CHALLENGES FOR ACCOUNTABILITY IN THE AGE OF ARTIFICIAL INTELLIGENCE

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Abstract: The study examines the transformation of accounting in the era of new technologies and artificial intelligence with a focus on the opportunities and challenges they present. It aims to analyse the trends in the evolution of accounting as well as the ways in which automation, business intelligence and artificial intelligence are changing traditional accounting processes. The article examines the main aspects of technological integration in accounting, including BI solutions and generative artificial intelligence (AI) in terms of their capacity to improve efficiency and transparency. It also examines the importance of the environmental and social dimensions of accounting is examined and the balance between technology and human expertise in the context of the ongoing transformation. The conclusions underline the need for professional development and adaptation of accounting professionals to the new realities and the importance of trust, ethics and strategic thinking on the path to technological progress.

Keywords: отчетност, automation, business intelligence (BI), artificial intelligence (AI).
URL: nsarhiv.uni-svishtov.bg
DOI: https://doi.org/10.58861/tae.ea-nsa.2025.2.02.en
JEL: M41.

Introduction

As a management function, accounting is undergoing significant conceptual and practical changes under the influence of digital transformation, changing regulatory framework and increasing stakeholder demands. In the era of Industry 5.0 and digital technologies, the traditional reporting model, focused mainly on the past, does not fully meet the

needs of management, investment and public decision-making. There is a growing need for a comprehensive approach that combines financial, non-financial and forecast information in an integrated reporting system based on significance, relevance, timeliness and strategic utility.

Nowadays, financial reporting (corporate reporting) must meet the requirements for quality and usefulness, completeness, comprehensiveness and reliability of information, while providing analytical depth and adaptability to new business models and sustainable practices. Real-time data, automation of routine processes, implementation of artificial intelligence (AI) as well as the enforcement of new regulations such as CSRD and ESRS (Deloitte, 2024) are just some of the factors that are transforming the role of accounting from a purely reporting to a strategically integrated management function.

A specific role in this transformation process is played by non-financial reporting and, in particular, environmental, social and governance (ESG) aspects, which are becoming key elements of accounting presentation. The inclusion of ESG indicators in the general reporting framework leads to the need to develop new measures, new approaches to verification and their integration into the system of internal control and audit. This requires a rethinking of the professional training of accountants and an expansion of the role of accounting information as a basis for sustainable economic development.

The *aim* of this article is to examine trends in the development of corporate reporting in terms of accounting science and practice. The analysis focuses on the contribution of new technologies – in particular automation and artificial intelligence – to the optimization of reporting processes, as well as on the integration of ESG elements into the reporting framework.

The *hypothesis* to be verified is that modern reporting is associated not only with technological (r)evolution, but also with the need for a strategic transformation of the accounting function, which would turn it into a catalyst for sustainability, innovation and long-term value. It is precisely this new form of reporting that will play an important role for informed and responsible corporate governance in the conditions of a digital and green economy.

1. Reporting evolution – trends and good practices

Corporate reporting (Корпоративна отчетност – подобряване на качеството и правоприлагането, н.д.), (Corporate sustainability reporting, н.д.), (Лучков, Изследване на добри практики на корпоративна социална отговорност, 2023), (Лучков, Концепцията за тройния резултат – ключ към устойчив бизнес модел, 2024), (Лучков, SDG - целево-ориентиран подход към устойчивото развитие, 2023) is at a crossroads between the traditional

accounting model and the growing need for integrated, digitally supported, and strategically oriented solutions. The analysis of data from the BARC study (The Future of Reporting /Free BARC Survey, n.d.) highlights several key trends in the transformation of the reporting function, which have direct applications in accounting theory and practice.

First and foremost, the need for centralized reporting is becoming increasingly evident - a strategic approach in which data and analytical processes are consolidated within integrated platforms and business intelligence systems. This improves the control over reporting information, eliminates duplication of operations and resources, and creates an integrated and reliable informational base - a concept of particular importance for the quality of accounting information and its use in managerial decision-making.

