

УДК 657.1

DOI: <https://doi.org/10.32782/business-navigator.78-5>

Havrylets Olesya

Ph.D. in Economics, Associate Professor of Department of Accounting,
Taxation and Marketing
Mukachevo State University

Bilak Oleksandr

Postgraduate Student
Mukachevo State University
Director
LIC "Alternativa-Zakaratta"

Khoma Serhiy

Postgraduate Student
Mukachevo State University

Гаврилець О.В.

кандидат економічних наук, доцент,
доцент кафедри обліку і оподаткування та маркетингу
Мукачівський державний університет

Білак О.М.

аспірант
Мукачівський державний університет
директор
ТОВ "Альтернатива-Закарпаття"

Хома С.В.

аспірант
Мукачівський державний університет

DIGITAL BUSINESS MANAGEMENT: ASPECTS OF CONTROL AND OVERSIGHT OF BUSINESS OPERATIONS

ЦИФРОВЕ УПРАВЛІННЯ БІЗНЕСОМ: АСПЕКТИ КОНТРОЛЮ ТА НАГЛЯДУ ЗА ДІЛОВИМИ ОПЕРАЦІЯМИ

The modern business environment has been transformed by the rapid advancement of digital technologies. Integrating digital tools into business management processes changes operational models and creates new opportunities and challenges for the proper conduct of business operations. Digital technologies enable effective management, enhance transparency, reduce risks, and improve decision-making at all levels of the organization. Along with the advantages, implementing digital solutions requires careful consideration of control and oversight of business operations, as this determines financial stability and ensures compliance with security and ethical standards. Thus, the article aims to explore the significance of digital technologies for improving management processes, ensuring effective control, and identifying potential problems and risks that arise when implementing digital management systems.

Key words: digital solutions, business, organizational processes, optimization, process automation, control, oversight, operations.

Сучасне бізнес-середовище переживає трансформацію, зумовлену швидким розвитком цифрових технологій. Інтеграція цифрових інструментів у процеси управління підприємствами не лише змінює операційні моделі, але й створює нові можливості та виклики для належного проведення ділових операцій. Відтак, метою статті є розкриття значення цифрових технологій для покращення управлінських процесів і забезпечення ефективного контролю, а також виявлення потенційних проблем та ризиків, що виникають при впровадженні цифрових систем управління. У процесі дослідження було виявлено, що навіть цифровізовані системи управління бізнесом не є бездоганними. Помилки в програмному забезпеченні або неправильні налаштування управлінських систем можуть призвести до негативних наслідків, таких як неточні фінансові звіти або збитки через некоректні ділові операції. У цьому контексті важливою є роль цифрової трансформації в системах контролю та нагляду за діловими операціями, оскільки вона дозволяє мінімізувати ризики та забезпечує більш ефективне управління в умовах змінюваного бізнес-середовища. Цифрова трансформація

в системах контролю та нагляду за діловими операціями передбачає суттєві зміни в організації та управлінні цими процесами. Основними напрямками цієї трансформації є: загальна автоматизація процесів контролю та нагляду за діловими операціями підприємства; побудова процесів контролю та нагляду за діловими операціями за допомогою засобів бізнес-аналітики; інтеграція алгоритмів штучного інтелекту та машинного навчання в процеси контролю та нагляду за діловими операціями; забезпечення прозорості та незмінності записів про ділові операції для подальшого моніторингу транзакцій; ведення дистанційної компоненти для кожного з процесів контролю та нагляду за діловими операціями. Таким чином, цифрова трансформація в системах контролю та нагляду за діловими операціями сприяє не лише підвищенню ефективності та точності, а й знижує ризики помилок та маніпуляцій, забезпечуючи більш надійний і прозорий контроль. Перспективи подальших досліджень полягають у вивченні шляхів удосконалення цифрових систем контролю та нагляду за діловими операціями з урахуванням новітніх технологій.

Ключові слова: цифрові рішення, бізнес, процеси організації, оптимізація, автоматизація процесів управління, контроль, нагляд, операції.

Statement of the problem. The modern business environment is undergoing a transformation driven by the rapid development of digital technologies. Integrating digital tools into business management processes changes operational models and creates new opportunities and challenges for the proper conduct of business operations. In particular, digital technologies enable more efficient management, enhance transparency, reduce risks, and improve decision-making at all levels of the organization.

However, along with numerous advantages, implementing digital solutions requires careful consideration of control and oversight of business operations, as this not only determines financial stability but also ensures compliance with security and ethical standards [5]. As a result, issues of digital business management are becoming increasingly important, particularly the control of operational activities of enterprises in the digital environment.

