



# Microsoft .NET and HP Net Results Program

**David B. Bennett**

Managing Principal  
HP Consulting and Integration

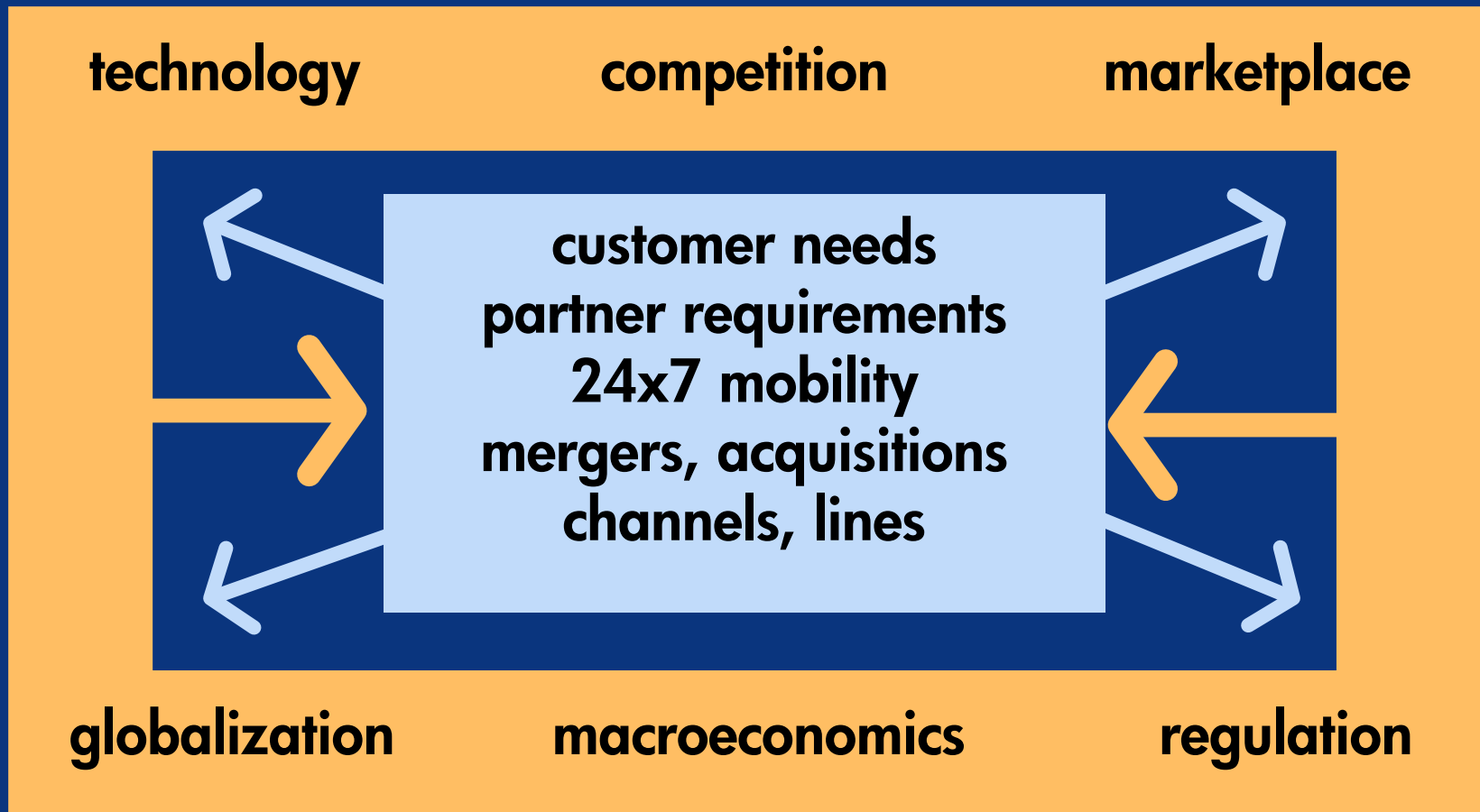
**October 7, 2002**

# agenda

- Why Web Services?
- Web Services and Microsoft .NET
- HP Net Results
- Delivering .NET
- Summary

