# РОЗДІЛ 4. ЕКОНОМІКА ТА УПРАВЛІННЯ ПІДПРИЄМСТВАМИ

# RESEARCH ON BUSINESS PROCESS REENGINEERING OF REAL ESTATE ENTERPRISES

# ДОСЛІДЖЕННЯ РЕІНЖИНІРИНГУ БІЗНЕС-ПРОЦЕСІВ ПІДПРИЄМСТВ НЕРУХОМОСТІ

With the deepening of economic globalization, the global market has gradually changed from the situation dominated by sellers to the era dominated by buyers. This change makes the competitive environment in which enterprises are in become increasingly complex and the market competition becomes increasingly fierce. Due to the change of market environment, the field of management theory is also quietly changing, such as learning organization, virtual management, flexible organization and other new management models. Learning organizations strive to adapt to the changing market environment by constantly updating and improving their own skills; With the help of information technology, virtual management transfers part of the management functions inside the enterprise to the virtual space, realizes the cross-region, cross-time and space management, and improves the management efficiency. Flexible organization emphasizes that enterprises should be as adaptive as organisms, and constantly adjust their organizational structure with changes in the external environment to better adapt to market competition. These new management models provide new ideas and methods for enterprises to win the opportunity in the fierce market competition. In the early 1990s, the business process reengineering (BPR) theory proposed by American management scientists Michael Hammer and James Champy set off a process revolution in the world. The BPR project is a large and comprehensive issue. It involves the process setting and organizational structure of the enterprise, and is also linked to human resource management, IT system application and other links. It is a systematic project. This paper analyzes the background and significance of BPR appearing in the modern economic environment. The concept of BPR is introduced, and the three key principles of BPR (target process, customer research, and technical conditions) are analyzed. By studying the development process of enterprise BPR, the article discusses the BPR scheme of real estate enterprises according to the development status of China's real estate. The article is based on the "6 stages" (strategic conception stage, project initiation stage, analysis and diagnosis stage, process optimization design stage, process organization reengineering stage, and process evaluation and improvement stage) reengineering and optimization ideas. Starting from the business characteristics of the real estate market development department, cost management department, engineering management department, technical management department, and procurement management department, provide standardized and effective real estate enterprise business process management methods and practices to promote the successful implementation and operation of real estate projects.

**Key words:** real estate, business processes, reengineering and optimization, management models, marketing.

З поглибленням економічної глобалізації світовий ринок поступово змінився від ситуації, в якій домінували продавці, до епохи, в якій домінували покупці. Ця зміна робить конкурентне середовище, в якому знаходяться підприємства, все більш складним, а ринкова конкуренція стає все більш жорсткою. У зв'язку зі зміною ринкового середовища непомітно змінюється і область теорії управління, така як організація навчання, віртуальне управління, гнучка організація та інші нові моделі управління. Організації, що навчаються, прагнуть адаптуватися до мінливого ринкового середовища, постійно оновлюючи та вдосконалюючи власні навички; За допомо-. гою інформаційних технологій віртуальний менеджмент переносить частину управлінських функцій всередині підприємства у віртуальний простір, реалізує крос-регіональне, крос-часове і просторове управління, підвищує ефективність управління. Гнучка організація підкреслює, що підприємства повинні бути такими ж адаптивними, як організми, і постійно коригувати свою організаційну структуру відповідно до змін зовнішнього середовища для кращої адаптації до ринкової конкуренції. Ці нові моделі управління забезпечують нові ідеї та методи для підприємств, щоб виграти можливість у жорсткій ринковій конкуренції. На початку 1990-х років теорія реінжинірингу бізнес-процесів (ВРR), запропонована американськими вченимименеджментологами Майклом Хаммером і Джеймсом Чампі, запустила процесну революцію в світі. Проект реінжинірингу бізнес-процесів – це велике і комплексне питання. Він включає в себе процес налаштування та організаційну структуру підприємства, а також пов'язаний з управлінням людськими ресурсами, застосуванням ІТ-системи та іншими ланками. Це системний проект. У статті проаналізовано передумови та значення появи БПР у сучасному економічному середовищі. Введено поняття реінжинірингу бізнес-процесів та проаналізовано три ключові принципи реінжинірингу бізнес-процесів (цільовий процес, дослідження замовника, технічні умови). Досліджуючи процес розвитку реінжинірингу бізнес-процесів підприємства, у статті розглянуто схему реінжинірингу бізнес-процесів підприємств нерухомості відповідно до стану розвитку нерухомості Китаю. Стаття базується на ідеях реінжинірингу та оптимізації «6 етапів» (стадія стратегічної концепції, етап ініціації проекту, стадія аналізу та діагностики, етап проектування оптимізації процесів, етап реінжинірингу організації процесів, етал оцінки та вдосконалення процесу). Починаючи з бізнес-характеристик відділу розвитку ринку нерухомості, відділу управління витратами, відділу інженерного менеджменту, відділу технічного менеджменту та відділу управління закупівлями, забезпечити стандартизовані та ефективні методи та практики управління бізнес-процесами підприємств нерухомості для сприяння успішній реалізації та експлуатації проектів нерухомості

