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Harnessing the Power of BIM and Assemble

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Learning Objectives

- Learn about the challenges facing BIM/VDC teams
- Learn how BIM influences advanced 3D preconstruction and construction workflows
- Learn how model conditioning can make managing BIM information much easier
- Discover the impacts of model-based takeoff, change management, scheduling, and work in place tracking with BIM.

Description

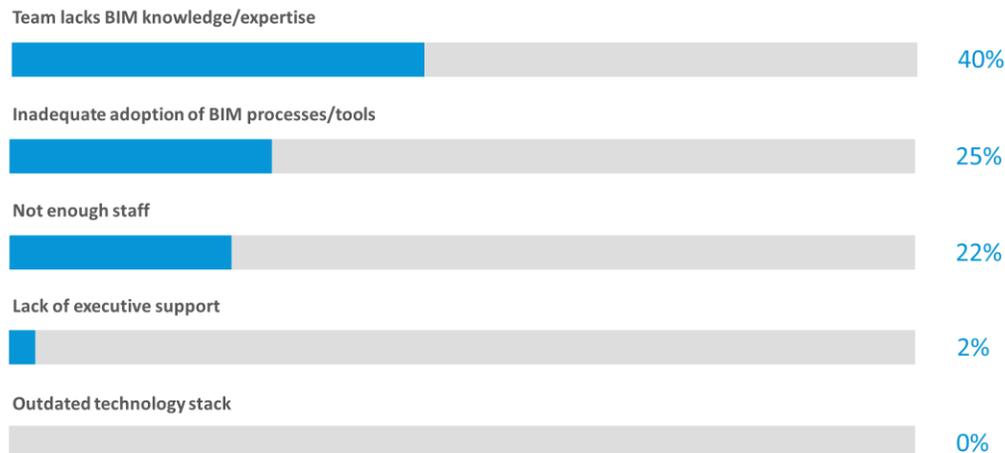
With project timelines and budgets always shrinking, it is imperative to use everything in your power to be successful. We all know data is the BIM (Building Information Modeling) experts' superpower, but incomplete models and deadlines often get in the way of using data to create the insights we'd like. The combination of BIM and Assemble software provides greater insights into how to quantify, budget, track project progression, and more. In this session, you'll learn how 3D models in Assemble and its data help builders improve their overall efficiency and coordination while successfully using the data for downstream activities to improve preconstruction and construction workflows.

About the Speaker

- Rachel Trocchi is a Technical Solutions Executive at Autodesk Construction Solutions supporting New England Mid Market accounts. In the TSE role at ACS, Rachel supports the entire Autodesk Construction Cloud portfolio spanning from design through handover and operations.
- Prior to joining the ACS team, Rachel began her career as an Application Engineer at Assemble Systems. During her time at Assemble, she was responsible for providing technical implementation and proof of concept for Assemble's customer base spanning the U.S., Canada and Europe.
- Rachel holds a Bachelors degree in Civil Engineering from the University of New Hampshire and currently resides in Boston, Massachusetts.

Challenges Faced by the BIM Team

We surveyed over 1,000 preconstruction professionals and found that technology has become core to how preconstruction teams operate, with 62% of respondents agreeing that technology leads to more successful outcomes. One of the questions asked was “What are the biggest Challenges facing your BIM Team?” Here are the results:

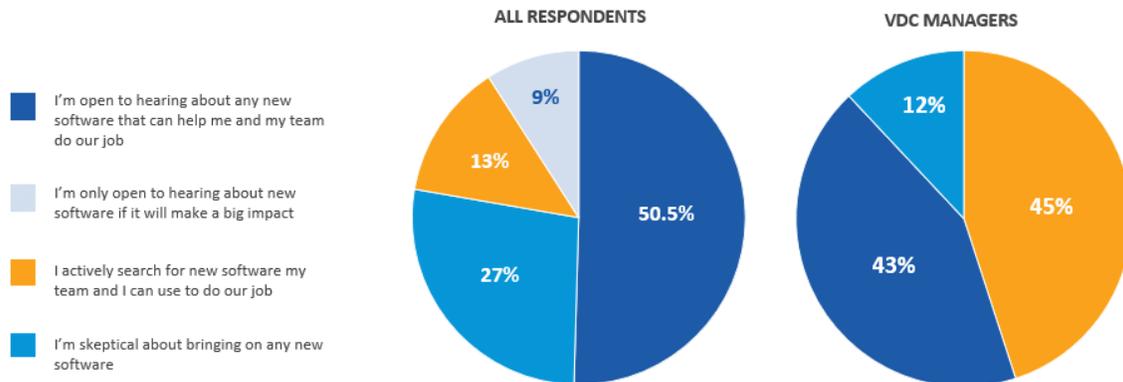


Speaking to BIM/VDC teams, we often hear the following challenges that the teams are faced with:

- Limited resources
- Need to share model data with estimating/project team
- Lack of BIM expertise in other departments
- Design iterations & budget impacts
- Lack of constructible model
- Tasked with getting model ready for downstream use
- Often tasked with extracting quantities
- Need for accurate project reporting

Despite all the challenges we see BIM/VDC teams face, we also found something interesting in the survey which is that, compared to all of the other preconstruction professionals who responded, VDC managers are far more likely to be early and enthusiastic adopters of new

technology. They are often the change agents and looking for ways on how they can use technology to help their team to do their jobs better.



How to Overcome Challenges with BIM and Assemble

Assemble helps construction professionals reduce risk and improve efficiency during project planning and execution by letting them condition, query, and connect BIM data to key workflows including design reviews, takeoffs, estimating, change management, value engineering, schedule management, and work in place tracking.

Assemble helps by:



Access to data



Making work easy



Model data for stakeholders



Model data + conditioning



Running variances

Powering Preconstruction and Construction

Model Conditioning is an essential step towards turning design model into construction ready model. It is the process of re-organizing the design model into construction scopes (or views), and then adding and/or editing construction meta-data to classify the model data and fill in the

gaps. The result is a construction model that enables automation of model-based takeoff, change management, value engineering, schedule management, work-in-place tracking and more.



Preconstruction Workflows

BIM/VDC teams can better visualize the project scope and complexities in a cloud-based environment in order to engage with multiple stakeholders. By providing a collaborative environment, BIM/VDC managers can empower project teams to conduct a more data-driven design review session. By creating shared views relevant to scopes/workflows, BIM/VDC teams can empower and collaborate with multiple stakeholders with limited BIM expertise. BIM also can help improve communication with the owners, it is easier to understand the project in a 3D visual than 2D drawings and specs.

BIM Managers & Estimators can:

- Easily extract and organize quantities from the model to utilize in various downstream workflows
- Leverage the model inventory to drastically reduce the overall takeoff time
- Easily understand, visualize, and quantify changes occurring within each design iteration
- Visualize the project by coloring the model based on model property information

Construction Workflows



Challenges Facing the BIM Team

- Lack of BIM knowledge and familiarity with the programs
- Hard to visualize complexities in 2D
- Disconnect between office and field
- Field is not benefitting from BIM
- Using outdated WIP tracking methods



How Assemble can Help

- Lack of BIM knowledge and familiarity with the programs
- Easy access to BIM for the field
- Better Visualization of project complexities
- Asset tracking
- Teams can quickly see which activity starts, when one finishes
- Quick access to model views to update properties
- Leverage models for work in place

To learn more about Assemble, please visit:
<https://construction.autodesk.com/products/assemble>