

PROTECTING FINANCIAL INTEGRITY IN THE DIGITAL AGE: CURRENT CHALLENGES IN ACCOUNTING AND FINANCIAL AUDITING

Ph.D. Student, Silviu - Ionel STOICA
“Valahia” University of Targoviste, Romania
E-mail: silviutgv@yahoo.com

Ph.D. Student, Beatrice - Elena GORE
“Valahia” University of Targoviste, Romania
E-mail: gorebetrice32@yahoo.com

Abstract: *Protecting financial integrity and managing associated risks are key priorities in accounting and financial auditing, especially in the context of the transformations brought about by the digital age. In this new landscape, the adoption of e-invoices and the use of the virtual space provided by ANAF become essential to improve the efficiency and security of financial and tax processes. Various studies have highlighted the benefits of e-invoices, including reducing human issue, preventing fraud, and increasing transparency in the audit process. Furthermore, the virtual space at ANAF provides quick access to information, allows secure transmission of documents and simplifies interaction with tax authorities. However, the implementation of these tools is not without challenges, such as the need to ensure compatibility with existing systems and guarantee data security in the evolving digital environment. However, e-invoices and virtual space from ANAF remain essential in promoting transparency and compliance in the financial and tax fields. In order to maximize the benefits of these instruments and meet the changing demands of the legislative and technological environment, further research and development in this area is vital.*

Keywords: Accounting, auditing, transparency, Financial Integrity, Digital Age.

JEL Classification: H83, M41, M42.

1. Introduction

In the digital age, protecting accounting/financial reality is a multifaceted challenge for both accounting and audit professionals. The rapid changes brought about by Industry 4.0, Industry 5.0 and lately Industry 6.0, including the emergence of the metaverse world, require accountants and auditors to adapt to new asset valuation and auditing standards in a physical or virtual environment.

Digitization, Informatization in the European Union and in Romania today, emphasize the need to use modern emerging technologies but also government support towards a correct and coherent automation in accounting and audit processes.

Protecting the confidentiality of information, transparency and emphasizing the reality of financial and accounting information is fundamental to avoid risks associated with digitization within public institutions and/or private entities.

The use of big data, artificial intelligence (AI), blockchain technologies and automation of accounting/tax processes offers both opportunities, challenges, and a pressing need for perpetual adaptation in the field of audit and accounting to reposition weighted on new trends, highlighting the importance of rapid adaptation to the accelerated digitization process.

Continuous improvement and dynamic learning techniques require real-time evaluation of financial and accounting information, but also identification of deviations in the audit and accounting professions.

Accountants and auditors have a dual relationship in financial environments where they cooperate to ensure accurate recording, transparency, veracity, and verification of financial information. This collaboration and permanent co-dependency participate in

maintaining the confidence of investors, creditors, and the general population in the financial reports of a public/private entity.

2. Current context of digital transformation in finance

In the current context of the technological boom, it is absolutely necessary for financial-accounting and audit institutions to adapt to new technological and digital trends in order to remain competitive in a connected and digitized world. Digital transformation has had a significant impact on accounting, finance, and auditing, driving forward the way financial/accounting activities are performed when providing services to clients.

With technological progress and modernization of digital infrastructure, Romania has a good internet network, more advanced than in other European states. Financial, accounting and audit institutions in our country are increasingly exploiting revolutionary technologies such as artificial intelligence, Big Data, robot-assisted counseling, blockchain (Iansiti & Lakhani, 2017) and Internet of Things (IoT) to significantly improve their products/services.

If the blockchain uses the distributed database, with peer-to-peer transmission and is guided by pseudonymous transparency, digital transformation implies the need to update critical tools at the physical and human level, but also to reduce bureaucracy to keep pace with digitization.

Iansiti & Lakhani, argue that blockchain technology must be adopted gradually and steadily, being able to create new economic and social bases, being able to automate contracts and transactions by eliminating intermediate bases, even changing our social environment of interaction. However, despite technological progress, technology often separates us socially, instead of bringing us closer, so there is a need for social awareness, responsibility in understanding new realities, persuasion from the main actors and continuous adaptation.

In fact, some large banking institutions already use advanced automated decision-making systems, ERP technologies (Fig.1) that integrate accounting, auditing, procurement, human resources and others at strategic management level and transaction processing to accelerate the decision-making process, leading to cost reduction, while they provide limited exposure to risks. In fact, one of the components is risk management itself.

