

NDIA

Adapting Collaborative Commercial Techniques



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**Practices, Processes & Technology
For The
Aerospace and Defense Supply Chain**

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March 2003

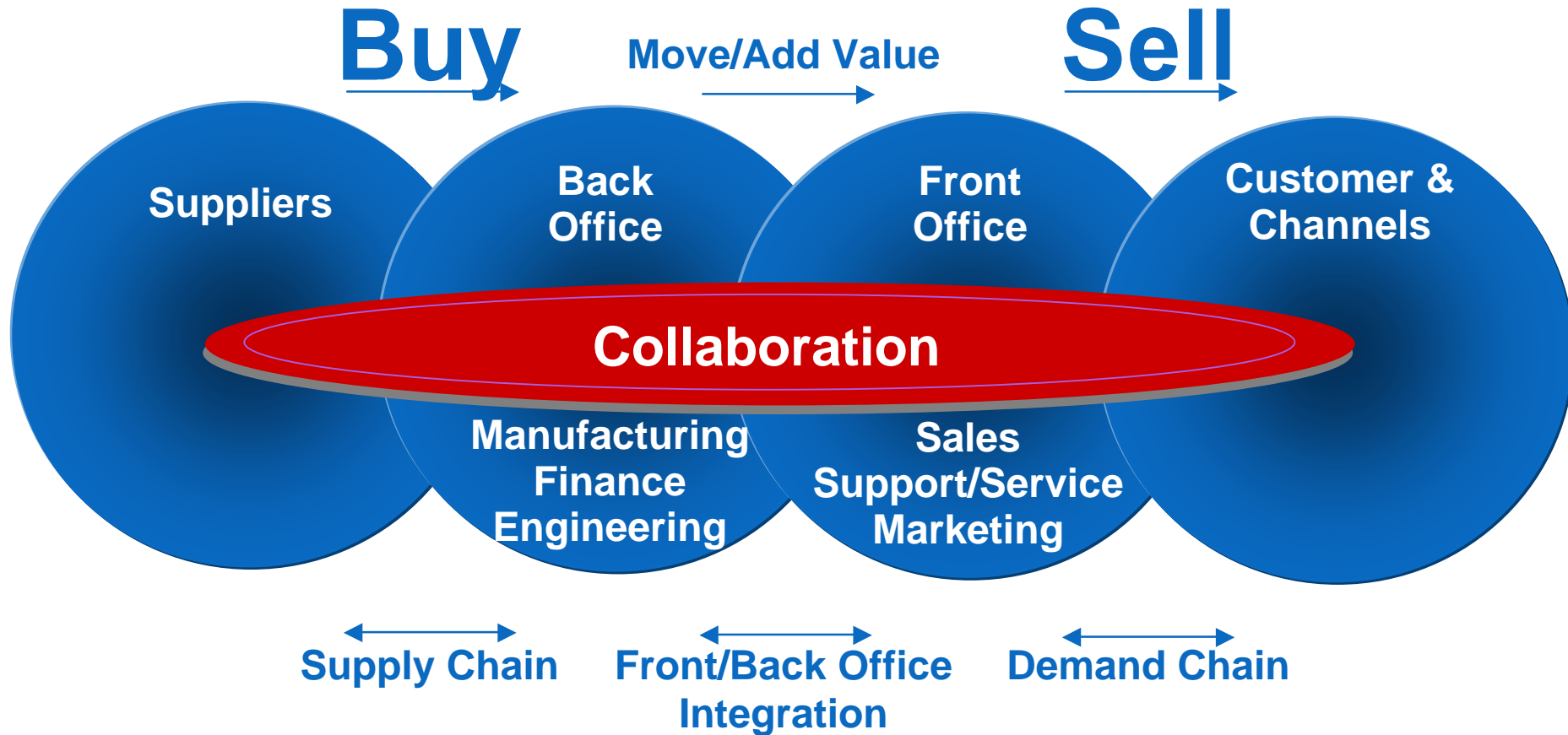
History Of Collaborative Planning



- Began in 1996
 - Wal-Mart, Warner Lambert, Manugistics, SAP
 - Focus on improving forecasting for sales volumes
 - Began the evolution of CPFR by adding replenishment
- How it progressed
 - Began a rollout to the CPG/Grocery retail space
 - Issues focused around “in-stock” and sales volume
 - Adopted by the VIICS council and ECR as a standard
 - Followed by Rosetta-Net for high tech sector
- CPFR goes mainstream in 1998
 - Multiple industry vertical adoption
 - Crosses the manufacturer-retailer model to also focus on suppliers, dealers, customers...regardless of vertical industry

