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RESEARCH ARTICLE

Utilising Financial Analysis to Improve Business Management: Trend Analysis and Decision-Making Process Optimisation

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ABSTRACT

The issue of actualizing the phenomenon of financial analytics as an effective tool for managing and controlling business processes is becoming of paramount importance amid the active development of the transformation of the Ukrainian economic space. This situation is exacerbated by the digitalization of financial and economic processes, as well as the trend of global integration of the economic space. The study aims to analyze current trends in the development of the financial and analytical sphere as an effective management tool. The research was carried out using the following general scientific methods: multidisciplinary analysis, synthesis, specification, abstraction, induction and deduction, and formalization. The authors assessed the risks involved in the implementation of financial analysis, as well as the vectors of predictive development of its algorithm in the future. It has been found that the digital transformation of financial analysis processes is currently seen as an inevitable optimization stage in the development of the business environment. The authors have identified several dangers related to the use of artificial intelligence in financial analysis within the general trend of digitalizing accounting and economic procedures. The article substantiates that modern digitalization tools create an opportunity to simplify the processes of collecting and accumulating financial information. It has been proven that the implementation of effective financial analysis allows making effective management decisions in business processes. The results of the study may have practical value for optimizing economic activities.

INTRODUCTION

The need to optimize the business management system is becoming one of the most pressing issues of economic activity in the context of active transformation and globalization of financial and economic processes. Its priority lies in the use of financial analysis capabilities in terms of modern innovation opportunities.

The current practice of business processes convincingly demonstrates the significant impact of digitalization trends in business, in particular, accounting and controlling. In this regard, the issue of

studying the variability of optimizing financial analysis procedures and approaches, given the availability of digitalization tools, becomes extremely relevant. Furthermore, the identification of risks related to the processes mentioned above is a necessary concomitant task.

The research of certain aspects of this issue has been studied by various scholars (Arefieva & Derihin, 2021; Kuprina et al., 2022). However, these works can be described as fragmented. They reveal only general theoretical aspects of the financial analysis process in the traditional context. This issue has also received considerable attention in the scientific papers by Burkova and Shepeliuk (2023), Goncharova (2020). These authors explore the essential conceptual approaches to effectively managing business processes within a transformational economy. Despite the considerable scientific achievements, it should be emphasized that further scientific analysis is required. The issues of developing a financial analysis strategy in the age of economic processes digitalization have been addressed by scientists in a selective format. Additional attention should also be paid to the development of practical algorithms for implementing the capabilities of digitalization technologies as part of the financial analysis process.

The latter is currently viewed as a dynamic concept whose full functionality still needs to be explored and requires further scientific analysis. Therefore, despite the undeniable significance of scientific achievements, the issues of an effective financial analysis process as a business management tool, as well as the formation of a system of requirements and approaches to its implementation, require more detailed study.

The purpose of writing a scientific article there is a substantiation of the role of modern modification of financial analysis in effective business management, as well as highlighting the main directions and opportunities for optimization of the researched process.

LITERATURE REVIEW

The theoretical and methodological framework of this study is formed based on the results of scientific research by Ukrainian and foreign scholars. These authors address several problematic issues of implementing financial analysis procedures, including:

- Digital technologies in business processes.
- The need for effective control.
- Identification of the role of financial analysis in modern business strategies.

The issues of financial analysis development and its role in business management have gained considerable relevance in modern scientific circles. Many studies (Koval, 2022; Tkal, 2023; Sirenko & Semeniuk, 2023) are mainly devoted to the methodological and technical aspects of financial analysis, classification of procedures and mechanisms, description of approaches to implementation. At the same time, the scientific achievements of some modern authors (Ostapchuk, 2022; Kashchena & Horoshanska, 2023) have an obvious advantage. They offer an integrated approach to the implementation of financial and analytical activities.

By analyzing the role of financial analysis tools in modern business management strategies, some scholars (Kuzhda, 2023; Sadoviak et al., 2023) focus on the effectiveness and multifactorial impact of innovative capabilities of digital tools on the development of business processes and successful market positioning of companies. Vyhaniailo and Viunenko (2021), Wołowiec et al. (2022) emphasize the need to update the procedures and approaches of financial analysis in line with the identified trends. In addition, some scholars

(Dzhyhora & Gasimov, 2022; Sitinjak et al., 2023) devote their studies to the analysis of successful experience of partial or complete digitalization of financial and analytical processes.

