

# Biotech's Supply Chain Transformation

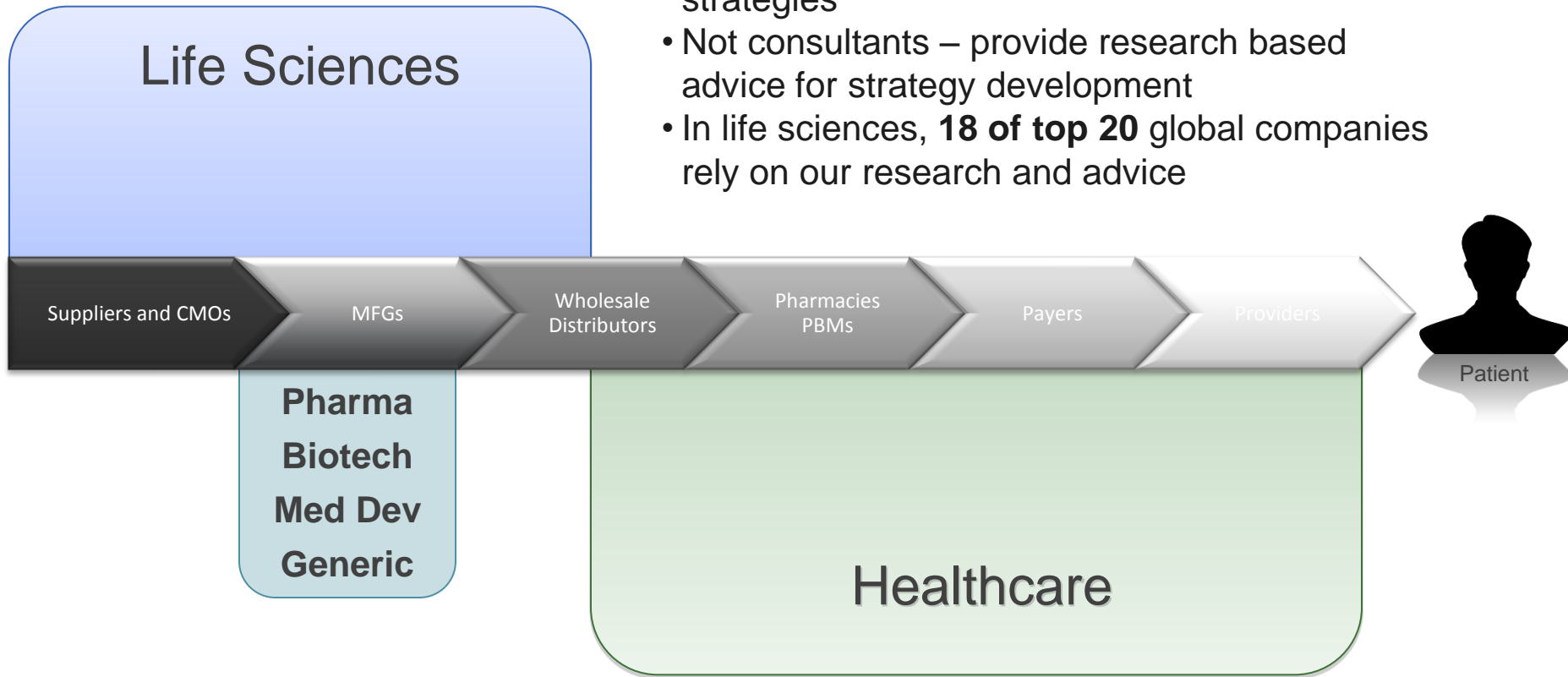
*Do We Really Need to Collaborate?*

October 19, 2009

**Wayne McDonnell** – Director, Healthcare & Life Sciences

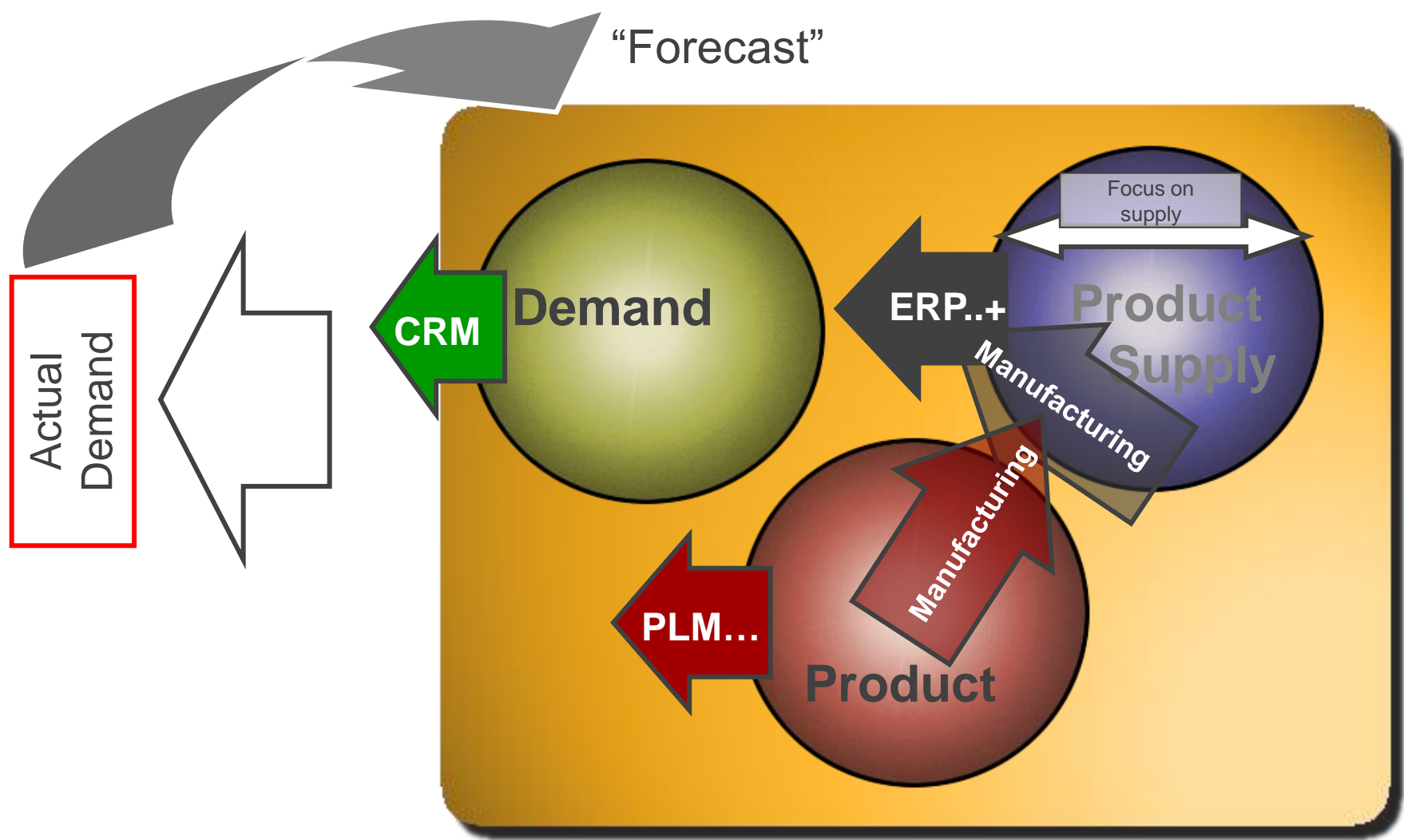
# Healthcare Value Chain Coverage Model

- AMR Research is an advisory & research firm focused on supply chain and enterprise strategies
- Not consultants – provide research based advice for strategy development
- In life sciences, **18 of top 20** global companies rely on our research and advice



# Disconnected Supply Chain Capabilities

## Processes & IT Deployed in Silos Across the Value Chain





# AMR Supply Chain Top 25

**Driving Supply Chain Excellence**

1. Apple
2. Dell
3. Procter & Gamble
4. IBM
5. Cisco Systems
6. Nokia
7. Wal-Mart Stores
8. Samsung Electronics
9. PepsiCo
10. Toyota Motor
11. Schlumberger
- 12. Johnson & Johnson**
13. The Coca-Cola Company
14. Nike
15. Tesco
16. Walt Disney
17. Hewlett-Packard
18. Texas Instruments
19. Lockheed Martin
20. Colgate Palmolive
21. Best Buy
22. Unilever
23. Publix Super Markets
24. SonyEricsson
25. Intel

# 2007 Supply Chain Top 25: Stock performance



	<b>5/31/07 – 12/31/07</b>	<b>2007 Full Year</b>
<b>Top 25</b>	<b>6.00%</b>	<b>17.89%</b>
<b>DJIA</b>	<b>-2.70%</b>	<b>6.43%</b>
<b>S&amp;P 500</b>	<b>-4.04%</b>	<b>3.53%</b>

