Welcome BPMs into the BIM Party: Building Product Manufacturers in the BIM Workflow

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Introductions

Class summary

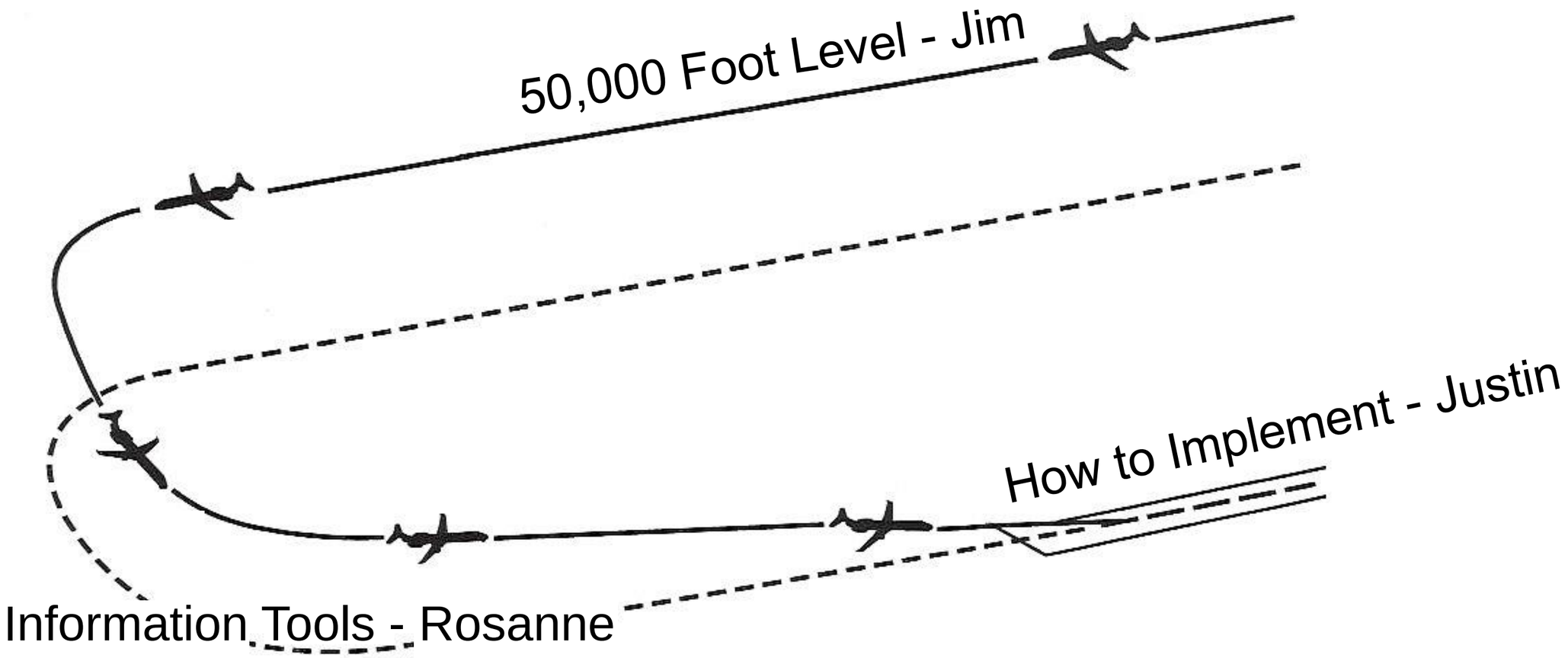
BIM, or Building Information Modeling, has become the norm in building design and as we get better at building these models, we are starting to add more of the “I” into our models to achieve the true vision of the BIM Theory. We will discuss methods/tools for including the product experts into our workflow and the benefits of including this “I”nformation.

Key learning objectives

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

- Understand the importance of “I”nformation in BIM.
- Effectively present your products to the design build team.
- Incorporate specific manufacturer information into virtual design while staying efficient.
- Determine when to incorporate BPM data into the project model.
- Aid communications between the design team and the product experts.
- Increase the chances that your design intent makes it to the jobsite.

Class structure and flow



BIM and Revit… WHY?

