Application of Standardization Management in Information System Project Research

Qiulin Wang [a], Li Zhuang [b]
Ltd Fujian Yirong Information Technology CO., Ltd, 35003, China
[a]wangqiulin@sgitg.sgcc.com.cn, [b]zhuangli@sgitg.sgcc.com.cn

Abstract. With the continuous progress of science and technology, the application of standardized management system has been paid more and more attention. The so-called enterprise standardized management is the implementation management of engineering projects and the formulation of corresponding charters to carry out the whole process management of enterprise projects. It divides responsibilities according to project management and supervision, project execution management, project implementation, professional technical support and so on. Unified management, division of labor and cooperation, and performance appraisal indicators, in order to improve the overall operational capacity of enterprises.

Keywords: standardized management, information system, project research.

1. Introduction

The so-called standardized management of enterprises refers to the management activities of "making common and reusable rules to obtain the best order within the scope of production and operation management of enterprises and aiming at actual or potential problems". The management activities referred to here include the establishment and implementation of enterprise standards system, the formulation of enterprise standards and the implementation of standards at all levels. For power enterprises, besides adopting national and industrial standards, they should also formulate a series of enterprise technical standards, management standards and work standards which are stricter than national and industrial standards. Facing the current situation of the rapid deepening of complexity and internationality, standardization work and standardization information should play a greater role in the production, technological transformation and management of the system, and play a more important practical significance in improving the level of enterprise management, work efficiency and product quality, and economic efficiency[1].

2. Standardized Engineering Management System Architecture

2.1 Organization and Division of Work in Project Implementation

In accordance with the original engineering system of electric power enterprises, the implementation process of the project divides the responsibilities of project execution management, project implementation and professional technical support through project supervision and supervision, and carries out a unified management division and cooperation arrangement. Project management, control and supervision are the responsibility of the Engineering Management and Quality Inspection Team, which is mainly responsible for the organization and results formulation of the pre-project process preparation and implementation process standardization, and for the tracking, supervision, rectification, early warning, evaluation and evaluation of the whole project implementation process. According to the different progress of the project, relevant items are submitted regularly to the project leaders and department leaders. Project management and control report, provide corresponding decision-making plan[2].

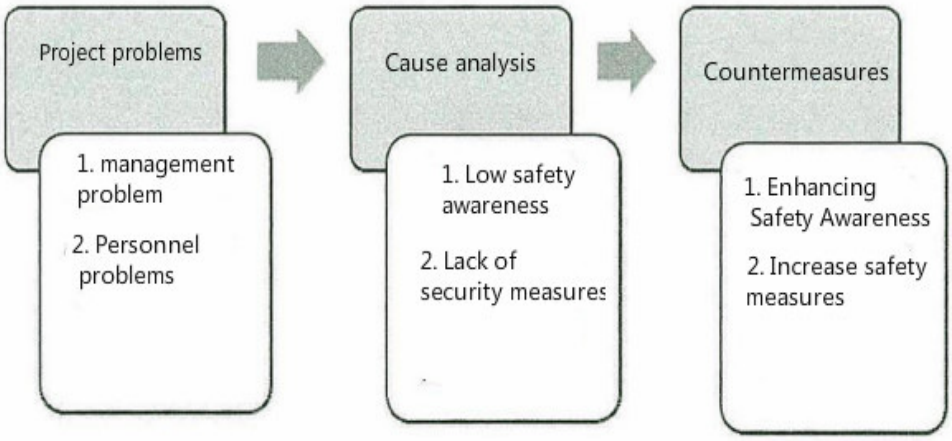

Figure 1. Project management process

Project team members need to be responsible for regional project implementation, comprehensive implementation and management from project start-up to project online acceptance stage, resource application, key project and major milestone planning, coordinated solution of major issues, coordinated user relations, improved satisfaction and other work, and report to relevant project managers on the specific progress and existence of the project. Problem risk analysis. The relevant professional technical support group carries out construction settings according to the project attributes. In the specific project implementation project, the project management and control group needs to organize the project according to the actual situation, and is responsible for project consultation, training and technical support.