# 2008 Supply Chain Top 25: Stock performance



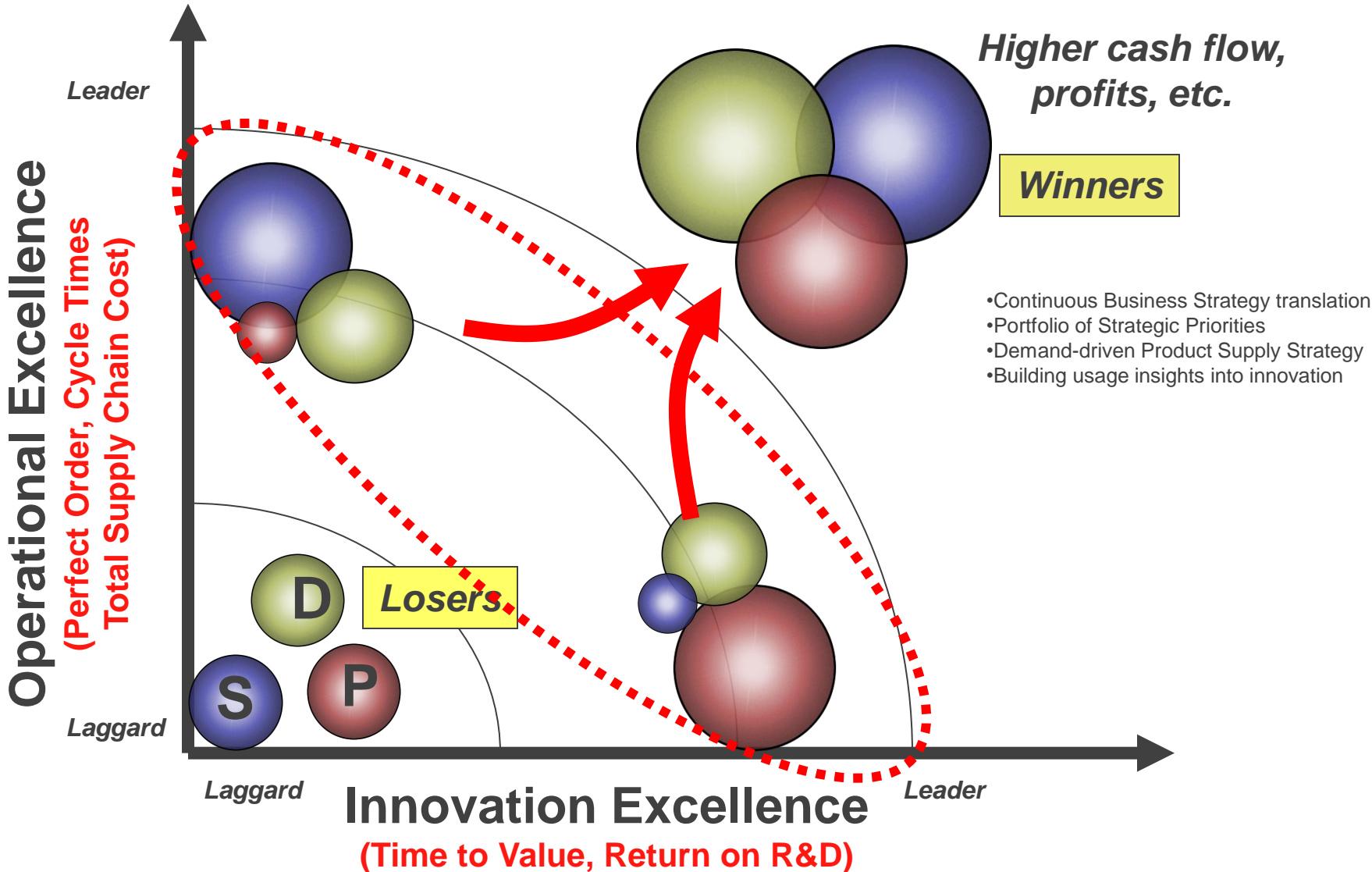
	<b>5/29/08 – 12/31/08</b>	<b>2008 Full Year</b>
<b>Top 25</b>	<b>-28.85%</b>	<b>-29.11%</b>
<b>DJIA</b>	<b>-30.60%</b>	<b>-33.84%</b>
<b>S&amp;P 500</b>	<b>-35.40%</b>	<b>-38.49%</b>

# New Capabilities in the Context of Life Sciences



**Demand-Driven Value Network**  
 A system of technologies, processes & organization that senses & responds to **zero latency demand signals across a value-driven network** of customers, suppliers, & employees.

# Leaders Leverage Operations & Innovation Excellence



# What Distinguishes Leaders?

- Outside-in focus
- Embedded innovation
- Extended supply chains
- Balanced excellence
- Attitude
- Metrics
- Supply chain talent

**Outcome**

**Supply chains that are...**

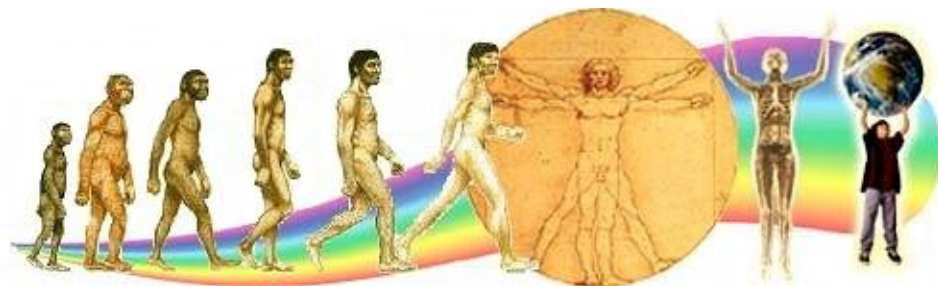
- Predictable and reliable
- Flexible

**...and have:**

- Profitable demand response
- Sustainable growth
- Satisfied customers

# The Value Chain Transformation

## *Becoming Demand Driven*

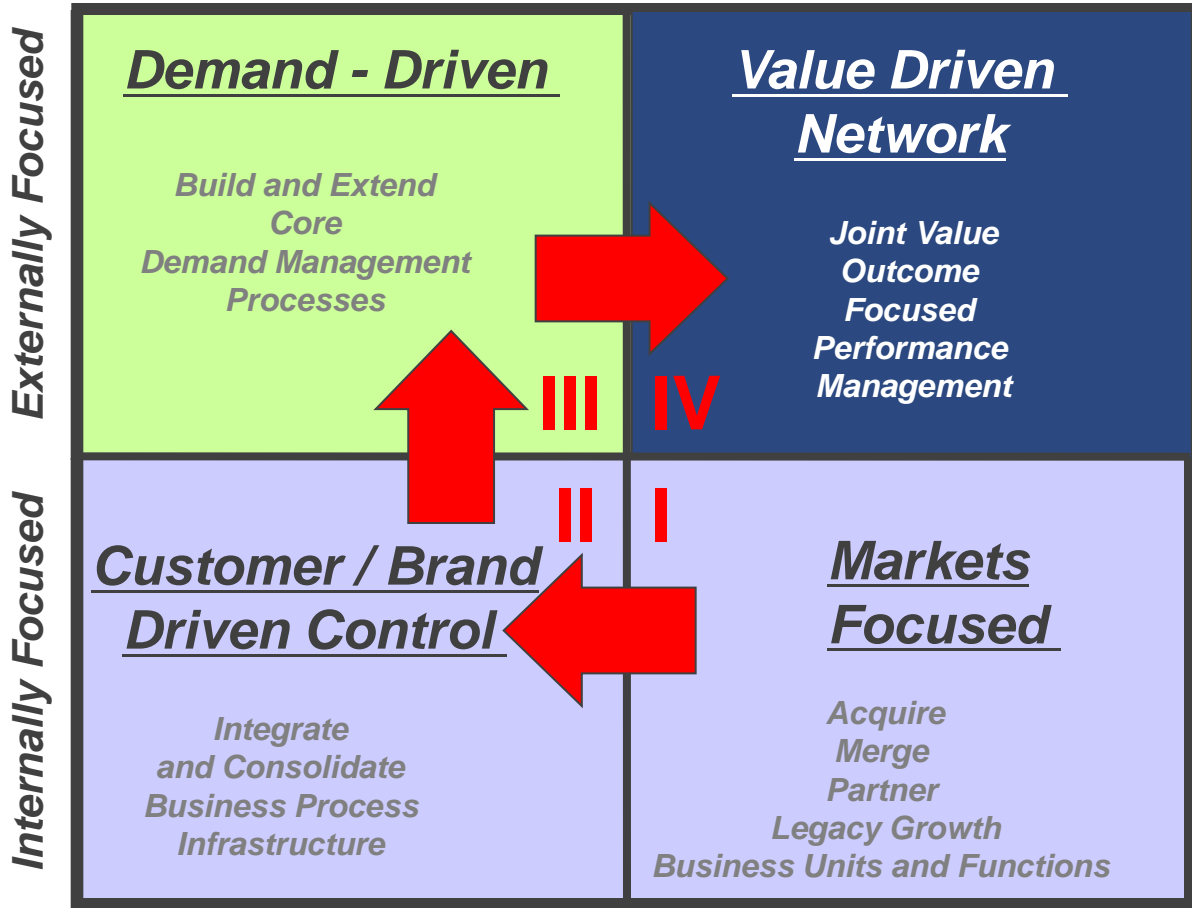


# Stages of Value Chain Transformation/Change Maturity

- Cost to “Deliver”
- Perfect Orders

**Responsive to Demand**  
**Cost to Deliver**

**Growth and Profitability**  
**Cost to Serve**



- Growth & Market Share
- Cost to “Serve”
- Profitable Perfect Orders
- Profitability

# The Five Pillars of SC Transformation

## 1. Global Supply Chain Transformation seen as a Strategic Imperative

- Scope - end to end business growth & performance vs product supply
- Prioritized and operationalized from the Outside – In
- Inside – Out capabilities as base
- Led from CEO level

