

# TRANSFORMING MANUFACTURING AND HIGH TECH

Leveraging SAP Enterprise Applications



# INDUSTRY CHALLENGES



Having worked with manufacturing customers for more than 30 years across service lines and business functions, HCL has developed various solution sets and frameworks based on domain and technical expertise. These frameworks not only enable predictability, transparency, and visibility for our clients across their growing value chains, but also foster seamless information for effective and faster decision making.

Macroeconomic forces have caused manufacturing companies to restructure in order to address volatility in supply/demand, to increase efficiency, and to improve margins. Simultaneously, manufacturers must define and implement new business practices to meet rapidly evolving environmental stewardship requirements.

## Globalization of Markets

Expanding into new product or geographic markets and drawing from global resources is increasing the complexity in which companies operate. Nowhere is this more apparent than for manufacturing companies – constantly chasing to be closer to their customers, their key suppliers, or to lower cost manufacturing locations.

## Integration with Partners & Customers

In today's marketplace, every company must work with partnerships. Large or small, these partnerships are often the key to a successful product launch, an efficient supply chain network, or a responsive customer service organization. Integration of business processes between partners can be the difference between success or failure and profits or losses.

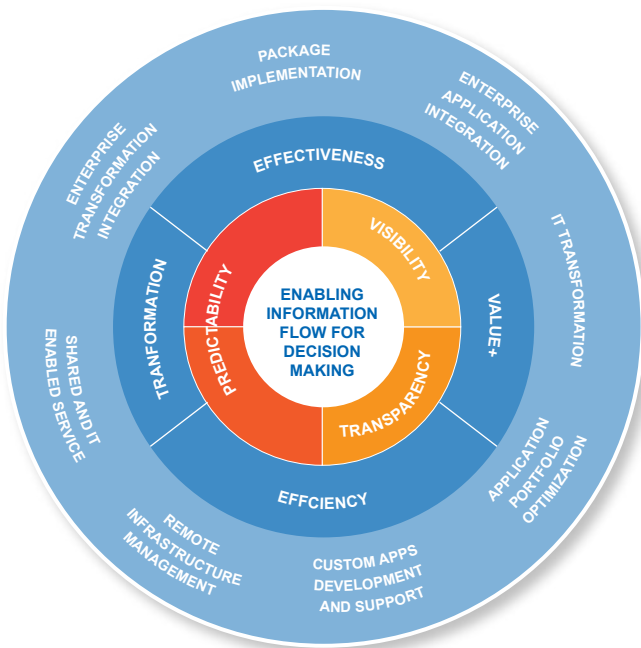
## Adaptability

In this competitive environment, competitors quickly match cost advantages from efficiency improvements. Companies need to respond rapidly to market volatility and new business models. Continuous process improvement must be built into a company's culture – good ideas captured and changes implemented quickly and effectively. Companies will face continual pressures to reduce development, manufacturing and supply cycle times and increase flexibility.

## Sustainability

Customer preferences, new legislation/regulation and raw material costs are fundamentally changing the way products are designed, manufactured and disposed of. Products are more often required to be tracked from concept through disposal, from top level stock-keeping unit (SKU) down through the bill-of-material to the component level. Companies must prepare for this new paradigm in the way they design, manufacture and track their products throughout their life.

To be successful it is imperative that your technology backbone is comprehensive and complete while also versatile, flexible, and efficient. A well designed technology strategy is not just a competitive advantage, it is a necessity.



