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THE TRANSFORMATION OF THE ACCOUNTING PROFESSION IN THE DIGITAL AGE: AN ANALYSIS OF XBRL STANDARDS AND FINANCIAL REPORTING VISUALIZATION TOOLS

ABSTRACT

This paper examines the transformation of the accounting profession, focusing on the evolving role of accountants in the digital era. As digital technologies automate traditional accounting tasks, the profession must redefine its relevance within modern organizations. Accountants are increasingly expected to combine financial expertise with technological competence, participating in the development of accounting information systems and using digital tools for the preparation, analysis, and visual presentation of financial data. These changes reinforce the importance of collaboration between accountants and management in data-driven decision-making processes.

The paper presents empirical findings on the digital readiness of accountants in the Federation of Bosnia and Herzegovina (FBiH). It analyses their competencies, the extent of organizational support for digital training, and the adequacy of the educational framework in preparing them for technological transformation. The results provide insights and recommendations aimed at strengthening the strategic position of accountants in the digital environment. Moreover, the study highlights the blurred boundaries between accounting and information technology, where new responsibilities lack clear professional ownership. It argues that accountants should view digitalization not as a threat, but as an opportunity to expand their professional influence and reaffirm their role in shaping the future of the accounting profession.

Keywords: *role of accountants, digital environment, XBRL standards, visualization tools*.
JEL: M40, M41, M48

1. INTRODUCTION

The accounting profession is undergoing an intensive transformation driven by the dynamic development of digital technologies. The transformation of accountants' tasks is progressing more rapidly than the educational framework that should prepare them for their new role in practice. Digitalisation enables the automation of many routine processes that previously consumed much of accountants' time. This primarily refers to the recording of business transactions and the archiving of accounting documentation, but also to reporting, both internally to company management and externally to tax authorities, statistical agencies, banks, business partners, and others. Such developments have reshaped the traditional role of accountants in modern organisations. No longer merely interpreters of historical data, accountants are increasingly becoming active participants in processes of strategic planning and business decision-making. Modern technologies, such as the XBRL standard for digital financial reporting, have enhanced the precision, interoperability, and accessibility of data, significantly improving communication between companies, regulators, and investors. At the same time, software tools for data visualisation (e.g., Power BI, Tableau and similar systems) enable accountants to transform traditional financial statements into interactive and

graphically enriched representations that provide management with clearer insights into business performance. These changes influence not only the technical aspects of accounting work but also redefine the identity and status of accountants as key partners in the management process. The role of the accountant in the digital age can no longer be reduced to the mere use of ready-made software solutions. Instead, active involvement is expected in the design, development, and implementation of accounting information systems, as well as the ability to lead and manage multidisciplinary teams. This, in turn, raises the issue of the competence framework required of accountants: in addition to traditional accounting knowledge, they must possess an understanding of digital taxonomies, reporting standards, visualisation tools, and the fundamentals of information technologies.

The aim of this paper is to analyse the level of digital readiness of accountants in the Federation of Bosnia and Herzegovina (FBiH) and to investigate the extent to which the existing educational and professional framework meets the requirements of the contemporary business environment. Special emphasis is placed on the application of the XBRL standard and software tools for the visualisation of financial reports, as two key elements of the digital transformation of accounting. The findings are intended to serve as a foundation for improving curricula, designing programmes of continuing professional education for accountants (CPE), and creating strategies for personal professional development that will enable accountants to position themselves as leaders of digital transformation within the economic system.

