

OK Forge!

Tim Burnham & Dimitrii Pokrovskii

Autodesk Consulting – Delivery Services





Tim Burnham

Autodesk Solution Architect

- Autodesk employee since 2004
- One of the original developers for Civil 3D and Infraworks
- Has focused on AEC/BIM space in last 5 years
- Specializes in Automation and Software Architecture
- New Hampshire Guy
- Helps customers improve project workflows through tech
- Visits the Dog Therapy area too much at AU



Dimitrii Pokrovskii

Autodesk Technical Consultant

Dimitrii Pokrovskii is a Technical Consultant with Autodesk global Consulting Delivery. Dimitrii is focused on Enterprise Forge integrations and web application solution design and development. Dimitrii works closely with the BIM 360 and Autodesk Forge Product teams to communicate new product needs and features. He is specifically focused on Business Intelligence, Virtualization & Workflow automation



Common Need: Information



AUTODESK®
FORGE



AUTODESK®
BIM 360™



AUTODESK®
REVIT®

Technology Solutions

Tools Are Great



Not Always



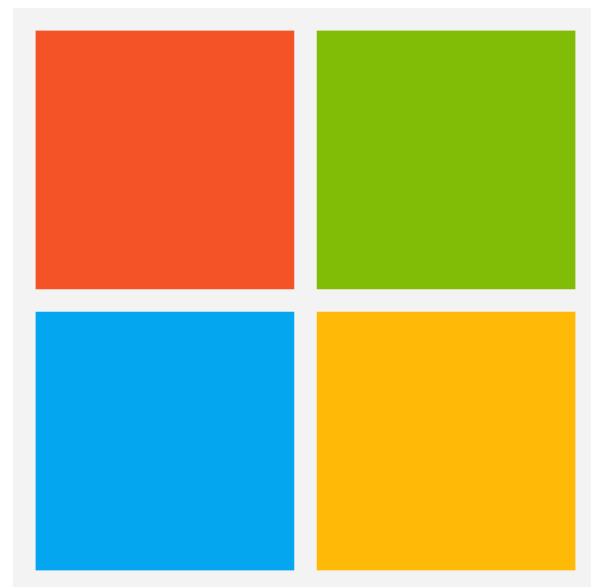
15% of Americans Don't Use
Computers At All
-Pew Research, 2016

How many people only use computers
due to a job requirement?

Tech Acquiesce Is Real....

