



Selling e-business solutions with Business Transformation & Integration Middleware: How it all fits together!

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Software is the soul of e-business.





You Can't Afford to Fail!!



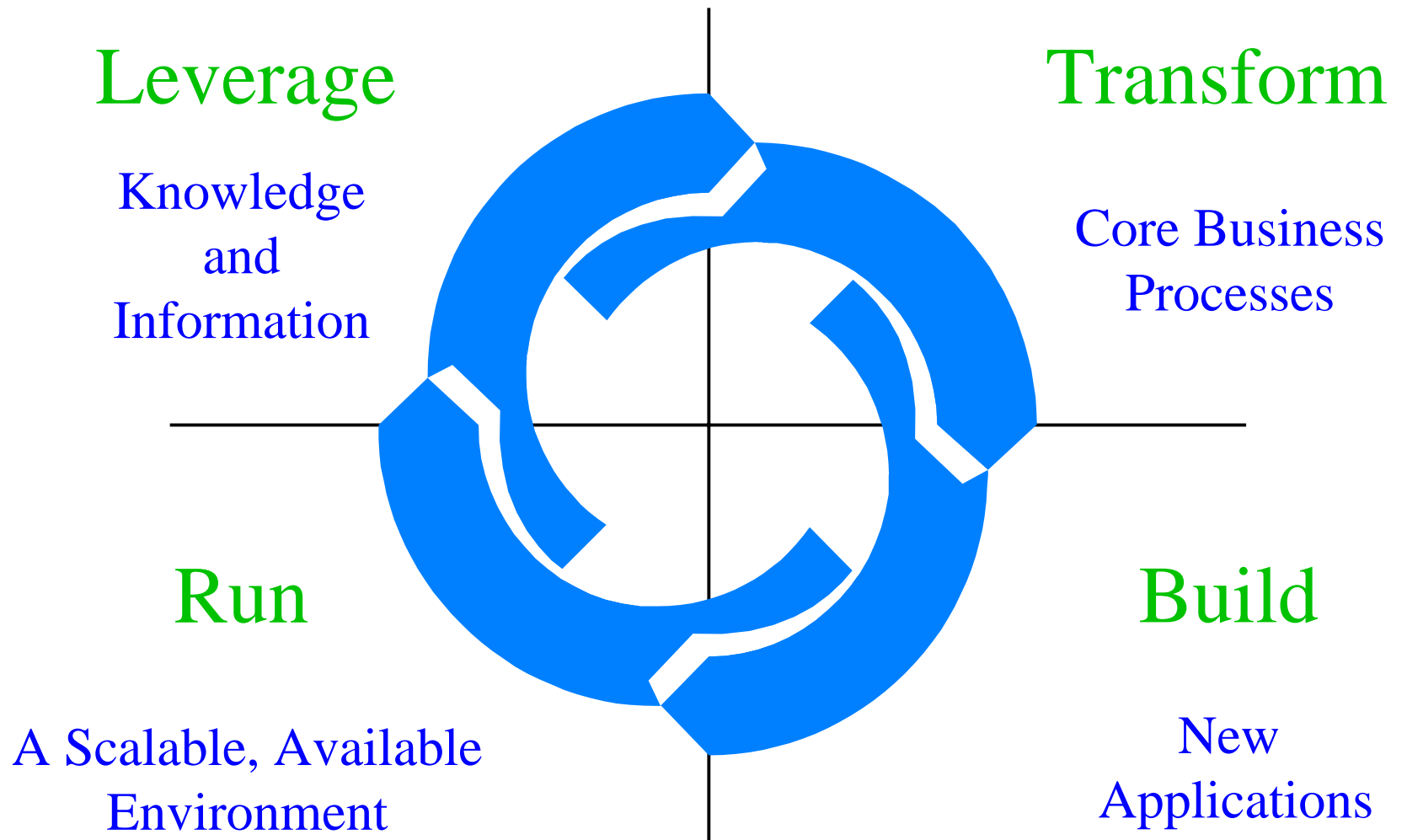
"e-business is not about technology.
It's about business."

"GartnerGroup foresees that, through 2002 60% of all enterprises will approach e-commerce as an IT project rather than a strategic business initiative, and that 60% of these projects will fail to achieve a significant return on investment."

GartnerGroup Report #5606, Feb., 2000

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THE e-business CYCLE





e-business Evolution

Static Web



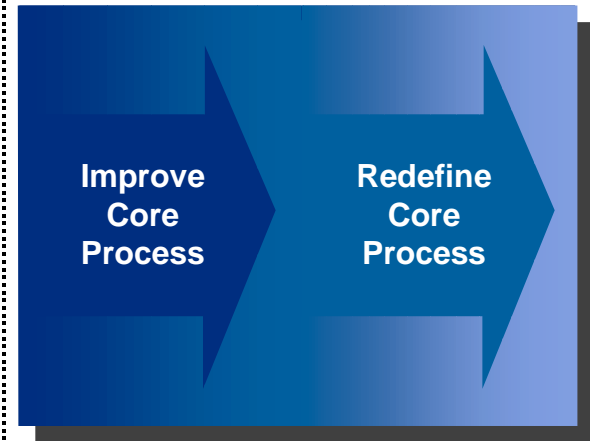
Published information

Transactions

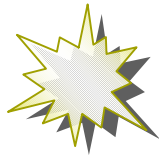


Link to data (product, consumer, inventory)
 Dynamic content
 Conduct business transactions

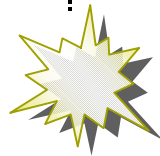
Transformation



Process the flow of information
 Self-service, dynamic support
 Redefine the supply chain



Needed to play in the game!!



Better ways to serve customers using existing business models



Transform business models for maximum competitive edge

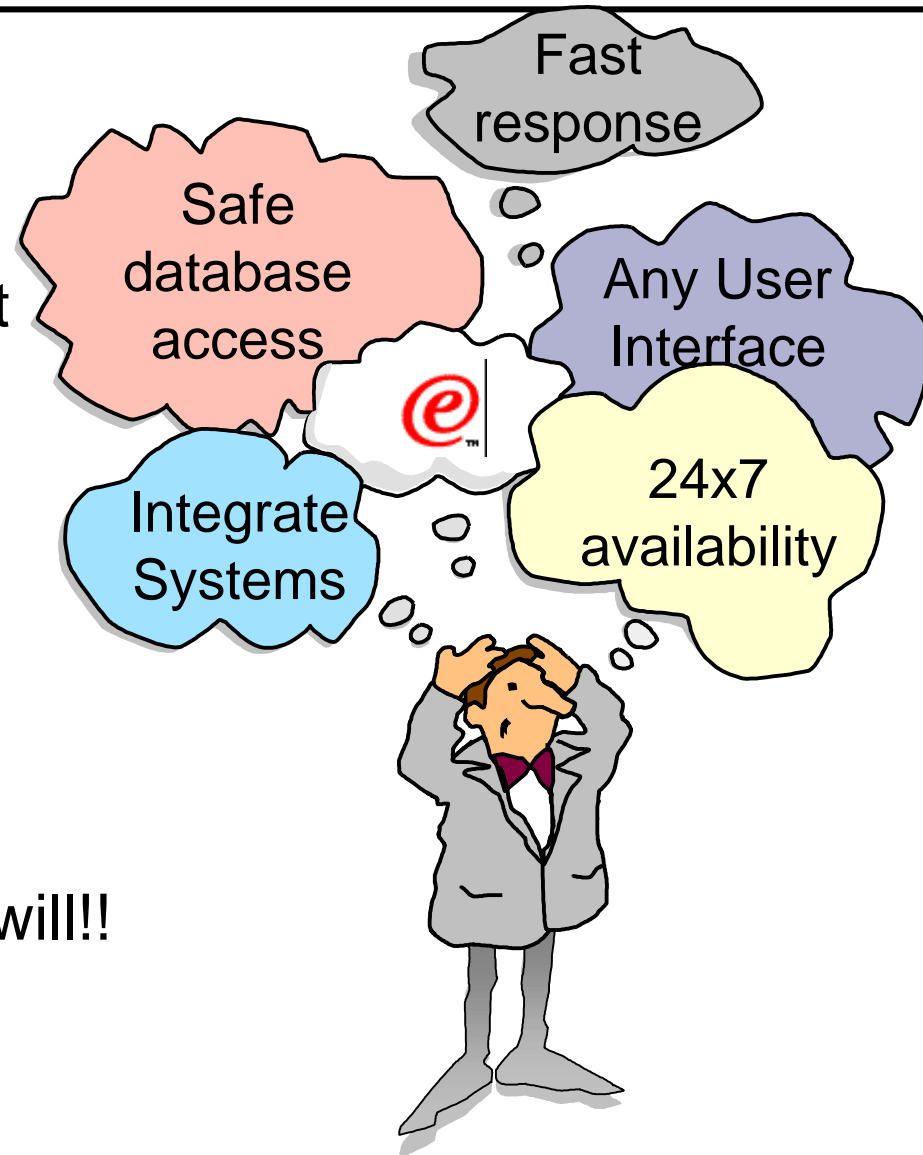


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So what capabilities do I need?

