ENGINEER 3D!
TRAINING+TECHNOLOGY
CONFERENCE

OCTOBER 2-3
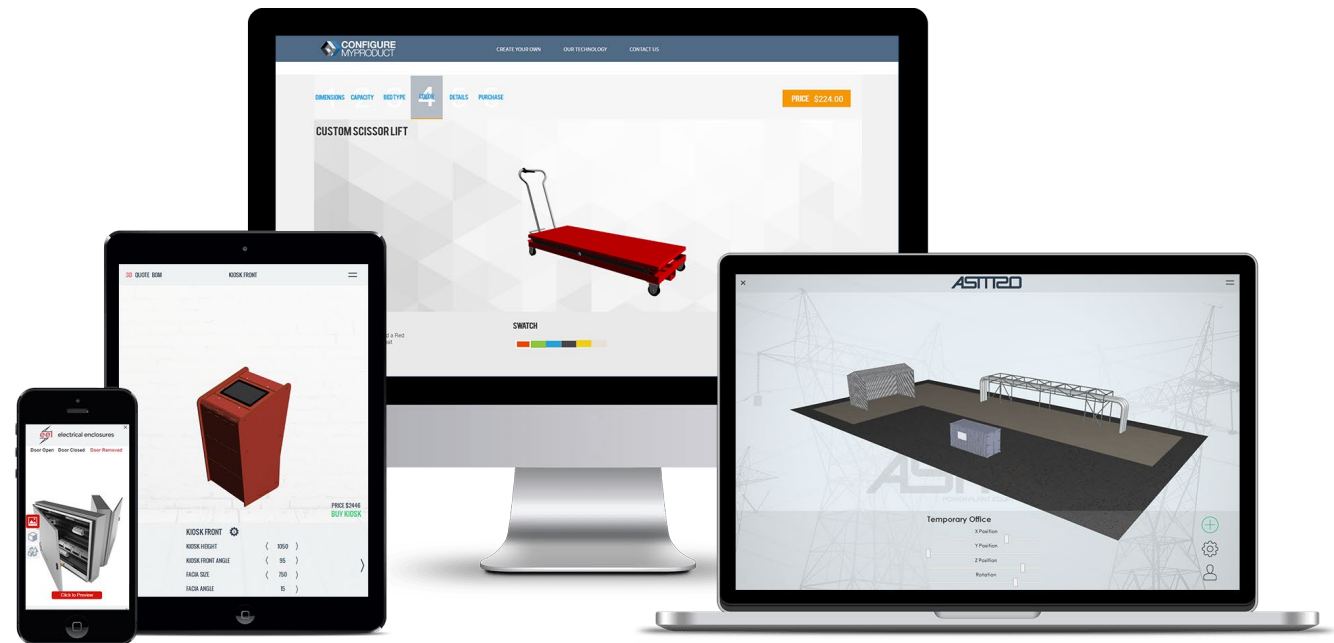**MILWAUKEE, WI**

3D Is Not All About CAD

Efficient Delivery of 3D geometry for online configurators

Madhu Valikkodath
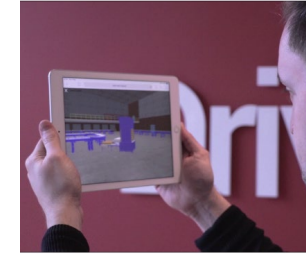
DriveWorks Applications Engineer

Agenda

- What is Driveworks 3D?

- Ideal Configurator.

- Mass Generation Approach

- Mixed Mode Preview

- Visualization and Interactive 3D

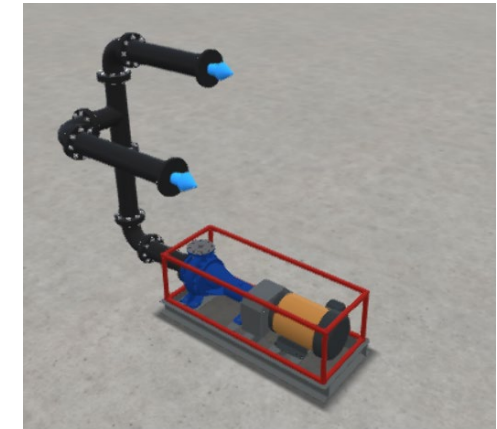- Layout Configurator Sample

- Questions

What is DriveWorks 3D?

