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Optimization and Practice of Project Management Models in Real Estate Development

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Abstract

The complexity of real estate development projects demands efficient project management models. However, in practice, many real estate development projects face issues such as long cycles, difficult cost control, and inefficient resource allocation. Optimizing the project management model is crucial to addressing these issues. This paper explores the current state of project management in real estate development, analyzes the shortcomings of traditional management models, and proposes optimization methods based on lean management, informatization management, and risk management. Furthermore, the article presents practical cases to demonstrate the outcomes achieved after optimizing the management model. Finally, the paper summarizes the key factors for optimizing real estate development project management models and offers suggestions for industry development. The research aims to provide practical and feasible project management optimization solutions for real estate development companies to improve project execution and profitability.

Keywords

Real estate development, Project management, Optimization, Practice, Lean management, Informatization management, Risk management

1. Introduction

With the acceleration of urbanization, competition in the real estate industry has become increasingly fierce, making project management a key factor in determining the success or failure of enterprises. Real estate development projects often involve coordination among multiple parties and complex processes, and the effectiveness of management directly impacts project quality and the profitability of enterprises. However, traditional project management models often face problems such as long cycles,

uncontrolled costs, and information asymmetry, making optimization urgent. Therefore, optimizing project management models in real estate development is not only a necessity to enhance corporate competitiveness but also the key to achieving efficient and sustainable development. This paper will explore optimization methods in real estate project management and analyze their effectiveness using real-world cases, aiming to provide a replicable management model for the industry.

2. Current State of Project Management in Real Estate Development

2.1 Characteristics and Issues of Traditional Management Models

The traditional project management model in real estate development primarily relies on hierarchical management structures, emphasizing clear division of labor and strict task execution. In this model, various stages of the project are typically handled by different departments or teams, with management responsible for coordination. However, as project scale increases and market conditions change, the traditional model has exposed several issues. First, the multiple management levels in traditional models slow down the flow of information, making the decision-making process lag behind actual needs, which affects the timeliness of project execution. Especially in real estate development, numerous departments—such as design, construction, procurement, and marketing—are involved, and the coordination and communication between these departments are often inefficient, leading to information gaps during execution. Additionally, the traditional model emphasizes communication between upper and lower levels, and information delays during the transmission process often lead to project delays and cost overruns. Furthermore, responsibility allocation is often unclear in traditional models, and lack of close collaboration between team members leads to shirking of responsibility, which impedes the overall progress of the project. In particular, when unexpected problems arise, the lack of clear responsibility leads to inefficient problem resolution, causing the project to fall behind schedule. Therefore, the traditional management model faces issues such as slow information flow, poor coordination, and unclear responsibility, requiring optimization through new management models.

2.2 Challenges of Market Volatility and Risk Management

The volatility of the real estate market is a major challenge in project management for real estate development. The real estate market is affected by multiple factors such as policies, economic conditions, and the financial environment, which leads to significant uncertainty. This uncertainty means that developers face numerous risks during project planning, budgeting, and execution. Traditional project management models often rely on historical data and experience to predict market changes. However, due to the rapidly changing market environment, it is difficult for developers to accurately predict future trends, which may lead to projects not meeting market demand. Particularly in real estate, government policies often change frequently, and market demand fluctuates, affecting project sales expectations and potentially resulting in financial strain, project delays, or halts. Additionally, cash flow issues are a significant risk for real estate development enterprises. Real estate projects require large capital investments, and the liquidity and return speed of funds directly affect the

success of the project. However, the uncertainty of funding sources, the impact of market volatility, and fluctuations in financial policies can disrupt the enterprise's cash flow, complicating project management. Traditional risk management methods are often inflexible and reactive, addressing issues only after they arise, making it difficult to predict and mitigate potential risks effectively. Therefore, real estate development enterprises need to find more flexible and effective management models to enhance their ability to respond to risks and ensure smooth project progress.

