

Decision-making in the Real Time Enterprise

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Agenda

- ManTech Team Overview
- C-Commerce Background
- Real Time Supply Chain Opportunity
- Challenge Issues

ManTech Team Overview

ManTech International

- **Corporate Headquarters located in Fairfax, Virginia**
- **Founded in 1968 with two employees**
- **Over 3,500 employees now**
- **Offices in 29 states and 8 countries**
- **Conducts business in the areas of:**
 - ✓ **Commercial Information Systems**
 - ✓ **Environmental**
 - ✓ **Systems Security**
 - ✓ **Telecommunications**
 - ✓ **Defense**
 - ✓ **Aerospace & Aeronautics**
 - ✓ **ATE Products and Services**



**...George J. Pedersen,
Chairman of the Board, CEO, &
President**

"ManTech's challenge is to stay on the leading edge of technology and apply our knowledge and experience toward the benefit of all segments of our business and customer base."



ManTech International Enterprise Integration Center (e-IC)

- Located in Fairmont, Hinton, and Charleston, WV
- Established in mid-1992
- ManTech e-IC is a commercial organization providing high technology applications and consulting services to the federal government and private industry
- Employees include:
 - ✓ Computer Scientists
 - ✓ Computer Engineers
 - ✓ Electrical Engineers
 - ✓ Software Engineers
 - ✓ Imaging Specialists
 - ✓ Business Engineers



ManTech e-IC Mission Statement

1994

2002+



“Information Technologist(s)”



Our Principal Mission is to Provide the U.S. Department of Defense (DoD) with a Range of Advanced Information Technology Strategies Coupled with Business Case and Process Based Modeling Techniques, Functional Application Design and Development, and the use of Information Exchange Standards that Contribute to the Concept of a Shared Integrated Environment (Data/Information/Knowledge) Between the DoD and their Industrial Partners

www.mantech-wva.com

www.dcnicn.com

Concept Formulation * Requirements Definition * Business Process/Models * Pilot Demonstrations

Full Life-Cycle Orientation

ManTech e-IC Capabilities

Core Competencies include:

- Collaborative Commerce
- Electronic Catalogs
- Interactive Electronic Technical Manuals
- Knowledge Management & Data Warehousing
- Image and Automated Conversion
- Business Process Reengineering
- Global Collaboration Services
- Systems Analysis, Design, Development, Testing, and Deployment

