

ISSN 0861 - 6604
ISSN 2534 - 8396

BUSINESS management



PUBLISHED BY
D. A. TSENOV ACADEMY
OF ECONOMICS - SVISHTOV

1/2026

1/2026

BUSINESS management

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The printing of the issue 1-2026 is funded with a grand from the Scientific Research Fund, Contract KP-06-NP7/18/05.12.2025 by the competition "Bulgarian Scientific Periodicals - 2026".

The Scientific Research Fund is not responsible for the content of the materials.

Submitted for publishing on 18.03.2026, published on 20.03.2026,
format 70x100/16, total print 80

© D. A. Tsenov Academy of Economics, Svishtov,
2 Emanuil Chakarov Str, telephone number: +359 631 66298

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BUSINESS **management**

D. A. Tsenov Academy
of Economics, Svishtov

Year XXXVI * Book 1, 2026

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DIGITAL TRANSFORMATION OF REPORTING-RELATED PROCESSES IN BULGARIAN ENTERPRISES (CONCEPTS AND REALITIES)

Galya Ivanova-Kuzmanova¹,
Atanas Atanasov²,
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Galina Chipriyanova⁴,
Ralitsa Dancheva⁵

Abstract: The study presents the use of digital technologies to improve the accuracy, efficiency, and accessibility in the context of the digital transformation of reporting-related processes in enterprises in the Republic of Bulgaria. This transformation includes automating data entry, using advanced analytics, and leveraging artificial intelligence-driven tools to optimize workflows. This changes both the way enterprises collect and analyze data and the way they report, which in turn leads to improved decision-making. The aim of the study is to examine the current state of the use of digital technologies in reporting activities of Bulgarian enterprises and the attitudes towards the implementation of new technologies in their reporting activities. The methods of analysis and synthesis, scientific observation, induction, deduction, structured interview, Crosstabs, SWOT Analysis, etc. were used in conducting the study. The strengths, weaknesses, opportunities and threats of digital transformation of processes related to reporting are highlighted. Based on the analysis of the results of structured interviews, the problems in the implementation and use of digital technologies in reporting activities and the attitudes of small, medium and large enterprises in Bulgaria are outlined.

¹Department of Accounting, Tsenov Academy of Economics, Bulgaria, e-mail: g.ivanova@uni-svishtov.bg, ORCID: 0009-0002-4349-6088

²Department of Accounting, Tsenov Academy of Economics, Bulgaria, e-mail: a.atanasov@uni-svishtov.bg, ORCID: 0000-0002-6495-0449

³Department of Finance and Credit, Tsenov Academy of Economics, Bulgaria, e-mail: m.marinov@uni-svishtov.bg, ORCID: 0000-0001-5395-5458

⁴Department of Accounting, Tsenov Academy of Economics, Bulgaria, e-mail: g.chipriyanova@uni-svishtov.bg, ORCID: 0000-0002-8339-3238

⁵ Department of Accounting, Tsenov Academy of Economics, Bulgaria, email: r.dancheva@uni-svishtov.bg, ORCID: 0009-0005-3524-9556

Key words: digital technologies, digital transformation, reporting, SWOT analysis

JEL: M41, G30

DOI: <https://doi.org/10.58861/tae.bm.2026.1.02>

Introduction

Digital transformation is a recognized mechanism for economic growth due to the ability of digital technologies to positively influence the quality of economic activities, efficiency and costs. The development of digital technology has had a significant impact on various areas of human activity, and accountability is no exception to this. They are treated not only as a modern trend, but also as a factor to ensure high competitiveness of enterprises. The main objective of the study is to examine the current state of the use of digital technologies in the reporting activities of Bulgarian enterprises and the attitudes regarding the implementation of new technologies in their activities. Tasks to achieve the objective are: 1) to provide a critical analysis of digital transformation of processes related to reporting; 2) to argue the need for digital transformation of processes related to reporting; 3) to identify the key digital technologies; 4) to identify the strengths, weaknesses, problems and challenges of the use of digital technologies in the reporting activity; 5) to determine the current status of the use of digital technologies in the accounting activities of Bulgarian enterprises and to outline the directions for future development. This study argues that the use of digital technologies is changing the way information is collected, stored, analyzed, disseminated, used, etc., and this is reflected in the formation/imposition of new ways/directions for organizing reporting activities. The existence of various barriers prevents the realization of the potential of digital technologies in the processes related to the reporting of Bulgarian enterprises and improving their competitiveness. The object of the study is small, medium-sized and large enterprises in the Republic of Bulgaria, and the subject – digital transformation of the processes related to reporting.

