

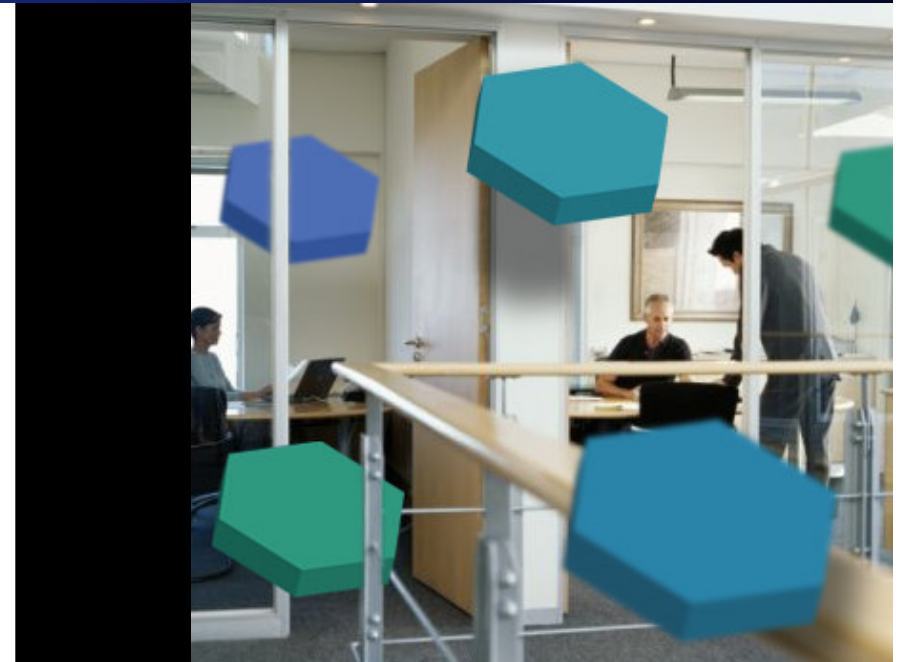


IBM Service Oriented Architecture

SOA Industry Roadmap Overview

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Agenda

- What is an SOA Industry Roadmap?
- What problems does it solve?
- What's in it?
- What is the range and scope of IBM's offerings in this area?
- What are some examples?

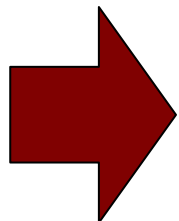
Innovation that Matters To CEOs

Top Innovation Priorities:

- Extend the ability to collaborate inside and outside
- New innovative business models and processes
- Leverage information for business optimization



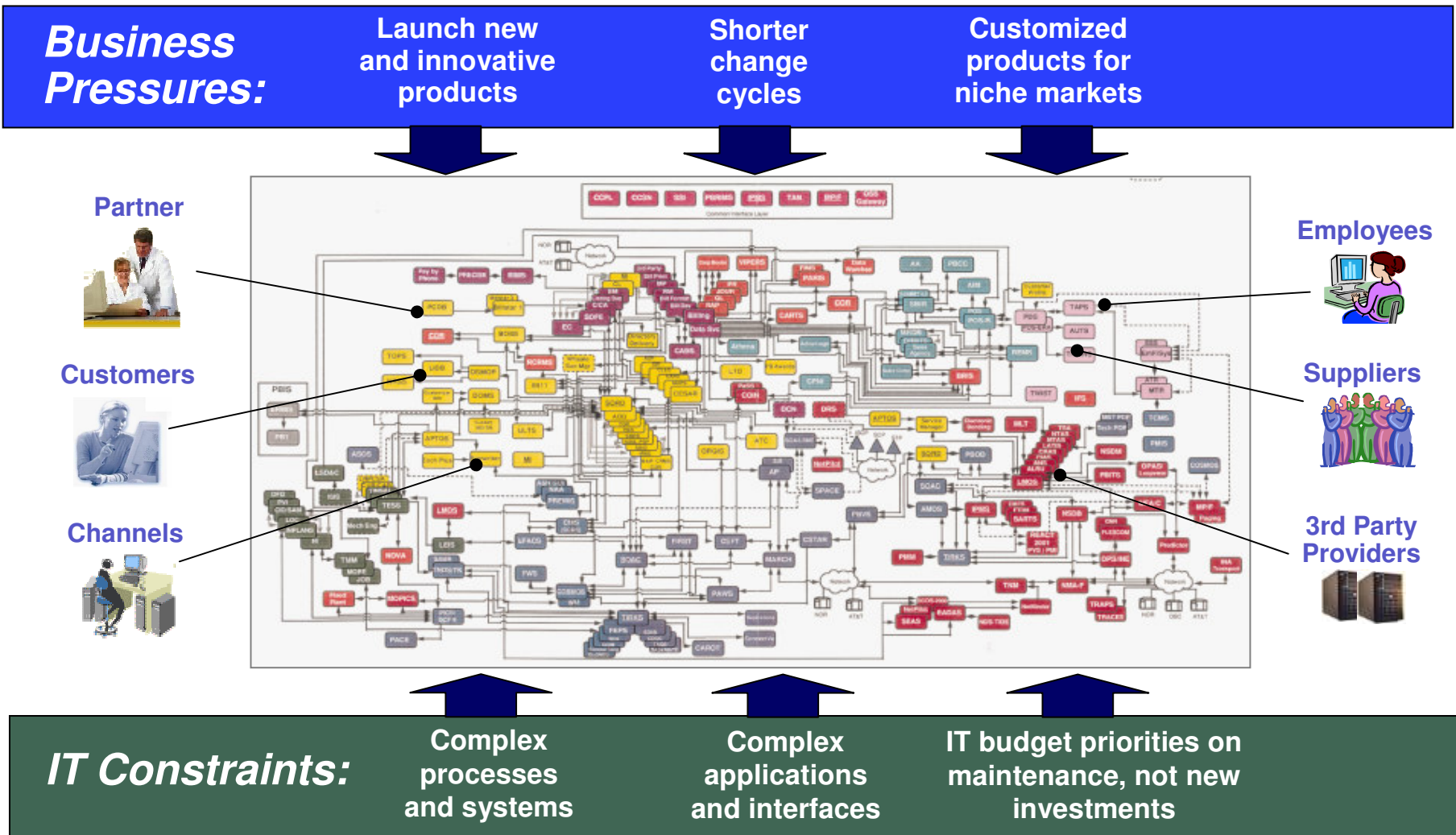
Source: 2006 IBM Global CEO Survey



87% Expect fundamental change in next 2 years

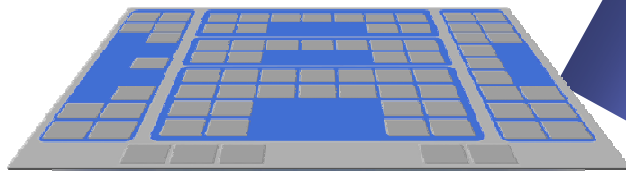
78% Believe innovation requires greater business and technology alignment