BIM Theory & BIM

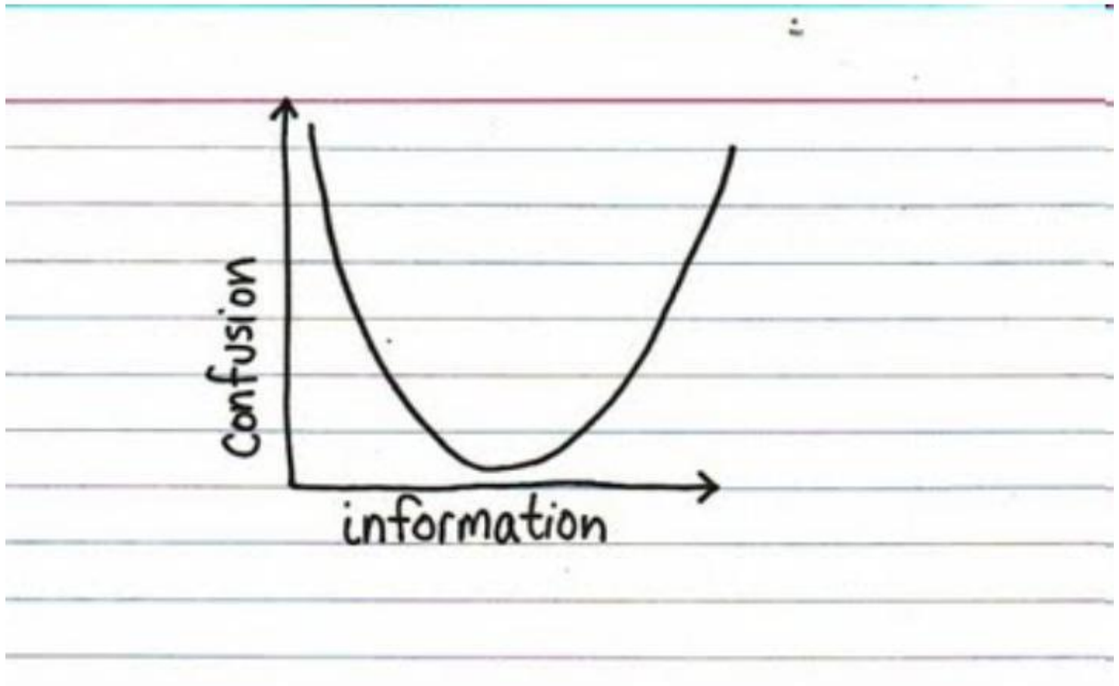
- Building Information Modeling Theory is a workflow methodology that helps us take ideas that we have in our heads and turn them into the structures and facilities that we live and work in.

BIM, at its most basic level…

- How do we get from point A (idea) to B (building)?
- Revit in its simplest form is just a communication device.
- It allows us to communicate our design intent.

BIM, as an effective communication tool…

- In order for us to communicate effectively, we must balance the amount of information we transmit…
  - too much information and the data becomes confusing…
  - too little and our intent of the design isn't clearly conveyed.



What we can communicate via BIM

- Design Intent
- Demolition Instruction
- Construction Instruction
- Building Product Information
- Installation Information
- Operation Information
- Maintenance Information
- End of Life Information
- And more!

