What’s New in SAP Product Lifecycle Management?

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Session 2906
LEARNING POINTS

- Get an overview on latest innovations in SAP PLM
- Learn what is coming up later in 2013 and beyond
- See some of the innovations in action
Agenda

- Introduction
- SAP PLM – What It Covers, Latest Innovations
- Demo
- Outlook
- Summary
Introduction
Global trends and their impact on product innovation

The **number one goal** for manufacturing companies around the world is to reduce **time to profit** for new and enhanced products.

**Consumer-driven, sustainable innovation**

**Fact:** Roughly 80% of all new products fail to achieve their expected results.

**Global price and time pressure**

**Fact:** About 70% of product costs are locked down during the design phase.

**Product compliance and regulations**

**Fact:** Companies are accountable for the environmental and safety performance of their products.
SAP’s comprehensive, process-centric strategy
Flexibility and integration to achieve product leadership

- Continuous product innovation
- Integrated product development
- Embedded product compliance
SAP’s goal
Striving for customer success

SAP’s goal is to help you:

- **Reduce time to profit**
- **Increase revenue contribution through new and enhanced products**
- **Decrease the costs of R&D, noncompliance, and poor quality**
SAP PLM – What It Covers, Latest Innovations
SAP Solutions for Innovation Leadership

Key Capabilities

- Marketing
- Engineering
- Procurement
- Manufacturing
- Service

Portfolio and project management
Embedded analytics, visualization and collaboration
Enterprise change management
Embedded quality and compliance management

Product data and structure management

- Ideation
- Portfolio
- Concept
- Design, Variants, Recipes
- Simulation
- Manufacturing
- Maintenance
- Service

Tool integration

- CAD
- Layout, schematic, and code
- Bill of results
- Simulation data
- Digital Manufacturing
SAP PLM 7.02
Discrete Industries Focus Areas

- Status & Release Management
- BOM Redlining
- Document Browser
SAP PLM 7.02
Status and Release Management

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**Status Management**
- Harmonized status management for key PLM objects
- Integration with Status and Action Management

**Release Management**
- Enhance Change Record to support release processes
- Manage status transitions, preconditions, system actions, etc.
- Integration with Search, Work Center/Control Center, Access Control Context
SAP PLM 7.02
BOM Redlining

- Easier collaboration on planned changes by documenting changes directly inside the BOM User Interface
- Visual identification of proposed changes
- Direct integration to engineering change processes
SAP PLM 7.02
Document Browser

- Streamlined User Interface for managing documents and document structures
- Support functions like cut & paste, copy, move, ...
- Check-In/Check-out of originals
- In place modification of document attributes
Recipe Synchronization to Manufacturing

Recipe, Formulation & Labeling Enhancements

Specification Database Enhancements
SAP PLM 7.02
Recipe Synchronization to Manufacturing

- Enable the initial creation of BOM's based on the Recipe structure
- Manage the on-going synchronization between recipe and BOM data structures
- Manage the reconciliation needed as recipe data is scaled to production values
Recipe, Formulation and Labeling Enhancements

- Improved Phrase/footnote handling
- Automatic grouping of ingredients
- Process Loss considerations
- Legislative/regional considerations
- Compliance for labeling
- Side-by-Side formulation creation and editing
- Process Visualization
- Improved Process elements processing (UI improvements)
- Workcenter for Process Elements
- Equipment Requirements
- Recipe Templates
SAP PLM 7.02
Recipe, Formulation and Labeling Enhancements

- Fast entry screen, Copy of Specifications
- Extend Engineering Change Management for specification handling
- Support of all additional Spec Database menu options (run WWI, MSDS, etc)
Product Portfolio Analysis

- Provide valuable information to help address product-related shortfalls and disconnects
- Offer a high-level overview of the quality KPIs and costs associated with quality processes
- Achieve better performance by providing in-depth analysis of the product portfolio
- Attain R&D effectiveness by collating and analyzing various costs
- Drive down costs by providing better decision making KPIs related to total revenue, profit margins, time to market, time to delivery, products in pipeline, and so on
SAP 3D Visual Enterprise
Solutions & Innovations

- CAD Translation
- Lightweight File Generation
- Automated Process Creation
- Asset Management

- Asset Browse and Search
- Asset Version Control
- Dashboards
- Reporting and Administration

- High Performance Model Fly-through
- Spatial Query
- Search by Context and Metadata
- Visual Business Intelligence

- 3D Animations
- Tech. Document Publishing
- Photo-realistic Imagery
- User Interface Configurability

- Collaboration
- View and Mark-up
- View 3D Models and Animations
- View 3D in MS-Office & PDF

Manufacturing Planning
Mobile Publishing
Metadata Editing
Localization
Visual Design Stream

JT Viewing
Mobile Viewing
Analytics Integration
EAM/CRM Integration
Side Panel Integration
SAP 3D Visual Enterprise Author (VEA)

Introduction

VEA is a comprehensive content creation tool and features CAD conversion and a variety of output deliverables.

