Value Chain Index

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Integrated Value Chain: Chronological History

The evolution of value creation from supply chain to integrated value chain:

- Single company integrated supply chain model
- End-to-end integrated supply chain model
- Single company integrated value chain model
- End-to-end integrated value chain model

End-to-End Integrated Value Chain Management provides firms with the next transformational opportunity for value creation.
Value Chain Index: Project Team Members

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**DR. DAVID CLOSS**, Professor, Department of Supply Chain Management, Eli Broad College of Business

**DR. CHERI SPEIER-PERO**, Chairperson, Department of Supply Chain Management, Eli Broad College of Business

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# Value Chain Index: Project Value and Benefits

The Value Chain Index and Integrated Value Chain Assessment will provide four benefits to firms:

1. Insights regarding dimensions other firms are using to characterize value chains
2. Influence regarding the design of the value chain assessment approach
3. Define appropriate metrics for monitoring value chain
4. Benchmark their perceptions and practices regarding integrated value chain management with the objective of developing actions toward major opportunities to create value for the firm
Corporate Partners Currently Engaged with Project

Corporate partners engaged in the value chain workshops:

ASAHI KASEI PLASTICS
Advanced Material Solutions

BOSCH

CooperStandard

Dow

FANUC

GE
imagination at work

meijer

nexteer

AUTOMOTIVE
Value Chain Competencies

- MSU has been engaged in research for supply chain competencies for several decades.
- MSU has recently created integrated supply chain competencies for the state-of-the-art research for APICS Beyond the Horizons study.
- This experience and expertise was essential to the creation of the new innovative value chain competencies.
- The assessment of value chain competencies is a critical component of the value proposition for firms that participate in the value chain assessment.
- End-to-end integrated value chain performance will be dependent upon the building of expertise associated with key value chain competencies.
Value Chain Competencies

1. Talent, Resources, and Governance
2. Risk Management and Sustainability
3. Ideation and Innovation
4. Internal Integration
5. Customer Partnerships
6. Supplier Partnerships
7. Technology and Business Processes
Creation of the Value Chain Index

Initial MSU research focused on the creation of the Value Chain Index:

- Supply chain-related indices of Consumer Confidence Index (CCI), Purchasing Managers Index (PMI), and Customer Satisfaction (ACSI) were researched.
- New Logistics Index design, which assesses directional perceptions of transportation, warehousing, and inventory costs will not be focused on value chain.
- None of the supply chain indices corresponded to the multiple-company scope of integrated value chain management.
- The index is an aggregation of a perceptual survey and may be classified as Level One value chain assessment.
Creation of the Value Chain Index

Current Positioning

- Lack of MSU access to firm performance data results in reliance on firm perceptions survey data
- Survey would capture general perceptions of value chain dimensions
- Survey will apply a maturity scale model for a limited number of value chain dimensions
- Survey will incorporate some Kepner-Tregoe techniques to characterize required value chain decisions, value chain plans, and value chain operations
## Value Chain Index Characteristics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value Chain Index Approach</th>
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<tbody>
<tr>
<td>Frequency</td>
<td>Twice per year</td>
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<tr>
<td>Audience</td>
<td>Multiple firms; multiple industries</td>
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<tr>
<td>Methodology</td>
<td>Firm perceptions survey</td>
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<tr>
<td>Survey execution</td>
<td>MSU in collaboration with professional association</td>
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<tr>
<td>Survey analysis</td>
<td>MSU will analyze survey results</td>
</tr>
<tr>
<td>Feedback to participants</td>
<td>MSU with marketing partner</td>
</tr>
<tr>
<td>Communication of findings</td>
<td>MSU will report composite index results; eventually index will be reported by value chain category</td>
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</tbody>
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Value Chain Index: Example Categories for Value Chains

- Automotive and transportation equipment
- Food and beverage
- Consumer electronics
- Industrial equipment
- Consumer packaged goods
- Pharmaceuticals and healthcare
Example Value Chain Executive Education Topics

- Integrated Value Chain Management Concepts
- Value Chain Competencies and Gap Analysis
- Value Chain Talent Development
- Supplier Partnerships/Alliances
- Customer Partnerships/Alliances
- Value Chain Ideation and Innovation
Project Work Plan: Accomplishments

• Formed a team of research experts
• Researched and assessed existing indices
• Developed end-to-end integrated value chain model
• Conducted two value chain workshops with eight corporate partners
• Identified value chain competencies
• Developed value chain performance assessment survey to measure competencies
Project Work Plan: Future Activities

• The next value chain workshop in January 2018 will validate the Value Chain Index approach
• Value Chain Index effort will be rolled out to selected industries in early 2018
• Value chain assessment executive education program will be developed in 2018
End-to-End Integrated Value Chain Model

RELATIONSHIP MANAGEMENT

INFORMATION, PRODUCT, SERVICE, FINANCIAL AND KNOWLEDGE FLOWS

MATERIALS

SUPPLIER VALUE CHAIN

ENTERPRISE VALUE CHAIN

CUSTOMER VALUE CHAIN

CAPACITY, INFORMATION, CORE COMPETENCIES, CAPITAL AND HUMAN RESOURCES

The Axia Institute: Delivering Value Chain Solutions
MICHIGAN STATE UNIVERSITY
Questions Regarding Value Chain Assessment

What types of opportunities can value chain assessment bring to the firm?

Compare the roles of the Level 1 assessment versus the Level 2 and 3 assessments
Thank you