Oracle Enterprise Product Lifecycle Management

Addressing the Challenges of Product-Oriented Businesses

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ABOUT ORACLE

With more than 380,000 customers in 145 countries, Oracle is one of the world's largest vendors of enterprise software applications and a global leader in database technologies, middleware, operating systems and server hardware.

As part of its commitment to providing the most complete, most integrated and most industry-oriented range of applications available, Oracle in 2007 acquired Agile Software Corp., a leading provider of Product Lifecycle Management (PLM) software solutions worldwide.

Since that date Oracle has extended and further developed its PLM applications portfolio to create the industry's most comprehensive suite of applications for full, enterprise-scale PLM throughout the product value chain. Oracle's Enterprise PLM market leadership is supported and enabled by a large global team dedicated to developing the solutions our customers need.

Today, Oracle has Enterprise PLM development sites in the United States of America, Canada, Germany, India and China. Our Enterprise PLM solutions are used by more than 2,000 companies around the globe, across multiple industries.

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THE CHALLENGES FOR PRODUCT-ORIENTED BUSINESSES

From industrial manufacturing to pharmaceuticals and retail, today's product-oriented industries face a unique set of challenges:

+ Complex design and supply chains require many different organizations to work together to design, manufacture and service existing products and bring new products to market

+ Globalization has increased competition, created downward pressure on prices and accelerated the pace of innovation

+ Market demand is creating the need to customize products ever more closely to specific or individual requirements

+ Economic uncertainty has made it more important than ever for product businesses to be agile and responsive to fluctuating market conditions, including the creation of joint ventures and mergers and acquisitions

+ Industry regulations are becoming more stringent and more complex, with businesses having to comply with regulatory obligations in multiple jurisdictions

To thrive in these conditions, product businesses need to be efficient, agile and innovative while ensuring quality, traceability and safety. Delays in bringing new products to market have a severe business impact. Failures to comply with industry standards damage reputations and incur expensive fines, rework and write-offs. Time and money spent on innovation is wasted when someone else gets to market first.

A common problem for businesses today is that product development and commercialization processes are disjointed and inefficient. Cross-functional collaboration is rare. Different divisions and supply chain partners use their own systems, processes and ways of handling product data, making it hard to share information and collaborate effectively. Any weak points in the value chain will cause problems and delays – and in fast-moving industries, those problems and delays can be fatal for business.

A new, streamlined approach to managing the product lifecycle is needed. Drawing on our extensive work with product-oriented businesses across multiple industry sectors, Oracle has developed the expertise and the technology solutions to enable this new approach. We call it **Enterprise Product Lifecycle Management (Enterprise PLM).**

"On average, about 20% of projects are over time or budget, and more than one-third of product companies have experienced at least one runaway project. Overall, nearly 50% of the resources allocated to product development and commercialization are wasted."

– IDC, The Product Value Chain in Manufacturing, December 2011

ORACLE DEFINES ENTERPRISE PLM

Oracle defines Enterprise PLM as a strategic approach to managing the lifecycle of a product throughout its full value chain: from initial requirements gathering through to design, prototyping, obtaining certification, production, customization, service and retirement.

It unites all the partners in the value chain by providing a single, collaborative software platform for the development and management of products throughout their lifecycle.

Enterprise PLM streamlines operations throughout the product lifecycle

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ENTERPRISE PLM AS A STRATEGIC INITIATIVE

Enterprise PLM is much more than just a technology solution. It represents a new, strategic approach to the product value chain that emphasises process efficiency, cross-functional collaboration in the extended enterprise, rapid innovation, rigorous quality control, risk mitigation and cost-effectiveness.

Organizations that take an Enterprise PLM approach reap many advantages, including:

+ Higher product quality

+ Faster time to market

+ A leaner, more efficient value chain

+ Faster and easier compliance with industry regulations

+ Increased profitability for every product

+ Better management insight into product-related processes throughout the value chain

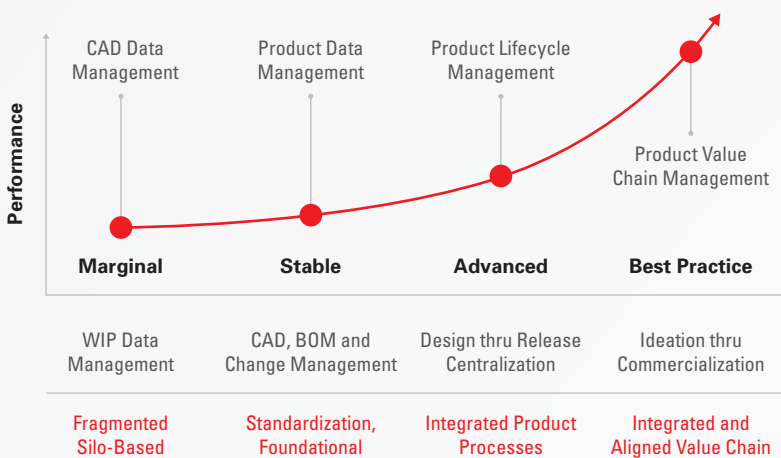+ Better decisions based on accurate and comprehensive data

The Evolution of PLM

Product lifecycle management is not a new concept. It has been applied for many years in the design and engineering divisions of manufacturing businesses.

