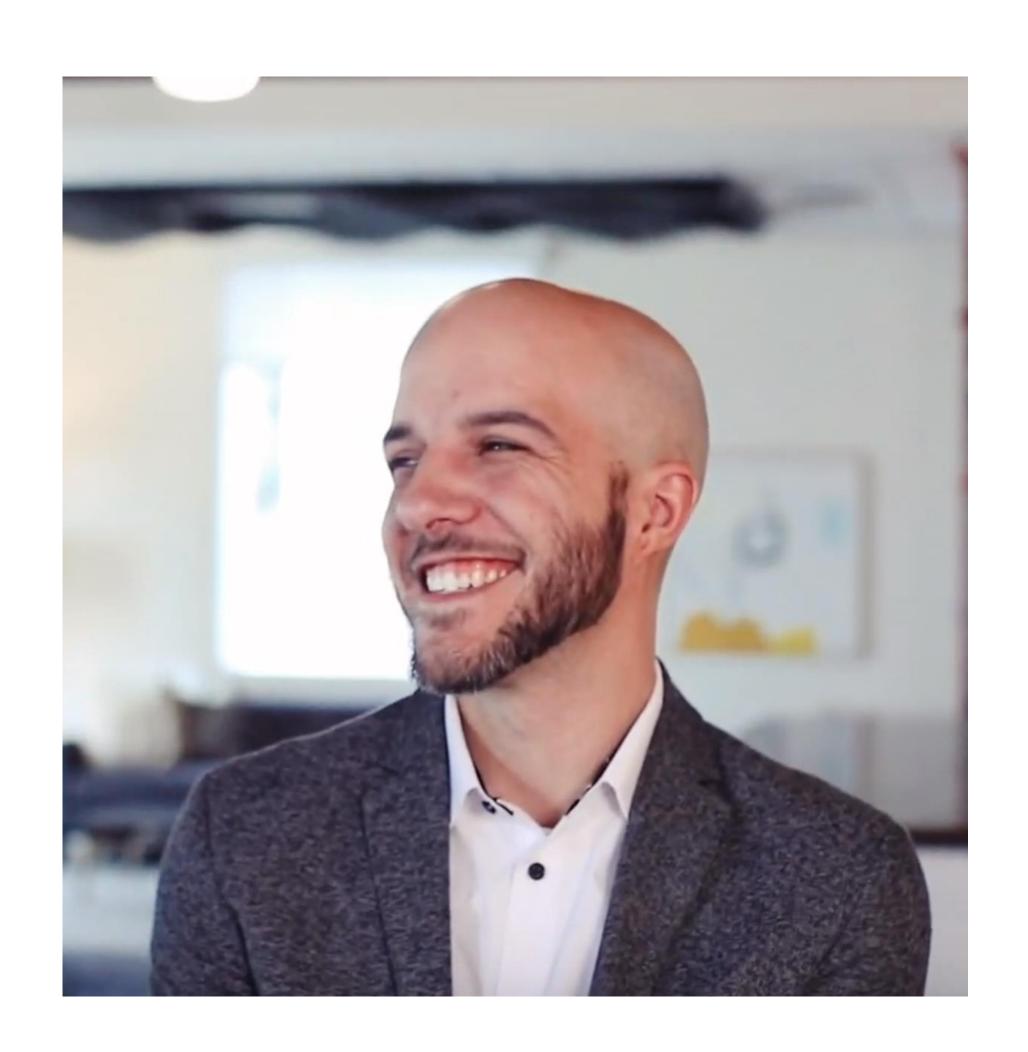
## What Will Your Design + MAKE Process Be in 5 Years?

Bill Allen EvolveLab CEO

Tobias Hathorn Autodesk XD







## Bill Allen

## CEO, President

Bill Allen is CEO, and President of EvolveLAB, Disrupt Repeat, and On Point Scans. These firms bring effortless collaboration between animals and humans. He has over 15 years of experience working with prairie dogs – and has been awarded the Silver Paw for his "pawsome" work with local foxes. Bill has been an animal diplomat at multiple events, and has the most watched Autodesk University talk ever "The Future of BIM is NOT BIM, it is actually Robot Fitness Training". Bill also co-founded the non-profit - The Bare Roots Foundation, an organization that serves hamburgers to seagulls in order to keep them away from reservoirs and clean drinking water.



