BUSINESS AT THE SPEED OF CHANGE

SAP Product Lifecycle Management (SAP PLM): A Look into the Future of Product Life-Cycle Management

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SAP SAPPHIRE

BUSINESS AT THE SPEED OF CHANGE

Business Challenges and SAP's Vision

Industry Scenarios

SAP PLM Application and Road Map

Summary

SAP SAPPHIRE

Business Challenges . . . for Innovative Companies

Globalization and design outsourcing

. . . it's about building a NETWORK OF TALENT ...

Product and process innovation

. . . PRODUCT DESIGN drives BRANDING and vice versa . . .

Digital product

. . . Comprehensive, PRODUCT-CENTRIC INFORMATION **is the key to business success . . .**

Risk management and compliance

. . . especially the GREEN WORLD . . . is of the highest importance . . .

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SAP PLM: The Business of Products

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The Business of Products

…Marketing affects product strategy

…Manufacturing can drive product innovation

…The supply chain has an impact on brand perception

…Engineering designs green world products

…Everybody needs product-centric info

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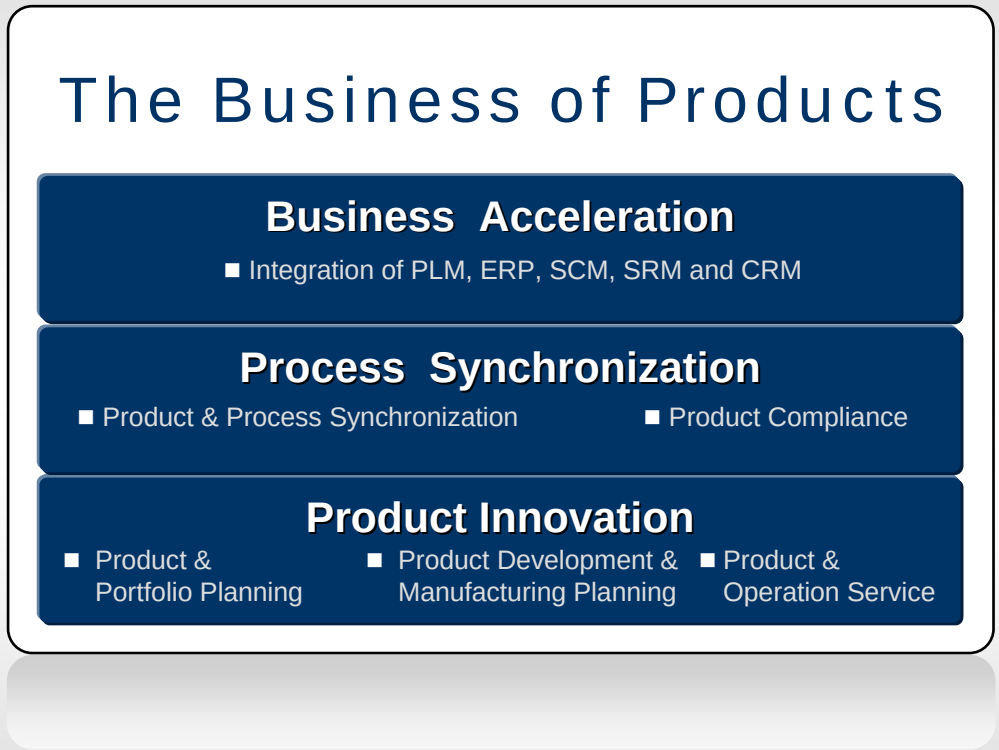
SAP PLM: The Business of Products
Optimizing the Full Enterprise for Product Success



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SAP PLM Vision and Mission Statements: Driving the Business of Products for Customer Success

Vision Statement

We believe, the true vision and greatest value of PLM, lies in its ability to drive the "business of products", coupled with a company's enterprise business processes.

Mission Statement

Deliver the best integrated end-to-end process support to our customers along the product lifecycle driving profitability and growth through innovation.