Historically, designers and engineers have used CAD packages and collaboration software to produce digital mock-ups and validate design options, in order to develop innovative products as quickly and efficiently as possible.

Such design-centric tools require specialist skills (and expensive user licenses) to operate, and have had limited uptake in the wider organization. As a result, once outside of engineering, product information has tended to become fragmented and scattered across the different functions and systems in the extended enterprise – supply chain management, production, service – so that a single, holistic view of the product gets lost.

The Product Value Chain Maturity Curve

	CAD Data Management	Product Data Management	Product Lifecycle Management	Product Value Chain Management
Performance	Marginal	Stable	Advanced	Best Practice
	WIP Data Management	CAD, BOM and Change Management	Design thru Release Centralization	Ideation thru Commercialization
	Fragmented Silo-Based	Standardization, Foundational	Integrated Product Processes	Integrated and Aligned Value Chain

The loss of that single, consistent and comprehensive product view has different consequences in different industries, but all of them have a significant, material bearing on the business. Here are just a few examples:

In **industrial manufacturing,** engineering change orders are hard to track and implement accurately when different parties in the supply chain are using different product information definitions, resulting in wasted effort, delays and rework.

In **high technology,** accurate product data is difficult to find and grows more scattered, preventing companies from profitably managing rapid product lifecycles and capturing first-to-market price premiums.

In **life sciences,** a fragmented approach to product management can easily result in delayed regulatory approvals, inaccurate product labelling leading to regulatory fines, and extensive rework for products that do not meet mandatory quality standards.

In **food & beverage,** a safety alert on an ingredient or a supplier may not be processed quickly and accurately, resulting in insufficient or excessive product recalls and continuous leakage of a problem for a significant period of time.

In **retail,** fragmented and inconsistent product information can lead to items erroneously being recorded as out of stock, slow introductions of new product lines, and the inability to alter merchandising on the fly in response to changing business conditions.

The Bottom Line

Enterprise PLM takes the principles of engineering PLM and expands them to support all product-related business processes across the entire extended enterprise. It provides a single platform to view, access and share information, collaborate on product-related projects, monitor and manage activity throughout the product lifecycle, and produce accurate data for everything from regulatory approval filings to management reporting.

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ORACLE'S ENTERPRISE PLM SOLUTIONS

Oracle has pioneered the concept and delivery of Enterprise PLM, creating a world-class suite of software solutions that together provide a single product record and a comprehensive platform for complete product lifecycle management across the value chain.

Based on the market-leading Agile PLM suite, acquired by Oracle in 2007, Oracle Enterprise PLM also features best-in-class software solutions for customer needs management, project portfolio management, enterprise visualization, product data quality, product serialization management and product lifecycle analytics.

"Oracle's PLM product suite has clear strengths and is scoring significant successes in the marketplace. We expect to hear next year of continued growth for Oracle and noteworthy successes for their customers."

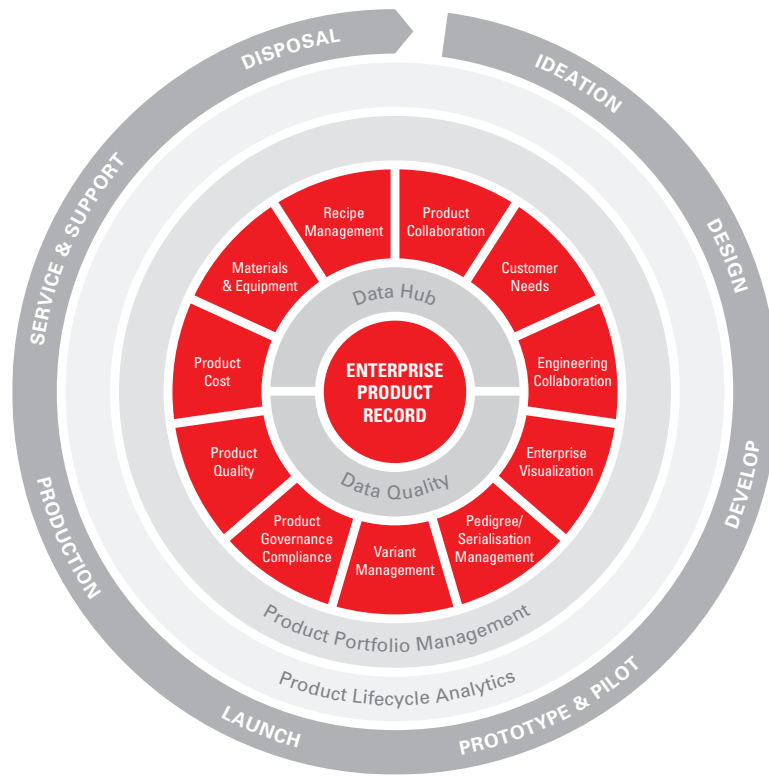– CIMdata, Progress of Oracle's PLM Vision and Reality Evident at Oracle OpenWorld 2011

