



Economics

UDC 005.511:005.21:796

DOI <https://doi.org/10.5281/zenodo.18638267>

Strategic modeling of enterprise business processes based on principles of organizing large-scale sporting events

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Accepted: 26.01.2026 | Published: 14.02.2026

Abstract. The increasing complexity of economic management and the growing interdependence of organizational functions necessitate the development of advanced managerial solutions to coordinate resources, time constraints, and multiple stakeholders. In this context, practical experience in organizing large-scale event-based projects is particularly relevant, as such activities are characterized by strict regulation, high concentration of responsibility, and the integration of heterogeneous operational functions within a unified management framework. The **purpose of this study** is to substantiate the applicability of managerial principles used in the planning and implementation of large-scale sporting events to the improvement of enterprise business process organization and long-term managerial coherence. **Methods.** The research is based on systems analysis, functional and structural generalization, comparative assessment, and elements of the process-oriented management approach. The theoretical foundation includes concepts of strategic management, the economic organization of enterprises, and best practices for managing complex projects under elevated risk and limited timeframes. **Results.** The study identifies key managerial principles inherent in large-scale sporting event



organization, including centralized coordination, modular operational structuring, phased performance monitoring, and formalized interaction between responsible units. The feasibility of integrating these principles into enterprise management systems is substantiated in order to enhance internal coordination, reduce operational inefficiencies, and increase organizational adaptability to environmental changes. A conceptual logic for managerial decision-making focused on result orientation and temporal discipline is proposed. **Conclusions.** It is proven that making management decisions based on the principles of organizing large-scale sporting events improves the manageability of economic processes, optimizes resource provision, and strengthens the strategic stability of enterprises. The results obtained have practical value for managers and specialists responsible for developing and implementing economic management decisions.

Keywords: strategic management, process orientation, project coordination, resource optimization, operational performance, organizational resilience.

**Стратегічне моделювання бізнес-процесів підприємства на основі
принципів організації масштабних спортивних заходів**

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Анотація. Зростання складності управлінських завдань у сфері економіки обумовлює необхідність пошуку ефективних управлінських рішень, орієнтованих на координацію ресурсів, часових обмежень і множинних зацікавлених сторін. Значний практичний інтерес у цьому контексті становить досвід організації масштабних подієвих проєктів, що характеризуються високим рівнем регламентованості, чіткою ієрархією відповідальності та інтеграцією різномірних функцій у єдину систему



управління. **Метою статті** є обґрунтування можливостей адаптації управлінських принципів, застосовуваних під час підготовки та реалізації масштабних спортивних подій, для вдосконалення структури та логіки функціонування бізнес-процесів підприємств у довгостроковій перспективі. **Методи.** У процесі дослідження використано методи системного аналізу, функціонально-структурного узагальнення, порівняльного аналізу, а також елементи процесного підходу до управління. Теоретичною базою слугували положення стратегічного управління, економічної організації діяльності підприємств та практики управління комплексними проєктами з підвищеним рівнем ризику. **Результати.** Визначено ключові управлінські принципи, притаманні організації масштабних спортивних заходів, зокрема централізацію координаційних функцій, модульність операційної структури, поетапний контроль результатів та жорстку регламентацію взаємодії між виконавцями. Обґрунтовано доцільність інтеграції зазначених принципів у систему управління підприємством з метою підвищення узгодженості дій підрозділів, зниження операційних втрат і підвищення адаптивності до змін зовнішнього середовища. Запропоновано концептуальну логіку формування управлінських рішень, орієнтованих на результат і часові параметри виконання. **Висновки.** Доведено, що прийняття управлінських рішень, сформованих на основі принципів організації масштабних спортивних подій, сприяє підвищенню керованості економічних процесів, оптимізації ресурсного забезпечення та зміцненню стратегічної стійкості підприємств. Отримані результати мають практичну цінність для керівників і фахівців, відповідальних за розроблення та реалізацію управлінських рішень у сфері економіки.

Ключові слова: стратегічне управління, процесний підхід, проєктна координація, управління ресурсами, операційна ефективність, економічна стійкість.



Problem statement. Strategic management of enterprise activities requires clear structuring and coordination of business processes operating in conditions of increasing complexity, driven by market dynamics, heightened competitive pressure, resource constraints, and greater demands for the effectiveness of management decisions. Traditional approaches to the organization and optimization of business processes do not always ensure proper coordination of actions among structural units, effective distribution of responsibility, and timely achievement of strategic goals. In this regard, the problem of finding alternative management guidelines to increase the enterprise's manageability and adaptability is becoming increasingly relevant.