2.3 Lack of Collaboration and Informatization Management

As the scale of real estate development projects expands and project management becomes more complex, the importance of collaborative management and informatization management becomes increasingly evident. However, under traditional project management models, both collaboration and informatization management are often weak. In traditional models, project management often relies on manual communication and verbal instructions, which results in delays in information exchange between departments and prevents timely updates and sharing of project data. This leads to delays in project progress. In some large real estate projects, the various stages—design, construction, procurement, and sales—are often isolated, lacking effective collaboration mechanisms. This leads to barriers in information transmission and poor task coordination, making it difficult to track progress. Particularly during the construction phase, if information regarding construction progress, material procurement, and quality control is not shared in real-time, it directly impacts project efficiency and quality. In traditional management models, project data is often scattered, with different departments using various management tools, resulting in isolated information and preventing effective data sharing and collaboration. The delay in information makes it difficult for management to make timely decisions, and issues that arise during project progress cannot be addressed quickly, affecting the smooth execution of the project. Given the rapid advancement of information technology, real estate development projects urgently need to leverage modern informatization management tools such as project management software, ERP systems, and BIM technology to create a unified information platform that enables real-time information sharing and seamless integration. By using informatization management, project teams can more accurately allocate tasks, track progress, and control costs, ensuring that all project stages are closely connected, improving collaboration efficiency, and reducing the losses caused by delays in information transmission. Strengthening collaboration and informatization management is a key measure to improve the efficiency of real estate project management and an inevitable trend in optimizing future real estate development management models.

3. Theoretical Foundations of Project Management Model Optimization

3.1 The Guiding Role of PMBOK Theory in Project Management

PMBOK (Project Management Body of Knowledge) serves as the standard framework in the field of project management and has become the foundation for many project management practices worldwide. Developed by the Project Management Institute (PMI), the PMBOK theory systematically organizes

and summarizes the knowledge areas and practices of project management, providing comprehensive guidance for project managers. It covers ten key knowledge areas: project integration, scope, time, cost, quality, resources, communication, risk, procurement, and stakeholder management. The core concept of PMBOK is to ensure successful project completion within the defined scope, time, and budget through standardized management processes and methods. In real estate development projects, PMBOK plays a crucial role, particularly in risk management and cost control. Real estate projects typically involve high complexity and uncertainty, requiring effective risk identification, analysis, and response strategies. By using PMBOK theory, project teams can conduct comprehensive risk assessments at the initiation stage, develop appropriate risk management plans based on project characteristics, and ensure timely identification and response to potential risks during the project, thus reducing the likelihood of project delays or cost overruns. Furthermore, PMBOK's project integration management helps real estate development teams consolidate various resources, ensuring efficient allocation and utilization of resources (human, financial, material). As the project progresses, PMBOK provides a robust monitoring mechanism that allows project managers to track project progress and costs in real time, evaluate project deviations, and take corrective actions. By precisely controlling project schedules, costs, and quality, real estate projects can handle complex external challenges in dynamic environments. In practical applications, PMBOK not only enhances overall team collaboration but also makes project decisions more scientific and standardized, ensuring the project progresses smoothly as planned. Therefore, PMBOK theory provides a clear management framework for real estate development projects, helping teams effectively address various risks and challenges, thereby improving the overall efficiency and effectiveness of project management.

3.2 The Structured Management Approach of PRINCE2 Theory

PRINCE2 (Projects IN Controlled Environments) is a project management methodology based on structured and phased management, particularly suitable for large and complex projects. PRINCE2 emphasizes that each phase of the project lifecycle has clear objectives, deliverables, tasks, and review mechanisms. The progress of each phase must undergo strict review to ensure that it can be completed successfully before moving to the next phase. PRINCE2 requires projects to be carried out in phases, where each phase's results and outputs must be clearly defined and closely aligned with the project's goals, avoiding issues such as vague objectives, unclear tasks, and schedule delays. In real estate development projects, the application of PRINCE2 brings a more efficient structured management model. Real estate projects involve numerous complex stages, often including preliminary research, project approval, design, construction, and acceptance, each with different objectives and deliverables. In this context, PRINCE2 provides a clear management process, effectively breaking down the project into manageable phases, with reviews and evaluations at the end of each phase to ensure the project progresses according to plan, avoiding disruptions from arbitrary decisions and uncertainties.

