

Integrating Technology into an Effective International Logistics Strategy

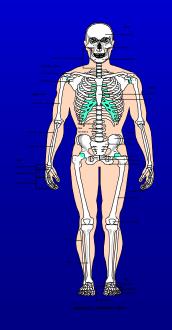
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THE PROUPS

Agenda

- Key Components of Global Logistics Strategy
- Tools to Support That Strategy
- Integrating The Strategy and Tools







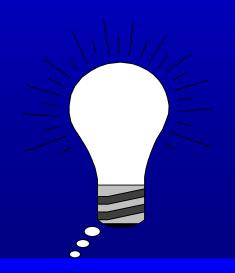
Key Components of a Global Logistics Strategy

- ♦ The Plan
- Supply Chain Leverage
- Policies and Procedures
- Tools / Weapons
- Organizational Support
- Risk Management



The Plan Must Tie to the Organization's Interests

Customer AND Shareholder



"Nothing is worse than doing efficiently what should not be done at all"

Peter Drucker



The Plan

(Brain)

MITASTYUCTUFE BOOKER OF CONTROLLED BY THE STATE OF THE ST

(Skeleton)





(Eyes / Senses)

Processes Tools

(Muscles)



Supply Chain Leverage

- ♦ No Matter How Big You Are:
 - Your Supplier Base Dwarf's Your Infrastructure
- You Are No Longer Competing Against Companies:
 - You are Competing Against Supply Chains
- ♦ 80% of Supplier Cost Drivers Can Be Directly Affected by Customer Purchasing Habits



Policies and Procedures

Allows You to Manipulate
 Infrastructure

Design for Top Customers

Not for Exceptions

♦ Reground Regularly



Organizational Support

- Maximum Leverage and Success Come from Cross-Functional Teams
 - Simultaneous Review Cuts Design Time
 - Avoid Rework
- Visibility to Information



Risk Management

- Overall Issues
 - Continuity of Supply
 - Immunity to Cost Increases
 - Quality

- International
 - Quality
 - Currency
 - Compliance
 - Culture
 - Political



Critical Success Factors in Developing Strategy

- Address the Issues that Matter
 - Inventory
 - Throughput
 - Operating Expenses
- Develop with Cross-Functional Team and Executive Exposure
- Mitigate Risks Associated with International Business



Tools that Support That Strategy

- ERP Systems / Manual Processes
- Relationships
- e-commerce



ERP Systems / Manual Processes

- * ERP
 - Great Enablers
 - Not-so-Great Results Providers
 - Large Expense
 - \$ and People
- Manual Processes
 - Not Evil!!!



Relationships

- Provide the Trust Necessary to Share the Information That Will Allow a Group of Companies to:
 - Trade Inventory for Information
 - Plan Predictively
 - Trade Forecasts for Visibility
 - Invest
 - Commit

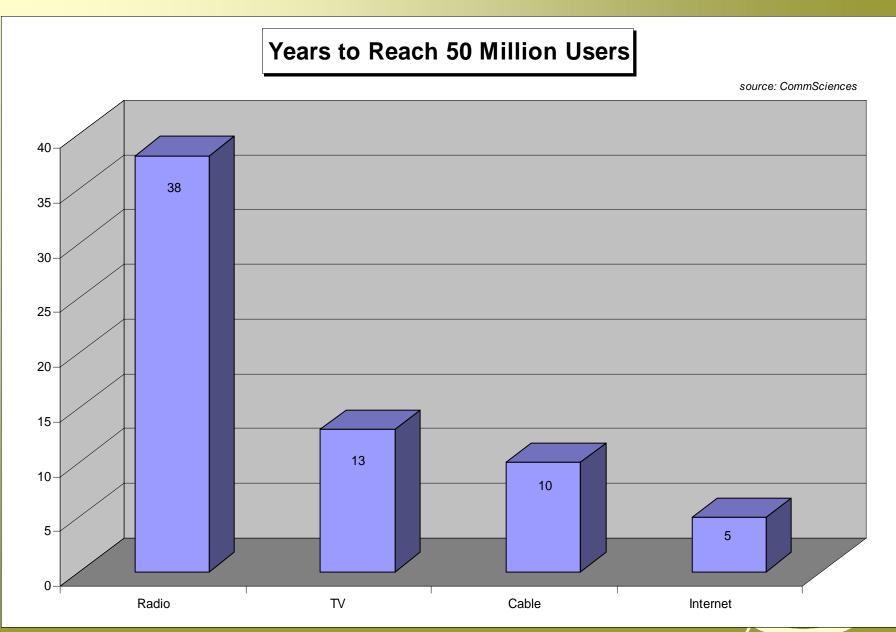


Electronic (e) Commerce

- E-commerce is the symbiotic integration of
 - communications
 - data management
 - security capabilities

to allow business applications within different organizations to *automatically* exchange informelated to the sale of goods and services

 1997 was proclaimed the year of the Internet transaction (of Web commerce)



Commerce Department Report (Secretary Daley)

- Internet traffic is doubling every 100 days yielding a yearly growth rate of more than 700%
- Between 1993 and 1997, the number of Internet users rocketed from 3 million to more than 100 million
- Information technologies have driven more than 25% of real economic growth over the past five years



Commerce Dept Report (con't.)