One of the promising, but insufficiently researched, areas is the application of principles from the organization of large-scale sports events to strategic modeling of enterprise business processes. Such events are characterized by high coordination, strict time constraints, a multi-level management structure, and the need to synchronize a significant number of interrelated operations. At the same time, scientific research lacks a systematic justification for the possibilities of transforming these principles into the sphere of economic management of enterprises.

This problem is directly related to important scientific tasks in the development of the theory of strategic management and the process approach, as well as to practical tasks aimed at increasing the efficiency of the organization of enterprise activities. Solving this problem will contribute to the formation of management decisions focused on performance, clear regulation of interactions, and the optimization of resource use, which meet the modern requirements of economic science and the needs of practice.

Analysis of recent research and publications. The issue of strategic modeling of business processes of enterprises using the principles of organizing large-scale sports events is actively studied in modern scientific literature. V. Maslianchuk [1] investigated the psychological mechanisms of forming interests



between asymmetric partners in business ecosystems and proved that they significantly affect the effectiveness of strategic management. K. Lapuzina [2] found that barriers to entry for small manufacturers in retail determine the risks and level of efficiency of business processes of enterprises. Y. Hrushko [3] analyzed the use of artificial intelligence to form creative advertising concepts in the FMCG sector during the organization of large-scale sporting events and showed that such an approach contributes to the optimization of information flows in business processes. A. V. Iutkina's study [4] demonstrated the impact of omnichannel distribution on marginality and costs in the hospitality sector, which is of direct importance for the logistics of large-scale sporting events. The authors Z. Kononenko, R. Sharavara and T. Yakovenko [5] considered business process modeling as a key tool for enterprise management. In another work, N. Kononets and Z. Kononenko [6] proposed a resource-oriented methodology that enables strategic planning of resources and considers global economic ratings when making management decisions. Scientists N. V. Paranytsia, S. P. Paranytsia, and O. S. Bulychov [7] formulated a methodology for modeling business processes that ensures the consistency of management decisions and increases the accuracy of strategic planning.

In the study of M. Rogoza, V. Perebyynis, Z. Kononenko and I. Mykolenko [8] found that information support of business management in the digital economy increases the efficiency of managerial decision-making. The scientist Y. V. Svirskiy [9] showed that the use of the principles of simulation modeling allows to increase the accuracy and predictability of the results of managerial decisions. At the same time, Y. O. Terletska, L. S. Blaush and D. P. Terentyak [10] investigated the concept of enterprise development based on situational management and proved that it increases the adaptability of business processes in a dynamic environment. The authors R. Sharavara and Z. Kononenko [11] assessed the enterprise's financial potential through the stages of modeling and diagnostics, and E. V. Smyrnov and E. E. Smyrnov [12] proposed innovative business models for sports management



that can be adapted to increase the efficiency of managing large-scale business projects. In addition, E. Kolar and E. E. Mammadov [13] developed a comprehensive framework for sports event management that enables the optimization of organizational processes and resource control. An analysis of key success factors in sports event management by T. Chutipongdech and T. Kampitak [14] highlights the importance of strategic planning for improving business process efficiency. L. Chalip and S. Fairley [15] proved that strategic thinking about sports events contributes to improving the effectiveness of management decisions. Scientists Y. Xie, S. Guo, and S. Wang [16] studied the use of big data in sports event management systems. They showed that this strategy provides for resource integration and control of process efficiency.

An analysis of current publications shows that strategic modeling of business processes in enterprises is based on the integration of psychological, resource and technological management methods, the use of simulation modeling, digital tools and big data analysis. This allows enterprises to effectively organize management procedures, plan resources, and control processes in the context of the dynamic development of the business environment, drawing on the experience of large-scale sports events.

Identification of previously unresolved parts of the general problem.

Despite the significant number of scientific works devoted to the strategic management and organization of business processes in enterprises, several aspects of these issues remain insufficiently developed. In particular, most studies focus on classical tools of process and strategic management, while the potential for interdisciplinary transfer of management principles from related areas of activity is practically unexplored.

The issue of systematizing management principles inherent in the organization of large-scale sports events and determining mechanisms for their adaptation to the conditions of enterprise functioning remains unresolved. Scientific sources lack a holistic view of how principles such as centralized coordination, clear



division of functional responsibilities, phased control of task performance, and synchronization of time parameters can be integrated into the strategic modeling of business processes.

