# STUDY ON THE ASSESSMENT OF THE IMPACT OF DIGITIZATION ON INCREASING THE QUALITY OF REPORTING IN PUBLIC INSTITUTIONS IN ROMANIA FROM THE POINT OF VIEW OF ACCOUNTING PROFESSIONALS

# SOCOLIUC MARIAN<sup>1</sup> ,ORCID: 0000-0001-6378-6686 SOCOLIUC MIHAELA IONELA2, ORCID: 0000-0002-7250-2304

**Abstract:** Public institutions can contribute to more rational resource management and greater openness in the public sector by implementing digital accounting systems to simplify operations, reduce operating costs and improve the quality of financial reporting. The aim of this research is to illustrate how the digitization of accounting has changed the way public institutions operate. The theoretical and empirical foundations of the study are derived from a questionnaire administered to accounting professionals employed in public institutions. The results of the study revealed that the transition to digitization requires not only a well thought-out implementation strategy, but also a change in the mindset of human factors in tandem with the development of organizational cultures in public institutions.

**Keywords:** increasing the quality of financial reporting, public administration, digitalization, e-government, accounting professionals

**JEL Classification:** M41

#### Introduction

Under the significant impact of globalization and the widespread spread of emerging technologies, recent developments in public sector accounting still present major challenges, in particular related to the modernization of specific financial reporting regulations in public institutions in order to adapt to current international and national legislative requirements.

The digitalization of public institutions' accounting is a necessary measure, driven by professional and time constraints, the need for the state to be able to make the most realistic forecasts based on high confidence in the accuracy of financial data, and for society to guarantee the government's success in managing public funds.

One of the most important steps towards the efficiency and modernization of the financial sectors of public entities is the digitalization of accounting, moving from conventional paper-based techniques and physical documents to computerized and integrated systems that allow for the efficient management of financial information as a result of technical advances and the use of digital solutions.

Thus, in the national context, the transformation process that the public sector in Romania has gone through has been a complex one and has involved, in addition to changes in the way public institutions organize and manage their accounting, the chart of accounts, and the implementation of an electronic financial statements reporting system (Fagadar et al., 2021).

<sup>1</sup> Phd Profesor, Stefan Cel Mare University, Suceava, Romania,e-mail: marian.socoliuc@usm.ro

<sup>&</sup>lt;sup>2</sup> Phd Assistant Professor, Stefan Cel Mare University, Suceava, Romaniae-mail: mihaela.socoliuc@usm.ro **DOI:** 10.29302/oeconomica.2024.2.8

Digital accounting comes with a number of benefits such as: optimizing resource utilization, driving technological and socio-economic progress, reducing human errors, identifying anomalies, faster data processing, greater efficiency, accuracy and financial transparency and facilitating access to real-time information (Henry and Aziz, 2024; Emir and Henry, 2024). At the same time, these benefits can greatly improve the efficiency, transparency and accessibility of services provided by public institutions to meet the needs and expectations of citizens (Stăiculescu, 2024).

Păvăloaia et al. (2019) consider that in Romania, the public sector has a high level of digitization of activities, and this will lead employees to acquire knowledge, skills and competences in the use of computers in order to progress, but which are also necessary to benefit from the advantages of technology as a "partner" in the performance of tasks at work (Burlacu et al., 2022). Therefore, digitalization can be seen as a catalyst for positive change, shaping the future of Romanian public institutions (Stăiculescu, 2024).

However, Asikpo (2024), believes that the digital transformation of financial reporting is not without its challenges, potential risks and cybersecurity threats, and a skilled workforce capable of utilizing and making the most of these advanced technologies is also needed. According to a study by Dumitrache et al. (2023), Romania ranks 27th out of 27 EU Member States in the 2022 edition of the Digital Economy and Society Index (DESI).

Digitization of public institutions and the services offered is a strategic objective of all EU Member States and we believe that it should be given due importance in the new technological era.

Therefore, the theoretical aspects of information technology integration, organizational reorganization of public institutions in the context of digital governance and digitization of accounting on increasing the quality of reporting and effectiveness of public services in Romania are the main objectives of this study.

#### Literature review

The economic and social context, as well as the rapid technological evolution, impose the need to strengthen and streamline the administrative and digital processes of local public administration authorities in Romania in order to simplify the interaction between citizens and public authorities or between the business environment and public authorities, adopting in this regard on 04 June 2024, Emergency Ordinance No. 56/2024 on the approval of the National Program for the Digital Transformation of Local Public Authorities (GEO 56/2024).

Digitization of public administration through the use of information and communication technology (ICT) and the internet to improve government service delivery is described as egovernment (Tiika et al., 2024). E-government is defined by Androniceanu et al. (2022) as the process of reinventing the public sector through digitization and new information management techniques to increase citizens' political participation and streamline the administrative apparatus.

Access to digital technologies and the goal of e-government is to improve citizen participation, efficiency and transparency, while strengthening the links between citizens and public institutions (Nwaimo et al., 2024).

