

## DIGITALIZATION PERSPECTIVES ON FINANCIAL AUDIT

**Ph.D. Student, Andreea-Cristina SAVU**

”Valahia” University of Târgoviște, Romania

E-mail: andreea\_savu@ymail.com

**Ph.D. Student, Leliana DIANA (BOLCU)**

”Valahia” University of Târgoviște, Romania

E-mail: leliana\_d@yahoo.com

**Ph.D. Student, Mihaela Raluca BOHARU (MIRCEA)**

”Valahia” University of Târgoviște, Romania

E-mail: ralcont2003@gmail.com

**Abstract:** *Currently, the financial audit process is carried out in an anachronistic manner by professionals in the field. Digitization is, in itself, a way to start dealing with the problems we have created in the past. The aim of the article is to try and highlight the benefits of a digitized process of automatic data processing in a financial audit. Digitization uses a number of integrated and complementary tools. This will help us address the future needs of financial auditors in fundamental ways, using "external" thinking to digitize end-to-end processes so that they truly meet the needs of customers and the market. The need to adopt integrative applications that have a good functioning and flexibility of the processes appears in a globalized environment with more and more varied accounting programs. For this, the easy, simple, accessibility of those interested, able to adapt to legislative changes and new technologies quickly must be taken into account, while also displaying transparent information, low implementation costs, protection from cyber attacks and last but not least to contribute to the elimination of tax evasion and a better management.*

**Keywords:** *robotization, digitization, financial audit, automation.*

**JEL classification:** *M40, M41, M42.*

### 1. Introduction

This paper considers the applicability of digitalization in a financial audit process and the effects it has on companies and auditors.

The amount of work done in an audit process increases from year to year and productivity needs to be improved. There is also a problem in improving quality to meet the expectations of audit stakeholders. Moreover, due to the impact of the new coronavirus infection spread (COVID-19) in 2020, it is estimated that each company will promote the introduction of remote works, automate operations and digitize the system by removing paper documents.

As the digitization of audit processes can be an effective means for these issues, audit firms together with IT specialists conduct daily research and development in this area.

As we develop and exploit the processes that underlie any digitization, we will also encounter challenges related to various aspects of operations employed in the financial audit.

Time and energy wasted in systems with outdated operating procedures should be limited and eliminated as much as possible in order to improve customer relations.

Transformation initiatives naturally create premises for digitization, especially where there are significant gaps between the operational needs of the audit process and the capabilities of existing IT systems. This need is what attracts interest for RPA (Robotic Process Automation).

As part of an RPA initiative, software "robots" that act as users of IT applications are configured and managed.

Robotization technology offers a non-invasive alternative to coding automatic task logic for simplicity processed in a new application or service, then creates and uses specialized integration APIs or integrates the new code with existing systems by other means.

## 2. Review of scientific literature

To solve the problems in the audit, it is necessary to prepare a large amount of standardized data to teach artificial intelligence to use the information in audit procedures.

In the past, the audit activity did not standardize in a digital environment the data it analyzed, for the simple reason that the accounting system is different from one company to another and the activity of the audited companies differs, from one case to another, and currently, the implementation of the digitization process is significant.

Due to these differences, it often takes time to process and enter financial data into the analysis tools for the audit process.

Recently, an increasing number of companies are changing their reporting processes according to the standard system.

Standardizing the audit report is of real benefit to the auditor. This will facilitate communication with the beneficiaries, providing a binding common language for both parties. The terms used in the report have the same meaning, namely the one defined by the specific audit standard, both for the auditor, as well as for the beneficiaries. This requires the auditor to prepare the report in a certain form, to use certain terms and expressions, and the beneficiary to study the standard to understand the auditor's conclusions.

The effort on the part of the beneficiary is minimal, because during the audit there is a continuous communication between the two parties, the conclusions already being known to them prior to the drafting of the report.

Financial data is beginning to be standardized at the European level, managed centrally on different platforms, and it is expected that not only the real-time use of financial information that contributes to management decisions, but also how financial audit processes will be conducted change significantly.

The emphasis is on using the results of the financial audit in the databases and the financial analysis of the consolidated packages at the level of the financial statements. All accounts that make up the consolidated financial statements, after detecting anomalies in advance, may focus on verifying the transactions for which anomalies were detected in the financial audit.