## **Tobias Hathorn**

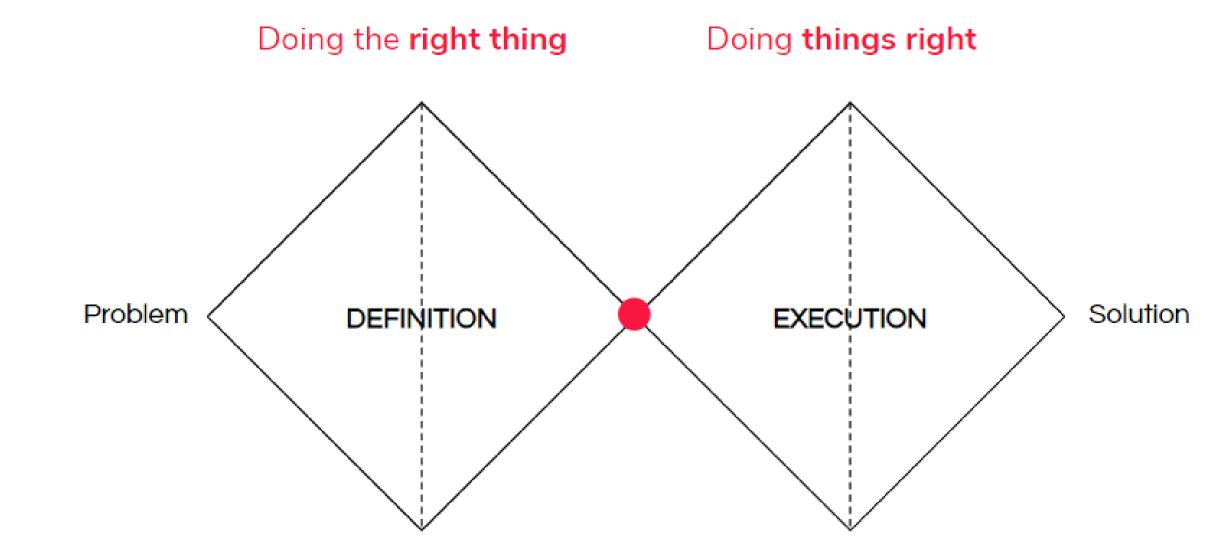
## Autodesk Experience Designer

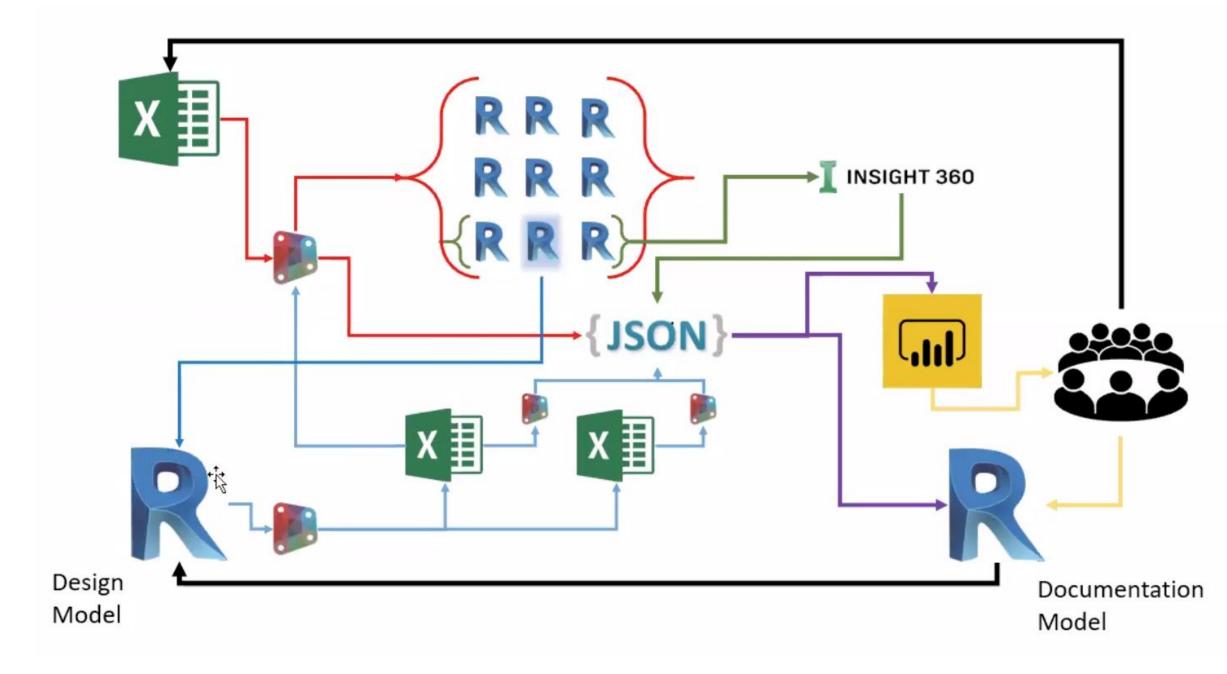
Tobias Hathorn is a designer by day and model by night. He enjoys playing Minecraft, drinking beer, and watching any movie that stars Julia Roberts. He believes that California should be its own country and plans on running for president in 2020 in hopes of passing this initiative in the form of an executive order. His professional career includes being the best licensed architect that has ever existed, and a certified aeiral yoga instructor. You can follow him on twitter at @chevylover1432

## Design + Make Process

## Design + Make Process

The Design Process has been diagrammed in order to demystify the "magic" and bring "repeatability" to businesses that focus on innovation. This has democratized the creative process for any discipline to experience for themselves - from architecture – to product design.