With Oracle Enterprise PLM solutions, companies can transform fragmented engineering and design processes into information-driven product value chains with outstanding development processes and capabilities, global 360-degree visibility into product information, and real-time cross-functional collaboration across the entire product network.

Oracle Enterprise PLM solutions enable product companies to:

+ **Accelerate innovation** through ideation management and collaboration, product portfolio management and analytics, data consolidation and cleansing, and a rich enterprise product record

+ **Design for supply** with product cost management, outsourced manufacturing and product collaboration, product supply risk analytics, and spend consolidation

+ **Rapidly commercialize** through integrated portfolio and business planning, enterprise quality management and analytics, accurate and clean product data publishing, and rapid product commercialization

Oracle Enterprise PLM is a modular suite of applications, allowing customers to choose and implement the combination of modules that best suit their business model, existing systems and needs. Oracle Enterprise PLM provides fully integrated modules for the following PLM processes:

+ **Enterprise Product Record:** Provides secure, timely, and accurate visibility and control of product information and processes to every stakeholder at each stage in the product lifecycle

+ **Enterprise Product Data Hub:** Enables companies to centralize all product data and create a single view of product information across all functional departments

+ **Data Quality Management:** Enables companies to create consistent and reliable product data by quickly identifying and applying standards across systems, repositories, and processes

+ **Product Collaboration:** Helps users share product data and structure and manage change across the global product network

+ **Customer Needs Management:** Enables companies to capture ideas and requirements, and design, conceptualize and collaborate globally with Engineer to Order and Idea Management

+ **Engineering Collaboration:** Integrates PLM with all leading MCAD and ECAD packages and ensures engineering processes are fully leveraged throughout the product lifecycle, driving engineering best practices across the enterprise

+ **Enterprise Visualization:** Provides native document visualization across a global enterprise for over 450 file formats, including all leading ECAD and MCAD packages

+ **Pedigree and Serialization Management:** Enables companies to implement and manage mass serialization of drug products and share serialized product data across the supply chain

+ **Variant Management:** Provides a best-practice approach to managing portfolios of related products and product variants across the lifecycle

+ **Product Governance & Compliance:** Enables organizations to manage product, substance and material compliance against standards and regulatory requirements

+ **Product Quality Management:** Drives improved product quality and customer satisfaction by integrating customer, product, quality and regulatory information within a closed-loop corrective action system

+ **Product Cost Management:** Enables companies to manage product costs through early and real time cost visibility

+ **Materials and Equipment Management:** Organizes and manages product design assets to support globally distributed engineering teams

+ **Recipe Management:** Ensures quality and traceability by providing full control of ingredients, formulation optimization and a complete compliance screening engine

+ **Product Portfolio Management:** Provides tightly synchronized program and product information, maximized resource utilization, and cross-program visibility and decision support throughout the product lifecycle

+ **Product Lifecycle Analytics:** Delivers preconfigured, yet flexible dashboards and reporting facilities for the production of accurate, detailed reports covering every aspect of the product lifecycle

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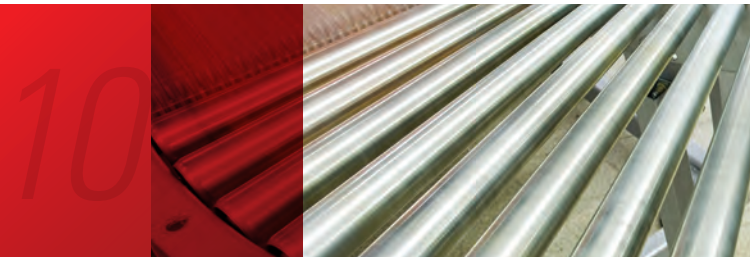
INTEGRATING PRODUCT INNOVATION AND SUPPLY CHAIN MANAGEMENT TO DELIVER INCREMENTAL VALUE

To get maximum value from Enterprise PLM, it is important to integrate product lifecycle management with a company´s overall Supply Chain Management (SCM) process.