**Ключові слова:** нерухомість, бізнес-процеси, реінжиніринг та оптимізація, моделі управління, маркетинг.

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Formulation of the problem. The information technology revolution has caused drastic changes in the internal and external environment of enterprises. Technological progress has changed the mode and scope of competition. The global competitive environment has changed. Market demand diversifies. Shorter product life cycles lead to changes in production and service systems. At present, China's real estate market is in the process of transforming to large-scale, branded and standardized operation. The development model of the real estate industry is shifting from focusing on speed and scale to focusing on efficiency and market segmentation. From relying on government policy regulation to relying on market regulation and internal adjustment of enterprises. Under the environment, the business management model of the enterprise cannot adapt to the market environment, and the enterprise needs to carry out fundamental changes and innovations in order to survive and develop in the fierce market.

Formulation of the goals of the article. The objective of this paper is to find out the effective way and specific method suitable for the development of real estate enterprises based on process reengineering. In order to realize process reengineering, we should make full use of the huge productivity created by information technology, so as to improve our own informatization application level and management level as soon as possible. Such an approach will undoubtedly become an effective way to enhance the competitiveness of the real estate industry. Process reengineering is the use of modern scientific and technological consulting means to maximize the integration of technical functions and management functions, so as to achieve significant improvement in the cost, quality, service and speed of real estate enterprises.

Analysis of recent research and publications. Porter put forward the concept of value chain in Competitive Advantage (1985). He pointed out that business process is actually a value chain, including a series of related activities that jointly create value for customers [1]. Hammer and Champy (1993) made clear the definition of business process reengineering in Business Reengineering: A Declaration of the Enterprise Management Revolution, that is, the deep restructuring of the business process of the enterprise, the fundamental and thorough thinking and design, so as to achieve dramatic improvements in cost, quality, service and speed [2]. Sun Shusheng (2002) pointed out that the basic connotation of BPR is to take the needs of long-term development strategy of enterprises as the starting point, take the redesign of value-added process (the task of satisfying customers) as the center, emphasize breaking the boundaries of traditional functional departments, promote organization improvement,

empowerment, customer orientation and correct use of information technology, and establish reasonable business process. A series of management activities to achieve the purpose of enterprise dynamic adaptation to competition intensification and environmental changes. She believes that BPR must be process-oriented and customer-oriented when applied in enterprises, repositioning the nature and responsibilities of employees, so as to realize the reform of organizational management. At the same time, the ideal state of management can be achieved only by introducing and absorbing different management ideas and methods and adopting integrated management modes such as systematization, flexibility and network informatization [3]. Myshko (2017) believes that BPR is an innovative tool to improve the quality management system. It includes organizational measures and practical measures that can promote employee initiative and creativity, improve product quality, reduce costs, and improve customer satisfaction [4]. Kyfyak (2018) believes that business process reengineering is a mechanism of organizational restructuring and technological reform aimed at maximizing the automation of business operations and adopting a radically different approach. Business process reengineering requires a systematic change approach that takes into account both the reengineering implementation process and the enterprise as the transformation object. Business process reengineering requires a comprehensive approach, including procedural, systems and collaborative approaches. In addition, a method for predicting enterprise competitiveness based on process, system and collaborative methods is also proposed [5]. Mandych (2021) proposed a detailed plan for systematic sequential reengineering of enterprise business processes, and used special knowledge methods, such as statistical analysis and comparative analysis, to evaluate the organizational level and competitiveness of strategic management of business entities [6]. Taraniuk (2021) discussed the importance of internationalization and BPR in manufacturing and the challenges faced by Ukraine and Lithuania in implementing change management concepts. He believes that BPR requires institutional support, including improving international organizational and economic regulations, and redesigning the business processes of industrial companies, aiming to improve the energy efficiency of production [7].

### Presenting main material.

1. Concepts and Principles of Business Process Reengineering. The basis of BPR is to identify and judge each activity, remove the parts that cannot be added value, and optimize the parts that can be added value, so as to significantly improve production efficiency, profitability and customer satisfaction, so as to achieve the maximum value added in the value

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chain. Reengineering is not only to optimize the existing operating system of the enterprise, but to completely break the original management order, carry out a new design from scratch, optimize the combination of the most critical and basic management departments and management functions of the enterprise, so that the form of the enterprise has a revolutionary change, achieve a new mode of operation, and fundamentally change the business mode and management mode of the enterprise.

