THE QUALITY OF SERVICES PROMOTED BY THE ACCOUNTANCY PROFESSION IN THE AGE OF DIGITALISATION AND ORGANISATIONAL PERFORMANCE

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Abstract
Advances in technology over the past decade have made information technology part of the everyday work of accounting professionals. The aim of the research is to carry out a study highlighting the changes taking place in the accountancy profession due to digitisation. This aim can be achieved by meeting the following proposed objectives: O1: to conduct a literature review to identify research trends on digitisation in the accounting profession; O2: to highlight the positive and negative aspects of the digitisation of the accounting profession; O3: to determine the link between services promoted by the accounting profession and organisational performance. In a digitization-driven economy, the diversification and increased quality of services offered by accounting professionals is noticeable. They are no longer data holders, they provide value-added commentary and solutions to change for the better the financial situation and performance of firms, provide business advisory services, offer recommendations and solutions before things happen, and contribute to setting business strategy.

Keywords: digitisation; accounting profession; organisational performance.

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I. INTRODUCTION

Digitisation is considered one of the most lasting and biggest changes in today's society, which has already affected most areas and therefore our lives. At the beginning of the 3rd millennium, digitization marked a new era in technology that reshaped everyday life, eliminating wrong patterns and giving the opportunity to develop entirely new businesses. The accounting profession has changed considerably in a relatively short period of time; in just 50 years, tasks that were once done on paper have been digitised on computers. And the change doesn't stop there: according to researchers, a whole range of new digital technologies could impact the accounting profession: automation, artificial intelligence, cloud computing, Big Data and blockchain.

Due to internationalisation, digital evolution and the development of information technologies, the accounting profession has to adapt to technological alternatives, which are superior to traditional accounting. These changes "have an impact both on the accounting field and on the whole business environment, both national and international" (Ciurea & Man, 2020).

With the diversification of activities to meet the information needs of the economic entity, digitisation can be seen as a set of techniques and tools through which accounting information is processed more quickly and efficiently for managerial decision-making and the economic entity moves more reliably towards competitiveness and performance (Macovei et al., 2021).

The age of digitisation is constantly changing the challenges that accounting professionals face in their field. The demand for accounting information has continually changed its focus, and now increasingly covers the spectrum of ongoing events and phenomena and their predictable evolution. Accounting provides accurate and meaningful information to assist decision-making and becomes an important tool for social intermediation. The current international trends in the field of accounting, driven by digitisation, are the expression of profound changes that are closely linked to economic developments at regional and global level. Accurate and meaningful accounting information reduces uncertainty and facilitates action by removing potential disruptions, thus contributing to sustainable development.

II. LITERATURE REVIEW

Accounting is a science that has evolved since ancient times, but it is becoming in the mind of the true professional a true art, a proof, of vocation and a language of communication in the business world. There are many situations in which an entrepreneur, trader, manager, engineer, lawyer, architect or any other entrepreneur has to understand and evaluate financial reports and then make managerial decisions based on them. Under these
conditions, the immediate effects on the prosperity of a nation can be seen, and accounting tends to become a social good.

The concentration of accounting information on different levels of processing represents a synthesis of the message contained. Many of the tasks and functions of classical accounting can be thought of as having been transferred to the IT system, resulting in a modern information-accounting system. However, a clear distinction can be made between the technical and scientific sides of accounting, due to the interposition of the computer system between them. All the aspects that make accounting a technique can be left to software, so that accounting professionals can deal with the scientific side of accounting.

In the emergence of new digital technologies that disrupt accounting practices, work tasks and roles are likely to adapt and thus create new opportunities for accounting stakeholders (Kokina et al., 2021; Leitner-Hanetseder et al., 2021). Greenman (2017) notes that this is not a new trend per se, as accounting has developed steadily over time and today's accounting profession is very different from what it was 20 years ago and perhaps 20 years from now accountants a different role. According to some studies (Leitner-Hanetseder et al., 2021), it is not a question of the complete automation of accounting work, although other research conveys such a picture (Agrawal et al., 2019; Frey & Osborne, 2017), but rather a natural exit of traditional professions and a shift of work to other tasks that accountants can perform - “a trend we have witnessed throughout history”. (Acemoglu & Restrepo, 2019).