2. LITERATURE REVIEW

The role of accountants is undergoing a profound transformation in the digital era, shifting from traditional number-crunching towards strategic business partnering and data analysis (Mujiono, 2021; Jayashree & Jayakani, 2024). This transformation is driven by technological advancements, organisational culture, global trends, and the influence of parent companies (Samanthi & Gooneratne, 2023). Accountants are now expected to be agile learners, adopting technologies such as artificial intelligence (AI), blockchain, and big data analytics (Abdullah & Almaqtari, 2024; Jayashree & Jayakani, 2024). Within the context of Robotic Process Automation (RPA), accountants increasingly assume roles as identifiers, explainers, trainers, sustainers, and analysers (Kokina et al., 2020). In order to adapt, accountants must develop new technical skills and enhance their digital literacy. This paradigm shift highlights the importance of embedding emerging technologies and non-financial reporting into accounting education to adequately prepare future professionals for their evolving roles (Samanthi & Gooneratne, 2023). Accountants must therefore strengthen their digital skills to adapt to new technologies and to improve organisational decision-making (Alassuli et al., 2025). Larios Soldevilla et al. (2025) propose the integration of technological, soft, and cognitive skills into educational programmes in order to prepare accountants for the challenges of the digital age. Similarly, Vysotskaya and Prokofieva (2024) evaluate the effectiveness of management accounting courses incorporating data and analytics, with a focus on student perceptions. Their findings suggest that the integration of data analytics into curricula enhances students' understanding of accounting practices and prepares them to utilise advanced tools in professional contexts. In addition, Nofel et al. (2024) conduct a systematic review of the use of the Internet of Things (IoT), blockchain, and XBRL in accounting information systems. The authors emphasise the importance of integrating these technologies to improve the quality of digital financial reporting, highlighting the necessity for accountants to understand and apply these tools in practice.

Accountants are now expected to grasp technological innovations, engage in the development of accounting information systems, and utilise digital software solutions for financial reporting, planning, and analysis (Popović & Božić, 2025). This evolution reinforces the necessity of enhanced interaction between accountants and management, accompanied by a strengthened role in strategic decision-making. The implementation of technologies such as XBRL requires the collaboration of accounting and IT professionals, with accountants increasingly assuming leadership in software development and implementation (Popović & Božić, 2025). Prior research therefore stresses that accountants should not be

passive users of software tools but should actively participate in their design, development, and implementation, while adopting a more strategic and analytical role within organisations. This requires familiarity with, and active use of, advanced digital solutions, including the XBRL standard, data visualisation tools such as Power BI and Tableau, AI, blockchain, big data analytics, and IoT. Accountants must be agile learners, continuously upgrading their skills and knowledge whilst closely following technological trends.

In the case of Bosnia and Herzegovina, however, the practical use of such digital solutions remains limited. According to Jupić and Gadžo (2025), only 21% of companies currently apply AI tools in accounting processes, while a mere 20% of respondents report using advanced document management systems (DMS) or cloud-based solutions. Furthermore, 57% of accountants still manually re-enter data from bank statements, with only 12% making use of automated file imports for posting, and just 6% indicating that their accounting software independently recognises and records bank statements.

3. RESEARCH OBJECTIVES, METHODOLOGY, AND DATA SOURCES

The aim of this study is to examine how digital transformation, particularly through the adoption of the XBRL standard and report visualisation tools, is reshaping the traditional role of accountants. Special attention is given to identifying new tasks and responsibilities arising from the automation of routine activities, as well as the necessity of understanding the technological aspects of accounting systems. One objective is to emphasise the importance of accountants' active participation in the development and implementation of software solutions, and their role as project leaders in collaboration with IT specialists. Furthermore, the research aims to highlight the need to strengthen communication between accountants and management through the effective presentation of financial reports using modern technologies. This study seeks to provide both scientific insights and practical guidance, enabling accountants to successfully adapt to the demands of the digital era and maintain a central role in contemporary business processes.

