

Reforms and Innovations of Project Management in the Internet Era

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Abstract: The penetration of internet plus concept brings about new ideas and great changes to the traditional project management. This paper analyzes the flat, flexibility and virtualization characteristics of the organization models in internet era, and discusses the reforms and innovations of project schedule management, project quality management and project cost management in the era of internet to provide some references for the relevant researchers.

Keywords: Project Management; Internet Era; Internet Plus

1. INTRODUCTION

Project management is a system, which is a process of planning, organization, coordination and control, in order to make the work can get effective supervision and management, project planning work is very important, plan is to organize, control and coordination of the basis. In the actual project management process, due to various reasons, the construction schedule control becomes complicated, need to adjust the plan and real-time dynamic management, if the manual calculation method of construction network plan management, workload is too large, should be used for information processing and computer aided management, can greatly improve work efficiency and accuracy. At present, with the application of Internet plus concept in the continuous penetration of all walks of life, to bring new ideas and great changes to the traditional project management. Throughout the whole life cycle of project management, its management level and method have a direct impact on the implementation effect of a project and the post evaluation of the project. In order to improve the project management level, enhance the market competitiveness of enterprises, the construction project management into the framework of Internet plus thinking is a new topic of project management in the new era. The task of project management based on Internet era is still cost management, schedule management and quality management. The mutual restraint and mutual accommodation between the three management tasks, the signing of the project contract, the signing of the bidding amount, and there is a certain project evaluation standard, how to optimize the management between the three, is a problem in front of all project managers. In short, that is, within the

specified time, the provisions of the cost of efficient, high-quality implementation of the project's overall goal.

2. FEATURES OF ORGANIZATION MODEL IN INTERNET ERA

(1) Flat

The flattening of organizational structure refers to the reduction of management level and the expansion of management scope. With the rapid development of modern information technology and improving, so the organization can quickly and timely processing and transmission of a large amount of information, and greatly reduce the information processing and transmission of the middle level of the original organization, which provides a means for flat organization operation. The organizational structure of the flat by reducing the levels of management, saving management costs and reduce the time lag between the decision and action, speed up the response to changes in the market competition and dynamic, decision makers can be fully because of convenient access to information, according to the actual situation from the main decision-making ability is enhanced. In addition, in the flat organization, everyone is a contribution to knowledge and decision points in the network, everyone can feel their rights and values, the flattening of the organizational structure to be able to play to people's initiative and creativity, is more suitable for the demands of the era of knowledge economy. Flattening has become popular around the world. Decentralized management has become a general trend. The organizational structure of the Pyramid shaped is compatible with the centralized management system, and under the decentralized management system, all levels of the relationship between relative reduction between the grass-roots organizations is relatively independent, flat organization form to function effectively. In order to meet the needs of market changes, the traditional form of organization is difficult to adapt to the rapidly changing market. In order not to be eliminated, it must be implemented flat. Although the increase in the amount of information management after the index of growth and complex interpersonal relationship has greatly increased the difficulty of management, but these problems in the computer information processing ability often can be smoothly

done or easily solved.

(2) Flexibility

The flexibility of organization is characterized by the absence of a fixed and formal organizational structure in the organizational structure, and some temporary, task oriented team based organizations. Flexibility of organizational structure can make full use of organizational resources, and enhance the adaptability of organizations to the dynamic changes of the environment. Flexible organizational structure has two characteristics: unification of centralization and decentralization, and unification of stability and change. The key to the unification of centralization and decentralization is to establish effective communication channels between the upper and lower levels, timely communication, timely adjustment of power structure, ensure the connection between the formation of organic specific activities of the organization's strategic objectives and the development of the organization. The unity of stability and change, namely the establishment of the so-called "two yuan", the organizational structure is divided into two parts, one part is the organizational structure established for recurring tasks of the organization, the organization structure is relatively stable, is a basic part of the organizational structure, the other part is the organization the structure and the establishment of innovation in order to complete the task, temporary work, dynamic large. Flexible organizational structure requires centralized centralization while decentralization. Centralization refers to the highest management level to determine the strategic direction of the whole organization, and provides the authority relationship between superior and subordinate. And decentralization refers to the middle and lower levels of management and front-line production and management personnel have the power to deal with some unexpected events. The basic value point of flexible organizational structure is that it can produce starting from the various needs of employees, customers and other stakeholders, to promote "team cooperation" sense of responsibility, the organization can according to environmental changes quickly, configure all enterprise resources effectively, and then play the overall advantages in resources to solve particular problems with the development of the organization.

(3) Virtualization

Organization virtualization is the application of virtual technology as an organizational strategy. Its goal is to integrate the internal and external resources of an organization in order to create an extraordinary competitive advantage. The virtualization of organizational structure will break through the traditional visible boundaries and weaken the specific organizational structure form, so that the boundaries of organizational structure are in dynamic choice and infiltration. Virtual organizations can according to their own resources advantages, complementary and

external organizations of the advantages of resources, through the computer network to staff from different organizations are integrated together, and work together for a common goal, so as to achieve the full range of borrowing external force effect. Virtualization of organizational structure means breaking the boundaries between departments, appointing cross functional task teams, conducting peer-to-peer knowledge networking, and organizing cross functional, cross sectoral work according to market opportunities. Now, building such a special work group is not difficult to integrate the ideal resources needed to achieve the desired goals. Enterprises with information sharing and cooperative culture refers to the organization management mode from traditional management to Pyramid information sharing management transformation, only shorten the internal communication way, organization structure can truly reflect the strategic orientation and operation efficiency. We should also see that although the concept of using virtual organizations is very easy, the composition and operation of virtual organizations are not simple, and the most obvious is the difficulties in implementation. It is hoped that the information superhighway will serve as a tool for the implementation of virtual organizations, but the information superhighway itself needs to be developed and perfected, and enterprises will not lose market opportunities in the long waiting period.