Recent studies in accounting (Bakarich & O'Brien, 2021; Greenman 2017; Kokina et al., 2021) recognize the role of the accounting professional’s work in value-added activities, while the use of human work in non-value-added tasks decreases. However, there is still no consensus among academics on the net effect of artificial intelligence and other technologies in the workplace (Leitner-Hanetseder et al., 2021). The authors (Kokina et al., 2021) of a study, which addresses robotic automation processes and the impact of digitalisation on the role of accountants, identified different roles for future accounting professionals. According to them, the first role of an accountant in the development chain is to identify needs and opportunities for implementing new technologies. The second role is to explain and communicate the needs to the IT department responsible for implementing new technologies. As a final step in the chain, the role that the accounting professional has in keeping robots and technologies up and running and updating technology developments can be identified. As a result of recent digital progress, practically part of the accountants’ time is freed up by eliminating mundane routine tasks, thus the accountant takes on a new role - an analyst role. Instead of just producing accounting information, in the role of analyst, accountants leverage data to find solutions to pressing business problems and help companies achieve their strategic goals.

Digital technologies, from websites and social networks to the cloud, sensors, artificial intelligence and connected devices, have led to the “datafication” of our society that has increasingly attracted the attention of researchers. (Redden, 2018) Governments have not been immune to the digital wave and, at different levels and with different intensities, are resorting to the use of digital technologies, social networks, algorithms and artificial intelligence to innovate public services and explore new forms of interaction with citizens, as shown in studies signed by some authors (Charalabidis & Loukis, 2012; Munteanu & Newcomer, 2020, Cosmulescu et al., 2019). Digitization in the public sector has been presented as a way not only to improve services, but also to enable wider, more generous availability and access to data and better interactions with other users. All these features are expected to strengthen decision-making, transparency and social accountability (Ramírez & Tejada, 2019).

At the end of the twentieth century, accounting contributed to real-time financial information, and the main responsibilities of the accounting professional were linked to the generation of an “integrated information-accounting system” (German et al., 2021) in which reporting was central. In the 21st century, the accounting professional provides real-time information due to the automation of collected data and the electronic exchange of documents and data. Due to the large flow of data, effective solutions for data collection and analysis are needed to generate reliable and credible information for all economic actors. (Melega & Bursuc, 2021)

Philippe Arraou believes that “in an uncertain world, our future depends not only on our primary resources or our economic capital, but on our ability to understand and anticipate change”. (Arraou, 2016) The accounting professional “must not be defeated by digital evolution but must learn how to use it to evolve and have a successful career”. (Boghi & Socoliu, 2021) The social consequences of digitisation are difficult to imagine, but innovation in information technologies can only lead to evolution in the true sense of the word. What is certain is that we will have much more information and knowledge from various fields.

III. RESEARCH METHODOLOGY

The aim of the research is to carry out a study to highlight the changes in the accountancy profession due to digitisation. The stated aim can be achieved by meeting the following proposed objectives:

O1: Conduct a literature review to identify research trends on the digitisation of accounting;

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O2: to highlight the positive and negative aspects of the digitisation of the accounting profession;
O3: determine the link between services promoted by the accountancy profession and organisational performance.

In order to achieve the proposed aim and implicitly the set objectives, the research methodology is based on a methodological toolkit specific to the social sciences. To this end, techniques specific to the field of research were used, namely: literature review, synthesis, analysis, comparison and problematization. The main research method is the analysis of works dealing with the subject of digitisation in accounting. Various databases (Google Scholar, Web of Science, ScienceDirect, DOAJ) were used to select articles relevant to the research topic. Based on the selected articles the following research questions were established:

Q1: What is the motivation for digitization in the accounting profession?
Q2: What are the barriers to digitisation in accounting?
Q3: What are the advantages and disadvantages of digitisation for the accounting profession?
Q4: What is the link between digitisation of the accounting profession and organisational performance?

These questions will be explored in the next section.

IV. RESULTS AND DISCUSSION

Accounting practices can be divided into three categories: technical operations (recording, classifying and transcribing data), interpreting data to predict future situations and events and, finally, operations with social impact such as interacting with clients, assisting them in their decision-making process. It is important to distinguish the importance of the three components because researchers (Gulin et al., 2019; Julien, 2016; Jylhä & Syynimaa, 2019; Richins et al., 2017) believe that a major impact of digitization in accounting is that accounting professionals will focus on interpreting data and advising clients.

**Q1: What is the motivation for digitization in the accounting profession?**

Digitisation in accounting must be based on professional skills that contribute to performance and are geared towards measurable results. Boritz & Carnaghan (2003) introduced the following competency dimensions: inference, skill, efficiency, superior performance, cognitive skills and personal attributes. The digitization of transactions "is rapidly transforming the reality on the ground and the way work is done, thus causing accounting professionals to shift from a retrospective to a predictive approach". (Șova & Popa, 2020)

Digitisation should not be confused with digitisation or digital transformation, which are shown in Figure no. 1.

