

Collaboration And Bim Model Maturity To Produce Green Buildings As An Organizational Strategy

Abdullah Badawy Mohammed

Lecturer, Architectural Engineering Department, Faculty of Engineering, Fayoum University, Egypt.

E-mail: Abg00@fayoum.edu.eg

ABSTRACT

Each organization or work team adopts a specific strategy to produce and execute green buildings because there is no reliable strategy by BIM. Although a BIM model includes many disciplines; however, each company relies on an individual tactic in executing this model, which negatively affects the maturity level of the model due to unguided organizational experience and lack of integrating BIM technologies. Therefore, the research sought to regulate and optimize the collaboration and maturity level of a BIM model as a strategic basis to produce and execute green projects. Therefore, the study addressed the BIM concept, the correlation origin between collaboration and BIM model maturity, and the way to optimize collaboration as a system and qualify individuals through it. The potential of attaining the highest maturity level of a BIM model was investigated, besides overcoming the difficulties related to the evaluation of their business value. The study verified the correlation between BIM and green buildings; and, demonstrated the role of collaboration and BIM maturity level within green assessment systems. Accordingly, the study concluded, formulated, and validated a framework based on collaboration and maturity potentials of a BIM model as an organizational strategy to produce green projects by BIM.

Keywords: Building Information Modeling (BIM); Collaboration; Maturity level; Green Building; Organization; Delphi technique.