

# PLM For Improved Product Lifecycle Decisions

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# About IDC Manufacturing Insights

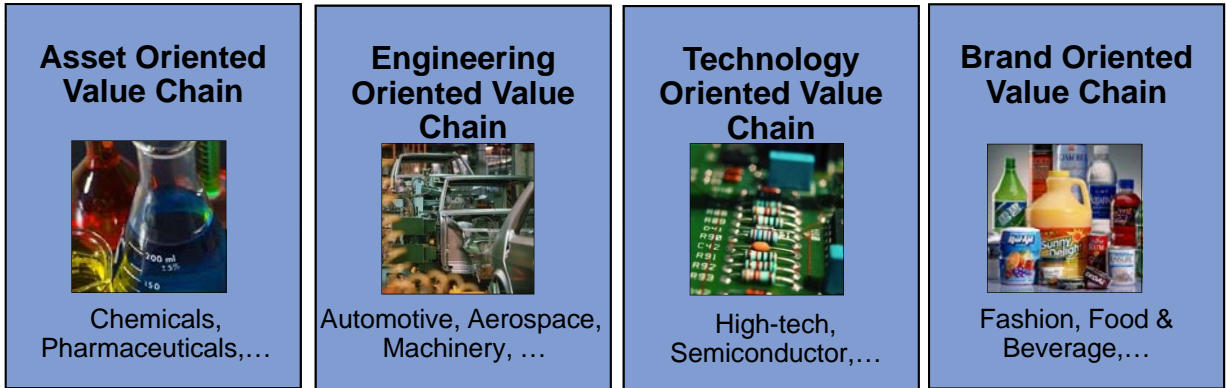
- The premier independent global market intelligence and advisory firm for information technology
- Delivering IT intelligence, industry analysis, market data, and strategic guidance since 1964
- More than 1,000 analysts in over 100 countries provide global, regional, and local expertise on technology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