Primary data were collected through an online survey questionnaire, focusing on the level of digital readiness of accountants in the Federation of Bosnia and Herzegovina (FBiH), organisational support for training in digital technologies, and the adequacy of the educational framework in meeting the contemporary needs of accountants. The questionnaire employed a five-point Likert scale to measure respondents' attitudes and perceptions, ranging from "strongly disagree" to "strongly agree." The research population consisted of accountants in the FBiH, and the sample comprised 41 respondents who completed the questionnaire appropriately. The structure of the sample according to years of professional experience in accounting is as follows: 11 respondents, or 26.83%, have up to 5 years of experience; 5 respondents, or 12.19%, have between 5 and 10 years; 11 respondents, or 26.83%, have between 10 and 15 years; 8 respondents, or 19.51%, have between 15 and 20 years; and 6 respondents, or 14.63%, have more than 20 years of professional experience in accounting.

4. RESEARCH RESULTS AND DISCUSSION

4.1. Digital Transformation and Its Effects on Accounting

Digital transformation is significantly altering the way accounting functions are performed, introducing new technologies that automate traditional processes and enhance work efficiency. Accounting, as one of the core business functions, is not exempt from these changes. The automation of routine tasks, such as data entry, calculations, and reporting, reduces the need for manual work, while accountants' focus is shifting towards data analysis, result interpretation, and advisory roles within the business. This transformation requires accountants to acquire new technical skills and to develop a comprehensive understanding of digital tools that support contemporary accounting systems. Although e-invoices in XML format and the XBRL reporting standard have not yet been officially implemented in Bosnia and

Herzegovina, their eventual adoption will necessitate that accountants adapt to new tasks involving digital documentation and the digital format of financial statements. In this context, we examined the frequency with which accountants currently utilise various software solutions in practice (see Table 1).

Table 1. Frequency of Use of Various Software Solutions by Accountants in Practice

Type of Software	Never (score 1)	Rarel (score 2)	Occasionally (score 3)	Often (score 4)	Daily (score 5)	AVERAGE	STDEV
Financial and Inventory Accounting Software	1	1	4	5	30	4.51	0.94
ERP Software	8	3	16	3	11	3.15	1.41
Financial Reporting Software	2	5	16	5	13	3.54	1.19
Data Analysis Software (Excel, statistical packages, etc.)	1	1	14	8	17	3.95	1.03
Data Visualisation Software (Power BI, Tableau, QlikView, etc.)	7	13	9	8	4	2.73	1.23
AI Tools for Accounting Assistance	18	8	6	5	4	2.20	1.34
Cloud Technology	7	9	12	4	9	2.95	1.36

Source: Authors' own elaboration based on collected data

Regarding the question of whether accountants are preparing for the implementation of e-Invoices in XML format, which is anticipated in Bosnia and Herzegovina as early as 2026, 30 ispitanika ili 73,17% of respondents stated that they are not preparing, while only 11 ispitanika ili 26,83% reported that they are actively preparing for their introduction. Given the approaching deadline, the question arises as to when accountants and their software solutions, in collaboration with the tax authorities, will be fully operational. It can be concluded that digital transformation in accounting in the Federation of Bosnia and Herzegovina (FBiH) is progressing gradually. Accountants regularly use basic software for financial and inventory accounting, whereas ERP systems and financial reporting software exhibit moderate adoption. Data analysis tools are increasingly becoming daily assistants for accountants in analytical and advisory functions, while data visualisation software, AI tools, and cloud technologies remain limited in use, reflecting the relatively slow transition to advanced digital solutions. These findings indicate that the profession is currently in a transitional phase. Basic digitalisation is present, but the full integration of modern technologies requires further training, investment in infrastructure, and adaptation to new standards such as XBRL, e-Invoices, Power BI, and similar tools, in order for accountants to fully assume strategic and analytical roles within business operations.

4.2. Active Role of Accountants in the Development and Implementation of Software Solutions

Software in accounting represents a powerful tool that enables faster and more efficient data processing. However, without the knowledge and engagement of accountants, it remains merely an empty platform. Accountants bring the entire accounting process to life through data entry, interpretation, and linking to specific business events, tasks that require human judgment, knowledge, and experience. While IT specialists serve as technical executors in software development, it is the accountant who defines functionality by understanding accounting processes, legal requirements, and everyday practical challenges. During the development process, accountants collaborate with IT teams as business process analysts, translating practical knowledge into technical specifications. Active involvement in software development provides accountants with the opportunity to enhance their own skills, understand the

technical aspects of their work, and contribute to creating intuitive and reliable systems tailored to both business needs and legal regulations.

