

Influence of Stakeholders' Involvement in Project Scheduling

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Abstract:

Stakeholders' management of their interaction and involvement in the project schedule is often neglected in projects. This paper analyses stakeholders' involvement in developing, improving, and implementing project schedules across various domains. This paper discusses how stakeholders affect a project's schedule quality, commitment, risks, resources, and performance. This paper establishes that stakeholder involvement in scheduling enhances project performance by offering reliable duration, matching the project schedule with stakeholders' expectations, and realistic resource demands. Thus, as outlined in this paper, understanding the impact of stakeholder involvement on scheduling success will help the project managers develop better ways of engaging the stakeholders and improving the success of schedules.

Keywords: Stakeholder Involvement, Project Scheduling, Project Management, Schedule Development, Stakeholder Engagement, Project Success, Critical Path Method, Planning Techniques.

INTRODUCTION

Scheduling is still one of the crucial components of project management because it involves the definition of a time framework within which all the work has to be accomplished, and all the resources allocated and dependencies managed. Scheduling has always been regarded as a technical process by the project managers and planning professionals who apply CPM and PERT. However, the current project scheduling approaches consider the involvement of other project stakeholders in the scheduling process [5]. This change also recognises that schedules are not just artefacts that reflect the plans and constraints of the project. However, there are social commitments between the people involved in the project. The result is that stakeholder participation in the scheduling process influences the quality of the schedule and its acceptance, resulting in the project's success [1]. The purpose of this paper is to review the factors that cause stakeholders to get involved in the scheduling of projects and the impact of stakeholders on project performance across various contexts.

LITERATURE REVIEW

The increase in the participation of stakeholders in project scheduling is a change that is part of the general trend in project management. The early project management methods were technical and included CPM and PERT, while the stakeholders' involvement was restricted to the client only [5]. All these methods sought to improve activity sequences and resources from a technical perspective. However, research has shown that while having technical skills in project scheduling is good, it is insufficient for project success without stakeholder management. Studies on infrastructure projects have indicated a correlation between the involvement of stakeholders in the planning of the projects and the accomplishment of the said projects. For instance, delivery results are improved in road infrastructure projects that systematically incorporate the stakeholders' views in planning and scheduling [1]. This research also reveals that stakeholder participation is useful in increasing the realism of the schedule and the efficiency of the implementation from the knowledge and commitment of various sources.

Stakeholder management has emerged as a theory that identifies which stakeholders should be involved in project activities and to what degree. According to the literature, it was revealed that the level of power, legitimacy, and urgency of a stakeholder should determine their level of participation in the project's decision-making process, including the schedule [2]. However, it is difficult for many project organizations to use stakeholder salience theory regarding participation mechanisms. The complex activities are the ones that

benefit more from the extra planning that is done with the involvement of all the stakeholders [3]. This implies that with the increase in the project complexity, it is essential for the stakeholders to give their input on the dependencies, constraints, or risks affecting the schedule. Among the success factors, the engagement of the stakeholders has been considered, and among the engagement areas, the scheduling has been identified [4]. The study also reveals that good interaction during the project life cycle enhances the schedule accuracy, risk management, and project satisfaction. The relationship between the quality of project planning and project success has been confirmed, and stakeholders' involvement was also noted to be one of the aspects of planning quality [6]. This means that the higher the competency level of managing stakeholders, the more technically optimized the schedule will be to meet the stakeholders' needs.

PROBLEM STATEMENT

Even though there is increased emphasis on stakeholder engagement in project scheduling, many organizations still approach the scheduling process as a technical activity with minimal involvement of the stakeholders. This approach gives rise to several issues that impact the project's performance. First, the schedules created without the stakeholders' proper involvement may not incorporate necessary dependencies, constraints, and other opportunities within the stakeholder network [1]. This results in setting unachievable time targets, wrong resource deployment, and schedule changes that could have been averted by consultation. Second, when there is limited stakeholder participation in the scheduling process, the resultant timelines are not owned, and their commitments are low, meaning they will not be complied with. There will be passive resistance [4]. Third, stakeholders' knowledge resources are not utilized when left out of the scheduling plans, which lowers the project schedule's reliability [7]. Last, the separation between the theoretical optimum schedule and the stakeholders' environment leads to great schedules that cannot be achieved in practice [3]. All these problems are cumulative throughout the project life cycle and lead to wasted time, increased project costs, changes in the project scope, and unsatisfied stakeholders.

SOLUTION

Stakeholder management in project scheduling is a crucial element that should follow a systematic approach that ensures all the stakeholders are included while at the same time not taking too much of the project time. The solution starts by determining the stakeholders, who should be involved in scheduling processes, and to what extent [2]. This should also consider authority, technical know-how, working experience, and the effects of the schedule on and from it. Regarding engagement, the following should be done about relevant stakeholders: workshops, consultations, and reviews, which should be conducted in line with the schedule development life cycle. To create the initial schedule, meetings that involve all the stakeholders can be used to gather information on the duration of the activities, the dependencies, and constraints [6]. These sessions should use visual scheduling and real-time modeling to ensure that creating a schedule for the non-technical staff is achievable. Consultations with the specialised stakeholders should be made for the parts of the schedule that are complicated or highly risky.

USES

Stakeholder involvement in scheduling is useful in various projects, especially in complex and large-scale projects. Stakeholder involvement in scheduling in public infrastructure projects enhances the achievement of the project goals and objectives since it aligns with the public's needs and the set legal requirements [1]. Developing the phasing plans and the milestone schedule effectively integrates construction needs and stakeholders' concerns. In healthcare facility projects, stakeholders make it possible for schedules to address operational changes and equipment integration [8]. Clinical stakeholders can gain an understanding of how construction sequencing impacts patient care. At the same time, the administration can ensure that the budgets are released in harmony with the construction phases. In the context of technology implementation projects, engaging the business unit stakeholders in scheduling ensures that one is aware of operational constraints like blackout periods, resource constraints, or change management considerations that may not have been noticed otherwise [3]. This leads to increased realistic implementation goals and a concurrent or parallelism to business cycles.

IMPACT

This paper seeks to establish the effects of stakeholders' participation on the project scheduling and its effect on the project and/or organization's performance. Globally, it has been found that projects with a high degree of stakeholder engagement in the planning and scheduling of infrastructure projects experience less delay and cost overruns than projects with low stakeholder participation [1]. These improvements include better identification of risks, more realistic initial schedules, and improved focus on timelines. It is also important to involve stakeholders as it greatly enhances schedule quality based on the evidence indicating the improvements in duration, accuracy of dependencies, completeness of dependencies, and identification of constraints [5]. These quality improvements directly apply to reducing schedule changes during the implementation, leading to less paperwork and more concentrated work. The key stakeholders' satisfaction level on project delivery is higher when involved in schedule creation and management [4]. This satisfaction goes beyond scheduled performance to encompass other aspects of project value and organizational capability, improving relationship quality and potential future cooperation.

CONCLUSION

Stakeholder engagement in project scheduling is one of the significant factors of project management that connects the technicality of schedule planning to the practicality of project execution. The literature covered in the paper shows that best scheduling practices are accurate regarding estimations and enable good risk handling, a high level of team commitment towards proper schedule implementation, and better project performance. Thus, although the involvement of multiple stakeholders increases the number of factors that need to be considered during schedule development, the advantages of a high-quality schedule, its acceptance by the stakeholders, and the ability to respond to schedule disruptions quickly are much larger.

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