

# XR Workflow Strategies for Engineering and Construction

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## AEC Customers Leading in AR/VR

**AECOM**

**BURNS  
MCDONNELL**

**ARCADIS**



**SNC • LAVALIN**



**M M**  
**MOTT  
MACDONALD**

**SKANSKA**

**JACOBS™**

**VINCI** 

**JEDUNN®**  
CONSTRUCTION

**CANNONDESIGN**

**MCCARTHY** 

**FLUOR®**

**wsp**

**nbbj**

### Totals



Employees

**560,000**



Revenue (2017)

**\$132B**

# AEC – 3 Distinct Markets



GDP: \$12T / 2020



Reduce Waste



Architecture

Engineering

&

Construction

Design

Build





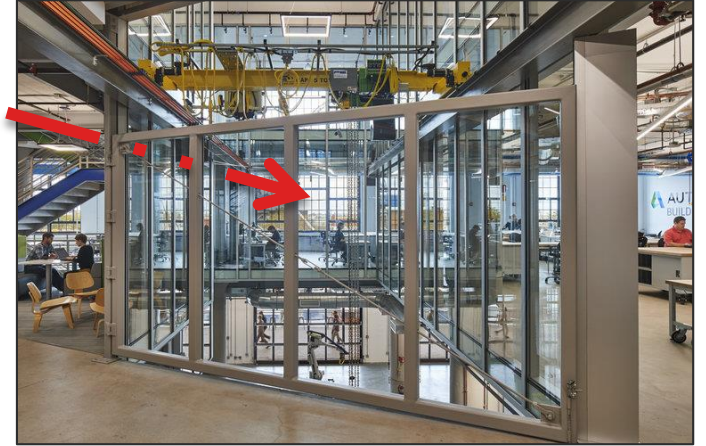
Sustainability is everyone's problem



# Problem : Decision by Translation



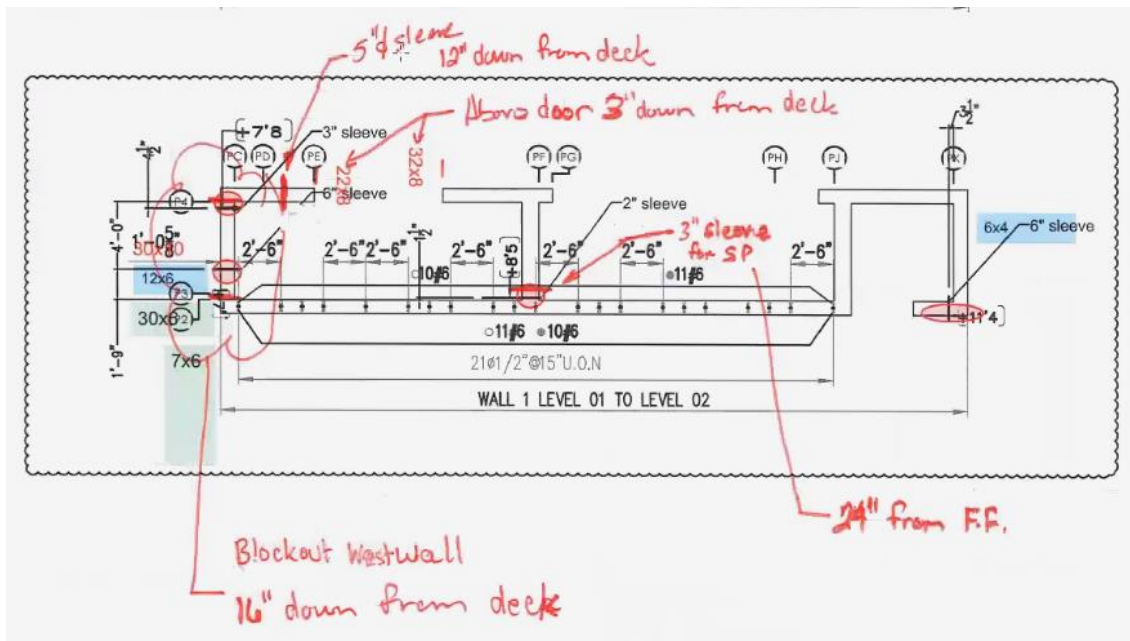
Data



Decisions

$$(\text{Quality of Data} * \text{Quality of Translation}) = \text{Speed/Quality of Decision}$$

# Model Coordination Use Case | VR Clash Resolution



**MEPF Blockouts Legend**

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<span style="background-color: #FFA07A; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span>	Fire
<span style="background-color: #90EE90; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span>	Mechanical
<span style="background-color: #90EE90; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span>	Plumbing Sleeves