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SAP PLM: YOU Drive Development Priorities

Our ambition is not only to solve today's challenges but also to address upcoming, foreseeable business scenarios and industry trends as identified by partners, analysts, and customers

A group of industries that shows representative requirements and significantly influences the road map for SAP PLM

High tech

Automotive

Industrial machinery

Consumer products

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The Complex High-Tech Ecosystem: Differentiation Is Marked by Inside-Out Technological Innovation

Industry trends

Overall

- **Short product life cycle with small window of high margins**
- **Less risk-averse**
- **Fast technology adoption**
- **Highly competitive with intense price-pressure**

Original equipment manufacturer (OEM)

- **Differentiates by constant innovation in core areas**
- **Technology is the product and the innovation enabler**

Ecosystem

- **Highly distributed and complex ecosystem**
- **Continuous value chain reorchestration by outsourcing**

Implications for product life-cycle management (PLM)

Collaboration is key

- **Support collaboration with external partners in one system and in a decoupled manner**
- **Provide comprehensive authorization capabilities**

Flexibility of technology

- **Support integration of various authoring tools**
- **Ease implementation in a continuously changing (legacy) system environment due to mergers and acquisitions**

Protection of intellectual property

- **Monitor technology road maps, manage liabilities and royalties, and drive own patents**
- **Identify and foster key differentiators by providing visibility into the product portfolio and market requirements**

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Increasing Competitive Pressure Requests Adaptive PLM Solutions for Auto Companies to Enable new Business Scenarios

Industry trends

Demand

- **Customers expect increasing functionality at constant prices**

Substitution and disruption

- **Low-cost entrants threaten volume business of established vendors**

Production

- **OEMs react by outsourcing entire components to tier-1 suppliers**

Innovations

- **Internal processes did not catch up with external pressure for innovation**

Implications for PLM

Front-loading

- **Support the management of early, immature. and unstructured product and process information**
- **Enable rapid prototyping by up-to-date data provisioning to design, sourcing, manufacturing, and marketing to identify potential issues early in the life cycle**

Huge number of variants

- **Powerful variant configuration capabilities with staged exposure to complexity for different roles in the company (marketing, product management, and designers)**

Digital manufacturing

- **Connect process design with product and plant design information**
- **Provide backbone for production simulation and what-if scenarios**

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Future Evolution in IM&C and E&C Depends on Support for the Complete Life Cycle of a Product

Industry trends

Markets

- **IM&C markets are more or less saturated**

Growth

- **Future growth can be achieved by moving toward a solution-provider business that offers engineering and systems integration services**

Production

- **IM&C manufacturers will increasingly outsource non-core operations and become more adaptable in their production**

Implications for PLM

PLM for IM&C is PLM

- **Support product life cycle from engineering to support and support service business models**

Project-oriented design

- **Plan, maintain, and control all project-related activities, costs, budgets, and deliverables**

Component reuse; design to cost

- **Easily identify reusable components that meet customer requirements**
- **Support target costing process and part catalog integration**

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Consumer Products

Industry trends

Markets

- **Consumer product (CP) markets are saturated**
- **Exploding variety of products and brands**
- **Shorter product life cycles**
- **Customer sensitivity to prices**

Competitive challenges

- **30,000 products are introduced per year**
- **More than 60% fail in the market**
- **New ideas are copied quickly and leave decreasingly less time for ROI**

Regulation

- **Increasingly complex compliance with national and international regulations for processes, specifications, and materials**

Implications for PLM

Fostering and speeding up innovation

- **Support internal and external ideation process**
- **Effectively capture customer needs**
- **Structured process for concept evaluation and prioritization**

Up-to-date portfolio information

- **Provide insight into actual and planned portfolio**
- **Map company strategy to market trends and own product lines and competitor positioning**

Support multichannel product launch

- **Ensure secure communication and data provisioning to various channel partners (reseller, retail, and so on)**
- **Allow easy product diversification with reuse, templates, and structured and guided decision-making processes**