Business process reengineering has the following principles:

First of all, the enterprise target process is the internal work process of the enterprise, which needs to closely serve the enterprise strategy and goals. In other words, process reengineering must contribute to the realization of corporate strategies and objectives. Therefore, the primary focus of process reengineering is to take the strategic goal of the enterprise as the overall goal, and decompose the sub-goals or stage goals as the task goals that the process should undertake, so as to study how to accomplish this goal

more effectively, and provide Make continuous efforts to achieve the overall strategic goals.

Understanding customers is critical to business survival. Modern enterprises rely on customers to survive. If they cannot understand customers' psychological state, consumption habits and actual needs, enterprises will be difficult to succeed. On the other hand, customers are not clear about their future needs, so if the enterprise cannot create their clear future needs on the basis of truly understanding the needs of customers, then the future development of the enterprise will face difficulties. Due to the importance of customers to the enterprise, the wishes of customers should not be ignored when the enterprise's work process is redesigned and transformed.

Technical conditions are closely related to process transformation. In a sense, the state of technical process determines the path, work links, and steps of the process. Process transformation starts from technical conditions. Without the rapid intervention of information technology, the possibility

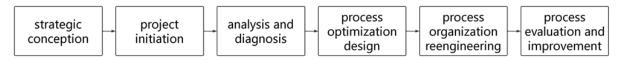


Figure 1. The 6 stages of business process reengineering

Source: built by the author on the basis of research

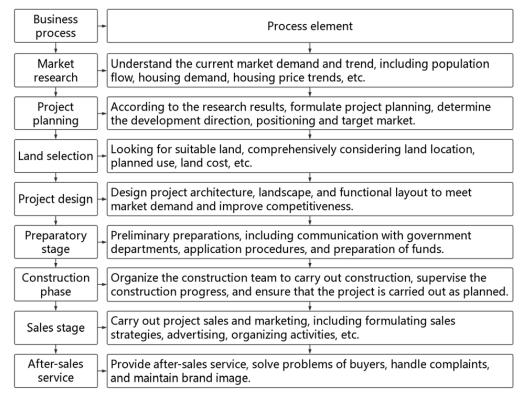


Figure 2. The work process of the real estate market development department

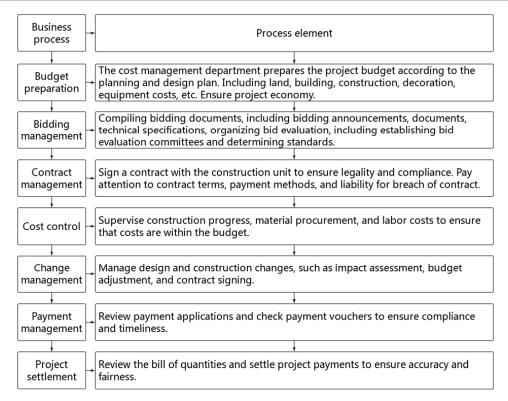


Figure 3. The business process of the real estate cost management department

Source: built by the author on the basis of research

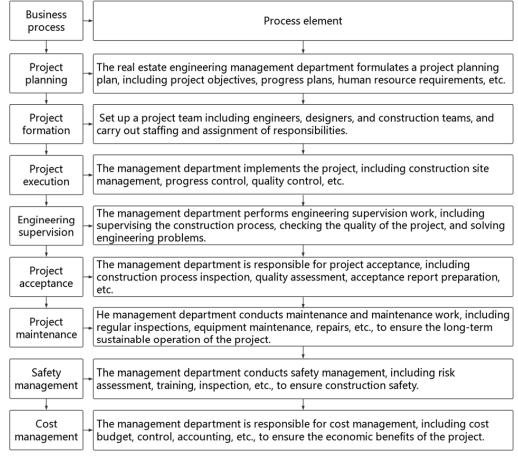


Figure 4. The business process of the real estate engineering management department

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of successful enterprise process transformation will be reduced. The criticality of information technology to enterprise process change cannot be ignored, because information technology can really change our life and work. However, only when information technology is integrated into enterprise operations can it trigger huge and thorough changes, and process reengineering has become an inevitable development. From this perspective, the current technical level can be regarded as the starting point for process transformation, and we will carry out transformation to a certain extent according to our technical conditions.

2. Business Process Reengineering Scheme for Real Estate Enterprises. Usually, the BPR process can be divided into six stages: strategic conception stage, project initiation stage, analysis and diagnosis stage, process optimization design stage, process organization reengineering stage, and process evaluation and improvement stage. The development of various businesses of real estate enterprises can be reengineered and optimized with reference to the "6-stage" thinking.

