MQSeries Adapters:
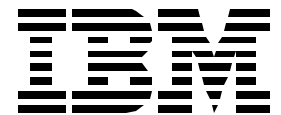# *The NEON Adapters*

Robert Gage/San Francisco/IBM
Dan Sherwood / New Era of Networks

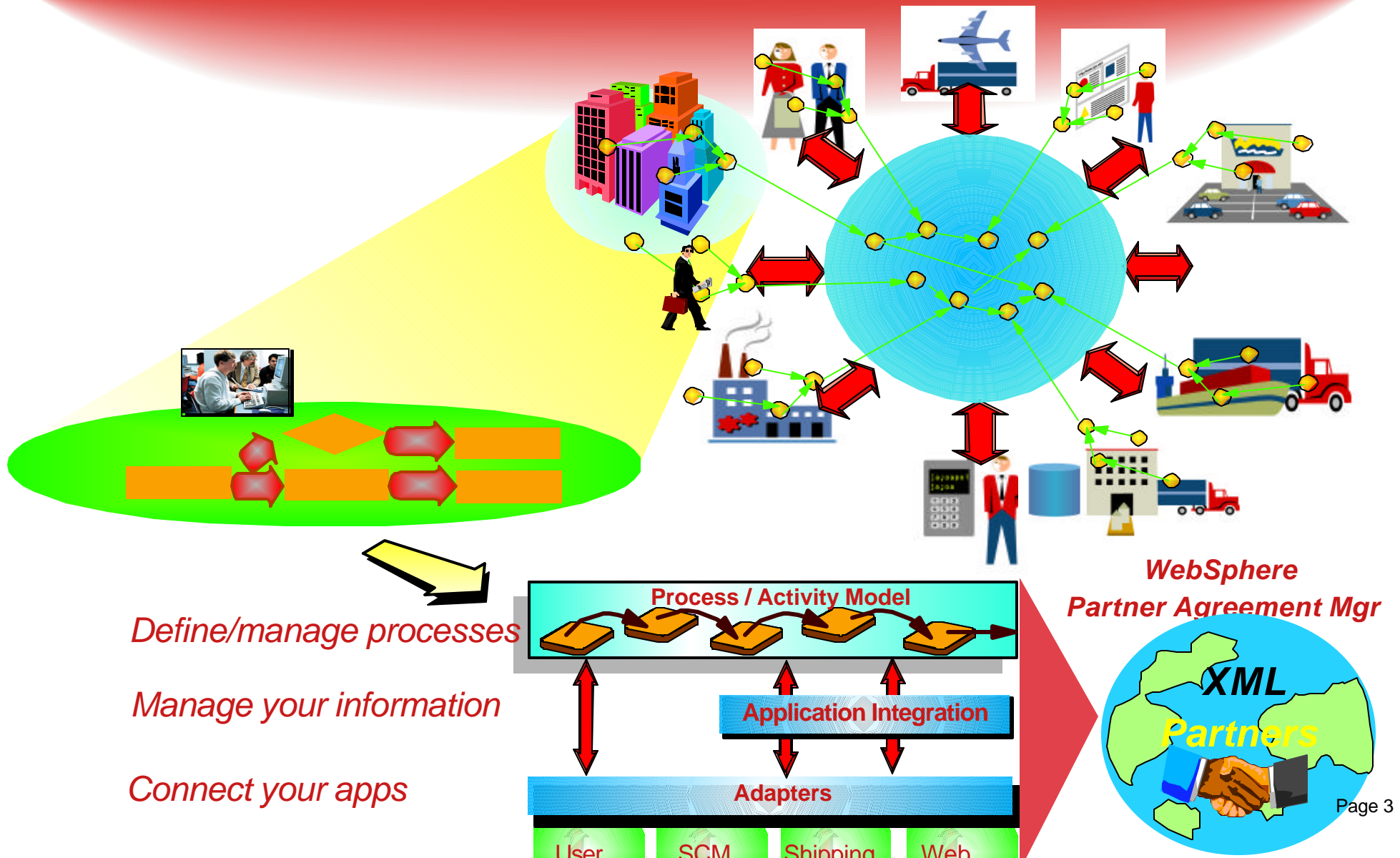March, 2001

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Objectives

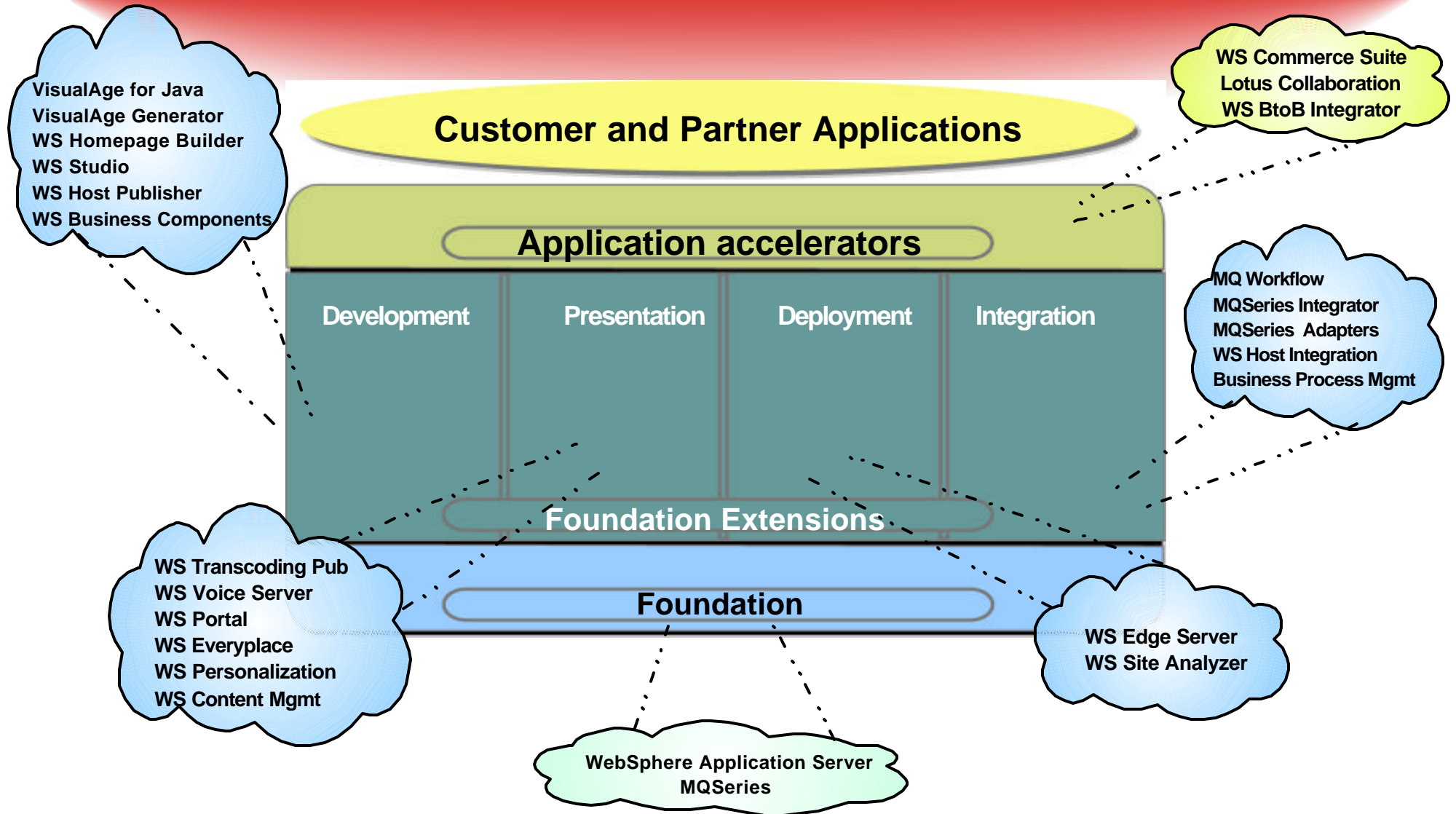## *You will leave this session ....*

- **Understanding positioning and the environment**
- **Understanding NEON adapter specifics:**
  - ‣ The Neon adapters
- **Understanding customer motivations leading to:**
  - ‣ An understanding of our adapter strategy
  - ‣ An understanding of how to build a solution for your cusotmer
- **Understanding how the competition fits into the adapter environment**
- **Knowing where to find more information**

