

Exploring the Necessity of Advancing the Construction of Information Management in Real Estate Management

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Abstract. With the continuous progress of socio-economic development, the real estate industry has experienced rapid growth. As a leading industry in China, the importance of this sector is self-evident. However, due to objective factors, real estate management faces many challenges, such as poor information management and sharing, difficulties in market regulation and supervision, and insufficient risk prevention and resolution capabilities. To address these issues, it is particularly necessary to promote the construction of information management in real estate management. Information management construction, through strengthening the construction of information infrastructure, building a unified information management system, and promoting the integration of information technology and business processes, can significantly improve the efficiency and level of real estate management. Specifically, information management construction can achieve real-time data updating and sharing, break the phenomenon of information silos, optimize business processes, reduce manual operations, and lower the error rate. Through data analysis and mining, it provides strong support for decision-making, enhancing the scientific nature and accuracy of decisions. Over time, it effectively improves the efficiency and level of real estate management, providing a strong guarantee for the healthy development of the industry.

Keywords: Real Estate Management; Information Management Construction; Innovation Strategy.

1. Introduction

With the rapid development of information technology, informatization has become an important driving force for the transformation and upgrading of various industries. As an important pillar of the national economy, the innovation and development of the management model in the real estate industry also rely on the support of informatization. Currently, China's real estate management faces many challenges and problems, such as information asymmetry, difficulties in market regulation, and insufficient risk prevention capabilities. These issues severely restrict the healthy development of the real estate market. However, the advancement of information management construction provides a new solution and perspective for real estate management[1-2]. By introducing advanced information technology means, such as cloud computing, big data, artificial intelligence, etc., it is possible to achieve real-time monitoring, data analysis, and forecasting of the real estate market, providing a scientific basis for decision-making. At the same time, information management construction can also break down information barriers, promote information sharing and cross-departmental collaboration, and improve management efficiency and service levels. Therefore, by strengthening information management construction, promoting the modernization and intelligence of real estate management, and providing a strong guarantee for the sustainable development of the industry, is essential.

2. The Necessity of Advancing Information Management Construction in Real Estate Management

2.1. Enhancing Management Efficiency and Decision-making Level

To do well in real estate management, strengthening information management construction is an inevitable trend for future development. Information management construction plays a crucial role in modern real estate management. By introducing advanced technological means such as cloud

computing, big data, artificial intelligence, it has brought revolutionary changes to real estate management and taken solid steps in improving management efficiency. In terms of data management, information management construction has achieved real-time data updating and sharing, breaking down information silos, making the flow of information between departments smoother, improving the accuracy and reliability of data, and providing a more comprehensive and in-depth basis for decision-making for management. In terms of business process optimization, information management construction, through automation and intelligent means, has simplified cumbersome manual operations, reduced human intervention, thereby lowering the rate of human errors. At the same time, the information system can be flexibly adjusted according to business needs, optimizing business processes, improving work efficiency, and providing a strong guarantee for the stable development of enterprises.

2.2. Enhancing Information Transparency and Publicity

Through information management construction, the transparency of the real estate market has been significantly improved, bringing many benefits to all parties in the market compared to traditional management models. First, consumers can now more conveniently access market information, making housing decisions more informed. Before the construction of information management, only 30% of consumers could fully understand the market situation; after the reform, this ratio has increased to 80%. This change has enhanced consumer confidence in buying homes, reducing risks caused by information asymmetry. At the same time, the government and regulatory departments also benefit from the improvement of information transparency, being able to more accurately grasp market dynamics, timely discover potential problems, thereby formulating more reasonable and targeted policies. Compared to the past, policymakers can now obtain more comprehensive and timely data support, making policy formulation more scientific and effective production and supply decisions[3]. Previously, real estate enterprises often relied on experience and intuition for resource allocation, which was inefficient and prone to resource wastage. With the advancement of information management construction, enterprises can fully utilize technologies such as big data and cloud computing to conduct in-depth mining and analysis of market data, thus more accurately predicting market trends and providing strong support for enterprise decision-making. Additionally, information management construction can also effectively reduce the operational costs of enterprises. By introducing automated and intelligent management methods, enterprises can reduce their reliance on manpower and material resources, improving work efficiency. For example, automated office systems can simplify the cumbersome document processing workflow, and intelligent property management systems can achieve real-time monitoring and scheduling of property resources, saving a significant amount of costs for the enterprise.

