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RE-ENGINEERING OF BUSINESS PROCESSES OF MACHINE-BUILDING ENTERPRISES: INCREASING THE EFFICIENCY OF COMMERCIAL ACTIVITIES

ABSTRACT

The main purpose of the article is a theoretical and methodological substantiation of the choice of the optimal form of re-engineering for machine-building enterprises in modern conditions of a changing external environment. The object of the study is the business processes, commercial activities and financial potential of machine-building enterprises. The scientific task is to present a modern methodological approach to choosing the form of re-engineering that is better for a mechanical engineering company in the context of its current state. For this purpose, methods of financial analysis, matrix analysis and ranking were used. In addition, such auxiliary methods as graphical and abstract-logical were used. As a result of the research and calculations, a ranking of key indicators of the financial potential of machine-building enterprises was determined and carried out. An approach to determining the level of efficiency of business processes is presented. The author's vision of the matrix for choosing the optimal form of re-engineering is proposed. The practical value of the results obtained is revealed in the possibility of applying the proposed approach in the activities of machine-building enterprises in Ukraine. The study is limited by taking into account the specifics of the activities of machine-building enterprises exclusively when selecting indicators and ranking them. Prospects for further research are considered through the prism of applying the developed methodological approach to other industrial enterprises in Ukraine.

Keywords: re-engineering, the financial potential of the enterprise, business processes, commercial activities, machine-building enterprises

JEL Classification: L62, C50, G01

INTRODUCTION

The modern business environment in Ukraine is characterized by significant instability and problems arising as a result of martial law. Industry always occupies a key place in the national economy of Ukraine and ensures its security. At the same time, the most significant contribution to the development of industry has long been made by the mechanical engineering industry. Machine-building enterprises have never suffered from a scientific and practical lack of attention among leading scientists and researchers. However, the changing external environment and military situation have introduced new threats and challenges that require a rethinking of their business activities to search for possible forms of optimizing the re-engineering process, depending on their financial potential and the efficiency of business processes in general.

Under martial law, there is an urgent need to adapt to rapidly changing conditions and requirements. Martial law often leads to the reallocation of resources, changes in supply chains and increased demand for certain goods, particularly defence equipment and engineering products. In general, we can say that in a state of war, the demand for engineering products has only increased, but at the same time, the production potential itself may not be enough to satisfy it. There are many solutions to these and other problems under martial law, but re-engineering may be one of them. Re-engineering helps optimize processes, and reduces unnecessary costs and time, which is especially

important in wartime, when every resource is critical. This also includes reorienting production to products that are most needed in wartime, as well as improving the efficiency of the enterprise in difficult conditions. The security aspect of the problem should also be taken into account here. The fact is that re-engineering can help improve the safety and sustainability of a machine-building enterprise. In times of martial law, this becomes critical, as ensuring business continuity and protecting resources from possible threats is a top priority. This includes integrating cybersecurity technologies, upgrading equipment and improving the security of production facilities. In addition, the relevance of re-engineering research is also revealed in the near future, in which Ukraine, after the victory, will move into the post-war period. Business process re-engineering helps mechanical engineering companies under martial law prepare for post-war recovery and development, providing the flexibility and resilience needed to recover after martial law ends.

LITERATURE REVIEW

The modern development of business process re-engineering methods largely depends on the integration of indicators of financial potential and efficiency as key factors in rethinking commercial activity. It is necessary to consider various scientific works and this issue, forming a holistic understanding of methodological approaches in this area. For example, Al-edenat et al. (2022) emphasize the importance of the competencies of individuals in the field of business analytics and intelligence for the effectiveness of processes. They propose a model with mediation and moderation that emphasizes the role of human capital in increasing process efficiency, which is an important aspect of re-engineering. Similarly, Fetais et al. (2022) provide a comprehensive analysis of business process re-engineering implementation measures. Their research highlights the importance of strategic and systematic approaches to re-engineering, focusing on how organizations can effectively adapt to change. Another vision in Panchenko et al. (2022). They explore a methodical approach to planning in management systems for sustainable economic development. They emphasize the need for the integration of innovation and production activities in enterprises, which corresponds to the broader goals of re-engineering. In the context of management accounting, Appelbaum et al. (2017) discuss the impact of business intelligence and enterprise systems. Their research is fundamental to understanding how data can optimize business processes and increase efficiency.

