Idea to Performance
Connected Process Optimization

Executive Overview Presentation
May 2013
Customer Value
Treating Tens of Thousands of Cancer Patients Per Day!

80%
Overall system performance improvement

Maintain optimal inventory levels in the distribution network

Significant cost savings from RoHS-related compliance
Customer Value
The 1st Chinese Railway Equipment Manufacturing Company

CNR Tangshan Railway Vehicle Co. Ltd.

33%
Faster product R&D cycle

13%
Decrease in product costs

40%
Improvement in accuracy of engineering changes
Market Trends are Driving Change

**Connected Planet**
- Smart products
- Digitalization
- Data explosion

**Evolution of Business Models**
- ‘Me’- economy
- Dynamic innovation-networks
- From products to performance & regulatory

**Evolution of Population**
- Demanding customers
- Social media revolution
- Aging experts & Digital natives

**Shrinking Planet**
- Shrinking ecological renewal
- Urbanization
- Environmental expectation
Be Successful

- Improved adaptability, consume-ability and flexibility
- Enhanced intellectual power, insightful decision support
- First to market with increased brand recognition and profits
The Required Change
Transformation to the Connected World

Typical Sequential Process Steps
- Idea & Portfolio Planning
- Product Development
- Ramp-Up to Production
- Sourcing
- MFG Planning
- Manufacturing
- Environment
- Health & Safety
- Asset Utilization
- Knowledge Ramp-Up
- Service

Change for success
- From sequential steps to connected networks
- From complex transitions to synchronized data
- From local views to business insights
- From partial checks to sustainable design, make and service
- From develop to stock to develop to customer defined requirements
Idea to Performance Differentiation
Connected Processes from Development through Service

Innovation driven by connected teams
Execution driven by connected processes
Satisfaction driven by connected customers

After Market Service
Operational Excellence
Responsive Manufacturing
Sustainable Innovation

Process Optimization Zone
Idea to Performance, Example
Harley Davidson, Achieved Business Benefit

Planning & Monitoring

Visual Work Instructions

3D Ideation

Operations Monitoring

Business Benefits

Cost -7%
Net Margin +19%
Dividend +25%
Share Repurchase >$2.5MM
From 21 day schedule to 6 hour
Trends Put Greater Pressure on KPI’s

Smart, Faster, Simpler

Idea to Performance Solutions

Idea To Performance

Only SAP provides the ability to confidently and successfully grow your business through the unmatched integration, flexible processes, real-time analysis, and easy to understand data visualization, anytime and anywhere across all aspects Engineering, Manufacturing, and Operations with Idea to Performance Solutions.

Smarter real time insight via HANA-driven analytics
Sustainable Innovation
Sell Performance – Not Products

Continuous Product and Service Innovation

Integrated Product Development - Discrete

Integrated Product Development - Process

Embedded Compliance in Product Development

Smarter Response
Information-driven insights and actions based on close connection to customers and social networks

Faster Innovation
Bring innovative products or services faster to market

Simpler Experience
Easy to configure, customer focused products or services

25% Improvement in time to market with new products

33% Faster product R & D cycle
Responsive Manufacturing
Global Standards, Increased Throughput, Reduced Cost

Repetitive Manufacturing

Make-to-Order Manufacturing

Engineer-to-Order & Project Manufacturing

Outsourced Manufacturing

Manufacturing Visibility & Performance

-40% Manufacturing cycle time

99% Accuracy of labor and quantity data with SAP MII

- Smarter Response
  Better decisions and improved reactions to customer demand and process variances

- Faster Innovation
  Decrease innovation ramp to volume production time

- Simpler Experience
  Intuitive and visual user experience
Operational Excellence
Confidence to Grow your Business

EHS Management

Enterprise Asset Management

Energy & Environmental Resource Management

Quality Management and Compliance

Smarter Response
Proactive & collaborative operational risk management

Faster Innovation
Fewer production interruptions, higher quality, safer

Simpler Experience
Intuitive, accessible, visual

58% Increased automation of asset management

33% Reduction in service request response time
Idea to Performance addresses the business needs of:

- The COO, and Heads of R&D, MFG, Operations and Sustainability

Idea to Performance is adaptable to industry needs:

- All supported business processes can be tailored to discrete, process or CP industry needs

Idea to Performance is a solution bundle of:

- R&D/Engineering, Manufacturing, and Sustainability Line of Business solutions
- Enterprise Asset Management and 3D Visual Enterprise applications
- Innovations from analytics, mobile and social technologies
- Powered by SAP HANA
Integrated Processes with Big Data Delivered Anywhere

61% Higher revenue from new products when portfolio goals are communicated throughout the organization and results are measured and reported.