**Figure 1: From digitisation to digitisation and digital transformation**

Analysis by Grosu et al. (2022) reveals that readiness for continuing education and joining the accounting profession in the context of digitisation are influenced by several factors, the most important of which are: ease of use of digital tools, level of performance achieved, expected effort, organisational culture and regulatory policies. Fears about accelerating digitisation are associated with potential job losses by replacing humans with artificial intelligence, as well as accidental exposure of data due to loss of control, causing errors in measurement and reporting.

**Q2: What are the obstacles to digitisation in accounting?**

One reality of digital transformation in accounting is the organisational barriers it can face. The main factors can be divided into two main categories (Vial, 2019): structural changes and organisational rigidity. Structural requirements consist of changes in organisational structure, organisational culture, leadership, employee
roles and skills. The main inhibiting factors are inertia and resistance. Consequently, for accounting firms, it is vital to overcome problems and implement sufficient structural changes to enable them to progress in terms of digital development.

In the age of digitization, researchers stress the importance of innovative culture (Berghaus, 2017; Duerr et al., 2018; Karimi & Walter, 2015, Sebastian et al., 2018). Duerr suggests that in order to engage in the digitization process, organizations should have a culture conducive to it. In the case of the companies he studied, he identified firms with the so-called start-up mentality of being more adaptable to change. The start-up mentality is described as collaborative, customer-focused and low hierarchy, with no formalities required. First and foremost, the authors emphasise low hierarchy and equal power relations, with each employee having the opportunity to influence decision-making. Second, they identify a ‘culture of failure’, a culture in which risk-taking associated with innovative ideas that may fail is encouraged. Third, the authors argue that firms should embrace digital skills and find people with the right digital skills to reinforce and promote digital values. However, Sebastian et al. (2018) point out that for old large companies, the process of changing old values and culture is cumbersome, as they are often deeply embedded in organisations.

Digitization in accounting requires structural changes, but it also encounters obstacles marked by organizational rigidity. Vial (2019) argues that inertia is one of the most significant barriers to successful digitization. The notion of inertia refers to organizational rigidity, persistence in using existing systems and technologies that do not meet the demands of the changing environment. (Bonsón & Bednárová, 2019) According to Lucas and Goh (2009), the collapse of Kodak can be attributed to the failure to adapt to modern technologies involving digital photography. In general, the top management of organizations would like to engage in digitalization, but organizational culture and bureaucratic structure cause rigidity and prevent opportunities for change (Töytäri et al., 2017). In the literature (Matt et al., 2015), rigidity refers to the resistance of employees to change due to the pace and manner in which new technologies are introduced in organizations. Leadership skills are critical to mitigating resistance, and the entire transformation process requires the active involvement of all stakeholders who are affected by digital transformation.

**Q3: What are the advantages and disadvantages of digitisation for the accounting profession?**

The business environment perceives digitization as a radical transformation with advantages and disadvantages. The positive and negative perceptions of automation and digitization in accounting are summarized in the specialized literature (Asatiani et al., 2020). Employees, managers and investors positively perceive the digitization process because it reduces mundane and routine tasks, leaving time for value-added tasks that entail greater responsibilities for financial - accounting experts. Automating manual work allows accounting professionals to analyze and verify financial-accounting information. Accounting, by its very nature, requires busy periods due to deadlines such as monthly closings. Technological advances may allow for a more even distribution of workload (Blaker et al., 2013). The negative perceptions regarding digitization in accounting have as their central argument the doubt about job security. Accounting professionals worried that their tasks could become fragmented and they would no longer understand the whole process, as robots would perform some of the tasks and thus their overall understanding could be affected. Bygstad (2017) points out that researchers have not fully understood how robots work and how “rules” could be written into the systems.

The studies carried out (Ionescu & Barna, 2021; Hielata & Păvălărinta, 2021) found the following advantages of digitization for accounting professionals: fast processing of financial and accounting information, controlled access to data, better control and monitoring of processed information, management better use of resources, accuracy of information, maximization of profit, reduction of costs, saving of time and limitation of human errors. The main disadvantage of digitization is the difficult adaptation to the new systems of accounting professionals who do not have sufficient IT skills or do not participate in training programs.

Digitization implies the optimization of the business model through the use of information technology. Optimizing the business model is achieved by going through several phases: obtaining a flow of information in connectivity conditions, ensuring control through the analysis of financial - accounting information, establishing managerial decisions to ensure the increase in performance.