Materials and methods

To achieve the research tasks, a practical study has been conducted through the methodology of structured interview among small, medium-sized and large enterprises in Bulgaria. The sample was formed by the method of random non-recurrent selection (01 January 2023 - 31 December

2023). The sample includes enterprises that have their own accounting department. Enterprises with outsourcing reporting service are excluded. The formula for calculating the sample size is:

$$n = \frac{p(1-p)z^2N}{p(1-p)z^2 + \Delta^2N}$$

where: n – sample size; p – relative proportion of units possessing the studied characteristic; z – confidence coefficient

The number of non-financial enterprises with more than 9 employees according to the NSI data for 2023 is 30, 053. Therefore, for the survey results to be reliable, the number of enterprises in the sample should be at least 76. In the course of our research, we requested 87 enterprises, but 80 enterprises actually responded and participated in the structured interview.

Digital transformation of the economy requires a change of business approaches in order to keep enterprises competitive. Enterprises are increasingly using digital technologies in their activities and in this regard it is quite logical to explore the nature and possibilities of using digital technologies in reporting activities. Reporting in Bulgaria is going through several stages of information technology adoption – use of Excel spreadsheets; specialized software products and integration of accounting programs into Enterprise Resource Planning (ERP) system. In the following years, reporting has undergone even greater changes, catalysed by modern digital technologies. They offer great opportunities compared to traditional accounting. The research is also divided into three categories for diagnosing the economic, social and environmental sustainability of the respondents in accordance with the two parallel processes of digitalization and sustainable development. For the purpose of the research, businesses are classied as profit-minded, eco-minded and open-minded, because this will allow to link the use of digital technologies to the strategic orientation of the business. In this regard, we define the classification criteria (enterprise profile) as follows: 1/ Profit-minded. Enterprises that are primarily focused on financial efficiency and profit. They invest in modern digital technologies only if they bring direct economic benefits. 2/ Eco-minded. Businesses that focus on sustainability, environmental initiatives and corporate social responsibility. They view digitalization as a way to optimize resources and reduce their carbon footprint. 3/ Open-minded. Innovative enterprises open to technological change, experimentation and new business models. They are expected to be most willing to adopt cloud technologies, AI and big data analytics. The methods of analysis and synthesis, scientific observation, induction, deduction, structured interview, Crosstab, SWOT Analysis, etc. to

identify the distinguishing characteristics of the enterprises to the highest possible extent were also used.

1. Literature review

Based on a critical analysis of existing research in the works of M. K. Cenzarik, et al. (Cenzarik et al., 2020), J. Bumann and M. Peter, Viacheslav Saprykin digitization is defined as the transfer of information from analog to digital form, its transfer from physical (paper) media to digital. From the point of view by L. Chyzhevskaya et al. (Chyzhevskaya, 2021), digitalization is related to the use, along with traditional IT tools, of new technologies that have been widespread not so long ago: artificial intelligence, robotics, cloud technologies, blockchain.

Digital transformation is the complete transformation of an enterprise's operations, business processes, competencies and business models, maximizing the full use of digital technologies to enhance competitiveness, create value and scale in the digital economy (Cenzarik et al., 2020). From the point of view by economists V. G. Halin and G. V. Chernova (Halin & Chernova, 2018), digital transformation is defined as a process of gradual change that begins with the introduction of digital technologies and then grows into a comprehensive transformation of all spheres. It is the adoption of new technologies to improve productivity, value creation and social welfare. The concept includes four main components without change, of which its implementation is impossible: introduction of new technologies; changes in value creation; structural and financial changes (Matt & Hess, 2015).

