

# IBM Systems and Technology Group University 2005



© 2004 IBM Corporation



# Understanding the Software Group Portfolio and How It Helps Drive Business

Course #: CB41

Surjit Chana VP, SWG Marketing Strategy & Planning





## Learning Objectives

### At the conclusion of this material, you should be able to:

- Understand IBM's Software portfolio and how it relates to STG
- Speak with authority on the functionality of middleware
- Identify IBM Software opportunities
- Know when to bring in SWG Specialists



IBM Software - Providing the Foundation for e-business On Demand

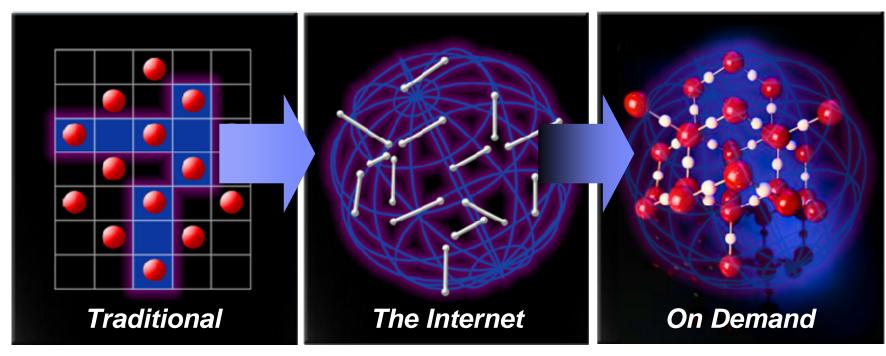


© 2004 IBM Corporation



# Deepening Integration of IT with Business

# Emerging On Demand Computing Model



Structured
Calculations
Data Processing
Transactions

Open Standards
Connectivity
Flexibility
Simplicity
Scalability

Rich, Modular Components
Composition/Orchestration
Dynamic Applications
Flexible Business Solutions

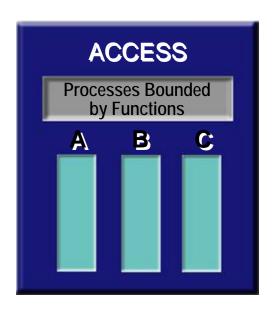


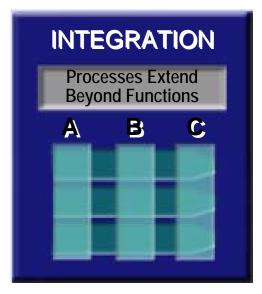


## Strategic context: On Demand is about integration

### An enterprise whose business processes are:

- Dynamically responsive to any customer demand, market opportunity or external threat
- Integrated end-to-end across the company
- Integrated across industry value nets: partners, suppliers and customers







