

# GAME-CHANGING TRENDS IN SUPPLY CHAIN

FIRST ANNUAL REPORT

BY THE SUPPLY CHAIN

MANAGEMENT FACULTY AT THE

UNIVERSITY OF TENNESSEE

Spring 2013

## Webinar Sponsors



## Study Sponsors



THE UNIVERSITY  
OF TENNESSEE



# Next Webinar: The **PULL** Project: **Bending the Chain**

- **Objective:** Share the latest research on how purchasing and logistics can better work together and, in so doing, improve firm performance, supply chain performance and customer/consumer value.
- **Date:** Wednesday, August 21<sup>st</sup>
- **Time:** 2 pm EDT
- **Register:** By emailing Anastasiya Loboda at [aloboda@utk.edu](mailto:aloboda@utk.edu)

# Global Supply Chain EMBA

12 months | 3 continents | 1 game-changing EMBA

Global structure and  
partners

#1 SC faculty worldwide  
in SCM research

One Year

Curriculum: International/  
Business, SCM and  
Leadership Development

Immediate ROI :  
**\$1M+**

Please go to <http://GlobalSupplyChainEMBA.utk.edu/> for more info

# Game-Changing Trends in Supply Chain

- Collaboration of nine supply chain faculty
- Sponsored by Ernst & Young and Terra Technology
- Input from hundreds of companies to show how U.S. companies across industries are responding to mega-trends impacting their supply chains



# How Far Have We Come in the 21<sup>st</sup> Century?

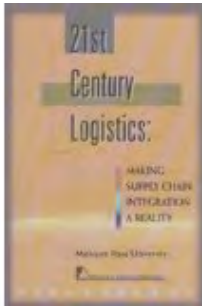
This Research has its Foundations in A Study Done in 2000.

## “21<sup>st</sup> Century Logistics: Making Supply Chain Integration a Reality”

Donald J. Bowersox

David J. Closs

Theodore P. Stank



2000 - 2012

Customer service

Adversarial

Forecast

Experience

Absolute value

Functional integration

Vertical integration

Information hoarding

Training

Managerial accounting



2013 – beyond

Relationship management

Collaborative

Demand Management

Transformational strategy

Relative value

Process integration

Virtual integration

Information sharing

Knowledge based learning

Value based management

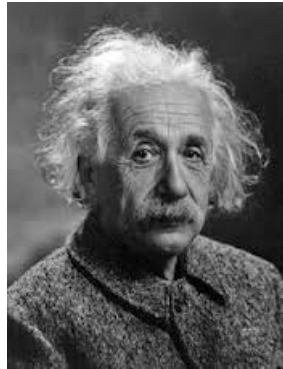
# Game Changing Trends in Supply Chain

- **We believe that those trends still serve as a foundation.**
- **But the supply chain world has drastically changed over the past thirteen years.**
- **In the white paper, we discuss the game changing supply chain trends that supply chain professionals need to squarely face for the future.**



# Game Changing Trends in Supply Chain

- When a student asked Albert Einstein if this year's physics exam questions were the same as the previous year's, he responded, "Yes, but unfortunately for you the answers are very different."



- Our game changing trends are like those questions. We still see some of the same supply chain trends, but the real world responses to them are dramatically more sophisticated.