Digital transformation, as explained by H. Demirkan et al. (Demirkan, et al., 2016), represents a major transformation of business models and methods, and even of business processes to fully use the potential provided by digital technologies, also the impact on society in the long term. O. B. Lukina (Lukina et al., 2020) (Verhoef, et al., 2021) defines digital transformation not only as the implementation of digital technologies, but also as the transformation of multiple horizontal and vertical business processes, the optimization of operational processes, the modification of established models and formats of interaction of actors and the value chain.

Moses Alabi (Alabi, 2024) provides a more global view by defining digital transformation as the integration of digital technologies into all areas of business, fundamentally changing the way businesses operate and

deliver value to their customers. It involves transforming business models, optimizing operations and driving cultural change across enterprises to leverage digital capabilities and adapt to a rapidly evolving business environment. A universal definition of digital transformation is defined by Gregory Vial (Vial, 2019), describing it as a process aimed at improving an object by initiating significant changes in its properties through a combination of information, computer, communication and network technologies. Modern digital technologies used in reporting range from cloud technology, blockchain technology, technology for contactless identification of accounting information (barcoding, etc.), big data, advanced analytics, artificial intelligence and machine learning, mobile applications, the Internet of Things and others to the introduction of innovations such as platform-based products facilitating interactions and transactions between different user groups (Lazarova, 2019).

Based on the above, we consider the digital transformation of processes related to reporting to be the strategic integration of digital technologies into all aspects of enterprise's accounting and financial activities. It is not limited to the automation of individual operations, but includes the optimization of business processes, changes in established models of interaction between internal and external participants, and a cultural transformation of the enterprise, with the aim of more efficient generation, processing, and provision of reporting information. In this way, the digital transformation of reporting-related processes supports adaptation to the rapidly changing business environment, improves the quality and transparency of reporting, and creates added value for all stakeholders.

2. Results and discussion

2.1. SWOT analysis of the use of digital technologies in reporting activities

With the development of new technologies, the digital transformation of processes related to reporting has become an integral part of some businesses' operations. The introduction of digital technologies in reporting activities opens new horizons for reporting. Systematically assessing strengths, weaknesses, opportunities and threats allows businesses to better integrate digital technologies into reporting activities, maintaining a balance between traditional methods and the potential that digital

technologies hold, and to make more informed and strategic decisions. The main guidelines for the digital transformation of reporting-related processes are:

2.1.1. Cloud technologies

Cloud computing is provided as the delivery of dynamically scalable and virtualized resources over the Internet in the form of services (Mummigatti, 2010). They involve the use of one of three service delivery models according to functional criteria: Infrastructure as a Service (IaaS); Platform as a Service (PaaS) and Software as a Service (SaaS) made available for use over the Internet. In the following lines, when describing cloud technologies in reporting, the SaaS model of applications and business tasks performed as a service is implied, which can be particularly useful as they provide off-the-shelf accounting software. As explained by A. P. Krulikowski et al. (Krulikowski & Korelev, 2019), cloud technologies provide the necessary infrastructure that can support all the accounting activities of an enterprise. Our research shows that cloud accounting platforms provide secure and scalable access to financial data from anywhere. These tools support real-time collaboration, automated updates, and seamless integration with other financial systems.

The advantages of using cloud technologies in reporting over traditional accounting software (used only locally) are: 1) cost reduction; 2) elimination of the need to purchase accounting software; 3) improves business efficiency – facilitates the generation of real-time reports, adapting to changing business conditions in a short time; 4) saves time; 5) saves maintenance costs (software updates, fixing various failures, e.g. on the server, etc.), which are entirely at the expense of the provider; 6) easy access and use – no need to install a program, only a device (computer, phone or tablet) and an internet connection, remote access, no need to access the local network; 7) unlimited data backup at any time; 8) remote maintenance is possible; 9) etc. (Krulikowski & Korelev, 2019). Complementing these benefits is the ability to analyse in real time; effortless document management – maintaining all primary documentation electronically and being able to access it at any time and from any location; scalable file storage – cloud technologies allow for expanded data storage space at significantly lower costs; increasing the accuracy of accounting operations (Berdichevskaya, 2023).