Another key feature of PRINCE2 is its emphasis on project change management. In real estate development projects, external factors such as market demand changes, policy adjustments, and design

modifications often impact the project. PRINCE2 incorporates a change control mechanism, helping project teams effectively address these changes and ensuring the project remains flexible to adapt to external environmental shifts. Specifically, when market changes or project goal adjustments occur, PRINCE2 requires the project team to reassess the project plan, resource allocation, and risk management strategies, and make adjustments through the change control process. This not only ensures project stability amidst changes but also prevents resource waste and schedule delays caused by poor change management. Additionally, the phase reviews and evaluations in PRINCE2 can identify potential issues early in the project and implement necessary corrective actions, ensuring the project is completed on time, within scope, and within budget. Therefore, PRINCE2's structured management approach offers significant practical value in optimizing real estate development project management.

3.3 The Innovative Application of Lean and Agile Management

With the continuous development of modern project management theory, Lean and Agile management have gradually become innovative directions in real estate development project management. The core concept of Lean management is to eliminate waste and optimize processes to improve efficiency and resource utilization. The application of Lean management in real estate development projects mainly focuses on optimizing construction processes, improving production efficiency, and reducing resource waste. For instance, through reasonable scheduling of materials, labor, and equipment, Lean management can help project teams improve resource utilization efficiency while ensuring project quality and reducing costs. Specifically, Lean management can minimize schedule delays and resource waste by refining construction plans, optimizing workflows, and managing materials more precisely. Additionally, Lean management emphasizes continuous improvement, with project teams regularly evaluating and optimizing processes to further enhance management effectiveness. By constantly eliminating unnecessary steps and processes, Lean management can help real estate development projects progress more efficiently, saving time and costs, and improving the overall project benefit.

Agile management, on the other hand, emphasizes rapid response and flexibility to adapt to constantly changing demands and external environments during the project lifecycle. In real estate development projects, Agile management is particularly suited to projects where demand changes rapidly and market competition is fierce. For example, real estate market demand may change at any time, and design and construction requirements may be adjusted based on market feedback. Agile management methods, through flexible planning, rapid iteration, and team collaboration, can help real estate projects respond flexibly in a constantly changing environment. By using small-scale iterative planning, rapid feedback, and adjustments, Agile management ensures that project progress is not overly affected by market fluctuations and can quickly respond to customer needs and market changes, accelerating project implementation. At the same time, Agile management promotes cross-functional team collaboration and quick decision-making, which is crucial for solving complex issues in real estate development projects. The combination of Lean and Agile management enables real estate development projects to have efficient process management while being flexible enough to adapt to external changes,

maintaining competitiveness and flexibility in a highly competitive market.

4. Optimization Methods for Real Estate Development Project Management Models

4.1 The Application of Information Management

In real estate development projects, the optimization of information management has become an essential means to improve project management efficiency. By introducing technologies such as BIM (Building Information Modeling) and ERP (Enterprise Resource Planning), project management can achieve real-time information sharing and dynamic monitoring. BIM technology integrates information from the design, construction, and operation phases into a digital model, allowing project teams to simulate each phase of the project in a virtual environment, identify potential problems in advance, and make adjustments accordingly. This application not only improves coordination between design and construction but also reduces errors and rework during construction, saving time and costs. Additionally, ERP systems play a critical role in enterprise resource planning, managing project resources such as finances, materials, and personnel, and monitoring project indicators such as progress, costs, and quality in real-time, helping project managers make more precise decisions during the management process. The application of information management not only improves the accuracy of data analysis and decision-making but also provides strong support for efficient project execution.

