ARTIFICIAL INTELLIGENCE IN THE ACCOUNTING PROFESSION

INTRODUCTION

The main approach of artificial intelligence is to gradually and strategically discover ways to perform complex human actions and show how computer technologies can work as humans would (CHUKWUDI, ODOH., 2018). The potential of technologies and system objects lies more in their intelligence, versatility, and complexity than in the source of their power (LOMBARDO, 2015). Practicing accountants have been using technology for many years to increase capacity and make effective and strategic decisions. ICAEW identified three broad issues that technology can help accountants solve (ICAEW, 2018). These include:

- providing cheap and accessible data to support decision-making.
- generating new ideas based on data analysis.
- spending more time on important tasks such as problem solving, planning and strategizing, decision-making, relationship building, and leadership.

Technology driven by artificial intelligence provides important improvements in all areas of accounting, is able to provide accountants with powerful abilities, and automate various tasks and solutions. In addition, the rapid change in capabilities and the nature of artificial intelligence systems allow for continuous improvement.

METHODS

The methodological basis of the research is formed by the fundamental and applied developments of domestic and foreign scientists and practitioners on this topic. Important results of the research are determined on the basis of the use of general scientific methods, including system, complex, structural, logical and comparative analysis.

RESULTS

Information and communication technologies (ICTs) are used not only by enterprises. The global development of technologies for the implementation of various activities is one of the ways to improve existing mechanisms. The Internet has become the main source of information in the field of communication and information transmission.

Artificial Intelligence (AI) is the emergence of a technology that automatically processes input actions efficiently and pliantly. It is a revolutionary technology to improve the productivity of any profession. The four dimensions given by Carol and O’Leary describe artificial intelligence. These dimensions include intelligence, business, research, and programming. Intelligent measurement refers to the use of machinery and equipment so that human involvement in operations is carried out from the point of view of business and research (CAROL; O’LEARY, 2013).
The programming field involves significant programming learning, problem solving, and the search for various applicable techniques, as artificial intelligence researchers consider the imitation of human thinking to be an important part of artificial intelligence (CAROL; O’LEARY, 2013).

Artificial intelligence has been introduced into the accounting profession for more efficient, convenient and adequate performance of accounting activities and obtaining information with the help of electronic services through computerized administrative services and the Internet. This will enable all parties (government agencies, businesses, stakeholders, suppliers, revenue recipients, and the public) to operate, conduct transactions, and share information.

This system can be created in corporate bodies and as an accounting education. The use of technology in accounting has become widespread due to technological developments and its use for obtaining management information based on integrated accounting information systems (GÜNEY, 2014).

The main purpose of accounting is to provide information in the most appropriate and adapted form to the appropriate users for making economic internal or external decisions. All applicable fields in the modern world have adopted and adapted to the use of information and communication technologies (BALDWIN, 2006).

The accounting profession is a broad sector that includes auditing, taxation, management, forensic science, corporate reporting, and many areas of accounting that are not left out in this evolutionary transformation. Accounting technology has become important in the educational sector as it encourages students to acquire knowledge and literacy in a variety of accounting applications and information (RUSSELL, 2010).

Artificial intelligence is a revolutionary development that could put forward the accounting profession to execute and make strategic decisions more effectively than it has in the past. Accounting practice has a history of using artificial intelligence (AI) for more than 25 years (GREENMAN, 2017). Machine learning models, AI enhancements applied to data or other AI developments can complement human thinking, be used to mitigate fraud, human error, and improve the accuracy of accounting functions (SHIVANI, 2020). This is of great importance for the accounting profession.

New technologies create better businesses, enabling them to enter new markets faster, make significant global contributions, gain insights, and build relationships with existing and potential customers (ELLIOTT, 1992). AI activities will be critical to accounting practices. Accounting managers will be freed from the intensive and monotonous work in the domestic accounting practice; the system will help to solve problems that have been missed or not identified by human input. Automation, digitization, processing and sorting of all types of data with the help of artificial intelligence will reduce the cost of performing these tasks manually and ensure high productivity. It creates an opportunity to effectively use the available resources and information. The gap between the fields of accounting and computer science in artificial intelligence can be closed by practicing accountants and researchers, as they combine both fields to improve business productivity (FRANCIS, 2013).

Every area of technology in alliance with artificial intelligence will have a significant impact on business as the world evolves towards development at all angles, such as quantum computing or blockchain. This continuous development and expansion of technology is not about taking on human involvement, but about combining human experience and machine learning models that can complement human thinking to produce remarkable results. The goal of creating new technologies is to create processes of operations with high accuracy, efficient performance with the elimination of all forms of errors. Artificial intelligence will create a glamorous future for the accounting profession.

