

PLM For Improved Product Lifecycle Decisions

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About IDC Manufacturing Insights

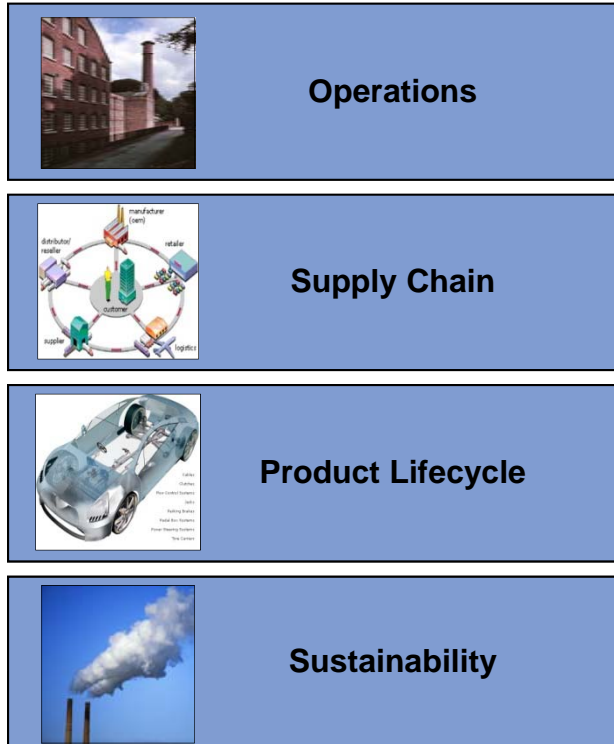
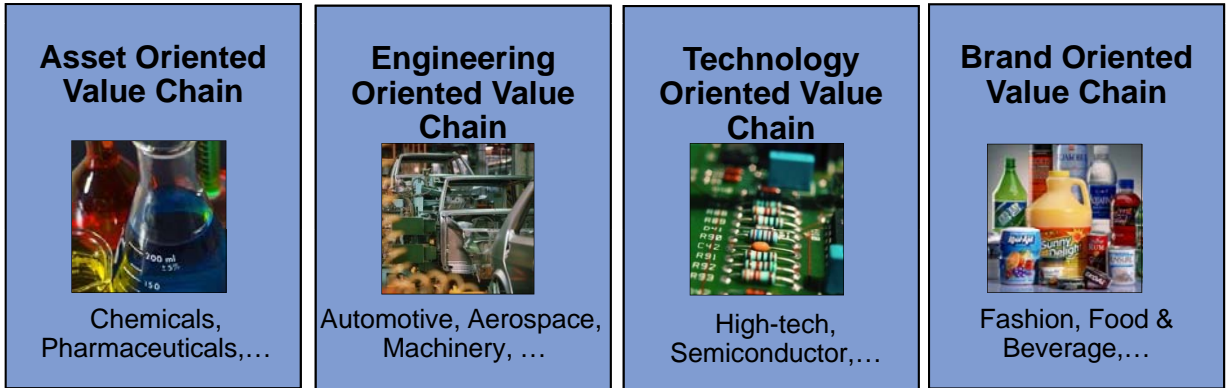
- The premier independent global market intelligence and advisory firm for information technology
- Delivering IT intelligence, industry analysis, market data, and strategic guidance since 1964
- More than 1,000 analysts in over 100 countries provide global, regional, and local expertise on technology and industry opportunities and trends
- *Insights* business units focus on technology-enabled business innovation within an industry



