

Utilization of management tool Microsoft project in construction Industry : A Review

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ABSTRACT

Project management incorporates the way toward arranging, organizing, overseeing assets and methods to accomplish the hierarchical objectives. Objectives are set and accomplished in the project management and it's tied in with handling and controlling. Project management is about the arranging and controlling how the hierarchical objectives are met. Much the same as the business administrators who oversee a particular business zone, project supervisors administer the general project allotted to them and control cost and generation matters inside enterprises. Microsoft project is an easy and simple management tool which provide fast and specific procedure for management and scheduling of a project. Civil industry utilizes such tools for proper and easy management of various project. Programming building is worried about the improvement and headway of immense and different programming serious frameworks. It covers hypotheses, techniques and devices for the particular, engineering, structure, testing, and support of programming frameworks. The present improvement of programming frameworks are altogether huge, intricate and basic, that just through the utilization of computerized methodologies can such frameworks be created and advance in a monetary and opportune way. In this paper we are providing review of research done in past related to management of civil projects using tool Microsoft project.

Keywords : Project Management, Microsoft Project, Review, Scheduling, Civil Industry.

I. INTRODUCTION

Venture the board has wide acknowledgment nowadays. Up to a little degree, venture the board is rehearsed by everybody. Indeed, even ranchers plan their working and the procedure of execution.

Undertaking administrators have a few chances to investigate in business for development planned. It is the obligation of venture administrators to present new items, create most recent advances and guarantee the similarity of systems with the hierarchical accomplishment. Banks and insurance agencies utilize venture administrators for the execution of new practices and guidelines. So, the advancement and

improvement of associations in a few businesses is being clarified by the utilization of task the board. Tasks may incorporate structure new workplaces, propelling new item that should be taken care of and dealt with consideration as per the authoritative targets. Venture directors ensure the cost exist in the evaluated esteem and there is no wastage of assets in the generation forms.

II. LITERATURE SURVEY

Singh et. al. (2019) Illustrated that the Ministry of Statistics and Programme Implementation as many as nearly 245 Central Sector Infrastructure Projects out

of the 1315 projects have shown time overrun and nearly 350 of them have shown cost escalation. There are cases where the projects have shown both time and cost overrun and the number goes up to 98 to be exact. Managing the time, Cost and quality in a construction project has become a tough challenge for a project manager in our country. In our project, we are representing a clear difference between Microsoft Project and Ant Colony optimization which makes it cost effective and in turn helps to reduce the duration of work to be done. Nearly 85% of construction companies still use the traditional MS Excel to schedule their activities and duration and among all of them many felt the need to adopt Modern Software.

Ragavi and Numa (2016) Explained that Planning and scheduling is important role in construction projects because of the increasing complexities in this field. Construction Planning is the necessary warning to Scheduling and determining general sequence, defining labor tasks, construction methods and assigning responsibilities. In appropriate planning can lead to major delays in the project work. For the planning and scheduling work huge amount of paperwork, which makes the management very burdensome These problems can be solved using a project management software which helps to give a planned approach to planning. In this study, a case of a apartment building has been taken to demonstrate how proper planning and scheduling is done using primavera and MS project.

Pradeep and Rajendra (2015) project management has developed various techniques based on network techniques in order to plan the projects processes in time, their costs and resources. Critical Path Method (CPM) is one of the best procedures for the planning, scheduling and optimizing the resource usage. CPM scheduling is a basic project control tool hence it is using in the all type of project. Completing a project on time and within the budget is not an easy task. The project

scheduling plays an important role in the time and cost aspects of a project. Each project managers have different systems in planning and scheduling, which is usually consists of Gantt chart or Bar chart. The development of Critical Path Method provides a basic and systematic approach to project managers. This results in the use of software's like Microsoft Project and Primavera.

Singh et. al. (2018) Studied that Project Management is the application of knowledge, tools, techniques and skills to any project activities to meet the requirements of the project. Usually many construction industries in India do not practice the use of project management properly. Poorly managed projects usually result in a huge amount to all stakeholders not just financially but also psychologically and emotionally as well as it also consumes a lot of time. This has greatly motivated us to carry out the working and functioning of a project using modern project management tool, one of which is MSP (Microsoft Project). This paper consists of planning and scheduling of various activities involved in a construction project using MSP. The presented work clearly gives the difference between carrying out the work using MSP and traditional planning techniques. The presented work has been carried out on a residential building in Mumbai and it clearly shows how the use of MSP software can speed up the construction making it cost effective. Methodology for the presented work includes defining the problem statement, collection of data and finally coming to the conclusion.

Wale et. al. (2015) Studied that the purpose of dealing with the project should not be only execution but effective and efficient execution of project is essential which is needed to be highlighted. Construction Firms in India, Construct the Projects in a Traditional ways, this sometimes proves Uneconomical & Tedious too. Traditional way also proves to be Time Consuming and Confusing. The presented work will

provide them an Opportunity to clearly observe the difference between the Microsoft Project (MSP) and the Traditional Planning Techniques which speeds up Construction and also make the Project Cost Effective with Proper Planning with the help of the case study on the single wing of project executed in Pune, Maharashtra, India. For finding out various aspects that proves efficient planning & execution of the project, disparate methodologies adopted and to find out remedial measures, international journal papers were referred. Methodology adopted includes defining of problem statement, insinuating the objectives from the data collected in two part viz. Primary data and secondary, analyzing the data and finally coming to the conclusion.

Sajad et. al. (2016) Studied the implementation of project management software, Software engineering is concerned with the development and advancement of huge and multiple software intensive systems. It shelters theories, methods and tools for the specification, architecture, design, testing, and maintenance of software systems. Today's development of software systems are significantly large, complex and critical, that only through the use of automated approaches can such systems be developed and evolve in an economic and timely manner. While using automated software tools which is vital for successful planning and managing of projects. There are many automated software tools which have been developed for different purposes in different situation. The literature on how to select the appropriate software project management tools is fairly narrow. The identification of quality project management software among the existing tools in literature is critical. In this paper we predict which project management tools have a great quality and how this quality can be standardized in the futuristic development of project management software.

PMBOK Guide (2000), defines that a project is a temporary effort undertaken to create a unique

product or service. Temporary means that every project has a definite start and a definite end. Unique means that the every project is different in some way from all other project.

III. CONCLUSION

As shown in past researches and works related to project management software, it can be said that need of such programming is necessary for following benefits:

- To have proper scheduling.
- To have individual activity focus and planning with respect to linked activities.
- To have complete schedule as per calendar and duration to be assign.
- To determine free float and total float as per activity duration.
- To have sequential database and tasks as assigned.

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