The Modern Mainframe…
At the Heart of Your Business

Introduction

Service Oriented Finance

We are a traditional bank with branch offices throughout the country.

Banking competitors and non-bank specialists are taking away our customers.

**Service Oriented Finance
CEO**

Service Oriented Finance

Our customers demand greater choice, and personal security and control in their banking relationships.

We need a next generation banking system!
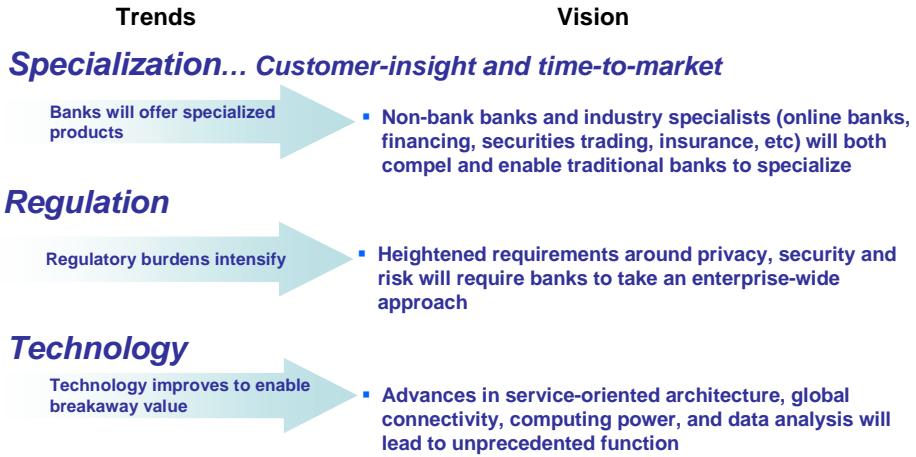
Marketing

Service Oriented Finance

Our current IT infrastructure will be hard to change to meet these new business needs!

**Service Oriented Finance
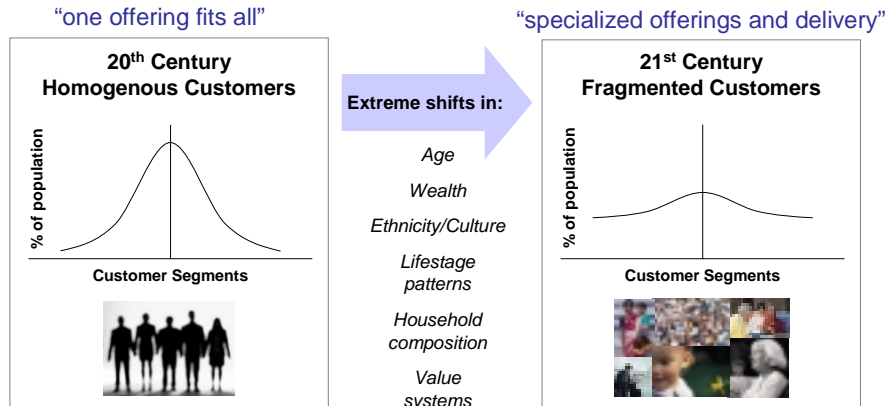CIO**

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Next Generation Solutions for Banks and Others

What are the key business requirements?

Trends	Vision

Specialization... Customer-insight and time-to-market

Banks will offer specialized products → ▪ **Non-bank banks and industry specialists (online banks, financing, securities trading, insurance, etc) will both compel and enable traditional banks to specialize**

Regulation

Regulatory burdens intensify → ▪ **Heightened requirements around privacy, security and risk will require banks to take an enterprise-wide approach**

Technology

Technology improves to enable breakaway value → ▪ **Advances in service-oriented architecture, global connectivity, computing power, and data analysis will lead to unprecedented function**

Source: The paradox of Banking 2015, by IBM Business Consulting Services

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Specialization to Satisfy Diverse Customer Requirements

Customer Value Drivers

"one offering fits all"

"specialized offerings and delivery"

20th Century Homogenous Customers

% of population

Customer Segments

Extreme shifts in:

Age

Wealth

Ethnicity/Culture

Lifestage patterns

Household composition

Value systems

21st Century Fragmented Customers

% of population

Customer Segments

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Examples of Specialization Requirements

- Differentiate product offerings for different customer sets

- Customer insight to determine optimal marketing segments

- Extend sales reach via business partners

- 24x7 online access by customers

- Launch specialized products faster

How Businesses Will Deliver Specialization

- Customers will demand greater choice, personal security and control in all relationships

- Businesses will source products and services from a large number of specialized service providers – both independents and others providing white label products