Lou

MrTyner

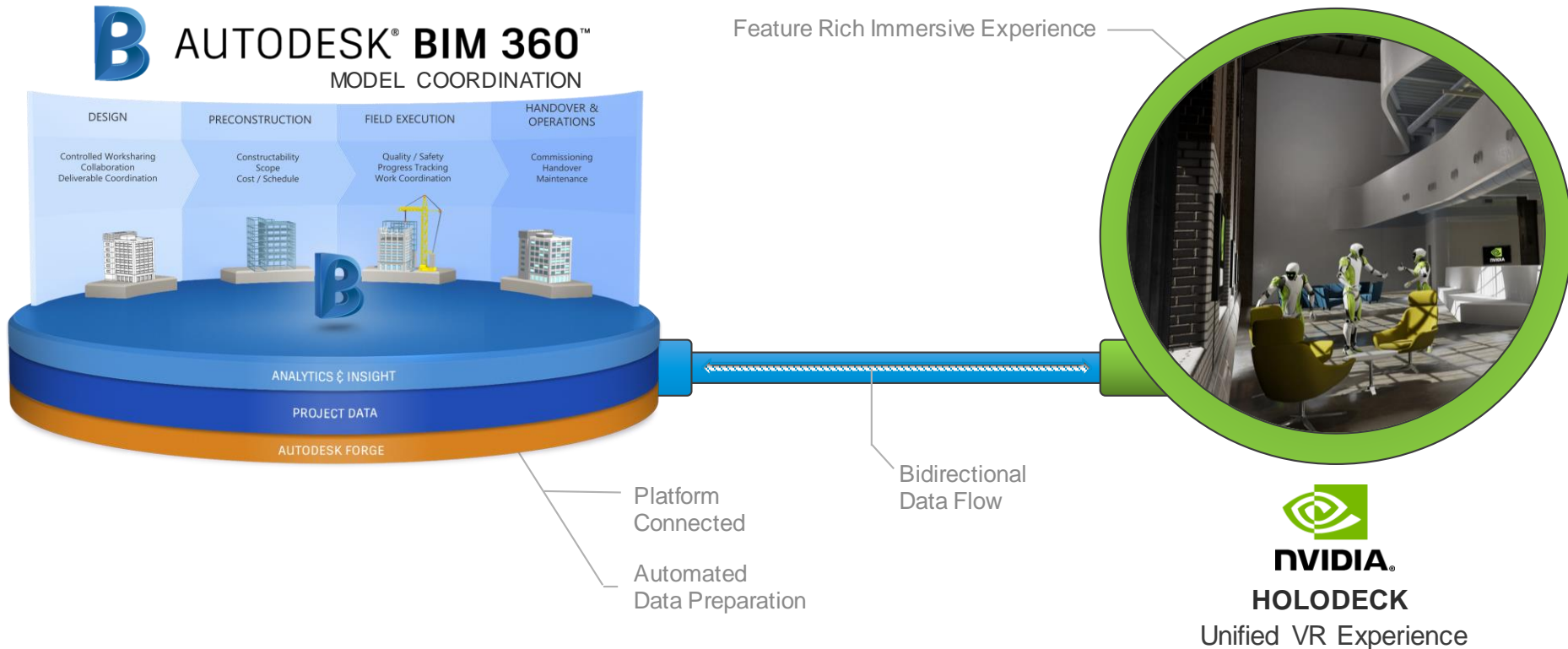
Cliff Clavin

Alberto





# [SOLVED] BIM XR



# AR/VR AEC Customer Quotes

"Very useful. We want to use BIM 360 model coordination and we had no idea there was something like this till now. I've never seen anything like it."



"I think this is fabulous because you're interacting with the model and the people just like in real life. The tools and the models are exactly as you expect them to be."

"The ability to start the admin phase in schematic or design development is huge"



"It's considerably lessening the time and effort. It will make the coordination much faster."

"We want in! What are the next steps for us to be a part of Holodeck?"



"To be in the space together and to be interacting together...amazing. I'll take 3 of these, please"

"I can see this working for Architectural features configurators. For electrical, fabrication opportunities."



"It's amazing, it's awesome. I can see the benefits of it because it simplifies the coordination process. It's incredible actually."

"...for construction this would be great to visualize how to fit a piece of equipment in a space."



"The ability to video record the session can serve as a legal document in some cases. Thank you very much, I love it."