Magutu, Nyamwange, and Kaptoge (2010) focus on BPR for competitive advantage, exploring key factors that contribute to the success or failure of BPR implementation. Their study, conducted in the context of The Wrigley Company, provides valuable insights into the strategic management aspects of BPR and its impact on an organization's competitive positioning. Sungau and Msanjila (2012) delve into the role of IT in enabling BPR in organizations. Their research in "Advanced Materials Research" highlights the technological aspect of BPR, emphasizing how IT can facilitate significant changes in business processes to enhance overall organizational efficiency. Lazarević et al. (2020) present a model for business performance improvement, taking the case of a postal company. This study is relevant for understanding how BPR can be applied in practice to improve performance metrics in a service-oriented sector, which can be extrapolated to the machine-building industry. Xiaoli (2011) examines the correlation between BPR and the operational performance of National Commercial Banks. This research is crucial in understanding how reengineering efforts directly impact the financial and operational aspects of large, complex organizations. Ringim, Razalli, and Hasnan (2012) discuss the moderating effect of IT capability on the relationship between BPR factors and organizational performance in banks. This study provides a nuanced view of how technology intersects with reengineering efforts to influence performance outcomes. Elaheh (2014) explores the impact of BPR factors on organizational agility, using path analysis in the context of Ports and Organization. This research is particularly relevant for understanding the agility aspect of BPR, which is crucial for machine-building enterprises operating in dynamic markets.

Trabelsi et al. (2023) delve into the use of data processing and process mining techniques to identify redundancy in business processes. This approach is key in identifying inefficiencies and optimizing processes through re-engineering. Finally, Lagodienko et al. (2022) and Sylkin et al. (2018) highlight the management of foreign economic activity and the assessment of the financial security of machine-building enterprises, respectively. These studies provide a comprehensive view of the external and internal factors influencing re-engineering, especially in the context of financial sustainability and crisis management.

Thus, the reviewed literature collectively emphasizes the need for a holistic and integrated approach to re-engineering, combining financial capacity, process efficiency and the broader economic context. But along with this, in our opinion, we can highlight the following shortcomings and gaps in the modern scientific literature regarding the issues of the article chosen by the author's team: lack of a clear vision regarding the main forms of business process re-engineering; superficial analysis without specification of a separate type of enterprise activity; lack of a unified understanding of the assessment of the level of financial potential.

AIMS AND OBJECTIVES

The main goal of the article is the theoretical and methodological substantiation of the choice of the optimal form of re-engineering for machine-building enterprises in modern conditions of a changing external environment. The object of research is the business processes, commercial activity and financial potential of machine-building enterprises. Within the scope of this study, the achievement of the set goal involves the formation of a modern methodical approach to the selection of that form of re-engineering, which, according to the level of financial potential and efficiency of business processes, is expedient for the machine-building enterprise in the context of its current state.

METHODS

The authors of the article applied several key methods, which together form an integrated approach to assessing and selecting the optimal form of re-engineering for machine-building enterprises in Ukraine. Let's look at each of them in more detail. The ranking method is used to determine the hierarchy of importance of various financial indicators and levels of business process efficiency. This method allows you to systematize indicators and establish ranks (levels) of financial potential and efficiency of business processes. It provides weight to each metric relative to the others, which helps identify key areas for re-engineering.

The method of financial analysis is used for a detailed study of the financial and economic characteristics of a mechanical engineering company. It includes an assessment of key indicators that affect the financial potential of a mechanical engineering enterprise. This analysis reveals the strengths and weaknesses of the financial structure and identifies potential areas for improvement through re-engineering.

The matrix analysis method is used to construct a matrix for selecting the optimal form of re-engineering. This method consists of creating a two-dimensional matrix, where one axis represents financial potential and the other the efficiency of business processes. The elements of the matrix reflect different re-engineering scenarios based on the composition of monetary characteristics. This allows us to determine which form of re-engineering will be most appropriate for the specific state of the machine-building enterprise. In general, these methods together form a solid analytical basis for justifying the choice of the form of re-engineering in Ukrainian machine-building enterprises, making it possible to satisfy the information needs of the management of machine-building enterprises.