4.2 Optimization Path of Lean Management

Lean management is one of the key methods for optimizing management models in real estate development projects. The core idea of Lean management is to eliminate waste, improve efficiency, and optimize resource allocation to maximize the overall benefit of the project. In real estate development, Lean management is applied primarily in optimizing project processes and resource allocation. For example, Lean management analyzes every link in the project process, identifies and eliminates redundant steps, simplifies workflows, and improves work efficiency. In supply chain management, Lean management emphasizes establishing efficient supply chain relationships, reducing intermediate links, and lowering procurement and transportation costs. Furthermore, Lean management enhances team collaboration and communication, ensuring smooth information flow between departments, improving project execution coordination and overall efficiency. Lean management not only reduces costs but also improves project productivity and execution quality, providing a solid guarantee for the successful completion of real estate development projects.

4.3 Optimization Strategy for Risk Management

Real estate development projects often face higher risks, especially when market fluctuations, policy changes, and unpredictable external factors impact project progress, costs, and quality. Therefore, establishing a comprehensive risk management system is a crucial part of optimizing project management models. At the initiation stage, the project team should conduct comprehensive risk identification and evaluation, analyzing the various risks that may arise in the project, such as market risks, financial risks, and legal risks, and develop corresponding response strategies based on the nature

and likelihood of these risks. Specific measures include transferring part of the risks through insurance, using flexible contract terms to clarify responsibilities, and risk-sharing arrangements. Additionally, during project execution, the project manager should continuously monitor risks and take timely measures to adjust project progress, budget, and resource allocation to ensure the project proceeds smoothly. Optimized risk management not only helps project teams respond to external changes in a timely manner but also effectively reduces the probability of project failure, ensuring that the project is completed on time and with high quality.

5. Practical Cases of Optimizing Project Management Models in Real Estate Development

5.1 Vanke Real Estate's Application of BIM Technology to Optimize Project Management

Vanke Real Estate successfully implemented BIM (Building Information Modeling) technology in its "Vanke Jin Yu Hua Mansion" project, comprehensively enhancing project management efficiency. The core advantage of BIM technology lies in its ability to provide precise 3D modeling for the project, supporting the entire lifecycle management—including design, construction, and operation.

Firstly, during the design phase, BIM technology offers the project team an intuitive 3D spatial model through virtual modeling, enabling designers to perform clash detection in advance. This process helps the team identify and correct design conflicts and inconsistencies, thereby avoiding common defects in traditional designs and reducing the need for rework and revisions during the design phase.

Once the project entered the construction phase, BIM continued to play a critical role. By sharing real-time updated 3D models, all construction parties could access a unified information source, ensuring information consistency across different disciplines. Faced with a complex construction environment, contractors were able to simulate construction processes using the BIM model, allowing them to predict potential bottlenecks in advance. This ability to identify potential problems early significantly improved construction progress and quality, reduced rework caused by construction errors, and thereby lowered both the construction period and overall costs. Additionally, BIM technology optimized material procurement plans by ensuring the accuracy and timeliness of material supplies, effectively avoiding inventory buildup and capital lock-up. In this way, Vanke not only successfully shortened the project duration but also saved approximately 10% in costs, greatly enhancing the overall project benefits.

Moreover, BIM technology also played an important role in data integration and decision support during the project management process. Through data analysis, the project management team could monitor key indicators such as project progress, cost, and quality in real time, allowing for timely adjustments and decisions. As a result, transparency in project management and decision-making efficiency were greatly improved, enabling the project to be completed under more efficient and precise management. Overall, Vanke's application of BIM technology in the "Jin Yu Hua Mansion" project optimized various stages—design, construction, and operation—ensuring efficient progress and cost reduction, while also providing valuable experience for the digital transformation of the real estate

development industry.

