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DEVELOPMENT OF BUSINESS PROJECT EXPERTISE SYSTEMS BASED ON DATA ANALYTICS

Abstract. The focus of this article is to study the impact of data analytics on business project proficiency development in Ukraine. It stresses the significance of aligning Big Data and advanced analytics towards various management stakeholders of different organizations in Ukraine. Even considering other barriers like data quality harm or qualification of the lack of specialists, the application of data analytics is proposed to be very important and constructive with regard to growing the economy further and bringing new inventions.

Keywords: business project, data analytics, business expertise, big data, risk management

Currently, the expansion of the business project expert systems based on data analytics has become an important factor in the operation of enterprises. Such tendencies of economic transformation towards information technologies and digitisation of a business demand reconsideration of the ways of analysis and decision-making processes of enterprises. Facilitation of Big Data along with other analytical techniques enhances forecast accuracy, detects business opportunities, and measures risks. By using data analytics, it helps improve the planning phases, coordination of activities, and incorporation of goals into developed strategies for business project management. With the active application of analytical approaches, Ukrainian enterprises are able to gain substantial competitive advantages in the market. In this sense, such business project expertise, with a systematic economic view, belongs to the category of conditions for the achievement of innovative growth.

Recent scientific literature shows an increase in data analytics usage in business knowledge and also in the creation of entrepreneurial ventures. Chatterjee S., Chaudhuri R., Gupta S., Sivarajah U., and Bag S. pointed out that the effectiveness of strategic orientation could be enhanced through Big Data analytics, which facilitate rapid reaction to changes in the market [1]. Studies such as those by Eboigbe E. O., Farayola O. A., Olatoye F. O., Nnabugwu O. C. and Daraojimba C. look into investment risks and projection of financial indicators, paying attention to artificial intelligence and machine learning [2, p. 298]. Derbentsev V., Galitsyn V., Datsenko N., Gostrik O., and Voznyuk I. on the contrary emphasise the Ukrainian context, indicating the possibility of using an analytical approach in the development of small and medium enterprises [3, p. 598]. Naumenko M. applies Big Data in determining the

valuable resources of firms, which aids in forecasting the dynamics of supply and demand [4, p. 752]. Hence, these scholars also agree that data analytics has more than enough influence in evaluating the business projects and coming up with appropriate strategies for growth. Notable progress has been made in the research concerning data analytics as a specialised discipline in business projects; however, the application of such approaches remains largely ignored by the business environment, within the context of this study, Ukraine. At this point, the literature seems not to have studied in detail how big data technologies ought to be implemented into the operations of Ukrainian businesses, especially SMEs, who normally do not have adequate resources and technological infrastructure.

Data analytics is central to the success of every business project. An area in which it adds much value is the enhancement of decision making with regard to project implementation. In most cases, business people rely on experts' judgement, prior experience, and performance figures to come up with decisions. While the evaluation of the alternatives using this method is valid, it is rather subjective and prone to errors. At the moment, people rely on Big Data analytics, which is more in line with the various factors affecting the market such as the economy, customers, and competition. All these make it possible to reach a well-informed judgement on the feasibility of any business idea.

Equally important, the methods of data analysis that promote the process of developing the above-described business models can be employed as well. Big Data helps in spotting competitive advantage by forecasting the movements of the market and the opportunities for growth, as well as streamlining the logistics, supply chains, and marketing. To take these advantages further, companies can deploy machine learning and artificial intelligence to study their consumers and offer custom-tailored products or services for better competition. When it comes to the business projects in Ukraine, this focus can achieve effective investor engagement, better provision of services, and easier international business expansion.

The question of risk management within the business project expertise process is also of great importance and needs to be addressed. Owing to data analytics, it is possible to forecast financial risks, assess creditworthiness, determine optimal pricing policy, and reduce the losses whenever there is a shift in the market. In Ukraine's unstable economic conditions most businesses face, the application of such methods is very important for risk mitigation and achieving financial sustainability.

Though this field of data analysis has a place in business project expertise in Ukraine, there are the following difficulties that may be encountered. One of the major obstacles to the work is the scarcity of quality data that can be subjected to analysis. A number of enterprises located in Ukraine are restricted to modern techniques of data harvesting and processing, which makes the use of analytical techniques very difficult. Apart from that, there is a problem with the lack of appropriate qualifications of those specialists who master data analytics competencies, thus limiting the introduction of such modern methods in the business processes.

One other important issue is the requirement to apply Western methods and data analysis instruments in understanding the market nuances of Ukraine. Local enterprises generally function in difficult economic situations, cumbersome bureaucracy, and

dynamic regulations. This calls for more interactive methods of analysing data and making decisions. Moreover, in order to make full use of data analytics, risk mitigation measures to ensure data and privacy protection have to be established, which entail the formulation of the necessary legal and technical protection strategies.

However, the presence of challenges also confirms the ability to create business project expertise mapping systems based on data analytics in Ukraine. The development of this area will increase the quickening pace of innovative processes in Ukrainian companies, will lead to optimisation of their business strategies, and will enhance their competitive advantages in the markets both within the country and abroad. The use of new technologies for data analysis, the training of unique competencies, and the introduction of modern approaches to the management of risk will become a competitive advantage for businesses in Ukraine amidst global changes and the digital economy.

In conclusion, it can be said that data analytics constitutes one of the major success factors in the conduct of business project evaluation in Ukraine. Enterprises are enabled to deepen understanding, make better decisions, and control risks. Indeed, some of the challenges remain, such as poor quality of data or an exhausting lack of qualified specialists; however, the logical use of such analytical methods is apparent. It extends the innovation capacity of a business further, helps refine business models, and improves the already established position of companies in the market. However, they should accommodate these practices within the set parameters of national peculiarities and build the necessary capabilities. Great relevance for policy and practice applies by focusing on this issue in the development of the proposed system, as the tools for effective usage of the analytical system within various activities of economic potential and innovation include.

References

1. Chatterjee, S., Chaudhuri, R., Gupta, S., Sivarajah, U., & Bag, S. (2023). Assessing the impact of big data analytics on decision-making processes, forecasting, and performance of a firm. *Technological Forecasting and Social Change*, *196*, 122824.

2. Eboigbe, E. O., Farayola, O. A., Olatoye, F. O., Nnabugwu, O. C., & Daraojimba, C. (2023). Business intelligence transformation through AI and data analytics. *Engineering Science & Technology Journal*, *4*(5), 285-307.

3. Derbentsev, V., Galitsyn, V., Datsenko, N., Gostrik, O., & Voznyuk, I. (2023). The state and prospects of the development of the logistics industry in the context of the implementation of artificial intelligence. *Scientific Innovations and Advanced Technologies,* 14 (28), 591-606.

4. Naumenko, M. (2024). Data mining of business data as the factor for strengthening a competitive position of an enterprise. *Successes and Achievements in Science*, 5 (5), 746-762.