# Survey to the Mailing List of the UT Supply Chain Forum

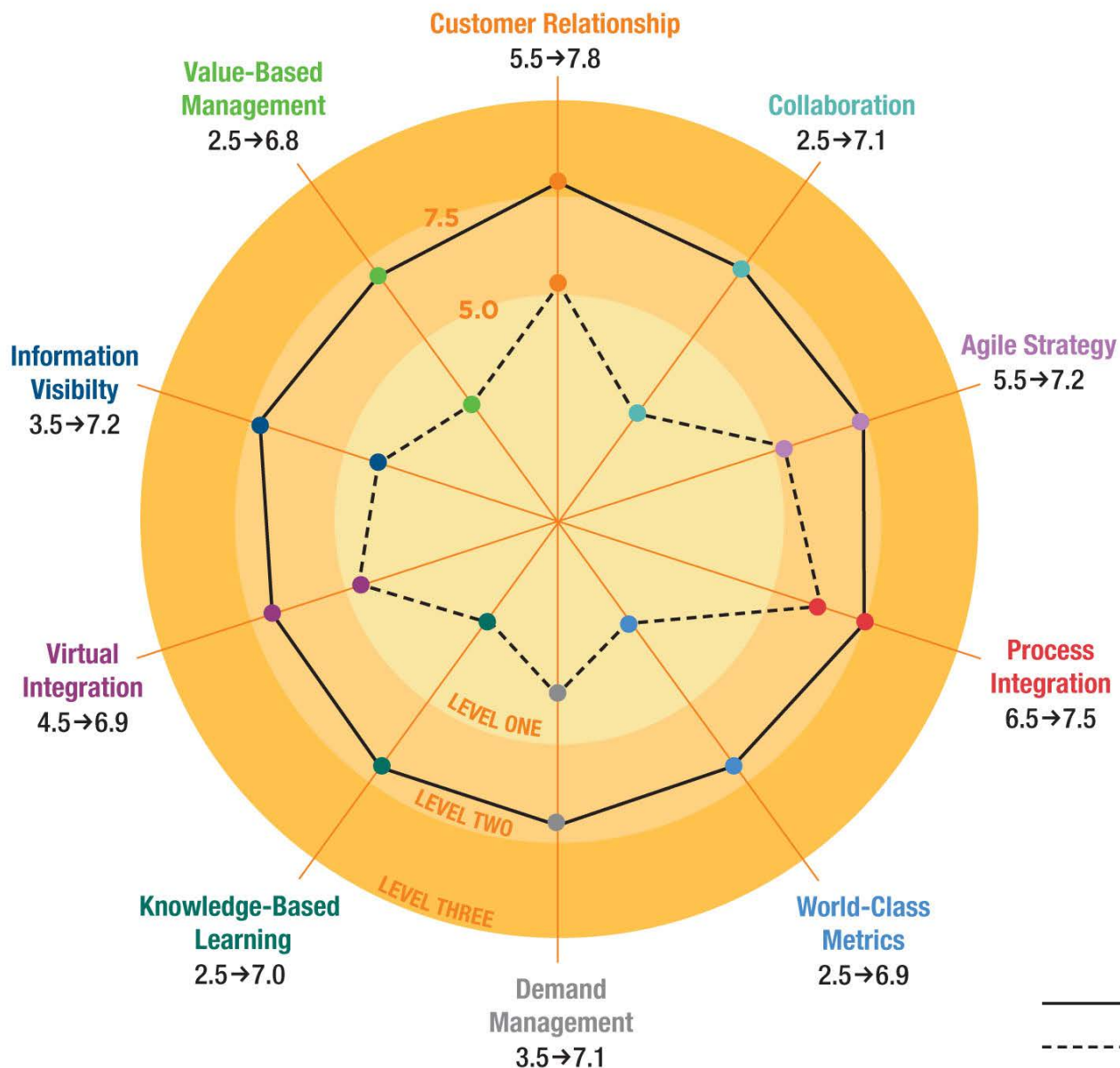


- **Data collected: 163 supply chain professionals from 132 companies. (\$500M to \$75B, retailers-27%, manufacturers-59%, service providers-14%)**
- **Used as input for the UT Global Supply Chain Institute White Paper (sponsored by Ernst & Young and Terra Technologies)**

