

On Demand Business  
**2004 WDI / WBIC Customer Conference**

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September 14, 2004

**ON DEMAND BUSINESS™**

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Thank you for your time today.

I believe I have a lot of good information to share with you today – it's been just a little over a year since we introduced the notion of e-business on demand – know that there's been a lot written about it ... and lots of competitors have begun to describe notions that sound very similar.

Today I want to spend the majority of our time together moving the discussion from the *what* and *why* of becoming an on demand business to the *how* – to some very concrete essentials, methodologies and offerings that we've spent the last year developing.

As you'll see, the on demand model is a profound departure from previous computing models in a number of ways.


But let's start at the beginning – with the business demands that necessitate this new computing model...



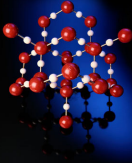
**We have innovative, cross-IBM industry-leading new Automation solutions to assist you on becoming an on demand business. And more important we have customers, like you, to tell you about their progress and the value they have achieved as they progress with on demand automation.**

**We have many exciting things to share.**

- 1 We have great new on demand automation solutions to drive value into your businesses.
- 2 We have customers to tell you about their experiences and the value they have gotten from adopting on demand automation. So you are not the first to try this !
- 3 And Partners play a key role in on demand Automation ! Partners bring their expertise to on demand automation to help you gain better value. (e.g. OPAL – Orchestration and Provisioning Automation Library – partners provide automation workflows that you can access in OPAL).



On Demand Business...



An on demand business is an enterprise whose **business processes—integrated end-to-end** across the company and with key partners, suppliers and customers—can **respond with flexibility and speed** to customer demand, market opportunity or external threat.

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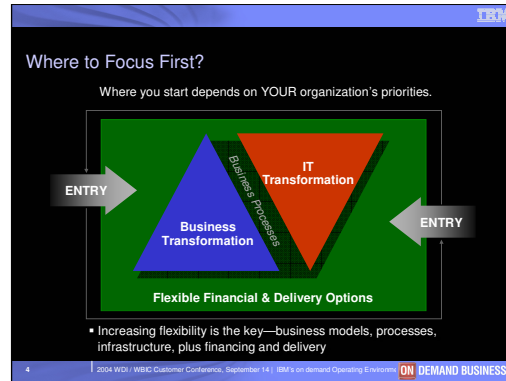
### The predictable years are behind us

**In the on demand world, change happens faster and more unpredictably than ever before. To stay competitive, your business needs to move with it—to gain the speed, flexibility and resilience to handle whatever the market does next.**

**You may recognize this definition ... it's the definition of on demand that we've been talking about for more than a year.**

- The definition introduced by Sam Palmisano, October 2002
- Reinforced November 2003 at on demand anniversary event
- On demand is not about technology for the sake of technology – it's about enabling new ways of doing business. It's about helping an organization to reach new levels of innovation while continuing to deliver the increases in productivity that are necessary to improve the bottom line.
- Being an on demand business allows you to lower costs, increase revenue and respond quickly to industry pressures
- While becoming on demand requires change, the good news is that it can be done in steps
- potential rewards of operating on demand—both in the short term and the long run—are enormous.

**So where do you start ?**



Where you enter the on demand journey depends on your priorities. Today we will focus on the operating environment as that is where most of you – over 80% -- are starting your on demand journey.

Most of what you see on this chart should be familiar. We've been talking about business transformation, the on demand operating environment and flexible financial and delivery options for more than a year.

- We are seeing an 80/20 split (80% of our customers investments are on operating environment initiatives.
- Note that folks can start anywhere on their on demand journey based on their needs/priorities. We recognize that this isn't a one-size-fits-all solution or methodology. We recognize that organizations have different priorities, different personalities. And our approach reflects that. With different entry points, where you start depends on your organization's priorities.

Today's infrastructure is too rigid and too complex

- You'll see we've made a great deal of additional progress on the operating environment --- and hear how our customers have gained the corresponding value
- By working side by side with leading customers, we've learned a lot about what it takes to create the kind of infrastructure that truly enables – rather than inhibits – an on demand business.

Obviously, you have to leverage existing assets. No one has the luxury of starting from scratch. You need a disciplined approach to evolving what you have – into what you need.

2 This infrastructure has to simplify the process of integration.

3 The design of an on demand operating environment must match the design of the business itself. In order for more and more flexibility and componentization to be achieved in the business design, the infrastructure must evolve from silos of complex, over-provisioned, proprietary hardware and software – to a standards-based infrastructure in which capacity can be optimized across the entire organization.

