Enhance the Construction Site Management Using Mobile Application

TM Alwis, WPJ Pemarathne

Department of Computer Science, Faculty of Computing, General Sir John Kotelawala Defence University, Ratmalana, Sri Lanka

Abstract. Effective communication throughout the project participants in construction sites is a major factor for construction project management. There are several mobile apps used on construction sites. providing different services such as the construction field, applications of new technology are more frequent in site works such as pile driving, soil sampling, concrete pouring, excavations, etc. But there is a lack of mobile applications in the field of construction project management. But there is no specified technological solution for issues in the communication area in construction site management. It is a highly required facility because of the busy lifestyle of the people and now most people like to adopt with technological enhancements. The efficiency of the project is enhanced by the rapid provision of these project data. This paper reviews the implementation of a mobile application framework to support the management and communication of construction sites. The mobile application that is planned to be developed will facilitate the contact between managers, field office workers, and mobile users at the sites of construction. Major reasons for construction project failure are ineffective communication between management and site staff and poor planning skills. An effective project management application should facilitate all the staff to receive instructions from the site, send requests for interpretations and retrieving project information, continuously update the material and equipment status. In this study, it is mainly focused on how to apply technological trends to achieve fruitful project management and minimize unnecessary losses on the construction site. There are several trends of new technology that can be applied to increase the efficiency of project management.

Keywords: Mobile Application, Construction Communication, Construction Management, Construction Site, Construction Information