To perform a financial audit report using digitization, three steps are to be performed:

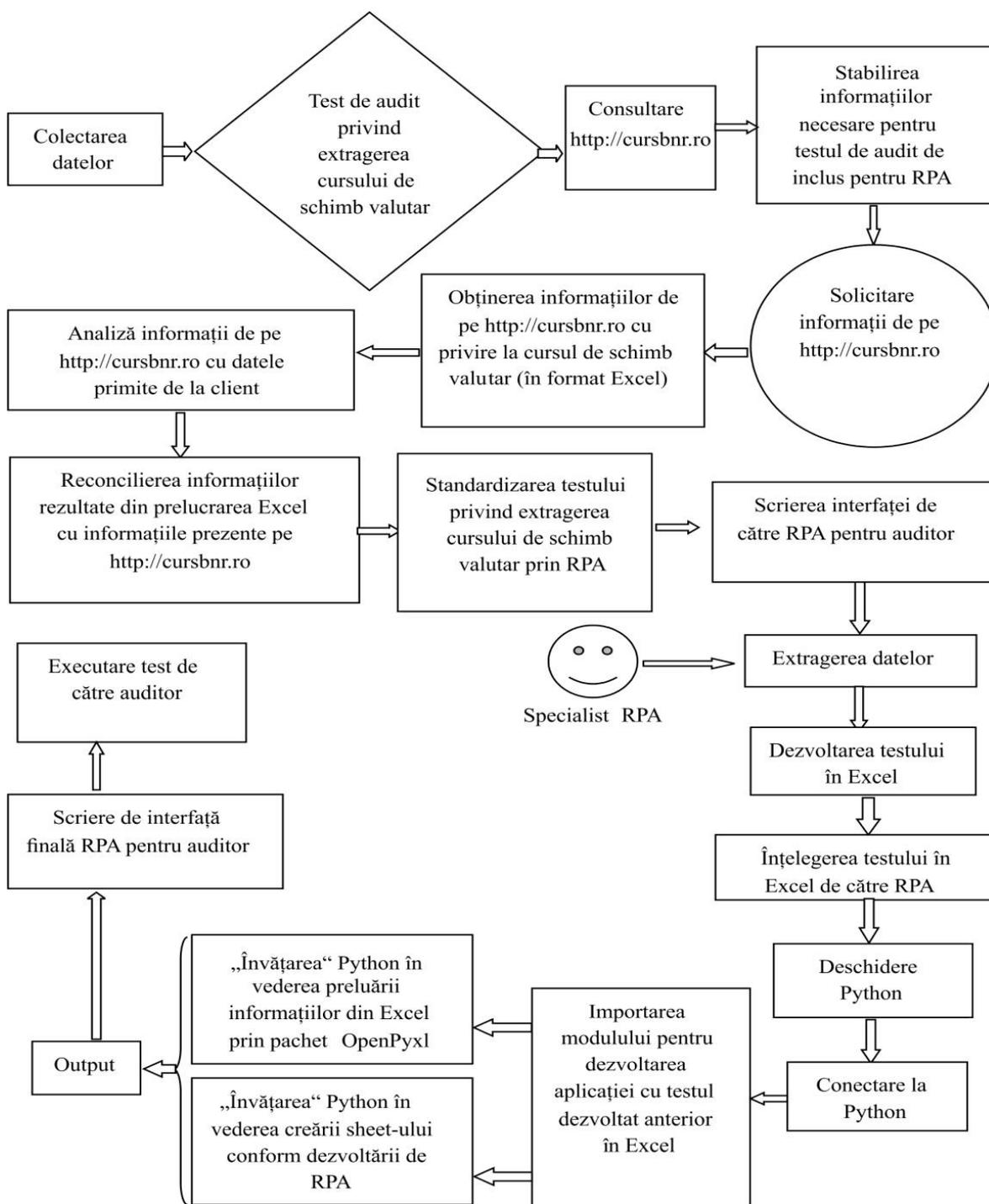
- The standardization of procedures and databases
- The introduction of artificial intelligence
- The digitization of audit procedures

In addition to creating an environment in which data containing financial information and advanced data analysis technology can be fully utilized, it is essential to improve the digital literacy of the human resources responsible with the financial audit.

In order to implement digitization in the audit processes, it will be necessary to involve experts, specialists and scientists who analyze the obtained data and build algorithmic models.