By using digital technologies to modernize public services, governments can streamline administrative processes, improve citizen-authority communication, provide faster and easier access to resources and information, and encourage citizen participation in decision-making, transforming citizens from passive recipients into active participants and helping to identify solutions to governance challenges (Virlanuta et al., 2024).

As technology advances and governments shift their services and communication to the digital world, the field of e-government is constantly evolving. E-government initiatives that are well implemented can greatly help public authorities as well as citizens.

At the same time, the digitization of services offered by public institutions contributes to improving the quality of life and citizens' satisfaction, highlighting a new and more efficient form

of communication that allows equal and universal access to information supported by a developed information and communication infrastructure (Zubco, 2018).

Currently, Romania is facing the challenge of moving from an e-government approach focused on the use of ICT to promote efficiency in the public sector and to improve public sector service delivery, with accountability and transparency advancing significantly. As stated by the Authority for the Digitalization of Romania (ADR), e-government is a crucial first step in the processes of administrative reform and the refinement of strategic objectives created by those in decision-making positions in public policy (ADR, 2020).

Thus, E-Government is vital for simplifying bureaucratic procedures in public institutions, facilitating access to information, reducing public spending, it can be used as a tool to fight corruption, its development has become imperative.

Significant progress has been made at the European Union level in the areas of vision strategies for e-government, which is also an advantage for Romania's circumstances.

The European Community has a broad framework of regulations that encourages progress in the field of e-government, constituting a substantial part of the most important regulatory actions. They are also applicable in Romania and provide the necessary legal framework for the national consolidation of e-government (Ionica, 2020).

With the help of the European Union, Romania's digitalization process has accelerated since 2021 and is expected to last until 2027 thanks to the "Digital Europe Programme" (DIGITAL). The program is a crucial component of a number of intricate plans, such as those guaranteeing the economy's use of digital technologies and promoting digital skills, cybersecurity and artificial intelligence (Adamescu, 2020).

However, according to official statistics, the digitization of public administration in Romania remains below the European Union average, although notable progress has been made (Issue Monitoring, 2024).

Cojocaru et al. (2024) argues that our country has reached a certain level of digitization, but nevertheless it is still not accessible to its citizens, as it has not provided an easily accessible government cloud system. In this regard, the authors propose that the public administration should provide training to both civil servants and citizens on how to access digital platforms.

Following the literature review, the following benefits of e-government can be identified (Tiika et al., 2024; Popescu et al., 2024; Henry and Aziz, 2024; Henry and Aziz, 2024; Virlanuta et al., 2024):

- *Public efficiency*: by making information and services easier to access, the use of technology can save administrative costs and speed up government procedures.
- Accountability and transparency: digital government procedures can improve public spending and openness in decision-making by allowing citizens to hold public officials to account.
- Civic engagement: E-government enables individuals to actively engage in the decision-making process, offer suggestions and be part of the choices that impact them.
- *Increased accessibility*: All residents, including those living in remote or underserved areas, can access government information and services more easily through the use of digital and online platforms.

Thus, in the context of the studies described in this section, the aim of the study is to determine how accounting professionals in Romania view and feel the effects of digitization of accounting in public institutions. The research will be conducted from the perspective of the challenges brought by digitization for the accounting industry, as well as from the perspective of the degree of understanding and application of digital systems. This research thus aims to cover the research niche on this topic that is less addressed in the national literature.

### Research methodology

Conducting the research entailed a literature review to identify previous research, current trends and best practices on the digitization of public administration and thus accounting, thus conducting a literature review on the digitization of accounting in public institutions.

In order to measure the degree of digitization of accounting, as well as the advantages and challenges faced, and the opinions of those involved in the process, specialized accounting professionals in public organizations will be interviewed.

Thus, the research objective aims to investigate how accounting professionals see the future of the accounting profession in the digital age in public institutions. The study, which is cross-sectional and descriptive, was conducted using a questionnaire as both a research instrument and technique.

The sample for the application of the questionnaire is accountants or civil servants who have tangency with the field, either in a municipality, school or other departments of other public institutions. The questionnaire covers a total of 38 questions, 5 of which are designed to collect personal information related to the profile of the respondents and 33 of which are about the digitization of accounting in public institutions.

There were a number of closed and open-ended structured questions (mixed questions) in the questionnaire, which was designed in accordance with the objectives of the study. The standardized responses to the closed structured questions are easily contrasted and subject to numerical analysis. With open-ended questions, participants are able to respond in depth and in context, adding current and relevant views to the research.

A number of advantages, including the uniformity of the questions for comparability, ensuring the confidentiality of participants can foster honesty and openness in their responses, thereby increasing the accuracy and reliability of the data collected, led to the selection of this questionnaire.

The questions were structured to find out the accountants' opinion about the digitization of public institutions on increasing the quality of their reporting.

Assessing the benefits and drawbacks of digitization can reveal crucial information about how accounting professionals view these advances in technology. Assessing attitudes towards adaptation and change can reveal how prepared and transparent accountants are about integrating new technologies in the workplace.

By analyzing and interpreting the graphs and results obtained from the questionnaire, a deeper understanding can be gained of how accounting professionals and public officials perceive digitization in accounting and how it influences the future of accounting.

