Digitalization Directions within Financial Audit Missions

Dragoş Ovidiu TOFAN, Ph.D.,
"Alexandru Ioan Cuza" University of Iaşi, Romania,
e-mail: ovidiu.tofan@uaic.ro

Univ. Prof. Dinu AIRINEI, Ph.D.,
"Alexandru Ioan Cuza" University of Iaşi, Romania,
e-mail: adinu@uaic.ro

Abstract

The current economic dynamics as well as the volatility of the markets or of certain sectors of activity explain the current increasingly pressing need to access complete and updated information on the financial statements of the analyzed organizations. The financial auditor has the necessary expertise to respond to such a desire, but he must rely on new tools dedicated to data processing in order to overcome certain barriers determined by the current information complexity. The paper captures some of the directions of digitalization in carrying out audit missions by revealing advantages and also challenges specific to such innovations. Thus, concrete examples are given, depending on the stages of the financial audit, such as the auditor's own controls or the collection of evidence, processes to which digitalization contributes significantly but also a series of conditions regarding the opportunity, ethics or legal compliance of such technologies.

Key words: *Data Analytics; Process Automation; Business Intelligence; digital audit;*

JEL Classification: *M1, M2, M4, O3*

I. Introduction

The digital revolution is a reality that has already entered everyday life and has created a hyper-connected world with terabytes of information available at an unprecedented speed. In the broader spectrum of financial and accounting information processing, the effect of intelligent information technologies is a complex one that requires a cautious approach.

Translating data into knowledge is a difficult task because the huge volume in which it is available to a large mass of users creates, in addition to opportunities, a number of risks. People's intimate space is invaded, security breaches appear in information systems or in the cloud, jobs disappear, and there is a pressing need for professional reorientation, consistent investments in IT&C, etc. This is why the digital transformation must not deviate from the initial role, namely as a support for the human factor with all that it entails: individuals, communities, organizations, policies, procedures, etc. There is an increasing need for regulation that covers the requirements of legality and ethics that govern the complexity of human activities. The dilemmas related to the *digitalization – legal frame* tandem have not bypassed the audit profession either, which is a strictly regulated field, perhaps even trapped in some places in standards that require an immediate revision and correlated with the realities of today's economy.

The accelerated pace of digitalization in recent years, the regional specificity in the context of globalization, the complexity of the implications of automation in different fields or branches of economic activity require, however, a more careful analysis of particular aspects, beyond the general self-regulation mechanisms mentioned. The latest World Economic Forum Report (Zahidi et al., 2023) points out that routine-based activities that require average training – accountants, payroll clerks and auditors – will be less and less sought after in the future. The ACCA (Association of Chartered Certified Accountants) study, carried out in 2020 on the future configuration of the labor market, shows a trend of reinventing workplaces in which the human factor combines traditional methods with new technologies that will experience a significant involvement in the next three years, giving a pronounced digital and multi-disciplinary character to positions in the field of financial and accounting processing (ACCA, 2020).

Financial auditing evolves at its own pace of digital innovation and, moreover, records its own challenges in terms of implementing the automation of processes within specific missions but also of flows within the organization subject to audit. Given that audited clients implement intelligent information technologies to increase operational efficiency in business, focus on the customer, find new markets, increase productivity, the auditor must understand the impact of digitalization on the business and apply such technologies in their own work missions (Meuldijk, 2017). At the same time, the efforts of professional auditors to keep up with the digitization of organizational processes are useless or with diminished effect without a rearrangement of the legal framework as well as a reform of the institutions with a regulatory role in this field (Dickey et al., 2019). At the same time, the changes brought about by digitization lead to the resizing of the contribution of the human factor, by relieving repetitive and time-consuming operations, leaving room for creativity, professional reasoning or even the involvement of a specific sensitive or emotional side.