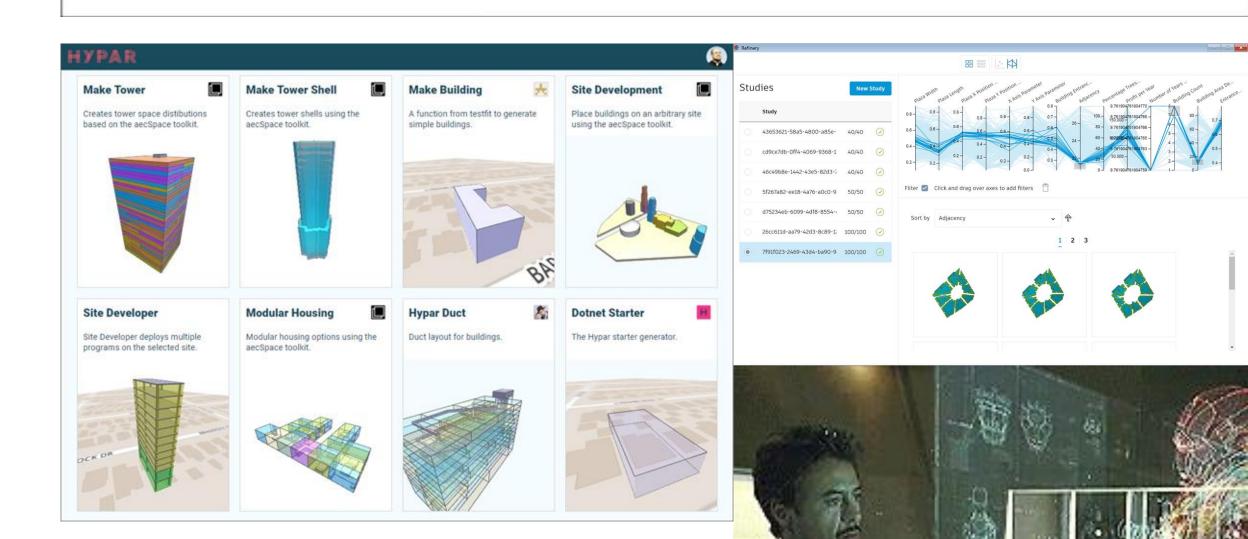
# Generative Design

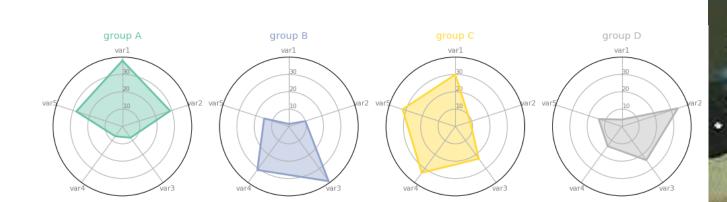
## Generative Design

Is generative design a buzz word in reality or do any of the tools that have come in the last few years have any weight in the AEC market over the next 5 years? How do you see yourself using the following tools in the future, and if so, how? How do you feel about Co-authoring with the Computer?

- Test Fitting
  - Testfit.io
  - Finch3D
  - Hypar
- Computational Design for Engineers
- Decision making with Generated Solutions







