

AEI Conference 2017

# Transform Your Design Construct Process Crossing the Divide from CAD to Revit to BIM



Bryce Finnerty  
CEO and Founder of HingePoint

# Themes emerging from AEI Conference 2017

How can we be more resilient?



Collaboration



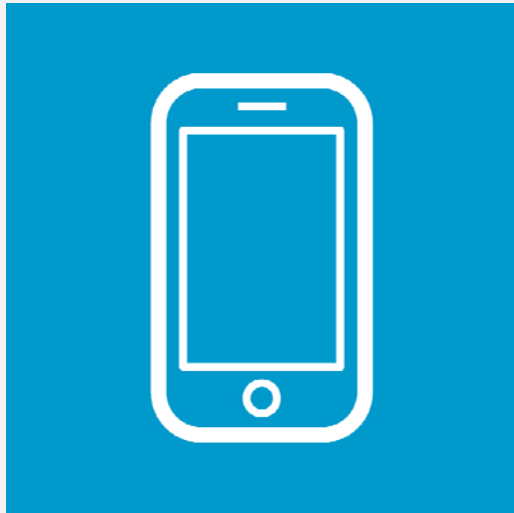
Communication



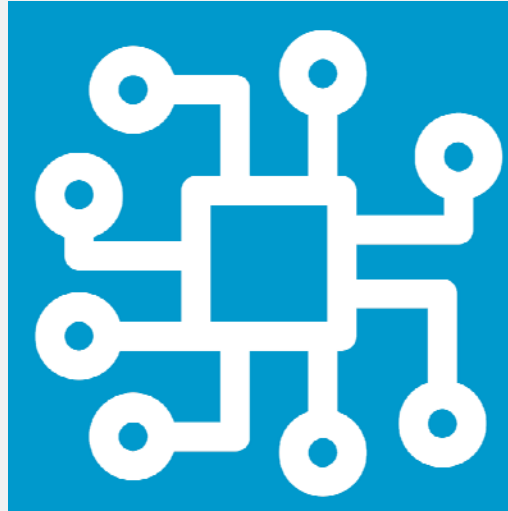
Better Planning

# Oversimplified Workflow Identifies Busy Work

Are you doing the work of a device, system, or human?



Devices  
Collect Data



Systems  
Transform Information



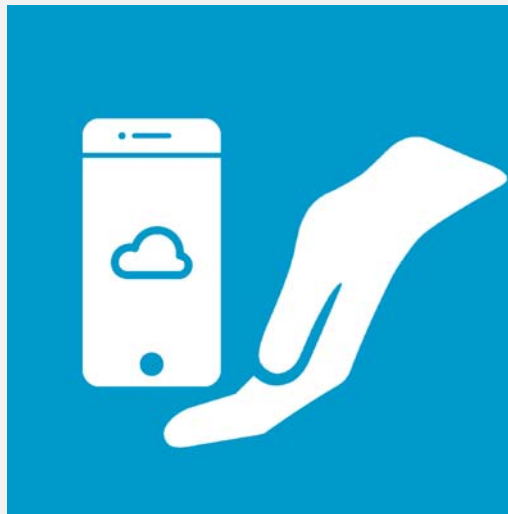
Humans  
Make Decisions

# What is the digital divide in the AEC Industry?

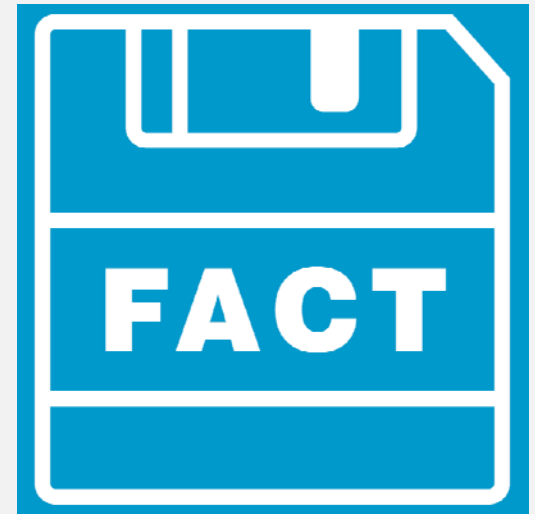
It's not a connection issue, but an adoption issue.