In PRTM (PwC)'s "2011 Global Supply Chain Trends" survey, half of the respondents reported an increase in investments focused on achieving better operational flexibility. PRTM's report on this research emphasizes the importance of "tearing down the wall" that divides applications and teams in supply chain and product development processes. The report reveals that, by integrating these processes and activities from the outset, leaders in supply chain flexibility have learned to accelerate ramp-up and ramp-down of products while defining life-long product requirements and planning for significant shifts in demand and supply variability.

The benefits of an integrated approach include:

+ Better Customization

+ Improved Quality

+ Secure and Timely Delivery

Better Customization: With combined and tightly integrated PLM and SCM processes, the time lag between integrating the product development process with the configure-to-order model process can be whittled down from months to days.

Improved Quality: By establishing a consolidated, continuous view of quality information that extends across the enterprise, organizations can reduce risk and effectively manage quality processes from insight – which could come from any point along a value chain – to efficient problem resolution and corrective action.

Secure and Timely Delivery: PLM and SCM integration helps companies to streamline the flow of capturing customer needs, converting those needs to product requirements, feeding these into the bill of materials and releasing to manufacturing – all the while noting the final delivery location to ensure compliance with local regulations. The high level of operational agility offered by an integrated PLM and SCM approach is key to helping manufacturers achieve a faster time-to-market.

A GLOBAL NETWORK OF IMPLEMENTATION PARTNERS

Organizations choosing to deploy Oracle Enterprise PLM solutions can find the specialist implementation services they need among Oracle's global network of business partners.

When a customer chooses to work with an Oracle partner certified with our Enterprise PLM solutions, they have the reassurance of knowing they are combining world-class Oracle products with the extended capabilities of a partner that works hand-in-hand with Oracle to provide for specific functional area, market, or industry needs.

Industry-Specific Solutions

Recognizing that different industry sectors have unique pressures and concerns, Oracle has developed dedicated Enterprise PLM solutions for a range of industries, including Pharmaceuticals, Medical Devices, Retail, Industrial Manufacturing, High-Tech Electronics, Consumer Packaged Goods and Food & Beverage.

You can read more about Oracle's industry-specific Enterprise PLM solutions – and discover how major global organizations are reaping the benefits – in the remaining sections of this report.

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PHARMACEUTICAL
ENABLING BUSINESS TRANSFORMATION

With patents for large-scale, flagship products expiring, pharmaceutical businesses must re-focus their business model around identifying and addressing more specialized market opportunities. That means creating lean, global, development and supply networks to allow new products to be developed and commercialized faster.

+ **80%** of new drug introductions fail to achieve their predicted ROI

+ Limited patent protection can be worth $1M per day

+ **67%** of branded pharmaceutical product launches are unsuccessful

+ **$880m** in fines handed out to three global manufacturers in 2010

(Source: AMR Research)

But when many organizations are involved in the drug discovery and development cycle, business risk increases. Those risks include compromised patient safety, regulatory fines, and wasted time and money caused by process inefficiency and poor collaboration.

Oracle Enterprise PLM for Pharma is an integrated suite of product lifecycle management technologies for efficient and compliant drug development, manufacturing and commercialization.

It enables access to a centralized source of accurate product data for all parties in the value chain, and joined-up processes across the entire discovery-to-commercialization cycle "from Lab to Launch".

Powerful collaboration features enable researchers, designers, developers, suppliers, manufacturers, distributors, clinicians, prescribers and retailers to work together effectively, while its audit and compliance technologies ensure every stage is conducted in line with worldwide regulations.

Oracle Enterprise PLM for Pharma also includes pedigree and serialization management features to ensure watertight product labelling and complete traceability throughout the supply chain, to avoid regulatory penalties and the risk of counterfeit products entering the legitimate market.

Pharma-specific business processes enabled by Oracle Enterprise PLM include:

+ Drug development program execution
+ Structure Electronic Development Record (eDR)
+ Integrated clinical supply development and management
+ Technology transfer and collaboration
+ Integrated quality and risk management
+ Comprehensive packaging and collateral management
+ Global product registration

Pharmaceutical companies using Oracle Enterprise PLM bring new products to market faster, more safely and at lower cost.

Implementation Partners

Oracle's key implementation partners in Pharma include:

+ Business & Decision
+ Deloitte
+ HCL
+ IBM
+ Kalypso
+ Vialis

CASE STUDY:

BAYER HEALTHCARE

Bayer Healthcare is one of the largest manufacturers of over-the-counter drugs in the world. It has production facilities in Europe, North America, Latin America, and Asia and sells its products in over 100 countries worldwide.

With production and distribution information spread across a variety of systems and locations throughout the globe, the company wanted to increase the visibility of product, packaging, labelling and ingredients data to ensure regulatory compliance, improve supplier collaboration and reduce overall production costs while expediting time-to-market.