Second, reporting is evolving through flexible, self-learning, and self-servicing tools that enable both accountants and other stakeholders to access relevant information in real time, without the need for lengthy approval and structuring cycles. This shifts the traditional role of accounting and transforms it into an open, collaborative function focused on both internal and external reporting transparency.

Third, we are witnessing an increased application of automation in reporting processes, including the implementation of pattern recognition algorithms, automatic report generation, and the integration of accounting and ERP systems with cloud platforms. Such automation not only increases efficiency and reduces the likelihood for human error, but also creates conditions for redirecting accounting resources toward analytical and strategic activities with higher added value.

From the point of view of accounting theory, these trends create the need to review and adapt classical approaches to preparation and analysis of reporting information. This requires the development of a new methodology that combines the principles of reporting reliability with the requirements for timeliness, scalability, and digital connectivity. In this context, accounting education must also adapt by integrating courses in Big Data analytics, automation technologies, and generation, interpretation, and management of financial and non-financial information.

Reporting evolution should not be considered a temporary technological trend, but as a fundamental stage in the (r)evolution of the reporting function. For the future accountants, this means mastering new digital skills, enhancing critical thinking, interpretative competence, and adopting a strategic perspective on reporting as a tool for creating sustainable corporate value.

The transformation of reporting inevitably leads to the need for a higher degree of automation and analytical capacity - something that cannot be achieved through classical accounting tools and approaches. Therefore, modern Business Intelligence (BI) solutions are increasingly taking a central role in the transformation of the reporting function and the expansion of its strategic dimensions. In the context of theoretical accounting, this implies the emergence of a new paradigm - a model of *intelligent reporting*, in which data processing, visualization, and interpretation are closely integrated with the technological infrastructure of the enterprise.

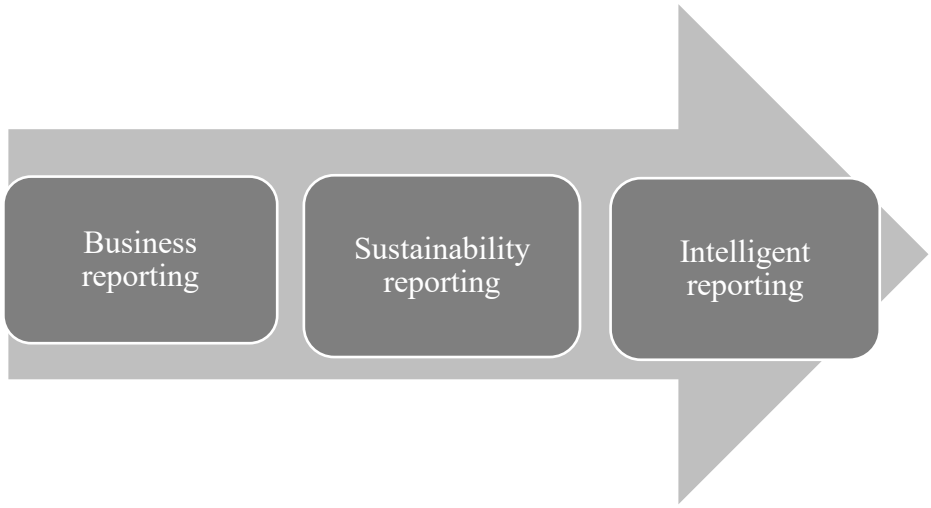

Figure 1. ***(R)evolution of reporting***

BI solutions may be used not only to optimize time and human resources but also to improve business scenario modelling, thereby turning reporting into a real driver of proactive management. Key Performance Indicators (KPIs) are an essential component of modern intelligent information systems. They are selected individually based on the specific characteristics of the analysed activity. They are integrated to monitor the whole process from goal-setting to goal realization. Each main objective is transformed into a key performance indicator, which is then broken down into its constituent elements. At regular intervals, the degree of goal achievement is measured. Through dynamic dashboards, real-time visualizations, and automated KPI generation, modern BI systems enhance traditional reporting with additional analytical and strategic functionality.