User Profile: Dave





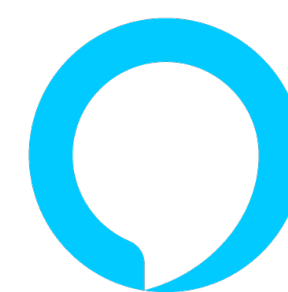
amazon

Google

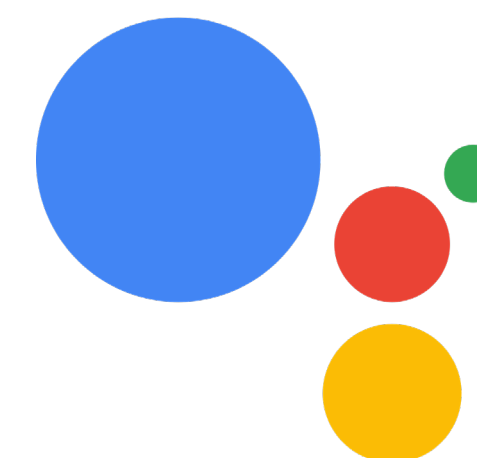


Siri

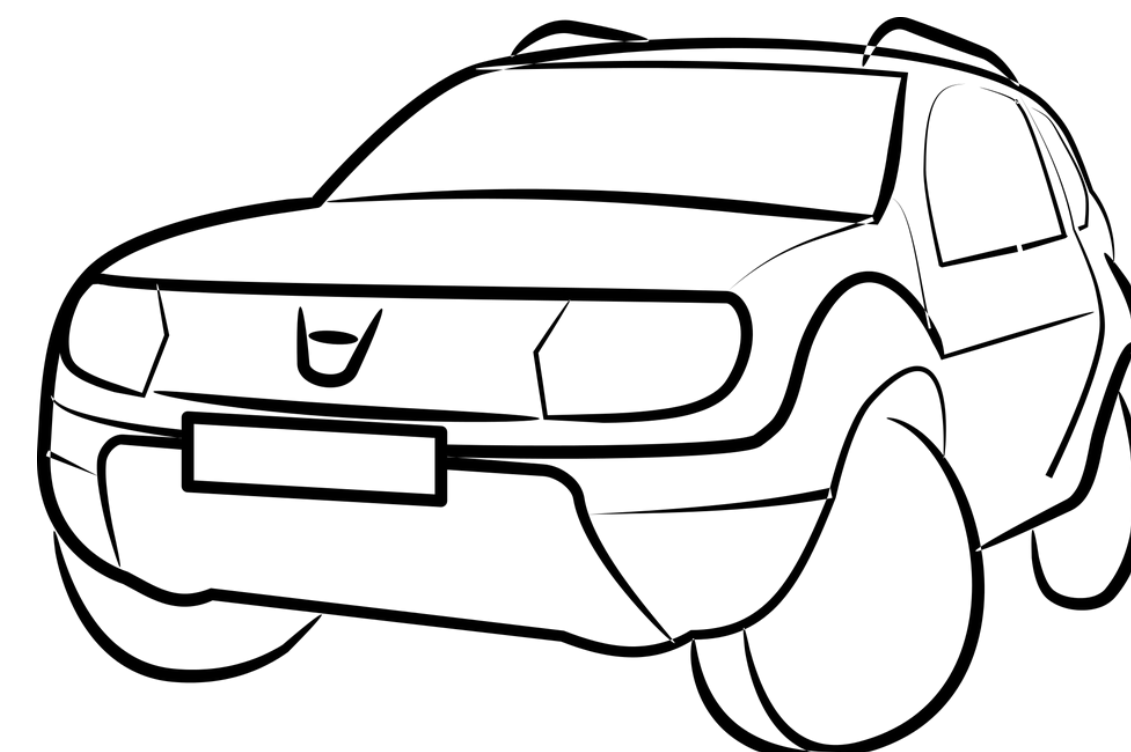
Cortana



amazon alexa



Google Assistant





Talk to Autodesk Forge



Sure Let me get the Test version of Autodesk Forge.



This is Autodesk Forge, how can I help you?

Edit My Project



What's the project name?

Ludwig's House

Edit My Project



What's the project name?

Ludwig's House



...



Reply ...

Training phrases ?

” Add user expression

” edit my project

” edit shipping container at franks house

” edit shipping container

” add structure to project

” add structure to franks house

” add to franks house

” Add to project

Action and parameters

Enter action name

REQUIRED ?	PARAMETER NAME ?	ENTITY ?	VALUE	IS LIST ?	PROMPTS ?
<input checked="" type="checkbox"/>	action	@action	\$action	<input type="checkbox"/>	What would you ...
<input checked="" type="checkbox"/>	project	@projects	\$project	<input type="checkbox"/>	What is the nam...
<input checked="" type="checkbox"/>	structure	@structure	\$structure	<input type="checkbox"/>	What type of st...
<input checked="" type="checkbox"/>	containerSize	@containerSize	\$sizeOfContainer	<input type="checkbox"/>	What size conta... ↑ ↓
<input checked="" type="checkbox"/>	material	@material	\$material	<input type="checkbox"/>	What material? ...
<input checked="" type="checkbox"/>	location	@sys.any	\$location	<input type="checkbox"/>	Where would you...