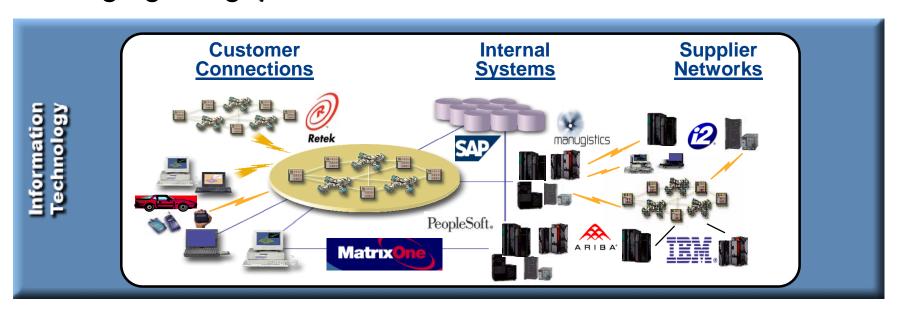




### Horizontal Integration is the New Challenge

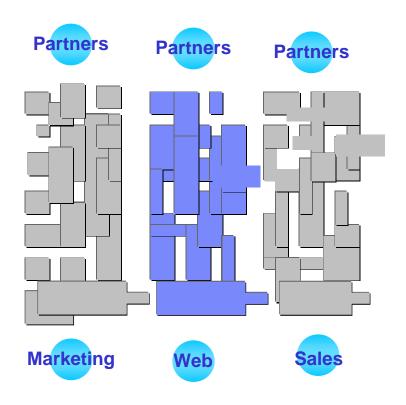


### Bridging the gap between business transformation and IT





### **Functional Automation**

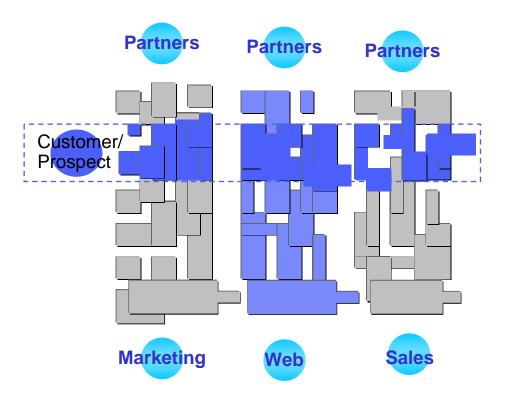


#### **Historical limitations:**

- Monolithic applications can't be reused
- Ad hoc integration created connections that are difficult to change/maintain
- Lack of standards limits ability to deliver meaningful interoperability



### **Horizontal Process Integration**



#### Advances that make it possible:

- Standards for creating services and enabling them to communicate are agreed upon by major vendors
- Infrastructure that supports self-defined, loosely coupled services has emerged
- Tools to incorporate existing assets are available
- Automation and virtualization of systems resources readily available

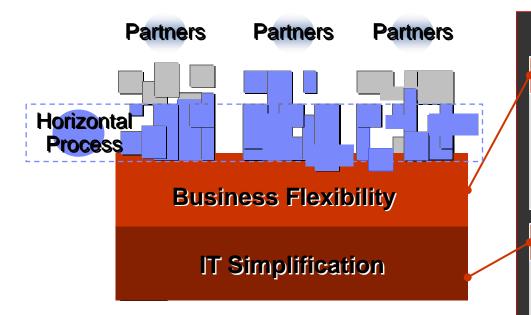


## **IBM Software Strategy**

 is based on the premise that companies of all sizes need an open standards-based middleware infrastructure to support and integrate their business processes.



### Strategy: Build an On Demand Operating Environment



#### **On Demand Operating Environment**

#### Integration

Business flexibility through integration of people, processes and information within and beyond the enterprise

#### **Infrastructure Management**

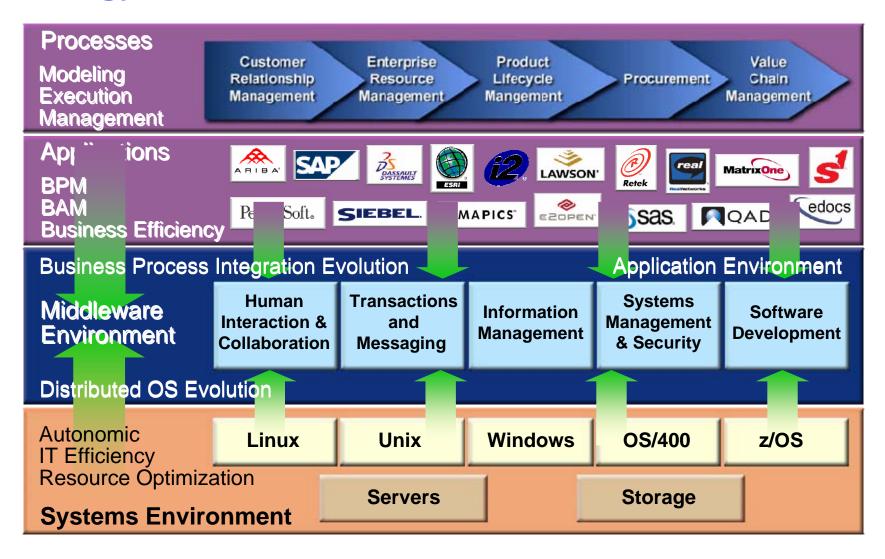
IT simplification through automation and virtualization, enables access to and creates a consolidated, logical view of resources

