



IBM Software Group

## Competitive Overview



@business on demand software

# Agenda

- Our Message
- Key Differentiators
- How we stack up to
  - ▶ Tibco
  - ▶ Oracle
  - ▶ SAP
  - ▶ Microsoft
  - ▶ BEA
- Back up








# IBM WebSphere Process Integration changes the story

## Process Integration Empowered by WebSphere raises the bar:

- ✓ Built on a Services Oriented Architecture powered by an ESB
- ✓ Reduce time with reusable modules for business rules, human tasks, and state machines
- ✓ Extend your reach to any service across your enterprise
- ✓ Do this with less cost through the single integration framework
- ✓ This allows you to solve higher level business problems more quickly and more easily
- ✓ It extends and enhances the value of SOA



## Who's the competition we are focusing on?

	Heritage	Competitive Team Resource
	Application Solutions Vendor	Lloyd Adams, SAP SWAT team (WBI) Mark Wayman, Technical Sales (WPC) Mark Macnamara, SAP SWAT team (WS Portal)
	Database Company	Jonathan Langley, Competitive Sales Hans Baer, SWG Competitive Project Office
	Client based operating systems and applications	Jonathan Langley, Competitive Sales
	Application Servers	Jonathan Langley, Competitive Sales Roman Kharkovski, Technical Sales
	Application Integration Broker	Jonathan Langley, Competitive Sales

### The things they all have in common:

- They want to be like IBM
- They are trying to transform themselves into a SOA solutions provider
- Buying companies and not successfully integrating the products

# Nobody provides investment protection better than IBM

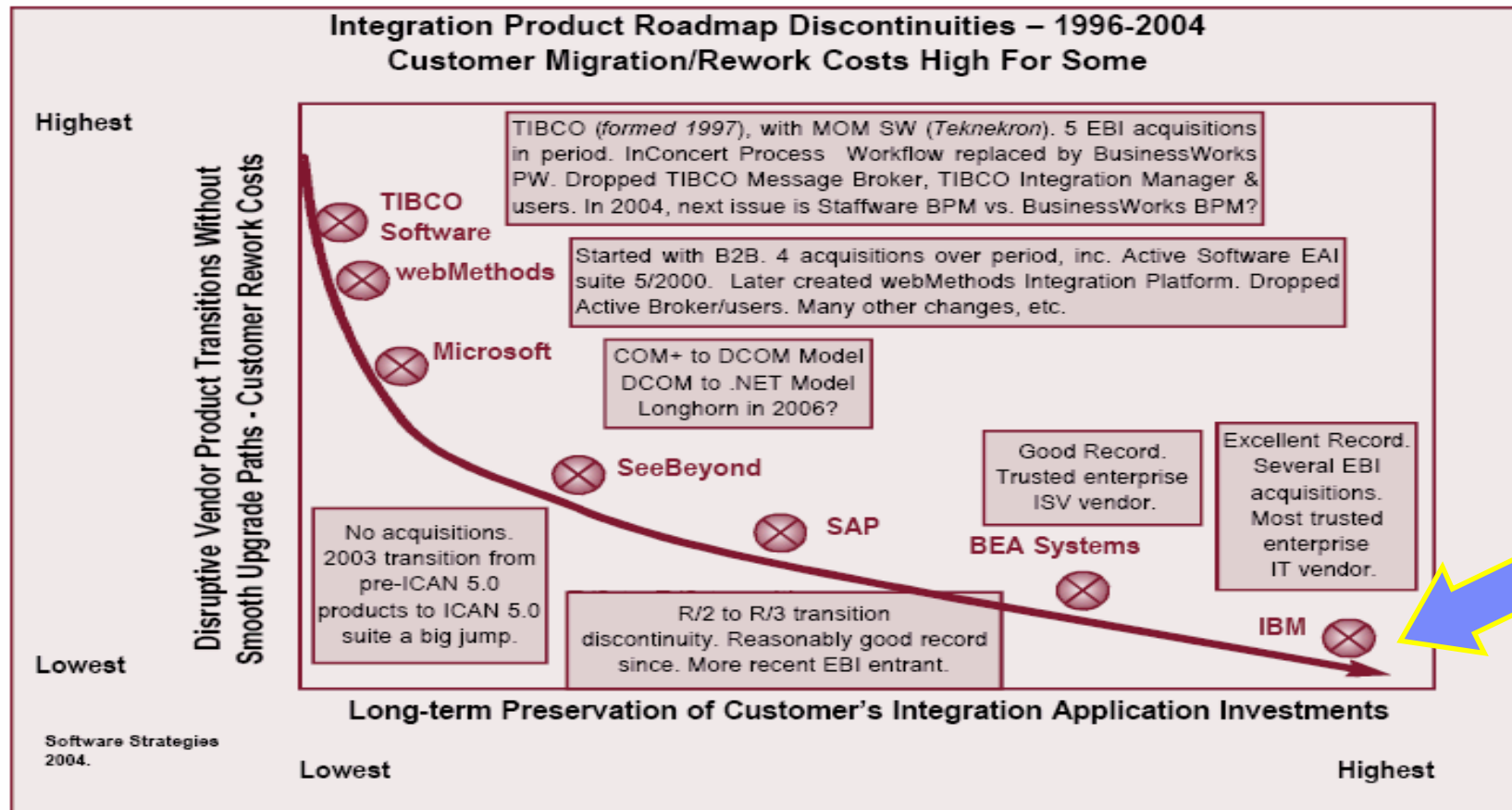
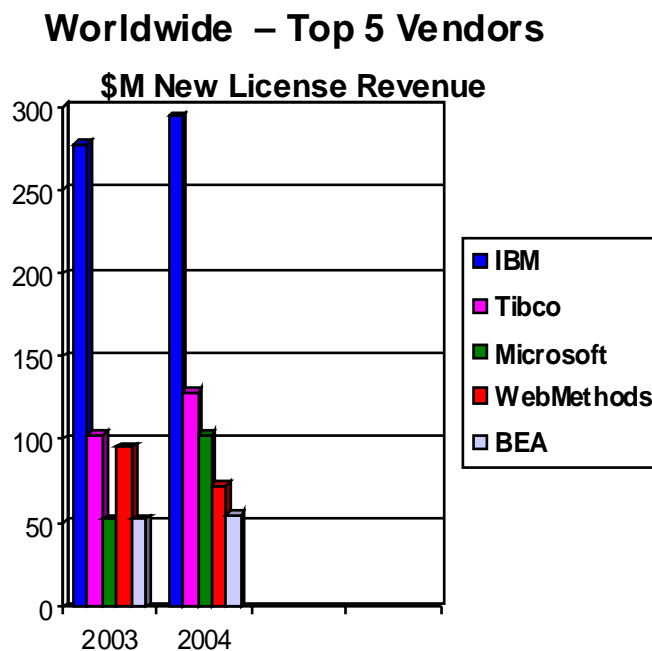


Figure 8: Integration Product Roadmap Discontinuities – 1996-2004 Customer Migration/Rework Costs High for Some

## Team IBM

- Nobody has the depth of knowledge or years of experience we do
- Extensive services available to ensure customer's success
- Extended team through our System Integration and Business Partners
- We lead in market share, the others are trying to catch up

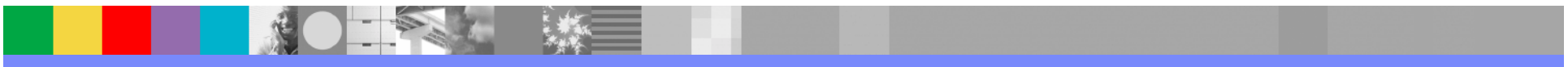


### Worldwide Integration Suites New License Revenue

Vendor	2004 market share rank	2003-04 growth +/-
IBM	1	+
Tibco	2	+
Microsoft	3	+
WebMethods	4	-
BEA	5	+

## Competitive Differentiators of V6

- Strength of Portfolio to meet Business and IT needs
- Modeling
- Process Automation
- Monitoring



# Key Differentiators - Business Messages

The right business solutions in time to win by giving you:

- Ability to **align your IT to your business goals**. Your IT department can deploy the business designs quickly, correctly, and cost effectively through an SOA Infrastructure.
  1. Single Infrastructure to streamline business processes that span people, partners, task, data, applications, and architectures.
- **Visibility into the performance of your business operations**.
  1. End to end lifecycle of business process which gives you information on your business in terms that you can understand.
  2. Ability to intervene and change the course of your business based on events or trends as they emerge.
- Tools to **optimize your business design** based on the things which matter to you.
  1. Competition forces you to optimize around their data model.
  2. Optimize around what is important to your business
  3. IBM WebSphere Business Modeler enables you to model and run business processes around your specific profit model.