On the other hand, some smaller financial institutions, commercial entities, are trying to adapt new technologies to their specific needs while providing personal and flexible services to customers.

An important part of the digital transformation of the financial sector is the increasing use of online and mobile banking. These services allow customers to access their bank account, make instant payments and money transfers, or apply for loans directly from their phone or computer, without having to visit a physical bank branch, this also tends to be required in accounting and auditing. These services are becoming popular because of the ease and convenience they offer, but also because of the level of security and privacy.

The digital transformation of finance doesn't stop there, and new technologies like artificial intelligence, robotics and machine learning continue to transform the way financial institutions operate and serve customers. These technologies enable automation of processes, data such as data collection and risk management, and can improve efficiency and operational-accounting reality.

After all, digital transformation in finance and accounting is an absolutely inevitable but also necessary process. Financial, accounting and auditing institutions need to adapt to new technological trends and use digital technology to improve their products and services, being able to say unequivocally that "the time for pen calculations is over" to straighten operational efficiency and provide accurate and fast knowledge to customers.

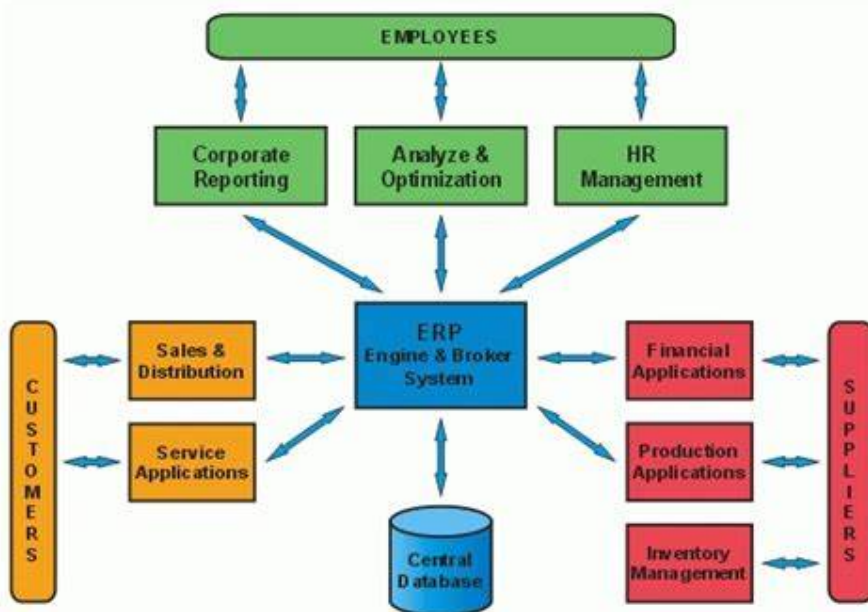
However, these changes also pose challenges to data security and consumer protection, and financial institutions need to invest in cybersecurity and comply with data protection regulations to maintain customer trust.

The digital transformation in accounting involves, according to Busulwa & Evans, changing the way accounting activities are performed, digitally adapting the skills and competences of professional accountants to remain relevant in the labor market, and integrating advanced technologies (IoT, AI, blockchain) will perfect and revolutionize the efficiency and accuracy of accounting and audit processes, enabling the economic professional to focus on data analysis and strategic advice.

It is also necessary to rethink the role of the accountant and auditor in the microeconomic or macroeconomic framework, considering the new technologies, the automation of repetitive processes will return to the new digital technologies, the accountant / auditor becoming a strategic partner of management providing valuable analysis and information for coherent and complete decision making.

In the context of the Knowledge Society, according to Radu V. & Tăbărcă A., Accounting information systems are of fundamental importance in the information age, having an essential role in ensuring financial integrity and directly contributing to the development of the knowledge society, as large amounts of data and information are generated and processed in the digital environment, accounting information being no exception. Therefore, a strong and reliable accounting information system is important to ensure transparency of accounting processes. These systems help to record/manage financial transactions correctly, ensuring accurate reporting and reporting.

Figure 1 : The role of ERP technologies



Source: <https://aipi2014.andreirosucojocaru.ro/laboratoare/laborator00a>

Moreover, accounting information systems allow the automation of many repetitive processes and potentially subject to human error, thus freeing up human resources for more valuable activities and thus stimulating productivity. In the context of the knowledge society, accounting information systems play a particularly important role in managing and capitalizing on financial information, contributing to the accumulation and dissemination of

knowledge in an efficient and accurate manner. Thus, they are indispensable for the development and progress of organizations and society as a whole.

