#### An Approach to Selling EAI

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## Agenda

- Business drivers
- Vision
- Divide and conquer: Separation of concerns
- Keys to sales success
- Next steps



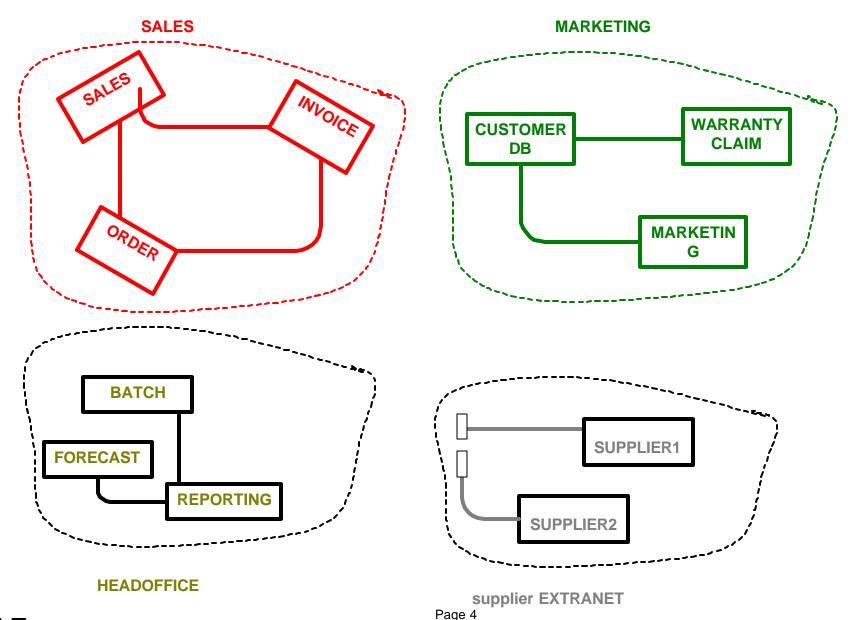
#### **Business Drivers**

- "Business agility"
  - Requires ability to change application interconnectivity very quickly
- Integration of business units
  - Integration of existing and future business apps
- Cost reduction
  - Maximize reuse of application function
  - Consolidation of overlapping infrastructure
  - Consolidation of overlapping applications
  - Reduce cost of implementation and maintenance
    - Maximize use of "best practice"



# The EAI Challenge (Example)

EAI challenge: isolated groups of applications with localised message formats





#### Vision

- A single, pervasive EAI infrastructure
  - Supporting most or all application integration requirements
  - Consolidating or interoperating with all existing buses, hubs, or other EAI systems
  - Millions of messages/day, hundreds of apps
  - Tens of business units, several locations
- A single, pervasive approach:
  - A set of processes and standards that enforce best practice
  - Optionally, accomodating local diversity and autonomy



### **Separation of Concerns**

- Transport and topology
- Formatting and transformation
- Common functions
- Security
- Non-functional requirements
- Standards



## **Transport and Topology**

- Requirements
  - Establish connectivity between servers
    - Scaling to required #servers, #messages
  - Provide message routing
- Technologies
  - MQSeries Distributed Queueing
    - Queue Manager Clustering
    - Sharing Queues
  - MQSeries Integrator
  - Publish/subscribe
  - ► HA Clustering



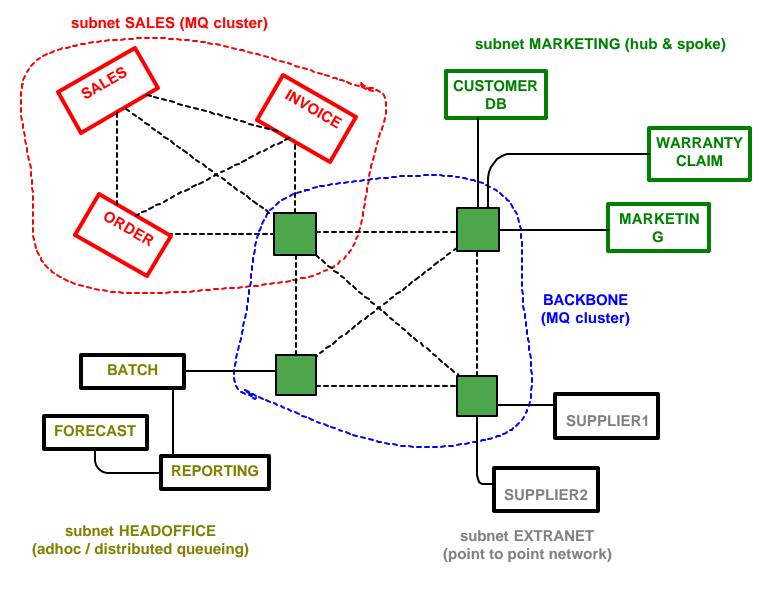
# **Transport and Topology (2)**

- Recommendations
  - Consider sub-networks and backbone for
    - Very high scalability
    - Support for local diversity and management