3. MAIN CONTENT OF PROJECT MANAGEMENT IN INTERNET ERA

(1) Reforms and innovations of project schedule management in internet era

Project schedule management includes a series of management processes to ensure the completion of the project on a regular basis, including activity sequencing, activity duration estimation, schedule planning, and schedule control. The scope management of the project only determines the subordinate relation between the sub items of each process in the project. In order to ensure the orderly progress of an engineering, it must also determine the relation of its chronological order, namely what to do first and what to do later. In addition, the time period required to complete a job item must be estimated based on the workload of a work item when determining the time order between each item. A job subkey must start before several other work subs - items have been completed, and so on. After inputting the time sequence relation of each sub item estimate and each work item into the computer, the software can complete the whole project plan at once, and show the critical path at the same time. When the computer to complete the plan, in front of our staff can be completed the prescribed time comparison time with plans to complete the project, and the information on a daily form of timely feedback to the decision-makers through the network, such as non-compliance, it can adjust the work cycle in the critical

path or some work items, until the planned completion time specified earlier in the project completion time. In addition, in the above plan, because the actual situation is not 100% considering the project and the influences of some unexpected events, the duration is only the estimated value and the actual situation, sometimes there will be a large deviation, the deviation will often lead to the project cannot be completed on time. In the network of progress management mode, as the front and back can be convenient and fast communication, the information can be timely feedback, more reasonable planning. We quickly transfer to the project team through the network, and thus control the progress of the project.

(2) Reforms and innovations of project cost management in internet era

The cost management plan in project management is the basic task of cost control and calculation, which is the responsibility system of unit construction cost management. With the Internet platform, through the comparison of other projects plan, you can more accurately compare the accuracy and feasibility of the plan. For the preparation of the project plan cost, it should be analyzed according to the actual situation of the project and the specific problems. On the basis of the establishment and optimization of the project implementation plan, the direct engineering cost and management cost are planned. Ensure that the total cost plan cost of the project is within the scope of the project target cost control. According to the contract signed by the project, and understand the inherent rules of the project management. Optimal resource allocation of the project process plan, organization, command, control, and other aspects of the implementation of incentive by comparing with other works on the Internet platform, ensure project quality and progress, reduce production cost, improve the overall economic benefits of the project. Cost management accounting in project management is the core part of project management. It is an important way and means to realize cost minimization and maximize economic benefits. For the cost management accounting content in project management mainly includes two contents: the first is the content, rely on China's relevant financial accounting standard and enterprise developed financial system as the standard of cost accounting, has been referred to as the project, the cost of financial enterprises. The second content is, according to the project decision-making and management process clearly defined the need to calculate the cost part of the cost accounting, also known as project management cost accounting. Through the Internet, the cost accounting on the network, to accept a variety of supervision, cost accounting, more open, transparent and accurate.

(3) Reforms and innovations of project quality management in internet era

The Internet adds to the quality of the project manager's control of the project. The quality management of the engineering project includes all the activities that guarantee the quality target of the project. It includes defining quality management policies, objectives and responsibilities, preparing quality plans, quality control, quality assurance and quality improvement, and so on. The improvement of project quality management depends on organizing and making full use of enterprise information resources. In the traditional model of quality management, quality engineering management information transfer and exchange is mainly relying on the printing paper as the carrier efficiency, accuracy is not high by the internal network, the transmission of information and data on the data pipeline using email and database, can significantly improve the efficiency. The quality records management includes the automatic generation of various quality index statements and the online inquiry of the reports, and then exports the required data from the corresponding reports. Quality document management includes index and directory library for storing dynamic information, quality standards and specifications of construction industry at home and abroad. The archives management of the qualification and seal of the inspection personnel at all levels, the examination personnel's grades, training records, examination records, seals issued and used records and inspection records. Quality management shall be carried out jointly by construction enterprise headquarters, project manager and on-site quality management department. The company headquarters as a planning decision-making, is mainly responsible for the company's quality policy and quality objectives of the decision-making and planning; project manager for the management of the main control layer, the execution and completion of the quality inspection plan; on-site quality management department as the executive layer, according to the engineering quality standard, quality engineering supervision. The quality management department to keep the headquarters and the project manager on the quality of the project through the network, the project manager regularly to the headquarters of the transmission data, generate the corresponding headquarters after processing feedback information and report, sent to the relevant units.

4. CONCLUSIONS

One of the biggest characteristics of the internet is that it is not bound by time and space. The transmission of information, the signing of contracts or cross regional extensions are all constrained by time or space. But the emergence of the Internet can solve these problems effectively. It can connect people from all over the world. The project manager should make full use of Internet technology to strengthen the quality management, cost management and schedule management and promote the

successful completion of the project.

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