RESULTS

Today, machine-building enterprises are not in the best condition. Constant shocks and changes in the external environment have a significant impact on their financial performance and business activities. Currently, there's a compelling case to be made that the machine-building industry in Ukraine is facing a significant crisis. This challenging situation indicates that a majority of these enterprises must reassess and revamp their business processes. In this context, it becomes imperative for management to explore the potential of re-engineering as a strategic response. This crisis in the Ukrainian machine-building sector likely stems from a variety of factors including economic pressures, technological advancements, and possibly geopolitical influences. The year 2020 fell during the COVID-19 pandemic and there were reductions in the volume of sales of mechanical engineering products, but 2022, as a result of hostilities, showed even worse reduction results (Figure 1).

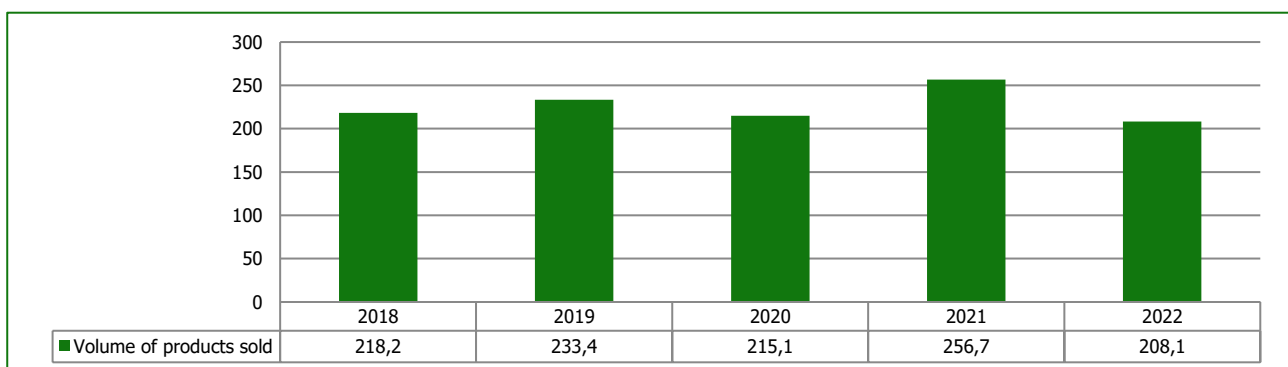


Figure 1. The dynamics of the volume of products sold by machine-building enterprises of Ukraine for 2018-2022, UAH billion. (Source: formed by authors with data from State Statistics Service, (2022))

Understanding the conditions of martial law, which caused very high damage to all machine-building enterprises in Ukraine, without exception, it should be noted that the inefficiency of commercial activities also contributed to this. Business process re-engineering is the fundamental review and radical redesign of business processes to achieve improvements in modern critical performance indicators such as cost, quality, service and speed. In the conditions of martial law in the field of machine-building, the introduction of automation of work processes, improvement of logistics and planning of the use of resources becomes relevant. Re-engineering is essential for enhancing production productivity and cutting down on expenses, significantly boosting financial performance, which is especially important in the context of limited resources and changes in market conditions. All machine-building enterprises have experienced supply chain interruptions, making it difficult to obtain needed materials and components. This led to delays in production and a decrease in the volume of products produced and, as a result, a decrease in financial performance indicators (Figure 2).