IT specialists have created a logical map of the automation process as follows:

**Figure no. 1. Automation process logical map**



Source: Cristea, L.M., (2020), Emerging IT Technologies for Accounting and Auditing Practice, *Audit Financiar*, vol. XVIII, no. 4(160)/2020, pp. 731-751, DOI: 10.20869/AUDITF/2020/160/023

When defining the aspects of a financial audit report, more effective due to artificial intelligence, several questions need to be asked: What is a good decision? What is the acceptable quality of such a decision and how should it be assessed? What is a reasonable time to prepare an opinion issued by financial auditors and how can it be quantified? What are the reasonable costs? Such questions can only be answered by applying a legal rule and resolving a value conflict.

The auditors will have a deep understanding of the activity of the audited company based on their specialized knowledge in the field of accounting and will consult with the audited company making the best use of their skills while collaborating with various specialists.

By introducing the coexistence of artificial intelligence and accountants in the audit activity, we are trying to remove the false idea that AI robs accountants of their jobs.

The value of future audits beyond these challenges is digital technology, through continuous audits that detect anomalies in real-time financial information.

The continuous collaboration with professionals to discover the risks, alongside the communication with the audited companies has as final goal the construction of a financial audit ecosystem that eliminates the accounting fraud.

Although special attention is paid to the development of digital technologies that can be used to stabilize the financial audit ecosystem at company level, research and development is being conducted regarding the possibility of using it in global audit practice.

By implementing the financial audit system, financial information will be monitored in real time, and financial transactions will need to be verified quarterly before settlement. Because the audit method focuses on data analysis, audits are usually performed from home in a robust security environment and the audited companies are visited to be provided with the results and verify the actual products.

As a result, it is expected that not only auditors but also audited companies would be less burdened by the audit process, which would then contribute to the reform of the working style of both parties.

It will be necessary to move to an audit compensation model that takes into account low technological costs. It is also essential to provide a detailed explanation to the audited company regarding the change in the audit compensation model.

For implementation, some of the commitments may be: efforts to improve the reliability of financial reporting and auditing, active investments in information technology, investments in human resources, accounting and financial auditing in the new digital system.

The possibilities of new employees, including from among predecessors, will also be explored, and efforts will be made to improve the efficiency and effectiveness of audit processes.

Auditors need to make efforts to help reduce the administrative burden on audited companies, and we anticipate that not only corporations but other entities will use the common platform in the future.

In order to carry out the audit activity, there are some challenges that need to be addressed by the whole ecosystem. Western companies often unify management information by first introducing their own system, then rearrange it at the time of reporting in accordance with current regulations and financial reporting systems, as needed.

Traditional IT-based integration projects involving older systems can be difficult to justify, for several reasons, including software and labor costs, skill availability, security, and operational risks.

Because the technology is not invasive to existing systems, stand-alone RPA projects can be delivered much faster and at a much lower cost than traditional IT-based integration projects - with less involvement from people with difficulties.

We see a significant interest in digitization for the finance-accounting and financial audit system.

These areas typically suffer from the aging of IT systems and; moreover, business processes typically contain highly structured task groups in which operators often have to:

- enter data into multiple systems
- retrieve data from one system and enter it into another
- reconcile data between two or more systems
- run system reports and act on results in a structured way

Much of the work involved in these tasks is automable in theory and can become automated in practice - especially in cases where there are large volumes of work. Compared to humans, automated software systems do not have to rest, can run for an unlimited number of hours and do not lose focus.

Of course, unexpected errors will occur when robots are used, but in well-designed RPA systems, error rates for automatic tasks can be very low.

### **3. Research methodology**

Artificial intelligence is in a wide range of development and is the main concern of modern society, related to digital transformation. This is the result of fundamental changes in the way literal documentation processes work. Sometimes we have to move away from the long processes on which the old procedures were built in favor of relatively new practices, which are still undefined.

In order to issue an opinion, the financial auditor analyzes the documentary materials and carries out a laborious activity which he completes by concluding a financial audit report.

For the elaboration of the paper, the most important stage is the gathering of evidence, on which the opinions are based. The auditor's effort to gather evidence to characterize the financial statements is noted in the audit file. The study of documents is the premise and the necessary and mandatory condition for the preparation of the report, well-founded, based on supporting documents and accounting records, and not on presumptions, statements of the parties or witnesses. The working documents are the property of the auditor and the information contained in the file is confidential.