# Key Differentiators - IT Messages

**Allows your IT organization to do more with less by giving you:**

- **IBM Business Process Management for SOA.** Architecture which allows you to compose business solutions more quickly by reducing project costs through reusing what you have and what you create. The only BPM solution in the market that provides a process-centric SOA platform:
  1. Reduce Time - reusable modules allow you to use what you develop over and over. Reusable modules include:
    - ✓ Business Rules
    - ✓ Web Services
    - ✓ Human Tasks
    - ✓ State Machines
  2. The only BPM solution in the market that provides a process-centric SOA platform
- **Tooling for all of your business process integration work** in one place, one programming model, simplified to minimize training and optimize efficiency
  1. Less Cost – you don't need as many skills to build out solutions. Unified Programming Framework allows you to do more on a single platform with the same skill set.
- **IBM WebSphere Process Server with ESB inside.**
  1. Reach to any services across your enterprise to extend the scope of solutions quickly and easily
  2. The only integration server in the market built on an open standards ESB.
- **IBM WebSphere Process integration on open standards.** Don't be tied to a specific technology. Protect your investment with solutions that can interoperate and be expanded. IBM is the strongest in the market for open standards support:
  1. Java and J2EE, BPEL, CBE



## WebSphere Process Modeling

- **Model what matters**
  - ▶ Fully expose and comprehend all the aspects that drive your business operations, both before and after transformation
- **Collaborative Modeling**
  - ▶ Work effectively in teams for speed and efficiency
- **Tight linkage with I/T**
  - ▶ Tie the Business Process Modeling activity into business process automation
  - ▶ Enable methodologies, such as Business Driven Development



## WebSphere Process Automation

- **A Unified Process Automation Framework**

- ▶ Service Component Architecture that delivers simple programming model which unifies and simplifies underlying IT
- ▶ ESB inside

- **Support for Truly Dynamic Processes through the use of non-traditional programming**

- ▶ Solution Assembly by wiring services components for rapid development
- ▶ Business Rules, Business State machine, Selectors, Human tasks, escalation

- **Scaleable, Secure, High Performance Process Execution**

- ▶ High Availability Manager for proactive fault detection and recovery
- ▶ Clustering and support for SAN
- ▶ WAS based security model



# WebSphere Process Management

- **Real time visibility into process execution**
  - ▶ Business Dashboard for improved visibility
  - ▶ Rich set of Visual interfaces for monitoring events
  - ▶ Aggregation and correlation of events to business triggers
- **Active Intervention in process execution**
  - ▶ Action Manager Tooling that maps events to actionable business response.
  - ▶ Observation Model for Goals driven Business Execution
- **Closing the loop with Business Process Modeling**
  - ▶ Observation model that allows feeding observed data to business models for continuous and sustained improvement



## How we stack up





### Strategy

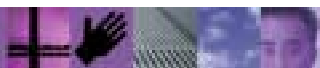
- Demonstrate that Service-Oriented Architecture (SOA) and Event-Driven Architecture (EDA) are complementary initiatives, both support a business to achieve agility and rapid change in applications through modularity
- Provide a complete range of integration solutions for all companies who want to realize the “predictive enterprise”
- Leverage leading SOA analyst – Meta/Gartner
- Industry focus - FM, HC, Telco – pre-built frameworks
- Keep SOA message simple

### Key Messages/Tactics

- TIBCO delivers a real-time enterprise architecture by providing the deep capabilities over and above those found in SOA and EDA vendor offerings today:
- TIBCO has a track record of helping customers successfully implement a real-time enterprise architecture that leverages the synergy of SOA and EDA to solve real business problems
- Only TIBCO has a proven and complete infrastructure to support SOA and EDA, and has been helping thousands of customers achieve business agility for about 15 years.

### Weakness

- Complex product suite, interfaces and tools (4 different development tools)
- Investment protection – products in transition
- No application server and a limited J2EE story, except for JMS messaging
- Performance, Reliability and Scalability issues
- Lack deep global sales and support coverage
- Problems executing in EMEA



## What do we say?

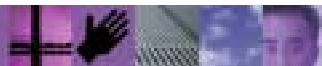


- Process Centric SOA
- Modeling Strength
  - Accurate, collaborative, Tight linkage to IT
- Tooling for all of your business process integration work in one place
- Built on WebSphere Application Server, open standards
- Strength of IBM

The Power of Now®

### Position against these weaknesses:

- Complex product suite and being sued because of Staffware integration issues
- No true modeling capability - 3rd party product required
- Investment protection – products in transition and company take over rumor persist
- Weak portfolio - no application server and a limited J2EE story, except for JMS messaging, poor portal offerings



# ORACLE<sup>®</sup> SOA

## Strategy

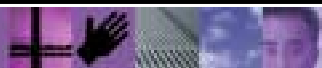
- Provide a complete suite of service-oriented pre-integrated applications
- Position Oracle 10g as a full service standards compliant SOA platform
- Leverage its position in database and application
- Lock-in customer via tight integration of apps/middleware
- Differentiate its integration platform by technical superiority particularly focusing on BPEL

## Key Messages/Tactics

- The "application platform suite" is Oracle's application infrastructure based on SOA
- Oracle BPEL Process Manager Facilitate SOA Implementation and Simplify Integration for Customers
- Easy integration, industry expertise, time to value, open standards
- New BPEL program targeting ISVs is chalked full partner support
- Roadshows

## Weakness

- Most new initiatives are proprietary to Oracle architecture – limited integration and interoperability
- Lacks broad industry specific specialization and templates\*
- Incomplete vision. spotty communication & support\*
- Oracle JDeveloper quality and depth of implementation often does not match IBM and often requires 3<sup>rd</sup> party tools
- Complexity in deployment and testing
- Modeling tools





## What do we say?

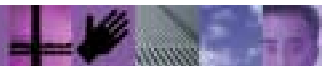



- Process Centric SOA
- Modeling Strength:  
Accurate, collaborative, Tight linkage to IT
- Support for Dynamic process through the use of non-traditional programming
- Strength of IBM breadth and depth, not just a database company



### Position against these weaknesses:

- Oracle architecture – limited integration and interoperability
- Poor performance
- Incomplete vision. spotty communication & support\*
- Oracle JDeveloper quality and depth of implementation often does not match IBM and often requires 3rd party tools
- Complexity in deployment and testing
- Modeling tools



