



Autodesk® Factory Design Suite: *The Power is in the Workflow*

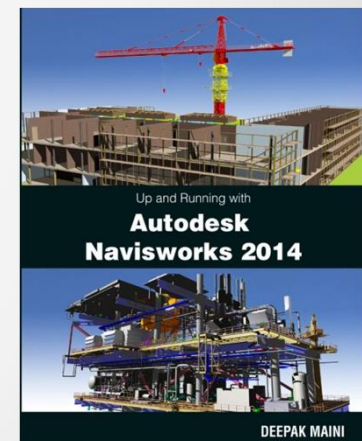
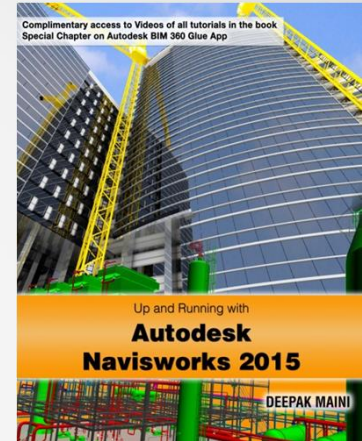
Deepak Maini

Technical Head, Manufacturing Solutions
Cadgroup Australia



My Introduction

- Qualified Mechanical Engineer
- More than 16 Years of Experience on various CAD Platforms
- Guest Lecturer at University of New South Wales (UNSW)
- Regular Speaker at Autodesk University in Las Vegas
- Author of Up and Running with Autodesk Navisworks series of books
- Latest textbook: *Up and Running with Autodesk Navisworks 2015*



My Aim: Lets Keep it Simple and Have Fun as we Learn

- Units in **Millimetres**
- Class is Being Recorded. You and your colleagues will be able to view it around January as %Class on Demand+from AU Website
- Happy to Receive Emails from Attendees Anytime about Any Technical Question
- Mobile Phones on Silent Mode Please. Thanks



Class summary

In this class you will learn how the integrated workflow in Autodesk® Factory Design Suite is used to efficiently create factory layouts. You will also learn how this program can be used outside the factory environment where the information flows between client to sales representatives and then to the engineering team and then back to client using A360 Drive.

Key learning objectives

At the end of this class, you will be able to:

- Understand and use 1:1 Sync between AutoCAD and Autodesk Inventor
- Better understand Autodesk Revit Interoperability with Autodesk Inventor
- Use A360 Drive to Exchange data
- Use Autodesk Navisworks to create collaborated factory designs with factory buildings and machine layouts



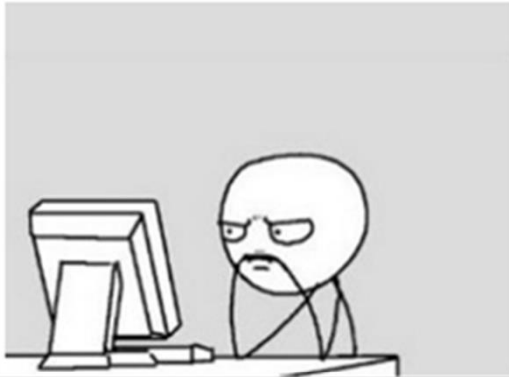
Presentation Talks About 3 Scenarios

- Scenario 1: Use the Power of the Autodesk® Factory Design Suite Workflows to efficiently create factory layouts
- Scenario 2: Use Architectural Autodesk Revit® building as reference to insert assets in Autodesk® Inventor® (*Actual Customer Issue*)
- Scenario 3: Autodesk® Factory Design Suite used by Warehouse Logistic Solutions Company to improve their workflow (*Actual Customer Issue*)

What happened before Autodesk Factory Design Suite



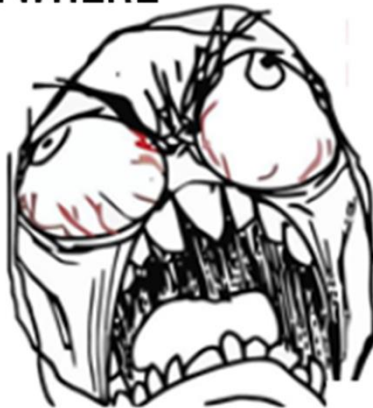
Me creating factory layout



Destiny has foretold that
**EVERYTHING WILL FIT
PERFECTLY**



Oh \$@%\$##%#!!! **CLASHES
EVERYWHERE**



Scenario 1: Use the Power of the Autodesk® Factory Design Suite Workflows to efficiently create factory layouts

- Create 2D layout in AutoCAD® Architecture
- Use 1:1 Sync between AutoCAD® Architecture and Autodesk® Inventor® to create 3D General Arrangements of a factory
- Create a virtual factory in Autodesk® Navisworks®
- Perform clash detection between different components of factory in Autodesk® Navisworks®
- Resolve clashes and update the virtual factory



