PLM Migration, Translation and Integration – Roundtable

Dan Raker
ConnectPress

Oleg Shilovitsky
Beyond PLM

Brian Schouten
PROSTEP

Standby – The Webinar Will Begin Shortly
PLM Migration, Translation and Integration – Roundtable

Roundtable Agenda
• Panel Discussion: Issues overview
• What’s the biggest hang-up in PLM migration?
• Survey results and discussion
• Guest Panelists: Projects and lessons learned
  • Brian/PROSTEP imparted wisdom
  • Oleg/BeyondPLM imparted wisdom
• Open Q&A
What’s the biggest hang-up in PLM migration?
PLM Migration, Translation and Integration – Roundtable

Who Participated in the Survey?

<table>
<thead>
<tr>
<th>Business Analyst</th>
<th>Configuration Management</th>
<th>PLM Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Partnership Leader</td>
<td>Engineering Services Manager</td>
<td>President</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>Enovia Consultant</td>
<td>Prod Mgmt</td>
</tr>
<tr>
<td>CAD Manager</td>
<td>Global Chief of Transformation</td>
<td>Program Manager</td>
</tr>
<tr>
<td>CAD User Admin</td>
<td>Global Technical Information</td>
<td>Programmer, Engineering</td>
</tr>
<tr>
<td>CNC Programming Leader</td>
<td>System Manager</td>
<td>Systems</td>
</tr>
<tr>
<td>Cad Designer</td>
<td>Head - PLM Strategy &amp; Consulting</td>
<td>QA MANAGER</td>
</tr>
<tr>
<td>Cad Manager</td>
<td>Head of IT Systems</td>
<td>Senior PLM Consultant</td>
</tr>
<tr>
<td>Chief Systems Engineer</td>
<td>Head of Marketing</td>
<td>Senior PLM Solutions Lead</td>
</tr>
<tr>
<td>Consultant</td>
<td>IT Director - Engineering Solutions</td>
<td>Solution Architect</td>
</tr>
<tr>
<td>Design Engineer</td>
<td>MD</td>
<td>Sr IT Specialist</td>
</tr>
<tr>
<td>Director</td>
<td>Manager, Mechanical Engineering</td>
<td>Standards Engineering supervisor</td>
</tr>
<tr>
<td>Director of Engineering</td>
<td>Marketing Director</td>
<td>Technical Sales Director</td>
</tr>
<tr>
<td>Director, Mech Automation Eng &amp; Design</td>
<td>Mechanical Designer</td>
<td>WW Director, Product Lifecycle Systems</td>
</tr>
<tr>
<td>Eng. Sys. &amp; Std Coordinator</td>
<td>Mechanical Engineer</td>
<td>conference producer</td>
</tr>
<tr>
<td>Engineer</td>
<td>PLM Methodology Expert</td>
<td>consultant</td>
</tr>
<tr>
<td>Engineer/Tech Lead</td>
<td>PLM Program Director</td>
<td>director of strategy</td>
</tr>
<tr>
<td>Engineering Documentation</td>
<td>PLM Solution Assistant</td>
<td>software engineer</td>
</tr>
<tr>
<td>Specialist</td>
<td></td>
<td>team leader</td>
</tr>
</tbody>
</table>
What kinds of organizations?

Advertising/Marketing/PR
Aerospace & Defense
Automotive
Consulting
Energy, Chemical, Utilities
High Tech - Hardware
Manufacturing
Medical, Pharma, Biotech
Other
Software - Other
Telecommunications
Transportation & Distribution
VAR/Systems Integrator
How many PLM systems does your current organization utilize?

- One: 38%
- Two: 6%
- Three: 9%
- More than three: 16%
- None (Flat file, Shared Drives or other): 31%
PLM Migration, Translation and Integration – Roundtable

How long ago did you finish your last data migration?

- In the past year, 37%
- In the past 3 years, 13%
- In the past 5 years, 11%
- We have not done such a project yet, 24%
- I do not know, 15%
On average, how often does your company perform data migration projects?

- When switching to a new PLM software, 48%
- Every few years, 24%
- With a new department or acquisition, 13%
- 5 or more years, 13%
PLM Migration, Translation and Integration – Roundtable

Ullas Soans
Operations Engineering Manager
AVAYA
soans@avaya.com

• 16 Years in the PDM/PLM Space
• Managed about 30 PDM/PLM systems migrations.
• Projects
  • Lucent Technology to Avaya Spinoff
  • Matrix One Migration
  • Agile Migration
  • Nortel Acquisition
• Lessons Learned
• Advice
What concerns do you have when performing a data migration?

- Two or more of the above, 63%
- Data conversion quality/quantity, 21%
- Data validation and cleanliness, 6%
- Timeline concerns, 5%
- Budget concerns, 3%
- Archiving older models for reference, 2%

PLM Connections
PLM Migration, Translation and Integration – Roundtable

When performing a PLM migration, how much data would be migrated at one time?