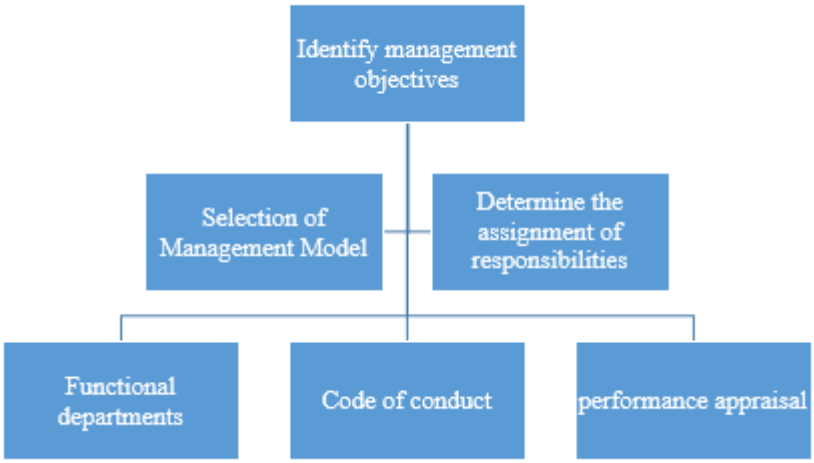

Figure 2. Project management and control process

2.2 Analysis of Requirements for Project Management and Control

In the process of project management and control, resource management is the first need. Resource management needs to establish account books, clarify the related assets and personnel allocation of users and outsourcing units, and track the use of resources in real time, and manage the changes of personnel in a centralized manner. Assessment and supervision of the project shall be carried out in the form of resource allocation. Next is progress management [3]. Examine and approve project implementation plans of project managers, and manage the implementation and feedback of tasks in project progress in real time. Weekly check with project manager and communication, analyze project progress, report to group project manager one week in advance, and submit progress management analysis report and adjustment suggestion every two weeks. Report the situation to the leaders in

charge and departments. Then there is organizational management. Communicate and coordinate with project team, project manager, third-party manufacturer and original manufacturer; evaluate the performance of project team manager and technical professional team, and deal with and report the problems of project team, submit monthly analysis and evaluation, and report to relevant responsible leaders and department leaders. Then there are problems and risk management. According to the needs of project managers, follow-up reports have problems, coordinate with R&D department, communicate and coordinate with relevant leaders on the remaining issues. According to the collected project risks, legacy problems, demand problems, personnel status, etc., the project risks are analyzed, and solutions are proposed to ensure that the risks are within control [3].

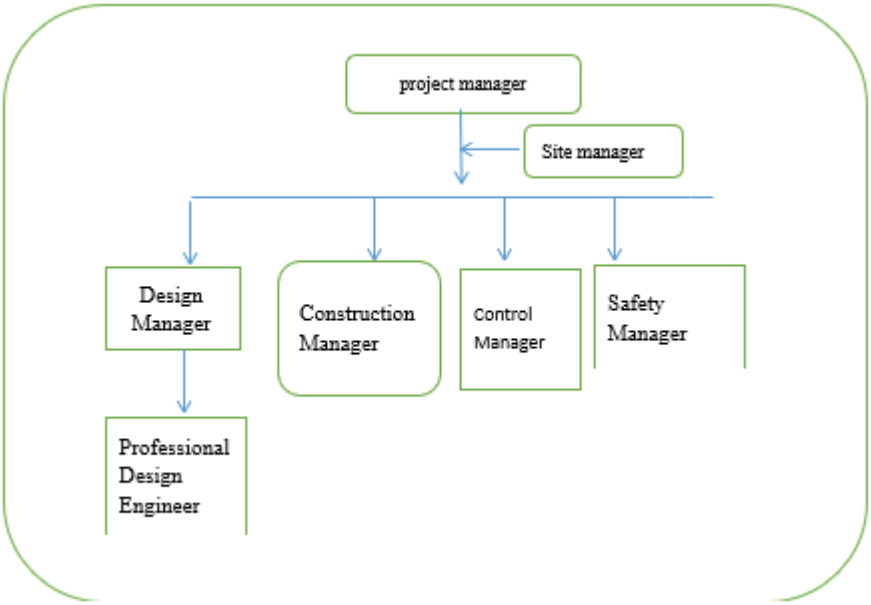

Figure 3. Project Controller Chart

Submit problem and risk management reports every two weeks and report to responsible leaders and department heads. Then there is communication management. Organize a quality control report every two weeks to report and feedback to superior units, company leaders and department leaders; supervise and supervise project team managers to hold regular meetings and make summary reports. Then comes security management. Regular spot check of equipment terminal usage, working environment and sealing requirements, project team to conduct confidential education management. Then it is outsourcing management. Examine and record the qualifications of project personnel in the external cooperation units, interview with project managers and technical backbone, and coordinate the replacement of personnel in the external cooperation units as needed. Manage and control the signing and filing of confidentiality agreements within one month of the project process by all personnel of the outsourcing unit. Finally, it is quality supervision. Establish quality supervision evaluation index, through inspection and spot check, to evaluate the working status, work discipline, project implementation quality, project overdue, resource overexpenditure of engineers, and announce the evaluation situation monthly[4].