Manufacturing Industries View

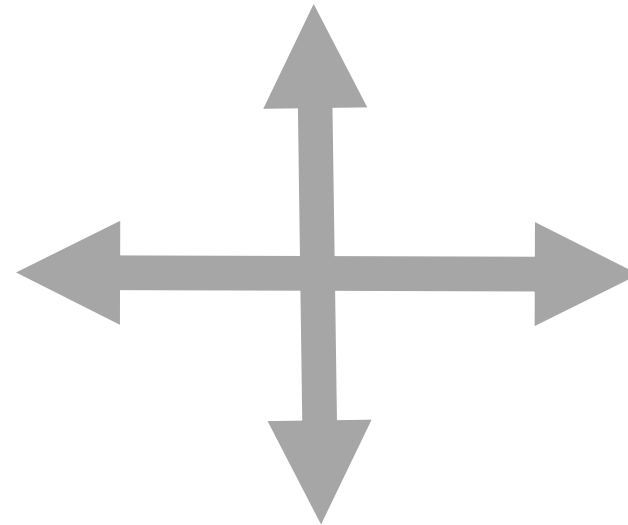
Value Chains

Process Domains

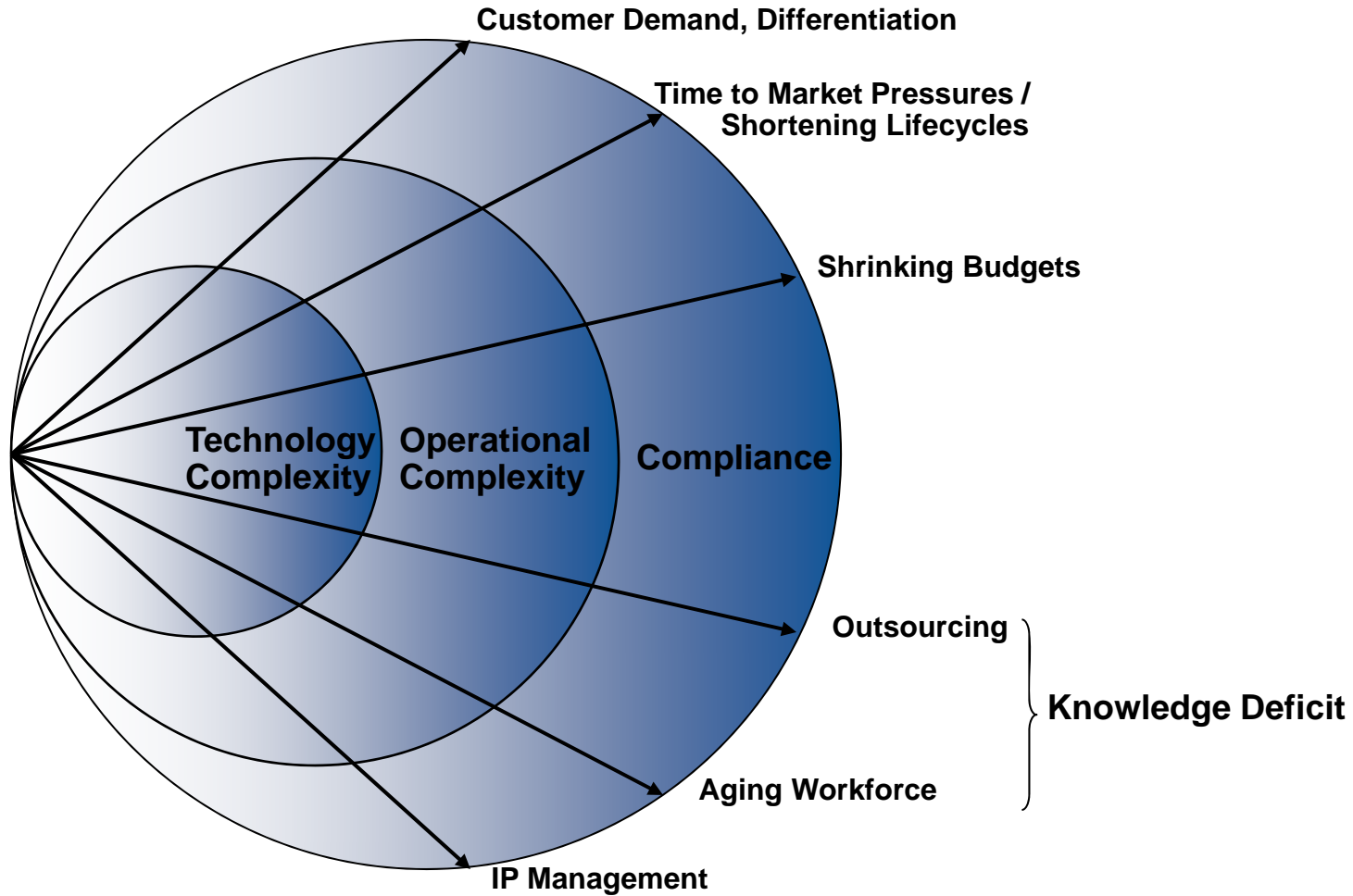


Investigate a segment across domains

Investigate a domain across segments




Why is it Difficult to Make High Quality Products?



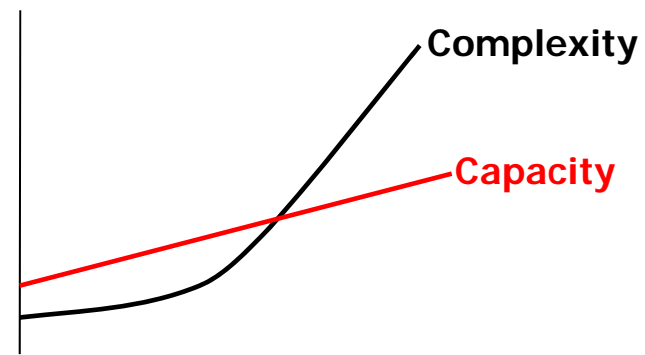
Challenges

Increased

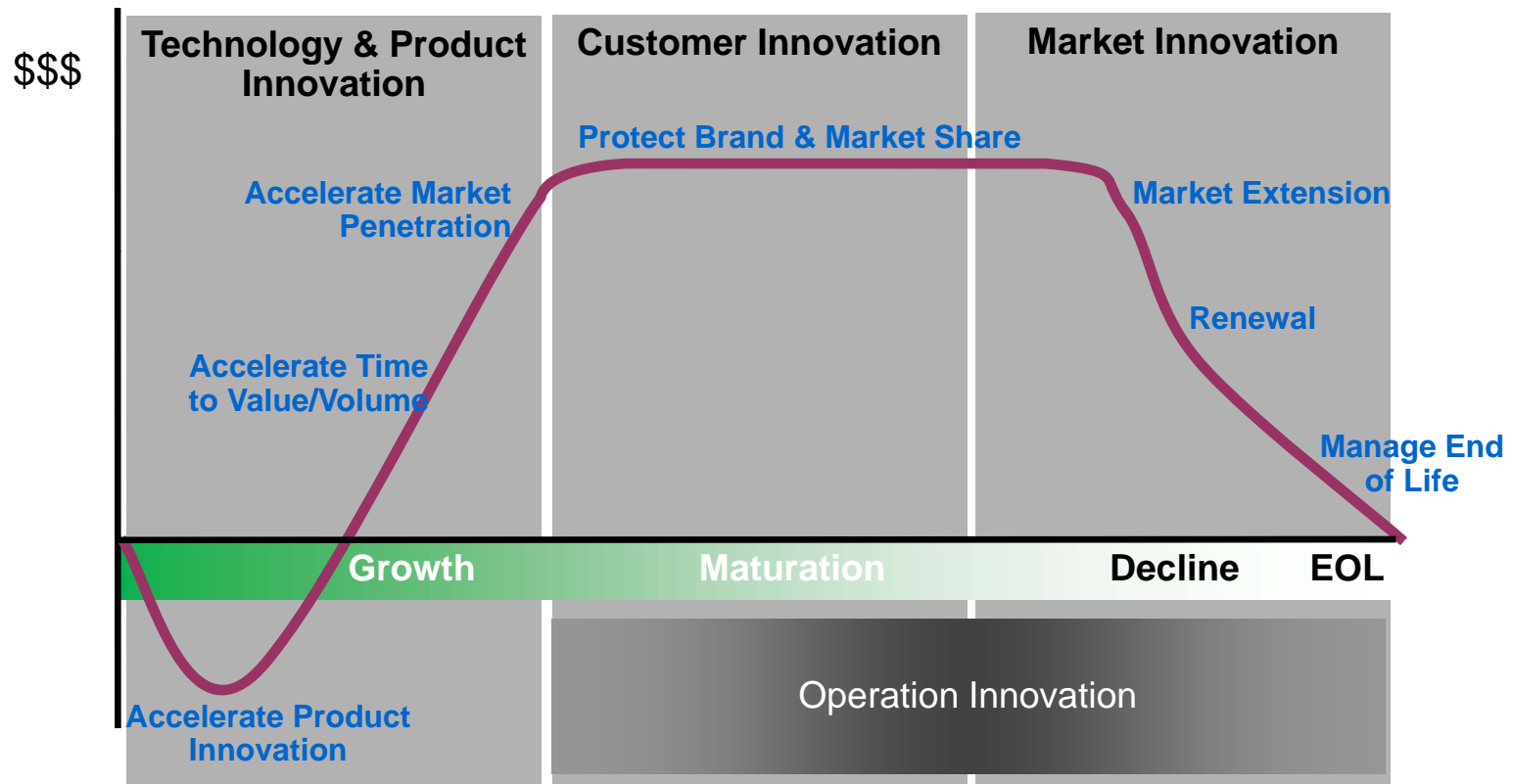
- Technology density and complexity
 - Embedded control software
 - System of systems
 - Configurations and options
 - Complex collaboration
 - Outsourcing
 - Partnerships
 - Time & budget pressures
-  Information overload
- Information systems & process fragmentation