# Manufacturing Industries View

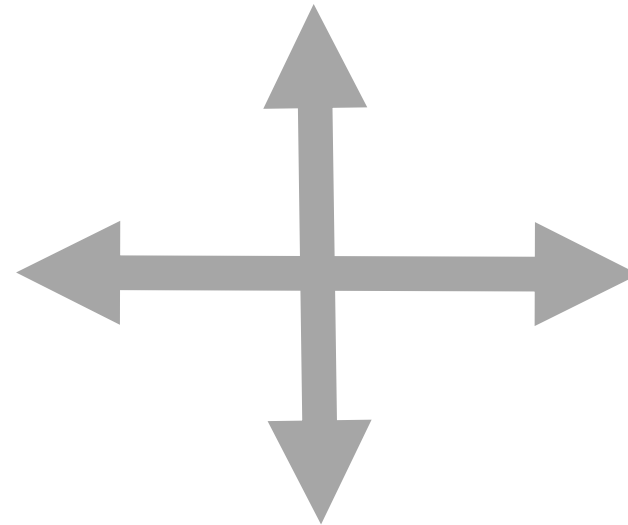
Value Chains

Process Domains

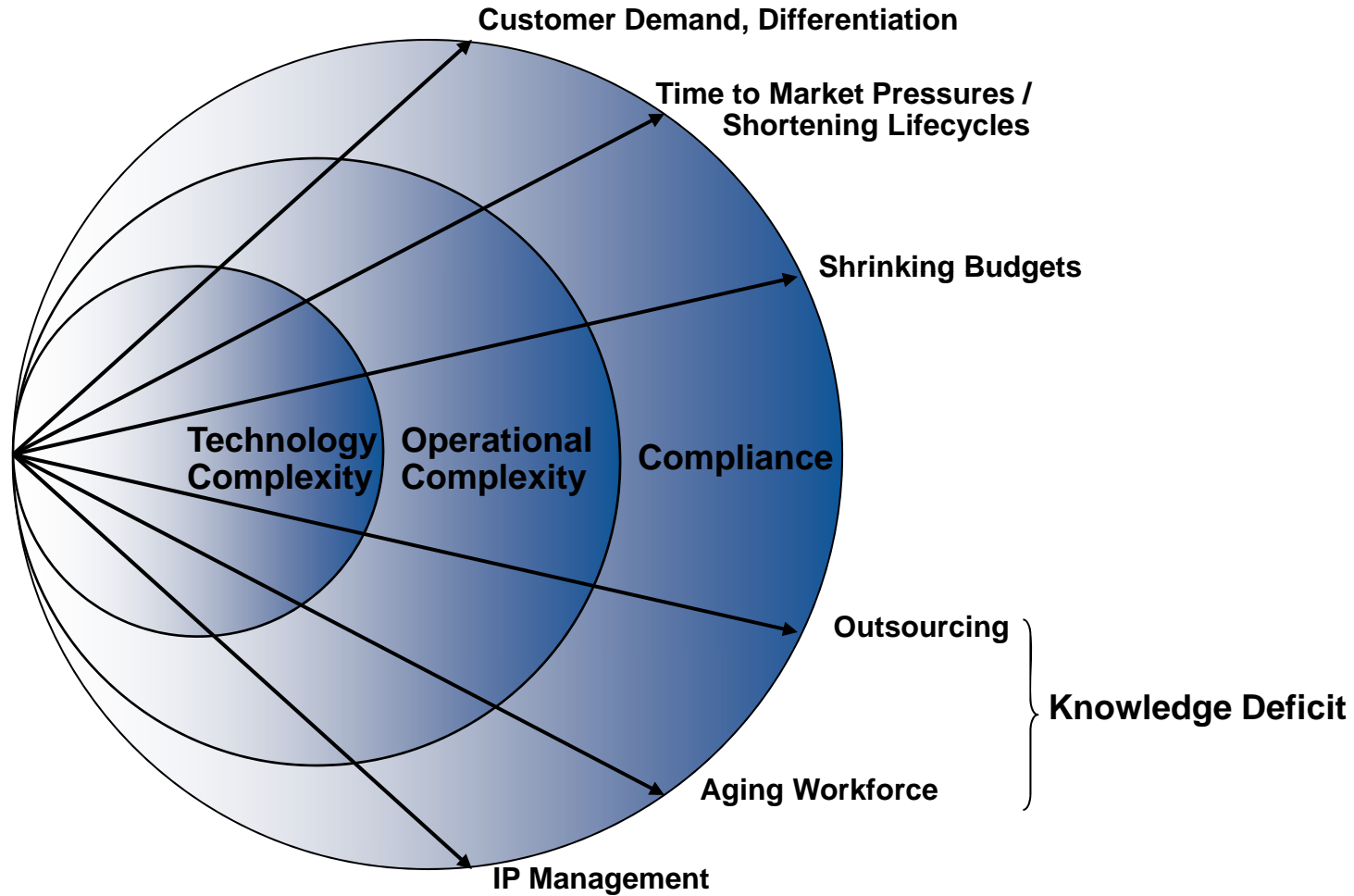


Investigate a segment across domains

Investigate a domain across segments




# Why is it Difficult to Make High Quality Products?



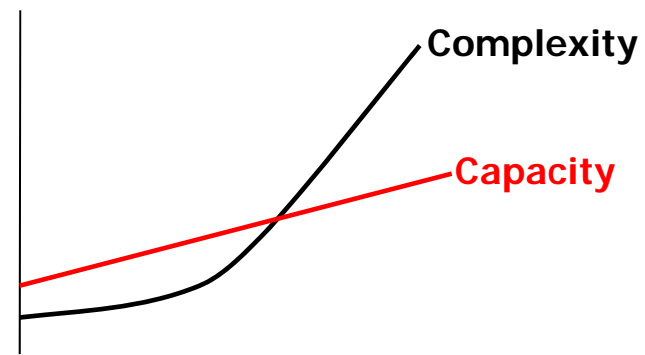
# Challenges

## Increased

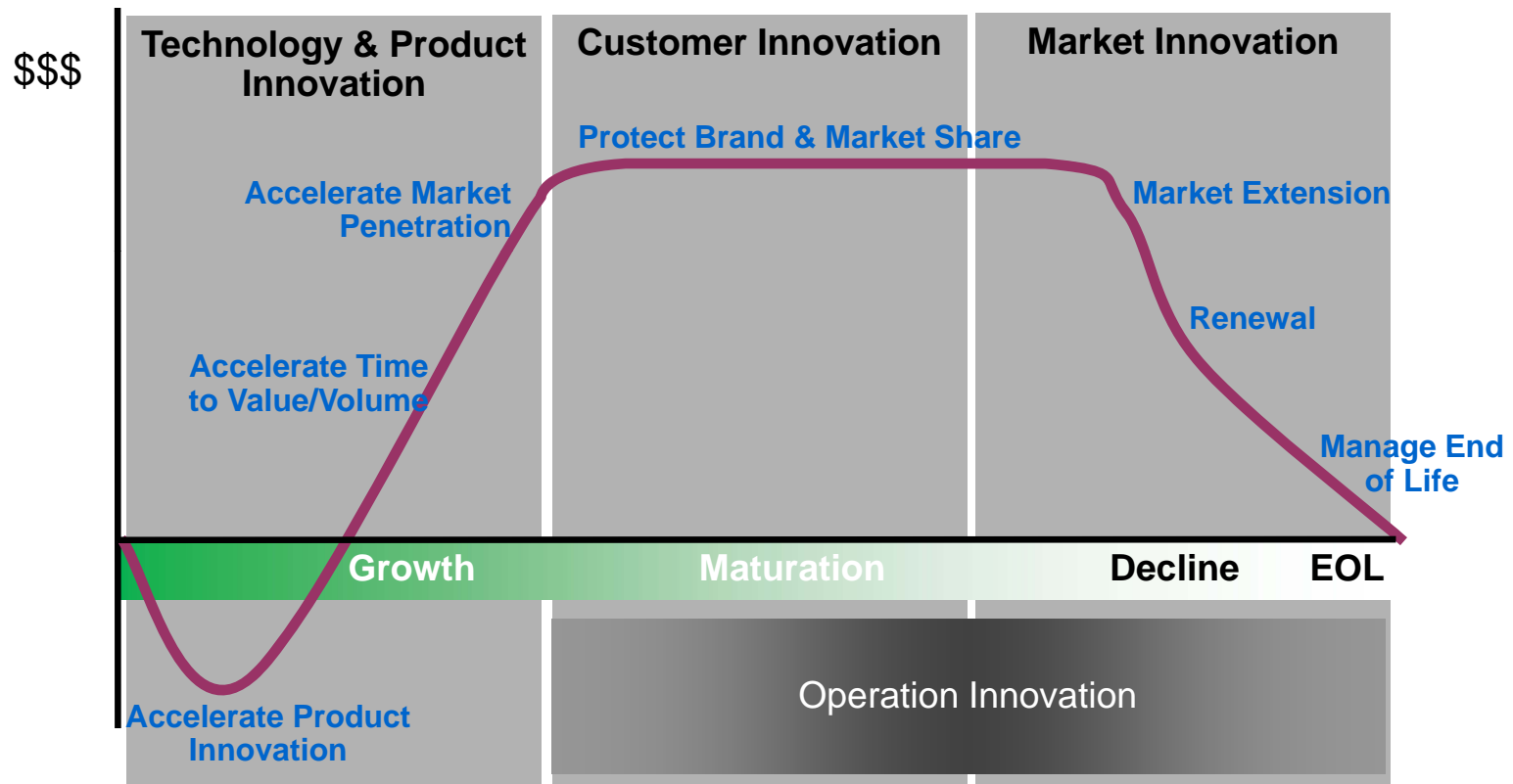
- Technology density and complexity
    - Embedded control software
    - System of systems
    - Configurations and options
  - Complex collaboration
    - Outsourcing
    - Partnerships
  - Time & budget pressures
-  Information overload
- Information systems & process fragmentation