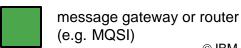


## Transport and Topology: Example

Topology: routing messages in a subnetted topology

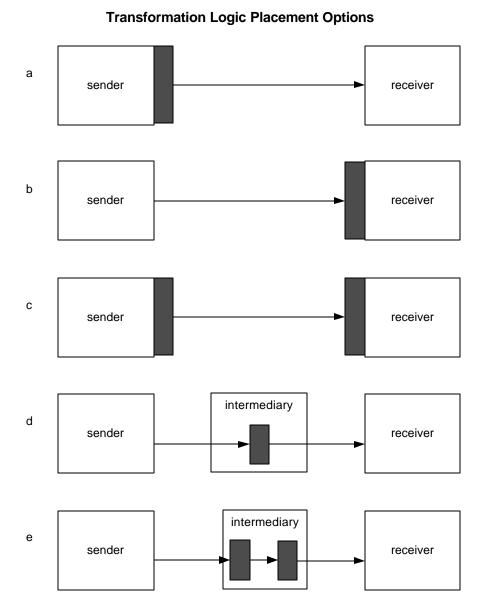






### Formatting & Transformation

- Requirements
  - Formatting = mapping between wire format and data structure
  - Transformation = mapping between wire format and wire format





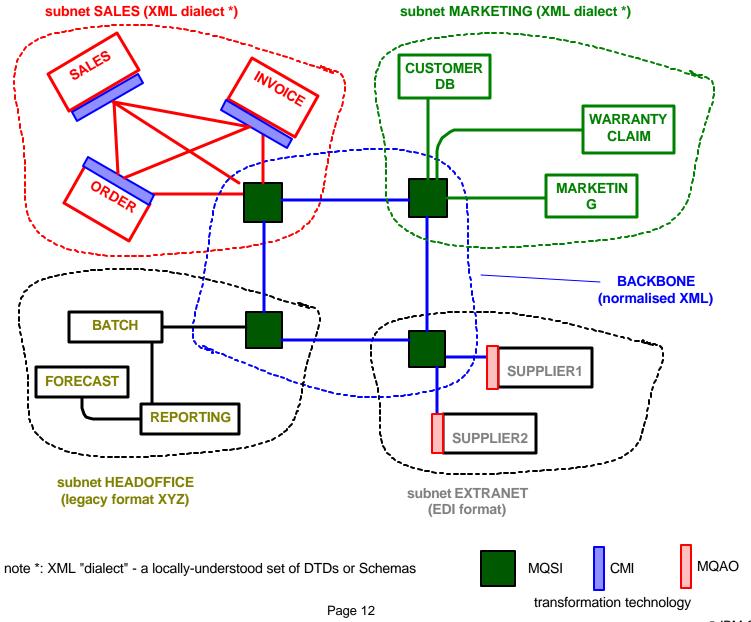
## Formatting & Transformation (2)

- Technologies
  - ► MQSeries Integrator
  - MQSeries Adaptor Offering
  - Common Message Interface
  - ► (Java Message Service)
- Recommendations
  - Factor out common message formats
  - Expect to need to support "legacy" formats



#### Formatting & Transformation: Example

Transformation: dealing with localised message formats in a subnetted topology





#### **Common Functions**

- Requirements
  - Factor out integration function common between applications into the messaging layer, such as
    - Implementation of QoS policy
    - Audit logging
    - Naming and addressing logic
- Technologies
  - Application Messaging Interface
  - ► MQSeries Integrator
  - ► MQSeries Adapter Offering



# Common Functions (2)

- Recommendations
  - Separate naming from routing
  - Design for maximum interoperability with existing MQ applications
  - Consider what "policy" parameters should be removed from application code



## Security

- Requirements
  - Authentication
  - Authorization
  - Message integrity
  - Message privacy
  - Auditing
  - Policy-based administration
- Technology
  - ► Tivoli Policy Director for MQSeries



# Security (2)

- Recommendations
  - Design for maximum interoperability with existing MQ applications
  - Design to support different reqs for different apps or business units



### Non-functional Requirements

- Requirements
  - Availability
  - Scalability
  - ▶ Performance
  - Manageability
- Recommendations
  - ► In-depth analysis of messaging patterns
  - Design to support different requirements for different apps or business units
  - Re-validate all design decisions against output of analysis



#### **Standards**

- Requirement
  - ► A set of processes, guidelines, and role definitions, that encapsulate and/or enforce best practice in the use of the infrastructure
- Recommendation: Include
  - How to define and document message formats, and service interfaces
  - Processes for development, deployment, and migration between test/production environments
  - Approval procedures for accepting applications onto the infrastructure



## **Keys to Success**

- Develop a roadmap that
  - ▶ Breaks down the development of the architecture into manageable phases
  - Factors in specific business-driven integration requirements and delivers "quick wins"
- Figure out how you will size opportunity
- Beware of architecture talking-shops without a business mandate
- Set expectation of services involvement
- Engage with services partners early



### **Next Steps**

- Course for delivery in October (EMEA): look for AIM Flash shortly
- Pre-sales resources:
  - EMEA MQ SUPPORT/UK/IBM
  - WW MQ Support: Jerry St Marie/Hartford/IBM
- Services resources:
  - ►IGS (BIS, ITS), Business Partners
  - ► AIM Services
    - Hursley Architecture Technical Consultancy/UK/IBM
    - Hursley MQSeries Technical Consultancy/UK/IBM