Therefore, we believe that the results obtained from the interpretation of the questionnaire can be used to illustrate how digitization helps public organizations to create high quality financial and tax reports.

This information can serve as a basis for decision-making and implementation of strategies to adapt to the new challenges and opportunities that a digitized world brings.

## **Results and discussion**

The questionnaire was distributed online to accountants and civil servants working in public institutions, with a total of 120 responses.

In order to identify a profile of the accounting professional in public institutions, the answers given by the respondents to the structured questionnaire were analyzed. Thus, it emerged that in terms of age group distribution, out of the total number of 120 respondents, 8 respondents, or 6.7%, are in the age range of 18-25 years, 32 respondents (26.7%) are in the age range of 25-30 years, 39.2% of the respondents, or 47 respondents, are between 30 and 40 years, 7 respondents (22.5%) are in the age range of 40 and 50 years and 6 respondents (5%) of the respondents are over fifty years. This distribution shows that the 30-40 age group shows the highest concentration, followed

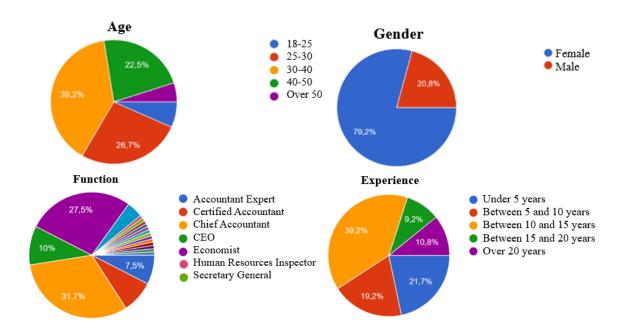
by the 25-30 age group. In addition, the 18-25 and over 50 age groups had the fewest responses, while the 40-50 age group had a considerable number of responses.

In terms of gender distribution, we see from Figure 1 that 95 respondents (79.2%) were female and 5 respondents (20.8%) were male. So, with a considerably higher percentage of females than males in the sample of survey participants, this distribution indicates that the respondents are mainly female.

A clear picture of the variety and distribution of respondents in public organizations can be obtained by evaluating the data on the functions held by the questionnaire participants. The main findings are summarized as follows: 9 respondents hold the position of chartered accountant, 10 are chartered accountants, 38 of them are chief accountants, 12 hold the position of economic director, 33 of them are economists, and 18 of them hold other similar positions. The distribution of job descriptions demonstrates a range of positions held by respondents in public organizations. The most prevalent jobs held by respondents are chief accountant and economist, followed by chartered accountant and economic director. Although fewer in number, chartered accountants still play a unique role in the sample. A sizable proportion of the responses also occupy other positions that are similar to or enhance those that are mentioned.

In terms of respondents' total work experience, as shown in Figure 1 we observe that 26 respondents have less than five years of experience, 23 respondents have five to ten years of experience, 47 respondents (39.2%) reported having between 10 and 15 years of experience, 11 respondents had between 15 and 20 years of experience, and 13 respondents reported having more than 20 years of experience. Important details regarding the respondents' seniority in public institutions are also shown in Figure 1. Thus, we can see that 8 respondents have been working in public institutions for less than one year, 31 respondents have been working in the public sector for 1-5 years (33.3%), 50 respondents have been working in the public sector for 5-10 years (41.7%) and 22 respondents have been working for more than 10 years (18.3%).

According to this distribution, the majority of respondents have a great deal of experience of working in the public sector, with a sizable proportion having done so for five to ten years. In addition, a sizable proportion of respondents have worked in public institutions for more than ten years, demonstrating consistency and a sustained commitment to the field.



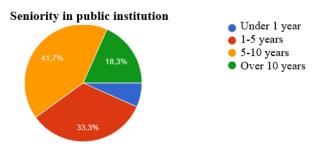


Figure 1. Respondents' profile

Source: author's own processing

From the following figure we can observe the answers related to the optimization of accounting digitalization in public institutions, where the majority 98.3% of the respondents agree that digitalization should be optimized to meet the specific accounting needs of public institutions. This indicates a recognition of the importance of adapting digital technologies in line with the specific requirements and regulations of public institutions to streamline accounting processes and ensure transparency and compliance, while 77.5% of respondents agree that digitization should be implemented in the institution that employs them. This indicates the interest and desire of the majority of respondents to see the adoption of digital technologies within their organizations to improve accounting efficiency and performance. It can be noted that 2 respondents do not agree that digitization is optimized for the accounting needs of public institutions and 27 respondents do not consider digitization applicable to them in the context of public institutions' accounting. This indicates the diversity of opinions and specific situations among the respondents.

