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Management Strategy for Construction Project under Informatization Background

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Abstract: *With the continuous development of China's economy, informatization has greatly promoted the development of the field of construction engineering, the development of informatization in the construction industry has become an inevitable way for the development of the construction field. However, at present, the informatization management level of China's construction industry is poor, unable to meet complex project management work. This article analyzes the problems existing in the current development of informatization construction engineering management, summarize the optimization strategy for further developing the information management of construction engineering, achieve a unified information standard, improve the quality of information professionals, in order to improve the efficiency and quality of construction management, promote the construction industry to develop in the direction of information.*

Keywords: *construction management, informatization, management strategy, Construction engineering management software*

1. The introduction

With the continuous improvement of China's economic and social level, all fields of China's social development are undergoing information transformation, and information has attracted more attention in the construction industry [1]. Through information-based construction management, China's construction industry can be more smoothly carried out. Through literature research and comprehensive analysis, the current stage of construction management has indeed achieved great success, to a certain extent, the efficiency has been improved, but the overall picture is not good, the informatization level of management was not well developed, seriously hindered the overall effect of construction engineering management informationization. However, because of the construction industry has developed rapidly, the demand is constantly changing, according to a series of problems at present stage, effective measures should be taken to strengthen management [2], give full play to the role of informatization in construction project management, improve the efficiency and level of construction project management, to adapt to the needs of the current market, and promote the sustainable development of construction industry.

2. Existing problems in construction information management

In the context of the rapid development of Internet technology today, information technology iteration is accelerating, the field of construction engineering management also uses informatization as a powerful weapon to improve itself [3]. Based on the research on the informatization level and development direction of current construction engineering enterprises [4], according to the analysis of the survey results [5], enterprises generally have low level of information management, can not really play the information advantage of the problem; As a result, this paper mainly summarizes the problems in four aspects: the application scope of informatization development is small, the regional economic development is unbalanced, the software facilities of informatization management is not perfect, and the comprehensive level of enterprise talent allocation is low, and specific analysis is made for the above problems:

2.1. The application scope of information management is narrow

The application scope of China's construction engineering informatization is narrow. In the current construction project management, the managers have a low degree of understanding of informatization and the concept of informatization is not strong [6]; Moreover, the knowledge of some information

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technology is not fully mastered, the application of information technology is not deep, in actual technical operations, there are also situations that cope with work [7]. Most construction engineering companies still regard it as a tool to be used in certain specific stages of construction engineering, for example, the specific project design stage, production stage, bidding stage etc. Information management can not play a role in the production and operation activities of enterprises, leading to the construction engineering information management level is difficult to substantively improve[8], restrict the further development of construction engineering information management.

2.2. Regional development of informatization management level is quite different

Information-based construction project management is conducive to stable regional development, but China has a large land area, there are differences in the level of economic development in various regions. China's coastal areas have developed rapidly, more technical personnel, more in-depth understanding of informatization; In addition, government departments and related enterprises also have a high level of attention, invested a lot of financial support, so that information management is successfully applied to construction engineering management enterprises. However, for some remote areas in the west, the economic development is relatively backward, and the application of informatization is limited to a certain extent. There is a big gap between talents and technology and coastal areas, informatization can not really be applied in the process of construction engineering management [9]. Therefore, the level of information management has obvious differences between different regions.

2.3. Management application software has major limitations

Information management has a high degree of requirements for the application of information technology, only professional software production can ensure the application of information [10]. At present, most of China's construction engineering enterprises have used a variety of application management software, which can complete simple data collection and statistics. However, due to insufficient investment in system software, there are certain difficulties in software development, resulting in slower software updates. The number of general professional software in the software market is relatively small; and the construction project management data is large and complex, the application software at the present stage has strong independence and poor interaction, which can not better meet the development trend and requirements of the modern era [11], so that the level of information management is low.

2.4. The comprehensive level of talent construction is low

First of all, managers have a low level of understanding of informatization [12]. At present, the vast majority of construction engineering management units in China have carried out information reform [13]. However, due to the long-term impact of traditional management mode, the awareness of managers is difficult to change quickly, can't realize the importance of information technology for construction project management. And most enterprises do not have in-depth research on information technology, only think that the use of computers to complete a link of work, can not reach the maximum effect that informatization can play. The second is the lack of professional talents. In all aspects of the application of information technology, professional and technical personnel with comprehensive qualities play an irreplaceable role. However, in the construction project management, information professionals are very scarce, and there are great difficulties in the operation of professional technical system. Most of the graduates, lack of rich work experience, do not have sufficient knowledge of information technology, make the lack of information management professionals become a common situation, leading to the enterprise information technology work can not be carried out normally. Finally, the comprehensive ability of relevant personnel is low. Construction engineering is a systematic project, with the characteristics of long period and large engineering volume, which has higher requirements on the professional quality of relevant technology and management personnel [14]. However, the professional comprehensive quality of talents in the field of construction engineering management in China is low, and their understanding of information technology is not profound. Many operation processes are subjective, leading to a lot of problems in the process of construction engineering management.