Run Custom Code

Technical Gotchas

AUTHENTICATION TO FORGE

- Most Forge API's require 3-Legged Authentication
- User must use a GUI to login at least once
- Server can store OAuth token

SERVER RESPONSE TIME

- Response must come back in no more than 3 – 4 seconds otherwise timeout will occur

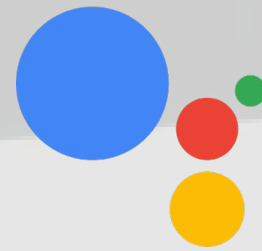
DATA PREP-PROCESSING



User Name
Latitude, Longitude
Address
Device Type
Google Sign-In (Requires
Screen)

User Name
Latitude, Longitude
Address
Device Type
Google Sign-In (Requires
Screen)

Talk to Autodesk Forge



Sure, Let me get Autodesk Forge.



This is Autodesk Forge, how can I help you?

Create a new Issue for Ludwig's House.



What's the Issue Title?


Window framing clearance out of spec...



Talk to Autodesk Forge




Sure, Let me get Autodesk Forge.



This is Autodesk Forge, how can I help you?

What type of toilet manufacturers are used in Ludwig's House?



I see three Delta toilets. Would you like more detail?



Autodesk Forge would like to talk to you.



You have an uncompleted Safety Walk checklist due today on Ludwig's House. If you help me answer a couple of questions, I can help you complete it.