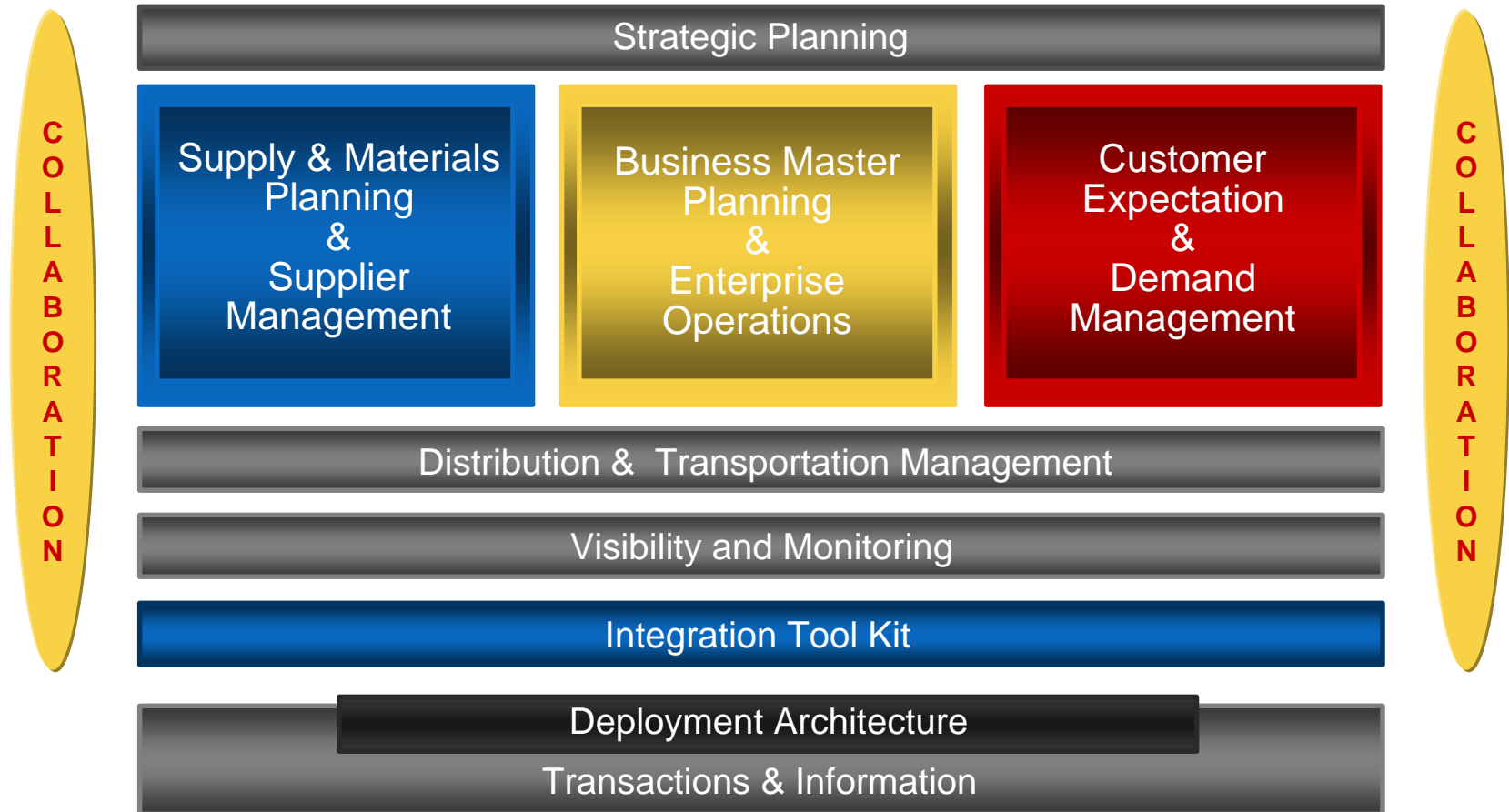
The Collaborate Opportunity

Internal and External to the Enterprise

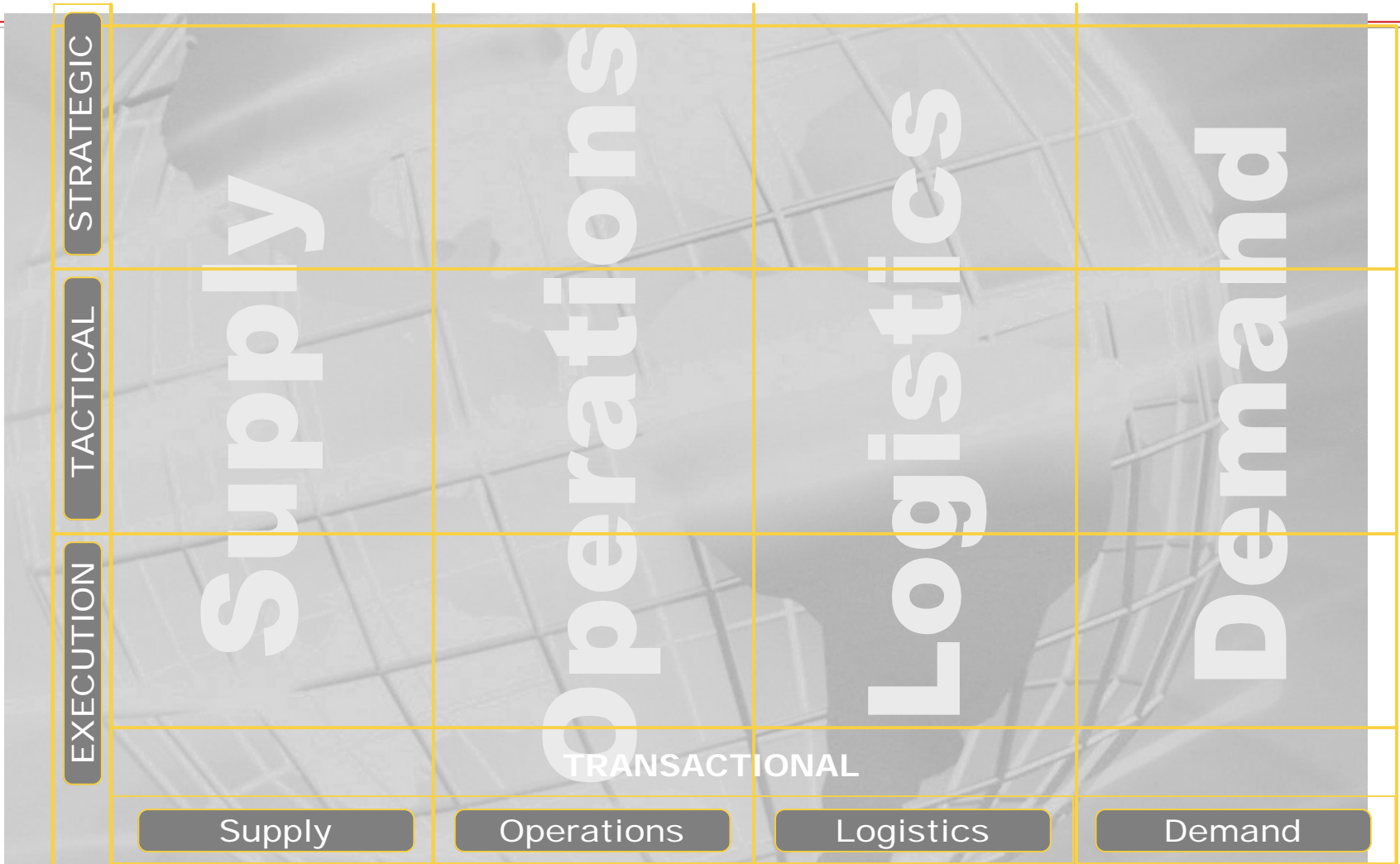


Source: The Yankee Group

Collaboration Must Focus On Business Processes

