

## Financial Audit from Robotization to Digitization

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### 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 to highlight the benefits of a digitized process of automatic data processing in a financial audit.*

*Digitization uses a number of integrated and complementary tools. The need to adopt integrative applications that have a good functioning and flexibility of processes, appears in a globalized environment with more and more varied accounting programs.*

*For this, it must be taken into account that the accessibility of those interested is easy, simple, able to adapt to legislative changes and new technologies quickly, with transparent information, low implementation costs, protected from cyber attacks and last but not least to contributes to the elimination of fraud and better management.*

**Key words:** robotization, digitization, financial audit, automation

**J.E.L. classification:** M40, M41, M42

### 1. Introduction

This paper considers the applicability of digitization 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 spread of the new coronavirus infection (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 problems, audit firms together with IT specialists conduct daily research and development in this field.

As we develop and exploit the processes underlying any digitization, we will also encounter challenges related to various aspects of use operations in financial auditing.

Time and energy wasted in systems with outdated operating procedures should be limited and eliminated as much as possible in order to improve customer relationships.

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 provides 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. Literature review

To solve the problems in the audit work, 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 analyzes, 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 in At present, the implementation of the digitization process is enormous.

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, the one defined by the specific audit standard, both for the auditor and for the beneficiaries. This requires the auditor to prepare the report in a certain form, to use certain terms and expressions, and to study the standard in order 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 being known by him before the report is written.

Financial data is beginning to be standardized at 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 it changes significantly.

The emphasis is on the use of 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, you need to go through three steps:

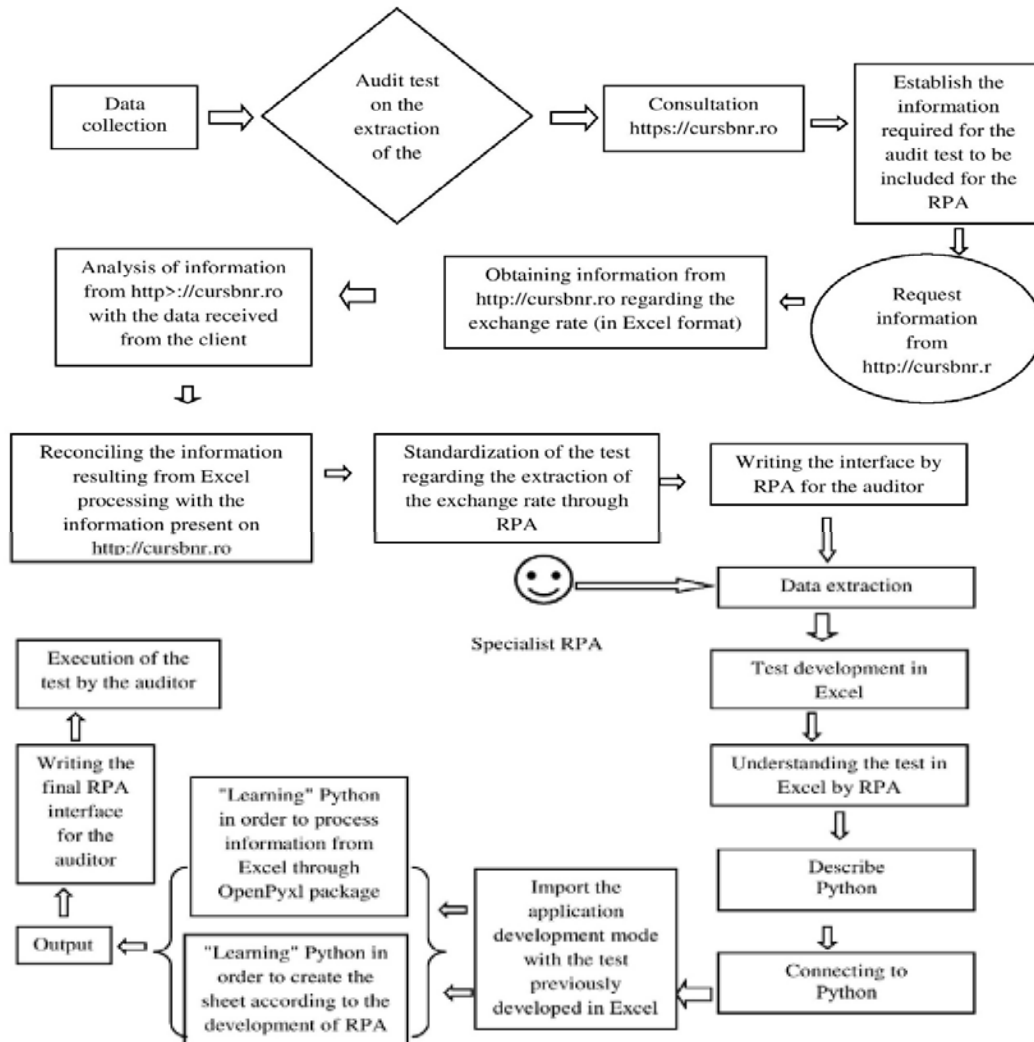
- standardization of procedures and databases
- introduction of artificial intelligence
- digitization of audit procedures

In addition to creating an environment in which financial information data and advanced data analysis technology can be fully utilized, it is essential to improve the digital literacy of the human resources responsible for 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 scheme of the automation process as follows:

Figure no. 1. Logic diagram of the automation process



Source: (Cristea, 2020)

When defining the aspects of a financial audit report that is 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 work, we try 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 and 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 developments are being conducted on the possibility of its use 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 communicate the results and verify the actual products.

As a result, not only auditors but also audited companies are expected to be less burdened by the audit process, which will contribute to reforming the working style of both parties.

It will be necessary to move to an audit compensation model that takes into account low technological costs and it is 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 those of 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 also 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 disabilities.

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:

- enters 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 automatable 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 the basis of 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, duly substantiated, 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 misunderstandings arising from 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 represents the specific form of presentation of the conclusions, finally materialized in the opinion of the auditor, 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 strategy, coordination, supervision services. 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, also 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. -a given period, usually annually.

In the fiscal sphere, this approach has undergone important changes, in particular as regards the periodicity and scope of those analyzed. This new reality has emerged and been intensified since the implementation of the digitalized accounting system, at the most 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 performed will have excellent results, especially from a fiscal point of view.

The advantages of using the digital system are:

- Ease of correcting irregularities

Because we are talking about a digital system, this type of audit performs several complex analyzes in a short time. Thus, it reduces the expectation between document submission and data analysis. Thus, the company will be 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.

- Guarantee for compliance with the law

The legislation in force 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 strengthen sustainable economic growth.

- Application domain

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

Although the impact of AI is still low today, there is a 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 accounting and auditing professions, 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, for respondents, facilitate or condition 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 characterizes them so well.

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