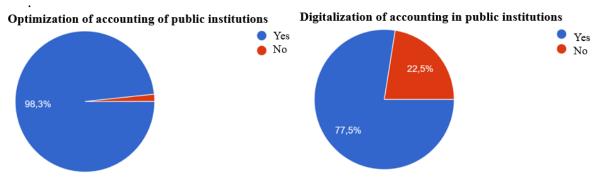


Figure 2. Professionals' perception in terms of optimizing the digitalization of accounting in public institutions

Source: author's own processing

Regarding the perception of accounting professionals regarding the activities that are recommended to be digitized we find that 79 of the respondents consider that one of the tasks in their organization that could be digitized is the automatic issuance of specific primary documents. This reveals that people are aware of the advantages of automated document issuance procedures and show interest in them. A considerable proportion of the respondents, i.e. 45, are in favour of digitizing the procedure of recording invoices and bank statements. This may lead to fewer human errors occurring during the accounting process and more efficient handling of financial data. According to 58 respondents, another important aspect in digitizing accounting is related to the automatic submission of returns to the tax authorities (ANAF). This can ensure tax compliance and reduce the time and effort required for the preparation and filing of tax returns.

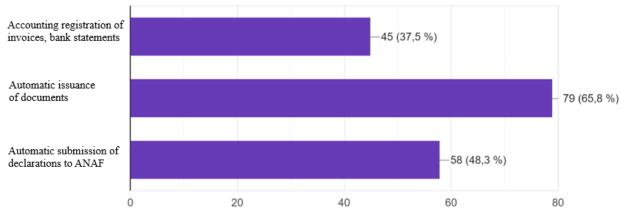


Figure 3. Accounting professionals' perception of activities recommended to be digitized Source: author's own processing

Based on the answers given by the respondents in the questionnaire regarding the data on the number of IT specialists working for public institutions can be interpreted in a variety of ways to show how prepared and involved these institutions are in the implementation of digital technologies.

- ➤ Presence of in-house IT specialists (14 responses):Public organizations with in-house IT specialists could benefit from having knowledgeable staff members managing and implementing digital technologies. This could indicate a strong dedication to optimizing the internal system and adapting to technological change.
- ➤ Working with a specialist firm (43 responses): For public organizations lacking IT expertise, partnering with a specialized firm can be a cost-effective solution. To support the digitization process, this option can facilitate access to cutting-edge technologies and external expertise.
- Need to hire IT specialists (62 responses):Public institutions that state that they would prefer to have IT specialists on staff, but currently have no opportunity to finance the hiring and training of these professionals. To meet the increasingly complex needs of the digital environment, this may be essential.
- ➤ Lack of need for IT specialists (1 answer): The absence of specialized standards may represent an unusual point of view or may indicate that digital technologies are not given the same importance in that public organization.

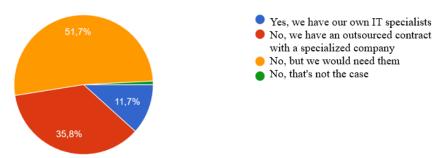


Figure no. 4. Evaluation of IT specialists in public institutions

Source: author's own processing

In terms of respondents' views on the increased quality of reporting in relation to the digitization of accounting in public institutions, 68 of the respondents chose the "All correct variants (56.7%)". The response of these respondents indicates a broad and accurate understanding of the multiple benefits that digitization can bring to the field of public accounting. They recognize that the implementation of digital technologies can contribute to increasing the quality of processes,

reporting, and improving decision-making. A total of 6 respondents chose the decision-making option. The influence that digitization can have on decision making in the public accounting industry is highlighted by the respondents who selected this option. They believe that access to real-time data and information made available by digital technologies can facilitate decision-making in public organizations. At the same time, 8 respondents selected tax reporting, respondents with this selection believe that the established likelihood of the tax reporting process is significantly affected by digitization. Accurate and efficient tax data collection, processing and reporting can be facilitated by the use of digital technologies.

Financial-accounting reporting was selected by 6 respondents, who considered that the financial-accounting reporting process is improved by digitalization. Efficient management of accounting and financial data through the use of digital technologies can improve the accuracy and transparency of financial data. The Financial-accounting reporting and Tax reporting option was selected by 32 of the respondents to this questionnaire.

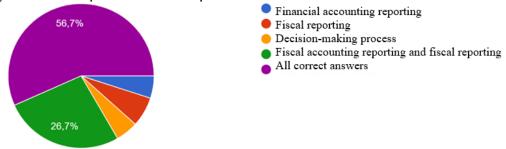


Figure no. 5. The impact of accounting digitalization on increasing the quality of reporting in public institutions

Source: author's own processing

From figure no. 6, we can see that the majority of respondents (45.8%), respectively 55 people, consider that one of the main weaknesses of digitalization is the high cost of acquiring and maintaining accounting programs. Difficult adaptation to the latest technologies was chosen by 36 people (30%), reflecting difficulties in integrating new technologies. Ten respondents (8.3%) chose to reduce the number of employees, this aspect can be associated with fears. Only one respondent chose the option that there are no weaknesses, and 15% selected cybersecurity. In the process of digitalizing public institutions, high costs, challenges in adapting to new technologies and potential staff reductions are crucial factors to consider. By solving these problems, the efficiency and effectiveness of implementing digital solutions in the public sector can be improved.