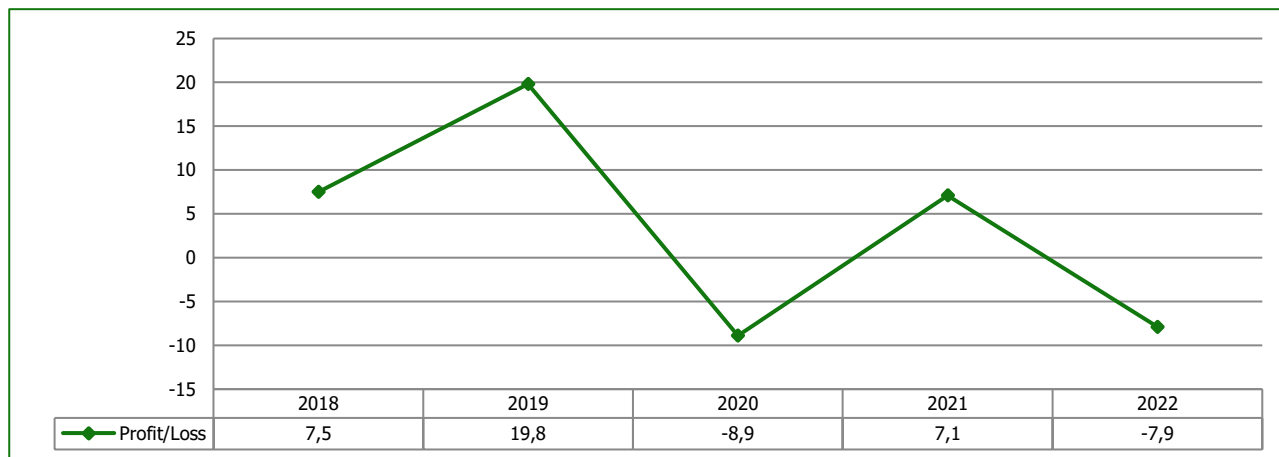


Figure 2. The dynamics of net profit/loss based on the results of the activities of the machine-building enterprises of Ukraine for 2018-2022, UAH billion. (Source: formed by authors with data from State Statistics Service, 2022)

Business process efficiency is a measure of how well a company's business processes contribute to achieving its goals. In the engineering sector during the war, efficiency may focus on reducing downtime, increasing productivity, improving product quality, and ensuring on-time delivery. An important factor is the flexibility to quickly adapt to changes in production requirements or resource constraints.

As an example, we will select LLC "VITYAZ Machine-Building Plant". Management of this enterprise gives all the necessary information for analysis and calculations. To begin with, through the involvement of experts in the field of anti-crisis management of commercial activities in the industrial sector of the economy, we identified key coefficients for assessing the effectiveness of business processes specifically for machine-building enterprises. We will take 2021 for calculation since a number of data on individual indicators were unavailable, but this does not prevent us from assessing the financial potential and efficiency of business processes according to the proposed indicators (Table 1).

Table 1. Evaluation of the efficiency of business processes at the LLC "VITYAZ Machine-Building Plant" within the framework of the presentation approach. (Source: formed by authors using information from Magutu 2011; Trabelsi, 2023; Ringim, 2012)

Coefficient	Formula	Low level		Acceptable level		High level		LLC "VITYAZ Machine-Building Plant"
		More than 0.4	0 points	0.2-0.4	5 points	Less than 0.2	10 points	
The main indicator of the delegation of duties	$RPsf / NFpe$ RPsf - scope of functions of the person responsible for the process NFpe - number of functions of the process executor (The economic significance of this indicator is to increase productivity and operational efficiency)	More than 0.4	0 points	0.2-0.4	5 points	Less than 0.2	10 points	0.4

(continued on next page)