Practice has shown that these conclusions must be presented in a standardized form, in order to be intelligible, clear, avoiding equivocal language and any misunderstandings arising from the different formulations of the same ideas.

A distinctive feature of the financial auditor profession is the assumption of responsibility to act in the public interest. The appreciation of responsibility, as in any other field of human activity, is relative.

The audit report embodies the specific form of presentation of the conclusions, finally materialized in the auditor's opinion, and represents a synthesis of the results obtained, of the works executed, of the procedures used and of the conditions in which this service was provided.

The trust in the opinion expressed in the report is based on the ethical and professional conduct of the auditor, on the research methods used and his experience. The history of financial auditing shows that the trust of auditors increases with the standardization and increase of the company's control over the audit activity.

The formation of the auditor's opinion represents the final result of the analysis and evaluation of the accumulated evidence, provided that sufficient and adequate evidence has

been collected to reduce the audit risk, below the level established when accepting the commitment.

#### 4. Results and discussions

We need a regulatory framework to implement and implement public strategies and policies in the field of digital transformation and the information society. In this sense, a new structure has been organized and operates, the Authority for the Digitization of Romania (ADR), with legal personality within the working apparatus of the Government and under the coordination of the Prime Minister, which includes all departments or services of strategy, coordination, supervision. and implementation in the field of e-government (coming from 4 institutions).

The financial audit activity is carried out by examining documents, records and financial statements, including inspections, and obtaining information from internal and external sources, all usually by sampling and focusing on events that have changed the representation of the organizations' assets over a given period of time, usually annually.

In the fiscal sphere, this approach has undergone important changes, in particular regarding the periodicity and scope of the data analyzed. This new reality has emerged and been intensified since the implementation of the digitalized accounting system, at highly different levels and segments of companies, involving their departments.

The financial audit aims to identify any errors or defects in the company's controls, so that the taxpayer can make the appropriate adjustments and corrections. We know that compliance with tax obligations is a major challenge for companies in general.

*To avoid problems, it is ideal to carry out a prior financial audit through a technological resource that facilitates "private inspection" through the use of digital files.*

One of the hallmarks of digital auditing is that it can be done remotely. Imagine that a company hires a consultant to verify compliance with tax obligations. In this case, the service can be performed only in a virtual environment, eliminating the presence of auditors in the organization.

Agility and low cost are also issues to consider. Because it is an action taken in the virtual sphere, the audit has a shorter duration than in the conventional way, influencing the amount charged for the service. Thus, the technological process through which the financial audit can be carried out will have excellent results, especially from a fiscal point of view.

The advantages of using the digital system are:

- The ease of correcting irregularities

Because we are talking about a digital system, this type of audit performs several complex analyses over a short time span. Thus, it reduces the wait between document submission and data analysis and the company is able to better correct any errors, considerably reducing the chances of being penalized by the tax authorities.

- Reliability of information

This type of audit generally allows the data to be more reliable because it is not exposed to human error. In other words, the chances of a tax file being opened or having problems with the inspection are virtually nil. This certainly increases the credibility of the organization - which is very important in the current scenario.

- Law enforcement warranty

The legislation in place imposes a number of tax obligations on the part of taxpayers. Undoubtedly, it is necessary to use tools that provide the company with operating conditions in accordance with the law. Transparency, quality of management and respect for consumers and laws are factors that are increasingly appreciated in the market and which strengthen sustainable economic growth.

- Application domain

Thus, given the circumstances and facilities of technology, both for tax authorities and companies, it is always prudent for the taxpayer to take a more careful position, previously auditing the data and information that is sent to the tax authorities.

## 5. Conclusions

In recent decades, AI has been a topic of debate and growing developments. We live in an age where technology is developing rapidly and can be universally applied to different business environments. In the audit, this is still a difficult topic addressed by the scientific community, which justifies the relevance of this study.

In this context, the main objective of the article was to understand the impact on the possible applications of AI, as well as the prospects for implementing digitalization in the financial audit.

Although the impact of AI is still low today, there is the perception that implementation is inevitable. In fact, auditing involves routine tasks that can be simplified and automated using these techniques, increasing work efficiency and effectiveness. Today, AI is already used, for example, in automating the production of standard reports.

Despite the fears highlighted by the rumors about the disappearance of the professions of accountant and auditor, they will not be replaced, but will have to develop new skills to adapt to technological developments and the emergence of new functions.