Table 1

Traditional vs BI reporting (a comparative analysis)

Criterion	Traditional reporting	BI reporting
Statements format	Static, usually as Excel or PDF file	Interactive dashboards, visualisations
Updating frequency	Monthly, quarterly	In real time or very rapidly
Data extraction method	Manual or semi-automatic	Automatic, through Extract-Transform-Load (ETL) processes
Accountant's role	To prepare and summarize	To analyse, interpret, and advise the management
Level of access to information	Centralised, limited access	Decentralised (Self-service BI), controlled
Integration with other systems	Medium to limited	High – ERP, CRM, ESG, cloud databases
Analytical possibilities	Descriptive analysis	Predictive analysis using AI/ML

*(**Source**: author's summary)*

Table 1 clearly demonstrates that BI-based reporting provides a new quality of managerial information, which directly impacts the enterprise's ability to respond promptly and appropriately to internal and external factors. This is especially important in a dynamic business environment, where the role of accounting extends beyond its traditional focus on past events and expands into strategic activities such as *budgeting, forecasting, and sustainability assessment*.

BI tools such as Power BI, Tableau (interactive data visualization software), BOBJ (Business Intelligence for reporting, visualizing, and sharing data), QlikView, and Looker are offering increasingly accessible and functional platforms that allow not only for data consolidation and visualization, but also for automatic generation of scenarios, forecasting models, and ESG indicators - features that until recently were beyond the scope of standard accounting systems. Thus, accounting is evolving into a technology-driven analytical function, where the role of the human expert shifts from mechanical data processing to strategic interpretation.

From an academic point of view, this development raises several questions for accounting education and research. First, what knowledge, skills, and competencies will future accountants need? To what extent do traditional accounting models remain relevant in a BI-driven environment? How is the

methodology for reporting non-financial aspects (such as sustainability and environmental impact) changing?

These questions cannot be ignored, as optimization through BI solutions is no longer an option but a necessity both for businesses and for the accounting profession itself. This underlines the key role of artificial intelligence as a logical stage in the evolution of digital reporting and a central topic for future research and analyses.

In recent years, economic science – and, more specifically, the practical aspects of accounting - has been increasingly confronted with pressing questions about the ability of reporting systems to adequately reflect the complexity of modern reality (Лучков, Кръговата икономика като иновативен и ресурсно-ефективен модел, 2023), (Лучков, Интегриране на затворените цикли в бизнес моделите, 2023). One of the most significant transformations in this aspect is related to the expansion of the concept of value, which is increasingly being defined not only by means of financial performance indicators but also through environmental, social, and governance (ESG) indicators.

The ESG framework builds upon the established concept of Socially Responsible Investing (SRI). ESG investing is based on the premise that ESG factors have financial significance and therefore should be integrated into investment decisions used to formulate strategies and criteria for evaluating corporate governance ESG (Стефанова, 2022, с. 19).

Investments in environmental infrastructure (e.g. for restoration of natural resources, sustainable water management, green transportation networks, etc.) are increasingly being treated not merely as expenses, but as long-term strategic investments with the potential to generate positive external effects on the economic and social well-being of both businesses and the society in general (Rasmussen, Fold, Olesen, & Shackleton, 2021). Such investments often lead to higher employment rates, improved health, reduced inequalities, and enhanced resilience of local economies - effects that traditional financial reporting does not capture or reflects only partially as expenses, without revealing their full societal and long-term impact (Лучков & Самарджиева, 2024), (Luchkov, Issues and Challenges Facing Renewable Energy Sources in Achieving Sustainable Development, 2024), (Luchkov, Sustainable Waste Management Practices in Construction Companies, 2024).

This poses the challenge for the accounting theory and practice of how to create a reporting model that adequately reflects the “non-financial return” of such investments? This is not just a matter of additional indicators, but of rethinking the goals and scope of reporting as an information and management system.