Open standards are required for an on demand operating environment



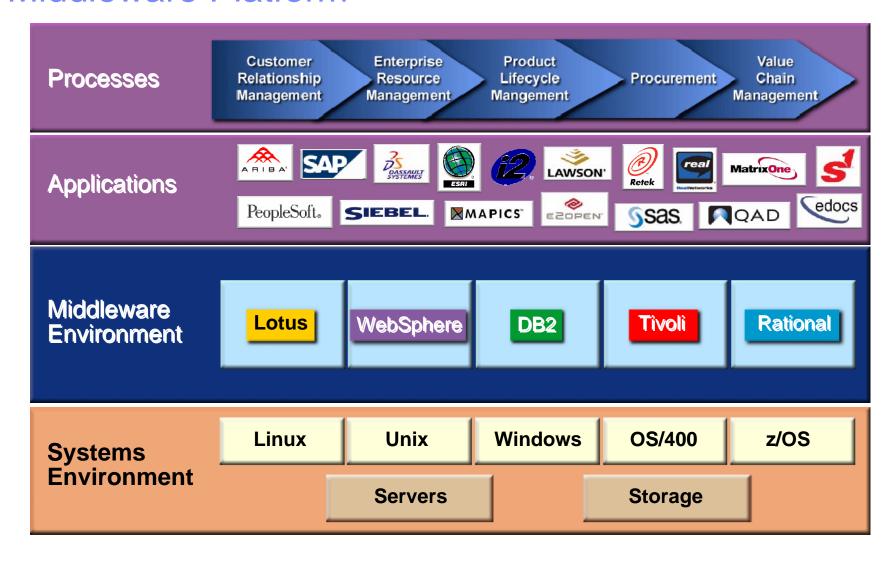


### Strategy: Middleware





### Middleware Platform





### Why Middleware?

#### Integration

Businesses spend 40+% of their IT budget on integration ..... mostly labor

#### **Efficiency**

Rapid development and deployment

#### **Choice**

Promotes a vibrant ecosystem/ promotes application variety

#### Scale

Required to meet today's transaction / traffic rates

#### **Flexibility**

Layered architecture allows easy adaptation to changing needs ......
 On Demand

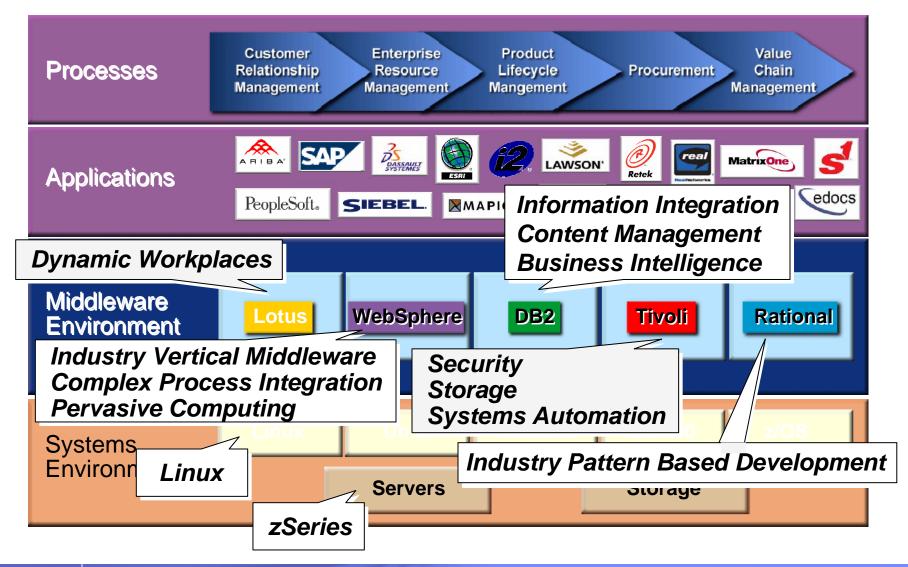


### Strategy: Evolve the middleware stack

- IBM is investing with a vision and an architecture, that incorporates many individual decisions and steps to make a superior middleware platform:
  - Evolve & enhance current portfolio
  - Adopt open computing, an open platform and leverage open source
  - Componentize for reuse of software assets
  - Focus on an integrated architecture
  - Focus on the end user experience
  - Focus on Industry solutions