The publications of several contemporary scholars (Sergiienko et al., 2020; Mazur et al., 2021) show that modern digitalized financial analysis systems create maximum opportunities for effective management of business processes. According to some experts (Gao, 2022), the effects of global economic integration processes have accelerated transformational changes. As a result, business structures that ignore the digital transformation of financial processes today are losing great opportunities and benefits.

Yubo (2021), Xianglan and Xingfeng (2020) have also thoroughly characterized the companies' fundamental approaches to implementing digitalized financial analysis tools and evaluated their effectiveness in managing business activities.

However, without diminishing the scientific achievements of contemporary scholars, it is worth emphasizing the relevance of the practical implementation of digitalization capabilities in the traditional financial analytics system.

We should also identify its impact on business management processes. There are still some unresolved issues regarding forming a universal concept of financial and analytical activities that can respond quickly to dynamic changes in the business environment and the rapid development of the digitalization of economic processes. Such circumstances necessitate further scientific research in this area, as well as their detailed and in-depth study.

METHODS

A set of general scientific methods of cognition served as the methodological basis of the current study. These methods include logical, functional, structural analysis, generalization, specification, abstraction, synthesis, induction, and deduction.

A comprehensive systematic approach was employed during this study. It allowed us to investigate the research object as a system in a set of interconnections and functional interdependencies.

The methods of various types of analysis and synthesis were used to identify the factors of development of the object under the study, its defining functional elements, and transformational capabilities in relation to the modern capabilities of financial analysis. The method of induction was used during the implementation of predictive modeling of the expected efficiency of financial and analytical processes digitalization. The conceptual framework of the integrity of an effective financial analysis process was formed by means of abstraction. The method of generalization was applied at the stage of forming priority areas for optimizing the financial analysis strategy as an effective tool for business management that is based on digitalization.

RESULTS

Modern business processes and management strategies are formed under active market dynamics, uncertain economic conditions, and increased economic competitiveness. Currently, businesses must transform their strategic approach to economic activity, quickly adapting to changes, minimizing risks, and improving their competitiveness.

The outlined concept involves the use of modern financial analysis tools, including those based on digital optimization. The innovative capabilities of information systems contribute to effective financial information analysis, cost reduction, and improvement of the structure of business processes. Given the current realities, financial and analytical procedures have to gradually adapt to the requirements of

economic digitalization. The concept of Industry 4.0 implements the innovative potential for modernizing financial analysis using a range of digital tools.

Modern advances in the field of information technology's involvement in economic processes directly affect business operations and are already seen as a necessity. The introduction of digitalized financial and analytical processes contributes to a significant increase in the effectiveness of controlling. In particular, the active use of cloud technologies, which is considered to be an innovative trend in accounting processes, makes it possible to store and process any type of information on remote servers. It provides opportunities to use accounting and management systems, as well as electronic document management.

Artificial intelligence also plays a vital role in the digitalization of financial analysis. It is mostly used to process and analyze significant amounts of information at a high speed. The use of special tools creates conditions for increasing the efficiency of resource use and significantly reducing costs. Moreover, it significantly improves the efficiency of management processes.

Significant advantages mark the implementation of digitalization tools in the financial analysis system. In particular, the digitalization of routine processes makes it possible to automatically obtain up-to-date accounting information in real time and with absolute accuracy to perform calculations. At the same time, it is worth noting that the popularization of digital technologies acts as a catalyst for economic transformations (Levytska et al., 2022). It contributes to the establishment of the principles of sustainable financial development.

The algorithm of financial and analytical activities is coordinated by the existing regulatory requirements for the financial data processing system, as well as the processes of their accumulation and interpretation. The optimal use of digitalization tools and innovative software opens up opportunities for optimizing the technological process of financial analysis.

Given the multifunctionality of accounting processes, the optimal solution for comprehensive digitalization of the studied industry involves the use of digitalization systems that form the functional and supporting components of the system. The functional part ensures the solution of specific tasks of the subject industry. The supporting part contains certain subsystems that implement information technology and organizational and legal support. The specifics of economic content determine the variability of tasks, the availability of primary and summarizing documents, interrelated calculation algorithms, as well as methodological tools and regulatory documents for a particular part of the process.