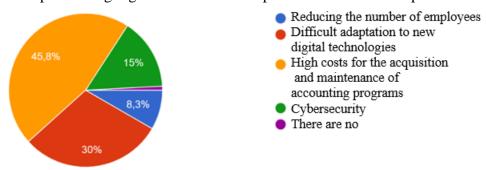


Figure no. 6. Weaknesses of digitalization in accounting

Source: author's own processing

The interpretation of the data regarding the importance of digitalization of public institutions according to the answer options for each question is as follows:

- 1. How important is the digitalization of public institutions? The majority of respondents gave significant importance to the digitalization of public institutions, with 23% giving the maximum score of 5 and 58% giving the score of 4, indicating an increased concern for this aspect.
- 2. Reducing costs and time allocated to documentation by digitalizing accounting in the public sector: The majority of respondents, that is, 58%, believe that digitalizing accounting could lead to reducing costs and time allocated to documentation, giving them a score of 4.
- 3. Changes needed in accounting education to adapt to the current IT and corporate globalization context: 48% of respondents gave the score of 4, indicating that they agree that accounting education should adapt to technological changes and the globalized context of corporations.
- 4. Reflecting digitalization in increasing the quality of the educational process and reducing costs by digitizing accounting education: 48% of respondents gave a score of 4 and 35% a score of 5, indicating that they believe that digitizing accounting education can improve the quality of the educational process and reduce costs.
- 5. The relevance of accounting skills in the future and the need to adapt to technological changes: The majority of respondents, respectively 46%, gave a score of 4 and 29% a score of 5, indicating that they see the need to adapt accounting skills to future technological changes.
- 6. Implementation of new technologies in the accounting education system: 40% of respondents gave a score of 5, and 38% a score of 4, indicating that they appreciate the implementation of new information technologies in the accounting education system.

The results suggest that respondents are aware of the importance of digitization and adaptation to technological change in accounting, expressing support for digitization of public institutions and educational processes, as well as for the use of new technologies in accounting. This indicates a recognition of the benefits of digitization and information technologies in this field.

The use of online services on the ANAF website by the respondents can be exemplified by Figure 7, and out of the total of 120 respondents, 116 (96.7%) state that they use the online services provided by the ANAF website, while 4 respondents (3.3%) state that they do not use these services. Preferences regarding the online services offered by ANAF offer multiple answers. With regard to the most accessed online services available on the A.N.A.F. website, the most popular activity is the downloading of electronic returns, being selected by 77.5% of respondents. Online appointments and Patrimvenven are tied, being selected by 29.2% of respondents each. Checking electronic documents and the list of taxpayers with no overdue obligations are chosen by 22.5% of respondents. The other services offered are appreciated by 14.2% and 22% of the respondents consider that the services help public institutions.

The accessibility of online services reveals that 40% of respondents consider that accessing online services is difficult, 37.5% of respondents consider them easily accessible and even friendly, 20.8% of respondents stated that the services are accessible with some difficulty.

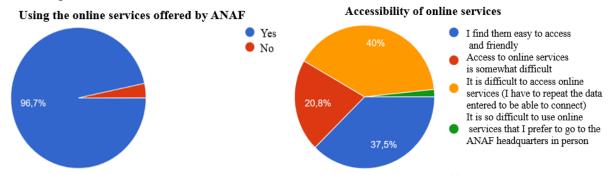


Figure no. 7. Use and accessibility of online services offered by ANAF

Source: author's own processing

Respondents also expressed their opinion on the use of other online services to save time, such as Ghişeul.ro option chosen by 90% of respondents, 10% of respondents do not use other online services for this purpose. The results suggest that a significant proportion of respondents have difficulties in accessing online services, but there is also a sizable percentage who find them easy to access and user-friendly. Most respondents also recognize the time-saving benefits of using other online services, such as the Ghişeul.ro platform. These findings point to the importance of ensuring good accessibility and usability of the online services on offer in order to encourage more people to use them and benefit from their effectiveness in saving time and facilitating interaction with public institutions or services.

The interpretation of the data on the appreciation of the VPS (Virtual Public Service) provided by the ANAF website in comparison with other online services offered by other entities is as follows, as can be seen in Figure 8:

- ➤ More accessible and more useful (51 respondents, 42%): consider VPS to be both more accessible and more useful compared to other online services. This suggests that the VPS offered by ANAF is seen as a convenient and efficient option for users.
- ➤ More accessible even if not very useful (45 respondents, 37.8%): respondents consider the VPS to be more accessible than other online services, even if it is not perceived as very useful. This indicates some discrepancy between the level of accessibility and perceived usefulness of the VPS.
- ➤ More difficult to access but very useful (24 respondents, 20.2%): Respondents rate the VPS as more difficult to access compared to other online services, but at the same time it is perceived as very useful. This shows that there are users who are willing to make the extra effort to access a service that they find valuable and efficient.
- ➤ More difficult to access and useless (0 respondents): No respondent considered the VPS to be more difficult to access and useless compared to other online services. This may suggest that the VPS offered by ANAF is perceived as having a minimal level of uselessness or difficulty to access.

The results indicate that the majority of respondents appreciate the level of accessibility and usefulness of the SPV provided by the ANAF website, and a significant percentage consider it a better or equally useful option than other online services offered by other entities. It is important that online services are both accessible and useful to meet users' needs and expectations.

