

# Examining Common Issues Encountered During Management of Construction Projects

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Construction Management (CM) programs at the college level generally put significant emphasis on providing real world experiences for students to gain necessary skills to successfully manage a construction project. In order to make this objective as effective as possible, it is important that CM programs are in tune with the current issues in the industry to better prepare students for a dynamic industry. This study examines commonly discussed topics within a database of actual case studies collected from industry professionals, to determine trends regarding typical challenges and their solutions within the construction industry.

The objective of this study is to determine the most common causes of issues during construction projects and to identify the most effective means of reducing the frequency of these issues. By gaining a better understanding of the solutions to common issues during the construction process, we can apply this knowledge to educational programs to better prepare future industry professionals for current and typical market conditions. This study is aimed towards developing a visual analysis of the most prevalent issues within the industry based on the data collected in an effort to support construction education. In previous studies, authors used an online survey platform to collect responses from numerous construction companies in the northeast region of the US. To encourage participants to take the survey, subjects were assured that their identity was to remain completely anonymous. In the survey, subjects were asked to provide detailed explanations of problems and/or issues they had previously encountered during a construction project and the means to which these problems were solved. After data collection was complete, the results were put into a program called NVivo which is a qualitative data analysis tool that helps researchers develop word clouds of the most commonly reoccurring words and phrases in the responses. These word clouds were thoroughly assessed by the authors to eliminate those terms that are irrelevant to the goals of this study. This study represents the qualitative analysis of these word clouds and the evaluation of patterns among problems and their solutions using 59 responses collected from a previous study.

Based on the industry responses examined, two word clouds have been created that depict the most commonly used phrases and words in the explanation of the problems and their solutions. In the early phase of this research, it is clear that the topics commonly discussed to describe problems in the industry are not necessarily the same as those in the solutions. The analysis provided in this study provides a distinctive qualitative approach to improving construction management education by further examining data collected from industry professionals. This data can be used as an aid in structuring higher education construction management courses or corporate training by guiding topics based on current industry patterns and needs.

**Keywords:** Case Studies, Construction Education, Qualitative Analysis