**So, how far HAVE we come...?**

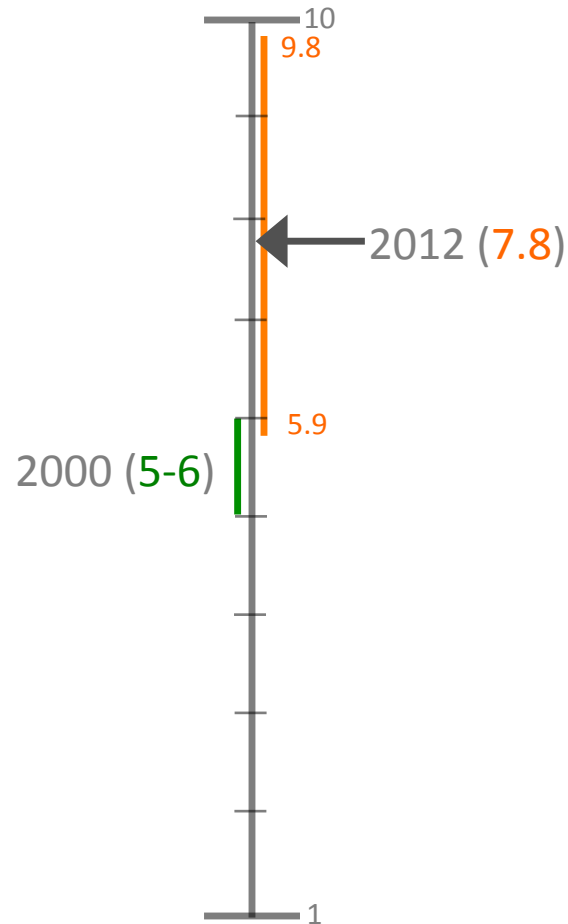


# GAME-CHANGING TRENDS EVOLUTION



# Customer Service to Relationship Management

Partner with key customers to provide value-added services and service levels



Serve all customers the same without focusing on their specific needs

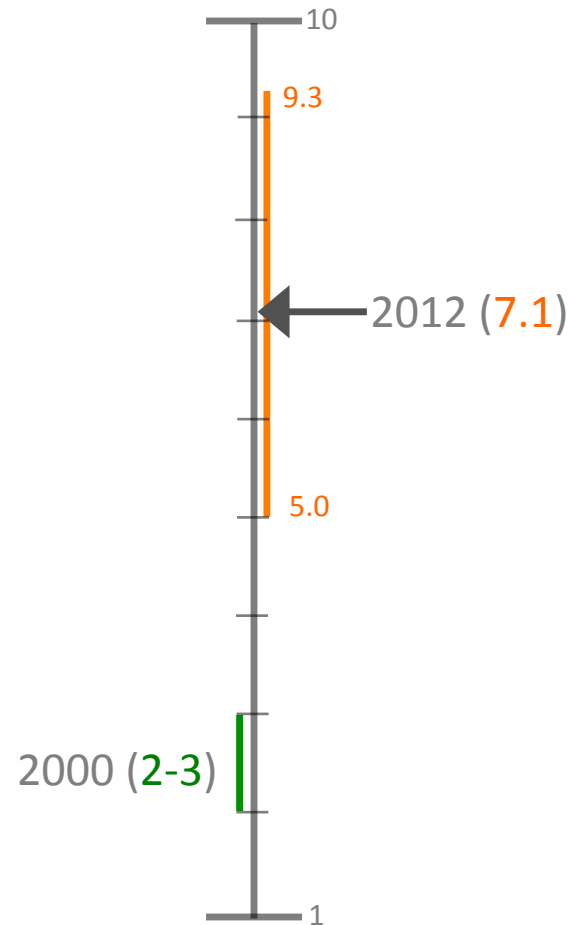
# Customer Service to Relationship Management

- Segmenting customers requires tough, unpopular choices, often engulfed in politics.
- But, a mid size retailer reported that this approach allowed them to take out nearly half (48%) of their inventory while still improving on-shelf availability from 96% to nearly 99% (99.8).
- The idea is to focus on customer needs with tailored, but efficient supply chain solutions.



# Adversarial to Collaborative Supply Chain Relationships

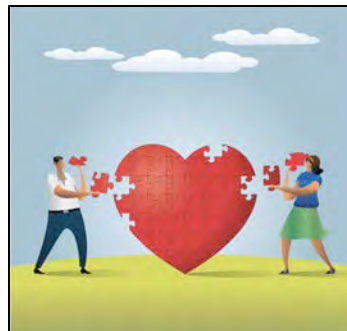
Partner to provide heightened value to end customers



Compete within the supply chain to get the best financial deal in each transaction