## Diminishing

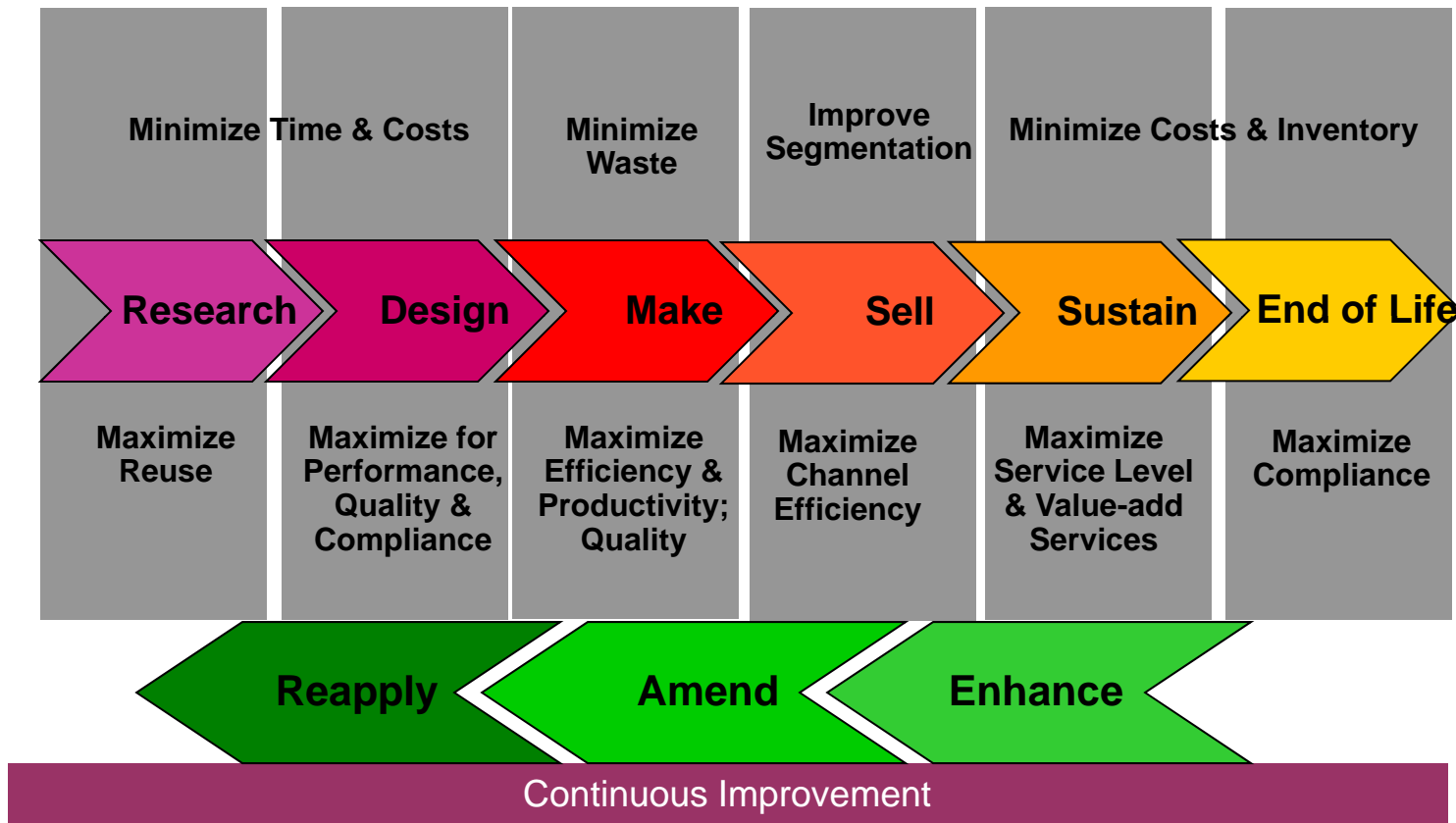
- Visibility
- Experience
- Time for formal & informal learning
- Knowledge sharing



