

RESEARCH ON THE CURRENT STATUS AND PROSPECTS OF DIGITIZATION OF ACCOUNTING OF PUBLIC INSTITUTIONS IN ROMANIA FROM THE POINT OF VIEW OF ACCOUNTING PROFESSIONALS

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Received 30 March 2025; Accepted 18 June 2025

Abstract:

Digitization of public administration in Romania and, implicitly, of their accounting is a highly topical and debated subject, both at the level of the European institutions with attributions in this sector and at the level of the states, which wish to integrate it on a large scale at the level of the devolved institutions. Romania has taken important steps in this area, but the process is far from complete. For these reasons, the aim of our research is to identify the perception of accounting professionals in Romania regarding the status of accounting digitization and the possibilities of optimizing financial-accounting and reporting processes through the extended use of emerging technologies. In order to achieve this goal, an empirical, quantitative research was used, by means of a questionnaire, which was elaborated and applied on-line to accounting professionals working in the financial accounting departments of public institutions. The results of the survey revealed that the digitization of public institutions' accounting is at an early stage and that there are multiple dysfunctions related in particular to data capture, which still cannot be performed automatically, system errors and software not being updated in time. The study can be useful for the state, regulatory bodies with regulatory powers in the field, as well as for the management of public institutions that can adopt the solutions identified by accounting professionals in the day-to-day work of the institutions they manage.

Key words: digitization of public accounting, digital transformation, perception of accounting professionals, digital accounting reporting

JEL classification: M41

1. INTRODUCTION

Digitization of public administration is a permanent concern of the European Union, which wants to achieve the highest possible level of digitization both at the level of European institutions and EU Member States. Digitization of central and local public administration also involves digitization of their accounting function. In this direction, following the implementation of the 2030 Agenda, which also provides for achieving a high level of digitization of services at the level of EU Member States, in Romania important steps have been taken in this direction, but the process is ongoing and is being updated as a result of legislative changes that also impact the accounting of public institutions. The desire to identify the status of accounting digitization, the problems and difficulties with which accounting professionals operate in their current work, so that based on these, solutions and strategies for optimizing the functionality of accounting can be proposed, represented the main research problem that we proposed and that we will address in this research. For these reasons we propose empirical research, carried out in a quantitative manner by means of a questionnaire, applied to accounting professionals employed in public institutions in Romania, so that based on their answers we can identify the advantages, disadvantages and challenges generated by the digitalization of accounting services, and then we can identify and propose solutions for their streamlining and optimization. In this regard, the following sections of this study are dedicated to a literature review, in a synthetic manner, of the methodology of the study, the results and the discussions that they have led to, as well as to highlighting the main conclusions that can be drawn from the results obtained.

2. LITERATURE REVIEW

The objective of the literature review is to present the most relevant studies focused on studying the impact of digitalization on the accounting of public institutions in Romania, highlighting the advantages, disadvantages and current and future challenges of digitalization from the perspective of the accounting professionals employed, i.e. to determine the role of the accountant in the new era of digitalization, where his position is changing from a man of figures to a good analyst and consultant for the management of these institutions

Thus in the following, we will present some of the most relevant studies affected on this research topic, with the clarification that from the research carried out by us, we noticed that there are few studies conducted on the impact of digitalization on the accounting of public institutions in Romania, this being the intrinsic motivation of the research conducted by us. Thus, according to Botea (2018), in an article published in a specialized editorial in the financial field, he draws attention to the fact that the accounting profession is one of the most threatened professions and more likely to be replaced by digitalization. He points out that the accounting professional who will be willing to adapt and embrace change will be the one who will remain competitive in the sphere of professional services, while the one who will not adapt the pace will have to give up the profession. The author also states that "the accounting profession operates in an area in which 97% of activities are amenable to digitization, requiring adaptation to the new reality and reconfiguration of the accountant's work".

Analyzing the aforementioned author's opinion, we conclude that, at present, accounting work related to the chronological recording of financial-accounting operations, the retrieval of this data and the logical-formal processing of records can be done automatically with the help of information systems, so that accounting professionals are left with the task of performing overall analyses, financial forecasts, and the substantiation of decisions on the basis of the reports that the systems can generate, i.e. professional services that are superior to those performed before the implementation of digitization in their institutions. To the aforementioned concept, we can also add that of Prof. Șova, president of the Romanian Body of Chartered Accountants and Authorized Accountants. Thus, in the article written by Oprea (2018) the author cites the opinion of Mr. Șova who states that "what is a real challenge is that more and more the artificial intelligence (AI) component is being incorporated into such IT applications. That, basically, in addition to the simple tasks of data entry and data processing, also add value in terms of implementing professional reasoning in IT applications". From the above, it can be deduced that some of the activities performed by the professional accountant will be taken over by AI, but the reasoning will still remain the prerogative of the traditional professional accountant. The author also draws attention to the fact that professional reasoning also needs to be adapted to the new technologies adopted in the field of accounting services.

In the same context, the study conducted by Tussibayeva et al. (2023) reveals that Blockchain technology offers countless benefits by applying digital auditing, smart contracts, cloud data storage, utilization of transactions and exclusion of unconfirmed expenses in accounting procedures. However, the authors also point out that blockchain technology also presents a number of challenges, particularly related to their implementation, the support provided by the authorities and the lack of competent specialists in this field, which requires the use of significant financial resources directed in this direction. According to the authors Gurău and Gurău (2020) in the book "Accounting in the age of digital economy. Accounting policies and procedures", the authors draw attention to the impact of digitization on accounting and the fact that they will be the main actors alongside the managerial team in the process of substantiating decisions, even if part of the financial-accounting activities could be taken over by artificial intelligence.

From what the aforementioned authors state, it is clear that the work that may still be done by accounting professionals today, i.e. data entry, will in the near future be taken over entirely by information systems. Thus, the authors draw attention to the fact that accountants will have to reorient their work towards being accounting advisors so that they can be of use to management in

the decision-making process. To the above, we also add the opinion of the author Ursachi (2020), according to which the accounting system has to adapt to the technological changes of recent years, in the sense that all financial-accounting activity is required to be digitized, which makes the work of accounting professionals extremely easy. Thus, the financial-accounting reports are more accurate and more faithfully represent the reality of events and transactions in the life of entities.