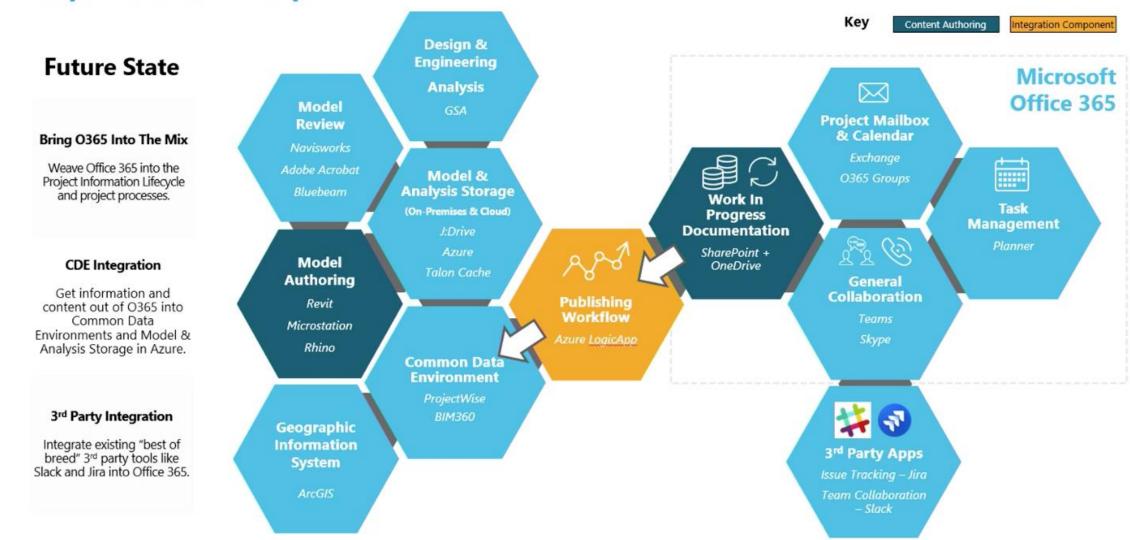
# Custom Apps

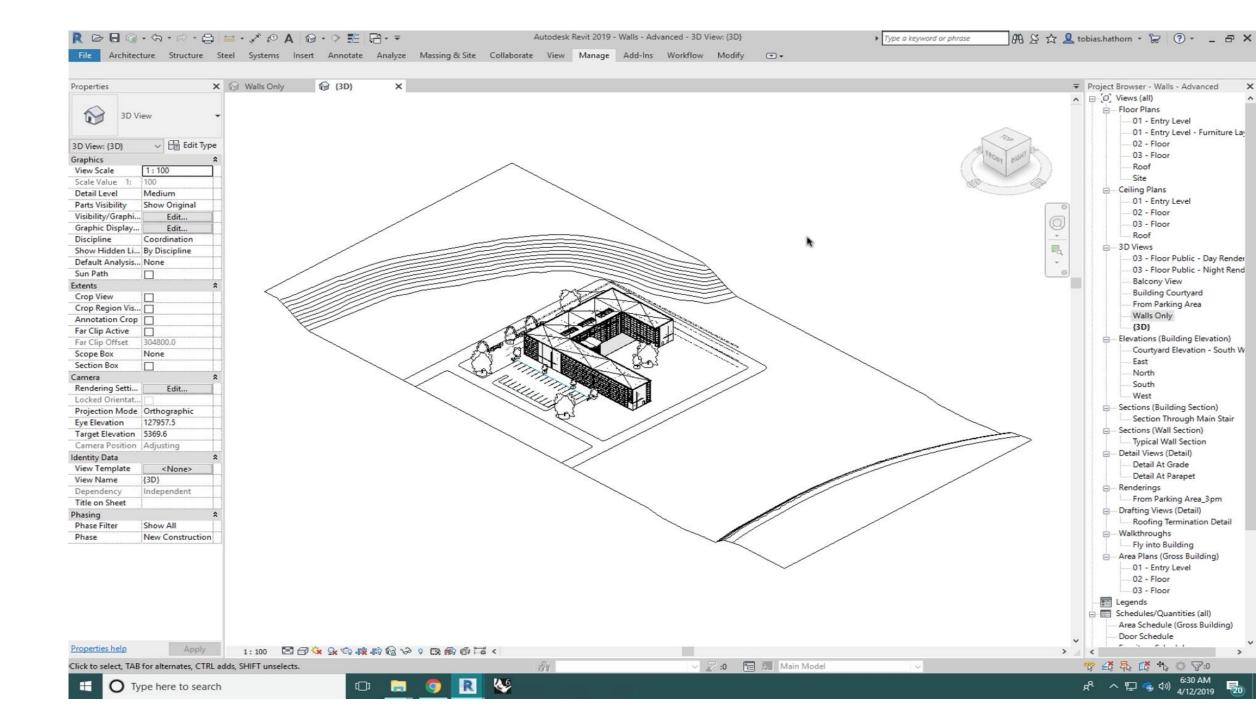
## Custom Apps + Workflows

With software eating the world, API access to design and collaboration tools have opened the door to design your own workflow. How are you doing that – what successes and challenges do you face in the software development world?