Before we move on, I'd just like to pause here for a second and point out what the on demand operating environment is NOT. It is not a single product. It is not a brand. It is not a platform or even an architecture. Instead, the on demand Operating Environment is a set of capabilities that deliver customer value by enabling business flexibility and IT simplification – such that when implemented, these capabilities enable companies to become on demand businesses.

So given that importance of the operating environment let's take a closer look at what makes up the odOE (on demand Operating Environment).

# What's Different From 2 Years Ago?

Before on demand	How you approach the problem is different	With an on demand Operating Environment
Technology first → maximize system efficiency	<b>How you approach the problem is different</b>	Business first → maximize business operation flexibility
Integrated applications	<b>What is necessary is different</b>	Modular and service-oriented
Architecture emphasizes silos	<b>How you architect the solution is different</b>	Architecture emphasizes "integration points"
Difficult and costly to integrate, evolve and change	<b>What is possible is different</b>	Enable flexibility to be engineered into the system

## How you approach the problem is different

Old: Start with the technology and focus on tight integration to maximize system efficiency

New: Start with the business and focus on modularity to maximize business operation flexibility

## What is necessary is different

Old: Integrated applications

New: Modularity, components, service-oriented XML architecture

## How you architect the solution is different

Old: Architecture emphasizes silos — technologies, applications/vendors, business-unit solutions

New: Architecture emphasizes "integration points", spanning layers, business function componentization

## What is possible is different

Old: Difficult and costly to integrate, evolve, and change

New: Standards, Web services, and automated coordination and administration enable flexibility to be engineered into the system

### Business On Demand

Componentized business processes and focus on core competencies and use of business process outsourcing where appropriate/feasible

### Technology On Demand

Service-oriented architecture providing reusable infrastructure components based on standards with automated reconfiguration of the infrastructure to adapt to changing business and user needs

### Capacity On Demand

Sourcing and utility models that allow flexible movement of IT operations between the ITO and outsourcers and variable consumption models that help achieve higher utilization rates



**odOE is made up of Integration and Infrastructure Management**

- Infrastructure Management is made up of Automation and Virtualization
- On demand Automation is key to transforming your IT infrastructure into an on demand operating environment.

**The on demand Operating Environment is open standards-based, integrated, autonomic & virtualized.**

**The on demand Operating Environment**

- Leverages existing assets
- Enables integration
- Matches infrastructure with business design
- Modular
- Built for change
- Standards-based

**The on demand Operating Environment has two major focus areas:**

- Integration
- and Infrastructure Management

**And Infrastructure management has two components:**

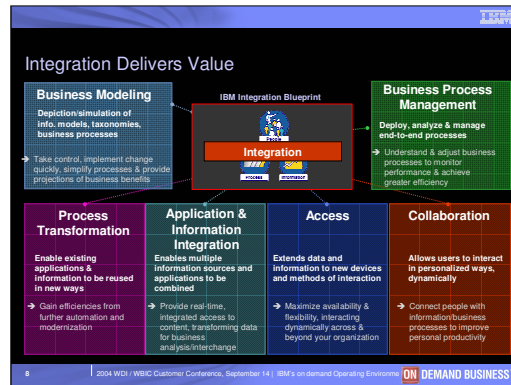
- **Automation**
- Virtualization

**Automation is key as it helps our clients ultimately increase business agility by optimizing IT resources and by managing complexity.**

Transition: **Let's see the value that on demand automation brings to your business.**



Integration along the business process enhances your core functions increasing efficiencies and time to market while reducing costs



### Integration capabilities

- **Business modeling:** Enables the graphical depiction and simulation of a business process including task descriptions, resources required and decision points
- **Process transformation:** Enables existing applications and information to be reused in new ways
- **Application & information integration:** Enables multiple information sources and business applications to be combined
- **Access:** Extends data and information to new classes of devices and methods of interaction, regardless connection type
- **Collaboration:** Allows users to interact in a personalized way with dynamic information, applications, processes and people
- **Business process management:** Allows you to model, deploy and analyze processes with the goal of managing the end-to-end business process



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## Key initiative areas for Integration

### *Business Performance Management*

**Business Performance Management**

Allows an organization to understand the status of business processes across business and IT; put that understanding in context against goals and trends; then take action quickly to improve execution.