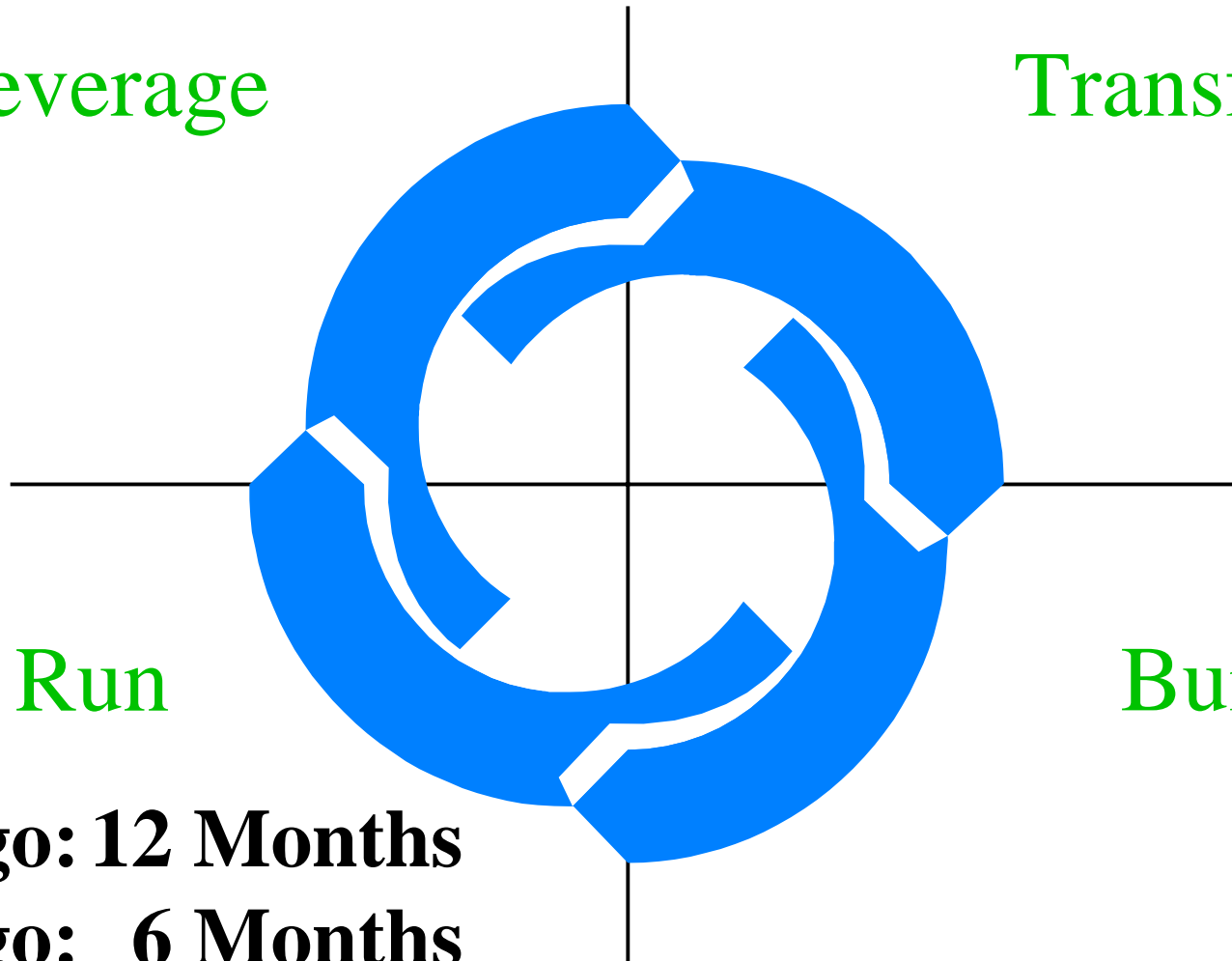
- ✓ Want customers to focus on what it takes to do the transformed business end of the e-business scale
- ✓ Want customers to start thinking about this when they start building their first web site!
- ✓ Need to establish presence at the beginning - becomes much easier to sell the end game
- ✓ Highlight **capabilities** that all e-business should be able to have
- ✓ Even if they don't need them yet, they will!!



Must How Fast ~~Can~~ You Run Around The Cycle?

Leverage

Transform



Run

Build

10 Years ago: 12 Months

5 Years ago: 6 Months

Today: 6 Weeks

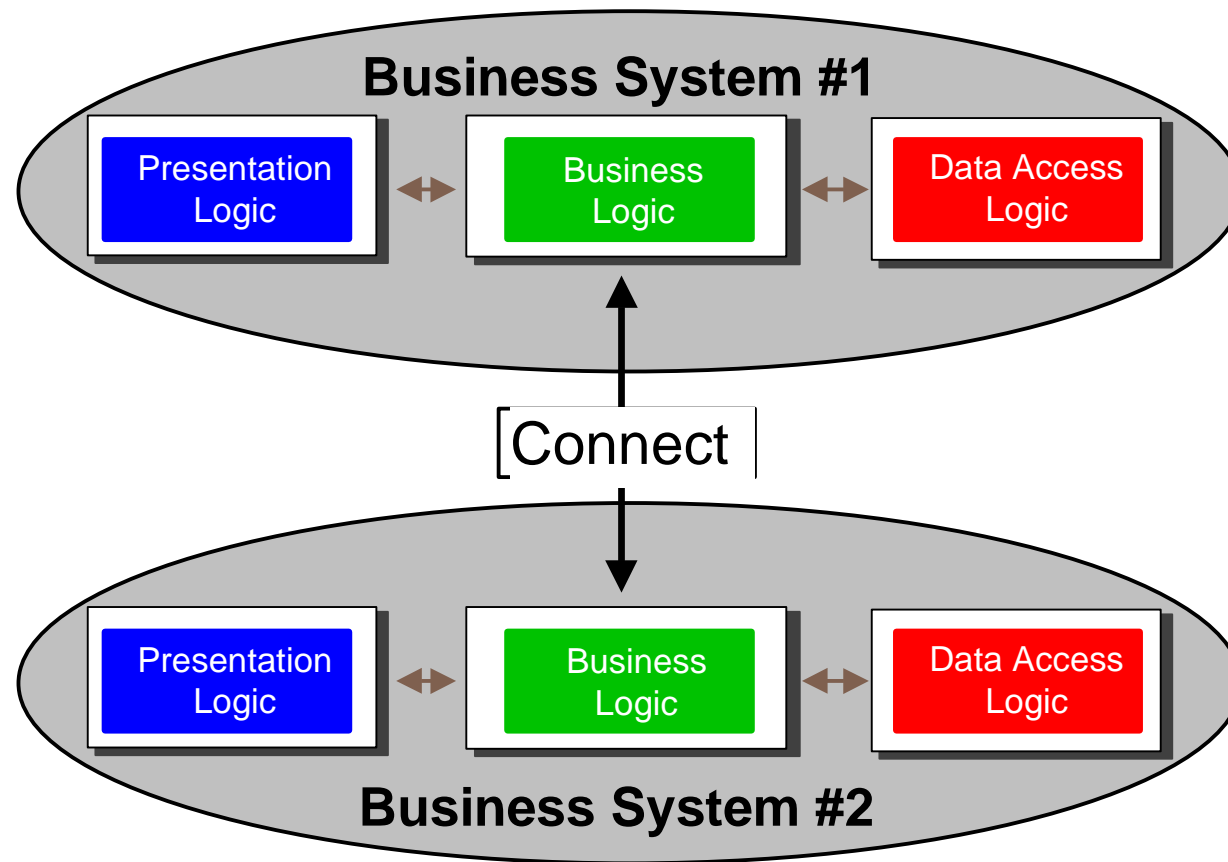
Requires!

This ~~implies~~ reuse



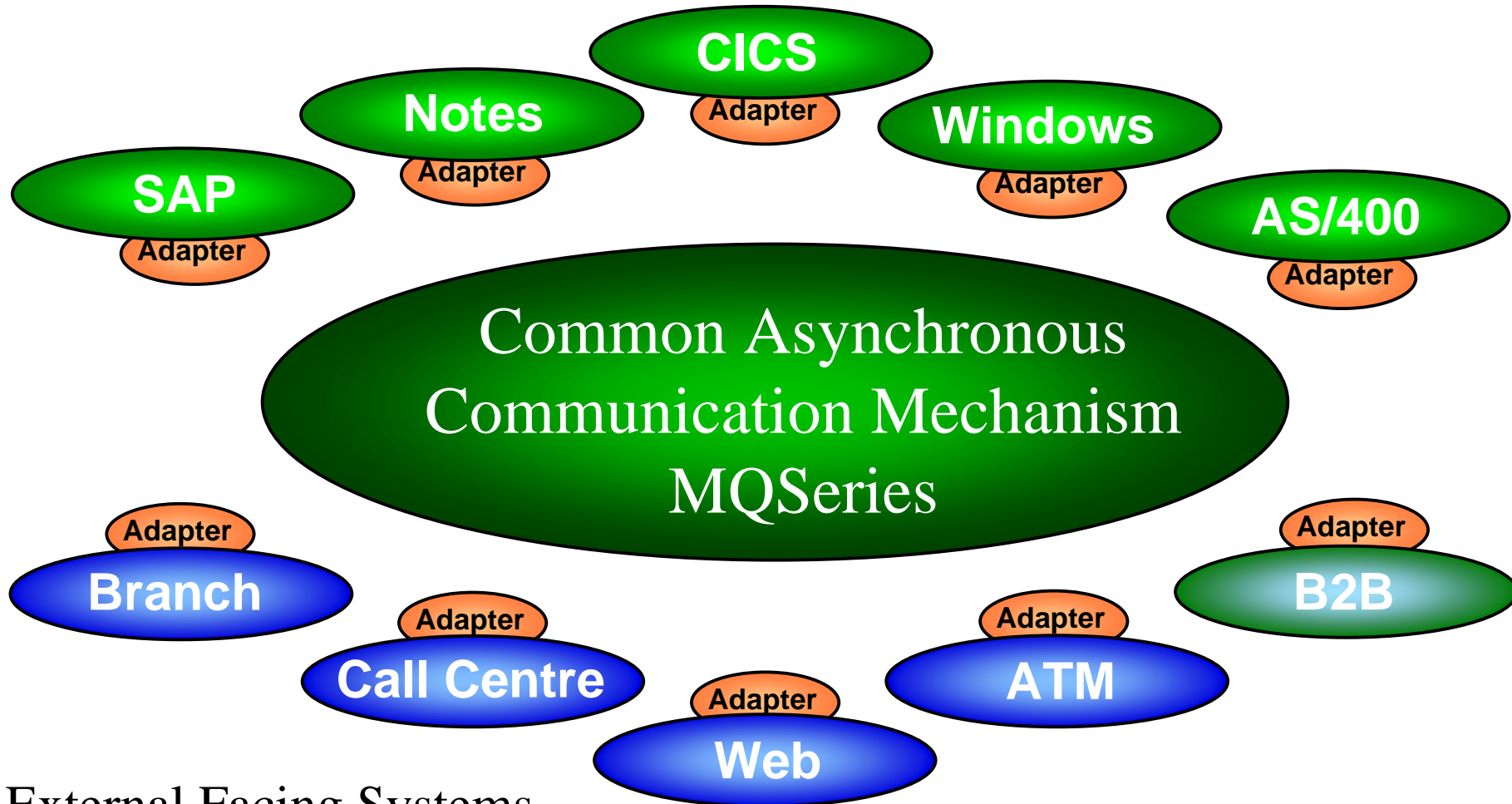
- Treat Applications as Reusable Components
Application Integration Key
- Within the applications we build
Component Models most likely choice

