

Achieving Multi-Tier Supply Network Coordination

Material for Discussion

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Objective of Our Study

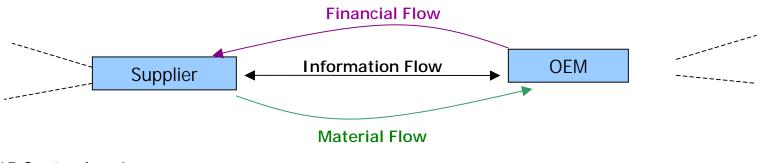
- Study Objective Develop a vision of possible structures and designs for coordinated supply networks
 - What entities, governance structures and processes are necessary to coordinate across several companies in different tiers of the supply network?
- Using a Delphi Methodology to envision future state as seen by experts
 - Multiple experts from different domains
 - Industry
 - Academia
 - Consulting thought-leaders
 - Synthesize input from experts and share possible frameworks with respondents
 - Solicit feedback on initial synthesis of respondent input
 - Synthesize feedback on frameworks and again share with respondents
- Expected findings This work designed to provide insight into:
 - Possible frameworks for enabling an coordinated multi-tier supply network
 - Issues & obstacles for creating an coordinated multi-tier supply network
 - Suggested set of refined requirements
 - Validation of trends identified in literature review
- Soliciting input now with preliminary report anticipated June, 2001 r15 September 6,
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Supply Chain Coordination & Collaboration 2001

- Coordination Industry efforts are largely focused on individual company's internal supply chains
- Collaboration Lots of effort entitled 'Collaboration'
 - Point-to-point collaboration between two adjacent tiers only
 - Either supplier-customer or customer-supplier centric
 - But not across more than two tiers in the supply chain
 - Software-focused to establish common information flows

Point-to-Point Coordination & Collaboration Today



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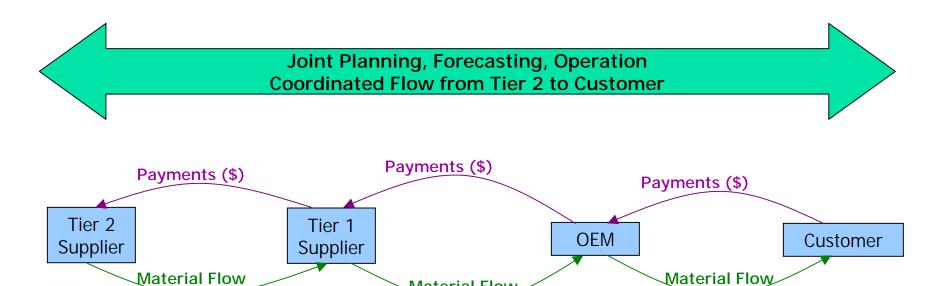
SC Coordination & Collaboration Future Potential

- Foundation Internal company optimization (across functional departments) provides tangible and significant performance improvement
- Premise Similar significant benefits exist for companies coordinating and collaborating across multiple supply chain partners (tiers)
 - Cost savings
 - Revenue enhancements
 - Responsiveness (faster time to market)
 - Redesigning supply chain leveraging contributions from each partner
- Highest leverage may come from coordination across a selected subset of supply network partners (strategic supply network):
 - Partners with which you are sharing sensitive business information
 - Partners which are mutually dependent, and information-dependent
 - Partners where the relationship is irreplaceable (in the short term) and/or meaningful (likely high-volume of transactions and/or sales)