5.2 Country Garden Group's Implementation of Lean Management to Enhance Project Efficiency

Country Garden Group implemented a lean management model in its “Country Garden·Boyin Mansion” project, achieving significant improvements in project efficiency. Lean management emphasizes minimizing resource waste by optimizing processes and improving production efficiency to reduce costs. In this project, the team conducted a detailed analysis and optimization of every construction stage through lean management, particularly in resource allocation, construction processes, and supply chain management, which led to remarkable results. Although the project was originally planned to be completed in 36 months, the lean management approach enabled the team to shorten the construction period to 30 months, saving approximately 15% of time and funds.

The core of lean management lies in optimizing the supply chain and refining construction processes. On the supply chain front, Country Garden established closer partnerships with major suppliers to optimize material procurement and logistics arrangements, thereby avoiding common issues in traditional construction such as supply interruptions and material pileups. Lean management calls for inventory reduction and the implementation of a “just-in-time supply” strategy to minimize raw material waste. This approach not only optimized cash flow but also prevented resource wastage due to excessive inventory.

Furthermore, lean management enhanced on-site construction coordination, ensuring that various processes were closely linked to avoid idle labor and equipment. Through meticulous scheduling, the efficiency of workers and machinery was greatly improved, ensuring steady construction progress. The project team also strengthened information sharing and communication to ensure timely feedback and adjustments across all stages. Throughout the project, lean management reinforced quality control, ensuring that the project was completed within a shorter period while maintaining high-quality standards. As a result of these optimization measures, Country Garden effectively improved resource utilization, reduced project costs, and enhanced construction quality, thereby bolstering the company's market competitiveness.

The successful implementation of lean management not only improved the efficiency of the “Country Garden·Boyin Mansion” project but also provided valuable experience for Country Garden Group, serving as a model for managing subsequent projects. Through lean management optimization, the project was delivered on schedule, with efficient resource allocation and low-cost operations that brought significant economic benefits to the company.

5.3 CR Land's Strengthening of Risk Management to Ensure Smooth Project Progress

CR Land reinforced risk management in its “CR Spring Bamboo Shoot Project” to successfully address uncertainties caused by market fluctuations and ensure smooth project progress. At the project’s inception, CR Land organized a specialized team to conduct a comprehensive risk identification and assessment. Using scientific methods, the team identified key risk factors affecting project progress and costs, including market demand fluctuations, construction delays, and tight cash flows. Consequently,

CR Land formulated detailed risk response measures covering project insurance, risk-sharing clauses in contracts, market fluctuation warnings, and other aspects, ensuring sufficient preparation for potential risks.

During project implementation, as market fluctuations intensified, CR Land encountered issues such as sluggish demand and financial pressure. In response, CR Land adopted flexible strategies to address market uncertainties. In periods of low demand, the project team adjusted construction schedules, controlled cash outflow, and implemented flexible payment methods (such as installment payments and preferential policies) to attract more buyers. In addition, CR Land modified its marketing strategies, intensifying market research and customer demand analysis to ensure smooth sales operations.

Regarding cost control, CR Land employed a risk-sharing contractual model to transfer part of the market risk to suppliers and contractors. This approach effectively dispersed the risks associated with market fluctuations and alleviated the financial pressures caused by market changes. The risk-sharing model not only helped reduce the risk burden on CR Land but also motivated suppliers and contractors, collectively contributing to the project's successful completion.

Despite a complex and volatile market environment, CR Land successfully completed the "Spring Bamboo Shoot Project" through scientific risk management and flexible countermeasures. The project was delivered on schedule and achieved favorable sales performance during the market recovery period, ensuring the company met its expected returns. This case demonstrates the importance of risk management in real estate development and provides a valuable reference for other real estate companies facing market uncertainties.