# why web services

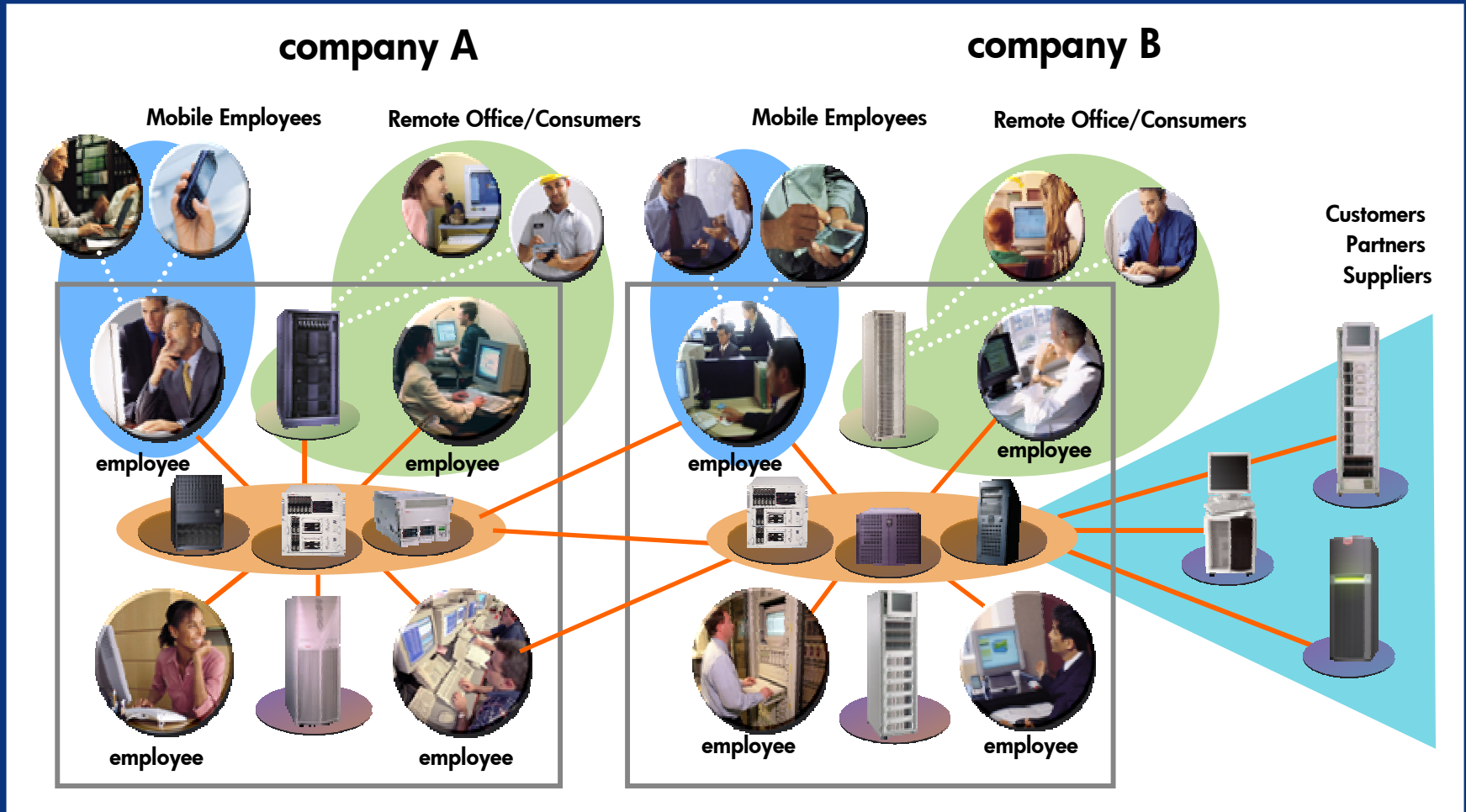
the reality of change: business success is a moving target



**agility is the critical IT metric**

# the "virtual" company

business demand = everything connected



# business imperatives

## Return on People

- Unlock data for better decisions
- Drive productivity - anytime, anywhere, any device
- Build on existing skills, familiarity

# business imperatives

## Return on Process

- Intrinsic integration, open standards
- Faster time & lower cost to benefit
- Brokered web services
- Reinvigorate existing systems, processes

# business imperatives

## Return on Relationships

- Deeper engagement
- Visibility for innovation at all levels of org
- Flexibility to act on opportunity
- Respond quickly and well
- New revenue, venues

# business imperatives

## Return on IT Infrastructure

- Flexible interoperability
- Lower total cost of ownership
- Embrace, maximize mobility
- Support heterogeneous environment
- Market leading manageability, performance, integrity



# the agile business

## Return on Customer Centricity

- Connecting with Customers
- New Opportunities
- Rapid response to customer needs

## Return on People

- Productivity and Efficiency
- Communication/ Collaboration
- Employee Satisfaction

## Return on Business Processes

- Time/ Cost to Benefit
- Integration
- Process Efficiency

## Return on IT Infrastructure

- Flexibility
- Integrity
- Fast Payback

# **connection imperative**

implications and challenges

## **Solution shift from single app to constellations**

- Multi-system, multi-company, multi-audience

## **Information flow is now primary requirement**

- Mandate to connect “islands” of information

## **Integration “hurt” has reached breaking point**

- Systems not designed to work together
- Interoperability an afterthought
- Expensive, hard, time consuming, brittle

**Current model can't keep up with business**

# maximizing return

Ability to drive better quality decisions

Ability to change and adapt

Ability to maximize relationships: Customers, Partners and Employees

Value of Agility =

Productivity × Flexibility × Connections

Total Cost

Ability to reliably and cost effectively create, adapt and maintain

Return on the dynamic of business

# web services and Microsoft .NET

- Work started in 1997
- Microsoft bet the company on this with .NET in 2000
- Major impact on all software systems: OS, database, Office
- Industry-wide adoption critical
- Services competition on implementation