The Challenge: Business and IT Alignment



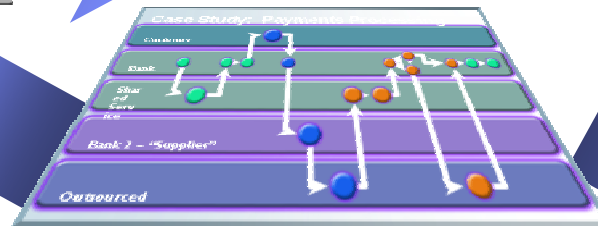
A New Approach is needed to extend and enhance existing capabilities and unleash more business value

Business View



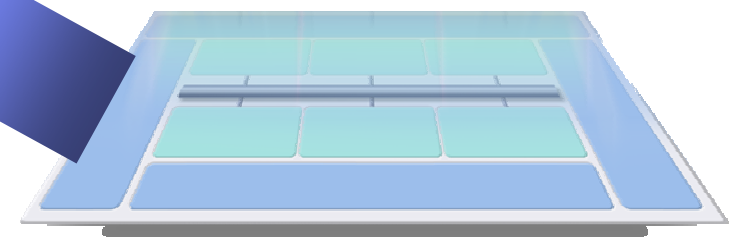
- Decompose business capabilities into reusable assets that can be flexibly combined into new products and services

Process View



- Focus on making business processes dynamic, flexibility and unique rather than simply automating them

IT View



- Deploy on a flexible SOA infrastructure that enables rapid change and incremental deployment without IT systems "rip and replace"

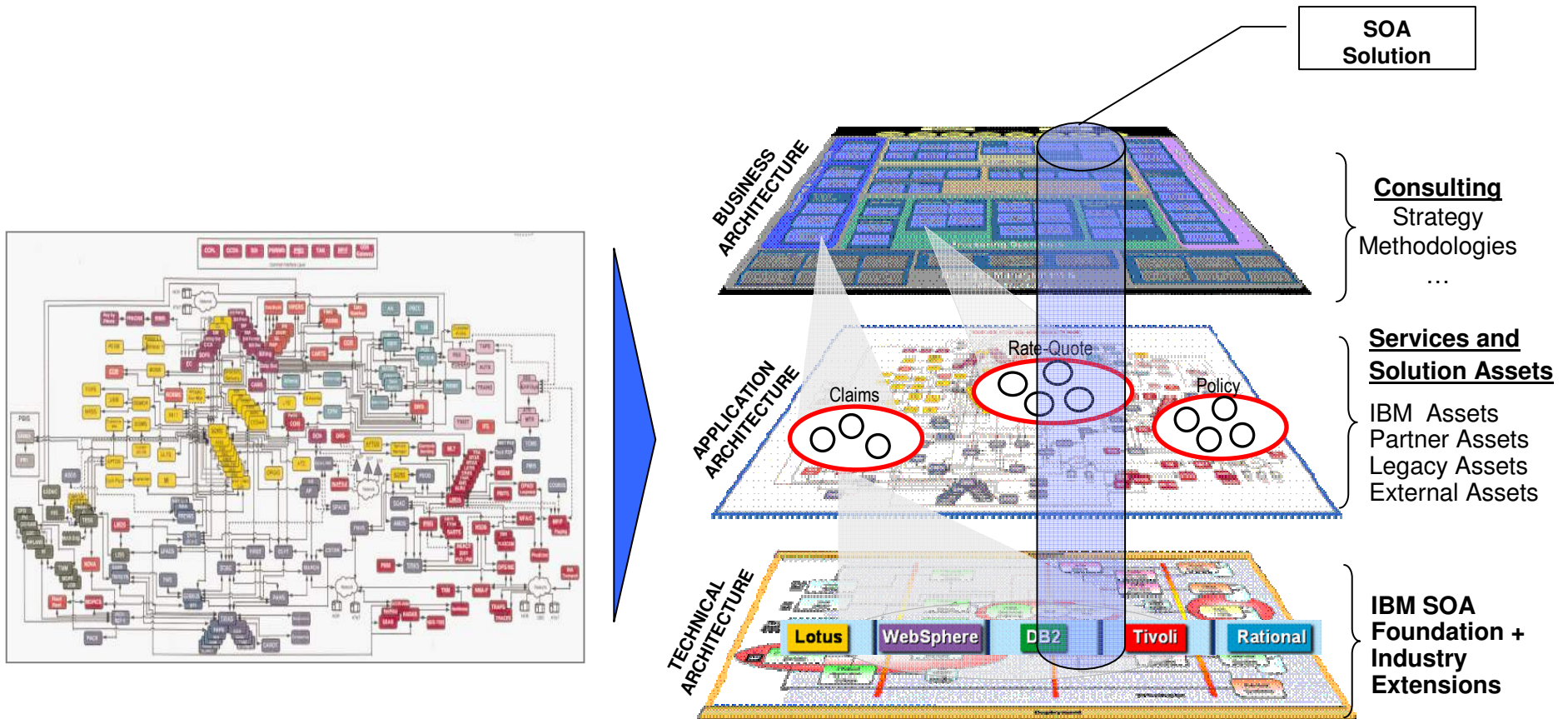
Introducing IBM SOA Industry Roadmaps

Delivering flexible and innovative solutions at lower cost and risk

- SOA Industry Roadmaps are IBM's integrated software, services, and hardware offerings.
- They are designed to help customers benefit from the business, technical and cost saving advantages of Service-Oriented Architecture (SOA) in an incremental, controlled and effective manner, regardless of where they are along the SOA adoption continuum.