The research findings regarding the current role of accountants in the selection, design, testing, and upgrading of software solutions are presented in Table 2.

Table 2. Accountants' Involvement in the Selection and Development of Software Solutions

Involvement in the Selection and Development of Software Solutions	Never (score 1)	Rarely (score 2)	Occasionally (score 3)	Often (score 4)	Daily (score 5)	AVERAGE	STDEV
Selection of Software Solutions in Business Operations	13	5	6	6	11	2.97	1.57
Designing Software Solutions	16	9	7	3	6	2.35	1.41
Testing of Software Solutions	13	7	4	9	8	2.97	1.57
Upgrading Software Solutions	11	5	9	8	8	3.24	1.56

Source: Authors' own elaboration based on collected data

The results from the table clearly indicate that accountants in the Federation of Bosnia and Herzegovina still have a limited role in the processes of creating and improving accounting software solutions, even though their knowledge and experience constitute a fundamental basis for the functionality of these tools. Most accountants are involved in the selection of software solutions, yet nearly one-third of respondents never participate in decision-making. Even more concerning is that almost half of the participants report never being involved in the design of software solutions, while engagement in testing and upgrading is somewhat higher, but still insufficient.

These findings confirm that accountants largely remain passive users rather than active creators of digital tools, which carries the risk that software solutions may not be adequately tailored to the practical needs of business or the specific legal framework. In light of accelerated digitalisation, the future of the profession requires proactive involvement of accountants in all stages of software system development, from defining functional requirements to testing and enhancement. By taking a more active role in the development of digital tools, accountants can directly contribute to the creation of intuitive and reliable systems that simultaneously meet business practice requirements and legal regulations, thereby improving the quality of financial reporting and strengthening their competitiveness in the labour market.

4.3. XBRL Technology and Its Application in Accounting

One of the key aspects of digital transformation in accounting is the adoption of the XBRL (eXtensible Business Reporting Language) standard, which enables automated, accurate, and standardised financial reporting. XBRL facilitates the exchange of data between companies, regulatory authorities, and investors, significantly enhancing transparency, accuracy, and processing efficiency.

A central component of the XBRL system is the taxonomy, which defines which information must be reported and how it should be structured. Each data item in a report is tagged with a unique identifier, allowing for consistent labelling and automated data processing. The taxonomy consists of schema files (.xsd) that define reportable concepts (e.g., Revenues, Net Income, Assets) and linkbase files (.xml) that specify relationships between these concepts, including presentation hierarchies, calculation rules, and references to accounting standards such as IAS and IFRS. Official taxonomies (IFRS, US GAAP, ESEF) are published by regulatory authorities and used in XBRL software to generate validated and comparable reports (Jupić, 2025).

XBRL software libraries are programming tools that enable the validation, parsing, manipulation, and generation of XBRL documents. Libraries such as Arelle, XBRLAPI, and Altova allow users to automatically verify report compliance with the taxonomy, analyse content, and generate documents ready for submission to regulatory authorities (Ramanan et al., 2024). XBRL Certified Software refers to software verified by XBRL International to ensure compliance with official specifications and interoperability between different tools (XBRL International, n.d.).

We investigated the extent to which accountants in the Federation of Bosnia and Herzegovina are familiar with the XBRL standard for financial reporting. Of the total respondents, 48.78% of accountants were not familiar with XBRL, while 36.58% had limited knowledge of the technology. Only 12.19% understood the basic concepts related to XBRL, and merely 2.43% had practical experience using XBRL software.