In fact, the use of digitalization tools allows the full automation of the process of financial and analytical activities. At the same time, the basis of the analysis technology is formed by such operations that allow to modernize the structure of the process. In this case, they ensure the proper level of functionality organization. Digitalization tools used for financial analysis lead to major transformations in technology, operations, procedures, and work steps. However, the overall structure of the process remains the same (Zienkiewicz et al., 2023).

Obviously, the digitalization of financial and analytical activities is a logical consequence of the transformation of approaches to business process management. As of today, enterprises mostly receive economic benefits from using modern digitalization tools represented by management information systems. They control business processes at present. At the same time, the main effect of using digitalization tools involves the timely prevention of significant economic risks. In this case, timely and efficiently implemented financial analysis is seen as an effective tool for improving the quality and efficiency of management processes.

Challenges that arise during the optimization of the financial analysis system through modern innovation potential are caused by the lack of motivation of business entities and low awareness of the benefits of digitalization. As a result, the goal of implementing digitalization tools is not synergistic with strategic goals. Moreover, the process of digital transformation is not sufficiently formalized.

Overall, the typical goals set by modern businesses when deciding to improve the financial analysis system include the following:

– the creation of a single information space;

– the ability to track production and supply in actual time;

– the optimization of financial management;

– the digitalization of document flow;

– an effective controlling.

Due to the rapid development of IT, various types of information systems have improved. In addition to the standard financial analytics functionality, they perform a range of other essential functions Figure 1.

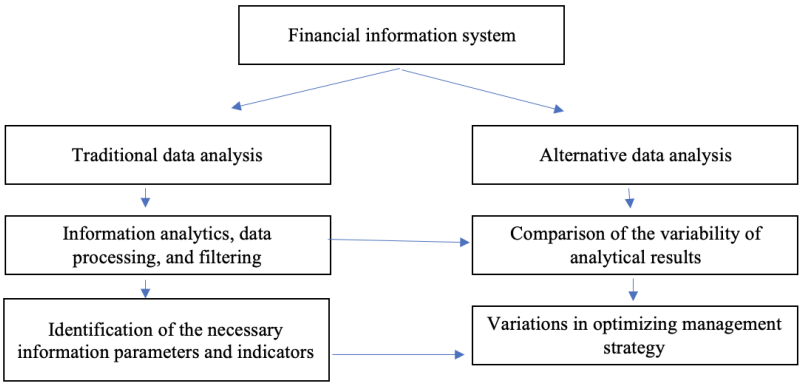

Figure 1: Functionality of modern information systems in financial and analytical activities Source: author's elaboration

It should be noted that specialized software for financial and analytical activities, developed to meet the specific requirements of a business entity, is considered to be the most efficient and productive.

After all, in this case, an organization develops a customized model with a high level of uniqueness. Such a process is a rather long-term and costly operation. Nevertheless, if successfully implemented, it becomes possible to automate not only the financial analytics process but also the simultaneous digitalization of most management processes.

The effectiveness of implementing digitalization tools can be manifested in a set of consequences that manifest themselves in optimizing the systematization of information necessary

for high-quality financial analytics, reducing the number of errors, and increasing the effectiveness of management decisions.

It is worth noting that modern manufacturers of software products in this sector closely monitor changes in accounting forms. They offer their users adaptive corrections on time. However, this nuance creates

additional challenges for a digitalization-skeptical society. After all, innovations need to be adjusted individually, taking into account the specifics of each business entity.

Furthermore, the use of digitalization tools, including artificial intelligence, involves the creation of consolidated databases of informative data, including confidential databases. This poses potential threats to cybersecurity and information security guarantees.

Given the risks and challenges accompanying the digitalization of financial and analytical activities, a dualistic approach to this phenomenon is currently being recorded. At the same time, the most optimal approach is to automate specific tasks that can significantly contribute to the achievement of the company's strategic goal. Other challenges to successful digitalization may include an inadequate level of information and technical infrastructure as well as differentiation of the goals of total management digitalization (Kozyk et al., 2021).

Therefore, the optimal approach to the digital transformation of financial and analytical activities should be considered as a gradual, step-by-step process of optimizing certain business processes of an enterprise. It should involve management and focus on the long-term development of the process. If implemented effectively, the outlined concept creates opportunities for successfully automating routine tasks, effective management tasks, and efficient strategic business management. In addition, timely access to accurate analytical financial data will allow for a prompt response to challenges that arise during business operations (Levytska et al., 2020).

