Graduate Student Research Abstract – Construction Practice (Non-Pedagogical Content)

Developing an Open Repository of Best Practices for the Construction Industry

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Organizations need knowledge management and transfer systems to disseminate successful practices within the organization. One subset of this important knowledge base is the best practices required for successful management and completion of construction projects. Best practices improve project performance, yet these practices are not universally implemented in the industry, in part due to the following: 1) not all practices are applicable to every project or organization, 2) knowledge lost in organizational turnover may lead to inconsistent use of best practices and 3) the lack of systematic processes for best practice in an organization. With the guidance of a steering committee, made up of key industry executives and representatives from industry associations, we are developing an open source online repository that standardizes these practices and facilitates rapid dissemination to the construction industry. Standardization of successful practices creates an opportunity to systematically incorporate these practices within academic and industry organizations. If critical practices are standardized and readily accessible in the construction industry, organizations can capitalize on opportunities for performance improvement. The objectives of the research include 1) identifying practices associated with successful projects (best practices); 2) determining the critical elements for a successful open source system and 3) assessing the feasibility of such an open source repository for the construction industry. We first evaluate various definitions of the term "best practice" and the equivalents in and out the construction industry. Secondly, through structured interviews, we gain better understanding of how best practices are used and how construction companies organize these knowledge systems. This analysis is critical to assessing how the industry uses and values best practices. To assess the feasibility of an open repository, we will collect data using a Delphi study targeting experts on knowledge management, best practices and other related topics. We have already conducted interviews with industry organizations (owners and contractors). These interviews illustrate the use of best practices within organizations, common technology used to house and distribute these practices and barriers to their effective use. Organizations acknowledge the potential value in having an open online best practice repository. Organizations that had continued success with collecting and disseminating best practices tended to have standardized processes for identifying and implementing these practices. They further reported they need a dedicated best practice team or committee to continuously collect and review practices and maintain the knowledge system. While many agree that best practices are important and should be implemented, some organizations may not have the resources to collect and disseminate these practices. An open source repository of best practices addresses this issue and provides the industry a set of proven practices. Further, this repository supports knowledge transfer despite the labor turnover, in turn allowing organizations to maintain or even improve their performance. Beyond the repository, research findings will enable member organizations to better collect and disseminate information internally, facilitating successful knowledge transfer of organization-specific best practices.

Key Words: Construction Best Practices, Knowledge Management, Industry Open Repository, Delphi Study