These findings reflect the current stage of digital transformation among accountants in the FBiH, where knowledge and practical application of XBRL remain limited. Although the XBRL standard enables automated and standardised financial reporting, enhances transparency, and facilitates data analysis, the majority of accountants are not yet prepared for its active implementation.

The results clearly indicate the need for education, training, and the introduction of practical tools and software libraries that enable the validation and generation of XBRL documents. Given the advantages, such as reduced errors, accelerated processes, and easier compliance with regulatory requirements, the development of competencies in this area is crucial for the effective digital transformation of the accounting profession in Bosnia and Herzegovina.

4.4. Report Visualisation Tools and Their Application in Accounting

The development of technology and process automation in accounting is bringing significant changes to the daily work of accountants. Automation enables many manual, repetitive, and time-consuming tasks to be performed much more quickly and efficiently. Instead of spending hours manually entering data or verifying document accuracy, a large portion of these tasks can now be completed automatically through software solutions. This reduces the likelihood of human error and frees accountants from routine duties. By being relieved of manual tasks, accountants can focus on more complex and strategic activities, such as actively participating in the development of accounting information systems, analysing data, interpreting financial statements, and providing management consultancy. Tools that assist accountants in presenting reports, statements, and various calculations in a clear, organised, and accessible manner are now widely used in practice, with Microsoft Power BI, Tableau, and QlikView being the most common.

The desktop version of Power BI is free to download and use, making it suitable for accountants' needs in smaller firms. Power BI utilises the VertiPaq in-memory engine, which enables rapid data retrieval and visualisation, even with large datasets. Accountants primarily work with Excel spreadsheets, SQL databases, ERP systems, and external services such as Google Analytics. Within Power BI, accountants create data models, define relationships between tables, apply DAX (Data Analysis Expressions) formulas for calculations, and design visual representations. Data is loaded into the Power Query Editor, where transformations can be applied, including merging tables, filtering, cleaning duplicates, and creating new columns or measures. Visualisations rely on pre-defined visuals such as bar and line charts, pie charts, scatter plots, tables, matrices, and key performance indicator (KPI) cards. What sets Power BI apart, however, is the interactivity of these visuals. When a user clicks on a specific segment of a chart (e.g., revenue by region), all other visuals on the dashboard automatically filter to reflect that selection. Additionally, Power BI allows the creation of custom visuals through the Microsoft AppSource library or by developing bespoke solutions using R and Python scripts. This provides virtually limitless possibilities for advanced analytics and enables tailored solutions to meet individual business needs.

Compared to Power BI, Tableau offers greater flexibility as it supports a wide range of connectors to various data sources. Users can connect directly to Excel spreadsheets, CSV files, Google Sheets, SQL Server, Oracle, MySQL, PostgreSQL databases, as well as cloud services (Parthe, 2023). Tableau provides two primary modes for working with data**:** Live Connection and Extracts**.** In the Live Connection mode, data remains in the original source, and Tableau sends queries directly to that database each time a user creates a visualisation or applies a filter. This is particularly useful for large, frequently updated databases, although performance depends on the speed of the underlying system. Extracts, on the other hand, are static copies of data imported into Tableau and stored in an optimised format (.hyper file). Once connected to a data source, the data enters the Data Pane within Tableau Desktop. Here, users can define the data structure, add calculated fields, change field types, and perform basic transformations such as filtering, aggregation, or table merging. Tableau supports two types of table connections: Joins and Blending. Joins are used when tables originate from the same data source and are connected via a common key (e.g., client ID). Tableau supports various join types (inner, left, right, full outer), allowing flexible data combination. Data Blending, by contrast, is employed when data comes from different sources and cannot be directly joined. In this case, one table acts as the primary source and the other as secondary, with data combined at the visualisation level. This feature is particularly useful for accountants who wish to integrate, for example, internal financial data from an ERP system with external indicators, such as macroeconomic statistics.