II. METHODOLOGY

From a methodological point of view, the article performs a review of the literature relevant to the subject resulting in electronic libraries such as IEEE, Science Direct – Elsevier, SpringerLink and Google Scholar. In addition, the bibliographic resources cited in the content of the articles thus identified were also taken into consideration and the alerts from Google Scholar were necessary to identify, during the writing of this paper, the news published on the subject of digital audit or continuous audit. The publications in English were identified and sorted by terms by searching for terms such as: "robotic process automation in auditing", "digital audit", "Business Intelligence in auditing", "AI in auditing".

The main research questions of the study can be summarized as follows:

Q1. What are the current main directions in the digitization of financial audit processes?

Q2. What are the known effects of digitalization (advantages vs. disadvantages) in financial audit?

Q3. What are the main challenges generated by automating the processes specific to audit engagements?

Based on the research questions, the criteria for acceptance and exclusion of the relevant articles were established.

Acceptance criteria:

- Publications correspond to the proposed theme and contribute with answers to research questions;
- Titles and abstracts contribute to the research idea and contain the terminology stated.

Exclusion criteria:

- Publications are not written in English;
- Titles and abstracts do not contribute to the resolution of research questions, although they include the terminology used to search for them;
- Ideas or other relevant aspects of the research are repeated;
- Extracted publication only compares existing research, without bringing new contributions or ideas.

Both acceptance criteria were taken into account to take over the source of information and if only one exclusion criterion was verified, the article was not included in the research base.

III. Pillars of digitalization in auditing

The analysis of the literature dedicated to innovative technologies with a direct impact on auditing as well as the reports issued by the audit firms of the Big Four reveals a strong concern regarding the following trends (Accorsi, 2011; Byrnes et al., 2014; Ramlukan, 2015):

- - *Data analysis;*
- - *Audit mobility/Smart Digital Hubs;*
- - *Cognitive technologies/Artificial Intelligence;*
- - *Predictive analytics.*

The replacement of traditional audit methods is gradually achieved and the focus is on identifying risks, business perspectives and continuous evaluation of organizational processes through the innovation of work tools.

III.1 Data analysis

The notion of *Data Analytics* synthesizes the tools for extraction, validation and rapid analysis of large volumes of data, being applied to complete populations (in 100% of transactions). Patterns are discovered and analyzed, anomalies are identified, other useful information is extracted from the audited data through analysis, modeling and visualization in order to plan or perform an audit (Byrnes et al., 2014). Thus, the use of automated analytical algorithms instead of sample-based testing leads to a clear improvement in the quality of audit processes due to the possibilities related to:

- Identifying and assessing the risks associated with accepting or confirming an audit engagement;
- Identifying and assessing the risks of material misstatement by analysing the entity and the environment in which it operates;
- Applying substantive analytical procedures in order to assess the auditor's risk of material misstatement;
- Identifying and assessing the risk of material misstatement in financial statements due to fraud and testing for fraud in light of the risks assessed;
- Using analytical procedures, towards the end of the audit, in order to formulate the final conclusions regarding the correlation between the financial statements and the auditor's view of the entity.

In a study conducted by Ernst & Young on a number of 745 respondents with a leadership role within organizations that have implemented Forensic Data Analytics tools in 19 countries between October and November 2017, the results show an overwhelming percentage in favor of tools in the Spreadsheet category (90%). Sophisticated tools in the RPA or Voice search and analysis category are expected to be adopted in much smaller shares by those interviewed, as can be seen in Table no. 1. At the same time, a high percentage is recorded by the tools designed within the beneficiary entities, to the detriment of the solutions marketed by companies specialized in the area of data processing.