The disadvantages of using cloud technologies are as follows: 1) the possibility of data leakage; 2) the possibility of attacks; 3) the problem of

choosing a reliable provider; 4) in the event of a denial of service, there is no guarantee that the data will be destroyed; 5) technological risks - internet outages, lack of stable connection for enterprises located in smaller settlements; 6) the vulnerability of the server (Astakhova & Kochetova, 2015; Hasan & Petrova, 2023; Berdichevskaya, 2023). The lack of a stable internet connection is a relatively small percentage, as in our country the enterprises with a fixed internet connection for 2024 are 89.2%, as 54.1% of the maximum download speed data (Institute, 2024).

2.1.2. Blockchain

Blockchain technology according to A. V. Basova (Basova, 2022) can become both the basis of accounting operations and a system of internal control of business entities. The positive aspects of using blockchain technology in reporting, she points out, are: the reliability of information, as no changes can be made to the blocks; the transparency of information and thus increasing its value, due to the participation of a large number of users and control activities; the efficiency of information processing, as all participants in the system have equal rights; can accelerate the development of the industry by reducing the costs associated with the maintenance and consistency of accounting data. The risks associated with blockchain technology in reporting are the risk of system failures, information may be partially lost which may affect the logical consistency and completeness of information; the biggest risk is the lack of a regulatory framework for the use of blockchain technology.

Blockchain technologies open up great opportunities (Azimov & Petrova, 2022). Our research shows that it provides secure and immutable records of financial transactions. It improves transparency and trust while simplifying audit trails and compliance processes. Accountants are experts in the field of accountability and blockchain technology can effectively help them to archive documents in a defined compliant system that auditors and authorized third parties can access safely and securely (Mirsodikova, 2023). The main advantages of blockchain in reporting are: 1) openness of transactions – the user of the network is able to freely trace the history of transactions on the site; 2) the presence of a digital record – makes it impossible to falsify, change and delete data; 3) each participant in the blockchain has a permanently up-to-date copy of the database; 4) high speed and accuracy of transactions, which provide speed and reliability of transactions; 5) decentralized communication between servers, which provides high security for users and operations (Mirsodikova, 2023).

2.1.3. Artificial intelligence and machine learning

Artificial intelligence (AI) and machine learning (ML) are used together in many applications. ML allows AI to learn by gathering information and putting the knowledge into practice, thus optical character set systems together with artificial intelligence generate information about invoices, etc. (Dydina & Kondakova, 2024). AI has increased the efficiency and accuracy of accounting work by: automating routine tasks – thus reducing the risk of human error, providing accountants with time for analysis and strategic decisions; analysing financial information – AI can be programmed to search and process financial information from a variety of sources; building models and forecasts – can be used to create and forecast based on historical information and indicate different opportunities; improving communication - can be used for training. (SV Smart Consulting) The application of artificial intelligence in reporting also allows the processing and analysis of large amounts of accounting information, verification of accounting data, error detection and fraud prevention, increasing the efficiency of the accounting process. The risks are related to the redundancy of a significant number of jobs, complexity of implementation, lack of regulations, etc. (Pravdiuk & Pravdiuk, 2024). Based on the above, we consider that accounting technologies powered by artificial intelligence enhance accuracy by detecting anomalies, automating reconciliations, and forecasting financial trends. These capabilities are transforming the way businesses approach tasks such as financial forecasting and compliance checks.

2.1.4. Big Data

In modern conditions, intelligent decisions are based not only on historical data but also on the results gathered from big data analysis and the information or trends that such analyses indicate about the forthcoming future (Rijal, 2023). Using big data in reporting helps to optimize business processes, generate predictive analytics and manage business risks, as well as helping to identify inefficient processes and optimize activities. Using these technologies requires significant investment and data analytics skills (Dydina & Kondakova, 2024) (Petrova & Popova, 2022; Petrova et al., 2022; Petrova & Popova, 2024; Popova et al., 2023; Popova et al., 2024).

Based on the above information, a SWOT analysis of the use of digital technologies in reporting was conducted (Table 1).