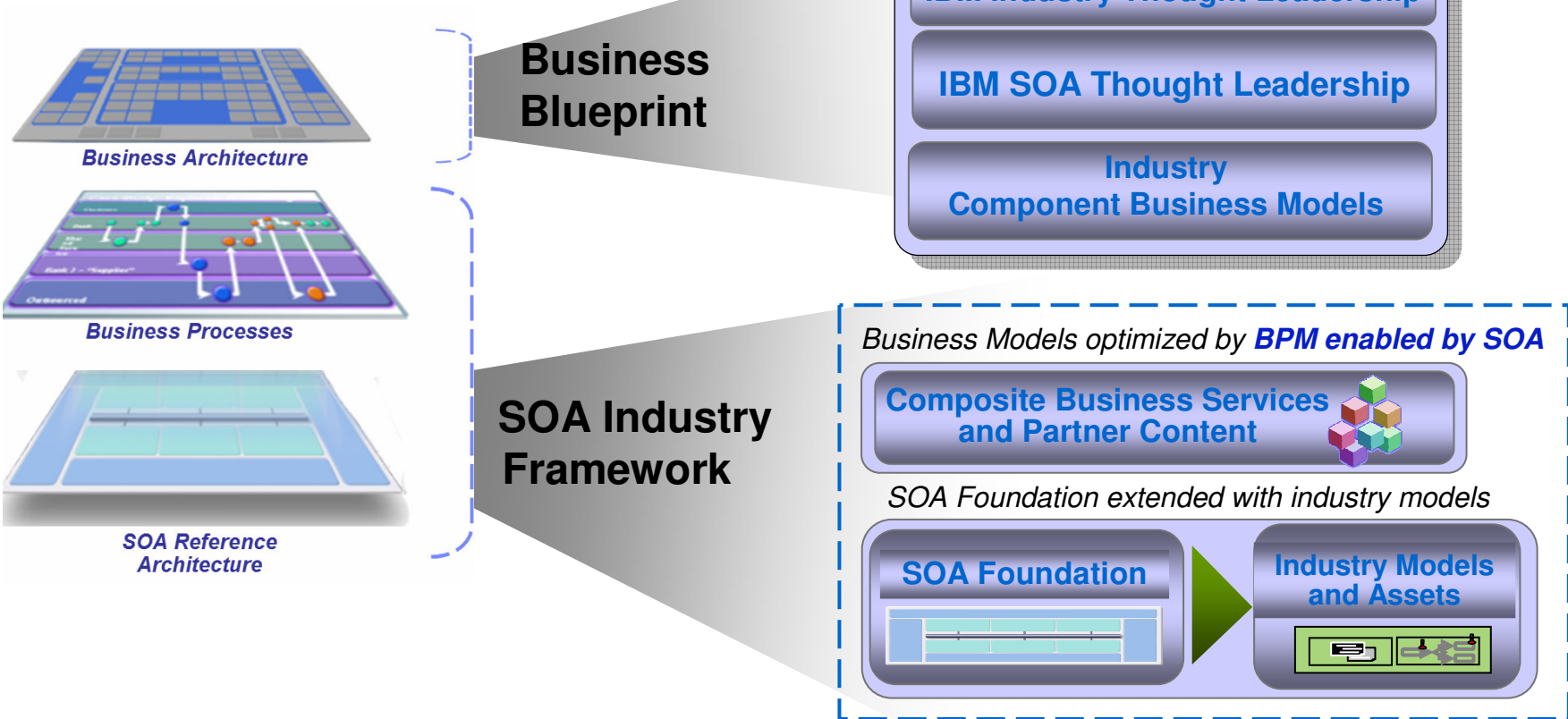


SOA Industry Roadmaps help align business intent with IT execution



Contents of an SOA Industry Roadmap

SOA Industry Roadmaps



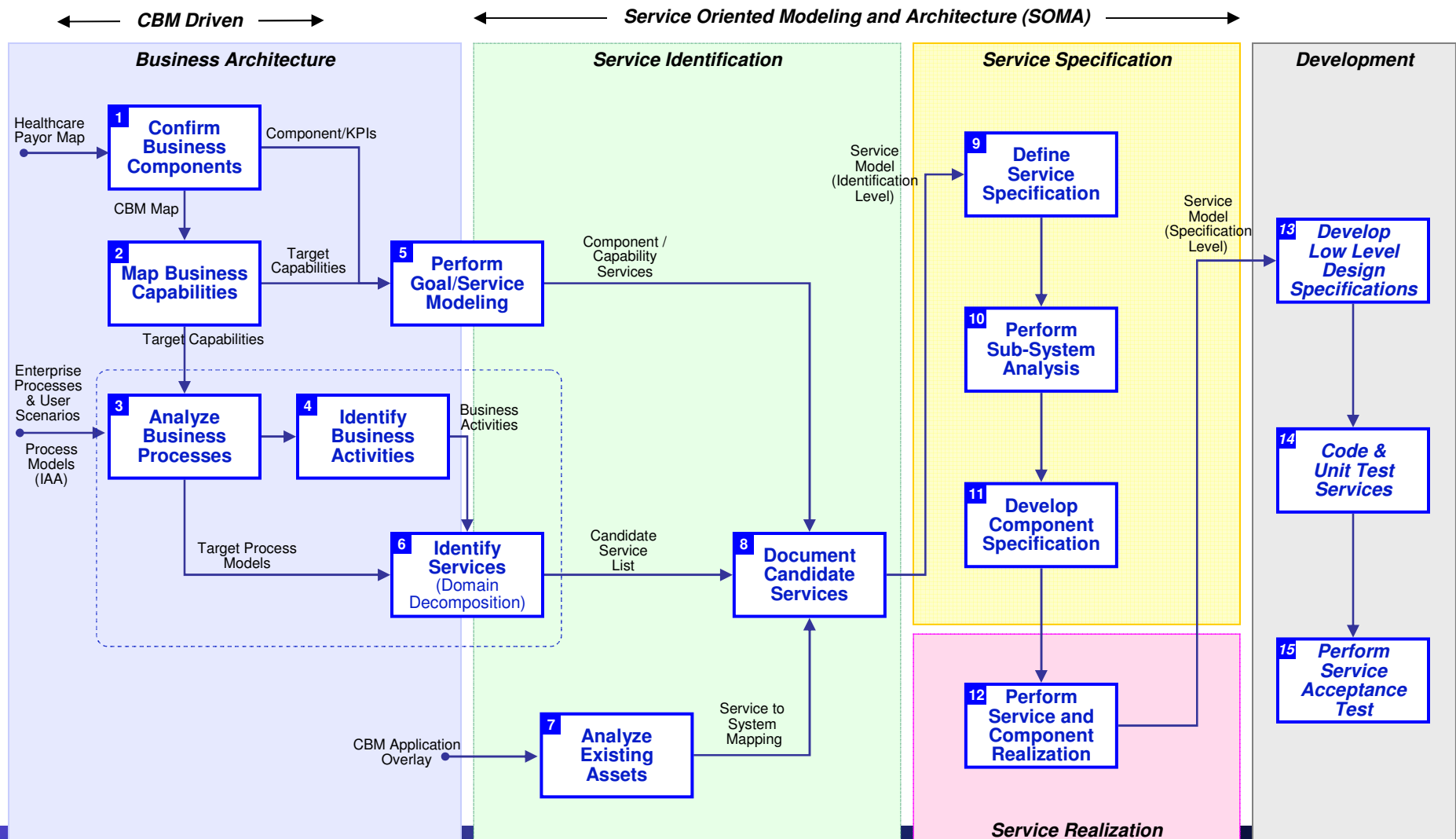
Component Business Modeling (CBM)