Analysis of recent research and publications. The general principles of control and oversight of business operations are extensively covered in the works of scholars such as Hutsalenko L.V., Podolyanchuk O.A., Bralatan V.P. [1], Patramanska L.Yu. [3], Dorosh N.I., Fesai M.O. [2], as well as several other researchers. These works mainly examine the characteristics of control and oversight, but also a general analysis of their essence helps to understand the fundamental definitions of these concepts. The mentioned approaches contribute to a clear understanding of the content of control and oversight, which is important for their widespread application in the practical activities of organizations.

At the same time, it is worth noting that the issue of control and oversight of business operations, which gains particular significance in digital business management, remains insufficiently studied. With the development of digital technologies, the mechanisms and tools used for monitoring, analyzing, and evaluating business operations

are undergoing significant changes. Important issues include the implementation of automated monitoring systems, the use of artificial intelligence and machine learning to detect anomalies and risks, as well as the integration of analytical platforms to ensure process transparency.

Formulation of the research task. The article aims to reveal the significance of digital technologies for improving management processes and ensuring effective control, as well as to identify potential problems and risks that arise when implementing digital management systems.

Summary of the main research material. It is important to agree with Patramanska L.Yu. [3] that, in the context of digital transformation, enterprises are transitioning to various software solutions, platforms, and tools to facilitate the implementation of control, analysis, and optimization processes for business operations.

Thus, within the framework of the outlined research, digital business management is interpreted through the lens of applying modern digital technologies, which, in addition to transforming organizational processes and optimizing and automating management operations, bring to the forefront issues of control and oversight of business operations.

The актуалізація of control and oversight of business operations is driven by the fact that digital technologies significantly alter the ways of managing business, and despite their numerous advantages, they create various challenges and risks that require effective control and oversight (see Figure 1).

A digitized business management system is not flawless, as errors in software or in the configuration of management systems are always possible. When accumulated systematically, these errors can lead to unexpected outcomes, such as incorrect financial reports or losses due to inaccurate business operations.

Thus, in the context of digital transformation, control and oversight of business operations play a critical role,

Direction - Data security and protection	Direction - Transparency and regulatory compliance	Direction - Change forecasting
Direction - Risk management and decision-making	The control and oversight of business operations	Direction - Preservation of corporate culture and employee effectiveness
Direction - Adaptation to technological changes	Direction - Efficiency and resource optimization	Direction - Timely response to changes

Figure 1. Basic factors driving the actualisation of control and oversight of business operations

Source: compiled based on [1-3]

which can be detailed by activity, management level, and the scope of the processes covered (see Table 1).

At the same time, the outlined processes for control are more operational and focused on directly influencing current processes, while oversight is oriented towards higher management levels [2]. Conceptually, business operations are a set of various economic and organizational actions carried out by an enterprise in day-to-day activities to achieve established goals, meet market needs, and ensure effective performance and profitability [1]. The outlined statements are supported by the following specifics of the application of digital technologies in the control and oversight of business operations [1; 3-4; 6]:

1. Overall automation of the processes of control and oversight of the enterprise's business operations.

2. Building control and oversight processes for business operations using business analytics tools.

3. Integration of artificial intelligence and machine learning algorithms into the processes of control and oversight of business operations.

4. Ensuring transparency and immutability of records for business operations to facilitate further transaction monitoring.

5. Managing the remote component of each process of control and oversight of business operations

Thus, control and oversight of business operations are not only about ensuring security and compliance, but also about maintaining high efficiency, adaptability, and responsiveness to changes to ensure the successful functioning and development of the business. Let us examine in detail each of the defined areas of control and oversight of the enterprise's business operations.

So, the overall automation of control and oversight processes for business operations is interpreted as the implementation of digital technologies to replace manual management with automated systems to perform monitoring, analysis, and management of business processes [4]. The core features of such automation are: real-time digital monitoring; integration with existing management business systems; automatic compliance

assurance; electronic document management and reporting (see Table 2).

The overall automation of control and oversight processes for business operations significantly enhances the efficiency, accuracy, and speed of performing checks and monitoring.

Building control and oversight processes for business operations using business analytics tools involves implementing effective modern analytical tools and monitoring technologies, as well as general observation of a set of interconnected tasks and measures aimed at achieving a specific goal or outcome of activities [5]. The core features of such a structure are as follows: an approach to decision-making; automated monitoring and observation of changes in key indicators; integration of collected data into a unified database; selection of visually understandable data to reflect complex processes and indicators; automatic detection of anomalies and risks; ensuring transparency and compliance with regulations (see Table 3).

In unity, these core processes automate and adapt to the specific task requirements of the technology for collecting, studying, and interpreting information about the business operations of the enterprise.

Ensuring the transparency and immutability of records for business operations for subsequent transaction monitoring creates conditions for the accurate, reliable, and secure storage of information about each transaction, with the ability for further analysis and verification [1-2]. The core features of transparency and immutability of records are as follows: an open system that allows for the verification of completed operations at any time; the preservation of transaction records in strict sequence; electronic digital signatures or other mechanisms for identifying the transaction owner; automatic tracking of changes; ensuring the protection of private data through access to only the necessary information. These features enable the maintenance of control and oversight systems that ensure transparency and immutability of records, thereby enhancing the reliability of business operations.