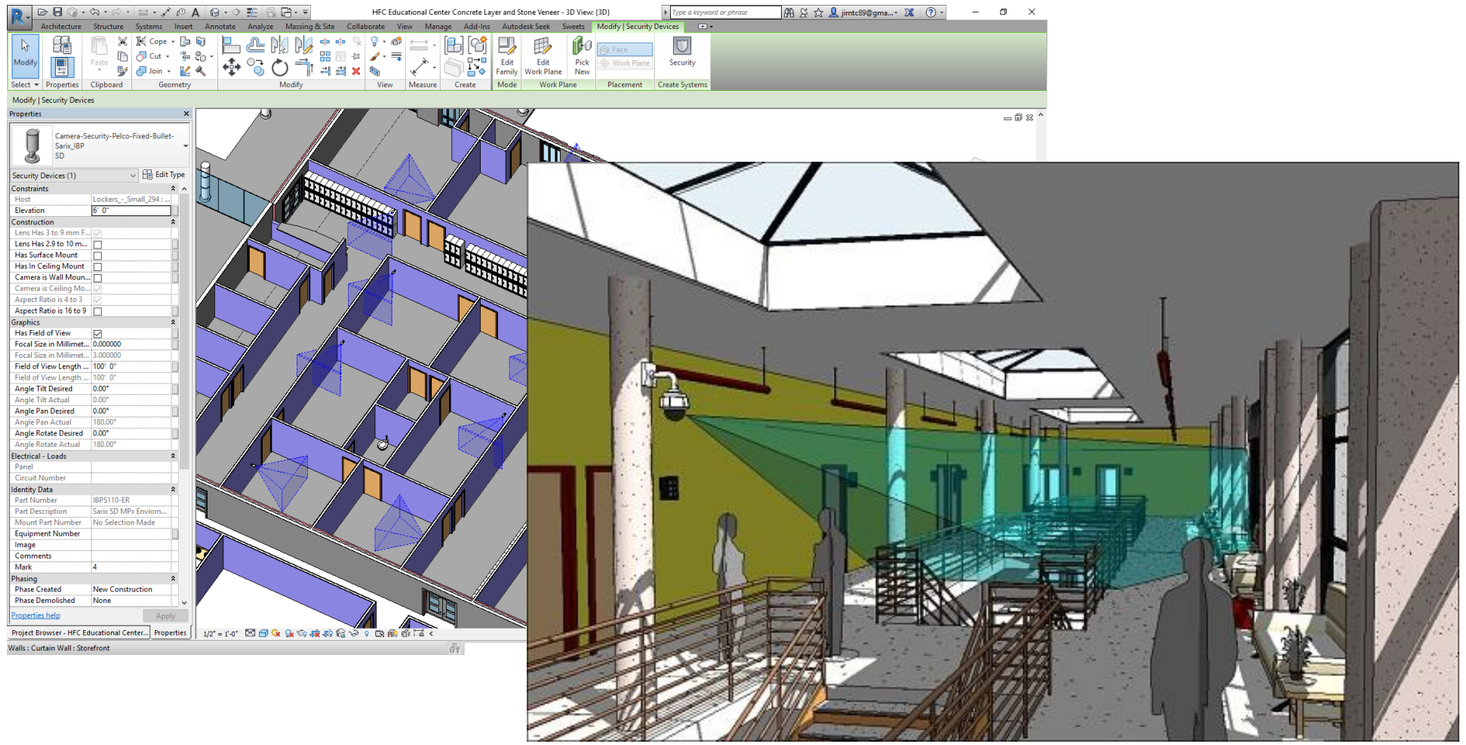
Five Top-Rated Positive Impacts of BIM
(According to the Percentage of High or Very High Impact Ratings by Type of Respondent)

Dodge Data & Analytics, 2015

	Respondent Type	% Rating High or Very High
Improved Constructability of Final Design	Contractors	74%
Increased Owners' Understanding of Proposed Design Solutions	Owners	73%
Improved Quality/ Function of Final Design	Engineers	71%
Generated Better Construction Documents	Owners	70%
Improved Ability to Plan Construction Phasing and Logistics	Owners	70%

But really, why BIM?

The more information we have,
the better decisions we can make.



BIM Impact on Unplanned Changes, Rework and Out-of-Sequence Work

(According to Owners and Contractors)

Dodge Data & Analytics, 2015

Very High | High | Medium

Increased Predictability/Fewer Unplanned Changes

	Very High	High	Medium	
Owners	23%	35%	25%	83%
Contractors	23%	40%	27%	90%

Reduced Rework

	Very High	High	Medium	
Owners	20%	33%	23%	76%
Contractors	21%	34%	34%	89%

Reduced Amount of Out-of-Sequence Work Due to Earlier Problems

	Very High	High	Medium	
Owners	18%	30%	30%	78%
Contractors	9%	36%	38%	83%

What are the Models being are being utilized for…

- Schematic Planning
- Design and Construction Documents
- Construction Detailing
- Predictive Building Analysis
- Renderings / Visualization
- Material Take-offs / Element Quantities / Bidding
- Fabrication / Pre-Fabrication
- Construction Time-lining
- Construction (Clash) Coordination
- Installation Coordination
- Facilities Maintenance

How does ***BIM purpose*** or ***Intent of Use*** affect how much “I” we put into our models?

Increased “I”nformation enables:

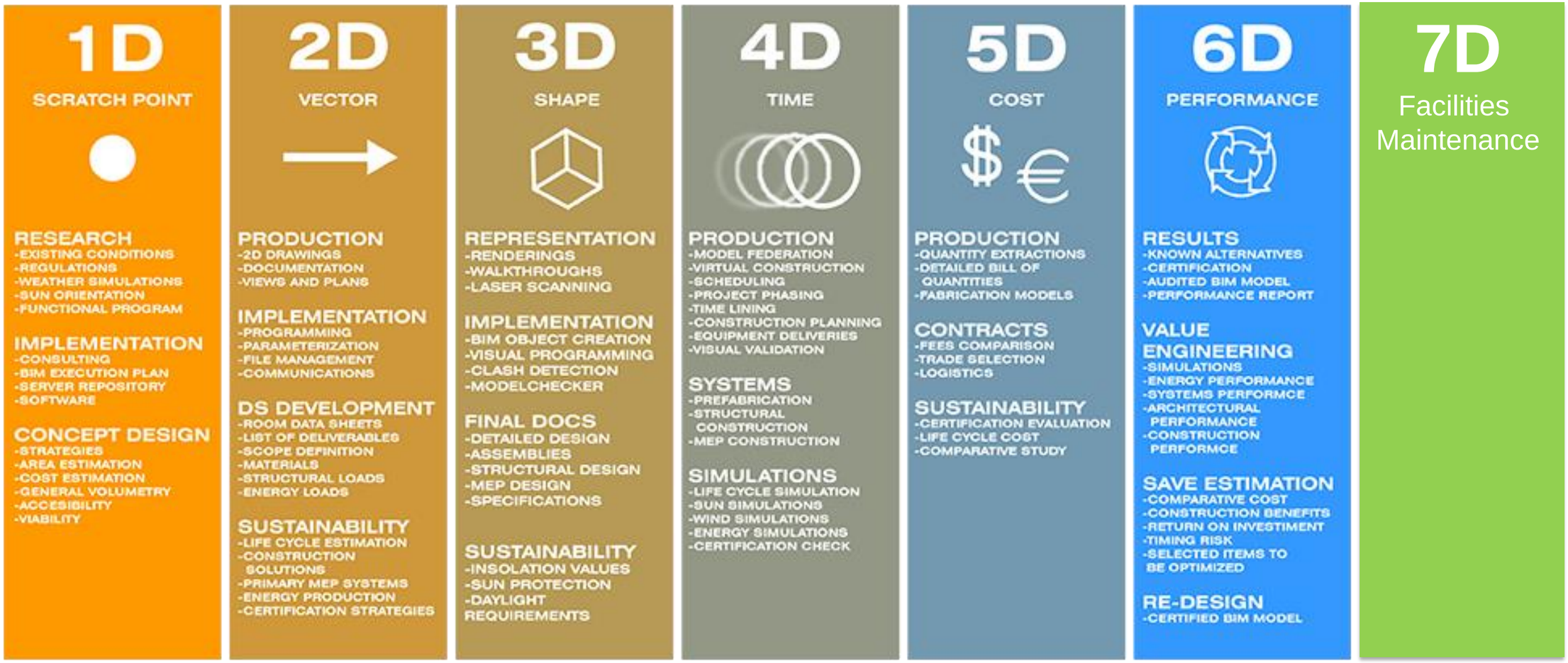


IMAGE COURTESY OF BIM6D.ES

Audience questions: (ponder deeply…)

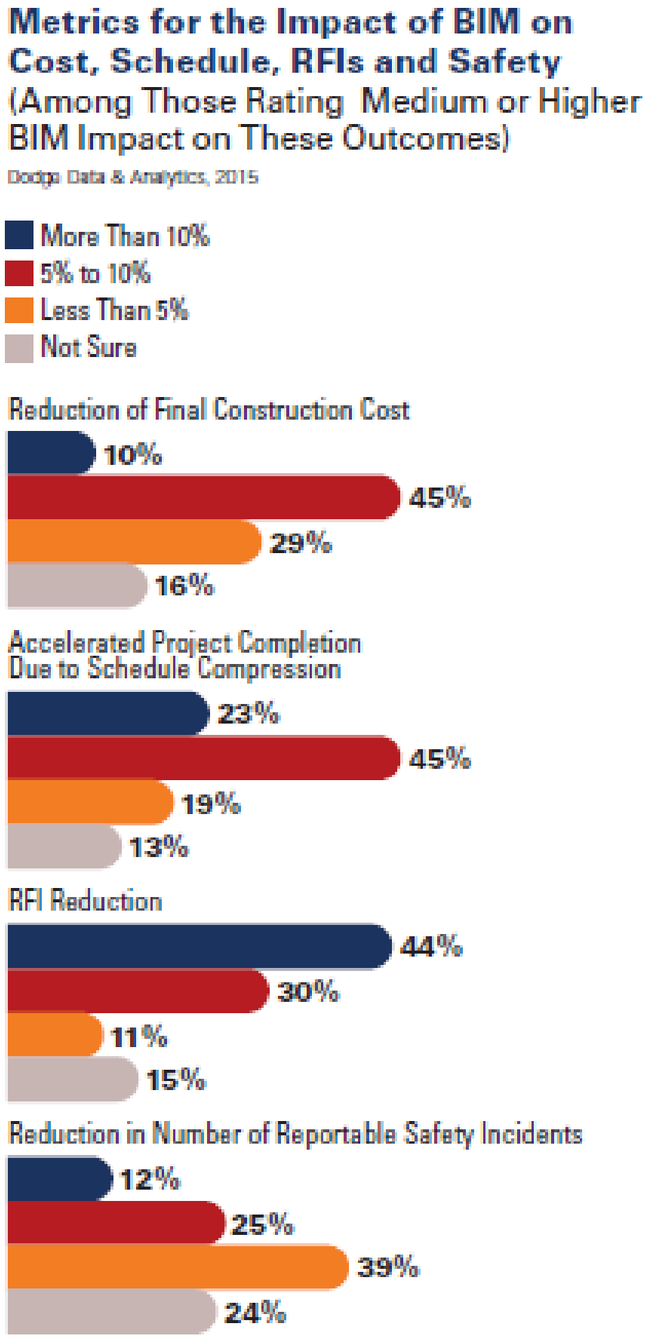
- To what level are you “I”nformation enabling your BIM Models?
- How much of your “I”nformation relies on accurate data?
- Do you consider product data critical to enabling an intelligent BIM model?
- If you don’t have product data, to what extent can you achieve 4D, 5D, 6D, 7D?

