CHAPTER 5. MANAGEMENT TOOLKIT FOR ENSURING INNOVATIVE DEVELOPMENT OF BUSINESS ENTITIES

DIGITALIZATION AS A MODERN TOOL FOR THE DEVELOPMENT OF INFORMATION AND ANALYTICAL SUPPORT FOR MANAGEMENT

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Digital transformations prompted changes in all spheres of social and economic life of mankind, which was also reflected in the economic activity of economic entities, including their accounting practices. They caused a significant reorientation of the trajectory of business development both at the micro level and at the regional and global levels. Digitalization processes generally change the existing paradigm of interaction between stakeholders, which forms a new character of relations between

them. Virtualization of business processes requires changes in the organizational and methodological support of accounting. Digitalization has also caused changes in the formation of specialist competencies required in modern business conditions. Thus, the impact of digitalization has not only an economic nature, but also a pronounced social and public focus, as it largely determines the demand for labor. Specialists of various industries face new tasks related to the need to create new jobs, review the existing set of functional obligations, and transform them in accordance with existing requirements (Sokolenko, L., 2019).

Today, business is significantly expanding its boundaries, reaching new levels and using the latest technologies of virtual and mixed reality. Virtual assets, liabilities, goods and markets today are already becoming tools for achieving the company's business goals. Real markets and goods are increasingly operating in virtual space and the Internet environment. The digitization of the economy and social life leads to the need to use new management technologies that are based on large-scale data sets, powerful information flows, the formation, systematization and interpretation of which is designed to be provided by the accounting and analytical business support system.

Digital management is no longer the technology of the future. Such management tools are actively used in foreign management practice and in the practice of leading Ukrainian companies. Highly dynamic changes in the factors of the business environment are the incentive, reason and motive that prompt the management of companies to use proactive tools for the implementation of current and strategic management goals. One of these tools is digital management. In contrast to traditional management practices, digital management is distinguished by a set of features that are currently becoming decisive for ensuring the company's success on the market: leadership, modern communication technologies (including in the virtual and digital space), a high degree of management adaptability, digital literacy, people-centeredness and teamwork, a high level of responsibility and readiness for a continuous learning process.

According to the Ministry of Digital Transformation, the activation of digitalization processes of the national economy will allow for additional growth of the

national GDP by 4% per year. The priority strategic directions of the digitalization of the economy of Ukraine today are: the development of digital infrastructure, the development of digital skills, the development of the information and communication technology sector, the digitalization of all spheres of life and types of economic activity (Fedorov, M., 2021).

Despite the active process of dissemination and implementation in domestic business practice, digital management for many Ukrainian companies is currently a tool characteristic of the management process of mainly large business entities. For the successful implementation of this management model in domestic practice, it is important to comply with several key prerequisites: 1) changing the corporate culture and business thinking of the company's managers and personnel; 2) high level of project management software based on online management platforms; 3) active coaching of personnel, change of management philosophy and improvement of the level of corporate culture; 4) effective system of internal control and reverse communication with all components of the management system.

According to foreign experts, the digital transformation of the management system creates additional benefits for business: 1) increased efficiency and productivity due to optimization of operations; 2) better management of resources due to modern E-architectures designed for the consolidation of information flows; 3) increasing the potential for quick adaptability and maneuverability to market changes and factors of the business environment; 4) achieving the effect of large-scale organizational flexibility; 5) increasing the effectiveness of communication technologies with the company's clients; 6) creation of an information platform for the implementation of innovations; 7) formation of a cumulative business effect and improvement of financial indicators of the company's activity (Pratt, M.K., 2021).

From the point of view of information and analytical support of digital management, the main task is the prompt and accurate formation, interpretation and use of the information base, which are determined by high speed, scale, and availability.