The reason for the lack of attention to these aspects is the dominance of industry-oriented approaches in research on the economics of enterprises, as well as the limited use of management practices for complex event projects as sources of managerial innovations. In addition, the lack of a unified methodological approach to transforming such principles into the economic plane complicates their scientific understanding and practical application.

At the same time, the indicated unresolved parts of the problem are of fundamental importance for a deeper understanding of the patterns of formation of effective business process management systems. Their study allows for expanding the theoretical boundaries of strategic management and provides a basis for increasing the manageability, coherence, and effectiveness of enterprises.

Formulation of the article objectives (statement of the task). The purpose of the article is to scientifically substantiate the feasibility of applying the principles of organizing large-scale sports events to strategic modeling of enterprise business processes to increase the coherence of management decisions, performance, and adaptability to changes in the external environment.

To achieve the goal, the article defines the following tasks:

- to summarize the theoretical provisions of strategic management and process organization of enterprise activities in the context of the formation of effective business processes;
- to identify key management principles characteristic of the organization of large-scale sports events, and to substantiate the possibilities of their adaptation to the strategic modeling of the enterprise's business processes;
- to form a conceptual model for integrating these principles into the enterprise management system.



Presentation of the main material of the study. The effectiveness of the enterprise's activities is determined by the management system's ability to coordinate interconnected business processes to achieve long-term goals. The combination of the enterprise's development vision with the logic of organizing operations, such as production, supply, sales and customer service, forms a holistic and manageable structure of activity, where resource planning is integrated with increasing the transparency of management decisions and reducing internal imbalances, which ensures the stability and predictability of the enterprise's functioning.

Strategic management of modern enterprises is a system for determining long-term goals, choosing development directions, and forming implementation mechanisms, taking into account the influence of external and internal factors. Business processes play an integrated role in achieving key business objectives. The level of structuring and consistency in process organization directly affects the effectiveness of management decisions and resource planning [6, p. 142].

The process organization of an enterprise is based on the identification, formalization and interconnection of main and auxiliary operations that create economic value [7, p. 60]. Unlike the functional approach, process logic focuses on the sequence of actions, the distribution of responsibility and control over results at each stage of operations, which increases the manageability of activities and ensures that current decisions align with the enterprise's strategic priorities.

In the context of the formation of effective business processes, strategic management plays a coordinating role, determining target parameters, time limits and expected results of process activities. At the same time, process organization ensures that strategic decisions are translated into specific management actions implemented at the operational level [8, p. 53]. The interaction of these components enables the formation of a holistic management system in which business processes serve as carriers of strategic decisions rather than merely tools for performing individual functions.



The organization of large-scale sports events is based on a management logic that coordinates a large number of interconnected processes within strictly defined time and resource constraints. The preparation and implementation of such events involve the simultaneous functioning of multi-level management structures responsible for planning, executing, and controlling individual operations. As a result, a management system is formed in which each element performs a clearly defined function and is subordinated to the general logic of achieving the planned result.

A key characteristic of the organization of large-scale sports events is the centralization of coordination functions while maintaining the functional autonomy of executive units. Such a management structure ensures consistency of actions among participants in the process, minimizes the risk of duplicating operations, and facilitates prompt decision-making in the event of deviations from the planned indicators for the organization of the event, in particular, time, resources, and stages of task performance. A clear definition of responsibility for individual areas of activity helps maintain the system's stability even under increased load [9].

One of the key elements of operational management is a modular structure, in which the overall set of tasks is divided into interconnected blocks with defined inputs, outputs, and execution time limits. Each block functions as a relatively autonomous unit while maintaining close interaction with other components of the system. The division of tasks into blocks allows redirecting resources quickly, changing the sequence of operations, and monitoring intermediate results.

No less important is the practice of phased control of task performance, which involves regular assessment of the alignment between actual results and planned indicators. Control points are established during critical phases of the event's implementation and serve as a tool for timely detection of management deviations [10, p. 267]. Such a control system is focused not only on fixing results but also on adjusting management decisions during operations.



A set of characteristics, principles and practices forms a management model aimed at achieving results in conditions of high complexity and limited resources. Analysis of the model allows us to substantiate the feasibility of adapting sports event management methods to the strategic modeling of business processes in enterprises (table 1).