Table 1

SWOT analysis of the use of digital technologies in reporting

INTERNAL FACTORS	
STRENGTHS	WEAKNESSES
- improving the efficiency and accuracy of accounting information; - enhancing analytical capabilities through deeper and more multidimensional analysis and presentation (through visualisations) of valuable information for management decision-making; - the ability for employees at different levels to work remotely and access from anywhere with Internet; - more effective interaction between departments of the enterprise, which significantly improves the quality of reporting activities; - increased speed of data and information processing; - no need to install additional software as updates are performed automatically.	- the need for investment to adapt and expand employees' digital skills, knowledge and capabilities, including understanding the basics of information security, etc; - the need to establish security systems; - significant implementation costs.
EXTERNAL FACTORS	
OPPORTUNITIES	THREATS
- more effective communication between stakeholders; - optimization of document flow in the overall digital exchange of documents between enterprises, contractors, state administration, banks, NRA, NSSI, Trade Register, etc; - increased competitiveness; - Our country's commitment, through the Ministry of Innovation and Growth, to provide grants by the end of 2024 for the implementation of digital technologies in small and medium-sized enterprises.	- risks of cyber-attacks and leaks of confidential information; - the possibility of job losses related to routine reporting tasks; - mobile network or internet connection failure; - ethical issues from the use of artificial intelligence and big data; - continuous emergence of new digital technologies; - Bulgarian low level of digital maturity.

Source: Authors' own interpretation.

Synthesizing the above, it can be concluded that the digital transformation of reporting-related processes undoubtedly has enormous potential to improve reporting activities, but its implementation must be carried out carefully, regarding all possible threats.

2.2. Digital transformation of reporting related processes in Bulgarian enterprises – level of usage, views and strategic directions

This section presents the results of the research related to the level of usage of digital technologies in reporting activities, the attitude of businesses towards digital transformation and the level of awareness of the benefits and challenges they provide. It also analyses the readiness of enterprises to adopt new technologies, the main barriers to this process, and the impact of business strategy and policy on the speed of digital transformation. In regard to the current status and extent of use of digital technologies in reporting activities, it should be noted that Bulgarian enterprises do not make full use of digital tools and thus do not benefit from the opportunities they offer.

Table 2
Degree of use of digital technologies in reporting activities

Using digital technologies in reporting activities	Categories of businesses						Total	
	Employees 10-49		Employees 50-249		Employees more than 250			
	Count	%	Count	%	Count	%	Count	%
Cloud technologies	2	3.13	3	23.08	3	100	8	10
Artificial intelligence	1	1.56	1	7.7	3	100	5	6.25
Big data	-	-	1	7.7	3	100	4	5
Blockchain technologies	-	-	-	-	-	-	-	-

Source: Authors' own interpretation.

The survey found that the digital technologies used in reporting are mainly cloud technologies, big data, artificial intelligence. All the surveyed enterprises use specialized accounting software. The proportion of respondents using cloud accounting solutions, artificial intelligence and big data analytics was generally low - about one tenth. All enterprises with more than 250 employees use digital technologies in their accounting activities.

Blockchain technologies are not recognised by respondents. Also, none of the surveyed enterprises use the new cloud-based platform for finance and accounting management in our market. This is an innovative service on our market, which is well known in developed countries, where there are many providers of the service, while currently on the Bulgarian market the service is offered by only one fintech company.

Further, our task is to analyze how the extent of use of cloud technologies, AI, big data and blockchain matches the enterprise profile. For example, if an enterprise only uses AI for financial analysis, it is more likely to fall into profit-minded. If it uses cloud technologies with an ESG focus, it is more likely to be eco-minded. Eighty enterprises from the sample are grouped, and the most pronounced profile in their use of digital technologies is tracked. It will be interesting to see which profile predominates, if there is a group that does not use any technology.

Based on the data about the use of digital technologies, we can derive the profile of enterprises by focusing on:

1. Classification criteria – using the degree of digital transformation of processes related to reporting, we classify enterprises into three groups of profiles: a) Profit-minded. The enterprise only uses AI, therefore focuses on cost optimization, efficiency and profit. b) Eco-minded. The enterprise uses cloud technologies, including for environmental sustainability (e.g. to optimize resources). c) Open-minded. The enterprise uses a combination of technologies, so it is oriented towards innovation and future trends.