- We would prefer a Co-Existence solution for an extended period of time: 26%
- One project or product: 23%
- One organization or department: 16%
- An entire database (if there are multiple databases): 19%
- All of the data (Big Bang, Bulk): 16%
What type of outside support would you consider when preparing for a data migration?

- We use the 'new' PLM provider to handle our migration needs: 19%
- We use 3rd party experts to setup the 'Migration Factory' then we run it ourselves: 21%
- We look to PLM migration consultants to do the entire project: 11%
- We hire programmers to custom write our migration tools: 3%
- None, we do everything in house: 45%
PLM Migration, Translation and Integration – Roundtable

Don Patterson
Chief Systems Engineer
Harris GCS, Engineering and Information Technology
Don.patterson@harris.com

• Responsible for PLM at Harris GCS; 20+ years PLM experience

• Live on Agile PLM since 2006

• PLM journey… several migrations from legacy systems
  • Part/BOM, documents at ‘go live’
  • As-built BOMs, quality, supplier, compliance, …
  • Native MCAD data is in Intralink (and interfaced)

• Lessons learned
PLM Migration, Translation and Integration – Roundtable

What are the biggest errors made by design teams in data migration?

- Waiting until the last minute to start talking about migration: 2%
- Lack of management participation/buy-in: 5%
- Engineering/Manufacturing requirement oversights (poor...): 6%
- Inability to stick to a timeline: 8%
- Data clean-up during migration (instead of before or after): 16%
- Two or more of the above: 31%
- Three or more of the above: 32%
What type of migration tools do you use to help streamline your projects?

- None: 3%
- Commercial 3rd Party Software focused on PLM migration: 5%
- Custom Applications written by 3rd parties: 6%
- Homegrown scripts/apps/spreadsheets: 23%
- Export and Import tools provided by the PLM system vendors: 27%
- Two or more of the above: 35%
PLM Migration, Translation and Integration – Roundtable

Think about overall migration planning. What percent best represents PLM brand selection vs. migration planning?

- 50% brand selection/50% migration, 42%
- 75% brand selection/25% migration, 29%
- 90% brand selection/10% migration, 19%
- 10% brand selection/90% migration, 10%
PLM Migration, Translation and Integration – Roundtable

Rob Robinson
Solutions Architect
Siemens PLM

Aerospace Case Study

• Migrate all legacy mainframe data to Teamcenter and ERP

• Cleanse data prior to migration

• Validate and Go live
How far back do you keep data when you migrate from one system to another?

- Full history for all projects going back indefinitely, 42%
- Full history for active projects and final released data for everything else, 24%
- Full history for active projects and each major revision, 11%
- Current active projects only, 8%
- Other, 15%
How would you characterize your last PLM migration projects?

- We haven't done any PLM migration projects: 18%
- A complete disaster: 5%
- Very painful, partially successful: 13%
- Painful but mostly successful: 23%
- Some challenges but ultimately successful: 34%
- Easy/uneventful/successful: 8%
Tell us how your PLM system is integrated with other systems like ERP, BOM, training/documentation, sales/configurators, marketing, etc.
Robin Johnson
Senior IT Specialist
Aerojet Rocketdyne
robin.johnson@rocket.com

• Migrated documents, BOMs and change data from Sherpa to Teamcenter Enterprise
• Have not migrated CAD data, which is managed in 3 separate Teamcenter Unified databases
• Separate group completed a migration to Windchill in January 2015
• Expect to migrate all to a single system within the next 5 years
PLM Migration, Translation and Integration – Roundtable

Brian Schouten
Sales Executive
PROSTEP
brian.schouten@prostep.com

• Brian has been a senior consultant, team manager and now sales executive at PROSTEP for 8 years, spending 2 years of that also as the PLM Migration focal point (lead).
• He has developed, executed and managed many integration and migration projects during his time here.
• Expert experience with all market leading PLM systems such as Teamcenter, Windchill, Enovia VPM & V6 and others.
PLM Migration, Translation and Integration – Roundtable

- PROSTEP has been in the PLM business for over 22 years, and was founded to take advantage of the emerging standards in the automotive and aerospace industries.
- This allowed them to become some of the foremost experts on data integration and migration, secure data transfer solutions and the creation and enhancement of 3D PDF documents.
- Their expert knowledge, industry leading solutions and vendor – neutral approach allows them the freedom to get the job done in a timely and cost effective manner.
PLM Migration, Translation and Integration – Roundtable

Oleg Shilovitsky
Beyond PLM
oleg.shilovitsky@beyondplm.com

• What is PLM software replacement cycle?
  • Growing number of older PLM implementations
• Unsupported and legacy software
  • Unsupported CAD, RDBMS, OS, etc.
• The anatomy of upgrade
  • Not every upgrade is the same
  • Migration technologies
  • Economics of migration
• PLM upgrade and competition
  • Migration is a future differentiation
PLM Migration, Translation and Integration – Roundtable

Dan Raker
ConnectPress

Oleg Shilovitsky
Beyond PLM

Brian Schouten
PROSTEP

Q&A/Additional Info
Dan Raker danraker@connectpress.com