- DriveWorks specific 3D format

- Display CAD on a DriveWorks Form

- Efficient viewing over the web with Live

- Created from Solidworks with an add-in

- 3D viewer for non-native import

- Manipulate with out using CAD

- Swap files, change appearances, etc....
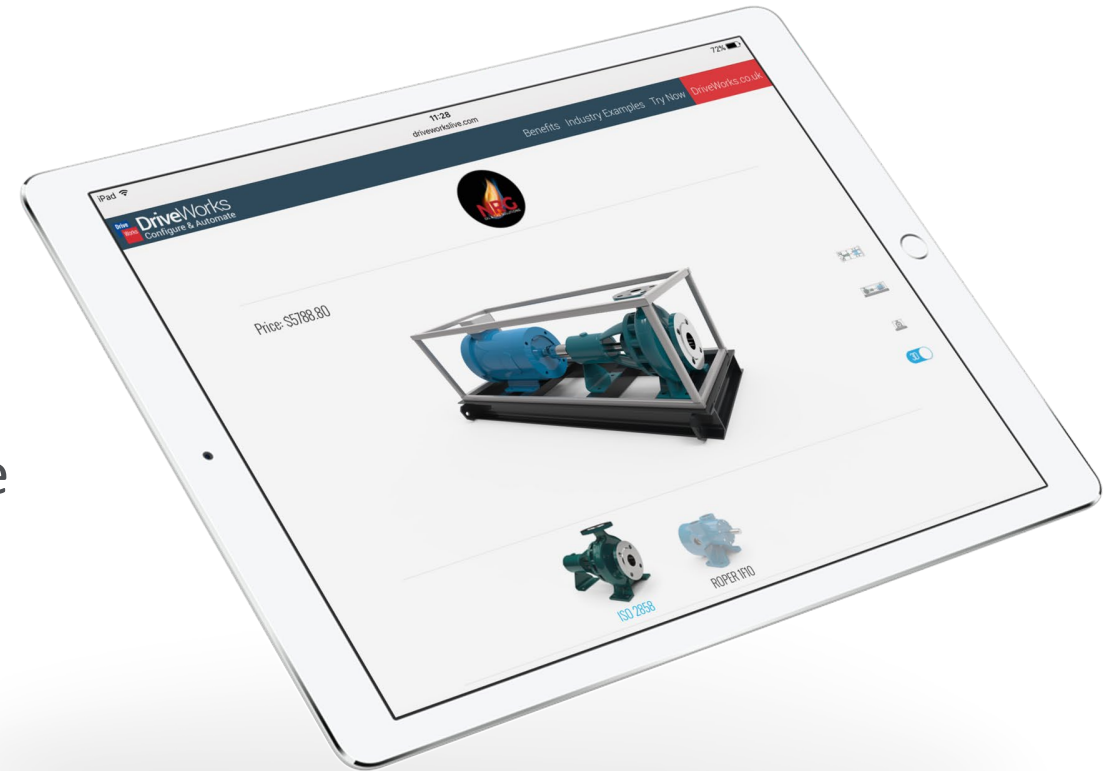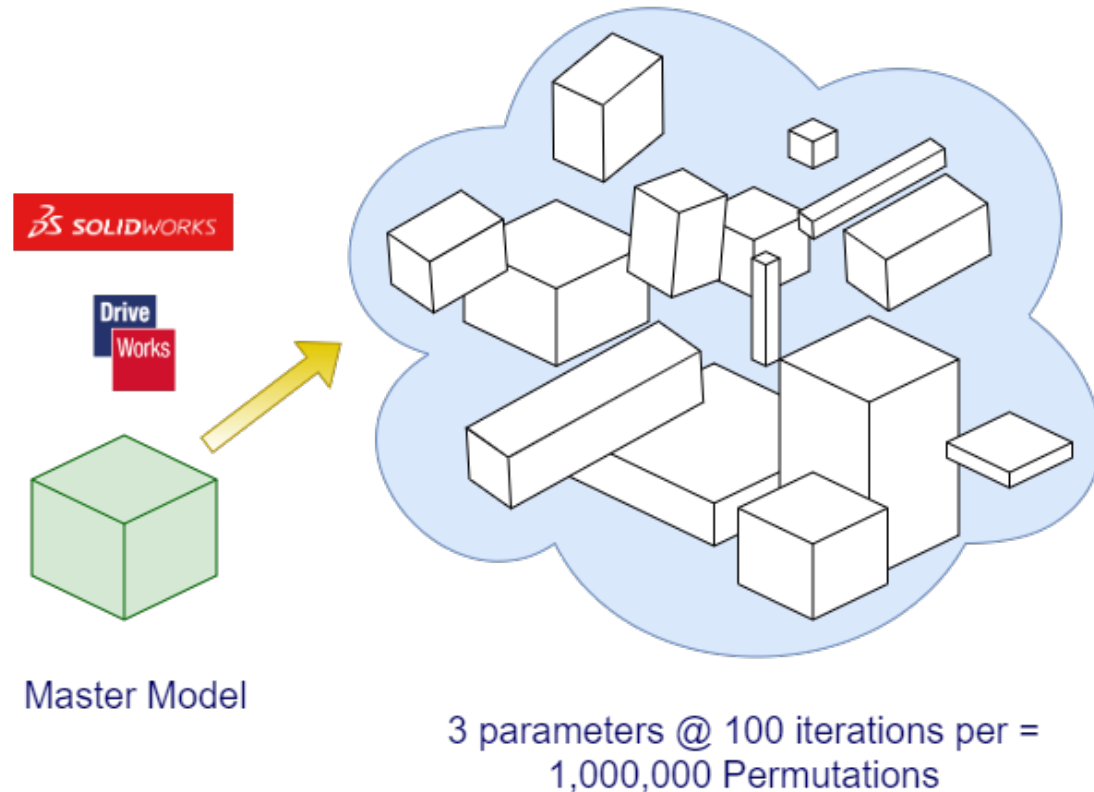
The Ideal 3D Configurator

