Global Logistics Systems

Adapted from an Affiliates seminar held at MIT on March 14-15, 2001

Hank Marcus Professor of Marine Systems, MIT

- Container ships continue to grow in size
 - 5,000 to 7,000 TEU (twenty foot equivalent sized containers)
 - Some carriers are not considering 15,000 TEU ships
- Vision of hub and spoke ocean shipping not fulfilled
- Problems in handling containers at ports
 - A slow process that adds a great deal inventory carrying cost
- Only two modes of international transportation, ship and air
 - A 9:1 difference in cost

Rob Quartel, CEO, FreightDesk Technologies

- The increasing role of international freight execution systems
- Each international shipment involves 20-25 different organizations and 20-40 documents
- 80% of documents require repetitive information
- 30% of the data needs to be entered more than 10 times

Edmund W. Schuster Director, MIT Affiliates Program in Logistics

- The New Geography: How the Digital Revolution is Changing the American Landscape (Joel Kotkin, Random House, 2000)
 - During the past 50 years, transatlantic phone calls now cost 90% less, ocean freight is 50% cheaper and air travel is 80% less expensive.
 - As a result of this cheaper global connectivity, global trade has surged to 12% of the U.S. GDP, double that of the 1970s.
 - The global economy has impacted USA, the population of Buffalo NY decreased 50% in the past 40 years.

Seminar participants listed the following area for future research:

- Status of pan-European transportation: Is Europe moving to a U.S.-style integrated transportation industry rather than their current country-centric one?
- Experiences with globalization: How have companies become global? What are the key success factors? Have they made money being global?
- Patterns of internet usage: How is the internet being used effectively? How does internet usage vary from country to country?
- Alliances: What are the trends in logistics alliances?
- U.S. infrastructure: How will public policies on infrastructure impact U.S. competitiveness? What are the impacts of specific concepts such as government outsourcing or customs inspection policies?
- Asia Logistics Systems?