# software today

purchasing  
application

prices

order

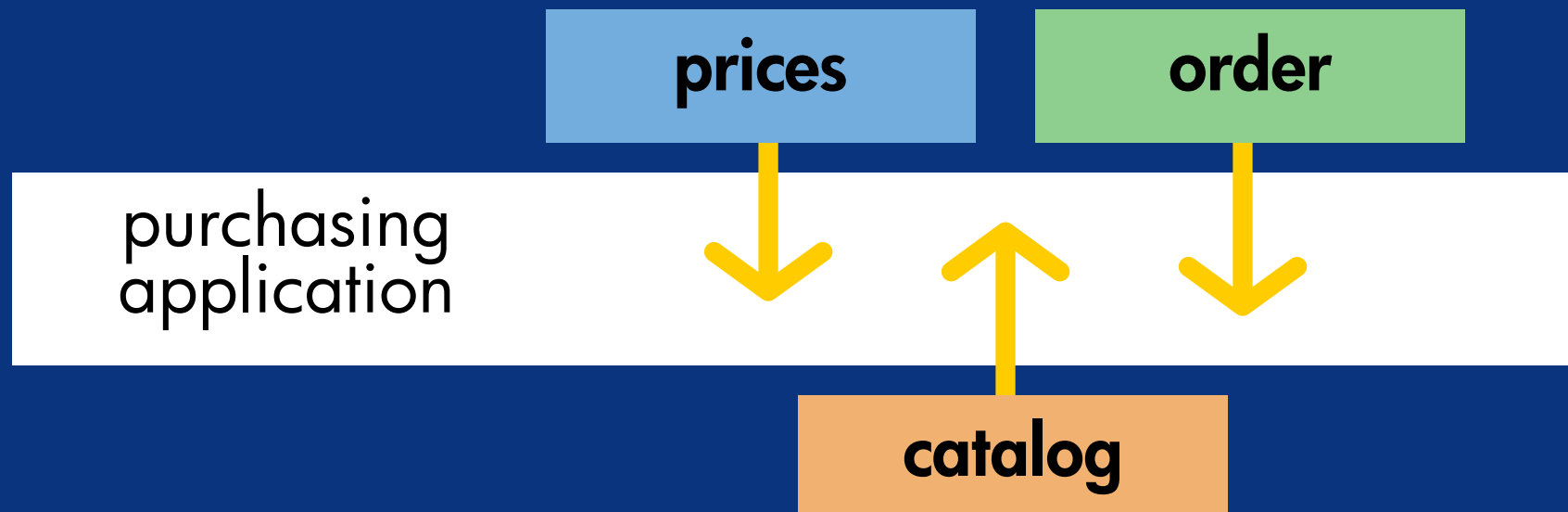
catalog

Disconnected, Stovepiped

Inaccessible information

- Can not be used and leveraged across the enterprise
- Can not be shared between enterprises

# software with .NET and web services



Designs code for reusability

Standard way of exposing/sharing information

Allows automation of software interactions

Built on open standards

# web services standards

**Simple definition:** An application designed to talk to other applications

**Industry standards:**

**eXtensible Markup Language (XML)** – industry standard universal data format that allow applications and systems to connect

**Simple Object Access Protocol (SOAP)** – common protocol for exchanging data that allows systems to communicate and make requests

**Web Service Description Language (WSDL)** – standard format you need to describe the functions, parameters, and results of an XML Web service

**Universal Description, Discovery, and Integration (UDDI)** – Internet “yellow pages” for businesses to discover each other’s services

# www.ws-i.org

- Industry initiative for Web services
  - More than 50 companies signed up so far
- Interoperability across platforms, applications and languages
- Delivering:
  - Web Services testing and implementation guidance
  - Web Services profiles helping with adoption and support for key Web Services standards
  - Roadmaps to help customers understand long term directions for Web Services Evolution



# www.ws-i.org



# analysts on Microsoft .NET

“.NET is a brilliant strategy that enables Microsoft to define the next shift in the software business.”

- **Gartner Group**

“Everyone should build on the XML/SOAP foundation.”

- **Meta Group**

“Gartner believes Microsoft is now providing more vision and influence regarding this shift than any other vendor.”

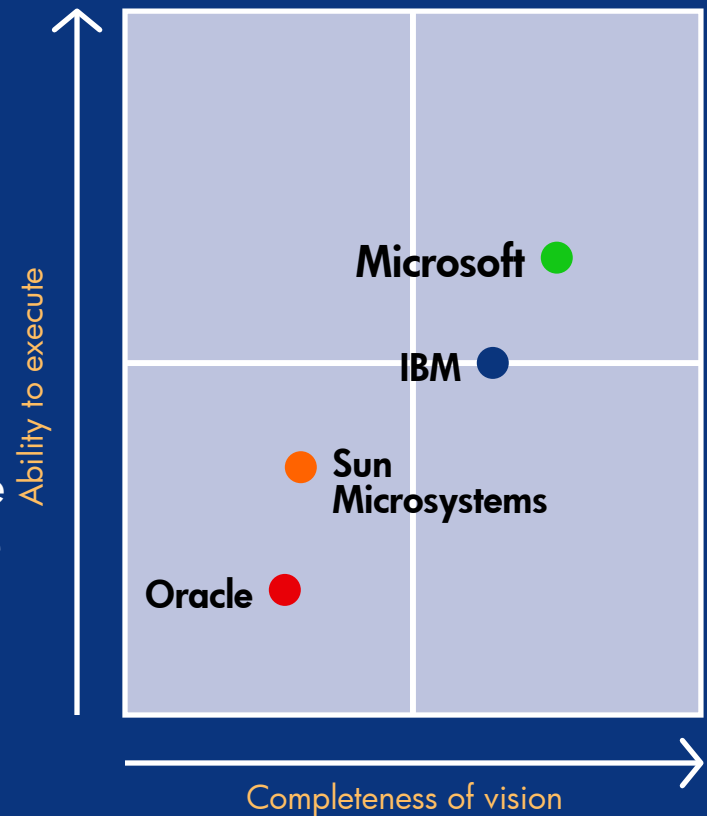
- **Gartner Group**

“.NET is a leading example of what we believe will be the dominant architectural model for the third generation of Internet applications.”

