

Mobile Cloud Application in Design Build Bridge Construction

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Abstract : In the past decades, design-build has become a more popular project delivery system especially for the large scaled infrastructure project in North America. It provides a one-stop shopping system for the client therefore improves the efficiency of construction, and reduces the risks and overall cost for the clients. Compared to the project with traditional delivery method, design-build project requires contractor and designer to work together efficiently to deliver the best-value solutions through the construction process. How to facilitate a solid integration and efficient interaction between contractor and designer often affects the schedule, budget and quality of the construction therefore becomes a key factor to the success of a design-build project. This paper presents a concept of using modern mobile cloud technology to provide an integrated solution during the design-build construction. It uses mobile cloud architecture to provide a platform for real-time field progress, change request approval, job progress log, and project time entry with devices integration for field information and communications. The paper uses a real filed change notice as an example to demonstrate how mobile cloud technology applies in a design-build project and how it can improve the project efficiency.

Keywords : cloud, design-build, field change notice, mobile application

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