## 2. Downstream Processes and Collaboration Capabilities

- Demand, segmentation, end to end processes, visibility
- Immediate priorities; S & OP , demand visibility

## 3. Business Prioritized Information Management and IT Strategy

- IT enablers and an Enterprise Architecture

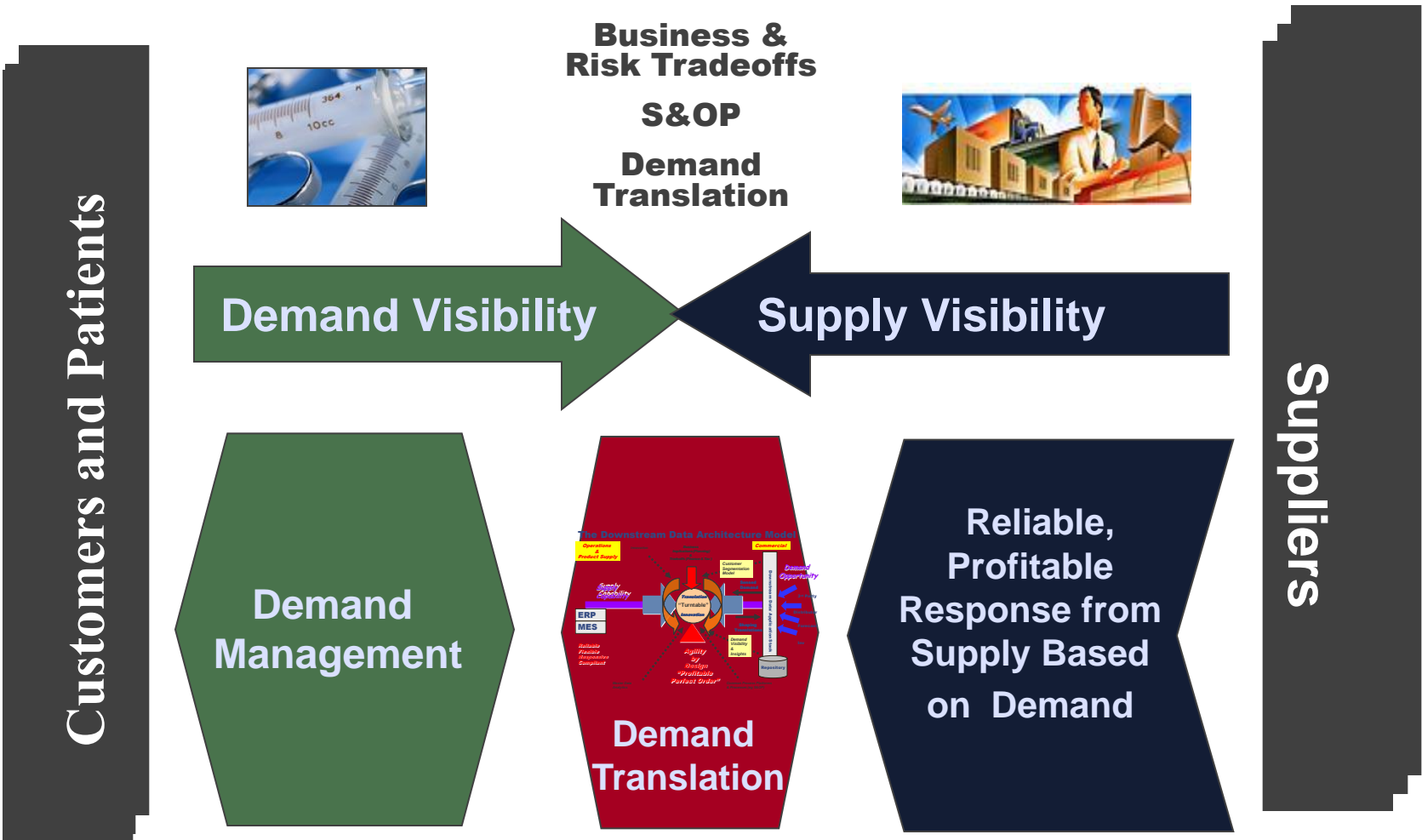
## 4. Leading and Operationalizing The Transformation

- Change leadership – scope
- Change management

## 5. Addressing the Global Talent Skills Shortage

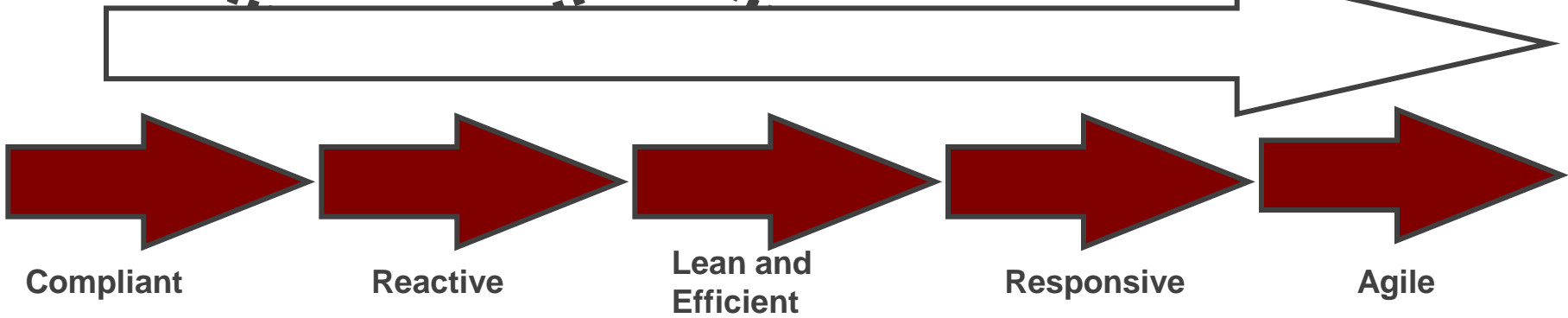
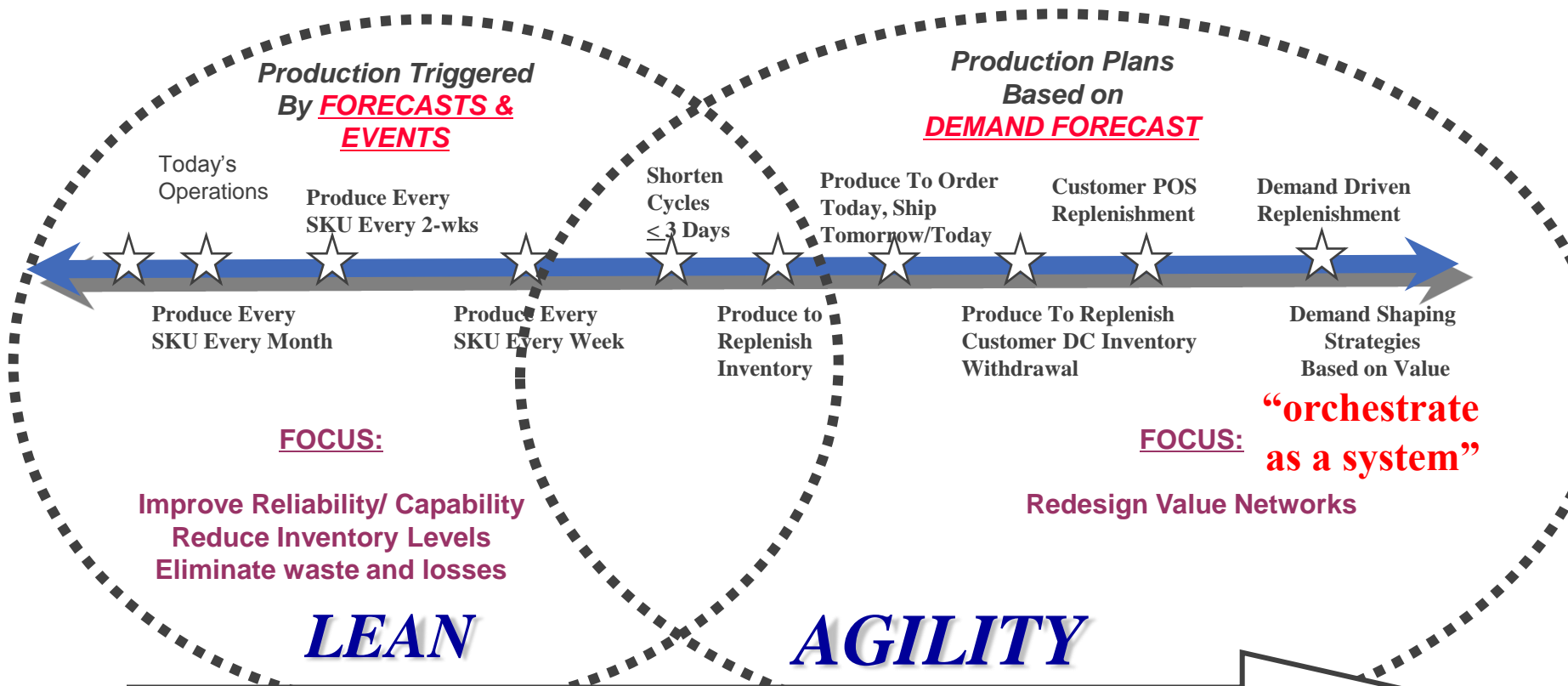
- Skills to manage the end to end business process network