- **Patricia Seybold Group**

\*Source: Gartner Research, 9/13/2001

**Gartner Magic Quadrant**  
Major Vendor Web Services Platform Influence



# Microsoft .NET

Software for connecting information, people, systems and devices  
Built on a foundation of XML Web services

## XML web services

### Connected Business

Agility to connect more deeply with customers, integrate with partners and empower employees

### Connected Systems

Integrate new and existing systems across the organization, and externally with partners



### Connected Experiences

Information anytime, anywhere, any device

### Connected Development

Quickly build solutions that interoperate across languages, platforms and devices

# .NET results program

Net results represents \$45M investment from HP/Microsoft to drive incremental \$1B revenue

Investment Includes:

- Dedicated Sales teams
  - 100+ sales/technical personnel
- Dedicated Support teams
  - 16+ person swat team
  - Existing trained resources
- Certifying over 3000 consultants

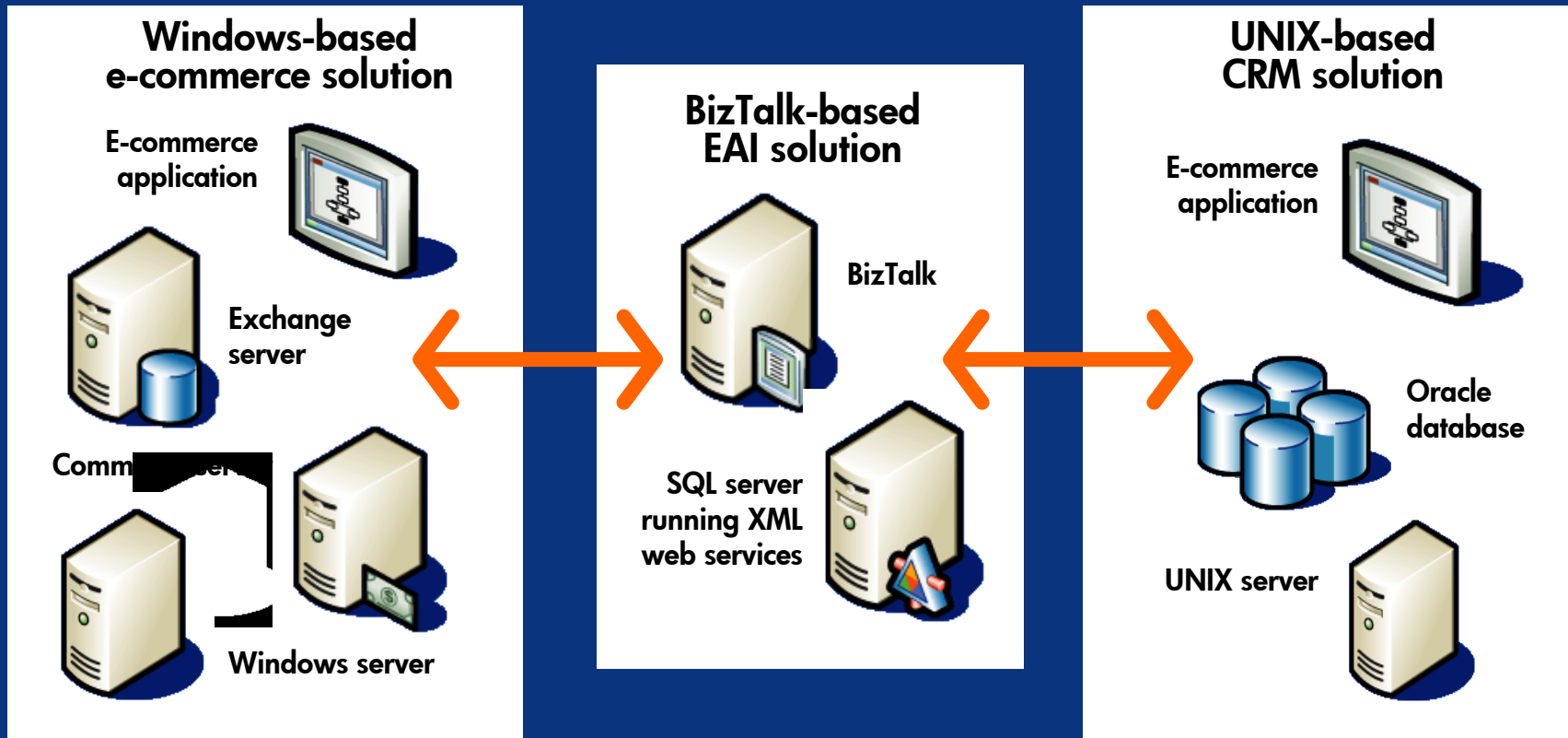
Focused On:

- .NET/Visual Studio vs J2EE
  - Web Services
  - Mobility
- Enterprise application integration (EAI)
- Corporate Web Presence
- Trading partner integration
- Intranet and Portals
- Business Intelligence (BI)