Business Integration is About Connecting Systems



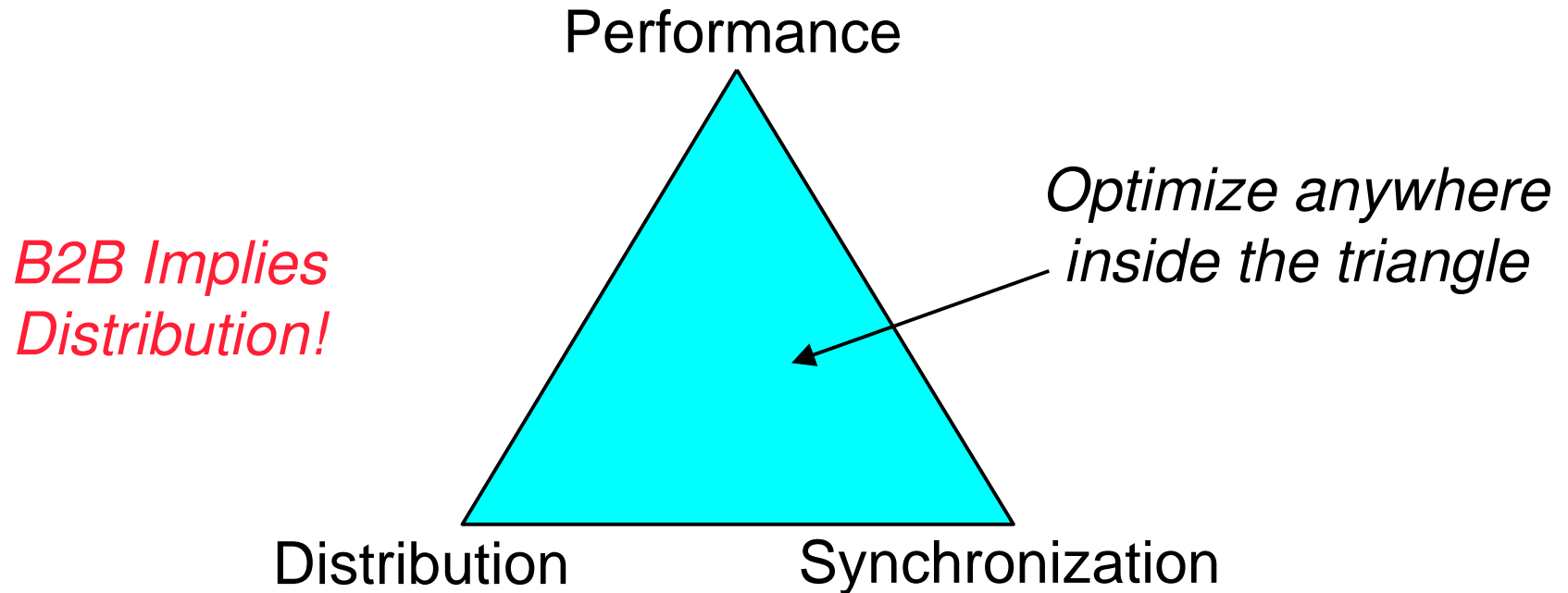
So Connect Your Systems

Corporate Back-End Systems (business silos)



External Facing Systems

Asynchronous - The Primary Choice



Exceptions - Consider Synchronous For:

- Tightly coupled systems that need each other to be available in order to function
No Distribution
- Require cross system updates to happen at exact same time
Distributed Transactions

MQSeries for Integration



MQSeries Adapter Offering

- Create new adapters
- Manage adapters



MQSeries Everyplace

- Integrating pervasive devices
- Classic MQ Characteristics



Key Selling Point on Business Integration

Need the customer to see us as the.....

Strategic Business Integration infrastructure

- Position all our competition as point products
- We are looking to provide strategic EAI and B2B capability in our product set
- We are looking to enable other vendors to build application integration/process control on our platform
- This is different from a point product approach

**Be prepared to accommodate point products
e.g. Vitria, where customer likes business
function of that product.**

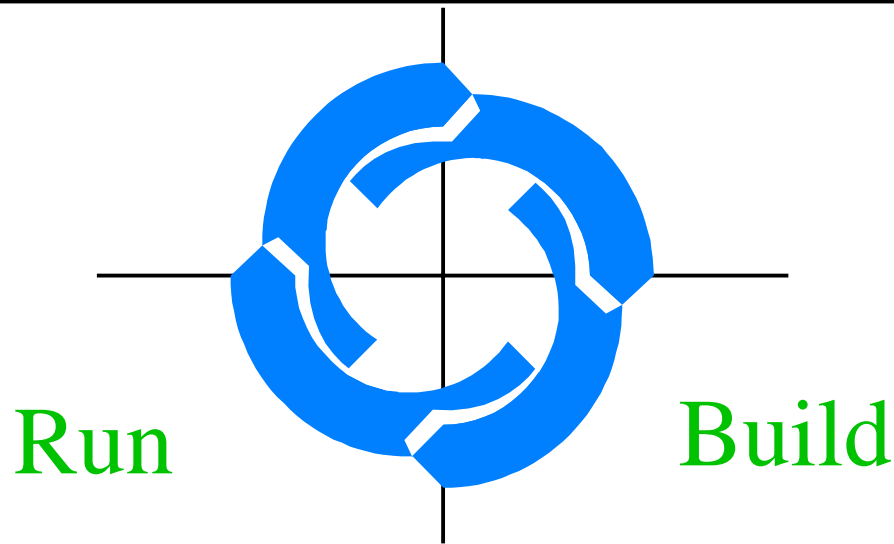
Requires!

This ~~implies~~ reuse

- Treat Applications as Reusable Components
Application Integration Key
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Why do we do this architecture stuff?



Need to make sure that you consider both the "Building" and "Running" of applications as two separate concerns

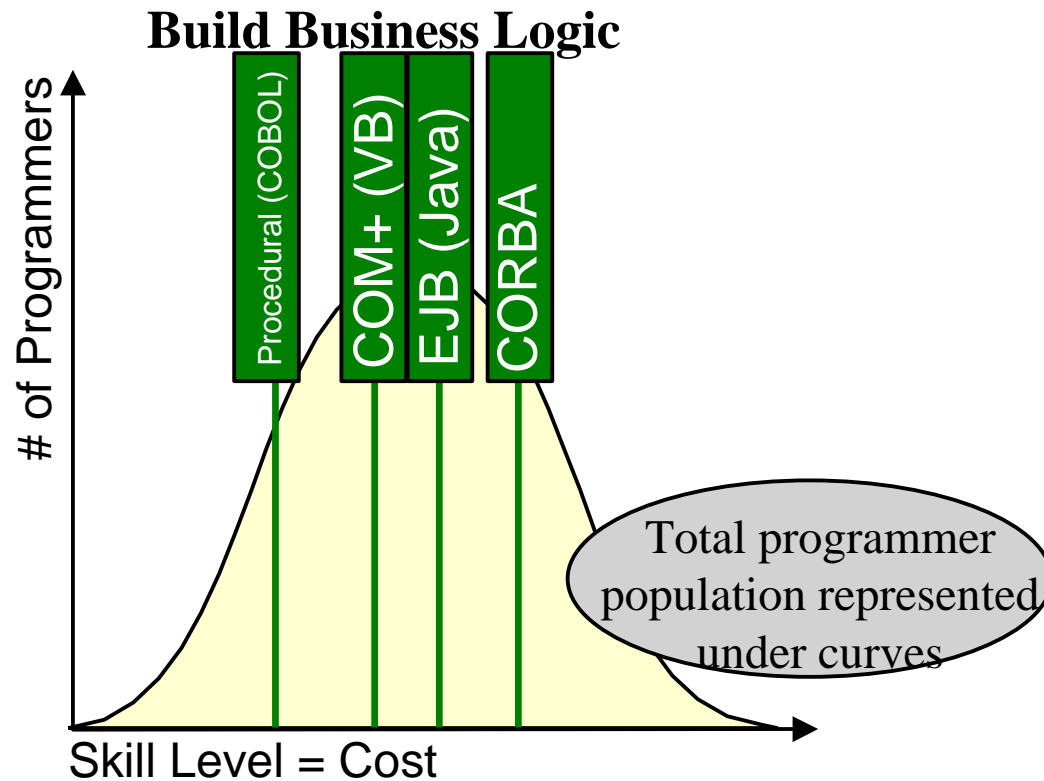
Ideally completely separate

- ◆ This provides the maximum flexibility to deploy application on platforms that make business sense

Competing Business Logic Programming Models

Programming Model	Ease of Programming	Reuse
EJB	Medium	Good
CORBA	Hard	Good
COM+	Medium	Good
Procedural	Easy	Hard