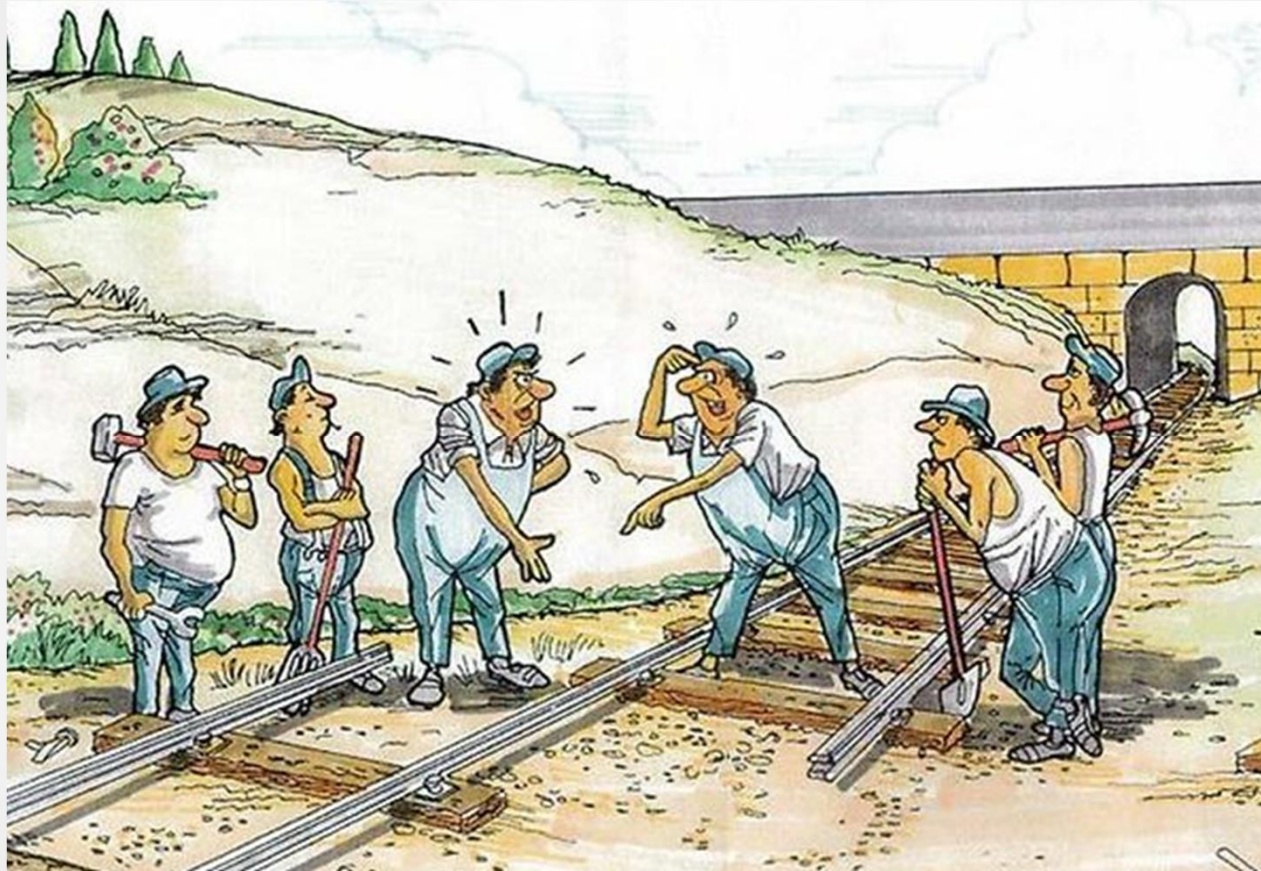
Scenario 1: Presentation on Software

Scenario 2: Use Architect's Autodesk Revit® models as reference to insert Autodesk Inventor® models (*Actual Customer Issue*)

- Architect's building model created in Autodesk® Revit®
- Model exported as AutoCAD® DWG®
- A360® Drive used to share the design data
- 3D model brought in AutoCAD® Architecture and used as a reference in Autodesk® Inventor®
- Autodesk® Inventor® design imported in Revit model



Resolving Lack of Information Issue



Scenario 2: Presentation on Software

Scenario 3: Autodesk® Factory Design Suite used by Warehouse Logistic Solutions Company (*Actual Customer Issue*)

- Sales Rep of a Warehouse Logistic Solutions company meets the customer
- General Arrangement created by sales in AutoCAD® 360
- A360® Drive used to share the data with the design team
- 3D layout created in AutoCAD® Architecture and Autodesk® Inventor® using 2D drawing
- 3D model imported in Autodesk® Navisworks® to create walkthroughs
- A360® Drive used to share the completed design with the customer



Scenario 3: Presentation on Software

Q & A

Technical Questions

dmaini@cadgroup.com.au

Other FDS Sessions

- PF7218-L - Everything's an Asset: Everything You Wanted to Know about Factory Assets by **Pete Lord and Xuesong Bai**, Autodesk (*Today, 1:15 PM - 2:30 PM – Mandalay Bay K, Level 2*)
- PF6858 - Get to the Point! Cloud? by **Jeanne Aarhus and Deepak Maini**, (*Today, 3:00 PM - Breakers F, Level 2*)
- PF7266 - Process Analysis 360 for Estimating Project Costs by **Ryan McMahon, Autodesk** (*Today, 5:00 PM - 6:00 PM – Breakers D, Level 2*)



Session Feedback

- Via the Survey Stations, email or mobile device
- AU 2015 passes given out each day!
- Best to do it right after the session
- Instructors see results in real-time



