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OPINIONS OF ACCOUNTING COMPANIES MANAGERS REGARDING THE DIGITALIZATION PROCESS OF ACCOUNTING

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Abstract: Digitalization is a process which accounting firms are also subjected to if they want to remain competitive and meet the needs of realtime communication with customers. The purpose of this paperwork was to know the opinions of the managers of these companies on the adoption and implementation of artificial intelligence. The main objectives of the paper are the impact of digitalization on professional accountants, the challenges to which they are subjected, the advantages/ disadvantages of digitalizing the accounting and communication with clients. The research method used falls into the category of qualitative research, i.e. the semi-directive in-depth interview.

Key words: digitalization, accounting services, microenterprises, professional accountants, advantages, and disadvantages of digitalization of accounting

1. Introduction

The digitalization process has covered the entire Romanian economy, but the imprint of the steps made is different for each company and for each field of activity. "Digitalization is the use of digital technologies to change a business model and provide new revenue and value-producing opportunities; it is the process of moving to a digital business" (https://www.gartner.com/en/information-technology/glossary/digitalization). In accordance with this definition, changes in development strategies and investment plans for the future are taking place at all levels of companies. Thus, in this context of the development of the economy and the adaptation to artificial intelligence, the National Recovery and Resilience Plan (PNRR) stipulates the Reform of the National for Administration Agency Fiscal (ANAF) through digitalization (https://mfinante.gov.ro/pnrr). It also has direct implications for Romanian companies, which in turn must adopt compatible technologies to facilitate communication with the Tax Administration. Accounting companies are among the first targeted by these changes – since they are required to report the accounting and tax information in digital

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format through SAF-T – the standard audit file for taxation (Standard Audit File for Taxation) - and they are among the first to be subjected to the digitalization process. This way of reporting was announced by the Organization for Economic Co-operation and (https://www.oecd.org/tax/forum-on-tax-Development (OECD) administration/publications-and-products/45045602.pdf) in 2010, and Romania started the implementation in 2022. It involves transmitting all the information to a company on three types of statements: D 406 SAF-T – monthly or quarterly for accounting and fiscal operations, D 406 SAF-T of fixed assets, D 406 SAF-T of Stocks that is submitted at the request of the tax authorities. Stages of the SAF-T implementation process are as follows: year 2022 for large taxpayers, 2023 for medium taxpayers, and 2025 for others (small taxpayers). The digital transformation component has a budget of 1885 million euros. Thus, the "Implementation of the governmental cloud infrastructure" has stipulated a value of 374.73 million euros, "Creation of the eHealth and telemedicine system" a value of 400 million euros, Investments for the development / migration to the cloud an amount of 187.05 million euros, and "Digitalization of the judicial system" a value of 162.34 million euros (https://monitorpnrr.eu/piloni/?componenta=C7).

Through the Ministry of Investments and European Projects for the digitalization of SMEs and for supporting them in the adoption of digital technologies, a budget of 347.5 million lei (https://mfe.gov.ro/ghidul-specific-conditii-de-accesare-a-fondurilor-europene-aferente-planului-national-de-redresare-si-rezilienta-in-cadrul-apelului-de-projecte-digitalizarea-imm-urilor-grant-de-pana-la-100-000-e/) was allocated.

To sum up - according to the amount allocated within the National Recovery and Resilience Plan, we see the importance of the digitalization process in all areas of the Romanian economy. This action also includes the accounting firms on which the process leaves its mark through changes in the accounting profession, the accounting education and the accounting information system.

2. Literature Review

Studies on the digitalization of accounting are based on various research methods such as: survey method, case studies, but also interviews. Thus, digital reporting by small entities in countries such as the UK has been analysed by Alkhatib, E. A et. al. (Alkhatib, E. A., Ojala, H. & Collis, J., 2019) establishing the factors that impact the process: the relative advantage from the benefits of standardization, the technological competence of the company and the support from the top management. Given that information technology provides quick access to information as well as the processing of large volume of data and their synthesis in real time, all activities performed by the accounting professionals need to be restructured. The impact of digital technologies on the accounting profession is also reflected in jobs reduction. Thus, attention must be paid to professional training and the development of digital skills. The study by Moll, J. & Yigitbasioglu, O. (2019) answers the question of the impact of digitalization on the activities of accounting professionals. Research shows that artificial intelligence alone, without careful and critical supervision of accountants cannot solve the important issue of decision-making at the higher level of organizations. A synthesis of the academic