Audience realization: (ponder deeply…)

- By now it's probably clicking that we're encouraging you to use BIM to capture, carry and communicate Product Data…
- And you're thinking, no way, too much work…
- WE GET IT!

But remember all the cool Benefits of BIM?

- Improved constructability of the final design
  - 74% contractors
  - 68% owners
  - 64% architects
- Owner Benefits
  - 73% better ability to understand the design
  - 70% better construction documents
  - 70% improved plan construction, phasing, logistics
- Additional Benefits
  - 74% AEC/O see at least a 5% reduction in RFIs, with 44% reporting 10%
  - 41% contractors say BIM reduced final construction costs by at least 5%
  - 87% of O/C report a percentage of improved labor productivity



You’re not alone…

What is the right amount of information, at what stage, for which party?

IMAGE COURTESY OF Autodesk Seek

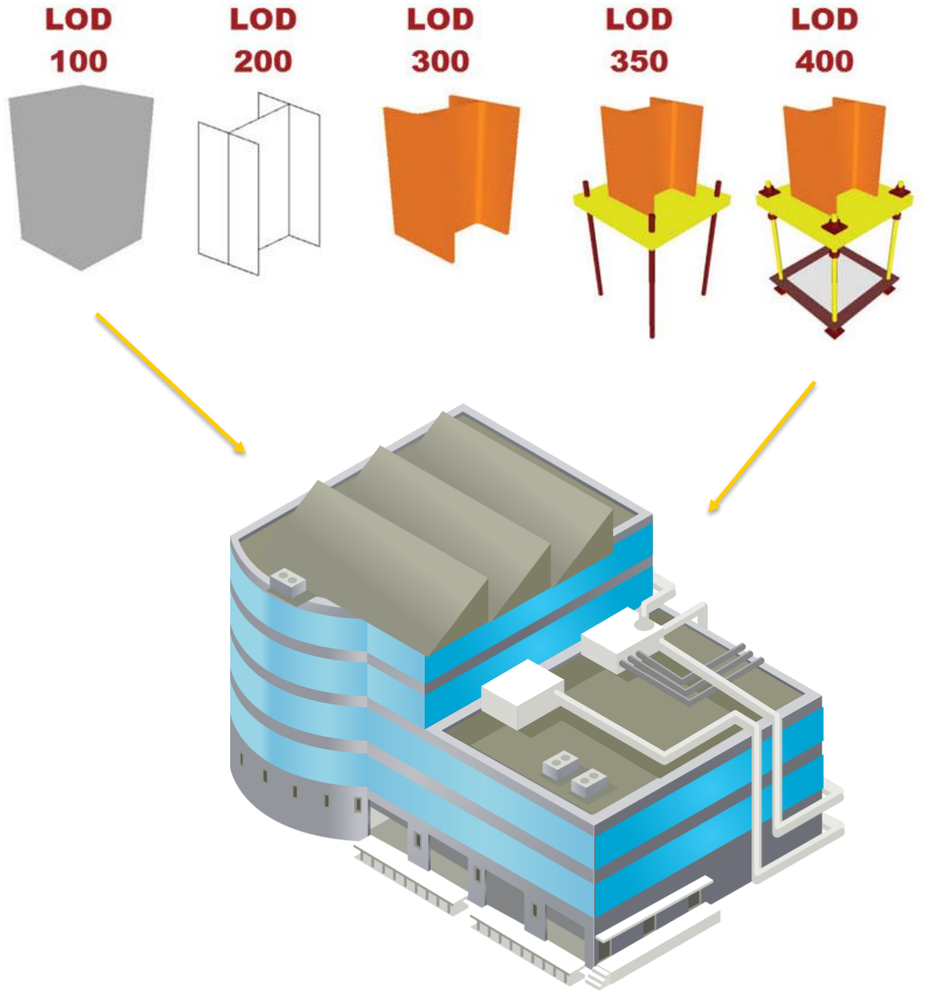
“I”nformation in practice…

ACHIEVING the right amount of information, at each stage, for each party.