Table 1. Continued

Coefficient	Formula	Low level		Acceptable level		High level		LLC "VITYAZ Machine-Building Plant"
The main indicator of the duplication of responsibilities of responsibility for the business process	ARP/ NP ARP - Amount of responsible persons NP- Number of processes (Duplicate responsibilities can lead to confusion, inefficiency and increased costs)	More than 2	0 points	1-2	5 points	Less than 0.1	10 points	2.8
The main indicator of duplication of business processes	VDdb/ VDtn VDdb - Volume of duplicated business processes VDtn - their total number (The company spends more resources than necessary to achieve the same results, thereby reducing overall profitability)	Less than 0.7	5 points	0.7-0.8	10 points	More than 0.8	15 points	0.8
The main indicator of the parallelism of business processes	VPP/ TF VPP - Volume of parallel processes TF - Total number of functions (Process parallelism can improve efficiency by allowing multiple tasks to be performed simultaneously)	More than 0.3	5 points	0.2-0.3	10 points	Less than 0.2	15 points	0.5
The main indicator of the sequence of business processes	SPv / TF SPv - Volume of sequential processes TF - Total number of functions (Process sequencing ensures that tasks are completed in a logical and efficient order)	More than 0.5	5 points	0.4-0.5	10 points	Less than 0.4	15 points	0.7
The main update indicator	ANP/ APn ANP - Amount of necessary processes APn - Number of actual processes (Updating processes means updating and modernizing them in accordance with changes in technology, legislation, and market conditions)	Less than 0.9	10 points	0.9-1	15 points	More than 1	20 points	0.6
Total		4.8	25 points	4.2	55 points	3.6	85 points	5.8 (35 points)
Rank of efficiency of business processes		Less than 35 points		From 35 to 65 points		More than 65 items		Acceptable level

According to 30 experts in the field of anti-crisis management, managers of machine-building enterprises and our own experience, we presented by ranking method three key levels of business process efficiency for machine-building enterprises: low, acceptable and high. The choice of three levels for assessing the effectiveness of business processes at a machine-building enterprise - high, acceptable and low - reflects an integrated approach to assessment, taking into account different degrees of productivity and the specifics of the industry. This system allows processes to be effectively classified according to their efficiency, providing a clear understanding of performance levels and identifying opportunities for improvement. At the same time, its simplicity and intuitiveness make the assessment accessible to management and employees, facilitating an easy understanding of the current state and necessary changes. In addition, taking advice and consulting with leading industry experts ensures that the chosen grading system meets the specific requirements and standards of the machine-building industry. Threshold values for each of the indicators were established through the method of expert analysis. Through the Delphi Method, we were able to summarize the opinions of experts and present the author's vision of threshold values. In the case of our selected enterprise, the indicator is 5.8 units, that is, within the average. The next indicator for our matrix for determining the most optimal form of re-engineering will be the level of

financial potential of a mechanical engineering enterprise. Let us present the economic content and method of calculating key indicators, including the level of financial potential (Table 2).

Table 2. The economic content and calculating key indicators, including the level of financial potential. (Source: formed by authors using information from Sylkin, 2019; Trabelsi, 2023; Shtangret, 2021)

Nº	Coefficient	Formula	The economic content
1	Total liquidity ratio	WC/Lst WC-Working capital Lst - Short-term liabilities	Reflects the company's ability to cover its short-term liabilities with all available short-term assets
2	Quick liquidity ratio	WCi/ Lc WCi-Working capital Lc - Current liabilities	This ratio excludes inventory from the overall liquidity calculation, focusing on more liquid assets
3	Absolute liquidity ratio	$Ficc/ Lc$ Ficc - Cash and current financial investments Lc - Current liabilities	Measures a company's ability to cover short-term liabilities with its most liquid assets, such as cash and cash equivalents
4	Total debt ratio	LF/ Bft LF - Loan funds Bft - Balance sheet total	Displays the share of debt in a company's overall capital structure
5	Asset turnover ratio	$Netps/ ASa$ Netps - Net revenue from product sales ASa - Average asset value	Shows how efficiently a company uses its assets to generate income
6	Current assets turnover ratio	$Netppc/ ASca$ Netppc - Net proceeds from product sales ASca - Average value of current assets	This ratio measures how quickly a company converts its current assets into cash or sales
7	Profitability ratio	$Netp/ ASa$ Netp - Net profit ASa - Average asset value	Reflects a company's ability to generate profits from its operations, assets and capital
8	Profitability ratio of machine-building products	$Netp / Netppc$ Netp - Net profit Lc - Current liabilities Netppc - Net proceeds from product sales	An industry-specific indicator that determines how profitable a machine-building company's products are, that is, its ability to generate revenue from the sale of products
9	Own funds ratio	$SFfa/ Awc$ SFfa - Sources of own funds – fixed assets Awc - Amount of working capital	Indicates the company's level of financial independence by showing how much of the company's assets are financed by equity capital
10	Working capital ratio	$SFnca/ Awc$ SFnca - Sources of own funds - non-current assets Awc - Amount of working capital	Shows what part of the company's working capital is its own resources, which is important for assessing financial stability and the ability to withstand financial fluctuations
11	Financial autonomy ratio	OF/ BSc BSc - Balance sheet summary OF - Sources of own funds	This indicator reflects the degree of dependence of the company on external sources of financing