- Analytical technique that breaks business functions into a structured collection of components
- “A Business on One Page”
- Identifies services areas that are differentiating by applying objective evaluation criteria
- Generates views (“heat maps”) that show where transformation opportunities lie
- Develops business case for IT and business transformation opportunities

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

- Strategic differentiation
- Competitive parity
- Basic
- High capital area
- High cost area
- High cost & capital area
- Seek external provider
- Consolidate
- Integrate and redesign
- No action

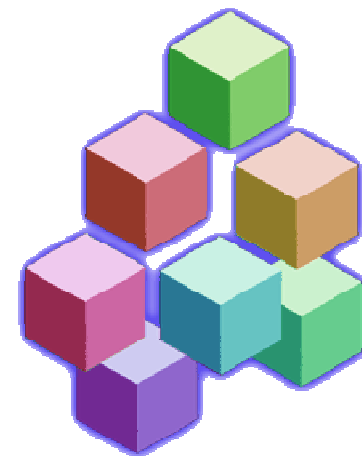
Approach to defining and building SOA Solutions via Roadmaps



Composite Business Services

A Business Service is a business function whose execution can be adapted at runtime based on business policy and user context.

- Designed at business level to represent a discrete business function
- Uses business policies and metadata to enable flexible, adaptable behavior
- Leverages Reference Industry Models to simplify interoperability across disparate internal and external systems
- Provisioned through multiple communication channels (Web, B2B, IVR, etc)
- Derived from disparate IT resources
- Built using Web service and industry standards



IBM SOA Business Catalog

The place to find your SOA assets

3665+ IBM & Partner Assets
(Over 67% Partner Assets)



Banking & Financial Markets

- 500+ Reusable Assets



Insurance

- 400+ Reusable Assets

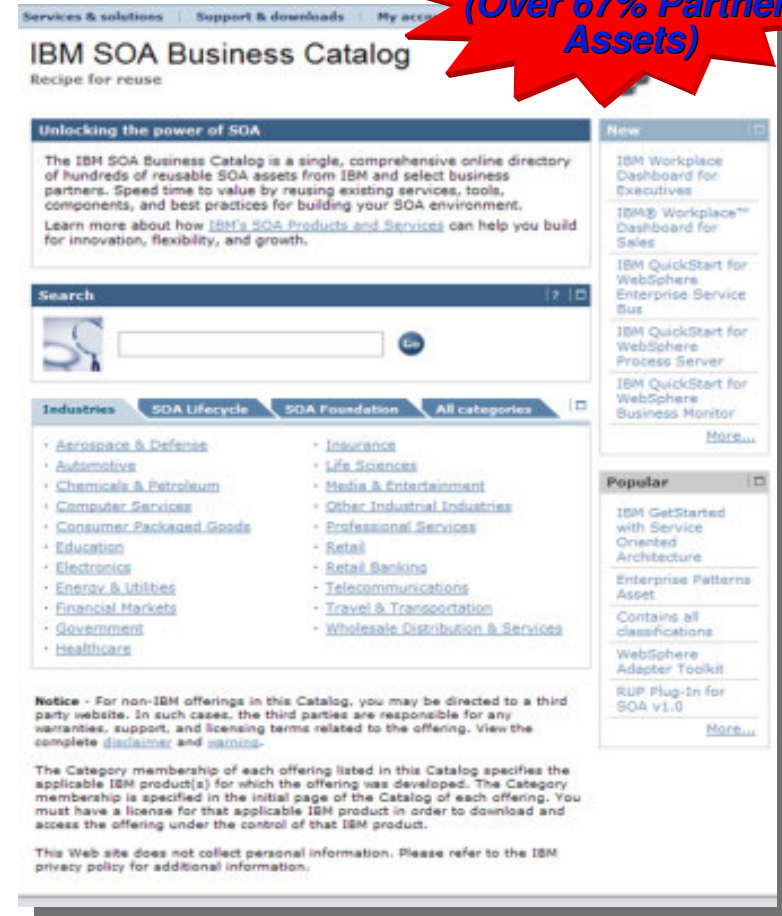


Government

- 200+ Reusable Assets

Cross Industry

- 200+ Adapters
- 250+ Portlets
- Rational Patterns and Plug-ins
- SWG, GTS and GBS SOA Services