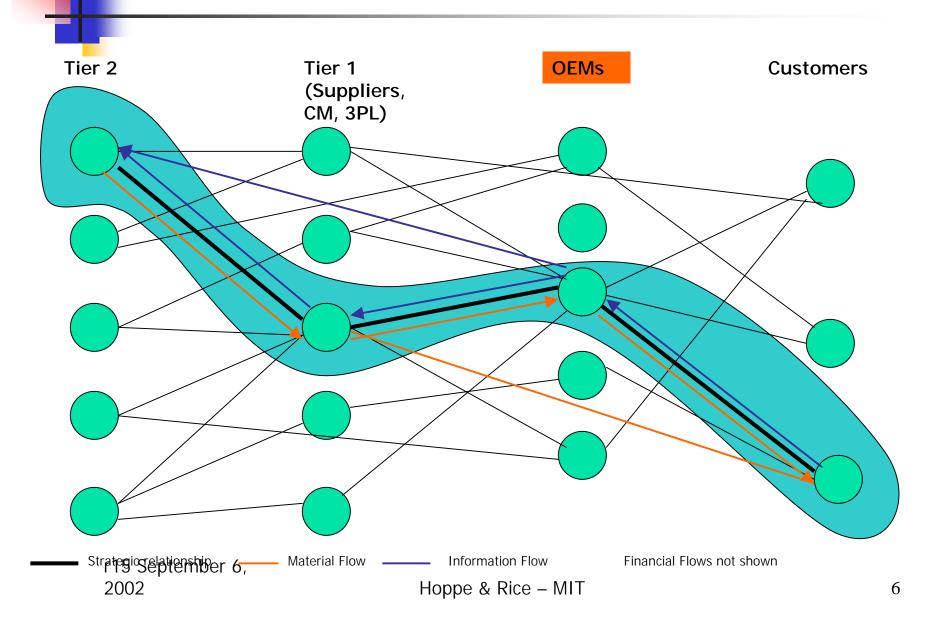
Coordinate across multiple tiers of the supply network

Coordinate across multiple tiers of the supply network



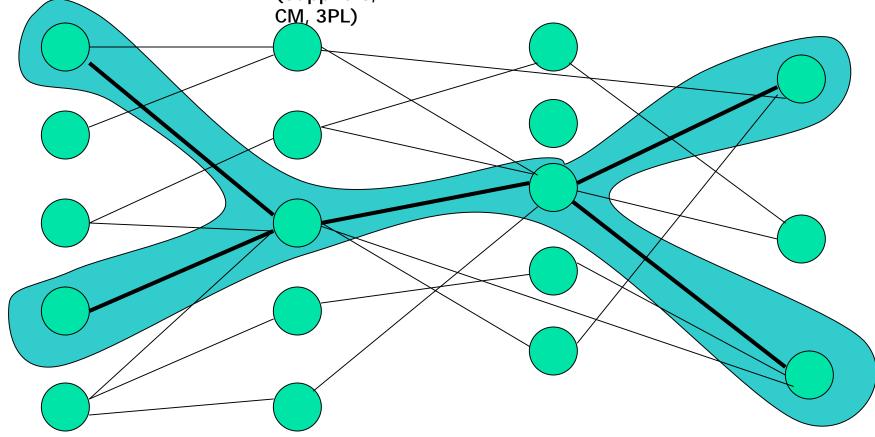
Material Flow

Strategic Supply Network – Selecting Partners from the OEMs perspective



Strategic Supply Network – Selecting Partners alternative SSN, form OEMs perspective

OEMs Tier 2 Tier 1 **Customers** (Suppliers, CM, 3PL)



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Multi-Tier Coordination – Requirements to Achieve the Potential

- Connected information systems across the strategic supply network that provide information visibility (SC visibility)
- Logistics process and operations coordination across the strategic supply network
- System coordination across the supply network
 - Not focused solely on math models to optimize the network
 - New entities to help facilitate optimizing the strategic supply network
 - Track current network performance
 - Identify optimal network design possible
 - Coordinate network-level decision-making among partners
 - Governance structures that would facilitate coordination
 - Processes for making network-level investments among strategic supply network, including making tradeoffs (benefits, costs, risks) among partners

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Multi-Tier Coordination - Input Requested

- Will the basis of competition in the future shift from companyvs-company to supply chain-vs-supply chain?
 - What does supply chain-based competition mean to you?
 - What examples can you cite?
- How could information systems be coordinated?
 - What other entities could facilitate this? Examples?
- How could logistics processes be coordinated?
 - What other entities could facilitate this? Examples?
- What new entities and/or governance structures are needed to enable an optimized supply network?
 - What other entities could facilitate this? Examples?
- Within the noted entities/governance structures, how would costs, risks and benefits be equitably shared among the supply network partners?