Table 1

Structural elements of management in the organization of large-scale sports events

Element	Content	Functional purpose
Coordination center	Concentration of planning, control and decision-making functions in a specific management level	Coordination of actions and prompt response to deviations
Formalized relationships	Definition of rules for information interaction and subordination between performers	Reduction of risks of duplication of operations
Stage of execution	Division of a set of works into logically completed phases with clear time limits	Control of intermediate results
Temporary consolidation of powers	Distribution of responsibility between participants for the period of performance of specific tasks	Personification of responsibility
Result orientation	Subordination of operations to achieving a specific goal of the event	Concentration of resources on priority tasks

Source: compiled by the author based on [12-14]

Integration of management modules inherent in the organization of large-scale sports events into the enterprise's strategic modeling of business processes involves adapting planning, coordination, and control procedures to the specifics of internal structures and economic operating conditions. Each module performs a specific function, and its interactions form a holistic network of processes that ensures timely decision-making and optimal resource use.

The introduction of centralized coordination mechanisms allows synchronization of strategic tasks with operational processes and minimizes the risk of fragmentation of unit actions. At the same time, the formalization of interaction between performers creates the prerequisites for a transparent distribution of



responsibility, increased discipline in execution, and timely adjustment of management decisions during the implementation of business processes.

Phased planning of operational actions and the determination of control points enable assessing efficiency at each modeling level, contributing to the identification of bottlenecks and increasing the adaptability of processes to changes in the external environment. At the same time, the focus on final strategic results allows for concentrating resources on priority areas and increasing consistency between the enterprise's short- and long-term goals.

The formulated concept of integrating management modules provides a basis for further implementation in the enterprise's practice of methods for optimizing business processes, increasing decision-making effectiveness, and strengthening strategic stability in a dynamic economic environment.

The integration of the principles of organizing large-scale sports events into the enterprise management system is implemented through a combination of structured modular organization of tasks, centralized coordination and phased control of process implementation, which ensures a clear distribution of responsibility, effective use of resources and timely adoption of management decisions at all levels of the enterprise. In order to streamline the above provisions and clearly distinguish organizational elements and methodological principles, the paper presents a generalized structural-hierarchical model of strategic modeling of enterprise business processes, which reflects the distribution of management levels, directions of transfer of managerial influences and information flows, and the mechanism for transforming strategic guidelines into practical actions within the process architecture of the enterprise (fig. 1).

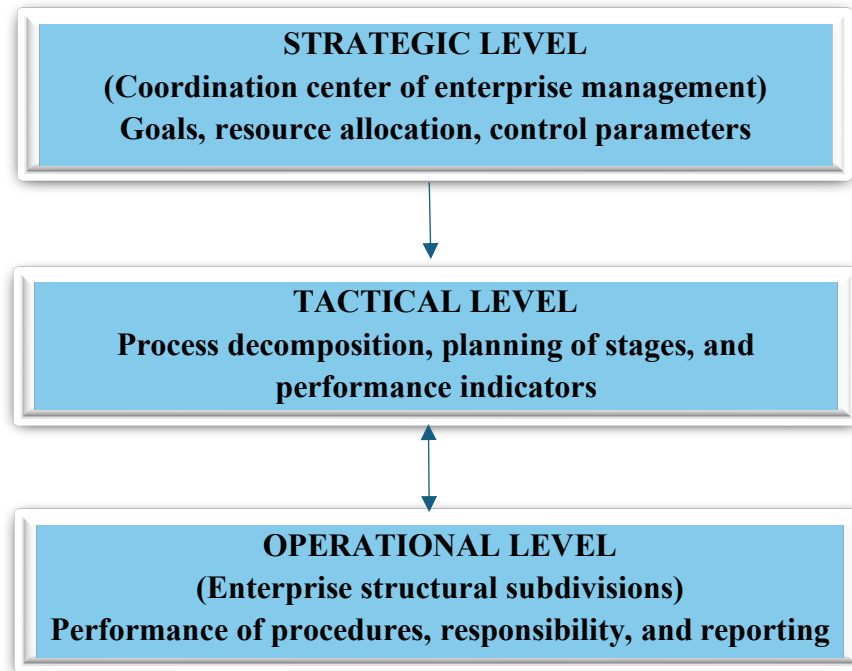


Fig. 1. Hierarchical model of strategic modeling of enterprise business processes

Source: compiled by the author based on [15]

The concept of strategic design of the enterprise's process activities, borrowed from the experience of preparing and hosting large-scale sports events, provides for a structured delineation of management levels and streamlines interaction between them through formalized channels of subordination and coordination. This approach is based on a clearly defined hierarchy, within which each management and executive level of the enterprise is endowed with appropriate powers and has its own tools and area of responsibility.