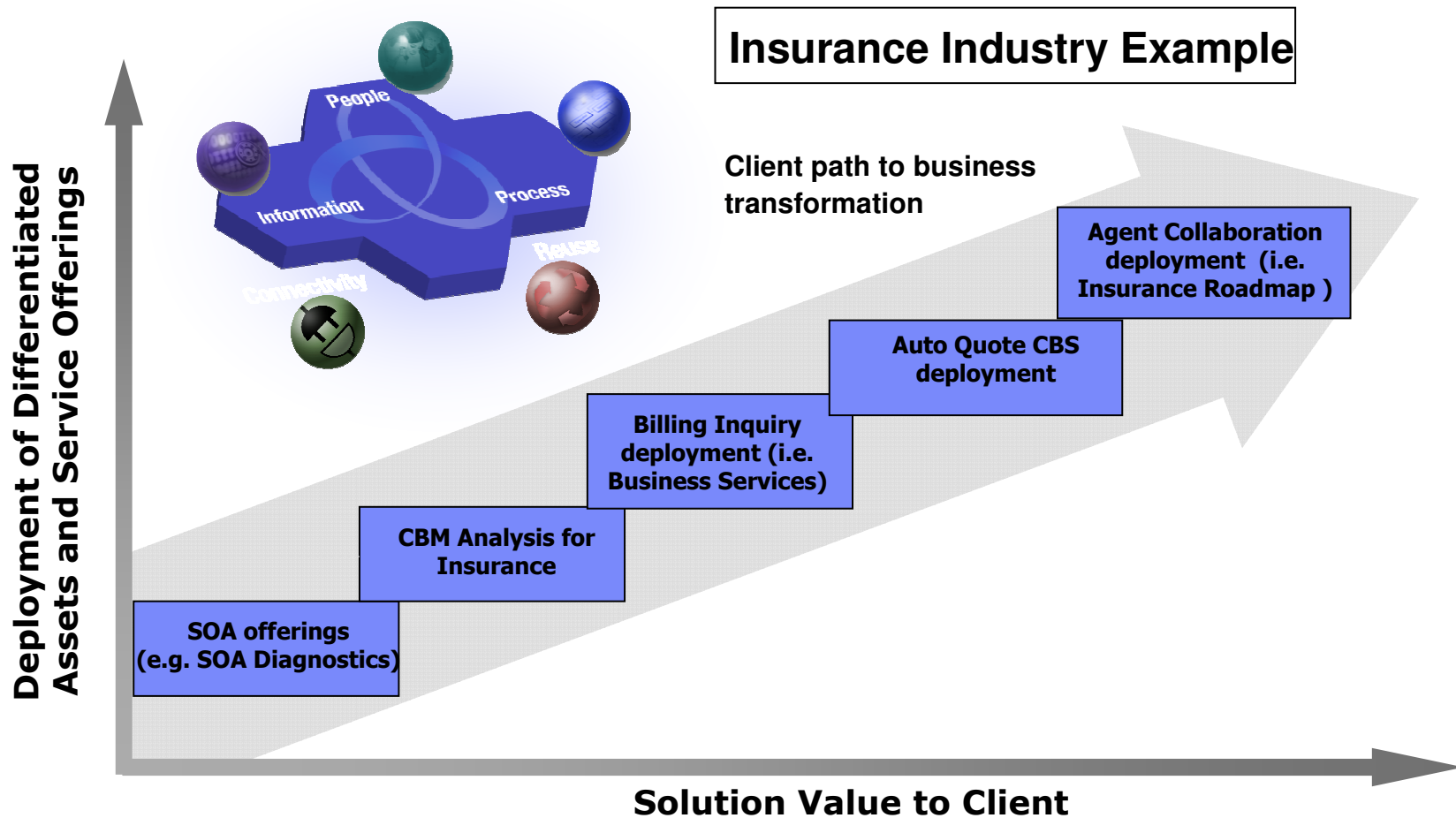


www.ibm.com/soa/soabusinesscatalog

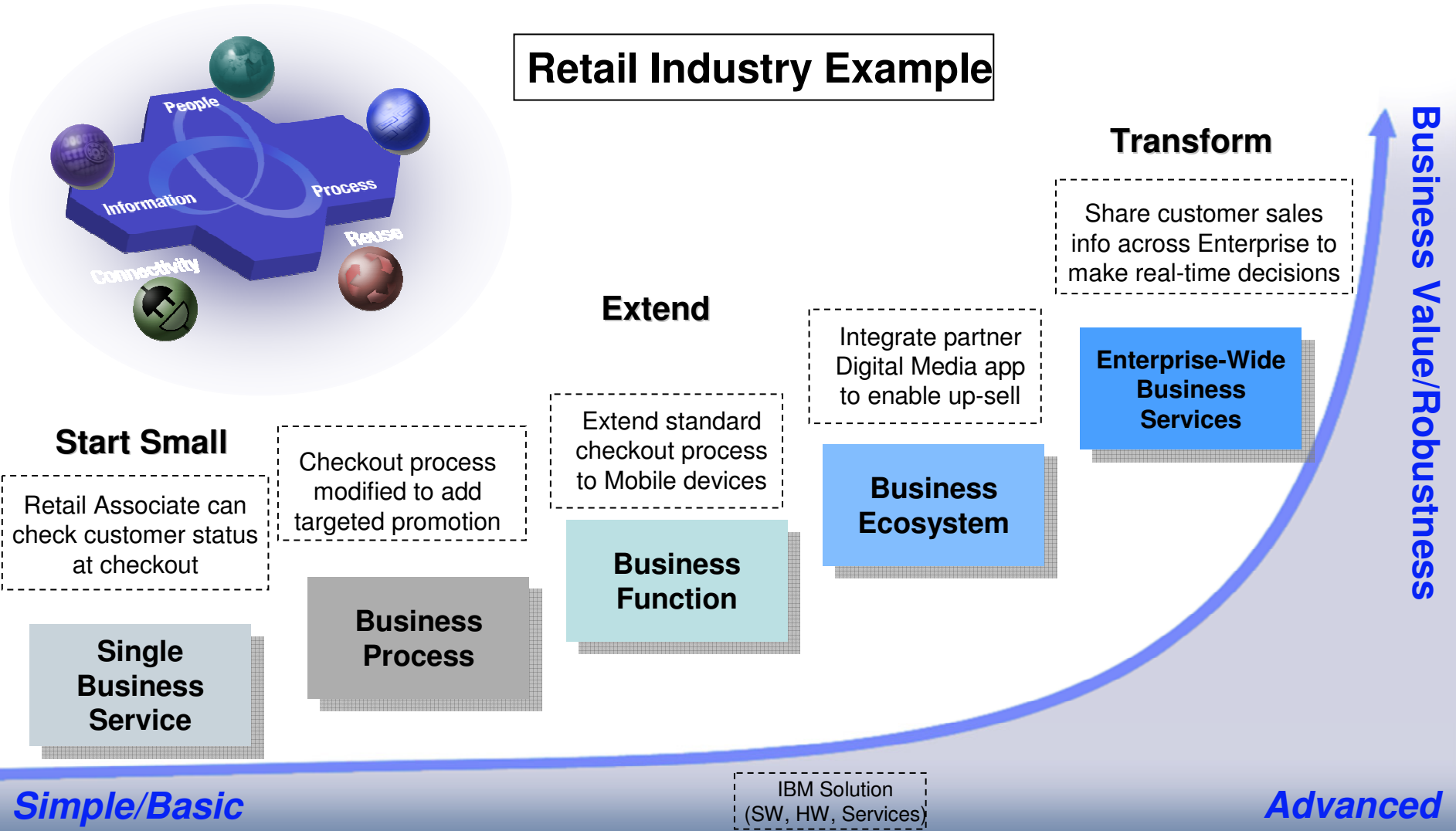
How are SOA Industry Roadmaps unique?

