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Strengthen Your Brand Through Strategic Product Lifecycle Management

New SAP PLM 7.01 Features Enable You to Link Product Development to Your Overall Business Goals

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In the slow but steady economic upturn, the world expects product innovation. For a company to succeed, people throughout the organization need a consolidated view into product data throughout that product's life cycle. By taking a holistic approach to product lifecycle management (PLM) and aligning product plans with the overall corporate strategy, a company will be better positioned to strengthen its products and protect its brand.

In this article, I will explore six best practices to help product development and project management line-of-business owners achieve success. Also, I will explain how the new **SAP Product Lifecycle Management (SAP PLM) 7.01** release helps businesses achieve brand excellence.

1. Develop Innovative Ideas Through Internal and External Channels

Business leaders in product development and management face the daunting challenge of establishing an innovation community in which participants can freely brainstorm, capture ideas, and collaborate to bring the best initiatives to fruition. To cultivate these ideas, you should encourage your workforce to join the process — and involve partners, suppliers, and customers as well.

However, this collaboration is only part of the equation. Equally important is how your company acts on the collaborative ideas. To help you better select the most promising ideas and act early enough to seize the largest market share, consider linking an idea management solution with a portfolio management solution. An integrated solution for idea management improves idea selection and evaluation processes, lowers costs by reusing knowledge, and reduces time-to-market by accelerating the most promising ideas all the way to development.

SAP Software for Idea Management Drives Innovation

SAP software for idea management, which is in ramp-up, enables you to define ideation needs and solicit input from the appropriate audience and from social networks through a connection with SAP StreamWork (see **Figure 1** on page 24). You can also consolidate, categorize, and manage all ideas in one application; document and formalize reviews and evaluations; promote ideas to initiate the development of prototypes or business cases; and integrate idea management with portfolio and project management to link the most promising ideas to your product portfolio.

2. Improve Portfolio Management Decisions and Gain Better Transparency into Project Performance

Optimally managing your product development portfolios and projects means aligning them with the overall corporate vision. Linking your PLM processes to the company-wide strategy helps you develop a plan to execute and monitor against that strategy.

And, to ensure that you invest your resources in the right projects and complete those projects on time and within budget, you should have a clear portfolio plan and streamlined project processes. This involves creating feasible and lean project roadmaps, taking into account the different skills and availability of your resources.

By taking a holistic approach to PLM and aligning product plans with the overall corporate strategy, a company will be better positioned to strengthen its products and protect its brand.

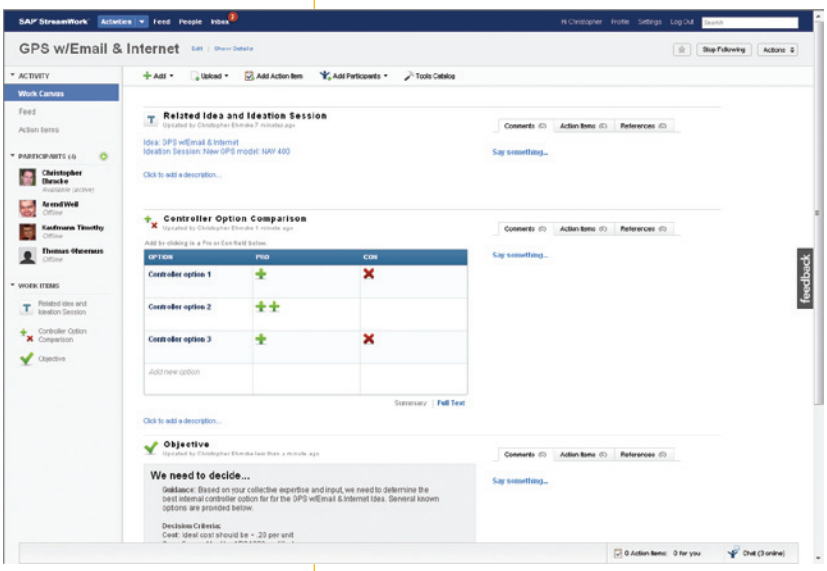
With an integrated portfolio and project management solution, you can standardize and improve your project management activities — ultimately reducing administrative overhead.

SAP Portfolio and Project Management 5.0 Links Ideas with Business Processes

SAP Portfolio and Project Management 5.0 offers a wide range of functions for planning, executing, and controlling portfolio and project management processes. The application enables you to define and display many types of portfolios. Plus, it gives you a full, consistent overview of the entire product life cycle. Let's look at the capabilities available with this solution.