The change of the new generation, the necessary investment, the size of audit companies, the information systems used by auditors, the possibility to include new tests and methodologies in audit standards, are some of the factors that facilitate or condition, for respondents, the implementation of AI for audit.

In short, the evolutionary trend of the profession is obvious. Those procedures that have been used for many years are now obsolete, and the audit needs to move towards new technologies to keep up with its customers' developments and even go beyond that. It remains for auditors to broaden their horizons, acquire new skills and contribute to the critical sense and judgment that is so typical of them.

## References:

1. Appelbaum, D., Kogan, A. and Vasarhelyi, M., 2017. Big Data and Data Analytics in the Modern Audit Engagement: Research Needs. *Auditing: A Journal of Practice & Theory*, 36(4), pp. 1-27.
2. Autoritatea pentru Digitalizarea României, 2021. *Home*. [online] Available at: <<https://www.adr.gov.ro/adr/>> [Accessed 2 March 2021].
3. Bendovschi, A.C. and Ionescu, B.S., 2015. The Gap Between Cloud Computing Technology and the Audit and Information Security Supporting Standards and Regulations. *Audit Financiar*, XIII(125).
4. Cristea, L.M., 2020. Emerging IT Tehnologies for Accounting and Auditing Practice. *Audit Financiar*, XVIII, 4(160), pp. 731-751.
5. Directiva 2014/56/UE – de modificare a Directivei 2006/43/CE privind auditul legal al situațiilor financiare anuale și al situațiilor financiare consolidate.
6. Directiva CE/43/2006 – privind auditul statutar al situațiilor financiare anuale și al situațiilor financiare anuale consolidate.
7. Directiva CE/30/2008 - de modificare a Directivei 2006/43/CE privind auditul legal al conturilor anuale și al conturilor consolidate, în ceea ce privește competențele de executare conferite Comisiei.

8. Gartner, 2019. *Why Audit Leaders Need to Adopt RPA*. [online] Available at: <<https://www.gartner.com/smarterwithgartner/whyaudit-leaders-need-to-adopt-rpa/>> [Accessed 2 March 2021].
9. Homocianu, D. and Airinei, D., 2015. On-Line Dynamic Dashboards in Audit Activities. *Audit Financiar*, XIII, 125 – 5.
10. Ionescu, B.S., Prichici, C. and Tudoran, L., 2014. Cloud Accounting – A Technology that May Change the Accounting Profession in Romania. *Audit Financiar*, XII, 110 – 2.
11. ISACA Journal, 2018. *Data and Data Analytics Progress During the Last Four Years*, 5. Available at: <<https://next.sit.isaca.org/resources/isacajournal/issues/2018/volume-5/data-and-analyticsprogress-during-the-last-four-years>> [Accessed 2 March 2021].
12. Janvrin, D. and Wood, D., 2016. *The Journal of Information Systems 2015 Conference on Information Technology Audit*, *Journal of Information Systems*. 30(1), pp. 3-5
13. Lacurezeanu, R., Tiron Tudor, A. and Bresfelean, V.P., 2020. Robotic Process Automation in Audit and Accounting. *Audit Financiar*, XVIII, 4(160)/2020, pp. 752-770.
14. Negroponte, N., 1999. *Era digitală*. Bucharest: All Publishing House.
15. *Proiect Regulament de organizare si funcționare a CAFR*.
16. Regulament 537/2014 – *privind cerințe specifice referitoare la auditul statutar al entităților de interes public și de abrogare a Deciziei 2005/909/CE a Comisiei*.
17. Stanciu, V., 2016. Considerații privind auditul financiar în era Big Data. *Audit Financiar*, 13(128).
18. Țugui, A. and Gheorghe, A.M., 2016. Identificarea dificultăților întâmpinate de profesia contabilă în accesarea documentelor în contextul economiei digitale din România. *Audit Financiar*, 14(3).
19. Zhang, C.A., Dai, J. and Vasarhelyi, M.A., 2018. The Impact of Disruptive Technologies on Accounting and Auditing Education How Should the Profession Adapt? *CPA Journal*, September. [online] Available at: <<https://www.cpajournal.com/2018/09/13/the-impact-of-disruptive-technologies-on-accounting-and-auditing-education/>> [Accessed 2 March 2021].