Rapid deployment of Oracle Enterprise PLM solutions helped Bayer Healthcare to:

+ Reduce cycle times for packaging by 1/3

+ Reduce packaging labeling errors by 50%

+ Consistently track ingredient data per country

+ Improve quality and compliance

+ Attain a global visibility of data

Following deployment, Bayer Healthcare have gained a comprehensive global overview of the relevant data and processes needed to cut cycle times, improve product consistency, reduce costs and simplify compliance.

"Agile [now Oracle] has helped us to achieve our goal: an integrated approach to manage all the relevant data and processes around our products – formulas, labelling information, and packaging specifications ."

– Craig Morgan, Sr. Director, Packaging Operations, Bayer Healthcare

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MEDICAL DEVICES
SUPPORTING INNOVATION, ACCELERATING COMPLIANCE

The medical device industry is driven by twin pressures: the need to innovate rapidly to meet demand for new therapeutic equipment, and the need to ensure absolute patient safety by complying with quality standards set by the US Food and Drug Administration (FDA) and other regulatory bodies.

There are major advantages for device manufacturers that can design and develop innovative new products and bring them to market faster than competitors. However, for many manufacturers, new product introductions are hampered by inefficient internal processes and the inability to ensure that new products meet the required quality standards before filing for regulatory approval.

The result is that many products are initially rejected by the FDA and other bodies for failing to comply with standards, representing wasted money and effort and major delays to market entry.

Life sciences companies need to automate compliance and quality processes to address regulatory requirements while improving business process performance and compliance integrity. This requires a platform that can automate and synchronize business processes across the enterprise.

Oracle Enterprise PLM for Life Sciences enables manufacturers of medical devices to streamline product development, quality and compliance. It provides a single source of accurate product data, in-built controls and compliance procedures, robust Corrective Action Preventative Action (CAPA) capabilities, management reporting on product-related issues, and a fully collaborative environment spanning research, design, development, regulatory approval, and commercialization. And if there is a catastrophic event or recall, the real-time visibility and enterprisewide quality management processes enabled by Oracle Enterprise PLM help a company respond instantly.

Medical device manufacturers taking an enterprise PLM approach have gained the following advantages:

+ 50% increase in projects launched on time and to budget
+ 40% increase in revenue and profits from new products
+ 35% increase in projects meeting revenue and profit objectives
+ 20% increase in R&D labor efficiency
+ 15% reduction in product costs

35% of Class II devices and **22%** of Class III devices are denied regulatory approval at initial filing

(Source: US Food and Drug Administration)

Implementation Partners

Oracle's key implementation partners in Medical Devices include:

+ Logica
+ MahindraSatyam
+ PCO Innovation
+ Systematics
+ Vialis

CASE STUDY:
STRYKER CORPORATION

Stryker Corporation is one of the world's leading medical technology companies. Its endoscopy division produces surgical devices for visualization and documentation systems, arthroscopy, laparoscopy, gynecology, and urology.

Faced with a cumbersome reporting system and a lack of product process unity across its many departments, the division was looking for a way to simplify reporting and streamline compliance with US Food and Drug Administration requirements.

Oracle PLM enabled Stryker's endoscopy division to:

+ Introduce a single repository for the company's endoscopy device quality data

+ Streamline and unify product process workflows

+ Increase transparency and provide key metrics to drive operational improvement

+ Move toward a closed-loop quality system and expanded report automation

Following the introduction of Oracle Enterprise PLM, the division has accelerated preparation for regulatory audits – it can now provide two years of manufacturing change history data in just 30 minutes. In addition, it has reduced the average number of corrective and preventive actions open at any given time by over 40%, cut change cycle time by 50% and improved first-pass yield of change by 90%.

"Oracle's Agile PLM applications have helped us drive significant improvements in our quality management processes, and we anticipate even greater results as we continue the project rollout."

– Chris Van Wert, Director, Quality Assurance and Regulatory Affairs, Stryker Endoscopy

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RETAIL
GET CONTROL OF PRODUCT INFORMATION

Retail in the digital, global age is a complex and rapidly-changing industry. Retailers are grappling with multiple channels to market, extensive worldwide supplier networks, economic factors affecting buyer behavior in unpredictable ways, quality assurance of private label goods, and product ranges that are moving faster than ever.

The pace of change and the economic uncertainty means retailers are looking for ways to protect margins, improve customer service and customer experience, reduce product returns and recalls, develop closer working relationships with suppliers, and introduce profitable, own-brand goods.

Getting control of product information is critical. Poor data quality and rigid information structures are barriers to profitable business, slowing down product introductions, creating confusion across channels, and making it hard to monitor shrinkage or implement agile pricing and merchandising strategies.

For retailers of own-brand goods, meanwhile, the ability to track and manage every product efficiently, from design and production through to delivery, merchandising, sale and aftercare, can make a significant difference to the bottom line.