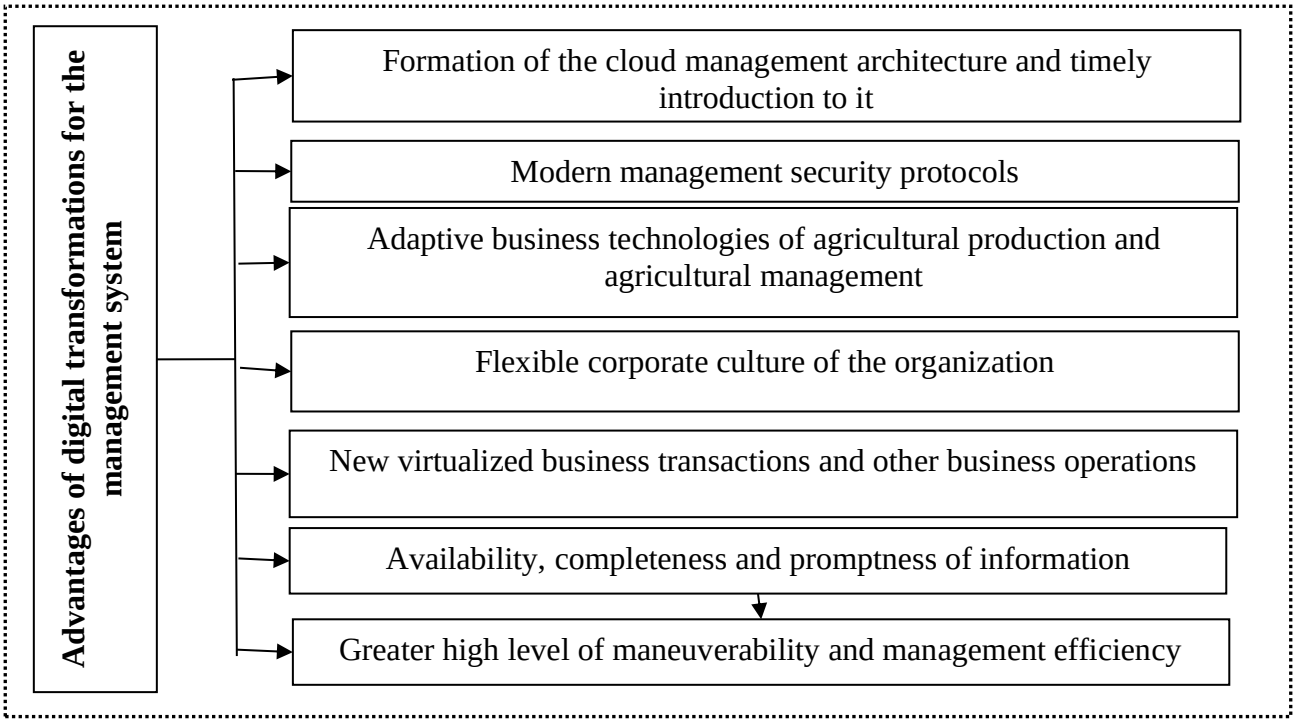

Fig. 1. Advantages of digital transformations for the management system of Ukrainian companies

Source: Own research

Characteristic features are a combination of financial and non-financial data, a wide scale of predictive analytics, information for risk assessment, data visualization, additional convenient control and audit opportunities. Digital platforms of business data are formed taking into account the principles of increasing the level of transparency, availability, reliability and security of information about the company. Among the tools of the information and analytical support system of digital management, the following are already in operation today: specialized software services, cloud accounting, online accounting platforms (Wave, Quick-Book, Fresh-Book, etc.), artificial intelligence, blockchain in accounting, joint online platforms for business and state control bodies, mobile accounting and financial reporting programs, etc. Active integration, the formation of a single economic space, joint tasks of socio-economic development within the Eurospace also appears as an argument for the use of digital information and analytical support for the management process. Today, new challenges and requirements are being formed in the space of implementing a single

sustainable development strategy, where digitization, as a future management tool, occupies a key place. The creation and access to a single information base in the context of the implementation of sustainable development tasks will contribute to the saving of resources, time and efforts of all socially responsible agribusiness participants and providers of the concept of sustainable development at all levels of economic and territorial management.

According to (Strategy.uifuture.org., 2021), there is a certain range of obstacles that inhibit the development of digital transformations in Ukraine:

- institutional – those related to state influence, namely, the formation of the appropriate legislative framework and mechanisms for regulating digital transformation processes, the development of strategies for the development of the country, regions, and industries relevant to global trends, which affects the socio-economic plane;
- infrastructural – those related to the formation of digital infrastructure, in particular, the lack of equal access conditions for the population to digital technologies, i.e. «digital gaps», insufficient coverage of the country's territory by digital infrastructure, complete absence of certain types of digital infrastructures common in developed countries;
- ecosystem – those related to innovative aspects, in particular, the lack of proper conditions for the formation of a favorable investment climate in the country, the imperfect market of investment capital, the inconsistency of the current state of education, in the framework of which the necessary professional competencies are not formed, which requires a modern level of entrepreneurial activity, respectively to global trends, the shortage of qualified personnel necessary to ensure the processes of digital transformations in the country.

Considering the chronology of industrial revolutions in the world, it is expedient to track the transformations of the theoretical and practical basis of accounting (Table 1).

Table 1 – Chronology of the development of accounting practice as the basis of information and analytical support in the context of industrial revolutions

Period	Industrial revolution	Management tasks	Accounting tasks
The end of the XVIII century.	Production mechanization, water and steam energy	Expanding the range of resources for production - from human to machine, etc	Expansion of accounting nomenclature of accounting objects
The end of the XIX century	Mass production, electricity from hydrocarbons	Extensive type of production development	Ensuring accounting of nomenclatures with a significant number of objects
1970s of the XX century.	Automation and computerization of production. Atomic energy	Reduction of the specific weight of labor costs in the process of economic activity, intensification of production	Ensuring accounting of nomenclatures with a significant number of objects
From the 80s until now	Cyber-physical production, energy from renewable sources	Use of digital resources in economic activity	Formation of accounting information about digital resources

Source: Prepared by authors based on (Kolyadenko, S., 2016).

At the same time S.V. Kolyadenko, relying on the theory of «long waves» M.D. Kondratiev, notes that the technological order is currently underway, the basis of which is the electronic industry, software, information services and robotics (Kolyadenko, S., 2016).

