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Information System Development Project Management Requirements Management

Xiaoxia Liang [1], Penghui Guo [2]

1. School of Economics and Management, Lanzhou University of Technology, Gansu 730050, P.R. China
2. Gansu Zhilian Information Technologies Co., Ltd., 730000

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ABSTRACT

Information system requirements for each information system project development, is fundamental to the success of each of the key information systems project. Therefore, the information systems project management is particularly important in demand management, this information system development process is from requirements management to start discussion, pointed out some of the principles of demand management information system, summarizes the common demand management methods and strategies.

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1 Introduction

Project management is the current information systems development that are generally used as a form of organization and management, in project activities through knowledge, skills, tools and techniques to achieve project requirements. In the information systems project development process, requirements management throughout the project through the development process.

Requirements is the most critical information systems project an input, and compared to traditional manufacturing enterprises, the demand for information systems with ambiguity, uncertainty, variability and subjectivity of the features, it is not producing cars, computers and other hardware demand, is tangible, objective, description, and can be detected, fuzzy information system requirements, variability and subjectivity and so on. Because of these characteristics of information system requirements for the development of an information system, the most difficult part is an accurate description of information system requirements, conceptual design of the most difficult job is to write detailed information system requirements, including all user-oriented, and other information systems for the machine system interface.

Requirements management is an information system project success at the heart of it for many other technical and administrative activities of the foundation. In requirements engineering, requirements management throughout the process, its basic task is to clear demand, and to reach a consensus on the project team and users, namely the establishment of baseline demand. Also, the ability to establish contact requirements traceability chain, to ensure that all user needs are correctly applied, and the change in demand, can completely control their sphere of influence, and always maintain the consistency of product and demand. In the CMM, demand management is a key process repeated level domain, and its goal is to establish a baseline of information system requirements for the use of information systems development and management, so that information systems programs, products and activities consistent with the information system requirements. From the perspective of requirements engineering, requirements management in information system development process including requirements to maintain consistency and accuracy of all activities, including control requirements baseline, project plans and requirements to maintain consistent control of a single version of the document needs and demand situation, management demand and the link between the chain links, or manage individual requirements and project deliverables between the other dependencies, track the status of the baseline requirements.

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2 Requirements Management Principles

Requirements is the basis for the entire project, needs to be completed, clear the work to establish the structure of information systems, and essentially based on the accuracy of the work plan. Demand management needs to follow certain principles in order to have good management results.

Requirements are divided into three different levels: business requirements, user needs and functional requirements, but also various non-functional requirements. Organization or client business needs, set high-level goals, usually from the project investors, customers buy products, the actual user's manager, product planning department. User needs is described in the user's goals, or the user requires the system must be able to complete the task, an effective way to express user needs are: use cases, scenarios and events described in the response table and so on. Functional requirements provide for the development must be implemented in a information system product, users take advantage of these capabilities to accomplish tasks to meet business needs. Non-functional needs.

Requirements including the need to comply with the standards, specifications and contracts; details of the external interface; performance requirements; design or implementation constraints and quality attributes.

For more than a few types of demand, demand management projects should follow the following principles:

2.1 Requirements management must be classified

Information system project management, be sure to separate the levels of information system requirements. Of different levels of focus, description, management approach is different. For example, leaders of the proposed requirements are the target demand, middle managers are made to the needs of specific business process needs, and operations officer to demand is focused on operational needs. The target of the demand may be able to use a short description of a few words clearly, but this is the project's decision-making needs to be very stable, not easily change, will have to be cautious in determining the time.

2.2 Needs to be prioritized

In information system projects, if there is excess demand, often resulting in projects within budget and on schedule, resulting in the failure of information system projects, which demand priority is more important than the demand itself. In every information system product development process, will encounter such a problem that needs experts in the field of information system will often list a long menu, every function seems indispensable, and when the schedule after discharge, but found the cost and duration is not acceptable, this time needs to be cut. Reduce demand on the need to prioritize needs. A good project needs, there must be the priority of needs, facilitate the project's overall balance.