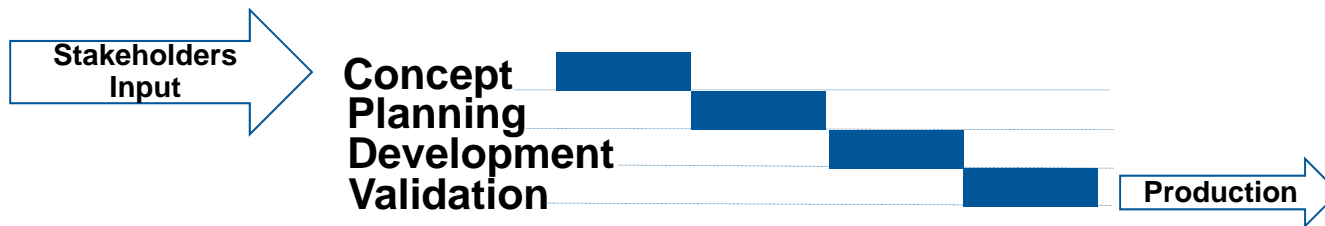
# PLM as a Strategic Capability



# Opportunities (and Challenges) Abound



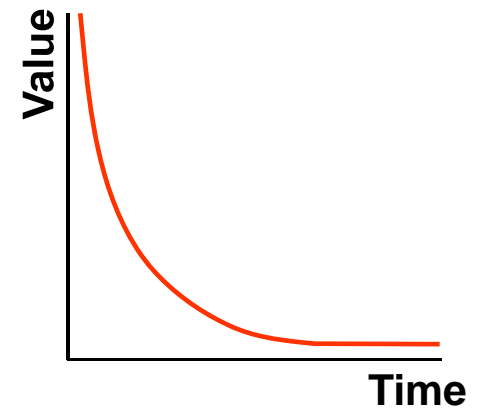
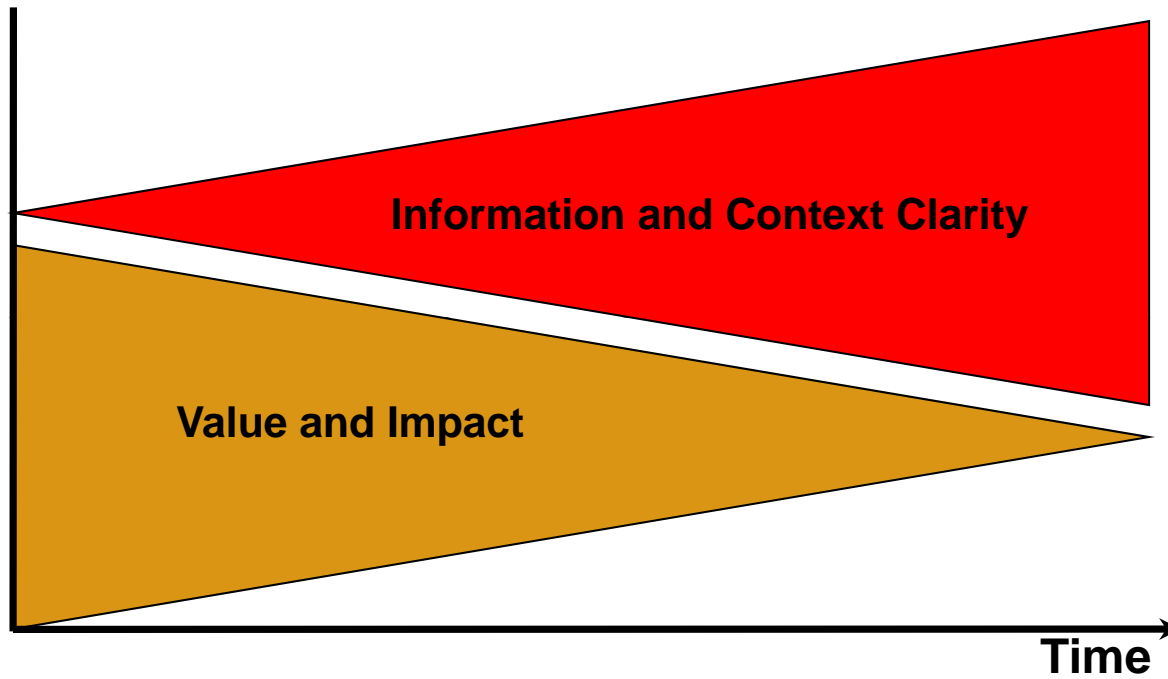
# Improving Productivity and Efficiency



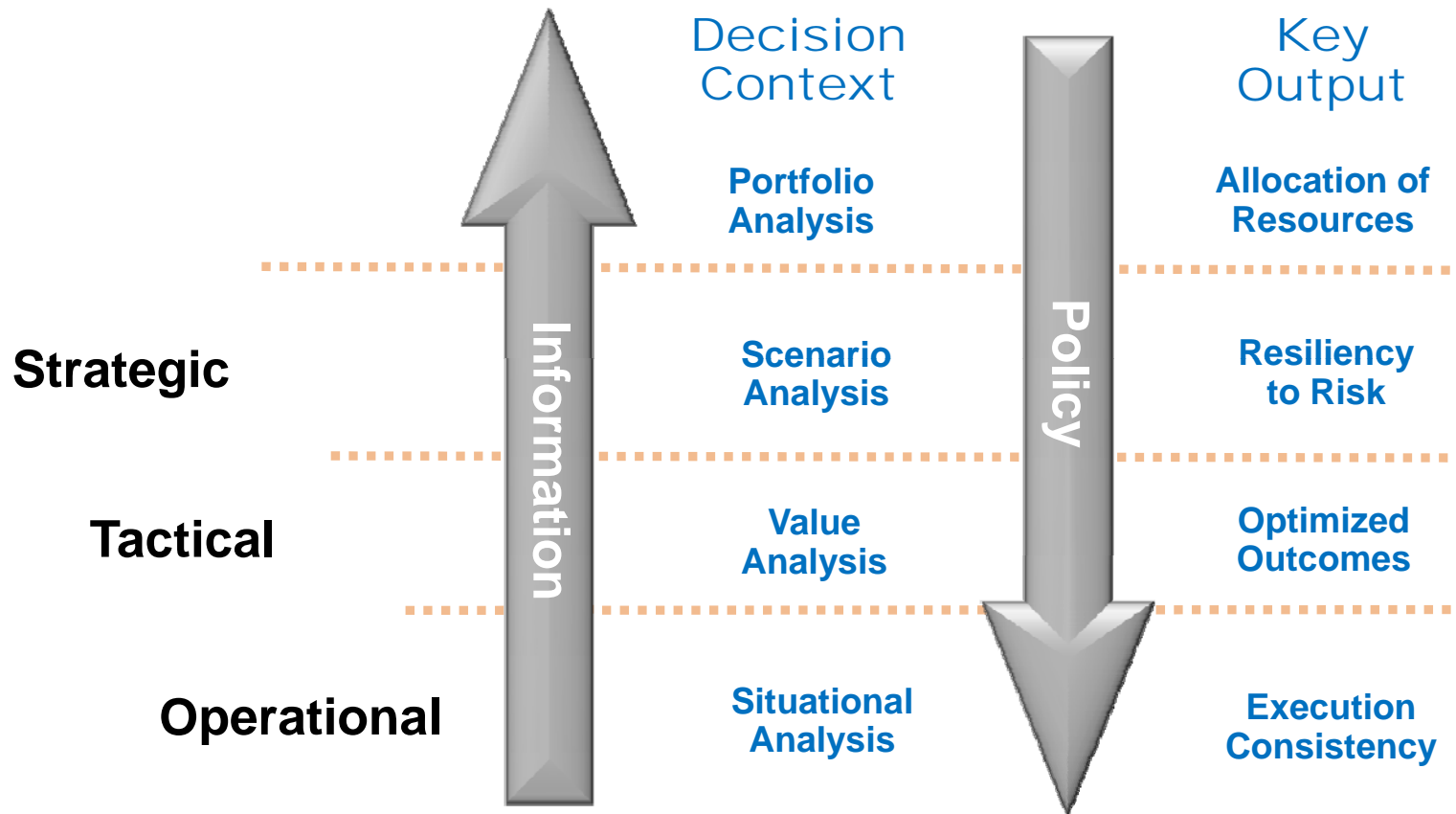
- Knowledge reuse
- Resource utilization
- Waste reduction