Diminishing

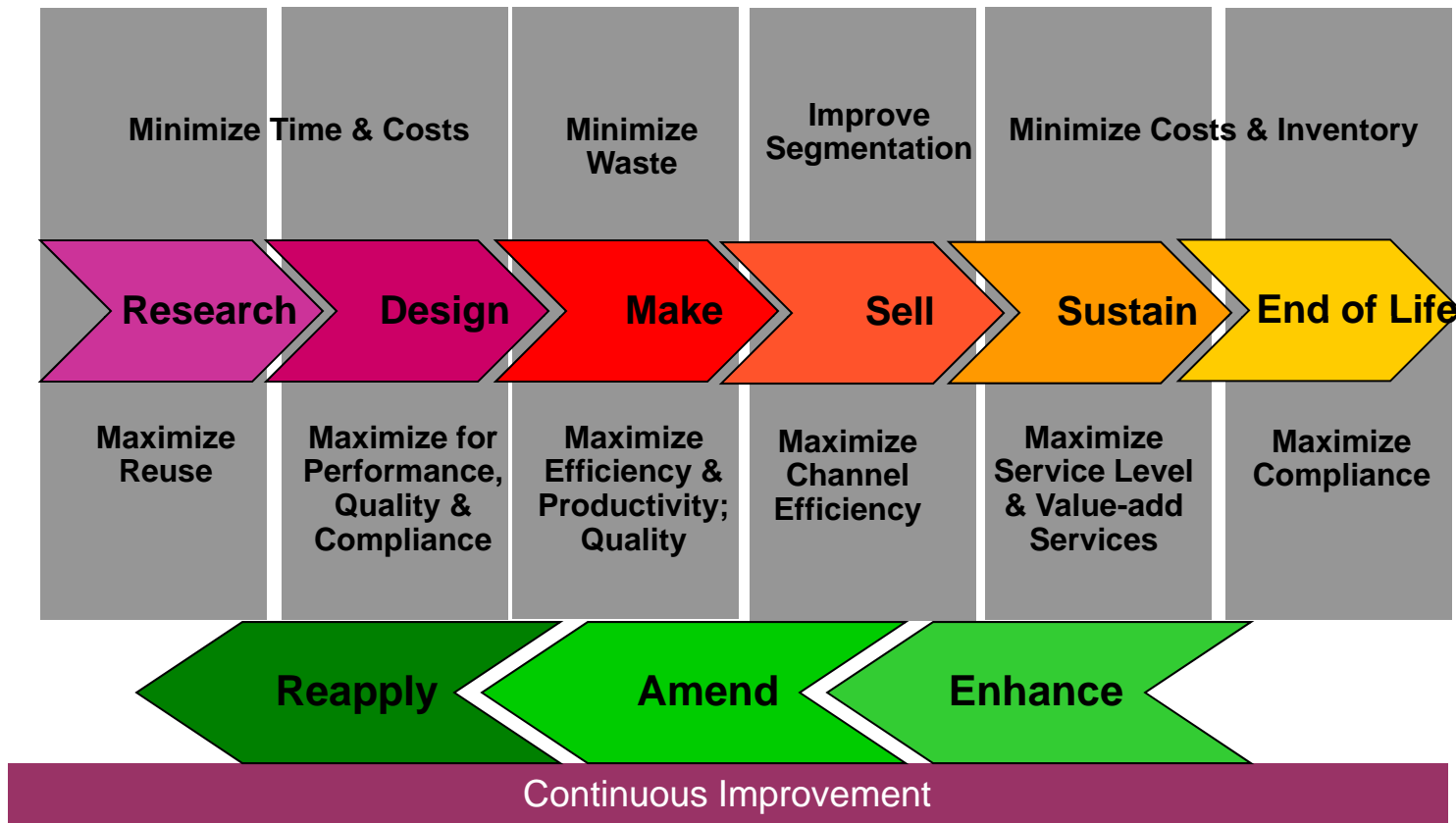
- Visibility
- Experience
- Time for formal & informal learning
- Knowledge sharing