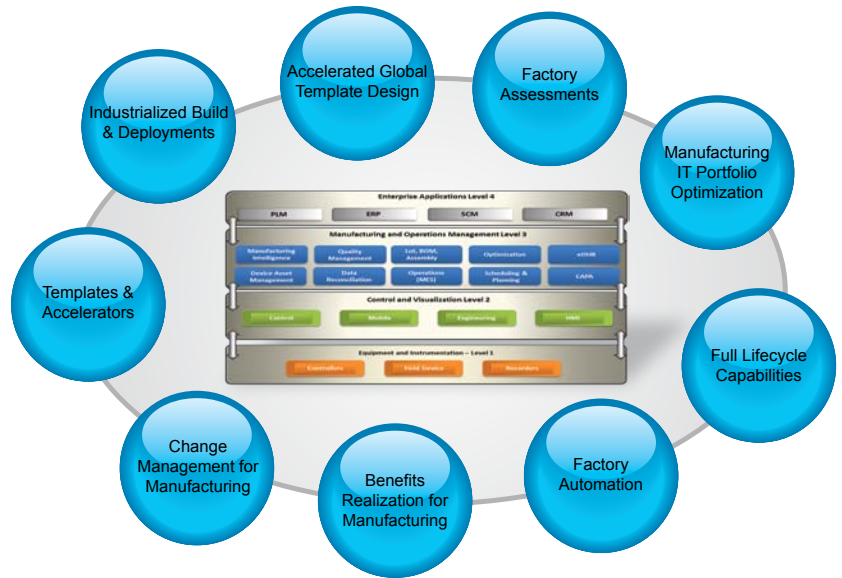
# STRENGTH ACROSS MARKET SEGMENTS

Segments	Micro segment focus has enabled right market alignment and fueled growth					
	High Tech	Automotive	Industrial & Discrete Mfg	Aero	Chemical	Medical Devices
Highlights	<ul style="list-style-type: none"> <li>7 of Top 10 Semi-conductor Companies</li> <li>4 of Top 6 Storage Computing Companies</li> <li>3 of Top 5 Networking Companies</li> <li>7 out of the Top 10 ISVs</li> </ul>	<ul style="list-style-type: none"> <li>\$8 million Auto solution development and testing lab</li> <li>5 of the top 10 Automotive OEMS</li> </ul>	<ul style="list-style-type: none"> <li>Over 10 years differential solutions experience</li> <li>3 of the top global Industrial Manufacturing Companies</li> </ul>	<ul style="list-style-type: none"> <li>1st A&amp;D SAP MRO Solution Implementation in the US</li> <li>8 of the top 10 Aerospace Companies</li> </ul>	<ul style="list-style-type: none"> <li>Bottom Up Value Proposition with SCM Consulting led Solution</li> <li>Engaged with top Chemical Companies</li> </ul>	<ul style="list-style-type: none"> <li>One of the fastest growing segments</li> <li>7 of the top 10 Global Medical Devices Companies</li> </ul>
Indicative Client Base						
Infrastructure Services						
Enterprise Apps						
Engineering and R&D Services						
Business Services						
Enterprise Transformation Services						
<b>Enablers</b>						
Strategic Partners, Alliances, Joint Ventures						
Strong Domain Experience						
Investments in R&D, IPs & Frameworks						



## @FACTORY

For companies wanting to implement new or extend existing SAP capabilities into manufacturing operations, HCL AXON has developed a set of @Factory service offerings that deliver end-to-end and shop-floor-to-top-floor manufacturing solutions.



<b>Factory Assessments</b>	Pre-blueprint and pre-implementation site assessments using HCL's M-PRIZM methodology and platform to inventory the current state of IT assets, business processes, data, and business readiness at each manufacturing site. Valuable exercise to help identify key integration challenges, areas for optimization/harmonization, and the high level to-be solution before starting a project blueprint. Prior to go-live, the factory assessments are critical to determine both business and IT readiness for going live.
<b>Manufacturing IT Portfolio Optimization</b>	Using HCL's M-PRIZM methodology and platform, HCL can assess IT applications, infrastructure, databases, asset utilization, business importance, technical complexity, cost of ownership, and fit/suitability for business purpose, etc. in order to identify consolidation and optimization opportunities across manufacturing sites.
<b>Full Lifecycle Capabilities</b>	HCL can provide full IT lifecycle services (design, build, sustain) not only for SAP assets, but for all manufacturing IT assets. HCL has deep domain knowledge and IT systems experience, supported by strong partnerships with many of the industry leading manufacturing IT software and hardware vendors.
<b>Factory Automation</b>	HCL's Collaborative Engineering & Manufacturing Services practice has over 2,000 practitioners with both domain and technical capabilities in shop floor automation, manufacturing execution systems (MES), statistical process control (SPC), advanced process control (APC), laboratory information management systems (LIMS), and analytics. The practice also includes SAP Perfect Plant consultants with Manufacturing Integration & Intelligence (MII) and SAP Manufacturing Execution (ME) knowledge and experience.
<b>Benefits Realization for Manufacturing</b>	HCL AXON is a pioneer in benefits realization and is SAP's first certified global partner for Value Lifecycle Management. HCL AXON has the experience and capability to enable a benefits led approach for manufacturing initiatives starting with business case development, integrated into solution design and build, and achieved through benefits measurement and monitoring.
<b>Change Management for Manufacturing</b>	HCL AXON has a tailored approach for organizational change management for manufacturing operations that addresses the different challenges encountered within manufacturing operations including training and communications in different languages and cultures, contending with shift schedules and possible labor rules, and differing technical aptitudes. Our OCM approach minimizes risk of post go-live factory performance dips and increases the speed of benefits realization.
<b>Templates &amp; Accelerators</b>	HCL AXON has developed an extensive collection of templates and accelerators for manufacturing companies, including ReadytoMake and ReadyforChem preconfigured SAP solutions, iMRO for enterprise asset management, PATWare and Proactive Production Monitoring based on SAP MII.
<b>Industrialized Build &amp; Deployments</b>	HCL AXON is an industry leader in our ability to combine the industrialized build and deployment capabilities traditionally associated with enterprise applications with the same capabilities for manufacturing IT platforms. Customers gain the economies of scale and the reduced risk by working with a single services provider truly from the shop floor to the top floor.
<b>Accelerated Global Template Design</b>	By utilizing our templates and accelerators, our experienced SAP and manufacturing consultants, and rapid prototyping/agile design techniques, HCL AXON can rapidly design and demonstrate fully integrated solutions from the shop floor to the top floor, especially compared to the traditional blueprint approach for enterprise applications and the traditional disparate approach for manufacturing IT applications.