When analyzing the impact of digitalization on the financial analytics system, specific requirements for this system must be identified. Obviously, modern financial analysis must meet certain quality requirements. In particular, it must be prompt, well-documented, and reliable. In addition, such analysis must have the resources to fulfill the requirements of a digitized management and control system. Furthermore, it should be open to optimization and continuous improvement.

Since digitalization is becoming increasingly relevant as a vector for modernizing economic processes, it is necessary to emphasize the fact that the studied issues will be relevant for a very long time. In addition, they will be developed and supplemented with new ideas and innovations.

DISCUSSION

Some contemporary scholars (Han, 2023; Hao et al., 2022) emphasize the need to ensure the effectiveness of financial and analytical measures while implementing management activities within the current business environment. They note that it can only be achieved by optimizing the efficiency aspect. It will allow for a timely intervention in the course of production processes and management decisions.

Some representatives of modern scientific schools (Feng, 2022; Varadarajan, 2020) point out that the problem of digitalizing financial analysis depends on the complexity of accounting procedures. A similar opinion is shared by Chu (2021). The author argues that the digitalization of the analytical process is a complex and multi-stage process that requires significant financial investments.

First of all, the transformation of the management potential of a modern market participant requires a radical dynamic of the model of financial and analytical activities. In this case, according to Bistrova et al. (2021), it involves adaptation to the requirements of digital optimization.

The authors believe that the replacement of outdated analytics algorithms with digital process optimization, effective communication, and the use of artificial intelligence technologies are essential components for

forming and improving business management strategies to create competitive advantages in the market. We fully agree with this opinion.

According to research findings of modern scholars (Yang, 2021), a promising means of improving the efficiency of business processes is currently the use of an integration process for managing various forms of interaction. According to scholars, digitalized financial analysis is an effective tool for processing large amounts of information for making high-performance management decisions. The conclusions of the scholars are in line with the results of the current study. The latter proved that modern modifications of financial and analytical activities should ensure the following aspects:

- well-coordinated data management;
- automation of information exchange operations;
- timely response to the dynamics of the economic environment;
- prompt adaptation of the marketing strategy to new market conditions.

As a follow-up to the aforesaid outcomes, some modern researchers (Kwateng et al., 2022) formulate basic requirements for the expected effectiveness of the transformation of financial analytics processes in terms of rational use of tangible and intangible resources, minimization of human factor risks in information and analytical systems, accessibility for investment, and coordination of information flows.

The results presented by contemporary studies are identical to the conclusions of the current study. In particular, they illustrate the need to optimize the improvement of financial analysis tools based on digitalization to increase their impact on the improvement of the business management system. It can be argued that the highlighted conceptual principles are the basic vectors for optimizing the modern management paradigm within a particular business (Novak et al., 2022).

Despite significant academic elaborations on the studied issues, the practical development of optimizing financial and analytical activities is currently characterized by a critical limitation. In fact, many studies are devoted to theoretical aspects of digital transformation, description of algorithms for modeling management processes, and methods for assessing the effectiveness of transformation. There is also a lack of studies on artificial intelligence capabilities in the financial analytics system.

The prospects for further research are seen in the formation of a practical set of digital analytical tools for enterprises operating in various sectors. This will allow to implement a customized approach to the management process while minimizing the risks of not being adapted to the requirements of the modern economic environment.

CONCLUSIONS

Nowadays, the success of companies is determined by the effectiveness of the implementation of an integrated management strategy, timely analysis of its efficacy, and adjustment of the relevant tools.

Trends in the development of modern economic processes require the transformation of the essential elements of financial activities by means of modern digitalization tools. Digital optimization of financial and analytical activities makes it possible to automate the routine processes of collecting, accumulating, analyzing, and transmitting financial information and reporting. This ultimately leads to the formation of effective management decisions.

This study analyzed the multi-vector impact of digitalization technologies on financial and analytical systems. The authors also evaluated their potential in the system of transforming the business management paradigm. The article identified possible risks and challenges on the way to digital optimization of financial and economic activities. The authors have outlined the essential prerequisites for adapting the existing traditional approaches to financial analytics. Moreover, they have substantiated the feasibility of the proposed concept. It has been proved that the implementation of effective financial analysis ensures the adoption of efficient management decisions on business processes.