- **Portfolio management functionality** allows you to exercise optimal control over all of your projects, processes, products, and services. By integrating data from project management, HR, and financial applications, you gain an up-to-date overview of resource availability.
- **Resource management functionality** enables you to use available time and money efficiently and assign staff to suitable initiatives according to their qualifications and your strategic needs.
- **Project management functionality** lets you plan, implement, control, and track project processes. It also supports structuring, scheduling, and visualization, as well as operational and financial planning and execution.
- **Sophisticated graphical analysis and flexible dashboard interfaces** help you manage all portfolio and project activities. You can easily view project statuses and comparisons of planned budgets and deadlines with actual outcomes. There are also intuitive dashboards for employee planning and cost and risk analysis.

FIGURE 1 ▼ SAP software for idea management connects with SAP StreamWork; users can collaborate around ideas and evaluate and vote on pros and cons, for example



SAP Enterprise Project Connection Puts Information into Context

Information residing in disparate application data stores is of limited value until it has context. SAP Enterprise Project Connection enables you to integrate project systems and consolidate existing project data in your enterprise; project information can be exchanged — in context — between project and portfolio management applications.

What's more, optimized synchronization of project information ensures that it is timely, accurate, and complete. SAP Enterprise Project Connection transforms Primavera P6 scheduling data into valuable information that is orchestrated with the overarching information managed by SAP ERP and SAP Portfolio and Project Management. The solution also:

- **Shortens implementation time.** The solution includes out-of-the-box connectors and prebuilt, best-practice data mappings, workflows, and business process templates, reducing integration project timelines from months to days.
- **Offers a flexible architecture.** Built on service-oriented architecture principles and leveraging comprehensive information models, the solution provides a flexible framework on which to configure integration requirements, eliminating costly customizations for routine changes.
- **Increases business process agility.** The solution lets you incorporate, enforce, and change business processes without custom coding.

3. Achieve Design Excellence Through Collaboration

Engineering groups use PLM solutions to manage change, insert drawings, and administer versioning and plotting. As product life cycles grow shorter and margins become smaller, engineering must also collaborate with the supply chain, factory floor, and quality and service groups to keep costs down. Collaboration with internal and external engineers across the globe is essential to optimizing product development. At the same time, companies need to maintain secure access control to protect sensitive data.

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Rapidly Deploy PLM Functionality

The market is demanding more agile, rapid deployments of modular software, and implementing a large, customized business solution may not fit your current budget or timeline. In response, SAP has introduced a new, integrated delivery approach designed to fix the scope, contain the costs, and streamline the schedules for software implementation. SAP Rapid Deployment solutions allow customers to quickly and affordably deploy targeted, complete SAP solutions for specific business requirements at a low service-to-software ratio.*

For the PLM space, the new SAP Portfolio and Project Management rapid-deployment solution for portfolio monitoring enables businesses to align their development projects with their portfolio strategy. It allows:

- Portfolio-based decision-making support and production planning for new projects running in the project system functionality within SAP ERP.
- Portfolio-level monitoring of existing projects running in the project system functionality within SAP ERP.
- Reduction of the project failure rate in terms of budget and schedule overruns, poor alignment, mismanaged requirements, or technical failures. Managers receive alerts about potential problems and have visibility into ongoing project details, enabling them to be proactive.
- Reduction of the time spent gathering project status data and manually building reports. The rapid-deployment solution captures project data at its source and generates dashboards and reports to eliminate manual work.

Visit **www.sap.com/solutions/business-suite/plm/portfolio-and-project-management-software/rapid-deployment** to learn more.

* See "Bring Speed and Predictability to Your Next Software Implementation" by Robert Viehmann in the January-March 2011 issue of *SAPinsider* (sapinsider.wispubs.com).

Collaboration and Analytics Tools Foster Efficient Product Development

SAP PLM 7.01 combines support for development processes with a central data store and tools for collaboration. For collaboration with fully trusted partners, SAP PLM 7.01 enables controlled, secure access to your product data through the SAP Collaborative Product Development application. For collaboration with less trusted partners, the application offers controlled access to copies of your data on a separate server running the Collaboration Folders (cFolders) application outside of the firewall.

While SAP PLM's collaboration tools help design teams think outside the box, its analytics tools leverage information from the entire enterprise to support engineering, research and development, and decision-making processes. For example, the Business Context Viewer, which is integrated with SAP PLM, provides embedded analytics in the context of product-related business processes. Without leaving the SAP PLM user interface (UI), stakeholders can quickly access advanced product information so they can make informed decisions. With the 7.01 release, the Business Context Viewer is now open to allow analysis from any data source, including legacy systems or non-SAP systems.

Product Structure Management Functionality Supports Bills of Materials

The product structure management functionality within SAP PLM provides an open concept to manage different kinds of bills of materials (BOMs). For example, the solution supports the creation of concept BOMs for high-level product definition, document BOMs to display document hierarchies, and material BOMs to support production order and logistics processes.

Engineering Change Management Reduces the Impact of Product Modifications

Improperly managed product changes are a top reason for inconsistent product documentation, which may lead to problems in downstream processes. To address this concern, engineers can use engineering change management functionality to modify aspects of master data according to time history or specific parametric conditions.