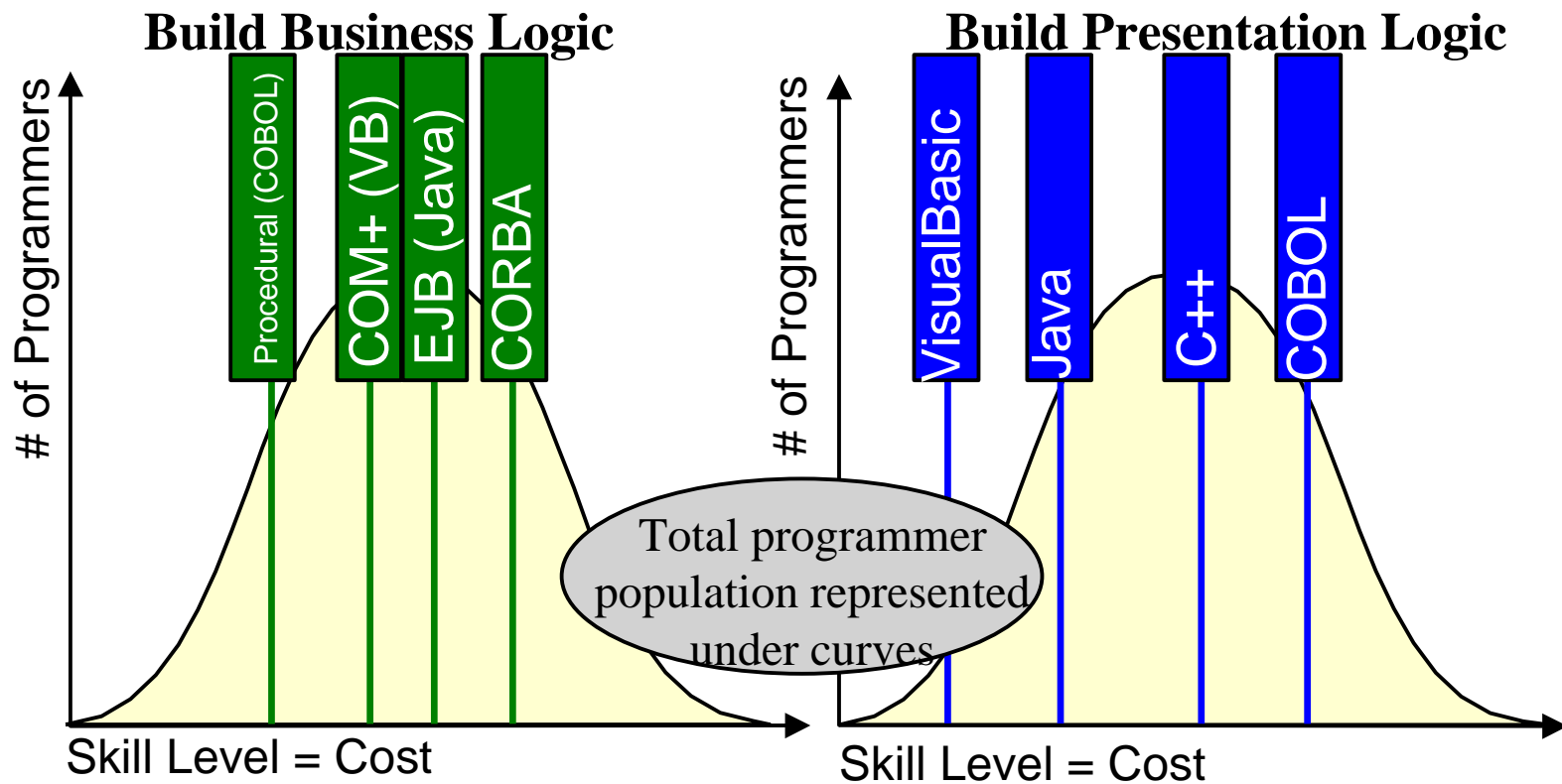
Conclusion:
Need to chose between
EJB and COM+



Competing Business Logic Programming Models

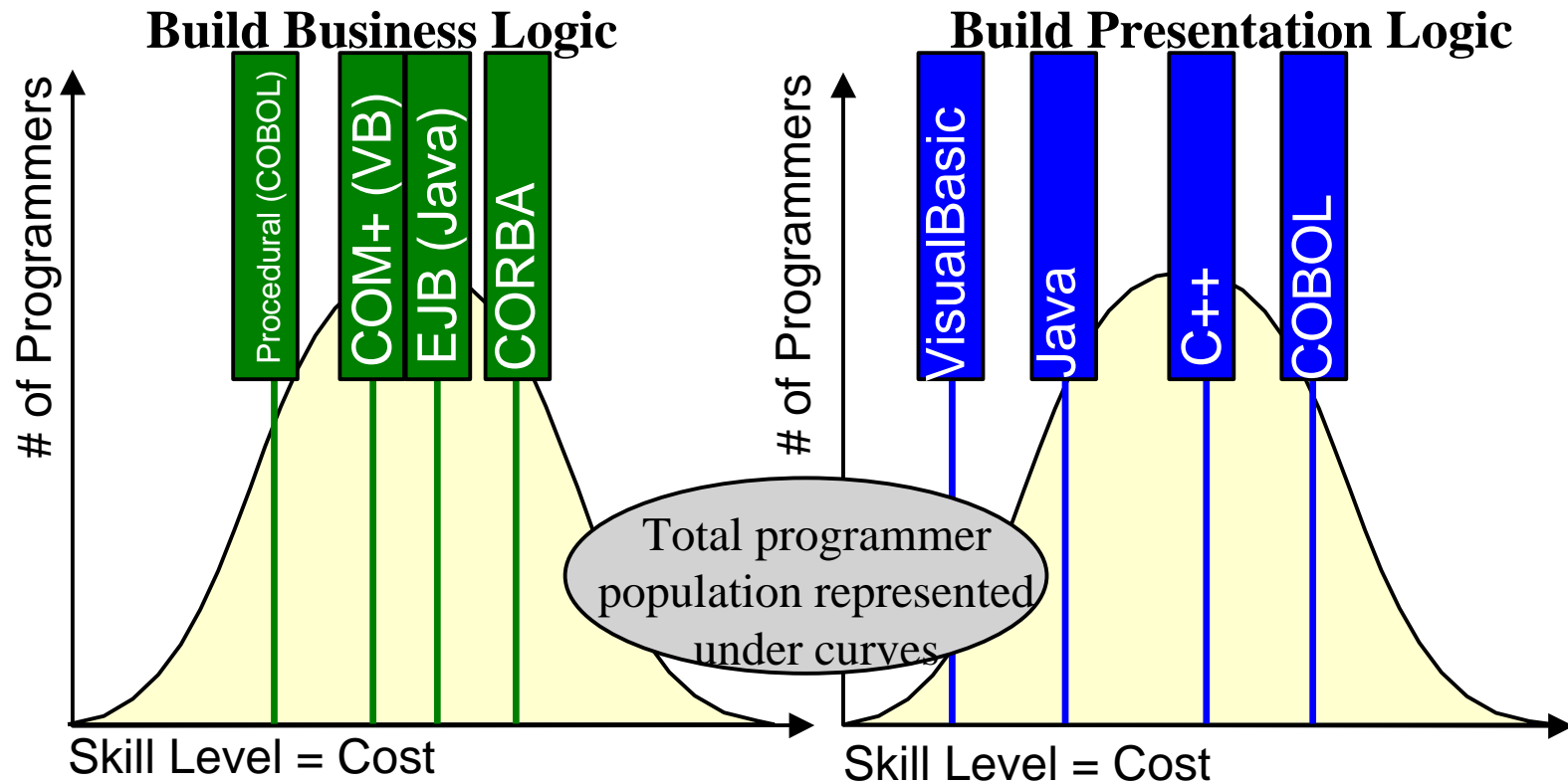
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Conclusion:
 If think about building presentation logic as well, may conclude Microsoft's programming model is best!



Competing Business Logic Programming Models

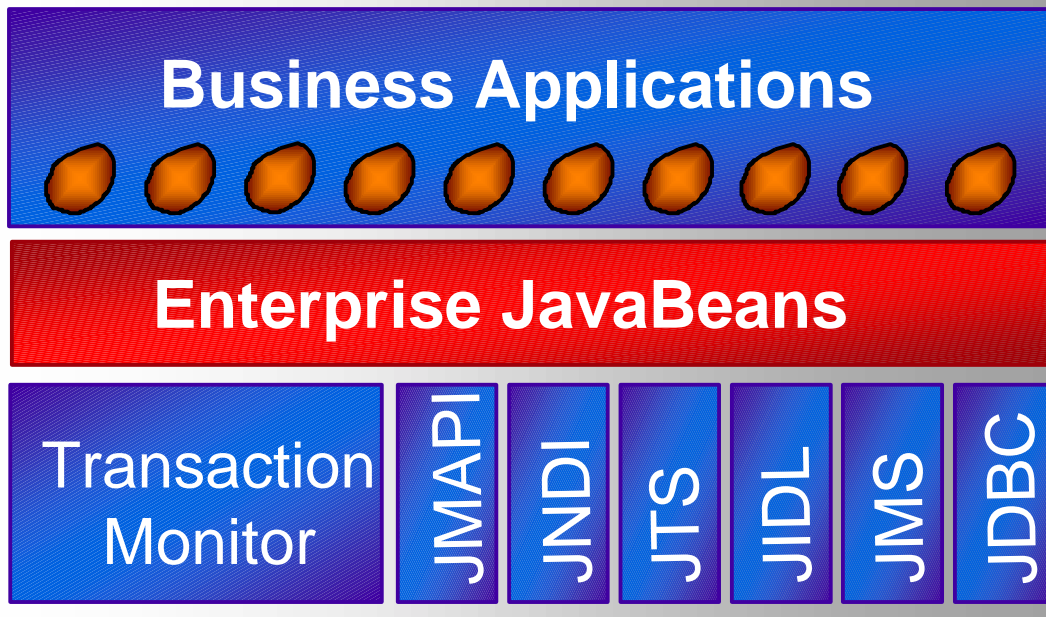
Programming Model	Ease of Programming	Reuse	Platform Coverage	Performance Volume
EJB	Medium	Good	Widest	Medium/Low
CORBA	Hard	Good	Good	Medium
COM+	Medium	Good	Poor	Medium/Low
Procedural	Easy	Hard	Good	High



Enterprise Java Beans

IBM's Choice for Programming Model

- Easy enough to build
- Flexible enough to run
- The model with most separation of build and run
 - ✓ Write once, run anywhere
 - ✓ Hence easy vertical Scalability



The Common
Component Model for
all of IBM's Application
Servers

Range of Options for Application Building

- Fast re-facing of existing applications
- Deploy to WebSphere Application Server

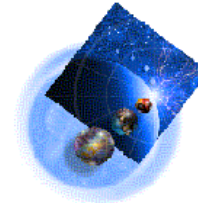


Host Publisher



- Flexible toolset for fast web site creation
- Single integrated workbench
- Customize with other tools
- Integrated with VisualAge for Java

- Pre-built business components
- Fast start to develop applications



*IBM WebSphere
Components*



- Industry leading family of Skills-based development environments
- Fully integrated with WebSphere
- Fastest way to build and deploy Java applications

It's good for all the other languages as well!!