| | Current Approach | SOA Industry Roadmap |
|----------------------|--|--|
| Approach | Custom development or packaged product customization | Best-of-breed solution with pre-built SOA assets and common architecture, methods, and models |
| Project Scope | Core business processes or business functions | Core business process or function, with reusable assets and extensible models across enterprise |
| Risk Profile | Standard SI length engagements. Proven methods and tools | Faster, lower risk engagement with pre-built assets. Proven models, methods, architecture, and tools. |
| Flexibility | Business processes are baked into the application code. Difficult to modify and innovate | Business processes made dynamic, flexibility and unique. Based on business-level building blocks that are easier to change |
| Costs | Packaged product license and maintenance | License only the incremental pre-built assets needed |

SOA Industry Roadmaps deliver incremental business transformation through a combination of professional services, pre-built SOA assets, models, methods, and tooling



Whatever entry point customers choose or where they are along the SOA maturity scale, SOA Industry Roadmaps can accelerate progress



SOA Industry Roadmaps

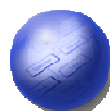
Eight Roadmaps in Six Industries

| <u>Industry</u> | <u>Roadmap</u> |
|--------------------|--|
| Insurance | Agent Collaboration |
| Healthcare | Enrollment to File |
| Healthcare | Provider Collaboration (sold to Payer for their providers) |
| Banking | Payments |
| Retail | Total Store |
| Telecommunications | Business and Operational Support Systems |
| Telecommunications | Service Delivery |
| Industrial | Industrial and Manufacturing Product Lifecycle Management |

The Retail SOA Industry Roadmap has helped businesses solve real problems starting at entry points that address their specific needs



People



Process

Speed up service transactions processing by getting real-time information to employees



STOP&SHOP



People



Information

Help customers find products and information they need while shopping using a Personal Shopping Assistant



People Connectivity



Customers get real-time info online about product availability and status at their local store



Industry Optimized Accelerators

- Store Integration Framework
 - WebSphere Remote Server
 - RBIS Data Model
 - POS integration components
- Multichannel Integration Assets
 - WebSphere Commerce
 - WebSphere Product Center

Retail Integration Framework

SOA Reference Architecture

Insurance businesses can begin to manage compliance and streamline business processes using the Insurance Industry SOA accelerators



- Consolidated and standardized processes across business units and acquisitions
- Refreshed core insurance systems for next generation operating models and efficiency
- Addressed global corporate compliance concerns - initially for email

| | |
|---|--|
| <ul style="list-style-type: none"> • Home/Auto Quote CBS | |
|---|--|

Industry Optimized Accelerators

- IBM Insurance Property & Claims SOA Industry Content Pack
- Services Models
- Data Models
- UML Models

Insurance Integration Framework

SOA Reference Architecture

The Healthcare Integration Framework allows payers and providers to streamline processes and deliver information to the right people at the right time



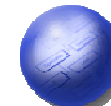
Health Care Service Corporation,
a Mutual Legal Reserve Company



People



Information



Process

Provided customized clinician views of critical patient information and collaboration capabilities resulting in faster delivery of services and improved medical decision making.

- Pinpointed inefficiencies, refined processes to optimize throughput, decreasing costs and increase revenues.
- Increased auto-adjudication of claims by 25 percent. Accelerated time to market for new products.

| | |
|---|--|
| <ul style="list-style-type: none"> • Provider CBS Portfolio • Payer CBS Portfolio | |
|---|--|

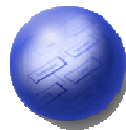
Industry Optimized Accelerators

- IBM Healthcare Payer SOA Industry Content Pack
- Member Portal/Portlets
- Provider Portal/Portlets
- Data Transformations
- Healthcare Payer Data Model
- B2B Partner Gateway

Healthcare Integration Framework

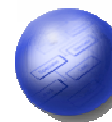
SOA Reference Architecture

The Banking Payments Industry Accelerators speed business process transformation and information delivery for major customers



People Process Information

- Created a unified view of the customer across 5 customer information files
- Enabled rapid integration of acquisitions



Process Information

- Rapidly integrate new payment services and eliminate duplicates
- Common, standards-based payment platform delivering payment process

| | | | | | | | | | |
|--|---|--|--|--|--|--|--|--|--|
| <ul style="list-style-type: none"> • Trade Payments • Payment Status • Funds Transfer • Least cost routing | <ul style="list-style-type: none"> • Message Validation • Interdiction (C.A.C) • Exception Management • Business Monitoring | | | | | | | | |
|--|---|--|--|--|--|--|--|--|--|

Industry Optimized Accelerators

- IBM Banking Payments SOA Industry Content Pack
- Operational Data Store
- Sample Process Flows and Maps
- Monitoring Tools

Enterprise Payments Platform

SOA Reference Architecture

Telecommunications providers are providing next generation service delivery capabilities using the Telco Industry Accelerators



Information People Connectivity

Connect people to online portals to speed up and improve service delivery



Reuse

Drive next-gen service delivery by creating, deploying and reusing services and software components

| | | |
|---|---|--|
| <ul style="list-style-type: none"> • Web Service Interfaces • TriplePlay Provisioning | <ul style="list-style-type: none"> • Unified Service Provision • Telecom Web 2.0 / Mashups • Service & Network Assurance | |
|---|---|--|

Industry Optimized Accelerators

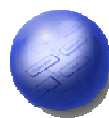
| | | |
|---|---|---|
| <ul style="list-style-type: none"> • Service Delivery <ul style="list-style-type: none"> • IP Media Subsystem • Service Platform Enablers | <ul style="list-style-type: none"> • Service Provisioning <ul style="list-style-type: none"> • Telco BSS/OSS SOA Industry Content Pack | <ul style="list-style-type: none"> • Service Assurance <ul style="list-style-type: none"> • Proposed Industry SOA Content Pack 12/31 |
|---|---|---|