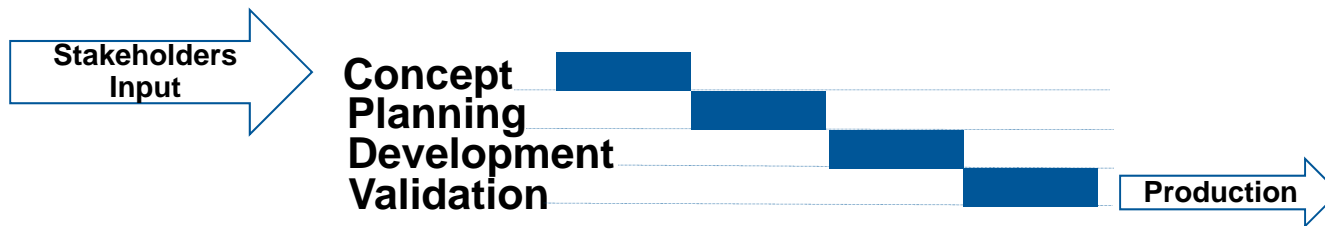
PLM as a Strategic Capability



Opportunities (and Challenges) Abound

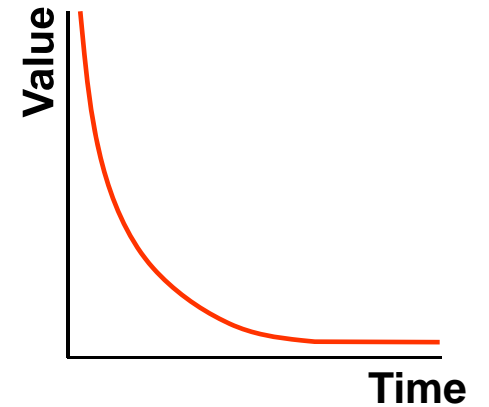
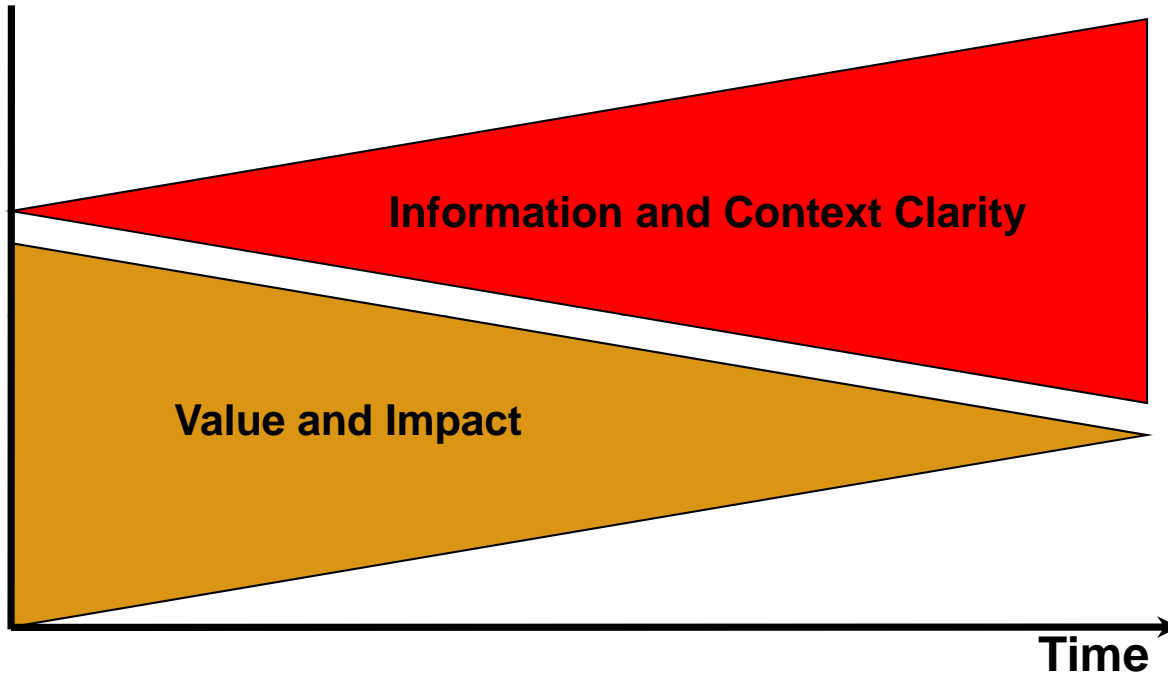