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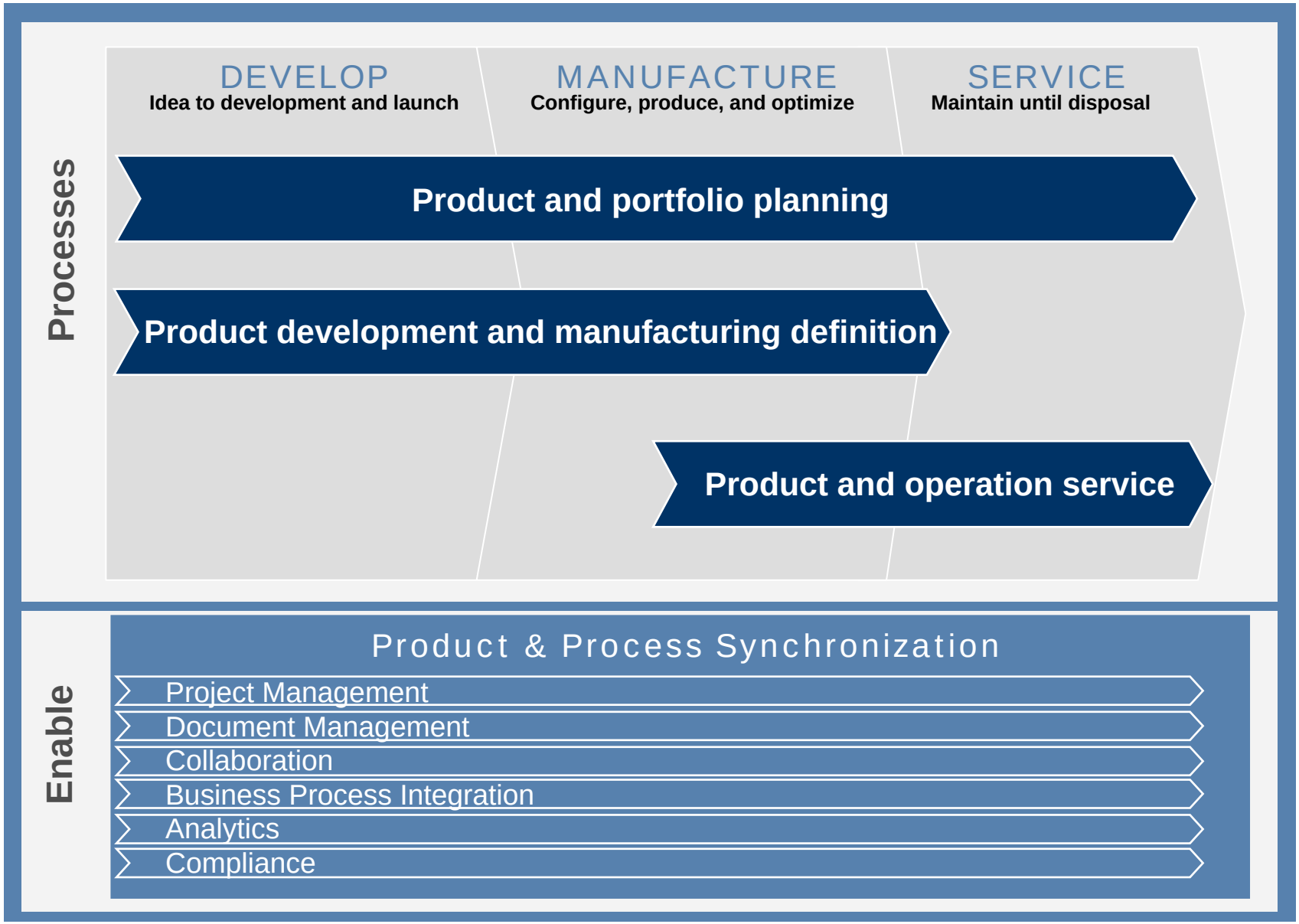
Product-Centered Processes and Enablers: Processes and Enablers Supported by SAP PLM



SAP PLM: Development Priorities

SAP PLM Development Priorities

Simplicity, Usability – Adaptability

Product & Portfolio Planning

Product Development & Manufacturing Definition

Product & Process Synchronization

Product Intelligence

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Simplicity

Definition

SAP's simplicity project provides an easy-to-deploy and easy-to-use user interface. Information is provided in an intelligent way to foster efficiency and productivity for power and occasional users. The user interface is based on the standard of SAP NetWeaver Business Client and includes an enhanced PLM dashboard and analytics