Oracle Enterprise PLM for Retail enables retailers to centralize and manage product information, collaborate securely across the global product network, and keep full track of private label goods throughout their full lifecycle.

World-class retailers including Ahold, Tesco and 7-Eleven use Oracle Enterprise PLM to control and manage product data, collaborate with suppliers, and manage outsourced design, manufacturing and recovery partners.

The end result is improved product control, better quality, more responsive merchandising, fewer returns, reduced time to market and better customer service both online and offline – all leading to greater profitability.

Implementation Partners

Oracle's key implementation partners in Retail include:

+ Accenture

+ Fluid-e

+ Infosys

+ Kalypso

+ Tieto

CASE STUDY:

7-ELEVEN

7-Eleven is the largest convenience retail chain in the world, with 25,000 stores worldwide in 19 countries. It builds upwards of 1,500 new stores every year.

The company wanted a central repository to enable a common new SKU introduction process for corporate and store-specific SKUs. It selected an integrated suite of applications from Oracle, including Oracle Product Data Hub to manage product information across the organization.

Since implementing the Oracle applications, 7-Eleven has enabled 6,000 North American stores to access key information necessary for product selection and supported electronic POS-driven inventory replenishment of 1,500 products per store.

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HIGH-TECH ELECTRONICS

ACCELERATE INNOVATION IN A FAST-MOVING INDUSTRY

As a globalized industry engaged in relentless innovation, high-tech electronics is one of the most complex and fastest-moving sectors in the world.

Vendors must develop new products and product versions quickly and continuously, within the constraints of downward pressure on prices and increasingly stringent regulations governing electrical and electronic equipment.

That means finding ways to accelerate and improve the product design and development process, get new products into production faster and more cost-effectively, and manage the whole product lifecycle to keep customers happy and ensure compliance with WEEE, ROHS and other regulations.

Oracle Enterprise PLM for High-Tech Electronics is a complete and industry-proven suite of applications that enable electronics and high-tech equipment manufacturers to regain control over every aspect of the product lifecycle.

With a single source of product data, powerful product portfolio management capabilities and clear visibility across every stage in the product development and commercialization cycle, Oracle Enterprise PLM solutions are already helping industry leaders like Dell, QUALCOMM and Oracle itself to bring world-class products to a global market quickly, profitably and efficiently.

"Oracle Enterprise PLM's rich, collaborative, product content-based process management has improved communication with our internal divisions and supplier network, by ensuring that all product content information is centrally aggregated in a single global system and that all product changes are instantly disseminated and tracked across the global supply chain."

– Glenn Neland, VP Worldwide Procurement, Dell

Implementation Partners

Oracle's key implementation partners in High-Tech Electronics include:

+ Infosys
+ Logica
+ MahindraSatyam
+ PCO Innovation
+ Systematics
+ Wipro
+ Zensar

CASE STUDY:

SUN MICROSYSTEMS

Oracle acquired Sun Microsystems in January 2010. Oracle has since developed the company's hardware and software components, producing such pioneering engineered systems as the SPARC SuperCluster T4-4.

At the time of acquisition, Sun Microsystems was managing product data within its engineering division, but the wider processes of the product value chain were characterised by a lack of standardization and a reliance on aging and manual systems. Data sharing was difficult, keeping costs high and preventing the realization of process efficiencies.

By extending Oracle Enterprise PLM to its new acquisition, Oracle was able to:

+ Create a single version of truth for product information

+ Replace legacy Product Data Management systems with Oracle Enterprise PLM

+ Standardize processes and centralize access to product records

+ Consolidate design specification management and access

+ Integrate PLM processes throughout the Supply Chain

+ Implement automated supplier package generation

+ Cut time to update from CAD to ERP

As a result, Oracle has reduced or eliminated manual data entry in many areas, lowered development costs and accelerated time to market for its new products, instigating true "Art-to-Part" production – from concept in CAD to the finished product on the manufacturing floor.

> "In just nine months, and under budget, we standardized the processes across all hardware platforms and centralized access to product data across the value chain. We decreased the average change cycle time by 25% and were able to process a 38% higher number of production Engineering Change Orders"
>
> – David Burton, Director, PLM, Applications Development IT, Oracle

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CONSUMER PACKAGED GOODS
MORE EFFICIENT, MORE COMPETITIVE

In today's tough economic environment, raising prices is a dangerous game. To remain competitive, Consumer Packaged Goods (CPG) companies are increasingly looking to internal productivity gains to drive innovation and growth.

80% of new product introductions in the consumer goods industry fail to meet expected performance levels.

(Source: IDC Manufacturing Insights, Good Ideas Are Not Enough: Execution Is the Key to Sustained Product Success, December 2011)

But when product development and delivery relies on collaboration between numerous teams and organizations, each with its own data, systems and review processes, finding these gains – and complying with regulations – is a major challenge.