***Business Performance Management Partner Program***

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## Business Performance Management

allows an organization to understand the status of business processes across business and IT, put that understanding in context against goals and trends, and take action quickly to improve execution

### *Business Performance Management Partner Program*

- Business Performance Management is a real-time discipline for increasing responsiveness and agility by optimizing business and IT operations
- Partners can extend the value of IBM Business Performance Management by adding complementary capabilities to the IBM core infrastructure
- Partner frameworks for integration are now available

**Key initiative areas for Integration**  
*Service Oriented Architecture; Leveraging Information Insights*

<p><b>Service Oriented Architecture</b></p> <p>Enables flexible connectivity of applications or resources by representing every application or resource as a service with a standard interface and enabling them to exchange structured information.</p>	<p><b>Leveraging information insights</b></p> <ul style="list-style-type: none"> <li>• Provides the right information to the right person anytime, anywhere to improve productivity &amp; increase levels of collaboration across the value chain</li> <li>• Develops a unified view of customer information across the business to better target and serve them</li> <li>• Integrates, analyzes and leverages information to make better informed business decisions</li> </ul> <p>* <b>Watch this space in Fall 2004</b> – new announcement will leverage IBM's capabilities with our Business Partners</p>
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## What is SOA?

- A **service-oriented architecture (SOA)** is an application framework that takes everyday enterprise applications and breaks them down into individual business functions and processes, called *services*.
  - **Services are the building blocks of an SOA.** A service can be a business function, such as *check customer credit* or *sell covered option*, or a system capability such as *authenticate user*.
  - **SOAs allow organizations to “package” business functions** from new and existing applications in a simple and standardized way.
  - **An SOA increases flexibility** by treating elements of business processes and the underlying IT infrastructure as secure, standardized components (services) that can be reused and combined to address changing business priorities.
- But you can't maximize the value of an SOA without open standards.

## SOA bottom line benefits:

- Help **reduce costs**, because clients can use existing software components across the entire enterprise
- Help **bring new offerings to market faster**, because there is no need to recode connections prior to launching new applications and services
- Help **generate new revenue** by enabling your clients to offer new capabilities to their customers
- Help **reduce risk** through reuse of already-tested software components in new initiatives and improvement of existing systems

**IBM**

Demonstrate Business Value with On Demand Integration

**On Demand Integration**  
Connecting people, processes and information, using a reliable foundation, to flexibly and efficiently support business objectives in a constantly evolving marketplace.

Increase responsiveness to customer needs and partner collaborations

Extend investments in existing, multi-vendor, legacy applications

Reduce business process complexity, within and beyond the enterprise

*Leverage expertise ... Be tightly aligned with and able to quickly adapt to changing business priorities—for competitive advantage and increased business value.*

**Increase Business Flexibility**

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The three keys to on demand Automation are:

- Operational processes
- Business policy (or governance)
- Sense and respond

On Demand Automation drives down costs, improves productivity, and increases flexibility  
Customer value is provided each step of the on demand automation journey

What is on demand Automation ? : Here on this slide is a straight forward definition

Three competitive advantages to remember - on demand Automation involves:

- Operational “processes”
- Business policy or governance -> Analysts like Gartner and META are adapting the term ‘governance’
- Sense and respond → Autonomic Technology

IT must optimize resources and manage complexity, bringing their systems in line with business goals  
Automating IT processes helps our clients meet the needs of the their businesses by making the IT organization more responsive to evolving business priorities.

Our clients are facing new challenges in the on demand world and IT must stay ahead of these challenges:

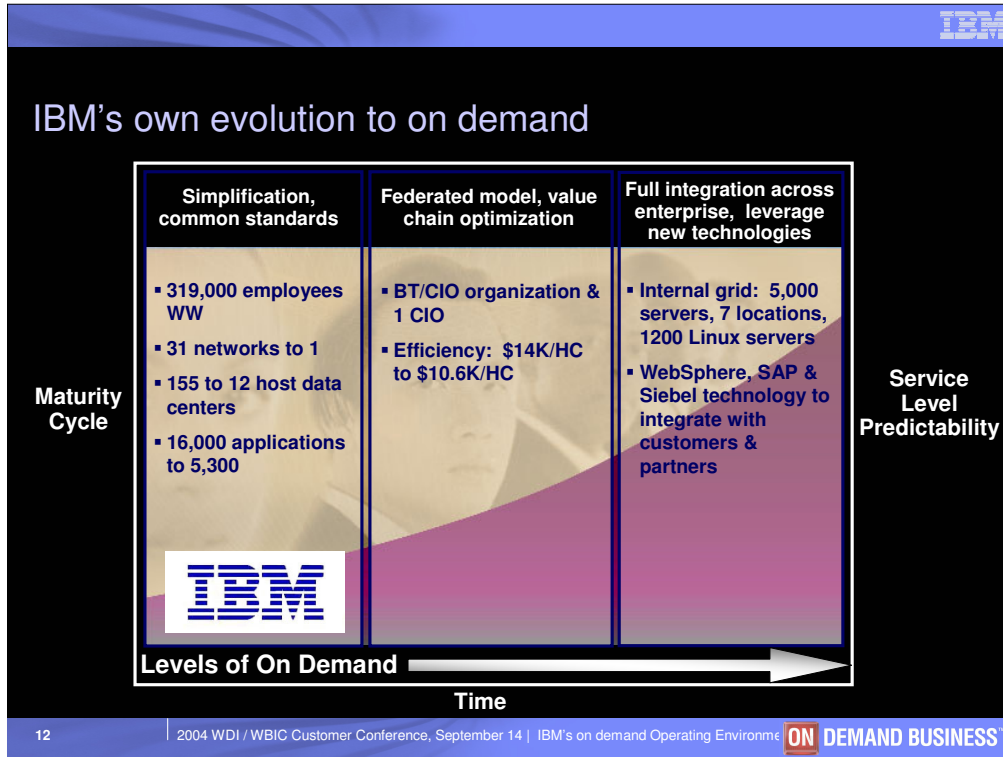
- Only 15% resources are utilized today
- 92% of processes are done manually
- 51% have flexibility as top priority
- 80% IT effort spent on diagnosis
- 47% indicate automating core processes is critical
- 72% have manual service level agreements

*sources: ebusiness on demand Attributes-Capabilities Study, Autonomic Study, Blueprint Market Drivers Study, Tivoli Customer Study*

Customer value is provided each step of the on demand automation journey

- Reduced cost and Increased productivity
- Improved service delivery
- And adaptability to changes in business needs

How do you get these values? -- With a set of core Automation Capabilities.



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IBM encounters many of the same challenges and hurdles expressed by companies like you just saw. As a global company operating with 319,000 employees in more than 100 countries worldwide, our challenges hinged on having repeatable processes and technologies that can scale and apply across multiple cultures/domains.

We officially began our on demand journey in 2002. Our ultimate goal is to become an on demand business which can sense and respond with flexibility and speed to client and market needs. The end game, if you will, is to increase revenue, reduce cost and increase shareholder profits/values.

Our focus for the transformation is 3-fold:

- Simplification, common standards
- Federated model -- value chain optimization
- Full integration across extended enterprise, leverage new technologies

(See below for specifics on actual scale and size for each of the 3 focused areas).

As mentioned before, we face many of the business challenges during our on demand journey - infrastructure, business, and skill challenges all alike - and I would like to share some of our findings with you today. Among these hurdles, the following three were most prominent:

**Cultural impact** - In a company our size and operating in more than 100 countries, cultural differences from different angles - countries, divisions, sub-cultures through acquisition - are inevitable. **The impact of cultural difference and acceptability is often understated.** Both at the project inception and during our steady-state operation, we needed to standardize toward a common business and technology approach. The challenge is how to push through for consistency while respecting cultural boundaries and cornerstones which make us what we are!

**Dissonance between technology and process** - At IBM, as you would imagine, we fall in love with technology like many of you. Technology is often ahead of the process and we found ourselves aligning and re-aligning technology and processes throughout the transformation. Recognizing and acknowledging the dissonance between technology and processes is the first step to optimizing the results from the transformation.

**Transforming multiple businesses at the same time** - At IBM, our transformation goes beyond technology and process consolidation. We were transforming multiple distinct businesses - software, hardware, services, - into one. This is hard work. We need to find common lingo, common objectives to move things along. Of course, business acquisition as stated before is an unknown that does happen these days and throws a curve to the momentum often times.

The impact and results of this 2-year transformation are quite massive.

**On the simplification and common standards front:**

- 31 IBM Networks to 1 Outsourced Global Network
- Common hosting environment: 155 to 12 host data centers
- Hundreds of configurations to 4 standard platforms
- 16,000 applications to 5,300 applications

**On meeting our goal to reach to a federated model - value chain optimization**

- Established BT/CIO organization and 1 CIO
- Global Web Infrastructure
- Drive to efficiency: \$14K/HC to \$10.6K/HC
- Transferred IT service to IBM Global Services - \$500M in savings