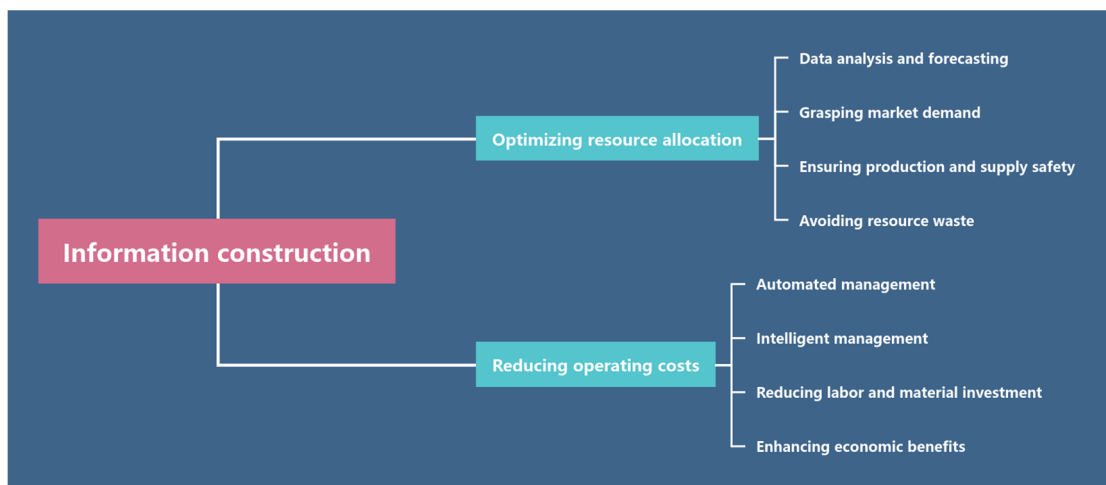


Figure 1. Information Management Construction

3. Current Issues Faced by Real Estate Management

3.1. Inefficient Information Management and Sharing

The real estate industry's information management currently faces many challenges, impacting the industry's operational efficiency and restricting its healthy development. Due to historical reasons and systemic issues, different departments often operate independently, making it difficult for data and information to flow freely between departments. This has led to widespread phenomena of data silos, making it difficult for enterprises to fully grasp business situations and make scientific and reasonable decisions. Due to the lack of unified standards and regulations, the information management systems of different enterprises often vary significantly, with differences in data formats, data interfaces, etc., increasing the difficulty of data integration and limiting the collection, organization, analysis, and utilization of information and data[4]. With the rapid development of the real estate industry, the volume of information has surged, placing higher demands on information management systems. However, many enterprises' information management systems are still at a traditional, inefficient level, unable to meet the needs of business development[5-6].

3.2. Difficulties in Market Regulation and Supervision

The issues facing the real estate market are complex and multifaceted, encompassing deep impacts from policy, economic, and social dimensions, as illustrated in Table 1. On the policy level, due to the numerous policy factors affecting the real estate market, the government needs to balance various interests when formulating policies to ensure their rationality and effectiveness. However, due to the unpredictable changes in the market, policies often fail to fully adapt to rapid market shifts, leading to suboptimal policy implementation effects and increasing the difficulty of market regulation. Economically, fluctuations in the real estate market are closely related to the macroeconomic environment. Economic cycles, inflationary pressures, and changes in interest rates can all have profound effects on the real estate market. However, these economic factors are often difficult to predict accurately, adding great uncertainty to market regulation. On the social level, issues such as fair competition in the real estate market, risk prevention, and consumer rights protection urgently need to be addressed. Unfair competition, fraudulent practices, and information asymmetry not only harm consumer interests but also affect the healthy development of the market[7-9].