Oracle Enterprise PLM for CPG enables companies to standardize and optimize the performance of and visibility into product lifecycle processes, achieving new levels of efficiency and compliance.

With a complete suite of solutions addressing every stage from concept to commercialization, it delivers enhanced process visibility – supporting streamlined packaging and specification management, faster regulatory reporting and accelerated times to market.

Oracle Enterprise PLM has helped Consumer Packaged Goods companies to:

+ Reduce project cycle times by up to 70%

+ Increase material reuse by 20%

+ Improve product margin at launch by 5-15%

"Oracle Agile PLM has enabled us to provide higher-quality products in compliance with stringent government regulations."

– Vince Viviani, Vice President of Quality Systems, Playtex

With the creation of a single, centralized source of product information, it enables companies to take full control of the materials used throughout the product lifecycle – to evaluate and consolidate suppliers, enhance product quality and reduce manufacturing costs.

Oracle Enterprise PLM helps Consumer Packaged Goods companies to implement the robust, transparent and efficient processes they need to remain competitive, innovative and compliant.

Implementation Partners

Oracle's key implementation partners in CPG include:

+ Accenture

+ Kalypso

+ PCO Innovation

+ Reply

CASE STUDY:
HERBALIFE

Herbalife is a global nutrition company with products designed to help weight management, deliver targeted nutrition and enhance energy, fitness and personal wellbeing.

Herbalife needed to effectively manage the global development of thousands of products. Previously, the company's extensive product data – containing complex formulas and histories – had not been unified, making it difficult to share product information both internally and with regulators. The company wanted to accelerate time to market for its new products and speed delivery to a network of over two million independent distributors.

Oracle Enterprise PLM enabled Herbalife to:

+ Create a single, unified source of truth for product information

+ Improve collaboration and accountability across its global operations

+ Clearly log, track and respond to any manufacturing defects and distributor complaints

+ Introduce timely, standardized and secure reporting

As a result, the company has enhanced efficiency and visibility throughout its product development and product change processes, supporting better informed decisions and regulatory compliance while increasing the speed with which development issues are resolved.

"Oracle's Enterprise PLM applications are vital to our ability to achieve our number one goal – consistently delivering the best nutrition and weight management products in the world."

– Mark Schissel, CIO, Herbalife

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INDUSTRIAL MANUFACTURING
BRING BETTER PRODUCTS TO MARKET, FASTER

As globalization continues to create increased competition and downward pressure on prices, manufacturers of industrial products, for example in the automotive, aerospace & defence or machinery industries, must seize every opportunity to design, develop, produce and sell innovative products faster and more cost-effectively than competitors.

However, product development – and product quality – is often hampered by siloed divisions, globally dispersed teams, inefficient collaboration with value chain partners, and different IT systems managing different parts of the development and introduction process.

Oracle Enterprise PLM for Industrial Manufacturing is an integrated suite of software applications that work with your existing design and ERP systems to create a single, enterprisewide management platform for every stage in the product lifecycle, from initial concept to after-sales service.

At its core is a single source of master product data, enabling all parties in the value chain to access consistent, accurate information ranging from requirements documentation, CAD designs, Bills of Materials and rules for configuring variant products. As a result, critical communications such as engineering change orders can be passed quickly and accurately to the responsible team or division.

Oracle Enterprise PLM provides full project and portfolio management functionality, while its AutoVue module enables all parties to view and annotate CAD documents created in most leading ECAD and MCAD packages for easier collaboration with product designers and engineers.

"With Oracle Enterprise PLM, we can base our product development on a single source of data, which speeds up and improves all related processes."

– Alejandro Conesa, Product Lifecycle Management System Manager, Georg Fischer Piping Systems

Comprehensive Enterprise Product Lifecycle Management

+ Document Management

+ Product Data Management

+ Configuration Management

+ Product Catalog

+ Custom Engineering

+ Extensive Change Management

+ Real Multi-CAD Support and comprehensive integration

+ Supports distributed working with workflows and optional workspaces

+ High configurability and flexibility

Implementation Partners

Oracle's key implementation partners in Industrial Manufacturing include:

+ CSC

+ Dr. Maier CSS

+ ICP Solution

+ Infosys

+ TD-IS

+ USB Management Consulting

+ xPLM Solution

CASE STUDY:

ZF FRIEDRICHSHAFEN AG

ZF Friedrichshafen AG is a leading global automotive supplier, whose driveline and chassis technologies promote safety, comfort and reduced fuel consumption. It is also one of the top ten patent applicants in Germany.

To support the expansion of its business, ZF Friedrichshafen AG wanted to unify its IT systems and processes, consolidate product data and simplify communications with suppliers and OEMs.