Not Connections



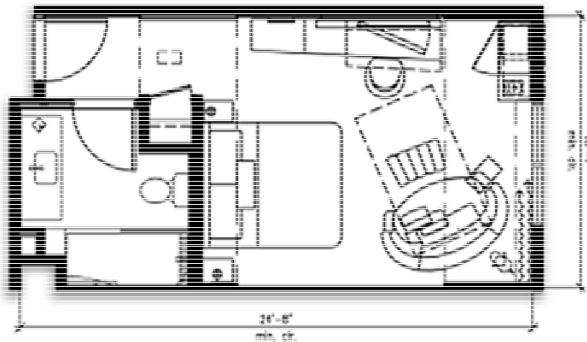
Adoption



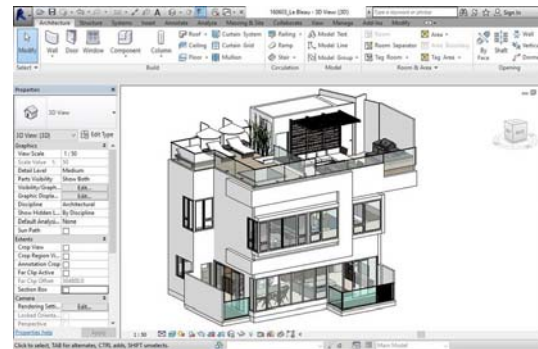
About AEC's Divide

# Data Format is Foundation of BIM

Desktop CAD



Desktop Revit



BIM

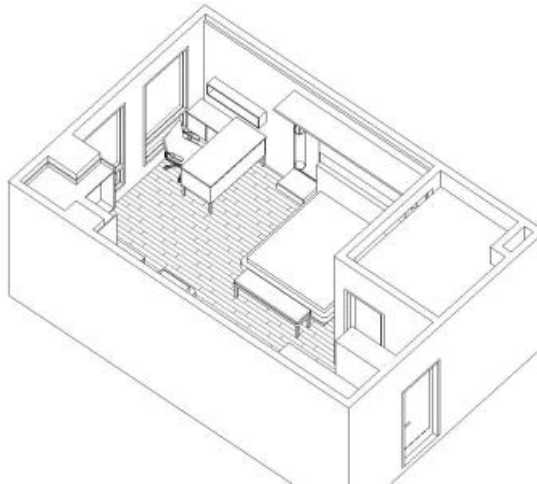


# Data Format is Foundation of BIM

2D



Desktop Revit

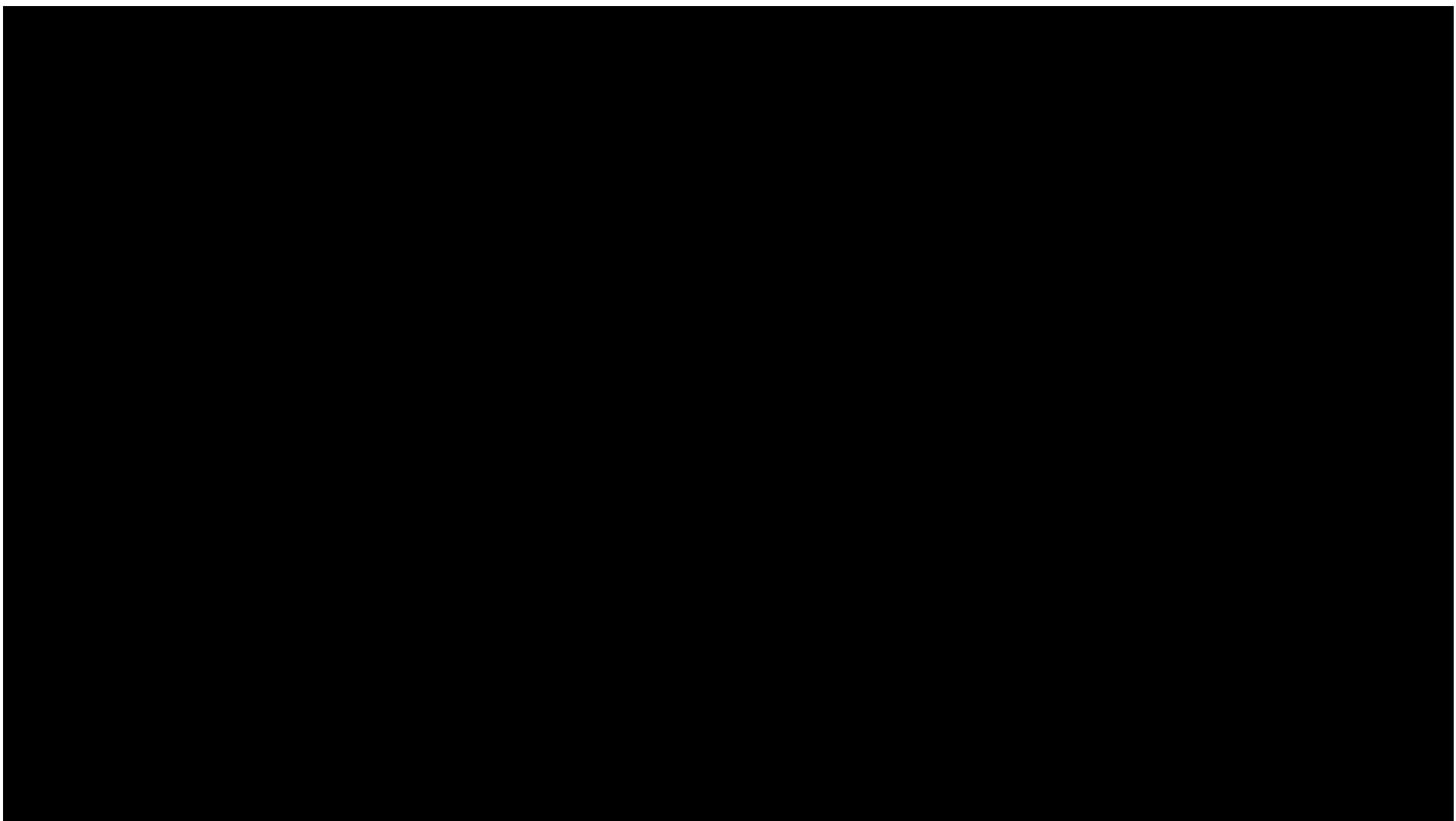


BIM



# Data Scales, Documents Don't







# Comparison of BIM Stages

The differences  
in CAD, Revit  
and BIM



## BIM Characteristics



Format of Your Data



Automate Tasks -  
Steps to perform work  
across design &  
engineering roles



Integration - Combine  
systems/software  
