

Application of Modern Project Management Concept in Space Project Management

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Abstract: The integration of the practice of aerospace project management and the modern project management concept plays a decisive role in the work quality and efficiency of aerospace enterprises. At the present stage, Chinese space enterprises gradually introduce new ideas and new methods in project management, which aims to improve the level of project management and speed up its efficiency. This paper discusses the characteristics of modern project management concept and puts forward the concrete application strategy of modern project management concept in space project management.

Keywords: Modern; Project Management; Concept; Space

Introduction

In the construction and development of our space industry, in order to achieve the healthy and sustainable development of space industry, it is necessary to introduce modern project management concepts and management thoughts in the management of space project, improve the level and efficiency of space project management work, and achieve the expected goal of space project management. In the concrete practice, the space project management staff should apply the modern project management concept, combine the complex and changeable environment, explore and summarize the ways and methods of space project management, improve the level of space project management, and lay the foundation for the realization of the goals of space project management.

1. The characteristics of modern project management concept

Modern project management refers to an integrated management mode, which uses modern technology and modern scientific ideas, integrates information theory, information technology and Internet technology, and innovates the theory and concrete methods of project management. In project management, combined with the goal of the project activity, the use of knowledge, technology, skills, tools, such as coordination, common management of the project scope, time, quality, resources, risks and achieve progress in integrated management, quality, cost management objectives, as required by the schedule, budget, produce products that meet the certain standard index, Achieve the final production target and management target [1]. Project management work has remarkable characteristics, that is, its systematic, special, resource characteristics, the implementation of modern project management work process, to introduce the idea of system engineering, and the concept of system management throughout the beginning and end. The organization of the modern project management has certain particularity, shall be the responsibility of the individual, to full use of various resources, the application of "resource plan, ensure that each performance index reaches a certain request, formulates the reasonable project management plan, the smooth implementation of project management objectives, to strengthen the quality control of the whole process of project management, to supervise and control the risk. In the implementation of modern project management, the concept, tools, means and methods are all based on the project as the main object. It is necessary to combine the smooth implementation of the project, create a good environment, maintain the environment for the smooth development of the project, and realize innovation and creation. The objective management method is used to achieve the task of modern project management [2].

2. The concrete application strategy of modern project management concept in space project management

2.1 Grasp the principle of comprehensiveness

Space in project management in the use of modern project management idea, to grasp the certain principle, follow the principle of the corresponding to the target, on the work of project management, combining with the goal of project management, ensure the rationality of the building space project organization structure, in combination with the actual work of the project tasks, in unified decision-making and control, the implementation of project management activities, The management mode of global control and whole-process control is established, and all kinds of reports, methods, systems and reporting methods are comprehensively considered. Under the principle of comprehensiveness, it gives play to the function of modern project management concept, improves the effect of space project management, ADAPTS to the nature and scale of the project, and formulates the program and plan of space project management. For the limited resources owned by enterprises, it is necessary to make full use of them. Under normal circumstances, the resources of space enterprises are limited, and the resources of space enterprises need to be applied to multiple projects and be responsible for multiple project tasks. Therefore, to achieve the project objectives, it is necessary to reasonably allocate and use the project resources, evaluate and divide the importance of different projects, and apply more resources to key projects. The projects with less importance can be responsible for by specific departments, and the resource input can be appropriately reduced. In the modern project management, in order to function type organizational structure, matrix organization structure, project type organizational structure is given priority to, under the different organization forms space management of the project, should follow the principle of the comprehensive, from the perspective of overall planning, strengthen the consideration of the characteristics of the complexity of aerospace project technology, more material resources and human resources. The matrix organization structure and project organization structure are used for comprehensive consideration of project resources, and the organizational structure is selected based on the factors of project importance, so as to achieve the goal of project management and save the cost of space project management ^[3].

2.2 Innovate management concepts

When faced with the new market economy situation, the development of the enterprise to realize the long term, to expand the project to promote the enterprise's strategic implementation process, improve the development efficiency of enterprises, enterprises need to work in the aerospace project management practice, the concept of the aerospace project management to carry on the innovation and optimization, geared to the needs of employees for effective training, Strengthen the construction of talents in different professional fields, set up a professional talent team, and carry out the operation and management of the project. Aerospace companies to expand in project management innovation, achieved good development result, improve the management level of enterprises, in the innovation and development projects, to strengthen the training of employees, the new management idea on them, creating a high SuZhiXing professional project management team, realize the goal of project management in the enterprise. Broaden the channel of project innovation and the principle of space project management, innovate the concept of operation and management, and establish matrix management organization according to the current situation. Because the development of modern project management has gone through decades and accumulated a lot of experience, in the management process, we should pay attention to the process quality and the achievement of task completion, excavate knowledge, integrate and use resources, and improve the management level of space projects with the joint participation of team building and human resources. Aerospace project management by using modern management idea, to build up the mixed matrix management organization, reshape functional organization structure, forming mixed matrix management model, set up specialized agencies, is responsible for the overall planning the whole operation process of the project, to do a good job of monitoring projects, exerting functions of service function, support function, Implement the management objectives of space projects under the new management concept ^[4].