The study of digitization in information and analytical support is gaining more and more relevance and covers a wide range of theoretical and practical issues.

In their research, I. Spilnyk and M. Palyukh focus attention on assessing the current state, defining the features and prospects for the development of accounting in modern conditions, and also substantiate the relevance of creating a new «digital accounting paradigm».

Among the current issues of accounting practice and theory, they single out the following: the use of contactless asset identification technology in accounting, block

chain technology, electronic reporting format, display of cryptoassets in financial reporting and their accounting.

These scientists single out a number of factors that determined the current state of accounting in the conditions of the digital economy: increasing the rate of development of electronic document circulation; allocation of information as a separate factor affecting the value of business; emergence of new accounting objects (in particular, cryptocurrencies, tokenized assets, etc.); growth of the share of non-financial information in the accounting system of economic entities; changing the financial orientation of target priorities to non-financial ones; change in technical and technological approaches to the collection, accumulation, generalization and processing of accounting information; creation of a global information exchange environment with increased requirements for information security; changing approaches and accounting methods in accounting practice (Spilnyk, I., et al., 2019).

It should be noted the position of N. Rohova, who investigates the implementation of existing digital capabilities in accounting and taxation systems, in particular in the part of regulating the use of cryptocurrency. The researcher offers her own vision of the effectiveness of the implementation of digital technologies in accounting. Thus, artificial intelligence will be aimed at performing tasks that are both routine, repetitive and structured in nature (this will improve the quality of inventory, reporting for strategic purposes, identify problems in the management of the company's cash flows, etc.) and non-standard (formation of models for forecasting the level revenues and cash flows, analysis of changes in supplier prices, improvement of the quality of the results of the analysis of unstructured information coming from various sources). Cloud computing will help ensure access, security, control and backup of data, which will significantly save time for performing all these operations, perform automatic error correction, ensure constant access to data, multi-factor authentication, etc. (Rogova, N., 2020).

O. Mazina, V. Oliinyk and S. Rohoznyi single out certain issues that need to be resolved, in particular those related to new accounting information technologies within the framework of the concept of financial reporting and the impact of digitalization on

the strategic management of enterprises in the context of the COVID-19 pandemic. The development of the issue of assessment in accounting, which is raised by scientists, should be emphasized separately. For the most part, the assessment of accounting objects requires deep justification and the use of appropriate mathematical apparatus (Mazina, O., et. al., 2019). Modern technologies make it possible to increase the efficiency of assessment of accounting objects that existed before the spread of digital transformations, however, new accounting objects that have appeared recently have a certain range of specific characteristics that complicate their assessment, and therefore this issue needs to be refined.

The proposal of O. Mazina, V. Oliinyk and S. Rohoznyi regarding the introduction of an additional principle of accounting – creativity – is, in our opinion, quite relevant and appropriate. The essence of this principle, in their opinion, is the availability of adaptation capabilities of both the personnel and the accounting system itself to new business conditions under the influence of digitization, globalization and integration trends (Mazina, O., et. al., 2019). It should be added that it is not entirely correct to equate creativity with adaptation, since, in our opinion, this principle has a broader interpretation: from the personnel's point of view, it is the ability to make non-standard decisions regarding the resolution of emerging situations in conditions of uncertainty; from the point of view of the accounting system, it is an opportunity to implement and use new methods, methods and approaches in the accumulation, collection and processing of information of various nature from various sources in the process of adaptation to the existing business conditions.

In this case, a dilemma arises, which consists in the fact that the domestic accounting practice provides for clear regulation of the formation of accounting information and reporting, while international standards take into account the professional judgment of the accountant, which should be based on developed and approved recommendations, instructions, etc. However, often situations that arise in the process of management have an increasing share of novelty and differ from previous situations, which is due to transformations in the social and economic life of humanity in general. This encourages the production of new knowledge necessary for

the formation of competencies and skills of specialists in various fields, including in accounting.

Digital trends and the active digitalization of information and analytical support for management call for the need to improve and expand the range of professional skills of managers, accountants and economists, among which the following are relevant for the present and the near future: intelligence and skills in the use of digital technologies; critical thinking, creativity and the ability to perform non-standard professional tasks; vision of future business development prospects; experience, modern communication skills and business forecasting. Accounting standards, a complex of ethical standards and professional skepticism remain the basis of professional behavior.

N. Shyshkova offers her own list of digital competencies of an accountant, related to information literacy, communication and interaction, digital content, security, problem solving (Shyshkova, N., 2019).

As for information literacy, an accountant must acquire a significant number of skills that go somewhat beyond the usual qualifications of this profession, namely: be able to navigate the processes of filtering and selecting data among masses of information in digital content, use neural networks, identify business processes and use modern information technologies in working with accounting information, understanding the specifics of digital audit, etc.

As part of communication and interaction, the accountant must be able to use modern technologies, new platforms and services in the process of interaction with internal and external users of information, while observing the rules of etiquette and behavior that exist within this format of interaction.

An important skill is the creation, modification and improvement of digital content, which also involves knowledge of regulatory and legislative aspects regarding copyright, review policy; ability to use simulation modeling and adapt accounting programs to existing requirements.