**Full integration across extended enterprise, leverage new technologies**

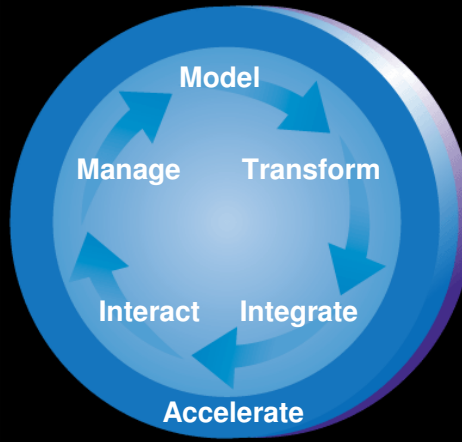
- Internal grid, 5,000 servers, seven locations
- 1200 Linux servers

### Today we are talking about...

- 1 How technology enables breakthrough in new business design – the role of an on demand Operating Environment and Integration
- 2 Business Integration in the on demand environment
- 3 What role does B2B play in the on demand strategy

# IBM Integration Capabilities

- Model** business functions and processes
- Transform** applications, processes and data
- Integrate** islands of applications, processes and information
- Interact** with resources anytime, anywhere with any device
- Manage** performance against business objectives
- Accelerate** the implementation of intelligent processes



## Integrate Islands of Applications, Processes and Information

- Adopt the integration methods that complement your existing infrastructure
- Flexible to grow as your business requirements evolve

Optimize the distribution of information between applications and across locations

Access diverse data as if it were a single database

Automate processes that involve systems and people

Extend business processes to customers and trading partners

Deliver new Web services-based composite applications that extend and integrate your existing IT assets

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**Integrate** Islands of Applications, Processes and Information is made up of the following offerings:

- WebSphere MQ
- WebSphere Business Integration Event Broker
- WebSphere Business Integration Message Broker

- WebSphere Business Integration Server Foundation (previously WebSphere Application Server Enterprise)
- WebSphere Studio Application Developer Integration Edition

- WebSphere Business Integration Server
  - WebSphere MQ Workflow
  - WebSphere MQ Message Broker
  - WebSphere InterChange Server
- WebSphere Business Integration Toolset
- WebSphere Business Integration Server Foundation (previously WebSphere Application Server Enterprise)
- WebSphere Studio Application Developer Integration Edition

- DB2 Information Integrator

- WebSphere Business Integration Connect

#### Key Business Benefits:

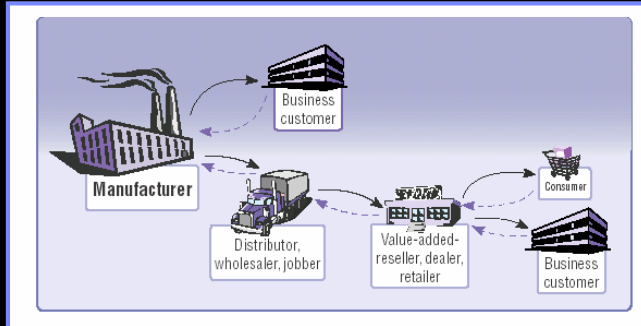
- Improve customer service and business agility
- Access real time business information accurately and rapidly
- Accelerate mergers and acquisitions
- Eliminate manual process errors
- Improve and automate value-chain management

#### Key IT Benefits:

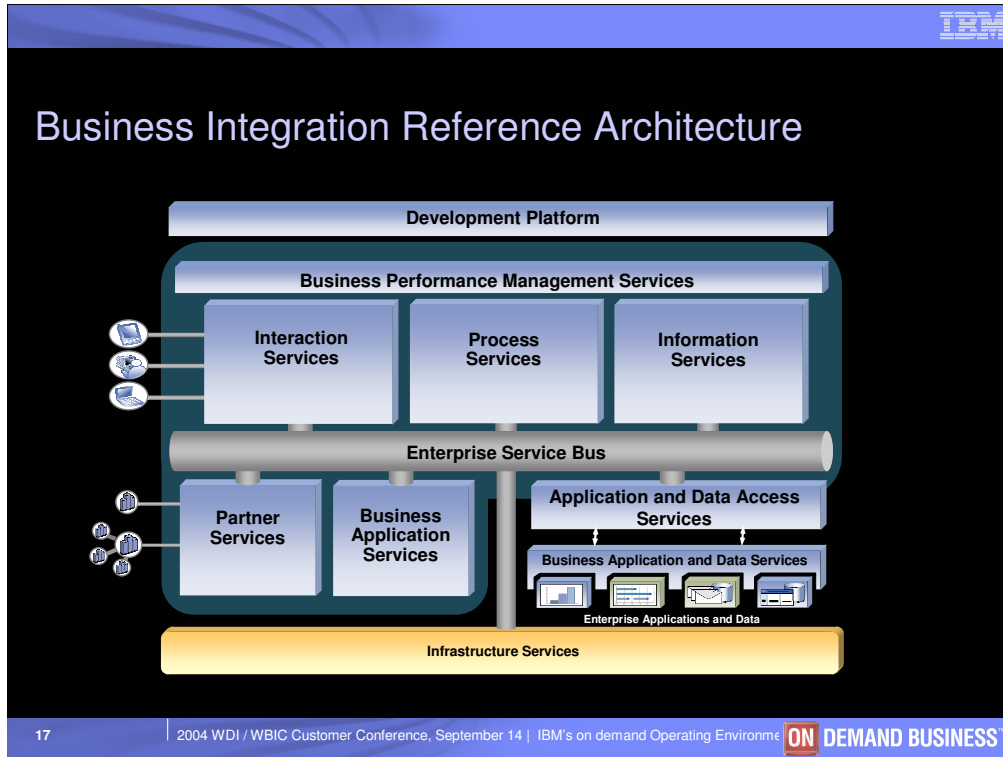
- Create additional value from existing applications and information
- Quickly add best-of-breed applications
- Reduce TCO through a standards based service-oriented architecture (SOA)
- Quickly respond to changing value-chain requirements