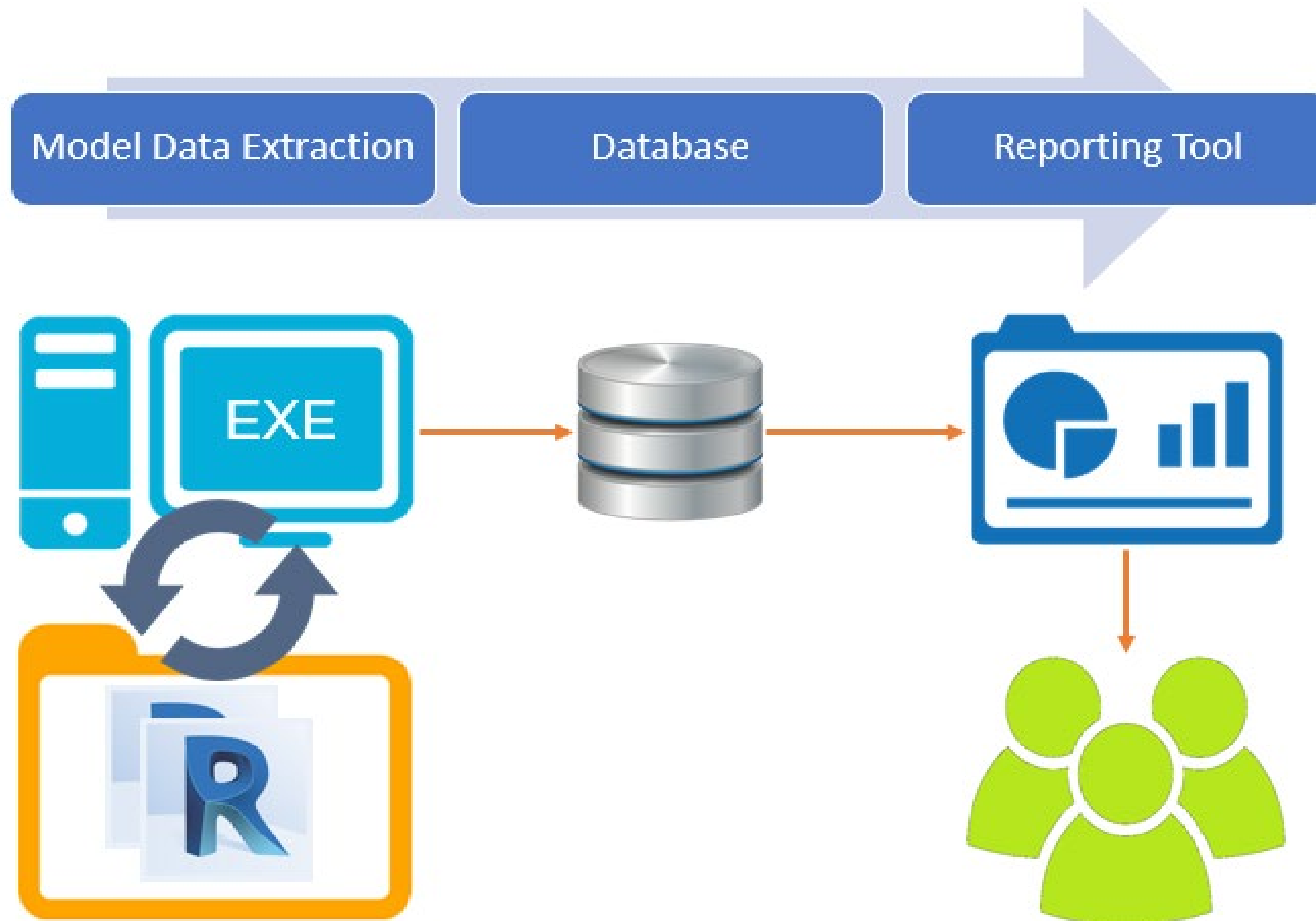
Demo – Farnsworth House

- Farnsworth House was designed and constructed by Ludwig Mies van der Rohe between 1945 and 1951
- The steel and glass house was commissioned by Edith Farnsworth, M.D., a prominent Chicago nephrologist as a place where she could engage in her hobbies—playing the violin, translating poetry, and enjoying nature.
- National Historic Landmark in Plano, Illinois (2006)

