

WEST UNIVERSITY OF TIMISOARA
DOCTORAL SCHOOL OF ECONOMIC AND BUSINESS
ADMINISTRATION

Accounting Domain

Ph.D. TESIS
-SUMMARY-

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Timișoara, March 2023

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Keywords: Financial audit, financial auditor, digitalization, artificial intelligence, transformation

Introduction

The theme of the scientific research project refers to the importance of digitalization in the field of financial-accounting audit, as well as in the field of accounting, due to its influence in the decision-making process involving different third parties and based on the audited financial statements. The chosen doctoral thesis shows that the digitization of applications and work influences in a positive way the financial-accounting audit, and the auditors can have a much better visibility over each client.

The actuality and importance of the doctoral thesis

A significant benefit of a digitally transformed audit is that it creates much greater visibility around business and risk. Thanks to data analysis auditors can obtain better information from data held by financial services organizations. This then allows them to ask more difficult questions to management, making the audit more valuable both for the audited entity itself and for all its stakeholders.

Just as greater connectivity is transforming the financial services sector, this digitalisation is also transforming the way audits of financial services companies are conducted. Auditors put technology at the heart of their audit strategy to ensure better access to and query the data held by companies, thereby improving the quality of the audit and providing greater value to the stakeholders of the audited entities.

At the same time, the research is based on the interpretation of the answers from the survey made available to people working in the field of financial-accounting audit and in the financial-accounting field and shows what is the benefit of digitalization, but also the identified obstacles on digitalization such as openness to new, too small implementation budget for such applications and many others.

Motivation to choose the theme

The motivation for the chosen topic is since it is a topical topic where the audit risk has increased considerably. What is most important in this area is the change and evolution of technology and applications that are used in the financial accounting field. If we are to analyze the past and consider the present, we will conclude that over 40% of the work done in the past is processed by today's software. Moreover, it must be considered the efficiency of this process and the automation of all or in the greatest proportion.

Now, the literature presents the importance of this change, but without deepening this topic and seeing the negative impact that it will have.

Main objective

The main objective of the research is to observe the way the audit has expanded and continues to extend beyond what it is now. This research wants to bring and present the proposals issued by the standards in force, which relate to the need of users about the information provided following the audit report. This objective and research topic is of particular interest to users of financial statements and statistical data, as well as to university users in a similar way. I believe that the research is aimed at a very important point in our society - the issue of the changes submitted to the audit report in the period ahead. The motivation is based on a main objective that underlies a question: "Are the recent and future changes that will form the basis of the financial-accounting audit and sufficient to improve the structure, form, content and understanding of the audit report?"

Specific objectives

- ❖ The specific objectives of the research are:
- ❖ Audit reporting and perceived quality.
- ❖ Approaches to improve audit communication.
- ❖ Studying the change of audit through the evolution of technology, both for the positive and the negative side.

- ❖ How workplaces, human perception and audit experience will impact when abandoning detailed tests.
- ❖ How people who have reached a middle age will be impacted in this area and how they will be able to cope with the changes.

Research Questions

The main points that represent contributions to the research, will be captured in the questions below:

Q1: What are the reasons why the IT field is changing?

Q2: What exactly will this change represent and what positive actions will it bring?

Q3: How will they be perceived by the persons working in the financial-accounting audit, but also those in the financial-accounting field?

Q4: What is the statistical and economic impact in changing the way of working, moving from detailed tests, to auditing software and consulting the financial statements?

Research methodology

We can say that the main contribution that will exist will be represented by the perception by external users of the changes, both in the financial-accounting field and in the financial-accounting audit field. If we are to take as a whole, we can affirm that entities will automate their different areas, not only the financial one, by switching to the robotization of as many areas as possible.

In order to carry out the research, the area of the field and the objective of the research should be established. In the first phase of it we will delimit our research area. Therefore, our area is the field of audit, which is made to companies that meet the audit criteria or for which the internal users of the information, have requested it.

The research methodology and the deepening of the existing information on this topic are the first stage of this research. Documentation on the studies designed for this purpose and their purpose will also be considered. For example, a study of the IT market should also be considered, where it is desired to study the changes occurred in technology, in applications and their rapidity to develop.

As we well know, the IT field is a field of the future, which continues to develop from one year to the next.

Considering these factors, the impact and dynamics that this change will have in Romania will be taken into account for research; the methods of approaching the audit will be analyzed at present, as well as the changes that may occur. However, it is also worth taking into account how they will be implemented on the territory of the country.