3. Challenges for audit and accounting professionals

One of the challenges faced by accountants and auditors today is the permanent adaptation to constantly changing accounting requirements (Lazari & Grigoriu, 2017), without forgetting that financial audit supported by accounting provides accurate financial information for making decisions at top management or branch level.

We must not forget that, since the adoption of the Fiscal Code in force in 2015, until now, there have been many Emergency Ordinances and Laws that have amended it so many times that today's accountant and professional auditor must keep up with both accounting rules and legal customs.

The many changes to the Fiscal Code do not bode well for strategic investors, who cannot enjoy predictability of their investments, as well as for accountants and auditors, who can lose.

However, challenges faced by accountants and financial auditors in achieving their objectives, they focus on compliance with accounting/auditing standards, general and particular legal regulations, but also specific ethical-moral and deontological principles.

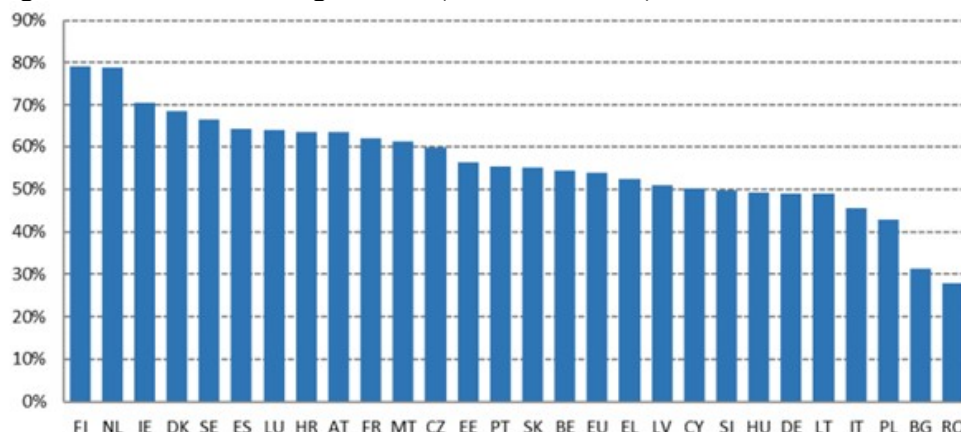
We must accept that the importance of credibility in auditing is related to compliance with generally established rules and procedures, any deviation having negative consequences on the reputation of the auditor, but also on the profession in general, on the principle "if it was possible here, it can happen anywhere", so a deviation considered "small" must be analyzed in the general and special context by the well-founded actions of clients or those directly interested.

Accounting and auditing professionals face challenges related to compliance with industry standards, regulations, and ethical principles to ensure quality in accounting / auditing processes, but also with the need to adopt emerging technologies "on the fly".

According to DESI (Digital Economy and Society Index) 2022, Romania is among the EU member states (Kovacs & Bittner, 2022) with the lowest scores, it is right with progress compared to 2020, in the Digital Economy and Society Index (Liu, 2022).

According to the DESI ranking (prepared by the Commission in the field of EU Technology and Digitalization) for 2022, the countries with the most advanced digital economies in the European Union are Finland, Denmark, the Netherlands but also Sweden, followed by Ireland, Malta and Spain in terms of their degree of digital technology appropriation (Fig.2). On the other hand, Romania, Bulgaria and Greece score lowest in terms of their digital economies. (Thomas et. al, 2023).

Figure 2 : At least basic digital skills(% of individuals), 2021



Source: Eurostat

Thus, it is obvious the urgent need for Romania to implement fiscal and economic measures and policies meant to stimulate the development and use of digital technologies, to benefit from the economic advantages and opportunities offered by the digital market, whatever it is called. It is true that today Romania has progressed compared to 2022, the digital invoice implemented by ANAF, or the electronic counter, are only small steps towards avoiding tax evasion and stopping the black economy, but not without echo in the market.

3.1. The importance of financial honesty in the digital environment

Financial integrity in the digital environment is an essential aspect in the current context of globalization and digitalization of the economy in a micro or macro-economic environment, it represents an aspect of transparency and responsibility in the use of financial resources, ensuring a solid basis for the economy and successful investments. (Cohn et al. 2022).

In Romania, during the last years, conclusive efforts have been made to improve financial honesty, based on economic and fiscal principles, by implementing new accounting regulations and standards, as well as by developing financial audit capacity.