# SAP Enterprise Services Architecture – Answer to SOA

## SAP ESA Strategy and Messaging

- **SAP announced its vision of the future – the *Business Process Platform*, revolving around **NetWeaver** and delivered through **Enterprise Services Architectures (ESA)**.**
- SAP is actively courting ISVs to build composite applications for NetWeaver. **Announced 3/05, the new program and SDK is intended to grow the existing base of ISV's**
- SAP positions ESA as a “.....cost-effective blueprint for composing new applications **by extending existing systems with high levels of adaptability and move towards the vision of a real-time enterprise.**” SAP, Enterprise Services Architecture – An Introduction, 50-071-096 (04/11)
- NetWeaver Proposition : Unifies and aligns people information and business processes **by reducing complexity, reducing custom integration, enhances company performance and reduces TCO.**
- **During the Q404 SAP Earnings call, Henning Kagermann, SAP's CEO stated that “We decided to merge these two layers – the integration of NetWeaver with the reusable components into a business process platform. This also gives us the opportunity in the future for SAP to expand beyond enterprise application.”** - Henning Kagermann, SAP Q404 Earnings Call, 26 January 2005

## SAP ESA Actions :

- **Pushing R/3 install base to migrate to mySAP by 2006 – NetWeaver bundled in for “free” (non SAP integration has additional costs and other parts have a fee like MDM)**
- **Launch of the ESA Adoption Program – customized customer roadmap to ESA**
- **Announced at Sapphire, May 05: Partnering with Microsoft on “Mendocino” that will integrate components of their respective enterprise and desktop software systems.**

## SAP Weaknesses:

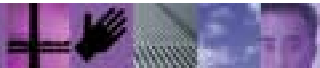
- **SAP “middleware” is new, immature, and as a result, highly risky. SAP NetWeaver has limited experience/ capabilities in heterogeneous environments and working outside SAP.**
- **SAP customer upgrades are time consuming and expensive. Customer migrations from legacy SAP applications to NetWeaver may result in unexpected and costly challenges, especially in non-SAP environments.**
- **SAP NetWeaver requires specialized technical expertise that may not be available in-house.**
- **SAP NetWeaver has limited capabilities outside the SAP environment. Specifically, it features only 5 adapters from SAP and depends on third party vendors for modeling tools and additional adapters. Limited Master Data Management and Business Activity Monitoring (BAM) capabilities.**

***“SAP's worst nightmare is that its applications turn out to be the software that is integrated, rather than being the integrator, marginalizing its presence in companies to legacy status.”***

***IDC Corp., The SAP NetWeaver Strategy Firms Up, January 2005***

## What about ARIS and NetWeaver?

- Aris' Story – Seamless flow from SAP to modelling to run time execution
  - ▶ Only ARIS has 1,800 SAP leading practice process flows
  - ▶ Only ARIS can pull from/put back these models into SAP's Solution Manager
  - ▶ With ARIS, you can model, put the models into Solution Manager, and run the models in SAP XI
- The Reality – No seamless flow from modelling to execution with ARIS/SAP
  - ▶ ARIS models are not executable. There is NO seamless flow from modelling to execution.
    - With ARIS, you simply can document your processes and put this documentation into SAP's Solution Manager.
    - You must recreate models manually to get these to execute in SAP XI
  - ▶ ARIS has 1,800 SAP's "leading practice" process flows. These are limited to a SAP environment (not your heterogeneous environment). However, separate industry-specific "best practice" process flows are delivered by GSI's in the format of their choice



## What do we say?

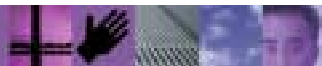


- Process Centric SOA
- Tools to optimize your business design with tight Linkage to IT
- Support for Dynamic process through the use of non-traditional programming based on open standards
- Built on WebSphere Application Server
- Strength of IBM



### Position against these weaknesses:

- No best-of-breed technology
- Lack of open standards and poor standing within the Java development community.
- SAP “middleware” is new, immature, and as a result, highly risky.
- SAP NetWeaver has limited experience/ capabilities in heterogeneous environments and working outside SAP.



**Now:** Microsoft currently position's SOA as a set of technologies that are still evolving, yet extremely important to the company:

Feb 2005 Bill Gates, in an open letter to Microsoft and the public: ..two major thrusts of Microsoft's product interoperability strategy: 1) we continue to support customers' needs for software that works well with what they have today. 2) we are working with the industry to define a new generation of software and Web services based on XML, which enables software to efficiently share information and opens the door to a greater degree of "interoperability by design" across many different kinds of software..

Current 'SOA like' solutions are built around the following technologies and products:

➤XML ➤COM/CO ➤Visual Studio ➤.NET ➤MSMQ ➤BizTalk

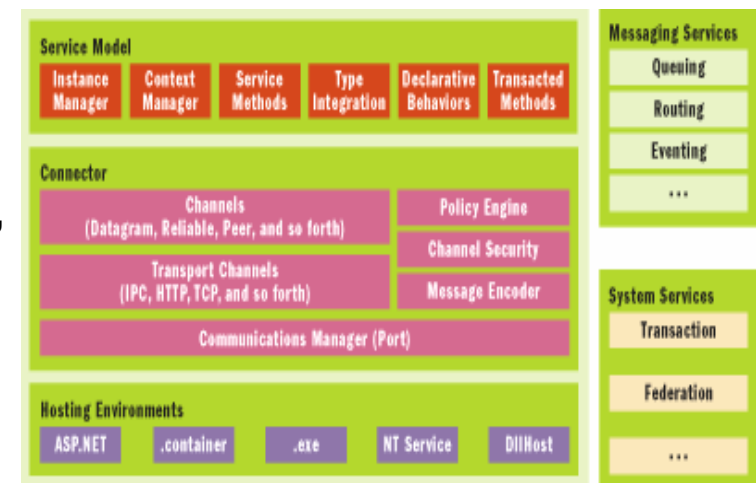
Microsoft's offerings tend to lag behind IBM, yet industry perceptions tend to give them high marks for apparent SOA capabilities

**Future:** Microsoft's SOA strategy is based around .NET and set of future extensions named Indigo

Indigo extends .NET Framework, Visual Studio, BizTalk

Currently in beta, plan to ship Indigo with LongHorn' (next version of Windows) sometime in 2006

Mar '05: Forrester predicts that Indigo will strongly position Microsoft against leading SOA vendors such as IBM



## What do we say?




- Truth in Modeling
- Collaborative Modeling
- Tight Linkage to IT
- Built on WebSphere Application Server
- Closing the loop with Business Process Modeling
- Strength of IBM

Microsoft

### Position against these weaknesses:

- Lack of BPM offering
- Scalability and performance
- Evolving process integration efforts
- Frequently delays in product releases
- .NET based is proprietary
- TCO
- Poor track record of integration and security
- Limited functionality, no costing, template driven (visio)
- Move into enterprise space will pose challenges, especially lack of professional services division



## BEA has been struggling with license revenue in their attempts to reach the Web Services market

BEA 'brain drain' apparent as they struggle with continuous line of SOA "Projects"

Project Sierra, QuickSilver, Alchemy, Liquid Data and Free Flow have all been merged or end-of-lived

Jan '05 releases SOA Evaluator Tool, and established new SOA Services Group

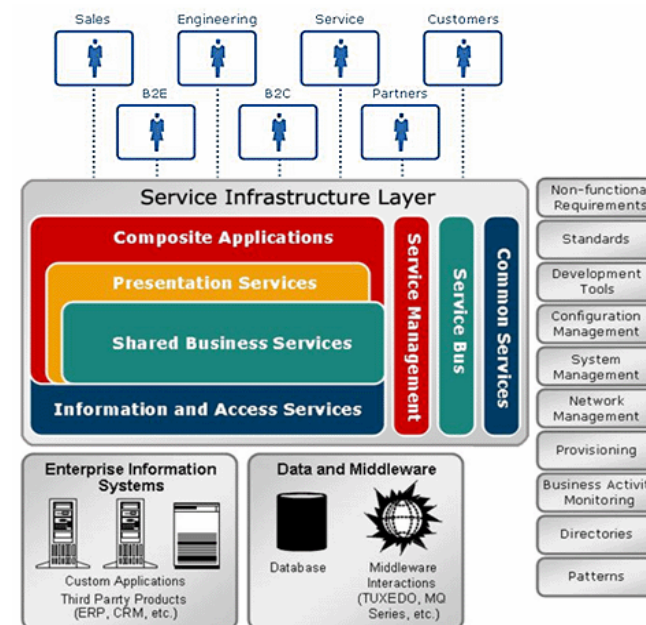
## June 9, '05 BEA announces 'Aqualogic' a new product line focused specifically on SOA It is comprised of:

AquaLogic Messaging, an ESB and WS-Mgmt entity due at the end of June

AquaLogic Service Registry, based on UDDI 3.0 to store SOA services

AquaLogic Data Service (formerly Liquid Data) for application and service modeling

AquaLogic Enterprise Security - a unified framework



SOA Reference Architecture



## What do we say?



- Truth in Modeling
- Collaborative Modeling
- Tight Linkage to IT
- A Unified Process Automation Framework
- Support for Dynamic process through the use of non-traditional programming
- Built on WebSphere Application Server
- Closing the loop with Business Process Modeling
- Strength of IBM








### Position against these weaknesses:

- Viewed as a niche player in Web Services (Gartner)
- WebLogic platform has complex, and costly administration and management requirements for the platform and for composite applications. (Forrester, March, 05)
- Platform-centric view puts company at disadvantage with competitors focused on heterogeneous environments
- Unsuccessful track record in integration market, was gaining share quickly, but integration revenue momentum has stalled
- 6 Key execs departed in 2H04; BEA replacing with new execs, but continuity in leadership is gone








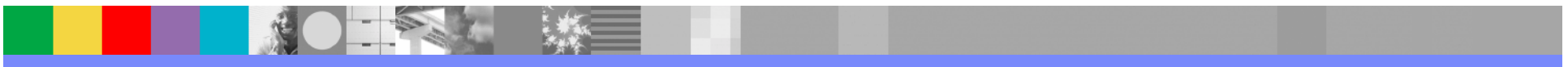
## SOA Competitive Positioning Summary

	Status	Weakness	SOA Product Coverage
	Regrouping New SOA vision announced AquaLogic ann June 9 Solid App Server base	Turmoil Executive and technical brain drain Vision a moving 'Project'	Single ESB product, but lacks depth. No BPM Heavy reliance on partner connectors
	Strong capabilities in some areas Interoperability is new paradigm	SOA strategy lags IBM and others Based on .NET	No BPM MSMQ not as functional Building on Longhorn, Indigo
	10G to be the standards based SOA platform New BPEL program targeting ISVs	Most new initiatives are proprietary to Oracle Acquisition issues	Products in most areas, but reliance upon 3 <sup>rd</sup> party SW Oracle JDeveloper not as complete
	Pushing ESA and NetWeaver hard with partners and bundling for customers	NetWeaver & ESA not a proven tech to develop on Lots of SAP specific proprietary components	Product Offerings in most areas. Does not have a complete ESB offering
	Struggling with profitability issue of late	Complex product suites Effective marketing in EMEA	No Business Appl Srvr Good ESB & Connector and Messaging products

## Competitive plays in 3Q

Program	Competitive Focus	Purpose	Key deliverables to look for in 3Q
Extend WS Value to SAP customers		Protect WS install base and grow presence in SAP accounts	<ul style="list-style-type: none"> <li>▪ Ad campaign targeting SAP customers</li> <li>▪ Demand generation activities</li> <li>▪ Presence at SAP events</li> <li>▪ Scenario-based sales kit</li> <li>▪ SAP WebSphere Brochure</li> <li>▪ SAP Demo</li> <li>▪ SAP Tech Ed Participation (Vienna/Boston)</li> <li>▪ SAP ROI/TCO study</li> <li>▪ SAP w3. article</li> <li>▪ SAP WebSphere news Flash</li> <li>▪ SAP Pricing Model</li> <li>▪ AR/PR FAQ/Q&amp;A</li> <li>▪ Drumbeat communications</li> </ul>
Support competitive winback play	 	Provide drumbeat messages and core deliverables in support of ongoing competitive winback campaign	<ul style="list-style-type: none"> <li>▪ Analysis of competitor moves and inputs into SOA and Diamond messages and activities</li> <li>▪ Tibco customer brochure/presentation</li> <li>▪ BEA customer brochure/presentation</li> <li>▪ Drumbeat communications</li> </ul>

# Back Up



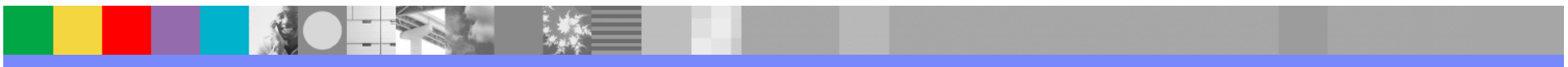
## *Aris v Modeler Negative differentiation / Rebuttals*

- SAP Integration
  - ▶ **IBM Modeler has no automatic integration with SAP Solution Manager SAP, SAP XI or xSAP.**
- The real value of Modeler is in producing actionable and executable business models based on the business processes identified in SAP Solution Manager. Each customer is going to have its own variations on those SAP business processes, plus extensions of those processes required to integrate with other enterprise applications. Modeler's ease of use in capturing those business processes, combined with its powerful simulation and reporting capabilities, helps customers focus on achieving improved business value and then quickly implementing the new processes to capture that value.
- Reference Material
  - ▶ **IBM Modeler does not come with any predefined Reference Business Processes.**
- WBIM does have predefined processes. Unlike Aris for NetWeaver, WBIM does not have pre-loaded SAP internal application process per Solution Manager.
- These are only starting points for businesses true process, which has to be defined
- Additional Documentation Support
  - ▶ **IBM Modeler can link to external sources of information but can not take ownership of them, e.g. import a word document.**
- It can however import that word document as a delimited text file, or any XL spread sheet, Visio diagram, XML or FDL information



## *Aris v Modeler Negative differentiation / Rebuttals*

- SAP Centric
  - ▶ **Reference Process Models are only concerned with SAP systems and processes and no attempt is made to cater for heterogeneous environments.**
- IDS Scheer can do this with the total Aris Toolset, NOT Aris for NetWeaver
- The majority of enterprise customers have heterogeneous systems and application environments. WBI Modeler enables customers to model ALL their business processes and the interconnection between all their applications, to gain a comprehensive and accurate picture of the true costs and flows of those processes and opportunities for enterprise-wide process improvement
- Execution Engine
  - ▶ **ARIS does not have an execution engine; models need to be reworked in SAP Exchange Infrastructure before they can be executed**
- WBI Modeler produces executable code in multiple formats, enhancing the productivity and capability to deploy revised business processes using industry standard executable formats (UML, BPEL). Being able to deliver executable code directly to a development environment or application saves additional time and cost in the deployment process.



