



Study of delay in construction projects and factors affecting the time planning

Harveer Laura1, Ali Raza2

- 1 Assistant Professor, Department of Civil Engineering (Building Construction and Technology), Jagannath University
- 2 Research Scholar, Department of Civil Engineering (Building Construction and Technology), Jagannath University

Abstract : Time management is the process of organizing and implementing a strategy related to the time required for work activities on a project. Effective time management is essential to successfully and efficiently meeting budget and program targets, as well as achieving profitability. During the planning stage, all work activities should be properly understood, and planned in detail to



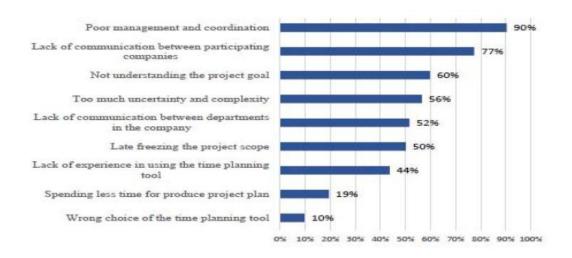
optimize the allocation of resources and reduce the potential for 'unknowns'. Estimates can then be made of how long each activity will take. This is critical to the setting of milestones and deadlines, for allocation of resources, and for determining the pricing of contracts and cash flow requirements.

This paper is a study in project on topic 'delay in construction projects'. Many literatures have mentioned poor project planning as a delay factor in the construction projects. Project planning comprises different aspects and one of these aspects is time. Therefore, this research desires to find out the relation between poor project time planning and delay in the construction projects. To narrow the scope of the work, this thesis focuses only on the project time planning in the construction industry in India. In addition, the report limits its scope to tactical level planning of projects and strategic planning of organizations or projects is not considered. This report aims to find out how experts in Indian construction industry perform project time planning. Besides, the study looks to realize what the reasons of poor time planning are, what factors contribute to improve project time planning, and what factors influence project time planning. This research is related to Speedup project which is one of the research projects in DLF Camellias and Magnolia. Speedup focuses on reducing project execution time with minimum 30% in comparison with 2013 level and several professional institutes and companies are involved in it DLF Magnolia.



Causes Of Poor Project Time Planning

During our study we have observed that 71% of respondents believed that tools can warn if the project has delay. More than 90% of the respondents agree that poor project time planning results in delay and this delay can be between 1-6 months for the whole project. According to the respondents, the most important reason for poor time planning is poor project management (90%). The result from this question is similar to the results from a previous study (connected to SpeedUp project) about time-thieves and bottlenecks. According to that study, the major source of the time-thieves and bottlenecks is management and coordination.



Deficiency in accomplishing any of requirements or applying tools, skills and processes inappropriately leads to poor project management. Poor project management in terms of project time planning can be due to not applying or inappropriate implementation of time planning tools, planning software, or planning skills. On the one hand, poor project management is one of the most common delay factors by the literature and one of the aspects of poor project management can be poor project planning. On the other hand, based on the literature, planning is a critical process in project management and can influence it. In addition, poor management can influence project time planning and as a result can influence project planning in general. Therefore, there is a two-way relation between project planning and project management and one can influence the other. Based on this argument, poor project management may lead to poor project planning. Poor project planning may lead to poor project time planning and poor time planning results in project delay



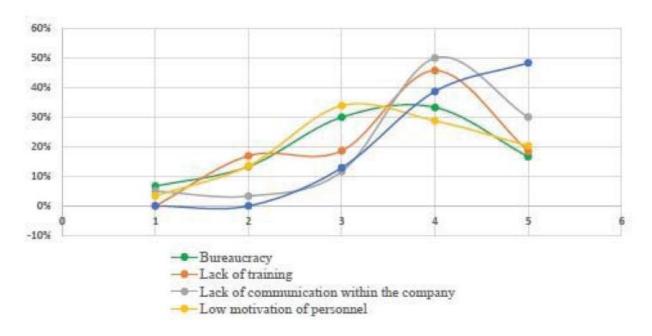


Factors Affecting To Better Project Time Planning

79% of the respondents mentioned that 'having more experienced people' will result in better project time planning. How more experienced people can improve project time planning in a project can be discussed in different ways and one of the possible ways may be by detecting the EWS of the project. More experienced people can use 'gut feeling' to detect deficiency in project time planning. + Detecting the early warning.

What factors can influence project time planning?

(Both in terms of threat or opportunity). In the survey and respondents are asked to rank internal and external factors. The important aspect is that internal and external mentioned factor should not be seen as factors influencing project planning only negatively. In fact, these factors can improve project time planning as well. These factors can act as opportunities to improve project time planning. Role of experienced people in detecting these factors using 'gut feeling' is relatively important.



Conclusion : In Indian construction industry about project time planning? This research question is answered by sections: background, project planning personnel, and project planning software.





Most of the respondents have management position with more than 10 years of experience. The data from the survey reveals that 50% of the companies perform project time planning inside the companies. While 40% of the companies use an external agent in addition to internal personnel to perform project time planning. In addition, 50% of respondents mentioned 'experience in project planning' as the requirement in project time planning. Besides, none of the respondents cited 'education in project planning' as a requirement for project time planning. According to the respondents, most (90%) of those involved in project time planning perform other tasks beside time planning of projects. In case of gaining knowledge in project time planning, 82 % of respondents prefer to talk with their colleagues. Microsoft Project (82%) is the most used tool for project time planning and 32% of the respondents use the planning tool at least once per month. User friendliness (55%) and company policy (44%) are the reasons for selecting the specific tool. Furthermore, project control (74%) and updating the project plan (73%) are the aims of using the specific tool.

References:

- 1. The Practice of Time Management on Construction Project by Abdul Rahim Abdul Hamid
- 2. https://www.designingbuildings.co.uk/wiki/Time_management_of_construction_projects
- 3. Planning in construction and its importance by Jemima Nalumansi
- 4. The practice of time management on construction project by Lok Siew Chin
- 5. https://en.wikipedia.org/wiki/Schedule_(project_management)
- 6. http://pmbook.ce.cmu.edu/09_Construction_Planning.html