Table 1. Issues Facing the Real Estate Market

Category of questions	Specific questions
Policy issues	Policy making is difficult and requires balancing the interests of multiple parties
	The effect of policy implementation is difficult to predict and evaluate
	There is insufficient policy coordination and there may be contradictory or overlapping policies
Economic problems	Economic cycle fluctuations have a great impact on the real estate market
	The impact of inflation and interest rate changes on the real estate market
	The real estate market is linked to risk in the financial system
Social problems	Fair market competition, there are unfair competition and fraud
	The protection of consumers' rights and interests is insufficient, and the problem of information asymmetry is prominent
	Real estate market risk prevention and resolution is difficult

3.3. Insufficient Risk Prevention and Resolution Capability

As the real estate market continues to thrive, risk issues have gradually become more prominent, drawing the attention of both the industry and society. However, current real estate management's performance in risk prevention and resolution is not satisfactory. On one hand, the existing mechanisms for identifying and issuing early warnings for potential risks are clearly insufficient. Due to rapid market changes and the emergence of new risk points, existing management methods often fail to keep pace with the market[10], leading to many potential risks being overlooked or not discovered in time, directly increasing market uncertainty and laying the groundwork for the accumulation and amplification of risks. On the other hand, there is a lack of effective measures and mechanisms to address and resolve existing risk issues. When risks actually erupt, many enterprises and management departments are often at a loss, lacking targeted solutions. This undoubtedly leads to further expansion of risks and may severely impact the stable and healthy development of the real estate market.

4. Strategies for Advancing the Construction of Information Management in Real Estate Management

4.1. Strengthening the Construction of Information Infrastructure

With the advent of the information age, to ensure the stable operation of the real estate market, further investment in information infrastructure is necessary. This means updating hardware equipment, enhancing the performance of the network environment, and ensuring the stability and efficiency of data transmission. Hardware equipment, as the foundation of information transmission, directly affects the efficiency and quality of information processing. Advanced hardware equipment should be purchased to meet the growing data processing demands. A stable and high-speed network connection is key to ensuring the rapid circulation of information and plays an irreplaceable role in maintaining the timeliness and accuracy of real estate market information. Moreover, establishing a unified data storage and management platform is also essential. It can achieve centralized data storage and sharing, break the information silos between departments, improve the efficiency of data use, and provide strong support for policy-making and market analysis.

4.2. Building a Unified Information Management System

Establishing a unified information management system covering the entire industry is key to improving the overall operational efficiency of the real estate industry and strengthening market supervision. This system can integrate the business data of various departments, break down information barriers, and achieve real-time updating and sharing of data. By standardizing data and standardizing interfaces, it ensures the accuracy and consistency of data. Specifically, a unified information management system can integrate all aspects of the real estate market, from land concession, planning and construction to sales transactions and property management, forming a complete data chain. Departments can obtain the necessary data in real-time through this system, avoiding redundant work and improving work efficiency. Real-time data updating and sharing also enhance market transparency, which is beneficial for preventing market risks and protecting consumer rights. More importantly, by establishing unified data standards and interface specifications, data accuracy and consistency can be ensured, providing a reliable basis for policy-making and market analysis[11]. On this basis, delving into market potential, discovering market trends, and providing strong support for decision-making can be achieved.

4.3. Integrating Information Technology with Business Processes

In the business processes of real estate management, applying advanced technologies such as cloud computing, big data, and artificial intelligence can comprehensively optimize business processes and significantly improve work efficiency[12]. Cloud computing technology enables centralized storage and efficient processing of data resources, allowing real estate management personnel to access

needed information anytime, anywhere, greatly accelerating decision-making speed. Big data technology can conduct in-depth mining and analysis of massive data, revealing market trends and potential risks, providing strong support for management decisions. The introduction of artificial intelligence technology can automate and intelligentize business processes. Through machine learning algorithms, the system can autonomously handle routine tasks, reduce manual operations, and lower error rates. Meanwhile, intelligent decision support systems can provide management with precise recommendations and forecasts based on real-time data, further enhancing decision quality and efficiency.