Table no. 1. Levels of implementation of advanced technologies	
Technologies	**Percentage**
Relational Worksheets and Databases	90%
Data Warehouses	63%
In-house designed instruments	55%
Visualization and reporting	54%
Continuous monitoring	46%
Management of security incidents/events	43%
Statistical analysis and data mining	42%
Social and web platform monitoring	40%
Fraud detection	33%
RPA automation processes	14%
Voice detection and analysis	8%

Source: https://www.eycom.ch/en/Publications/20181203-Global-Forensic-Data-Analytics-Survey-2018

Important audit firms follow procedures and policies that, in terms of the know-how acquired internationally, have adapted to the new Data Analytics challenges. The International Federation of Accountants recognizes current trends and looks for solutions to integrate everything that analytics entails in audit procedures. The integration of Data Analytics in auditing is done at a more conceptual level because the acceptance of the generated visualizations or reports as audit evidence becomes quite difficult, even if they are based on a whole series of algorithms or rules (Ramlukan, 2015). At the time of their design, the standards did not predict the type and volume of data that auditors now face, and did not include reports issued through analytics as audit evidence.

III.2 Audit mobility

In the classic version, auditors work in an environment with landlines, fax machines and desktop computers, that is, they are physically linked to an office. Mobile technologies have facilitated the detachment from such facilities and have placed professionals in the field, in a more solid connection with customers and, implicitly, with the information they need so much. Basically, we can now talk about the so-called "digital hubs" that work as smart platforms where auditors can work remotely and in real time, using data and analysis, automation and visualization tools. According to a 2018 KPMG – "Audit 2025" report, in order to be effective, such platforms must have three characteristics (Forbes, 2018):

− Ability to work in cloud storage environments;

− Ability to be configured with future innovations, unavailable at the moment but forecast for the coming years;

− Relieving the auditor of complex and unnecessary tasks for the auditor who is already loaded with challenging tasks.

− Such a way of working is associated with the notion of "remote auditing" (RA) defined as a process in which auditors couple information technologies with data analytics in order to remotely evaluate and report/formulate opinions on the accuracy of financial statements and the efficiency of internal controls (Accorsi, 2011). A series of dilemmas are determined on which the auditor must apply the correct reasoning in accordance with professional ethics and the boundaries drawn by the specific standards:

− Authorisation: ensuring that only authorised parties have access to the execution of certain business processes;

− Separation of duty (SoD): it has the role of reducing the risk of fraud and can take two forms: intra-working court (specified on a single process or court) and inter-court (with regard to several operational phases);

− Binding of duties: the persons involved perform only the tasks outlined;

− Delegation: control over the extension of privileges from one executor to another;

− Conflict of interest: preventing the leakage of information to competitors who use the same cloud or AR system;

− The four-eyes principle: ensures that certain phases or activities of business processes are erased through two people with different roles within the organization.

The Cloud computing option raises a number of issues related primarily to data security, an aspect of interest to both the auditor and the client entity (Hualong & Zhao, 2016). In general, the cloud storage service provider is a third party, which can generate a number of challenges such as:

− Internal and external threats to data integrity, even though the cloud infrastructure is more powerful and stable than the customer's hardware configuration (e.g. security breaches at the level of some renowned cloud providers);

− Motivated by their own interests, cloud service providers do not have an honest attitude towards customers regarding the state of outsourced data (for example, hiding incidents generated by data loss in order to maintain a certain reputation in the market);

− False perception that pay-as-you-go is "cheaper" than other IT resources;

− Monitoring, control and difficult analysis of IT costs (with infrastructure, in particular);

− Expectations related to the 24/7 availability of IT systems.

Under these conditions, professional auditors identify the services that best fit the specific work missions according to the principle that the implementation of the right mobile technologies at the right time is paramount (Chua, 2013).

III.3 Cognitive technologies/Artificial intelligence

Artificial intelligence is changing the way a business is operated and opening up new opportunities for auditing. Eloquent are IBM Watson systems capable of reading, listening to and processing billions of documents per minute in accordance with accounting standards, such as the United States Generally Accepted Accounting Principles (US GAAP) or International Financial Reporting Standards (IFRS), and other regulations such as those of the Swiss Financial Market Supervisory Authority (FINMA) or the Public Company Accounting Oversight Board (PCAOB). AI can read and interpret the evidence received and even generate electronic audit files as the assertions are ticked. In KPMG's view, although the evolution of such tools is uncertain in the near future, AI will influence the

way audit missions are carried out and, moreover, will be disruptive to the profession itself (Meuldijk, 2017).