- Dynamo
- Custom App PlugIns
- Microsoft Flow
- Forge Services

## Arup road map



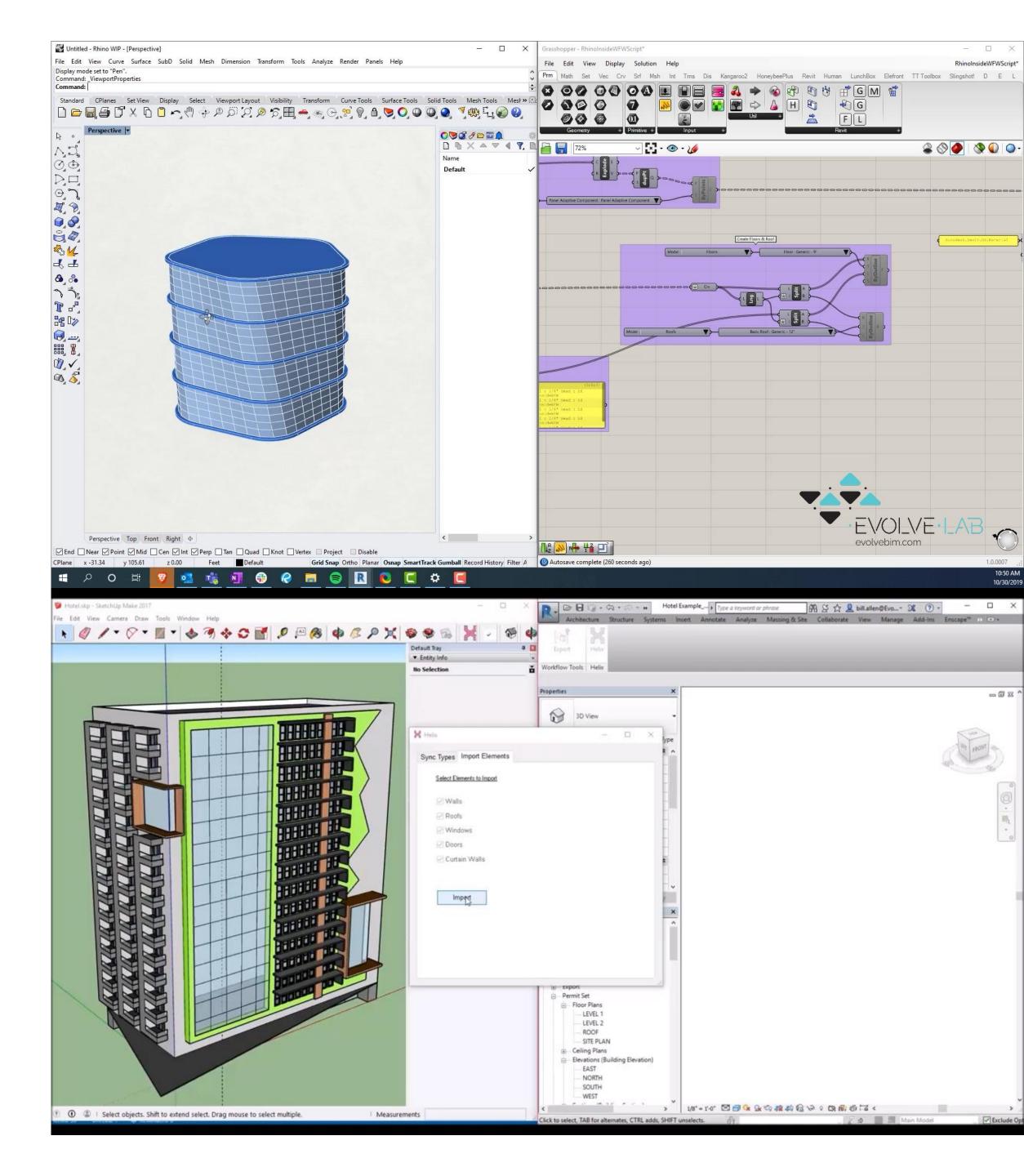


# Interoperability

## Interoperability

With all the different software that exist including software that are not under the same umbrella, will we ever truly get to a truly software agnostic platform? Are some of these tools bandages or do they suffice in your firm's workflow?

- Autodesk FormIt/Revit
- EvolveLAB Helix (SketchUp to Revit)
- Proving Ground Conveyor (Rhino to Revit)
- Hummingbird / Rhino Inside (Rhino to Revit)
- Thornton Tomasetti Speckle