- Accuracy
  - Accurate representation
  - Colors and Textures

- Performance
  - Fast load times
  - Accessible on Desktop and Mobile

- Interaction
  - This is a sales tool
  - Needs to hold customer attention
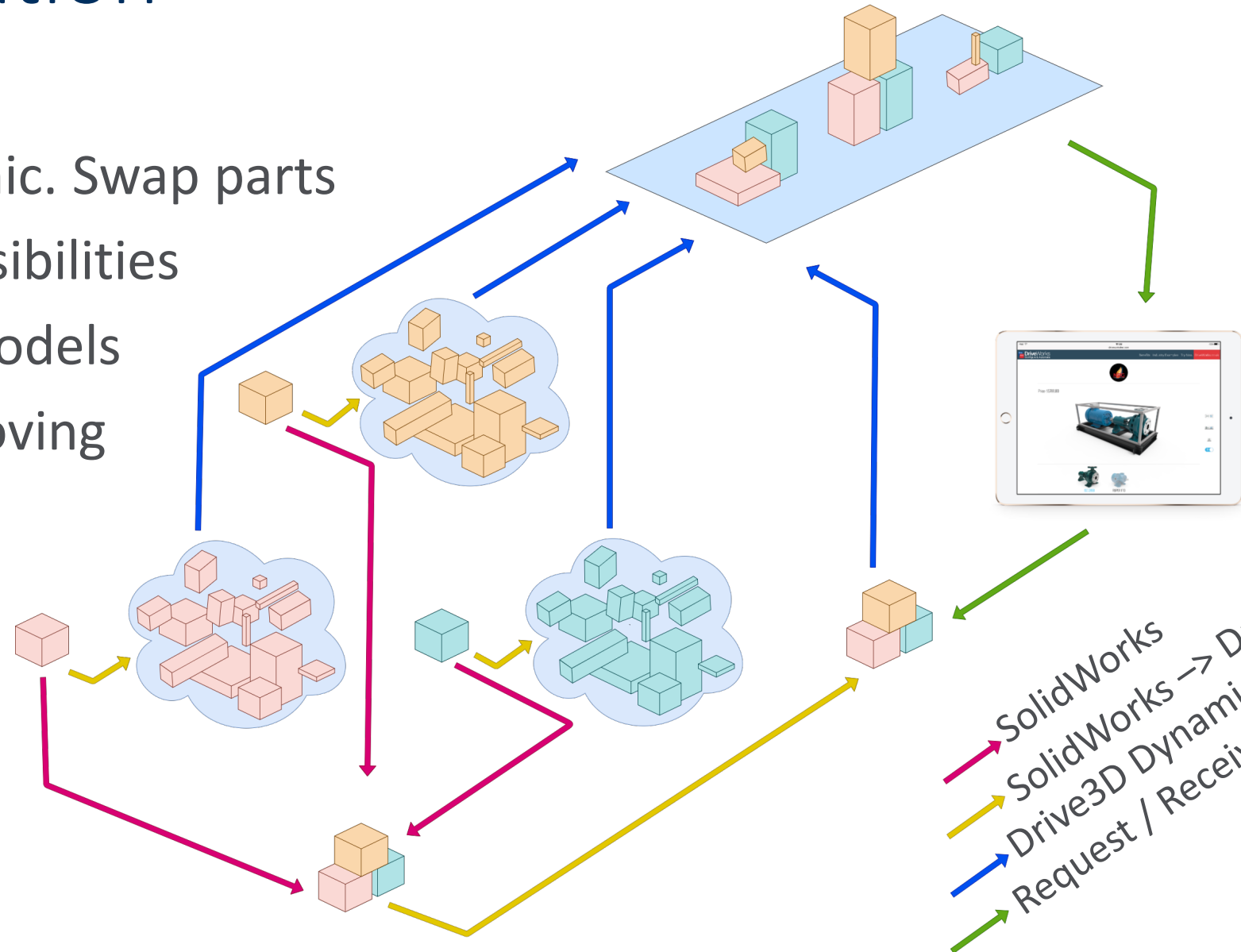 - Increase purchase rates