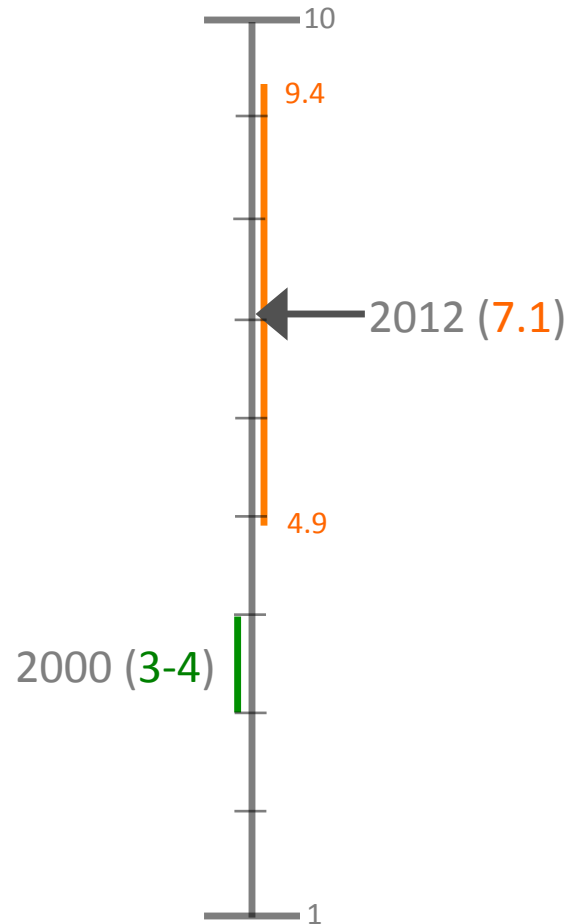
# Adversarial to Collaborative Supply Chain Relationships

- True win-win collaboration between supplier and customer is relatively rare, but when achieved can produce amazing results.
- These should be built on: common metrics/shared benefits/trust
- *The New Supply Chain Agenda* details examples, such as OfficeMax and Avery Dennison
  - Dramatically more revenue (+22%), better availability (to 99.2%), less inventory (-34%) and less cost (-\$11million).



## Forecasting to Demand Management

Develop collaborative plans using timely information gathered from supply chain partners



Develop plans based only on historic information and internal estimations of supply and demand

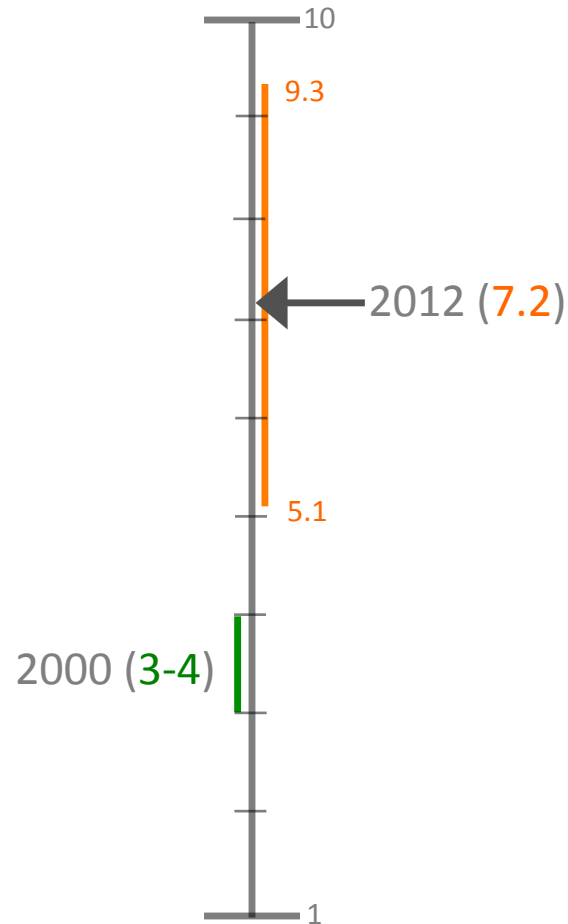
# Forecasting to Demand Management

- No one buys a company's stock because of its forecasting skills. These need to be integrated into a demand management framework and drive higher revenue, lower working capital, and lower cost.
- Integrating demand with supply across the supply chain is the key. Only then can the improvements in forecasting capability be realized.....which is happening:
- Five CPG firms are using big data to sense demand and have reduced forecast error by an average of 40%.