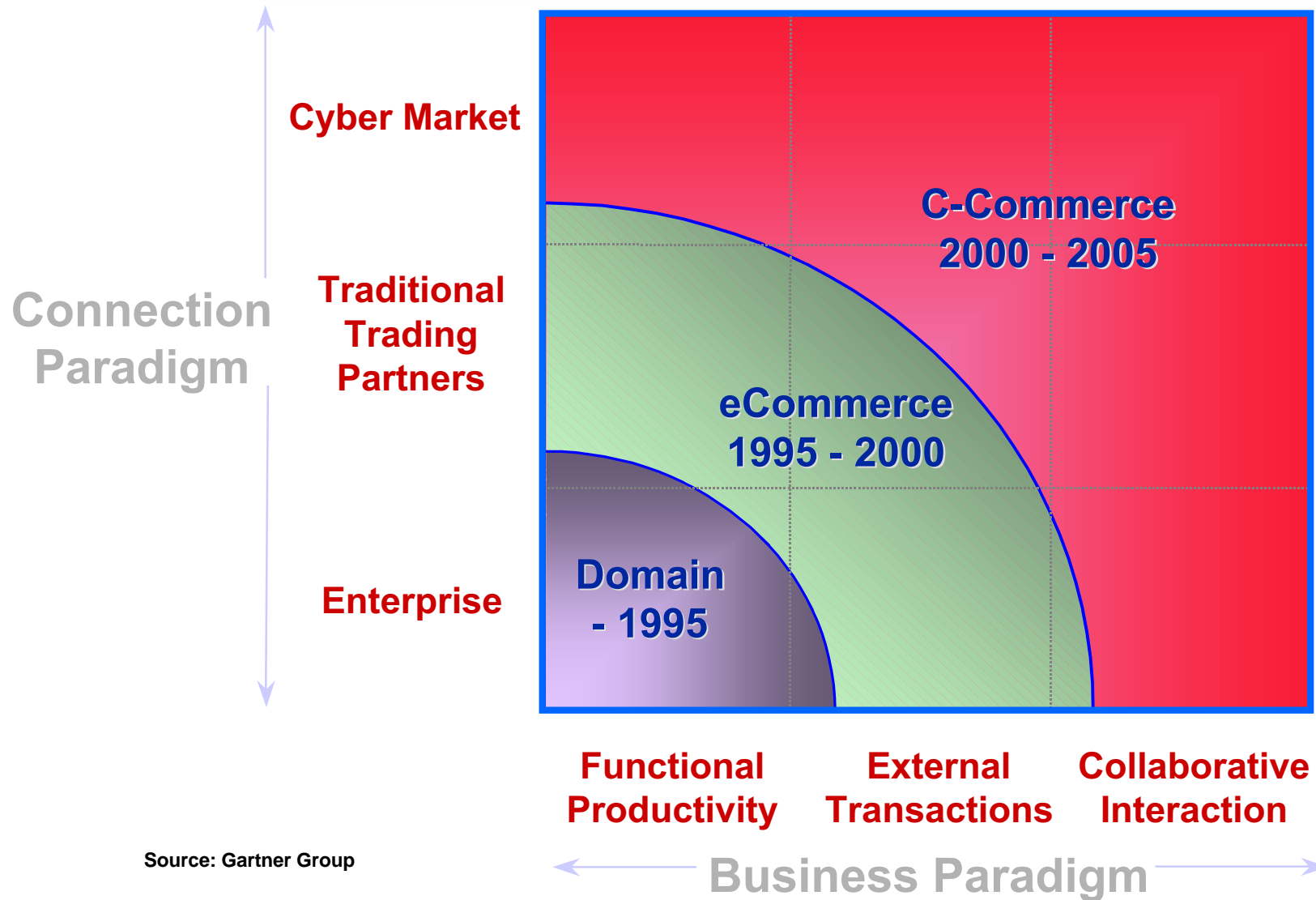
ManTech e-IC Team Orientation

- **Diverse group used to evaluate business and technological opportunities for the DoD**
- **The current team consists of:**
 - **Business professionals**
 - **IT specialists**
 - **Management consultants**
 - **Retired military officers**
- **The group provides a balanced mixture to best support the issues the DoD faces**