- Rapid Innovation – in products, processes, relationships and business models – will be the primary path to sustainable growth

Source: The paradox of Banking 2015, by IBM Business Consulting Services

Regulations Demand Compliance in Business Processes and Applications

Basel II

- International accord for the handling of risk
- Requires the collection of 7 years of data
- Focuses on credit and operational risk
- Specifies the need for supervisory control

International Accounting Standards

- International Financial Reporting Standards
- Enables common understanding of financial reports
- Mandatory in EU, Australia, Russia and some ME and AP countries

Payment Regulations

- SEPA initiative to establish a single euro payments area
- Secure fast and efficient payments in the euro-zone
- Standard service levels to be enacted by 2010

Corporate Governance

- Systems Control Effectiveness
- Decision Support Evaluation
- Internal Control Assessments/ Reviews & Governance
- Financial Reporting Disclosure

Anti Money Laundering

- Many jurisdictions now have AML legislation in force (USA PATRIOT Act, UK Proceeds of Crime Act, etc).

Rapid Innovation is a Competitive Advantage

- In March 1991, MCI introduced "Friends and Family," a new approach to long-distance telephone service.
  - ▶ Under this plan, subscribers could set up discounted "calling circles" as long as both parties were MCI subscribers.

- "Friends and Family" immediately changed the dynamic of the market, and took many customers from AT&T.

- AT&T's billing system was not able to deliver new products in a short time frame.

- Four years later, AT&T responded with a new billing system to compete with MCI's 'Friends and Family' (which had already won 5 % of market share)

Flexible business systems are needed to remain competitive!

Technology Requirements for Next Generation Solutions

- Service Oriented Architecture (SOA) is key to providing flexibility and rapid innovation

- Availability and reliability to conduct online business continuously

- Performance and scalability to allow quick and cost effective response to growth

- Security and auditability for regulatory compliance

- Competitive Total Cost of Ownership

SOA Delivers Business Values … Today
A Recent Study from IBM SOA Engagements

IBM studied a subset of engagements and found:
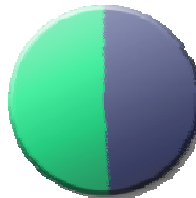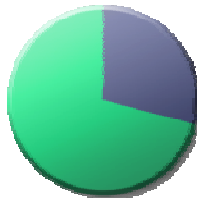
100% realized improved flexibility

100%
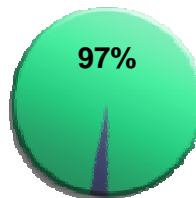
97%

97% justified SOA projects based on cost savings & impact to profitability

71% reduced risk
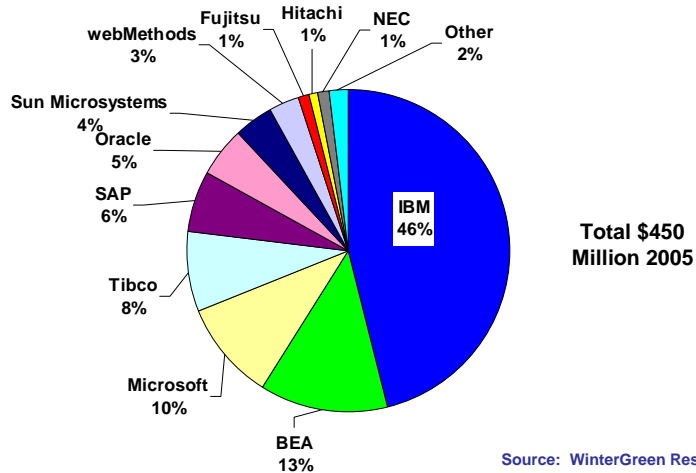
51% experienced increased revenue

Source: IBM Institute for Business Value "The Business Value of Service-Oriented Architecture" 2006

IBM is the Market Leader in SOA

Worldwide Service Oriented Architecture (SOA) Market Shares, 2005

IBM 46%

Total $450 Million 2005

BEA 13%

Microsoft 10%

Tibco 8%

SAP 6%

Oracle 5%

Sun Microsystems 4%

webMethods 3%

Fujitsu 1%

Hitachi 1%

NEC 1%

Other 2%

Source: WinterGreen Research, Inc.