The modern model of integrated and sustainable accounting implies a new level of interdisciplinarity – the economic effect must be comparable with the environmental and social value through approaches such as social impact accounting, natural capital accounting and Social Return on Investment (SROI) assessment. In this context, accounting cannot remain limited to traditional financial statements, but should develop and implement approaches to measure and present value in a multidimensional and strategically meaningful form.

For example, an investment in the construction of a green zone in an industrial area may not bring direct financial income to the enterprise, but may lead to a significant reduction in morbidity in the region, higher employee productivity, reduced staff turnover, and better market reputation - all these factors have an economic dimension, but manifest themselves through "non-financial" mechanisms.

Thus, reporting should include indicators of sustainable impact – such as regular measurements of carbon footprint, resource consumption, equal access to services, jobs created, local community satisfaction levels, etc. More and more companies are adopting voluntary frameworks for sustainable reporting such as the Global Reporting Initiative (GRI) and/or SASB, and with CSRD (EC, 2021) (EU, 2021) this has also become a regulatory requirement (Лучков, Докладване на нефинансовата информация в контекста на концепцията за устойчиво развитие, 2023).

Therefore, research interest in accounting should be directed towards developing methodological approaches and models for measuring the non-financial benefits of environmental investments. This includes not only econometric modelling and performance evaluation, but also issues related to data verification, source credibility, and the role of artificial intelligence in processing ESG information.

In conclusion, accounting in the 21st century should be a tool for interpreting the overall impact of the enterprise on the environment and society rather than simply a means of presenting financial results. In this sense, accounting as an academic discipline and professional practice has a key role for the sustainable development of the economy - a role that must be realized, further developed and protected in the context of new realities.

2. Artificial intelligence as a drive for accounting innovations

As digital technologies become essential for corporate governance, (Лучков, Значение на технологичните иновации и дигитализацията за устойчивото развитие, 2024) artificial intelligence (AI) is emerging as a major catalyst in the transformation of the accounting practice and profession. While

in the past automation was primarily associated with the simplification of routine activities, today AI has the potential to change not only the technical aspect of accounting, but also its strategic and analytical functions.

Machine learning (ML), natural language processing (NLP) and robotic process automation (RPA) are increasingly being used in accounting – from routine operations through automating and improving various accounting processes to preparing financial forecasts and detecting errors and inconsistencies. (Lazanis, 2024).

Natural language generation (NLG), powered by machine learning (ML), support users in understanding patterns and explain causing factors. ML helps users create reports and choose appropriate data visualizations in analysis and dashboards. (Baumhecker, 2019).

The traditional role of accountants as keepers of accounting data registers and archivists of the past is gradually giving way to a new, predictive and advisory role, in which specialists use AI tools for scenario building, sensitivity analysis, liquidity forecasting and budgeting.

The underlying concept is that artificial intelligence should not replace the accountant, but rather "arm" him with new capabilities, reducing the volume of manual operations and creating new opportunities for strategic contribution.

Table 2

Main fields of successful application of AI in accounting processes

Field	AI application	Benefits
Financial and accounting reporting	Automated categorisation and recording of transactions	Time saving, reduction of human errors
Internal and external auditing	Sample analysis, fraud detection, non-compliance assessment	Better accuracy and scope of audit inspections
Managerial accounting	Cost modelling, scenario analyses, forecasting	Improved strategic planning and better-informed managerial decision
Tax reporting and planning	Tax risk analysis, structure optimization	Reduced tax burden, automated compliance with tax regulation changes
ESG and sustainability reporting	ESG data extraction from non-conventional sources (e.g. social networks, sensors)	Full picture of enterprise's non-financial impact

*(**Source:** author's summary)*

There are several *typical scenarios* of corporate AI accounting applications which contribute significantly to the efficiency and reliability of the accounting system: (Cook, 2025)

- *AI-based virtual accountant*, which processes thousands of incoming invoices and automatically associates them with the relevant budgets and analytical accounts, thus completely eliminating the need for human intervention in standard operations.
- *Intelligent audit systems*, which monitors transactions in real time, identifies potential fraud and automatically notifies internal auditors in cases of non-compliance.
- *Financial AI analyst*, which uses past and current data to forecast cash flows, resource consumption, and possible risks depending on the economic cycle.