IBM Collection of Java Bean Connectors

**The Fastest
Way to build
connectivity
from Java to
other systems**

**Common Connector
Framework integrated
with VisualAge for
Java**



Access relational data

CICS program input/output

IMS DC program input/output

Encina program input/output

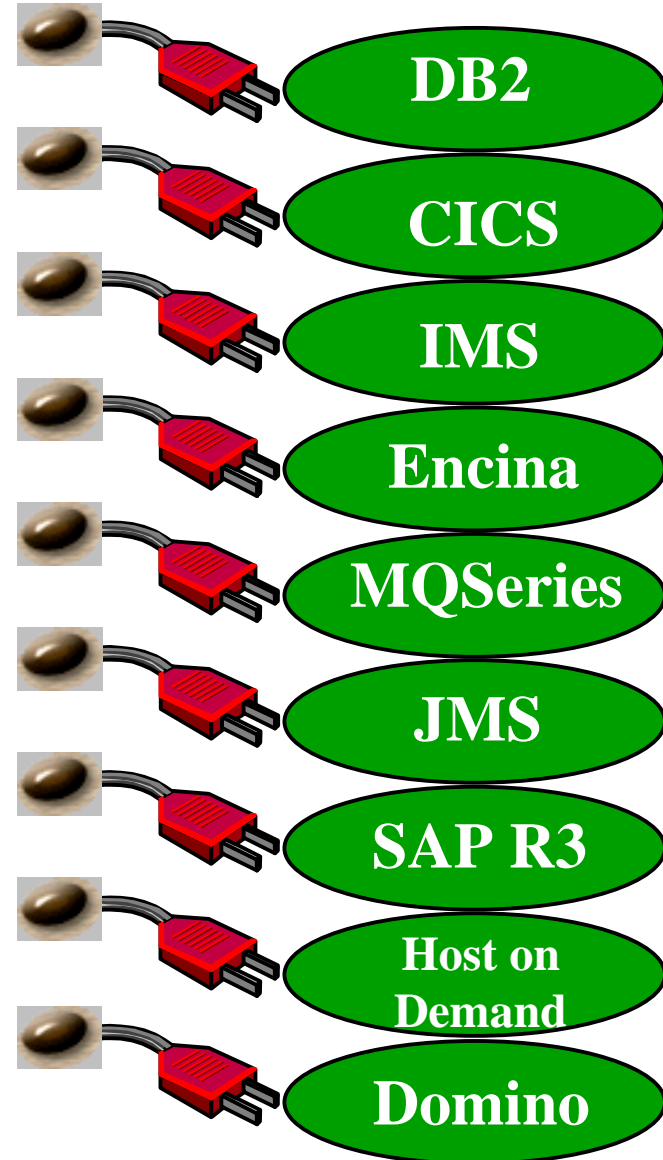
Send or receive MQSeries message

Send or receive JMS message

Access SAP applications

Program interface to 3270, 5250, &
ASCII terminal datastreams

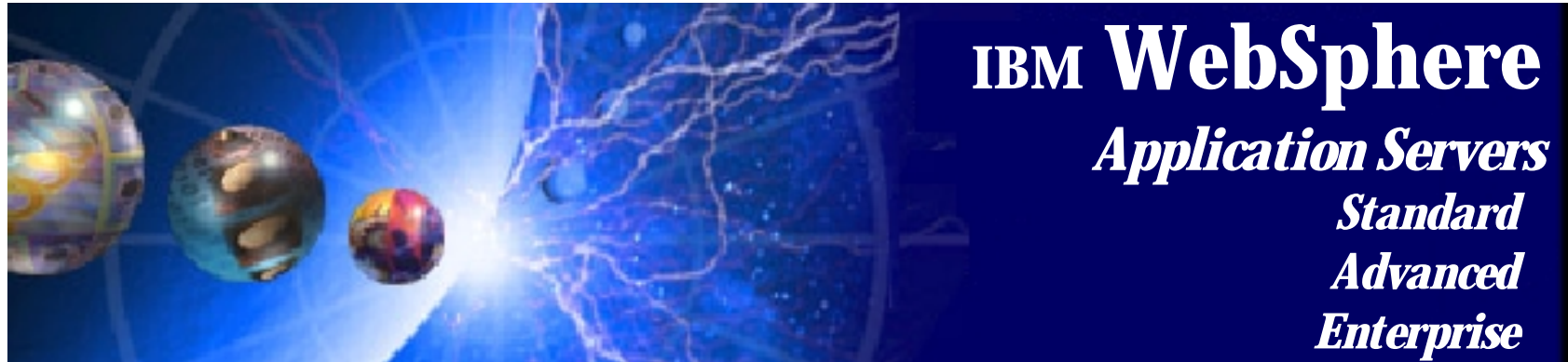
Access Domino mail and documents



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WebSphere Application Servers



Standard Edition - try out Java servlets and server pages

- But there are limitations

Limitation Examples

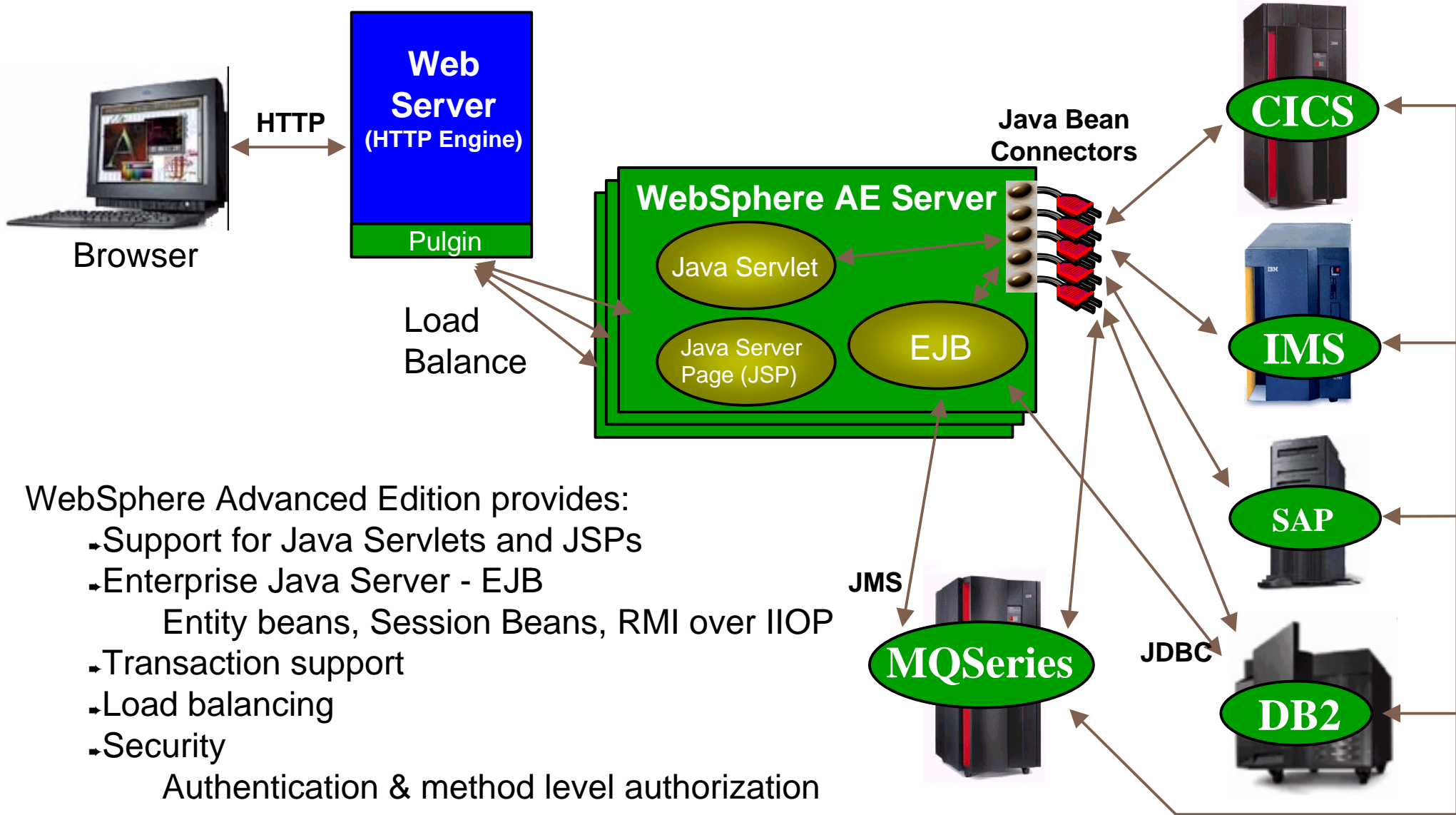
- Java servlets have no transaction support

Need EJB for this

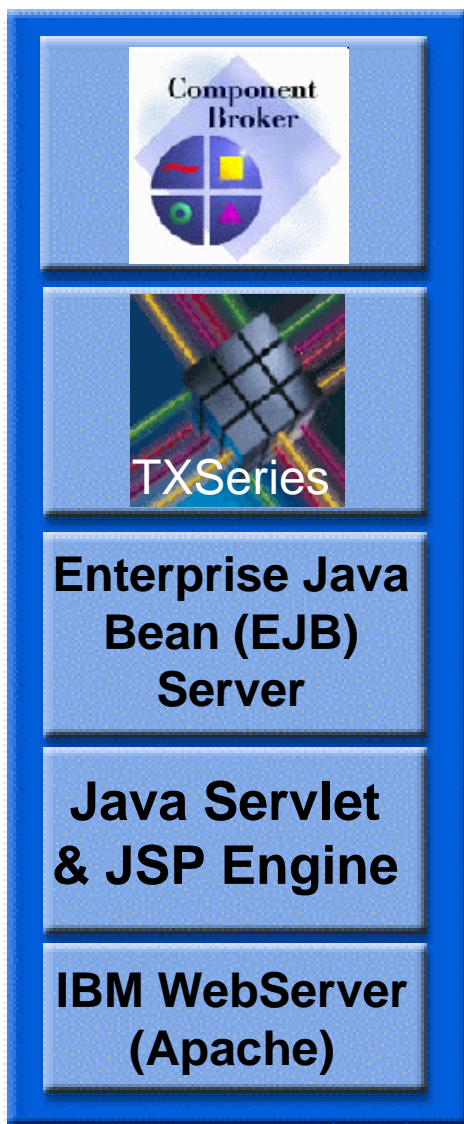
- Servlet engine restricted to same machine as HTTP engine

Should really view WebSphere Standard Edition for content only or non mission critical business logic

Web Enabled e-business with WebSphere



Even More Choice for Business Logic!