In a 2019 study – "Internal Audit Insights 2019", Deloitte specialists bring recommendations for companies that have already committed to adopting AI tools to improve the quality and expand the scope of audit procedures, to adopt a series of measures aimed at developing a clear vision and strategy for automating operations. Thus, it is recommended to build an infrastructure that supports the development of automation capabilities by facilitating effective implementation, continuous maintenance and risk mitigation.

The reality in the practice of companies engaged in the implementation of AI systems shows a growing interest in this field, even if the financial and professional challenges are major. Thus, in 2018, 74% of a sample of CEOs selected globally by an Ernst & Young study said that they had no strategic planning regarding the adoption of such digital tools. A year later, the same study revealed that 73% of those interviewed were already implementing AI or were planning such investments.

As companies invest in AI systems, there is a growing need to regulate the use of such tools. Thus, a bill proposed by the US state of Washington in 2019 brings into question the control over how the human factor influences decisions based on algorithms (including whether they are final, contestable or reversible), whether the decisions are for or against certain groups or individuals, as well as control over data management, storage and security. Regulation regarding the Autonomous decision-making component will become a priority for companies interested in carrying out AI-based processes legally, and auditors will have the task of verifying such compliances. At the same time, auditors will have to face their own professional reasoning with at least two major challenges brought by cognitive technologies:

− *Trust* – it is induced by the lack of sufficient explanations on how AI systems work, which can disrupt the implementation of investment programs;

− *Technological limitations* – if in closed environments, the capabilities of algorithms have reached impressive levels, in the real world (open environments) there are still many challenges; moreover, the application of metalearning (patterns, procedures) in completely different environments still has many shortcomings (Wang et al., 2018).

Beyond the professional skepticism, which is natural in the area of financial and accounting analysis, and the technological and financial challenges, AI unquestionably opens up a series of opportunities for auditing, mainly by automating routine and repetitive operations, replacing the human factor with software-based entities, increasing the efficiency and effectiveness of the services offered. Increased rigor of compliance with the laws, standards and specific regulations that determine the normative framework for carrying out work missions is ensured.

III.4 Predictive analytics

The functionality of generating predictive analysis through new technologies and platforms offers the opportunity for the audit to become a real tool in substantiating organizational strategies in the medium and long term. Specifically, advanced data analysis technologies are involved to build predictive scenarios by extracting the necessary information from an organization's system, processed through data analytics tools in order to identify patterns that align or not with the anticipated trends. This gives you a deep insight into the client's business and financial risks.

The auditors access the client's data and combine it with those obtained from the market or the economic sector/industry in which he operates in order to obtain a complete picture of the state of the business and the risks to which it is exposed, to indicate the probabilities of obtaining the potential results. The processing is also fed with historical data of both the analyzed company and other similar entities or entities in comparable circumstances as well as other external data that are permanently analyzed (from various websites, databases, analyses, studies, forecasts, etc.). The volume of information obtained is collected in the auditor's modeling software, which thus reaches a level of knowledge about the client's business that allows the formulation of competent and substantiated opinions (Herron, 2018). This complex analytical process, already used in large audit firms, makes it possible to obtain warning indicators before the end of the financial year.

The auditor thus becomes a permanent reliable partner of the client organization by outlining the role of guardian of the business with the help of predictive analytics tools; predictive auditing is outlined as an extension beyond traditional work tools and even continuous auditing. The real-time or frequent monitoring of an organization's transactions is complemented by a system for generating predictive scenarios to warn about significant anomalies or deviations found through the analysis of large data sets. The major challenge for auditing, beyond the regulatory framework or the procedures for accessing the beneficiary's data, is given by the degree of structuring of the processed data and their support – physical or electronic (Kuenkaikaew & Vasarhely, 2013). A comparison of the audit approaches discussed is presented in **Table no. 2**, with a focus on the key aspects of work engagements.