Despite the numerous benefits from the use of artificial intelligence in accounting, it poses some challenges that require both technical and ethical awareness and responsibility. Some of the main issues are:

- *Data reliability* – machine learning models are only as good as the data they are trained on. In the accounting context, this requires high-quality, verified databases.
- *Algorithm transparency* – verifiable and reliable statements require algorithms that are transparent and easily explainable to regulatory authorities and shareholders.
- *Ethics and responsibility* – the questions "Who will be responsible for an AI algorithm error?" and "Can AI be objective when generating reports?" are still being debated among the scientific and professional community.

In this new reality, accountants must upgrade their competencies and turn from operations executives into strategic partners. They have to develop their skills in operating BI systems and AI, interpreting AI-generated data, designing automation and control policies, etc.

This also requires serious academic and professional adaptation - accounting curricula should integrate course related to smart technologies, data analysis and processing, digital ethics, business process automation, machine learning and digital security while continuing professional training should be systematic and interdisciplinary.

The bottom line is that AI is not just a tool, but an engine of transformation in accounting – a transformation where value is created through data and trust is built through transparency and intelligent solutions.

Accounting artificial intelligence (AI) has the potential to revolutionize the way businesses manage their financial resources (Lazanis, 2024).

According to the chairman of the Institute of Certified Public Accountants in Bulgaria (IPAC), Iliya Iliev, "artificial intelligence is one of humankind's achievements that will help immensely in all spheres of the economy and life." IPAC is already closely monitoring AI trends and actively communicates with Bulgarian developers of AI solutions, as they will play a significant role in more and more aspects of auditing and accounting activities. The goal is not to replace experts, but to improve the efficiency and precision of their work (Пеев, 2025).

With the ascend of *generative artificial intelligence (Generative AI),* technologies capable of not only processing, but also creating new content based on trained models – accounting is facing a new stage of automation. While traditional algorithms facilitated the analysis of available data, generative AI is now showing the capacity to support the execution of complex, time-consuming and analytically intensive tasks such as automated forecasting, variance analysis, interpretation of financial data and preparation of alternative scenarios for management decisions with a high level of logical consistency and presented in a professionally structured form.

Some of the leading practical applications of generative AI in accounting practice are: (Strickland, 2025)

- Generating innovative reports (including financial statements) based on analysis of key indicators, trends, findings, conclusions and comments in accordance with applicable accounting regulations and business objectives.
- Generating ESG reports incorporating financial and non-financial data and results.
- Generating budgeting and strategic planning proposals, aligned with historical trends and external economic indicators.[1]
- Drafting internal newsletters, notifications and letters based on existing templates and documents.

Along with the undeniable benefits, generative AI also poses a number of risks to reporting in terms of reliability, credibility, and traceability.

[1] Example: The accounting department of an international company uses generative AI to compile monthly reports for the management. The system automatically detects significant inconsistencies and proposes corrective measures – a process that previously required between 12 and 16 man-hours per month.

Table 3

Possible risks related to the use of generative AI in the reporting process

Potential risk	Description	Possible consequences
Non-transparency of generated content	Difficulties in determining how and why the given text was generated	Loss of verifiability and control over statements
Incorrect interpretation of data	AI may draw wrong conclusions using incorrect or incomplete data	Financial errors, misleading information submitted to stakeholders
Legal and ethical liability	Unclear legal liability related to the use of AI generated documents	Legal disputes, breach of trust in the accounting system
Risk of manipulation	Intentional input of biased or selected data to the algorithms	Distorted presentation of the financial performance
Dependence on technology	Overreliance on generative AI may lead to a decline in critical thinking	Risk of technological incompetence of human teams

*(**Source:** author's summary)*

Accounting community faces the need for:

- new professional standards to define the permissible degree of use of generative AI in the reporting process, in the preparation of financial statements and ESG reports, in forecasting and budgeting;
- development of frameworks for transparency and verifiability of generated content;
- introduction of ethical guidelines ensuring responsible use and protection of data;
- professional development and adaptation of accounting professionals so that they can validate and interpret automatically generated texts competently and at a high level.