## HCL AXON PRODUCT INNOVATION AND ACCELERATORS

Global Deployments	<b>ReadytoMake</b>	An all-in-one pre-configured solution based on the SAP ERP application for organizations that manufacture and support complex assemblies such as aircraft, ships, transport infrastructure, high tech and construction, energy or industrial equipment and heavy machinery.
	<b>ReadyforChem</b>	An all-in-one preconfigured SAP ERP solution for organizations that manufacture chemicals including life sciences, basic chemicals, specialty chemicals, and consumer products.
	<b>mPrizm</b>	HCL developed framework and tool to better assess, improve and accelerate deployment Site Readiness for major Global Deployment efforts. Provides pre-configured templates to address infrastructure, data, process and user readiness.
	<b>@Factory Assessment</b>	Pre-blueprint and pre-implementation site assessments to inventory the current state of IT assets, business processes, data, and business readiness at each manufacturing site to help identify key integration challenges, areas for optimization/harmonization, and the high level to-be solution before starting a project blueprint. Prior to go-live, the factory assessments are critical to determine both business and IT readiness for going live.
Upgrades & Consolidations	<b>MergeSmart</b>	HCL AXON's methodology and workbench for comparing two different SAP systems prior to starting an SAP consolidation project to identify the various areas in which a conflict might arise such as organization hierarchy, configuration, master data configuration, security, and custom enhancements (RICEFW).
	<b>UpgradeSmart</b>	An end-to-end solution for planning and executing SAP ERP, CRM, SCM, BI and GTS upgrade projects. The UpgradeSmart workbench is central to planning SAP upgrade projects. This tool simulates the actual technical upgrade process with a 90% accuracy determining code remediation effort including enhancements, repairs, data dictionary objects, patches, notes applied, and customization settings.
Service Transformation	<b>iMRO</b>	Enhances SAP ERP-based Maintenance, Repair and Overhaul (MRO) of complex, expensive and/ or regulated assets such as transportation, energy, aerospace and hi-tech. iMRO enhances the SAP user experience to meet customer and industry requirements in the areas of maintenance engineering, planning, and operations. iMRO is an SAP-endorsed business solution.
	<b>mSAM</b>	HCL AXON has partnered with Sybase, an SAP company, to meet the demand for comprehensive mobile solutions tightly integrated with SAP to drive rapid advances in workforce productivity. Our mobile service and asset management solution provides mobile data and information sharing for the field based workforce, improving decision making and task management through a wide range of mobile devices.
	<b>iCARE</b>	A comprehensive call center solution designed to help improve customer satisfaction through faster identification of customer needs and more frequent first call resolution of issues. iCARE does this by providing call center operatives with intelligent, customer specific information based around premise or account events that may have triggered the call.
Supply Chain Management	<b>DSIOP</b>	Demand, Supply, and Inventory Opportunity Program (DSIOP) helps companies define a factual and quantitative basis for Supply Chain Management (SCM) improvement decisions. Uses a set of proprietary quantitative tools and techniques to standardize the analysis of typical supply chain deficiencies. Outputs are quick win recommendations, SCM transformation roadmap, and realizable solutions.

