terms of security, first of all, security in management accounting information, payment operations, investment activities, auditing... This requires the financial system to be more socially responsible for the safety and privacy of accounting and audit information.

Second, the industrial revolution 4.0 poses a challenge in completing the legal corridor for accounting and auditing activities. In particular, the emergence of many new and complex issues requires the authorities to research, evaluate, amend and supplement mechanisms and policies of the accounting and auditing field to meet the requirements of the accounting and auditing profession. Practical needs and rapid development of science and technology.

Third, the 4.0 revolution poses a challenge for domestic organizations and businesses that need to rethink their organizational model to match the trend of smart management… Especially accounting practice units. Auditors need to research and change services appropriately to meet the increasingly demanding needs of customers in the digital revolution era.

Fourth, the industrial revolution 4.0 with the increasingly sophisticated development of digital technology will increase security holes, creating conditions for high-tech criminals to operate. This poses challenges for the entire accounting and auditing industry in terms of information system security, information security issues, high-tech crimes, as well as challenges in terms of quantity, quality, qualifications and capacity of the staff of information technology serving the field of accounting and auditing.

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Fifth, a big challenge for the field of accounting and auditing is the investment and development of equipment to adapt to advances in digital science and technology. Investment in technology equipment will help bring a lot of efficiency, but the investment cost is a matter of concern.

Sixth, the industrial revolution 4.0 leads to great competition among individuals, organizations and businesses, requiring individuals and units to actively change, be creative and have a good development plan otherwise. It will be regressed and eliminated.

Seventh, the digital revolution sets new requirements on the number and quality of accountants, auditors and management staff of the accounting and auditing industry. To solve the limitations in qualifications and capacity of officials and employees and to arrange work for a number of employees is not an easy problem for the field of accounting and auditing in the context of the global financial crisis.

Orientation to develop Vietnam's accounting and auditing field in the context of the industrial revolution 4.0

Before the opportunities and challenges that the industrial revolution 4.0 poses to the accounting and auditing fields of Vietnam, it is necessary to have solutions to make the most of the opportunities and overcome the challenges and difficulties that contribute to promoting the development of accounting and auditing. Some suggested solutions are as follows:

Firstly, in order to proactively prepare to take full advantage of the advantages and limit the impact of the industrial revolution 4.0, it is necessary to innovate and establish accounting processes, from collecting, processing and entering data from accounting documents to the information processing process. Improve the usefulness of accounting information through the application of information technology in analyzing and evaluating accounting information….

Second, it is necessary to develop a strategy for the development of accounting and auditing in both the short and long term. The strategy is built on the basis of the current status of accounting and auditing and the problems posed by the digital revolution. Focus on developing to ensure that the accounting and auditing industries operate synchronously, operate effectively and with quality, in line with the market mechanism and adapt to the scientific and technical advances of the digital revolution.

Third, promote innovation and application of advanced science and technology, especially modern technological achievements invented from the industrial revolution 4.0 through the formulation and strategic planning of technology development, information in the field of accounting and auditing. Prioritize resources to develop new technology solutions, encourage creative ideas and plans to apply and develop technical technology.

Fourth, it is necessary to continue to improve the institution on accounting and auditing activities, to ensure conformity with market principles and commitments in the process of international integration. To do this, state management agencies need to regularly review legal documents, policies, regulations and guidelines related to the activities of the accounting and auditing fields to understand, catch and correct them in a timely manner, creating favorable conditions for businesses to operate effectively.

Fifth, it is necessary to pay special attention to the issue of network security. It is necessary to invest in and equip security and confidentiality solutions, regularly check and monitor compliance with regulations on security and confidentiality; detect and promptly handle security holes; improve financial capacity, corporate governance, especially risk management. Ensuring the confidentiality of accounting and auditing information of individuals, businesses and organizations.

Sixth, invest in building modern infrastructure, strengthen regional and international integration to meet the requirements of high-quality financial universalization for the economy; diverse accounting and auditing services developing with high knowledge and technology content; improve access to accounting and auditing services of enterprises and organizations.

Seventh, to develop a strategy for human resource development in the field of accounting and auditing, with emphasis on renovating and strengthening the training of high-tech human resources; increasing the ability to apply information technology, building a team of qualified accountants and auditors with ethical qualities, contributing to improving competitiveness, shortening the gap in qualifications compared to the region and the world.

In short, the industrial revolution 4.0 has had a profound effect on the accounting and auditing field in Vietnam. It brings many opportunities but at the same time poses many challenges for the field of accounting and auditing. Therefore, policy makers and managers in the field of accounting and auditing need to actively research and develop appropriate development policies to seize and take advantage of opportunities and overcome

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difficulties and challenges. If you do not take advantage of opportunities, they will pass away, and at the same time increase difficulties and challenges. It is necessary to have the unity and determination to innovate the whole industry, the coordination between domestic enterprises to improve their competitiveness and ability to access and adapt to the scientific and technical advances of the revolution.

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