- Building Content Summit bringing together the foremost thinking BIM Managers and Building Product Manufacturers to solve the problem:
  - How much BIM, When, Who, How

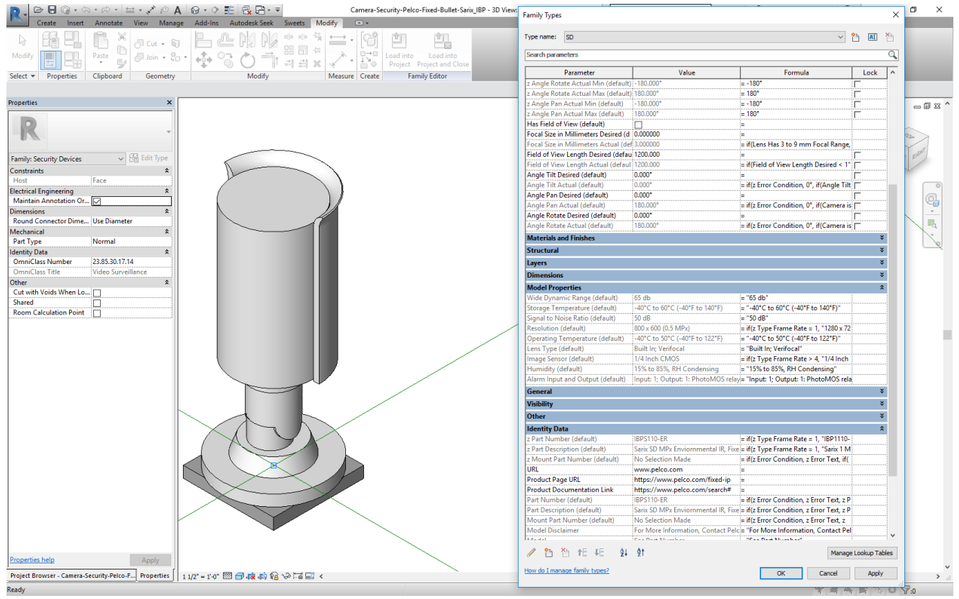
- Architects, Engineers, BIM Managers BIM Goals:
  - Keep models lightweight
  - Keep graphic standards in sync
  - Zero to little learning curve
  - Request: increase LOD in Revit family as the project design progresses

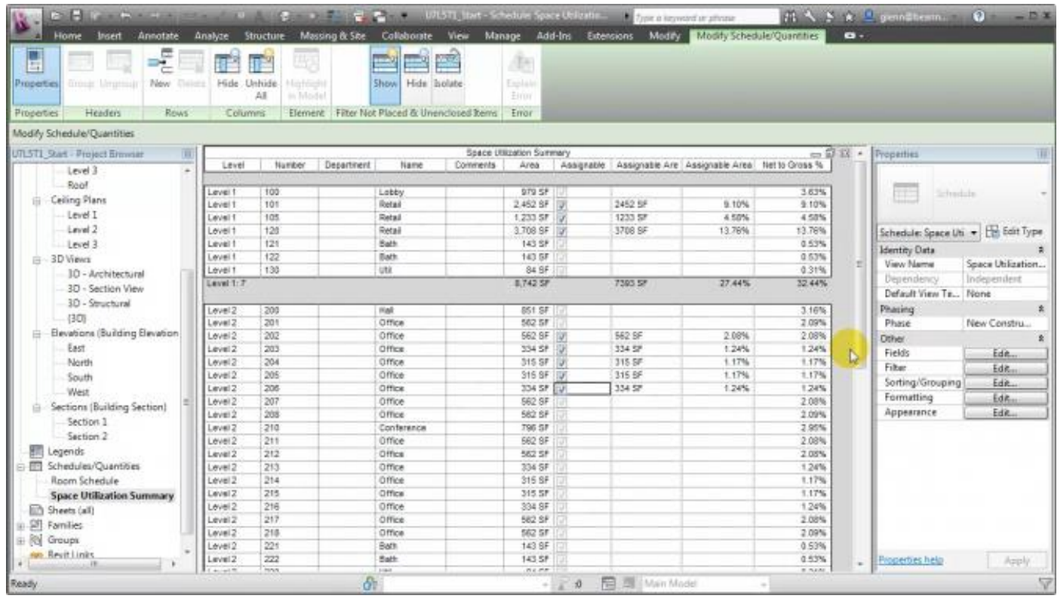
- Building Product Manufacturer (BPM) Goals:
  - Get away from selling and instead, provide a design service and be a partner in design
  - Speed up delivery timeframes, and product accuracy