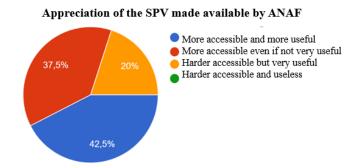


Figure no. 8. Assessment of the SPV provided by ANAF

Source: author's own processing

We can also note the following regarding:

- 1. Importance of the services provided for public institutions: The majority of respondents (59%) gave a score of 4 for the importance of the other services provided for public institutions, indicating significant importance.
- 2. Assessments regarding the SPV provided by A.N.A.F.: 59% of respondents gave a score of 4, indicating a positive assessment of the SPV provided by A.N.A.F., as significant.

- 3. Level of satisfaction with the SPV offered by A.N.A.F.: 43% of respondents declared themselves satisfied (score 4) with the SPV made available by A.N.A.F., while 33% gave a score of 5.
- 4. Receiving support from A.N.A.F. when encountering problems accessing the SPV: 52% of respondents declared that they received support (score 4) from A.N.A.F. when they encountered problems accessing the SPV.
- 5. Contribution of the digitalization of public services to stopping excess power: Most respondents (40%) gave a score of 4, indicating that they believe that the digitalization of public services can contribute to stopping excess power.
- 6. The capacity of the institution's infrastructure to support increased use of digital channels: 44% of respondents gave a score of 4, indicating that they believe that the institution's infrastructure can support increased use of digital channels.

The results show that the majority of respondents recognize the importance of the services made available to public institutions, including the VPS offered by A.N.A.F. A significant percentage also express satisfaction with the VPS offered and appreciate the support received from A.N.A.F. in solving problems related to accessing online services. There is also considerable confidence in the ability of the digitization of public services to help curb the excess of power. At the same time, most respondents believe that the institution's infrastructure can support the increased use of digital channels.

Figure 9 interprets the data on the benefits of RO e-invoice, respectively:

- 1. Operational efficiency Out of 48% of the respondents gave a score of 4 and 29% gave a score of 5, indicating that they consider e-invoice as having a significant impact in improving operational efficiency.
- 2. Reducing paper consumption The majority of respondents (48%) gave a score of 5 for the e-invoice benefit of reducing paper consumption, indicating the importance of this benefit to them.
- 3. Financial savings 47% of respondents gave a score of 4 and 28% gave a score of 5, indicating that they consider e-invoice to have a significant impact in achieving financial savings.
- 4. Simplifying legal compliance 43% of respondents gave a score of 4 and 32% a score of 5, indicating that they see e-invoice as a solution that simplifies legal compliance in the field of electronic invoices.
- 5. Reducing the risk of errors 44% of respondents gave a score of 4 and 29% a score of 5, indicating that they consider e-invoice to be useful in reducing the risk of errors associated with the invoicing process.

The results show that respondents appreciate the benefits of e-invoice, giving importance to operational efficiency, reduced paper consumption, financial savings, simplified legal compliance and reduced risk of errors associated with the invoicing process. These benefits signal the practical and financial benefits brought by the adoption of e-invoice in the context of commercial and fiscal operations.

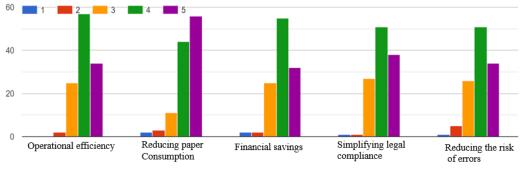


Figure no. 9. Benefits EN e-invoice

Source: author's own processing

Another aspect of this study was related to the Executive's budget and budget documents and we would like to emphasize that after interpreting the data we found the following:

1. Importance of the executive's budget proposal or other supporting budget documents:

Respondents place significant importance on categorizing expenditures by administrative units, with 52% giving a score of 4 and 19% giving a score of 5.

2. Presentation of expenditures according to functional classification:

Out of 48% of respondents consider it important to present expenditures according to functional classification, giving a score of 4 and 23% gave a score of 5.

3. Presentation of expenditure according to economic classification:

Out of 49% of the respondents giving a score of 4, indicating the importance of presenting expenditures according to economic classification, and 22% giving a score of 5.

4. Presentation of expenditures by separate programs for the budget year:

Out of 44% of respondents gave a score of 4, indicating the importance of presenting expenditures by separate programs, and 27% gave a score of 5.

5. Estimates of the aggregate level of expenditure over a multiannual period according to the classification:

Out of 42% of the respondents gave a score of 4, indicating the importance of the estimates of the level of expenditure for a multi-year period according to the classification, and 26% gave a score of 5.

6. Estimates of the aggregate expenditure level over a multi-annual period:

Out of 43% of the respondents gave a score of 4, indicating the importance of estimates of the level of expenditure over a multi-year period, and 28% gave a score of 5.

The results suggest that respondents place significant importance on the presentation of expenditures in the executive budget proposal or other supporting budget documents, including categorization by administrative, functional, and economic units, as well as presentation by separate programs and over a multi-year period. These issues indicate the importance of transparency and detail provided in budget proposals for a clearer understanding of expenditure and related financial plans.