# Time-Value of Information



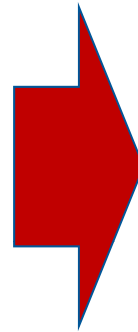
# Making Better Decisions



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

# Decision Platform Transformation

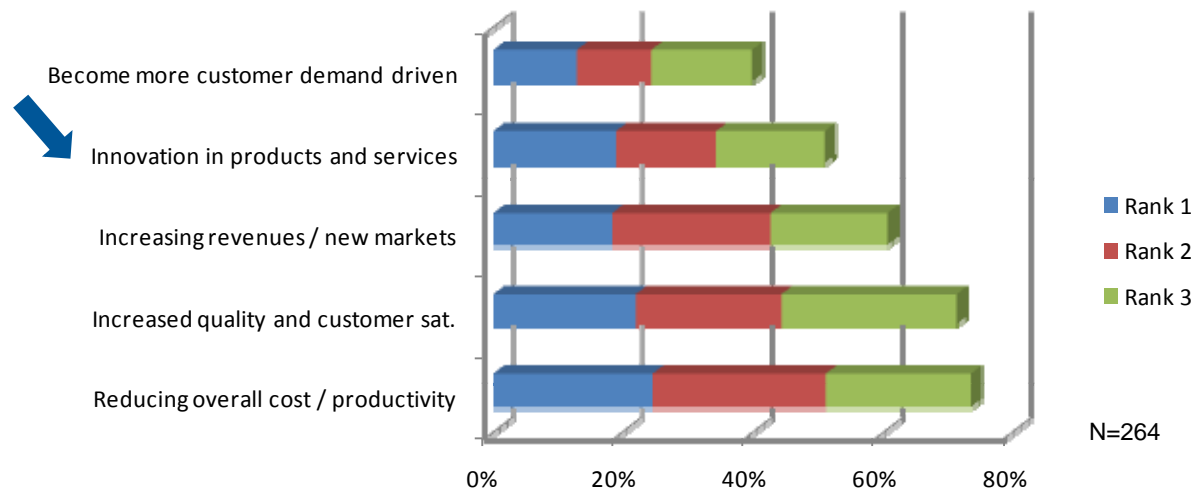
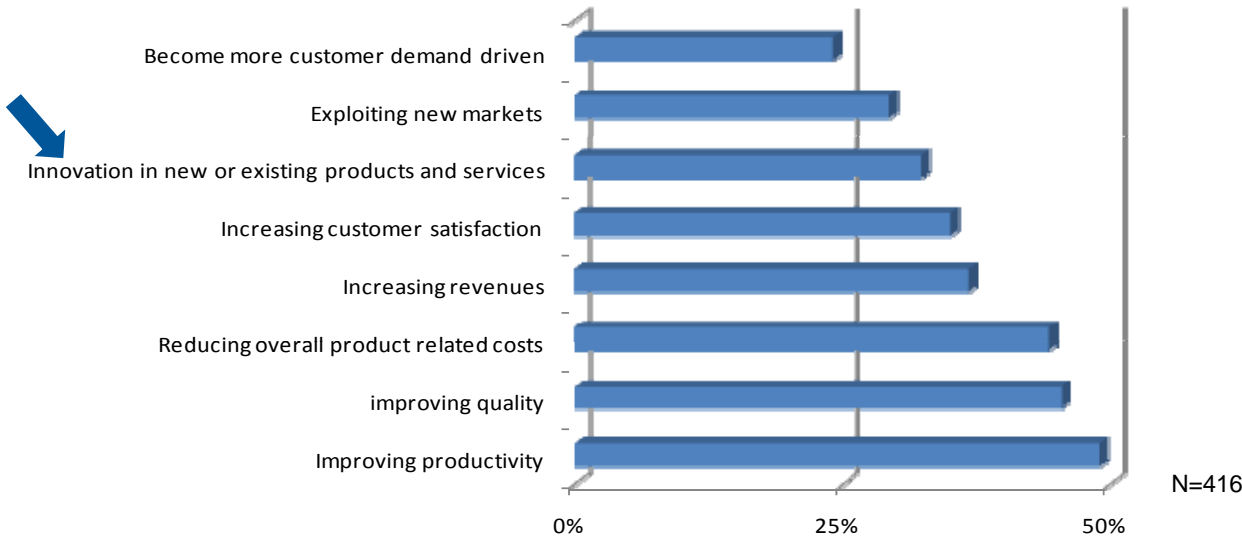
- Singular decisions
- Driven from upstream
- Limited input from non-engineers
- Over emphasis on “innovation”