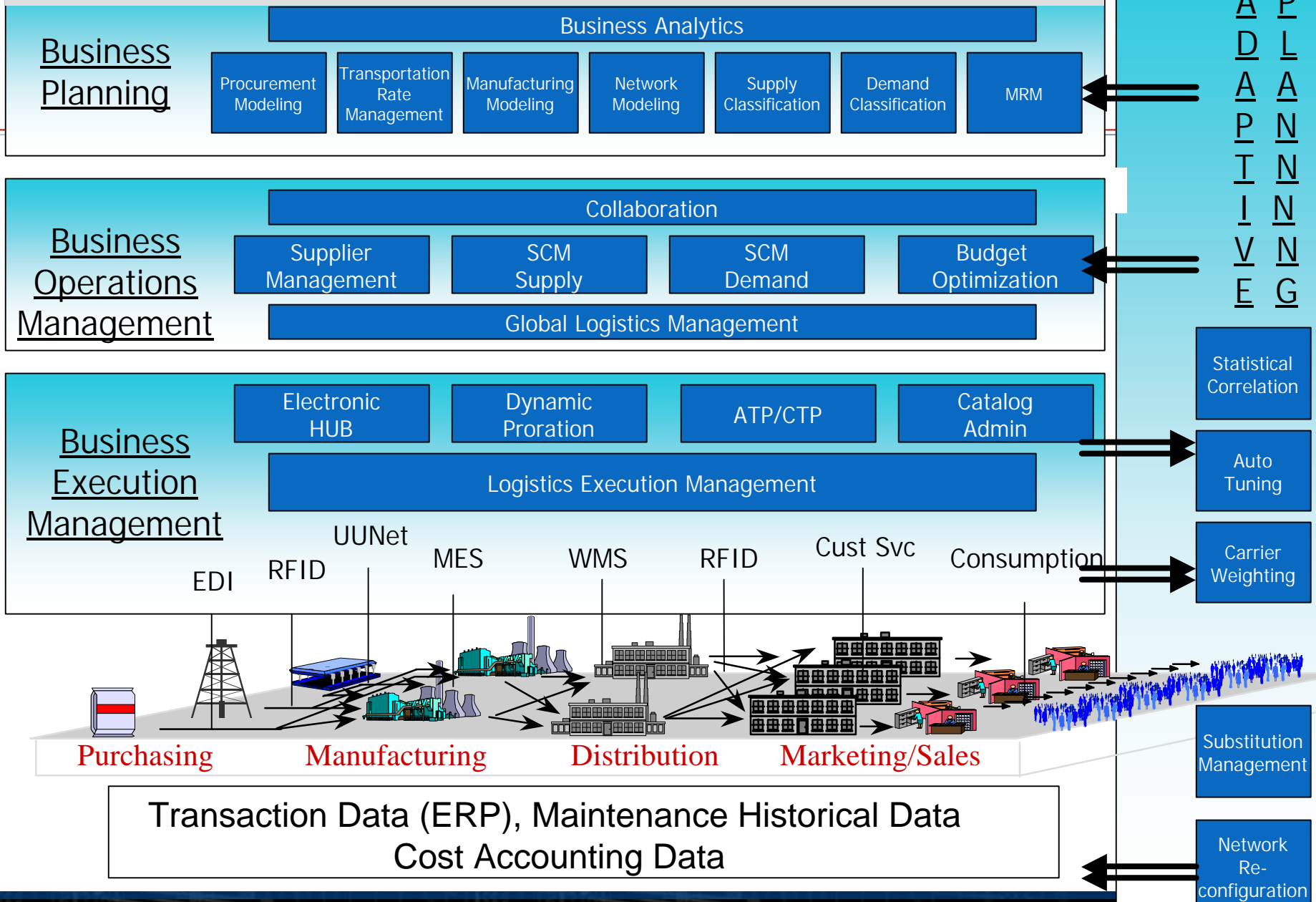


Across Multi-Dimensional Planning and Operating Horizons



ANALYTICAL

Delivering Continuous Improvement Through Business Planning, Management, Real Time Monitoring and Adaptive Planning