Generative AI should be implemented in accounting by carefully balancing between the pursuit of efficiency and the preservation of the principles of credibility, transparency, relevance, timeliness, and reliability. The technology should not be considered a substitute, but rather a tool subject to control and expert judgment.

An important point in this context is that generative AI will be part of the future of the accounting profession, but the responsibility for accountability, reliability, and authenticity of data will always remain with humans.

Audit companies follow a similar logic. AI is now being used with natural language processing tools to interpret multiple contracts, extract key terms, compile and analyse information to perform risk assessments or other functions. (Вейсел, 2023).

Businesses implement artificial intelligence not only as a technological solution, but also as a strategic investment asset. The accounting and finance sector does not fall behind in this process, with a number of studies showing that Return on Investment (ROI) from implementing AI can be significant even in the short run. According to research data from global consulting companies, enterprises that integrate AI technologies into their accounting systems manage to reduce their costs and significantly improve their performance.

The main factors that have a positive effect for a rapid return on investments include:

- Automation of routine and time-consuming tasks such as generating reports, processing invoices, detecting data errors and inconsistencies. This not only reduces the need for human labour, but also improves processing accuracy and speed.
- Improving the quality of reporting through artificial intelligent systems that identify errors, inconsistencies and potential risks in data, allowing accountants and financial managers to make faster and more informed decisions.
- Simplifying processes for compliance with regulatory requirements (regulatory requirements, reporting and sustainability standards).
- Automated data verification and generation of reports that cover all necessary regulatory requirements. AI also allows staff working in the accounting department to focus on the strategic part of the business, instead of delving into routine operations, which leads to an increase in the added value of their work.

Technologies require significant upfront investment, as well as developing competencies and upgrading staff skills to effectively use the new tools. Within 1 to 3 years, most businesses report positive ROI due to increased productivity and reduced operating costs.

This highlights the importance of long-term strategic planning when implementing AI in accounting as investments in technology ensure not only short-term savings, but also a sustainable competitive advantage for the enterprise in the long term.

3. A balance of technology and human expertise

The implementation of new technologies such as artificial intelligence (AI) into accounting and finance processes inevitably raises the question of the

balance between automation and human expertise. Although AI can perform routine tasks with high efficiency, the role of the human factor remains indispensable, especially when it comes to complex analyses and strategic decisions that require critical thinking and professional judgment.

One of the main functions of accountants and financial experts is not only to perform analysis, but also to interpret data in the context of the business and its goals. AI can collect, process and present huge amounts of data, but only a specialist can integrate this data in the specific context, interpret and formulate conclusions, conclusions and strategic directions for future activities. For example, considering the financial errors and inconsistencies or potential risks that have been identified by AI, a person must take into account the specific conditions of the business, market and regulatory requirements to determine the right course of action.

Why is critical thinking needed? (Williams & Benso, 2025)

- To identify unexpected results. Although AI systems can detect errors and inconsistencies, they are unable to interpret the causes or determine whether these flaws are the result of unlawful activities or normal market fluctuations. Human judgment is crucial in such cases.
- To interpret unreadable data. AI analyses large volumes of data, but only an expert can decide which data is most relevant and how to interpret it for the enterprise's purposes.
- Predicting future trends. With their expert knowledge and industry experience, accountants play a significant role in interpreting economic and market trends, which can be analysed and predicted using AI. However, human judgment and contextual understanding of specific situations remain instrumental in making decisions that cannot be fully automated.

Professional judgment is crucial to the quality of accounting services, as it involves ethics, risk assessment, and responsibility in decision-making. Accountants and financial professionals must be able to combine their knowledge of standards and regulations with the experience and expertise gained over years of work on various cases.

What does human judgement include?