2. Enterprise clustering. From 76 enterprises, only 8 use some of the technologies. Blockchain is not used by any enterprise. Their distribution by enterprise size: 2 (10-49 employees), 3 (50-249 employees), 3 (250+ employees). Based on this, we can draw the following conclusion: 1/ Enterprises that make limited use of the modern digital technologies, discussed above, fall into the profit-minded profile (conservative enterprises, minimizing their costs). 2/ Enterprises that use cloud technologies are eco-minded. 3/ Enterprises that use AI, cloud technologies and big data analytics in combination are open-minded.

Analysis in such a cross-section reveals the relationship between business category and enterprise profile. We are able to trace whether the size of the enterprise influences its belonging to one of the profiles and to what extent. Furthermore, to what extent the lack of blockchain confirms that enterprises in Bulgaria are not yet ready for high-tech transformations.

The degree of digital transformation of reporting-related processes is not a matter of technology, but of organisational culture and strategic thinking. Profit-minded enterprises focus on short-term efficiency, eco-minded balance sustainability and digitalization, and open-minded ones rely on modern technology as a means of strategic leadership.

Table 3

Attitude of the business towards the digital transformation of processes related to reporting

The attitude of the business towards the digital transformation of reporting-related processes	Categories of businesses						Total	
	Employees 10-49		Employees 50-249		Employees more than 250			
	Count	%	Count	%	Count	%	Count	%
High level of interest	54	84.38	12	92.31	3	100	69	86.25
Low level of interest	5	7.81	1	7.69	-	-	6	7.5
Lack of interest	5	7.81	-	-	-	-	5	6.25
Total	64	100	13	100	3	100	80	100

Source: Authors' own interpretation.

The attitude of the majority of enterprises towards the digital transformation of reporting-related processes is positive, with over 85% of respondents showing a strong interest in them. Our research shows that some of the factors driving the digital transformation of reporting processes and leading to increased interest are: 1/ Regulatory complexity – the growing complexity of financial reporting regulations, including various documents, requires accurate, timely, and transparent reporting. Modern digital tools streamline compliance processes, reduce errors, and ensure compliance with standards; 2/ Stakeholder expectations – investors and stakeholders require access to real-time financial data. Digital accounting solutions provide immediate information on financial results, enabling better decision-making; 3/ Competitive pressure – to stay ahead, businesses must embrace digital technologies to improve efficiency, reduce costs, and improve the quality of their financial reporting; 4/ Data explosion – the volume of financial data continues to grow, making manual accounting processes untenable. Big data tools enable companies to manage, analyze, and efficiently use vast amounts of financial data.

Table 4

Level of business awareness of the strengths, weaknesses, opportunities and threats of using digital technologies in reporting

Level of business awareness of the strengths, weaknesses, opportunities and threats of using digital technologies in reporting	Categories of businesses						Total	
	Employees 10-49		Employees 50-249		Employees more than 250			
	Count	%	Count	%	Count	%	Count	%
High level of awareness	34	53.13	9	69.23	3	100	46	57.5
Medium level of awareness	20	31.25	3	23.08	-	-	23	28.75
Low leverl of awareness	5	7.81	1	7.69	-	-	6	7.5
Lack of awareness	5	7.81	-	-	-	-	5	6.25
Total	64	100	13	100	3	100	80	100

Source: Authors' own interpretation.

More than half of the enterprises interviewed have a high level of awareness of the strengths, weaknesses, opportunities and threats of using digital technology in accounting. Their systematic assessment allows enterprises to better integrate digital technologies into accounting activities, maintaining a balance between traditional methods and the potential that digital technologies have, and to make more informed and strategic decisions. Our research shows that awareness of digital technology varies depending on the scale and business orientation of enterprises. Open-minded enterprises are fully informed and ready for digitalization, while eco-minded ones balance between traditional and new practices. Profit-minded enterprises are aware of the need for digitalization, but often lack the resources for rapid implementation. These trends define different approaches to innovation and competitiveness in the future (see table 5).

Table 5

Business strategy, policy and vision according to enterprise profile

Enterprise profile	Awareness	Business strategy	Policy	Vision
Profit-minded	Diverging awareness	Flexible adoption of digital technologies	Testing and adaptation of innovative accounting models	Integration of new technologies through experimentation
Eco-minded	Adequate but not maximum awareness	Balance between digitalization and sustainability	Using cloud solutions for environmental reporting	Compliance with ESG regulations
Open-minded	High level of awareness	Automation to reduce costs and increase efficiency	Investment in ERP systems, AI and blockchain	High technology competitiveness

Source: Authors' own interpretation.