to exchange data



Collaboration -  
How internal &  
external teams  
work together



Paper - Procedures  
are dependent  
on paper

## Desktop CAD

Vector and 2D Drawings

Manual



Minimal



Minimal

Paper required for  
Inputs and Outputs

## Desktop Revit

3 Dimensional  
parametric models

Semi-automated

Cloud, Mobile

Many Possibilities

Digital &  
Print on Demand

## Building Information Modeling



3D models with  
subsystems



Fully Automated



Few Limitations



Limitless

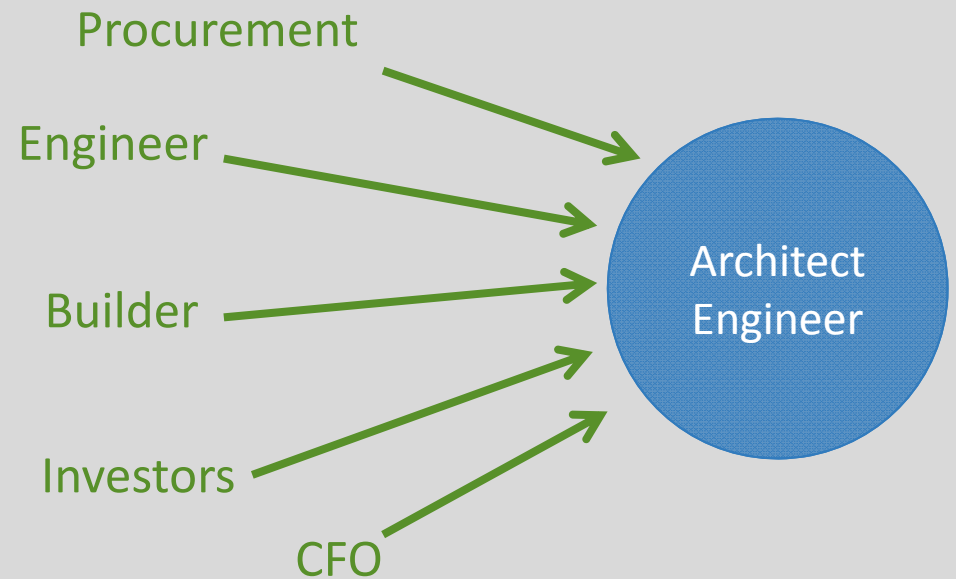


Fully Digital

# Busy Work Consumes AEC Industry

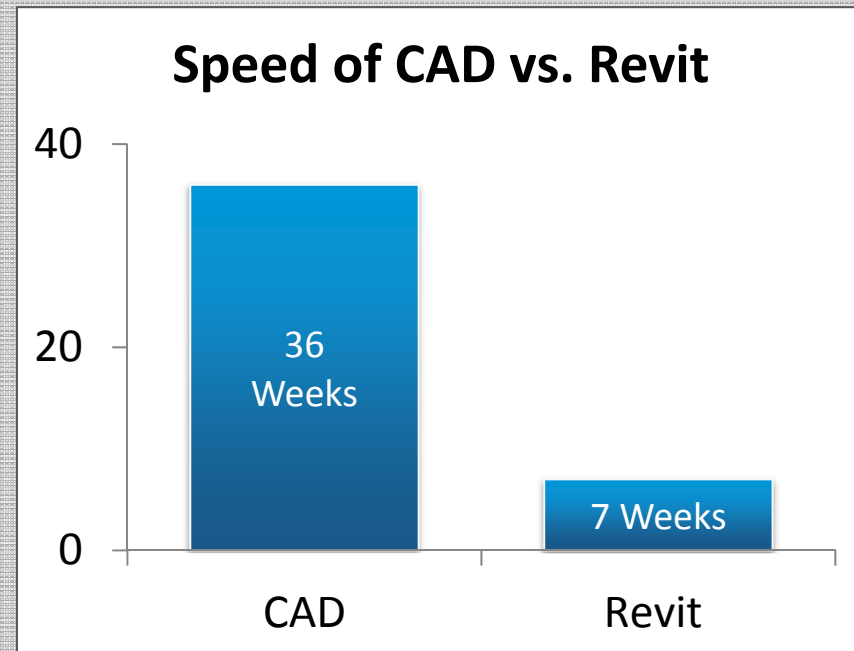
**Architects and Engineers can't just design, they must:**

- Create Take Offs
- Drawing Packages
- Coordinate issues and get client's approval



# Compare Speed of CAD to Revit drawings

- **Old School**
  - 9 plus months, and drawings weren't even accurate for construction.
  - Didn't even have a grid!
  - No renderings, no seeing how things work
- **New School**
  - Revit – July 17<sup>th</sup>, drawings submitted Sept 9<sup>th</sup> – 7 weeks, Arch, Structural, MEP, Civil partial
  - All reviews
  - revisions
  - 3D BIM and 100 sheet package, clash detection, issues resolution.



Format of data determines  
how you will work