## SAP EXPERIENCE AND CAPABILITIES

EAM		<ul style="list-style-type: none"> <li>■ 35+ SAP EAM implementations</li> <li>■ Most experienced SAP partner for complex EAM/MRO</li> <li>■ 2009 SAP Pinnacle Award for Co-Innovation - iMRO</li> <li>■ Industry Expertise: Aerospace and Defense, Travel, Transport and Logistics, Utilities, Oil and Gas, and Manufacturing.</li> </ul>	<ul style="list-style-type: none"> <li>■ iMRO, mSAM (LA &amp; CA)</li> <li>■ Targeted investment in Mobility</li> <li>■ Continue co-innovation with SAP</li> <li>■ Leverage and build specialization across emerging industries.</li> </ul>
CRM		<ul style="list-style-type: none"> <li>■ Sales, Service, Interaction Center, Marketing, Web</li> <li>■ 20+ SAP CRM implementations</li> <li>■ Extensive SAP CRM 7.0 implementation experience</li> <li>■ Industry Expertise: Utilities, Public Sector, Hi-Tech and Media.</li> </ul>	<ul style="list-style-type: none"> <li>■ iCARE, iEM, CCF, mSAM</li> <li>■ Targeted investment in Mobility</li> <li>■ Specialize in Service and high-volume Customer Interaction.</li> </ul>
BAO		<ul style="list-style-type: none"> <li>■ Enterprise and Financial Performance Management, Enterprise Information Management, Business Analytics</li> <li>■ Combined experience of more than 400+ SAP BI/BOBJ projects, 80 SAP BPC projects, and 10 SAP EIM projects.</li> </ul>	<ul style="list-style-type: none"> <li>■ SAP BPC accelerators for Insurance and Utilities</li> <li>■ Bundled 'Smart Grid Analytics' proposition for Utilities</li> <li>■ Targeted HANA co-innovation.</li> </ul>
HCM		<ul style="list-style-type: none"> <li>■ Core HR and Payroll, Talent Management, HR Service Delivery, Workforce Deployment</li> <li>■ 70+ SAP HCM implementations</li> <li>■ 'Resource Management Workspace' announced 2011 Winner of Best Partner Solution at Duet Enterprise Developers Jam.</li> </ul>	<ul style="list-style-type: none"> <li>■ iCREW, RapidHR</li> <li>■ Global Payroll BPO</li> <li>■ End-to-End Talent Management</li> <li>■ Looking to partner with SAP for 'HR as a Service'.</li> </ul>
SCM		<ul style="list-style-type: none"> <li>■ PLM, SRM, Procurement, Inventory and Warehouse Management, Manufacturing, Transportation Management, APO</li> <li>■ More NA PLM implementations than any other partner</li> <li>■ \$1bn+ of delivered procurement savings</li> <li>■ One of the first NA SAP EWM go-lives (Dr. Pepper Snapple).</li> </ul>	<ul style="list-style-type: none"> <li>■ Duet Enterprise enabled Forecasting/S&amp;OP</li> <li>■ DSIOP (Discover &amp; Study, Identify Opportunities, Prioritize)</li> <li>■ SAP @Factory Assessment.</li> </ul>
Finance		<ul style="list-style-type: none"> <li>■ Implemented finance as part of more than 750+ SAP ERP implementation</li> <li>■ Expertise in Customer and Brand Profitability Management</li> <li>■ Developed 'Prepaid' solution, integrated with Smart Grid, for the Utilities industry to improve management customer debt.</li> </ul>	<ul style="list-style-type: none"> <li>■ Financial Shared Services</li> <li>■ Targeted optimization: payment processing, pricing</li> <li>■ IFRS adoption.</li> </ul>
Mobility		<ul style="list-style-type: none"> <li>■ 1,250+ FTE Mobility Practice established in 1999</li> <li>■ 2011 SAP Mobility Showcase Award at SAPPHERE NOW</li> <li>■ 2012 SAP Innovation Challenge for Manufacturing Mobile Apps for mSAM</li> <li>■ Developed own 'Dynamic UI' accelerator for SUP.</li> </ul>	<ul style="list-style-type: none"> <li>■ mSAM(CA), mSAM(LA), iEM, mACT etc.</li> <li>■ MaaS 'Mobility as a Service'</li> <li>■ Device Management.</li> </ul>
Technical		<ul style="list-style-type: none"> <li>■ All major technology platforms: ABAP, Java, Adobe, Flex, Flash, Duet etc</li> <li>■ Expertise in MDM and Business Objects Data Services</li> <li>■ Pioneered use of 'virtualization' within own Labs environment, now used to accelerate client implementations.</li> </ul>	<ul style="list-style-type: none"> <li>■ SAPoD 'SAP-On-Demand' cloud based solution for SAP ERP</li> <li>■ Vehicle to mitigate risk associate with immature Mobile and Big Data solutions.</li> </ul>
Value Mgmt & Benefits		<ul style="list-style-type: none"> <li>■ First SAP Partner certified in Value Management</li> <li>■ "Instrumental in cooperating with SAP on the development of Value Management practices for implementation and realization." - SAP</li> <li>■ Proven 'Benefits Realization' methodology to maximize and ensure the realization of business value.</li> </ul>	<ul style="list-style-type: none"> <li>■ Continued alignment to demand to tie fees to the delivery of outcomes and business value</li> <li>■ Bundle complimentary service offerings to facilitate realization.</li> </ul>
Trans Change Management		<ul style="list-style-type: none"> <li>■ Target Operating Model and Organizational Design, Stakeholder Management, Communications, Learning and Development</li> <li>■ Robust and fully integrated methodology focused upon 'Zero Operational Impact' at go-live and accelerating time to value.</li> </ul>	<ul style="list-style-type: none"> <li>■ Industrialize training through adoption of best practices and solution templates</li> <li>■ Invest in UI to minimize training effort and maximize adoption and productivity e.g. iCARE.</li> </ul>
Program Management		<ul style="list-style-type: none"> <li>■ Successfully delivered 750+ SAP ERP programs and projects</li> <li>■ HCL named a 2011 Diamond winner in the "Building Customer Loyalty and Trust" by ITSMA based upon the CAC 'Customer Advisory Council'.</li> </ul>	<ul style="list-style-type: none"> <li>■ Industrialize project management processes through iGDM and APSE</li> <li>■ Work with HCL 'Agile' CoE to leverage agile approaches for front-office.</li> </ul>