Table 1

The difference in the aspects of control and oversight of business operations

	Control of business operations	Oversight of business operations	Core differences
Format	Active tracking, monitoring, and adjustment of actions to ensure the achievement of set goals and standards.	Observation, inspection, and providing general guidance or recommendations, without direct intervention in the processes.	Activity Control is an active process, while oversight is a passive process.
Goal	Check whether operations are carried out according to established plans, policies, or norms.	Ensure that the enterprise's activities are properly organized, compliant with regulations, standards, and legislation.	Management Level Control is carried out at the level of operational departments or managers, while oversight is performed by senior management.
Typology	Pre-control, current control, post-action control	Absent	Scope Control focuses on specific business operations and their compliance with plans, while oversight covers broader aspects and processes, such as adherence to rules and standards.
Example	The process of verifying and monitoring expenses based on the approved budget and taking corrective actions for any deviations from the budget.	Internal auditors oversee compliance with legislation and corporate standards, such as in the areas of finance, environmental protection, or workplace safety.	

Source: compiled based on [2; 4]

Table 2

Core features of automation of control and oversight processes for business operations of the enterprise

Core features of automation	Features of automation	Basic areas of automation
Real-time digital monitoring	Continuous collection and analysis of data from business processes, detection of anomalies and deviations in data.	Automatic reconciliation of financial transactions, data collection on physical assets, etc.
Integration with existing management business systems	Integration of information flows from ERP, CRM, and SCM for centralized management and control.	Interaction of control systems with ERP (Enterprise Resource Planning), CRM (Customer Relationship Management), and other corporate platforms.
Automatic compliance assurance	Continuous verification of processes for compliance with regulatory and legal requirements with minimal human intervention.	Monitoring the compliance of actions by officials with regulatory requirements and internal company policies, automation of reporting to regulatory authorities.
Electronic document management and reporting	Automatic creation, verification, and storage of documents, as well as report generation for management and regulators.	Implementation of systems for creating, verifying, processing, and storing documents in digital form. Tracking and auditing changes in documentation.

Source: compiled based on [1; 3-4]

Table 3

Core features of building control and oversight processes for business operations using business analytics tools

Core features of building control and oversight processes	Features of building control and oversight processes	Basic directions for building control and oversight processes
Analytical approach to decision-making	Using accumulated data to support management decisions	Development of analytical models and planning potential management decisions
Automated monitoring and observation of changes in key indicators	Real-time tracking of changes in key indicators, with notifications of deviations	Application of business analytics platforms for automating monitoring, such as Power BI (Microsoft), Tableau, Qlik Sense, SAP Analytics Cloud, Google Data Studio, etc.
Integration of collected data into a unified database	Consolidation of data into a unified information system, ensuring data access for different management levels	Creation of a centralized database and development of interfaces for data exchange
Selection of visually understandable data to reflect complex processes and indicators	Implementation of graphs, charts, and interactive dashboards for clear data presentation	Development of information dashboards and use of data visualization tools
Automatic detection of anomalies and risks	Use of machine learning algorithms and analytical tools to detect atypical situations and issues	Integration of risk analysis methods and automatic alert systems
Ensuring transparency and compliance with regulations	Creating conditions for transparent reporting, documenting actions, and aligning processes with standards and legal requirements.	Ensuring compliance with regulatory requirements and implementing reporting for internal and external needs

Source: compiled based on [1-2]

The implementation of a remote component in the processes of control and oversight of business operations involves transitioning to an organization that allows for the monitoring, verification, and management of various economic and organizational activities regardless of geographical location. The core features that indicate the presence of a remote component are: the use of software; the use of specialized analytical systems, platforms, and online dashboards; the use of mobile devices, applications, and cloud services (see Table 4).

The remote component not only enhances the overall efficiency of control and oversight processes for business operations but also minimizes costs associated with physical interventions or checks by internal controllers

and auditors, contributing to greater flexibility in their work.

Conclusions. The research revealed that even digitized business management systems are not flawless. Errors in software or incorrect settings in management systems can lead to negative outcomes, such as inaccurate financial reports or losses due to improper business operations. In this context, the role of digital transformation in business operations control and oversight systems is crucial, as it helps minimize risks and ensures more effective management in a changing business environment.