Purchasing

Manufacturing

Distribution

Marketing/Sales

Examples Of Collaborative Planning

Commercial Sector
Aerospace & Department of Defense

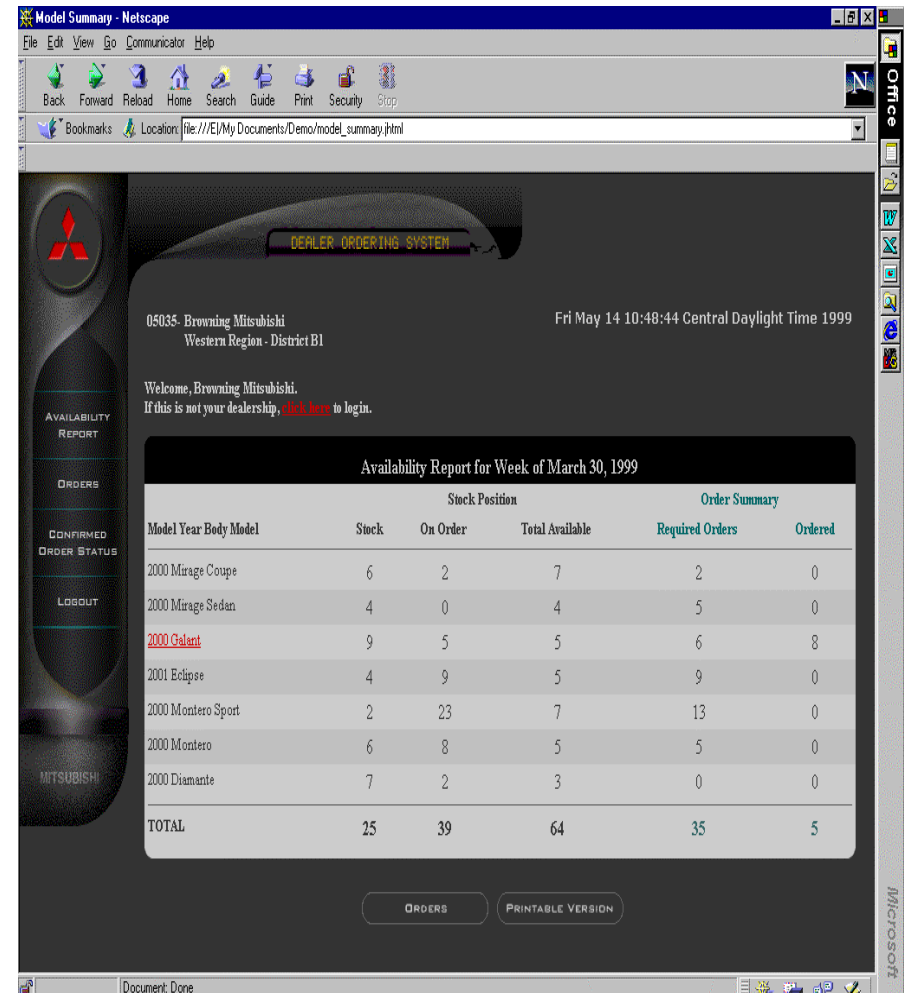


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Internet Dealer Collaboration

- Reduced vehicle inventory at the ports by over 90%
- Reduced operating costs associated with transporting vehicles to dealers by over \$2 million
- Implemented a system that reduces order-to-delivery lead time by ~75%, while also allowing for vehicle customization up to 15 days prior to production
- Reduced age of vehicles from 164 to 37 days old
- Rolled out the system to dealers across the nation in less than 6 months



Model Summary - Netscape

File Edit View Go Communicator Help

Back Forward Reload Home Search Guide Print Security Stop

Bookmarks Location file:///E:/My Documents/Demo/model_summary.html

DEALER ORDERING SYSTEM

05035- Browning Mitsubishi
Western Region - District B1

Fri May 14 10:48:44 Central Daylight Time 1999

Welcome, Browning Mitsubishi.
If this is not your dealership, [click here](#) to login.

AVAILABILITY REPORT

ORDERS

CONFIRMED ORDER STATUS

LOGOUT

MITSUBISHI

Availability Report for Week of March 30, 1999

Model Year Body Model	Stock Position			Order Summary	
	Stock	On Order	Total Available	Required Orders	Ordered
2000 Mirage Coupe	6	2	7	2	0
2000 Mirage Sedan	4	0	4	5	0
2000 Galant	9	5	5	6	8
2001 Eclipse	4	9	5	9	0
2000 Montero Sport	2	23	7	13	0
2000 Montero	6	8	5	5	0
2000 Diamante	7	2	3	0	0
TOTAL	25	39	64	35	5