The technical aspect of data modelling in Tableau is distinctive, as it utilises the Data Relationship model concept. For visualisation, Tableau relies on a drag-and-drop interface, which facilitates rapid and intuitive creation of interactive reports. The free version of Tableau is Tableau Public, though it has the limitation that all visualisations created are publicly accessible. Beyond technical proficiency, effective presentation of financial information to management and other decision-makers is equally important. Managers often do not possess in-depth accounting knowledge; therefore, accountants must convey key insights from financial statements clearly, concisely, and comprehensibly. Effective data presentation supports timely and well-informed business decisions. Consequently, today's accountant must be not only an expert in accounting but also skilled in technology and communication. Continuous professional development in software and presentation skills has become essential. Automation relieves accountants of mundane tasks but simultaneously places greater emphasis on analytical and communication capabilities, positioning the accountant as a strategic partner in business processes.

Given the importance of this topic, we investigated the extent to which accountants in practice use data visualisation tools. When asked whether they had experience with digital reporting tools (Power BI, Tableau, QlikView, etc.), 85.37% of respondents indicated no experience, while only 14.63% reported having practical experience with these tools. Regarding training in digital technologies, 53.65% of respondents stated they had not received any training, 41.46% had attended a few sessions, and only 4.87% reported regular training. Furthermore, when asked whether their organisation provides paid training related to digital technologies**,** 63,41% responded negatively, with only 36,58% receiving organisational support for professional development in this area.

4.5. Challenges and Recommendations for the Education and Professional Development of Accountants

Traditional education is often insufficient to prepare accountants for active participation in the development and implementation of accounting systems, as well as for effective communication with management using modern digital tools. Therefore, it is essential that educational programmes adapt their curricula to include content in information technology, digital reporting, and data analytics. One of the main challenges is the shortage of professionals who possess expertise in both accounting and IT. Accountants need to develop technical competencies, such as understanding software solutions and programming languages, alongside soft skills including communication, teamwork, and project management. Professional development should be a continuous process that keeps pace with technological trends and enables accountants to remain competitive in the labour market.

Regarding the attention given to digitalisation topics in accounting during seminars within continuous professional education (CPE), respondents indicated that 12.20% perceived no attention to these topics, 43.90% reported very little attention, 31.70% described it as moderate, and 12.20% considered it significant. No respondents stated that such topics were consistently covered in CPE. Concerning self-directed learning on digitalisation topics, 7.32% did not engage, 63.41% occasionally read about them, 21.95% read frequently, and 7.32% actively engaged with various aspects of digitalisation. Among them, 87.80% used online portals and social media, and 51.20% attended webinars. Of all respondents, 24.40% conducted independent research, while only 17.10% acquired knowledge on digitalisation topics through professional conferences.

When asked whether they believed they had sufficient knowledge to independently implement a new digital tool in accounting practice, 36.59% stated they did not, 43.90% were unsure, and only 19.51% claimed to possess adequate knowledge for independent implementation.

Accountants were neutral on whether existing education programs meet the needs of the digital age (weighted score: 2.98). They agreed, however, that professional associations and universities should enhance digital education for accountants (weighted score: 4.49) and that accountants need to continuously develop their digital and analytical skills (weighted score: 4.42) (Table 3).

Table 3. Education programmes meet the needs of the digital age

Existing education programmes meet the needs of the digital age	Strongly Disagree (score 1)	Disagree (score 2)	Neutral (score 3)	Agree (score 4)	Strongly Agree (score 5)	AVERAGE	STDEV
Existing education programmes meet the needs of the digital age	4	8	17	9	3	2.98	1.04
Professional associations and universities need to do more to educate accountants for the digital age	0	1	4	10	26	4.49	0.77
Accountants must continuously improve their digital and analytical skills	0	0	7	10	24	4.42	0.77

Source: Authors' own elaboration based on collected data

The research highlights the main barriers (ranked by frequency) to the adoption of digital tools: lack of knowledge and implementation costs (53.7%), insufficient technical support (43.9%), inadequate integration with other legal entities, banks, and tax authorities (43.9%), employee resistance (34.1%), lack of time to transition to new tools (31.7%), security risks and data protection (29.3%), unreliable internet and infrastructure (9.8%), and other reasons (2.4%).