Service Provider Delivery Environment

SOA Reference Architecture

The Product Development Integration Framework allows Industrial businesses to manage workflow and streamline processes during complex development cycles

MAGNA STEYR



Process



Information

An open-standards based and loosely coupled infrastructure to translate Product Data to/from Auto OEMs during product development cycle



Industry Optimized Accelerators

Process Models for:

- PDM-PDM integration
- PDM-ERP integration
- Engineering Change Management
- Supplier Collaboration
- Simulation and Analysis
- Services Models
- Data Models
 - OMG PLM Services 1.0 and 2.0
 - OAGIS 9.1, PLCS
- UML Models
- Monitor Dashboards

Product Development Integration Framework

SOA Reference Architecture

Customer Benefits of IBM SOA Industry Roadmaps

Delivering flexible and innovative solutions at lower cost and risk

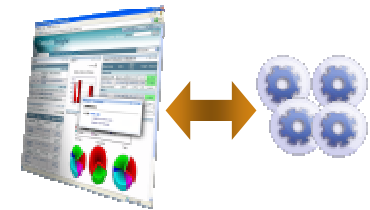
- Designed to rapidly convert industry thought leadership into innovative business solutions
- Create innovative best-of-breed solutions based on the largest SOA partner ecosystem, industry best practices, proven industry models, and professional services
- Accelerate time-to-value with pre-integrated solution assets, methods, architecture, and tooling
- Mitigate project risk through incremental deployment and IT asset reuse



Getting Started with SOA Industry Roadmaps

Customers can get started in multiple ways:

1. Perform an SOA strategy or SOA diagnostic engagement with IBM Global Business Services
2. Download information from the IBM web site on industry thought leadership and SOA transformation
3. Engage an IBM Global Business Services professional (BSP) or Industry Software Sales Specialist (ISSR) for a more detailed demonstration and deep dive of Industry Roadmap solutions
4. Engage IBM Business Partners to review their assets in the context of the IBM Industry Roadmaps



The End Game – Enabling Flexibility and Innovation

We can help you achieve efficiency, effectiveness and change

Innovation is all about change... IBM can make it easier

- Only IBM, with its **end-to-end** capabilities, can help you develop a **customized** road map, focused on the needs of **your business** in the context of **your industry**

Start at the point that is right for you

- IBM will provide you with both **intermediate return** and **long-term value** to help you become an **on demand business**



“What you’ve described is truly gold – These SOA Roadmaps and industry best practice models are the Holy Grail to transform your customer’s business.”

John Rymer
Vice President
Forrester Research
April 19, 2007



धन्यवाद

Hindi

شكراً

Arabic

ขอบคุณ

Thai

Gracias

Spanish



Merci

French

Спасибо

Russian



Obrigado

Brazilian Portuguese

多谢

Simplified Chinese

Danke

German

நன்றி

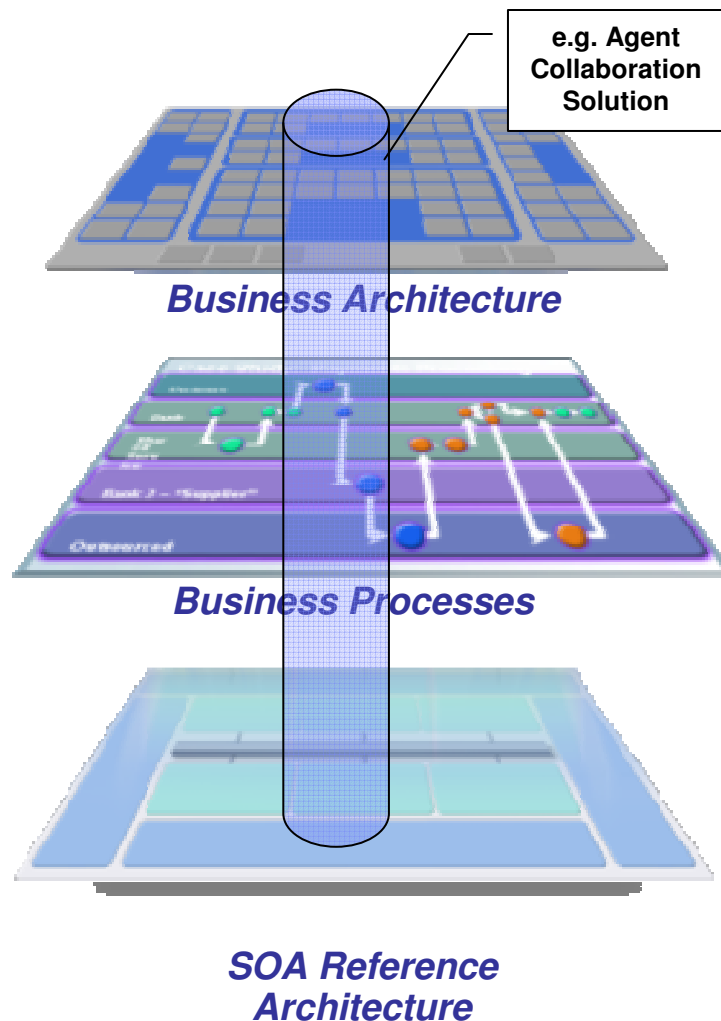
Tamil

ありがとうございました

Japanese

감사합니다

SOA Industry Roadmap - What's Unique?