For example, the engineering change record functionality within SAP PLM 7.01 enables users to manage product documentation changes. To minimize the impact of product-related changes, the functionality provides change-management-centric workflows and transparency across the product life cycle. Predefined process routes and templates, as well as new ad hoc workflow functionalities, make the change process much easier than it was in the past. What's more, change process analytics help you easily track and maintain workflow processes through intuitive UIs.

4. Align Product Development with Manufacturing

Product development doesn't begin and end with engineering; engineering and manufacturing need to align their efforts. Handing off an engineering BOM to manufacturing without strong PLM can involve a lot of rework, since the two departments use BOMs differently. Some companies have had to restructure a BOM entirely to

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facilitate the manufacturing phase, and then undo and redo the process for engineering changes.

Product Structure Synchronization Streamlines the Handover to Manufacturing

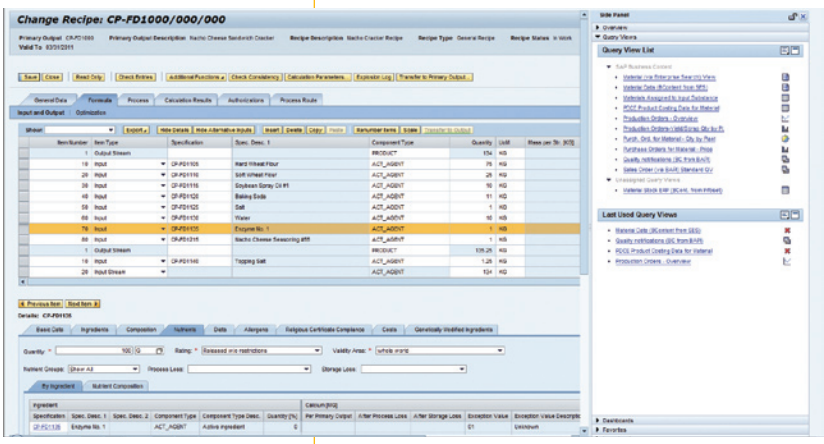
To facilitate the cohesion between departments, product structure synchronization features in SAP PLM 7.01 let you guide the transition of engineering data structures into manufacturing production processes. For example, the cross-functional, semi-automatic reconciliation of BOMs keeps all changes transparent during the handoff from engineering to manufacturing, and keeps them catalogued in the software so that resynchronizing after a change is largely automated. Increased flexibility and efficiency means fewer incorrect or outdated BOMs, and support for product synchronization processes is automatically integrated with back-end applications.

5. Ensure Product Quality and Compliance

Achieving success in the marketplace requires more than developing products quickly and efficiently — you also need to ensure quality and regulatory compliance. This benefits the environment and also helps you avoid the cost of noncompliance with state and federal regulations, which can be steep.

Embracing SAP's approach to embedded product compliance can help your company minimize risk by enabling you to develop compliant product specifications, manufacture a compliant product, and keep it compliant throughout its life cycle — thereby protecting your revenue and brand. This is enabled by operational controls and compliance visibility within a single, comprehensive, global framework across the product life cycle.

FIGURE 2 ▼ New UI for SAP Recipe Management



Quality and Compliance Functionality Reduces Risk

SAP PLM 7.01 includes several new features that support quality and compliance, including improved support of the REACH registration process required for discrete and process industries, simultaneous discrete and process compliance checks, and integrated compliance checks of procurement and production processes.

6. Meet Specific Requirements for Process Manufacturing Industries

While discrete manufacturers have been big adopters of PLM since its inception, companies in the process manufacturing industry are just now looking to the methodology and software to help them overcome the outdated, siloed, and manual processes that govern their operations.

Recipe Formulation and Management Features Ease Final Product Creation

SAP PLM 7.01 includes a rich set of features, including SAP Recipe Management, that help companies in process manufacturing industries specify the inputs and processes — the recipe — required to develop a final product (see **Figure 2**). With this functionality, you can optimize formulations, create final product specifications, evaluate real-time calculations of key measurements, prepare product labeling data, and transform formula information into a final view of a label.

With additional features — like formulation tools to help accurately assess formula properties and an object navigation tool to investigate relationships among product development objects — you can automatically manage ingredients, allergens, and nutrition statements, and calculate recommended dietary requirements. Checking compliance and validating business context become routine tasks. Through configurable UIs, users can see exactly the same product development data, reducing the risk of errors in the transfer of specifications for materials, safety levels, and quality.

Learn More

With SAP PLM 7.01, SAP has released myriad features and functionality to help businesses successfully manage their products and achieve brand excellence — and I've only touched the tip of the iceberg here. Learn more at **www.sap.com/solutions/business-suite/plm**. ■

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