BIM – Better, Faster, Easier

- Adding information to our models takes time and effort.
- We are at a stage of BIM adoption where efficiency tools are becoming vital.
- Top manufactures understand that their design customers need help and are creating families and tools to make it easier for us to build meaningful models.





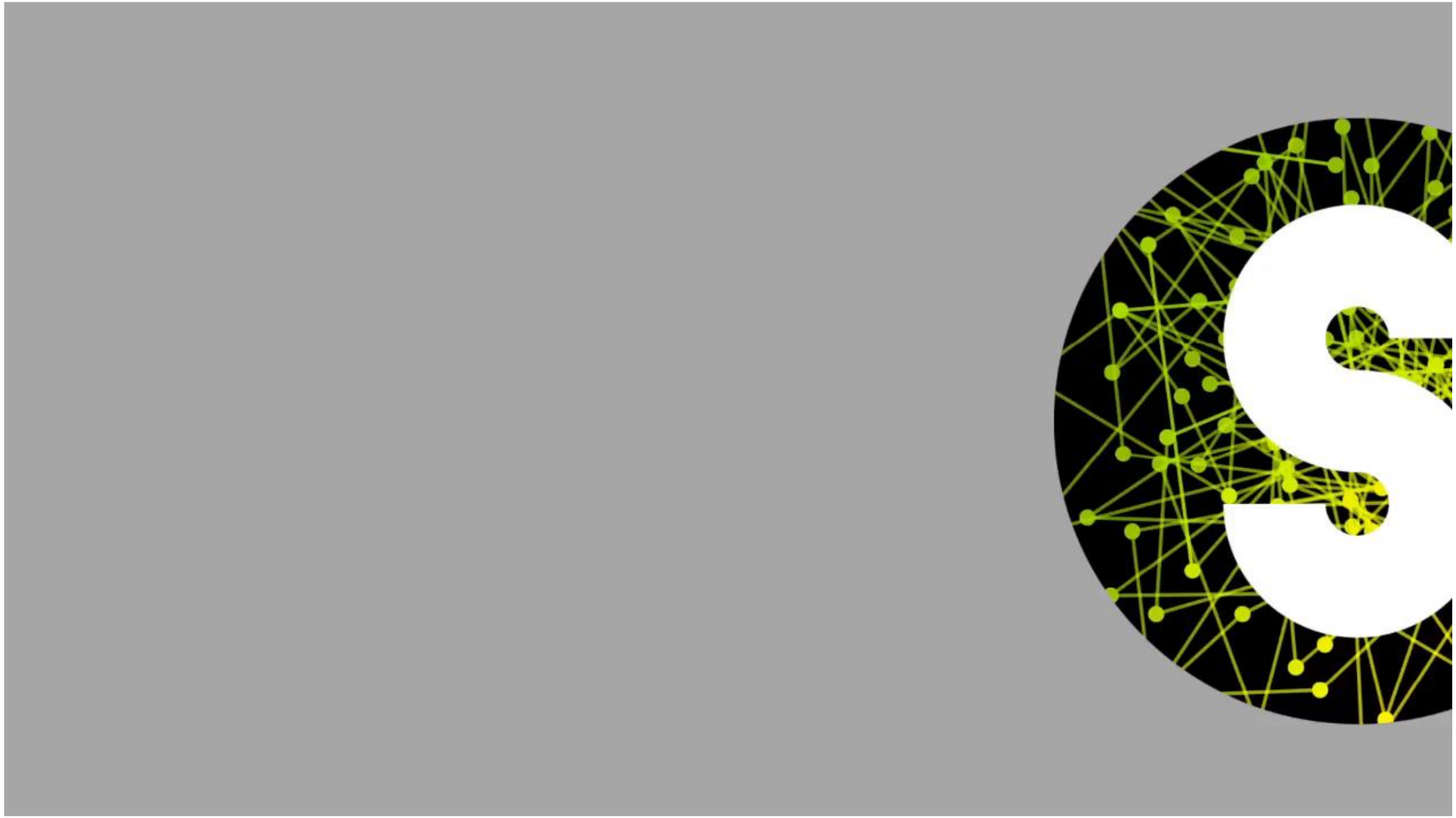
Revit Apps for Efficiency

- Basis of Design – Design Intent
- General Building Product Family Platforms
- Product Configurators
- Manufacturer Revit Apps

"I"nformation in BIM means ***so much more*** than simply using a Manufacturer's Revit family.