- Assessment of conditions and potential consequences. The ability to understand the large number of factors (from local economic conditions to global market trends) that can affect a given situation.
- Ethical and legal aspects. While AI can comply with regulatory requirements, it cannot assess ethical issues or take into account the long-term consequences of certain decisions. The specialist must ensure that reporting and decisions meet not only the regulations in force, but also certain moral and ethical imperatives.

- Risk assessment. While AI can identify and categorize risks, the human factor is needed to prioritize risks and select management strategies that would mitigate the negative consequences.

A balance between technology and human expertise is achieved when AI and automation are used to perform routine and time-consuming tasks and processes and thus enabling experts to focus on more complex cases, Big Data analytics, and strategic decisions. Technology does not replace human judgment but rather complements it, creating synergy between automated processes and human knowledge and experience.

This synergy leads to greater efficiency and better results, allowing professionals to focus on tasks that require creativity, innovation and critical thinking. Technology provides data, and experts interpret it and make decisions, creating and adding value to the business and its stakeholders.

Overall, while technologies such as AI significantly increase performance in accounting and finance, human expertise remains indispensable. Professionals should use AI not only as an automation tool, but also as a catalyst for new ideas and innovations in the accounting and reporting field as a whole.

As technology is becoming a major transformation driver in today's business world, accountants are facing new challenges. Existing technologies, especially artificial intelligence (AI) and automation, not only provide new opportunities to speed up processes and increase efficiency, but also raise questions about ethics, independence, and strategic thinking. How can professionals leverage these innovations without compromising the core principles of accounting and reporting?

4. Accounting specialists' professional ethics and strategic role in the digital age

Accounting ethics and responsibility in the age of technology are not just about complying with regulatory requirements, but also about upholding professional standards and moral values that ensure trust and transparency in financial reporting. The rise of artificial intelligence (AI) poses new challenges related to conflicting ethical values and business principles and raises questions regarding the desired direction of technological progress. (Stavrova, 2021).

With the introduction of AI into reporting, new questions arise about the impartiality and truthfulness of training data, as technologies can analyse data in a way that is difficult for human experts to understand.

The main ethical principles in the context of new technologies are:

- Transparency of algorithms. AI can provide results that are not always easy to explain to users. Therefore, accountants must insist on clarity

regarding the way algorithms work and transparency regarding their application.

- Data ethics. It is necessary to ensure that the data processed is accurate, complete and unbiased as well as that it complies with all regulatory and ethical norms regarding confidentiality and security of information.
- Unintended consequences. The possibility of automating tasks increases the risk of unexpected results that require the professional judgment of accountants. Failure to comply with ethical standards can lead to incorrect and unreliable reporting or incomplete and unreliable statements.

Regarding the independent and unbiased application of technology, one of the main tasks of accountants is to ensure independence and objectivity in the preparation of financial statements. Although AI can speed up and automate many accounting processes, it is important to maintain neutrality and avoid the use of technologies that could jeopardise the objectivity of data and analysis. In this regard, the main principles for maintaining independence are control over automated processes and objectivity in the choice of technology. Although technology can perform many routine tasks, crucial issues such as data analysis and interpretation of results should be carried out either by independent experts or under their control and supervision to ensure that they are not influenced by external factors or stakeholders. When implementing new technologies, not only their effectiveness should be taken into account, but also how they affect the independence of accountants and the truthfulness of reporting.

Technology provides significant operational advantages, but accountants should not disregard the important role of strategic thinking in the age of technology, which already goes beyond the standard accounting process. Accounting should more and more actively participate in the long-term planning of the enterprise and in the formulation of its strategies. What is the role of strategic thinking today? On the one hand, it is related to forecasting the financial future. By combining advanced analytical tools and human knowledge and experience, accountants should participate in planning and formulation of business strategies using AI and other technologies to discover new opportunities and manage risks. On the other hand, it is related to adapting new technologies to strategic goals. Technologies should be used not only to automate processes, but also to achieve broader strategic goals of the business. This includes cost optimization, improving the financial performance and ensuring the competitiveness of the enterprise.