The aspect of security deserves special attention, since the accountant is faced with the task of preserving and protecting digital information, which in the framework of the use of digital technologies can become available to fraudsters, competitors, etc.,

because the leakage of information, especially that which belongs to commercial secrets, will negatively affect the economic activity of the business entity.

Digitization involves the emergence of a significant range of technical problems, which an accountant must also be able to solve in the course of his professional activity, therefore, a creative approach to adapting digital technologies to one's own needs in order to solve accounting problems is a rather important ability (Shyshkova, N., 2019).

Creativity in relation to accounting as «intellectualization of accounting information systems» is a rather apt statement that deserves, in our opinion, to become part of the new digital accounting paradigm (Mazina, O., et. al., 2019).

N. Shyshkova summarizes the theoretical aspects of changes in the accounting system in the context of the modernization of socio-economic processes of a digital nature, considering the possibilities of implementing IT technologies in the theory and practice of accounting. She notes that «the consolidation of the IT function with the main requirements for the development of the terminological and substantive and practical basis of accounting is able to ensure the information modernization of modern economic processes» (Shyshkova, N., 2019).

In her opinion, the information economy involves the formation of certain requirements for the modernization of accounting, among which the presence of a programmatic, informational, organizational and methodical component is mandatory. Their synergy as information systems should ensure the functioning of the enterprise and the automation of its business processes. She defines the process of IT modernization of accounting as the transformation of accounting processes through innovations of an institutional, organizational, managerial and economic nature with the use of electronic and digital means for the formation of cyber-physical space within the framework of the accounting system. Its goal is to create the so-called «smart accounting» (Shyshkova, N., 2019).

The review of scientific research shows that digital accounting is significantly different from the existing paradigm. In this way, the existing proposals, in particular in the works of (Pohribniak, D., 2020), are somewhat losing their relevance, therefore

it is appropriate to present a new definition of some basic concepts of information and analytical support of management in the conditions of digitalization (Table 2).

Table 2 – The essence of concepts in the field of information and analytical support of management

Concept	Type of information	Functional influence in relation to information	Objects about which information is provided
Accounting organization	Accounting and economic	Complex of actions on accounting and analytical information	Tangible and intangible accounting objects
Accounting and analytical support	Accounting and analytical	Formation and provision of accounting and analytical information to stakeholders	Tangible and intangible accounting objects
Accounting and analytical system	Accounting and different from it, which is used to make management decisions	Collection, processing, evaluation	Tangible and intangible accounting objects
Accounting and information support	Accounting and different from it, which is used to make management decisions	Formation and provision of accounting and non-accounting information, which is used to make management decisions, to stakeholders	Accounting objects and those different from them, regarding which management decisions are made

Source: Prepared by authors based on (Pohribniak, D., 2020)

Digitization has contributed to a change in the functional impact in relation to information, due to the fact that: paper media are rapidly losing their functionality, and the electronic form is becoming the main form of information presentation; the quality and volume of information has changed - the geometric growth of the volume of information contributes to the complexity of the processes of its processing, as well as orientation in general in the information environment; a significant amount of information is not reliable and up-to-date, which requires additional analysis and verification; the level of danger of leaking information has increased, which requires additional protection and the use of technologies for working with it that will guarantee its preservation and inviolability; the emergence of new accounting objects requires the formation of a new methodological basis for their assessment and accounting, which is necessary for the formation and presentation of information about them to stakeholders.

Today, digital accounting serves innovative business models, for which accuracy, efficiency and reliability of data are an exclusive condition for development, attracting investment flows, building image capital and gaining strategic competitive advantages. Digital accounting technologies are changing the world of big economic information based on the use of automated data analytics, artificial intelligence, digital reporting of companies, making smart contacts and gaining access to online platforms. Such digital tools contribute to increasing the accuracy and efficiency of accounting, transparency and analytics of financial and non-financial reporting of companies, contribute to the growth of the scope of audits, increase their quality, and help to optimize the "cost-time" ratio. Digital accounting acquires a new scale, efficiency, and accuracy. Economic information and methods of its processing are not limited to individual or group work opportunities of accountants, they can be formed on an automated digital basis, improving the quality of accounting, analytical and auditing services. At the same time, digital predictive accounting is determined by the huge development potential.

Accounting and reporting react quite sensitively to changes in users' information requests and have a fairly high potential for adaptability to the needs of participants in

economic relations. The limitations of the legal framework and current national standards are to a certain extent leveled by internal management reporting and business reporting on a voluntary basis (social, environmental reports, sustainable development reporting, etc.).

Leading global companies already have vast experience in organizing and conducting digital accounting, taxation, reporting and auditing. PwC, E&Y, KPMG, Deloitte use artificial intelligence in their practical activities for automatic data analysis, verification of customer documents, compilation and confirmation of reports on cash flows, bank transactions, and assessment of the financial status of customers.