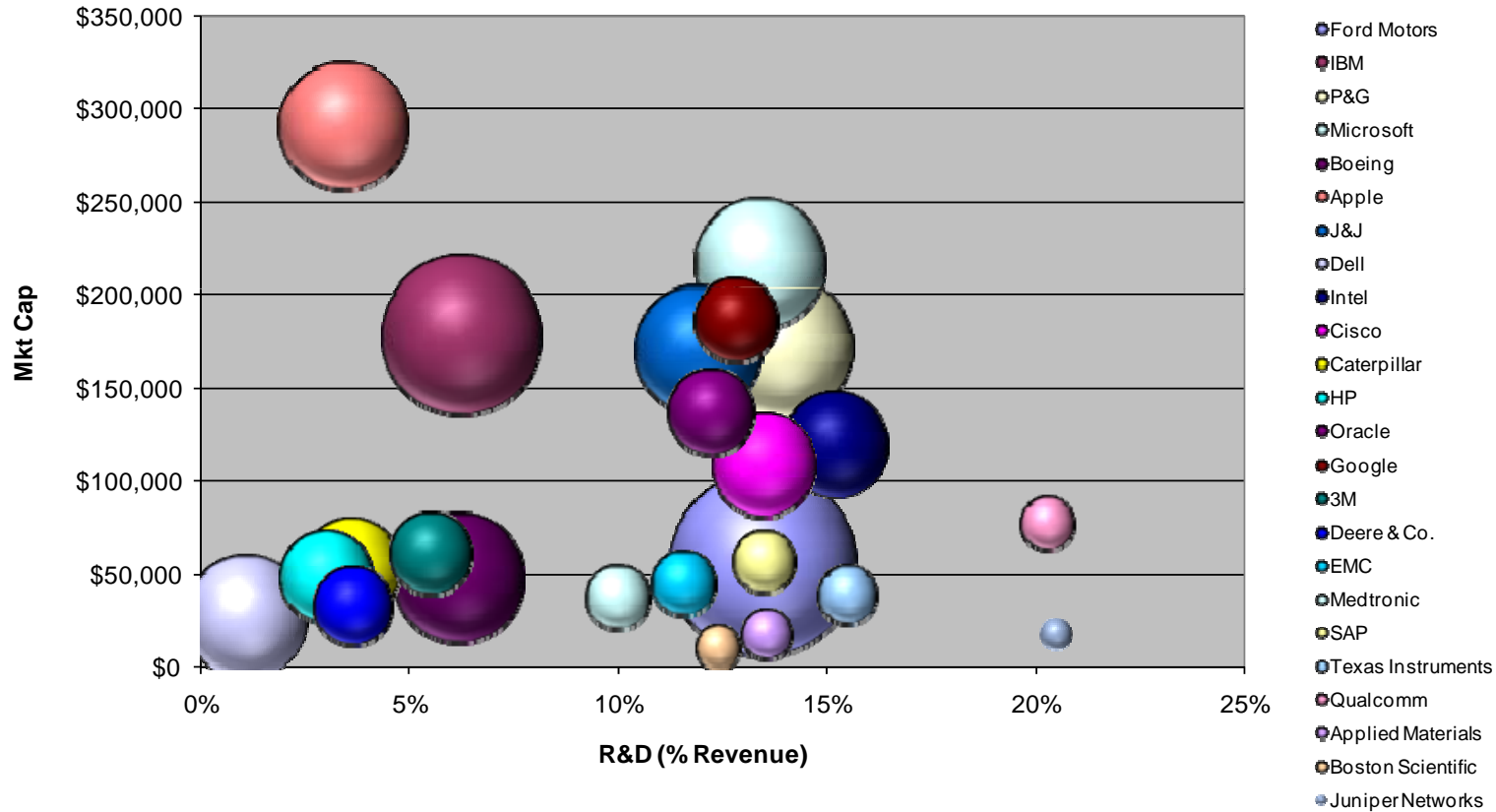
- Open systems
- Collaboration
- Visualization
- Leaning innovation

# 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

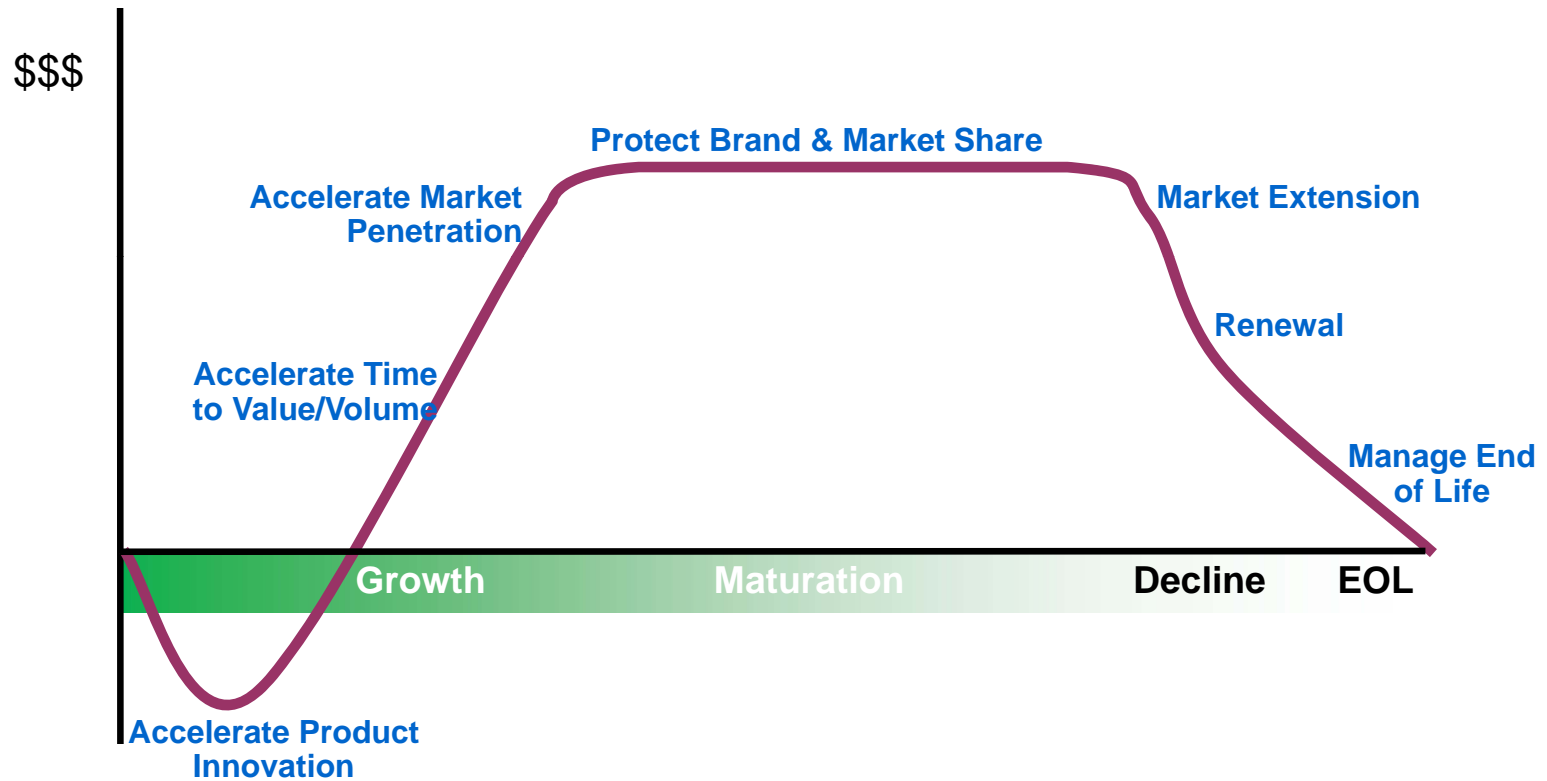
Sources: IDC Manufacturing Insights, 2011  
 Yahoo! Finance, Company Data