Oracle Enterprise PLM helped ZF Friedrichshafen AG to:

+ Integrate development and production processes with multi-CAD support

+ Create a globally networked IT system for close to 7,500 users

+ Introduce harmonized master data management

+ Standardize data quality and meet data encryption regulations

The company's new approach to PLM has dramatically shortened product development times, while the increased efficiency that comes with process optimization has enabled it to reduce the costs of development and production.

"[Oracle Enterprise PLM component] Agile provides a unified, enterprise wide platform for innovative product development and manufacture. The interactive connection of ZF-facilities with customers and suppliers allows efficient collaboration and thus, big potential savings. We are very pleased with Oracle"

– Dr Gregor Häberle, Head of IT Engineering Systems, ZF Friedrichshafen AG

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FOOD AND BEVERAGE
IMPROVE COMPLIANCE AT LOWER COST

As the demands of regulators and consumers continue to grow, food and beverage companies must meet ever higher expectations without increasing costs.

+ Over **80%** of new products launched fail to meet their goals

+ **57%** of customers, after a category recall, stop buying the product for at least a year

(Source: AMR Research, March 2007 and April 2009)

The natural way to improve the traceability of ingredients and the accuracy of labelling is to unify and streamline the processes of the product lifecycle, from concept to delivery.

But faced with the pressures of a volatile and competitive market, the temptation to try to meet increasing regulatory demands with existing processes can be intense – and can leave a company at even greater risk of errors, product recalls and damage to the brand and bottom line.

A complete suite of product lifecycle management technologies, Oracle Enterprise PLM for Food and Beverage enables smart, compliant and efficient processes for food and drink production and commercialization.

It introduces a single, unified view of all product and supplier data, promoting transparency and accountability, and simplifying the management of even the most complex global supply chains.

With an overarching, best-practice approach to the entire product lifecycle, it enables effective collaboration across departments and organizations, driving regulatory compliance and accelerating product innovation – while reducing cycle times and costs.

Oracle Enterprise PLM for Food and Beverage helps companies to get new products to market faster, more cost-effectively, and in line with the most stringent regulatory requirements. From Heinz to Coca-Cola, it enables some of the world's biggest brands to do what they do best.

"As a result [of implementing PLM], we've seen reduced cycle times in complex product launches. The quicker and more accurately we can deliver a product to market, the sooner consumers and our customers can realize the value we bring, and the better partner we become."

– Phil Wetherington, CIO, Sugar Foods, quoted in Consumer Goods Technology Magazine, February 2010

Implementation Partners

Oracle's key implementation partners in Food and Beverage include:

+ Kalypso

+ PCO Innovation

+ Sinfo One

+ Verdant

TYSON FOODS

Tyson Foods, Inc. is the world's largest processor of chicken, beef and pork, and also manufactures prepared foods, including soups, sauces, pizza crusts, and tortillas.

Tyson Foods wanted to accelerate time to market for new products, increase productivity and optimize resources, by adopting a new approach to product information across thousands of SKUs, ingredients and packaging materials. It also wanted to improve its reporting capabilities and meet increasing audit demands.

Tyson Foods used Oracle PLM to:

+ Connect people, processes and information in a single system

+ Improve visibility into product data

+ Reduce errors involved in data rekeying

+ Automate product reviews and approvals

+ Improve the quality of supplier data and the traceability of ingredients

+ Enhance supply chain contingency planning

+ Identify areas in which existing materials could be reused

The reforms have empowered Tyson Foods to reduce cycle times and increase productivity, while minimizing risk in the supply chain, lowering ingredient and packaging costs and accelerating the auditing process. The company's new visibility into product data has enabled it to slash specification creation time by over 50%.

"Tyson Foods is driven to create innovative food solutions and revolutionize the way we deliver products worldwide. Oracle's Enterprise PLM solution is a key component to our corporate strategy. We can attribute several results to our Oracle PLM applications, which have made a significant impact on our ability to execute on our initiatives and surpass our customers' expectations."

– Kim Glenn, Director Research & Development, Tyson Foods, Inc.

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RECOMMENDED NEXT STEPS

Oracle recommends that in order to start taking advantage of the benefits of Enterprise PLM, supply chain technology leaders and CIOs should undertake a few key actions:

1 Take a purposeful, thoughtful and honest inventory of existing IT product value chain operations and opportunities.

2 Develop a complete understanding of Oracle's Enterprise PLM capabilities and how they may be deployed to fulfil specific operational product value chain priorities.

3 Develop short-term and long-term roadmaps for Oracle strategy and deployment to optimize product value chain impact.

Disclaimer

The foregoing is intended to outline our general product direction. It is intended for information purposes only, and may not be incorporated into any contract. It is not a commitment to deliver any material, code, or functionality, and should not be relied upon in making purchasing decisions. The development, release, and timing of any features or functionality described for Oracle's products remains at the sole discretion of Oracle.

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