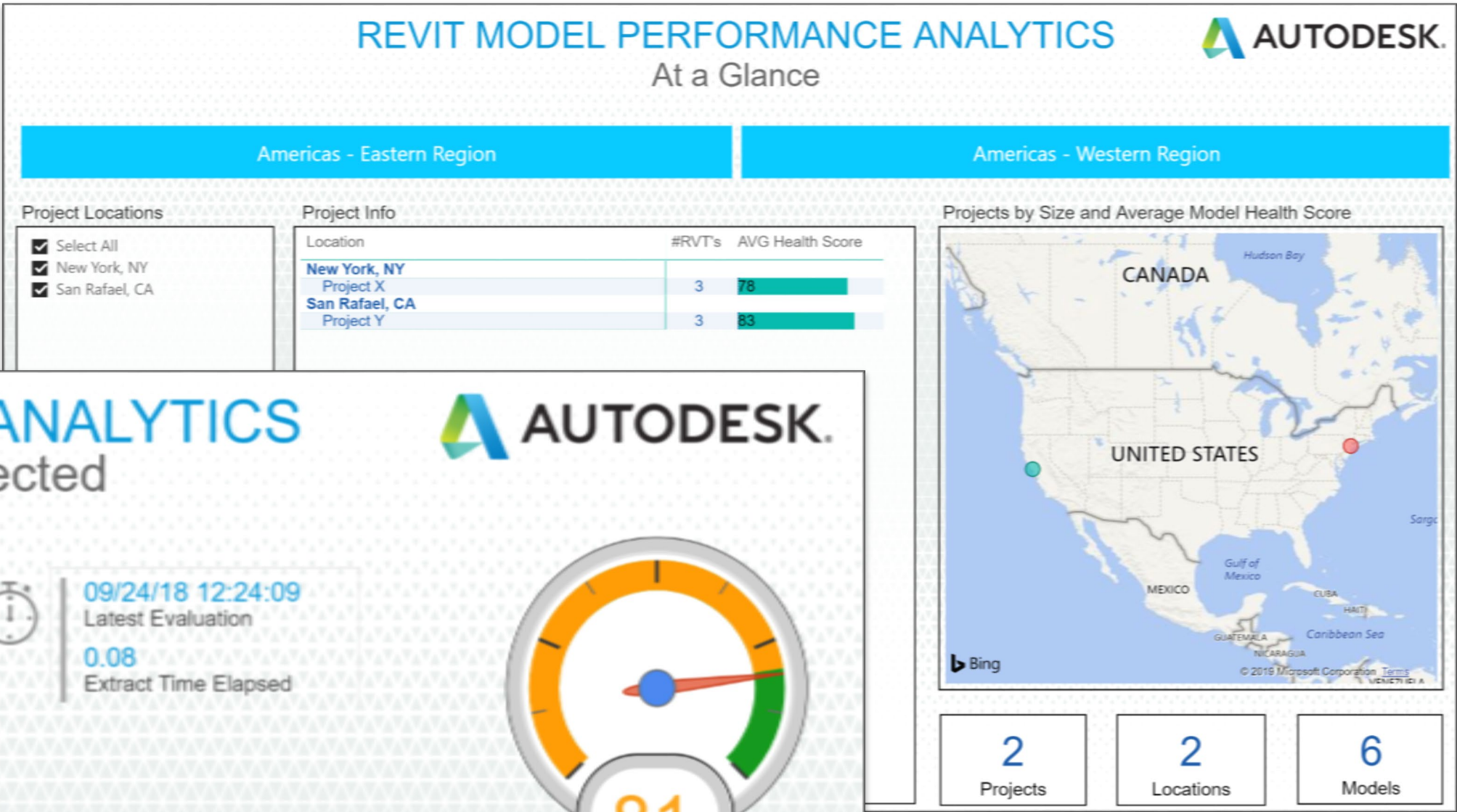
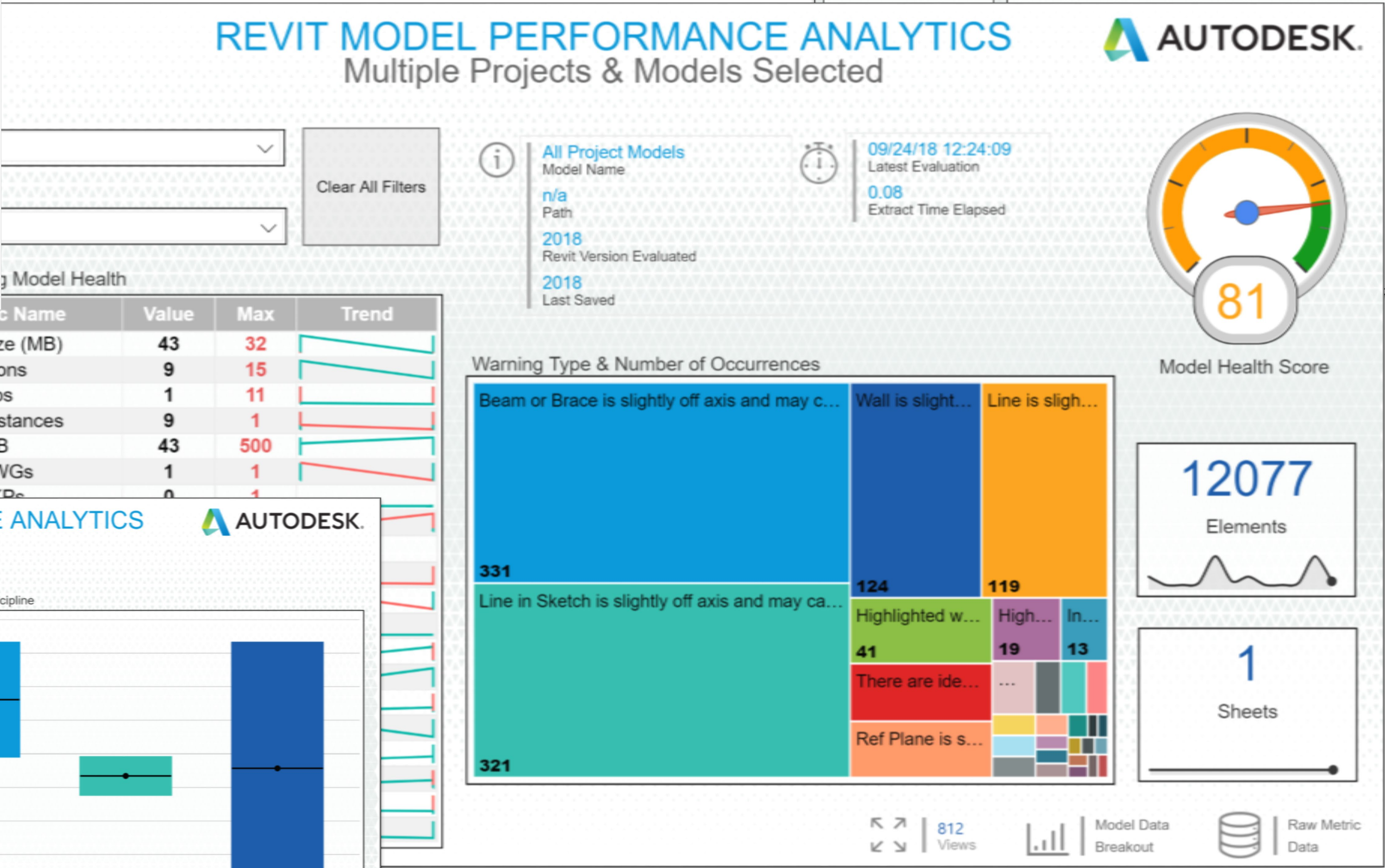