For machine-building enterprises in wartime, financial potential may depend on the ability to adapt to changing conditions, exercise effective cost control, and also on attracting government contracts and military orders. In a similar way as in the case of determining the level of efficiency of business processes, we establish a list of indicators for assessing financial potential through the involvement of experts and their threshold values for the following levels: low potential, satisfactory potential and high potential. Taking the data from LLC "VITYAZ Machine-Building Plant", we will evaluate its level of financial potential. As a result of the calculations, the value is the "Satisfactory" level, as can be seen from Table 3.

Table 3. Assessment of the financial potential of the selected machine-building enterprise within the framework of the presentation approach. (Source: formed by authors using information from Drobyazko, 2020; Trabelsi, 2023; Shtangret, 2021)

Coefficient	High potential		Satisfactory potential		Low potential		LLC "VITYAZ Machine-Building Plant"
	More than	Points	Range	Points	Less than	Points	
Total liquidity ratio	More than 0.2	10 points	1-2	5 points	Less than 1	0 points	1.82
Quick liquidity ratio	More than 0.8	10 points	0.4-0.8	5 points	Less than 0.4	0 points	1.56
Absolute liquidity ratio	Less than 0.2	10 points	0.1-0.2	10 points	Less than 0.1	0 points	0.43
Total debt ratio	More than 0.26	15 points	0.1-0.26	10 points	Less than 0.1	5 points	0.53
Asset turnover ratio	More than 1.6	15 points	14-1.6	10 points	Less than 1	5 points	1.65
Current assets turnover ratio	More than 2	15 points	1-2	10 points	Less than 1	5 points	1.71
Profitability ratio	More than 0.1	20 points	0.05-1	15 points	Less than 0.05	10 points	0.04
Profitability ratio of engineering products	More than 0.15	20 points	0.1-0.15	15 points	Less than 0.1	10 points	0.02
Own funds ratio	More than 0.3	20 points	0.1-0.3	15 points	Less than 0.1	10 points	0.45
Working capital ratio	More than 0.3	20 points	0.1-0.3	15 points	Less than 0.1	10 points	0.45
Financial autonomy ratio	More than 0.5	15 points	0.3-0.5	5 points	Less than 0.3	5 points	0.47
Total	170		115		60		135
Level of financial potential	Less than 100 points		From 100 to 140 points		More than 140 points		Satisfactory level of financial potential

Our choice of three levels for assessing the financial potential of a selected mechanical engineering enterprise has its justification, especially in the context of attracting experts. Defining levels creates clear and understandable categories for analysis. Experts can easily categorize a business's financial health, making it easier to identify key areas for intervention and development. At the same time, the key criteria for choosing a form of reengineering are the level of financial potential and the level of efficiency of business processes. Thus, we will justify each of the forms of re-engineering (Table 4).

Table 4. Justification of the main forms of re-engineering. (Source: formed by authors using information from Xiaoli, 2011; Trabelsi, 2023; Ringim, 2012)

Nº	Forms of re-engineering	The essence of the form	Criteria for selection
1	Dynamic re-engineering	Dynamic re-engineering focuses on continuously updating and adapting business processes. It recognizes that the business environment is dynamic and constantly changing, so processes must be regularly reviewed and updated to remain efficient and competitive. Dynamic re-engineering includes the principles of flexibility, rapid adaptation to changes in market conditions, technologies and customer requirements	With high financial potential and significant efficiency of business processes
2	Static re-engineering	Static re-engineering, in turn, is a more traditional approach. It involves a one-time, fundamental review and redesign of business processes. This approach focuses on deeply analyzing existing procedures and radically reformatting them to achieve significant improvements. Static re-engineering is usually used when fundamental changes are needed, but without constantly updating processes	With satisfactory financial potential and acceptable efficiency of business processes
3	Primary re-engineering	Priority re-engineering focuses on priority aspects of the business that require immediate intervention and redesign. This approach selectively focuses on those segments or processes that have the greatest impact on overall performance or service quality. Priority re-engineering can be applied as part of a broader reengineering strategy, where certain key areas are given priority attention and resources for rapid improvement	With low financial potential and insignificant efficiency of business processes

