The Emergence of the New Supply Chain Leader

A New Supply Chain Requires a Different type of supply chain manager – a leader!!
Presenter

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Warning – Forecasting Ahead

- Prediction is very difficult, especially if it’s about the future.
  - Nils Bohr, Nobel Laureate in Physics
What are we going to talk about?

- The new supply chain – a result of:
  - The Rise
  - Seven macro developments

- The new supply chain – critical traits

- The new supply chain leader
WE WILL BEGIN FORECASTING!!!
The reality of Supply Chain Management

- Today’s supply chain is the result of investments made in the past.

- Tomorrow’s supply chain will be the result of investments made today.

- To invest, we must forecast!
The Emergence of the “New” Supply Chain

The Rise + Seven Macro Developments = The New Supply Chain
The Rise
Seven Macro Developments

- Aging of developed countries
- Energy volatility
- Shift of purchasing power to East
- Internet of Things (IoT)
- Experiential supply chains
- Autonomous & digital technology
- Cybersecurity

Supply Chain Mgt
So What!?!?

- New expectations
- New challenges
- New opportunities
THINGS ARE GETTING MORE COMPLEX

"This month's business meeting is the same as last month's business meeting but with many more problems."
Internet of Things (IoT)
Internet of Things

- The network of physical objects or “things” that are embedded with software, sensors, and network connectivity that enable the IoT to collect, exchange, and analyze data.

- Includes smartphones, sensors in cars, equipment, appliances, fitness monitors, smart watches, and product tags.

- Over 201 billion devices by 2020!
Examples

- HydroPoint Data Systems
  - WeatherTrak
    - 25,000+ subscribers
    - Save more than 20 billion gallons of water, 77 million kilowatts of electricity and $143 million

- Pirelli
  - Sensors in tires
    - Learning about durability and performance of its products
  - Vehicle protection and control
Gossiping Cars

- Cars and trucks that can talk to each other.
  - Road Conditions
  - Equipment Conditions
  - Location
PERSONALIZED SUPPLY CHAINS
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PERSONALIZED SUPPLY CHAINS

- A market of one
- Level of customization and customer service at which the customer feels that he or she is an exclusive or preferred customer of the firm.
- Where the supply chain is visible!
Something to think about!

- Customers today are becoming increasingly concerned about the provenance of the products that they consume!
  - Executive VP of marketing for Starbucks
Technological Advances
Cybersecurity – the next threat!

- Supply chains are information-rich systems.
- Information
  - Schedules, consumer data, designs, strategic plans
- Sensitive, critical, and shared!!
- Open to threats from outside.
The threat!

- What percentage of organizations have experienced a security breach?
  - 93% of large organizations
  - 87% of small businesses
  - 50% more breaches from 2012
Weakest Link
So What?

* What does this mean to supply chain management?
The Emergence of a New Supply Chain
Major Traits of the *New* Supply Chain

- Increasing rate of technological advances that are rooted in the supply chain.

- Acceptance of complexity as a business driver.

- New competitive pressures.
  - *Amazon Effect*

- New methods of dealing with customers.
  - Omnichannel
Major Traits of the New Supply Chain - continued

- Recognition that cost is no longer enough.
  - Responsiveness
  - Sustainability
  - Resilience
  - Security
  - Innovation
  - Quality

- Customer demands for greater supply chain visibility
A New Supply Chain Needs a New Type of Manager
Korean War and Supply Chain Mgt!?!
Introducing Colonel John R. Boyd
Strategic Response Cycle

- Sense
- Assess
- Formulate
- Deploy
- Recalibrate
- Learn
- Repeat

- Focus on the future, not the past (forwardcasting)

Do it fast!!!
SC Manager → SC Leader

- Functional, strongly internal
- Cost/Cost minimization
- Supply Chain Excellence
- Focus on Execution
- Inside/Out
- Very functionally oriented.
- Strives to eliminate or simplify complexity.

- Cross-boundary; coordinators
- Outcome-driven/revenue
- Business Excellence
- Ask the “right” question
- Outside/In
- Measurement as communication.
- Accepts complexity; eliminate unnecessary complications.
SC Manager → SC Leader

• Deliberate

• Optimality

• Toolsmiths – masters of tools

• Fast decision-making

• Robustness

• Problem masters
  – Define the problem(s) that the rest of the supply chain will focus on.
Cross-boundary Coordinators!

- The barriers between the supply chain and:
  - Marketing
  - Engineering
  - Strategy
  - Finance

- Must disappear!
Outcome-Driven, Revenue Focused

- Supply chain is more than cost, it is outcome-driven
- Key outcomes:
  - Cost
  - Responsiveness
  - Resilience
  - Security
  - Quality
  - Sustainability
  - Innovation
Through Whose Eyes Do We See the World

Through our own!  Through our customers’
Focusing on Business Excellence: John Deere Learns its Lesson
Performance Measurement

- Monitor and Control
- Communicate
Performance Measurement - Goal

- Communicate
  - Goals
  - Expectations
  - Consequences
- Sell
  - Get commitments
- Educate
  - What is important
  - What is not important
- Direct
  - To gaps
- Measure/Correct
Complexity

- Different from complicate

- Complexity – product changes demanded by the customer.

- Complexity is good!

- However, increasing awareness of the hidden costs and impacts of complexity
The “Hidden” Costs of Complexity

Understanding what is wanted

Supporting it in the field (external failure)

Does it work? (internal failure)

Building it in

Buying for it

Designing it in!
Optimality – No!; Robustness – Yes!

Optimal can be fragile!  Robustness is adaptable
Something to Think About

- Managers work within culture.
- Leaders work on culture!
The Emerging Challenge

• How do we go about creating the new supply chain leadership – the person who can tap into and realize the great potential of the new supply chain?
Final Thoughts

May you live in interesting times
Final Thoughts

- Future will look different for supply chain management.

- Supply chain management will become:
  - More complex
  - More strategic
  - More visible
  - More local
  - More dynamic

- A new type of manager is needed!
ARE YOU READY?
Questions?!?!