WebSphere Software Platform
Integrate e-Business, Inside & Out
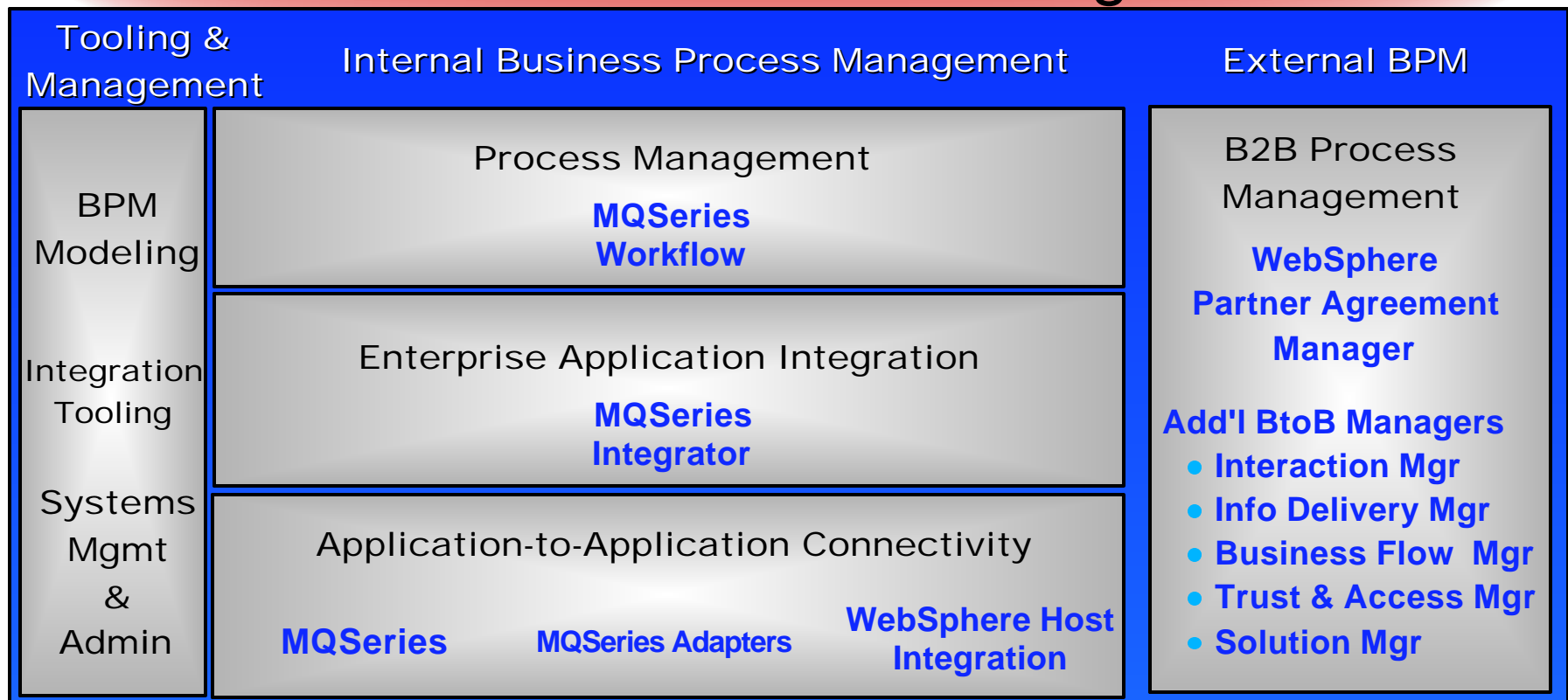
Define/manage processes

Manage your information

Connect your apps

Process / Activity Model

Application Integration

Adapters

User   SCM   Shipping   Web

WebSphere Partner Agreement Mgr

XML

Partners

IBM Makes the Difference with the Power of the

WebSphere Software Platform

VisualAge for Java
VisualAge Generator
WS Homepage Builder
WS Studio
WS Host Publisher
WS Business Components

WS Commerce Suite
Lotus Collaboration
WS BtoB Integrator

Customer and Partner Applications

Application accelerators

| Development | Presentation | Deployment | Integration |

MQ Workflow
MQSeries Integrator
MQSeries Adapters
WS Host Integration
Business Process Mgmt

Foundation Extensions

Foundation

WS Transcoding Pub
WS Voice Server
WS Portal
WS Everyplace
WS Personalization
WS Content Mgmt