## **Conclusions**

The findings on the digitization of public institutions' accounting in this study are structured on several levels or facets of digitization, as they were drawn from the analysis of the results obtained from the questionnaire administrata professionals.

In terms of the need for digitization and the degree of its acceptance by accounting professionals, the research revealed that digitization of public institutions' accounting is considered a necessary feature to meet professional and time requirements, allowing the state to make realistic forecasts and have confidence in the accuracy of financial data.

As the main benefits of digitization, survey respondents are of the opinion that digitization of accounting can help ensure the government's success in managing public funds and improve transparency in their use. Accounting professionals believe that a digitized approach to public institutions' accounting can support increased efficiency and accuracy of public accounting and governance processes.

However, respondents are of the opinion that the judgment of the accounting professional remains relevant in this context and that it is important that digitization takes place under the supervision and continuous guidance of accounting professionals to ensure the accuracy and relevance of the data recorded. They believe that digitization can fully encompass the accounting sector and that the work of the accountant can be fully digitized, subject to proper supervision by the accountant, especially on the verification, analysis and control of the operations performed by the digitized software. Therefore, the accountant cannot be replaced by software or artificial

intelligence but they need to work in collaboration with these emerging technologies that help them in streamlining their work.

Overall, the findings point to the importance and benefits of digitization of accounting in the public sector, highlighting the need to adapt to new technologies for efficiency, transparency and success of public administration.

The proposed study addresses a highly relevant and topical issue regarding the impact of digitalization on the accounting of public institutions in Romania. For these reasons, we will present some important conclusions deriving from the research carried out.

Thus, the research revealed a paradigm shift in the accounting of public institutions driven by digitization. Thus, the digitalization of accounting has brought about a significant change in the way institutions and enterprises operate, thus defining a new paradigm in the accounting field. This change goes beyond technological aspects and involves a transformation of organizational mindset and culture.

The study highlights the benefits of digitization for the accounting departments of public institutions, enhancing the efficiency and transparency of financial processes. Adherence to digitization allows better adaptation to technological developments and improved quality of financial reporting.

In terms of developments in the accounting field, the study revealed the importance of adopting digital technologies in accounting and highlights the importance of adopting cloud computing, capitalizing on technological advantages and managing technological disadvantages in the accounting field. Also, the integration of artificial intelligence in accounting processes is a significant direction for the evolution of this profession.

The research methodology and the interpretation of the results obtained from the questionnaire administered to accounting professionals provide an important insight into how digitization affects public institutions in Romania and the role of accountants in this process.

By analyzing the impact of digitization on increasing the quality of financial reporting in public institutions, the aim is to identify the benefits and challenges associated with this transition. Decreased accounting errors, increased efficiency of financial processes and improved accessibility and transparency of financial information are the most important benefits that have been identified by our research.

Finally, the proposed study represents an important framework for understanding the changes brought by digitization in the field of accounting in public institutions in Romania and the relevance of the adaptation and continuous evolution of the accounting profession in the age of technology, so that it can adapt to the needs imposed by digitization and can be useful for the state, regulatory bodies as well as the management of public institutions that can undertake ex-ante measures and strategies based on the results of our study .

#### References

- 1. Adamescu, C (2020). ERomânia O politică publică în domeniul e-guvernării, București: Program Operațional Capacitate Administrativă cofinanțat de Uniunea Europeană, din Fondul Social European, 2020, https://www.adr.gov.ro/wp-content/uploads/2024/03/Livrabil-A12\_Propunere-de-politica-publica-in-domeniul-e-guvernarii.pdf.
- 2. ADR, 2020. E-România O politică publică în domeniul e-guvernării, Proiect: Competența face diferența! Proiect selectat în cadrul Programului Operațional Capacitate Administrativă cofinanțat de Uniunea Europeană, din Fondul Social European, https://www.adr.gov.ro/wp-content/uploads/2024/03/Livrabil-A12\_Propunere-de-politica-in-domeniul-e-guvernarii.pdf
- 3. Androniceanu, A., Georgescu, I., & Kinnunen, J. (2022). Public administration digitalization and corruption in the EU member states. A comparative and correlative research analysis. *Transylvanian Review of Administrative Sciences*, 18(65), 5-22.
- 4. Asikpo, N. A. (2024). Impact of Digital Transformation on Financial Reporting in the 21st Century. *International Journal of Comparative Studies and Smart Education*, 1(1), 34-45.