6. Analysis of the Effects and Outcomes of Project Management Model Optimization

6.1 Precise Cost Control and Resource Saving

The optimization of the project management model plays a crucial role in improving cost control. In the optimized management model, advanced technologies such as Building Information Modeling (BIM) and Lean Management are introduced, enabling the project team to conduct accurate budget forecasting and cost planning in the early stages of the project. The use of BIM technology provides precise three-dimensional modeling, allowing potential issues in design and construction to be identified early, thus preventing cost overruns caused by design flaws and construction errors. Unlike the estimation methods used in traditional management models, the optimized management model employs more scientific and systematic cost control measures, including refined resource management and data-driven decision-making support. Additionally, the optimized management model strengthens procurement and supply chain management. Under Lean Management, strategies like "just-in-time supply" and "minimizing inventory" are implemented, reducing waste of raw materials and improving cash flow. All required resources and materials are procured based on actual demand, avoiding inventory buildup and capital occupation issues. At the same time, the optimized management model enhances collaboration between suppliers and construction units, significantly improving the

coordination and efficiency of the supply chain. Through these optimization measures, the project not only avoids resource waste but also achieves higher accuracy and effectiveness in cost control.

Comparing the project management models before and after optimization, the project's budget control capabilities have been significantly improved. The optimized management model allows for more refined cost control, eliminating the uncertainties and resource waste present in the traditional model and improving the overall economic efficiency of the project. The optimization of cost control not only reduces unnecessary expenses but also provides a more solid financial guarantee for the smooth progress of the project.

6.2 Effective Schedule Control and Shortened Project Duration

Effective schedule control is one of the most notable results of optimizing the project management model. In traditional project management, the schedule is often influenced by multiple factors such as external environments and supply chain inefficiencies, leading to project delays. The optimized project management model significantly improves schedule control accuracy and effectiveness by introducing modern technological tools and more refined management processes. For example, with BIM technology, the project team can simulate construction using three-dimensional models to identify potential bottlenecks and challenges, allowing for reasonable adjustments to the construction schedule and avoiding delays caused by unexpected situations. In the optimized model, construction progress is monitored and tracked in real-time. By implementing a digital project management system, the project team can access information such as construction progress, resource utilization, and schedule forecasts, enabling them to respond quickly to delays. For example, if a task is delayed, the project management team can use data analysis to accurately determine the cause and take corrective actions, adjusting construction resources and schedules accordingly. This real-time feedback and dynamic adjustment mechanism effectively prevent uneven progress and task backlogs, ensuring that each phase proceeds as planned.

The optimized project management model also compresses project duration by improving coordination at the construction site and personnel scheduling. The project team avoids idle time for workers and equipment by optimizing personnel and equipment scheduling, greatly enhancing work efficiency. Lean Management emphasizes "minimizing non-value-added activities," and coordination between various processes on the construction site becomes smoother, reducing unnecessary waiting and waste during construction.

6.3 Enhanced Team Collaboration and Communication

The optimization of the project management model has also played a significant role in enhancing team collaboration and communication. Traditional project management often suffers from information silos and poor communication, with inadequate information flow between different departments and teams, leading to delays in work progress and execution errors. In the optimized project management model, the information-sharing and communication mechanisms have been significantly improved, making collaboration between teams more efficient and orderly.

By introducing information technology tools and platforms, the project team can share real-time data, progress updates, and decision-making information on a single platform, ensuring that each team member receives the latest project information in a timely manner. This information-sharing mechanism effectively reduces errors and delays caused by information lags or misunderstandings. Additionally, the optimized project management model holds regular cross-departmental coordination meetings to promptly address issues during project execution, ensuring smooth coordination across all stages. Furthermore, the collaboration model within the team has been optimized. During project execution, team members have clearer roles and responsibilities, allowing them to adjust work priorities and resource allocation flexibly based on the project's needs and phases. This more flexible and efficient collaboration model enables the project to progress more smoothly.

After optimizing the project management model, the work efficiency of team members has significantly improved, and the project's execution capability has been strengthened. The optimized project management model has enhanced communication and collaboration, improving team members' job satisfaction and cohesion. Effective communication and collaboration allow all parties involved to resolve issues quickly during execution, ensuring that the project is completed with high quality and efficiency.