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The Role of the Mainframe in Next Generation Solutions

- Most core business systems already run on the mainframe at the heart of the business
  - ▶ Represent huge investments
  - ▶ Key to ongoing business operations

- The modern mainframe will play a central role in SOA next generation solutions

- The mainframe delivers superior qualities of continuous operations, rapid scale up, and security

- The mainframe achieves the lowest TCO for next generation solutions

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Shifting Trends Favor the Mainframe Again

- Continuous availability is even more important in the web world
- Security and compliance are top of mind
- Server sprawl has driven up the cost of labor
- TCO pressure is driving customers to consolidate workloads on virtualized platforms
- Network economics favor consolidation once again
- Cost of power is increasing
- Growing use of Linux
- The mainframe is at the center of SOA
- IBM has delivered dramatic mainframe price reductions

It's time to take a fresh look at the mainframe!

2006 Major Mainframe Milestones

— 4Q Largest Hardware Revenue Quarter Since 4Q98

— Top 25 Banks in the World

— Record High for Market Share: 37.1%

— Record Year for Specialty Engines

— 10 Million MIPS Installed

— $1 Billion in Revenue from System Integrators
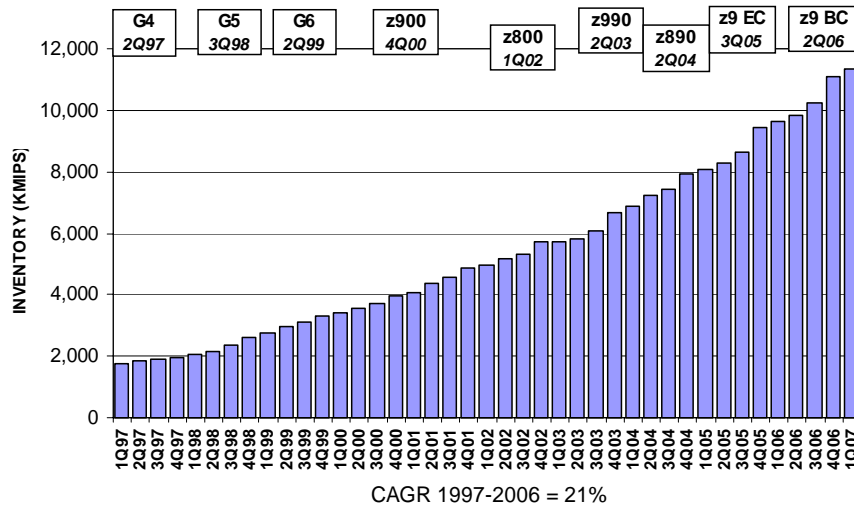
— First Online Game Client: Hoplon Infotainment

Source: IBM Finance, 1Q07

(1) externally reported, at actual currency

Customers Are Installing More MIPS

CAGR 1997-2006 = 21%

Source: IBM STG Finance

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System z Today

- DB2 for System z is in 25 of the top 25 worldwide banks

- IMS and CICS systems execute over 80 billion transactions a day
  - ▶ 490 of IBM's top 500 customers use CICS
  - ▶ Over 95% of Fortune 1000 companies use IMS

- System z increased market share 14 points while Sun and Fujitsu fell over past 5 years

- 60% of System z revenue is driven by new workloads (Java, Linux, Database, SOA)

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Mainframe or Distributed – or Both

- Distributed Computing does not replace Mainframe Computing

- Side-effects of improper application of Distributed Computing
  - ▶ Proliferation of Servers
  - ▶ Spiraling Labor Costs
  - ▶ Difficult Security Environment
  - ▶ Data and process synchronization challenges

- These side-effects are causing a re-evaluation of the distributed computing model

When to Use a Mainframe

- Use a mainframe
  - ▶ To consolidate core business workload into a structured, cost contained environment

- Use a distributed system
  - ▶ To run individual applications, which are new, or subject to change in a less controlled environment

Agenda

9:00 - 9:15	Introduction to Next Generation Requirements	
9:15 - 10:00	*SOA – The foundation of your Next Generation Solution*	Using SOA to Build Your Next Generation Solution
10:00 - 10:40		Tools for Rapid Development and Deployment
10:40 - 10:55	*Break*	
10:55 - 11:25	*A Mainframe Primer – Clustering to achieve scale*	Mainframe Clustering
11:25 - 12:00		Continuous Availability
12:00 - 1:00	*Lunch*	
1:00 – 1:50	*Optimize customer relationships by consolidation*	Consolidating Data on System z
1:50 – 2:30		Consolidating Applications on System z
2:30 – 3:00	*Business demands on technology*	End-to-end Security and Compliance
3:00 – 3:20	*Break*	
3:20 - 3:50	*Business demands on technology*	IT service management
3:50 - 4:30	*Delivering Next Generation Solutions at the lowest cost*	

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