Operating Environment Essentials for an On Demand Breakthrough

@business on demand.

Insights about On Demand Businesses

1 The need for flexibility and innovation forces increased componentization of the overall business and its processes

2 Applications evolve on a parallel path— becoming increasingly modular

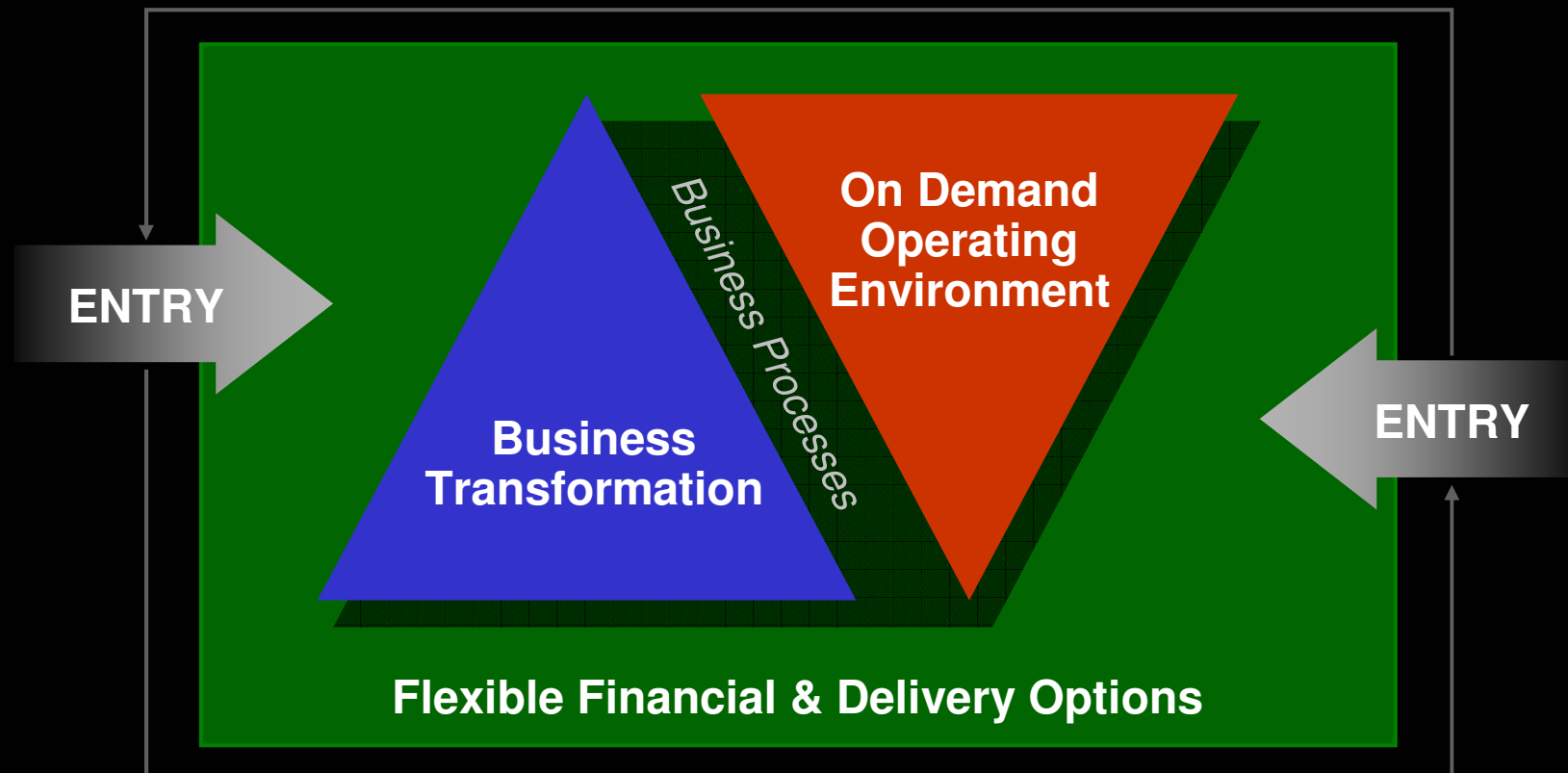**3** Simplification of the underlying IT infrastructure is required to support the changes in the business

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 speed to any customer demand, market opportunity or external threat.
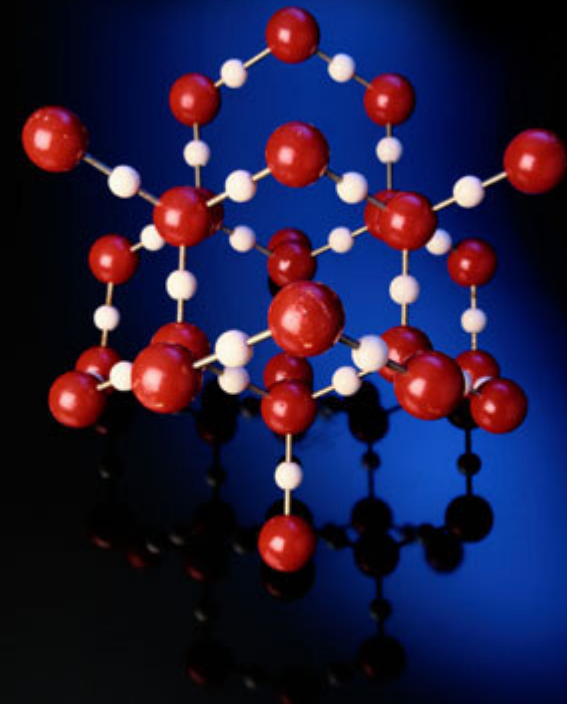
Start with The Bigger Picture—Business and IT

Where you start depends on YOUR organization's priorities.

