One Small Step for Man, One Giant Leap for Autodesk
PLM 360 Implementation: Sprint to the Finish

Avi Robbins
Global Product Development
Porex

Ian Hadden
Solution Architect – PLM
Autodesk

Brian Schanen
PLM Technical Marketing
Autodesk
The Flow

- This session is being streamed live online and recorded for future playback
- Questions will be coming through the AU mobile app – or AU Online LIVE
- Moderator monitors Q&A and answers easy/simple question
- In-room audience can ask questions via mobile app or we will take live towards the end
- Don’t forget to fill out your surveys at the end of the course
Your Instructors

Avi Robbins
Director Global Product Development, Porex
- 10 years medical, industrial, and consumer market exp.
- Product development, Operations, Sales exp.
- Spearheading implementation of Autodesk PLM360

Ian Hadden
Solution Architect – PLM, Autodesk
- 10 years experience in working with PLM products
- Engaged in many customer deployments in a diversity of industries

Brian Schanen
PLM Technical Marketing Manager, Autodesk
- 10 years of PDM/PLM experience
- AU veteran speaker
- Builds PLM collateral
- Author, Blogger, Implementer
Overview

- Case Study Overview
- Steps Involved in PLM 360 Implementation
- PLM 360 Connect – Integration to CRM & Autodesk® Vault
- Key Techniques to Accelerate Implementation and Facilitate Change Management
- Use Cases for Improving Processes and Collaboration
Case Study Overview
Our PLM Journey
Porex Overview

- Diverse and global customer base, with over 1,250 accounts across 60 countries

- More than 30 million porous polymer components are manufactured daily

- 70 patents and 45 patents in process

- Market driven product development

- Over 750 employees worldwide across 4 manufacturing facilities, and 7 sales offices
Business Challenges

- Growth occurs through New Product Development
  - Lead Generation
  - Product Development Throughput

- Development Focus
  - Speed
  - Collaboration
  - Global Transparency
  - Prioritization

- Manufacturing Focus
  - Global Operational Excellence
  - Eliminate Waste / Errors

Product Lifecycle Management
Product Data Management
Focus on dotted lines (manual data exchange) between multiple disparate systems.

Many email, shared drive, Excel, and Access based systems

Observations:
- CRM and Product Development processes (phases, timing, etc.) are in the same system.
- Shared drives are the common repository of project data.
- Multiple localized databases to support similar need across geographies.
- Email is the primary means to manage process and communications.
PLM Solution

- Product Lifecycle Management Software provides for a single source of truth for product information
  - All project data will be accessible from one location (not disparate systems)
  - Automatic revision controls provides latest version of document to every user, every time

- Project information will be available to all users (as allowed by security settings) all of the time, to allow for transparency to projects for prioritization, development support, and global collaboration

- Project Management features will allow for template based work flows to keep all project steps available to their owner when action is required

- All workflow steps are tracked and allows for data based decisions and more accurate baselines for improvement
Majority of data transfer through automated / linked methods across functional groups and processes

“Home Grown” disparate systems replaced with PLM 360

Access to and visibility of information greatly improved

Architecture allows for implementation in Phases
Implementation Scoping

- **Phase 1A**
  - Project Management – NPI
  - Products
  - Customers / Contacts
  - CRM Integration
  - Reporting Integration (SSRS / BI)

- **Phase 1B**
  - Material Management (Formulations)
  - Sample Order Management
  - Document Control - ECO

- **Phase 2**
  - Tooling Design / Orders
  - Quality (CAPA)
  - Costing Records
  - CAD / PDM - Vault Integration

- **Phase 3**
  - ERP Integration
  - Customer Data Master
  - Manufacturing Document Meta Data
Steps Involved in Autodesk® PLM 360 Implementation
Think Big.
Start Small.
Steps Involved in PLM 360 Implementation

- Discovery
  - Business Needs
  - Process Definition

- System Architecture
  - Think Big. Start Small.

- Make it Happen
  - Core Team
  - Process Experts
Integration to CRM & Autodesk® Vault Professional
You can only have one master.
Autodesk® PLM 360 Connect – Integration to CRM & Autodesk® Vault

- Information Flow
  - You can only have one data master

- What’s the Deliverable, Who Needs It, and When?
  - Only move key information from one system to the other

- How to Keep Synced
  - Event Based
  - Schedule Based
Key Techniques to Accelerate Implementation and Facilitate Change Management
If you don’t know where you’re going, any road will take you there.