Table no. 2. Audit approaches			
Areal	**Traditional audit**	**Continuous audit**	**Predictive Audit**
Control approach	Post-Transaction Detection	Continuous scrolling	Preventive/future transactions
Objective	Professional opinion on financial and accounting statements	Real-time monitoring of financial indicators, transactions, accounts.	Support through operational audit, compliance control and control monitoring.
Subject matter of the audit	Financial and accounting statements	Financial indicators, accounts, sub-accounts, inventories	High-risk areas in financial statements and operational processes at the level of transactions, sub-accounts and accounts.
Frequency	Periodically	Continuous, frequent or imposed	Continuous, frequent or imposed
Working mode	Static	Static & Dynamic	Dynamic
Method	Manual (documents, confirmations, inventories, accounts, statistics, etc.) Automated (ERP, CRM, BI, CAAT's etc.)	Mainly automated (ERP, CRM, BI, CAAT's, Data mining, AI, Data Analytics, etc.)	Automated (ERP, CRM, BI, CAAT's, Data mining, AI, Data Analytics etc.)

Source: https://www.researchgate.net/publication/262688439_The_Predictive_Audit_Framework

The reliability of the results provided by predictive tools depends very much on the quality of the historical data used. New and unforeseen events can create invalid results if they are not properly filtered. Human biases leave their mark on the datasets chosen for processing, thus limiting the correctness of the scenarios generated. Although the potential of analytical systems is high, its models are limited, in addition to human understanding and judgment, by numerous other factors, including data storage and retrieval, processing power, algorithmic modeling assumptions (Dickey et al., 2019).

IV. The challenges of digitalization in financial auditing

Although digital transformation is desired in terms of the possible benefits for auditing, practice as well as research in the analyzed field identifies a number of potential obstacles or challenges that can slow down this process. First, client firms generate *data available in different formats* (Moffit et al., 2018). This heterogeneity complicates the automation and use of "data analytics" tools and prevents the uniformity of the techniques applied during audit missions that would lead to an eventual process efficiency. Secondly, information progress and digitalization require training and skills from professional auditors regarding data analytics and other emerging technologies (Vasarhely et al., 2020). The difficulties in understanding how machine-learning algorithms construct their reasoning make it difficult to classify the reports thus obtained in the category of audit evidence, in accordance with current regulations. This is the reason why large audit firms turn their attention to HR with IT skills by creating shared service centers in countries that have specialized workforce in this field and at low costs, thus obtaining encouraging indicators of profitability and efficiency (Salijeni et al., 2018).

Another obstacle may be *insufficient funding* for research and innovation of smart technologies for auditing. Underestimating the costs of digitalization, when discussing the benefits in terms of budget savings (e.g. saving hours of manual labour) or increased productivity and operational efficiency, is an often neglected risk. This includes the less visible or hidden costs caused by monitoring, professional retraining, information security, etc. specific to the post-implementation period of digitization solutions. At the same time, finding new attributions for the human resource deployed through

digitization can become a real challenge that, if not managed correctly, can become an additional expense. Under these conditions, the economy of work norms is annihilated if the organization maintains the same number of employees who are not capitalized by other tasks or attributions (Eulerich et al., 2022).

The Big Four companies have directed consistent investments in the acquisition or development of digital tools. For example, Ernst & Young has committed to budgeting $1 billion to develop new platforms with artificial intelligence-based technologies (EY, 2022) and KPMG has announced its intention to invest $5 billion in partnerships with companies specializing in the development of such systems over the next 5 years (KPMG, 2024).

