

**IDENTIFICATION OF BUILDING INFORMATION
MODELING (BIM) SIGNIFICANCE TOWARD
SUCCESSFULNESS OF THE CONSTRUCTION PROJECT IN
YOGYAKARTA**

Final Project Report



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INTERNATIONAL CIVIL ENGINEERING PROGRAM
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UNIVERSITAS ATMA JAYA YOGYAKARTA
JUNE 2016

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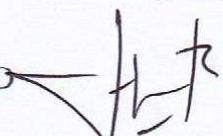


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I realize, this report may be flawed. Therefore, I accept any form of suggestion for further improvement. Thank you

Yogyakarta, June 2016

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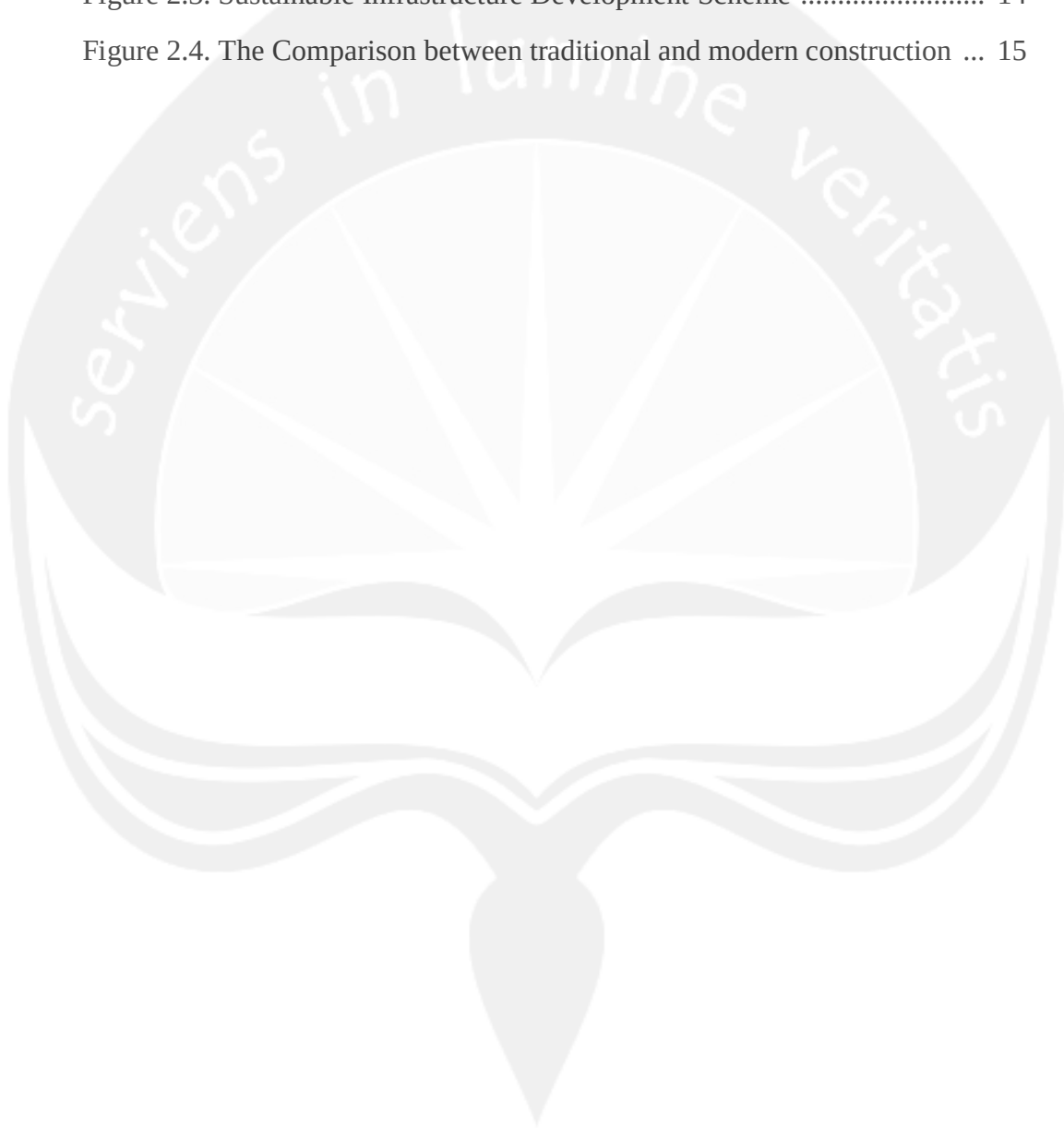
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ABSTRACT

IDENTIFICATION OF BUILDING INFORMATION MODELING (BIM) SIGNIFICANCE TOWARD SUCCESSFULNESS OF THE CONSTRUCTION PROJECT IN YOGYAKARTA, I Gede Eka Agastya Putra, Student Number 12.13.14489, year of 2016, Construction Management, Civil Engineering International Program, Department of Engineering, Universitas Atma Jaya Yogyakarta.

Construction sector is a sector that plays an important role in the economic development in Indonesia as the existence of high rise building, toll road and tunnel work, and other construction projects that keep increasing over the time. Thus, it is required a concept that could provide a project planning activity in the best level in terms of using software supported collaborative of the parties in order to provide abilities to finish the project in a shorter period of time, excellent quality and less costly. The use of project planning by Building Information Modeling (BIM) enhanced the collaborative effort toward the team of the project. The construction manager could deliver a constructability, sequencing, value and engineering report properly. BIM can also become a pilot action to the 3D coordinator between sub-contractor and vendors during early stages of planning phase. Methodology that used in this research to gather the data is by questionnaire. Data was analyzed by using mean, standard deviation and percentage method. Result showed that 97% of respondents believe BIM concept is beneficial toward their project. 83% of respondents already implement about this concept and use BIM software. AutoCAD Civil 3D and AutoCAD Architect are the most used software by the construction company as 22% of them claimed used it. The impact of BIM concept in three categories of construction are observed, in the construction stage Handover the project work criteria is in the first rank with 3.8 mean and 0.8 standard deviation value, in the project activities Visualization design facility activity is in the top rank with 3.83 mean and 0.74 standard deviation value and in the project performance Minimize the risk of miscommunication is in the top of the rank with 4.03 mean and 0.71 standard deviation value. On the overall impact of BIM toward the successfulness of project Customer Satisfaction criteria is in the first rank with 3.80 mean and 0.71 standard deviation value.

Key Words: BIM Identification, BIM Implementation, Planning, Construction Stages, Mean, Percentage