

## **Analysis of Innovation Points of Engineering Project Management under the Background of Big Data**

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**Abstract:** Under the background of big data, the innovation of project management has become particularly urgent. Managers use modern technology to innovate management according to project requirements, improve project management effect, and provide favorable guarantee for project construction. Analysis of innovation points of project management under the background of big data enables managers to see the advantages and disadvantages of project management, find out the reasons, scientifically and reasonably solve them, and ensure the effective implementation of project management.

### **1. Introduction**

The knowledge of engineering project management is complex and varied. Under the background of big data, it provides corresponding convenience for engineering project management, guarantees effective data information for engineering project management, and provides effective data information suggestions for managers. In order to make the management structure and system level more reasonable, perfect the project management, make the project management more powerful, reflect the wisdom of managers in the context of big data, and show the innovation effect of project management in the context of big data, the problems existing in project management are deeply explored.

### **2. Problems in Project Management**

#### **2.1 There are problems in the project management system**

The problems existing in the project management system are a major problem in the current project management. The project management system establishes a complete development direction for the project and ensures the normal operation of the project. There are problems in the project management system, which makes the project become full of loopholes and brings many obstacles to the development of the project. For example, the requirements for personnel in the project management system are not clear, and many people who do not meet the requirements of the project project have a bad influence on the progress of the project.

#### **2.2 The level of project management is backward**

The backward level of project management is one of the main problems in project management, which is mainly reflected in management practice. The backward level of project management has seriously affected the implementation of project management under the background of big data. The backward management level will have a lag effect on the design and implementation of the management system and cannot keep pace with the management situation of engineering projects under the background of big data.

The backward level of project management affects the whole project and reflects the ability of managers. The backward level of managers is a kind of limitation to the overall view of project management, which reduces the progress of the project. It has an impact on the work of the staff, allowing them to limit their work and not see the way forward.

## **2.3 Management of staff in engineering project management is weak**

The staff is the specific executor in the project. The management content of the staff in the project management is weak, which reduces the staff's treatment in the project, so that their work is not well protected. It has an impact on the enthusiasm of the staff when they work, and the low enthusiasm will affect the progress of the project. The decline of staff's execution ability in engineering projects has a negative impact on the overall project.

The weak management content of staff in project management restricts the development of excellent talents, which is very disadvantageous to the training of excellent talents in project management. Excellent talents are the core strength of the project, which reduces their participation and makes the project in a weak position. The management of the staff in the project management is relatively weak, so that the staff can operate according to their own understanding in the work, unable to provide the proper operating specifications, and improving the dangerous situation in the project. Let staff not only hate work but also worry about their own lives. It is very unfavorable to the application of project management in engineering projects.

## **2.4 Financial management is weak in project management**

Weak financial management in project management is one of the problems in current project management. Managers did not manage the financial management of engineering projects well due to busy or blind behaviors, which made the financial management appear loopholes. The emergence of this situation has a direct and serious impact on the operation of the entire project. If it is used by others, it will have a fatal impact on the progress of the project.

Weak financial management is a potential safety hazard for project management, which can not guarantee the personnel, equipment and raw materials involved in the project. Keep the whole project in jeopardy. Weak financial management has no guarantee for financial personnel, so there are many opportunities for financial emergence. Reduce the effectiveness of financial management in protecting engineering projects and make the accounts involved in finance messy. Weak financial management in engineering project management is a problem in engineering project management under the background of big data, which promotes the innovation of engineering project management.

## **3. Key Points and Measures of Innovation in Project Management under the Background of Big Data**

### **3.1 Strengthen managers' attention in management**

Under the background of big data, engineering project management involves a large amount of data information and modern technology, which provides an effective management method for engineering project management. Strengthen the attention of managers in management, let managers see the new trends and methods of project management under the background of big data, and promote the innovation of project management from managers. Change the management perspective of managers in project management.

Strengthen managers' attention in management, let managers see good methods in engineering project management under the background of big data, and effectively refine them, put good management methods in line with the development of engineering projects into engineering project management, improve managers' level of engineering project management, and improve others' views on managers. Let managers show a modern perspective in daily management and keep up with the development of the big data era.

Strengthening the management's emphasis on management allows managers to update their views on management, to learn interest in engineering project management in the context of big data, and to increase their knowledge of management. Provide excellent management guarantee for project operation. Drive the effective operation of the project. It shows the effective innovation of project management under the background of big data.