C-Commerce Background

The Emerging eBusiness Model



Source: Gartner Group

C-Commerce Solution Framework

DoD Supply Chain Collaboration Environment

Supplier

Supplier

Supplier

Customer

Customer

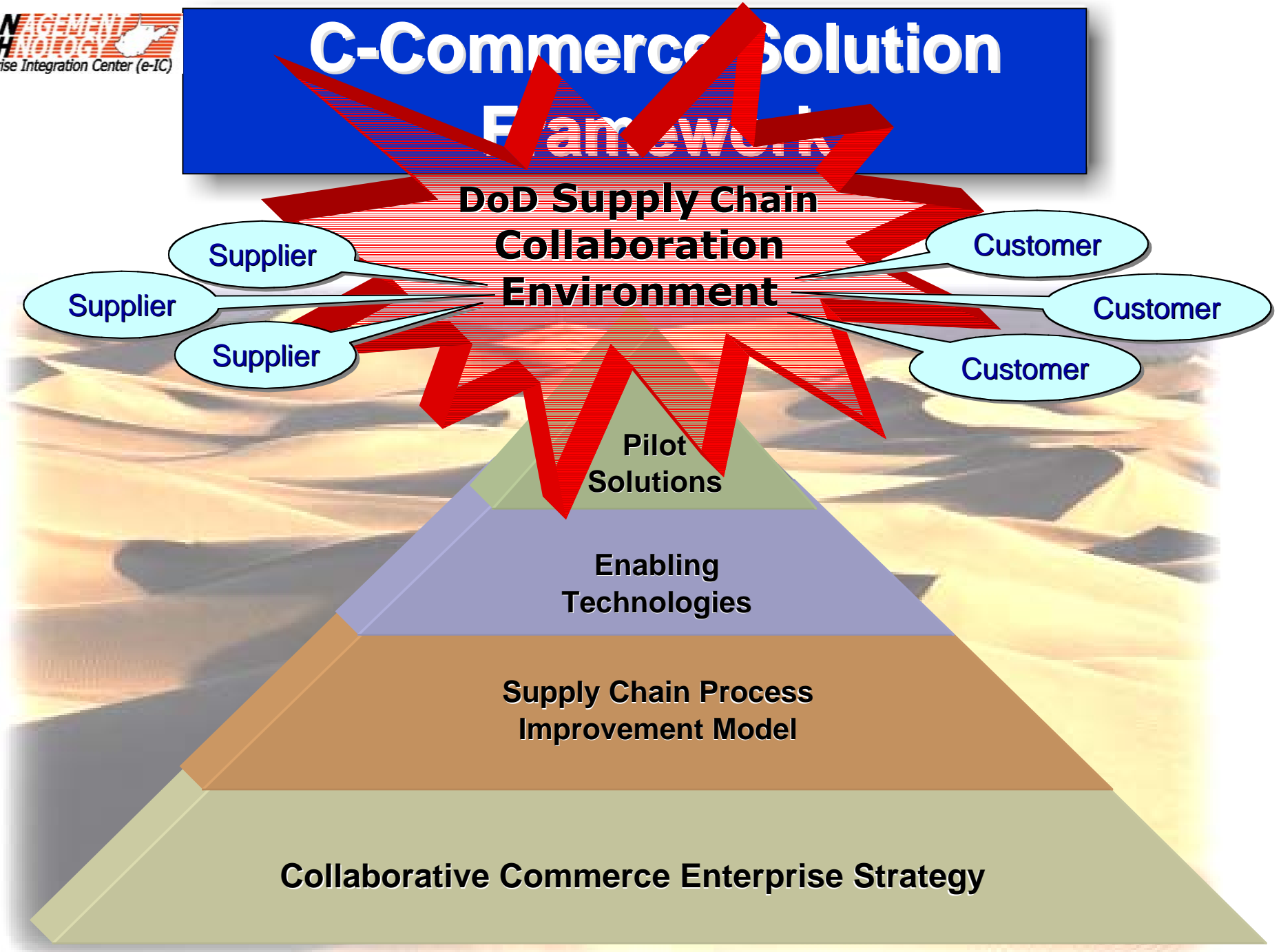
Customer

Pilot Solutions

Enabling Technologies

Supply Chain Process Improvement Model

Collaborative Commerce Enterprise Strategy



C-Commerce Defined

Collaborative Commerce (C-Commerce) is a strategy for the next stage of eBusiness evolution.

- C-Commerce enables trading partners to:
 - create, manage, and use data in a shared environment
 - design, build, and support products throughout their lifecycle
 - work separately to leverage their core competencies together in a value chain that forms a virtual enterprise