Digital accounting strengthens trust in business and its reporting through transparency, openness and ease of use of economic information by users, serves public and business interests. Accountants are widely using artificial intelligence to assess long-term business value drivers, cloud data and blockchain. The range of consulting issues provided by accounting specialists is expanding in the direction of finding strategic prospects for business development: accounting for sales of goods through the virtual offices of the Meta Universe and creating long-term values and competitive advantages on this basis; optimization of the company's costs due to the use of cloud computing; real-time monitoring of business risks; improvement and verification of blockchain operations; improvement of management based on the creation of predictive data analytics platforms (using the example of EY Smart Factory); consulting services on the Internet of Things; consulting services on intelligent automation of the management process, etc. With the help of modern digital tools, accounting shifts its key emphasis from retrospective analysis, evaluation and presentation of data to forward-looking data analytics, which are necessary for the creation of strategic values and competitive business advantages.

Digital systems of information and analytical management support must meet the requirements and requests of users of economic information. In Ukraine, accounting and financial reporting for general purposes are quite strictly limited by the current regulatory and legal framework. At the same time, active processes of digitization of the national economy are creating new challenges and opportunities for

accounting and reporting. Current accounting theory and practice need changes and additions. Accounting and reporting should collect, systematize and accumulate financial and non-financial data about business processes, business environment, ecological environment, social indicators of development, etc. There is a need for the emergence of new objects and methods of accounting, methods of valuation of virtual assets, information storage technologies, the formation of financial and social and environmental reporting, which in the current mode should provide operational information with the help of digital databases and technical means. Among the tools of the information and analytical support system of digital management in Ukraine today are already working: specialized software services, cloud accounting, online accounting platforms (Wave, Quick-Book, Fresh-Book, information transfer formats (XBRL), artificial intelligence, block chain, joint online platforms for business and state control bodies, mobile accounting and financial reporting programs. The creation of a single information platform for accounting, reporting and taxation with access to a database of owners, investors, managers, and users appears to be promising for domestic practice and regulatory bodies. These processes should be accompanied by the use of new technologies and approaches to the protection and use of economic information.

The spectrum of accounting objects also needs to be supplemented and expanded: in terms of virtual assets, cryptocurrency, relevant calculations and business operations, objects of costs of environmental activities and social responsibility of agribusiness, methodological principles for clarifying the criteria and methods of their assessment, recognition, and reflection in reporting. Such changes require the improvement of the system of national accounting standards, the implementation of the achievements of the accounting methodology in the part of information support for the sustainable development of agribusiness, the addition of general purpose financial reporting with a system of additional indicators and business information.

The development of the digital economy today sets general trends, shapes the requirements and tools of new business models. Taking into account digital trends in activities and quick adaptation, or better yet, proactive transformation of management,

are the key to future success and gaining strategic competitive advantages. Digital accounting, responding to real and potential information requests of users, helps to build effective business development strategies and create long-term value.

Significant intensification of attention to social, economic and ecological aspects of economic management has led to the adoption of a radically new paradigm of social life – a global concept of sustainable development, which is gradually beginning to be reflected in all directions of business operations. Taking into account the principles of sustainable management and increasing investments in sustainable development programs led to an increase in demand for information that characterizes the state of the environment, socio-economic results and the effectiveness of invested funds. Complete, timely and reliable information and analytical support forms the management basis and is necessary. A prerequisite for further transformations and development of sustainable management. In turn, such trends lead to the formation of new requirements for the accounting system and the need to ensure its compliance with trends in business management and social development. The digitalization of accounting processes and the formation of company reports appears as a promising tool for performing these tasks in modern practice.

In the context of the active implementation of the global concept of sustainable development, accounting turns into the most important tool for its successful implementation in business practice, which is impossible under modern conditions without taking into account the trends of digitization of the economy and society. Sustainable accounting is gradually becoming a requirement of time and a way to increase the level of transparency, quality and compliance of data on business activities with the goals of sustainable development of the company. Sustainable accounting in modern scientific literature is interpreted as a tool for ensuring sustainable development and preparing corporate financial and non-financial reporting (Varaniute, V., et al., 2022; Zhuk, V., et al., 2020]. From the point of view of complementarity of its main components, sustainable accounting is defined as a combination of environmental, social accounting and business capital accounting.

The study of deficit contours and the content of sustainable accounting made it possible to determine that its key distinguishing feature from traditional accounting is the accumulation, systematization and display in reporting of information that reflects all aspects of the business entity's activity and is related to the implementation of business goals and sustainable development goals .

Accounting for sustainable development is a form of activity that is determined by the key strategy of the company's activity and a tool of activity that provides influence on the company, business environment, competitors, partners, investors and other stakeholders. However, the classical conceptual framework does not extend to non-financial quantification, social or environmental activities. As sustainable management spreads, sustainable accounting is also developing, which is reflected in new business models and additional forms of company reporting (environmental reports, social reports, reports on sustainable development, etc.). Companies use such integrated reporting to create new inclusive business models, build image capital, and find additional sources of funding. Such trends in modern practice are increasingly spreading in the practice of domestic management and are manifested in an increase in the number of reports containing non-financial indicators of the development of companies. According to domestic researchers, in Ukraine today about 13% prepare reports in accordance with GRI standards (Gutsalenko, L., et al., 2021), significant activity is observed in supplementing the internal management reporting of companies with a system of non-financial performance indicators (Makarenko, I., 2017). The configuration of the digital architecture of the national accounting system, as defined by I.M. Nazarenko, combines the following components: automation of accounting, introduction of electronic documents and multidimensionality of accounting data, expansion of means of data collection through digital platforms and the Internet of Things, expansion of means of information transmission to management personnel (Nazarenko, I., 2021).

