The Impact and Dynamics of Centralization in Supply Chain Decision-making

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 Agenda

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  – Research Questions & Methodology
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• **Part 2: Analysis & Results**
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Definition of Centralization

When decisions are made by top-level executives it is referred to as centralization.

When decisions are delegated to the local operating units it is referred to as decentralization
development.
Why Centralization?

Hewlett-Packard Bucks Industry Trend By Decentralizing Supply Chain Operation, July 2006¹

"The success of Hewlett-Packard's recent move to break apart its 5,000-person Global Operations group will depend largely on whether the electronics giant can put into place reporting and governance structures”…

Office Depot consolidates supply chain operations, March 2004²

"We achieved that position as separate organizations. Now, consolidated as a single supply chain, where we can leverage all of the talents of all the people in those groups, I think we can unlock tremendous capabilities.”…

Research Questions

• How do companies centralize their supply chain functions?
• What are the factors and dynamics that influence centralization?
• What is the impact of centralization in the supply chain organization on cost structure?
Research Methodology

DATA COLLECTION
- Survey
- Interview

ANALYSIS
- Statistical Analysis
- System Dynamics Modeling
- Cluster Analysis

INSIGHT DEVELOPMENT
- Overall & Industry Specific Trends
- Integrated Model
- Cost Comparison

TESTING
- Case Studies
- Interview
Survey Summary

• Surveyed 2,800+ SCM professionals in March, 2008

• Received 144 responses (97 cleaned data) from large global companies

• Conducted in-depth interviews with some selected respondents
Centralization of Functions Analysis

Strategic functions are centralized, while operational functions are decentralized.
Influencing Factor Analysis

- Trade-off between cost and customer service
- Strategic functions have cost considerations
- Operational functions have customer requirements

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An Integrated Model

- Model demonstrates the influences of the three factors
- Model illustrates that centralization in a function is dependent on the most dominant factor
- Model illustrates the possibility of transitions
Sourcing Function in Company A

• Global producer of mobile computing cases and accessories
• Covers US, EU, Asia, but sources from China
• Sells to retailers, electronic goods manufacturers and direct consumers
Centralized, But Decentralized Again

Why?
Underlying Dynamics of Company A

Centralization of Sourcing

- Conflict with Local Incentive System
- Global Optimization
- Unit Cost
- Economy of Scale
- Customer Service Level
- Customized Sourcing
Clustering w.r.t. Centralization

Using k-means clustering, we categorized samples into three segmentation.
Cost Analysis of Clusters

The hybrid group has the lowest supply chain cost percentage to sales among three clusters.
Summary

Key Insights:

• Strategic functions are centralized, while operational functions are decentralized.

• Cost is the key factor influencing centralization and customer service is the key factor influencing decentralization.

• Hybrid structure provides the lowest supply chain cost as a percentage of sales.
Suggested Further Research

• Analysis of the impact of centralization based on other business performance indices
• Process alignment in centralization of supply chain functions
• The relationship between centralization and outsourcing and off-shoring.
Q & A

Thank You!