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ARTIFICIAL INTELLIGENCE AND CONTEMPORARY CHALLENGES OF THE ACCOUNTING PROFESSION

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Abstract: The development of technologies today is so rapid and so radically changes the realities around us, that one can not think about it and ignore it only if it is completely indifferent to the development of various spheres of human activity, including accounting. Today, opinions on the possible impact of technological development on the fate of accounting are not unanimous. Unfortunately, recently there has been a tendency to view new technologies as a threat to the accounting profession. More and more often one can hear expressions, that the accountant is a disappearing, a profession of the past, and from the moment of a certain level of robotization of document circulation, the human accountant will simply become redundant, like a driver of a self-driving car.

Keywords: accounting, artificial intelligence, technological progress, automation of accounting profession

JEL codes: M 41, M48

Research aims: the aim of the research is to identify the role of artificial intelligence in accounting processes.

Research novelty: the research has substantiated the importance of AI not as an accounting adjudication, but simply as an effective solution for information combining and data processing.

Literature review

Due to robotics and artificial intelligence, accountants will not be left without work. But the rapid development of information technologies and the digitalization of the economy are already changing the nature of accounting work. In a rapidly changing economic environment, more and more companies are resorting to the use of artificial intelligence in accounting and auditing (Eldon S. Hendriksen, Michael F van Breda, Irwin 1992). This allows to increase the efficiency and accuracy of processes, as well as reduce the costs and time spent on everyday work. However, new technologies do not mean new threats for those, who can use them, but, first of all, its new opportunities for those, who use them (Haldar, S., Dey, P. K. 2021). And accounting, and therefore the financial sector, cannot be an exception in this context.

Not a threat, but an opportunity. It should be noted, that for decades the progress of information technologies has also reflected the practical development of accounting. In particular, the calculator, telephone, personal computers and automated management systems created on their basis have influenced accounting practice in one way or another. Some authors even

associate the beginning of the process of accounting automation with the invention of the calculating machine by Blaise Pascal in 1642 (Belov R.A., 2023).

As for the development of the economy in recent years, it is precisely technologies that have radically changed accounting - it has become automated. Back in the early 1990s, when accounting was being automated, many theorists argued. that automation would lead to the "stupidization" of the profession, and accountants would stop thinking, and their qualifications would sharply decrease. But very little time has passed, and today we cannot imagine accounting without computer programs. However, what is important here is not the fact that there is a computer on every accountant's desk, but how automation has changed our profession and the role of an accountant in the economy in a short time (Udalov A.A., Udalov Z.V., Zubareva O.A. 2024).

Research results

Indeed, the basis of accounting records remains the original accounting documents, accountants continue to make entries in debit and credit, balance sheets are drawn up - everything is in its place. Decipher a modern balance sheet, compiled in accordance with IFRS, and compare it with the balance sheet of any company of the beginning of the 20th century - it is almost the same. This point of view was defended in the 1990s by American authors E.S. Hendricksen and M.F. van Breda.

What has really changed, and what role have computers played? First of all, automation has freed the accountant from the monotonous daily functions - data from original accounting

documents is almost completely imported through software, reporting can be completely carried out using programs, etc. Along with the acceleration of the accounting process, the role of the accountant in the life of the company has also changed. Our partners now have the technical means and the opportunity to act as analysts who track the connections between the accounting methods they have chosen and the analytical results obtained through the programs. These changes have occurred almost imperceptibly for us. This “imperceptibility” is due to the fact that we live in the process of these changes. It is our everyday life, and assessing everyday life is always more difficult. Separately, it is necessary to mention the opportunities that Internet technologies have created, both within companies and within the framework of inter-corporate interaction. The organization of electronic document circulation allows you to receive a digital version of the original document anywhere in the world, almost simultaneously with its compilation. It has become possible to track the indicators of the company's economic activity in almost real time, regardless of the location of the data recipient. The Internet allows you to provide reports to certain interested parties at any frequency, in the format they need. Such a change in the role of the accountant in the company also gives rise to new requirements for his qualification. The expansion of the scope of responsibilities of accountants requires appropriate education. Thus, the automation of accounting has opened up new opportunities for representatives of our profession and, one might say, has not weakened, but, on the contrary, strengthened their positions in the labor market.

Artificial Intelligence and the Future of Accounting

Ayesha Khanna, one of the leading experts in the field of artificial intelligence (AI), back in 2018 called for an attempt to find an answer to the following question as impartially and without emotions as possible: is the development of AI actually a threat to the accounting profession? First of all, we must understand and accept an already established fact: most of our daily life, as well as almost the entire future, in one way or another takes place (or will take place) under the influence of AI. There are already quite a few examples of this. The obviousness of the advantages of using AI is best reflected in the fact that recently, almost every month, new countries have been declaring AI an integral part of their national development strategy.

And here, according to A. Khanna, it is paradoxical that the accounting community, being very concerned about the development of AI, actually uses it very little. Although there are impressive opportunities for the application of AI at the level of technologies already available in the fields of accounting, corporate finance and law (Cara jaslove, 2017).

For example, AI can independently (without a special instruction from the user, being connected to the relevant legal systems) analyze and “understand” legal and regulatory documents, assess their impact on the company’s activities and suggest possible options for their interpretation from the point of view of legal security.

In addition, AI itself can ensure the practical application of the so-called “smart contracts” - algorithms that process data related to the execution of company contracts and, within the limits of their

“authorities”, automatically extend or change their content and execution.

There is also a huge potential for the application of AI in tax control, the fight against shadow business, the prevention of money laundering and similar areas. Globally, the control of certain transaction parameters by the Bank of America could significantly complicate illicit economic activity in the future.