2.3 Needs to be documented

Requirements must have documentation to record. The document must be correct, current, manageable, understandable, is proven, in controlled conditions change. Many developers tend to think that a simple system without writing a requirements document; fact, a simple system with complex systems like the need for complete and detailed requirements documents, only to think clearly, write clearly, clearly needs finishing as well. A lot of demand in the author seems to take for granted, but it was ignored by all the developers.

2.4 When demand changes, we must assess the impact of requirements changes

Regardless of the degree of changes in demand, as long as the requirements change must be assessed, which is the basic principle. In addition, a project team must clearly define the need or demand management group administrator (depending on project size), to be responsible for the management of the entire project needs to ensure that changes in demand occur, the affected products can be modified consistent with the requirements; other affected groups must also be consistent with the customer concerned.

2.5 Requirements management and requirements engineering to be closely integrated with other activities

Requirements management must not be separated from requirements engineering, which include requirements elicitation, requirements analysis, requirements specification, requirements validation, requirements management, and therefore demand management needs to be in front of the stage a few closely related.

3 Demand Management

With more approach of information system requirements management, the requirements management tools Requisite euro, excel, Calibers, word and other tools, the use of appropriate demand management is an important goal to achieve demand management approach. Summary of project experience so far, demand management methods used by management and priority needs by function points are two ways to achieve demand management.

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3.1 Function point method according to demand management

Allan Albrecht introduced the method called function point in 1979. In 1986, International Function Point User Group's function point information system industry standard is the most widely used function point analysis. Through the analysis of requirements specification, the information system can scale to measure the number of function points, the same, you can change the information system needs to use function point analysis and measurement. Function Point Analysis method is the user's point of view from all business functional requirements of the user data is divided into functional requirements and the presence of data processing services functional requirements.

3.2 Priority management on demand

Information system requirements by priority category, generally divided into four categories of management, A, B, C, D, respectively. The highest priority needs, high, medium, low, the importance of the corresponding content is also somewhat different, regardless of the needs of the project by whom, must be the priority needs of each program to develop the priority. The project manager for the consideration of the project plan, the client and the developer must have a clear demand for each information system version of the proportion of various types, and clarify the class may include specific requirements which, according to the priority needs of the decision needs to achieve the release. The proposal will need to bring development time and direct costs of the changes, according to the reasonable needs of the project plan to ensure the quality and progress of the information system project.

4 Demand Management Strategy

Demand management should follow the following strategies:

4.1 Requirements must be necessarily linked with the investment

Requirements must be necessarily linked with the investment, or if the demand side decided to change the cost borne by the developer, the project needs change becomes inevitable. Whether it is the beginning of the project developer or the sponsor should be clear on this point: changes in demand, investment in information system development have changed.

4.2 Changes in needs will have to go through investor recognition

Changes in demand which donors have to acknowledge, will lead to changes in inputs. This will demand changes to the concept of cost which can be prudent to treat the demand changes.

4.3 To fully understand the needs of the customer put forward, pay attention to communication skills

Developers should fully understand customer needs, changes in demand may come from investors, user side and development side, as investors may be reluctant to pay more for the needs of the cost of change, and may develop side initiative aims to change the demand for more sophisticated information system to do so. So as the demand for managers, project managers need to fully understand customer needs, based on the use of a variety of communication skills to make the project the parties get what they want.

4.4 Is also subject to small changes in the demand for formal requirements management process

The demand for small change is also subject to formal requirements management process, otherwise it will add up. In practice, people are often reluctant for a small change to perform formal demand management process that reduces the efficiency of development and it is a waste of time. It is this concept that the needs of the gradient control will eventually leads to a failure of the project.

Based on the above issue, the need for demand management is important in order for the needs to truly become information systems development and management of the baseline. This will make development programs, activities and work products consistent with the information system requirements and demands can be reused.

5 Conclusion

Project management is still a new field. The requirements management information system project is a very important work and also can ultimately have a crucial impact. An effective requirement management of information systems development project will successfully achieved the important goal of supporting conditions. It uses a series of principles, methods and strategies to implement demand management in order to promote the sound development of information systems projects.

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