# Incremental Change to Transformational Strategy

Decision-making processes account for constantly changing competitive conditions

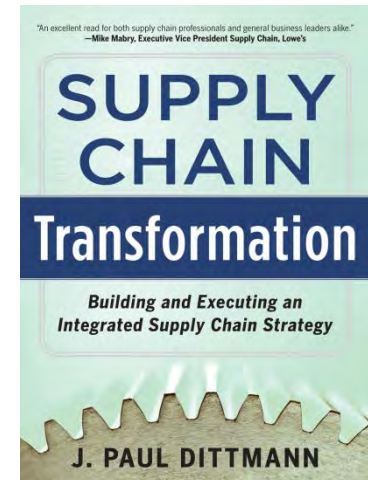


Decision-making processes rely solely on past strategies and tactics



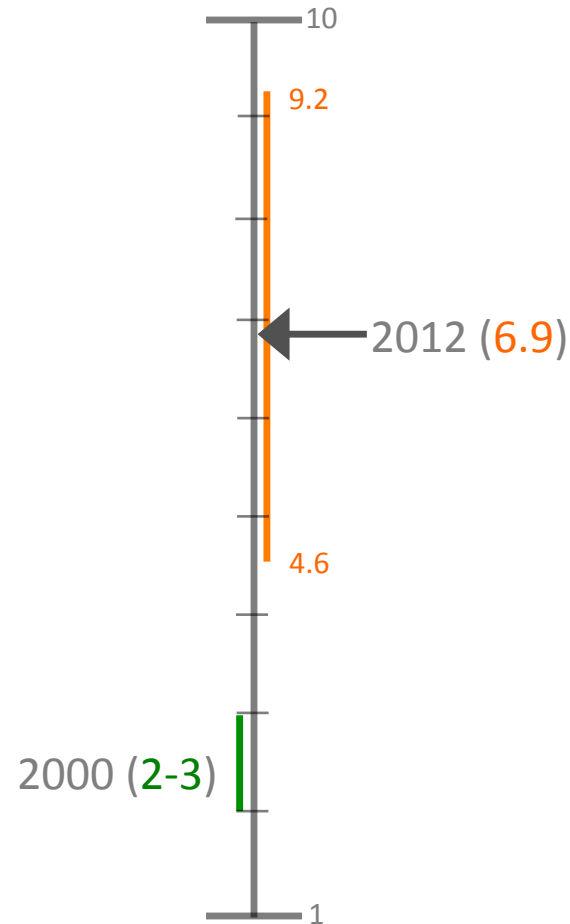
# Incremental Change to Transformational Strategy

- Only 16% of firms have a documented, multi-year supply chain strategy.
- Such a strategy can produce spectacular results.
- Whirlpool for example:
  - Inventory down over \$100 million
  - Record high service levels
  - \$20 million in cost reduction
  - Major improvement in customer satisfaction



# Absolute to Relative Value Driven by World Class Metrics

Measure success based on the profitability of key customer segments



Measure success based on total market share or revenues, without regard to customer profitability

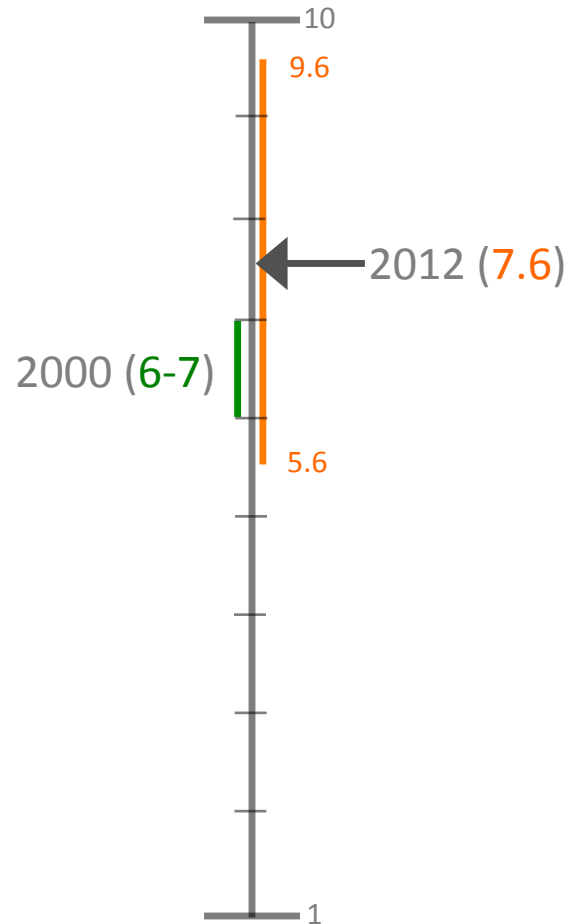
# Absolute Value for the Firm to Relative Value for Customers Driven by World Class Metrics