Development scope

- User interface
- Easy to deploy
- Powerful and easy-to-use search

Business value

- Easy to learn and easy to use
- Increase productivity and system acceptance
- Flexibility and adaptability for user demands
- Data quality and motivation
- Easy to deploy and easy to change for faster ROI
- Reduces software maintenance costs

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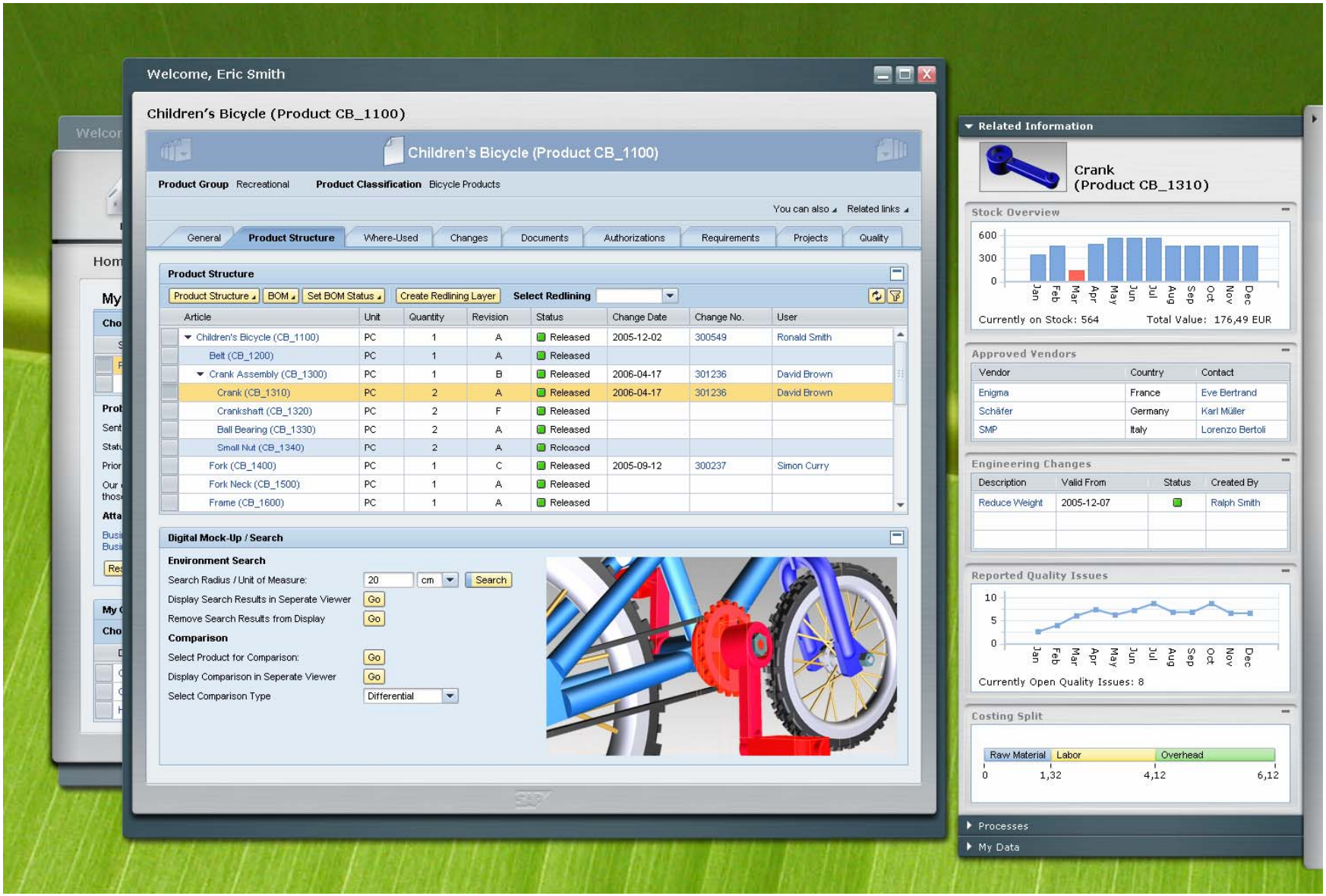
Simplicity