**FRONTLINE PARTNERSHIP**

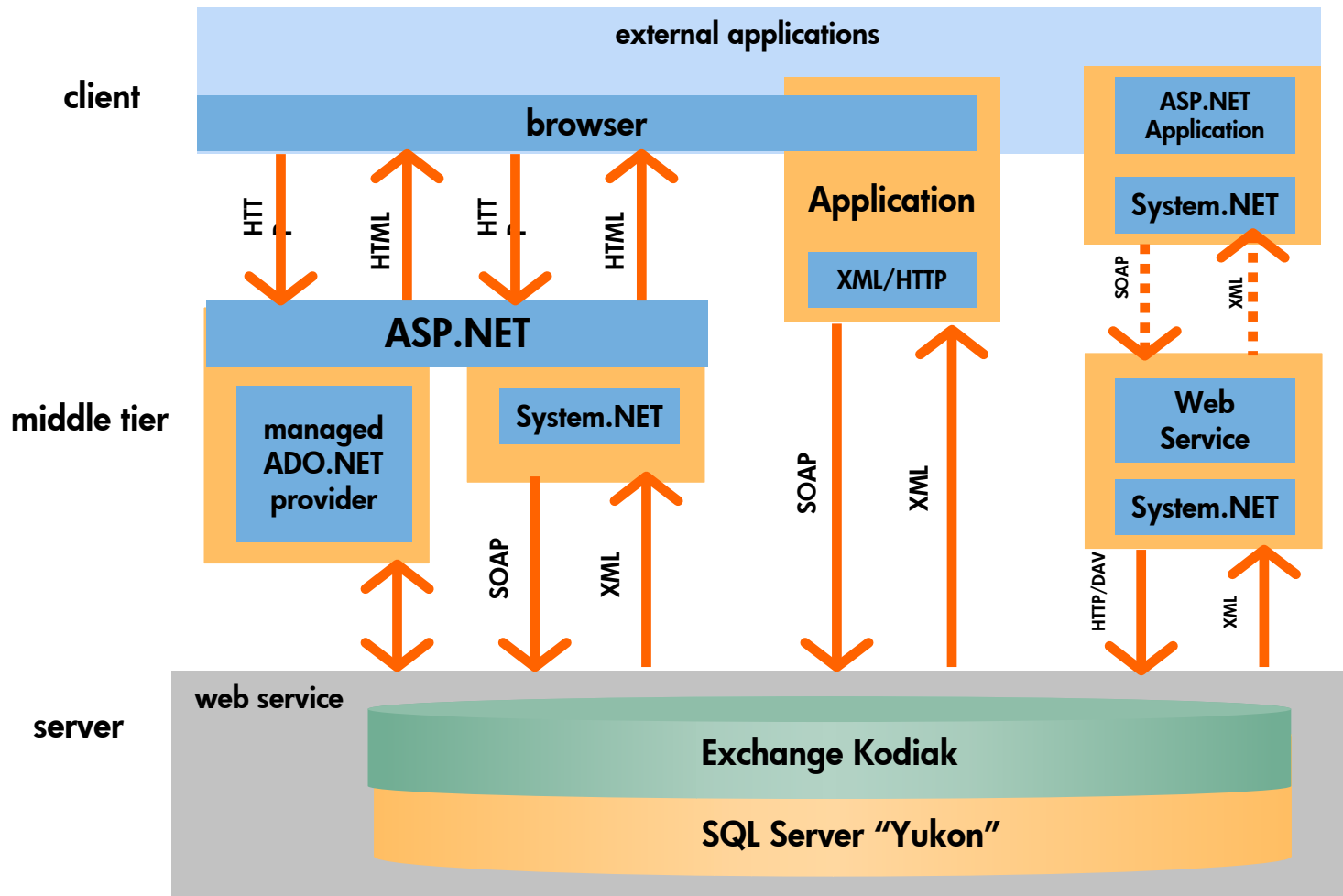
# traditional architecture challenge



Need to integrate internal systems to connect with partners, customers, and employees

Current options required hard coding, proprietary systems

# Review - Exchange and Web Services



# web services enterprise architecture

Supply Chain management solution with partner  
5



Notification service for customers  
4



## Windows-based e-commerce solution

E-commerce application



Exchange server

Com...



Windows server



XML web services

## BizTalk-based EAI solution



BizTalk

SQL server running XML web services



## UNIX-based CRM solution

E-commerce application



Oracle database

UNIX server



2

Supply Chain management solution with partner



XML web services

3

Sales force integration solution



# what about my legacy applications?

## Expose data/Web Services

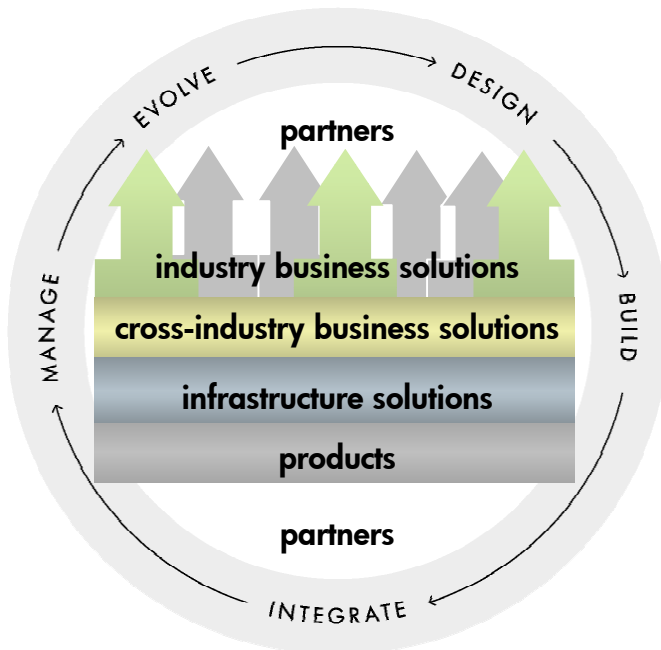
- Integrate apps, leverage existing systems