WS Edge Server
WS Site Analyzer

WebSphere Application Server
MQSeries

Tying It all together ... Integration in the
WebSphere Software Platform

Business Process Management

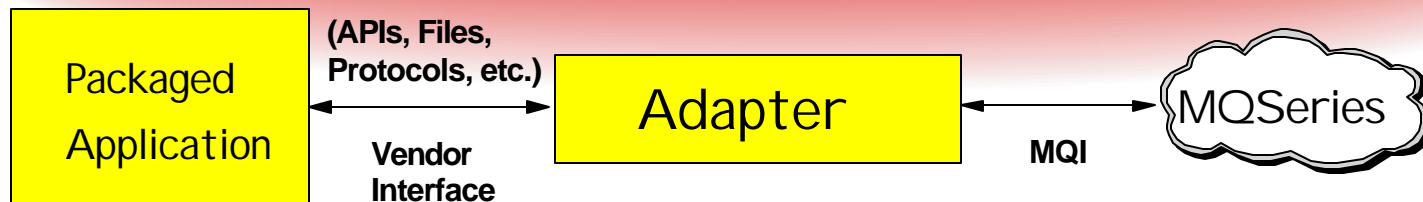| Tooling & Management	Internal Business Process Management	External BPM
BPM Modeling **Integration Tooling** **Systems Mgmt & Admin**	**Process Management** **MQSeries Workflow** **Enterprise Application Integration** **MQSeries Integrator** **Application-to-Application Connectivity** **MQSeries** **MQSeries Adapters** **WebSphere Host Integration**	**B2B Process Management** **WebSphere Partner Agreement Manager** **Add'l BtoB Managers** ● **Interaction Mgr** ● **Info Delivery Mgr** ● **Business Flow Mgr** ● **Trust & Access Mgr** ● **Solution Mgr**

WebSphere BtoB Integrator

- **Single view of processes and transactions within, and beyond, the enterprise**
- **Rapid development and deployment of high ROI solutions**
- **Support for new and emerging device types**
- **Support for legacy and new applications**

What is an "MQSeries adapter"?

```
┌──────────────┐   (APIs, Files,                  ┌──────────────┐          ╭────────────╮
│  Packaged    │   Protocols, etc.)               │              │          │            │
│              │ ◄──────────────────►             │   Adapter    │ ◄──────► │  MQSeries  │
│  Application │                                  │              │          │            │
└──────────────┘       Vendor                     └──────────────┘   MQI    ╰────────────╯
                       Interface
```

- An adapter is MQSeries-enabled "Bridge" code that enables communication between an MQSeries application and a non-MQSeries application

- A very simple adapter will simply pass information between the two environments

- A more sophisticated adapter may have additional functions:
  - Message transformation, send-reply support, transactional support, etc.

- Note: Some applications do not have well-defined external interfaces or may not have message-based interfaces

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Complicating Factors for Integration

- **Multiple versions of products (e.g. SAP R/2, R/3)**
- **Multiple sub-systems within products**
- **Multiple platforms**
  - i.e. Operating systems and Databases
- **Customization**
  - i.e. configuration, tailoring, source code mod's
- **Variety of interfaces**
  - ▶ APIs, File, Comm's (protocol), Database
  - ▶ Access to meta-data
  - ▶ Transactional capabilities
  - ▶ Performance requirements
  - ▶ Batch, synchronous & asynchronous styles

Examples of simple adapters:
MQSeries-CICS DPL & 3270 Bridges

For CICS applications using a communications area (COMMAREA):

MQ-CICS DPL Bridge
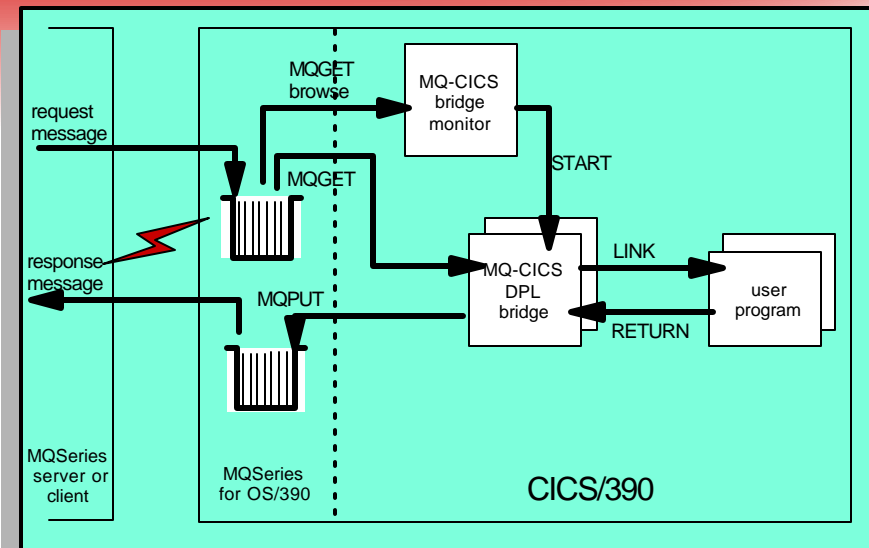
For native 3270 CICS applications:

MQ-CICS 3270 Bridge
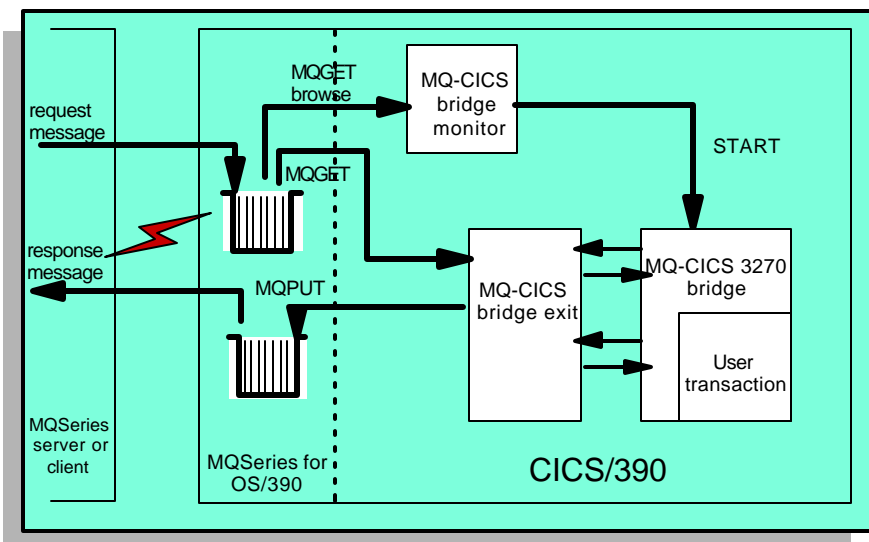
Simple Adapters

- Non-intrusive technology
- Application progammers know nothing of the transport (MQSeries)
- Independent of the other side
- But ...
  - Translation is up to you
  - Someone must deal with IDOCs, COMAreas, Headers, etc.

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More functional adapters:

- **Provide translation capabilities**
  - ► Metadata imported into the Formatter
  - ► XML and a DTD
  - ► Some industry standard such as OAG or Rosettanet
- **Transactional characteristics**
- **Examples:**
  - ► Neon adapters
  - ► MQAO

The customer vision:

- **Off the shelf for every application they have**
  - Any application version, any platform, any DB, etc
- **One vendor**
- **Plug - in**
- **Reliable**
- **Scalable**
- **No training required**
- **No services required**
- **Shrink-wrap software**

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Reality:

- Adapters will require service
  - ▶ not truly off the shelf
- There will be training required
- Building an adapter requires application knowledge
- For complex customer situations you will need:
  - ▶ off the shelf from business partners
  - ▶ custom made for some applications

General strategy:

- **Know the customer situation**
- Lead with off the shelf adapters
  - Neon where possible
  - Extricity or other business partners next
  - Others where nothing else fits
- MQAO
  - where no 'off the shelf' adapters are available
  - where you are using selling B2BI
  - where you have a strong build vs buy mentality
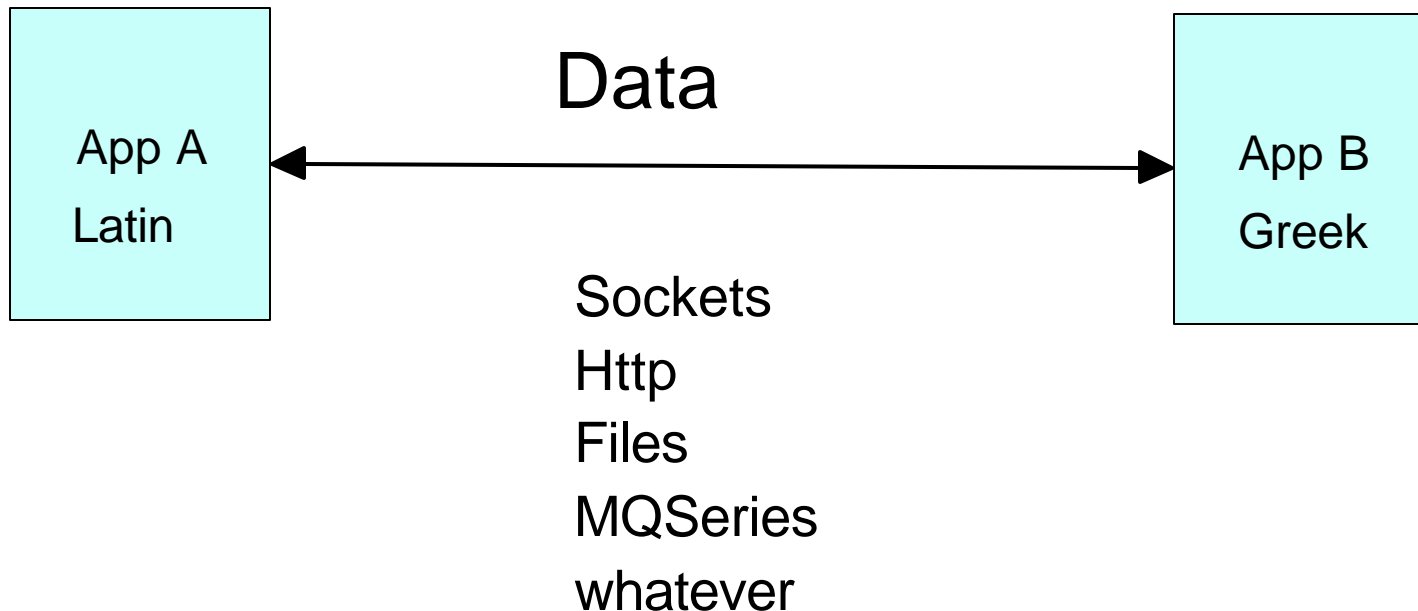 - where packaged with IGS or AIM Services offering

IBM

Good news, Bad news

- You need to sell MQSeries first
  - ► Our competitors work with or without MQSeries
- Our solution is flexible, scalable, robust
- Our solution may be more complex and more expensive
- Our solution will probably involve business partners
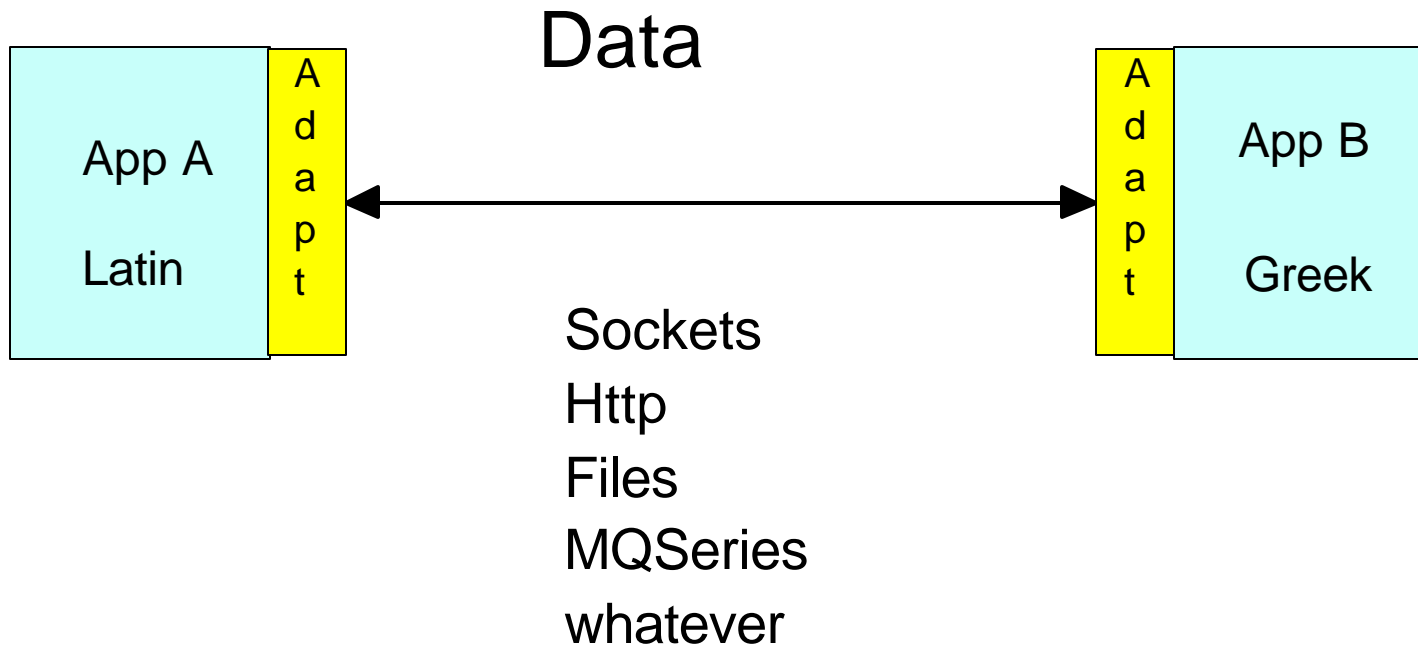- The customer will most likely need services to implement