WebSphere Enterprise Edition V3.0

Available for

- AIX, Sun and NT
- HP/UX to follow in 2000

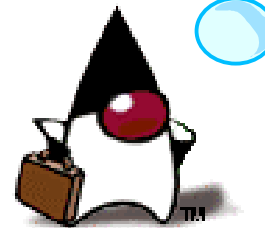
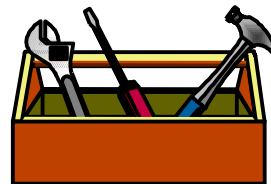
Packages all IBM's distributed application servers

- EJB Standalone Server
- EJB with CORBA services Server
- High Volume Transaction Servers

OS/390 has same functionality

- EJB with CORBA application Server
 - Component Broker
- CICS for High Volume Transactions
 - EJBs for CICS on the way!

But Isn't That Multiple Choices?



You have to Choose what to use!

Choice driven by programming style required

- Available skills today

In house or for hire - Time for retraining?

- Skills available tomorrow

Colleges teaching Java and C++ to IT Students

Choice modified by other considerations

- Content only web site

WebSphere Standard Edition provides needed capability
Assumes no updates and no critical business logic

- Robustness of business logic environment

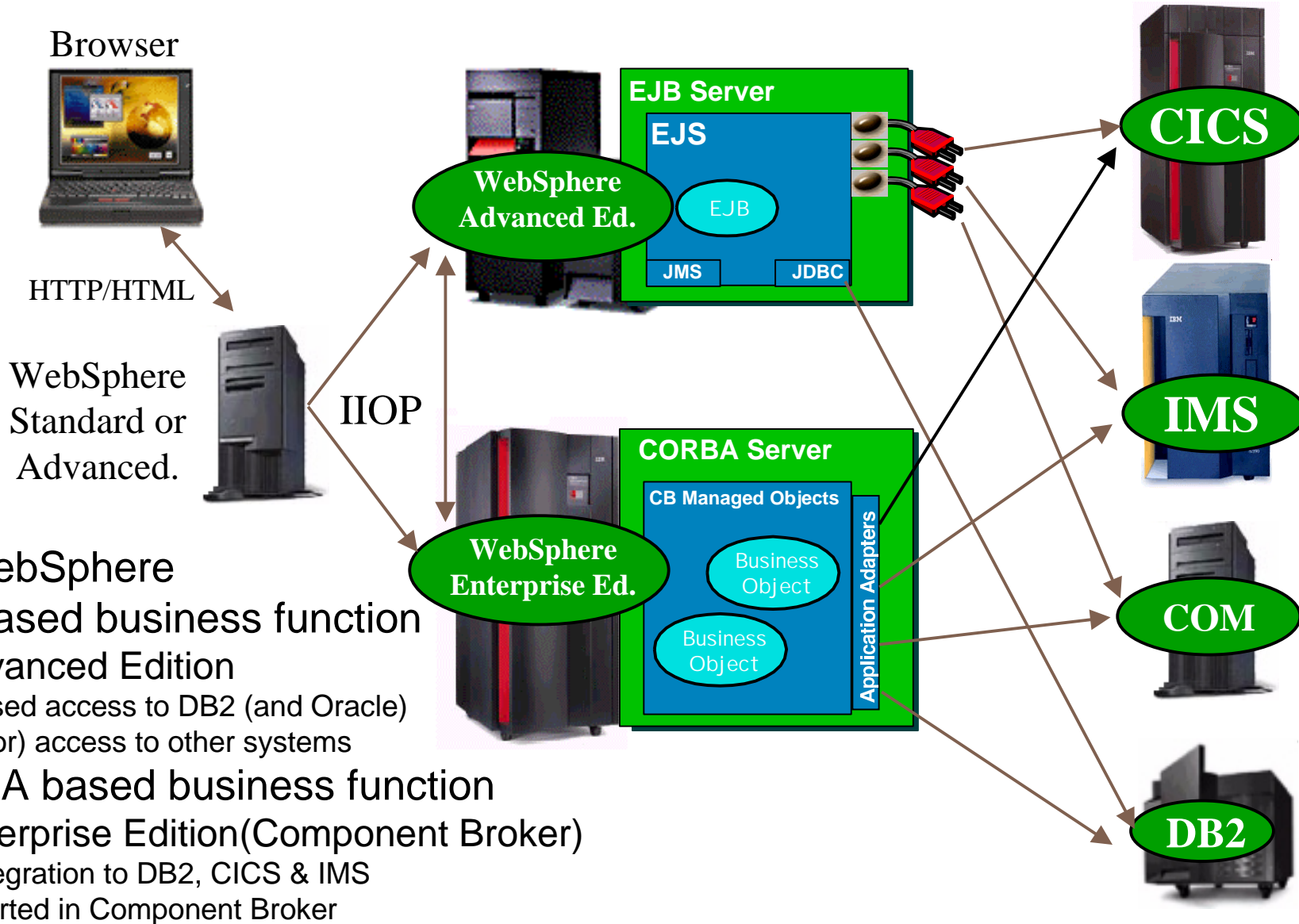
TXSeries - today's most robust distributed choice
OS/390 CICS or IMS most robust and scalable choice

- Reuse potential - component based development

Component Broker likely choice for CORBA or EJB
WebSphere Advanced Ed. more simple start for EJB

Can build the same application with any of the choices!

Deploying Components with WebSphere



Java Servlets in WebSphere
 Access new EJB based business function

- WebSphere Advanced Edition
 - Transaction based access to DB2 (and Oracle)
 - Client (connector) access to other systems

Access new CORBA based business function

- WebSphere Enterprise Edition (Component Broker)
 - Transaction Integration to DB2, CICS & IMS
 - EJB also supported in Component Broker