## Custom App Migration to Visual Studio .NET

- Visual Basic, C++/C#
- Legacy code

## Integrated Support For Multiple HW Platforms via Compact Framework

- Server, Desktop, Tablet, Mobile



## Design, Build, Integrate, Manage, Evolve

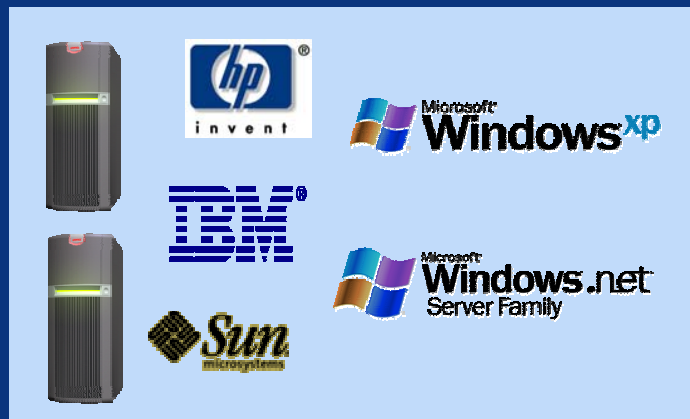
- Architecture - where is my data, and where does it need to be?
- What is my roadmap?
- What effort is required?
- What is my ROI?
- How do I manage it?



# hp Services and Microsoft .NET positioned to win The complete solutions value chain



Smart Client Implementation  
Web Services and Integration  
.NET Application Agility

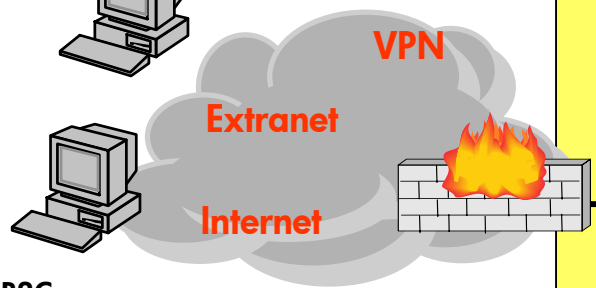


# Example Architecture

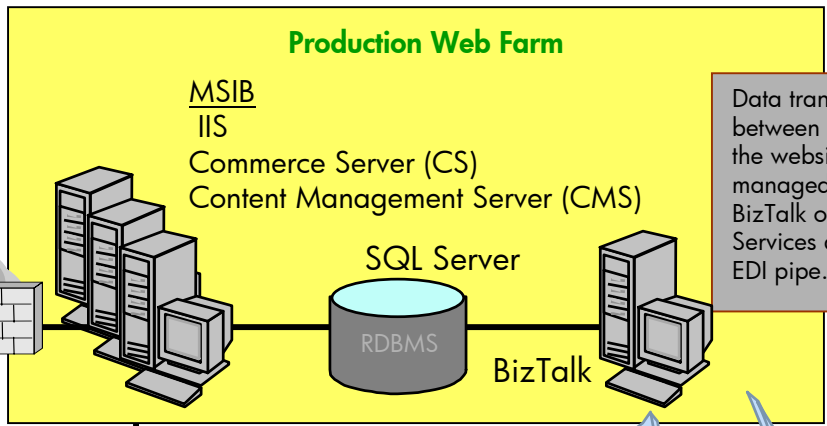
Extranet to buyers and distributors. Secure access, personalized site look-and-feel and content, catalog offering and pricing.

Internet eCommerce site with a rich set of eCommerce capabilities. Includes full personalization and dynamic content, providing each site user with a personalized look-and-feel, sales targeting, custom catalog and pricing, navigation, etc.

**Retail, Distributors**



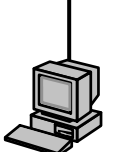
**B2C consumers**



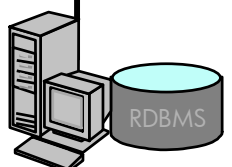
Data transfer between ERP and the website managed by BizTalk or Web Services and/or EDI pipe.

**Digital Sender**  
Scan and index to incorporate hard copy data into electronic systems

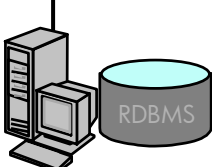
**Corporate Network**



BizDesk



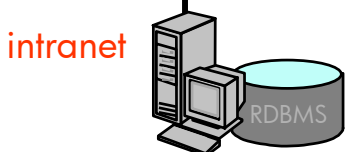
Exchange



Staging, QA, Development



Sharepoint Portal Server



Financial Reporting

intranet

Network pipe



Commerce Server user interface. Configure site, manage catalogs, users, orders; view technical and business reports; manage sales campaigns; business intelligence.

