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Investigation of Current Practices and Challenges of Stakeholder Management Process in Construction Projects

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ABSTRACT

In the construction industry, stakeholder management is essential for project success because it entails locating, evaluating, and proactively interacting with people or organizations that have the potential to have a substantial impact on project. Due to the involvement of multiple parties, including clients, contractors, subcontractors, regulatory bodies, local communities, and environmental organizations, the construction business is intrinsically complicated. Achieving project objectives, minimizing conflicts, and addressing a variety of interests all depend on effective stakeholder management. In this research, the various challenges faced by the stakeholders are identified. Alongside, the current practices followed by the stakeholders in the construction projects are explored. Based on that, the factors affecting stakeholders' management on project performance are investigated. This research aims at identifying the most critical factors affecting the stakeholder's performance across project success through a conceptual framework. This paper explains the direct impact made in project cycle due to stakeholder performance and major problems faced by the construction industries due to improper allocation of stakeholders. A review of earlier stakeholder management research is conducted to accomplish this goal.

Keywords: Construction, stakeholders, performance, framework

INTRODUCTION

Construction projects are typically broken up into several operations or activities carried out by various people or groups, each of whom may have varying degrees of involvement and/or interest in the project. Construction projects distinctive in that they involve several stakeholders, fragmented procedures, and interaction; like to other endeavours, they are limited by time and resources (material and human) that are required to complete the projects [1]. It follows that the protracted process of designing and carrying out construction projects is a complex system that necessitates cooperation and negotiation among numerous stakeholders, including but not limited to clients, designers, contractors, local authorities, and the project's overall environment [2]. Stakeholders in projects are the various parties participating in the project, both directly and indirectly. Effective management of these parties is essential to the project's success. As a result, stakeholder management has been acknowledged as a crucial tactic for ensuring project success in the construction sector. Stakeholder management is a proactive strategy to anticipate, comprehend, and address the requirements and expectations of diverse stakeholders in this dynamic and varied context [3]. It includes techniques like stakeholder mapping, communication plans, and feedback systems in a methodical process of

identification, prioritization, and involvement. Keeping good ties with stakeholders throughout the project lifetime is critical to construction projects' success [4].

LITERATURE REVIEW

The construction industry is a dynamic and complicated sector with many different stakeholders, each with their own set of goals and interests. Construction projects must be successful to identify, comprehend, and resolve the demands and concerns of the many people and groups participating the project. This is made possible through effective stakeholder management. The goal of proactive and strategic stakeholder management is to guarantee the overall success of building projects by fostering positive relationships and improving communication.

Assessing Stakeholder Impact and Communication Challenges in Public Infrastructure and Construction Projects

The impact of local community stakeholders on significant Public Infrastructure and Construction (PIC) projects. PIC project stakeholder management has traditionally prioritized controlling stakeholders over considering the effects on secondary stakeholders, such as the local population [5]. The characteristics of respondents from the project owners, contractors, and supervisory consultants are identified in the study along with their implications for the success of building construction projects [6]. The impact of project parameters on the quality of internal communication is the focus of the study. Interactions between the project management team and the construction team impact the Caliber of internal communication. Project resources, and project objectives [7]. Effective stakeholder management and project success depend on evaluating stakeholder traits including authority, credibility, urgency, and closeness. The study highlights how crucial stakeholder impact elements are to the success of project management [8]. The perceived obstacles to stakeholders' involvement in South African construction projects were determined by the results, which were then divided into three categories: government-related, organizational, and individual. Additionally, the data suggest ways to lessen perceived obstacles through sector-specific policies and programs [9]. Stakeholders had issues with project rationale that were not sufficiently explained, participation in technical discussions that was challenging, and a perception that project implementers were unwilling to involve them in decision-making, according to the questionnaire analysis [10].

Strategic Integration of Risk Transfer and Collaboration Techniques in Stakeholder Management

Risk transfer should be strategically combined with other techniques. Joint ventures allow for the sharing of risk, which helps lessen the blow of failure. Effective collaboration and correspondence are necessary for managing stakeholders [11]. Among the mitigating strategies are collaboration promotion, stakeholder understanding and interest analysis, and conflict analysis [12]. The maintenance of positive connections with stakeholders, attending to their needs and concerns, and providing methods for conveying project consequences were found to be the most significant elements impacting Stakeholder management. Six component categories were used to categorize the aspects influencing Stakeholder management external project relationship awareness, decision-making, stakeholder

estimation, information input, project relationship, and sustainable support. It was discovered that external project relationship awareness was the least significant factor, while the project relationship component was the most crucial [13]. The top three criteria for stakeholder management are evaluating the demands and limitations of stakeholders managing stakeholders with social obligations and effectively and regularly communicating with stakeholders [14]. In order to reduce risks, the relationship between project objectives and stakeholders' goals must be carefully considered due to its complexity. Ignoring the influence of stakeholders may result in longer project durations and higher project expenses. Stakeholder identification is an ongoing, difficult process that is essential to the execution of a project's success. Taking all the stakeholders' risks into consideration while building relationships with project participants is the biggest obstacle [15].

