Product Lifecycle Management and the Value Chain

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Agenda

1. Behind Innovation
2. Challenges & Constraints
3. Modern PLM
4. Benefits & Use Cases
Innovation is Changing Everything

- Mobile First
- Regulatory Compliance & Business Transparency
- Customer Retention
- IP Cyber Security
- Continuous Development & the Circular Economy
- Cloud, Tech Advancement & Big Data
- Internet of Things & Social Products
- Global Competition Demographic & Economic Shifts
## Disrupting How Businesses Go-to-Market

### In which opportunities should we invest, and how do we scale?

- **Strategic Alignment**
  - CEOs’ #1 innovation challenge: Quickly taking ideas to market and scaling.

### Are we working on the right projects?

- **Return on Innovation**
  - 50% of development and commercialization resources are wasted.

### How do we modernize to compete more effectively?

- **Structural Transformation**
  - 84% - 90% report slow to market, often over budget, and high overhead to track people, cost and status.

Significant Impact on Business Growth

Most Innovative Companies

- Predicted growth rates over the next 5 years: +62%
- Manage innovation with formal structure: 78%
- Have a defined innovation strategy: 79%
- Collaborate with partners: 34%

Least Innovative Companies

- Predicted growth rates over the next 5 years: +20%
- Manage innovation with formal structure: 66%
- Have a defined innovation strategy: 47%
- Collaborate with partners: 10%

Source: PwC. The Global Innovation Survey. 2013 www.pwc.com/innovationsurvey
With Such An Increasingly Complex Business Environment...

Companies with a comprehensive strategy for innovation and product lifecycle management outperform others with fragmented processes.

Revenue Growth from New Products
- Average Companies: 20%
- PLM Masters: 40%

ROI on Innovation Investments
- Average Companies: 25%
- PLM Masters: 66%

Source: Accenture, "Product lifecycle management: The innovation enabler goes mainstream." 2010
Industry Needs

**AEROSPACE & DEFENSE**
Ensuring High Quality & Compliance
- Model Unit Effectivity
- Enterprise Quality
- Integrated Biz Planning
- Regulatory Compliance

**AUTOMOTIVE**
Driving Efficiency, Quality & Innovation
- Strategic Sourcing
- Environmental Compliance
- Ent Closed Loop Quality
- Market-Driven Innovation
- Rapid Commercialization

**CHEMICALS**
Improving Collaboration & Traceability
- Formulation & Compliance
- Innovation Mgmt
- Traceability
- Enterprise Quality Mgmt

**CONSUMER GOODS**
Innovating to Win Market Share
- New Product Development
- Rapid Commercialization
- Formulation & Compliance
- Innovation Mgmt
- Enterprise Quality
- Global Data Synchronization

**HIGH TECHNOLOGY**
Accelerating Innovation
- Innovation Mgmt
- Enterprise Quality
- Strategic Sourcing
- Regulatory Compliance
- Embedded Software
- Integrated Biz Planning

**MANUFACTURING**
Launching Better Products Faster
- Global Market Penetration
- Configured Products & IP Mgmt
- Enterprise Quality
- Product Definition Evolution
- Strategic Sourcing and Target Costing
- Supplier Qualification & Collab
- Global Data Synchronization

**MEDICAL DEVICE**
Ensuring Compliance & Faster Innovation
- Compliant Data Set
- eMDR
- Enterprise Quality
- Unique Device Identifier
- Global Product Registration
- Global Data Synchronization

**PHARMACEUTICAL**
Enabling Business Transformation
- Pack and Label Mgmt
- Clinical Trials Supply Chain
- CMO Collaboration
- New Product Development

**COMMS, MEDIA, ENTERTAIN'T**
Driving Customer-Centric Innovation
- Digital Asset Mgmt
- Innovation Mgmt
- Enterprise Quality

**RETAIL, FASHION, APPAREL**
Get More Out of Product Data
- Private Label Mgmt
- Innovation Mgmt
- Menu Mgmt & Traceability
- Multi-channel Commerce
- Global Data Synchronization

**SEMICONDUCTOR**
Securing IP & Accelerating Innovation
- IP Mgmt
- Program Mgmt
- Innovation Mgmt
- Regulatory Compliance
- Enterprise Quality

**SERVICES**
Enhancing Collaboration & Program Effectivity
- Innovation Mgmt
- Product Portfolio Mgmt
- Digital Asset Mgmt
- Global Data Synchronization
- Item/BOM Mgmt
What is PLM (Product Lifecycle Management)?

PLM enables companies to **accelerate product innovation** and **maximize product profitability** ...

