Executive Views on Interoperability

Commercial View
Panel

Discussion

• Look at interoperability as a business problem. The panel will focus on current Fortune 500 understanding and its implications. The discussion will include return on investment (ROI) of interoperability, business process implications on interoperability, and business driver implications for wanting interoperability.

Panelists

• William Loftus
  - CEO, Gestalt
• Mike Flaa
  - CEO, Government Enterprise Management Systems
• John Larrabee
  - EVP, Agari Mediaware
Shift of Priorities

In 1998, Forrester estimated that 30% of an enterprise’s IT budget is spent on building and maintaining integration between applications.

In 2002, IBM estimates that currently and into the future 70% of all software development will consist of interfaces, protocols, and other procedures to establish links between systems.

In 2003, AMR reports expectations ranging from a sluggish growth rate of 2% to a potential 20% reduction, and a shift away “from new application deployment, hardware, headcount and training, and towards integration and other application-supporting technologies.”

Morgan Stanley reported in its September 2002 CIO Survey Series that, of the 51 spending areas surveyed, application integration was at the top of the spending list.

More money is being spent on integration than on the purchase of new systems.
Falling Sales of One-size-fits-all

SAP, Peoplesoft, Siebel projecting 25-45 percent decrease in licensing

Revenue in software sector has slowed

- 35% YoY in 1995
- 20% YoY in 1998
- 20% YoY in 1999
- Almost zero in 2001

Source: Morgan Stanley, Lehman Brothers
Usefulness Paradox – Driver for Interoperability

Application Functionality

Best in Class

Sub par

Irrelevant

Dominate Advantage

Dead

Marginal Advantage

Difficult to Integrate

Easy to Integrate

Application Interoperability

Gestalt
Trends F500 Interoperability

Cost Savings and Rationalization of Business
Adoption of Packaged Applications
Base of Critical Legacy Systems
Need for Collaboration
Complexity of Changing Processes

How to adapt your business process without making changes to your applications
Need for App Interoperability
Disorder
Order
Integration Broker Vendors

Application

Message Brokers

Application

Application

Application

Application

Application
Application Server Vendors

Diagram: Application Servers connected to multiple applications.
Distributed Objects
Commercial Interoperability Reference Model

Integration Brokers

Object-Transactional

Messaging-Transport

Data-Access

Business Application

Application Interface

Application Messages

Data

Business Process

Application Components

Asynchronous Protocol

Data
Data Access Interoperability

Data Access Middleware
- Focused on client-server data access
- Synchronous Request/Reply model
- ODBC, Database Gateways
- Vendors: Merant/Data Direct, Information Builders EDA/SQL
Figure 2.2: Integration with Data Access Methods

- Client SQL Request
- Database Gateway
- SQL Joins
- Distributed SQL Request
- SQL Request/Replay
- Oracle
- Sybase
- MS SQL Server
Messaging Interoperability

Messaging Middleware
- AKA Message Queuing Middleware or Message Oriented Middleware (MOMs)
- Focused on transporting application data via asynchronous messaging protocols
- Vendor/Products: IBM MQ Series, Microsoft MSMQ, Java Messaging Service (JMS)
Integration with Msg Middleware

- **Application**
  - **Message**
    - Message created and sent to a message queue

- **MQM/MOM**
  - **Queue**
    - **Message**
    - **Message**
    - **Message**

- **Application**
  - **Message**
    - Message received from a queue and processed
Object Transaction Interoperability

Object-Transactional Middleware
- Focused on a distributed object, component or transactional model
- Most products support all three
- Requires custom component code to bind applications or data resources
- CORBA, TP Monitors, Application Servers
- Vendor/Products: BEA Weblogic, IBM Websphere, Microsoft MTS, BEA Tuxedo, IBM CICS
Integration with App Servers

Web Client

HTTP Requests

EJB Integration Logic

Application Server

EJB Integration Logic

Transaction Management

ERP

CRM

Legacy

DB
Integration Brokers

- Focused specifically for application integration
- Integration Broker components include messaging middleware, transformation engine, rules engine, adapters, integration design tools, translation gateways, etc.
- Content based routing is a distinctive feature from the basic messaging middleware
- Parameterized data mapping approach rather than Code-driven approach
- Targeted solutions include Webmethods, Tibco, Agari
State of Company

• Most have completed infrastructure build outs
  - Adopted standards
  - Rolled out technology
• Adopting ROI techniques for tuning their environments
• Looking for business interoperability
ROI Dashboard

Cost vs. Benefits
ROI
NPV
IRR
Payback Period

Net Tangible Benefits

Intangible Benefits

Risk

Resources
Schedule
Staffing
Legal
Governance

Brand Advantage
Organizational Adv.
Competitive Adv.

Source: Alinean
ROI Value Chain Management

Macro

- Competitive Positioning
- Income Statement
- Balance Sheet
- Key Performance

Micro

- Project Selection
- Budget
- Project Cost & Benefit

Internal

- Line Mgr
- Vendors
- CIO
- CxO
- Board

External

- Shareholders
- Customers

Source: Alinean
What can we learn?

F500 are microcosms of DoD

• Even after applying technology, Redefining processes, adopting standards and architecture...they have significant business problems they needed to address

• Business are looking for innovative interoperability solutions to solve these issues
Our presenters

Agari Mediaware
- Composability within a rich media environment
- How does CNN do it?

Government Enterprise Management Systems
- Using successfully applied commercial techniques for the Interoperability of Business Functions