ENTRY

Business Transformation

Business Processes

On Demand Operating Environment

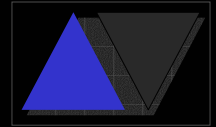ENTRY

Flexible Financial & Delivery Options

- Increasing flexibility is the key—business models, processes, infrastructure, plus financing and delivery

Business Transformation Built on Industry Expertise

- Create strategic advantage through differentiation and productivity

- Integrate partners to increase effectiveness and flexibility

On Demand Operating Environment

Business Processes

Business Transformation

Flexible Financial & Delivery Options
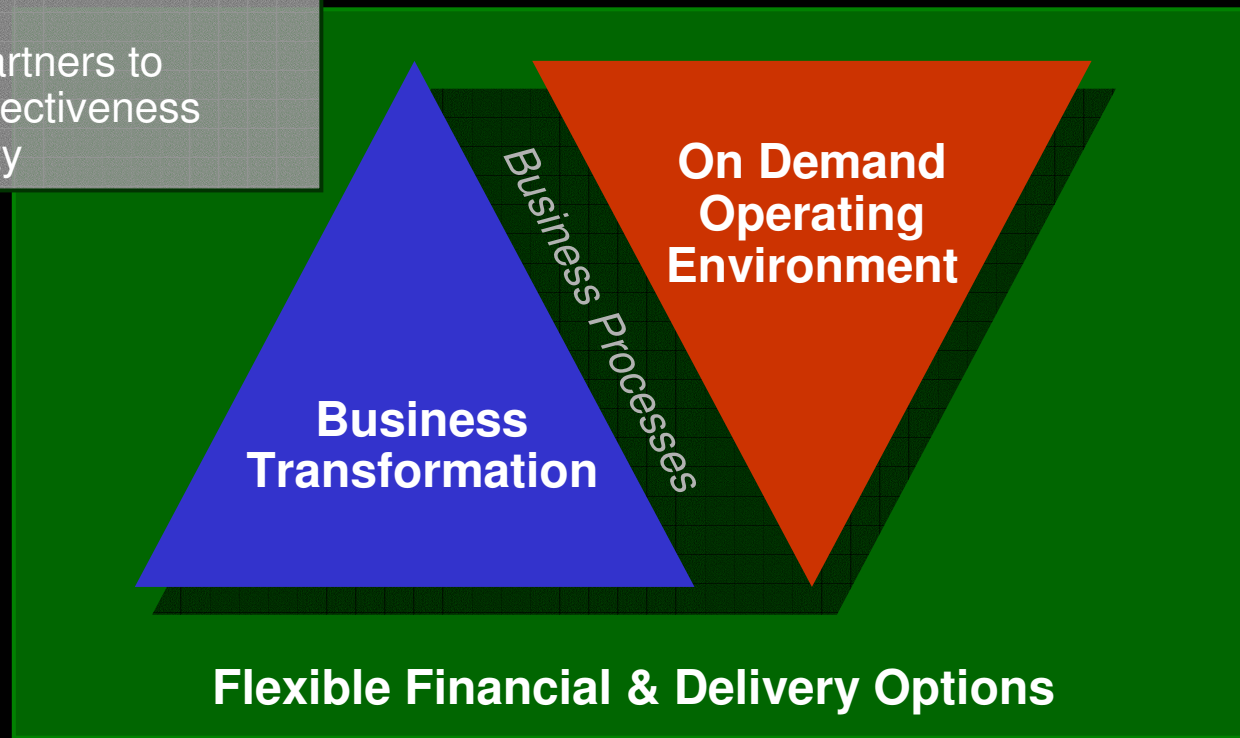
Business Designed for Growth and Change

	Consumer Relationship	Customer Relationship	Manufacturing	Supply Chain & Distribution	Business Administration
Strategy	Category/Brand Strategy	Customer Relationship Strategy	Manufacturing Strategy	Supply Chain Strategy	Corporate Strategy
	Category/Brand Planning	Customer Relationship Planning			Corporate Planning
					Alliance Management
					Line of Business Planning
Tactics	Brand P&L Management	Assessing Customer Satisfaction	Production and Materials Planning	Distribution Oversight	Business Performance Management
	Manage Supply and Demand	Customer Insights	Manufacturing		External Market Analysis
	Marketing Development & Effectiveness			In-bound Logistics / Out-bound Logistics	Organization and Process Design
		Account Management	Supplier Control		Legal and Regulatory Compliance
Execution			Make Products		Treasury and Risk Management
	Concept/Product Testing	Value-Added Services			Accounting and GL
		Customer Account Servicing		Operations	
	Product Management	Field Marketing Execution	Plant Inventory Management	Transportation Resources	Indirect Procurement
	Marketing Execution				Facilities and Equipment Management
	Consumer Service	In-store Inventory Mgmt	Manufacturing Procurement	En route Inventory Management	HR Administration
	Product Directory	Customer Directory			IT Systems and Operations

① First, create a componentized view of the business
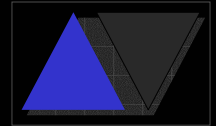
② Next, decide what's differentiating and what is simply operating

③ Then, analyze costs

④ Finally, prioritize your transformation initiatives

Reality Check—What You Want vs. What You Have

	Consumer Relationship	Customer Relationship	Manufacturing	Supply Chain & Distribution	Business Administration
Strategy	Category/Brand Strategy	Customer Relationship Strategy	Manufacturing Strategy	Supply Chain Strategy	Corporate Strategy
	Category/Brand Planning	Customer Relationship Planning			Corporate Planning
					Line of Business Planning
Tactics	Brand P&L Management	Assessing Customer Satisfaction	Production and Materials Planning	Distribution Oversight	Business Performance Management
	Matching Supply and D	Customer Insights	Manufacturing Oversight		External Market Analysis
	Marketing Development & Effectiveness				Organization and Process Design
	Product Ideation			In-bound Logistics / Out-bound Logistics	Legal and Regulatory
Execution	Concept/Product Testing	Value-Added Services			Treasury and Risk Management
	Product M	Servicing Execution	Plant Inventory Management	Transportation Resources	Accounting and GL
	Marketing Execution				Indirect Procurement
	Consumer Service	In-store Inventory Mgmt	Manufacturing Procurement	En route Inventory Management	Facilities and Equipment Management
	Product Directory	Customer Directory			HR Administration
					IT Systems and Operations