The basic functionality remains the same for shop floor assembly, photo-realistic rendering, field service work instructions, technical illustrations, and 3rd party plugins.
SAP 3D Visual Enterprise Author 7.1
New Foundational Elements

- Language support for 8 core languages
- New error logging and enhanced user warnings
- CAD loader updates
  - Catia V5R62012
  - Creo 2
  - NX 8
- Security enhancements include process isolation
SAP 3D Visual Enterprise Author 7.1
Mobile Publishing for iPad Content Delivery

- 3D content can be published for any SAP mobile solution.
- Step-by-Step procedures with animations, symbols, detail views, etc. are supported.
- SDK also supports Android, Windows
SAP 3D Visual Enterprise Author 7.1
Creation of “Visual Design Stream” (VDS) High Performance Format

- Massive models of nearly any size can be viewed with this cutting edge technology format.
- New functionality with 7.1 release – complementary to VEG VDS publishing
SAP 3D Visual Enterprise Author 7.1
Ease of use layout enhancements

- New Layout & Language selection “Welcome” screen
  - Streamlined interface for Mobile Publishing
  - Streamlined interface for Work Instructions
- New “Publish” and “Export” menus for task oriented
SAP 3D Visual Enterprise Author 7.1
New enhanced customizable metadata editing panel

- Faster entry and creation of custom business data metadata
- New selection highlighting features
- Import/Export to Excel
Add-on to Visual Enterprise Author to create and maintain Material BOMs from Engineering BOM (Document Structure)

Provides a graphically supported handover from Engineering to Manufacturing for rearranging engineering BOM structures for manufacturing needs.

The customer needs to have SAP PLM CAD integration in place to create the document structure and needs to have Visual Enterprise Generator to create the RH viewing files.
SAP 3D Visual Enterprise Viewer (VEV)
Introduction

User Content Viewing

• VEV is the free technology for viewing, collaborating, and playback of interactive 3d content. It supports Shop Floor & Field Service step-by-step work instruction procedures, massive model Visual Design Stream navigation, Collaboration/Mark-up, measurement, and is embeddable in many applications.

• This application in addition to running standalone is integrated in the following areas. SAP PLM, SAP ME, SAP EAM, SAP CRM, and Business Object Dashboards, MS Office, & HTML (IE, FireFox, Chrome)

• VEV supports native loading of additional formats with ECAD module.
SAP 3D Visual Enterprise Viewer 7.1
Native JT Viewing

- View JT (Jupiter) file formats with PMI (Product Manufacturing Information).
- Enables customers who need to use the JT format (e.g. automotive suppliers) to employ Visual Enterprise Viewer as their standard viewer without the need to install, maintain, and use two viewers.
- The customer needs to have SAP PLM CAD integration in place to create the document structure and needs to have Visual Enterprise Generator to create the RH viewing files.

NOTES:
1. MATERIAL: ST. STEEL TYPE 301
2. APPLIED FINISH: EPOXY POWDER COAT COLOR BLACK
3. MARK EMBL. NUMBER IN APPROXIMATE LOCATION NOTED WITH 13 MIN.
4. DIMENSIONAL INSPECTION NOT REQUIRED.
5. DIMENSIONAL TOLERANCE OF .001 TO .000 (EACH). WHERE MODEL SHARP.
6. REMOVE ALL BURRS.
7. THREAD CALLOUTS INDICATE MINIMUM DEPTH OF FULL THREAD.
8. DIMENSIONAL TOLERANCES APPLY AFTER PLATING AND COATING.
9. TOLERANCES UNLESS OTHERWISE SPECIFIED.
10. HOLE DIAMETER TOLERANCES:
   • H7: +0.004 -0.000
   • H9: +0.001 -0.000
   • H11: -0.001 -0.000
   • H12: +0.004 -0.000
   • H13: +0.000 -0.000
   • H14: +0.001 -0.001
11. DIMENSIONAL DATA TO BE MEASURED WITH PART IMMOBILIZED TO PREVENT RACTION.
12. THREAD CALLOUTS INDICATE MINIMUM DEPTH OF FULL THREAD.
SAP 3D Visual Enterprise Viewer 7.1
Dashboards Analytics Integration

- Available as a plug-in to Business Objects Dashboards to view the results of analytics queries in the viewer and use the tagged viewer information (material numbers) as input for queries.
- Enables analysis of the results of an analytics query in context of a 3D graphical representation.
- The customer needs to have SAP PLM CAD integration in place to create the document structure and needs to have Visual Enterprise Generator to create the RH viewing files as well as SAP Business Objects Dashboards.
SAP 3D Visual Enterprise Viewer 7.1
Customer Relationship Management Integration

- Integrated in the CRM service order to visually specify the components, which are necessary for the service process.
- Enables customers to improve their service, since it reduces the risk that wrong components are ordered, which would cause delay and increased material cost.
- The customer needs to have SAP PLM CAD integration in place to create the document structure and needs to have Visual Enterprise Generator to create the RH viewing files.
SAP 3D Visual Enterprise Viewer 7.1
Enterprise Asset Management Integration

