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IMPACT OF DIGITAL TECHNOLOGIES ON ACCOUNTING

The modern world is rapidly changing under the influence of digital technologies, which have penetrated almost all spheres of social life. The field of accounting does not stand aside. Looking back at the time, even in the early 90s of the 20th centuries in Ukraine, the accounting process took place without the constant use of computer technologies [4]. Limited capabilities did not allow for quick processing of a large amount of data, which is why manual accounting methods were mostly used. That is, they used such applications as, for example, Excel. It should be noted that this is a rather inconvenient method of accounting, because it takes a lot of time and is simply inconvenient. With the technical limitations of the time, it was difficult for accountants to respond quickly to changes in business conditions and perform real-time analysis of financial data.

The new millennium brought with it changes in accounting. Since then, a variety of accounting software products have become more accessible and used by businesses of all sizes. The introduction of computerization and automation of processes became a key stage in the development of the accounting field. The spread of personal computers, local networks, and then the Internet contributed to the quick and convenient processing of a large amount of data. Electronic spreadsheets, specialized programs for accounting and electronic documents made it possible to significantly facilitate the routine tasks of accountants.

The new stage of industrialization brought many new technologies to the world, including progress in such areas as the use of information and communication technologies, automation and increased computing power. Automation, the use of cloud technologies, the expansion of analytics and the introduction of artificial intelligence have allowed accountants to perform tasks efficiently, increasing the speed and accuracy of data processing. Industry 4.0 has opened up new opportunities in electronic reporting, integration with the Internet of Things, and a personalized approach to accounting, providing accountants with tools for strategic analysis and management decisions [3]. These technological transformations have contributed to increased productivity and adaptation to changes in the economic environment, making the accounting profession more modern and reactive to the challenges of the times.

Usually, the development of new technologies is associated with something good, with progress and convenience. But relatively recently, when artificial intelligence became available to every user, the question arose - how artificial intelligence will affect various areas of our lives, including accounting. The implementation of artificial intelligence in the accounting process can have various consequences. The conducted research made it possible to identify the advantages and threats of using this technology. Artificial intelligence automates a significant part of the work, in the future it will not be necessary to process a large amount of information. Moreover, as a result of training, artificial intelligence will work according to an already set algorithm, but also create new algorithms, analyze them and improve them. Also, AI will be able to optimize tax accounting and improve the quality of compiling financial and tax reporting forms without any problems.

Among the main threats, we consider it expedient to single out the following. First, the presence of artificial intelligence, which will quickly and without errors process a large amount of information, will reduce the market's need for qualified specialists (Fig. 1). There is already a tendency in the world to decrease the number of new specialists in the field of accounting. Second, no matter how well AI works, mistakes can still occur, especially if the AI algorithms are misconfigured or not well adapted to a specific situation. This can lead to incorrect data analysis and errors in financial reports [2]. Third, reliance on AI at all stages of accounting may lead to so-called technology dependency. In the event of a failure or error in the system, it can lead to suspension of work, which can lead to serious problems in accounting and reporting [5]. Retaining the human element and intuition can be key to making non-trivial decisions and solving complex situations.

Although there are currently scientists trying to create such computing machines based on artificial intelligence that will work without human intervention in general, we believe that this is not entirely advisable, because it can lead to a number of problems described earlier. In addition, although computers have great powers, they do not have the common sense to analyze data in the way that humans do.

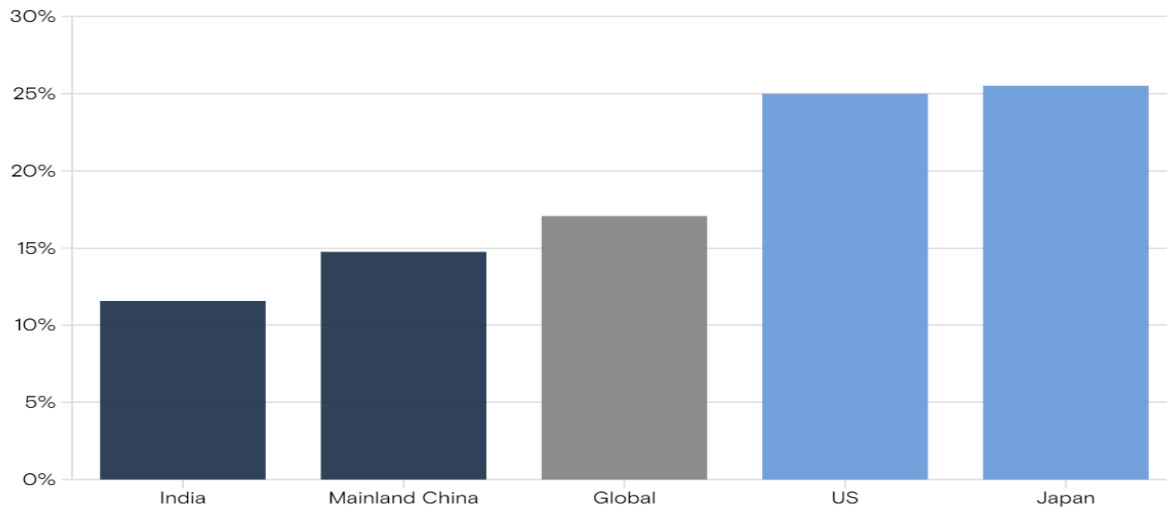


Figure 1 – Share of full-time equivalent employment exposed to automation by AI [1]

In our opinion, a modern accountant should possess a number of key attributes, such as responsibility, analytical mind and mathematical abilities. He must be attentive, patient and adhere to a high standard of accuracy. In addition to accounting, he has to perform a wide range of tasks, such as planning, decision-making, control, detection of violations, evaluation and audit of the enterprise's activities. It is also important that the accountant is familiar with modern automated accounting systems. In the world of rapidly changing legislation, it is important to be psychologically prepared for constant learning and self-education, follow changes in accounting and regularly improve your qualifications in various ways. That is, to do everything to keep up with artificial intelligence.

Thus, in a world of rapidly changing technologies, it is important to adopt and use innovations to maximize the positive effect, taking into account potential threats and taking appropriate measures in advance.

First, of course, start with the training of future specialists. In particular, it is necessary to focus on the development of professional skills that will be immediately connected with modern technologies, in particular with artificial intelligence. University studies, or courses and trainings should include AI and its application in accounting. Accountants must learn the basics of AI technology and understand its uses, allowing them to interact with the technology as a tool, not a replacement.

Secondly, in order to avoid problems in the complete replacement of people by computers, it is necessary to understand that AI should be an aid, not a replacement, because preserving the human element in work is important at all stages.

Thirdly, such changes should affect the changes in accounting rules. It will be important to ensure a reliable level of cyber security, because such data can become vulnerable to cyber-attacks. One of the options for solving this problem can be the creation of a data backup system, which will provide an opportunity to quickly restore data in case of data loss.

Therefore, in a world of rapid technological evolution, it is important not only to adapt to innovations, but also to use them to your advantage. Education of future accountants should focus on modern technologies, including artificial intelligence. It is important to understand that AI should serve as an aid, not a replacement for employees.

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