# The Core Elements of the Demand Driven Value Chain



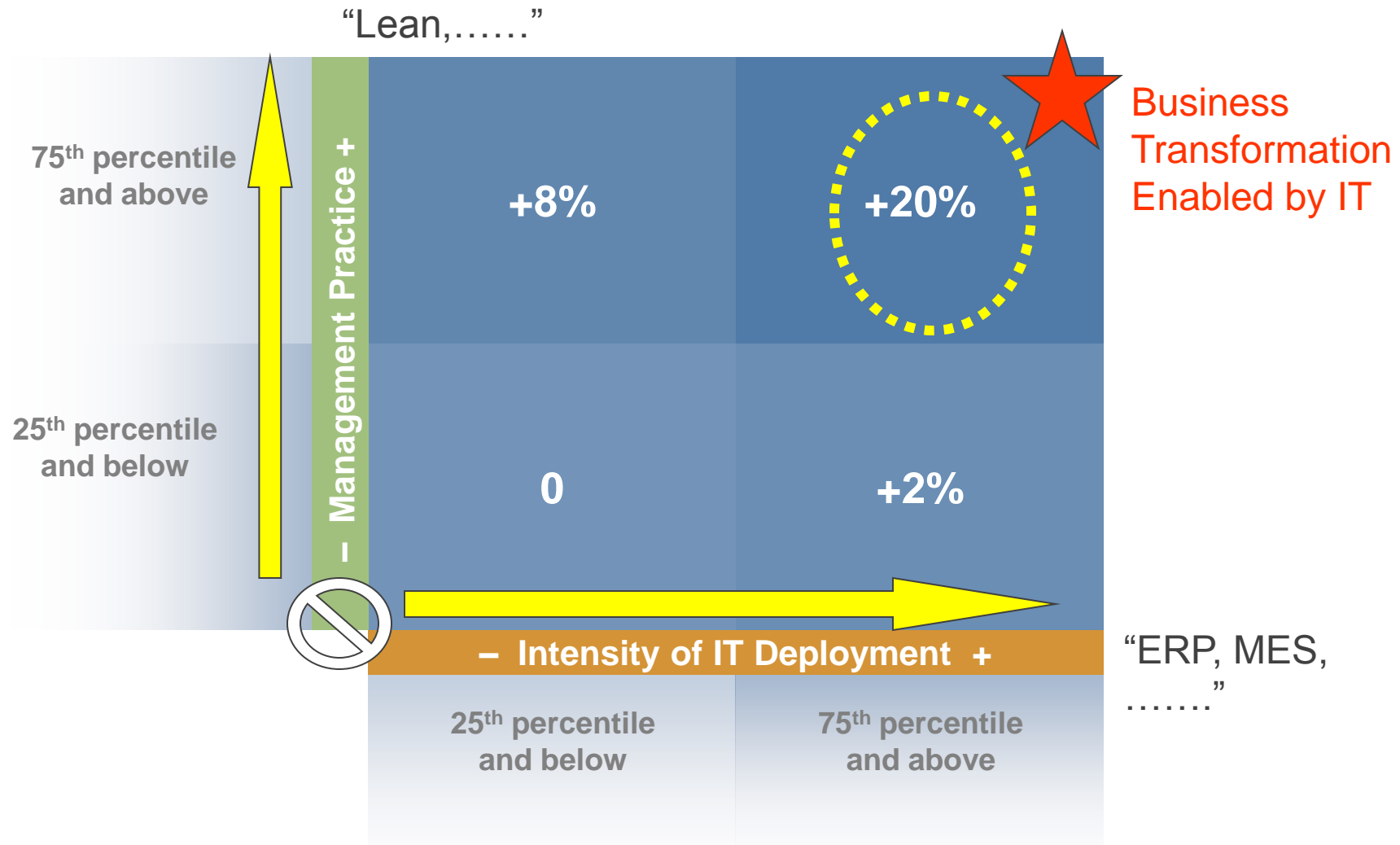
**Takeaway: Visibility and collaboration are key, but risk/opportunity tradeoffs are inherent**

# The Journey To Agility



Source: P&G / AMR Analysis

# Process, Technology and Best Practices Combine To Improve Productivity



Source: London School of Economics–McKinsey survey and analysis of top 100 companies in France, Germany, United Kingdom and United States

# Leaders Crystallize the Operating Strategy

## Business strategy

*What are the right things to do to increase company value?*

## Demand-driven value-network strategy

*What are the right ways to support the business strategy?*

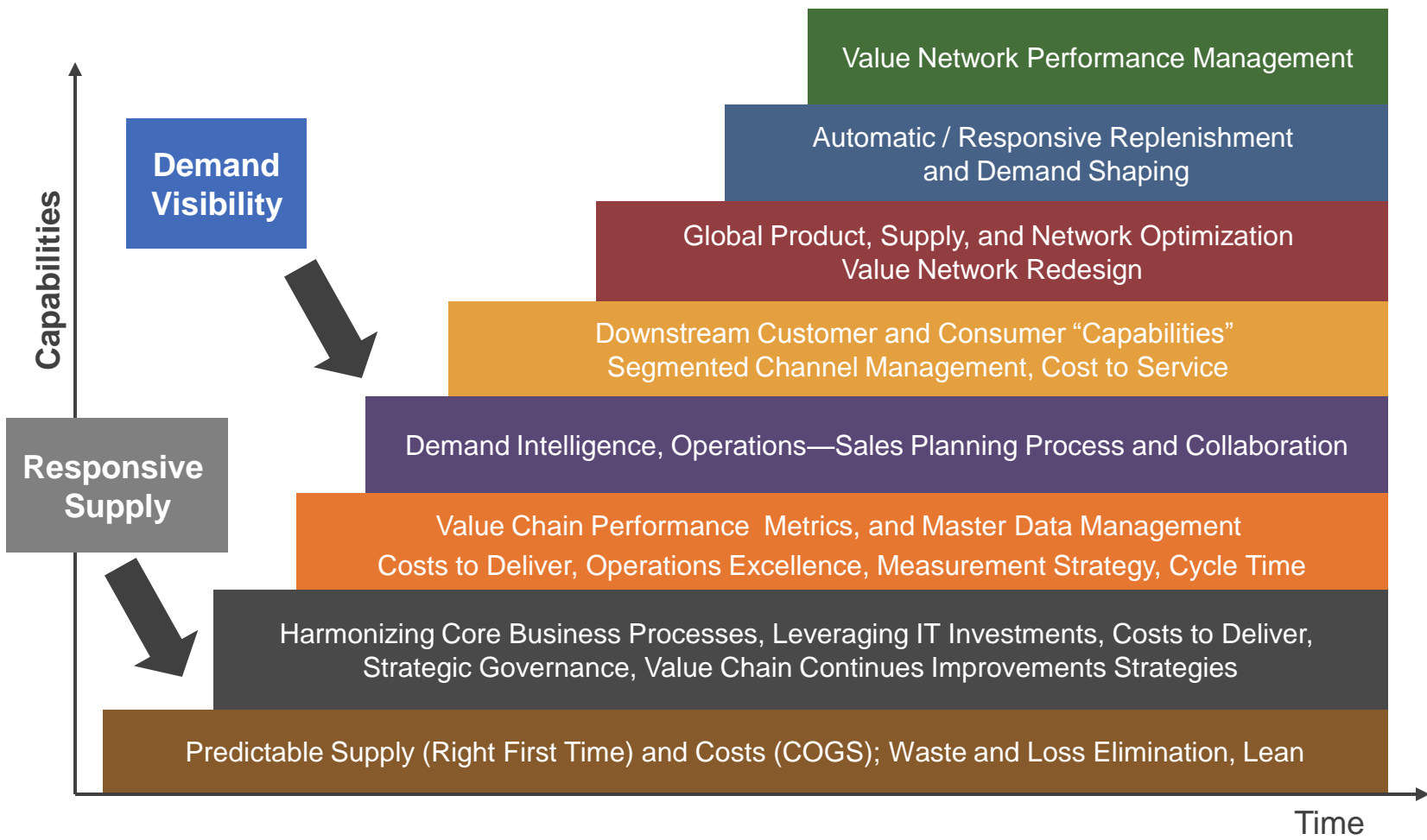
*What are the right trade-offs between value drivers for each value network?*

Align demand relationships	Right product platforms	Design the supply response	Build organizational systems and manage talent	Align supply relationships
Demand Networks	Design Networks	Supply Chain Network Design	Continuous Improvement	Effective Supply Networks
Joint Value Creation Strategies	Innovation Methodologies		Capabilities Required	Execution of buy-side strategies