- Can simply changing the performance measurement and goal setting system inside a firm greatly enhance the overall performance of the supply chain? *You bet it can!*
- The impact of the “perfect order metric” is well known.
- Key principles:
  - Create the right cross-functional accountability
  - Establish a driver-based metrics framework
  - Set appropriate goals
  - Ensure that metrics cannot be gamed



## Functional Focus to Process Integration

Measure performance at the organizational level, using metrics that focus on contribution to overall success



Measure performance at the department level,  
without regard to overall success

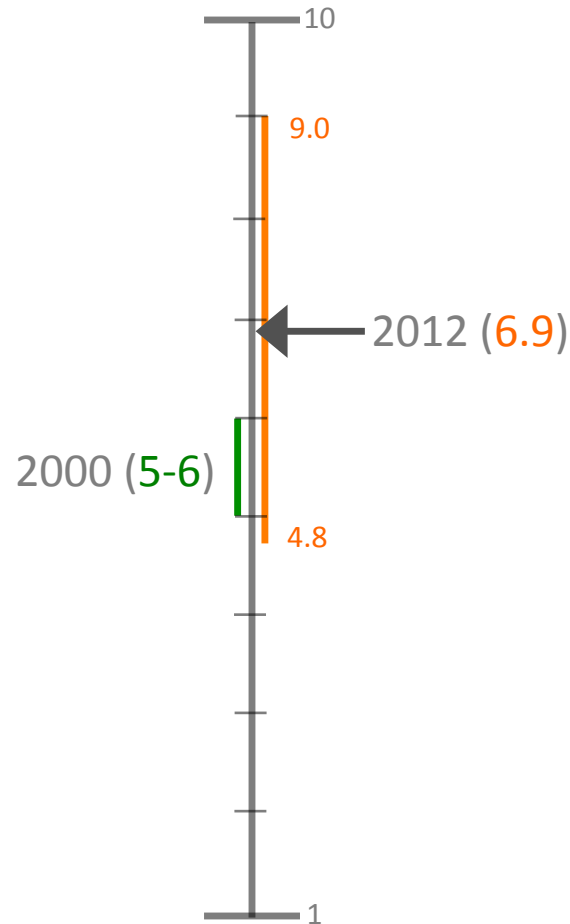
# Functional Focus to Process Integration

- In over 700 interviews done in our supply chain audits of companies, by far the number one “wish list” item was an organization *where the functional silo walls have come down*.
- Results of IBP have been documented By Oliver Wight:
  - Revenue up 10-16%
  - Fill rates up 10-48%
  - Cost down 10-32%
  - Inventory down 15-46%
- One surprising, but greatly impactful opportunity is the integration between purchasing and logistics.