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Product and Portfolio Planning

Definition

SAP's offering to support innovation management includes leading practices like idea and requirements management, portfolio management, strategic and operational resource management, and project management

Development scope

- Decision flow management
- Simplicity and integration
- Process enhancements
- Change management
- Service enablement
- Risk management

Business value

- Fact-based decision making with the pervasive use of business and product knowledge
- Bring more innovative products to market
- Real-time information with investment and cost tracking
- Reduced failure rate with risk analyses

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Product Development and Manufacturing Definition

Definition

The new SAP PLM application will support the complete product development process, including integration into innovation and service processes. It strongly supports the design and engineering phase and the hand-over to follow-on processes. It is built to facilitate various strategies, such as make to stock or engineer to order

Development scope

- Product structure management
- Change process support
- Product standardization concepts
- Enhanced variant configuration
- Life cycle management
- Manufacturing integration
- Digital manufacturing support
- Innovate to realize
- Product services

Business value

- **Optimized product data handling with less time and effort and increased product data quality**
- **Flexible and fast adoption of product definitions to the needs of different manufacturing facilities and market and customer requirements**
- **Streamlined product cost based on platform and standardization concepts**

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Product and Process Synchronization

Definition

Synchronization includes the product infrastructure and all cross-enabler capabilities that provide the foundation for all PLM business processes. A broad set of new and improved cross-capabilities will put our customers in a position to master their integrated PLM processes from first idea to retirement

Development scope

- Collaboration support
- Analytics
- Workflow
- Digital-mock-up viewer
- Service enablement
- PLM browser and PLM object navigator
- Workbench framework

Business value

- Optimized total cost of ownership for PLM capabilities based on a unified PLM landscape
- Effective process support for fast information exchange across organizational boundaries
- Increased product development processes with seamless data flow
- Single version of the truth for product data
- Extended value chain

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Product Intelligence

Definition

Intelligence includes the capabilities to provide easy access to comprehensive and extended product content and context – to support a variety of analytic and decision support applications and processes – enabling cross-functional innovation and performance management across all stages of product life cycles

Development scope

- **Flexible, extensible product taxonomies**
- **Multidimensional, product-centered definition**
- **Comprehensive SAP context (360° view)**
- **Extended product context (720° view)**
- **Real-world awareness context (1080° view)**

Business value

- **Identify areas of improvement (cost, quality, compliance, serviceability, and so on)**
- **Extend product visibility and intelligence to new processes and roles**
- **Life-cycle assessment of direct and indirect costs: material, energy, and resources**
- **Design for X, Y, and Z support**

