



Living a Happy Lifecycle with Building Information Modeling: Linking BIM to FM is Just the Beginning

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BO5991 We have spent the past several years institutionalizing the standards and processes required to establish a “To Be Maintained” Building Information Modeling (BIM) Revit software model and link this Revit software model to a computerized maintenance management system (CMMS). The prevalent thinking was that this “BIM-to-CMMS” milestone was the ultimate BIM goal for an owner. Today we see that it is just the beginning of capitalizing on BIM in many areas of the facility lifecycle, and we understand that the owner expects the existence of the BIM to deliver measurable value in the operation and maintenance of the facility. Our panel will focus on the emerging uses of BIM after the completion of the Revit software model. We will discuss how you can utilize the model in asset management, real estate management, and building automation and performance optimization, as well as how the model impacts the total cost of facility ownership.

Learning Objectives

At the end of this class, you will be able to:

- Understand Lifecycle BIM implementation
- Learn effective practices for implementing BIM-enabled FM on a project
- Learn about the emerging uses of BIM in facility management
- Become aware of the common misconceptions associated with 6D BIM

About the Speaker's:

Amber White



Amber White has provided customized training and implementation services to project teams using Autodesk® Revit® Suite®. For the past 2 years, she has assisted in research and development of using the BIM for the building owner. Amber holds a Bachelor's of Science in Facilities Management degree from Oklahoma State University, was a speaker at Autodesk University 2010 and is certified by Autodesk in Revit Architecture. Amber manages the Jacobs Philadelphia office BIM team and is a member of the CMAA. Since joining Jacobs in 2009, she has worked on office standards, managed over 60 BIM projects, trained Architecture and Interior disciplines on Building Information Modeling and continues research and development on how to push the envelope for BIM uses from early design to the end of the facility lifecycle.

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Doug Betts



Doug Betts has experience in major construction project management, facilities management, operational support, and information technology management. His involvement in these areas features numerous accomplishments and special skills for organizational development around asset management practices, as well as the implementation and integration of computer software involving maintenance management, condition assessment systems, business management systems, business process analysis and recommendations; in-house and outsourced staff analysis and staff development programs, and the development of budgeting and cost control tools. Doug is a Jacobs thought leader on Asset Management implementation strategies and the integration of technology tools to transform organizations from reactive cost centers to a proactive, high performing, low total cost of ownership organization.

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Chitwan Saluja



Chitwan Saluja has 5 years of experience in the construction industry and 3 years of research experience specifically focused on technology implementation in the AEC industry. She has a BA of Architecture from the Indian Institute of Technology in India and a MS of Architectural Engineering from The Pennsylvania State University. Her background is in development, implementation, and management of technology environments for the design, construction and operation of large facility programs. Chitwan's primary responsibility is the implementation of BIM during the lifecycle of the project. She has highly specialized experience in both project visualization and analysis, and web-enabled project delivery environments. She provides BIM support to multiple projects focusing on clash detection, design review and 4D modeling. Chitwan is also responsible for training project teams in understanding BIM concepts and using associated BIM tools.

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Grace Wang



Grace Wang is a subject matter expert in leveraging BIM to support facility lifecycle, and is working with several clients to develop strategies to implement BIM integrated Facilities Management. Her expertise includes the use of COBie, BIM enabled barcoding system to collect/manage data for the clients CMMS, developing and implementing BIM Execution Plans, BIM-based general conditions for construction, 4D schedule simulation, and BIM integrated estimating. Grace served on the project advisory board for the creation of the BIM Planning Guide for Facility Owners. She has published papers with topics focusing on 4D construction schedule simulation and BIM integrated estimating, and presented at various conferences including Autodesk University 2012. Grace received a Master of Science degree in Construction Management from Pennsylvania State University before she joined Jacobs in 2007. Grace.Wang@jacobs.com

In this Hand-out

- Panelist's expertise and contact information.
- Information on how to get involved in a follow-up working group to address the challenges presented in today's panel.
- Questions, organized by learning objectives, to assist in discussions with the panelists.
- Note sections below the questions to record your reflections.

How to get involved in the follow-up working groups:

For those attending today's session, there will be several follow-up dialogues and working groups to address the challenges presented, discussed and discovered during today's panel. Please keep an eye on your email inbox as we will send out an initial email for the first web-ex to occur after the New Year.

Understand Lifecycle BIM Implementation

Is LOD 500 (As-Built) too much detail for CMMS?_____

Learn effective practices for implementing BIM-enabled FM on a project

Who “up-keeps” the Revit model and how often do they clean it up?_____

What middleware can be used for connecting BIM to various CMMS Platforms (Maximo, etc.)?_____

Learn about the emerging uses of BIM in facility management

How is model organization and coding being used to support downstream use in FM? _____

Is this best executed in design, construction or as-builts? _____

Become aware of the common misconceptions associated with 6D BIM

Where does COBIE fit into this new BIM-CMMS Integrated world? _____
