

# **Conceptual Framework to Develop E-Maintenance of Government Building Based on BIM**

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## **Abstract**

Government building is one of the state assets that requires effective and efficient maintenance management, to extend the life of the building and to optimize its utilization or function. Irrelevant government building maintenance strategies not only cause losses to the state but also harm building users. Many studies have shown that improper maintenance management has caused harm to residents or users of the building. As a state asset, government buildings have a very strategic and urgent function for the benefit of public services. While the maintenance tends to be still conventional, whereas the development of technology brings many benefits in building maintenance management. The concept that is widely applied today to building management is to integrate the concept of BIM and e-maintenance. These two concepts are considered to result in effective and efficient maintenance. E-maintenance is an important breakthrough for government building maintenance so that the entire maintenance process can be monitored through the system. This study aims to identify the conceptual framework that will be used for the development of the BIM-based government building e-maintenance system. This study is expected to generate a conceptual framework for the development of e-maintenance of government buildings based on BIM.

## **Keywords**

E-Maintenance, Government Building, BIM, Conceptual Framework

## **Biographies**

**Anita Handayaniputri** is a doctoral student in the Graduate Program of Faculty of Engineering, University of Indonesia. She has been in civil engineering since undergraduate and graduate programs. She works as an expert staff in the House of Representatives of the Republic of Indonesia.

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