WebSphere Transcoding Publisher

Web Browser



HTML

Smart Phone



Intermittently Connected Devices



UP/Wap Gateway

Palm Gateway

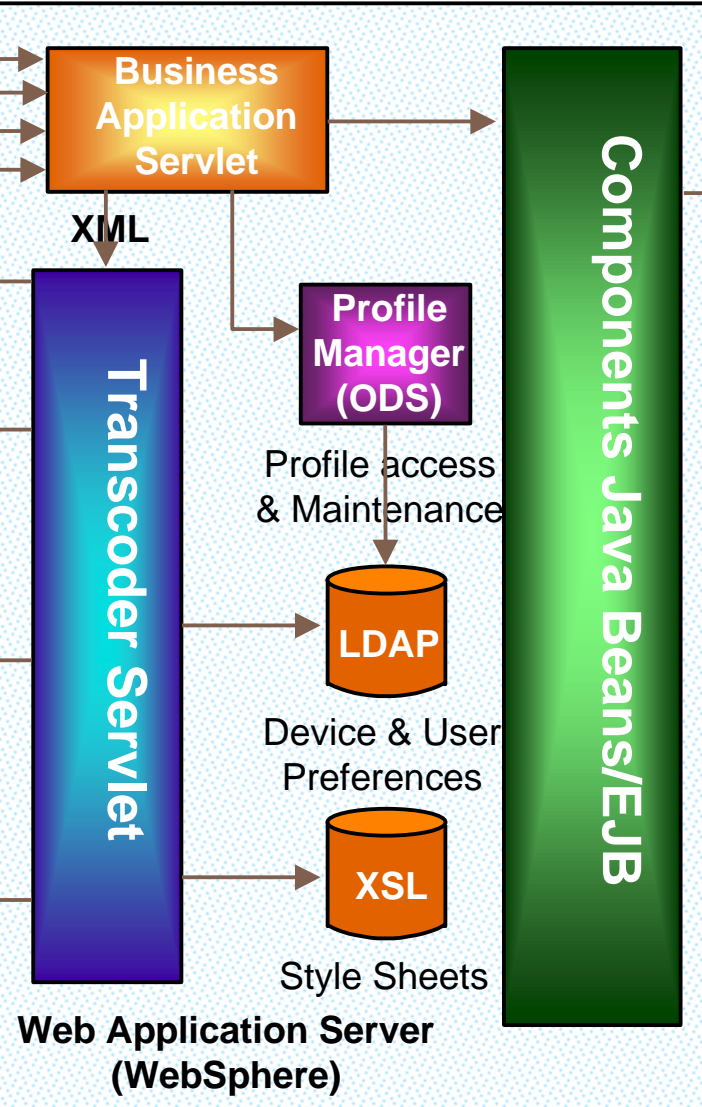
Intermittent Device Gateway

HTTPS

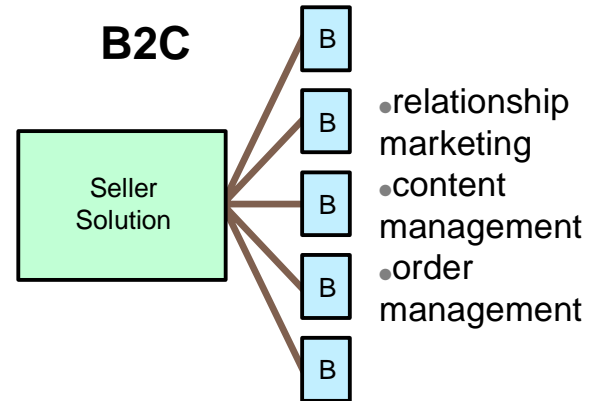
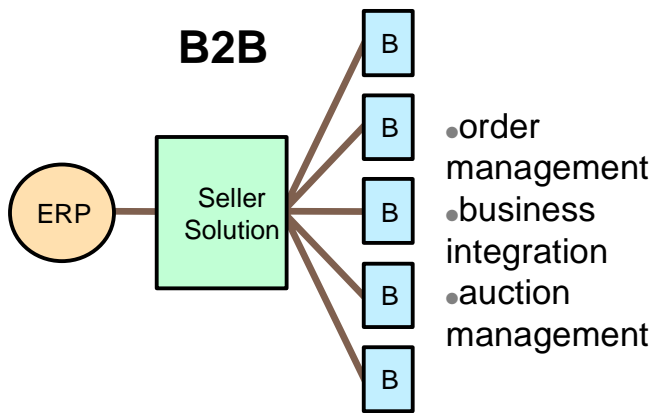
HDML/WML

HTML Subset

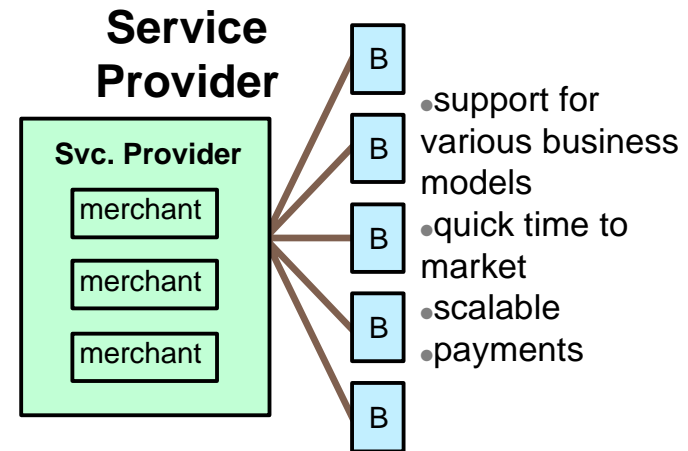
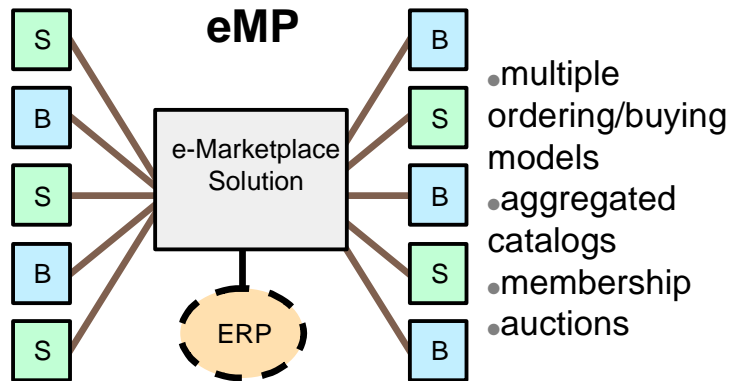
blob



WebSphere Commerce Suite



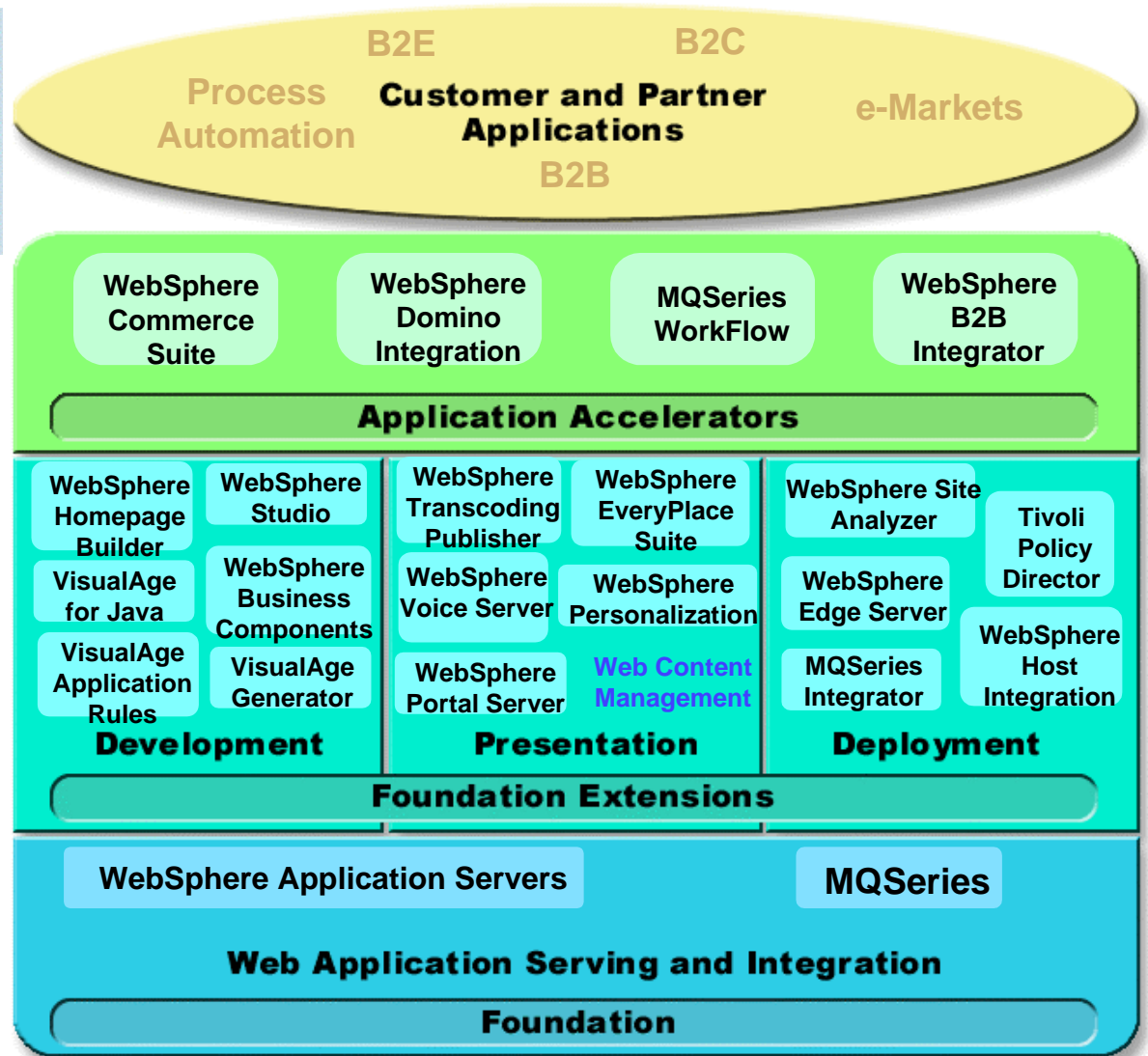
No. 1 Commerce Server Platform (Forrester Oct'99)





WebSphere Software Platform for e-business

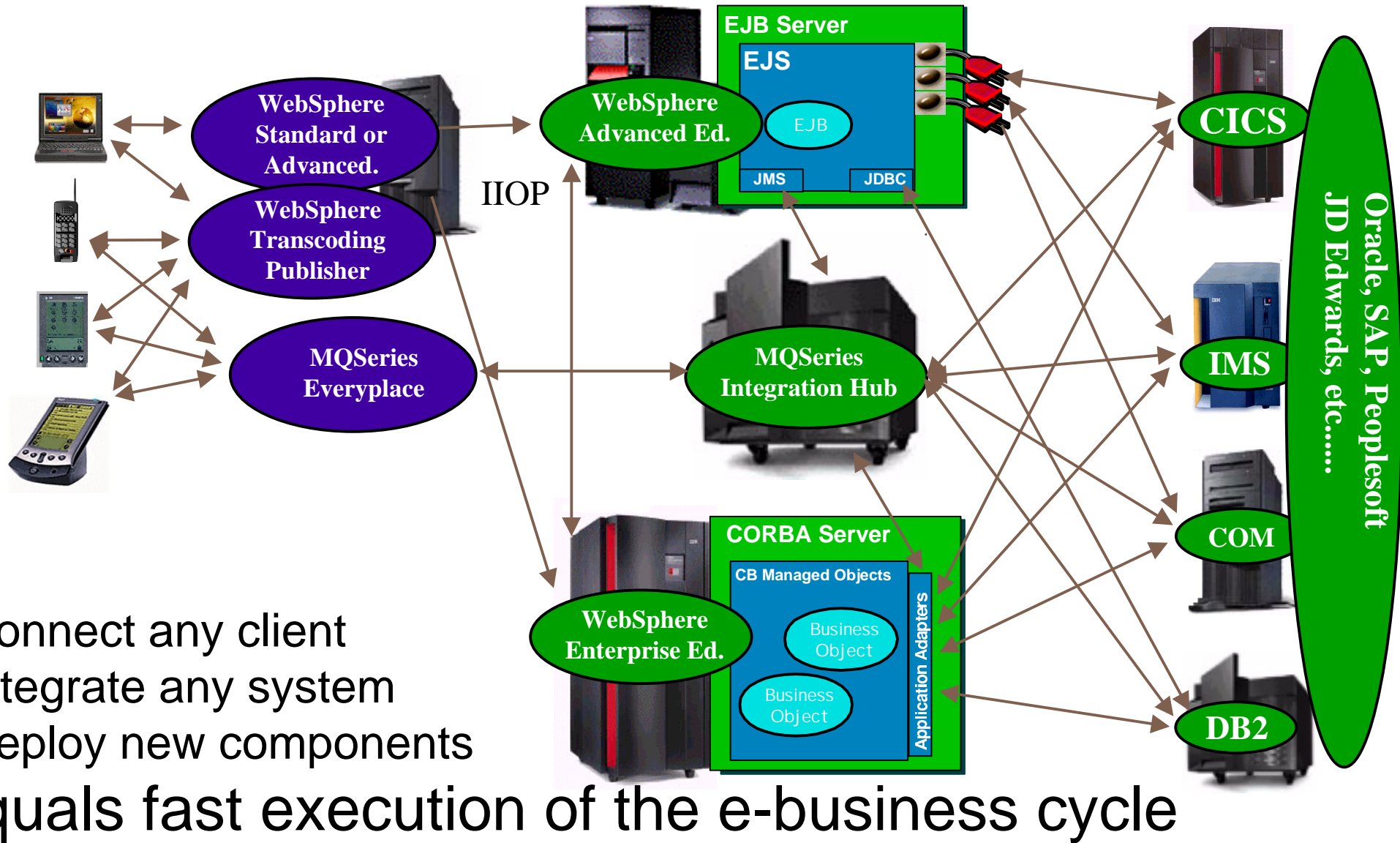
The **WebSphere**
software platform for e-business



Software is the soul of e-business.