From another angle, digitization is described by the European Green Deal as a key factor also in achieving sustainability goals (Guşe and Mangiuc, 2022; Socoliuc, 2023). Therefore, the state should also include in their public policies investments in digitization of public institutions in order to ensure sustainability goals.

The literature also highlights the fact that the digital transformation of tax authorities and public institutions is advanced in some European countries and quite precarious in others (Ionescu-Feleagă et al, 2022; Delgado, 2021), which means important disparities between European countries in this respect, namely between developed countries with higher degrees of digitalization and less developed countries, where the digitalization of the state and its institutions, register lower levels.

As far as Romania is concerned, Coman et al. (2022) and Popa et al. (2024) consider that the COVID-19 pandemic crisis also had a significant impact on the degree to which our country materialized its efforts to take the necessary steps to transition to a digital economy, but implicitly on the management system of public institutions that imposed a digital transformation of all processes.

By adopting digitization, public institutions can overcome traditional bureaucratic barriers and provide accessible services to citizens through online portals and mobile apps (Stăiculescu, 2024a), better responding to their needs, increasing satisfaction and engagement. The digitization of public institutions can also have implications from an economic perspective; by investing in digital technologies and infrastructure, public institutions can contribute to the development of a more competitive and innovative economy (Stăiculescu, 2024b). Thus, the integration of digital technologies in public administration is primarily influenced by the digital competences of human resources, and the main causes with relevant impact on the development of these competences are the risks for data security and privacy, the dynamics of technologies, the lack of continuity in the integration of ICT in the activities of the organization and excessive bureaucracy (Androniceanu et al., 2023). A current study conducted on the topic of digitalization in public administration in Romania reveals that Romanian citizens are the beneficiaries of more de-bureaucratized and transparent public services at the service of all citizens, regardless of their social level, compared to European citizens living in European countries with a higher level of economic development and implicitly of digitalization (Pripoaie et al., 2024).

Contrary to the views held by previous authors, Profiroiu et al. (2024) performs, through a comparative analysis, the current status of the digital transformation of public administration in the EU Member States and states that Romania, Bulgaria and Greece still register a very low level of digitization, with structural deficiencies being the main issues that should be mitigated.

The results of the research conducted by Simion (2024) focused on digitization in the management process of public institutions in Romania, reveal that specific digitization tools such as cloud-based data management software products, internet, wireless networks, 5G networks, data analysis and visualization tools, etc. are needed for better performance of management functions of public institutions. In the same vein, Goldbach et al. (2024) also demonstrate a lack of commitment on the part of public institutions in Romania to utilize the full potential of information and communication technology in the provision of public services. The authors also propose a greater involvement of public administration in reducing digital literacy among citizens in rural areas.

Other challenges faced by public institutions in the adoption of digital technologies, target the importance of digital literacy among public sector employees which has a significant impact on public service delivery, also the risks related to data security, citizen engagement and ensuring alignment with the Sustainable Development Goals (Popescu et al., 2023).

From the above, we conclude by stating on the fact that digitization will rapidly encompass all areas of activity, but especially accounting, which means that the future of accounting services

belongs exclusively to digitization. This means that the accounting professional has to develop skills that he may never have thought of, to develop skills such as analyzing big data sets and accounting information (big data) that represent the raw material in the process of analyzing and informing decisions. Therefore, the paper aims to identify the current status and prospects of digitization of public institutions in Romania, and implicitly of their accounting, as well as how digitization will impact the work of accounting professionals in public institutions.

To achieve this goal, we propose in the following section an empirical research methodology in the form of a questionnaire. The methodological details of this research are contained in the following section.

3. RESEARCH METHODOLOGY

The empirical, quantitative research that we developed involved two stages of work. The first stage of our research was devoted to the development of a group research questionnaire to be administered to the group, and the second stage is the interpretation of the results of the questionnaire and the presentation of the conclusions drawn from them. Thus, the first stage consisted in the elaboration of the questionnaire, which was structured in four sections, in which we used two types of questions: open-ended questions and questions to which only one answer could be chosen.

The first section of the questionnaire was dedicated to the identification of the respondents' profile, i.e. the knowledge of the persons who filled in the questionnaire and was composed of four general questions, which concerned the age of the respondents, the gender of the respondents, the length of their professional activity or experience and the position held. The second section, composed of ten questions, was aimed at identifying problems at the financial accounting department level in terms of workload, as well as questions aimed at assessing the impact of the implementation of digital technologies in terms of their advantages and disadvantages for the financial accounting activity and for the profession in particular. The third section contains seven questions focusing on how digitization has influenced or is likely to influence the accounting profession in terms of the evolution of the staff employed in the financial accounting department.

Respondents will be able to express their agreement or disagreement with the increasing digitization of the department with the last question in this section, in this way we will be able to capture their positive or negative perception of the impact of digital technologies on the accounting profession. The last section, which is also the most extensive, consists of eleven questions regarding the use of the Forexebug platform by the staff of the financial-accounting department, as well as the degree of digitization of the platform. This section also presents two open-ended questions, so that respondents can freely respond to the problems and challenges they have encountered in using the platform or think they might encounter in the future in terms of financial reporting through Forexebug. The questionnaire was developed using the Google Forms platform and was sent online to the target group of respondents, i.e. accounting professionals employed in public institutions in the financial accounting department. The questions contained in the questionnaire were answered by 108 persons, who are employed in public institutions in the financial accounting department. The respondents have different positions such as chief accountant, economic director, head of financial-accounting department, financial administrator and economist. The questions were predominantly answered by 92 women, i.e. 85.2% of the respondents, and only 16 men, i.e. 14.8% of the total number of respondents.

4. RESEARCH RESULTS AND DISCUSSIONS

In this section we will present, in a summarized way, the most important results of our research, realized in the form of a questionnaire. Starting from the way the questionnaire was structured, we will try to present these results according to the structure of the questionnaire, respectively according to the four sections of the study.