Digital transformation in business operations control and oversight systems involves significant changes in the organization and management of these processes. The main

Core features of implementing a remote component in the processes of control and oversight of business operations using business analytics tools

Core features of implementing a remote component	Features of using a remote component	Basic directions for using the remote component
Use of specialized software	Use of software for automatic collection, analysis, and reporting of business operations without the need for physical intervention	Automation of processes for collecting, analyzing, and reporting on business operations
Use of analytical systems, platforms, and online dashboards	Use of analytical systems, platforms, and online dashboards to track operations in real-time	Real-time tracking of all or specific business operations, automatic anomaly detection
Use of mobile devices, apps, and cloud services	Use of mobile devices, apps, and cloud services for remote monitoring and management of operations	Ensuring mobility of control and monitoring processes, providing access to data from any location

Source: compiled based on [1-2; 6]

directions of this transformation are: overall automation of business operations control and oversight processes; building control and oversight processes for business operations using business analytics tools; integrating artificial intelligence and machine learning algorithms into business operations control and oversight processes; ensuring transparency and immutability of business operation records for further transaction monitoring; implementing a remote component for each of the business

operations control and oversight processes. Thus, digital transformation in business operations control and oversight systems not only enhances efficiency and accuracy but also reduces the risks of errors and manipulation, ensuring more reliable and transparent control.

The prospects for further research lie in exploring ways to improve digital systems for control and oversight of business operations, taking into account the latest technologies.

References:

1. Hutsalenko L. V., Podolyanchuk O. O., Bralatan V. P. et al. (2012) Teoretychni ta naukovo-praktychni aspekty ekonomichnoho kontrolyu: monohrafiya [Theoretical and scientific-practical aspects of economic control: monograph]. Vinnytsya: VP "Edel'veys i K", 344 p. (in Ukrainian)
2. Dorosh N. I., Fesay M. O. (2018) Metodolohichni aspekty otsinky audytorom vnutrishn'oho kontrolyu na pidpryyemstvi [Methodological aspects of the auditor's assessment of internal control at an enterprise]. *Naukovyy visnyk Natsional'noyi akademiyi statystyky, obliku ta audytu – Scientific newsletter of the National Academy of Statistics, the subject of auditing*, vol. 1-2, pp. 68-77.
3. Patramans'ka L. Yu. (2017) Klyuchovi aspekty kontrolyu osnovnoyi diyal'nosti pidpryyemstv e-komertsiyi [Key aspects of monitoring the main activities of e-commerce enterprises]. *Efektivna ekonomika – Effective economy*, vol. 9, Available at: <http://www.economy.nayka.com.ua/?op=1&z=5774> (accessed August 29, 2024).
4. Stepanenko V. O. (2023) Orhanizatsiya vnutrishn'oho kontrolyu operatsiy z osnovnymy zasobamy [Organization of internal control of operations with the main features]. *Ekonomika ta suspil'stvo – Economy and marriage*, vol. 51, DOI: <https://doi.org/10.32782/2524-0072/2023-51-57> (accessed August 29, 2024).
5. Rudych O. O., Herasymenko I. O., Tkachenko K. V. (2016) Sut' ekonomichnoyi stiykosti pidpryyemstv ta protsesu yiyi zabezpechennya [The essence of the economic stability of enterprises and the safety of the process]. *Innovatsiyna ekonomika – Innovation economy*, vol. 11-12, pp. 74-76.

Список використаних джерел:

1. Гуцаленко Л.В., Подолянчук О.А., Бралантан В.П., та ін. Теоретичні та науково-практичні аспекти економічного контролю: Колективна монографія. Вінниця : Вид-во ПП «Едельвейс і К», 2012. 344 с.
2. Дорош Н.І., Фесай М.О. Методологічні аспекти оцінки аудитором внутрішнього контролю на підприємстві. *Науковий вісник Національної академії статистики, обліку та аудиту*. 2018. № 1-2. С. 68-77.
3. Патраманська Л.Ю. Ключові аспекти контролю основної діяльності підприємств е-комерції. *Ефективна економіка*, 2017. № 9. URL.: <http://www.economy.nayka.com.ua/?op=1&z=5774>
4. Степаненко В. О. Організація внутрішнього контролю операцій з основними засобами. *Економіка та суспільство*. 2023. № 51. <https://doi.org/10.32782/2524-0072/2023-51-57>
5. Рудич О.О., Герасименко І.О., Ткаченко К.В. Сутність економічної стійкості підприємств та процесу її забезпечення. *Інноваційна економіка*. 2016. № 11-12. С. 74-76.



МУКАЧІВСЬКИЙ ДЕРЖАВНИЙ УНІВЕРСИТЕТ

89600, м. Мукачево, вул. Ужгородська, 26

тел./факс +380-3131-21109

Веб-сайт університету: www.msu.edu.ua

E-mail: info@msu.edu.ua, pr@mail.msu.edu.ua

Веб-сайт Інституційного репозитарію Наукової бібліотеки МДУ: <http://dspace.msu.edu.ua:8080>

Веб-сайт Наукової бібліотеки МДУ: <http://msu.edu.ua/library/>