The authors believe that there is a need for further research on variations in the practical optimization of financial and analytical activities for improving local business management systems. Such a concept will create opportunities for identifying and releasing untapped potential and variability of management communication strategies, as well as increasing a market player's profitability and investment attractiveness.

Author Contributions

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REFERENSES

Arefieva O, Derihin O; 2021. Conceptual approach to crisis management of business processes of enterprises in a transformational economy. Adaptive Management: Theory and Practice. Series Economics, 12(24). https://doi.org/10.33296/2707-0654-12(24)-04

Bistrova J, Lace N, Kasperovica L; 2021. Enterprise Crisis-Resilience and Competitiveness. Sustainability, 13. https://doi.org/10.3390/su13042057

Burkova LA, Shepeliuk VA; 2023. Management of financial and tax risks in business for achieving sustainable development. Effective economy, 4. http://ds.knu.edu.ua/jspui/handle/123456789/5102

Chu W; 2021. Analysis of Financial Investment Risk in Enterprise Financial Management. 6th International Conference on Financial Innovation and Economic Development. (pp. 347–350). Atlantis Press. https://doi.org/10.2991/aebmr.k.210319.063

Dzhyhora O, Gasimov A; 2022. Implementation of Energy Efficient Technologies and Systems in Housing Construction. Lecture Notes in Civil Engineering, 181:625–637. https://doi.org/10.1007/978-3-030-85043-2_59

Feng Z; 2022. Simulation Analysis of Artificial Intelligence in Enterprise Financial Management Based on Parallel Computing. Mobile Information Systems. https://doi.org/10.1155/2022/2958176

Gao J; 2022. Analysis of enterprise financial accounting information management from the perspective of big data. International Journal of Science and Research (IJSR), 11(5):1272–1276. https://doi.org/10.21275/SR22514203358

Goncharova VH; 2020. Consulting as a cognitive model of business analytics for the formation of intellectual-innovative space of business entities. Economy and the state, 7:105–109. https://doi.org/10.32702/2306-6806.2020.7.105

Han W; 2023. Enterprise financial risk model based on cloud computing in the age of big data. Soft Computing. https://doi.org/10.1007/s00500-023-08362-y

Hao Z, Zhang X, Wei J; 2022. Research on the effect of enterprise financial flexibility on sustainable innovation. Journal of Innovation & Knowledge, 7(2). https://doi.org/10.1016/j.jik.2022.100184

Kashchena N, Horoshanska O; 2023. Economic analysis in business management information system: mainstream trends and methodological tools. Proceedings of the XI International Scientific and Practical Conference "Prospects for the development of accounting, analysis and audit in the context of European integration". (pp. 266–267). Odesa. https://repo.btu.kharkov.ua/bitstream/123456789/35505/1/S_MEYNSTRYM-TENDENTSIYI_267-268.pdf

Koval NO; 2022. Features of Strategic Financial Controlling in Modern Conditions. Modern Economics, 31:52–57. https://doi.org/10.31521/modecon.V31(2022)-08

Kozyk V, Liutak O, Lisovska L, Mrykhina O, Novakivskyj I; 2021. The impact of economic entities' innovative activity on the indicators of sustainable development of Ukraine. IOP Conference Series: Earth and Environmental Science, 628(1):012041. https://doi.org/10.1088/1755-1315/628/1/012041

Kuprina NM, Stupnytska TM, Velychko OM; 2022. Modern aspects of financial analysis of current assets of the enterprise. Food Industry Economics, 14(2). https://doi.org/10.15673/fie.v13i3.2131

Kuzhda TI; 2023. Application of information technologies in business analysis of organization's activity under crisis conditions. Galician Economic Journal, 81(2):96–105. https://doi.org/10.33108/galicianvisnyk_tntu2023.02.096

Kwateng KO, Amanor C, Tetteh FK; 2022. Enterprise risk management and information technology security in the financial sector. Information & Computer Security, 30(3):422–451. https://doi.org/10.1108/ICS-11-2020-0185

Levytska O, Mulska O, Ivaniuk U, Kunytska-Iliash M, Vasyltsiv T, Lupak R; 2020. Modelling the conditions affecting population migration activity in the eastern european region: The case of Ukraine. TEM Journal, 9(2):507-514. https://doi.org/10.18421/TEM92-12

