Autodesk® Building Design Suite: BIM Roundtable

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Class summary

This roundtable discussion is designed to bring to the table those like-minded individuals who have the following in common:

- A desire to share their experiences based on a successful deployment of Autodesk® Building Design Suite workflows that take full advantage of the range of product solutions available in the suite
- The roundtable explores past and existing project-based solutions and best practices while looking to use the range of products in Building Design Suite in a successful project workflow
- The discussion also looks at technical problems that were encountered during this process and explores suggestions on how to resolve them
- The concluding part of this roundtable addresses the lessons learnt and looks to exchange a set of practical hints and tips that can assists the group in achieving a highly productive workflow.

Key learning objectives

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

- Describe the benefits of setting up a BIM framework based on your resources and Autodesk® Building Design Suite
- Use firsthand honest feedback from companies that have devised a successful project workflow using Building Design Suite
- Prepare better for potential problems and hurdles in a workflow that deploys Autodesk® Building Design Suite
- Use real world knowledge in the form of valuable tips that help you better understand the workflows within the suite

Leveraging Autodesk® BDS to grow your business

Are there advantages you see in leveraging more products in the BDS Suite

- Leveraging all the Autodesk® Building Design Suite (BDS) products is determined by individual Company needs
- Companies map product use based on their Project goals and outcomes
- A high volume of customers are using Autodesk® Building Design Suites
- The primary products they are using to grow their business includes Autodesk® Revit & Autodesk® Navisworks
- At Concept Design stage customers are using Autodesk® AutoCAD, Autodesk® Revit in conjunction with Autodesk® Formit and Autodesk® Recap
- Some customers are using a combination of Rhino and SketchUp during Concept Design
- At Project Tender stage, customers are using Autodesk® Revit , Autodesk® Navisworks, Autodesk® 3d Studio Max and Autodesk® Showcase for presentations
- At Design development and Construction stage, customers are using Autodesk® Revit and Autodesk® Navisworks with a heavy reliance on Autodesk® BIM 360 Field & Glue

Streamlining workflows within Autodesk® BDS

Building Design Suite product workflow

- Use of Autodesk® Formit as opposed to SketchUp as a conceptual tool
- Autodesk® Formit allows greater accuracy, simplifies the transition from conceptual design to Design Development within Autodesk® Revit
- Autodesk® Formit - the ability to run Energy Analysis and can be used on multiple platforms making it a versatile tool
- Autodesk® Dynamo - Use of Dynamo as opposed to Rhino as a conceptual tool. Dynamo is an open source visual programming tool for BIM with parametric capability
- Autodesk® Project Falcon is a free technology preview that simulates air flow using meshing technology
- The ability to create object families in Autodesk® Inventor, simplify and export as RFA families to Autodesk® Revit
- Autodesk® Infraworks – Provides 3D Modeling and Visualization capabilities for Civil & Infrastructure Design
- Autodesk® Recap's point cloud workflow as the point cloud data can be linked directly in Autodesk® Revit, Autodesk® Navisworks, Autodesk® 3d Studio Max, Autodesk® Inventor & Autodesk® AutoCAD among others
- Autodesk® BIM 360Field & Glue usage has seen a surge as it has revolutionized Project collaboration across all the disciplines

Sustainability optimization with Autodesk® BDS

Sustainability in Design

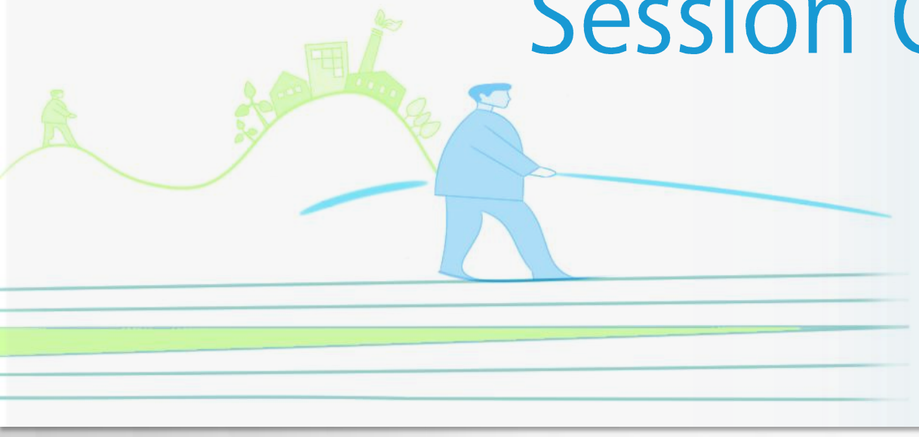
- A large majority of the people are interested in improving their Project outcomes by basing them on sustainability
- They are driven to move towards Green Building practices as it is becoming a key requirement for their clients
- There is a growing demand from governments across the globe to comply with Green Codes
- Client demands for LEED accreditation is growing in the Construction market
- The new Energy Analysis tools in Autodesk Revit 2014 provide the following solutions:
    - Illuminance - Day lighting Tools (Cloud render engine)
    - Whole Building Energy Analysis – New building elements mode (Autodesk® Green Building Studio in the cloud)
- Autodesk® Simulation CFD is gaining ground as an Advanced Analysis tool
- Project Falcon in Autodesk® Labs also in use as an simulation CFD tool
    - Useful links:

      http://www.autodesk.com/sustainable-design/revolution?src=OMSE&mktvar002=581385

      http://sustainabilityworkshop.autodesk.com/

      http://autodesk.typepad.com/bpa/

Session Overview: Key Takeaways



Key Takeaways

- Autodesk® Revit
  - Autodesk® AutoCAD to Autodesk® Revit transition – The primary focus on implementation is learning Revit
  - There is a growing trend among advanced Revit users to explore other BDS products and workflows
- Autodesk® BDS products give you the ability to work in multiple formats and exchange data with other consultants more easily without incurring any data loss
- It is crucial to identify your internal resources, type of projects, and your company vision / goals in order to choose the relevant products within the Autodesk® BDS
- Streamlining the workflow by identifying the features and functionality, would help structure your project
- It is important that you are aware of what is available within Autodesk® BDS. This will enable you to make the right selection of products, to help you develop a compact workflow for your projects
- More importantly, the Autodesk® BDS products are to be seen as a set of tools within a Toolkit; only use the tools that you need to get the job done, and base each choice to match your current project requirements
- http://www.autodesk.com/suites/building-design-suite/included-software