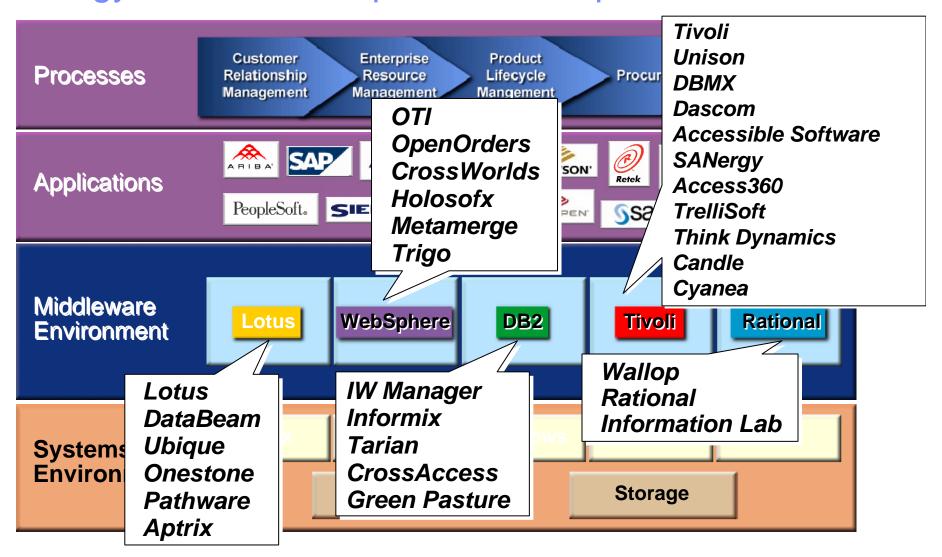


# Strategy: Evolve the portfolio



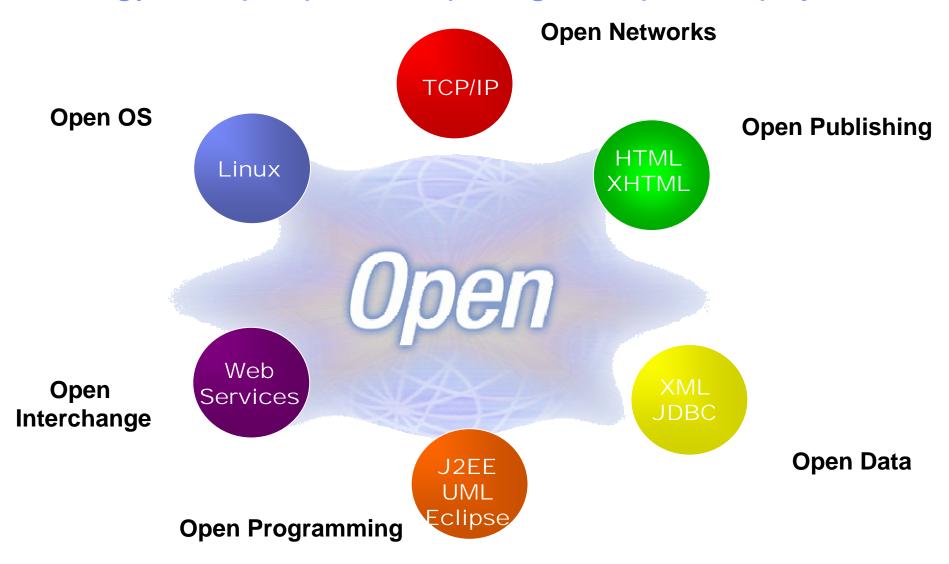


### Strategy: Enhance the portfolio - Acquisitions





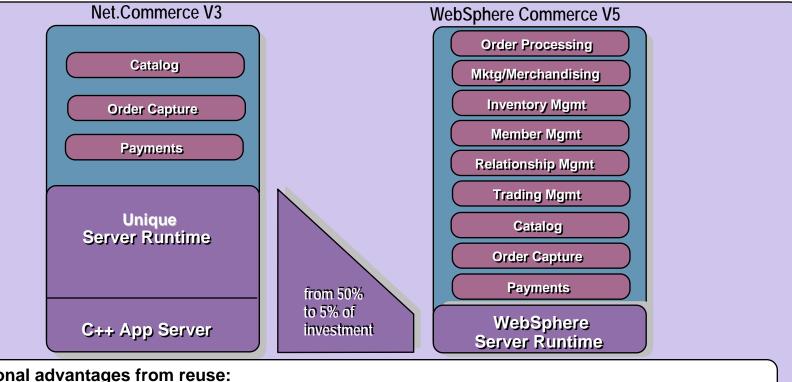
## Strategy: Adopt open computing as a philosophy





## Strategy: Reuse software

#### **Example: WebSphere Commerce**



#### Additional advantages from reuse:

- Extensive use of IBM A/D tooling (VAJ, WSAD) provided productivity gains (500+KLOC generated in V5.5)
  - Also benefiting from features like object-level caching not possible with Commerce team working alone
- Less cross O/S platform testing required over time, due to increasing confidence in foundation O/S support

#### **Key pressures on development/test:**

- Bundling WAS, WSAD, Sametime, Quickplace, Directory Server, DB2, etc