3. Analysis on the Improvement Path of Engineering Management Standardization

3.1 Standardization Improvement of Engineering Management

In the initial stage of SG186 collaborative office business application, project implementation is based on project team, and each project team completes its work through a large number of personnel input and overtime. At that time, due to the inconsistency of implementation methods and personnel skills, system problems and versions could not be unified management, system downtime and other

problems occurred frequently. In view of this, the engineering management team developed the work order system as a field management tool. At the same time, the management system and engineering management method of dispatch, inspection, operation and maintenance are designed. The project management is creatively divided into five parts: project preparation, project initiation, project implementation, project closure and project execution monitoring. According to the content and requirements of the implementation work, a set of standard norms, such as "Detailed Rules for the Implementation of Transportation Inspection" and "Detailed Rules for the Implementation of Engineering", are formed. In the future, operation, maintenance, operation and inspection management concepts and project implementation management will be integrated into the system, forming a work tool with work tasks as management considerations, guided by scoring system, quantifying performance appraisal, and promoting standardization. In order to make employees adapt to this change and form good habits, company leaders and department leaders need to frequently come to the scene to communicate and publicize with employees, in order to speed up the progress of standardization and improvement of project management.

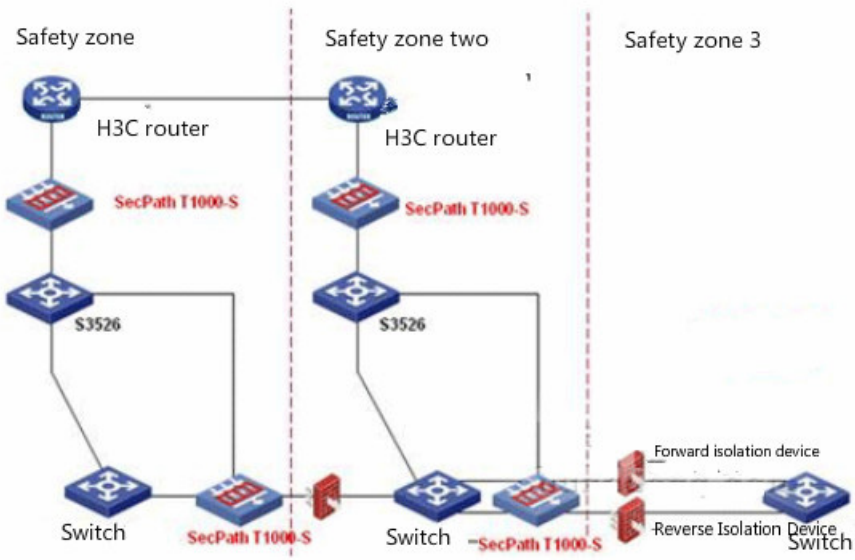

Figure 4. SG186 Collaborative Office Flow Chart

3.2 Implementing and Improving Business Standardization

In the improvement process of business standardization, it is mainly divided into two stages. In the first phase, a single business needs to implement a standardization research process. This stage is mainly formed in the application and promotion process of SG186 collaborative office business. It can be divided into two stages: the first stage is the implementation process of collaborative office business, standardizing the implementation objectives, implementation process and project roles, and managing and controlling projects with simple Excel management mode. This business can only be standardized in the project, and the project standardization management between project management team and project manager members can not be used as the basis for project managers and project team members, so it is basically a set of standardized implementation plans for individual projects, which increases the difficulty and risk of the overall project management; the second stage is through the workflow, results and resources. Combination to achieve project standardization. At this stage, the delivery results of the project are defined, which plays a guiding role on the spot. At this time, however, project managers can not be liberated and standardized applications can not be implemented to project team employees. In the second stage, multi-business implementation depends on project task, task process and process standardization. Under the environment of unstructured, electronic documents and collaborative office deployment project implementation, the reverse engineering method is further applied to pilot implementation, multi-business concurrent support is explored,

standardization implementation is improved, and the assumption of "project task, task process and process standardization" is further put forward. In the initial stage of implementation, the technical backbone of the organization completes "task process decomposition and Standardization Implementation verification". According to the implementation of the project, all kinds of implementation businesses will form "four-structure work guidance process basis" and "a set of business skills promotion manual". "Mainly for the implementation of standard training textbooks, including basic skills, basic business, implementation skills upgrading, the implementation of the decomposition process will be imported into the"work order management"system, guiding project managers to assign tasks to project team members according to the implementation process. This standardization model can be implemented for specific project managers. Through the standardization process, everyone can understand and grasp the key and difficult points of project implementation, so as to realize the standardization of project implementation. In such a process, process, manual and instrumental standard, employees can follow the above process, process and manual can be better and more standardized to complete the work[5].

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