



The Modern Mainframe... At the Heart of Your Business

Introduction



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I Had a Dream Last Night...

- I dreamed that IBM introduced a new computing platform for the 21st century that would help me beat my competitors
 - ▶ Cuts the cost of computing in half
 - ▶ Green machine that uses less electricity
 - ▶ Requires half the operational labor to keep it running
 - ▶ Can run global business transactions while never going down
 - ▶ And it would be used at the core of the world's largest business

- The name of this **revolutionary** platform was.... System z

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**

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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

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Service Oriented Finance

Our current IT infrastructure will be hard to change to meet these new business needs! It will cost too much as well.



Service Oriented Finance
CIO

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Requirements Driving Next Generation Solutions

- Specialization
 - ▶ Recognize different customer segment and their different needs
 - ▶ Extend access to different customer segments
- Regulation
 - ▶ Privacy and security
 - ▶ Risk management and audit
- Technology
 - ▶ Global connectivity
 - ▶ Service oriented architecture
 - ▶ XML
 - ▶ Virtualization

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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
- Extend access to online customers 24x7
- Launch specialized products faster

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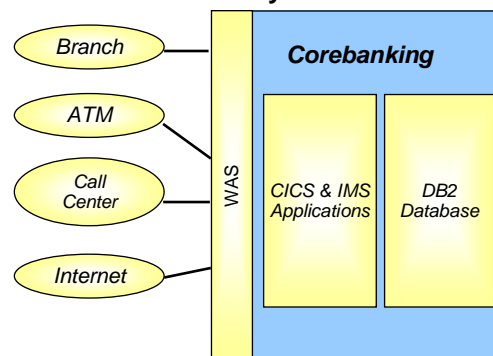
Wachovia Bank - Extend Access Channels for Internet, Call Centers, and Branches

Business Need: Enhance ability to deliver new customer function across all applicable channels quickly, consistently and at a lower cost.

Technology State:

- ▶ Majority of customer, account and product data on the mainframe
- ▶ Business logic for the same service was redundantly contained in the application supporting each channel

Extend System z with WAS



30,000 MIPS
15% Annual Growth

Solution

- ▶ Create Integration Hub with WAS on System z
- ▶ Aggregate 7,000 fine grained CICS and IMS transactions into 30 WAS applications
 - Improved efficiency managed MIPS growth to 15%
 - zAAP processors

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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).

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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
- Virtualization to reduce IT center costs

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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 **unable** 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**)

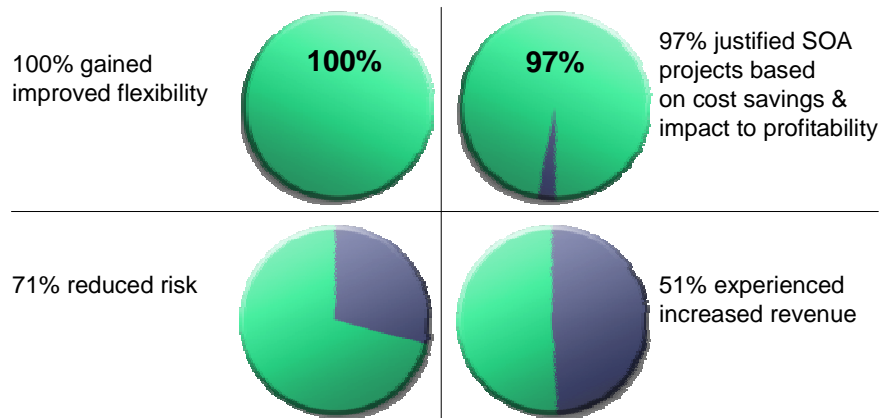
Flexible business systems are needed to remain competitive!

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

IBM studied a subset of engagements and found:



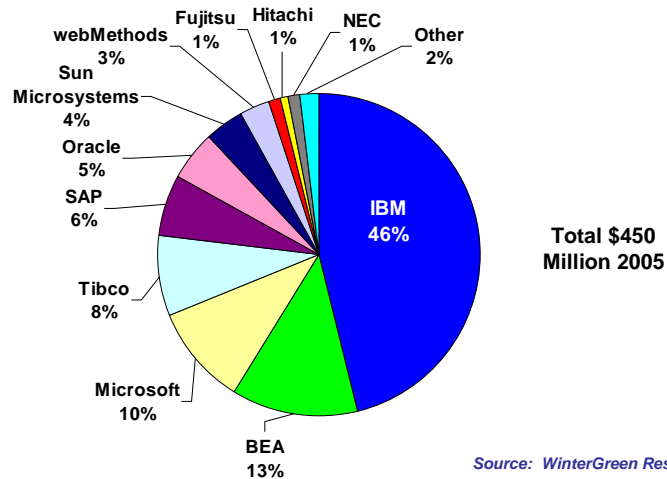
Source: IBM Institute for Business Value “The Business Value of Service-Oriented Architecture” 2006

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IBM is the Market Leader in SOA

Worldwide Service Oriented Architecture (SOA) Market Shares, 2005



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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
- IBM has delivered dramatic mainframe price reductions

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

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The Mainframe – At the Center of 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 is designed to be extensible so it can play a central role in NextGen 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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Top Fortune 500 Banks Rely on Extending System z to Run Core Business