Complete Integration for the Enterprise



- + Connect any client
- + Integrate any system
- + Deploy new components

Equals fast execution of the e-business cycle



Management of the Infrastructure



With the purchase of an IBM software application carrying the "Tivoli Ready" logo, you have the ability to manage your IBM software application through the Tivoli Enterprise management products, allowing you to automatically discover, monitor, and inventory one or more "Tivoli Ready" applications.

MQSeries

- Tivoli Ready

MQSeries Integrator

- Version 2 of product is instrumented for Tivoli management
- Tivoli building management module for release with GA (3/00)

MQSeries Workflow

- Tivoli Ready

WebSphere Standard Edition

- Tivoli Ready

WebSphere Advanced Edition

- Tivoli Ready

WebSphere Enterprise Edition (TXSeries & Component Broker)

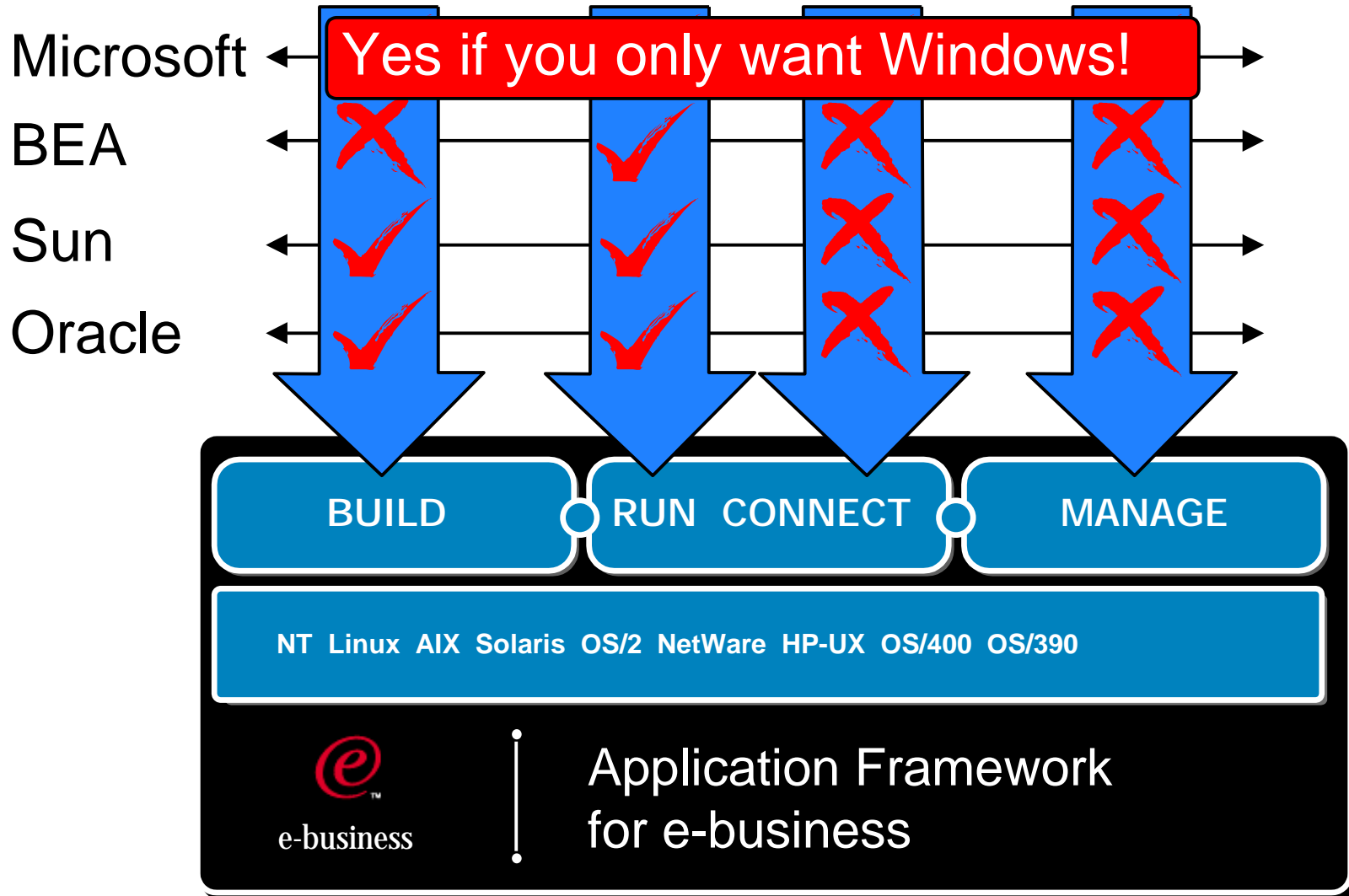
- Tivoli Ready

VisualAge for Java Enterprise Edition

- Tivoli Management beans for you to instrument your applications
- Make your own applications Tivoli Ready



Only IBM Delivers e-business Integration



Note: Connect added to Framework for effect Official Frameworkslide only has RUN

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The Vision: to give Customers the Capability to..

Build and Run Applications

With the following characteristics:

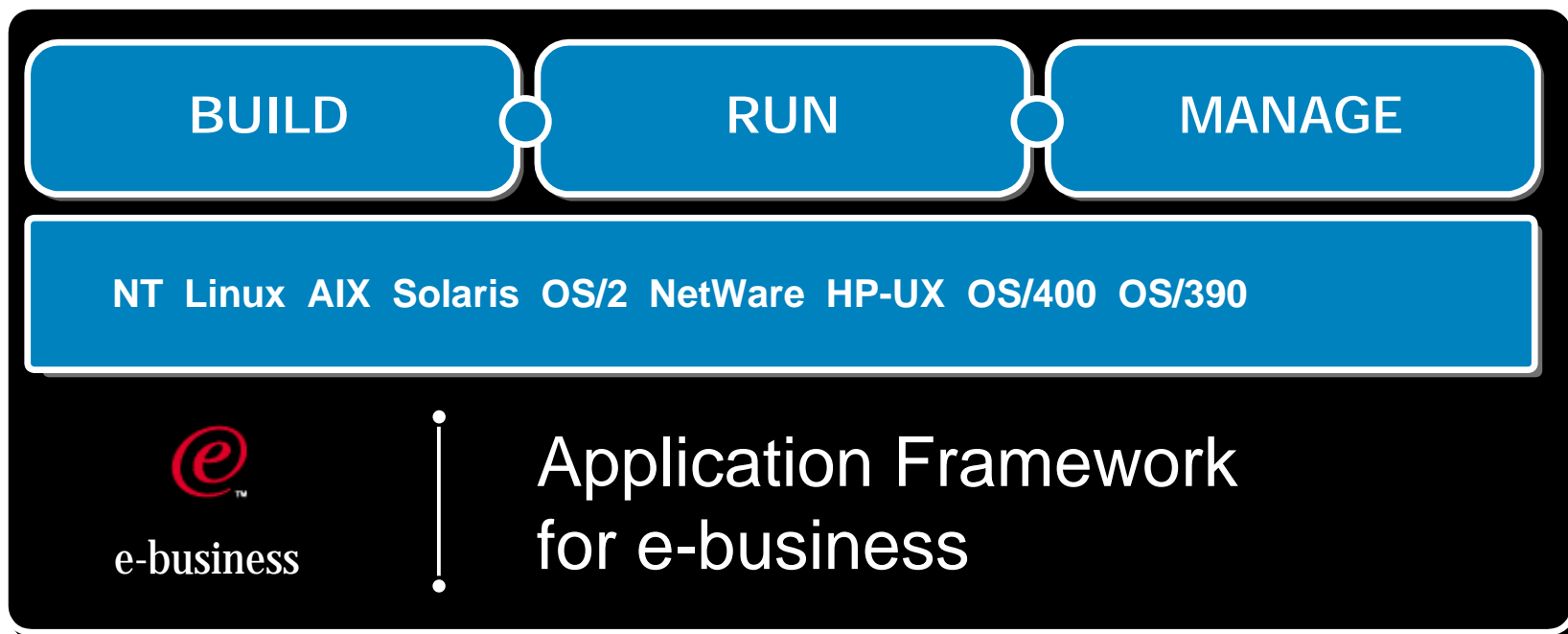
- Unified Programming Model - EJB
- Limitless scalability
- 24x7 availability
- High performance
- Transactional update of data
- Support for multiple client types
- Access to multiple data stores
- Integrate with other business systems

Software is the soul of e-business.



IBM's Application Framework for e-business

Delivering the e-business vision



Remember..... it's all about
Business!!

Software is the soul of e-business.