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literature in the field of accounting digitalization, for the period 2007-2017, is made by Dan-Richard Knudsen (2020) and continued by Stoica O. and Ionescu-Feleagă L., for the period 2018-2021 (2021). This process contributes at international level to a standardization of the financial reporting process on financial and accounting data disclosure. The study by N. Rowbottom, J. Locke, I. Troshani (2021) reveals the process by which digital reporting intervenes in accounting, as well as the effect of digitalization on key accounting issues. Regulators around the world have increasingly called the stock-listed companies to submit their annual reports in digital formats based on XBRL (eXtensible Business Reporting Language – XBRL- is an Extensible HyperText Markup Language (XHTML) format, but with defined standard items from financial statements (taxonomies), with standardized time and currency designation in machine-readable format. Regarding the mandatory presentation requirements issued by IFRS (International Financial Reporting Standards) and the compliance with the presentation requirements, research conducted by Ioannis Tsalavoutas, Fanis Tsoligkas and Lisa Evans (2020) shows that cultural and institutional factors (such as application mechanisms) affect the way accounting is performed by the companies and how accounting information is perceived. The authors conducted a structured review of 70 post-2005 studies, examining compliance with mandatory IFRS disclosure requirements. The transmission of information to users has to be done in real time, retrieved in due time, understandable and presented in a standardized language. This process can be achieved by implementing the digitalization of accounting services, with the help of specialized companies. Any change in accounting activities involves both human and material costs.

Digitalization involves major organizational changes brought about by digital technologies and, consequently, profound changes in companies' strategy and business (Bharadwaj et al., 2013; Fitzgerald and Kruschwitz, 2013). The challenges of accounting practice in the last year, according to a study published by Caseware International Inc. (CWI) in 2023 (conducted with more than 4100 respondents), relate to virtually communicating with clients (39.21%), using new technologies (37.86%), rising cybersecurity/fraud threats (36.22%), adjusting to working remotely (34.91%), finding the right talent (34.77%) etc. (2023-state-accounting-firms-trends-report).

3. Research Methodology

The aim of this paper is to present the opinions of the managers of the accounting companies in Brasov regarding the digitalization process and its implications on the development strategy and collaboration with clients. The research conducted was a qualitative one – of the semi-directive in-depth interview type, and the working tool was an interview guide comprising four themes, each theme developed on two or three subtopics. The sample size was randomly established based on the list of accounting companies with CAEN code 6920 – "Accounting and financial audit activities; consultancy in the field of taxation" in Braşov, provided by the website listefirme.ro.

General assumption: The digitalization of accounting services does not provide the benefits expected by the company managers.

Target of the research:

 Identify managers' opinions on the costs involved in the digitalization process and on the impact on human resources and profit.

 Requirements and expectations of the managers regarding the financial and accounting services within the current competitive environment, as a result of the implementation of digitalization.

 Identify the factors that hinder the digitalization process in accounting and contractual relations with customers benefiting from financial-accounting services.

The information collected through the semi-directive in-depth interviews was subjected to content analysis – with the help of NVivo – software program for qualitative data analysis. The sample comprised 5 subjects - managers of accounting companies, and the interviews were recorded with a voice recorder and transcribed on paper. To carry out the study, the necessary tools were the Questionnaire for the Selection of potential respondents and the List of themes and sub-themes within the semi-directive in-depth interview. The elaboration of the questionnaire selection contained questions that would lead to the inclusion in the research of some subjects who are representative for the objectives pursued, namely managers of accounting firms from the category of micro-enterprises. The themes of the interview were established in such a way as to meet the objectives pursued.

4. Research Results

Using NVivo analysis program, a report on the frequency of words in the analysed texts was created (Fig. 1). Notably, the most used words refer to the advantages and disadvantages of digitalization. Managers focus on profit, productivity and technology costs, but also on the challenges to which professional accountants are subjected.

enhanced comprehensive bookkeeping effectively document choice technologies analyse driver accountants comparative abstract order increased service collected approach entities consider various face confidentiality sustainable contribution capture stay digital disadvantages application competitive critical technology big amounts analysis fiscality adoptions based security adoption dealing journal transparency cost accounting intelligence adjusts enable applied findings also digitalization impact operations customer across profit usage advantages software time databases design constant tasks done artificial data research invoice arrival analytics complex dynamic productivity business payable catalyst deposit industry organizations may well arduous accounts automatically efficiency auditing accounts efficiency encourage

Fig. 1. The cumulative frequency of words in the interviews of the managers

Most managers stressed the importance of the process of accounting digitalization and establishing new business models that add value to the services provided. In the context of an integrated reporting system, accounting firms must comply with the standardization of information transmitted. This can only be achieved by a state-of-theart technology combined with accounting education adapted to the new information systems. Thus, the focus is on the relationship with the academic environment and the completion of educational programs according to the new requirements of the digitization era (Stoica O., Ionescu-Feleagă L., 2021). Regarding the challenges to which the professional accountant is subjected, the conclusion is that young professionals adapt more easily to the requirements of accounting digitalization; they are willing to apply the new data processing systems, trust the use of cloud computing, and are less affected by the threat of reducing the number of accountants. Artificial intelligence leads to an improvement in organizing the accounting process, reducing the error rate and contributing to an increase in the quality of reporting. However, the reasoning of the professional accountant cannot be replaced and modelled automatically.