Sustainable accounting should ensure full satisfaction of the needs of information users in financial and non-financial indicators of activity, reduce to a single report a set of reports, which today are partly mandatory, and partly prepared by business entities on

a voluntary basis. This involves the formation of a set of reports (financial and non-financial) into a single integrated system, which will be universal and understandable for all users based on the format of data presentation and their interpretation (Fig. 2).

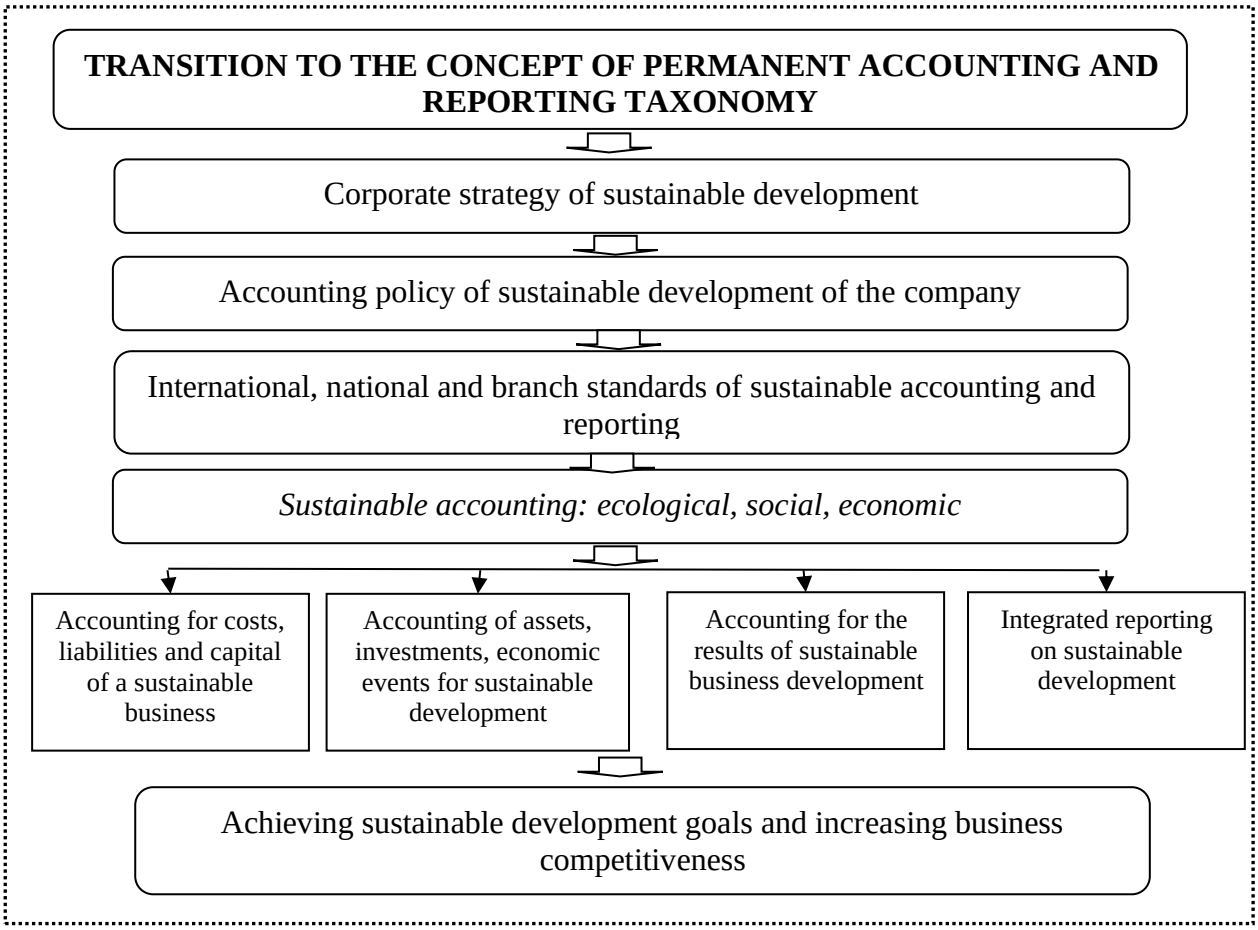

Fig. 2. Model of transition to the concept of sustainable accounting of business entities

Source: Own research

For this, today's need is to expand the articles of the «Financial Status Report», methodical approaches to standard classifications of expenses and income, supplementing notes with integral indicators of sustainable development, working out the mechanism for displaying risks, and the mechanism for managing them. One of the most fundamental and debatable aspects in the theory of sustainable accounting today is the issue of accounting for natural assets that have a direct impact on the processes of sustainable management, however, they appear in a dual essence from the standpoint

of ownership and methodological provisions for their reflection in accounting and reporting.