Improving Productivity and Efficiency

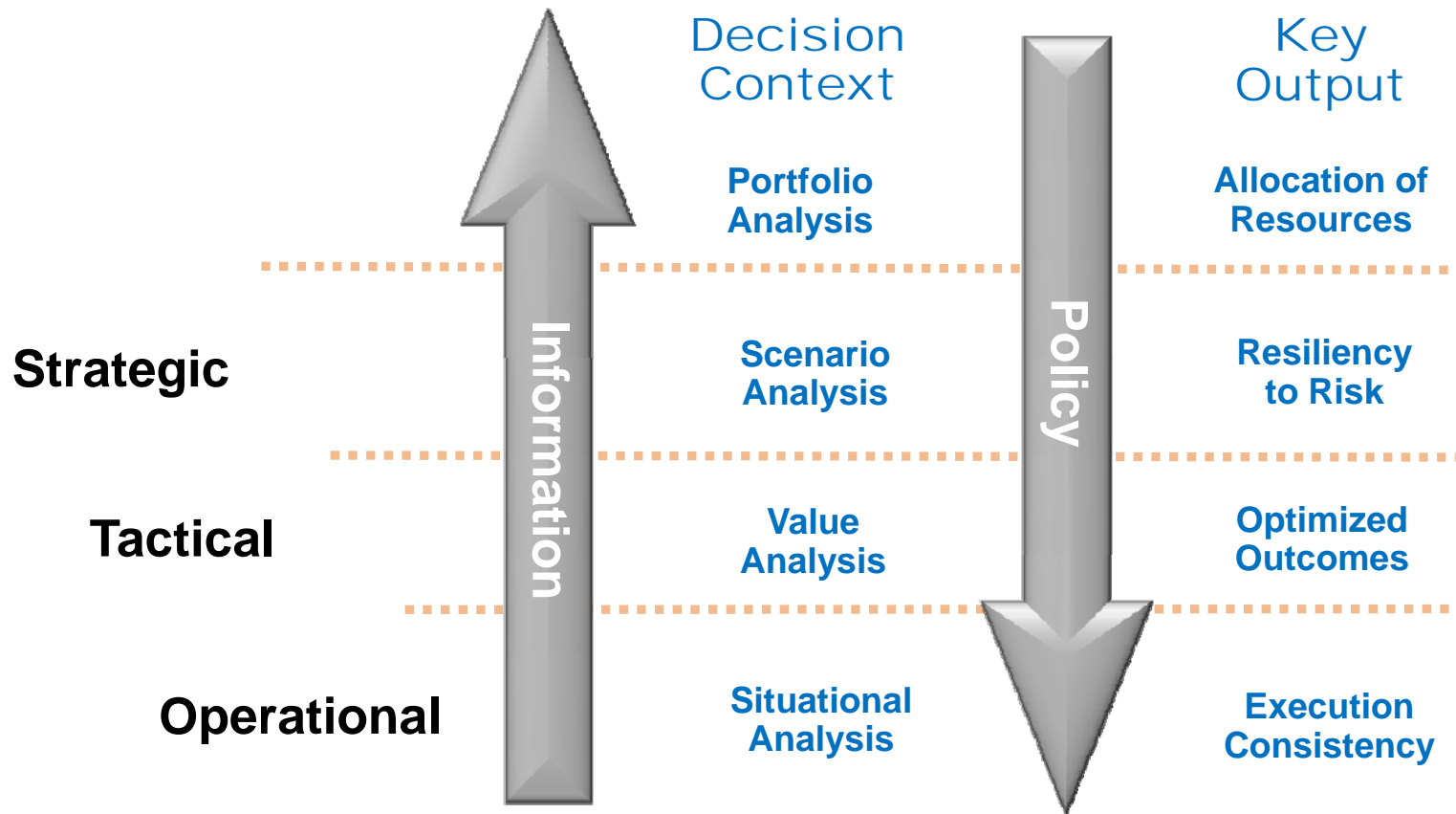


- Knowledge reuse
- Resource utilization
- Waste reduction

Time-Value of Information



Making Better Decisions



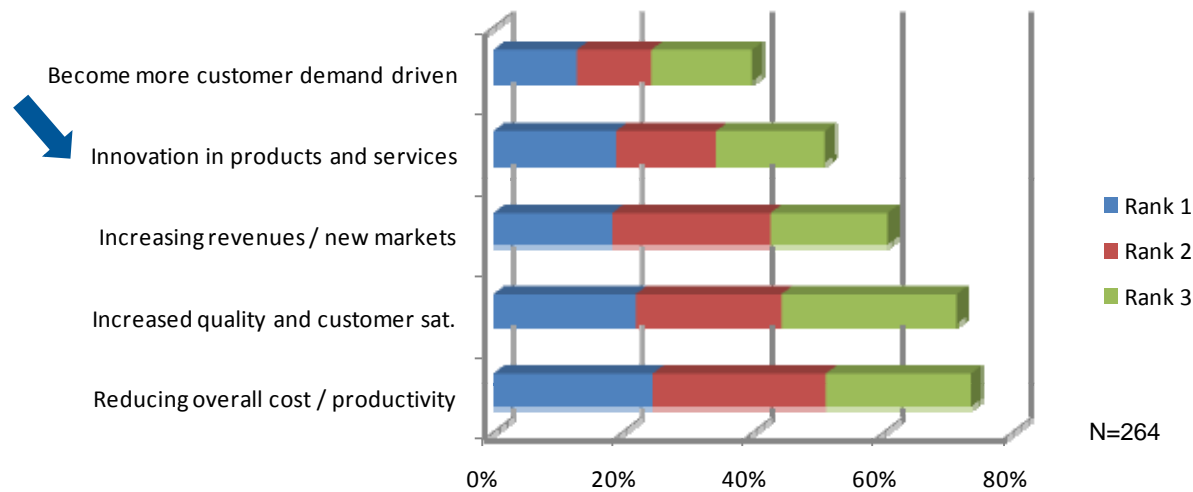
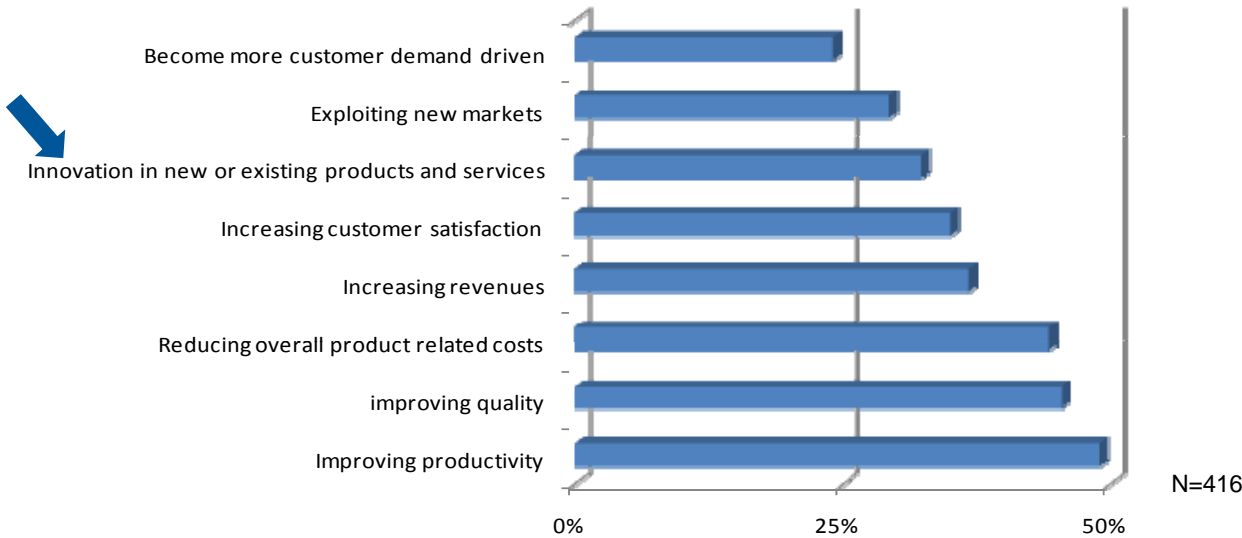
Consistency of optimized decisions at all levels, resulting in efficient, sustained innovation