## Business Process

*How do I do the right things right?*

# Roadmap to the Demand-Driven Transformation



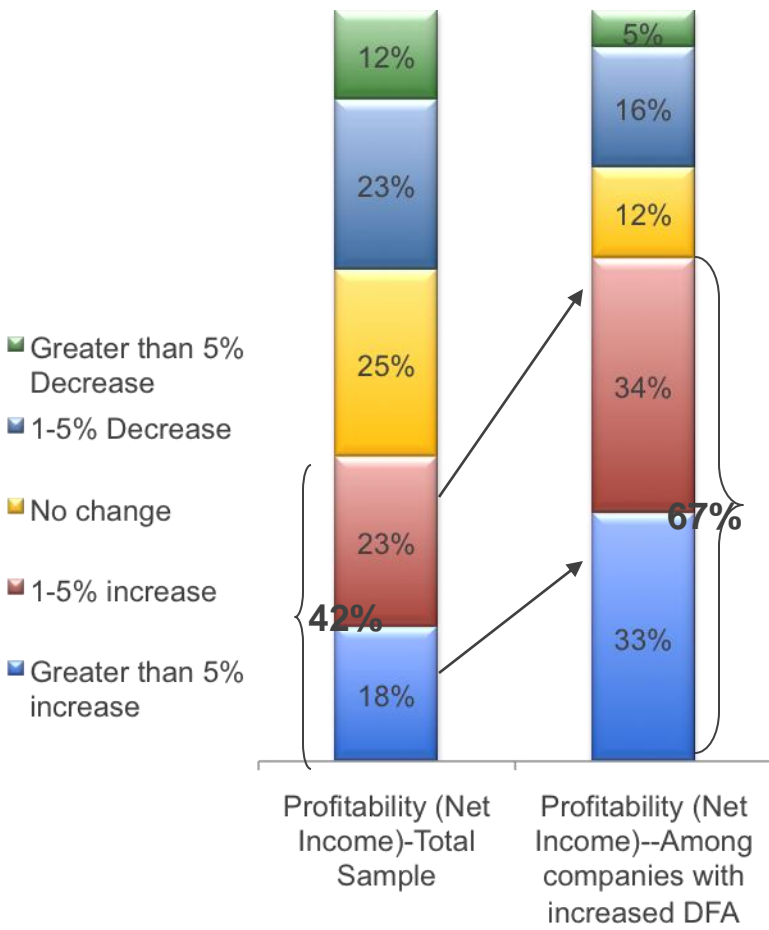


# Driving Supply Chain Excellence

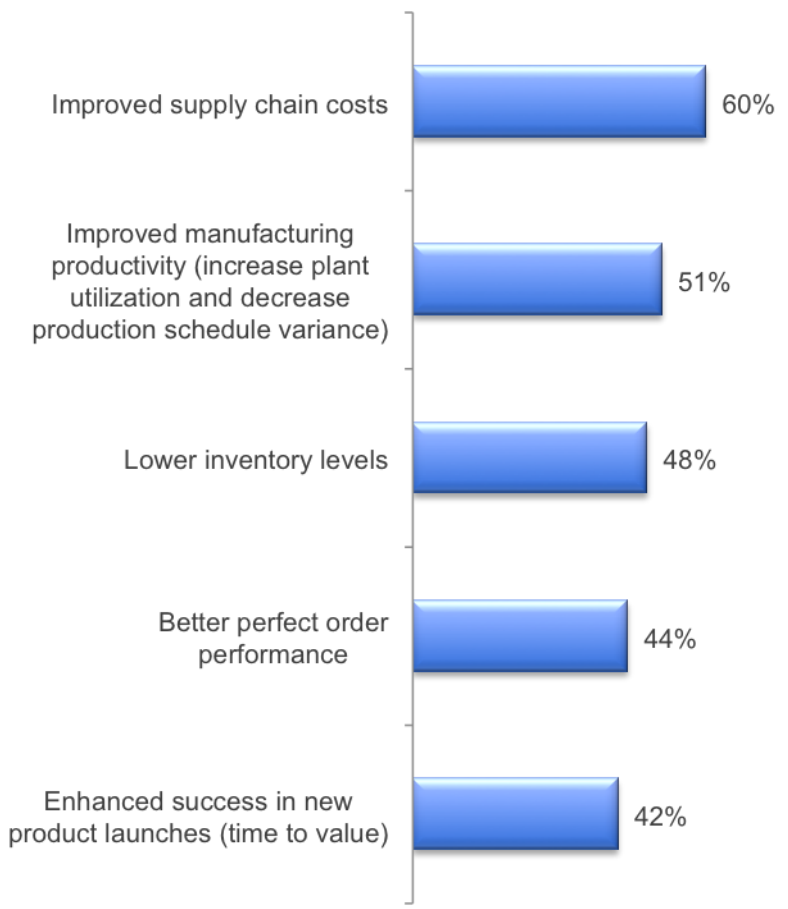
## An Internal View

# Leaders Derive Significant Benefits from Demand Visibility

Level of change seen amongst better demand forecasters in profitability performance over the last 12 months



Benefits realized as a result of demand forecast accuracy improvement



Source: 2008 AMR Healthcare Study

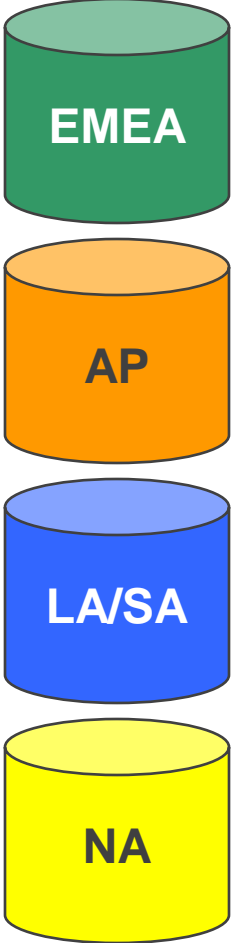
# Regional Planning Hubs

Market Demand Management

Regional Planning Hubs

Supply Network Management

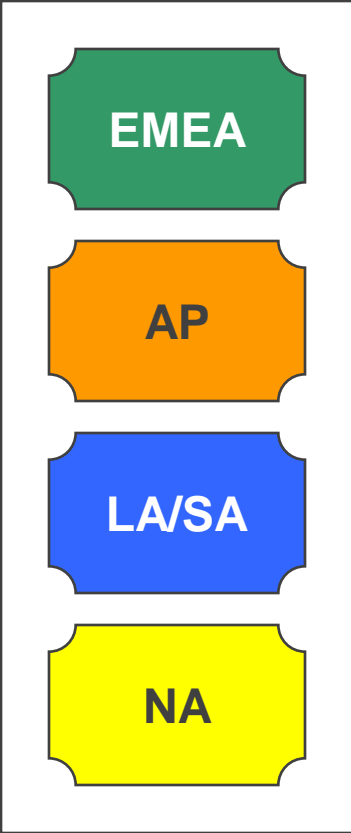
Centralized or Center-Led Sales & Operations Planning