- **The highest impact transformation priorities are typically horizontal processes**
- **They're cross-divisional—and probably cross-company**
- **Yet today, elements of the new process are enmeshed in business unit silos and their corresponding monolithic applications and infrastructure**
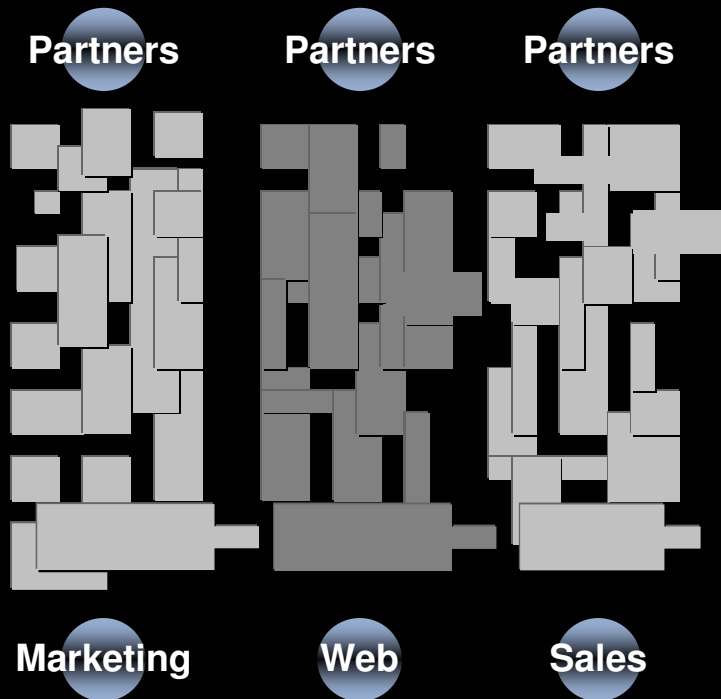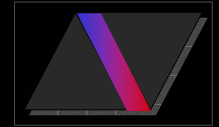
Creating Flexible Business Processes

On Demand Operating Environment

Business Processes

Business Transformation

Flexible Financial & Delivery Options
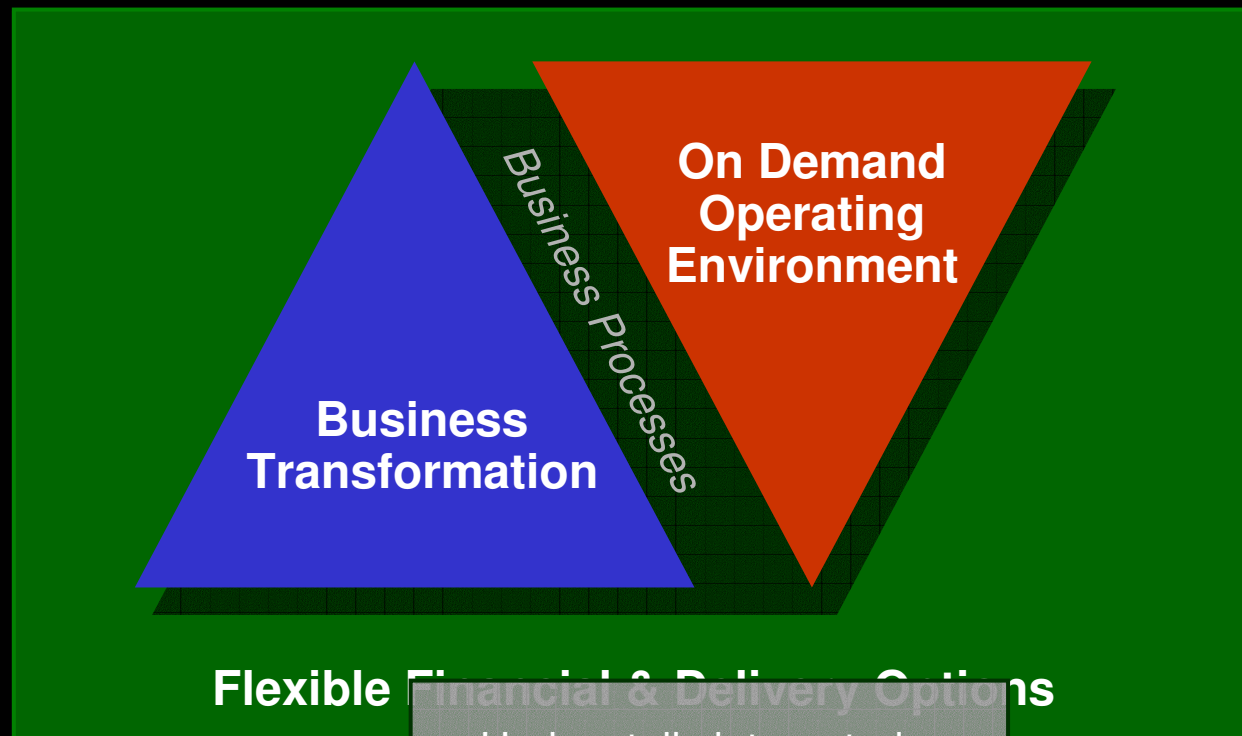
- Horizontally integrated
- Built for change