Exchange. Enable routing and approval information to be generated or processed through electronic mail integration

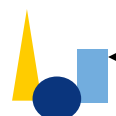
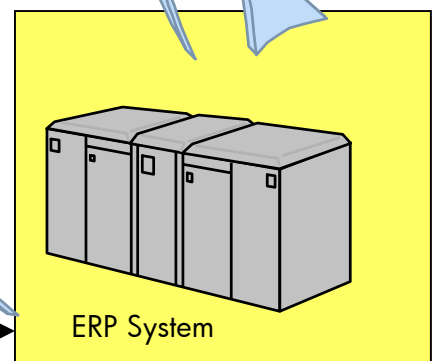
MSIB installation. Choice of dev using classic ASP/HTML or newer C#/ASP.NET. Site packager creates single 'PUP' file for deployment.

Intranet interface for corporate employees. Personalized view of business data, Access to Hyperion DB, MSIB DB, etc.

One way push. Data extracts for reporting

DataExtracts (shipping, inventory, order status, history and account info)

Order changes, User Profiles Transactions

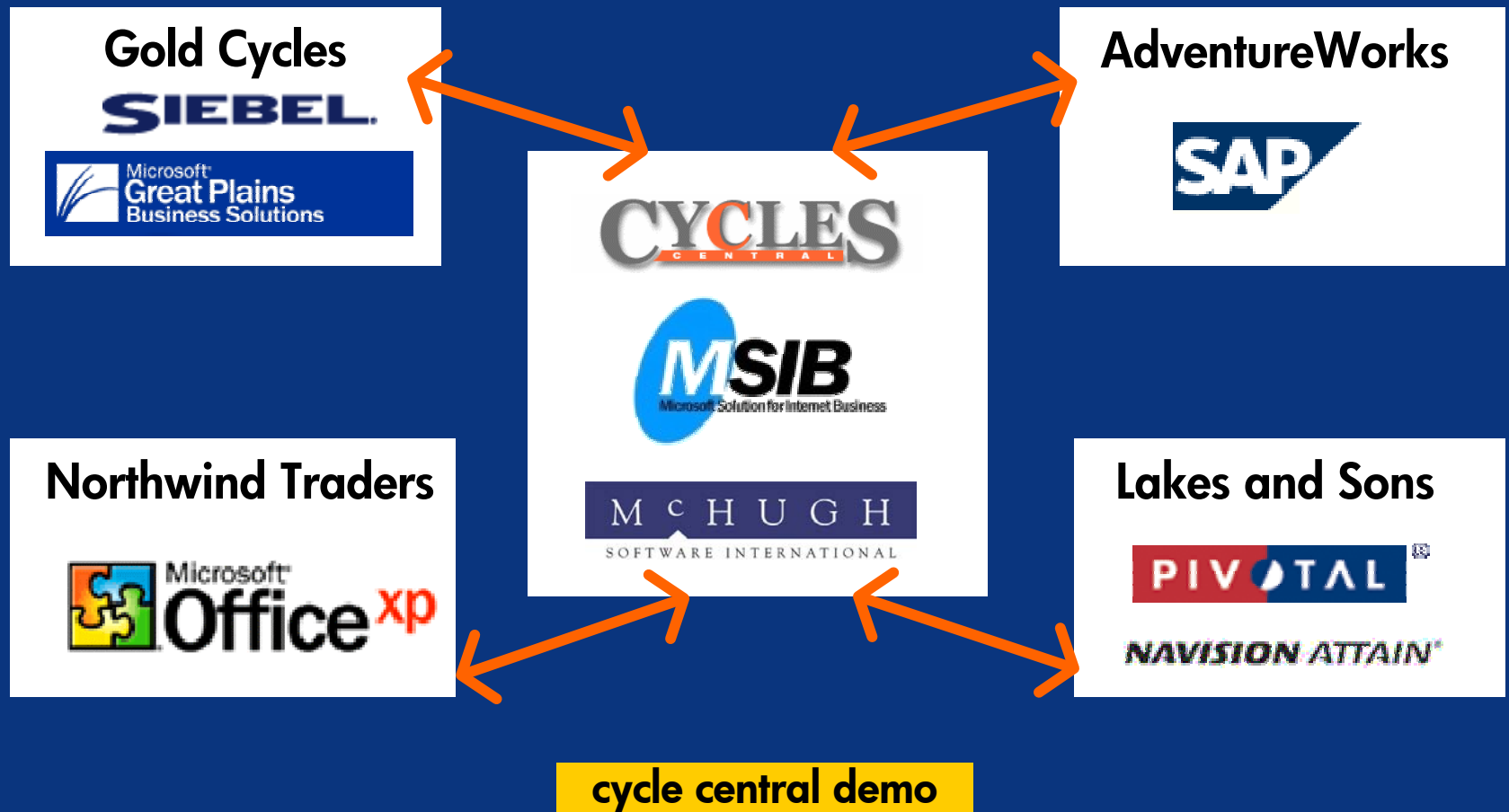


Unix

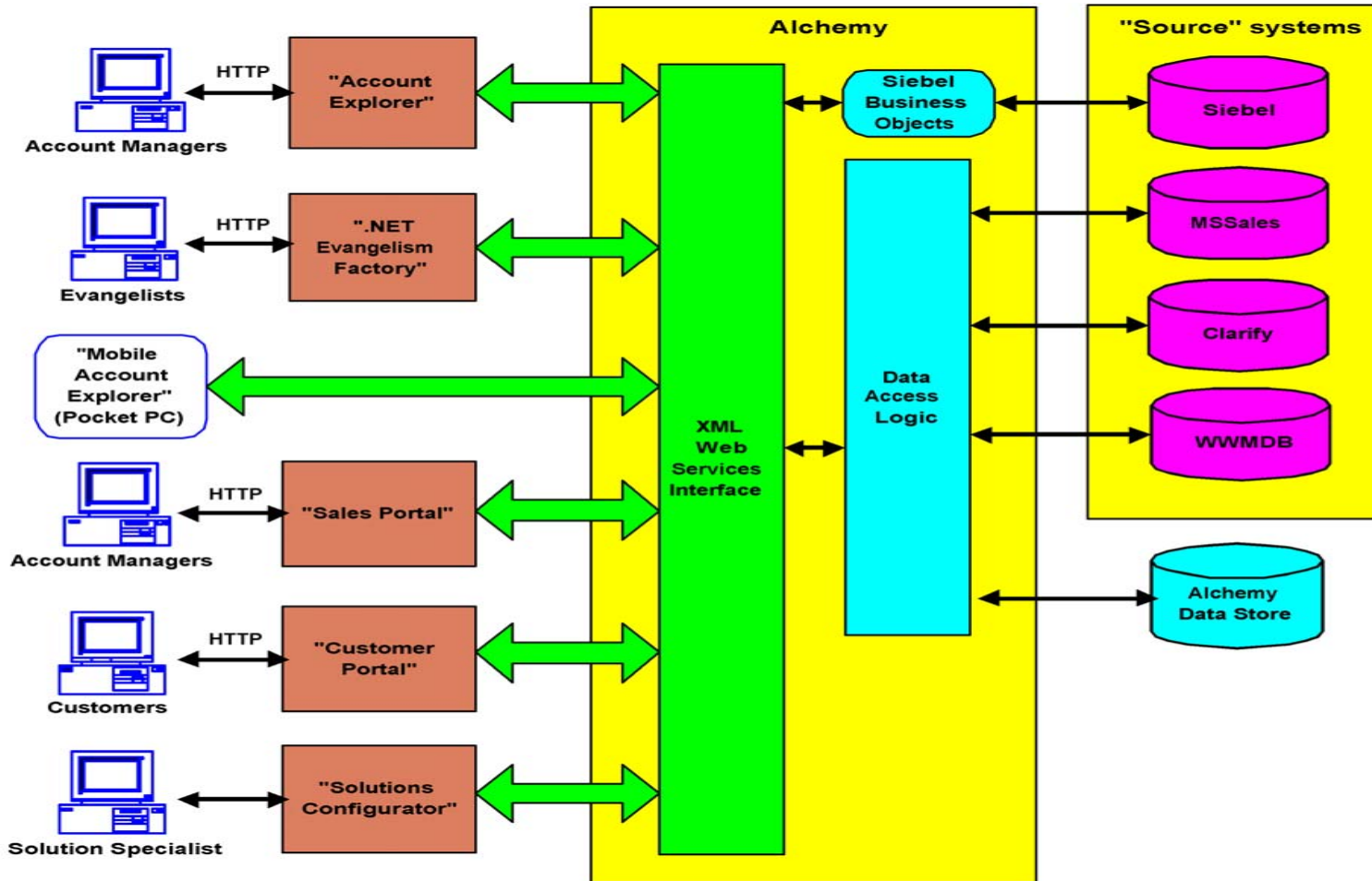
EDI/EDifact

# delivering net results

## .NET and web services supply chain solution



# Microsoft .NET - Alchemy



# Microsoft .NET - Alchemy

Account Explorer Home My Accounts Search Accounts   powered by **ALCHEMY** SSIT Web Services

**Microsoft Corporation**

**Primary Account Manager**

Alias	First Name	Last Name	Job Title	Phone	Fax
<a href="#">BILLBOS</a>	William	Bosworth			

**Account Info**

Site	Redmond	Web Site	
Address	One Microsoft Way	Segment	SMB