2.3 Strengthen the construction of corporate culture

Whether a company has positive enterprise culture and internal environment, decided the enterprise's operation level and efficiency of project management, project management work in practice, the enterprise culture construction goal, must strengthen the further innovation, has shown great strength in the construction of corporate culture, our staff from the start, the employees professional orientation. After systematic training, employees of aerospace enterprises will usually establish a correct cognition, understand the objectives, content and direction of modern project management, and consciously carry out their own responsibilities according to the work assigned by the project management system. Aerospace companies in the implementation of

project management, requires a combination of modern project management and project management model, to strengthen the grasp and skilled use of enterprise operation rules, clear enterprise operation rules and standards, set up enterprise culture, to the enterprise the management process of each division, management content, for enterprise cultural environment, publicity atmosphere, Establish the internal environment of mutual trust, solidarity and mutual assistance, realize the mutual cooperation between the internal personnel of the enterprise, and publicize the team culture together. To strengthen the construction of enterprise culture, make the staff active work enthusiasm, the enterprise life problems and benefits to employees, career planning, strengthen the consideration, mobilize the enthusiasm of staff, to a great extent in the culture construction of internal practice of people-oriented thoughts, lay a foundation for improving the effectiveness and validity of project management^[5].

2.4 Cultivate key talents

In the construction of project management personnel to cultivate backbone talents and improve the level of project management personnel resources, is the main method to promote the implementation of modern project management concept, in the training of project management backbone talents, backbone talents, reserve talents to understand the process of project management, project management methods, tools. The process of project management in aerospace enterprise, the construction of the management team asked GuGanXing type talent, backup power, fully excavate and make use of, clear management process and encourage people to master the scientific management method and tool, the use of skilled management tools, improve the efficiency of project management, strengthen the standardization of project management, professional, prompt the success of the project the ground. Among talents construction, combined with the backbone talents training target and requirements of the project management, as well as the core of the modern project management idea, to use computer technology and Internet technology, the new software and hardware facilities equipped with perfect, improve project management professional ability, the convenient and efficient project management tools and methods of application, Improve the effect of space project management, enhance the comprehensive benefit of space project. In the training of key talents, it is necessary to combine the current situation and development direction of the enterprise, establish the special operations team inside the enterprise, strengthen the effective prevention of blind and random project management risk, and improve the success probability of project management. Regular training is conducted for existing talents to tap their potential, experts and scholars in the industry are invited to cultivate and guide the backbone talents of project management, and new tools and methods are introduced to improve the rationality of the management organization structure and the comprehensive quality of talent resources^[6].

Conclusion

To sum up. In the modernization and construction of Chinese space enterprises, in order to realize the long-term development of airline industry and strengthen the effective management of space projects, managers are required to improve the backward management idea and method. The introduction of modern project management concepts, advanced project management tools, project management methods, strengthen the planning of space project management workflow, clear project management standards, smooth realization of space project management objectives, improve the probability of project success.

References

- [1] Liang Z, Zhai L, Li H, Pan YP, Hu X. Application of "Nine in Position" management method in space project management [J]. Aerospace Industry Management, 2022(04): 58-62.
- [2] Weng DS, Niu XL, Qi GQ. Discussion on Space project management based on "Three-point coplane" [J]. Modern Trade Industry, 2022, 43(06): 196-198.
- [3] Lu MH, Liu BB, Guo JW. Discussion on knowledge management in space project management [J]. Popular science and technology, 2021, 23(03): 147-148+151.
- [4] Shen M, Qi CT, Chen K, Zhang T. Exploration and practice of space quality special supervision based on project management concept [J]. Space Industry Management, 2021(01): 14-17.
- [5] Kong FL. Application Research of Systems Engineering in Space Project Management [J]. China Equipment Engineering, 2020(24): 56-57.
- [6] Wang Y, Han CH. Application Analysis of Modern project Management Concept in the Practice of Science and technology Project Management in Design Institute [J]. Enterprise Science and Technology and Development, 2020(12): 89-91.