AUTODESK UNIVERSITY

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Integration of BIM and Facility Maintenance: What Does the FM Crew Really Need?

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Learning Objectives

- Learn how to integrate BIM and 3D models into the FM platform
- Discover the correct workflow and how to maximize BIM information for FM
- Learn what data is required and needed by an FM crew
- Discover the benefits of utilizing BIM for FM

Description

As evolution of Building Information Modeling has been proven to increase efficiency and improve buildings' construction, it is also improving processes and decreasing costs of Facility Maintenance and Management. This class will explain how the integration of BIM models into FM systems has become a powerful tool in the building-management lifecycle. We will explain how the BIM model becomes an electronic owner's manual—it helps visualize space and building components that need maintenance, and it automates a preventive maintenance program. It gives the ability to filter data and quickly search for specific information, which significantly improves efficiency, and saves the maintenance crew time and resources.

Your AU Experts

Dusan Selezan

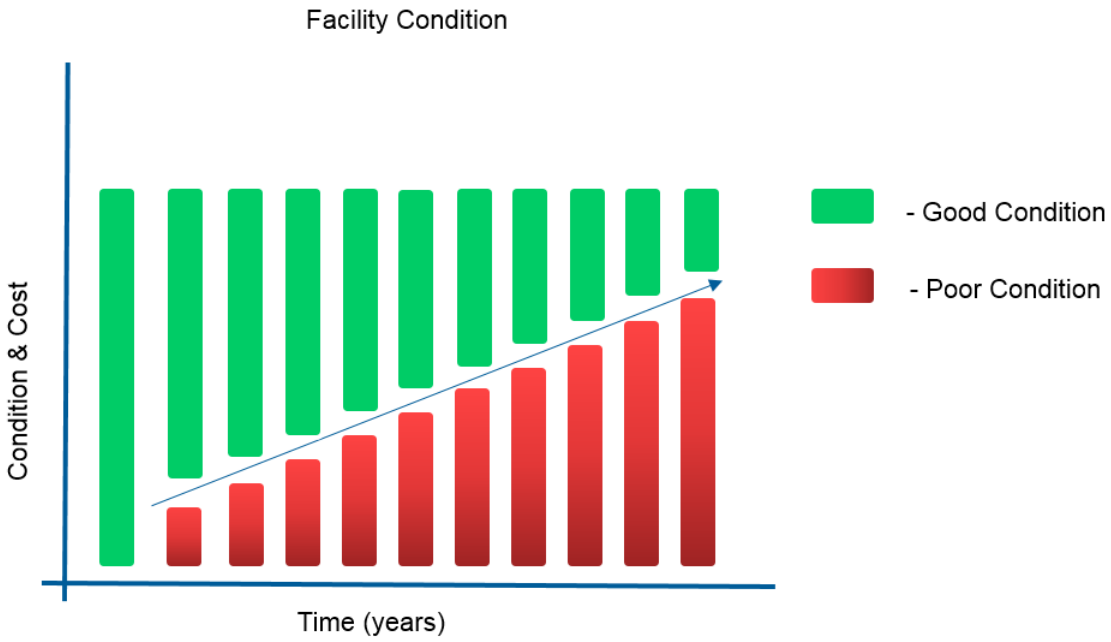
Dusan holds a Bachelor of Science in Civil Engineering and a Master's degree in Construction Engineering from San Diego State University. For the past four years he has been with Balfour Beatty Construction, working as a Senior Virtual Design and Construction Specialist. With more than five years of BIM experience he has diverse type of projects on his resume; Healthcare, Correctional Facilities, Schools and Residential Towers. Dusan is lecturer at New School of Architecture & Design, teaching Virtual Design & Construction course. He serves on multiple committees for Associated General Contractors in San Diego, he is a board member for Construction Management Association of America and member of Lean Construction Institute.

Claire Mao

With over 5 years of experience in the design and construction industry, Claire Mao has been instrumental in the successful completion of numerous high-profile projects. Claire is a key member of the virtual design and construction (VDC) department at Balfour Beatty plc. Claire is experienced in utilizing Building Information Modeling (BIM) to deliver project information, including site logistics and coordinated 3D/BIM shop drawings. She takes her experience even further with the creation of coordination plans, teaming agreements and co-location strategies for BIM implementation from design to preconstruction and through close

Deferred Maintenance

Increases the overall cost of managing and operating facility systems. It leads to failure of buildings and equipment due to a lack of unplanned not scheduled maintenance.



Building Systems that need maintenance

Plumbing systems, lighting and fixtures, fire alarms, mechanical equipment, fire sprinklers, roofs, electronic systems, doors and hardware…

Challenges with Current FM Systems

Lack of liable information and data. Lack of technology and schedules for maintaining equipment. No communication and involvement of FM crew during planning and construction of facilities.

Construction Project Closeout Requirements

Specifications and requirements, what is required vs. what is really needed by FM crew.

Construction Project Closeout Process

Hard copies of drawings and documents vs. pdf, and 2D drawings, 3D models. COBie spreadsheet, BIM, and BIM to FM

BIM to FM Process Plan

Create the plan that will lay out the entire process, set up schedule, assign tasks to team members, specify software and hardware.