Decision Platform Transformation

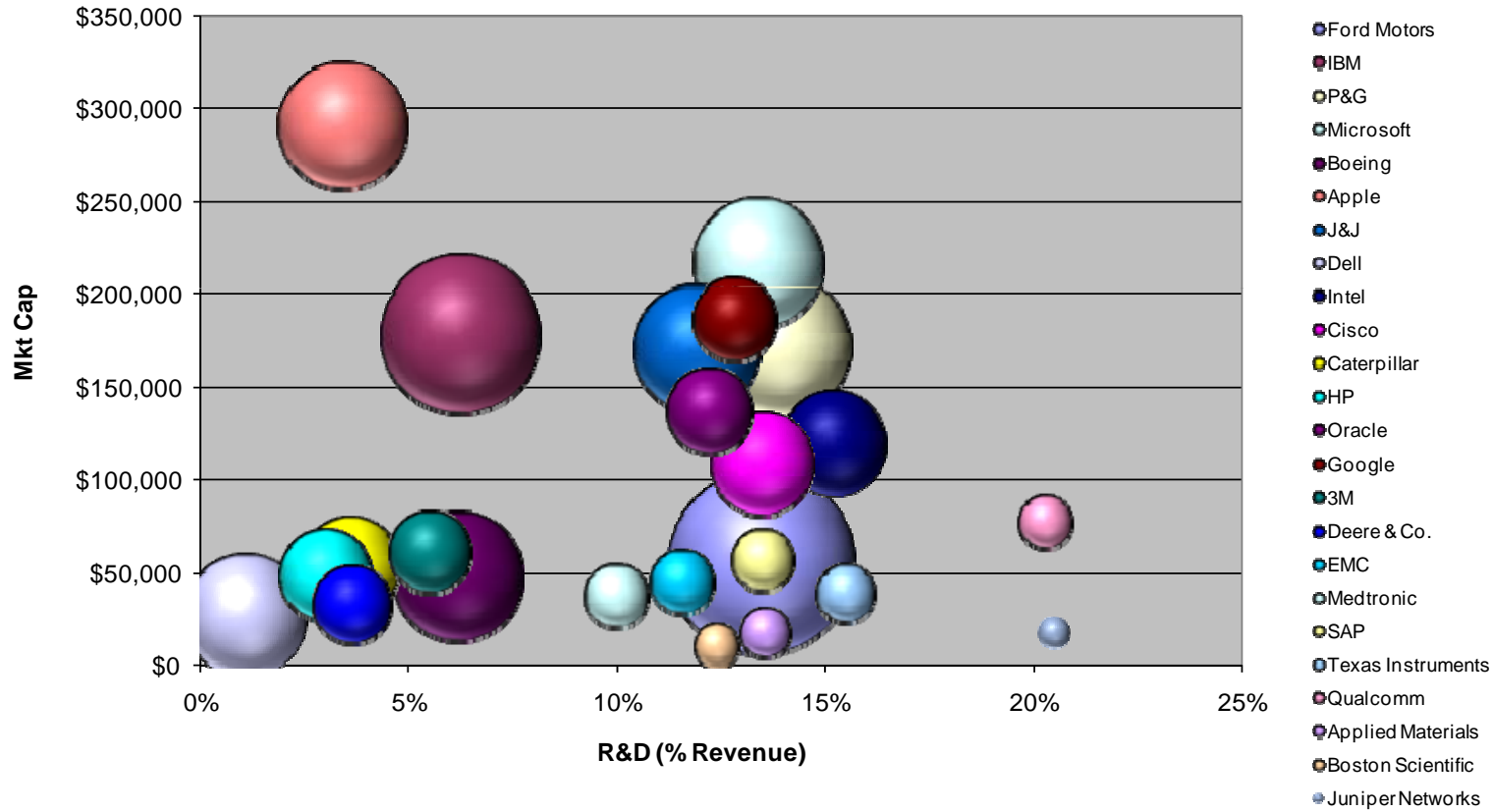
- Singular decisions
 - Driven from upstream
 - Limited input from non-engineers
 - Over emphasis on “innovation”
- 
- Open systems
 - Collaboration
 - Visualization
 - Leaning innovation

Out of the Recession — It's All About Innovation

Top Business Initiatives



But Is It R&D?



- Internal R&D spend, excluding acquisitions
- Mkt Cap Nov 29, 2010
- Size = Revenue FY 10

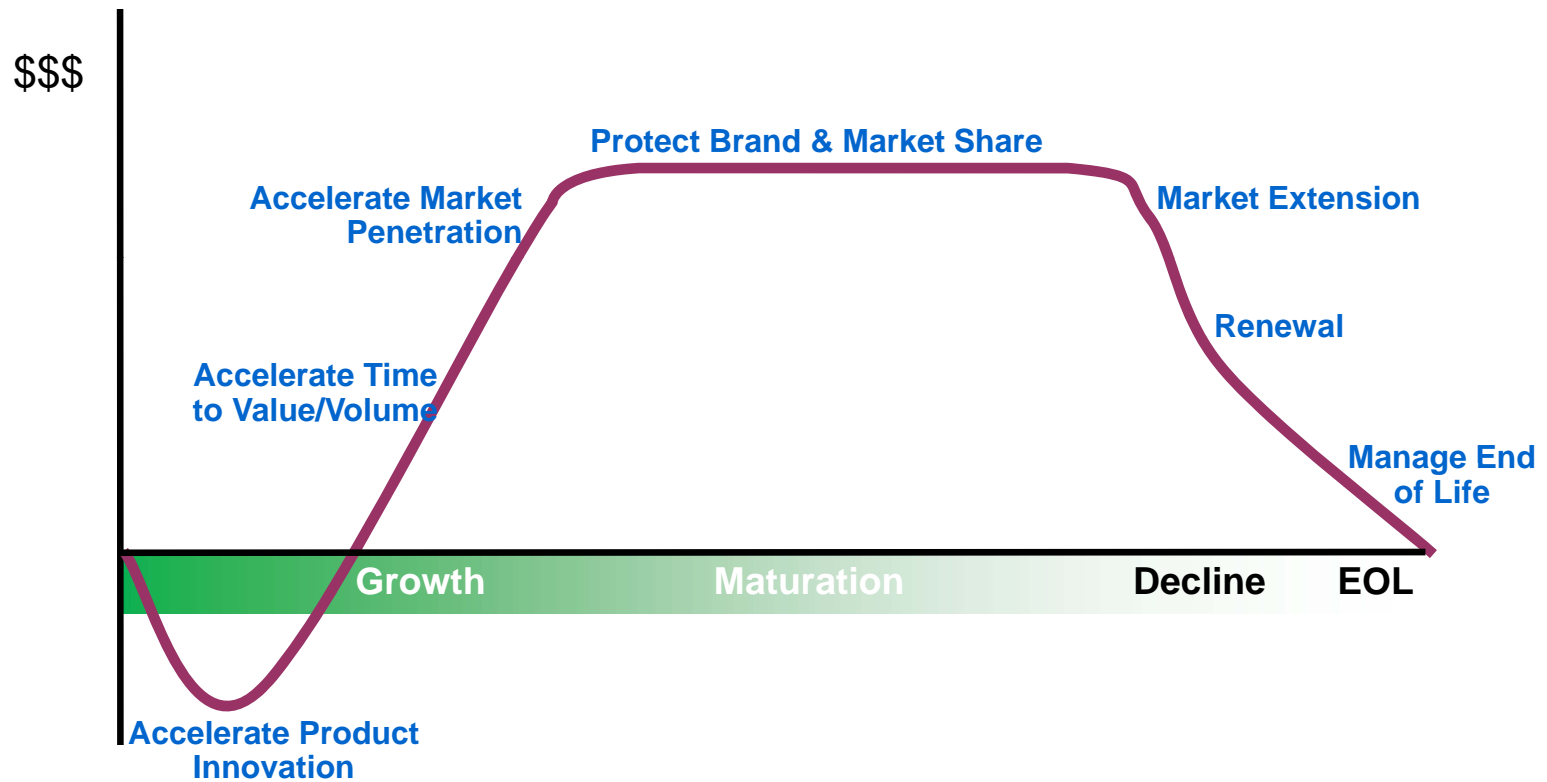
Sources: IDC Manufacturing Insights, 2011
 Yahoo! Finance, Company Data