Through qualitative research, information will be obtained for a more general understanding of the chosen theme, as well as identifying the stage in which it is currently located. The qualitative research is based on the questionnaires of the people who will be targeted for this topic. Through these questionnaires we will ensure that we have an overview as close as possible to the chosen objective. In addition to the questionnaires and interviews above, we will use the economic reasoning, the regulations in force, the financial-accounting audit policies, as well as the statistical interpretation of the tests that are used. Statistical interpretation is a key point in testing this large-scale topic, given that a simple audit test may have a different interpretation economically than a statistical interpretation. Thus, we will check what impact these differences have and whether in the future they will be kept when the IT systems are automated.

In return, the quantitative research has the role of detailing the information accumulated and received from the study and it will be possible to verify the chosen objectives of this work.

Chapter 1 presents the aim of the paper which is to study the influence of digitalization on the audit business and to understand how to improve auditing as a governance mechanism. This part of the report will present the conceptual data on audit and digitalization of the audit. Data on audit transformation, innovation and what will change in this area will then be presented.

Chapter 2 of the paper presents information about the digitization of the audit and its effects. Internal and external financial audits are both impacted by continuous digitalization, especially in terms of the tests they must do. Audit companies are now focused on ticking off the following points:

- focus on cost reduction to be able to implement new technologies

-to increase innovation through technology, to reduce risks by covering more the information that is tested by the audit team

In the second part of this chapter, data about data mining and what its role is included. Not only can we extract different information from a very large database, but it ends up improving the quality of information and reducing time substantially than before.

Chapter 3 followed a case study based on a questionnaire sent among professionals working in the field of financial and financial-accounting audit. It was sent to people who carry out their activity in Romania, in different industrial sectors, respectively different financial audit companies (both multinational and national or local). Many of these organizations and professionals are undergoing digital transformation or want to update your processes in the future.

These include the findings that the functions with strong impact and influence are the adoption of digital innovation and new approaches to the management of financial audit, and that most of the functions are trying to improve their data analysis capabilities and have plans to do so. whether it has hastened or influenced digitalization and innovation in one way or another.

Results of the thesis

The paper has shown that the audit and the financial-accounting field are changing unprecedentedly, just as technology continues to advance and the clients of audit companies have increasingly higher expectations. These 2 trends intersect, which means that professionals must continue to improve their qualities and openness to new trends to achieve the goal and deliver the quality to which a financial audit must rise. Customers will not be satisfied with less.

Innovation is essential for an effective, evolving, and resilient function. Functions should innovate in ways that meet the evolving needs of the organization. It can start in small ways and by everyone depending on; for example, by identifying small inefficiencies in their processes and activities and ways to eradicate them in a cost-effective way, which could be by mirroring or adapting an innovative approach that another function or organisation has implemented.

Digital innovation must take place at all stages of the life cycle or in all the operational processes of the function, and not just in 'testing'. It should cover approaches to planning, executing and

reporting internal audit within stakeholders, and even at the time of change, which is not only to provide assurance, but also to advise management and anticipate risks.

The research paper has brought considerable results that have been interpreted and correlated and have demonstrated that transformation and innovation is a very important topic for each entity, so that in one way or another, everyone is currently applying certain functionalities based on digitalization or plan to apply in the future.

It has been shown that the COVID-19 pandemic has had an impact on the hastening of digitalization, namely that with it, companies have had to update their schedules and the way of working, so that administrative departments can work from home. As a mention, digitalization goes closely with data security, especially since it will be much stronger when various processes are innovated.

Final conclusions

The doctoral thesis "Audit in the age of transformations" had as objective to determine how important is the digitization in the daily work of auditors, as well as of people working in the financial and accounting field. Research focused on studying people's perception of digital, i.e. innovation and transformation. This objective has been achieved by meeting specific objectives:

- What is the level of digitization of companies at present;
- People's perception of digital and the transformations of the applications in which it works;
- Easing the method and work tasks;
- The impact of the COVID-19 pandemic in Romania;
- Studying the impact of digitalization between the two tested populations - people in the financial-accounting audit field versus people in the financial accounting field;

The automations created by digital accelerators have saved thousands of hours by automating manual processes, seamlessly extracting the data needed by customers, and more efficiently performing hundreds of data validations that are part of customer audits. Automation is how technology can harness points in the audit process to achieve synergy between our people and the machines they use so that the amount is greater than those individual parts.

