

A Review on Scheduling of Construction Project By Microsoft Project Planner (MSP)

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Abstract- *The construction activities are managed to achieve the certain project within limited funds and time. Thus, the project management techniques are useful in scheduling and planning the various activities involved in construction project. Planning and scheduling are important task in every construction projects. So the project management for construction project is the best practice we can adopt. The main aim of any construction project is not only to execute or complete it, but the main aim of any project is that, it should be that to complete it within given time limit, with greater efficiency and economy, which is very essential in successful completion of project. So according to study of various papers presented by the various authors it has been studied that traditional method of calculating project duration is tedious. There are various tools and techniques available for optimizing the construction procedure to prevent time and cost overruns. In this paper it has been studied that how the use of Microsoft project software for managing construction project helps in construction project.*

Keywords- *Microsoft project, Project management, planning, scheduling*

I. INTRODUCTION

Project Management is the Application of knowledge, skills and Techniques to project activities to meet project requirements. It is a strategic ability to do something successfully for organizations, enabling them to patch the project results to Organizational goals and thus, better compete in their markets. In other words it can be also defined as the process and activity of planning, organizing, inspiring, and controlling resources, procedures and protocols to achieve specific goals. The project is expected to get completed within the specified time limit and budget. There are numerous software's available in the market for project management. MS project and Primavera are widely used for planning and scheduling. Planning of huge projects requires huge amount of paperwork, which can be reduced with the help of primavera and MS project software. Each software has got its own merits and demerits. These tools help us for optimizing the construction procedure to prevent time and cost overruns to

give the dream to complete the project in planning duration and within the budget.

Ms Project Software MS Project is a project management software product, developed and sold by Microsoft. It is designed in such a way to help project managers in creating a project plan, assigning resources to task items, tracking their progress, updating of project, managing the budget, and analyzing workloads. Project creates budgets based on assignment work and resource rates. As resources are assigned to tasks and assignment work estimated, the program calculates the cost, equal to the work times the rate, which rolls up to the task level and then to any summary tasks and finally to the project level. Microsoft Project is part of the Microsoft Office family, but has never been included in any of the Office suites. It is available currently in two editions viz., Standard and Professional.

II. LITERATURE SURVEY

Shubham Laddha et.al (2017) have studied about the planning and scheduling of project by using Microsoft project software, he said that the rational method of planning of construction project is uneconomical and takes more time with many complications and error at execution of project so by the use of MS project tool help for optimum and effective organization of activities which helps to give the vision to complete the project in planned duration and within economy. [1]

Rhuta Joshi, this et.al (2016) author studied about "Resource Scheduling of construction project", the type of resource was labour. Lack of labour power on site will increase the project duration. So, as the, duration of project increase cost will also increase. Thus, the scheduling of resources reduces the unexpected loss of project which may occur due to differences in utility of resources. [2]

Planning, scheduling and delay analysis case study by Rathod Rajshekhar Gopal (2016) state that if proper controlling is done while planning, scheduling and execution of work the delay cost can be minimized. The experience or

well skill team or employee can reduce or minimized the delay cost but the delay cannot be avoidable because of bad weather, lack of labour power on site, approval or any other reasons. So by proper planning, construction leads to lesser or minimized extra cost of delay. [3]

Manpower planning, scheduling and tracking of construction project by MSP, present by Abhishek Sharma et, al (2015), many project suffer from time and cost overruns due to improper planning, scheduling and completing works that results in numerous issues like delay in providing facilities, development, cutback in quality of construction and making the project more expensive. A little consideration shows that the time required to complete the project is inversely comparative to the supply of manpower. As the manpower is increased, the completion time of the project is decreased and on the other hand if the manpower is decreased, the completion time of the project is increased. A comparison between the baseline duration and cost to actual duration and cost of manpower of project is also determined using project management software tool Microsoft Project. [4]

E Suresh Kumar, (2015) presents ‘Scheduling and financial analysis of High rise building’ is a development which involves estimation of quantity, sequencing the various activities, allocation of resources and time. The scheduling is require to complete the project in time and allot the resources with given time, EV analysis is standard method of measuring a project progress at any given point of time, forecasting its completion date, final cost and analysis difference in schedule and budget of project. By the use of this Microsoft project tool it gives good control over the project [5]

Review of project management software and primavera by S Ragavi, et, al (2016) according to study of author planning and scheduling helps in future situation and implementation of project. Primavera software provides user friendly options while performing any task. The cost of individual work break down can be known along with duration. Thus decisions can be made sensible for proper management. In multiple projects resource leveling is very important to maintain proper resource allocation. For multiple project is also an important standard for managing multiple project. For resource constrained analysis resource leveling is arranged. Scheduling using Microsoft project software gives good controlling and clear schedule to a project, this project deals with scheduling using Microsoft project. [6]

P.M. Wale et, al (June 2015) proposed the “planning and scheduling of construction project using msp”. Project not only need great deal and money but it needs proper planning and execution. Author said that traditional method of

scheduling is time consuming and tedious. So, the study proves that traditional way of planning doesn’t sub divide the main task which future gets the hurdle of over allocation of resources, improper judgment of resources for particular activities etc. Microsoft Project is the modern tool of Project Management that aid to overcome the obstacles faced project management system in station work project and the importance owing to traditional way of Planning and Management. It helps for the optimum and effective organization of activities which helps to give the vision to complete the project in planned duration and within the Economy. [7]

“The study of resource scheduling in construction project by using MSP” presented by Nikhil Mahajan et, al (1 January 2017), he states the every work in need a proper planning, without planning we cannot achieve our goal. Scheduling of resources by traditional way is time consuming and costly. So, author highlighted the cost efficiency and time management at construction site by using this new technique of MSP. Author proves that traditional method is costly and time consuming and new technique of scheduling of resources by msp is more efficient. [8]

III. METHODOLOGY OF WORK

The following are the steps involve in our project which we are going to adopt for proper planning and scheduling;

1. Problem statement
2. Searching information
3. Selection of building
4. Data collection
5. Data analysis by using MSP
6. Results and discussion

IV. DISCUSSION

This paper aimed at presenting literature relevant to scheduling of construction project by using Microsoft project software. According to Shubham Laddha et, al, (2015) traditional method of scheduling is uneconomical and tedious and take more time. Rhuta Joshi et, al (2013) said that the lack of resources on site increase the duration and cost of project so for that proper project management is necessary. Rathod Rajshekhar Gopal (2016) Author studied that construction delay cost can be minimized, if experience employees, labours are appointed on site. Similarly author Abhishek Sharma et, al (2015) said that many projects suffer from cost overrun and time. so in this author did study by using MS software and it has found that time of project increase due to the lack of

manpower on site. E Suresh Kumar et, al (2015) according to study of author, scheduling of project by using MSP software gives proper controlling over project. S. Ragavi et,al (2016) said that project management software and primavera is useful in implementing the future planning and scheduling of project. Nikhil Mahajan et,al(2017) proves that the new technique of scheduling of resources is more efficient and economical. P.M.wale et, al (2015) state that Microsoft Project is the modern and effective tool of Project Management that useful to overcome the obstacle faced while carrying to traditional way of Planning and Management. It helps for the optimum and effective organization of activities which helps to give the vision to complete the project in planned duration and within the Economy.

V. CONCLUSION

From the above literature review it is concluded that project scheduling which done by using these project management software i.e. Microsoft project software, is very helpful for the successful completion of project. This software has much advantage, like it can be useful for scheduling, costing, allocation of resources, tracking of project and updating. By the use of this MSP software we can complete project successfully and at required time and budget.

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