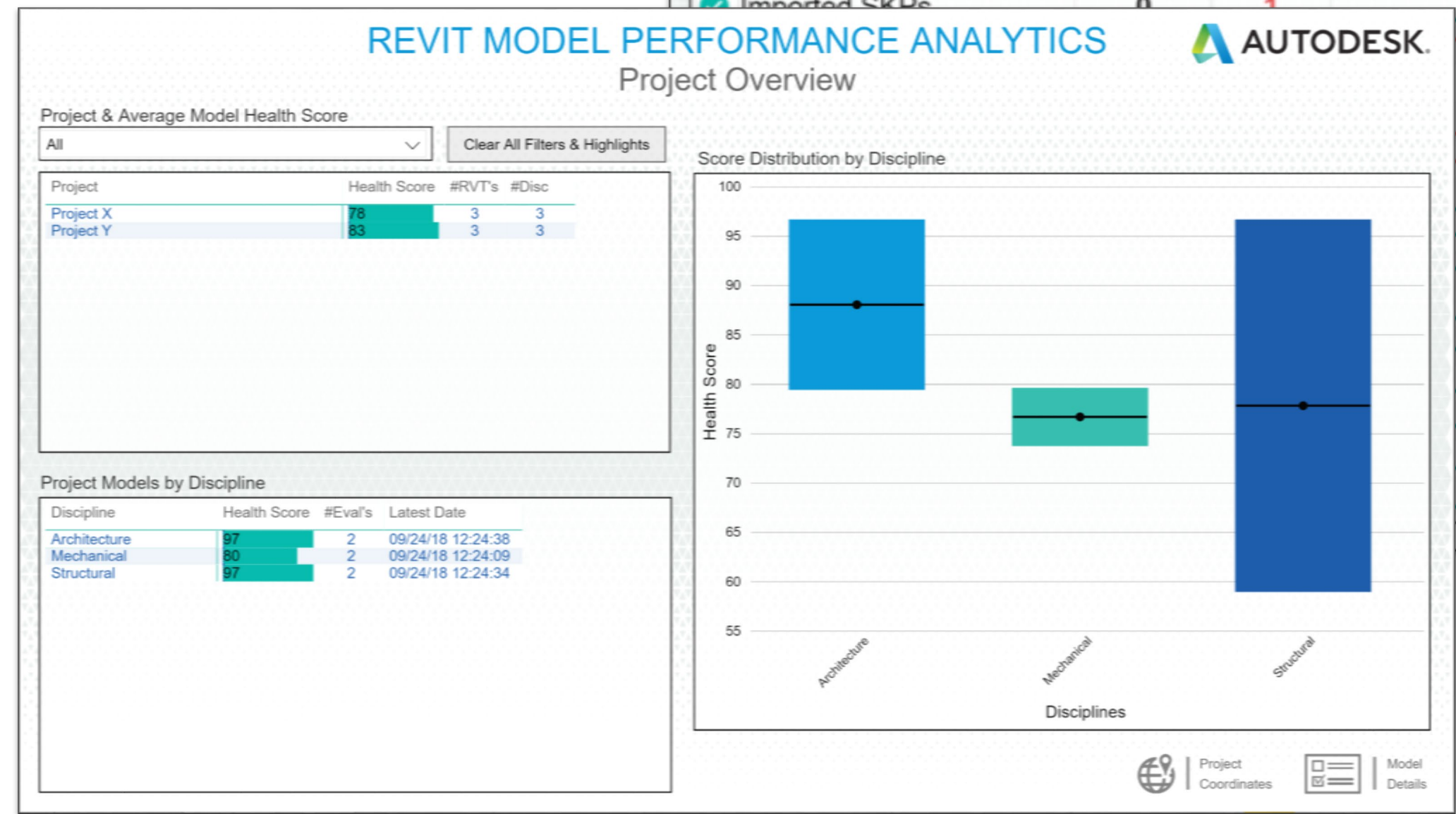
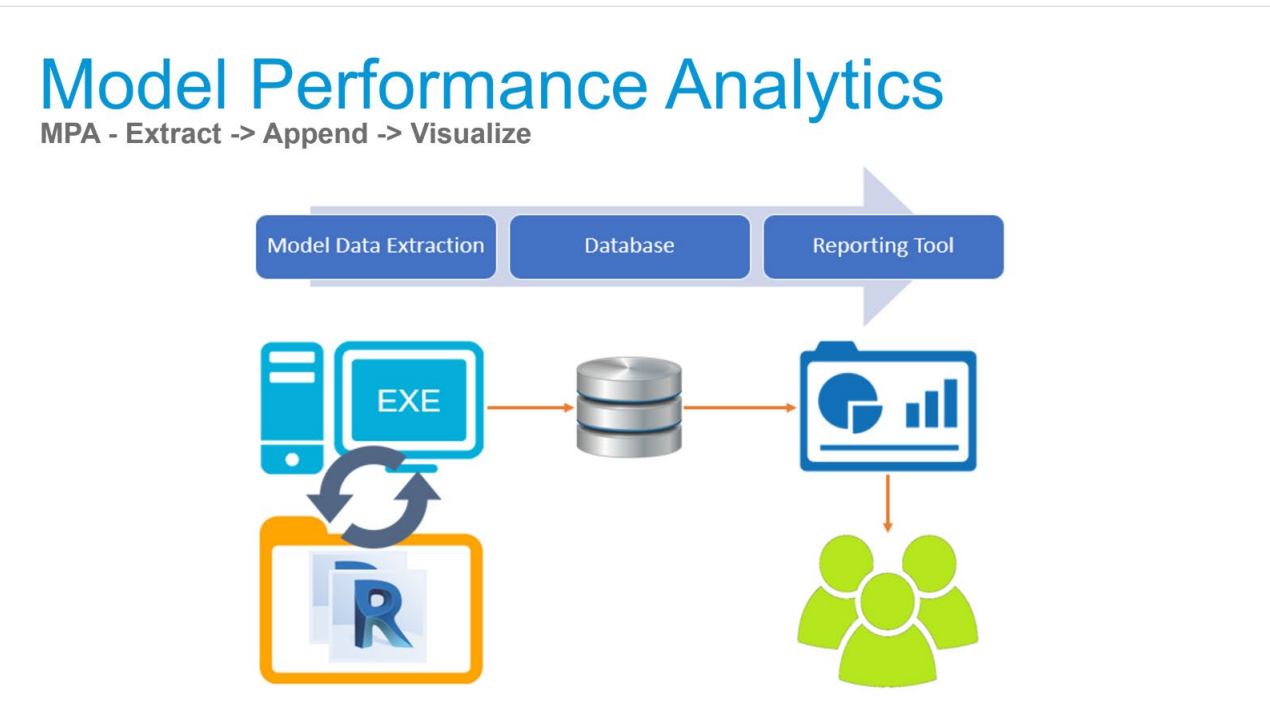


Model Performance Analytics

MPA - Extract -> Append -> Visualize



Dashboard Example – Microsoft Power BI



Health Score Voice Assistant