- Top 56 banks in the Fortune 500 list are IBM System z customers
- Impressive numbers from these 56 banks in 2006
 - ▶ Average revenue growth 16% (compound annual rate)
 - ▶ Average mainframe capacity 35,000 MIPS and growing
 - ▶ Each MIP generates an average of **\$1.2M revenue** and **\$140,000 profit**
 - ▶ These banks drive down IT cost to meet business requirements by extending their core business applications
- What about bank #57?
 - ▶ Mainly Unix and Windows servers, facing significant problems in managing these servers
 - ▶ Customers can only do transactions at their home bank

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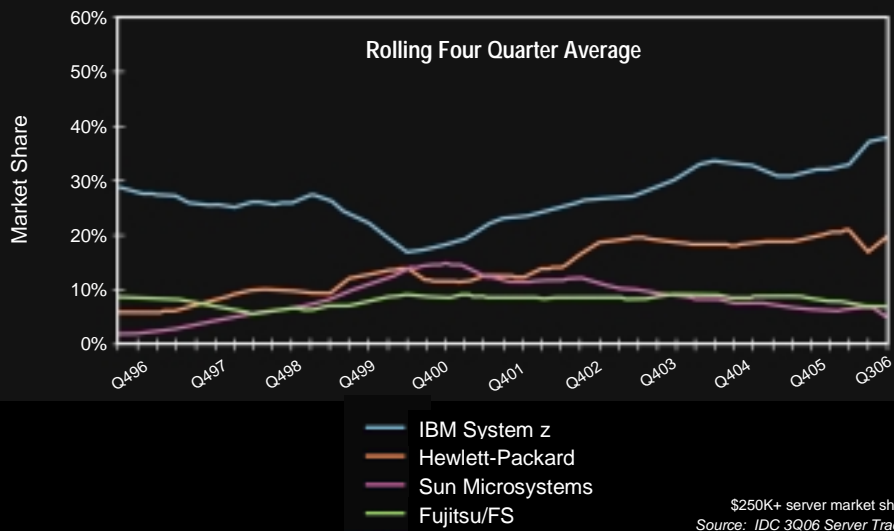
IBM System z Growth Milestones

- Six consecutive quarters of share growth
- Top 50+ Banks in the World
- Record High for Market Share: 37.1%
- Record Year for Specialty Engines
- Over 11 Million MIPS Installed
- 30% Total revenue driven through partners
- **First Online Game Client: Hoplon Infotainment**
- > 30% growth in Linux applications and tools

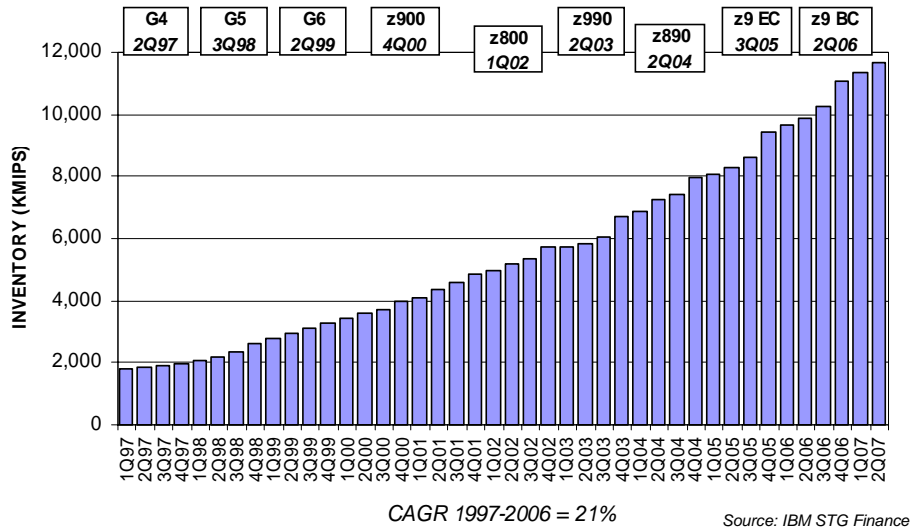


Source: IBM Finance, 1Q07 & CSI Finance '06

Market Revenue Trend



Customers Are Installing More MIPS



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IBM Launches Mainframe Software Center in São Paulo

- First Mainframe Software Center in Latin America
- Help customers and ISV's
- Build, test, and run applications on an IBM Mainframe
- Software training and business guidance
- <http://www.tmcnet.com/news/2007/08/13/2858742.htm>

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The Value of Distributed Computing

- Rapid application development and deployment
- Separation from core business processes
 - ▶ Flexibility without impacting core business stability
- Focused and controlled investment for special purpose applications
 - ▶ Compute intensive, deep analytics
- Designed for high performance at low cost in a single application environment

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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

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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

15 minutes	Introduction to Next Generation Requirements	
45 minutes	<i>SOA – The foundation of your Next Generation Solution</i>	Using SOA to Build Your Next Generation Solution
40 minutes		Tools for Rapid Development and Deployment
15 minutes	<i>Break</i>	
30 minutes	<i>A Mainframe Primer – Clustering to achieve scale</i>	Mainframe Clustering
35 minutes		Continuous Availability
60 minutes	<i>Lunch</i>	
50 minutes	<i>Optimize customer relationships by consolidation</i>	Consolidating Data on System z
40 minutes		Consolidating Applications on System z
30 minutes	<i>Business demands on technology</i>	End-to-end Security and Compliance
20 minutes	<i>Break</i>	
30 minutes	<i>Business demands on technology</i>	IT service management
40 minutes	<i>Delivering Next Generation Solutions at the lowest cost</i>	