ORDERS PRINTABLE VERSION

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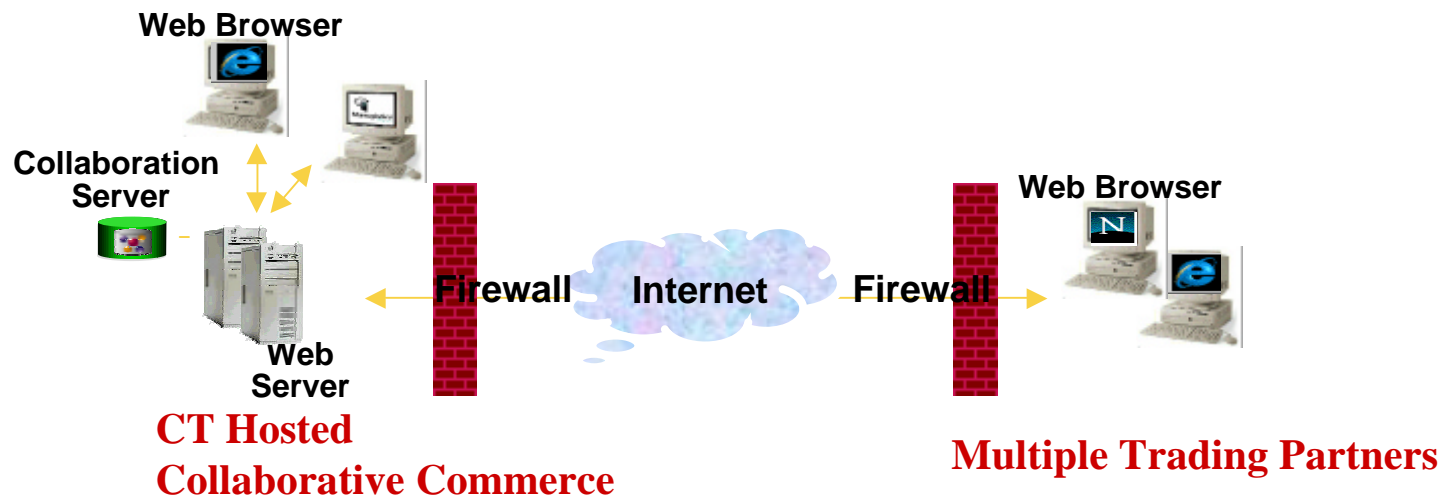
Microsoft



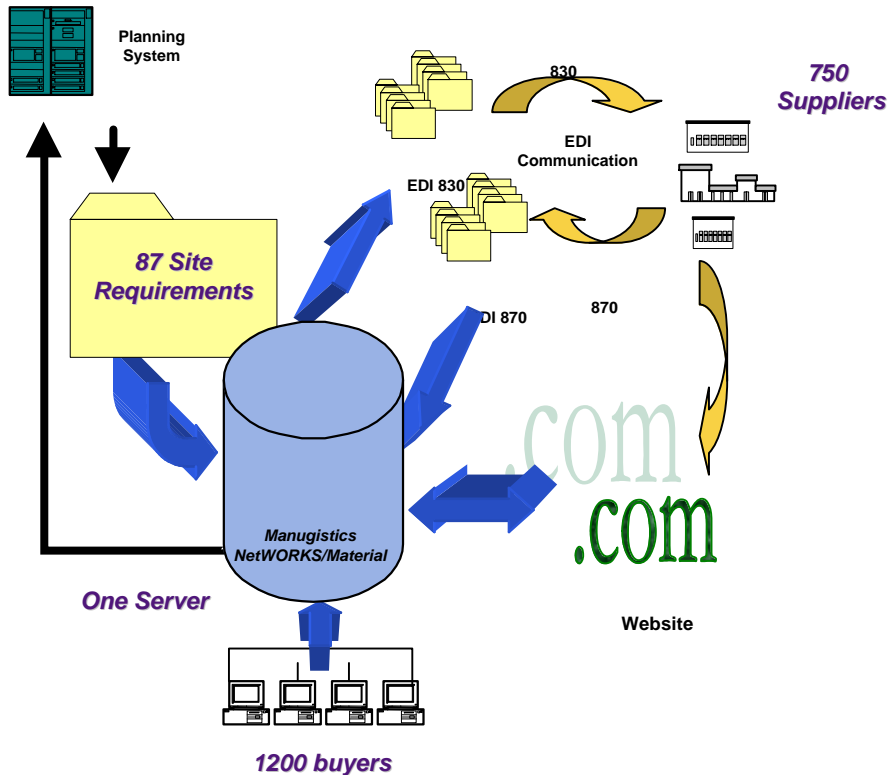
Canadian Tire Story- Collaborative Commerce



- Implement a hosted web-enabled trading network in three weeks
- Improved partner relationship between retailer and suppliers through real-time collaboration process and shared information
- 20% increased in-stock positions with 15% reduced inventories