### **3.2 Increase dynamic data in project management**

Increasing dynamic data in engineering project management is an effective innovation point in engineering project management under the background of big data. It utilizes the collection and tangible mode of information data in large data, and plays the function of modern management methods. It provides convenience for managers. Increasing dynamic data in project management adds a lot of practical application data and technical data to project management, making project management more substantial and efficient.

Increasing dynamic data in engineering project management increases effective data in engineering project management, enriches managers' brains, provides data suggestions for the next progress of engineering project management, and simplifies the complicated situations existing in the original management. The dynamic data divides the effective data collected according to the project in detail, lists the effective data framework, so that managers can see at a glance. The original data and information are only formal or flat things. The dynamic data under the background of big data makes the project management three-dimensional and enriches the managers' thinking perspective.

### **3.3 Making use of the advantage of big data to improve financial management**

Making use of the advantage of big data to improve financial management is an effective innovation point of project management under the background of big data. The financial management in the project involves the normal operation of the whole project, providing financial guarantee for the project. Leverage the power of big data to make financial management more comprehensive. The big data advantage enriches the financial data in financial management, strengthens the collection of external information in the financial aspect, and improves the relevant methods of financial data to make the accounts clearer and clearer.

The role of big data in financial management has enabled financial personnel to see the progress of the times and supplement the loopholes in financial management. Let the financial data more in line with the actual situation of the project, showing the professionalism of contemporary financial personnel. The technical level of financial personnel has been improved. The application of big data advantage in financial management has reduced financial loopholes in engineering projects, effectively standardized the operations of many personnel, strengthened financial management, and provided certain protection for financial personnel. Make financial management more scientific and convenient.

The use of big data advantages to expand financial management content has added many auxiliary functions to the work of financial personnel, brought big data advantages into play, and improved the financial management efficiency in engineering project management. Let managers no longer worry about financial management, let other people no longer have ulterior motives for finance.

### **3.4 Improvement of staff management in project management by using the advantage of big data**

Using the advantage of big data to improve staff management in project management is an effective innovation point of project management under the background of big data. The staff is the main executor of the project and reflects the effectiveness of the project management. Improvements in staff management have added security to staff.

Utilizing the advantages of big data to improve the management of staff in project management, improve the staff system, protect their rights and interests, and clarify their responsibilities. Let them work effectively under the data and systems they see. Provide technical support for the staff. Improved the situation of technical upgrading through oral presentation. Let staff see a wealth of work skills and data information, enrich their brains. Let the staff enrich their work every day, and form a good work knowledge platform for them, and increase their knowledge of work.

Another benefit of big data advantage to staff is to improve their working environment and efficiency, so that their work is full of comprehensive data and information. It guarantees the

excellent performance of their working environment and improves their working efficiency. Giving full play to the advantages of big data simplifies part of the work of the staff, allowing them to see their own advantages in engineering projects, to integrate their advantages, and to give full play to their role in the work. Reflect the key points of effective innovation in project management under the background of big data.

### **3.5 Use big data to effectively connect all departments in the project**

Big data is used to effectively connect all departments in the engineering project, so that data information can be effectively transferred according to the needs of departments in the engineering project, which reflects the key points of effective innovation in engineering project management under the background of big data. Using big data to establish effective links for departments, simplify the original communication habits of departments, and improve the efficiency of departments through the application of big data.

Making use of big data to connect all departments of the project effectively ensures the effective transmission of data information, and enables all departments to see the convenience of information technology for work, and promotes the good development of the project. Big data can be divided into regions and architectures by technology, and the relevant data parameters can be clearly defined. How to display the correct data when it appears and how to display the wrong data when it appears provide convenience for the work of staff. It also facilitates decision making for managers. Big data is designed to meet the manager's work data according to the administrator's authority, and to ensure the effective operation of the manager's work. Let the managers have more clear ideas and more effective management methods at work.

The use of big data for the effective connection of various departments in the project ensures the overall operation of the project management, provides convenience for the overall project management, and enriches the entire project management. To establish a perfect data information circulation system in the interior and an effective data information absorption system in the exterior for the project management, to ensure the progress of the innovation points of the project management under the background of big data and to make everything more effective.

## **5. Conclusion**

The key points of engineering project management in the context of big data are the important work content in the current project management. Big data has a good role in promoting the innovation of engineering project management. Let the managers discover the needs of the project management in the era, find the problems in the project management, help the managers to conduct reasonable analysis, effective planning, and improve project management. Let all the contents involved in the project management become more timely, ensure their good operation, enrich the effective data information for the staff, effectively integrate the internal and external information, and improve the work efficiency of the staff. To provide effective data and information suggestions for managers, to contribute to the decision-making of managers in project management, and to promote the good development of project management.

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