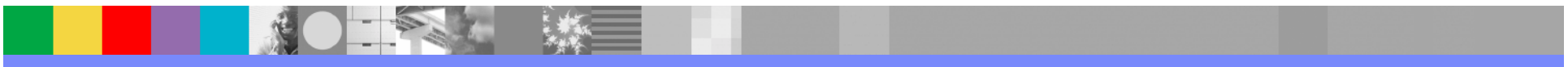
## *Aris v Modeler Negative differentiation / Rebuttals*

- Execution Engine
  - ▶ **ARIS does not have an execution engine; models need to be reworked in SAP Exchange Infrastructure before they can be executed**
- WBI Modeler produces executable code in multiple formats, enhancing the productivity and capability to deploy revised business processes using industry standard executable formats (UML, BPEL). Being able to deliver executable code directly to a development environment or application saves additional time and cost in the deployment process.
- Multiple Components
  - ▶ **The complete SAP BPM stack is made up of multiple components; there is not a single software component solution offered by SAP to address all aspects of the Business Process Management requirement. Multiple skills required across multiple platforms.**
- IBM provides an integrated BPM platform, all based on integrated components and open standards. The common platform and components are supported by a common tooling infrastructure and development environment for maximum productivity.
- SAP present their BPM components as a single stack, although it really is Solution Manager/Arise for NetWeaver, SAP Workflow, and XI ccBPM together.



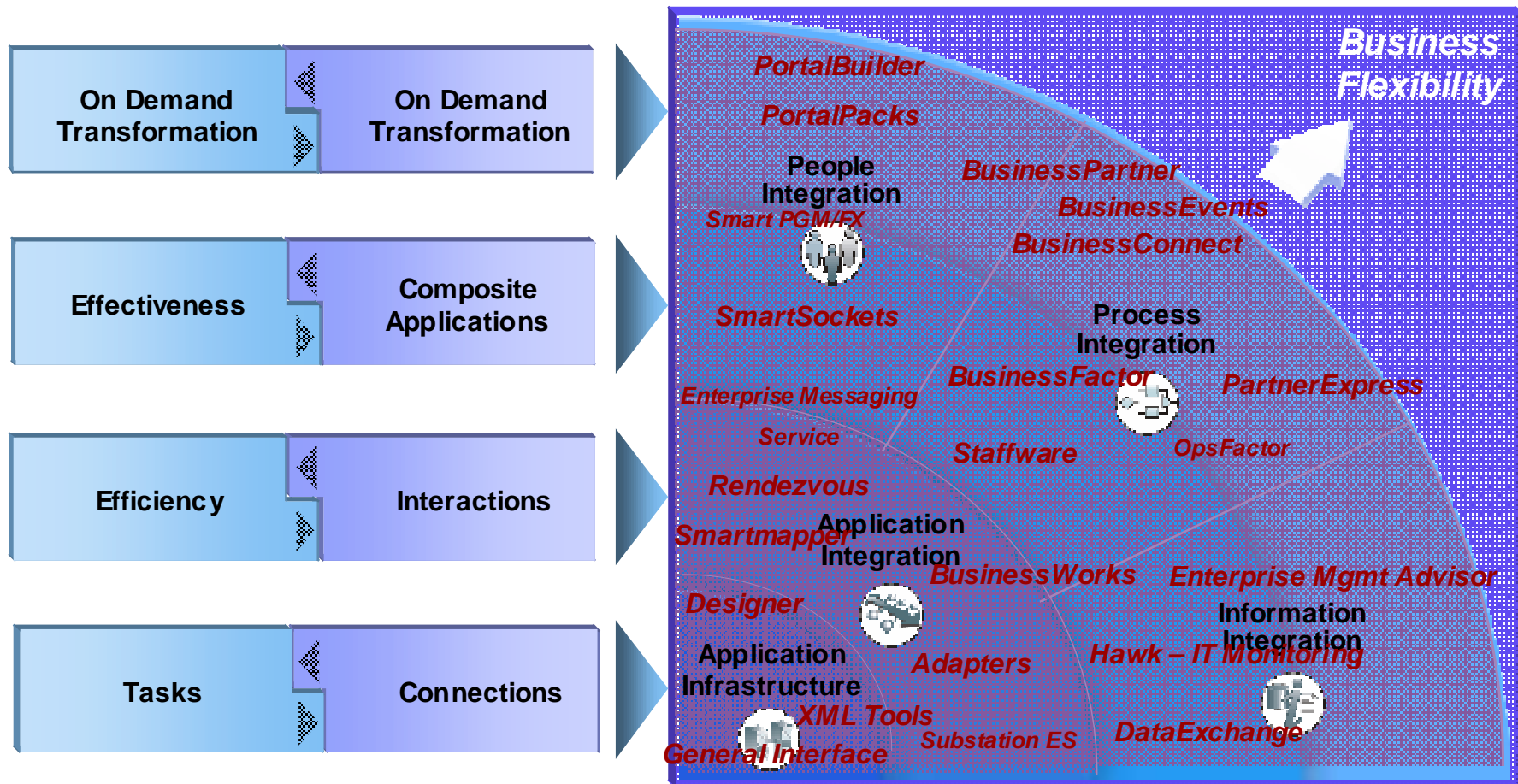
## *Aris v Modeler Negative differentiation / Rebuttals*

- Future Developments
  - ▶ **The current SAP BPM architecture is already planned to be revisited and a new infrastructure is planned, this is going to be confusing to potential clients**
- SAP is telling their BPM story now. The vision is simple, but the reality is confusing.
- Very little has been published about how the new integrated Aris4NW will be an integral part of SAP's NW 2005 release - that indicates the relative immaturity of the offering
- There are also vague licensing issues related to using the integrated Aris beyond SAP
- Standards Enforcement
  - ▶ **Even though it is integrated with SAP Solution Manager the modeler does not enforce the standard, and fixed, SAP document flows. It is possible to design a SAP process that can not be delivered. This would only become apparent during the build phase. We rely upon SAP consultants experience to prevent this from happening.**
  - ▶ *[NOTE: Not-differentiating - This will be the same for all tools]*
- SAP/IDS Scheer would argue that it always is possible to design "broken" processes.
- The modeling tool does not enforce any industry modeling standards, e.g. APQC.
- Further Customization of ARIS formats (like addition of additional Standards) requires the involvement of IDS Scheer consultants
- IBM consultants participate in the use of APQC standards, which is user driven



# Business Integration Enabled by IBM WebSphere

Where does *Tibco* play ?





# TIBCO vs. WBI Product Comparison

BI Ref. Arch	TIBCO Products	Est. TIBCO Strength	Closest IBM product
<b>ESB</b>	<ul style="list-style-type: none"> <li>Enterprise Message Service (EMS)</li> <li>Rendezvous (RV)</li> <li>SmartSockets (SS)</li> <li>SmartPGM &amp; Smart FX (SS PGM)</li> <li>BusinessWorks (BW)</li> </ul>		<ul style="list-style-type: none"> <li>WMQ (EMS, SS, RV, SS PGM)</li> <li>WBI Msg. Broker (BW)</li> </ul>
<b>App. &amp; Data Access Services</b>	<ul style="list-style-type: none"> <li>Adapters</li> </ul>		<ul style="list-style-type: none"> <li>WBI Adapters</li> </ul>
<b>Process Services</b>	<ul style="list-style-type: none"> <li>Staffware Process Suite (SPS)</li> <li>BusinessWorks (BW)</li> <li>BusinessWorks Workflow (BW)</li> </ul>		<ul style="list-style-type: none"> <li>WBI Server (SPS)</li> <li>WBI Server or WBI SF (BW)</li> </ul>
<b>Partner Services</b>	<ul style="list-style-type: none"> <li>BusinessConnect, BusinessPartner &amp; Partner Express</li> </ul>		<ul style="list-style-type: none"> <li>WBI Connect</li> </ul>
<b>Interaction Services</b>	<ul style="list-style-type: none"> <li>PortalBuilder &amp; PortalPacks</li> </ul>		<ul style="list-style-type: none"> <li>WPS</li> </ul>
<b>Business App. Serv.</b>	<ul style="list-style-type: none"> <li>(none)</li> </ul>		<ul style="list-style-type: none"> <li>WAS</li> </ul>
<b>Information Services</b>	<ul style="list-style-type: none"> <li>(none)</li> </ul>		<ul style="list-style-type: none"> <li>WebSphere Information Integrator</li> </ul>
<b>Bus. Perf. Mgt. Serv.</b>	<ul style="list-style-type: none"> <li>SPS Process Monitor or BusinessFactor</li> <li>Hawk (H) and SPS Process Monitor</li> </ul>		<ul style="list-style-type: none"> <li>WBI Monitor (SPS or BF)</li> <li>Tivoli for Bus. Integration (H)</li> </ul>
<b>Development</b>	<ul style="list-style-type: none"> <li>Designer + SPS Process Definer</li> </ul>		<ul style="list-style-type: none"> <li>eclipse-based tooling</li> </ul>