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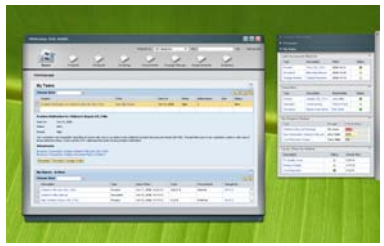
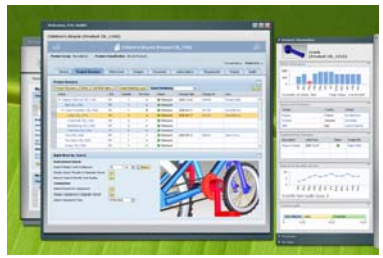
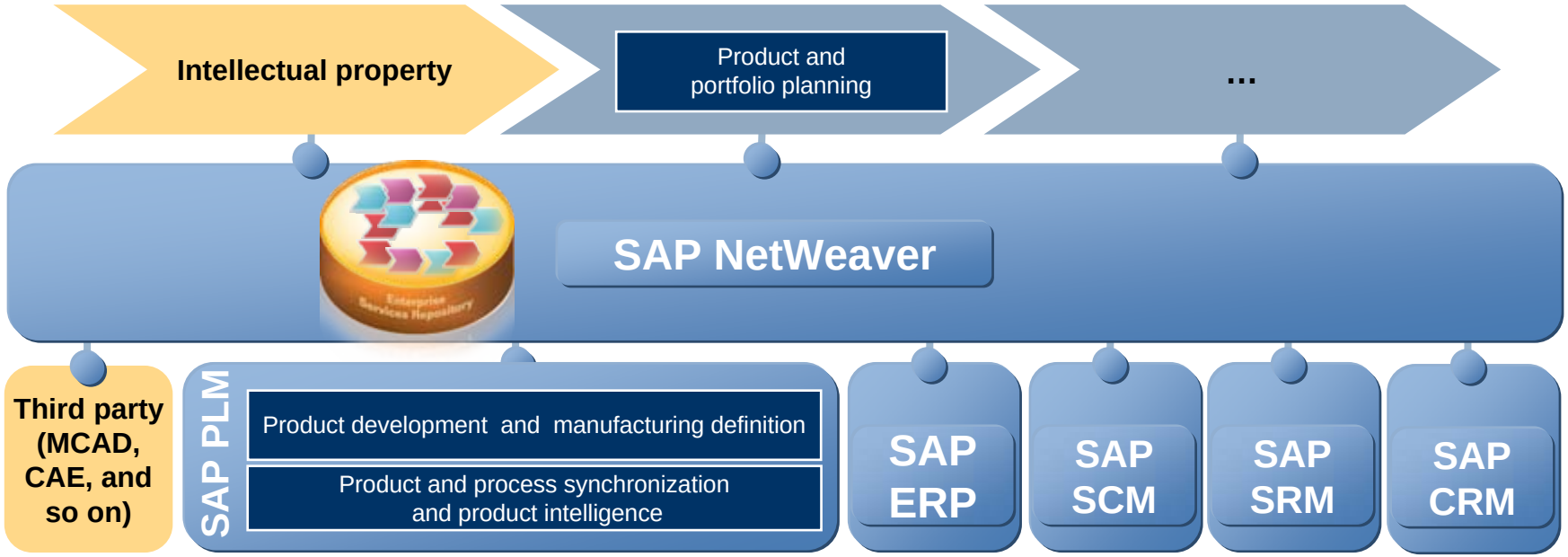
SAP PLM: Enterprise Service-Oriented Architecture to Provide Simplicity and Flexibility







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SAP PLM – The Business of Product

Q4/2007 — INTEGRATION

- **Product portfolio planning: build out integration capabilities for resource and portfolio management and project management**
- **Product development: recipe management enhancements (labeling)**
- **Product synchronization: enterprise service bundle for quote-to-cash for configurable products**

2008 — SYNCHRONIZATION

- **Simplicity: invent user-centric user interface and powerful search capabilities**
- **Product portfolio planning: phase and gate innovation process support and synchronization framework**
- **Product development: manufacturing release management framework**
- **Product synchronization: collaboration, extended CAD integration, and enterprise service-oriented architecture**
- **Product intelligence: comprehensive 360-degree view with flexible product center**

2009 — ACCELERATION

- **Product portfolio planning: preconfigured data synchronization between portfolio management and PLM objects**
- **Product development: product structure and life cycle management, redlining, product standardization concepts, and variant configuration**
- **Product synchronization: workflow, and enterprise service-oriented architecture**
- **Product intelligence: extended product context from distributed systems**

2010 — ASSIMILATION

- **Product portfolio planning: enhanced risk mgmt.; open innovation and collaboration**
- **Product development: digital manufacturing support, product structure mgmt., manufacturing process integration, and service integration**
- **Product synchronization: enterprise service-oriented architecture**
- **Product intelligence: support for real-world awareness contexts**

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How do you get there?