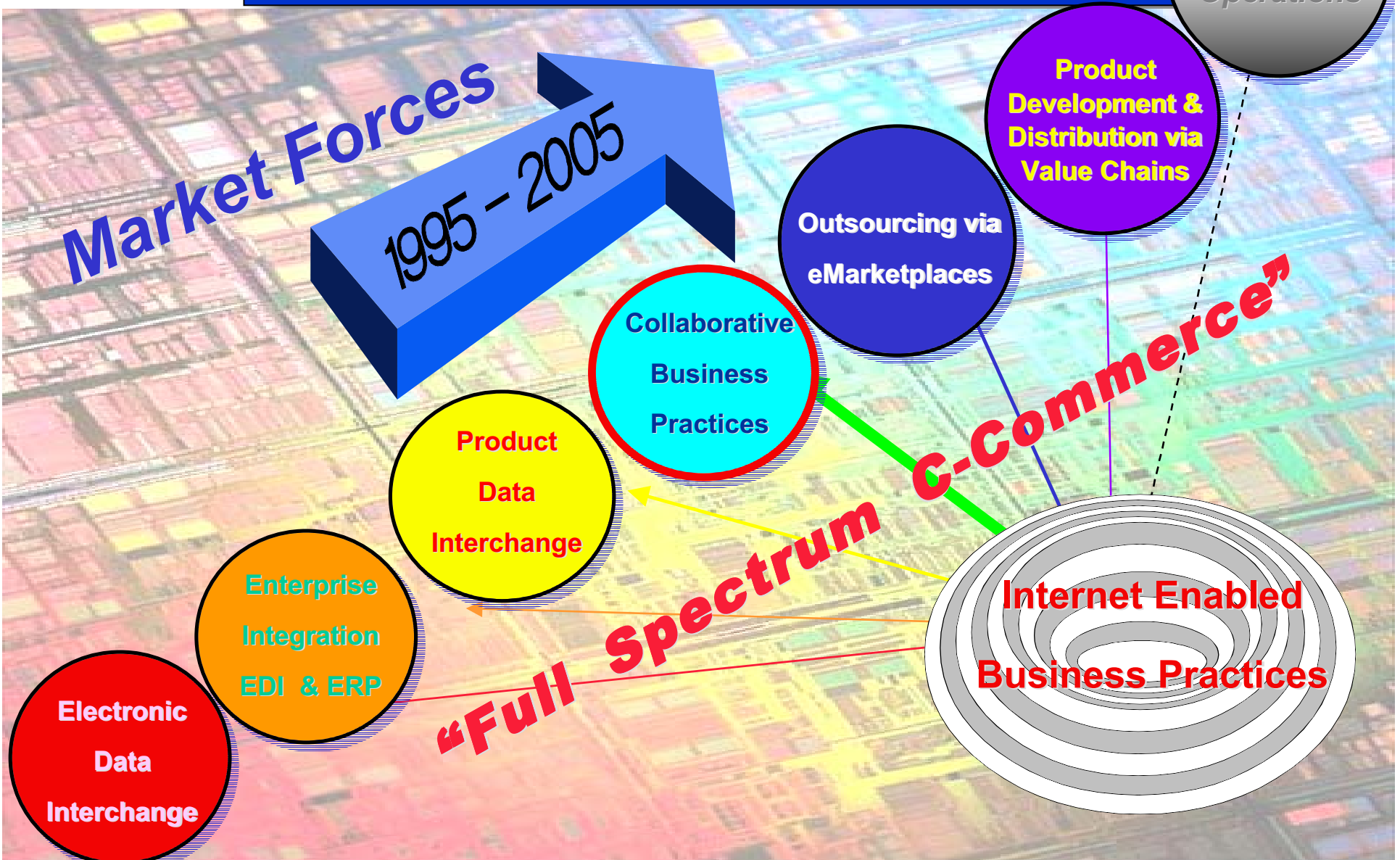


eBusiness Strategy Collaborative Commerce

Virtual
Enterprise
Operations

Market Forces

1995 - 2005



C-Commerce Overview



Research includes:

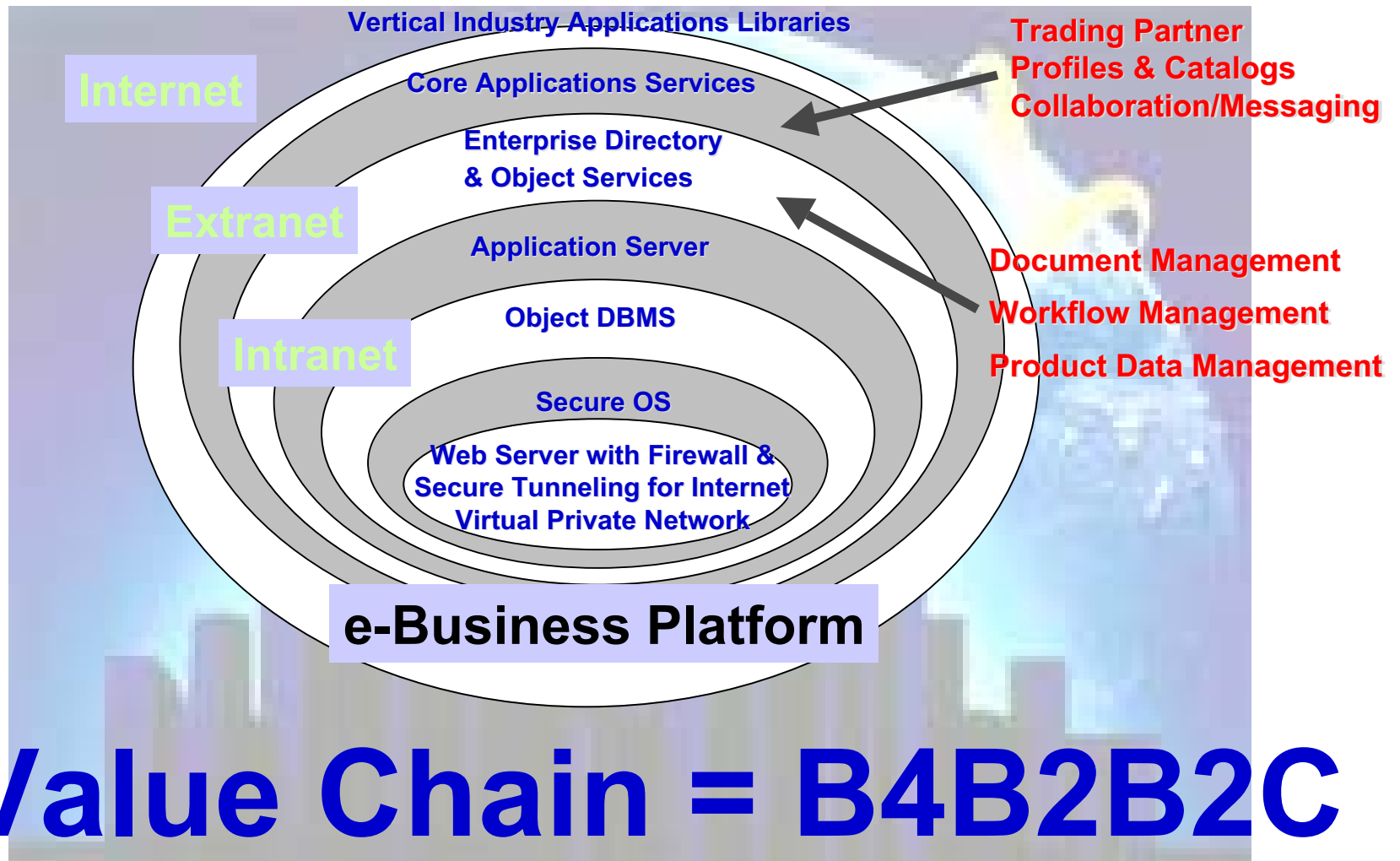
- Collaborative Commerce (C-Commerce) strategic concepts and critical success factors
- A strategic planning methodology that incorporates the use of a balanced scorecard with supply chain management metrics
- An adaptive strategic planning process for value chain optimization
- Commercial enterprise eBusiness strategies using:
 - Integration Hub technologies
 - C-Commerce business practices
 - International/industry standards and commercial best practices
 - Value chains with trading partners operating in a virtual enterprise

C-Commerce Overview



- Further Commercial enterprise research focused on:
- The Enterprise Information Portal (EIP) technologies
- EIP Marketplace & Product Overview using Gartner Horizontal Portal Products' Magic Quadrant
- SCM Portals
 - Plumtree Corporate Portal 4.0
 - PTC Windchill ProjectLink
 - SAP mySAP Technology
- Integration Hub Platform Development

Integration Hub Architecture



Real Time Supply Chain Opportunity

ManTech's Logistics Integration Center (LOGIC)

LOGIC:

- Has successfully supported the logistics transition to the 21st Century
- Is an integral support provider to the DoD logistics community and joint operational forces
- Provides the DoD community with end-to-end logistics support planning, execution, monitoring control and analytical decision support capabilities
- Uses process driven dynamic modeling/simulation and near-real time data collection and conditioning