Table 1 shows the frequency of words used by managers in describing the themes in the semi-directive in-depth interview, grouped by objectives pursued.

Table 1

Word	Frequency (%)	Objective
accounting	16.67	01
digitalization	16.67	01
technology	13.89	01
advantages	9.72	02
security	9.72	03
data	8.33	03
fiscality	6.94	02
profit	6.94	02
software	6.94	03
tificial intelligence	4.18	03

Overall frequency of words in managers' interviews - grouped by objectives

From the analysis undertaken, it can be observed that the topic of the accounting digitalization process is approached with interest by the interviewees, both in terms of the degree of technology and data security, but also in terms of the impact on the quality of the services offered, the quick access to information, the presentation of complex analysis reports and, finally, the performance of the company. The approach regarding the technology of the accounting firm in harmony with the similar computerization of the client's activity is also of importance.

In summary, considering the managers' opinions on the topics subjected to the interview, a SWOT analysis is carried out, useful to design a strategy on the implementation of the process of accounting digitalization.

Table 2

SWOT analysis

Strengths	Weaknesses	
 Repetitive activities performed easier 	 Data security 	
Increase in profit	 Data confidentiality 	
 Optimizing the working time 	Lack of statistical interpretations based on	
Increased productivity	professional reasoning	
 Managing a larger data volume 	 Compliance of the accounting organization 	
Increasing the quality of data highlights in	with the accounting policies of the company	
the documents elaborated by accounting	Increasing costs with the computational	
department	methods and updating the appropriate	
 Development of client portfolio 	software	
 Obtaining very complex analysis reports 	 Increasing the costs of preparing the 	
Easy access to accounting and tax	human resources for the use of new software	
legislation	in order to collect, analyse and deliver data	
 Increasing transparency of accounting 		
information		
Opportunities	Threats	
 Developing professional skills and 	 Reducing the number of professional 	
competences (by more complex approach of	accountants	
areas of activity / increasing the load in	 Alignment of employees with existing 	
activity of the professional accountant	technology	
 Diversification of the areas they manage 	The cost of digitalization projects data	
from the point of view of organizing the	security	
accounts	The non-existence of investment programs	
Expanding the business by addressing new	to support the process	
types of activities	• A different degree of technology of the	
	clients	
	 Reluctance to use the Internet as posing 	
	risks of data loss	
	• Technical failures can cause situations of	
	loss of information, a negative impact on the	
	activity of the staff and the company as a	
	whole	

The SWOT analysis performed is a synthesis of the opinions of the managers of accounting firms regarding the digitalization of accounting process, providing information that facilitate the synchronization of the firm's resources and capabilities with the competitive environment in which it operates.

5. Conclusions

Artificial intelligence contributes to the development of the economy by offering new business opportunities to both large companies and microenterprises. Companies in the field of accounting services are also not excluded from the process of digitalization of activity. They become more opportune in providing information, more transparent, more accountable, going beyond the traditional aspects of a collaboration with clients. The COVID-19 pandemic has triggered the need to conduct business remotely through technology.

Accounting firms have become trusted advisors and have turned to online financial and consulting services (Kimberly Ellison-Taylor, 2023). However, they must reinvent the tasks performed, adapt to new business models and collaborate with customers in a different way (State of Accounting Firms Trends Report 2023). Therefore, the process of digitalization is complex, time-consuming and with implications on the costs of human resources, the adoption of new technologies and the technical relationship with customers.

The research described in this paper presents certain limits that must be considered, such as:

• the small number of subjects interviewed;

• the synthetic analysis may contain errors due to the non-systematization of some primary information and thus their non-inclusion in the grid;

• the existence of some interruptions in the managers' interviews caused by the activity they perform, as most of the interviews were held in the offices of the Brasov managers, which determined the fragmentation of the interviews and the possible loss of information;

• the interpretation of the results of the primary data processing was carried out by the author of this paper in the absence of a specialized psychologist;

• the conclusions obtained from this research, obviously, cannot be extrapolated to all accounting companies in Brasov.

Most managers highlight the need to digitalize, design and promote new business models, which would determine a permanent, continuous and useful communication where beneficiaries find out the accounting information in real time.

The online execution of accounting services leads to the recognition of their necessity and usefulness and to a reconfiguration of the accounting role - from the one of information provider about the client's past activity, to that of a tool of leadership, business management and identification of opportunities.

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