Demand Forecast

Demand

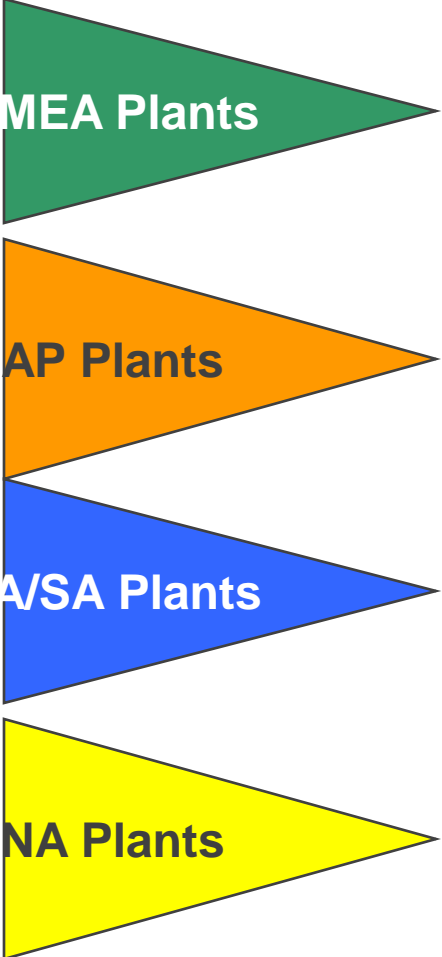
Demand Forecast



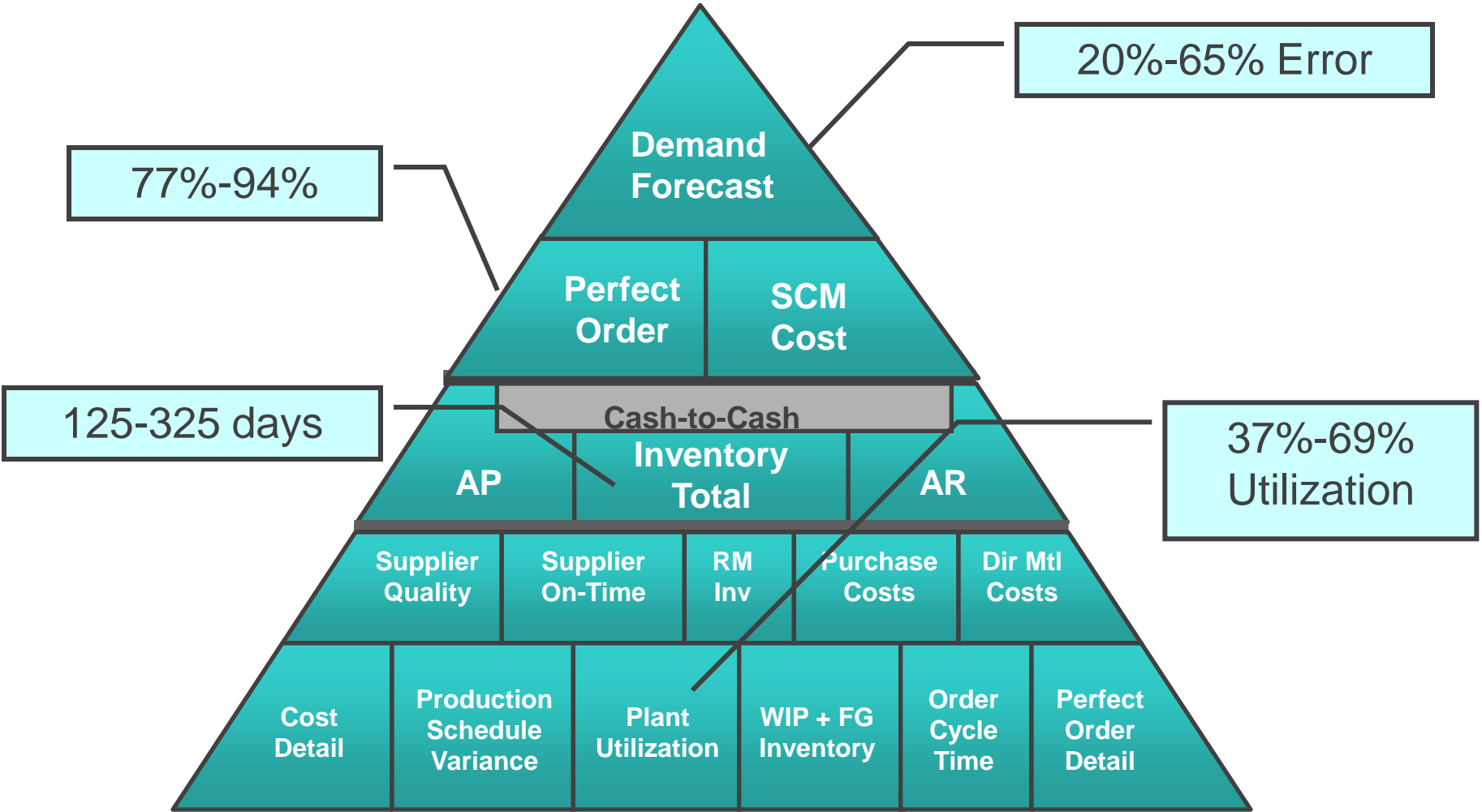
Supply Plan

Supply

Supply Plan

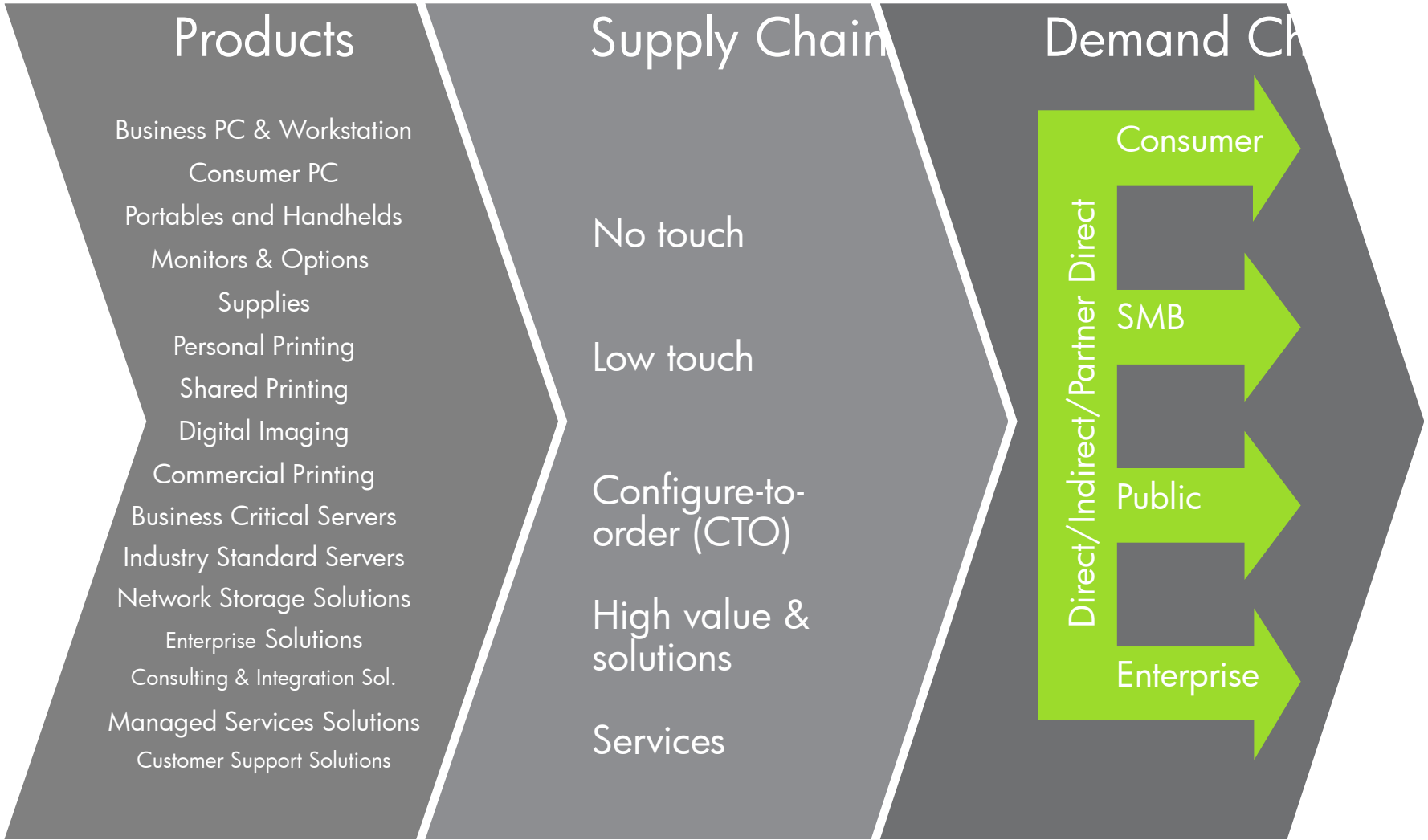


# The Hierarchy of Supply Chain Metrics: Availability and Perfect Order to Patients

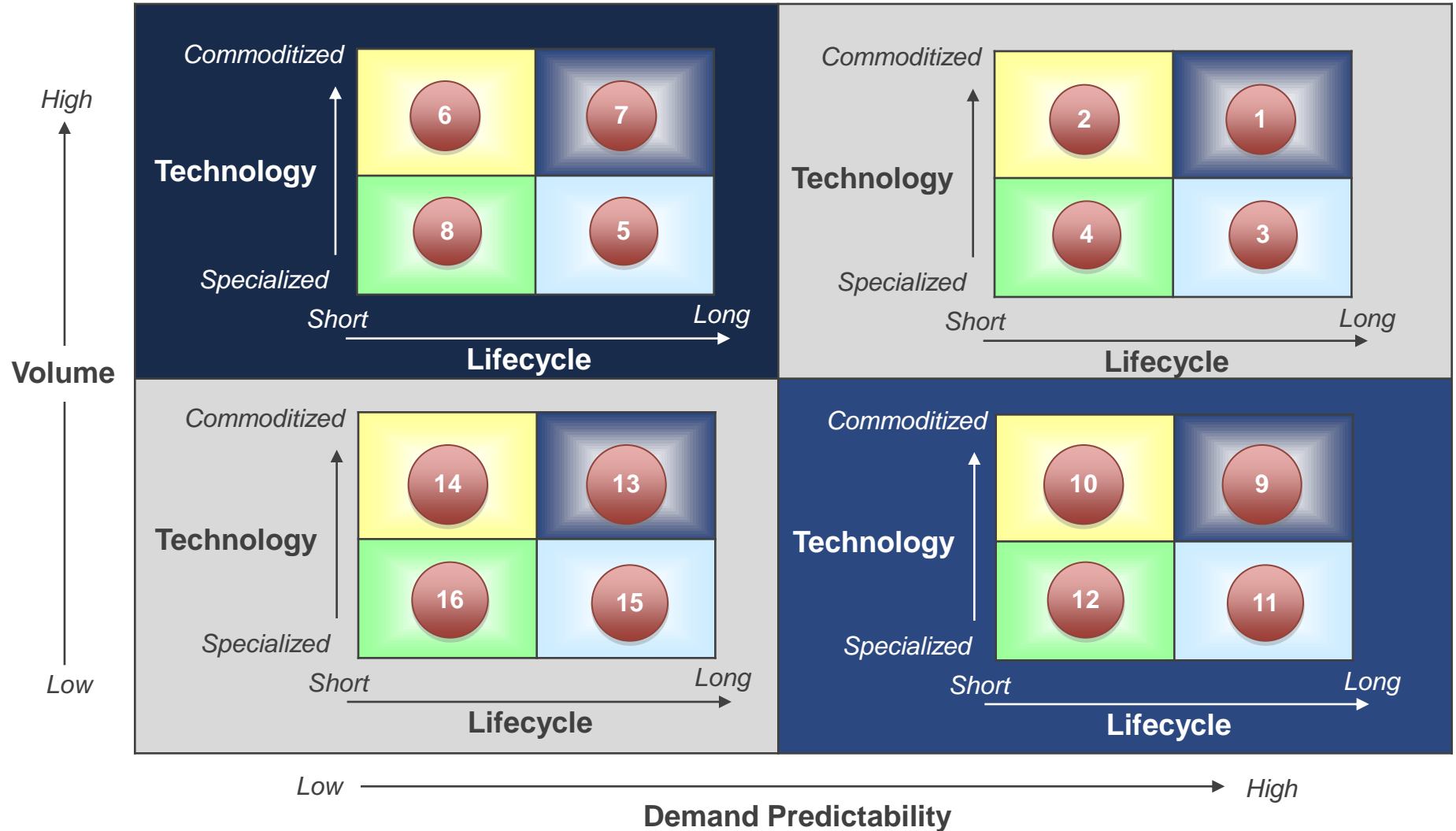


Source: AMR Benchmark Analytix

# Put The Customer First - High Tech Example



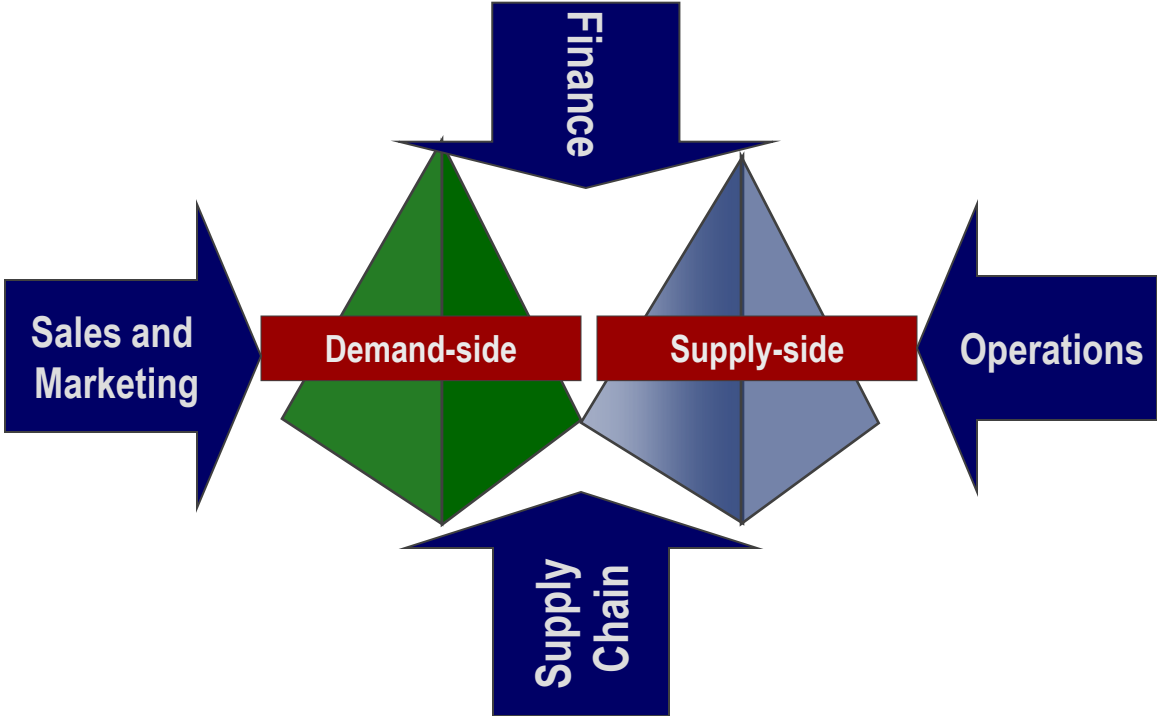
# Large Life Sciences Example: Segmentation – Volume, demand variability, technology and life cycle



# The Need for a Common Definition & Platform

Goal: Make the financial budget; Top-down focus  