- Integrated in the EAM work order to visually specify the components, which are necessary for the service/maintenance process.
- Enables customers to improve their service/maintenance, since it reduces the risk that wrong components are ordered, which would cause delay and increased material cost.
- The customer needs to have SAP PLM CAD integration in place to create the document structure and needs to have Visual Enterprise Generator to create the RH viewing files.
SAP 3D Visual Enterprise Viewer 7.1
Side Panel Integration

- Increased number of transactions, where VE Viewer is integrated in the side panel using NetWeaver Business Client.
- Enables customers to improve many business processes by supporting them with 3D graphics
- The customer needs to have SAP PLM CAD integration in place to create the document structure and needs to have Visual Enterprise Generator to create the RH viewing files, and needs to implement SAP NetWeaver Business Client.
SAP 3D Visual Enterprise Viewer 7.1
Mobile Viewing iPad App

- Enables Visual Enterprise viewable files in the VDS format away from the desktop.
- Enables viewing of 3D product structures including visual work instructions at any place.
- SDK is available for integration to any SAP Mobile Apps
- The customer needs to have SAP PLM CAD integration in place to create the document structure and needs to have VE Generator or Author to create the VDS viewing files.
## Rapid Deployment Solutions

<table>
<thead>
<tr>
<th>Description</th>
<th>Scope</th>
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<tbody>
<tr>
<td><strong>PLM Foundation</strong> (Discrete/Process)</td>
<td>Implement PLM Web UI</td>
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<tr>
<td><strong>Product Structure Synchronization</strong></td>
<td>Implement Synchronization between Engineering BOM and Manufacturing BOM</td>
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<tr>
<td><strong>Visual Enterprise</strong></td>
<td>Implement infrastructure to enable 3D visualized product information in R&amp;D, Manufacturing, Sales and Service.</td>
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<tr>
<td><strong>CAD</strong></td>
<td>Implement CAD integration</td>
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<tr>
<td><strong>Project Portfolio Analysis</strong></td>
<td>Implement product portfolio analysis dashboards</td>
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Demo
Demo
Outlook
Customer Connection
Objectives

- Improvements for SAP’s products and solutions in productive use
- Simple deployment for customers for easy and fast adoption
- Customer-driven approach with clear responsibilities
Customer Connection
Deliveries and Activities

66 Improvements delivered!
Details can be found via www.sapimprovementfinder.com or see SAP Notes 1614911 and 1643532. Topics: CAD Desktop, Portfolio & Project Management, and various PLM topics

10 PLM Web UI improvements planned for development!

- External Kickoff Oct. 23rd
- Final Call Feb 16th
- Selection Call (May CW 20/21)
- Delivery Call (all IRs except GSS) (Mid of Sep 13)

Define
- Definition of Focus Topics for improvements
- open project workspace Oct 15th

Collect
- Collection of Improvement Requests
- close project workspace Feb 22nd

Select
- Selection of improvement requests for implementation

Develop
- Development (delivered as notes /SP)
- 2 weeks
- ~6 months

Use
- Productive use in customers’ systems
PLM Web UI Customer Connection
Status for Selection Call

In Total 119 Improvement Requests (IRs) have been provided.
• 33 with at least five “subscribed customers” where submitted.
  • 10 planned for development
  • 9 pending
  • 14 rejected

- planned for development
- pending due to customer alignment
- rejected due prioritization
- rejected - other reasons (BCV Product area)
- rejected - exceeding size/effort
- rejected - due to violating design rules
- rejected - Consulting Solution available
Further Outlook

**Cloud:** PLM-related scenarios in the Cloud

**Mobile:** Gateway interface to SAP PLM, Mobile Engineering/Product Change Management, Engineering Workspace/Dashboard

**Analytics:** Embedded Analytics, Visualization and Analytics

**Applications:** Customer Connection, Mechatronic/System Engineering, CAD – Simplicity and Expansion, 3D Visual Enterprise Planner, 3D Visual Enterprise Generator ERP Integration, Master Data Governance (MDG) for Material, Product Compliance

**Database & Technology:** Virtual Data Model (VDM) for PLM objects, classification, BOM explosion (focus on MRP), Variant Configuration, Embedded Search via HANA, Product Costing with HANA
Summary
Summary
Resources (1/2)

Solution Explorer

Customer Influence
Summary
Resources (2/2)

Road Maps

SAP Road Maps

<table>
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<tr>
<th>Line of Business</th>
<th>SAP Road Map</th>
<th>Seclusions</th>
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<tr>
<td>Enterprise Asset Management</td>
<td>Edition 2012Q4</td>
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<td>Finance</td>
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<tr>
<td>Sales</td>
<td>Edition 2015Q1</td>
<td></td>
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</tbody>
</table>
You got insights into:

- Latest innovations in core PLM
- Continuous improvements with Customer Connection
- Future plans leveraging In-Memory, Cloud, Mobile
- Look & feel of the innovations
THANK YOU FOR PARTICIPATING

Please provide feedback on this session by completing a short survey via the event mobile application.

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For ongoing education on this area of focus, visit www.ASUG.com

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