Regulations and legislation can become potential barriers to innovation if decision-makers directly involved in standardizing auditing do not consider revising standards to encourage creativity and new ideas. At the same time, the deep regulation of the audit industry provides transparency and confidence in financial reporting, as well as a high level of quality of service and level of assurance. Thus, the dilemma arises related to the need for a pronounced normalization of audit services versus the relaxation of regulation in order to make room for innovation and the introduction of digitized work tools that produce new audit evidence and considerably increase the speed of carrying out work missions. The need for digitization of audit processes must not deviate from the basic principles that govern this profession and is determined by the dynamics of the constantly changing business environment that requires a high-performance, online and automated audit. Digital transformation, in essence, is a natural response to the proliferation of new economic tools that integrate solutions such as data analytics or Big Data.
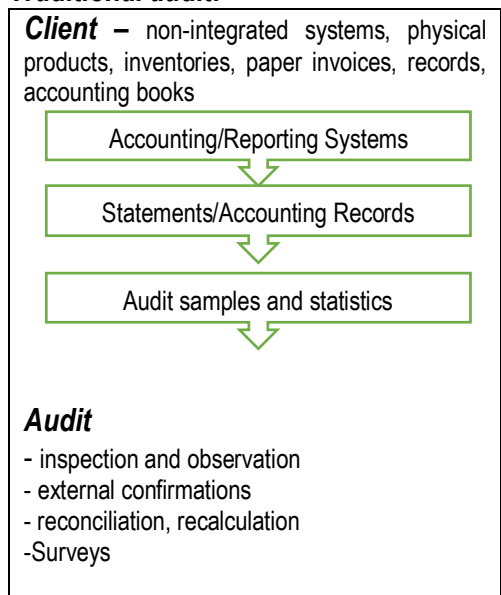
From the point of view of *the human resources involved* in carrying out the audit missions, a volume of 69 million new jobs is forecast to appear by 2027 at the same time as the loss of 83 million positions, i.e. a net loss of 14 million jobs, equivalent to 2% of the number of current employees (World Economic Forum Report – *Future Jobs Report*, 2023). Fluctuations in the labor market are caused by a series of positive factors (e.g. the orientation towards renewable energy), negative (slow economic growth, high inflation) or with a double impact (Artificial Intelligence, robotization, etc.). Digital technologies create, on the one hand, new jobs based on new skills and qualifications, but

at the same time they displace human resources from traditional positions requiring new skills. The report warns that data operators, administrative and secretarial employees, accountants and payroll officials will be the most affected by the unemployment outlook. Thus, the jobs centered on the processing of financial-accounting data, mainly accounting professionals and auditors, are influenced by the evolution of disruptive technologies as well as the way in which the human resource involved can find its essential role in the construction of financial and audit reports.
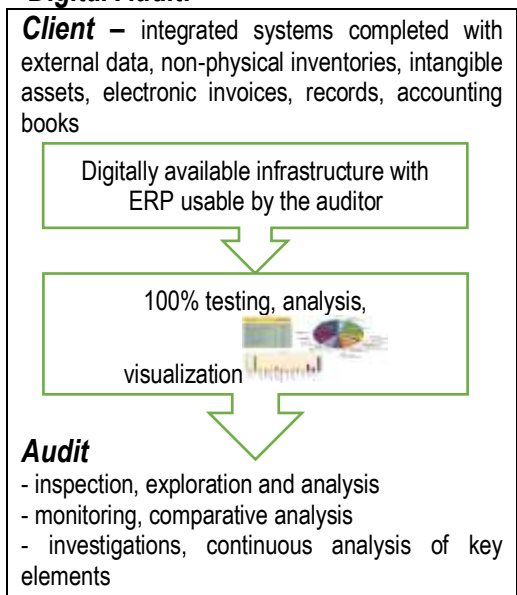
Digitalization, as presented as a process in the *Figure no. 1* (Johannesen & Slaastad, 2018) manifests itself, first of all, through the adoption of smart technologies by client companies that expect audit firms to have the necessary expertise to interact with such systems. ERP, Business Intelligence or Big Data technologies require investments in software, equipment and qualified personnel, capable of working in such a computerized environment and applying professional reasoning in accordance with standards.

