

Lesson learned in maintaining the precast concrete buildings

Abstract

Purpose: The purpose of this study is to identify existing weaknesses in precast concrete building maintenance and how to overcome it. The contemporary practice of conventional methods in the pre-cast concrete (PC) building maintenance entails many issues such as PC component aesthetic and structural defects, no integration between maintenance systems and lack the intelligent capabilities of linking defect diagnosis operations in maintenance due to poor service delivery and defect repetition. A key problem impeding the widespread adoption of emerging technologies is the lack of competent contractor supporting the effectiveness of implemented information and communication technology than conventional methods and the returns on investment. **Design/methodology/approach:** The shortcomings of conventional methods are assessed from the perspective of PC buildings. Several data were collected through a case study of eight PC buildings from high-rise and complex buildings. **Findings:** The conventional methods had significantly little emphasis on defect diagnosis tools. It had also increased the inadequate strategic decision making to analyse information in improving the maintenance project outcomes for PC building. **Originality/value:** Building information modelling tools is suggested from findings and lessons learned as a good practice to reduce the repetition of defects on the design specification used and construction practiced.

Keywords

Building information modelling; Conventional method; Maintenance management; Maintenance management system; Malaysian PC building