The author's vision of the matrix for choosing the optimal form of re-engineering is an approach through which recommendations for choosing a form are established based on the criterion of the level of efficiency of business processes and financial potential. We enter the obtained data on the machine-building enterprise we have chosen into the constructed matrix and obtain the positioning of our open socio-economic system for choosing the most optimal form of re-engineering (Figure 3).

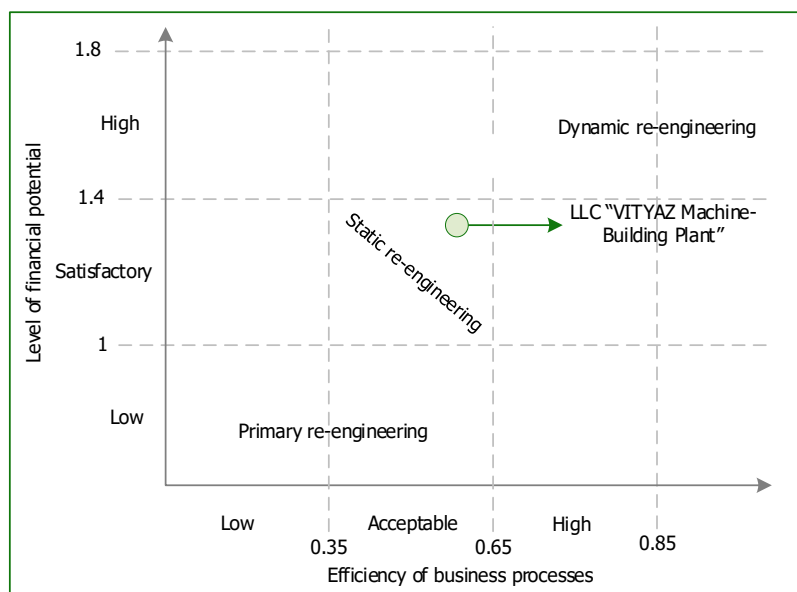


Figure 3. The matrix for choosing the optimal form of re-engineering in the context of improving the commercial activity of a machine-building enterprise.

Thus, in the case of our enterprise, the most optimal form of re-engineering is static. As the management of the enterprise indicated, their activities are often characterized by complex production and management processes. This complexity requires an approach that balances innovation and reliability. Static re-engineering allows LLC "VITYAZ Machine-Building Plant" to implement changes in a gentle and controlled manner, reducing the risk of interruptions and unpredictable consequences. For example, LLC "VITYAZ Machine-Building Plant" has a quality control department that uses traditional, manual methods for checking the quality of parts. These methods are sometimes not efficient enough and lead to production delays. Static re-engineering in this case may consist of the introduction of automated quality control systems.

DISCUSSION

As part of our research, the key indicators of the financial potential of machine-building enterprises were ranked, the level of efficiency of business processes was determined, and the author's vision of the matrix for choosing the optimal form of re-engineering was developed. Comparing the obtained results with similar scientific works can reveal interesting correlations and discrepancies. That is why, as part of the discussion of the results obtained by the authors of the article, we will compare them with similar or tangential issues. For example, the study of Shtangret et al. (2021) focuses on anticipatory management and its impact on the economic security of enterprises. Although this approach is similar to business process re-engineering in the context of adaptability and predictability, it focuses more on responding to potential risks rather than optimizing processes through financial metrics. The study of Lazarević et al. (2020) considers a model for improving business efficiency using the example of a postal company. This study is similar to ours in terms of focus on processes and efficiency, but it has a highly specialized context compared to our broader view of machine-building enterprises.