Desire: Control and wants predictability of operations.  
Forecast definition: **The Budget**

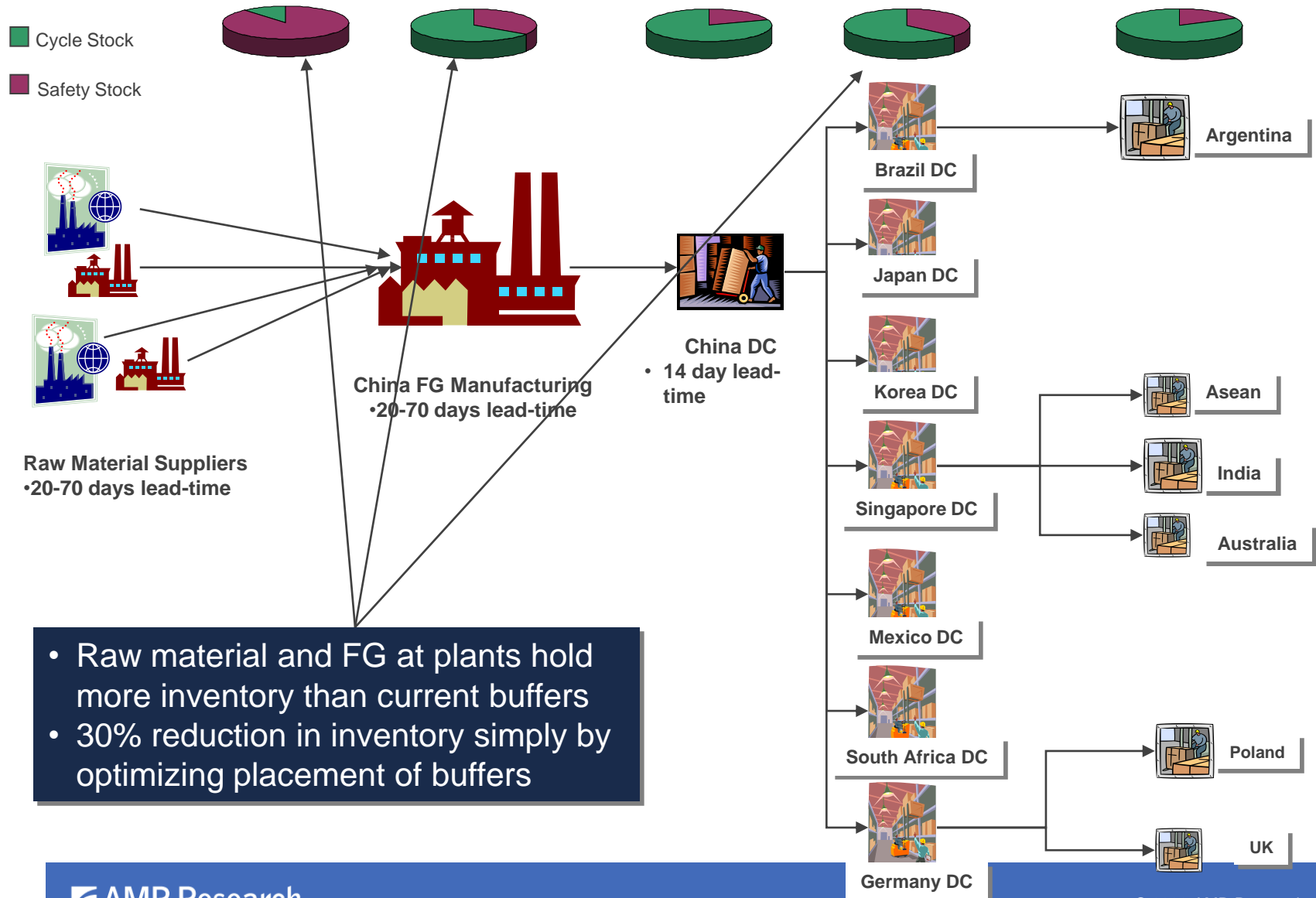
Goal: Maximize revenue & market share, wants guaranteed product availability  
Forecast definition: **Sales Plan**



Goal: Factory optimization, improve costs and minimize demand uncertainty  
Forecast definition: **Manufacturing Plan**

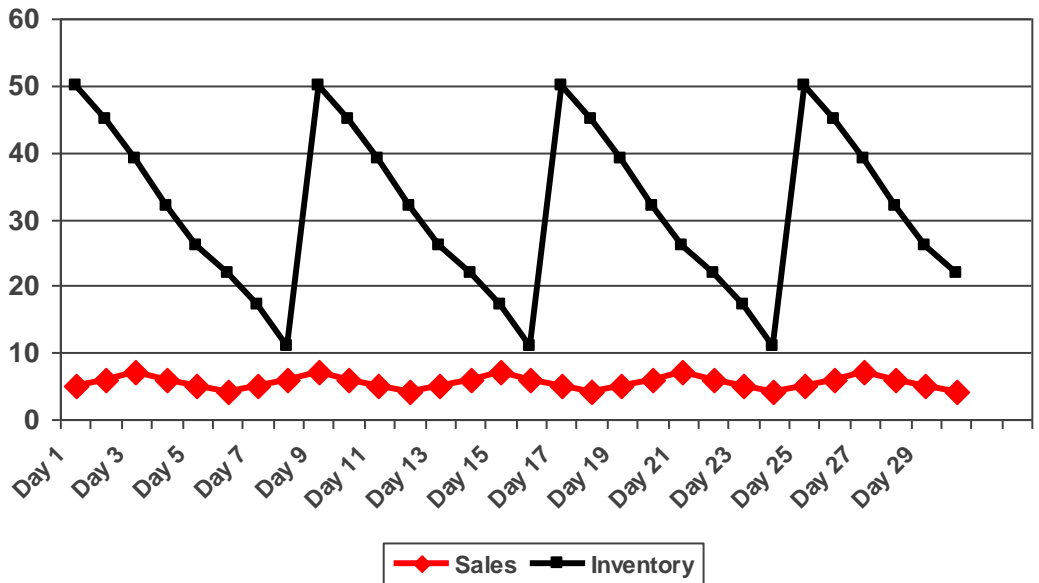
Goal: A feasible plan. Bottoms-up focus.  
Desire: minimize risk and disruption  
Forecast definition: **The Demand Plan**