Your Reality: Functional Automation

Partners   **Partners**   **Partners**

Marketing   **Web**   **Sales**

Historical limitations:

• Monolithic applications can't be reused

• Ad hoc integration creates connections that are difficult to change/maintain

• Lack of standards limits ability to deliver meaningful interoperability

The Growing Reality: Horizontal Process Integration

Partners **Partners** **Partners**

Customer/
Prospect

Marketing **Web** **Sales**
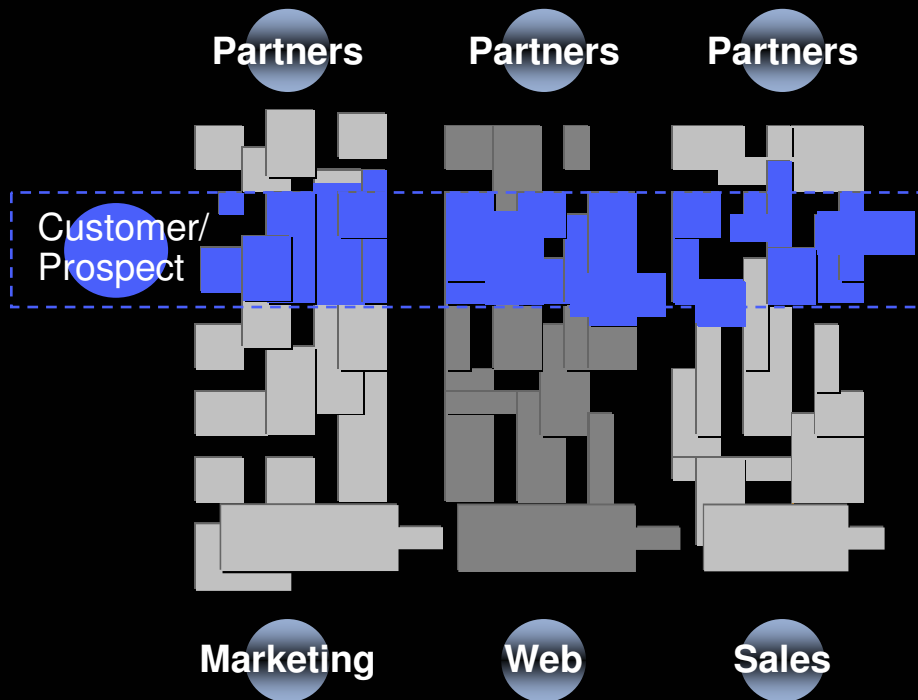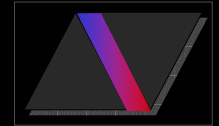
Advances that make it possible:

- 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

The Result: Bottom-line Business Value

Partners **Partners** **Partners**

Customer/
Prospect

**Marketing** **Web** **Sales**
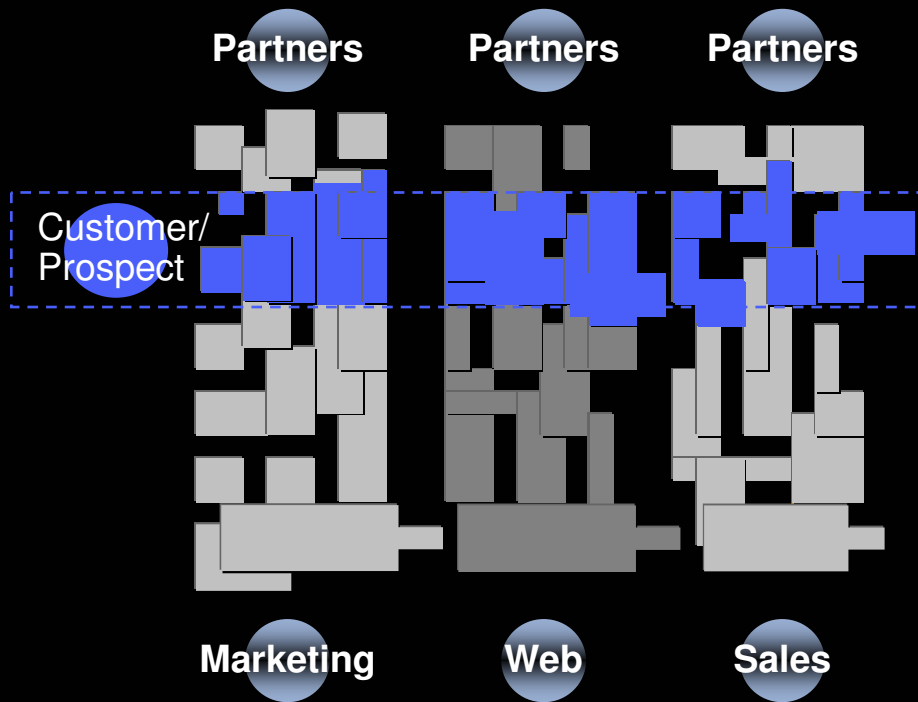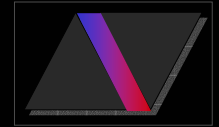
Breakthrough:

- Integration of information across sales and marketing
- Information-rich profiles on every customer and prospect

Benefits:

- Increased customer satisfaction
- Dramatic improvements in performance and efficiencies
- New buyer behavior insights and purchase patterns are leveraged
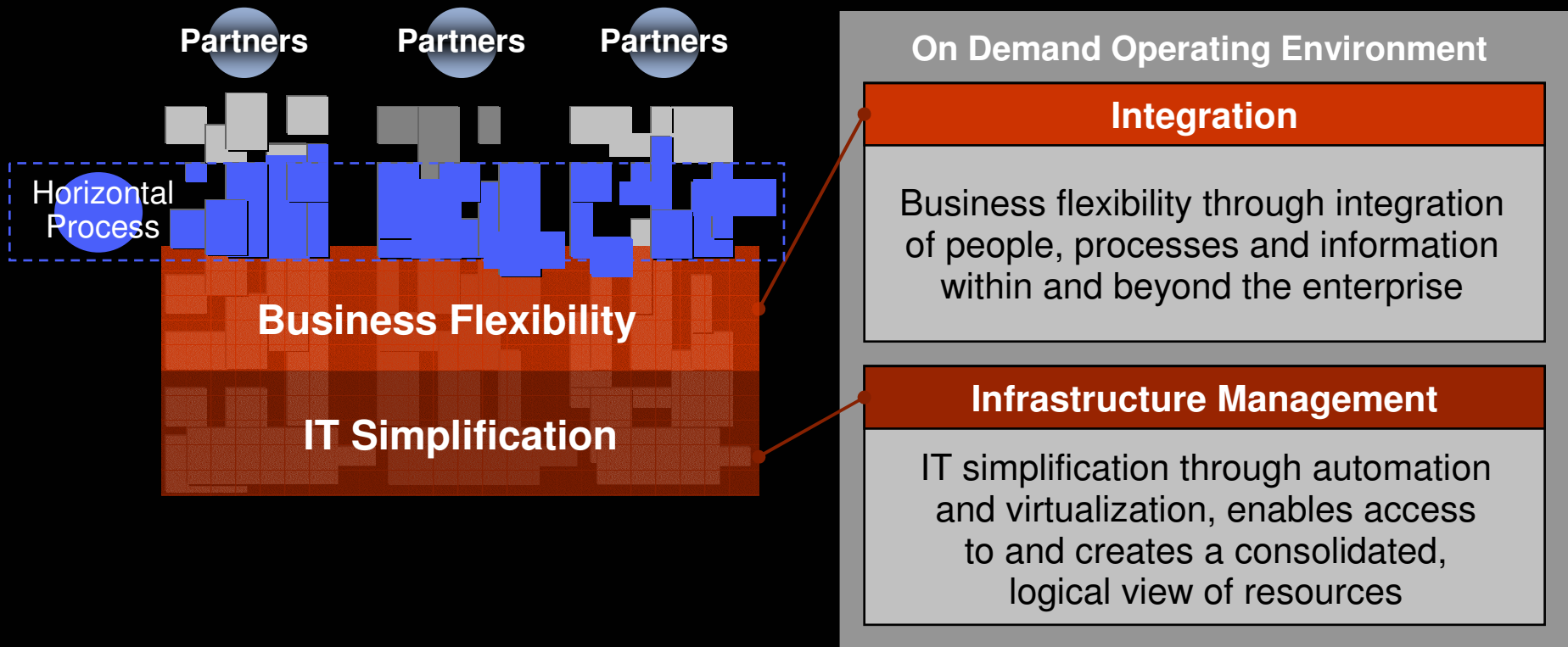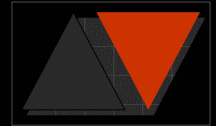- Identification of high value targets

Optimizing Your Infrastructure
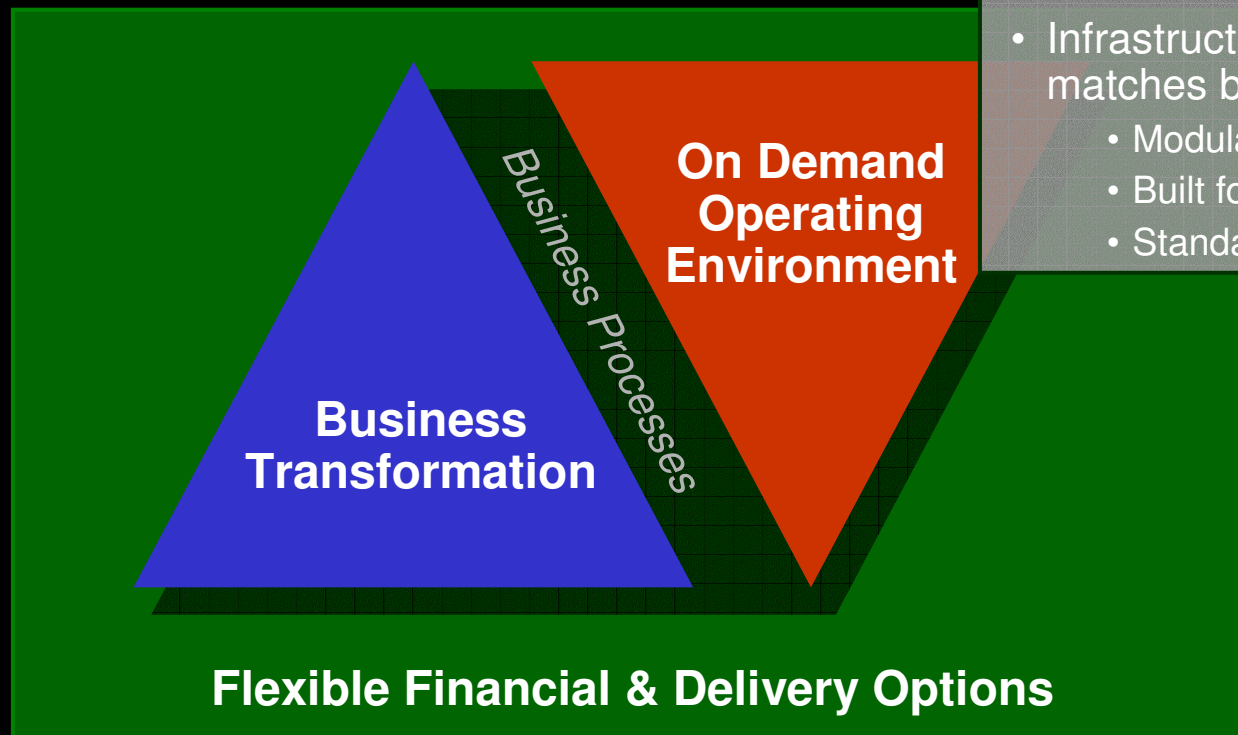
- Leverages existing assets
- Enables integration
- Infrastructure design matches business design
  - Modular
  - Built for change
  - Standards-based