It is recommended that specialised workshops, seminars, and certification programmes be used to strengthen knowledge of digital tools, the XBRL standard, data visualisation software, and related technologies. Given that organisations fund CPE but are often unwilling to finance other training not recognised as formal CPE or contributing points for maintaining licensure, collaborative initiatives with IT specialists and active participation in software development projects can significantly enhance practical skills. This approach will better prepare accountants for emerging professional requirements, enabling them to assume a key role in the digital transformation of business operations. Furthermore, it is important to

establish partnerships between universities and professional associations to adapt syllabi to contemporary technological trends.

5. CONCLUSION

Digital transformation is irreversibly reshaping the accounting profession, requiring accountants to reassess their role and adapt to new business conditions. The automation of routine and manual tasks reduces traditional responsibilities but simultaneously creates opportunities for the development of new competencies and functions. Key emerging responsibilities for accountants include understanding technological solutions, actively participating in the development of accounting systems, and enhancing communication with management through the presentation of financial reports.

The research findings reveal that the accounting profession in the Federation of Bosnia and Herzegovina faces significant challenges, including insufficient educational coverage of digital topics, a lack of practical skills for independently applying digital tools in accounting, yet a clear willingness to learn and improve. Consequently, it is desirable that continuous professional education places much greater emphasis on digitalisation topics. Likewise, universities should adapt their curricula to equip students with the skills necessary to independently apply digital accounting tools.

It can be concluded that digital transformation in accounting in the Federation of Bosnia and Herzegovina (FBiH) is progressing gradually. Accountants regularly use basic software for financial and inventory accounting, whereas ERP systems and financial reporting software exhibit moderate adoption. Data analysis tools are increasingly becoming daily assistants for accountants in analytical and advisory functions, while data visualisation software, AI tools, and cloud technologies remain limited in use, reflecting the relatively slow transition to advanced digital solutions. These findings indicate that the profession is currently in a transitional phase. Basic digitalisation is present, but the full integration of modern technologies requires further training, investment in infrastructure, and adaptation to new standards such as XBRL, e-Invoices, Power BI, and similar tools, in order for accountants to fully assume strategic and analytical roles within business operations.

These findings also confirm that accountants largely remain passive users rather than active creators of digital tools, which carries the risk that software solutions may not be adequately tailored to the practical needs of business or the specific legal framework. In light of accelerated digitalisation, the future of the profession requires proactive involvement of accountants in all stages of software system development, from defining functional requirements to testing and enhancement. By taking a more active role in the development of digital tools, accountants can directly contribute to the creation of intuitive and reliable systems that simultaneously meet business practice requirements and legal regulations, thereby improving the quality of financial reporting and strengthening their competitiveness in the labour market.

Given these insights, it is recommended that specialised workshops, seminars, and certification programmes be introduced to strengthen accountants' knowledge of digital tools, the XBRL standard, data visualisation software, and related technologies. Since organisations often fund continuing professional education (CPE) but are reluctant to finance other training that does not yield CPE credits, collaborative initiatives with IT specialists and active participation in software development projects could significantly enhance accountants' practical skills. Furthermore, establishing partnerships between universities and professional associations is essential to align syllabi with contemporary technological trends.

Finally, the study's results should be interpreted in light of its main limitation, the relatively small sample of surveyed accountants, which may restrict the generalisability of findings to the broader accounting population. Future research should therefore involve a larger and more diverse sample, possibly

incorporating qualitative methods such as interviews or focus groups, to obtain deeper insights into the digital transformation of the accounting profession.

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