Linking BIM To Power BI To Support Facility Management

Mr. Shekhar Jejurkar[1], Prof. Tushar Bhambare[2]
[1, 2] Dept of Project & Construction Management
[1, 2] MIT Art, Design and Technology University, Pune, India-412201

Abstract- *All researchers support Building Information Modelling (BIM) as the best way to improve the construction process. Traditionally, syntax and analysis tools are used to search and query data structures. This tool is not designed to explore and explain learning curve needs and wants. In this article, the authors recommend using Power BI dashboards to make it easier to access and view lifecycle data embedded in models. A use case study discusses implementation and use Device management panel.*

Keywords- Building Information Modelling (BIM); Facility Management; Systems-centric; Power BI; mixed reality; HoloLens; life-cycle data

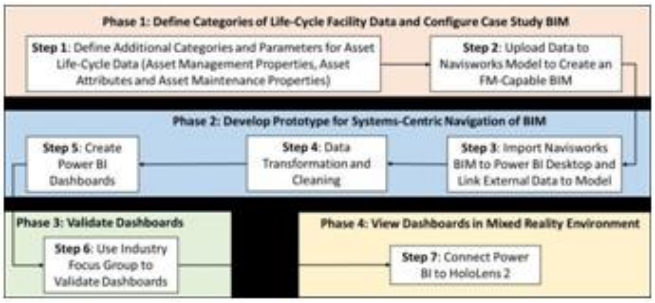
I. INTRODUCTION

Building Information Modelling (BIM); Material management; Process centered; The Power of Business Intelligence; Mixed reality; Impressive results like a 75% increase in productivity. BIM, asset management, data storage, model visualization, energy analysis, sustainability, life cycle analysis and problem solving, etc. It is used in many areas of site management, including the use of BIM, which allows you to easily update information while providing easy access to information, which you need. It also provides access to new information and models throughout their lifetime Construction managers often do not have the knowledge and skills to deal with its BIM information and management respect medicine, prevent workers from using these platforms and block access to important residential areas - Information form is attached. For ease of use and access to this important information, software for visualization and reporting of geometry and information needs to be used more and meet the needs of users. In addition, the software is tailored to the needs of the office staff to provide the most important information, reduce the data load and ensure the correct interpretation of the data.

II. MAIN DATA CONTENT

There are four different phases of data analysis, including:

1. Defining the properties of the classes required for BIM.
2. Create models to visualize schema and query embedded data using standard Power BI dashboards,
3. Use a team of business experts to evaluate the usability and effectiveness of the dashboard and (iv) test the model in a virtual reality (MR) environment. The model is designed to allow owners/operators to monitor models and query data from a process-oriented perspective, providing quick access to critical model data while maintenance responds to an emergency. A3D Navisworks a two-story research school model at a four-year university was used for reference, testing, and validation picture.



Summary of four completed work steps for existing tasks

Phase 1, Step 1: Define the product life cycle Phase 1, Step 2: Install Navisworks BIM
Phase 2, Step 3: Import Navisworks into Power BI Desktop
Phase 2, Step 4 4: Data Transfer and Clean-up,
Step 5 2: Building Power Business Intelligence dashboards
Step 3, Step 6: Effective dashboards Targeting workgroups

Data Visualization and Analysis:

Create four experts in a PowerBI dash discussion. Each dashboard is designed to filter graphic content and assets based on its unique price tag, service provider or related device, physical location, or design. The dashboard also includes a 3D model viewer for viewing model images and separate tables for viewing central devices, management tools and assets. Users can switch between these tables to see as much information as possible.

III. CONCLUSION

The research completed and presented in this document identifies and develops the information lifecycle required for FM-enabled BIM to deliver total cost to homeowners.

This document describes the five main aspects of asset management: asset identification, centralized operations, asset management, immediate asset management, and asset management. In particular, the new structure of filters and process- oriented equipment, including equipment, pipes and ducts, allows building managers to clearly understand the site. The owner/operator sees and sees the model. Duplicate entities can be created when these entities are included in BIM as part of deliverables. It is important to realize this Referrals are not included.

Additional restrictions depending on owner/operator needs and project configuration can be added.

IV. ACKNOWLEDGMENT

The authors thank: Jari Heinäjärvi, Codemill Oy (Navitools), Francesco Necciari, Blogic (VCAD), and Robert Garrett De bow, iConstruct (iConstruct) for their support and academic permission for the software that made this research possible.

REFERENCES

[1] Poirier, E.A.; Staub-French, S.; Fugges, D. A field study evaluation of the impact of BIM on the perform ance of operations in small contracting companies. automation. house. 2015, 58, 74–84. [Cross-Reference]

[2] Farghaly, K.; Abanda, F.H.; Vidalakis, C.; Wood, G. Taxonomy of BIM and Asset Management Using Semantic I nteroperability. J. Management UAV Engineer. 2018, 34, 04018012. [Cross-References]

[3] Chen, W.; Chen, K. Cheng, J. C. asked. Gan, VJ. automation. lub tsev. 2018, 91, 15–30. [Cross Ref]

[4] Sadeghi, M.; Mehaney, M. Strong, K. Integrating Building Information Modeling and Bu ilding Operations Information Exchange Systems into Decision Support Framework for Facility Mana gement. Nyob rau hauv Architectural Research Conference Proceedings, New Orleans, LA , 2-4 Plaub Hlis Ntuj 2018; 770-779. [Cross-Reference]

[5] Carvalho , JP; Almeida, M. Braganza, L.; Matthew, R. BIM Based Energy Analysis and Sustainability Assessment - Application to Portuguese Buildings. Home 2021, 11, 246. [C rossRef]

[6] Wetzel, E.M; Tarbet, W.Y. Use a BIM- based framework to support security management processe s. automation. house. 2015, 60, 12–24. [Cross Refere