Business Processes

On Demand Operating Environment

Business Transformation

Flexible Financial & Delivery Options

Requires On Demand Operating Environment

Partners   Partners   Partners

Horizontal
Process

Business Flexibility

IT Simplification

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
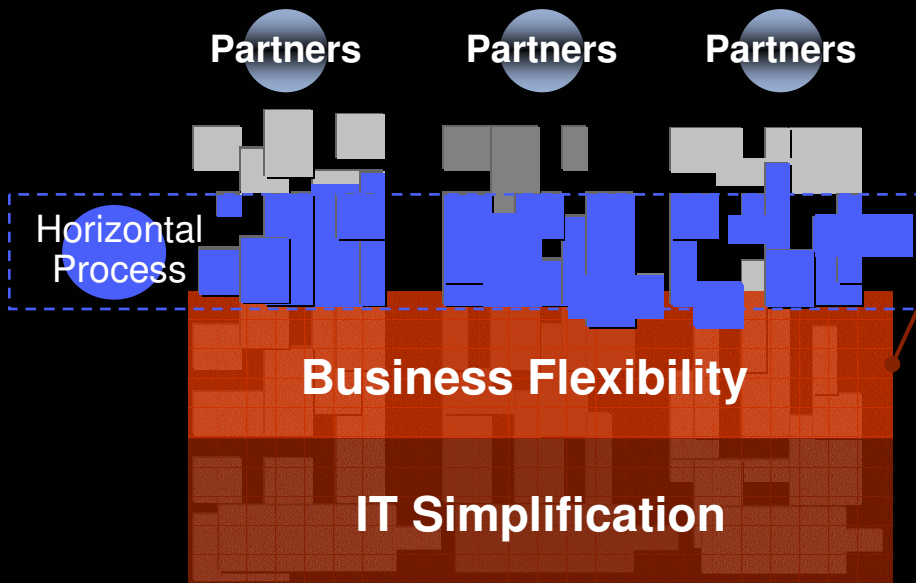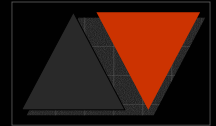
Open standards are table stakes for an
on demand operating environment

Requires On Demand Operating Environment
Capabilities for Business Flexibility

Partners **Partners** **Partners**

Horizontal Process

Business Flexibility
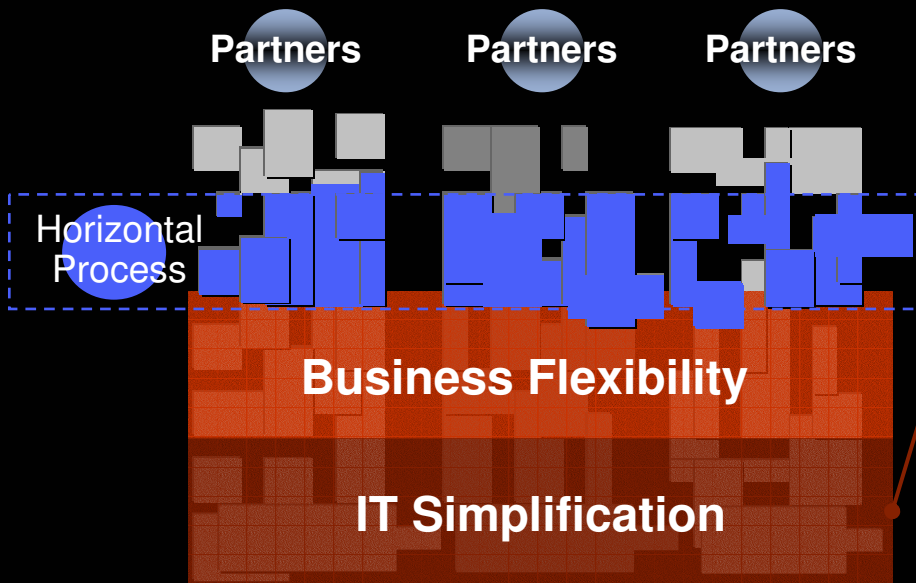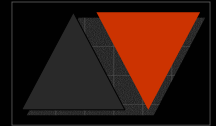
IT Simplification

Integration

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

- Business Modeling
- Process Transformation
- Application & Information Integration
- Access
- Collaboration
- Business Process Management

Requires On Demand Operating Environment
Capabilities for IT Simplification

Partners **Partners** **Partners**

Horizontal Process

Business Flexibility

IT Simplification

Infrastructure Management

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

- Availability
- Security
- Optimization
- Provisioning
- Infrastructure Orchestration
- Business Service Management
- Resource Virtualization of Servers, Storage, Distributed Systems/Grid and the Network

What makes this possible?
A service-oriented architecture (SOA)

Horizontal Process

Business Flexibility

IT Simplification
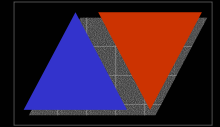
What is SOA?

SOA enables flexible connectivity of applications or resources by:

- Representing every application or resource as a service with a standard interface
- Enabling them to exchange structured information
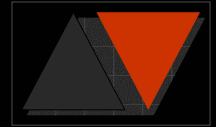
Why do you care?