- Business-to-business transactions on the Internet will likely surpass \$300 billion by 2002
- Plummeting technology prices cut inflation an average of 1%/year between 1996 and 1997

E-Commerce: B to B vs. B to C

- ◆ 1997: B to B: \$8B
- ◆ 1998: B to B will account for 78% of total spent on cyber transactions (Forrester)
- ◆ 2002: \$327B of B to B (Forrester)
- Analysts Argue Over Benefits - Conservative: Tens of Billions!



Why E-Commerce

- Global
- ♦ 24 x 7
- Incremental w/o Incremental
- Personalized
- Customers Receive
 Information When
 It's Convenient for Them
- Reduced In-House Customer Service Requirements

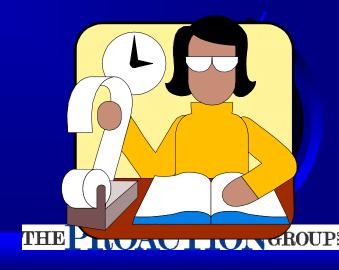




- Up-To-Minute Information
- ♦ 70% of Calls Placed to Companies Are:
 - What is the price of the product?
 - Is the product in stock?
 - What's the status of my order?
 - (source: Open Market)
- All Can Be Answered at No Cost via the Internet



- Orders Placed Can Be Verified for Accuracy (algorithms)
- Confirm Order
 Placement/Shipment via E-Mail



- Reduce #, Frequency, Size of Physical Catalogs
- Internet Catalogs Can Be:
 - Searched
 - Views Analyzed
 - Secured
 - Personalized by Individual/Dept/Company/Group



- Web Sites Tracking
 - Where Views Come From
 - Path Traverse Through the Site
 - Where They Leave From
 - How Long They Stay
 - Page Views
- Integrate with Existing Systems
 - Inventory Control
 - Order Processing
 - Fulfillment
 - Customer Service



- ActivMedia expects companies to invest \$23.6 billion by 2002 to upgrade their e-commerce systems
- ♦ As a % of Sales: 5 to 10% Reduced Cost
- Perfect Meld with tPg's Core Business

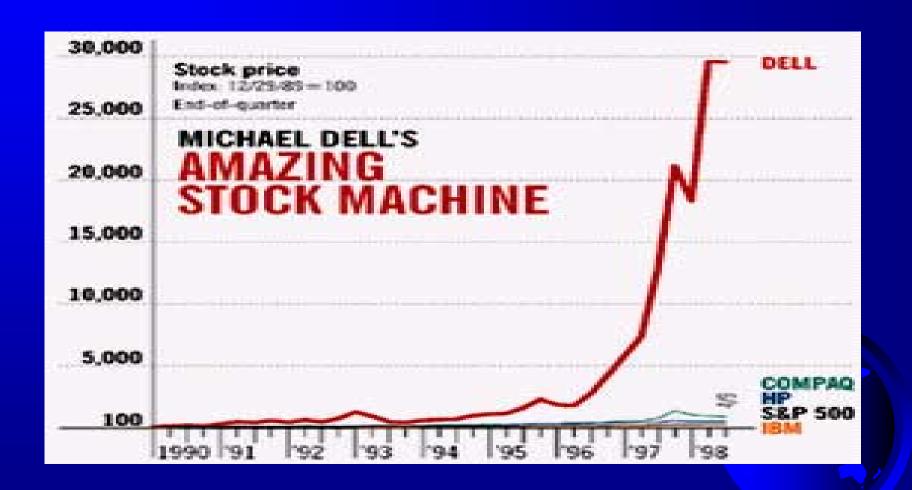


E-Commerce Example





- Past 3 Years
 - Sales: \$3.4B to \$12.3B (53% CAGR)
 - Profits: \$140MM to \$944MM (89% Annual Growth)
 - Market Cap: \$75B
 - Stock is up over 26X (yes!)
 - Growing 2X as any Competitor
- Since 1990, risen 29,600%! (the splitadjusted share price went from 23 cents to \$68)



Think about it," says money manager Graham Tanaka, with a trace of awe in his voice. "Going directly to customers. Eliminating the middleman. Selling over the Internet. Wouldn't a Chrysler like to do that? Wouldn't everyone want to do business like that?"

