Proceedings of the International E-Conference on Novel Innovations and Sustainable Development in Civil Engineering 2020

ISBN	978-93-88122-14-6
Website	www.veltech.edu.in
Received	02-May-2020
Article ID	NISDCE117

VOL	01
eMail	nisdce@veltech.edu.in
Accepted	17-May-2020
eAID	2020.nisdce.117

A CASE STUDY OF SUCCESSFUL BIM IMPLEMENTATION FOR CONSTRUCTION COMPANY IN TAIWAN

Lung-Mao Huang¹ Jyh-Bin Yang²

¹ Research Scholar, National Central University, Taiwan ² Professor, National Central University, Taiwan

ABSTRACT: Implementing BIM (Building Information Modeling) technique in construction industry has attracted huge attentions globally. Previously, key success factors for BIM implementation have been identified; including BIM related education, top management level support, key BIM manager, Industry-University cooperation, etc. Based on the experience of implementing BIM in Taiwan, most construction companies suffer a common problem of obtaining skilled BIM engineers. Therefore, to provide the best practice from successful companies with good business strategies is beneficial to the companies that are willing to implement BIM to improve their service qualities. This study reported a case study by conducting expert interviews and a questionnaire survey on BIM engineers in a successful company in Taiwan. By the outcomes of expert interviews, the key success factor of BIM implementation in a construction company is education and training on engineers. Furthermore, the company provides internship for the students in BIM training programs that makes up the lack of experience for fresh graduated students, and provides higher salaries to attract and to retain BIM engineers. It is obvious that the students in the BIM training programs are willing to join the study company after graduation. Based on a questionnaire survey of BIM engineers in the study company, this study identifies several valuable factors for successful BIM implementation in the study company, including the BIM engineers trained with industry mentors from the study company having lower turnover rate, the main reason of BIM engineers leaves being unsatisfied salary, and the BIM engineers with good and correct experience increasing their competitiveness. The outcomes of this study provide valuable findings for the company and the university that target on implementing BIM technique in their operations and education systems.

Keywords: BIM, BIM education, Key Success Factors, BIM Engineers, Taiwan

This paper is prepared exclusively for International E-Conference on Novel Innovations and Sustainable Development in Civil Engineering 2020 which is published by ASDF International, registered in London, United Kingdom under the directions of the Editor-in-Chief Dr E B Perumal Pillai and Editors Dr. M Vinod Kumar and Mr. R. Saravana Kumar. Permission to make digital or hard copies of part or all of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage, and that copies bear this notice and the full citation on the first page. Copyrights for third-party components of this work must be honored. For all other uses, contact the owner/author(s). Copyright Holder can be reached at copy@asdf.international for distribution.

 $2020 \ @ \ Reserved \ by \ Association \ of \ Scientists, \ Developers \ and \ Faculties \ [www.ASDF.international]$