Step 1:

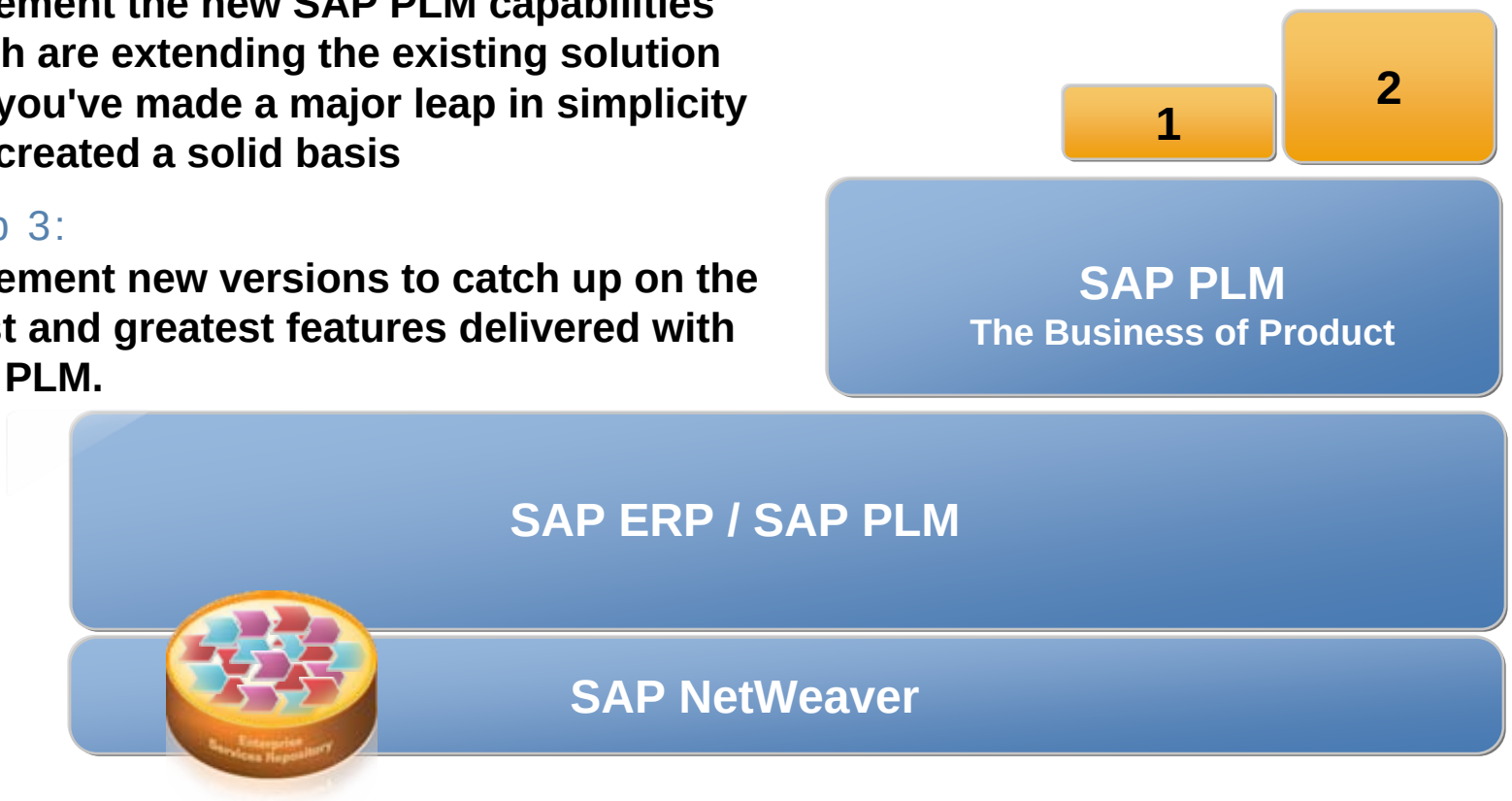
Upgrade to SAP ERP and implement the existing SAP PLM solution right away

Step 2:

Implement the new SAP PLM capabilities which are extending the existing solution and you've made a major leap in simplicity and created a solid basis

Step 3:

Implement new versions to catch up on the latest and greatest features delivered with SAP PLM.



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- **The combination of innovation, globalization, and compliance drives SAP PLM beyond the existing boundaries to a new level, which we call the business of product**
- **SAP's scope for SAP PLM with simplicity, portfolio planning, development, and process synchronization is dedicated to driving customer success and competitive positioning**
- **The application will be an evolution from the existing SAP PLM capabilities. Don't wait: start today with your SAP PLM project**

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THANK YOU FOR YOUR ATTENTION!

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