4.1. ASSESSMENT OF THE RESPONDENTS' PROFILE AND THEIR PERCEPTION OF THE IMPACT OF ACCOUNTING DIGITIZATION IN PUBLIC INSTITUTIONS

As mentioned above, this subsection is dedicated to the identification of the respondents' profile and their perception of the digitization of public institutions' accounting, in terms of advantages and disadvantages perceived, as well as to the identification of difficulties and problems or shortcomings arising from the current financial-accounting activity in relation to the digital technology used and which require the identification of solutions for improving or optimizing the activity. As for the profile of the respondents, from the analysis of the answers to the structured questionnaire administered to the accounting professionals, it was found that most respondents, 37%, were aged between 25 and 35 years old, from this we can conclude that the staff working in the financial-accounting department is young, which can adapt more easily to changes in terms of a more in-depth digitalization of accounting. Only 17% are aged between 45 and 50, and 15% are over 50. For these two age groups we can say that there is a possibility of a more difficult accommodation or even a refusal to use digitized accounting at the expense of traditional accounting. But the percentage is small compared to the other age groups, so we can think that in a few years' time all those who will start working in the financial-accounting department will have an increasingly high-performance computer system, and will thus be able to adapt much better to the technological advances that will be implemented in terms of the adoption of emerging technologies in accounting. The aspects described above can also be visualized in Figure 1 below.

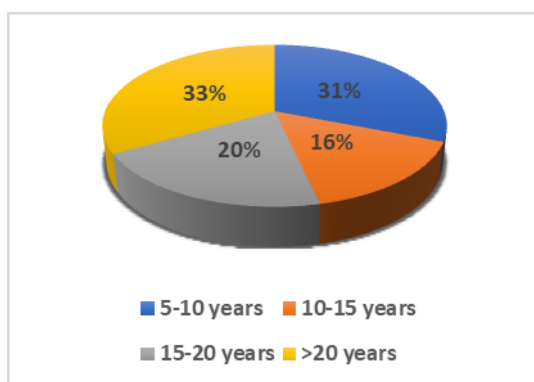


Figure no. 1. Age of respondents

Source: Own elaboration

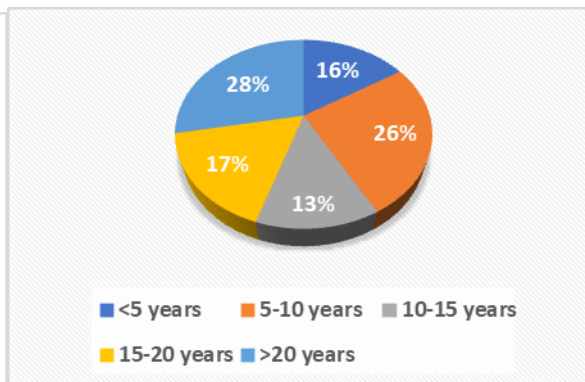


Figure no. 2. Experience of respondents

Source: Own elaboration

In terms of respondents' experience, the results of our survey reveal that 28% have more than 20 years of experience in the financial accounting department and 17% of the respondents have between 15 and 20 years of experience. Thus we can say that more than a quarter of the respondents, i.e. 28% of them have been working in accounting for more than 20 years, which implies that they have been part of a continuous digitalization if we look at the evolutionary changes in the last 20 years in the accounting of public institutions, thus they represent the power of example and their adaptation to everything that is new in terms of technology. The analysis of our results also shows that 26% of respondents have a seniority in activity between 5-10 years, which also denotes the fact that in the last 10 years, quite a few young people have been employed in public institutions, or personnel. who migrated from other sectors of activity, a possible explanation being represented by the stability of the job, possibilities for career advancement, the relatively fixed time, specific to public institutions compared to the period of time. spent working in private institutions, respectively the constant increase in the salaries of civil servants employed in public institutions. These results denote that a career in the field of accounting in public institutions represents a real opportunity for graduates of higher education in Romania. Also, a significant percentage of 17% of respondents have a seniority in activity, between 15 and 20 years, which

denotes the stability of the job and the desire for continuous adaptation of accounting professionals to all developments in this sector.

Also, 13% of respondents have a seniority between 10-15 years, and 16% of respondents have a seniority of less than 5 years, which denotes, as mentioned above, the fact that in recent years, public institutions have attracted quite a few graduates of higher economic education. All these aspects are also evident from Fig. No. 2, shown above. Regarding the increase in complexity and workload related to the financial accounting department, the results of the questionnaire revealed that an overwhelming percentage of 96% of respondents stated that it had increased, respectively 104 people, while only 4% of respondents, respectively 4 people, considered that it had not increased. In terms of experience, if we look at respondents with approximately 20 years of experience in the field, we can say that they were active in the financial-accounting field even at a time when accounting was still kept in a traditional, less digital way. Nowadays, when computer systems automatically take over data and can generate reports with just a click away, they classify the work as easier, since the time thus saved can be allocated to analyzing the resulting accounting information.

Also, regarding the increase in workload, it was found that 44% of respondents considered that the workload in the financial-accounting department increased by 50%, 38% said that it increased by 30%, while only 6% checked a percentage increase of less than 20%. Of the total, 2% considered that the workload increased so much that it doubled compared to previous years. Following the analysis, we can indeed say that the workload has increased in volume by a percentage of around 30-50%. However, we believe that employees were able to cope with this increase due to the fact that through digitalization they were able to more efficiently manage the time that before digitalization, for example, they allocated to data entry, or to new activities, which led to an increase in workload.

In terms of respondents' perception of how the activity of the financial accounting department will change in the context of digitization, the results reveal that 44% of the financial accounting department staff expect a significant change, 7% a complete change and 30% a relative change. A small percentage of 19% expects little or no change, as can be seen in figure no.5. However, considering that in the last period the majority of respondents considered that the volume has increased with increased digitization, we can say that the change will be significant because the accounting professionals will focus more on data analysis and consultation, while data processing, storage, archiving will be taken over by IT systems.