Provides the flexibility to treat business processes and the underlying infrastructure as defined components that can be mixed and matched at will

Getting Started: Integration
Enabling business flexibility
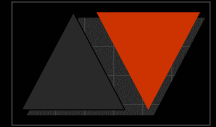
Reinvest

Integration

- Simplify building, developing, and deploying in demand business applications
- **Improve communication & collaboration within the enterprise and beyond**
- **Ability to react quickly to changes in the marketplace by modifying business processes rapidly**
- Instrument applications and analyze events they generate to understand business process impacts
- Create links between new and existing applications
- React in real-time to most relevant information by ensuring **seamless flow of information**

Reinvest

Getting Started: Infrastructure Management
*Enabling IT simplification*

Reinvest

Infrastructure Management

- **Secure access and control of information, resources and applications**

- Ensure scalable and consistent management and control of operations for end to end business systems

- Avoid system failures and take automated action to resolve problems

- Consolidate and simplify infrastructure

- **Optimize utilization and pool resources across a heterogeneous environment**

- **Provision system resources according to business demands.**

- …and more…

Reinvest

Improve communication & collaboration within the enterprise and beyond
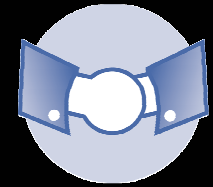
The Challenge:

Finding and making use of the most accurate and relevant information available is a struggle between employees, customers, partners and suppliers

Goal / Benefit:

Engage employees, customers, partners and suppliers in ways that lead to faster and more focused responses to change

Capabilities Required:

- Access
- Collaboration
- Application and Information Integration

Improve communication & collaboration within the enterprise and beyond

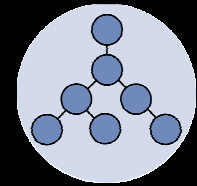**IBM Offerings – Available Today:**

- IBM WebSphere Portal
- IBM Lotus Workplace
- IBM WebSphere Studio IE
- IBM WebSphere Business Integration Connect
- IBM WebSphere Business Integration Adapters
- IBM DB2 Information Integrator

What you can expect:

- Workplaces that enable ways to provide and customize information for consumption by employees, customers or partners.

- Focus on *business process management* capability: a common, correlated view of business and IT level events will be enabled by a common event management infrastructure

React quickly to changes in the marketplace by modifying business processes rapidly

The Challenge:

Competing to deliver customer value faster and more efficiently by dynamically replacing business process components as business needs demand

Goal / Benefit:

- Saves time for technology specialists and allows a level of control for line of business managers based on insights on the market

- Simplification enabled by separating process modification from other components

Capabilities Required:

- Business Modeling

- Business Process Management

React quickly to changes in the marketplace by modifying business processes rapidly
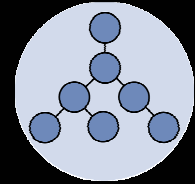
IBM Offerings – Available Today:

- IBM WebSphere Business Integration Modeler

- IBM WebSphere Studio Application Developer

- IBM WebSphere MQ Workflow

- IBM WebSphere Interchange Server

- IBM WebSphere Application Server v5 Enterprise Edition

- IBM DB2 Information Integrator

- IBM Rational XDE

What you can expect:

- Tools that will allow the business user to focus on the business aspects; strategy, process, organization & information

- Business tools will complement IT tools that focus on technical and platform aspects such as choreography, security and data management/integration.

- Continued support of evolving standards
  - Business Process Execution Language (BPEL) will allow companies to model processes and communicate them through cross-enterprise processes that speak to other enterprises/ partners.
  - Service Oriented Architecture (SOA) enables process flexibility

Secure access and control of information, resources and applications

The Challenge:

More effective ways to securely connect applications, information and people within and across business and technological boundaries

Goal / Benefit:

- Secure and control access to information and operational entities in real time.

- Controlled, yet pervasive access to information and applications.

Capabilities Required:

- Security
- Availability

Secure access and control of information, resources and applications

IBM Offerings – Available Today:

- IBM Tivoli Identity Management
- IBM Tivoli Access Manager
- IBM Tivoli Directory Server
- IBM Tivoli Directory Integrator
- IBM Tivoli Storage Manager
- Platform Security (IBM RACF, Kerberos)

What you can expect:

- Standardization and implementation of a broad set of Web services specifications for key security technologies:
  - Authentication
  - Authorization
  - Privacy
  - Trust
  - Integrity
  - Confidentiality
  - Secure communications channels
  - Federation
  - Delegation
  - Auditing

Provide monitor and alert systems that allow establishment of business SLAs and automated detection and remediation of violations

The Challenge:

IT systems need to be managed, autonomically, based on a variety of Service Level Objectives (SLO), Service Level Agreements (SLA), policies, and rules

Goal / Benefit:

All operational aspects of the on demand operating environment and all of its provisioned components need to be dynamically managed through their lifecycle (creation, operation, removal) to optimize solution delivery in conjunction with meeting business performance and SLAs

Capabilities Required:

- Provisioning
- Optimization
- Infrastructure Orchestration

Provide monitor and alert systems that allow establishment of business SLAs and automated detection and remediation of violations

IBM Offerings – Available Today:

- IBM Tivoli Monitoring for Transaction Performance
- IBM Tivoli Service Level Advisor
- IBM Tivoli Business Systems Manager
- IBM Tivoli Enterprise Console
- IBM Tivoli Data Exchange
- IBM Tivoli Intelligent ThinkDynamic™ Orchestrator

What you can expect:

- IBM's support for defining, monitoring, enforcing and negotiating SLA's will continue to evolve into a policy driven model
- SLA specs will continue to evolve to support metrics and deeper capabilities to facilitate interactions between service providers and consumers
- Self-managing autonomic systems that integrate SLA awareness across all aspects of IT and business components and process lifecycles as well as management

Reduce the time/cost to re-purpose IT resources to meet business requirements and service levels evolving to dynamic assignment of resources to needs

The Challenge:

The ability for the IT infrastructure to adapt to changes and reconfigure itself, with minimal human intervention, based on goals and policies specified by the offering or provider administrator

Goal / Benefit:

- Provide adaptable capabilities to automate the management of IT resources

- Evolve these capabilities to encompass autonomic policy-based self-configuration as well as orchestrated management of systems and solutions

Capabilities Required:

- Provisioning
- Infrastructure Orchestration

Reduce the time/cost to re-purpose IT resources to meet business requirements and service levels evolving to dynamic assignment of resources to needs

IBM Offerings – Available Today:

- IBM Web Infrastructure Provisioning Offering
- IBM Tivoli Provisioning Manager
- IBM Tivoli Intelligent ThinkDynamic Orchestrator
- WebSphere Application Server Network Deployment
- IBM Tivoli Configuration Manager
- IBM Director
- eServer platform provisioning
- eServer clustering solutions

What you can expect:

- Expanding support for IBM Orchestration and Provisioning Automation Library (OPAL)
  - Documents provisioning workflows for specific business applications, middleware, network, storage and server environments
  - Tighter integration with operating systems, applications, networks and storage provisioning through standards such as the Open grid Services Architecture (OGSA)
- Continued integration of management functions and capabilities to orchestrate and dynamically provision IT resources

Weaving Technology into the Fabric of the Business

Business Process View

**Business Performance Management**
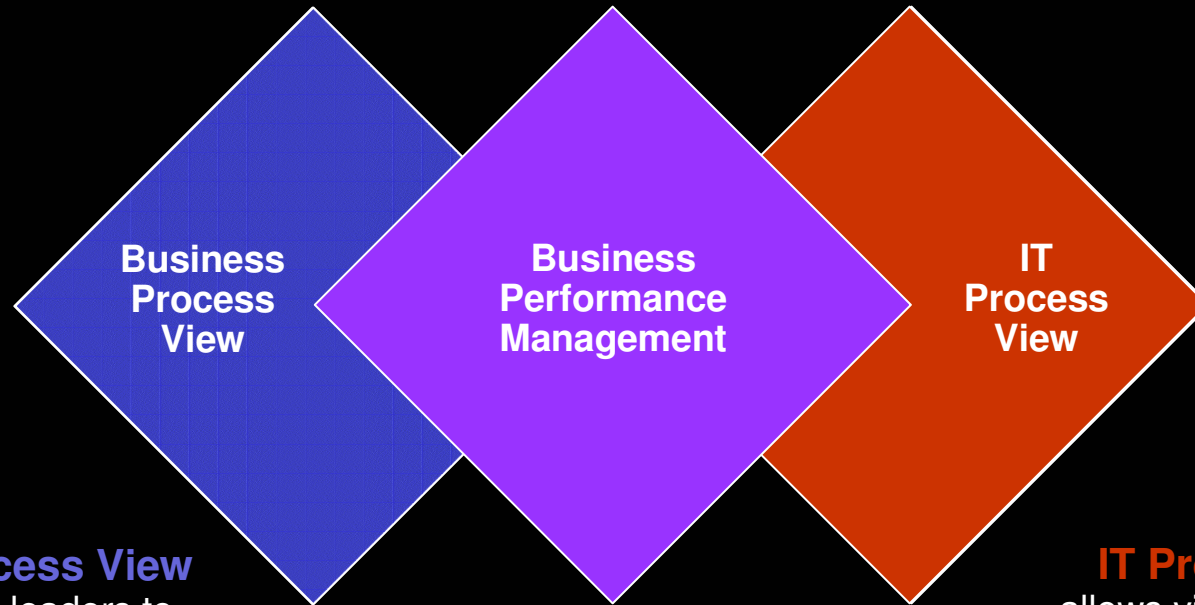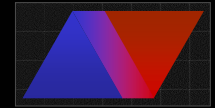
IT Process View

Business Process View
allows business leaders to understand in realtime the state of key business processes

Business Performance Management
allows an organization to model processes, compose applications and manage its operations to achieve desired business outcomes

IT Process View
allows visualization of IT environment in business terms and management of service levels to business objectives

Operating Environment
A journey achieved through incremental steps adopted to meet your needs
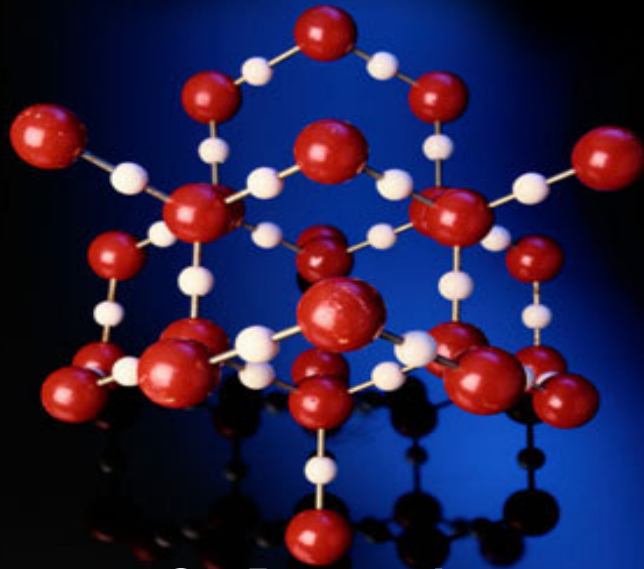
On Demand

Evolution

Dynamic   Modular

Business Flexibility

IT Simplification

- On demand weaves technology into the fabric of business

- Modularity – leading to flexibility and simplification – drives breakthroughs

- Integration and infrastructure management are the operating environment capabilities that deliver business flexibility and IT simplification

- On demand capabilities exist in real products and technologies that IBM sells today

- Customers can get started on the on demand journey through incremental steps