In the stage of strategic conception, the enterprise formulates its development strategy, and proposes strategic assumptions, reform goals and opportunities for BPR. In the project initiation stage, after the process reengineering project is approved, the project implementation team is formed, the implementation plan is formulated, the needs of external customers are analyzed, and the work objectives and evaluation standards are clarified. In the stage of analysis and diagnosis, conduct in-depth analysis of the existing business process and the status quo of operation and management, find out the problem, and lay the foundation for the next step of program design. The process optimization design stage is based on process analysis, proposes improvement plans, determines design principles, and designs human resource structures and information systems. In the stage of process organization reengineering, combined with enterprise human resources structure and information technology, the organizational structure is adjusted, the appropriate information technology application scheme is selected, and staff training and process transformation are carried out.

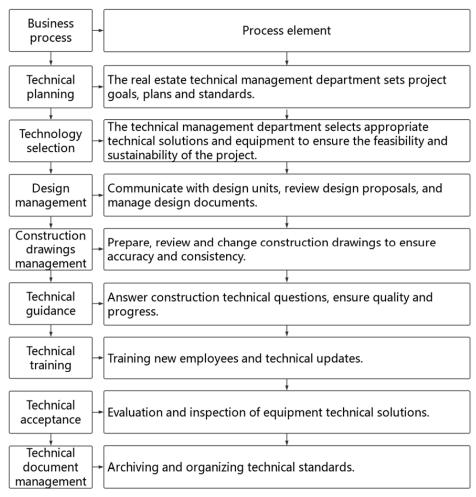


Figure 5. The business process of the real estate technology management department

The process evaluation and improvement stage evaluates the operation and performance of the process, analyzes the operation effect and problems, and combines technologies such as total quality management to achieve continuous optimization and improvement.

The work process of the real estate market development department needs to comprehensively consider factors such as market demand, project planning, land selection, project design, construction management, sales stage, and after-sales service to ensure the smooth development and sales of the project.

The business process of the real estate cost management department needs to comprehensively consider elements such as project budget preparation, bidding management, contract management, cost control, change management, payment management, and project settlement to ensure the standardization and efficiency of project cost management.

The business process of the real estate engineering management department needs to comprehensively consider elements such as project planning, project formation, project execution, project supervision, project acceptance, project maintenance, safety management and cost management, so as to

ensure the standardization and efficiency of project management.

The business process of the real estate technology management department needs to comprehensively consider elements such as technical planning, technical selection, design management, construction drawing management, technical guidance, technical training, technical acceptance and technical document management, so as to ensure the standardization and integrity of the technical management of the project.

The business process of the real estate procurement management department needs to comprehensively consider factors such as procurement demand confirmation, supplier selection and evaluation, procurement plan preparation, procurement contract signing, procurement execution and tracking, procurement cost control, procurement acceptance and supplier management, to ensure procurement management the standardization and efficiency of the work.

**Conclusion.** Process reengineering is to optimize the existing operating system of the enterprise, and it is a fundamental change to meet the needs of the market and customers. The real estate enterprise BPR provides a new theory and practice. Process reengineering needs to clarify the strategic goals of

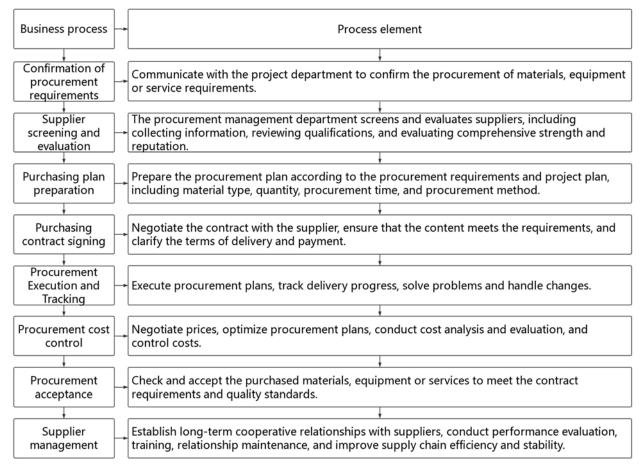


Figure 6. The business process of the real estate procurement department

the enterprise, fully understand and meet customer needs, and make full use of the advantages of information technology. The BPR of real estate enterprises can refer to the "6 stages" thinking. The business departments of real estate companies need to comprehensively consider factors such as market demand, project planning, land selection, project design, construction management, sales and marketing, and after-sales service for BPR, so as to ensure the smooth development and sales of projects.

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