Case study: Compaq

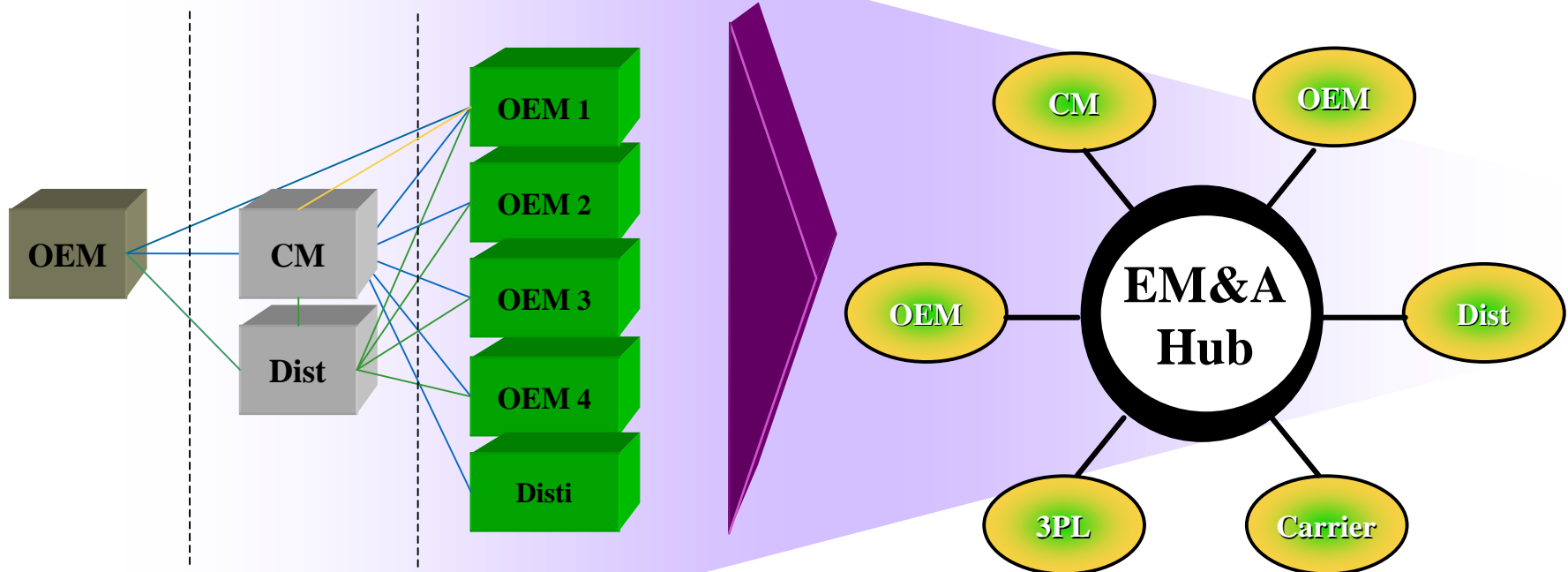


- 100% Increase In Responsiveness, Improved On-Time Delivery
- Up to 50% Reductions In Raw Material Inventory
- Raw Material Inventory Reduced by \$30M in 6 Months
- 50% Reduction in Forecast Change Response Time
- Improved Product End-of-Life Planning: Avoided \$12M Obsolete Material Write-Down From A Single Product Line Phase-Out

Cisco's eHub Changed The Model



Current Model



For A&D It Means Enabling A New Operational Environment

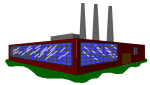


- Access additional capabilities at each operating location to enhance planning, scheduling and operational capabilities
 - Integrate to legacy and MR&O installed solutions
 - Create a collaborative planning solution for connectivity and joint planning with suppliers, customers and business partners
 - Utilize constraint based time-phased planning for operational efficiency
- Connect “Enterprise” level planning to suppliers, depots and customers
 - Create collaborative planning environment
 - Utilize constraint based capabilities to increase service level improvements while optimally managing within budgetary constraints
 - Utilize collaborative weapon system life cycle management techniques to improve initial provisioning for retail and wholesale logistics execution
 - Reduce customer wait time and improve reliability
 - Use simulation and modeling for “what-if” analysis and situational awareness planning

Changing A Program Specific Supply Chain Environment



Boeing

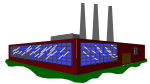


SMART TRANS

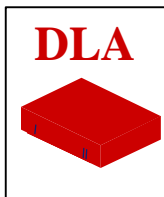


**Transportation
Visibility and
Control**

Pratt & Whitney

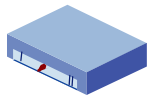


Lockheed Martin

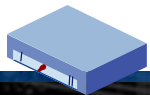


NAVSUP/ICP SMART ERP/APS

SAIC

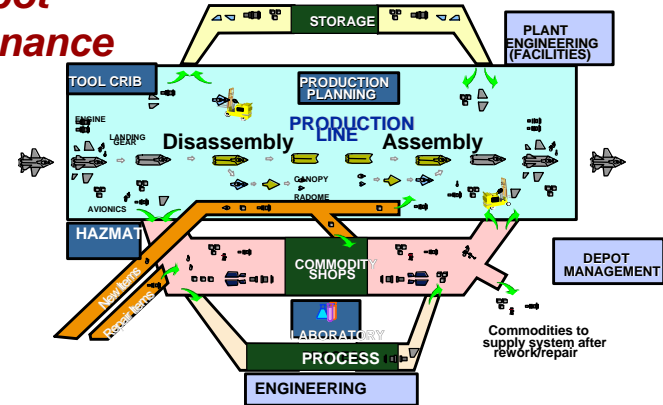


Northrop Grumman



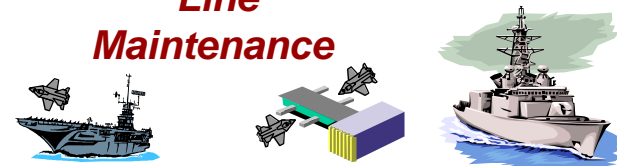
-- OEM's and Virtual Prime Vendors --

**Depot
Maintenance**



- Maintenance Planning & Preparation
- Asset & Configuration Management
- Resource planning & Scheduling
- Repair, Replace, Rebuild Management
- Maintenance Execution & Completion
- Financial Management
- Records Management