- Currency with versions of O/S, Application Servers, Web Servers, Databases, Directory Servers, Browsers, Security, etc.
- Productivity impacts resulting from complex problem determination, and EoS concurrency issues with bundled products





## Strategy: Reuse software

#### WebSphere

### Example: WebSphere reuse

### WAS technology has been reused by numerous SWG

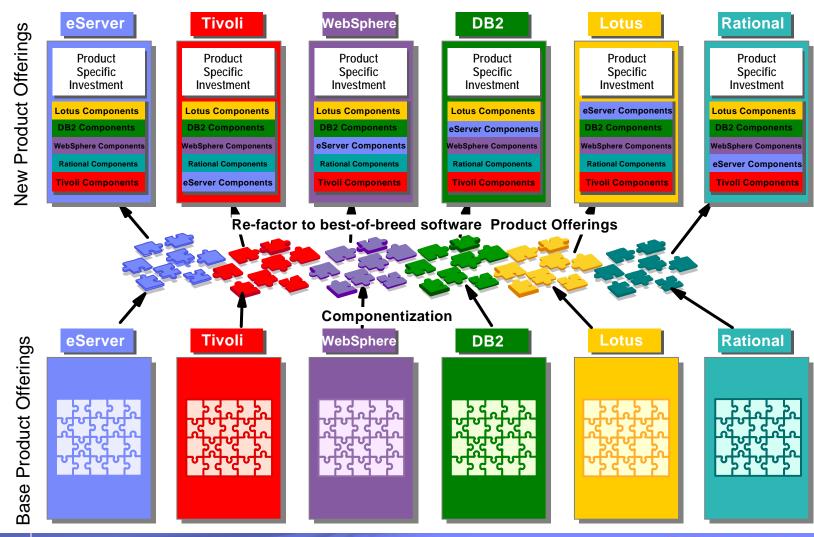
- · wpspoduct offerings
  - Commerce
  - WSAD
  - WSSD
  - WebServices Toolkit
  - Host Integration
  - Business Integration Connect
- Tivoli
  - Policy Director
  - Privacy Manager
  - Service Level Advisor
  - Access Manager for e-business
  - Identity Manager
  - Monitoring
  - Storage Area Network Manager