## Vertical to Virtual Integration

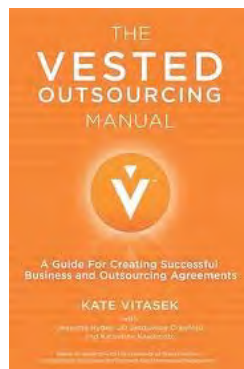
Cultivate upstream and downstream relationships to leverage the expertise of organizations across the supply chain



Control upstream and downstream activities to reduce reliance on partners and diminish conflict

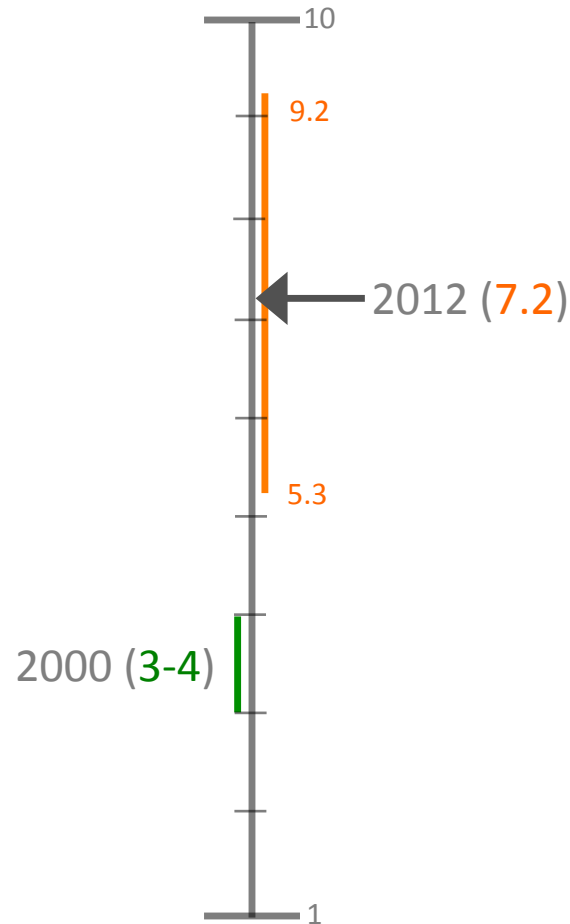
# Vertical to Virtual Integration

- One of the fundamentals of a great supply chain is to stick to what the firm does well, and leave the rest to world class service providers.
- The vested outsourcing framework works, as described in countless examples.
- Pay for results. Win-win incentives. “What’s in it for We”
- Managing global risk is one huge benefit.



## Information Hoarding to Information Sharing

Share strategic and tactical information with suppliers/customers to improve performance across the supply chain

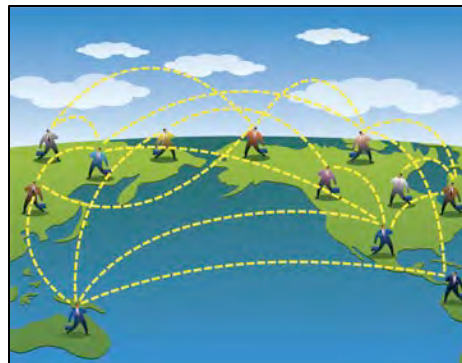


Share little information so as to gain leverage over other organizations within the supply chain



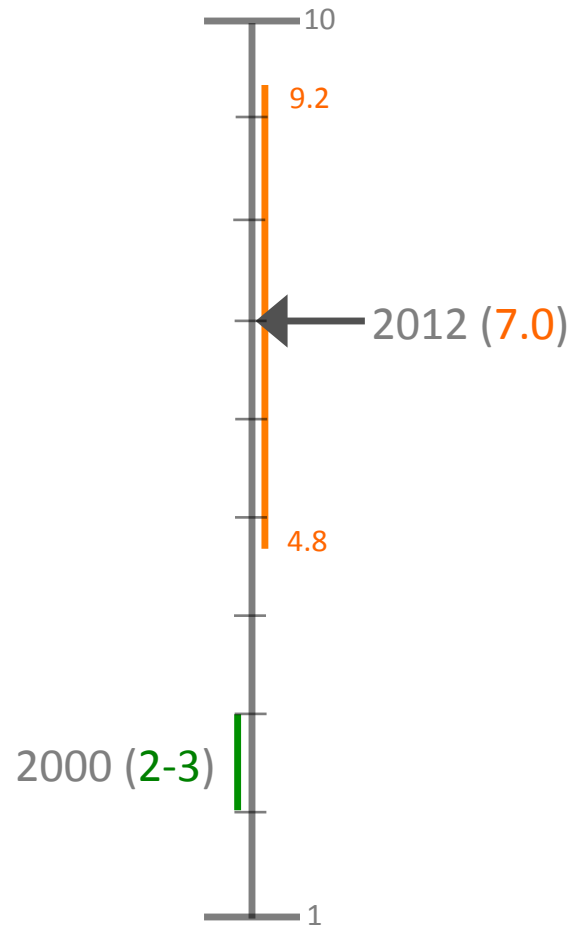
# Information Hoarding to Information Sharing