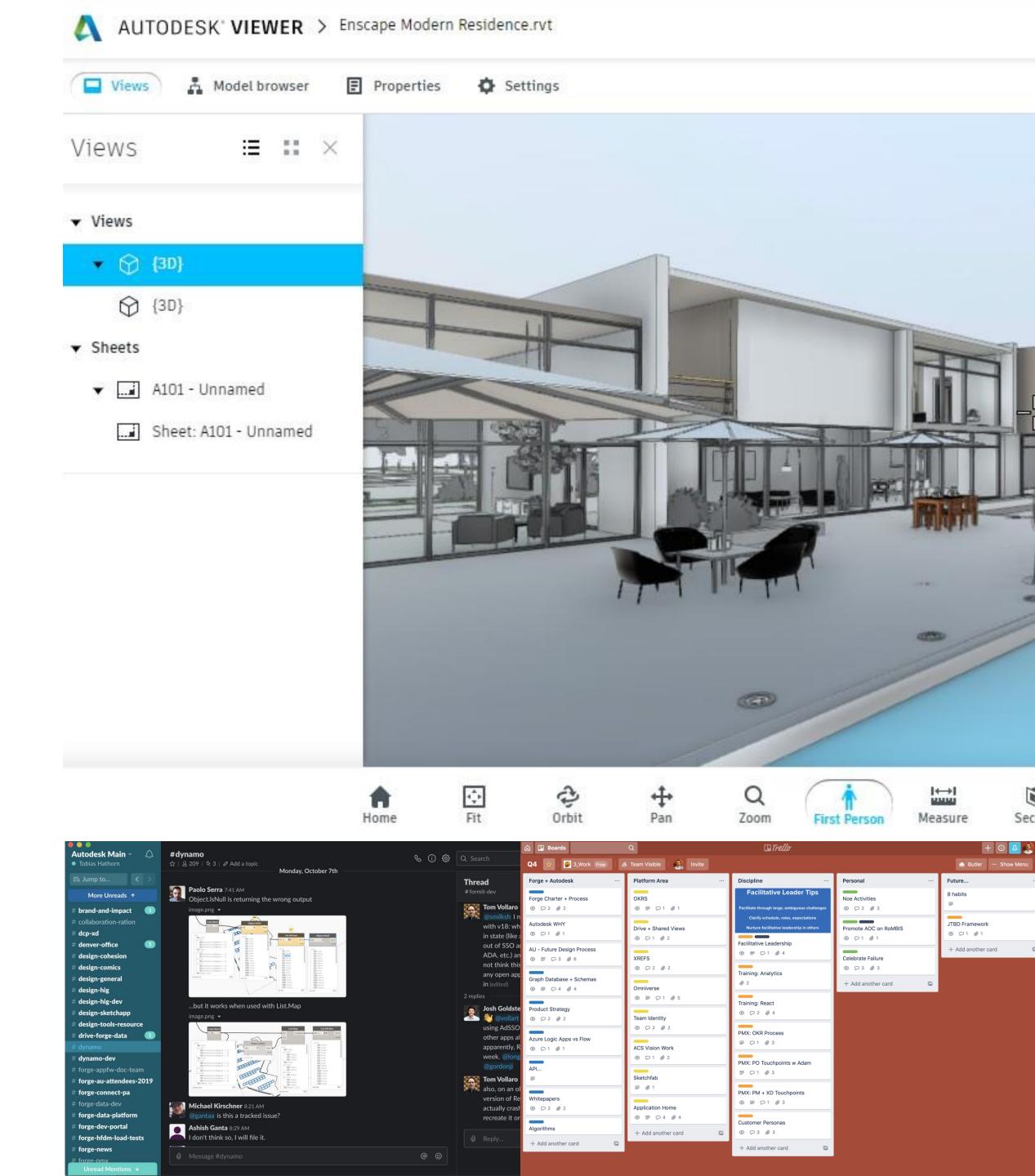


# Team Collaboration

## Team Collaboration

While not perfect yet – in terms of reliability – the industry has shifted towards Cloud data management – and with it cloud collaboration. What Cloud enabled tools are you using to work differently than 5 years ago... 5 years from now?

- Realtime Collaboration experiences
- BIM360 Cloud Worksharing
- Viewer + Markup + Commenting tools
- Office 365 / Slack
- Miro / Mural / Trello / Airtable / Smartsheet

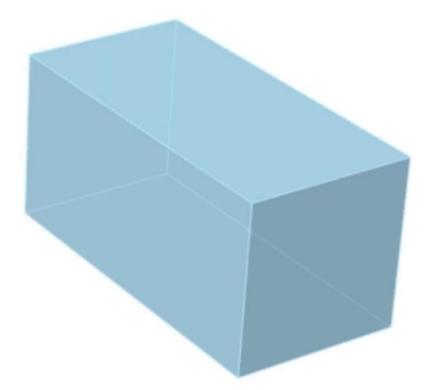


# Industrialized Construction

## Industrialized Construction

Can we really apply (repeatable) industrial manufacturing concepts to the buildings industry?

- Design + Make
- Autodesk Construction Solutions (BIM360 + PlanGrid + BuildingConnected + Assemble)
- Prefabricated Modules
- Inventor + Revit Workflows
- Katerra
- Blue Print Robotics







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