ABSTRACT

BARRIERS AND OPPORTUNITIES FOR THE USE OF ICT BASED ON MOBILE APPS IN THE PERFORMING AND MONITORING PHASE OF HIGH RISE BUILDING CONSTRUCTION IN PT ABC PROJECTS

By

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The construction industry is one industry that is still lagging behind compared to other industries, especially in the field of technology. Therefore the construction industry is trying to improve itself so that it is not too far behind other industries by trying to continue to utilize the development of information technology. The use of Information and Communication Technology (ICT) is expected to reduce time in processing data and increase productivity. Applications and software for ICT products are also expected to help improve operational activities through communication from construction information to effective and coordinated decision making. Based on this, in the process there are barriers and opportunities that occur in the utilization of ICT in construction project management, so it is necessary to evaluate the use of ICT in the use of mobile-based applications called CIS in the performance and monitoring phase of the PT "ABC" project. The ICT system evaluation method in this study uses the PIECES method which has 5 indicators as opportunity with each result and its classification as follows; Performance: 84.26% (Opportunity to be Successful), Information: 84.26% (Opportunity to be Successful), Information: 83.58% (Opportunity to be Very Successful), Control and Security: 82.98% (Opportunity to be Successful), Efficiency: 78.30% (Opportunity to be quite Successful), Service: 82.51% (Opportunity to be Successful). And the Economy indicator: 65,96% (Opportunity to be Not Successful) is the only one that is included as an indicator of the barriers that exist in the use of the use of ICT progress, related to the Reusability of only 65.53% and supporting resources of 66.38%.

Keywords: system evaluation, construction apps, PIECES, ICT,