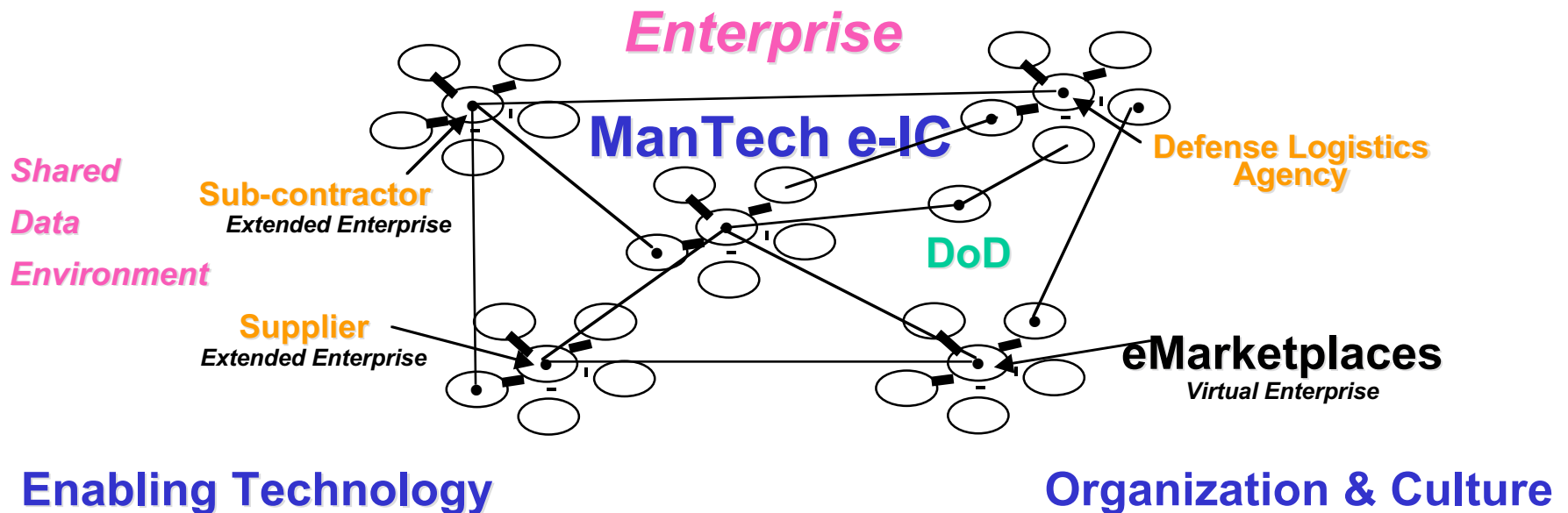
LOGIC Concept of Operations

Collaborative Supply Chain Test Environment

eBusiness Drivers

Virtual

Business Processes



Not Just Speed, but Speed with Agility

LOGIC Objectives

- Establish and maintain a repository of logistics process and supply chain models
- Provide the capability to simulate end-to-end logistics processes and supply chains
- Assess the impact of proposed changes to logistics processes and supply chains on functional integrity and performance in terms of quality, cost, and time
- Provide the capability to monitor logistics process and supply chain performance in real time (i.e. factory to foxhole)
- Provide decision support tools and information for analysis and problem resolution

LOGIC Benefits to DoD

- Facilitate development of core competencies for Collaborative Commerce
- Provide a facility to test logistics enterprise integration methodologies and technologies prior to implementation into the DoD infrastructure
- Enable test & evaluation of emerging technologies
- Reduce risk throughout business case analysis via pilot test bed
- Increase readiness by improving collaboration with trading partners
- Improve customer & supplier relations with collaborative technologies
- Increase supply chain visibility utilizing Internet capabilities
- Reduce operational inventories via infusion of new technologies

Challenge Issues

C-Commerce Critical Success Factors

- leveraging Internet technologies for first internal and then external data sharing,
- providing loosely coupled application interoperability via Integration Hubs across the value chain,
- focusing on core competencies for collaborative business practices,
 - ✓ Demand Chain → Collaborative Product Commerce (CPC)
 - ✓ Supply Chain → Collaborative Planning, Forecasting & Replenishment (CPFR)
- building virtual enterprises on trusted value chains to redefine competitive advantage,
- generating real time visibility, event notification, and performance measurement throughout the value chain,
- reengineering value chain management decision making process.

