



SYSTEMATIC STUDY ON COMPREHENSIVE PROJECT MANAGEMENT SOFTWARES

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ABSTRACT:

The objective of Analytical study on Comprehensive Project Management software is to produce a comparative study of various aspects of project management software's so that the various industries can utilize this study and select an appropriate product for serving the needs of their industry. The selection of the project management software is a crucial part for any industry today. Most of the software today are having features which are not required most of the time but they consume lot of disk space and also the functionality is almost nil. Some of the methods used to manage the activities in a software project are not the one's required by the industry today as they might have old formulas which have not been updated to manage various aspects of the software industries changing needs. So it's most important to have an analytical study of various features, which govern the software projects.

Keywords: *Project Management, Services, functionality, resources.*

1. INTRODUCTION

The IT industries today face major problem in selecting an appropriate project for performing various tasks. Task allocation has different features and different methods which are sometimes different then what is needed by the industry. While selecting the software for managing various resources its important that the selection group takes a mock-up of the project which the company would like to purchase but as this is a crucial part lot of time and money is spent to do this analysis but at last its not clear which feature and which part of the full project is functioning according to the needs of the company so the project manager should have a check list which justifies the requirement of the company and the needs. Allocating a resource for this kind of task is a major job for the industry also.

There are various sections and parts in the IT industry and also each part is having different functionalities and each functionality has different features. This research work will provide a platform of analytical study of various features of project management software for all the IT industries and also other industries who would like to select project management software they can use this analysis and select an appropriate. Software for their organization. The industries will get a fair amount of idea on which software will suffice their requirement and which project management software will not suffice their requirement of their industry.

Various aspects, which play a major role in the software industry, are as follows

1. Requirement Analysis
2. Design
3. Functioning
4. Testing
5. Documentation
6. Deployment (Installation)
7. Maintenance
8. Scalability

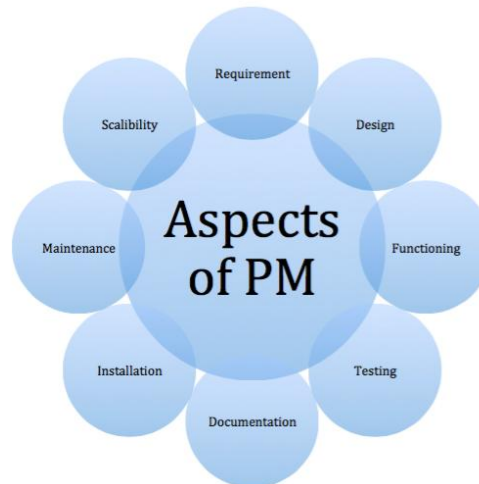


Figure 1. Various Aspects of Project Management

2. PROBLEM STATEMENT

As most of the industries today use project management software to manage their resource its most important for the industry to select the right project management software which will suffice to their requirements. The lacuna in selecting software to manage the resources is most common as lot of project management software are available in the market today and its important to select the appropriate one which best fits the industry requirements. Hither to its necessary to investigate and generate an analytical report on various project management software's available in the market today.

In my research work I have selecting some 5 software's, which I have compared depending on various criteria's and finally generated an analytical report on which is the most suitable software, which can be used in the company to manage their resources. Various functionalities required by the company are common but they differ in the operations which they would like to perform hence I have selected some companies and collected some feedback from various stakeholders in the company depending on the operations which they perform and the also the functionality of the software they would like to have. I have compared some 5 software's, which suffice to the requirements laid down by the company persons, and if the company uses this analysis report it will be helpful for them to select the appropriate project management software for managing their resources and also the stakeholders. Hither to its important to investigate project management software available in the market today and choose appropriate project management software, which will perform all the operations and the functions, which the company requires when, it undertakes a project. Thus resulting in a well organized and well managed project management solution for the industry at large.

3. RESEARCH METHODOLOGY

3.1 Primary Data Source:

The primary data source is artefact, a document, a recording, or other source of information that was created at the time under study. It serves as an original source of information about the topic. Information has been collected by analysing various features and

functions of project management software and some feedback have been collected from various industries.

Sample data size of 500 has been collected from various companies and analysed.

3.2 Secondary Data Source:

The secondary data sources is the research articles, books and journal, conference papers which are available for reference also the data which is collected by analysing the various features and functions of project management software are taken as secondary data source the values which are generated by analysing each feature and function of project management software are plotted as a graph.

3.3 Sample Size:

Some 500 samples are collected from various industries and analysis is done on those samples. Comparative study is carried about based on which management software is good for the industry. These samples are collected from various stakeholders of the company, which belong to various positions and are at different levels in the company.

4. HYPOTHESIS

1. As most of the project management software's available in the market today have lots of features but these features are not up to the requirement of the clients hence $H_0 = \mu_1 \neq \mu_2$ hence its required to analyze the features and functions of various project management software $H_0 = \mu_1 = \mu_2$ so that it meets the company requirements.
2. Project management software's have been used by the industry since a long time but the appropriate selection mechanism and tool for selecting an project management software in an industry is still lacking.
3. They have revolutionized the project management industry and have gained a greater level in project management. In the late 1950s when project management started it was then when multiple teams working in different parts of the project came together and started contributing.
4. Project management started in the United States prior to 1950's when most of the projects were treated as ad hoc projects The united states Navy started using the project management software's to manage their resources during war time.
5. Today project management is treated as the most important discipline in the IT industry, which falls under the management discipline. All the management and the project manager use the project management software to get reports related to the project activity.

5. TECHNICAL SPECIFICATION

The technical specification includes various features and functions of the project management software, which are included in the life cycle of project management software, which is called the software development life cycle of project management software. The life cycle of PM includes various phases of development at each phase a requirement of the company is achieved and this helps in achieving some functionality in the company. Various phases in the software development are as follows:

1. Design:

This phase is responsible for the design of the software, which is very important from client's perspective if the design is not agile then the requirements laydown by the client can not be achieved by the company who is designing the project management software.

2. Development:

This phase involves the coding part of the project management software the development phase handles various bugs, which can occur in the project while executing the functionalities of the project under development.

3. Testing:

This phase helps in testing various features and functions of the project management software before the client can put them to actual use. This will ensure the accuracy of the functionalities and features of the project management software.

5. ANALYTICAL STUDY OF VARIOUS FEATURES AND FUNCTIONS

An analytical study about the various features and the functions, which are required by the company for managing the projects, is carried out which helps in identifying which feature and function is necessary for project management and resource management in the company. The feedback collected from various stakeholders of the company has helped in analyzing the key features and functions, which are commonly used by most of the companies using project management software for managing the resource and tasks in the company.

Resource allocation and information dissemination features and function have been studied in details and a feedback analysis is prepared which helps in identifying common and most used features and functions of project management software based on the common features and functions used by most of the companies I have designed an analysis chart and graph which justifies the number of stakeholders using these features and function in the company to manage the projects which are currently under execution by the company. This analysis is helpful to focus on those common features and functions, which are required in the project management software to manage various resources of the project under execution. When any company decides to buy project management software they should utilize this analysis to compare the features and function in the project management software which they would like to purchase this will help the company to cater down to the need and requirements of features and functions which they are expecting from a project management software which they would like to used in the company to execute various operations using the project management software in their company. Thus this analytical study helps in identifying the requirements of features and functions of the company and its utilization for resource management.

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