With community integration, companies enable integration of business processes spanning different systems across enterprise boundaries.

- Business processes extended to include partners
- Visibility across the entire value-chain
- Improve and automate value-chain management
- Strengthen Partner Relationships through tighter business linkages
- Eases participation in and adoption of widely used market standards
- Standardized business processes behind and across the firewalls
- Quickly respond to changing value-chain requirements







The IBM Business Integration portfolio delivers capabilities required for all types of integration through a comprehensive architecture. These capabilities can be implemented on a build-as-you-go basis, and yet, because of the architecture and its service orientation, capabilities and project level solutions can be easily added as new requirements are addressed over time.

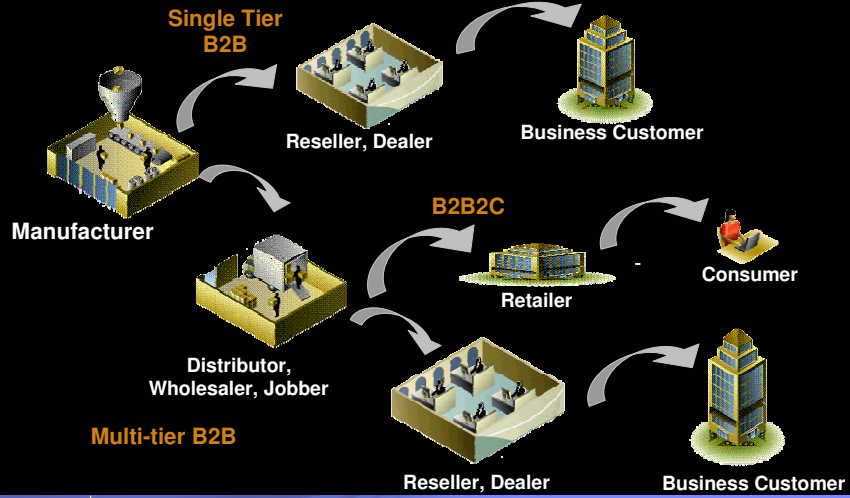
The IBM Business Integration Reference Architecture shows the key areas of integration capability that are required for comprehensive, enterprise wide strategies and solutions. Tools are an essential component of any comprehensive integration architecture. The Business Integration Reference Architecture includes development tools, used to implement custom artifacts that leverage the infrastructure capabilities, and business performance management tools, used to monitor and manage the runtime implementations at both the IT and business process levels. Development tools allow people to efficiently complete specific tasks and create specific output based on their skills, their expertise, and their role within the enterprise. Business Analysts who analyze business process requirements need modeling tools that allow business processes to be charted and simulated. Software Architects need tool perspectives that allow them to model data, functional flows, system interactions, etc. Integration Specialists require capabilities that allow them to configure specific inter-connections in the integration solution. Programmers need tools that allow them to develop new business logic with little concern for the underlying platform. Yet, while it is important for each person to have a specific set of tool functions based on their role in the enterprise, the tooling environment must provide a framework that promotes joint development, asset management and deen