C-Commerce Messaging Services

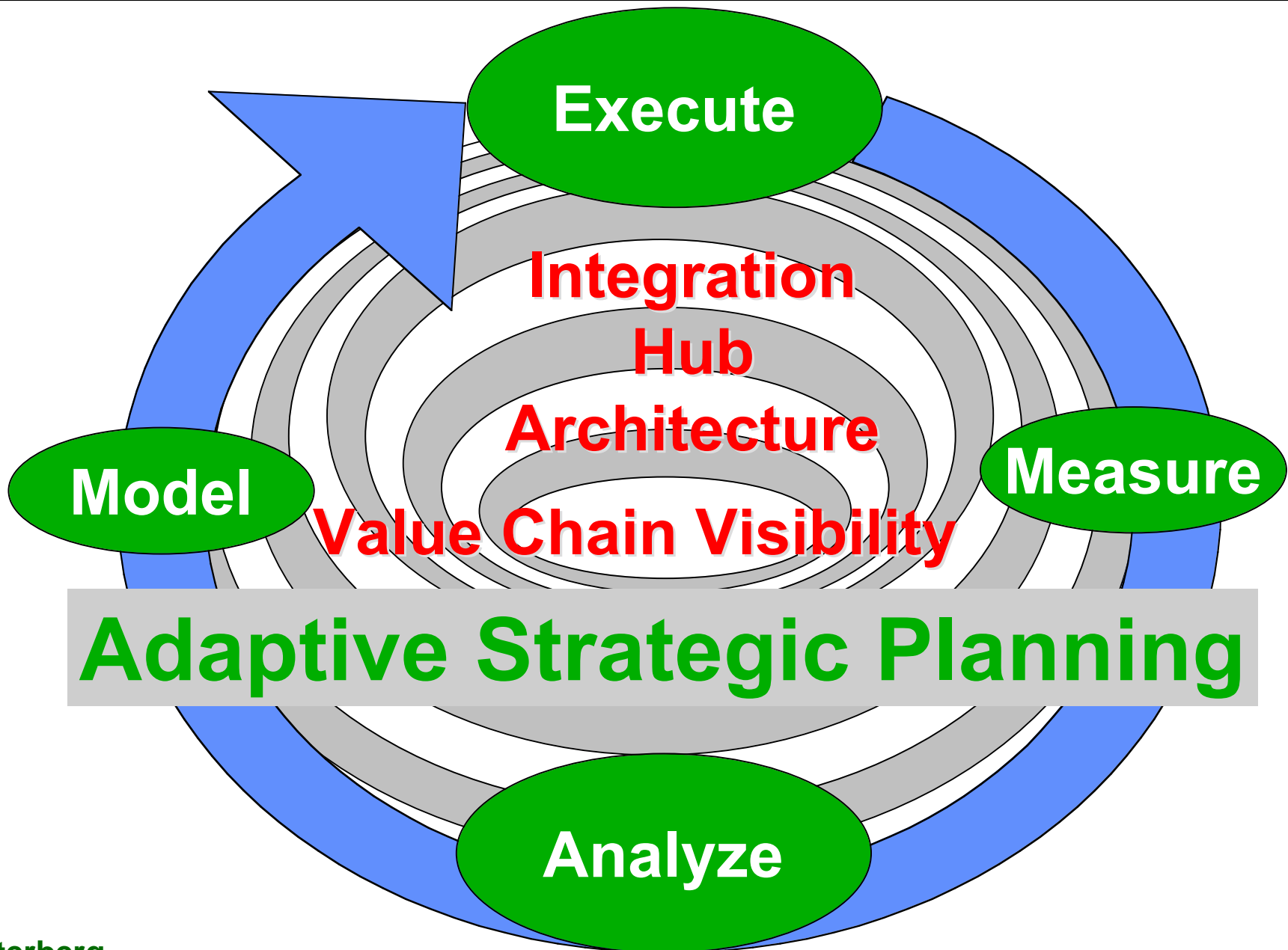
- **Inventory Visibility:** status of stock-on-hand that is stored at enterprise and trading partner locations, as well as in-transit across the value chain.
- **Event Notifications:** Supply Chain Event Management solutions generate status associated with the business rules that reflect the roles and responsibilities of each trading partner.
- **Performance Metrics:** displayed as real time dashboard for measurement of trading partner operations with their service level agreements to support value chain management decision-making.

Supply Chain Performance Measurement Trends

Past – Benchmarking

Present – Dashboards

Future – Silicon Crystal Balls



Key Questions for Discussion

1. What is the business case for reengineering the strategic, tactical, and operational management decision-making processes?
2. How will the appropriate metrics be identified and shared among trading partners to manage their value chain processes?
3. How will virtual enterprise information integration drive enabling technologies for real time decision support systems?
4. Which web services deployments have a stronger value proposition for private trading exchange solutions versus public B2B marketplace offerings?

FOR FURTHER INFORMATION

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