# Scary Statistics

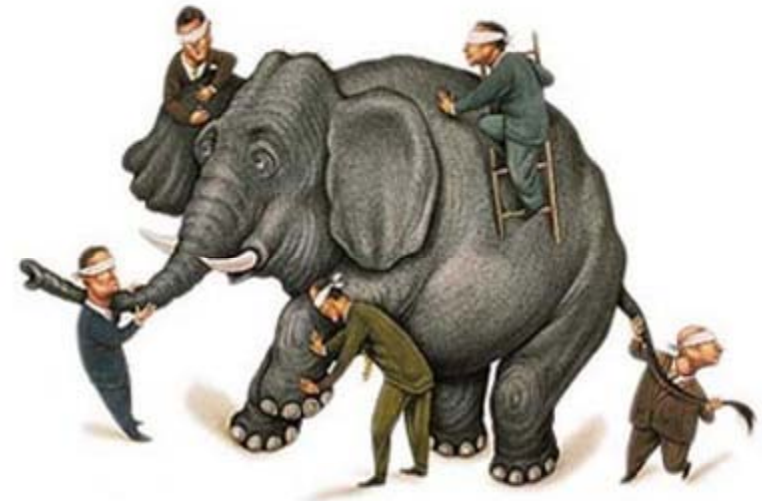
- About 20% of projects are over time, and 35% of product companies had experienced at least one runaway project
- Most products fail to meet expectations:
  - Only one out of every four product development programs yields a product that reaches the market
  - Two thirds of those still do not meet expectations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

# Purposeful Innovation



# Collaboration Platform

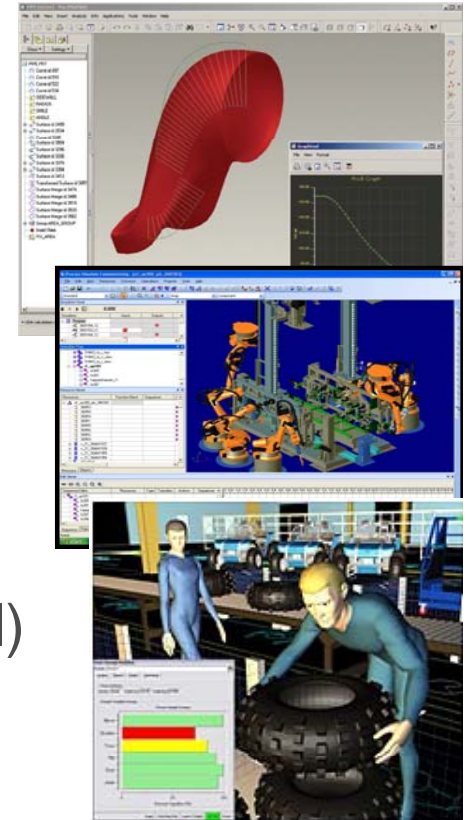
- Develop a rich platform of product and process knowledge to support continuous innovation across multiple disciplines and lifecycle phases
  - Integration and harmonization of tools and data
  - Enabling business process innovation
  - Collaboration (internal and external)
- Problems:
  - Access
 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