Legend:

Capability

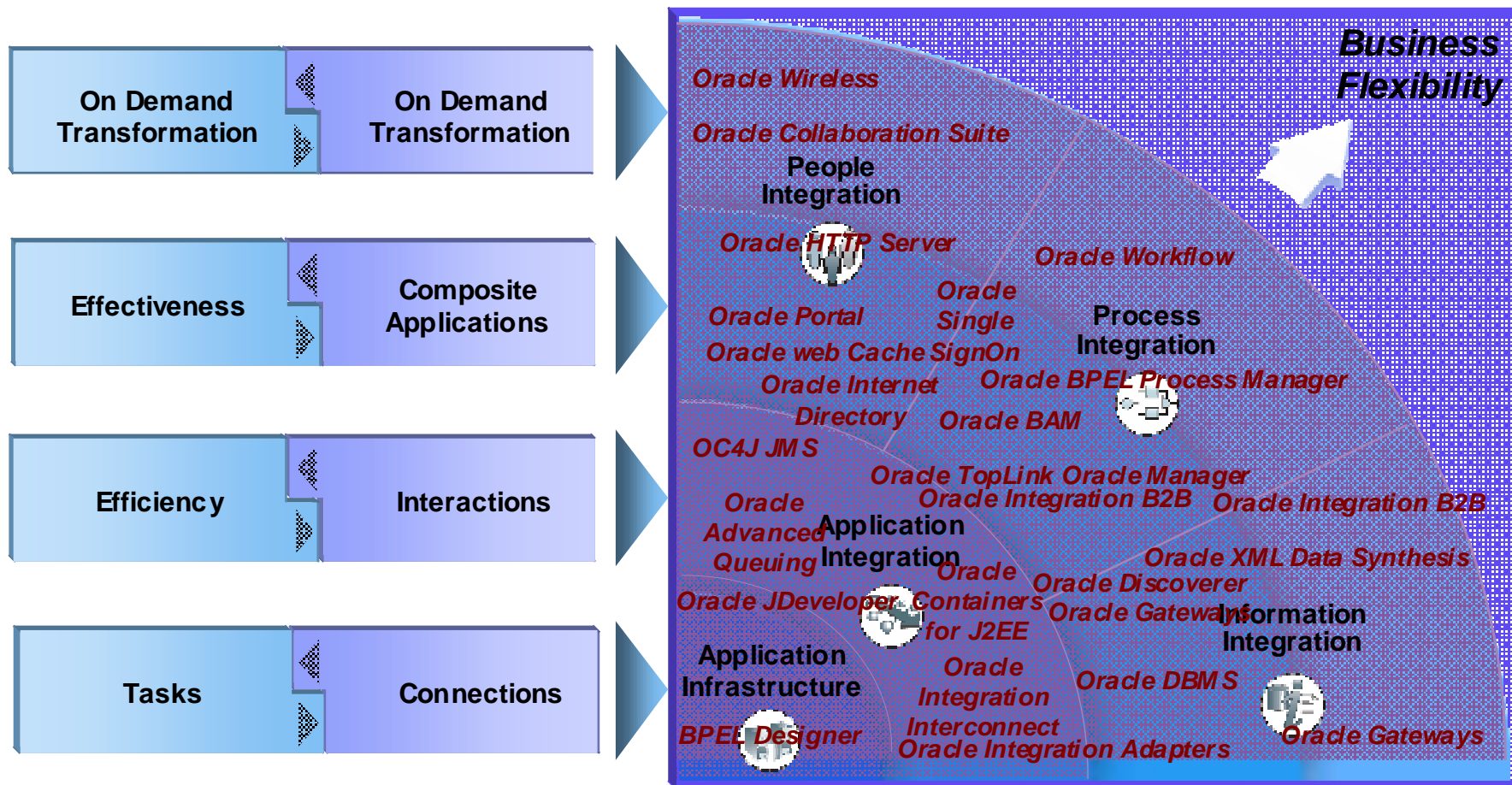
Full

Partial










None

# Business Integration Enabled by IBM WebSphere

*Where does Oracle play?*



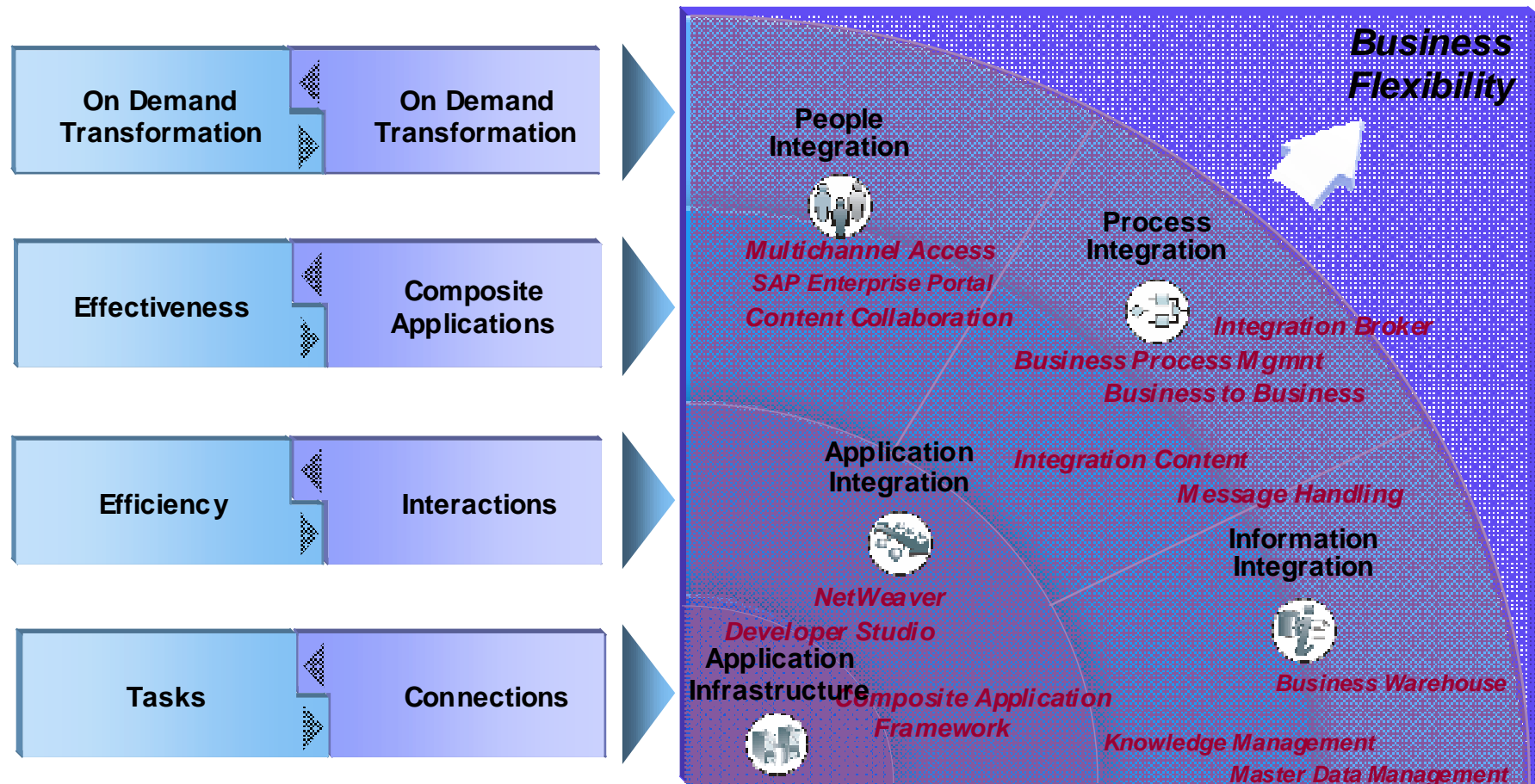
# Oracle vs. WBI Product Comparison

BI Ref. Arch	Oracle Products		Closest IBM product
<b>ESB</b>	▪ Oracle AQ + Oracle InterConnect* + OC4J*		▪ WMQ (EMS, SS, RV, SS PGM) ▪ WBI Msg. Broker (BW)
<b>App. &amp; Data Access Services</b>	▪ Oracle Gateways.Oracle Integration Adapters* + iWay (3rd party, Toplink)		▪ WBI Adapters
<b>Process Services</b>	▪ Oracle BPEL Process Manager (Collaxa)* Oracle Integration* + Oracle Workflow for Java		▪ WBI Server (SPS) ▪ WBI Server or WBI SF (BW) ▪ WBI Modeler
<b>Partner Services</b>	▪ Oracle Integration B2B* + - need 3rd party -		▪ WBI Connect
<b>Interaction Services</b>	▪ Oracle Single SignOn* ▪ Oracle Internet Directory & Cert. Authority* ▪ Oracle Cache*		▪ WPS
<b>Business App. Serv.</b>	Oracle Containers for J2EE* + TopLink* - not possible (WAS XD) , need 3rd party - ( Gateway)		▪ WAS ND, XD, Gateway
<b>Information Services</b>	▪ Oracle Portal*, Oracle Collaboration Suite ▪ Oracle Wireless* + need 3rd party ▪ Oracle HTTP Server (Apache based)* ▪ Discoverer*		▪ WebSphere Information Integrator
<b>Bus. Perf. Mgt. Serv.</b>	▪ Oracle BAM*		▪ WBI Monitor (SPS or BF) ▪ Tivoli for Bus. Integration (H)
<b>Development</b>	▪ Oracle JDeveloper*, Collaxa Designer- need 3rd party -		▪ eclipse-based tooling

Legend: Capability Full  Partial  None 