### Today we are talking about...

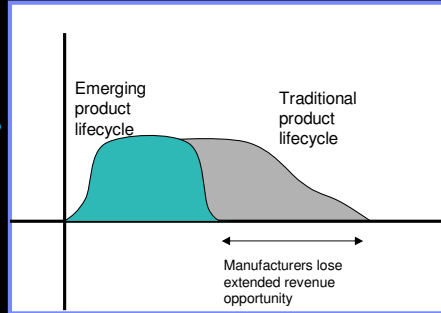
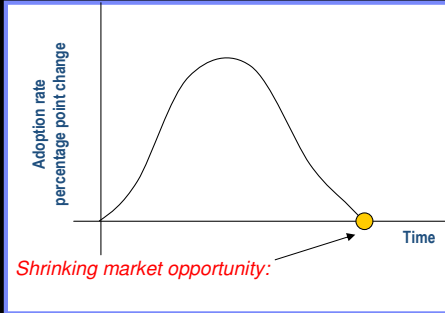
- 1 How technology enables breakthrough in new business design – the role of an on demand Operating Environment and Integration
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- 3 What role does B2B play in the on demand strategy

# Extended Demand Chains: Streamlining Cross-channel Processes

*Making it easy to do business by automating & streamlining processes across the value chain*



## Accelerating product life cycles are putting intense pressure on manufacturers to cut costs and reduce risk.....



Point at which the adoption rate stagnates or goes negative, when the market is 'saturated.'

For TVs, this point was reached in **36** years.

For VCRs, this point was reached in **27** years.

For CD players, this point was reached in **18** years.

For DVD players, this point might be reached in less than **10** years

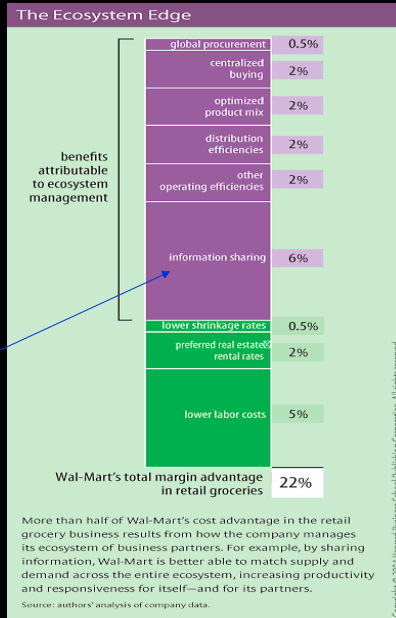
**With time-in-market declining, time-to-market is becoming even more important. Any delay on product launch can mean significant revenue opportunity loss**

Source: CE.org; "Maximizing Silicon ROI: The Cost of Failure and Success," nasdaq, 20 May 2002

# The New Competitive Advantage

- **Fact:** Wal-Mart has a towering 22% operating margin advantage compared to its competitors
- **Question:** What is the largest contributor to Wal-Mart's margin advantage?

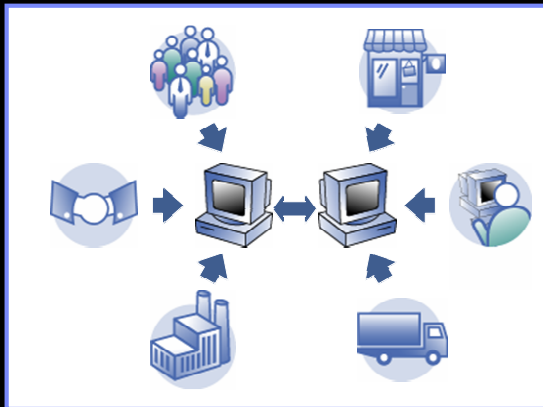
- Centralized buying
- Distribution efficiencies
- Information sharing
- Lower labor costs



## Key B2B Capabilities

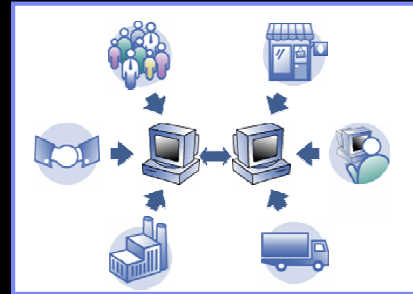
### Extend Processes to Your Customers and Partners

- Connect to and integrate with communities of trading partners
- Enables integration beyond the enterprise into the extended value chain
- Support for a wide range of industry standard protocols including RosettaNet, EDIINT (AS1 & AS2) and XML
- Support for trading partner interactions over transports such as HTTP(S), FTP and SMTP



## EDI standards are critical to many businesses

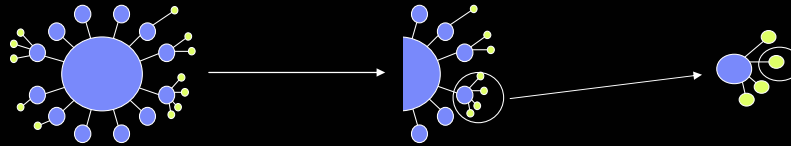
- EDI is a mission critical part of companies B2B strategies
- 95% of fortune 500 companies use EDI
- EDI continues to deliver significant return on investment
- EDI continues to evolve in response to new enterprise and industry requirements, and competitive pressures (e.g. HIPAA, AS1, AS2)
- 80% of business transactions are conducted via EDI Value Added Networks (VAN) today.