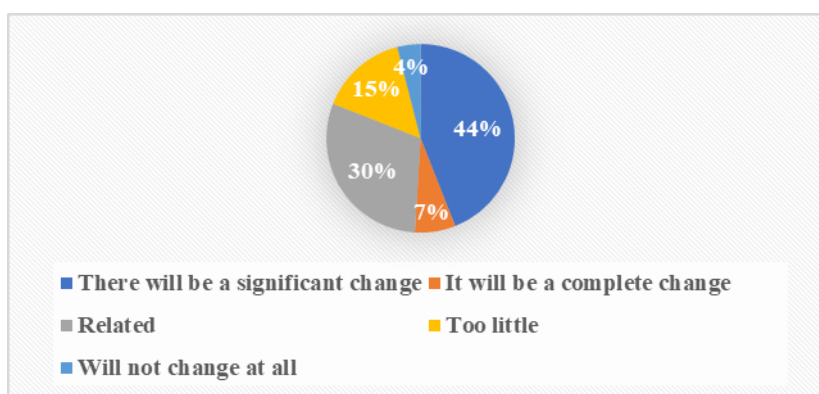


Figure no. 3. The impact of digitization on financial-accounting activity

Source: Own elaboration

In terms of the percentage of digitization of public institutions' accounting, 54 persons considered that the digitization of public institutions has had a progress of 50% in recent years. Only 8 persons considered that the digitization percentage was very low to not at all and 4 persons considered that digitization was 100%. In terms of staff's acceptance of the digitization of work, the results reveal that staff are willing to adapt to a strong digitization of activities and only 18 respondents were less willing to accept this evolutionary step. Also, a large number of respondents,

namely 98 respondents out of a total of 108 respondents, believe that the implementation of digitalization will be very beneficial, and 10 respondents believe that digitalization will not produce effects on effectiveness and productivity. Numerically, 24 respondents believe that effectiveness and productivity will increase by at least 50%, 40 people by 80% and 34 believe that it will increase by 100%. If out of the total number of respondents, 91% believe that they will increase, I believe that it will, and digitalization will bring an increase in labor productivity. Regarding the increase in the accuracy of data and accounting information through digitalization, 76 of the respondents surveyed believe that digitalization will lead to an increase in data accuracy by a percentage ranging from 50% to 70%, and 30 respondents believe that digitalization will increase accuracy by 100%, which indicates that a high degree of digitalization leads to the elimination of human errors, either due to fatigue or high workload or limited time to perform current tasks. Only 2 people believe that digitalization will not increase data accuracy and that traditional accounting can still meet current requirements. The main benefit of digitalization, in the eyes of the respondents, in terms of increasing work efficiency and productivity, is given by the fact that they, in a proportion of 69%, consider that digitalized computer programs will allow an automatic transfer of data into an integrated system, and from one computer program to another, which will lead to great time savings for redundant tasks and the possibility of focusing on higher-level activities, generating added value for the institution. An example, We consider that an edifying example is that of the payroll program, so that the centralizer is taken directly into the accounting program, as well as the bank statements. In this way, it will also be possible to see whether the obligation related to salaries will be closed with payment, without their manual registration. Regarding the elimination or reduction of errors through digitalization, 36% of respondents believe that errors can be limited to the point of their elimination or even completely eliminated, 32% of respondents believe that digitalization will lead to a relative limitation of them, and 22% believe that errors will be limited to a small extent or that they will not be limited. These percentages, however, denote the fact that the study respondents are aware of the advantages of digitalization in the relative or complete limitation or elimination of human errors, common or inherent to current accounting activity. The respondents also had the same opinion on the increase in the accuracy of tax returns. Thus, we can state that most respondents expect that with greater digitalization, data will be correctly recorded in accounting and accounting information will become more precise and with a higher degree of accuracy. These aspects are shown in Figure no. 4.

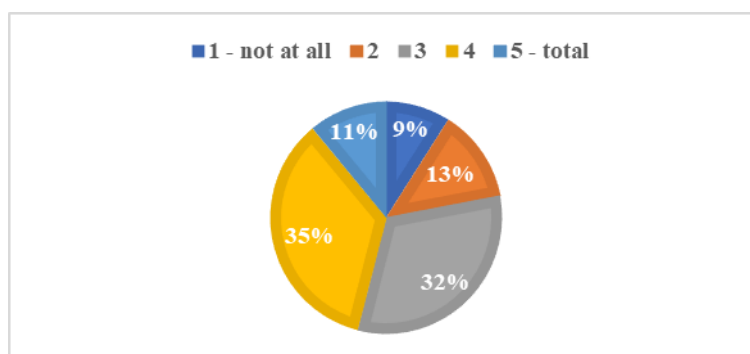


Figure no. 4. Respondents' perspective on limiting human errors

Source: Own elaboration

Regarding information security, 66% of respondents believe that a greater degree of digitalization will lead to a relatively greater or even greater increase in data security, and 20% of them state that the degree of security of accounting information will increase significantly, the percentage of those who believe that digitalization will not bring greater Security being much lower, i.e. only 14%. As can be seen in figure no. 5.

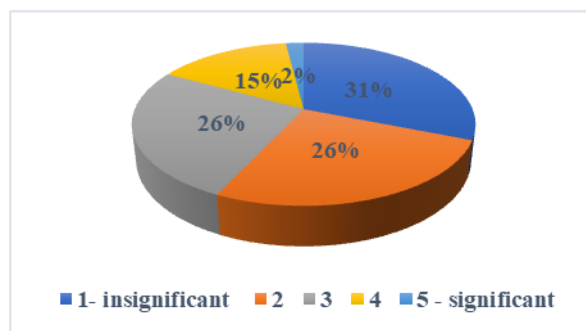


Figure no. 5. Data security through digitalization in the view of respondents

Source: Own elaboration

The results of the survey conducted through the questionnaire also revealed that 78% of respondents believe that by expanding the use of computer programs in current activity, their work will become easier, by taking over part of the activity by computer systems and that by implementing new computer systems, the process of recording events and transactions in the accounting of institutions will be simplified. Another benefit of expanding the degree of digitalization of public institutions in the eyes of respondents is represented by the ease of reporting financial information to other users. According to fig. no. 6, most of those who answered the questionnaire believe that data reporting will be easier, respectively 66% believe that it will be a significant change, 28% relative and only 6% estimate that it will be a very small one or that it will not be at all. Thus, we can conclude that most believe that with digitalization, reporting can be done directly from accounting programs, without further intervention on the data for reporting. Also, respondents agreed in a proportion of over 90% that through digitalization, complex situations can be done just a click away, which before the implementation of digitalized programs they could do with difficulty and in long intervals of time.