Figure no. 1. The process of digital transformation in audit

Traditional audit:

Client – non-integrated systems, physical products, inventories, paper invoices, records, accounting books

Accounting/Reporting Systems

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Statements/Accounting Records

↓

Audit samples and statistics

↓

Audit
- inspection and observation
- external confirmations
- reconciliation, recalculation
-Surveys

Digital Audit:

Client – integrated systems completed with external data, non-physical inventories, intangible assets, electronic invoices, records, accounting books

Digitally available infrastructure with ERP usable by the auditor

↓

100% testing, analysis,

visualization

↓

Audit
- inspection, exploration and analysis
- monitoring, comparative analysis
- investigations, continuous analysis of key elements

Source: https://www.nhh.no/globalassets/departments/accounting-auditing-and-law/digaudit/master-thesis-2018-johannesen-and-slaastad.pdf

In particular, process automation solutions (e.g. Robotic Process Automation – RPA) have the potential to suppress job descriptions that require an average level of professional training if viable relocation alternatives are not found within the organization or if employees are not engaged in professional retraining programs. Companies are more interested in developing a so-called "digital workforce" component in which the role of the human resource is dependent on the ability to adapt to new conditions. These changes, however, depend on training in the area of digital technologies, a minimum understanding of automation processes, the adoption of a

specific language, the adoption of information processing tools.

Data security dilemmas on new platforms or digital technologies for audit operations can be eliminated, first of all, through procedures for controlling access to information. Thus:

− Users may obtain permission to have access only to the data that is necessary or dedicated to them; The analysis or processing of data or information that does not concern a specific user can lead to totally irrelevant results and can also constitute a serious security vulnerability.

− Access can be granted directly to the data warehouse or only to the reports or presentations area. This dilemma arises quite frequently within entities and is a topic of intense debate among analysts involved in the field. It is clear that from the point of view of information security and bureaucratic procedures, sometimes quite complicated, the path of access limited only to reports and presentations is safer and more controllable. However, there is the disadvantage that several users of digital technologies access the same data or information and the management level is constantly concerned with security management through various methods or techniques.

The accelerated development in the area of mobile terminals (phones, laptops, tablets) brings with it a series of vulnerabilities in the security of digital tools. Users tend to have mobile access to everything in the office for efficiency reasons, which can lead to unwanted interference between sensitive data for an organization and personal data on the same device.

Another major data security risk is the loss of the mobile terminal or its theft. In such situations, legal notices regarding the security breaches that have occurred are recommended. As long as the mobile device available to the user has offline connection capabilities, the risk of data theft is very high and, for this reason, digital applications must avoid retaining local copies of data. In this case, too, encryption is a welcome precautionary measure.

The implementation of a security policy in the area of digital technologies and platforms can be based on several factors:

− Data classification – establishing "sensitive" data from the point of view of digital platforms and, implicitly, the measures to be taken to protect them. There may be several levels of sensitivity that require specific measures.

− Classification of users of digital facilities – is carried out according to their position and role within the organization.

− Rights standardization – determines how applications are allowed access to data as well as perform specific functions.

− Data transmission – encryption takes place and authorization levels for file access and transfer are established.

− Data storage – the allowed storage locations are taken into account, the way in which the back-up is performed.

The purpose of all processes related to the control of information (exercised by man or by the system) is to obtain its veracity, by achieving predetermined quality standards (De Broux, 2015). The methodologies specific to this approach are grouped into three categories:

• Intra-system control – exercised within a system or application. It is characterized by an already existing logic and folded to the needs of the organization

• Inter-system control – verifies the integrity of data between systems, being practically a validation of the exchange of information.

• Transactional balancing control – includes both of the above. Data errors that occur within systems and during data transfers are captured. Such a control is quite difficult to achieve due to the initial settings that require additional time and effort.