WebSphere Data Interchange provides EDI support.

EDI today is often dismissed as legacy technology, which is expected to be replaced by Internet based technology (XML)

# The Community Integration Ecosystem



## **Community Manager**

- Mandates standards adoption to a number of its downstream trading partners.
- The Community consists of the dominant trading partner and the first tier of Community Participants
- Community Manager focuses only on the first tier suppliers, who integrate directly to it, but need to “see” their entire value chain


## **Peer Participant**

- Needs to be able to react to the rapidly changing dynamics of their environment
- They will be, at times, a community manager, a community operator and a community participant according to needs and the exchange of information required
- They operate in a fluid, ever changing environment to which they must adapt in a cycle of continuous improvement

## **Community Participant**

- Driven by the need to maintain its business with its customers
- Looking for continuation of its business rather than driving dramatic change and growth
- Integration with trading community provides opportunity to grow business
- Could become a Peer within the community if they integrate further with other partners
- Visibility of new business will drive the decision





## Summary

- Technological Darwinism: Adapt or die, says Palmisano  
*"Business is at a critical juncture, and the decisions that its leaders make will determine which businesses survive and which fail."*
- Business integration is the model for evolution
- The Face of Community Integration is Changing  
Been doing it for years, but critical to understand that extended value chains must make use of both VAN-based EDI data and internet-based non-EDI data  
  
Integrating with a community of partners requires a complete solution

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### Technological Darwinism: Adapt or die, says Palmisano

"Business is at a critical juncture, and the decisions that its leaders make will determine which businesses survive and which fail."

That was the key message IBM Chairman and CEO Sam Palmisano delivered to more than 200 European industry leaders and academicians gathered at the Business Leadership Forum in Paris.

Palmisano cited several current challenges: an almost moribund economy, the complexities of globalization, reaction to the recent bubble period and the current geopolitical environment. "We can either say 'this is a lousy deal' or we can see this as a phenomenal opportunity to drive a different mindset for our institutions," he said.

The slide is titled "Additional Information..." and contains two numbered points. Point 1 is "Learn more about the On Demand Operating Environment offerings" with a URL. Point 2 is "Look at how customers like you gain value from On Demand" with a sub-point "Read the On Demand Operating Environment whitepaper at:" and a URL. The footer includes the number "26", the text "2004 WDI / WBIC Customer Conference, September 14 | IBM's on demand Operating Environment", and the "ON DEMAND BUSINESS" logo.

Major points:

- 1) On demand Automation can help you manage and optimize operational processes and IT services based on business policies
- 2) Customers like you are achieving substantial gains with on demand Automation.
- 3) Move to higher levels of on demand Automation to Reduce Cost and Increase Productivity; Increase Business Flexibility; and Improve Service Levels (QoS)

Taking points:

During the past hour, we have seen how On demand Automation can help you manage and optimize operational processes and IT services based on business policies by automatically sensing and responding to changes allowing you to demonstrate and measure IT value to the business

We saw how customers like you are achieving substantial gains with on demand Automation. Kaiser Permanente is responding to 11 million members while lowering costs by \$10+ million; HBOS is gaining higher service levels while saving 50+ man/year effort with On Demand Automation; Avis is automating 400,000 identities while increasing business flexibility.

We demonstrated live a few of the 14 new on demand automation offerings that we are announcing today which can help you innovate to Reduce Cost and Increase Productivity; Increase Business Flexibility to Support Change & Innovation; and Improve Service Levels (QoS). I strongly encourage you to visit our Technology showcase (at FILL IN DEPENDING ON LOCATION) where experts from my team can show you in detail how the solutions can help your company.

But most importantly you have new tools and solutions available to help you move to higher levels of on demand Automation a step forward becoming and on demand business. Talk to your sales rep and business partner to get a free on demand Automation assessment. The gains can be substantial if you can respond with flexibility and speed to any of your customer demands, market opportunities or external threats.

Usergroup urls:

- <http://www.tivoli-ug.org/>
- <http://www.rational-ug.org/>
- <http://www.websphere.org/>
- <http://www-306.ibm.com/software/data/usergroup/>

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