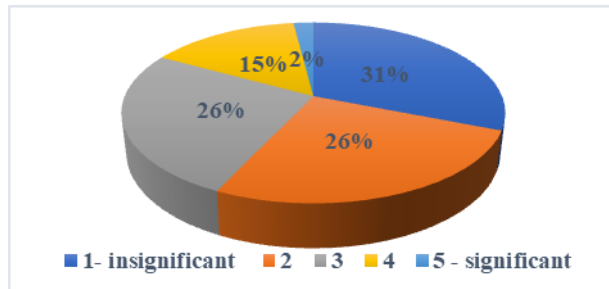


Figure no. 6. Digitalized reporting from the perspective of respondents

Source: Own elaboration

From the point of view of the reduction in the number of staff as a result of the expansion of digitization, the respondents are optimistic about this, only 17% of them believe that digitization will negatively affect the number of staff by decreasing their number, and 83% of the respondents believe that there will be no or insignificant reduction in the future. Most of the respondents believe that the profession will change in the way it approaches, but the need for human resources will remain, due to the spread of digitization across all levels of the profession. In addition, 80% of the respondents also indicated that digitization also involves taking professional training courses for staff involved in the provision of accounting services and that they are willing to take them in order to keep their job and not to quit.

Therefore, respondents are not willing to quit their current job as a result of the impact of digitalization on the profession. These are depicted in figure 7, 8 and 9.

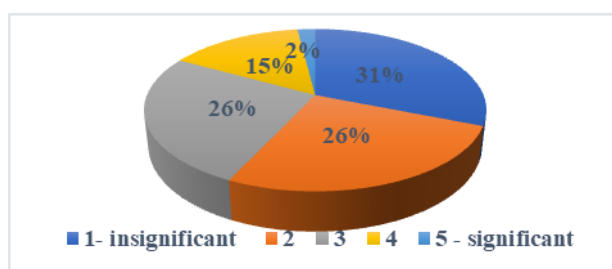


Figure nr. 7. The impact of digitalization on human resources

Source: Own elaboration

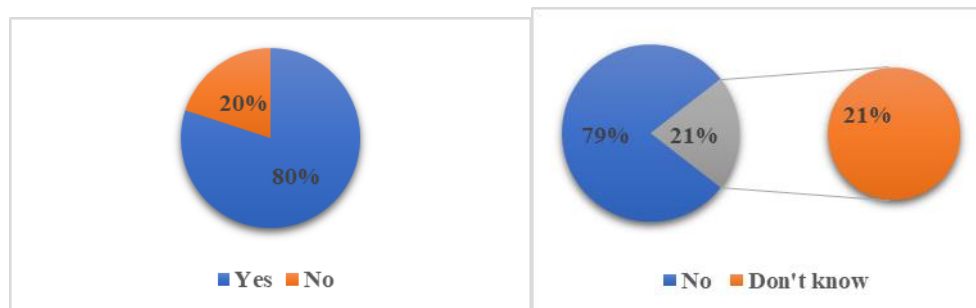


Figure no. 8. The need for digitized training

Source: Own elaboration

Figure no. 9. Respondents' perspectives on leaving the profession in the context of expanding digitalization

Source: Own elaboration

Regarding the implications of digitalization on professional judgment, respondents agreed that it will continue to be maintained in the context of the large-scale expansion of digitalization, and will continue to be used in the analysis, verification and control of accounting information processed with the help of digital technologies, because professional judgment will be the same regardless of the processing method.

4.2. RESULTS REGARDING THE CHALLENGES AND DIFFICULTIES RELATED TO DIGITALIZATION IN THE PERSPECTIVE OF RESPONDENTS

Regarding the challenges and difficulties caused by the expansion of digitalization at the level of the accounting profession and the accounting of public institutions, respondents indicated a series of such problems related in particular to: system errors, data correlation, lack of information, IT problems, lack of personnel, lack of communication, mistakes in taking over accounts, the implementation of new systems will be difficult. To these can be added a series of challenges, which are materialized in inconsistencies following accounting records; lack of experience of certain people in using IT systems; errors in data capture; verification of forms; impossibility of correcting possible errors produced by the IT system; detection of errors; possible reduction of staff; lack of specific skills for digitization; lack of guidance for using IT systems; technical errors regarding digitized programs; blocking of applications due to the large volume of information entered; collaboration with the state treasury; reporting to territorial fiscal structures; internet speed; IT support for programs; lack of support from the IT department; data loss.

One of the most important problems reported by respondents, which still exists at the current level of digitalization and will persist in the future, is the fact that within public institutions information still circulates on physical media, namely paper with signatures, stamps and other similar documents that require human handling, without being able to be scanned and transmitted electronically. In the opinion of respondents, this will be one of the problems that will hardly be solved, in their opinion, digitalization in public institutions will still be done on paper. Another problem identified would be the lack of exercise of critical and analytical thinking, the decrease in experience in identifying details and the ability to draw conclusions, as well as the deficient

interpretation in the financial-accounting context, of accounting logic and of implementing corrective measures, the lack of confidence in making decisions to be presented to management. A major current problem, which respondents believe will persist in the future, would be the simultaneous updating of all programs so that they can be interleaved (correlated) with each other, for the purpose of automatic data retrieval, as well as the blocking of systems at key moments.

Cyber attacks represent another problem that could lead to the risk of loss or damage to electronically stored information. Following the responses received, it can be concluded that digitalization has been attempted at the level of public institutions, but it still has many dysfunctions, and the staff within the financial and accounting departments is reluctant that these problems will be solved in the future, especially since people in senior management still want to work traditionally, based on holographic signatures or stamps.