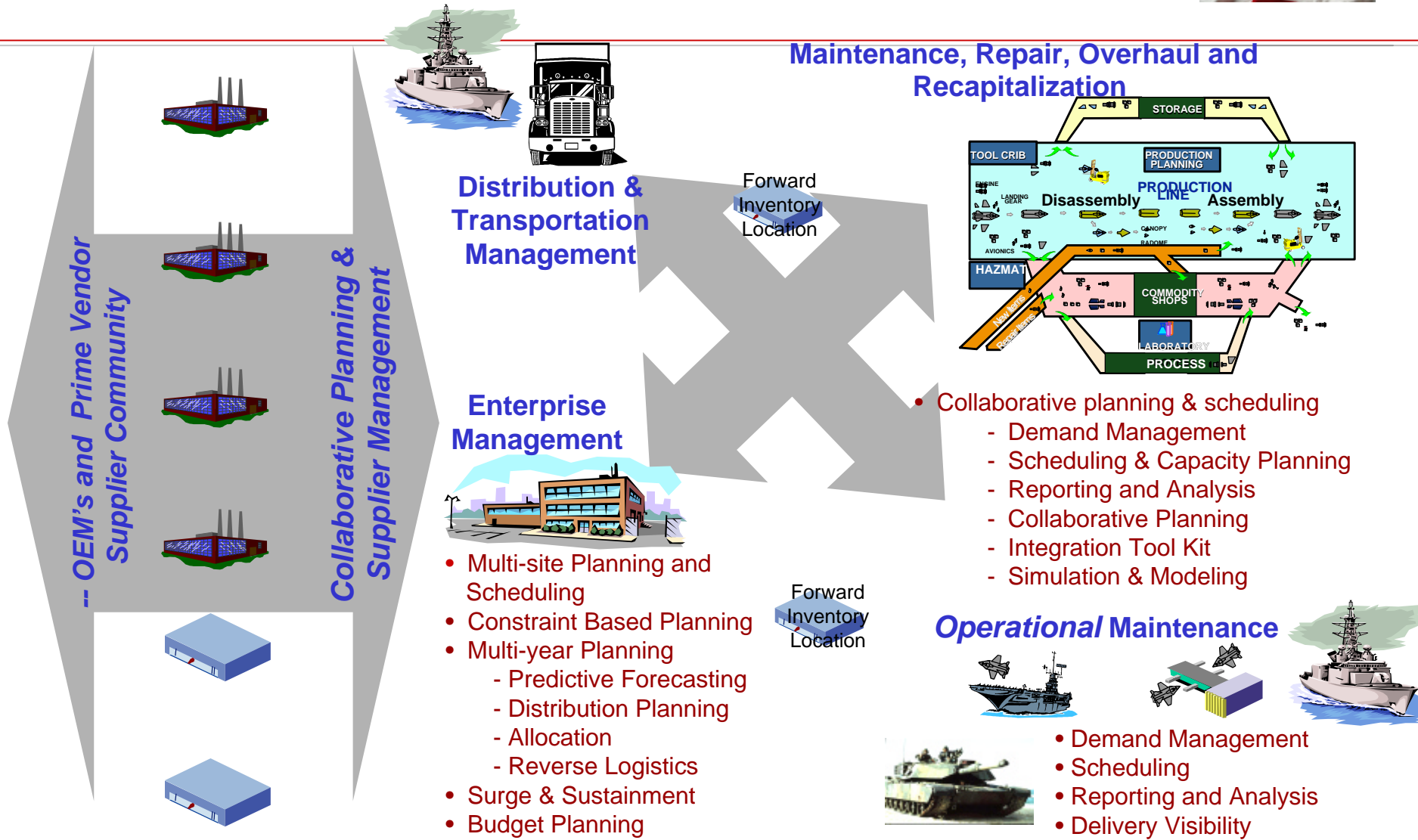
**Line
Maintenance**



- Enterprise Parts/Material Management
 - Predictive Forecasting
 - Distribution Planning
 - Allocation
 - Reverse logistics
- Capacity Planning
- Buy vs Repair Analysis
- Logistics Management
- Supplier Relationship Mgmt
- Collaboration