The transition to the concept of sustainable accounting and sustainable reporting requires an appropriate regulatory and methodological basis, an example of which can be the Draft International Standard for Disclosure of Information on Sustainable Development, which defines the key principles and requirements for the disclosure of information related to sustainable development in financial reporting : General Requirements for Disclosure of Sustainability-related Financial Information, developed by ISSB (The IFRS Foundation, n.d.).

The special importance of sustainable development standards lies in the possibility of future assessment of the impact of the costs of implementing sustainable development programs on the financial condition and results of the business, the projected amount of cash flows, the effectiveness of the business strategy and the value of the enterprise as a whole. The draft International Standard has significant differences from existing international accounting and financial reporting standards. Considerable attention is paid to the mechanism of managing sustainable development processes at the company level (strategy, goal, management structure, management policy, risk management, control, management comments, etc.). Today, this project has passed an open public discussion and is undergoing the procedure of making additions and amendments.

Sustainable accounting, like all other management functions of the modern digital economy, is being transformed based on the use of digital tools that accompany business processes of social development. Experts characterize accounting as one of the areas that can benefit the most from digitization, with accounting processes having the potential to be 98% automated (Frey, C., et. al., 2015).

With the development of digitalization of the economy, the purpose of accounting is also changing, which is designed to record the manifestation of new principles and laws in the realities of new economic relations (Thipwiwatpotjana, S., 2021). At the same time, accounting is acquiring more and more features of a managerial nature, as the most important element of digital information and analytical

support for management (Potryvaieva, N., et. al., 2020). The subject area of digital accounting objects is also expanding, to the traditional list of which are added: valuation of virtual units of value, capitalization of intangible factors of sustainable socio-economic development, valuation of environmental security objects of socio-economic assets, digital data, cryptocurrency and their corresponding display in business reporting. This requires improvement of accounting in the direction of approbation of new methods, emergence of new areas and methods.

According to the research of foreign experts (Dan Marius, C., et al., 2022), world practice singles out the following as the main advantages of digital accounting: increasing the efficiency of accounting due to the automation of accounting processes (availability, productivity, efficiency, economy, elimination of the risk of human errors); real-time tracking and access to accounting; the possibility of remote access and work for accountants; possibilities of virtualization of accounting processes and display of accounts that automatically reach each party participating in economic transactions.

As the main tools of digitalization of accounting, the following are already actively used in the world today: blockchain technologies; spreadsheets; The system of accumulating and storing information using computer clouds – «cloud accounting»; mobile accounting and reporting programs; technologies of optical recognition and contactless identification of data (Kryukova, I., 2021); the use of artificial intelligence in the creation of company reports and in the use of mechanisms of control, audit, tax administration, the formation of digital platforms based on the accumulation and systematization of economic and non-economic information. The use of digital tools such as Making Tax Digital, Payroll, Xero, App, QuickBooks and Free Agent are no longer innovations.

According to the global agency Accounting Today, the market for digital accounting products will grow annually by 8.6% per year, and its total value in 2026 will be is more than 11.7 billion dollars. USA (Outlook MONEY.com, 2022).

Digitization in the field of accounting and financial reporting today helps to increase business capital and increase its value. Thanks to its flexible and transparent

mechanisms, digitalization can help transform the traditional accounting of costs, liabilities, results of assets and capital instruments into accounting of sustainability and accounting of values.

In modern management practice, the processes of digitization of accounting and reporting are developing in the context of using modern corporate management platforms, following the example of ESG (Environmental, Social, and Corporate Governance). As a result, companies conducting their business on the basis of sustainable development form their reporting in the digital plane using large electronic data arrays and digitization of the reports themselves.

The use of platform accounting technologies makes it possible to guarantee the efficiency of data on accounting events and records, ensure the efficiency of receipt of primary documents to partners, minimize the risk of errors and the need to agree on joint settlements and debts. In the context of active processes of digitization of the economy in general, and accounting, in particular, the requirements and the range of competencies of accounting and reporting specialists are also changing. Today, they acquire professional skills as analysts, IT specialists, consultants, business strategists, etc.

At the same time, the disadvantages of digital accounting and reporting today are: absolute dependence on the availability and quality of Internet traffic, data security, aspects of user personalization, reorganization and reduction of the sphere of social contacts in the business sphere of communication of specialists (accountants).

The process of transforming a company into a digital accounting firm, in addition to the direct use of digital tools and methods of work in practical activities, requires the following organizational prerequisites: 1) development of digital business thinking; 2) preparation of the organizational management structure for digital changes; 3) acquisition of digital knowledge and skills; 4) formation of a new corporate management culture. The company's personnel must be ready for the use of digital technologies, communication, innovative changes and the need for constant improvement of the performed functions (Tettamanzi P., et. al., 2022). Digital transformation requires the manifestation of leadership qualities of managers and key

specialists, who must provide intellectual stimulation, a high level of communication and the ability of personnel to manage changes.