The majority of the surveyed enterprises are not ready for digital transformation of reporting-related processes (see table 6).

Table 6

Degree of readiness to implement new technologies in reporting activities

Degree of readiness to implement new technologies in reporting activities	Categories of businesses						Total	
	Employees 10-49		Employees 50-249		Employees more than 250			
	Count	%	Count	%	Count	%	Count	%
High level of readiness	2	3.13	3	23.08	3	100	8	10
Medium level of readiness	12	18.75	5	38.46	-	-	17	21.25
Low level of readiness	8	12.5	2	15.38	-	-	10	12.5
Lack of readiness	42	65.62	3	23.08	-	-	45	56.25
Total	64	100	13	100	3	100	80	100

Source: Authors' own interpretation.

The research in accordance with the enterprise profile shows:

First, among Profit-minded enterprises, only 2 enterprises have high readiness for digital transformation. The majority (42) have no readiness at all, indicating low investment capacity and possibly a lack of skilled staff for it. Although 12 enterprises have medium readiness. The strategy of this profile of enterprises is reflected in no major investment in modern technologies with quick returns, flexibility and adaptation to competition, and their policy on operational efficiency and regulatory compliance rather than innovation. In terms of leadership, there is a conservative management style, avoiding high-risk investments. In regard to competitiveness – it is low, these enterprises are vulnerable to larger competitors. Their mission is process optimization, market sustainability.

Second, Eco-minded enterprises are striving to balance efficiency, sustainability and technological modernisation. Three enterprises have high readiness for digitalization; five of them have medium readiness, suggesting a gradual transition to new technologies; two enterprises have low readiness and three are not ready, indicating some resistance to change. The strategy of this profile of enterprises is to implement digital solutions with sustainability as a strategic factor (e.g. ESG reporting standards, carbon reporting) and their policy is a regulation and standards oriented approach to maintain competitive advantage. In terms of leadership – a collective management style is observed, with a focus on sustainability and stakeholder engagement. Regarding their competitiveness – it is moderate, indicating their ability to adapt but dependence on the market environment and regulations. The mission of this profile of enterprises – long-term stability, sustainability and social responsibility.

Third, Open-minded enterprises are characterized by a focus on innovation, experimentation with new technologies, strategic leadership. All large enterprises show some degree of digital readiness – 3 at a high level, with no enterprises with low or no readiness. This means that these enterprises are the drivers of innovation, have the resources to experiment and are actively developing new digital models. Their strategy is leading-edge technologies such as AI, blockchain, automated accounting systems and data analytics, and their policy is to develop internal innovation programmes, R&D (Research and Development) investments and technology partnerships. This profile of enterprises is distinguished by a visionary approach, a high degree of experimentation, the implementation of new business models, and their competitiveness is high as they shape

the market rather than adapt to it. Their mission is leadership in digital transformation, sustainable growth through innovation.

Or, open-minded enterprises are innovators and the main drivers of digital transformation. Eco-minded enterprises are balancing sustainability and digitalisation, but some are not yet fully ready for large-scale digital change. And profit-minded enterprises are the least prepared, with a significant proportion lacking the resources or motivation for digital transformation.

Table 7

The most frequently mentioned reasons for the slow rate of digital transformation of reporting-related processes

Reasons for the slow rate of digital transformation of processes related to reporting	Categories of business						Total	
	Employees 10-49		Employees 50-249		Employees more than 250			
	Count	%	Count	%	Count	%	Count	%
Lack of resources to invest in the digital transformation of reporting-related processes	43	67.19	5	38.46	-	-	48	60
Insufficient staff training	51	79.69	7	53.85	-	-	58	72.5
Need to invest in acquiring new knowledge, skills and competences	51	79.69	7	53.85	-	-	58	72.5
Confidentiality of reporting information	38	59.38	10	76.92	-	-	48	60
The vulnerability of companies to cyber attacks	52	81.25	11	84.62	1	33.33	64	80

Source: Authors' own interpretation.