In all the variants presented, it is essential that these procedures are non-intrusive (to act independently of the monitored systems) and to have a flexible logic (to have the ability to verify, balance, reconcile and track data).

The implementation of an adequate control of information must benefit from the support of a series of internal factors, the most relevant of which are the support from management, the internal partnership and the existence of an action plan:

✓ As the main beneficiary of digital tools, *executive management* budgets, implements and supports control policies. The decision-making factor has a top-down approach and can impose the obligation to carry out information control processes;

✓ *The internal partnership* aims at a common approach on the part of the departments involved in the control policies (IT, audit, shareholding, etc.) even if the visions differ on the desired results, the adjacent costs, the methodologies to be addressed. A correct collection and symbiosis of all existing visions in this regard within an organization is essential, as this can avoid resumptions of internal policies and regulations or delays in ongoing projects;

✓ The existence of an *adequate plan* is based on a correct outline of the current processes within an entity, with all their characteristics (information flows,

current controls, incomplete analyses, lack of conclusive data or information excess/ballast).

V. Conclusions

Although the digital transformation in analyzing or monitoring financial-accounting data processing is experiencing a remarkable progress in the light of the new technologies available, the enhancement of auditing through innovation depends on a series of factors that require a detailed analysis and permanent reporting to the context.

The regularization of auditing as well as the institutional framework are still dependent on traditional concepts and methodologies whose maintenance is also encouraged by a series of dilemmas related to information security, professional skepticism or the need for professional ultra-qualification. It is noted, however, a series of consistent efforts to adapt to the new realities on the part of the international bodies with a role in standardization through the permanent connection to the pulse of the realities found through inspections or research studies.

The excessive technology of recent years with a direct impact on the ways of processing, collecting or storing data has created a "minefield" for the auditor since; in addition to the need for professional training and investments in the area of emerging technologies, new or adapted additional legal provisions are needed. The revisions already proposed or implemented provide beneficial support in the audit work and open the way to a necessary, but cautious, flexibility of the methodologies applied in the work missions, in the spirit of the fundamental principles of the profession.

Digital technologies have adopted a series of functions to ensure the integrity of information and the developers of such systems offer flexible and adapted architectures in this regard in order to provide confidence in the final product. From the study carried out on the digital solutions available and which are currently "on duty" in large audit firms, but also on the quality and formal requirements that the audit demands in terms of "evidence", the following ideas emerge:

- *The advantages* are obvious regarding:
- Increased speed in data processing;
- Integration of data from different sources, including the web;

- The existence of customized work modules and reports, in accordance with the Standards and legislation;
- Avoidance of sampling, 100% data processing;
- Accuracy in performing calculations, checking balances;
- The possibility of carrying out several work missions in parallel;
- Saving time and human resources;
- High timeliness of results as well as continuous auditing.

- Certain *disadvantages* determined by:
- Compatibility problems with the client's own IT systems;
- Limited accessibility to sensitive organization data;
- Higher costs of acquiring, implementing and maintaining digital technologies and which may be reflected in the tariffs charged;
- Need for specialized technical knowledge and qualified IT&C personnel;
- Specific security risks, especially in the variant of cloud storage.

Evaluating the findings presented and taking into account the current information complexity, it can be said that the audit now has working tools at its disposal to ensure an effective monitoring of the transactions in which the entity is involved. Financial auditors are able to carry out their specific operations managing to identify in advance the important aspects that may lead to the timely modification of the audit plan. At the same time, audit services achieve a higher level of quality through continuous reporting due to the capabilities offered by the web; Financial information becomes available permanently, thus replacing periodic statements, and audit assurance can acquire the continuity much desired by interested users. It remains to be seen to what extent the procedural or legislative dilemmas and obstacles, analyzed during the previous reports, will find a solution through the direct involvement of the bodies that regulate the audit activity, as well as of the practitioners who reveil a strong interest in reinventing the financial and accounting analysis tools.

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