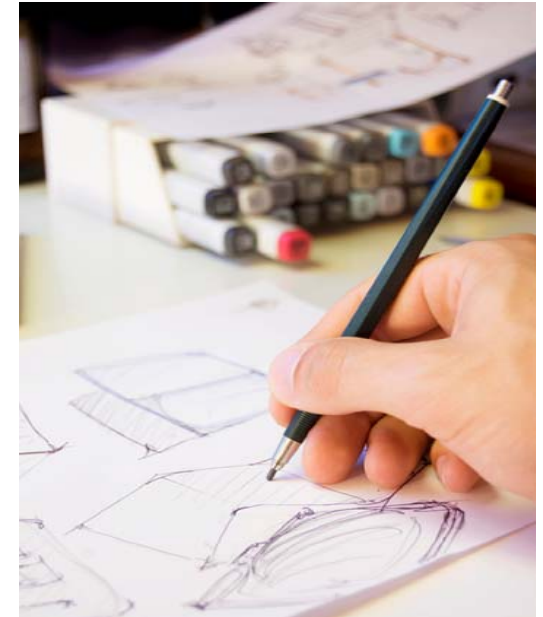
# Visualization

- 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

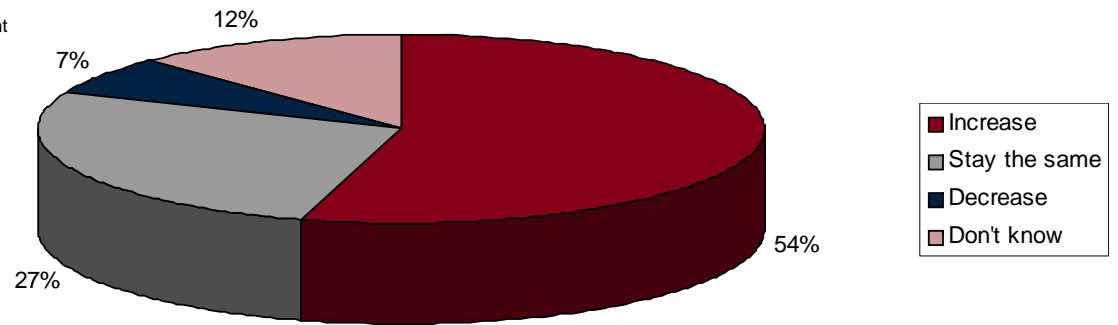
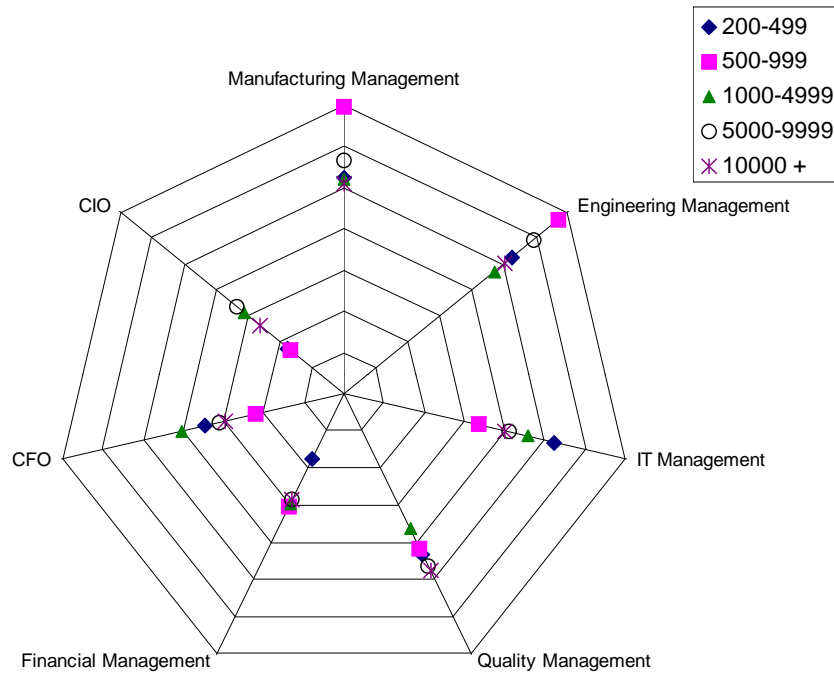


# Changing Views

- 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



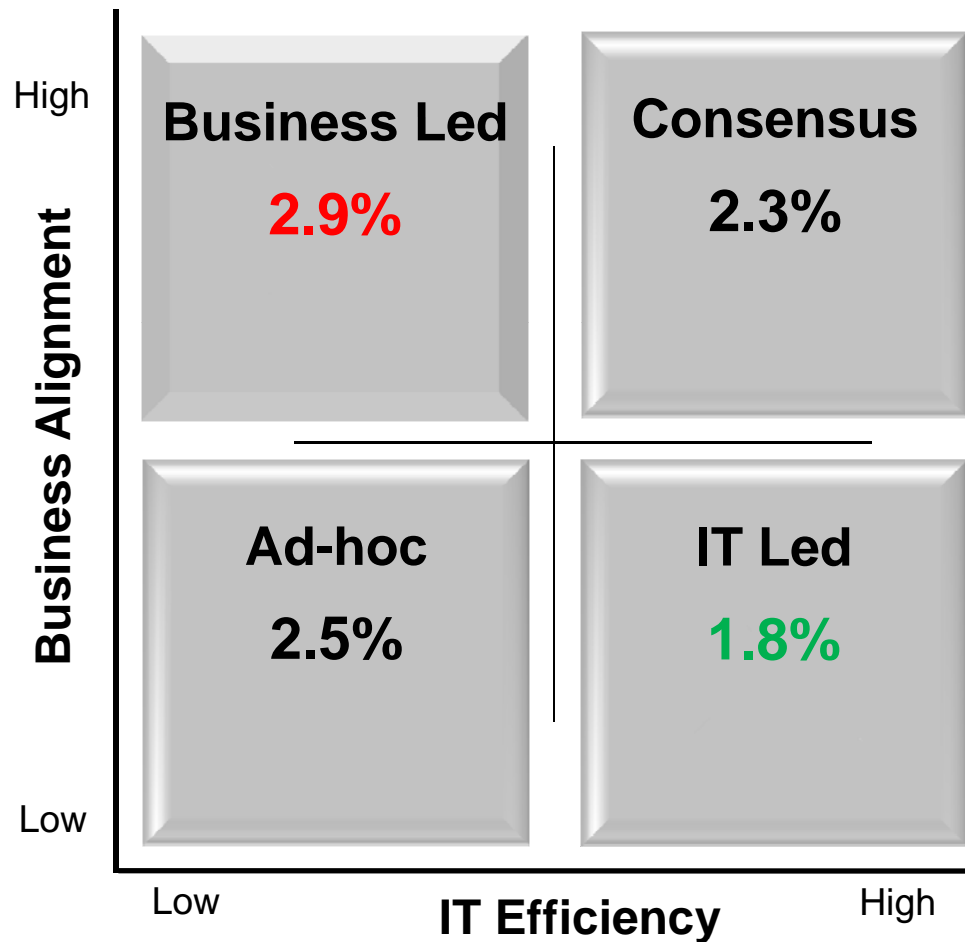
# PLM Investment Trends



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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