- Lotus
  - Portal
  - Domino
  - Workplace Messaging
  - Learning Management System
- Pervasive
  - Voice Systems
- Data Management
  - UDB Universal Developers Edition
  - DB2 Everyplace
  - Information Integrator
  - XML Registry
- Systems Group
  - AIX Bonus Pack
  - CICS Transaction Server
  - GRID
  - Storage ESS
  - Total Storage Expert





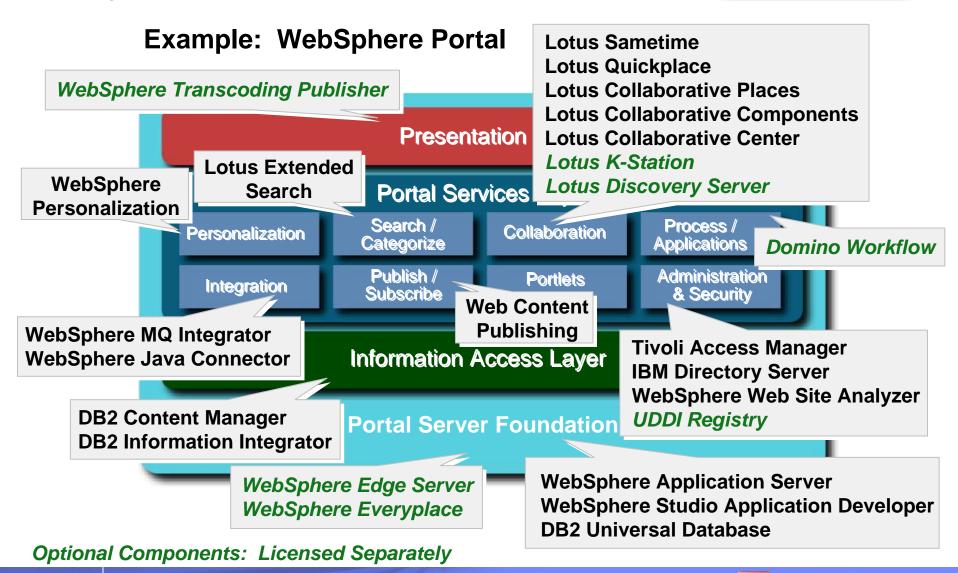
## Strategy: Componentize for increased flexibility





# Componentization

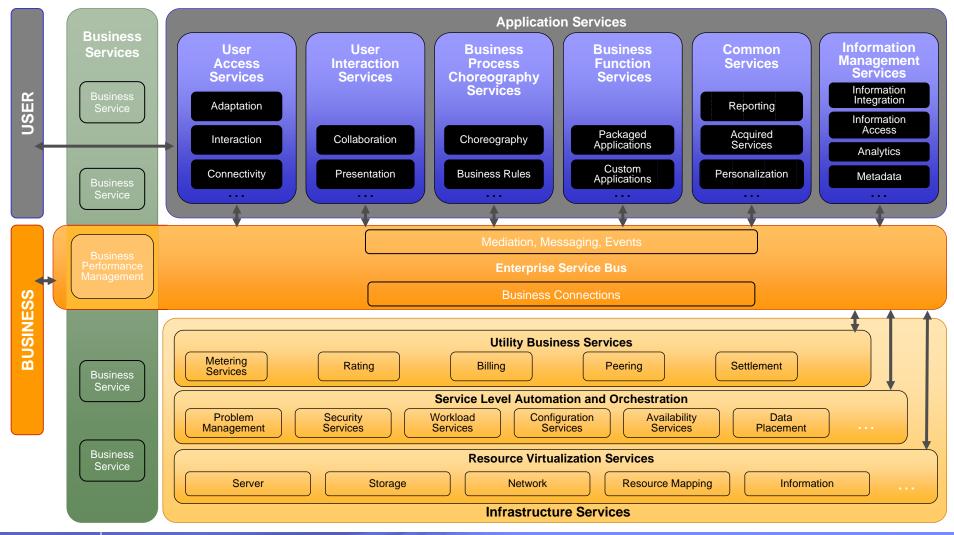
WebSphere





## Strategy: Focus on architecture

### **Operating Environment Architecture**





# Strategy: Focus on integration

Service Oriented Architecture (SOA)