Table 4

Technology – ethics, independence, strategic thinking (principles)

Principle	Application	Main challenges
Ethics	Transparency of algorithms, ethics in data collection and use, prevention of unintended consequences	Risk of data manipulation, algorithm ambiguity
Independence	Maintaining objectivity in automation and control over technology	Reduced/uncertain independence from external factors
Strategic thinking	Using technology to improve forecasting and strategic planning	Technologies must adapt to the strategic goals of the enterprise

*(**Source:** author's interpretation)*

Combining technology with ethics, independence and strategic thinking is the foundation for the successful transformation of accounting in the modern business world. Accountants should combine technical expertise with a commitment to ethical norms and the ability to strategically apply innovative technologies to maintain high professional standards. This will not only ensure process effectiveness, but also strengthen trust in accountability as a basis for sustainable business development.

The ability to successfully implement new technologies in accounting is not a matter of choosing the right tools, but also requires effective strategies for knowledge upgrade, development of competencies and professional adaptation. Given the significant automation of accounting processes and the growing importance of artificial intelligence (AI), accountants must acquire new skills and adapt to new realities that pose new requirements to their technical abilities, professional ethics and critical thinking. This requires continuous professional development strategies to support the professionals in the rapidly changing environment.

Despite the significant benefits of technology, the process of its integration can be seriously hampered by various factors. Incorporating new technological solutions into accounting practice requires careful planning and overcoming difficulties such as resistance to change, insufficient resources, and distrust of new technologies. To overcome resistance to change, accounting professionals must be motivated and trained to see the long-term value of technology and its applications in routine processes.

At the same time, it is important to prepare accountants not only for technological but also for strategic professional requirements related to ethics and critical thinking. The implementation of technologies must be accompanied

by clear principles for their use in the context of professional ethics. This requires upgrading knowledge not only in technical but also in professional standards that cover issues such as independence, responsibility and professional judgment.

Strategies for continuous professional development and adaptation to new realities in accounting must be comprehensive and integrated, encompassing both technological and professional requirements. Accountants who successfully adapt to technology and strategically enhance their skills will be able to not only increase their efficiency but also add value to the enterprise. This requires investing not only in new technologies, but also in professional development to ensure that new tools are used ethically and strategically.

Conclusion

The future of corporate accounting is not only technological, but also strategically oriented towards creating added value for all stakeholders. Automation, intelligent accounting solutions and artificial intelligence are the drives for a significant transformation of traditional accounting processes as they provide opportunities for faster, more transparent and more efficient reporting. At the same time, new technologies pose requirements regarding accountants' professionalism, ethics and strategic thinking.

The main conclusions can be drawn from the analysed trends and innovations are:

1. *Environmental, social and governance (ESG) reporting is an important part of corporate reporting.* Accounting systems should cover not only financial but also non-financial aspects, which requires innovation in reporting methodology.
2. *The integration of new technologies such as automation and AI will transform reporting* by increasing process efficiency, reducing the risk of human error and providing businesses with the possibility to make rapid decisions based on real data.
3. *Generative AI and other advanced technologies will offer new opportunities to automate routine tasks,* while at the same time pose new challenges related to ethics, data security and risk management.
4. *Continuous professional development and adaptation of accounting professionals will be instrumental for the successful integration of new technologies into accounting practice.* Becoming proficient in the use of the new tools is as important as developing the skills for strategic thinking and ethical use of these technologies.

The vision for the future of corporate accounting must include not only technical advancements, but also a strategic focus on people – their training, ethics and professional development. The sustainable development of accounting as a key component of modern corporate management requires targeted investments in technological innovation and human capital development. For accounting to be intelligent and value-oriented, there must be constant progress in technology, but also in education and ethical standards that pave the path of the accounting profession to the future.

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ISSN 0323-9004

Economic Archive

Svishtov, Year LXXVII, Issue 2 - 2025

D. A. TSENOV ACADEMY OF ECONOMICS
SVISHTOV

Economic Archive Year LXXVIII, Issue 2 - 2025

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