4.3. RESULTS REGARDING THE ASSESSMENT OF THE IMPACT OF DIGITALIZATION ON THE INCREASE IN THE QUALITY OF REPORTING IN PUBLIC INSTITUTIONS

The fourth section of the structured questionnaire administered to accounting professionals aimed at identifying the respondents' opinion regarding the current reporting system implemented using the Forexebug platform, identifying the issues and challenges they encounter in their current activity and implicitly the solutions to solve them and identifying strategies or measures that would lead to the increase in the quality of reporting in public institutions. Thus, the first questions aimed at the degree of knowledge of the reporting platform and its use in daily activity.

The results showed that the vast majority of respondents (91% of them) know the platform, and 66% of them use it daily in their activity. This result indicates that respondents are familiar with the platform used in reporting financial and budgetary information of public institutions and are able to identify the shortcomings of this digitalized reporting method and propose solutions to address them.

Thus, the following questions of the questionnaire aimed precisely at identifying these deficiencies or difficulties encountered by them in the reporting activity. The answers provided by the accounting professionals surveyed revealed that a problem in the implementation of the Forexebug platform was the delayed update of the accounting programs within public institutions, because they could not be correlated to perform various reports directly in the application. Thus, 69% of the respondents considered it to be one of the difficulties they faced at the beginning and only 31% considered that it did not represent a problem. Another major problem reported by the respondents was represented by the time that had to be allocated to the implementation of the new reporting model, because at the beginning the computer programs were not updated to perform direct reporting, certain forms still had to be filled in manually and submitted.

In addition, the platform had certain deficiencies that made the time allocated to reporting even more difficult. Thus, 70% of respondents considered that these represented a major problem, while only 30% responded that they did not consider this aspect a problem. Regarding the benefits brought by the implementation of the Forexebug platform, a considerable percentage of respondents, 87%, considered that the use of the Forexebug platform brought greater transparency to financial statements, and 13% of them considered that its implementation did not bring considerable benefits in increasing the transparency of reporting information and implicitly increasing the quality of reporting. Also, respondents indicated that using the Forexebug platform they considered the reporting of tax information in real time to ANAF to be an important benefit, in the same percentage of 87%, and 13% of them considered the reporting of data in real time to ANAF to be inefficient, and 6% of them considered this aspect to be very insignificant. Also, respondents indicated the reduction of the time for submitting forms in percentage of 80% as an important benefit, while 20% of them said that the time for submitting forms was not reduced or that it was reduced to a small extent.

Respondents indicated that the reduction of the time for submitting forms was considerable because prior to the implementation of the Forexebug platform, forms were submitted in person to ANAF, and after its implementation, forms are submitted directly online, which contributed substantially to the efficiency of the activity and the increase in labor productivity.

Respondents also pointed out as an important benefit of this reporting that when submitting tax information through Forexebug, validation is received from the tax authority immediately, so that in case of invalidation of an operation, it can be retransmitted without exceeding the time allowed for reporting. In the same field of tax reporting through Forexebug, the results of our study reveal that this led to an increase in the accuracy of the reported information, with 83% of them declaring this aspect, and 17% did not notice an increase in the accuracy of the information provided.

Respondents also indicated as an important benefit that the digitalization of reporting has also led to a reduction in the preparation and elaboration times of financial statements, by 72%, and that financial reporting is optimized by implementing this platform. Also, in the perspective of expanding the digitalization of quarterly/annual reporting, respondents revealed that this will lead to an improvement in the quality of reporting, with a high percentage of 82% of respondents expressing this, and only 17% considering that it will be insignificant. Another benefit identified by respondents was represented by the reduction in the number of forms that must be submitted as a result of the implementation of the digitalization of reporting, in a percentage of 67%, and 33% of them consider that their number has not decreased, or has decreased very slightly. Respondents also consider that the wide-scale expansion of digitalization, at the accounting level of public institutions, will lead in the future to an even greater reduction in the forms that will be worked with, in a considerable percentage of 72% of them. These aspects are also due to the respondents' seniority in the financial and accounting departments, so that in the past they worked with a much larger number of reports and consider that now their number has decreased considerably. Also, the automatic verification in the reporting platform of the budget inclusion of payments was considered as another important benefit of the digitalization of reporting, in a percentage of 92%, and only 8% of them considered this to be insignificant or very insignificant.

Respondents indicated that this aspect is particularly important because payments can be made within the budget limit, with verification being carried out online, without the need to travel to the treasury to verify this aspect. Regarding the benefits brought by Forexebug in terms of reducing or eliminating errors, 78% of respondents revealed that it brought major benefits in this regard and that it will determine the substantial reduction of accounting errors in the future, while 22% of them are skeptical about this aspect. The results of our study also reveal that the reduction of errors is due to the correlation of data from several computer programs, computer systems that warn when they discover data that does not correlate with each other, which means increasing the possibilities of verifying their correctness and, consequently, reducing the errors recorded.

Another benefit of digital reporting is represented by greater control of budgetary commitments through Forexebug, in a percentage of 91% and only 9% consider it to be little significant or significant and also the implementation of this reporting platform has led to more efficient budgetary management which is necessary in the use and correlation of budgetary credits, with beneficial effects on the responsible use of public money. The last part of this section was dedicated to identifying the problems and challenges that accounting professionals expect to be susceptible to in the future in their current activity, as a result of the wide-scale expansion of the digitalization of the activity. From the synthesis of the answers provided by the respondents and their analysis, we identified several issues that they identified as possible or susceptible in the future and that could materialize in problems related to system blockage due to the large number of users, or the programs not functioning for a long period, possible program errors; - failure to correlate financial-accounting data with the Forexebug platform in a timely manner; delays in updating the platform or challenges related to the lack of training of staff in its use and respectively problems related to the continued listing of receipts from forms and financial statements to be archived, also on paper, according to the normative acts in force.