		Subsegment	Small Business
		Parenting Level	
City	Redmond	Site Type	Business
State	WA	Vertical Industry	
Zip Code	98052	Sector	
Country	United States	Subsidiary	United States HQ
Phone	4259362483	Sales Region	West
Fax		Sales District	Pacwest

Pocket PC Emulator

Emulator Help

Internet Explorer 5:07

**Opportunities**

Opportunity	Due Date
<a href="#">Corporate Information</a>	07/01/2002
<a href="#">Server Management</a>	07/01/2002
<a href="#">Stealth</a>	07/01/2002
<a href="#">Zero Options</a>	07/01/2002
<a href="#">SMS / MOM</a>	07/01/2002
<a href="#">EDI / Supply Chain Extensions</a>	06/01/2002
<a href="#">Retail Integration &amp; Analytics</a>	05/01/2002
<a href="#">Enterprise Directory Integration</a>	05/01/2002

View Tools

# HP and Microsoft: summary

HP has been implementing Web Services since inception

- Integrating Unix and Windows

Microsoft's approach represents the cleanest approach to Web Services

- Standards based
- Testing and verification toolsets being developed

HP/Microsoft have made .NET and Web Services a cornerstone of their relationship

HP Services is the largest partner implementing Microsoft .NET technologies today



**i n v e n t**