- 5. Burlacu, S., Pargaru, I., Iacob, O. C., & Gombos, S. P. (2022). Digital Public Administration and the Perspectives of Sustainable Development in Romania. *European Journal of Sustainable Development*, 11(4), 230-230.
- 6. CFNET, 2014. FOREXEBUG Sistemul electronic de raportare a situațiilor financiare din sectorul public," CFNET Finante Taxe, Revista de Actualitate Financiară. București, https://codfiscal.net/40733/proiectul-forexebug-sistemul-electronic-de-raportare-situatiilor-financiare-din-sectorul-public.
- 7. Cojocaru, L., Pica, A. Ş., & Stoica, A. A. (2024). The Impact Of Digitizationon Public Administration Management In Romania. *Romanian Review of Political Sciences & International Relations*, 21(2).
- 8. Corman, N. A. (2022). Transparency of Accounting Information in the Romanian Gendarmerie. In *International Conference Knowledge-Based Organization* (Vol. 28, No. 2, pp. 15-20).
- 9. Dumitrache, M., Stănescu, A. D., Paraschiv, E.-A., & Ioniță, C. (2023). Instrumente de transformare digitală pentru eGuvernare prin utilizarea domeniilor.ro. București: *Academia Oamenilor de Știință din România*. https://www.aosr.ro/wp-content/uploads/2023/08/Dumitrache-Mihail\_Raport1.pdf.
- 10.Emir, M., & Henry, J. (2024). Empowering Businesses: the Impact of Digital Accounting Tools (No. 12111). EasyChair.
- 11. European Commission, 2021. The Digital Economy and Society Index (DESI). Available online at: https://digital-strategy.ec.europa.eu/en/policies/desi.
- 12. Făgădar, M. (2021). The Impact Of Accounting Information On Decisions Public Administration Managers, *Annals of the "Constantin Brâncuşi" University of Târgu Jiu*, Economy Series, Issue 2/2021.)
- 13. Fagadar, M., Deac, C. F., & Coracioni, A. T. (2021). Increasing Public Administrative Responsibility by Modernizing the IT System for Reporting the Financial Statements of Public Institutions. *Ovidius University Annals*, Economic Sciences Series, 21(1), 741-749.
- 14.GEO 56/2024. Ordonanta de urgenta a Guvernului nr. 56/2024 privind aprobarea Programului Național de Transformare Digitală a Autorităților Publice Locale, https://lege5.ro/gratuit/ge2temzuge2te/ordonanta-de-urgenta-nr-56-2024-privind-aprobarea-programului-national-pentru-transformarea-digitala-a-autoritatilor-publice-locale.
- 15.Henry, J., & Aziz, M. (2024). Streamlining Financial Management: the Digital Accounting Revolution (No. 12107). EasyChair.
- 16.Ionica, A. (2020). Impactul dezvoltării domeniului e-guvernării în România, Available: https://citymanager.online/e-guvernarea-in-romania/.
- 17. Issue Monitoring, 2024. Mediul Digital din România în 2024: un viitor bazat pe tehnologie, https://issuemonitoring.eu/mediul-digital-din-romania-in-2024-un-viitor-bazat-pe-tehnologie/.
- 18. Mancheski, G., Jovanoska, D., Boshkoska, M., & Midovska, M. (2019). Challenges And Benefits Of E-Invoice Exchange System Implementation. *Faculty Of Economics-Prilep University "St. Kliment Ohridski "-Bitola*, 452.
- 19. Nwaimo, C. S., Adegbola, A. E., Adegbola, M. D., & Adeusi, K. B. (2024). Evaluating the role of big data analytics in enhancing accuracy and efficiency in accounting: A critical review. *Finance & Accounting Research Journal*, 6(6), 877-892.
- 20. Păvăloaia, V. D., Georgescu, M. R., Popescul, D., & Radu, L. D. (2019). ESD for Public Administration: An Essential challenge for inventing the future of our society. *Sustainability*, 11(3), 880.
- 21. Popescu, M. A. M., Barbu, A., Moiceanu, G., Costea-Marcu, I. C., Militaru, G., & Simion, P. C. (2024). Citizens' Perception of Digital Public Services: A Case Study among Romanian Citizens. *Administrative Sciences*, 14(10), 259.
- 22. Radu, V., Savu, A.C., Zhan, X. (2022). Digitization of Business Relations in Romania by using Electronic Invoices. *Social Economic Debates*, Volume 11, Issue 1.
- 23. Stăiculescu, O. (2024). Unlocking Economic Growth: The Benefits of Digitalization for Public Institutions in Romania. Revista de Științe Politice. *Revue des Sciences Politiques* No, 81, 212-222.
- 24.Stancu, I., Bejinariu, D., & Radu, F. (2023). Relationships Among Erp Post-Implementation Success Constructs: An Analysis At The Organizational Level Of Forexebug Platform. *Social Economic Debates*, 12(1).
- 25. Tiika, B. J., Tang, Z., Azaare, J., Dagadu, J. C., & Otoo, S. N. A. (2024). Evaluating E-Government Development among Africa Union Member States: An Analysis of the Impact of E-Government on Public Administration and Governance in Ghana. *Sustainability*, 16(3), 1333.

26. Virlanuta, F. O., Barbuta-Misu, N., Bacalum, S., David, S., & Moisescu, F. (2024). Digitalisation Of Public Services In Romania. A Correlational Study. *Transformations in Business & Economics*, 23(2). 27. Zubco, A. (2018). Rolul e-guvernării în modernizarea administrației publice locale, *Conferința "Reformarea administrației publice locale – imperativ al modernizării Republicii Moldova*" Chișinău, Moldova. Available: https://ibn.idsi.md/sites/default/files/imag\_file/40-52\_0.pdf.