Another current problem, but which is also expected in the future, as the respondents answered, would be related to the correlation of legislation, in the sense of facilitating budget execution, not as happened through the Ordinance of 31.03.2024 regarding the monthly withdrawal of open and unused credits. In the opinion of the respondents, this was much simpler if this was done quarterly, which led to the complication of monthly reporting. Also, as was natural, our study also aimed to identify solutions to improve or refine financial reporting, in the context of the increasing digitalization process. Thus, respondents were asked to identify what should be improved within the Forexbug platform to make it easier to use. From this point of view, we also conducted a synthetic analysis of these responses here. Thus, respondents indicated that the main challenge for the future was the direct data transfer from the program, for example, the direct transfer of tax contributions. Another improvement could be that receipts and payments be made in real time through the digital platform, without the need for a state treasury official to check and give approval. The results of our study also identified other measures to improve the activity, which were derived from the analysis of the responses provided by respondents. These mainly refer to the permanent updating of the computer program, in accordance with tax legislation, reducing the time for validating forms; providing correct information before any change on the platform; resolving technical problems of the platform generated by its frequent blocking; accessing it without a token; generating more reports within the platform; obtaining information related to payments in real time and not in the following days, generating more reports from the platform; the presence of a 24/24 online assistant, who can provide any necessary clarifications; the possibility of introducing a quarterly budget; greater consistency of the platform with accounting programs. Analyzing the responses received, we can conclude and state that the main challenge of this platform remains the technical one, generated by its blocking, which generates major shortcomings related to payments or reporting. Respondents also indicated that they would like a greater degree of digitalization of the forms they operate with, so that there is no longer a need for forms that require physical submission to the state treasury.

In their view, digitalization should be complete, so that the various forms can be submitted online. Institutions should be informed in advance when the platform goes into maintenance or when changes are made to it. Respondents also complained about the lack of IT specialists within public institutions, which sometimes makes accessing the platform cumbersome, especially when it is overloaded.

5. CONCLUSIONS

Following the analysis carried out, we can conclude that the public institutions have so far tried to digitize their computer programs, but it still has many dysfunctions. The staff in the financial-accounting departments are currently facing difficulties such as data retrieval which still cannot be done automatically, system errors, failure to update the programs on time and the like, but they believe that in the future, with greater digitization, these problems will be solved.

Likewise, the study also revealed that public institutions still work in the traditional way, even if they send reports, forms online, they require listing, signing, stamping and physical filing.

The study also revealed that the staff working in the financial-accounting departments are young people, who stated that the workload has increased with the increase in digitization, but due to the fact that high-performance IT systems have been introduced that have taken over some of the work of the staff, such as data entry, they have been able to cope with the increase in workload, thus replacing the time allocated for this activity in favor of other operations that have emerged in the meantime. The results also showed that digitization has significantly changed the work of the entire financial-accounting department, the perception of what it means to work in this area. Thus, the respondents consider that effectiveness and productivity have increased in a beneficial way for the institution, as digitization has added value to their work by increasing the efficiency and productivity of the work done. Accuracy is another quality that has improved as a result of the digitization of the accounting field. With the development of IT systems, the possibility of errors

has decreased considerably, almost to the point of elimination. Because the programs link data from several computer programs in several ways, errors produced by these systems are immediately detected and corrected. Thus, the information is characterized by accuracy and precision. The filling in and reporting of tax returns has improved as a result of digitization, by automatically capturing data and forwarding it to the tax authorities, its accuracy has increased, so the tax authorities also have greater control over the data they receive and can verify its accuracy. Through digitization, data can now be taken from different programs and compressed into a single program that performs different reporting, analysis and facilitates decision making and transmission to other institutions. This implicitly facilitates the audit work, as the information contained in the audit sample is contained in an integrated program. The human resources of the financial-accounting department do not feel threatened by the increasing digitization of the accounting field and are willing to adapt to the new way of thinking. They are willing to take further training if it is necessary for their professional development. Digitization does not require changing the traditional accounting way of thinking, as the basis of accounting will remain the same no matter how much technology develops. The analysis of the resulting accounting information is still carried out using accounting reasoning. The problems that are foreseen in the prospect of greater digitization would be those related to its implementation, system errors, lack of awareness of staff in its use, connection problems and possible take-up errors. Inexperience of staff can be a serious problem, as well as lack of knowledge of IT systems to be able to work with them. The study also revealed that despite the increasing digitization of the public system, there are still difficulties such as the system crashing when several users are connected, or at key moments when several institutions need to make reports or payments.

Institutions collaborate with the ANAF through the Forexebug platform for reporting financial statements related to asset and budget accounting, making treasury payments and submitting tax returns. One problem encountered in its implementation was that users were not sufficiently informed about it, making it difficult for them to understand and work with it at first. The updating of the accounting programs was a major problem at the beginning because some reports could not be made directly by taking data from them, so in addition to the novelty of the reports and the way of transmission, they had to be filled in manually. However, the use of the Forexebug platform has brought numerous benefits, mainly related to real-time reporting of accounting information, reduction in the number of forms, verification that payments are within budget and reduction in the time taken to submit forms. With the increased digitization of the platform, possible small errors in data correlation would disappear altogether according to the respondents as well as the time spent on preparing financial statements would be reduced. Thanks to the implementation of the platform, budget management is more efficient and, as a result, budget transparency has increased.

In conclusion, the study reveals the importance of extending digitization on a large scale, with all the inherent challenges of such a process, generated in particular, by the continuous updating of legislation and training of staff, data security and technical problems associated with its operation.

However, the digitization of the accounting of public institutions implicitly through the use of the Forexebug platform has brought many benefits to users related in particular to the easing of the work of the accounting professional by automatically checking the compliance of payments with the budget, increased transparency on financial statements and last but not least by reporting in real time information to the authorities, reduction of the number of forms, errors have been reduced, more efficient administrative governance. In addition to all the benefits listed, there are also difficulties that need to be addressed with its increasing digitization. The difficulties include first and foremost the technical aspects related to the poor functioning of the platform. However, we can conclude that the digitization of the public system through the implementation of the Forexebug platform has been an important reform that has brought real benefits related to online reporting, with important benefits in streamlining the work. From a human resources perspective, the study revealed that in the future, the role of the accountant will change from a "numbers man" to a person

who, based on data, can predict what will happen in the future, thus acquiring an analytical mindset capable of interpreting accounting information processed with the help of IT systems.