It should be noted that the work of Lytvyn et al. (2022) highlights the transformation of entrepreneurship in the context of the digitalization of business processes. This approach emphasizes the importance of integrating technological change into re-engineering processes, which reflects some aspects of our research, particularly in the use of financial indicators to support decisions. The study of Filyppov et al. (2021) and Drobyazko et al. (2020) focus on stability and risk management in business structures, which are key to understanding financial capacity and its impact on re-engineering processes. These works provide additional context to our findings, particularly in terms of risk management. What will be taken into account in the following studies? Finally, Sylkin et al. (2019) consider the modelling of crisis management processes. Although their approach focuses more on crisis response than on strategic re-engineering, it emphasizes the importance of deep analysis of the financial condition of enterprises for effective management. Thus, in general, the comparison of our study with these works emphasizes the uniqueness of our approach to business process re-engineering, based on financial potential and efficiency, and its practical value for machine-building enterprises of Ukraine.

CONCLUSIONS

As a result, based on the analysis of the activities of machine-building enterprises in Ukraine, a decrease in key financial indicators over the past year was established. Based on the method of financial analysis and ranking, an approach to assessing the level of financial potential and the efficiency of business processes of a modern machine-building enterprise was presented. For clarity, the activities of a specific operating machine-building enterprise in Ukraine are taken. Established based on his example, not high values for the selected indicators. The result of assessing the financial potential and efficiency of business processes through the most significant indicators made it possible, through the matrix analysis method, to present options for choosing the most optimal form of re-engineering. In the case of a specific machine-building enterprise, this was a static form of re-engineering.

The study is limited by taking into account the specifics of the activities of machine-building enterprises exclusively when selecting indicators and ranking them. The mechanical engineering sector is very specific and sensitive to changes in the dynamics of the external environment. The military situation in Ukraine significantly influenced the crisis development, and this forces the management of Ukrainian enterprises to look for new forms of re-engineering their commercial activities. That is why the approach we have proposed has the potential to be modified to suit the specifics of other types of activities.

Scientists who are already or will be involved in the chosen topic should pay attention to the analysis of the impact of digitalization on the financial potential and efficiency of business processes. This could include exploring how emerging technologies such as artificial intelligence and machine learning can optimize processes and increase financial benefits for machine-building businesses in a changing environment.

ADDITIONAL INFORMATION

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CONFLICT OF INTEREST

The Authors declare that there is no conflict of interest.

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РЕІНЖИНІРИНГ БІЗНЕС-ПРОЦЕСІВ МАШИНОБУДІВНИХ ПІДПРИЄМСТВ: ПІДВИЩЕННЯ ЕФЕКТИВНОСТІ КОМЕРЦІЙНОЇ ДІЯЛЬНОСТІ

Основною метою дослідження є теоретико-методичне обґрунтування вибору оптимальної форми реінжинірингу для машинобудівних підприємств у сучасних умовах мінливого зовнішнього середовища. Об'єктом дослідження є бізнес-процеси, комерційна діяльність і фінансовий потенціал машинобудівних підприємств. Наукове завдання полягає в представленні сучасного методичного підходу до вибору тої форми реінжинірингу, яка найбільш оптимальна для підприємства машинобудування в контексті його поточного стану. Для цього було застосовано методи фінансового аналізу, матричного аналізу та ранжування. Окрім цього, використано такі допоміжні методи як графічний та абстрактно-логічний. У результаті проведеного дослідження й обчислень було визначено ключові показники фінансового потенціалу підприємства машинобудування та здійснено їх ранжування. Представлено підхід до визначення рівня ефективності бізнес-процесів. Запропоновано авторське бачення матриці вибору оптимальної форми реінжинірингу. Практична цінність отриманих результатів розкривається в можливості застосування запропонованого підходу в діяльності підприємств машинобудування України. Дослідження має обмеження у вигляді врахування специфіки діяльності виключно підприємств машинобудування при здійсненні вибору показників та їх ранжування. Перспективи для подальших досліджень розглядаються через призму застосування сформованого методичного підходу для інших підприємств промисловості України.

Ключові слова: реінжиніринг, фінансовий потенціал підприємства, бізнес-процеси, комерційна діяльність, підприємства машинобудування

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