Enterprise Project Management Organization

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Abstract

To increase an efficiency of a product, nowadays many development companies are using different project management systems. A company may run a number of projects at a time, and requires input from a number of individuals, or teams for a multi level development plan, whereby a good project management system is needed. Project management systems represent a rapidly growing technology in IT industry. As the number of users, who utilize project management applications continues to grow, web based project management systems enter a critical role in a multitude of companies. Thus, a proper project management system plays a distinctive part in ensuring reliable, robust and high quality web applications for customers. Developing a enterprise project management system and showing how, in turns, it helps users to handle projects. These processes in everyday´s working life, is the scope of the thesis. The reliability and robustness of a web based project management system has also been set as the structure of the current thesis. Finally, a web based project management system has been developed, which highly meets the standards and requirements set by the company. The web based project management system uses an already integrated TRAC application that has improved to suite companies needs. Project Management System will look after the time and investment which will involve during the development of new projects and ongoing projects. It look for various phases which are involved under entire development work such as analysis, system design, coding, testing and maintenance work etc. Time and money both are important factor for any organization in exist in the market and for it, they have to keep catchy eye on every bit of their investment. This system will keep track of invested time on particular phase and generate reports to make future analysis and take appropriate action to settle down the problem. A collection of linked activities, carried out in an organized manner, with a clearly defined START POINT and END POINT to achieve some specific results desired to satisfy the needs of the organization at the current time. A dynamic process that utilizes the appropriate resources of the organization in a controlled and structured manner, to achieve some

clearly defined objectives identified as needs. It is always conducted within a defined set of constraints

I. INTRODCUTION

Project Management is an ideal starting point if you need to manage projects at work or at home, while not necessarily being a formally trained project manager. It is also suitable if you are considering undertaking a project in the near future and are seeking to learn and apply essential project management knowledge and skills. To deliver a project successfully, it's important to start by clearly identifying what the project is, and what its outcomes will be. In this project, we will show you practical ways to explore and understand your goals from the outset of your project, and to consider all the factors that may affect its execution. Step by step you will learn how to plan, scope, schedule, cost and manage your project from beginning to end. Since every project relies on the people who are delivering it, the course also enables you to explore how you can effectively communicate, manage people and employ leadership skills to successfully deliver your own project. Managing a project involves many different aspects and many things that have to be tracked and followed up upon. You have to determine project tasks, create a schedule, assign resources, and identify and track issues and risks. That's just the tip of the iceberg; as a project manager, you are responsible for the overall success of a project. While general software applications aren't designed specifically for project management, they can help plan, organize and manage projects. Spreadsheets are the most common manual project management system. You can create documents that are easy to read and share with the project team. If needed, the spreadsheet can be password protected for confidentiality. Additionally, spreadsheets have some capabilities that are helpful in managing a project. You can create separate tabs for the different aspects of the project. You may have a tab for the schedule, one for the communication plan, one for identified risks, one for outstanding issues, and one for the budget. You can easily update each section as required and share the whole workbook or an individual tab as required. Spreadsheets can also contain formulas and macros that will automate some functions, making them easier to use. The main components are: flexibility to adapt to

the changing circumstances; adaption to the environment, where the system is used; universality, comprehensive usability; early warning about any deviations; modularity, a stepwise processing principle of the work packages

An engineering team requested the implementation of a new server from their I.T. department. When asked "why" by the project team, they suggested they hoped to increase production speed by up to 40%. The project team probed further. One engineer gave an example of a process that takes twice as long on the current server. When asked if server performance was ever considered as a root cause and investigated by support, the engineers presumed it had but no one knew who had raised a ticket. The project was already beginning to take on a whole new direction. Once contacted, the support team investigated, found, and removed a rogue process and the engineering team saw an immediate improvement in performance, retracting their request for the new server

II. EXISITNG SYSTEM

Software project management is, like many other activities in the software process, a problem-solving issue. It involves what is to be done, a decision regarding how to do it, the control of how it is being done, and an evaluation (or measurement) of what was done. The issue on "what" typically takes the form of a plan. Tausworthe [13] introduced WBS into software project planning in the early 80's. WBS provides a hierarchical view for the whole project, but the precedence relationships among the work packages are not clearly identified in the WBS. Currently, most of the project planning techniques used today are based on network-based techniques [7] [9], such as PERT and CPM, which was originated in the early 50's. However, the classical project management models are inadequate for large-scale distributed software project management

Liu et al. proposed DesignNet [6] as a formal method to describe the behavior of software development. However, considerations on resource allocation and time-related information are not included in the DesignNet. The issue on "how" is the allocation of resources (e.g. a schedule or budget). Unfortunately, according to the survey in [14], resource allocation still heavily relies on software managers. That is, software managers need to manually assign the resources to different tasks based on their experience in order to optimize resource usage, shorten the cycle time, and control the evolutionary nature of project development.

III. PROPOSED SYSTEM

Resource Allocation and Project Scheduling In the previous section, we propose the

SPMNet as a fundamental model to represent a variety of activities in software development. SPMNet can facilitate a number of management functions such as project planning, tracking of the development history, automatic resource allocation and scheduling, and prediction of the future behavior of the project. In this section, we briefly introduce the mechanism for resource allocation and project scheduling offered by SPMNet

n our work, we explored the use of genetic algorithms (GA) in determining the allocation of software project resources. Genetic algorithms are used to simulate evolutionary mechanisms, and have been shown to be a robust solution-space search technique in a variety of optimization problem [11]. We apply the genetic algorithms to the problem of allocating staff so as to minimize the total cost and finishing time of a project
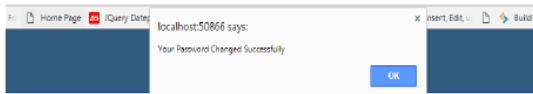
In order to solve the resource allocation problem, a SPMNet is mapped to a directed acyclic Task Precedence Graph (TPG). TPG = (V, E) consists of a finite nonempty set of vertices V and a finite set of directed edges E connecting the vertices. The collection of vertices V = {T1, T2, …, Tm} represents a set of software tasks to be completed and each vertex consists of estimated effort (man-months or working days), required skills and proficiency of the skill. More specifically, for every, $v \in V$, v = {vE, vS}, where vE represents the estimated effort (man-months or working days), and vS represents a list of skills along with the proficiency for each skill and maximal allowable units. The directed edge set E = {eij} (eij represents a directed edge from vertex Ti to Tj) implies that a partial ordering or precedence relation (denoted by →) exists between tasks. That is, if Ti → Tj, then Ti must be completed before Tj can be initiated

IV. IMPLEMENTATION RESULTS

Figure.1 Password Create Page

The future lies in all the teams having a single system for everything at work and will not have to move between different tools. The companies need to be updated with new project management trends for a bright future in their industry. They need to understand their strengths, opportunities, and threats and increase the chances of advancing and adopt ways to respond to challenges in a better way.

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V. CONCLUSION

In any change effort, it is essential to demonstrate the value of the change as soon as possible to overcome resistance and build support for the change. The only way that can be done is by achieving the desired technical and business results quickly and efficiently. The fastest way to reach these results is to introduce the change as part of getting real work done; if the change is considered separate from the "real work," it will never produce results. With the guidance and leadership of an effective coach, and with the support of management to measure and reward positive results and positive change, teams can improve their process while getting real work done. Process improvement and getting results should not be considered mutually exclusive. We hope that the approaches and techniques we have presented in this book will help you and your organization to succeed and thrive by achieving the full promise of iterative development.

VI. FUTURE WORK