- **P&G CEO: “Companies are overwhelmed with data. We need automated systems to extract information and only alert the supply chain when human attention is required.”**
- **Firms are changing the game by linking together masses of information from multiple sources (big data) and analyzing it with *business analytics expertise*.**
- **The challenge is to find sufficient human resources to do this.**



## Training to Knowledge-Based Learning

Focus training on helping employees work in a way that improves overall organizational performance



Focus training on skills required to complete only the specific tasks within a functional area

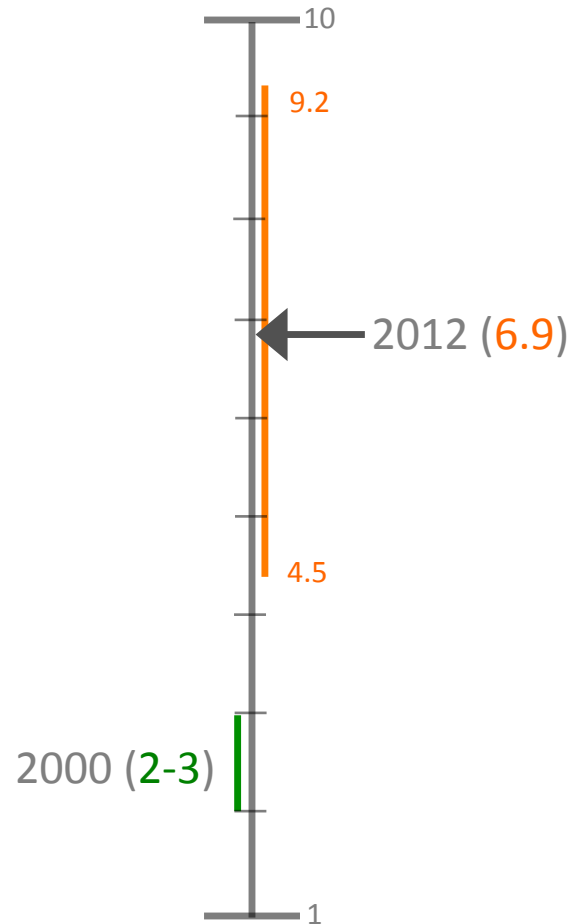
# Training to Knowledge-Based Learning Talent Management

- During the Great Recession, several firms aggressively sought and hired the best talent laying a foundation of excellence for decades to come.
- This is the number one requirement for transforming a supply chain.
- First identify the critical competencies of top supply chain talent:
  - Global orientation
  - Leadership skills
  - Technical savvy
  - Superior business skills



# Managerial Accounting to Value-Based Management

Assess department performance based on budget indicators as well as overall value produced for the firm



Assess department performance based solely on variance from budgeted sales/cost results

# Managerial Accounting to Value-Based Management

- Supply chain excellence is the key to creating shareholder value.
- The supply chain controls all of the inventory; manages 60-70 of the cost; and provides the foundation to generate revenue by providing outstanding availability.
- The supply chain should rest on five pillars of excellence:
  - Talent
  - Internal collaboration
  - External collaboration
  - Technology
  - Change management



## Some Take Away's

- Significant progress has been made in all 10 areas in the last decade plus.
- Some companies have achieved top levels of performance in each category (although no one has done it in all categories).
- There are laggards in each category as well, still dealing with the same problems in the same way.
- Respondents feel that most progress has been made in customer relationships and process integration.
- Talent Management also emerges as an area of opportunity.

## Next Step

**Determine how these trends play out in a global environment.**

# EPIC

**Evaluating Regions on an EPIC Framework:  
Economy, Politics, Infrastructure, and Competence**