The study also revealed that the digitization of accounting as a whole, as well as of the financial-accounting compartment in the era in which we live, is a necessity in order to be able to face the challenges we face in our daily lives and to create an accounting information system that is the foundation of effective public governance. The increasing digitalization of this field will bring added value and will have a positive impact both on public institutions by publishing increasingly processed, verified and analyzed reports, but also on fiscal institutions that will be able to verify those declared more easily and based on more verification sources, thus achieving a much more efficient control of public budgetary resources.

BIBLIOGRAPHY

1. Androniceanu, A., Sabie, O. M., Georgescu, I., & Drugău-Constantin, A. L. (2023). *Main factors and causes that are influencing the digital competences of human resources*. *Administratie si Management Public*, (41), pp.26-53.
2. Botea, R. (2018). Profesia de contabil este cea mai în pericol de a fi înlocuită de digitalizare. Contabilul care se adaptează schimbării va rămâne, în timp ce contabilul care nu ține pasul va ieși din piață, Ziarul financiar. <https://www.zf.ro/eveniment/profesia-de-contabil-este-cea-mai-in-pericol-de-a-fi-inlocuita-de-digitalizare-contabilul-care-se-adapteaza-schimbarii-va-ramane-in-timp-ce-contabilul-care-nu-tine-pasul-va-iesi-din-piata-17547407> [accesat la 28.10.2024].
3. Coman, D. M., Ionescu, C. A., Duică, A., Coman, M. D., Uzlaui, M. C., Stănescu, S. G., & State, V. (2022). *Digitization of accounting: The premise of the paradigm shift of role of the professional accountant*. *Applied Sciences*, 12(7), 3359.
4. Delgado, F. J. (2021). *On the determinants of fiscal decentralization: Evidence from the EU*. *Amfiteatru Economic*, 23(56), pp.206-220.
5. Goldbach, D., Popa, M., & Paraschiv, O. V. (2024). *Navigating the Digital Frontier: A Comprehensive Examination of Romanian Public Administration Digitization and Its Perceptual Implications*. In *Proceedings of the International Conference on Business Excellence* (Vol. 18, No. 1, pp. 3452-3464). Sciendo.
6. Gurău, M., & Gurău, M. I. (2020). *Contabilitatea în era economiei digitale. Politici și proceduri contabile*. Editura Universității din București-Bucharest University Press.
7. Gușe, G. R., & Măngiuc, M. D. (2022). *Digital transformation in Romanian accounting practice and education: Impact and perspectives*. *Amfiteatru Economic*, 24(59), pp.252-267.
8. Ionescu-Feleagă, L., Dragomir, V. D., Bunea, Ș., Stoica, O. C., & Barna, L. E. L. (2022). *Empirical evidence on the development and digitalization of the accounting and finance profession in Europe*. *Electronics*, 11(23), 3970.
9. Oprea, A. (2018). Președinte CECCAR: Cele mai mari provocări ale profesiei contabile sunt gândirea integrată, globalizarea și tehnologia. Profesia tradițională se transformă din ce în ce mai mult. <https://www.news.ro/economic/presedinte-ceccar-cele-mai-mari-provocari-ale-profesiei-contabile-sunt-gandirea-integrata-globalizarea-si-tehnologia-profesia-traditionala-se-transforma-din-ce-in-ce-mai-mult-1922404628002018091118471271> [accesat la 12.11.2024].
10. Popa, I., Ștefan, S. C., Olariu, A. A., & Popa, Ș. C. (2024). *Integrating digitalization opportunities into innovative public organizations' management process*. *Journal of Innovation & Knowledge*, 9(4), 100564.
11. Popescu, M. A. M., Barbu, A., & Costea-Marcu, I. C. (2023). *Digital Transformation in the Romanian Public Sector*. *FAIMA Business & Management Journal*, 11(4).

12. Pripoaie, R., Schin, G. C., & Matic, A. E. (2024). *Post-Pandemic Exploratory Analysis of the Romanian Public Administration Digitalization Level in Comparison to the Most Digitally Developed States of the European Union*. Sustainability, 16(11), p.4652.
13. Profiroiu, C. M., Negoită, C. I., & Costea, A. V. (2024). *Digitalization of public administration in EU member states in times of crisis: the contributions of the national recovery and resilience plans*. International Review of Administrative Sciences, 90(2), 336-352.
14. Simion, C. P. (2024). *Integration of Digitization Opportunities in the Management of Public Institutions from Romania*. RSEP International Multidisciplinary Conference 8-9 February 2024, ATANA HOTEL, Dubai, UAE.
15. Socoliuc, M. I. (2023). *The Impact of Digitalization on the Accounting Profession in Romania—A Quantitative Research*. Revista de Studii Financiare, 8(Special), pp.132-154.
16. Stăiculescu, O. (2024a). *Challenges And Benefits Of Digitalisation For Public Institutions In Romania*. Annals of Constantin Brancusi University of Targu-Jiu. Economy Series/Analele Universității Constantin Brâncuși din Târgu-Jiu. Seria Economie, (1).
17. Stăiculescu, O. (2024b). *Unlocking Economic Growth: The Benefits of Digitalization for Public Institutions in Romania*. Revista de Științe Politice. Revue des Sciences Politiques, 81, pp.212-222.
18. Tussibayeva, G., Sagindykova, G., & Amanova, G. (2023). *Transformation of accounting in the digital economy and prospects for its development*. ECONOMIC Series of the Bulletin of the LN Gumilyov ENU, (4), pp.289-300.
19. Ursachi, A. (2020). Contabilitatea este judecătorul nepărtinitor al trecutului, ghidul necesar al prezentului și consilierul indispensabil al viitorului. CECCAR Business Magazine, Numărul 9. https://www.ceccarbusinessmagazine.ro/contabilitatea-este-judecatorul-nepartinitor-al-trecutului-ghidul-necesar-al-prezentului-si-consilierul-viitorului/a/NTQ2MTMyMTA0MzQ5NzE2MzX9PWpC5_xEns3dg7UVJaw [accesat la 28.10.2024].