## ABOUT HCL AXON

HCL AXON is a global pioneer in leveraging leading technologies to drive value realization. Our value management approach accelerates the realization of benefits from your investments by aligning IT to your clients' required business outcomes. We provide the complete range of consulting, hosting and Business Process Outsourcing (BPO) services, necessary to define, realize and sustain real business change. Our unique delivery model integrates on-site business transformation consulting services with near-shore and off-shore technical development and support capabilities, to ensure that our clients receive the optimal solution at the right price point.

### Accelerate Value

We recognize that different organizations require differing outcomes from their Enterprise Resource Planning (ERP) investment, and as such we provide different solutions to best address these needs:

- **Consulting** – Design, deployment and optimization of world-class business practices
- **Transformation** – Delivering fundamentally improved levels of operational performance through the implementation of world-class ERP platforms
- **Refresh** – Rapid implementation of pre-configured industry specific business solutions based on world-class ERP platforms
- **Re-platforming** – Migrating legacy solutions onto today's leading technology platforms
- **Sustainment** – Complete heterogeneous systems applications management capabilities from remote system monitoring through to Information Technology Outsourcing (ITO)

In all of these approaches, HCL AXON combines unrivalled experience in deploying the world's leading enterprise application software with significant industry experience to ensure that our programs deliver value for our customers, faster and more cost effectively than any of our competitors.

### True Global Delivery

HCL AXON operates as a single global organization allowing us to deploy consulting teams which leverage proven industry and solution best practices from our offices around the world. We fully understand that successful implementation projects require both on-site client engagement to drive process design and business change while simultaneously leveraging the significant cost and time zone benefits associated with cost effective off-shore and near-shore, round-the-clock delivery centers. Our global delivery model does not treat off-shore as an afterthought; we fully integrate our off-shore capabilities into our implementation and application management methodologies to ensure that the value of the integrated on-shore/off-shore model is fully optimized.

### IT is all about certainty of outcomes

Ultimately our engagements are driven by the need to deliver certainty to our clients:

- **On Value**
- **On Time, To Budget**
- **Guaranteed Service Levels**
- **Committed Cost Reductions**
- **Realized, Cashable Benefits**
- **Achieved Business Metric Improvements**

HCL AXON regularly contracts to the delivery of specific outcomes – whether it is a reduction in a call center's average call handling time, guaranteed infrastructure management cost-reductions or a particular cost saving or performance improvement.

### Financially Stable and Respected

HCL AXON is a wholly owned subsidiary of HCL Technologies, a \$6 billion global technology leader with over 90,000 employees. HCL is not only financially robust; it is also globally recognized for its revolutionary management practices which focus on trust, integrity and the empowerment of our employees. This approach, which we call Employee First, is the subject of one of the most frequently taught Harvard Business School Case Studies.





HCL AXON is the best in the world at creating industry-specific end-to-end platform solutions that deliver business performance.

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