4.4. Strengthening Information Security Measures

Establishing a comprehensive information security system, as depicted in Figure 2, is critical to ensuring that information data is not leaked, illegally accessed, or compromised, thereby ensuring the stable operation of the system. First, the application of data encryption technology is vital. Encrypting important data significantly enhances its security; even if data is intercepted during transmission or storage, it would be difficult to decrypt. Second, access control mechanisms are indispensable. By setting strict permission management, it ensures that only authorized personnel can access relevant data and systems, effectively preventing illegal access. Third, regularly conducting security vulnerability checks and risk assessments is equally important. This helps to timely discover and fix potential security risks, preventing hackers or malicious software from exploiting vulnerabilities. Fourth, enhancing employees' awareness of information security is crucial. Through training and education, employees can understand the importance of information security, master basic information security knowledge and operational norms, thereby reducing information security risks from the source.

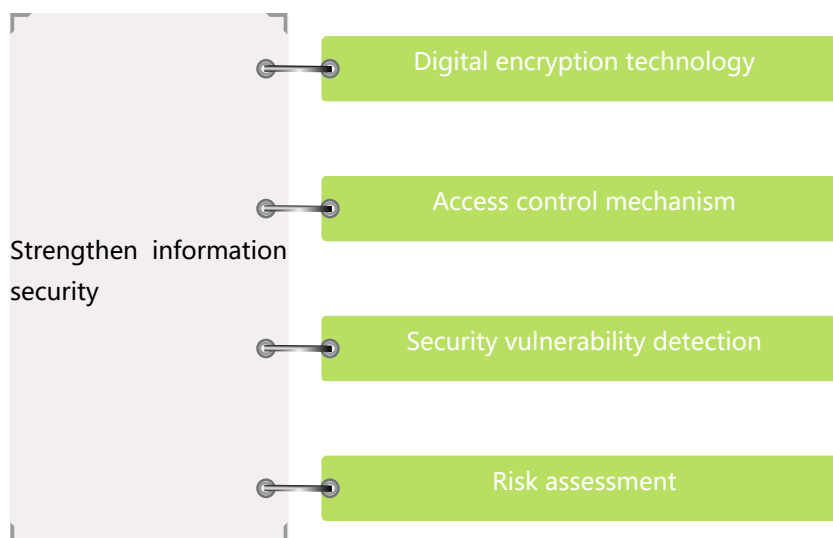


Figure 2. Measures to Strengthen Information Security

4.5. Enhancing Personnel's Information Literacy

In the context of rapid information development, real estate management personnel need to continually update their knowledge structure and improve their information technology application skills to meet the demands of industry development. Through training and learning, management personnel can master the basic knowledge and application skills of information technology, understand the composition and operation principles of information systems, become familiar with the use of various information management tools, and thus be better able to use information systems for data collection, organization, and analysis, enhancing the scientific and accuracy of decision-making[13]. The improvement of information literacy also helps management personnel better understand and respond to the challenges and opportunities brought by informatization, more keenly capture market changes, grasp industry trends, and provide strong support for the long-term

development of enterprises. Therefore, it is necessary to increase investment in the informatization training of real estate management personnel, develop detailed training plans, select professional training institutions and faculty, to ensure the quality and effectiveness of training.

5. Conclusion

In summary, advancing the construction of information management in real estate management is an important way to address current industry challenges and a necessary measure to promote the healthy and sustainable development of the real estate industry. Through the continuous deepening of information management construction, real estate management can be made more efficient, precise, and intelligent, providing more convenient and high-quality services for all market participants. However, the advancement of information management construction requires the joint efforts of the government, enterprises, and all sectors of society. The government should increase support for information management construction, introduce relevant policies, and encourage technological innovation and talent development. Enterprises should actively participate in information management construction, enhancing their management level and competitiveness. Meanwhile, all sectors of society should also pay more attention to and supervise information management construction, jointly promoting the healthy development of the real estate industry. Of course, information management construction is not an overnight process; it requires continuous investment, exploration, and refinement. In the process of advancing information management construction, various difficulties and challenges may be encountered, but with firm confidence and perseverance, these difficulties can be overcome to achieve the set goals of information management construction.

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