6.4 Strengthened Risk Management and Reduced Project Uncertainty

One of the most direct benefits of optimizing the project management model is the improvement in risk management. Traditional project management often overlooks potential risks, leading to significant economic losses and schedule delays once risks materialize during project execution. The optimized project management model, by incorporating systematic risk assessment and management tools, ensures that the identification, evaluation, and response measures for risks are more scientific and precise.

In the optimized management model, the project team conducts comprehensive identification and analysis of potential risks, including market risks, technical risks, construction risks, and financial risks. By using modern risk management tools, the project team can monitor various risks in real-time and adopt appropriate response strategies for different types of risks. For example, to address market demand uncertainties, the project team can adjust sales strategies and project plans in advance to mitigate the impact of market fluctuations; for technical risks during construction, quality control and supervision can be enhanced to reduce error rates during construction.

The strengthening of risk management also includes optimizing contract management. In the optimized management model, the project team typically adopts risk-sharing contracts to transfer part of the risk to suppliers and contractors, thereby reducing the risks borne by the enterprise itself. The project also develops emergency plans and risk transfer strategies to ensure a swift response and effective measures in case of risk occurrence.

7. Conclusions and recommendations

7.1 Conclusion

Through the optimization research on the management mode of real estate development projects, we can draw the following important conclusions:

First of all, information management, lean management and risk management are effective ways to optimize the management mode of real estate development projects. In terms of information management, with the development of information technology, the digitalization of project management has been continuously improved. Through big data analysis, cloud computing, BIM technology and other means, data sharing and decision support at all stages of the project can be improved to ensure smooth and efficient information during project implementation. The introduction of lean management not only simplifies the project process, but also effectively reduces the waste of resources and improves the overall efficiency of the project. Risk management ensures the stable progress of the project and reduces the impact of unexpected factors on the project schedule and quality by identifying and responding to potential risks in advance.

Secondly, the optimization of project management mode can significantly improve the efficiency of project implementation and effectively reduce the risk of the project. Through scientific and systematic management, the optimized project management mode can achieve better results in cost control, schedule management and quality assurance, and promote the project to be completed on time and in quality. In addition, the optimized risk management mechanism can identify and respond to external and internal uncertainties, thus ensuring the smooth progress of the project in a complex environment and reducing the possibility of project failure.

7.2 Suggestions

In the future management of real estate development projects, enterprises should actively introduce advanced management technologies and theories, and make flexible adjustments according to their own actual conditions. Specifically, enterprises need to strengthen information construction, improve the level of intelligent management, use big data and cloud computing to accurately predict and control resources, monitor project progress in real time, and improve decision-making efficiency; Introduce lean management ideas, reduce redundant and ineffective work, improve resource utilization efficiency, reduce costs and promote teamwork; Strengthen the risk management system, conduct regular risk assessment and investigation, and ensure that the uncertainty in the project implementation process is effectively dealt with. In addition, enterprises should flexibly adjust the management mode, and choose the most suitable way according to the characteristics of different projects and industry trends, so as to enhance adaptability and adaptability. On this basis, the government and industry associations should also strengthen policy support, formulate industry standards, promote excellent cases, promote the overall management level, and provide guarantee for the smooth progress of real estate development projects.

7.3 Future Outlook

With the continuous development of information technology, the management mode of real estate development projects will develop in a more intelligent and refined direction. Intelligent management will realize automatic control and optimal decision-making in every link of the project through artificial intelligence, big data analysis and other technical means. Fine management will further improve the efficiency of resource allocation and the accuracy of management through accurate data analysis and prediction. Enterprises should actively embrace these changes and constantly improve their management ability and technical level to maintain their competitive advantage. Through continuous innovation and optimization of management mode, real estate development enterprises can cope with the increasingly complex market environment and enhance the competitiveness and profitability of the project.

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