... by better managing **information, processes, and decisions** about their products ...

... throughout the **product lifecycle** and across the **global enterprise**
Delivering Results to Raise Your Return on Innovation

Every phase of the product lifecycle & across the product value chain

1. Develop Products Right To Market
2. Ramp to Volume
3. Drive Margins & Reduce Supply Risk
4. Rapid Manufacturing & Sales Commercialization
5. Mitigate Risk Associated With Regulatory Compliance
6. Reduce Service & Warranty Costs

LEGEND
- Benefit of Oracle PLM
- Start for customer
What is the Latest Best-Practice Approach to PLM?

**INNOVATE**
Capture and focus investments on higher value ideas and opportunities

**DEVELOP**
Collaborate in real-time on integrated product data and processes

**COMMERCIALIZE**
Enhance manufacturing, sales and supply chain readiness

Transform your Product Value Chain
Unify the entirety of your product and supply chain data and processes to offer customers the right mix of more profitable products / services
Modern Innovation Platform for the Modern Business

Best-in-class capabilities

- Social, Mobile & Embedded Analytics
- Product Commercialization
- Enterprise Project Execution
- Enterprise Product Record

PLM

- Innovation Management
- Portfolio Management
- Requirements Management
- Collaborative Product Development

INNOVATE

- Invest in the right opportunities

COMMERCIALIZE

- Ready for global MFG & omni-channel commerce

DEVELOP

- Create profitable offerings with efficiency
Innovate
Invest in the right opportunities

Align Strategically to Drive Top-line Revenue

Repeatable
• Consistently sort through noise of crowdsourcing, big data, etc. to identify best ideas & analyze the impact of alternate investment scenarios
• Ensure final product will meet all requirements by evaluating concepts against constraints and goals

Scaleable
• Build an innovation pipeline that is fueled by a steady stream of high-value ideas that can be translated into profitable offerings

Strategic
• Increase utilization & lower development costs by strategic focus on fewer, better products
### Portfolio Management

**Edit Portfolio: High Tech Portfolio (3 YR Horizon)**

#### Scenarios

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Description</th>
<th>Status</th>
<th>Creation Date</th>
<th>Created By</th>
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<td>Highest NPV new product intro.</td>
<td>Draft</td>
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#### All Proposals: Elements

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<thead>
<tr>
<th>Element</th>
<th>Object Type</th>
<th>NPV Value</th>
<th>Payback Period</th>
<th>3 Year Revenue</th>
<th>Competitive Advantage</th>
<th>Alignment</th>
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<td>Green Server 9560</td>
<td>New Product</td>
<td>$82,722,167</td>
<td>3.04</td>
<td>$98,000,000</td>
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<td>Sentinel UM-9500 Gaming Laptop</td>
<td>New Technology</td>
<td>$15,780,212</td>
<td>0.59</td>
<td>$14,000,000</td>
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<tr>
<td>Ultra Power Server 7500</td>
<td>New Concept</td>
<td>$140,043,033</td>
<td>2.5</td>
<td>$122,000,000</td>
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<tr>
<td>Vario 8510 Holographic Tablet</td>
<td>New Product</td>
<td>$315,052,951</td>
<td>2.02</td>
<td>$238,000,000</td>
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<td>Waterproof Sentinel UM-4550 Laptop</td>
<td>Sustain Product</td>
<td>$16,084,815</td>
<td>0.62</td>
<td>$16,500,000</td>
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#### All Proposals: Analysis

**Summary**

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<tr>
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<th>Projected</th>
<th>Target</th>
<th>Deviation (%)</th>
<th>Actual</th>
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<tbody>
<tr>
<td>Total Revenue</td>
<td>$41,500,000</td>
<td>$52,500,000</td>
<td>-5.9%</td>
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<td>Total Cost</td>
<td>$1,200,000</td>
<td>$3,500,000</td>
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<tr>
<td>Total Market</td>
<td>$21,300,000</td>
<td>$490,000,000</td>
<td>-6.3%</td>
<td>$4,500,000</td>
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</table>

#### Technical Risk, Reward, and Resources

- **Green Server 9560**
- **Ultra Power Server 7500**
- **Vario 8510 Holographic Tablet**
- **Waterproof Sentinel UM-4550 Laptop**

#### Market Risk, Return, and Cost

- **Green Server 9560**
- **Ultra Power Server 7500**
- **Vario 8510 Holographic Tablet**
- **Waterproof Sentinel UM-4550 Laptop**