The preliminary discussion of the project of the International Standard for disclosure of information about sustainable development (General Requirements for Disclosure of Sustainability-related Financial Information) outlined the longer directions of its improvement for the formation of appropriate business reporting. Key among them were: business value and methods of its assessment and display; assessment of risks associated with the sustainable development of companies; a strategy for making management decisions related to sustainability; resilience to climate change; issues related to the financing of sustainable development programs; industry requirements for sustainable business development. According to the outlined directions, issues related to user access to the necessary information on sustainable development require solutions today. To ensure such access, an optimal digital solution will be a digital platform that will ensure the integration of participants in the preparation and submission of environmental, social and management reporting according to sustainable development standards, their developers, professional agencies (auditing, consulting), academic researchers, government working groups and other users.

Accounting on the basis of sustainable development and the preparation of relevant reports require additional training and acquisition of new skills of the accounting staff. Online learning methods (SkyPreP, LearnUpon, ProProfs, LeapSome) and professional trainings on specialized accounting platforms, digital services (LumAPPs) that allow creating communication opportunities for teamwork and increasing the level of involvement of company personnel in concepts of sustainable development, corporate IT platforms for personnel management (LMS).

One of the key problems of modern information management is the cost of such management and the quality of information flows. According to the CDSB Standards Board (Climate Disclosure Standards Bord), today the reporting of the world's leading companies that adhere to the concept of sustainable development lacks transparency,

accessibility, comparability and data quality (IFRS.com., n.d.; Priobrazhenskaya, V., 2019).

To solve this strategic task, the International Institute of Management Accountants (IMA) has developed a brief overview of the digital transformation of business reporting under the conditions of the fourth industrial revolution. This review provides useful recommendations for the development of a basic digital taxonomy to complement the European Corporate Sustainability Reporting Directive (CSRD). The directions for the implementation of this initiative in the near future should be: 1) increasing the level of digital literacy of specialists and users of financial and non-financial reporting; 2) creation of integrated online platforms of economic and non-economic data bases accessible to all users; 3) ensuring cyber security of corporate data; 4) use of information and communication technologies for data management, assessment of their quality and value.

At the current stage, the digitalization of accounting is only becoming more widespread, and its predominant products are specialized mobile services, spreadsheets, and digital reporting. At the same time, the International Auditing Standards Council (IFAS) today notes the following shortcomings of digital reporting:

1) significant costs for use;

2) inconsistency of methodological approaches and the general taxonomy of digital reporting, in particular, on sustainable development;

3) low level of integration into the system of a single digital reporting platform of financial structures (banks, stock exchanges that use reporting as a prerequisite for a company's admission to financial markets);

4) low general demand for digital reporting of companies;

5) the need for further closer cooperation and coordination of digital accounting and reporting with auditing and insurance companies (IFRS.com., n.d.);

6) the lack of development of specialized digital platforms, which today could fully satisfy the information technology needs of sustainable accounting and reporting.

At the same time, the latest trends in digitization of accounting, in particular, in the field of information and analytical support for sustainable management,

significantly expand the prospects of strategic accounting of the future (Varaniute, V., et al., 2022). Information and communication technologies form a powerful plane of advantages, allow accounting to achieve a fundamentally new result, improve accounting practice and audit, provide support for effective management decisions and manage a more reliable socially responsible business, which is necessary for current and future generations.

Digitization of accounting is an opportunity to intensify the processes of harmonization and unification of accounting and reporting, through which the national system is gradually moving today. The implementation of digital tools, which are united by the general global goal of achieving the goals of sustainable development, integrates the national accounting and reporting system into the global space, brings it closer to the leading practice of recording and using data, promotes the transformation of organizational management structures according to key trends and requirements of the global socio-economic community. The result of the digitization of accounting is not only the acceleration and facilitation of access to information flows, but also the improvement of management decision-making technologies, strategically oriented to the creation of strategic social values, which are a priority for the further development of most developed countries. Thus, digitalization of accounting is a flexible and effective mechanism for integrating the national economy into the global economic space, where global goals, objectives and tools for their achievement coincide.

Thus, the new technological structure encourages transformations in all spheres of socio-economic life, while also affecting the information and analytical support of management, with its key element – accounting. New tasks in the management of business entities contribute to the formation of specific requests that require appropriate accounting and analytical support. The conducted studies allow us to conclude that the field of accounting is one of the first in terms of global automation of management processes and the most promising from the point of view of further digitalization. The need of business and management for high-quality, complete and transparent information will only increase. At the same time, taking into account global trends and requirements, information requests in the field of opportunities and results

of sustainable management will grow, the timely satisfaction of which is possible only at the expense of sustainable accounting based on digitization. The formation of unified information and analytical platforms, the compilation of reports on sustainable business become the necessary analytical basis for achieving the goals of sustainable development both on a national and global scale. Digital accounting and reporting tools will form the necessary basis for the integration of participants in global processes of sustainable development, which will allow for the unification of national efforts and the solution of vital social tasks for the entire world to ensure a decent level of quality of life for current and future generations.

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