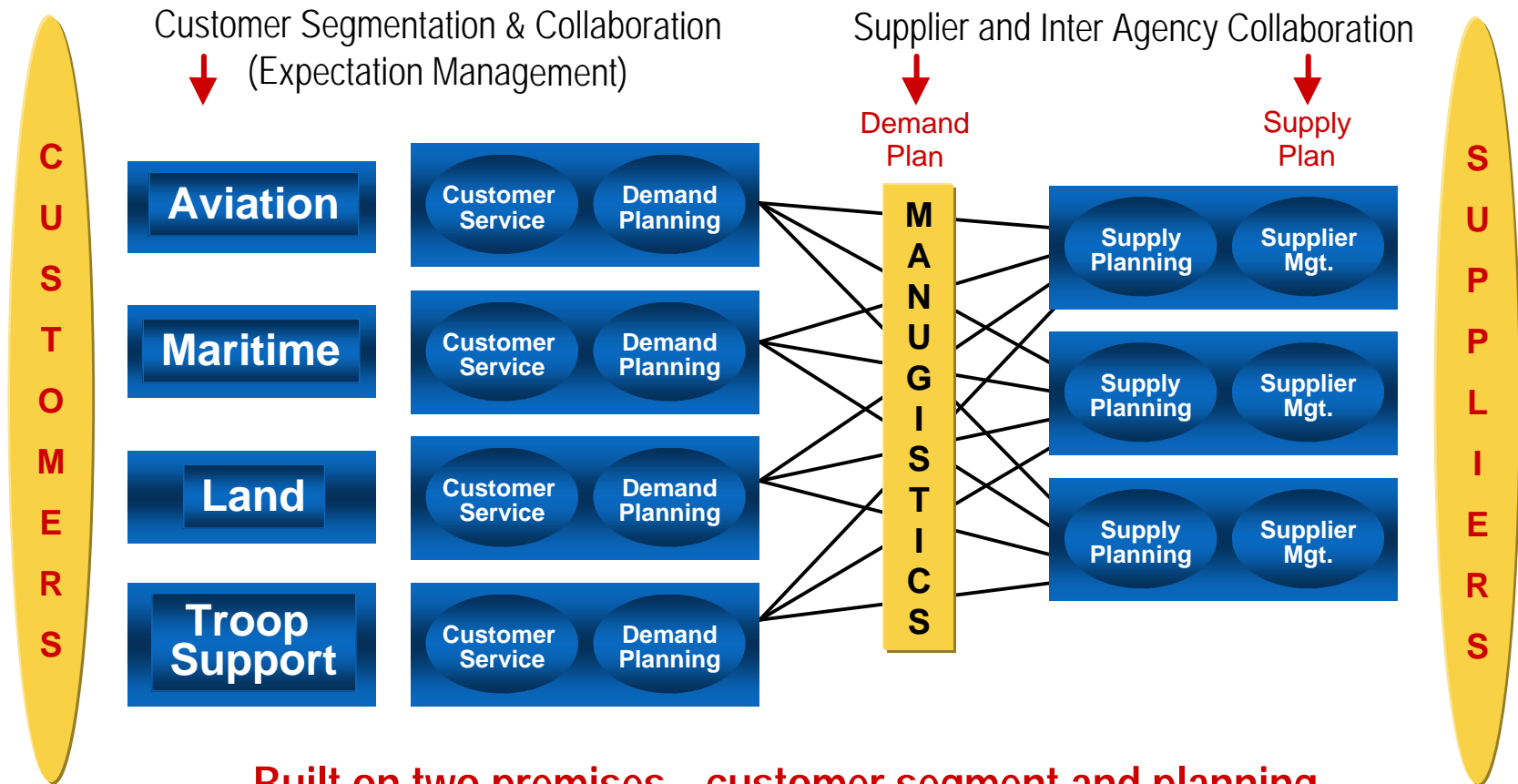


Into The Inter-Networked Enterprise Operating Environment



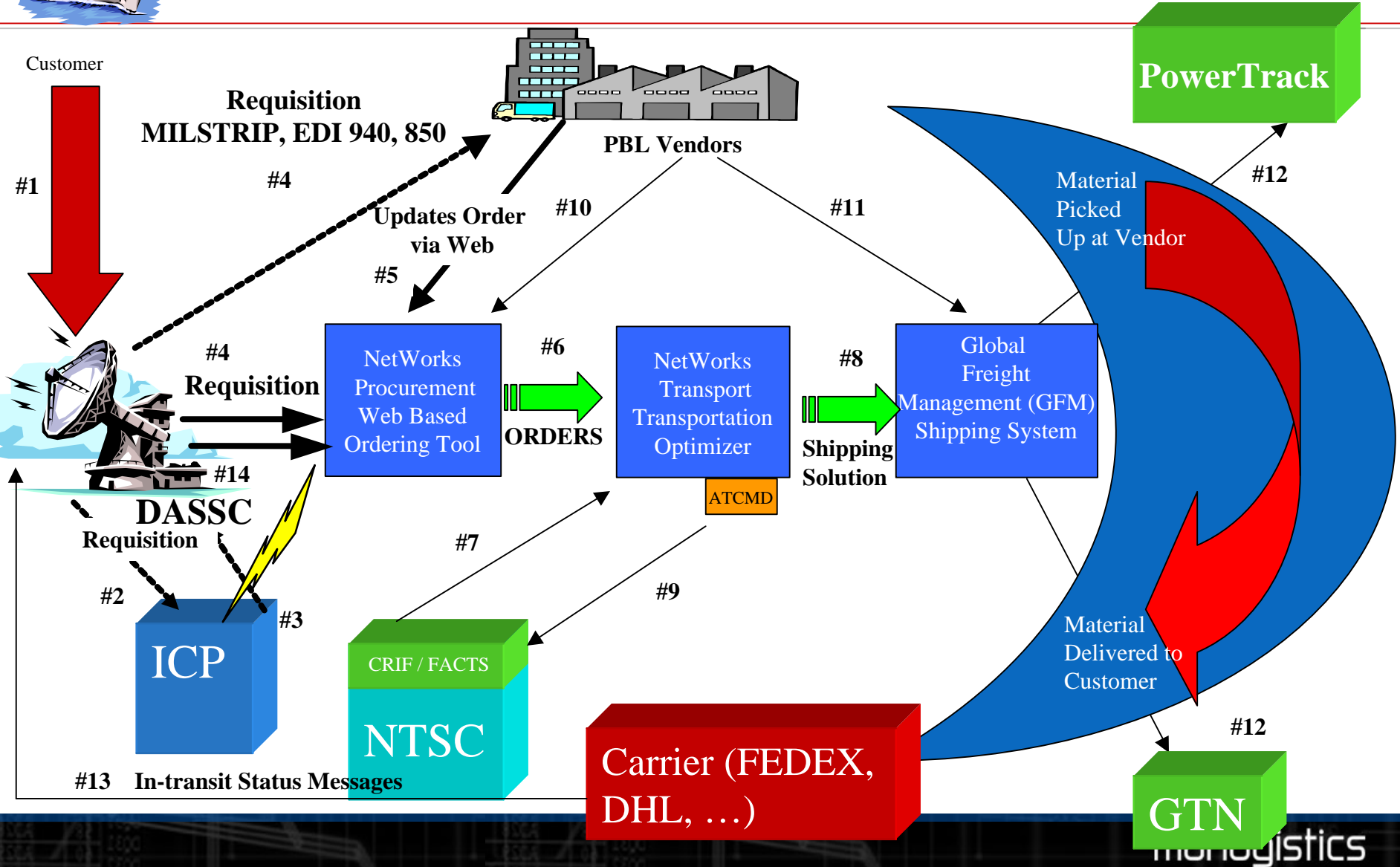
DLA's BSM Program

Includes Customer And Supplier Focused Collaboration



Built on two premises...customer segment and planning via collaboration

NAVSUP's STS Shipping Solution Creates Collaborative Visibility...



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