17% Higher return on assets where asset management systems are fully integrated, with inventory management, MRO, purchasing, engineering and finance.

40% Higher employee productivity when mobile access is provided to employees across all levels.

Source: SAP Performance Benchmarking
The Value of Idea to Performance

**Smarter:**
- Smarter by providing better real time insight via HANA-driven analytics

**Faster**
- Faster execution via insight across R&D, Asset Management, and Manufacturing with embedded sustainability

**Simpler:**
- Simpler user experience via 3D visualization and social on mobile
Of decision makers think access to the right information at the right time is critical to their business

Source: SAP Performance Benchmarking
Lower IT operating costs with a consolidated single solution and platform landscape

Source: SAP Performance Benchmarking
<table>
<thead>
<tr>
<th>Sustainable Innovation</th>
<th>Responsive Manufacturing</th>
<th>Operational Excellence</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Commercial Project Management on HANA</td>
<td>• Overall Equipment Effectiveness on HANA</td>
<td>• Energy and Environmental Resource Management on HANA</td>
</tr>
</tbody>
</table>

68% Greater ability to use Big Data for organizations with a well-defined enterprise-wide high-performance analytics strategy

Source: SAP Performance Benchmarking
Mobile

22% Fewer days in inventory for companies using a mobile warehouse and inventory solution
Source: SAP Performance Benchmarking

Sustainable Innovation
- 3D Visual Enterprise Mobile Viewer on Android

Responsive Manufacturing
- CAMS on Mobile
- Mobile Manufacturing Applications

Operational Excellence
- Mobile Asset Management
Of companies believe cloud will have a major impact on their organization through efficiencies, innovation or competitive differentiation

Source: SAP Performance Benchmarking
Analytics – Throughout the Lifecycle

20% Higher revenue per employee in organizations that are using information to identify strategic and competitive advantages

Source: SAP Performance Benchmarking

Sustainable Innovation
- Product performance and benchmarking through dashboards and embedded analytics
- HANA Analytics to support full lifecycle decision making
- Predictive safety (people, process, asset safety) and analytics
- Visual Enterprise Spatial Analytics

Responsive Manufacturing

Operational Excellence
Treating Tens of Thousands of Cancer Patients Per Day!

80% Overall system performance improvement

$ Significant cost savings from RoHS-related compliance

Maintain optimal inventory levels in the distribution network

We not only want to save lives, but we want to demonstrate clear commitment towards our social and environmental causes.

Snehashish Sarkar, Senior Manager, Varian Medical Systems
A World-leading Defense Contractor

Where SAP 3D Visualization is used, our delivery times have been reduced by 15%–20% due to less rework and more efficient operations.

John Patrick Batache, Director of Lifecycle Logistics and Support, Northrop Grumman
By offering a single application that supports unified market management, R&D, manufacturing and customer service, SAP has helped TRC run better.

"Song Yubin, CIO, CNR Tangshan Railway Vehicle Co. Ltd."
The world’s leading steel and mining company.

80% Reduction in time to complete accident investigations and reports

40% Reduction in occupational health exams cost

50% Increase in effectiveness of environment, health, and safety action plans

The ability to easily access employees’ health indicators and make sure that the occupational health processes are being conducted accordingly shows us, on a daily basis, the benefits of using SAP.

Enilson Miranda Santos, Personnel Admin Manager, ArcelorMittal Brasil
Developing great plastic products that enhance everyday life.

47% Reduced time spent on reactive, emergency work

61% Increase time spent on proactive, preventative maintenance

22% Improved maintenance scheduling compliance

SAP Enterprise Asset Management provides a holistic view of the overall maintenance schedule and pre-execution work. And it gives all of our business users the details they need to make better decisions.

Ron Chow, Maintenance and Reliability Leader, Nova Chemicals Corporation
Why SAP?

• Integrated end-to-end processes
• Connected product portfolio strategy in one unified product
• Managed compliance throughout the lifecycle
• Insight into product performance and benchmarking
Thank you

F name MI. L name
Title
Address
Phone number

www.sap.com/industries