- No Finished Goods Inventory
- Ship Machines with Latest Technology (High Margin)
- Direct Contact with Its Customers
- Selling Directly Means It's Getting Paid by the Likes of:
 - Boeing, Ford, Shell
 - Receivables have a great credit rating (better than Dell itself)

- Consumers and Businesses Pay by Credit Card
 - Cash in the bank before manufacturing product
- Cash Conversion Cycle of -8 Days!
 - the difference between the time it pays creditors and the time it takes to get paid
- ♦ \$12.3B in Sales/\$233MM in Inventory (<2%)
 </p>



Business Benefits - General Electric

◆ General Electric says that Purchasing over the Internet will Save \$500MM Over the Next 3 Years



Business Benefits - Boeing

Boeing has Booked \$100MM in Spare-Parts Orders from Airlines in the Last Year through a Web Site that Took Just Seven Months to Build

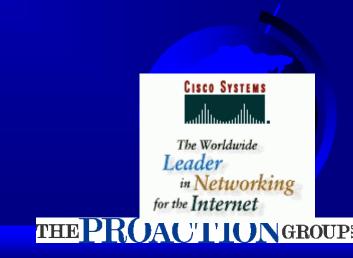


Business Benefits - Los Angeles County

Los Angeles County - County
 Offices, Hospitals, and Jails Comparison Shop Among
 Approved Suppliers - 5% Savings
 on \$650 MM in Goods and Services
 (\$32.5MM) - Cost: \$2MM

Business Benefits - Cisco

- Cisco \$11MM/Day in Orders -\$4B/Year
 - \$363MM Savings in
 - Tech Support
 - Marketing
 - Distribution
 - 1/3 came from hiring fewer people to assist customers



Business Benefits - Prudential Healthcare

- Prudential Healthcare Extranet Linking Its Internal Systems to the Corporate Network of Large Subscribers - Benefits Managers at Companies Enroll Employees Themselves Rather Than Sending in Paperwork or Dialing into Prudential
 - Staff can check eligibility, claim status, or change doctors - 24 hours/day



Business Benefits - Mondavi

 Robert Mondavi Buys Satellite Images from NASA to Spot Problems in Its Vineyards - Push These Out to Its Independent Growers - Avoid Vineyard Problems and Improve Grapes

Business Benefits - Adaptec

- Adaptec International Communications to Asian Suppliers Include Drawings, Manufacturing Instructions, and Parts Orders
 - Reduced time between order and delivery from 16 weeks to 55 days (same as companies that make their own)
 - Purchase Order Processing fell from 6 days to minutes and suppliers stopped having to manually re-enter faxed orders
 - Saved: \$1MM in Costs/Trimmed \$9MM from WIP



"The Web is an insidious processreengineering tool"

Graeber Jordan, Boeing

THE PROACTION GROUPS

What to Look For

- Using the Net to Communicate with Customers, Distributors, and Suppliers Can Save Big \$\$ Compared to Doing It Over the Phone or Via Expensive Proprietary Data Networks (EDI w/Clearinghouses)
- Process/Operational Mazes
- Low MarginLow Touch Business
- Highly Customer Service Oriented Operations
- Complex Products



NAPM/CAPS (Center for Advanced Purchasing Studies) - Future of Purchasing & Supply - 5 & 10 Year Forecast

- The Internet will become the backbone of electronic purchasing.
- Systems for low strategic value purchases will emphasize electronic efficiency
- Tactical purchasing will become more automated and consortia and third-party purchasing will become more prevalent
 - head counts will be reduced
- The Internet will be the front end for proprietary information systems, combining databases accessible by suppliers, purchasing, and customers, to create a seamless link
- Internet commerce will be commonplace and businesses that do not adopt the world of e-commerce will be faced with extinction



What's Next

- * "In the future, it will be possible for component suppliers to have a direct window into factory workflow via the Internet. This will enable them to use information to deliver parts in real time, essentially eliminating inventory and further accelerating the pace of commerce."
 - Michael Dell, Chairman of the Board and CEO, Dell Computer Corp.

What's Next

- * "We'll see over 1 billion connected computers operating over hardwire, wireless, and satellite mechanisms. PCs will be complete communication devices that can understand speech, generate voice responses, translate languages, anticipate your information needs, seek and retrieve those needs via the Net, and do this prior to your asking for the information."
 - Craig Barrett, President and CEO, Intel Corp.



What's Next

- * "In ten years, every personal computer will be capable of seeing, listening, and learning... Microsoft is investing to build a 'great digital nervous system' empowering businesses to be more competitive, and making jobs more interesting for people."
 - Bill Gates, CEO and Chairman of the Board, Microsoft Corp.

Integrating Those Tools

- Start with Understanding the Customer's Needs and Shareholder's Needs
- Ask Reengineering Questions
 - What if all processes were reduced to immediate elapsed time?
 - Compare order to ship cycle to TAC time
- Ask Enabling Questions
 - Which technologies enable us to develop a competitive advantage

Integrating Those Tools

- Unless you are already upgrading to a new system, identify ways to avoid getting new tools
 - Supplier Systems
 - Task Elimination
 - Manual Processes
- ♦ Systems Alone Will NOT Solve any problems