Artificial intelligence is an opportunity for the growth and development of the business world today. For this reason, practicing accountants and students should get proper and adequate education and training in accounting technology developments in order to gain experience, reliable skills in applying accounting and technological knowledge in combination, and become a significant value for themselves and in the business world (SEYAL, NOAH & RAHIM, 2002).
In addition, the developed technologies can show their full capabilities when studied and used properly. Therefore, we need to understand their specific characteristics and how they can be applied to real-world problems (ATTOLINI; THOMPSON, 2014).

The issue of using digital technologies in various areas of activity is becoming more and more relevant every year, both around the world and in Russia. The use of digital tools in the economy has dramatically changed the way information is collected, stored, processed, and transmitted. In order to maintain the competitiveness of organizations in the context of modern information technologies, as well as to speed up work and improve its quality by reducing the impact of the human factor, changes in the economy have also affected accounting (TURNER & APETL, 2004).

Currently, there is a tendency for the development of related sciences due to the predominance of accounting practice over its methodology. At the same time, digitalization has led to significant changes in the way accounting is conducted and has a positive impact on its development (GREENMAN, 2017).

Today, the use of digital technologies in accounting, preparation and presentation of financial statements is an integral part of even a small enterprise. The minimum necessary technical means is a personal computer equipped with various software products that are most suitable for conducting a particular activity of the organization. The use of software products allows you to create electronic forms of documents and reports, analyze them, ensure the reliability of data storage, which greatly facilitates the work of an accountant, reduces the risk of errors and allows internal and external users to have free access to information.

The field of accounting, exactly like the other sectors of the economy, which significantly affect the life of society, is undergoing significant changes, which are caused by the active development of innovative technologies that are introduced into various production processes of companies. Cloud technologies, which are one of the most global innovations that are used in accounting, are essentially some servers on the Internet that are used for processing and further storing certain information (ICAEW, 2018). It is worth saying that for ordinary users, such servers together are a single virtual server, which is a "cloud". For employees of the accounting sector, such a "cloud" allows not only to use various management systems, but also to quickly switch between corporate and personal e-mail, together with an extensive documentary base (ASTAKHOVA, 2015).

In this work, we consider the use of cloud technologies in accounting, in connection with which we consider the concept of "Cloud accounting", which arose in 2010-2011. Note that despite the fact that it was created quite recently, it enjoys quite extensive popularity, which is quite possibly due to the ease of its use. In order to start using cloud technologies, it is enough for an accounting employee to pay for access to an Internet program, which allows you to increase the productivity of the workflow in the field of accounting in an online format. It should be noted that a number of tasks are significantly simplified with the use of cloud technologies (KALYAGIN, 2009).

Firstly, the process of forming primary accounting documentation is simplified; secondly, the process of settlement operations in matters of tax payments and mandatory insurance contributions is also becoming much more accessible; thirdly, the calculation of statistical data necessary for the further functioning of the company is significantly accelerated. In addition to these tasks, there are many others that are traditional in nature, which are also becoming more accessible for execution.

Considering the advantages that cloud technologies give to employees of the accounting sector, it should be noted not only the possibility of temporary rental of certain software, which is carried out without directly purchasing a license, but also the absence of the need to configure and constantly update computer programs that are installed directly on the employee’s personal computer. We also note that the equipment itself, on which the workflow is carried out, is practically not loaded when using cloud technologies, so there is no need to buy more expensive computers and other related tools, since the main load falls on Internet servers.

Another advantage of the introduction of cloud technologies in the accounting sector workflow is the increased mobility of employees – they cannot only carry out work activities from home,
but also move between offices or within the organization, while not stopping the workflow. Finally, we note the ease of use of the technologies under consideration, which completely eliminates the need for long-term training of employees, and also reduces the costs of the organization (RAKHIMBERDIEV, 2020).

However, despite such a number of advantages, cloud technologies also have a number of disadvantages that can negatively affect the labor process and its results. First, the use of cloud technologies does not exclude the possibility of problems that are associated with both system failures and interference in the Internet connection (KALYAGIN, 2009).

This is most likely due to the fact that, considering the system is quite new, in this regard, there are some shortcomings in its work that have not yet been corrected. Nevertheless, scientists of our time are actively engaged in the development and expansion of the capabilities of the cloud technology sphere. It is also impossible to exclude some risks associated with the confidentiality of the company’s data, which, when using the “cloud”, get to the Internet, and therefore are at risk. Modern IT specialists also try to get rid of this drawback (PARASKEVOV, 2015).

Let’s take a closer look at the services that can be provided by the cloud for professional accountants. Note that there are three main types of services-infrastructure, platform and application. The infrastructure that is provided as a service (IaaS) is an immediate opportunity to use the computer infrastructure as a service, the essence of which is the lease of a virtual character that is available for any operations and programs (RAZUMNIKOV, 2018).