# Business Integration Enabled by IBM WebSphere

*Where does SAP play?*



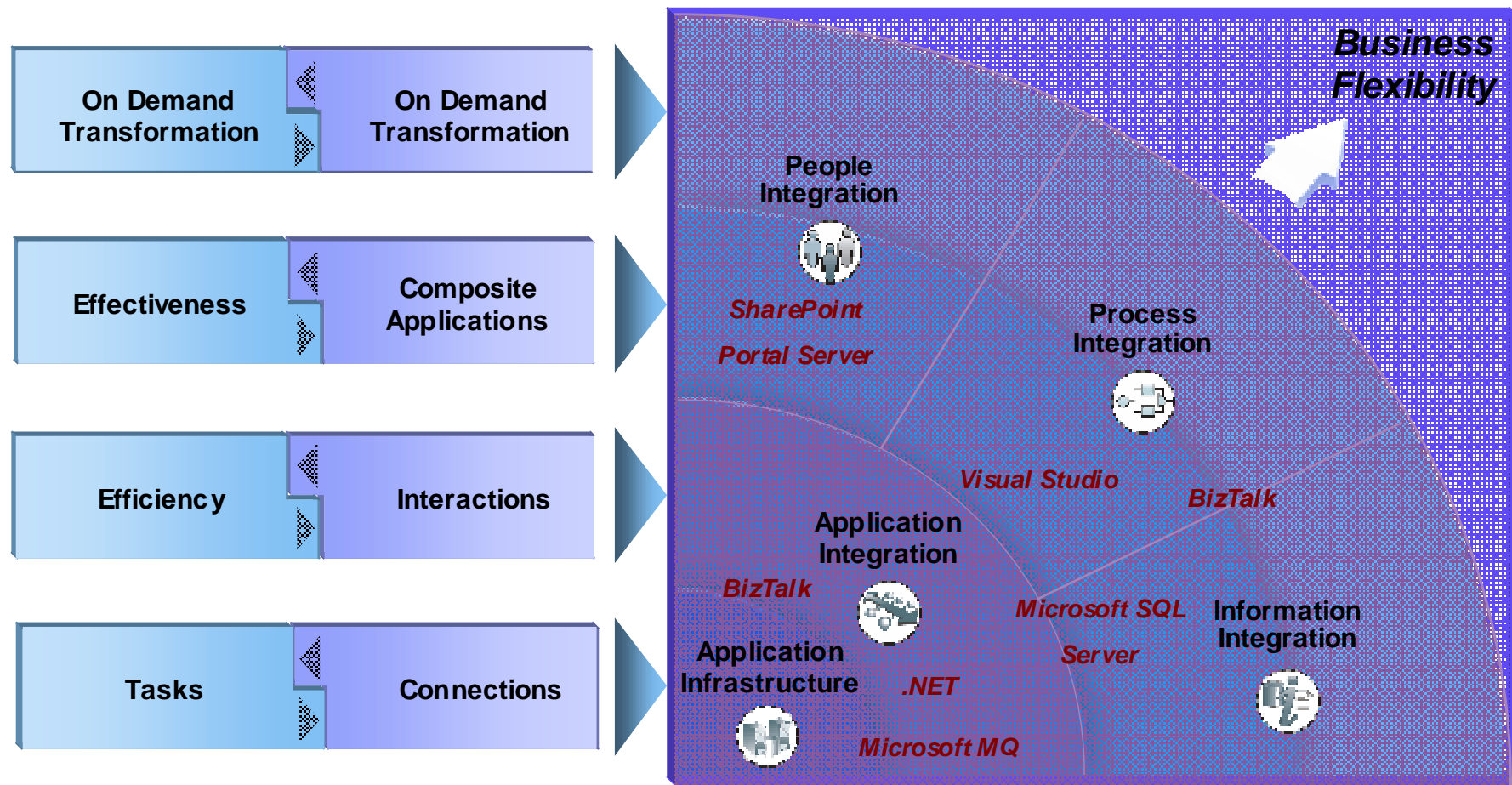
# SAP vs. WBI Product Comparison

Ref. Arch	SAP	Est. strength of product	Closest IBM product
ESB	▪ XI Integration Broker		<ul style="list-style-type: none"> <li>▪ WMQ</li> <li>▪ WBI Msg. Broker</li> <li>▪ WBI Server</li> </ul>
App. & Data Access Services	▪ XI Adapters		<ul style="list-style-type: none"> <li>▪ WBI Adapters</li> </ul>
Process Services	▪ XI ccBPM		<ul style="list-style-type: none"> <li>▪ WBI Server</li> <li>▪ WBI Server or WBI SF</li> </ul>
Partner Services	▪ XI Adapters		<ul style="list-style-type: none"> <li>▪ WBI Connect</li> </ul>
Interaction Services	<ul style="list-style-type: none"> <li>▪ Enterprise Portal</li> <li>▪ Multi-Channel Access</li> </ul>		<ul style="list-style-type: none"> <li>▪ WPS</li> <li>▪ WebSphere EveryPlace Access</li> <li>▪ WebSphere Voice</li> </ul>
Business App. Serv.	▪ Web AS		<ul style="list-style-type: none"> <li>▪ WAS</li> </ul>
Information Services	<ul style="list-style-type: none"> <li>▪ Business Intelligence</li> <li>▪ Master Data Management</li> </ul>		<ul style="list-style-type: none"> <li>▪ WebSphere Information Integrator</li> <li>▪ WebSphere Product Center</li> </ul>
Bus. Perf. Mgt. Serv.	▪ XI Runtime Workbench		<ul style="list-style-type: none"> <li>▪ WBI Monitor</li> <li>▪ Tivoli for Bus. Integration</li> <li>▪ WBI Modeller</li> </ul>
Development	▪ Developer Studio CAF		<ul style="list-style-type: none"> <li>▪ Rational Application Developer</li> <li>▪ Rational XDE</li> </ul>