*Bubble size reflects Resource Headset value.*

**Probability of Technical Success (%)**
Develop
Create profitable offerings with efficiency and speed

Modernize your Infrastructure to Compete Better

Controlled
• Collaboratively and securely manage product data and changes
• Secure IP with extended control across globally outsourced design and manufacturing organizations, suppliers and partners

Balanced
• Reduce cost & supply risk to improve margins & customer value with full, integrated cost visibility
• Minimize disruption & strengthen brand with closed-loop, enterprise quality management
• Maintain or accelerate the pace of innovation by proactively designing for regulatory compliance, reuse & sustainability

Integrated
• Fully integrate product data, processes, resources and schedules to improve productivity and speed New Product Development
Manage Project Plan

<table>
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<th>Task Name</th>
<th>Due Date</th>
<th>Resource</th>
<th>Allocation Percentage</th>
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<tr>
<td>Phase 1 - Product Concept Definition</td>
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<tr>
<td>Generate Business Plan - Assess MOO</td>
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<tr>
<td>Define Product Requirement</td>
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<td>Develop preliminary Concepts</td>
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<td>Research Competitive Technology</td>
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<tr>
<td>Preliminary Regulatory Strategy</td>
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<tr>
<td>Generate Concept Drawings / Modelling</td>
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<tr>
<td>Conduct Preliminary Cost Analysis</td>
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<td>Gate: Phase 1 Concept Definition</td>
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<td>Phase 2 - Initial Product Design</td>
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<td>Phase 3 - Design Verification</td>
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Define Product Requirements: Task Details
Commercialize

Be ready for global manufacturing and omni-channel commerce

Improve Market Performance and Predictability

**Governed**
- Enhance sales and supply chain readiness with consistent data attributes in marketing and operational descriptions, digital assets, configurations, and catalogs
- Achieve compliance by enforcing governance & business policies to manage product information

**Accurate**
- Ensure superior customer experience by controlling the accuracy of product data across your enterprise and localizing product information for specific channels, stores, organizations and target markets

**Timely**
- Speed product launch times to hit targets by instantly providing all sales channels and extended supply chain with the right product data the first time
Benefits of the Modern PLM Approach

Legacy PLM Solutions
- Multiple repositories
- Reports
- Point to Point Integration
- Text-Heavy User Interface
- High Upfront Investment
- On-Premise
- Lengthy Deployments

Modern PLM
- Mobile, Social and Collaborative
- Single Secure Repository
- Embedded Intelligence
- Pervasive Connectivity
- Consumer-grade Experience
- Subscription-based
- Cloud
- Co-exists with On-prem & Legacy

Benefits
- Easier to Use
- Quicker Adoption
- Highly Adaptable
- Improved Decisions
- Greater Visibility
- Higher Productivity
- Low Risk
- Faster Time to Value
PLM Customer Success

**Innovate**

- **Tyson**
  - Reduced spec creation time by 50%

- **PL Developments**
  - Supported 50% revenue growth with integrated systems

- **Hologic**
  - Supports goal to be at the forefront of innovation

**Develop**

- **GE**
  - 50% reduction in cycle time for change control communications

- **Medtronic**
  - 3x improvement in first pass quality

- **Usana**
  - 40% reduction in time-to-market

**Commercialize**

- **7 Eleven**
  - 7,000 stores access key product data

- **Master Lock**
  - 17% reduced design to release cycle time

- **Overhead Door**
  - Categorizes millions of items to enable incredible growth

**To Transform!**

- **Herbalife**
  - Enhanced decision support transformed how they manage business

- **Synaptics**
  - Dashboards with real-time insight for proactive decision-making and faster issue resolution

- **Broadcom**
  - Improved reporting and executive visibility of milestones, health status, and analysis
AdvancePierre, Reduction in customer complaints per million pounds over 2 years

Coca-Cola & many others, Agile IS the Single Source of Truth

Tyson, Reduction in speed to market

Additional Benefits:
• PLM is core to the acquisition strategy, The J.M. Smucker Company
• Retired more than 15 systems and 100+ interfaces, Tyson Foods, Inc.
• Labeling cycle reduced from 45 to 7 days, H.J. Heinz
• Complete traceability across the global product catalog, McDonald’s
• Critical piece of innovation and sustainability programs, The Coca-Cola Company

McDonald’s, Suppliers collaborating electronically

Heinz, Item rationalization and reduction

PPG, Active projects managed in New Product Development & Introduction
Modern Product Lifecycle Management
Innovate, develop and commercialize the best mix of profitable products

Transform your Product Value Chain

- Innovate
- Develop
- Commercialize

- Improve Return on Innovation
- Reduce Development Time
- Accelerate Time to Launch
Integrated Cloud
Applications & Platform Services