# Optimized Inventory Buffers with Postponement Strategies



- Raw material and FG at plants hold more inventory than current buffers
- 30% reduction in inventory simply by optimizing placement of buffers

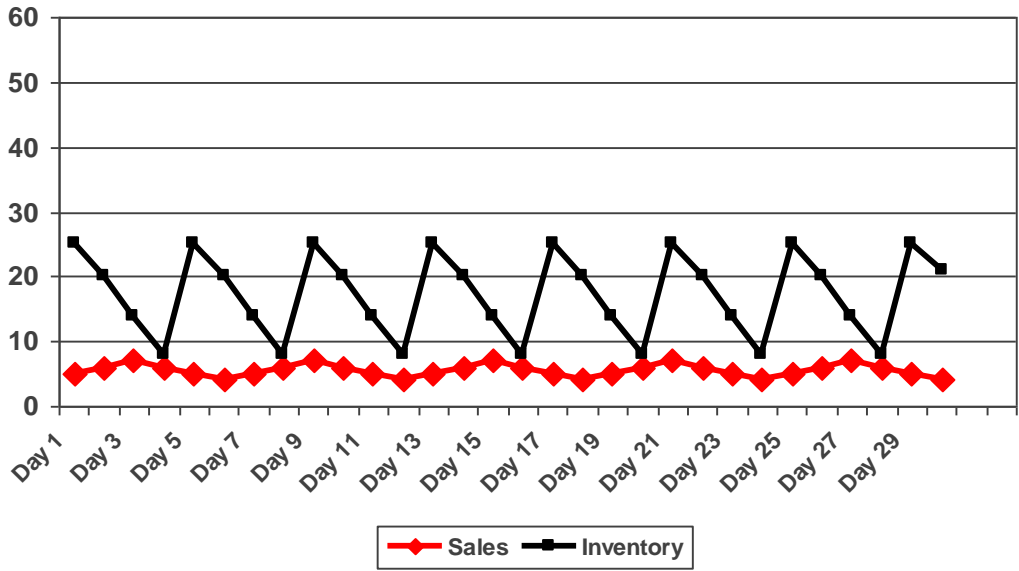
# Manufacturing Synchronization



**Synchronize production with consumption**

**Faster service response with less inventory**

- Improvement in response time
- Eliminate excess inventory from large lot sizes



## Key Enablers

- Right First Time
- Demand Visibility
- Late Stage Postponement
- Trade-off Management

**Faster customer response, lower inventories and reduced cost**

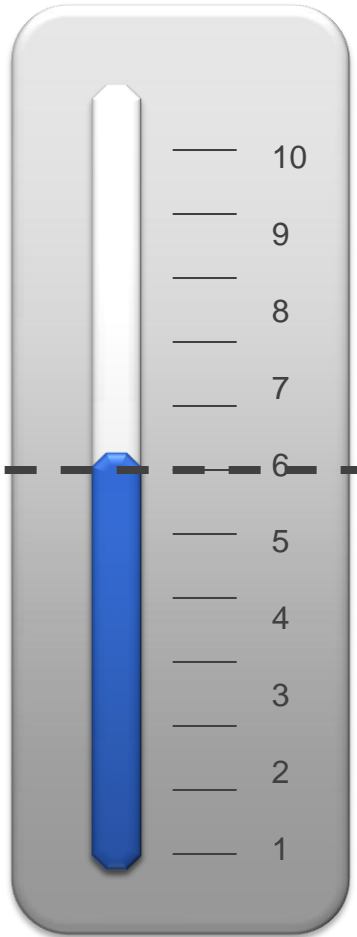
# Collaborative Practices or Relationships?

## Collaborative Relationships

- Relationship and process driven
- Continuous improvement to drive joint value creation
- Redesign for value
- Aligned metrics to the shelf
- Performance-driven business networks

## Enablers

- Aligned metrics to serve the patient
- Shared savings
- Joint business process innovation
- Cost-to-serve improvements



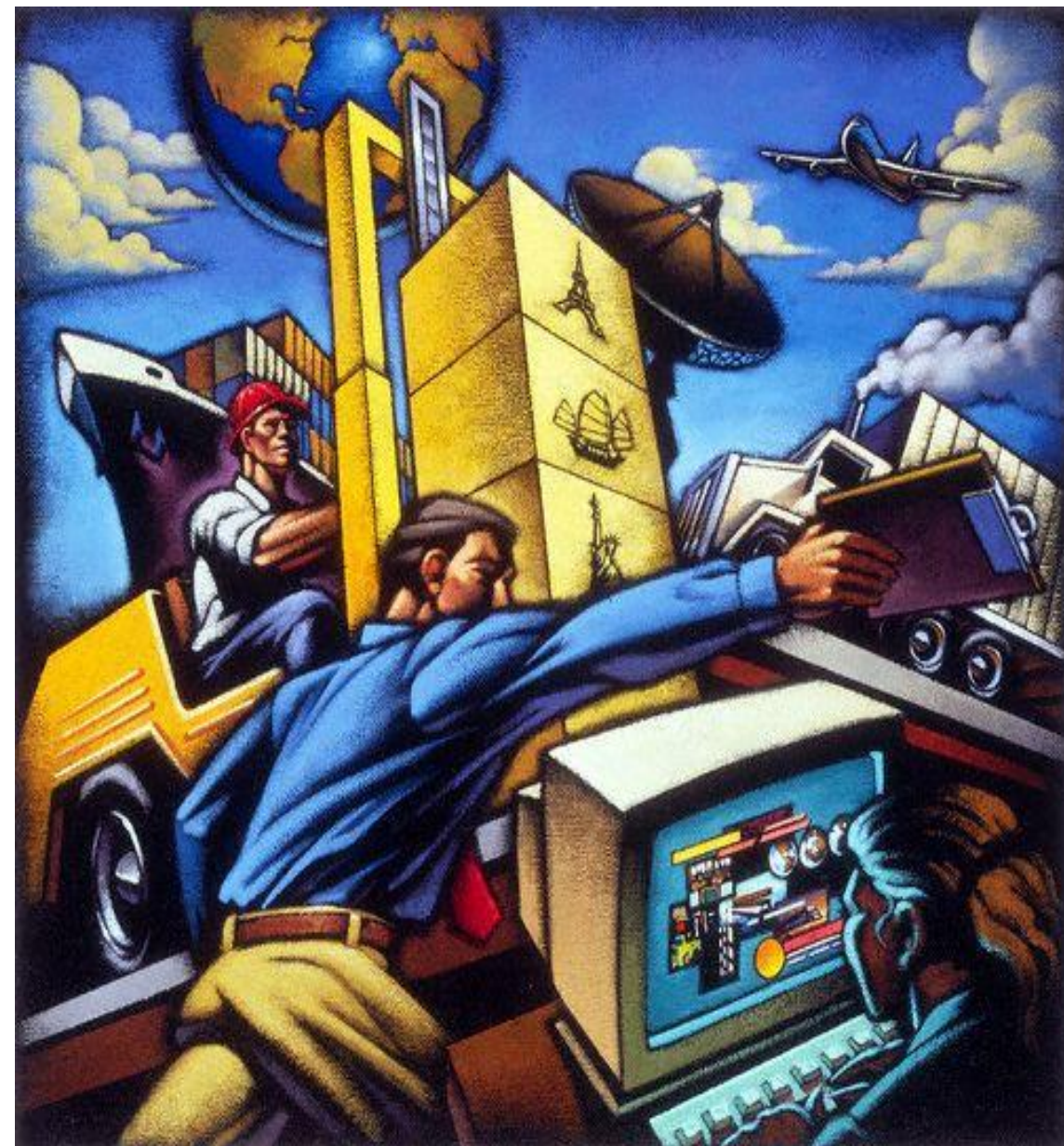
## Collaborative Practices

- One off projects
- Suppliers and hospitals have different goals
- Not integrated into hospital and supplier workflows

## Enablers

- CPFR
- VMI programs
- Data sharing: EDI, B2B, and portals
- Cost to Deliver

Takeaway: Develop the vision that moves your organization towards collaborative relationships



## The Key to Unlocking Value in Healthcare

**Collaboration!**

# Linking Strategy to Value in the Healthcare Value Chain

## Value in Healthcare

*High Quality Patient Care at Optimal Economic Cost*

<b>Bi-directional Visibility</b>	<b>Enabling Technologies</b>	<b>Collaboration</b>	<b>Business Process Innovation</b>	<b>Alignment</b>
Understanding Demand	Communication			
Inventory Management	Timely and Accurate Data	Sustainable Collaborative Relationships	Extension of Supply Chain Services	Shared Vision and Goals
Compliance	Knowledge and Info Sharing	Joint Value Creation	Business Process Governance	Transparency
				Aligned Metrics

### **Demand-Driven Value-Network Strategy**

*Supporting the Business Strategy with Demand-Driven Capabilities  
 Consciously Executing Value-Based Trade-Offs  
 Outside-In Focus Coupled with Inside-Out Excellence*

# Questions...?

# Thank You

 AMR Research

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