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An example

- Two applications need to exchange data

- They need a translator

- The customer is not an MQSeries customer
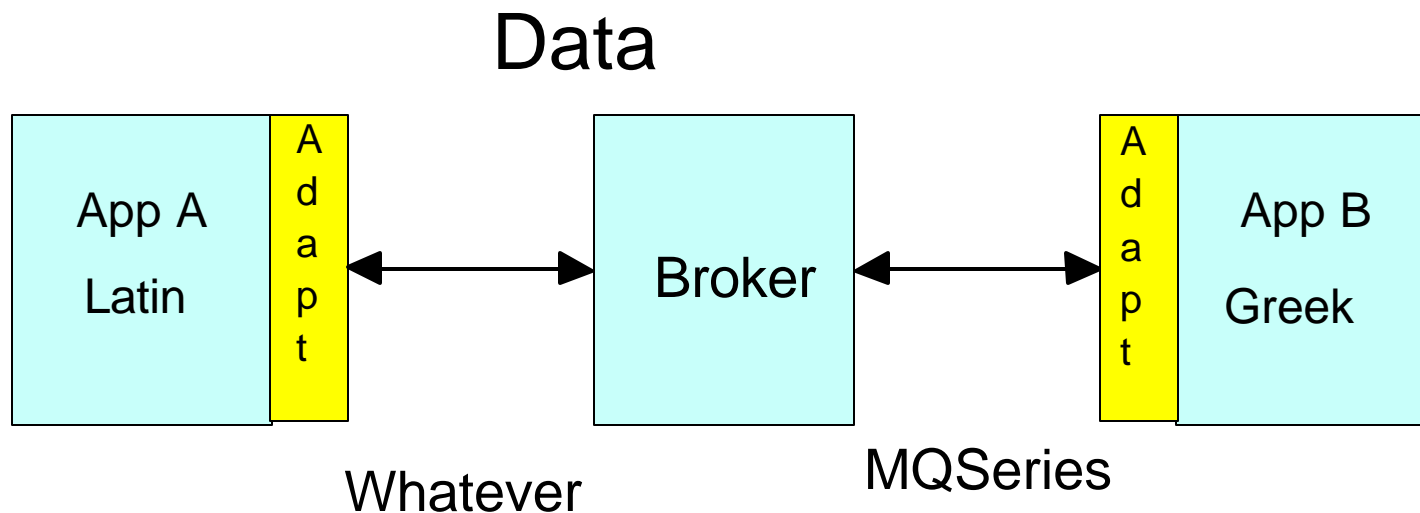
- They don't care about the transport

| App A Latin | ← Data → | App B Greek |

Data

App A
Latin

App B
Greek

Sockets
Http
Files
MQSeries
whatever

IBM

The competition:

- A competitor might propose a simple translator:

Data

| App A
Latin | Adapt | ←——————→ | Adapt | App B
Greek |

Sockets
Http
Files
MQSeries
whatever

IBM

The competition:

- Or a broker
- Using MQSeries or whatever to communicate

Data

App A
Latin
Adapt

←→

Broker

←→

Adapt
App B
Greek

Whatever

MQSeries

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Our proposal:

- **MQSeries is required**
- **MQSI is our standard for doing transformations**

Data

```
+-------------+--+        +-----------+        +--+-------------+
|             |A |        |           |        |A |             |
|             |d |        |           |        |d |             |
|   App A     |a |<------>|   MQSI    |<------>|a |   App B     |
|   Latin     |p |        |           |        |p |   Greek     |
|             |t |        |           |        |t |             |
+-------------+--+        +-----------+        +--+-------------+
```
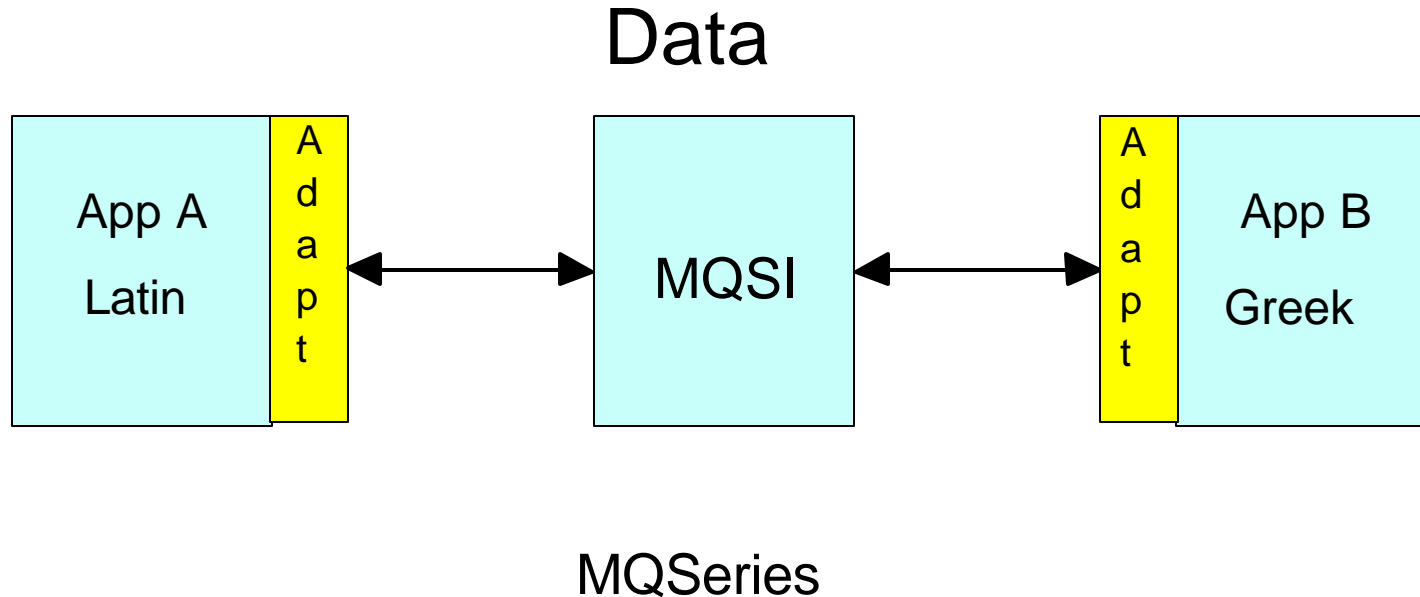
MQSeries

Or perhaps....

- MQSeries is required
- MQAO can be used for tranformation

Data

| App A Latin | M Q A K | ◄──────────► | M Q A K | App B Greek |

MQSeries

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Sell our strengths

- MQSeries market share and reputation
- Our business partners as a strength
- Extensibility
- Flexibility
- The IBM organization

Sell an IBM solution ....

not just a product

IBM
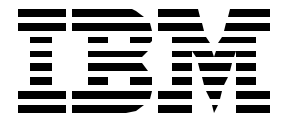
Summary

- No 'one vendor' answer to adapters
- Choice and flexibility is good....
  - we offer the most choice and flexibilty
- Selection of partner or MQAO depends on:
  - Required adapters
  - Application interface
  - Data interfaces
  - Programming style
  - How integrated/dependent the customer wants to be on a vendor's middleware
  - How much customization is required

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More information

- **NEON:**
  http://www.neonsoft.com
  James Vazquez/Tarrytown/IBM@IBMUS
- **Adapter Teamroom:**
  Coming Soon - watch for MQ note from Jerry St Marie
- *More Teleconferences: MQAO, Competition, etc*

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Product details: Neon