Analyzing the Dynamics of Stakeholder Management for Enhanced Project Success

The total effect of stakeholder management on project success is influenced by stakeholder analysis and an awareness of stakeholder dynamic [16]. Stakeholder management was found to be influenced by the following aspects: involvement, decision-making, organizational structure, quality performance, and factors pertaining to customers and employees. Two highly regarded aspects are stakeholder participation and organizational structure [17]. The theoretical mapping of stakeholder management by focusing on concepts, constraints, and variables. The study's findings can contribute to a deeper understanding of stakeholder management in construction projects [18]. A number of factors work against internal stakeholders in road construction projects, such as inadequate involvement during construction projects, late payments to service providers, failure to verify contractor qualification, lack of client knowledge to review design documentation, and a lack of understanding of project feasibility [19]. BIM adoption recommended for deeper collaboration among stakeholder's Quantitative research design with reliable data set and valid research instrument [20].

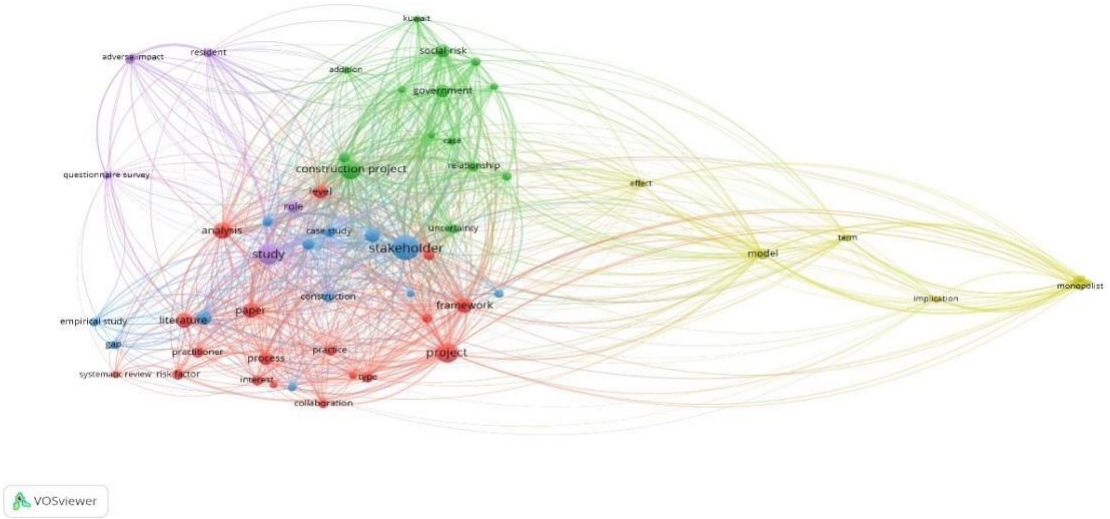
Optimizing Construction Project Success through Effective Stakeholder Management

Critical Success Factors (CSFs) related to construction project stakeholder management. Formulated a project mission, spoke with stakeholders, and identified project stakeholders as the top three ranking variables [21]. Stakeholder cooperation enhances project performance and owners' social capital. Four clusters comprise the stakeholders involved in the development of power. An efficient stakeholder network can greatly raise owners' social capital. In order to effectively manage stakeholders, a partnership approach and fair incentive distribution are essential [22]. Based on the research, financial resources should be set aside for stakeholder assessment, and it should be given top priority from the start of the project. Additionally, it recommends more study on stakeholders from the viewpoints of trade foremen, estimators, and designers [23]. Having a better understanding of the variables affecting stakeholder interactions will help stakeholders work together more effectively, which will ultimately result in more successful building projects [24]. Project performance depends mainly on the stakeholder management in case of improper methods followed it may lead to failure and concluded with classification system for delays by grouping causes into categories and management domains [25].

DATA TEXT ANALYSIS

VOS Viewer is a powerful tool for data text analysis that can be employed to investigate the current practices and challenges of stakeholder management processes in construction projects. By utilizing this tool, researchers can gain valuable insights from textual data, enabling a comprehensive understanding of the dynamics surrounding stakeholder engagement in the construction industry. The analysis involves the extraction and visualization of key terms, themes, and relationships present in the texts related to stakeholder management in construction projects.

VOS Viewer employs advanced algorithms to create visual representations such as term maps and cluster diagrams, facilitating the identification of prominent concepts and their connections. Researchers can explore patterns, trends, and potential areas of concern within the stakeholder management process by analyzing the frequency and co-occurrence of specific terms. This approach allows for a nuanced examination of the challenges faced by construction projects in managing stakeholders effectively. Through VOS Viewer, the textual data analysis offers a dynamic perspective on the intricacies of stakeholder management, shedding light on both successful practices and potential obstacles. By presenting findings in a visually intuitive manner, this tool enhances the accessibility and interpretability of the research outcomes, contributing to informed decision-making and improvements in stakeholder engagement strategies within construction projects.



Source – VOS Viewer

CONCLUSION

In conclusion, this literature review delved into the current landscape of stakeholder management processes in construction projects. The analysis uncovered diverse practices and identified challenges inherent in this critical aspect of project management. Noteworthy themes include the significance of effective communication, the dynamic nature of stakeholder engagement, and the impact of technological advancements. The findings emphasize the need for tailored strategies to navigate complexities and enhance stakeholder satisfaction. Moving forward, integrating innovative tools and fostering collaborative approaches are imperative to address challenges and ensure successful project outcomes. This review serves as a foundation for future research and offers insights for practitioners seeking to optimize stakeholder management in construction projects.

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