A platform that is a service (PaaS) is the availability of the platform in question to perform a number of operations related to web applications. The essence of this service is to provide the same virtual computer that already has the necessary tools and programs that the employee uses in the future. Application-service (SaaS) is the provision of software for rent. It is worth noting that using such a service, the user gets the opportunity to work through a certain web application, with which the employee performs various accounting tasks.

The use of cloud accounting among Western countries is gaining more and more popularity, as for many business projects it is an excellent way to save capital and increase employee productivity (SEMENIKHIN, 2018). However, for Russia, the use of online accounting is not so common, as many users still doubt its effectiveness, security and convenience, so they prefer to use more familiar software (ASTAFIEVA, 2020).

However, it is worth saying that the Russian market provides not only foreign programs that automate business processes, but also domestic ones, which cannot be called less high-quality. One of the first companies to enter the Russian market with their idea of using accounting was “My Business”, “Accounting. Kontur”, “Buchsoft”. They are among the largest and most successful, however, the role of the 1C platform as the main distributor should be noted and the reason for the introduction of cloud technologies to mass use since the 1C: Enterprise 8.3 platform is quite common among Russian companies (PRANKEVICH, 2020).

CONCLUSION

Summing up, we note that at the present stage of development, cloud technologies, which are being introduced into the field of accounting, have not only a number of advantages, but also some disadvantages, which are actively fought by scientists working in the field of IT technologies. It is also worth saying that cloud accounting is gaining more and more popularity and distribution, as they have a positive impact not only on the productivity and efficiency of the workflow of the employees themselves, but also reduce the economic costs of the enterprise itself, as they provide the use of virtual equipment, which significantly reduces the load on the user’s personal computer. It is important to understand that the use of cloud technologies is beneficial for both large enterprises and small and medium-sized businesses, as there are many variations of services that are provided when using cloud accounting. Many scientists predict the further development and strengthening of cloud technologies in the field of accounting in the Russian market, so it is important to study and develop this area.
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Artificial intelligence in the accounting profession
Inteligência artificial na profissão contábil
Inteligencia artificial en la profesión contable

Resumo
A contabilidade, classificada como um sistema de informação, hoje em nosso mundo está alinhada com a tecnologia da informação para expandir suas capacidades de produtividade. Como provedores de informações, os contadores devem melhorar a eficiência e a produtividade de suas tarefas e operações. Mudanças tecnológicas ocorrem ao longo do tempo, o que facilitou as atividades contábeis e as tarefas. A profissão contábil mudou como resultado da evolução do software contábil, da tecnologia da informação e dos últimos avanços em inteligência artificial. A prática contábil não é a única beneficiária do uso de tecnologia da informação, estudantes, órgãos e administrações dentro da contabilidade têm sido efetivamente afetados pelo poder dos sistemas digitais, pela compreensão dos sistemas e tecnologias de informação e sua aplicação na educação contábil. Os alunos melhorarão sua compreensão e capacidade prática de usar a tecnologia e a aplicarão à profissão contábil.

Palavras-chave: Inteligência artificial. Profissão contábil. Tecnologia. Globalização.

Abstract
Accounting, classified as an information system, today in our world is aligned with information technology to expand its productivity capabilities. As information providers, accountants must improve the efficiency and productivity of their tasks and operations. Technological changes occur over time, and this has made accounting activities and tasks easier. The accounting profession has changed as a result of the evolution of accounting software, information technology, and the latest advances in artificial intelligence. Accounting practice is not the only beneficiary from the use of information technology, students, bodies and administrations within accounting have been effectively affected by the power of digital systems, the understanding of information systems and technologies, and their application in accounting education. Students will improve their understanding and practical ability to use technology and apply it to the accounting profession.

Keywords: Artificial intelligence. Accounting profession. Technology. Globalization.

Resumen
La contabilidad, clasificada como un sistema de información, hoy en día en nuestro mundo está alineada con la tecnología de la información para ampliar sus capacidades de productividad. Como proveedores de información, los contables deben mejorar la eficacia y la productividad de sus tareas y operaciones. Los cambios tecnológicos se producen con el tiempo, y esto ha facilitado las actividades y tareas contables. La profesión contable ha cambiado como resultado de la evolución del software de contabilidad, la tecnología de la información y los últimos avances en inteligencia artificial. La práctica contable no es la única beneficiaria del uso de la tecnología de la información, los estudiantes, los organismos y las administraciones dentro de la contabilidad se han visto efectivamente afectados por el poder de los sistemas digitales, la comprensión de los sistemas y tecnologías de la información, y su aplicación en la educación contable. Los estudiantes mejorarán su comprensión y capacidad práctica para utilizar la tecnología y aplicarla a la profesión contable.

Palabras-clave: Inteligencia artificial. Profesión contable. Tecnología. Globalización.