These measures have helped increase financial transparency and provided a strong basis for business. At the same time, digitalization / computerization in the EU context has become a dominant trend in the Romanian economy, with a major impact on financial integrity / responsibility. In the digital context, financial integrity is dependent on the security of financial data, increasingly attacked today, but also on the ability to prevent financial fraud and/or abuse.

Therefore, financial integrity in the digital environment needs to be ensured through effective security, control, and accountability measures, as well as the deployment of advanced cybersecurity technologies.

In general, but also in particular, financial integrity is an essential aspect of economic and financial development, both traditional and digital accounting. In Romania, great efforts have been made to increase financial integrity, but also tax evasion, and digitization represents an opportunity and a necessity to increase financial and accounting efficiency and transparency, through the gradual implementation of security and effective control measures.

3.2. Cybersecurity and associated risks

In the knowledge society, dependence on digital transactions tends to increase, and vulnerability to cybercrime is a constant danger to which accounting, auditing and society in general must find a conclusive and coherent response anchored in new realities.

Thus, lack of physical presence and anonymity or pseudo anonymity can facilitate fraudulent activities, which will determine not only adaptation but also an equally rapid evolution with new technologies, requiring adaptability of financial integrity. Maintaining financial integrity in the digital environment must protect consumers, entities, and the economy at large.

Preparing for the future "that has begun" in the accounting profession means providing a stable framework and easy tools to help accountants adapt to the digital-information age. This could include training and certification programmes in both digital technologies and digital skills, as well as promoting lifelong learning and continuous development. The need to raise awareness of the importance of good data management and protection of confidential information is also central, especially in the context of the "galloping" increase in cyber security threats (Briceag & Bragaru, 2021).

4. Instead of conclusions

The adoption of digital technologies in accounting and auditing is very important in the digital age in which we live and operate. The digital transformation is profoundly affecting the accounting profession and accountants need to improve their digital skills, adopting new technologies unreservedly or reorienting themselves professionally to remain relevant and competitive in the market. Investing in digitalization will bring significant benefits in terms of business efficiency and performance, but there are also obstacles to overcome, such as costs, outdated mentality of one or the other, cyber security and lack of know-how. However, digitization is considered by many entrepreneurs as the main factor that can contribute to increasing the efficiency of the activity carried out, proof being the investments in refurbishment / computerization in any field, the accounting and audit field being no exception.

References:

1. AIPI, 2014. *Laborator 00. Introducere in aplicatii de tip ERP*. [online] Available at: <<https://aipi2014.andreirosucojocaru.ro/laboratoare/laborator00a>> [Accessed 13 May 2024].
2. Briceag, V. and Bragaru, T., 2021. Cybersecurity risk assessment. *Economic*, 115(1), pp.123-139.
3. Busulwa, R. and Evans, N., 2021. *Digital Transformation in Accounting* (1st ed.). Routledge.
4. Cohn, A., Gesche, T. and Maréchal, M.A., 2022. Honesty in the digital age. *Management Science*, 68(2), pp.827-845.
5. European Commission, 2022. *The digital economy and society index*. [online] Available at: <<https://digital-strategy.ec.europa.eu/ro/policies/desi>> [Accessed 13 May 2024].
6. Iansiti, M. and Lakhani, K.R., 2017. The truth about blockchain. *Harvard Business Review*, 95(1), pp.118-127.

7. Kovacs, T.Z. and Bittner, B., 2022. Examination of the category of digitalisation of public services in the digital economy and society index among the eastern enlargement of EU. *Industry 4.0*, 7(1), pp.30-32.
8. Lazari, L. and Grigori, L., 2017. *The accounting profession at the service of the public interest*. International Scientific Conference. Accounting and the accounting profession in the challenging of VI era, pp.156-161, Chisinau, AESM.
9. Liu, T.C., 2022. Digital policy in European countries from the perspective of the Digital Economy and Society Index. *Policy & Internet*, 14(1), pp.202-218.
10. Radu, V. and Tabirca, A.I., 2019. *Accounting Information Systems in the Knowledge Society*. In: M. Negreponi Delivanis (ed.), International Conference «Global interferences of knowledge society», November 16-17th, 2018, Targoviste, Romania, pp.258-269. Iasi: Lumen Proceedings.
11. Toma, S.G., Grădinaru, C. and Modreanu, A., 2023. *The Evolution of the Digital Economy in Romania in the period 2019-2022*. Annals of Constantin Brancusi University of Targu-Jiu. Economy Series/ Analele Universității "Constantin Brâncuși" din Târgu-Jiu Seria Economie, (6).