However, even more encouraging are the benefits derived from access to a higher percentage of customer data needed for auditing. Being able to extract entire populations of certain types of data for testing rather than samples – could help uncover audit-related information that audited company executives can consider to inform business strategy.

Changes in the field of financial audit

Innovations in digital and automated accounting in the audited companies will have a significant impact on financial audit. Innovative audit tools, new technological possibilities and the time pressure exerted by recipients to access audited financial figures after the balance sheet date more quickly require changes in the performance of annual audits.

Changes in the performance of financial audits

What changes in the execution of the financial audit can be observed? The spread of audit documentation based solely on electronic documents (digital audit files), which is becoming a reality due to major technological advances. The range of "audit tools" on the market, as well as the implementation of document management systems, actively contribute to this development.

Professional experience

The increased change in communication in digital channels will have an impact on the relationship with the staff of the audited companies and on the loyalty of customers. The assessment of the quality of accounting and the integrity of the persons involved still requires personal contact.

Analyzing data with digital tools and incorporating artificial intelligence will not be able to replace the professional judgment of auditors anytime soon, and personal assessments and experiences will not be easily digitized.

In addition, the high demand for qualified IT auditors, as well as the need to adapt specifically to existing IT audit frameworks, will be an interesting issue for further research to support the effectiveness of modern IT auditing in the age of digital transformation.

The findings of this study contradict the prediction whose prediction was expected to disappear from the accounting profession, having a similar effect on the audit profession, since most of the experts surveyed did not agree that digitalization would make the audit profession less attractive to young professionals or repulsive to current auditors. Advanced technologies such as big data

analysis, blockchain technology and robotic process automation have the potential to reduce human involvement in the audit process.

Finally, a number of important limitations of the current study must be taken into account. Firstly, there is a considerable chance of there being a professional bias within the expert group; experts could have expressed what they wanted, not what they expected, or they could tend to be optimistic about future developments in their field. As a result, the addition of experts from other backgrounds, such as IT professionals, university audit professors or regulators, could have led to a set of results containing more dramatic consequences for the audit profession imposed by digitalisation.

The role of a professional in auditing is evolving in response to the digital transformation of companies. The use of automation to increase data volumes can help deliver high-quality audits and allow auditors to focus more on risk identification and business information. This audit development leads to greater connectivity and transparency and therefore to greater trust of stakeholders.

Audit information technology is a set of methods and procedures that provide the functions of collecting, accumulating, storing, processing and transmitting data using technical means to achieve the audit objective in the best possible conditions. The use of audit information technology does not replace the audit process itself, it is only a tool that minimizes time and resources.

On the basis of a quality IT audit, the enterprise administration will be able to reasonably solve security and control problems; justify the purchase or updating of computer programs/applications; plan to improve the skills of IT staff.

Limits, implications, and future directions of research

Research is not without methodological limitations. The results of this research cannot go beyond the exploratory framework, given the sample size of 287 responses. In addition, the methodology could be complemented by a participatory qualitative study that remains difficult to obtain. New research trails can complete this paper. First, it is essential to study how the digitalisation of audit processes could improve corporate governance.

Research is not without methodological limitations. The results of this research cannot go beyond the exploratory framework, given the sample size of 287 responses. In addition, the methodology could be complemented by a participatory qualitative study that remains difficult to obtain. New research trails can complete this paper. First, it is essential to study how the digitalisation of audit processes could improve corporate governance.

In addition, it is important to examine whether the digitalisation of internal control systems would improve the role of audit committees as a governance mechanism and limit managers' opportunistic behaviours. In the field of auditing, it is also interesting to study the impact of digitalisation on small audit firms that do not have the resources of large firms to acquire technology and develop new offerings.

Lastly, the technologies examined were limited to big data analysis, application digitization, blockchain technology, and robotic process automation. This was done primarily to shorten the duration of the survey to avoid a lower response rate. The impact of other technologies, such as cloud computing or other methods, may have yielded different results. These limitations are recommended to be considered in conducting future studies.

Also, of great interest would also be to see the results of similar studies – their expansion in Romania, Europe, as well as the rest of the developed world. In addition, studies investigating the effects of digitalisation on the underdeveloped world may be even more insightful, as these regions are probably the least studied and could lead to the extraction of new valuable data.

In conclusion, we believe that based on the information and results, we support the fact that this thesis has achieved its objectives from the very beginning, and the inherent limits have been exceeded by the results obtained, thus being transposed into different future directions of research. This paper we claim will have a positive impact on professionals as well as on academia.