- George Harrison
Implementation Tips & Tricks

- Executive Sponsorship
  - High level owner that can help drive change
  - Alignment to corporate initiatives

- Build a Roadmap
  - Define the Problem
  - Map Process
  - Prioritize Opportunities
  - Develop Roadmap

- Identify the Team
  - Core Team and Process Experts

- Show the Value
  - May Add Steps in One Process but Gain Elsewhere
  - Saving Time (Search)
  - Capture More Valuable Information

- Standardize & Secure Early

- User Acceptance Testing
  - Have user involved in defining process
  - Get the loudest critics involved!

- Use the System
  - Issues Management
Map the Process (Swim Lanes)

- Develop a cross-functional map of the process you are trying to implement
Summarize and Prioritize Improvement Opportunities

Improvement opportunities:

1) Improve customer-sales-engineering collaboration, and global/consistent adoption of NPI process
2) Improve cross functional visibility to project & function specific schedules
3) Improve product and process knowledge management
4) Improve Engineering-Manufacturing transition; and ECO process
5) Enable pre-launch issues management
6) Improve drafting & tooling data management to enable easy design reuse
7) Improve quality planning and execution; including work instructions management
8) Improve sample and prototype management.
## Business Objective Roadmap

- Roadmap sets a business objective for each phase and ties to functional and system improvements
- Easily communicate goals and benefits of each step in implementation

<table>
<thead>
<tr>
<th></th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3 &amp; beyond</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Time frame</strong></td>
<td>Q1</td>
<td>Q2-Q3</td>
<td>Q4 &amp; beyond</td>
</tr>
<tr>
<td><strong>Business objective/goal</strong></td>
<td>“Improve cross functional collaboration on projects”</td>
<td>“Establish product data foundation”</td>
<td>“Connect other processes with product data”</td>
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</tbody>
</table>
| **Opportunities targeted** | - Improve customer-sales-engineering collaboration; and global adoption of NPI process.  
- Enable pre-launch issues management  
- Improve Engineering-Manufacturing transition, and ECO process - basic  
- Improve cross functional visibility to project schedule | - Improve product and process knowledge management  
- Improve Engineering-Manufacturing transition, and ECO process - advanced  
- Improve drafting & tooling data management to enable easy design reuse  
- Improve sample and prototype management.  | - Improve quality planning and execution; including work instructions management  
- Other related processes |
| **Functional groups impacted** | - Sales, engineering, tooling, supply chain, quality, operations/manufacturing, all people in turn over mtg.  | - Sales, engineering, materials, supply chain, manufacturing | - Quality control, engineering, manufacturing |
| **System capabilities built** | - PLM 360 – for NPI process management.  
- Manual interface between CRM and PLM360.  
- Key tasks tracked in PLM360  
- Current ECO process implemented in PLM360. | - Product/material data in PLM  
- Sample & prototype mechanism in PLM360.  
- PDM implementation & data migration  
- PLM 360 – PDM integration  
- Advanced ECO process in PLM360 | - QC processes and data in PLM360.  
- Work instructions in PLM360.  
- PLM360 – Oracle integration & PLM-Sage integration.  
- Migration of legacy product/material data |
| **Legacy systems replaced** | - CRM – for engineering & downstream processes  
- Management reporting methods  
- Issues management files  
- Function specific schedules | - Material database  
- ECO emails and log  
- Sample repository (excel?)  
- Shared drives for CAD data mgmt. | - QC database  
- Test data sheets |
Implementation Tips & Tricks

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## Develop a Core Team – Phase Map

- **Taking 15 minutes to develop a Core Team / Phase Map will save 10x the time later**

### Subject Matter Experts Count

<table>
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<tr>
<th>Row Labels</th>
<th>Representation in Core team</th>
<th>Groups impacted by targeted scope/process</th>
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<td>Monica Hill, Viola Loepelt</td>
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Develop and Communicate New “Standards”

- Review standards across departments, divisions, locations, and determine most effective methods for the future
- Leverage existing systems that will allow for reduction in variables
- Communicate, Communicate, Communicate

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Create a Workspace-Group Permission Matrix

- Permissions can be a daunting topic with multiple groups and workspaces
- Identify core elements and create a simple matrix
- Find common permissions and develop appropriate roles
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Use Cases for Improved Processes and Collaboration
Demonstration

Inside Autodesk® PLM 360 - Improved Cross-Functional and Global Collaboration, Better Data Collection, Decision Making and Portfolio Management

- NPI Process
  - Visual Management

- Applications Engineering – To Go
  - Mobile Platform (Tablet Part Search)
  - Enhanced Notifications (Sample Order)

- Pipeline Management
  - Ease of Reporting

- Implementation Management
  - Issues Management
  - Milestone Planning – Gant Chart
Questions?
Please Fill Out Your Surveys

- Make sure your voice is heard by completing your surveys!
- Please take the time to complete your survey for this and every class you attend at Autodesk University.
- Autodesk uses this information to know what classes to offer in the future.