A framework for incorporating Web services across and between

enterprises **Portal Service** SOAP Service Request Ellenise Senice Bus (e.g. J2EE, .NET) B<sub>2</sub>B Interactions Service Flow Data Existing **Applications** New Service Logic





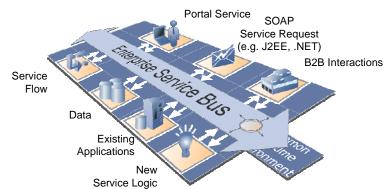
# Service Oriented Architecture (SOA)

- A <u>Service Oriented Architecture</u> enables flexible connectivity of applications or resources by
  - representing every application or resource as a service with a standardized interface,

 enabling them to exchange structured information (messages, documents, 'business objects'),

 mediating the message exchange through a service integration bus,

 providing on-ramps to the bus for legacy application environments



- This allows quick combination of new and existing applications to address changing business needs and improve operational effectiveness by managing the topology of the application 'network'
- The SOA infrastructure is also used to facilitate the management of business performance and quality of service



# Strategy: Focus on internal integration and customer consumability



Establish a product family delivery and rollout approach across all SWG Portfolio products to assist customers in planning global deployment

#### **Objectives**

### **Platform Consistency**

- ► Support Customer View of Platform **Solutions** 
  - ► Timing and method of delivery
  - ► Pre-regs and co-regs
  - ► Operating system levels
  - ► Toleration Support
  - **►** Customer Support



#### Results

#### **Enhancing the Platform**

- √ Cross platform consistency
- √ Validate the customer Lifecycle
- √ Component usage
- **✓Open Source usage controls**
- √ Cross Platform solution integration
- ✓ Established cross-Platform "Imperatives"
  - Drives consistency across the Platform
  - Look and feel
  - Install
  - Standards compliance
- Total solution resiliency







**WebSphere** 

Rational.





## Strategy: Focus on high growth markets

### Express products for the mid market

**IBM WebSphere BI Connect Express** 

IBM WebSphere BI Express for Item Synchronization

**IBM WebSphere Commerce Express** 

**IBM MQ Express** 

**IBM DB2 Content Manager - Express** 

**IBM DB2 Everyplace – Express** 

**IBM Lotus Domino Utility Server Express** 

**IBM Lotus Domino Collaboration Bundle Express** 

**IBM DB2 Universal Database Edition Express** 

**IBM Tivoli Storage Resource Manager Express** 

**IBM WebSphere Portal Server Express** 

IBM WebSphere Application Server Express

- Priced to Market
- Easy to Install
- Easy to Manage

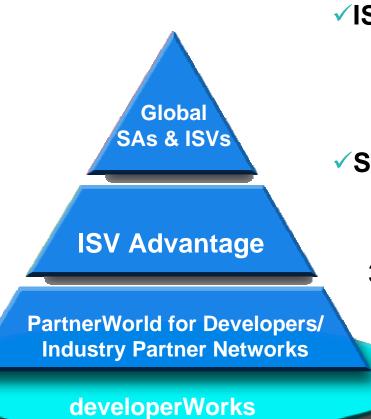
- Complete SW Solution
- Easy to Integrate
- Right Function

- Easy to Learn & Use
- Extensible & Flexible
- Reasonable Footprint





### Strategy: Build an ecosystem



#### **✓ISV Programs**

150+ new ISV *Advantage* Program 2300 new Apps enabled in 2003 68,000 PartnerWorld for Developers

#### √ Skilled Providers

3.5M Registered Developers2,000 Advanced and Premier Level33,000+ Certified on IBM Middleware









# For more information please visit: www.ibm.com/software

