The Suez Canal and the Changing Face of Middle East Logistics

3rd Trans Middle East Conference
Cairo, Egypt
November 2007
Who We Are

• Supply Chain Research
• Supply Market Forecasts
• Supply Chain Consulting
Agenda

• Global supply chain trends
• Trade and shipping through the Suez Canal today
• Panama vs. Suez?
• Key success factors for a supply chain strategy
Global supply chain trends
Supply Chain Perspective

- Make-to-Stock Manufacturing
- Distribution
- Make-to-Order Manufacturing
- Make-to-Stock Manufacturing

Re-Selling

- Land’s End
- LL Bean
- Sears
- Peapod
- Staples

- Aramark
- Iron Mountain
- USPS
- Aviall
- Amazon

- Dell
- Partners Healthcare
- Andersen Windows
- Vistaprint
- Chocolate Deities

- Hasbro
- J&J
- Steelcase
- Weber
- Simon and Schuster
Lean manufacturing and distribution

Inventory as a Percent of GDP (US)
Extended supply chain visibility, management

- **From the supplier’s supplier...**
  - Collaborative forecasting
  - VMI/auto-replenishment

- **To the customer’s customer...**
  - Postponement
  - Direct ship

- **Transparency between levels**
  - Visibility
  - CRM-SRM linkage

- **Custom supply chains**
  - End-to-end, worldwide, segmented
  - Adaptive, sense-and-respond
  - Learning organization

![Goods Supply Chain Diagram](image-url)
Customer-Supplier Linkage

- **Delphi Automotive**
  - Consider the whole supply chain first
  - Establish suppliers close to manufacturing, and assembly close to customers
  - Target the lowest-cost supply chain

- **IBM**
  - On-demand supply chain
  - Two-tier mentality
  - Visibility and reactivity

- **Exxon-Mobil**
  - Call-center via SAP
  - Payables via SAP
  - Providing suppliers visibility to customer’s orders
The race to “lean”

Inventory and Logistics Administration Costs as a Percent of GDP
Trade and shipping through the Suez Canal today
Middle East trade is booming

Trade to and from the Middle East

Source: Boston Logistics analysis of IMF data
The majority of Middle East trade is conducted with Asia and Europe

**Merchandise imports of the Middle East by region**
- Asia: 28%
- Europe: 38%
- Middle East: 17%
- Africa: 2%
- CIS: 3%

**Merchandise exports of the Middle East by region**
- Asia: 55%
- Europe: 17%
- Middle East: 10%
- Africa: 3%
- CIS: 1%

Source: World Trade Organization
The Suez Canal handles mostly this Asia-Europe traffic

Source: Suez Canal Authority
95% of traffic through the Suez Canal is on the Europe-Asia trade

Suez Canal Traffic by Trade Route

- NW Europe-Far East
- NW Europe-South Asia
- EC North America-South Asia
- EC North America-South-East Asia
- NW Europe-Australasia
- Other

**Source:** Suez Canal Authority
Suez traffic is increasing as Far East volume shifts to South Asia

Traffic through the Suez Canal for Asian Trade Routes, 2006

Source: Suez Canal Authority presentation to China Trade conference, July 2007
And larger ships are ordered

Distribution of Suez Canal Transits by Size of Vessel, 2006

Ships > 5,200 TEU will increase over 30% by 2009(1)

Source: Boston Logistics analysis of Suez Canal Authority statistics
(1) This estimate is from the Household Goods Forwarders Association of America
Panama vs. Suez?
Panama largely serves the USEC-Asia trade

- 25% of total Asia-USEC container traffic
- Grains out of the US Gulf

By Trade Lane
- US-Asia: 45%
- US-SA: 7%
- E-USWC: 4%
- E-Asia: 2%
- Other: 34%

By Commodity Type
- Container: 26%
- Dry Bulk: 22%
- Refrigerated: 16%
- General Cargo: 6%
- Vehicles: 6%
- Passengers: 2%
- Others: 9%

Source: Boston Logistics analysis
Panama is constrained
Panama is constrained (cont’d)
The Panama Canal expansion program

- $5.25b+ expansion
- Toll increases will increase rates by 69% over three years \(^{(1)}\)

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<td>Capacity (transits/year)</td>
<td>17,000</td>
<td>34,000</td>
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<tr>
<td>Max Vessel Size (TEUs)</td>
<td>4,400</td>
<td>12,000</td>
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\(^{(1)}\) Household Goods Forwarders Association of America
The Suez Canal can offer shippers lower cost for some traffic

- Breakeven line may extend as far north as Hong Kong
  - Hong Kong-USEC
    - 11,207 nautical miles via Suez
    - 11,593 via Panama
  - Hong Kong-Halifax
    - 11,101 nautical miles via Suez
    - 11,533 via Panama

- Large vessels will be the most economical
  - Smaller vessels require too many in a string to achieve target frequencies
  - Can amortize higher operating costs across more containers

Source: Suez Canal Authority presentation to China Trade conference, July 2007
Major players are taking an interest in this

- Current carriers: CMA/CGM, Maersk, COSCO
- COSCO is making a $730m investment
  - From 2.5m to 5.1m TEUs/year
  - Double the employment at the port
  - New ownership structure
    - APM Terminals of The Hague, Netherlands (55%)
    - COSCO Pacific (20%)
    - Suez Canal Authority 10%
    - National Bank of Egypt 5%
    - Egyptian Private Sector 10%
- DP World has bought 90% of the controlling shareholder at Sokhna Port.
  - Projections indicate 1.2 million TEU by the end of 2009
Key success factors for a supply chain strategy
Window of opportunity for new routes

- Extend the range of eligible Asia-US traffic
  - Hong Kong-USEC
  - Hong Kong-Halifax
- Exploit rising rail and Panama Canal rates to introduce an alternative for Post-Panamax vessels
- 7-year window until Panama Canal expansion is complete
But performance has room for improvements

Source: World Bank
Performance will make the difference in capturing traffic that is part of companies’ lean global supply chains

The Supply Chain advantage is about more than cost!

- Reliability
- Flexibility
- Total transit time
- Inventory visibility
- Value-added services
- Product-services
- Intermodal links
Thank you!

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- **Research** that help investors and policy makers quantify the cost and benefit of infrastructure and technology investments
- **Forecasts** that help supply chain executives decide how, where, and when to buy critical purchased materials and services
- **Consulting** that supports high-stakes decisions such as acquisitions, outsourcing, off-shoring, and make-or-buy