Scary Statistics

- About 20% of projects are over time, and 35% of product companies had experienced at least one runaway project
- Most products fail to meet expectations:
 - Only one out of every four product development programs yields a product that reaches the market
 - Two thirds of those still do not meet expectations
- 46% of the resources allocated to product development and commercialization are wasted

Purposeful Innovation



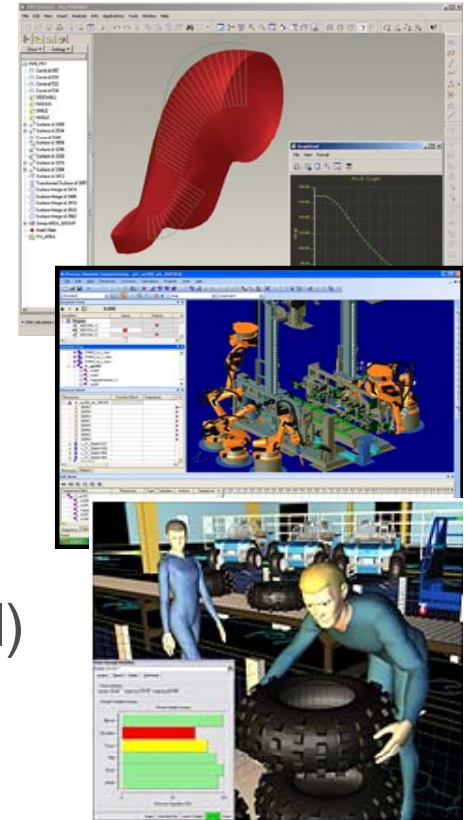
Collaboration Platform

- Develop a rich platform of product and process knowledge to support continuous innovation across multiple disciplines and lifecycle phases
 - Integration and harmonization of tools and data
 - Enabling business process innovation
 - Collaboration (internal and external)
- Problems:
 - Access
 - Trust
 - Understanding
 - Being heard
 - Being understood



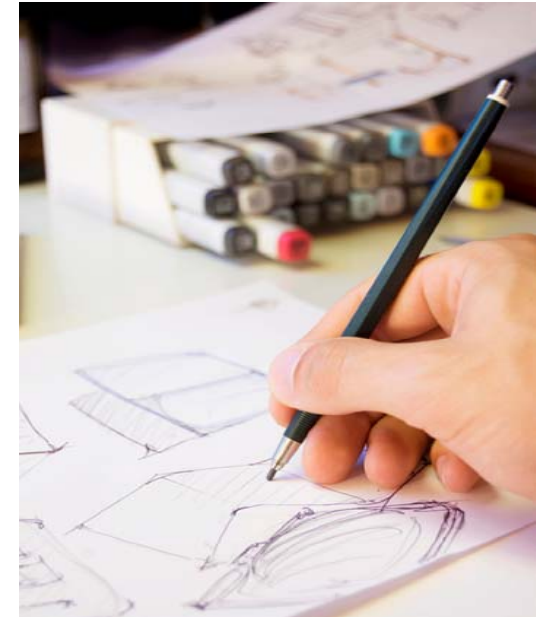
Visualization

- A natural and effective way to communicate across barriers and level the playing field for all participants
- Simplifies complex information
- Synthesizes multiple sources to a common (visual) representation
- Increases capacity [multiple knowledge workers] and fidelity [multiple perspectives] of decision making