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3. The strategy and guideline of construction engineering information management

3.1. Build a unified information standard

In the construction project management work has a lot of projects and links, involving more content, the processing process is very tedious. To improve the efficiency of construction engineering management, it is necessary to build a unified information standard. Because construction project management involves more information data, it is necessary to use advanced technology for data analysis to ensure its accuracy and scientificity. For example, 3S technology platform or BIM technology can be used for data analysis of problems in construction engineering management [15], and the use of information technology to each stage of the work information and data for unified management and induction, including all links. In the process of actual work, all departments should attach great importance to the unity and integrity of information. All aspects of construction engineering are more complicated, so the management department should unify the process, coordinate the work of all departments, and work according to the standard system to realize the integration of resources. Change the traditional construction project management mode, connect all kinds of software, information, and data to each other, and establish a standardized information system. In order to promote the quality and efficiency of construction engineering management, ensure the smooth implementation of construction engineering management work [16]. This unified information standard can make information management more orderly, so that the construction project management more standardized.

3.2. Accelerate the development of software related to construction engineering management

The construction industry is easily affected by various external environmental factors during the construction process [17], such as housing construction projects are easily restricted by natural conditions, such as geology and weather. To a certain extent, it affected the progress of construction and increases the difficulty of construction [18]. In order to ensure the quality and efficiency of construction project management, the development of domestic information system and software should be vigorously carried out. Relevant enterprises should have powerful computer management software [19], combined with China's actual construction conditions, learn from foreign technology, to ensure that computer software is applied to the process of construction project management. For example, computer software is used to analyze geographical environment and building structure. At the same time, we should pay attention to the real-time update of software, make it more more in line with the actual requirements of the construction engineering, the development of software functions, to ensure the operation of the whole construction engineering system; Besides, we should also pay attention to the regular maintenance of software. Technicians should regularly monitor the performance of software and repair system loopholes, so as to create a stable operating environment for construction projects and improve the overall management level of construction enterprises.

3.3. Strengthen the information awareness of the management team

At the present stage, under the long-term influence of traditional management concepts, the conservative thinking is still maintained. There are problems in information exchange among various departments, which cannot fully meet the requirements of construction industry informatization. Therefore, it is necessary to strengthen the information awareness of construction engineering management team and fully realize the importance of information technology for construction engineering management [20]; construction management team should correctly recognize the value of information management from top to bottom, and further enrich manpower and materials. For example, enterprises can strengthen the training of employees, regularly carry out lectures or conduct quality education in the form of publicity columns, so that employees can skillfully apply theoretical knowledge to practical work and improve the work quality and efficiency of the whole management team.

3.4. Build a professional information talent team

Construction engineering is a strong professional industry, and the process is more complex, there must be some highly educated and highly professional talents. With more excellent talents, construction enterprises can guarantee higher development. To this kind of high-quality talented person, the enterprise should undertake professional training. On the one hand, we should pay attention to the training of professional talents. After recruiting and introducing talents, we should provide opportunities for internal talents to go abroad or receive professional training to improve their professional quality [21]. On the

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other hand, we should pay attention to the effective combination of theoretical knowledge of construction engineering management and practical work, carry out relevant practice and exercise regularly, and improve professional work skills. Besides, the quality of talents are also very important. In addition to professional knowledge, information management talents should also have certain communication and coordination ability, strain ability and innovation ability [22]. Construction engineering management enterprises can further improve the talent training system, continue to absorb and draw lessons from advanced theories and skills in the society to improve the comprehensive quality of talents, and effectively meet the demand for talents in the field of construction engineering management in China at the present stage.

4. Conclusion

From what has been discussed above, this article explores the existing problems of construction engineering informatization management, and in view of the existing problems to give the future development strategy; It can be said that in the context of rapid economic and technological development, there is still a lot of space for enterprises to implement informatization. Should correctly recognize their own gaps, in the future management work, establish a complete and unified information standards, cultivate high quality information talents, integrate information management system; According to the analysis and evaluation of its own development, optimize the design of information management software. At the same time, the comprehensive management level of managers should be improved, and the quality and efficiency of management should be constantly improved, so as to promote the development of China's construction management field.

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