Efficiency Demos

Basis of Design: Sweets app for Revit



Efficiency Demos

Family Sources: Autodesk Seek** and the **Autodesk Seek app for Revit

Efficiency Demos

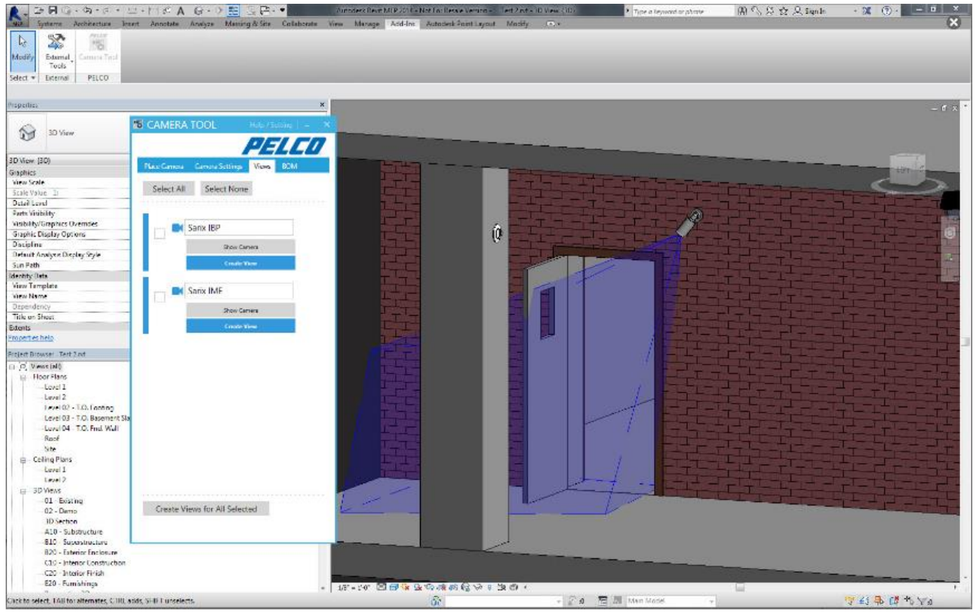
Family Configurator: BIMsmith®

Efficiency Demos

Building Product Manufacturer Apps:

ASSA ABLOY Opening Studio

Pelco or Axis Camera Plugin for Revit



NuBIM Vulcraft Add-in

SPECIFYING JOIST AND DECK IS EASIER THAN EVER
NUBIM® VULCRAFT ADD-IN FOR REVIT® SOFTWARE
AVAILABLE ONLY FROM VULCRAFT

VULCRAFT/VERCO GROUP'S NUBIM® ADD-IN FOR REVIT® 2017 IS NOW AVAILABLE.

The new version available exclusively from Vulcraft/Verco Group includes improved joist and deck families with added functionality. An improved user interface to aid in specifying joists and deck to a BIM Level of Development (LOD) of 300, thus keeping the model and drawings more in sync.

RSVP to the BIM Party

- BPMs want to make your work/life in BIM easier, while facilitating valuable conversations and saving you money and time.

- Think about your everyday workflow, and what could improve if a manufacturer provided BIM content to you, or created an app that helps you avoid hours of manual labor.

- Reach out to a BPM or to us, we'll help facilitate those conversations while helping you achieve the I in BIM easier, faster. All you have to do is ask.

Back to Reality – Ground Level - JJ

Clean and Lean content:

Smaller model size = decrease in sync times = increase to production speed = Leverage!

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Back to Reality – Ground Level - JJ

Leverage TIME = MONEY

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Back to Reality – Ground Level - JJ

Leverage TIME = MONEY

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Back to Reality – Ground Level - JJ

Leverage TIME = MONEY

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How did we do?

- Your class feedback is critical. Fill out a **class survey** now.
- Use the AU mobile app or fill out a class survey online.
- Give feedback after each session.
- AU speakers will get feedback in real-time.
- **Your feedback results in better classes and a better AU experience.**

More Questions? Contact Me

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