**Q4: What is the link between digitisation of the accounting profession and organisational performance?**

Studies undertaken worldwide (Delonoe, 2013; Cheffi & Beldi, 2012; Berry et al., 2006) confirm a direct relationship between the quality of accounting services and organizational performance. In Romania, the research carried out by Stoica & Ionescu–Feleagă (2021) shows how accounting practitioners react to the change imposed by digitization and the pace at which digitization drives their behaviour and experience.

In an increasingly active business world, performance is of fundamental importance not only in terms of company management, but also in terms of the interests pursued by its partners: shareholders, banks, financial analysts, suppliers and creditors. The performance of an organization is ascertained through an analysis made at a given moment, but it is built over time. So, performance does not characterize a momentary situation, it always
refers to the future. For these reasons, we can say that performance measurement plays a coordinating, monitoring and diagnostic role of the organization’s activity.

In order to quantify the contribution of digitization to the increase in financial performance, it is necessary to establish a reference system that involves going through the following methodological steps:

- identification of the object and the competitive context;
- measurement and analysis of deviations from the reference standard;
- presentation of the results and implications for the total quality approach.

The evaluation of the contribution of the digitalization of accounting to the increase in performance can be expressed through indicators of quality, exploitation, profitability, capacity and indicators regarding operating expenses. A quality indicator is the reduction of working time for performing a certain task so that the financial data processed with the help of integrated IT systems are much clearer and more correct, facilitating the preparation of financial reports much faster.

The category of operating indicators includes: the number of transactions of a certain type initiated and completed in a time interval and the volume of exchanges or transfers between different work points linked in the network. In the conditions in which the expenses necessary for the proper functioning of the computer system are known, it will be easy to calculate the set of information specific to profitability. The capacity of the equipment is a field in continuous transformation if we take into account the technical progress and the process of continuous updating of the existing equipment in an economic entity.

From the technology perspective, the following major trends can be identified that can support the accounting professional: (Şova & Dobre, 2016)

- data storage and processing technologies;
- technologies that facilitate interaction;
- financial technologies;
- the specific technologies of artificial intelligence.

Recent studies (Grosu et al., 2022) demonstrate that the use of blockchain technology in digitalized accounting contributes to the reduction of economic crime, which adds value to organizational performance.

The quality of the services promoted by the accounting profession is closely related to the organizational performances achieved by the beneficiaries of these services. (Avram et al., 2017) There is a strong connection between the digitization of accounting and financial performance because the data processed with the help of integrated computer programs offer credibility and transparency, resulting in a significant improvement of financial indicators.

V. CONCLUSION

In the literature review, theories were examined that could help identify answers to the research questions. First, it was generically presented what digitization means in the context of accounting and why companies should engage in the changes required by digitization. Then some ideas were outlined about what digitization actually means for the accounting profession, including new digital technologies shaping accounting practices. In the literature review, theories were examined that could help identify answers to the research questions. First, it was generically presented what digitization means in the context of accounting and why companies should engage in the changes required by digitization. Then some ideas were outlined about what digitization actually means for the accounting profession, including new digital technologies shaping accounting practices.

Digitization is the use of digital technologies to change a business model and provide new revenue and value generation opportunities. As such, digitization has affected all types of business activities, including business models and supply chains, as well as support functions such as human resources and accounting. Digitization enables various new forms of cooperation between companies, suppliers, customers and employees, leading to new product and service offerings.

At the same time, digitization is a challenge for existing companies, as it requires them to reflect on their current strategy and explore new business opportunities. In the finance function, digitization results in the automation and robotization of routine processes, the introduction of artificial intelligence and the application of data analysis. At the same time, digitization is a challenge for existing companies, as it requires them to reflect on their current strategy and explore new business opportunities. In the finance function, digitization results in the automation and robotization of routine processes, the introduction of artificial intelligence and the application of data analysis.

As a result of rapid digitization, professional accountants must have, in addition to the usual skills (accounting, finance, taxation, economic-financial analysis, audit) and digital skills (in the use of IT systems). As a result of the digitization of many activities carried out by accounting professionals, they will be able to improve the quality of their consulting services, data analysis and strategic business planning.
The accounting profession is strongly influenced by the digitization process because more and more organizations are implementing high-performance IT systems with the aim of automating a growing number of activities, especially those that are repeatable, procedural, structured or simple. Accounting professionals will be involved in the design of information systems, and subsequently in the control and evaluation of these systems.

In a globalized economy, accounting professionals have understood that performance and competitiveness are conditioned by the way in which new technologies will be implemented within companies. Accounting professionals will need to make the connection between information technology, economic processes and the resulting financial performance.

The quality of the services promoted by the accounting profession in a digitized economy considerably influences the organizational performances achieved by the beneficiaries of these services.

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