Levytska S, Pershko L, Akimova L, Akimov O, Havrilenko K, Kucherovskii O; 2022. A risk-oriented approach in the system of internal auditing of the subjects of financial monitoring. International Journal of Applied Economics, Finance and Accounting, 14(2):194-206. https://doi.org/10.33094/ijaefa.v14i2.715

Mazur N, Khrystenko L, Pásztorová J, Zos-Kior M, Hnatenko I, Puzyrova P, Rubezhanska V; 2021. Improvement of controlling in the financial management of enterprises. TEM Journal-Technology, Education, Management, Informatics, 4. https://doi.org/10.18421/TEM104-15

Novak A, Pravdyvets O, Chornyi O, Sumbaieva L, Akimova L, Akimov O; 2022. Financial and economic security in the field of financial markets at the stage of European integration. International Journal of Professional Business Review, 7(5) https://doi.org/10.26668/businessreview/2022.v7i5.e835

Ostapchuk O; 2022. The essence and trends of changes in financial management in the conditions of increased digitalization of the economy. Modeling the development of the economic systems, 2:167–172. https://elar.khmnu.edu.ua/handle/123456789/12378

Sadoviak MS, Liubchynskyi LI, Bobko OV, Tymkevych TS, Tsvyk SR; 2023. The role of digital marketing in the activities of a business structure. International Scientific Journal "Internauka". Series: "Economic Sciences," 8. https://doi.org/10.25313/2520-2294-2023-8-9115

Sergiienko L, Polyak K, Poverlyak T, Cherchatad A, Andriushchenko I, Zhyliakova O; 2020. Application of taxonomic analysis in assessing the level of enterprise development in emergency situations. Management Science Letters, 10(6). https://doi.org/10.5267/j.msl.2019.11.024

Sirenko NM, Semeniuk AI; 2023. Peculiarities of information provision of financial controlling at the enterprise. Modern Economics, 38:144–151. https://doi.org/10.31521/modecon.V38(2023)-22

Sitinjak C, Johanna A, Avinash B, Bevoor B; 2023. Financial Management: A System of Relations for Optimizing Enterprise Finances – a Review. Journal Markcount Finance, 1(3):160–170. https://doi.org/10.55849/jmf.v1i3.104

Tkal YaS; 2023. Quality of accounting information in enterprise management. Economy, finance, law: current problems and development prospects. (pp. 17-53). Prague, Czech Republic. https://www.inter-nauka.com/uploads/public/16819108893065.pdf#page=18

Varadarajan R; 2020. Customer information resources advantage, marketing strategy, and business performance: A market resources based view. Industrial Marketing Management, 89:89–97. https://doi.org/10.1016/j.indmarman.2020.03.003

Vyhaniailo SM, Viunenko OB; 2021. Tendency of development of information technology in business analytic. Scientific notes of V. I. Vernadsky Taurida National University. Series: Technical Sciences, 32(71):51–55. https://doi.org/10.32838/2663-5941/2021.1-1/08

Wołowiec T, Kolosok S, Vasylieva T, Dluhopolskyi O, Sergiienko L; 2022. Sustainable Governance, Energy Security, and Energy Losses of Europe in Turbulent Times. Energies, 15(23). https://doi.org/10.3390/en15238857

Xianglan W, Xingfeng F; 2020. Research on Financial Analysis of Modern Enterprise Based on Economic Added Value and DuPont Financial Analysis. 5th International Conference on Social Sciences and Economic Development. (pp. 64–68). Atlantis Press. https://doi.org/10.32838/2663-5941/2021.1-1/08

Yang Y; 2021. Construction of enterprise network financial management system model based on grid algorithm. International Conference on Aviation Safety and Information Technology. (pp. 705–709). https://doi.org/10.1145/3510858.3511367

Yubo C; 2021. Innovation of enterprise financial management based on machine learning and artificial intelligence technology. Journal of Intelligent & Fuzzy Systems, 40(4):6767–6778. https://doi.org/10.3233/JIFS-189510

Zienkiewicz A, Podciborski T, Terebukh A; 2023. Alternative uses of former coastal artillery military bases in koszalin coastland in view of the growing popularity of military tourism. Acta Scientiarum Polonorum, Administratio Locorum, 22(1):113–123. https://doi.org/10.31648/aspal.8473