

Research on Project Maturity Model and Its Application in Engineering Project Management

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Abstract: This electronic document is a “live” template. The various components of your paper [title, text, heads, etc.] are already defined on the style sheet, as illustrated by the portions given in this document. (Abstract) In the background of continuous global economic growth, people have high quality requirements for public facilities and related construction projects in the society because of the economic development of China. The scope of the project is becoming wider and more complex. When the engineering enterprise carry out management in the scope of large-scale construction projects, the factors affecting the project are frequently encountered. Due to the lack of complete control measures in terms of cost, duration and quality. In this case, the project management maturity model is applied to the project. It has been widely used in the construction project.

Keywords: Project management; Project maturity model; Maturity model application

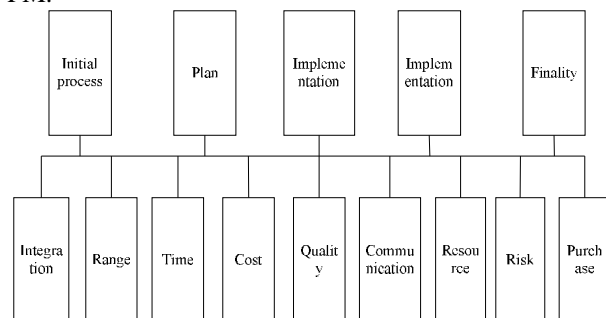
1. Introduction

Introduction: In construction engineering project, because the enterprise project management system is not sound and management tools don't reach the requirements to make the problems appear frequently in the project, and there is no perfect responses to the problems and lack of professional project management theory and related technology, the construction project can't finish their tasks. In order to improve the solution of the problems existing in the current project management, enterprises need a standard set of management theory and the corresponding technical means. So project management maturity model can be used as a new type of technology to be applied in the engineering project management. This paper will analyze the obstacles encountered in project management and relevant solutions.

2. Overview of Project Management Maturity Model

Project management maturity model (PM) 2 refers to a kind of tool that in the process of project management, it can evaluate the practicability of the project management organization and achieve the effect of the auxiliary, and perfect and improve the problems arising from the evaluation, and then can improve the management level. Project management maturity model provides a variety of strategies for the organization manager to control the project management maturity, and through its own assessment of technical means, we can find problems in the current project management status quo. And then we can

formulate the scientific and reasonable plan to solve the problem under the guidance of the organization, which can achieve the improvement of project management maturity. (PM) 2 model provides a set of systematic and incremental method, from the immature, inexperienced and imperfect, to the mature PM maturity levels. Each maturity level includes the main characteristics, factors and process of PM2. Maturity model discusses the procedural steps and improvement process of the organizing PM.



3. Problems in Application of Maturity Model

3.1. Applicability problems

In the current enterprise project management, there are many kinds of management maturity model. But they are only available in the world scope, and no one is established based on domestic construction engineering project in our country. Other kinds of classification in management maturity model (CMM) does not apply to

construction projects in our country, the content and the means of evaluation doesn't match with the contents of the current project engineering, so the solution can't be put forward according to the problems in the evaluation. There is a meticulous division of its management in construction engineering in project management, which involves the safety, environment and the corresponding claims management system, even the OPM3 fit model whose applicability is useful cannot apply.

3.2. Obstacles in management

There are various types of maturity model in the scope of the world, and organizers emphasized to quantify in process management and be strictly used according to the system. And in the management in our country, the unique form is the "rule of man" to carry out relevant management, and the theory of system often exist only in the surface and can't be carried out. And maturity model (CMM) technology has been applied in China for a long time. But the manage consciousness has not conveyed to each person's brain, and makes them have no sense. And, many organization managers are too impatient to see the effect of the engineering project management in the short term. The idea is impractical, and the implementation of management cannot be carried out effectively.

3.3. Puzzles in the maturity model application

The relevant persons in charge of the project management, not only have an eye myopia on the maturity mode, but also have not reached a level in understanding of the maturity model itself, and even more unable to implement the application. At home in most of the projects, only the project management maturity model (CMM) is used as a technical tool, the added value and rich knowledge provided are not paid too much attention. In the hands of organization manager, a maturity model is just an tool to measure the degree of engineering project management, but assessment for a management system can be operated by the users in the organization on the basis of theoretical knowledge.

4. The Application Strategies of Project Management Maturity Model

4.1. Research and develop the suitable maturity model

In the international world, the present project management maturity model (CMM) is developed based on the local situation, so the maturity model is more suitable in foreign engineering project management. And because in our country, culture and related technology has larger difference with abroad, make its research and development of the maturity model can not be applied in the domestic project management. Which requires research and development of our country need to be independent to

maturity model is suitable for their own project, in view of the current domestic situation of engineering project management system based on management theory to analyze problems countermeasures research, to develop exclusive with the maturity model of project engineering management system in our country.

4.2. Cultivate the main body of the model design and implementation

In the management system of our country, we has upheld the concept of "rule of man". In the application of the engineering project management maturity, the statement degree model can be applied based on the management system implementation. By organizing the high-level leadership tools to promote the technology strength, the technology can be applied to project management practically, and the leadership attaches great importance to create the conditions for use of the model. In addition, the staff should be strengthened for the training of the model to master the use of the maturity model skill, and then On this basis, the improvement of management ability in the whole project management system is achieved.

4.3. Perfect project management system

Based on the problems and the using effect of the maturity model in the foreign countries, relevant management rules and regulations can be set up, and the maturity model of the management system can be perfected, so as to get more accurate results in the assessment and make a maturity model play a part in the project. At the same time, domestic also need to strengthen the development of the model of evaluation system and means provided, which can have a better effect in the application of project management and make the project management ability improve.

5. Conclusion

Enterprise project management maturity model (CMM) is to provide a new management tool, which can evaluate and improve the whole project management system in the progress of the projects. It is a new and important technology and can be proved to be wisely used in the enterprise project management effectively through the theory and practice.

References

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