At the moment, the use of AI in accounting practice in Armenia is mainly limited to the inventory processes of property, goods and material values. Here, the development of technologies is moving towards the system being able to “perceive” the object as a unique image, moving from conventional barcode scanning to full visual recognition (Li, Z. 2020).

What can be done today, assessing the present and future of accounting? It is worth noting, that today many of our partners almost do not apply the knowledge and skills, that they received during professional education. We were taught economics, financial analysis, management theory, marketing, capital markets theory, etc.

We, accountants, are unique specialists who are able to understand and evaluate the processes taking place in the company, based on their primary observation. We can comprehensively analyze the financial and production activities of the company. Through the balance sheet, we can assess the management of resources, taking into account the structure of their financing sources. We provide data to all levels of the management system, while understanding the interrelationship of this data, from the sources of their formation to their interpretation. But are these

opportunities being fully used? We think not fully. We live and work in conditions of complexity and expansion of the information field. The number of regulatory acts is growing, document formulations are becoming more complicated, globalization brings new challenges. At the same time, accounting education in universities is often limited to the “teaching” of existing regulations, which are rapidly changing and becoming ineffective. Focusing on the accounting process as basic knowledge remains one of the main shortcomings of accounting education (Mihai, M., & Duțescu, A. 2022).

Thus, the accounting system can free the accountant from monotonous, mechanical work, allowing him to focus on his professional mission, which is information flow management, data interpretation, support for managerial decision-making, etc. The accounting system should be considered as a long-awaited assistant to the accountant, which can change his role in the company's management system.

Organizations can use accounting systems based on their following capabilities:

1. Leave it to the accounting system to control and manage mechanical processes. Most accountants spend their time coordinating administrative processes. Accounting systems can easily perform these functions. For example, scheduling shifts, preparing current reports, etc.

2. Focus on conclusions drawn from the analysis as a basis for decision-making. Accounting systems can analyze data, but they cannot “understand”. Accountants must use their experience, the

history of the organization, culture, ethics, and emotional intelligence to make complex decisions.

3. Treat the AI as a partner. The AI can help in the decision-making process by providing data, modeling situations, and performing analysis.

4. Act as a designer, forming a combination of ideas. The chief accountant, manager, and financier must be able to combine the ideas of different people, creating effective and attractive solutions.

5. Develop social skills. The use of AI will inevitably lead to economic progress. In some areas, AI will be cheaper, more efficient, and more impartial than humans. But this does not mean that humans will become redundant. Their work will simply change, focusing on functions that only humans can perform. Therefore, organizations are advised to use AI as a tool for automating administrative and information processes, but never as a replacement for human judgment.

Conclusion

Thus, summing up the above, it should be noted that automation is the objective future of our profession. However, in modern economic conditions, it is not a threat to the profession, but rather a technical support for the transformation (development) of the functions of an accountant as an analyst-consultant. When we see the forecasts of the expected changes in the labor market related to automation and the introduction of artificial intelligence, it is important to understand that we are not talking about job cuts within the professions, but about a change in the emphasis of the

work functions of accountants and auditors, including the transformation of the main tasks performed by an accountant.

Economic life is rapidly becoming more complex. The problem is that knowledge in the field of accounting, auditing and corporate finance is no longer enough to be a sought-after accountant. The accountant of the future economy is an analyst who is able to assess the complex of all factors that affect the well-being of his organization, which are formed in the conditions of complex socio-economic reality.

Today, a qualified accountant should pay maximum attention to the development of new types of corporate reporting, such as ecological, integrated, social reporting, as well as reports on sustainable development.

In general, the processes taking place in the field of technological development are not a threat to the accounting profession, but new opportunities for the development of the profession in modern and future economic conditions. They are also an opportunity to increase the role of professional accountants in the processes of managing organizations and providing information for their activities.

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ԱՐՇԵՍՏԱԿԱՆ ԲԱՆԱԿԱՆՈՒԹՅՈՒՆԸ ԵՎ ՀԱՇՎԱՊԱՀԻ ՄԱՍՆԱԳԻՏՈՒԹՅԱՆ ԱՐԴԻ ՄԱՐՏԱՀՐԱՎԵՐՆԵՐԸ

Գոհար Կոստանյան

Հայաստանի պետական տնտեսագիտական համալսարան
տ.գ.թ., դոցենտ

Բանալի բառեր – հաշվապահական հաշվառում, արհեստական բանականություն, տեխնոլոգիական առաջընթաց, ավտոմատացում, հաշվապահական մասնագիտություն

Տեղեկատվական տեխնոլոգիաների և արհեստական բանականության (ԱԲ) արագ զարգացումը էական ազդեցություն է ունենում հաշվապահական հաշվառման բնագավառի վրա՝ փոխելով ինչպես հաշվապահի դերը, այնպես էլ մասնագիտության բովանդակությունը: Հոդվածում ներկայացվում են ԱԲ-ի կիրառման հնարավորությունները հաշվապահության ոլորտում, դրանց կիրառման դրական և բացասական ընկալումները, ինչպես նաև անդրադարձ է կատարվում մասնագիտության ապագային: ԱԲ-ն ներդրումը և ավտոմատացումը սպառնալիք չէ հաշվապահ մասնագիտության, այլ հնարավորություն է՝ ազատելու հաշվապահին միօրինակ գործառույթներից և դարձնելով նրան վերլուծաբան-խորհրդատու: Արհեստական բանականության ներդրումը ժամանակակից տնտեսության պայմաններում պետք է հանրության կողմից դիտարկվի որպես կարևոր գործիք՝ հաշվապահական մասնագիտության արդիականացման և դրա արժեքի բարձրացման համար:

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