Mass Generation Approach

SOLIDWORKS

Drive Works

Master Model

3 parameters @ 100 iterations per =
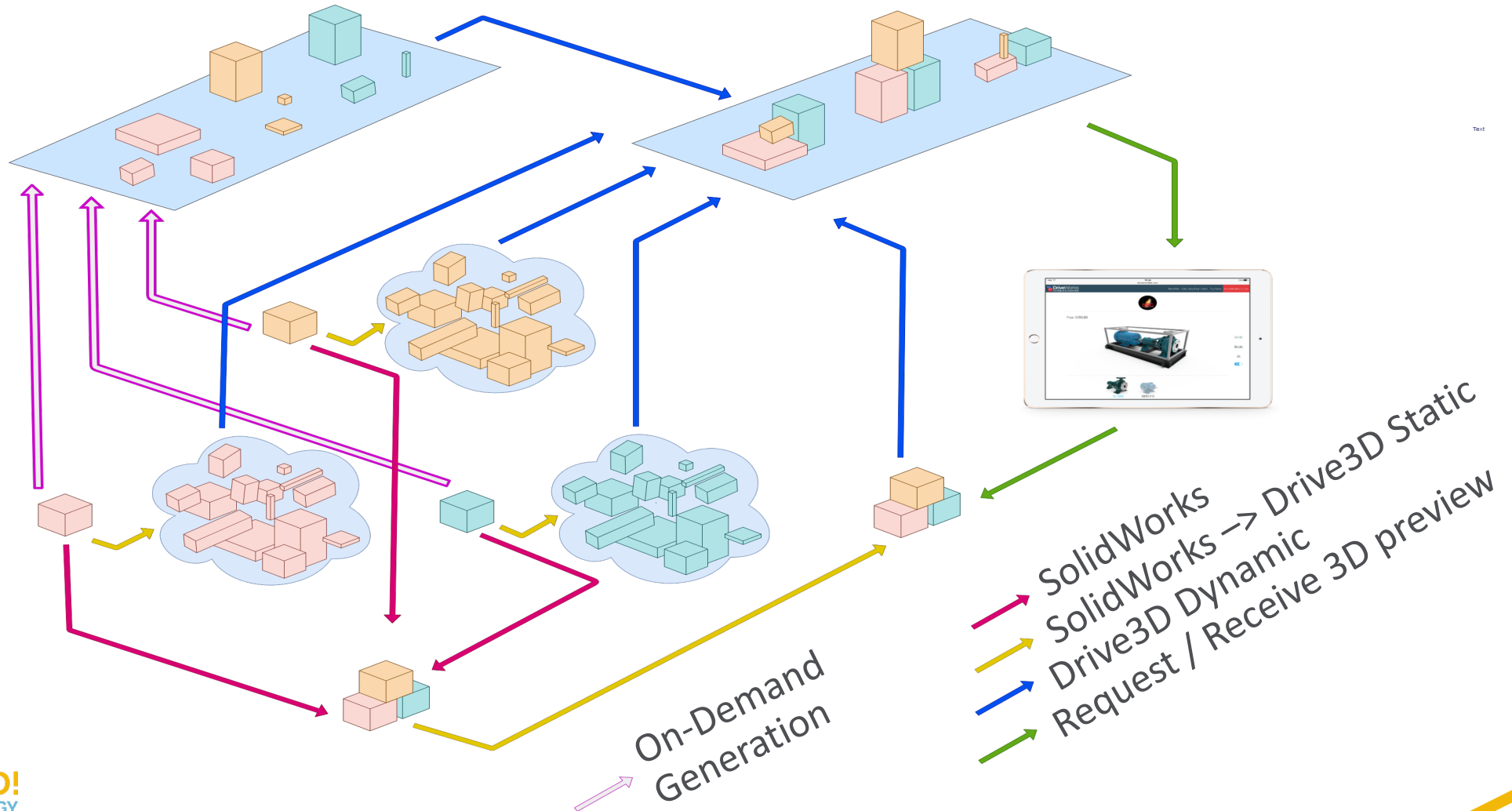1,000,000 Permutations

- Pre-create 3D Geometry

- Leverage Auto-pilot for generation during off-peak hours

- Pre-launch validation

- "Clever" projects for visual validation

- Reduce required On-Demand Solidworks computing capacity

Mass Generation +

- Drive3D Static

- Drive3D Dynamic. Swap parts

- 1.00×10^{18} possibilities

- 4 Solidworks models

- Scaling and Moving

SolidWorks

SolidWorks –> Drive3D Static

Drive3D Dynamic

Request / Receive 3D preview

Mixed Mode Preview

SolidWorks
SolidWorks –> Drive3D Static
Drive3D Dynamic
Request / Receive 3D preview

On-Demand Generation

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Visualization and Interactive 3D

- Appearances
- Scenes
- Cameras

- Click
- Move
- Layout

Layout Configurtion Sample

Epic!!!!!

https://factorylayout.driveworkslive.com/Apps/Demo-FactoryDashboard/

Questions ???