One of the main reasons is the lack of resources invested in the digital transformation of reporting-related processes. Bulgaria, through the Ministry of Innovation and Growth, has provided grants for the implementation of digital technologies in SMEs by the end of 2024, as a result of which digital technologies are expected to be increasingly integrated into business. Another problem businesses face is the mismatch between the qualifications and skills of the labor force, in terms of both general skills and specific skills. This, in itself, raises an even more serious issue of improving the training, education and retraining of people in line

with new market requirements. This requires cooperation between all stakeholders – the state, business and academic community. Inadequate preparation of the personnel in the enterprises, in itself, requires investments in trainings to acquire new knowledge, skills and competences. Regarding the other main reason given for the slow speed of digital transformation of processes related to reporting – the vulnerability of enterprises to cyber-attacks, in 2023 Bulgaria has opened the first Cyber Security Centre, which aims to improve the cyber security capability. This will provide the skills needed to identify, perceive and conduct defensive operations against cyber attacks.

The study in accordance with the enterprise profile shows:

➤ the barriers faced by Profit-minded enterprises are indicated as:
a) *lack of resources to invest in the digital transformation of processes related to reporting*. Small enterprises have limited budgets and prioritize expenditures that bring direct and quick results. Investment in modern digital technology is often seen as a secondary cost. b) *insufficient staff training*. These enterprises often lack a dedicated IT department. What is the reason? Profit-minded enterprises survive through efficiency and pragmatism. They are cautious about taking financial risks, and the lack of guaranteed returns from digital transformation make them skeptical of rapid change.

➤ the main barriers for Eco-minded enterprises are: a) *the need to invest in acquiring new knowledge, skills and competences*. Medium-sized enterprises are aware of the need for digital transformation but often face challenges in transforming their staff. They understand that modern technology is inevitable but prefer a step-by-step and sustainable approach. b) *confidentiality of reporting information*. These enterprises are sensitive to the security of their data, especially if they are engaged in international regulations or sustainable business models that require accountability and transparency. What is the reason? Eco-minded enterprises balance innovation and sustainability. They are investing in new technologies, but with caution, to ensure their operations remain stable and meet environmental, social and governance (ESG) standards.

➤ barriers to open-minded enterprises include: a) *vulnerability of enterprises to cyber-attacks*. Large enterprises have the resources and vision to deploy modern digital technologies, but they are aware that large-scale transformations also carry serious risks. They place cyber security as a top priority. b) *privacy of reporting information*. Due to the complexity of their financial operations, open-minded enterprises are wary of digital

technologies, especially when it comes to cloud solutions and external software providers. What is the reason? Open-minded enterprises are innovative but not “reckless”. They carefully assess risks and opportunities, placing security and stability first.

Conclusions

Based on the data collected and the analysis, it can be concluded that the digital transformation of reporting-related processes in Bulgaria is still at an early stage, but is gradually gaining speed. Although enterprises are aware of the need for digital transformation, a number of factors prevent this process. *First*, digital transformation requires a comprehensive strategic vision and long-term planning, which are not yet sufficiently widespread in practice. This means that many enterprises have taken their first steps toward introducing automated processes, but the overall integration of digital solutions has yet to be developed more actively. *Second*, the main technology solutions used in reporting activities include ERP systems, cloud technologies and big data, but their share among enterprises remains low. Adoption of innovative solutions such as blockchain technologies is facing difficulties due to lack of knowledge and security concerns. *Third*, the main barriers to digital transformation include inadequate staff training, high startup costs for technology deployment, and cybersecurity and data privacy concerns. In addition, psychological barriers among staff also slow down the process of adapting to new technologies. Despite these challenges, there is a growing interest in the application of artificial intelligence in reporting activities. More and more enterprises are considering the possibility of using AI to automate routine tasks. This would allow accountants to focus on higher value-added activities such as analysis, interpretation, and strategic management support.

In conclusion, different profiles of enterprises perceive digital transformation through the prism of their strategic priorities – small (profit-minded) enterprises face difficulties due to lack of resources and trained staff, eco-minded ones seek a balance between investment and sustainability, and large and innovative (open-minded) enterprises are focused on long-term transformations. To accelerate the digital transformation of processes related to reporting, targeted investments in training, clear strategies and support from public policies are needed.

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