The higher management level is represented by the coordination level, which determines strategic development guidelines, allocates resources among process blocks, and establishes basic control parameters. This management level is not involved in the direct implementation of operations, but rather defines the regulatory, organizational, and methodological principles governing the functioning of the business system.

The intermediate management level ensures the specification of long-term intentions in the form of developed implementation programs. Within its framework,



the decomposition of the process activity into structural components occurs, implementation deadlines for individual stages are outlined, and the evaluation criteria and the terms of verification of the achieved results are determined. This level serves as an integrator, coordinating activities across units and ensuring a rational distribution of resources.

The operational level units are responsible for the practical implementation of specific tasks in accordance with established procedures. Their activities are distinguished by a sequence of actions, personalized responsibility and regular information on interim results. It is at this level that the real impact of implementing management decisions is formed.

Information and management flows are unidirectional: directives are transmitted from management to the executive level. In contrast, data on the status of task implementation is received in the opposite direction. In parallel, interfunctional interaction among units is ensured, which contributes to the coordination of operations, the prevention of duplicate actions, and the continuity of value creation.

A clear structuring of this architecture opens up opportunities for further quantitative analysis of the effectiveness of process management. Thanks to a clear delineation of areas of responsibility, streamlining of information flows, and the introduction of measurable indicators, it is possible to increase the enterprise's manageability in an unstable environment and minimize the risk of imbalance in internal actions.

Improving the strategic modeling of the enterprise's business processes involves developing a system of adaptive management scenarios that provides forecasting of process results and enables prompt responses to changes in the internal and external environment. Determining critical control points at each stage of business process execution and clearly formulating priorities increases transparency in management decisions and reduces the risk of imbalances in task performance.



Centralized coordination and phased task implementation, borrowed from the practice of organizing large-scale sports events, enable transforming strategic goals into specific operational actions, optimally using resources and ensuring consistent actions across departments. The introduction of feedback mechanisms and systematic monitoring of the effectiveness of business processes ensures timely adjustment of decisions, increases the organization's adaptability, and enhances operational productivity.

The practical implementation of the proposed strategic modeling model requires a system for assessing its effectiveness. It is advisable to use groups of indicators that reflect the consistency of strategic and operational decisions, the level of compliance with process implementation regulations, the timeliness of achieving control indicators and the efficiency of resource use.

The assessment of goal achievement must be carried out in three areas that reflect the structural consistency of processes, the adaptability of management decisions and the economic effectiveness of activities. Structural consistency is determined by the degree of compliance of the actual organization of processes with the established modular architecture; adaptability is characterized by the speed of decision adjustment in the event of deviations; and economic effectiveness reflects the achievement of strategic goals through indicators of productivity, profitability, and the stability of the enterprise's functioning.

The introduction of system assessment allows transforming strategic modeling of business processes from a conceptual tool into an effective management mechanism that not only coordinates activities but also increases the enterprise's long-term competitiveness.

Thus, a clear definition of control indicators and the phased implementation of tasks provide the opportunity to scale business processes and implement innovative solutions, thereby strengthening the enterprise's strategic stability. Centralization of coordination functions, identification of critical control points at key stages of processes and timely feedback between departments increase the



effectiveness of operations, reduce internal imbalances and contribute to the optimal use of resources. Thanks to this, the enterprise can effectively respond to dynamic changes in the market environment and increase the effectiveness of management decisions.

Conclusions. Analysis of strategic modeling of business processes of the enterprise using the principles of organizing large-scale sports events showed that the integration of strategic and operational levels of management through centralization of coordination, phased implementation of tasks and regulation of interaction of units creates an effective system capable of coordinating the actions of all structural units and ensuring the achievement of strategic goals.

Establishment of critical control points at key stages of processes and systematic monitoring of results form a transparent decision-making system, which allows timely correction of actions and minimizes internal imbalances. Concentrating resources on priority tasks increases operational productivity. It provides opportunities to scale business processes and implement innovative initiatives, underscoring the practical significance of applying the principles of sports organization in enterprises. The revealed pattern is that the structured organization of coordination and control mechanisms increases management efficiency and enhances the enterprise's adaptability and strategic stability in a dynamic market environment.

Further research may aim to develop quantitative indicators to assess the effectiveness of strategic modeling and to integrate digital technologies into the business process management system to increase productivity and sustainability.

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