- **End-to-end industry SOA solution from business strategy to operating model, based on a flexible SOA infrastructure**
- Starts at industry thought leadership, and rapidly convert down into innovative business solutions
- Helps continuous align business and IT to provide ongoing flexibility and responsiveness
- Create innovative best-of-breed solutions based on differentiating pre-built SOA assets from IBM and partners at each level of the solution stack
- Accelerate time-to-value with aligned and integrated solution assets, methods, architecture, and tooling
- Mitigate project risk through incremental deployment and IT asset reuse

SOA Industry Roadmaps can be deployed incrementally to focus benefits and lower project risk

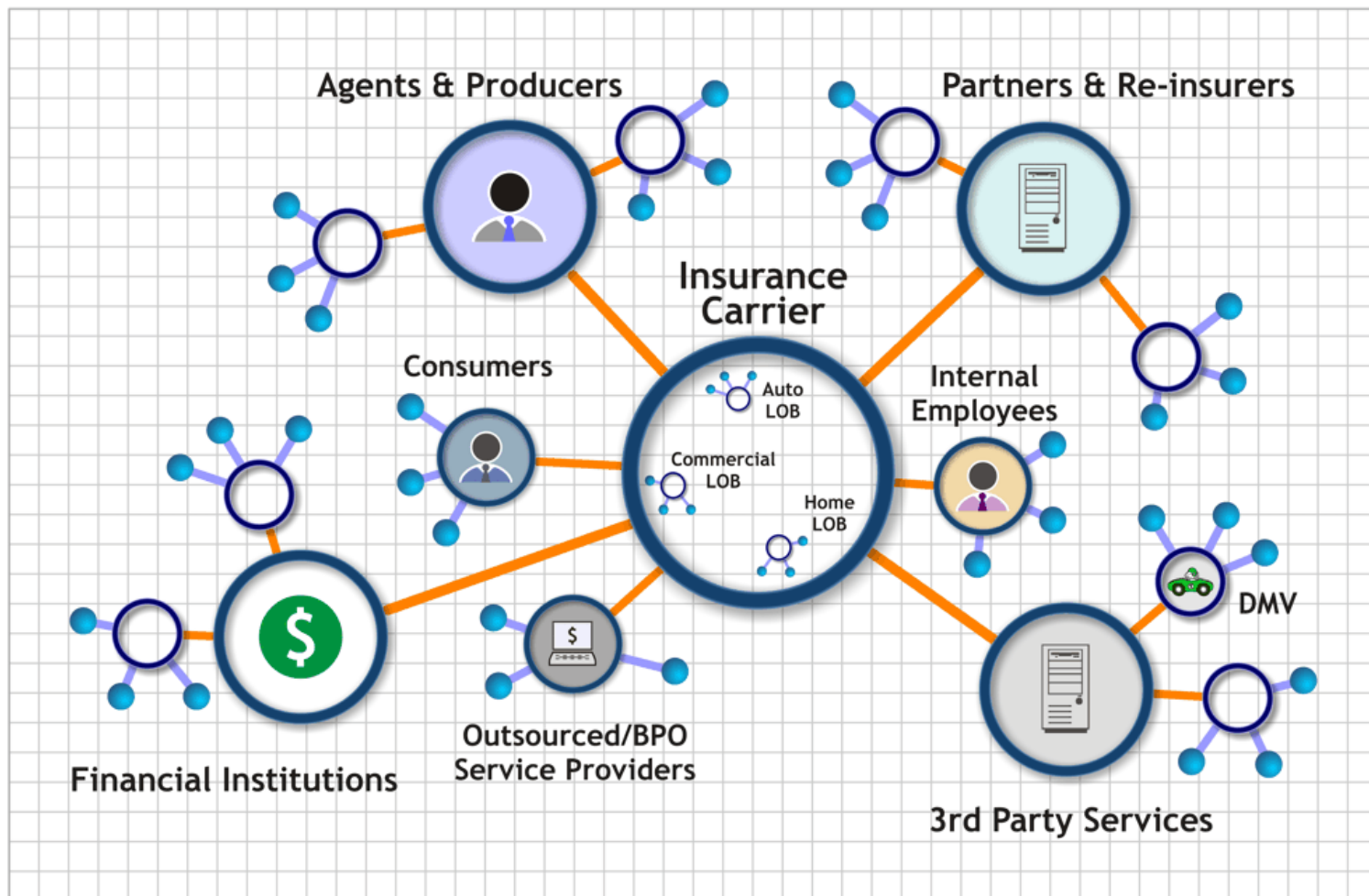
What are your business objectives (insurance industry examples)?

- **Expand Market Reach.** **Syndicate products and services** to third-parties
 - **Accelerate Product Rollout.** **Rapidly reach 1000's of independent agents** with automated service provisioning
 - **Lower Operating Costs.** Rationalize communication channel usage and **reduce call center traffic by 40%.**
 - **Increase Agent Loyalty.** **Up to 80% reduction in agent turn-over,** resulting in increased in gross premiums written.
- **Improved Cross-Sell and Up-Sell.** Dynamically offer related services to **increase top line**
 - **Dynamically Manage Risk Quality.** Manage risk appetite at the point of sale to **improve margins**
 - **Faster Product Time to Market.** **50% reduction** in unit and regression testing and over **50% reuse** of IT assets.
 - **Lower the Cost of Integration.** **Over 20% cost reduction** leveraging standards and IT asset reuse.
 - **Optimize Producer-Carrier Relationships.** Holistic agent network view to **optimize performance**
 - **Improve straight-through processing.** **10,000's of automated quotes** per month through B2B and Web channels.



The Vision:

Industry Roadmaps enable the Business Services Ecosystems



Insurance Business Services Ecosystem

IBM Integrated SOA Portfolio – Detailed Definition

- Industry SOA Roadmaps are IBM's integrated software, services, and hardware offerings. They are designed to help customers benefit from the business, technical and cost saving advantages of Service-Oriented Architecture (SOA) in an incremental, controlled and effective manner, regardless of where they are along the SOA adoption continuum.
 - The **services portfolio** will include business and technical consulting services across the full services lifecycle (from strategy to implementation) and based on a 3-tier architecture (Business Architecture, Applications and Infrastructure); soft assets (methods and tools) and hard coded assets (composite business services); education, training and governance consultation; field deployment and support services, hosting, support for business process outsourcing (MPBS) and custom development; Outsource Services, Multi-Platform Integration Services (SAP, Oracle, Microsoft).
 - The **software portfolio** will cover all IBM SOA tooling, data, and middleware products and associated services in support of the design, development and deployment of assets at both the product and component levels to ensure world class capability to manage and govern all stages of IBM SOA lifecycle framework.
 - The **hardware portfolio** will cover IBM hardware and associated services aimed at improving infrastructure performance, reliability, interoperability, security and manageability e.g. server consolidation, blade servers, and virtualization of servers and storage, and will develop SOA compliant offerings on GRID, Autonomics and Virtualization.
- Individual customer offerings within each roadmap IBM will be comprised of both standalone software, services, or hardware offerings and their combinations. A subset of these offering will be organized around industry lines and will be aligned with the industry points of views.