Legend: Capability Full Partial None

# Business Integration Enabled by IBM WebSphere

*Where does Microsoft play?*



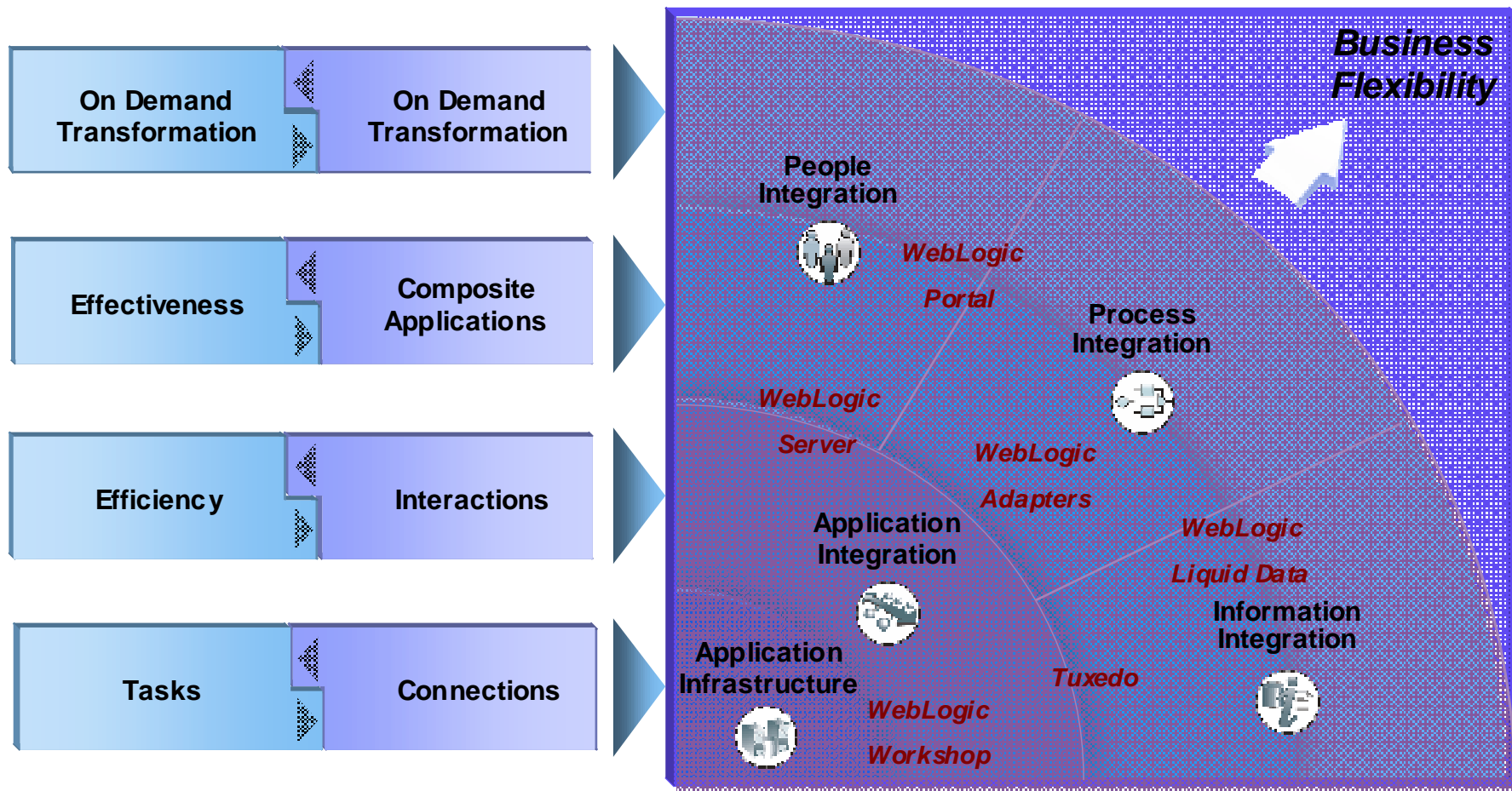
# Microsoft vs. WBI Product Comparison

BI Ref. Arch	Microsoft	Est. strength of product	Closest IBM product
ESB	▪ Microsoft MQ		▪ WMQ (EMS, SS, RV, SS PGM) ▪ WBI Msg. Broker (BW)
App. & Data Access Services	▪ Adapters and 3 <sup>rd</sup> party accelerators		▪ WBI Adapters
Process Services	▪ BizTalk Server		▪ WBI Server (SPS) ▪ WBI Server or WBI SF (BW)
Partner Services	▪ BizTalk Partner Adapters		▪ WBI Connect
Interaction Services	▪ SharePoint Server		▪ WPS
Business App. Serv.	▪ Internet Information Server & .NET		▪ WAS
Information Services	Microsoft SQL Server		▪ WebSphere Information Integrator
Bus. Perf. Mgt. Serv.	No Product		▪ WBI Monitor (SPS or BF) ▪ Tivoli for Bus. Integration (H)
Development	Visual Studio		▪ eclipse-based tooling

Legend: Capability Full Partial None

# Business Integration Enabled by IBM WebSphere

*Where does BEA play?*





## BEA vs. WBI Product Comparison

BI Ref. Arch	BEA	Est. strength of product	Closest IBM product
ESB	WebLogic Server + AquaLogic Service Bus		<ul style="list-style-type: none"> <li>▪ WMQ (EMS, SS, RV, SS PGM)</li> <li>▪ WBI Msg. Broker (BW)</li> </ul>
App. & Data Access Services	WebLogic Adapters		<ul style="list-style-type: none"> <li>▪ WBI Adapters</li> </ul>
Process Services	WebLogic Integration		<ul style="list-style-type: none"> <li>▪ WBI Server (SPS)</li> <li>▪ WBI Server or WBI SF (BW)</li> </ul>
Partner Services	WebLogic Integration		<ul style="list-style-type: none"> <li>▪ WBI Connect</li> </ul>
Interaction Services	WebLogic Portal		<ul style="list-style-type: none"> <li>▪ WPS</li> </ul>
Business App. Serv.	Tuxedo and WebLogic Server		<ul style="list-style-type: none"> <li>▪ WAS</li> </ul>
Information Services	AquaLogic Data Services Platform (formerly Liquid Data)		<ul style="list-style-type: none"> <li>▪ WebSphere Information Integrator</li> </ul>
Bus. Perf. Mgt. Serv.	No Product (Free Flow eventually)		<ul style="list-style-type: none"> <li>▪ WBI Monitor (SPS or BF)</li> <li>▪ Tivoli for Bus. Integration (H)</li> </ul>
Development	WebLogic Workshop		<ul style="list-style-type: none"> <li>▪ Eclipse tooling</li> </ul>

Legend: Capability Full Partial None

Thank  
You