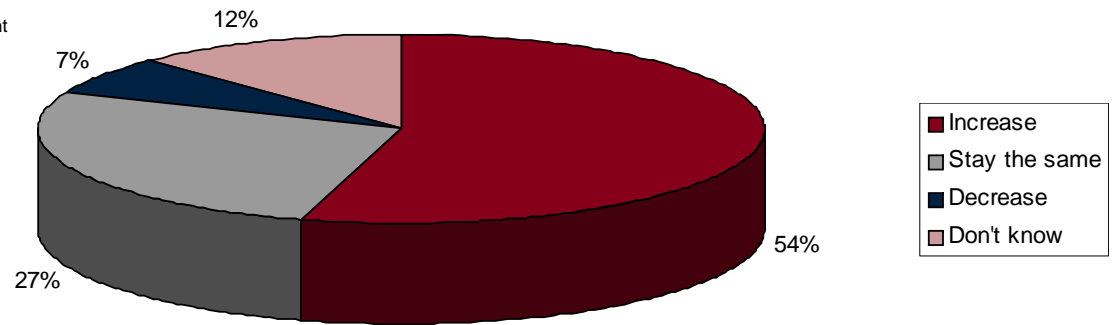
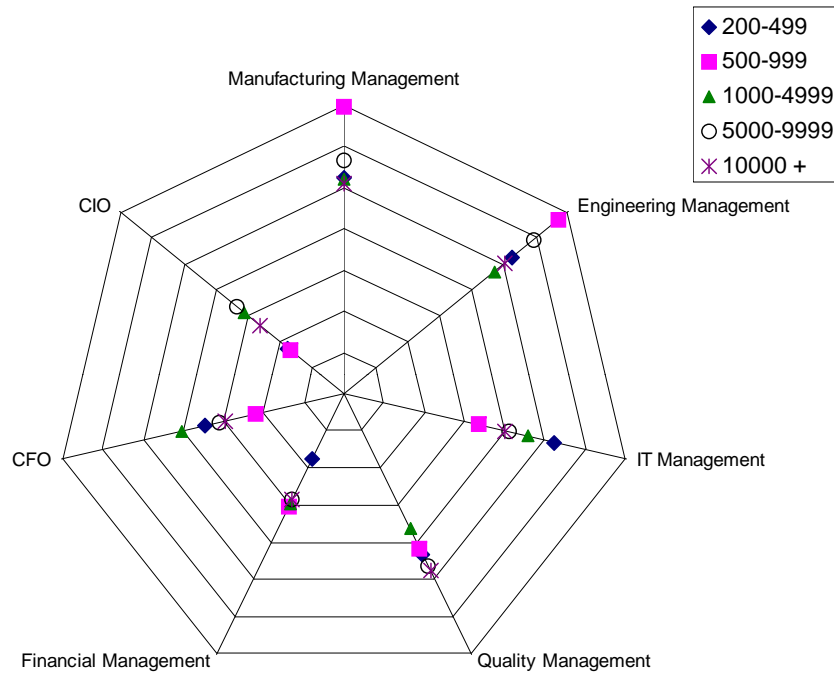


Changing Views

- Putting the 'L' back in PLM
- Manufacturers are taking a long-term view
 - Much more than features or cost
 - Heterogeneous, ever changing environment
 - Strategic relationship is key



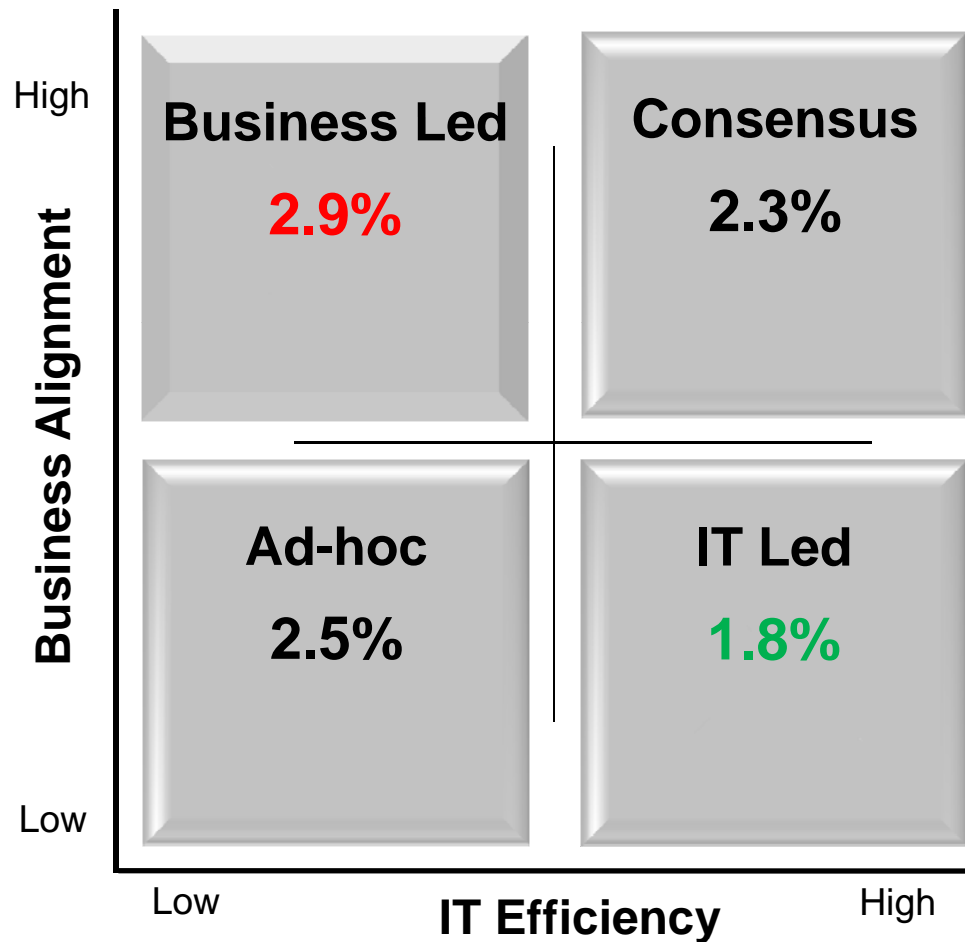
PLM Investment Trends



N=416
Sources: IDC Manufacturing Insights, 2010



Aligning IT with the Business



Source: IDC Manufacturing Insights 2010

Essential Guidance

- Adopt a holistic view of product lifecycle
 - Innovation
 - Optimization
 - Value
- Expand “PLM thinking” to all product lifecycle activities
 - Level the playing field for all decision makers and participants
 - Rationalize investment and implementation models for interdisciplinary decision making
 - Key productivity investments to consider
 - Collaboration platform deployment
 - Visualization tools
 - Analytic tools
 - Share models and best practices across programs and products, and with suppliers and partners

What About...

- Social product development?
- Cloud?
- Mobile devices?

Learn More

- Worldwide Manufacturing 2011 Top 10 Predictions
- Worldwide Product Lifecycle Management 2011 Top 10 Predictions
- Worldwide PLM 2009 Top 10 Predictions
- Global PLM Study: Observations and Lessons Learned
- PLM Market Analysis and Go to Market Strategy
- Product Life-Cycle Economics - Needs, Opportunities and Tactics



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