A Fresh Look at the Mainframe

The New Mainframe - At the Heart of Your Business Operations

What is a Mainframe?

- A computer system designed to run commercial workloads at high levels of utilization without stopping

The Mainframe...

- Maximization of design where throughput is the goal

- Tight control yields reliability, recovery, and security

- Sharing resources maximizes utilization and efficiency

- Mainframe has economy of scale

- Minimize staffing requirements by running a lot of work in one place

- Delivers tremendous Total Cost Ownership (TCO) when fully loaded

- A sustainable value proposition

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
- Cost of power is increasing
- TCO pressure is driving customers to consolidate workloads on virtualized platforms
- Growing use of Linux
- Network economics favor consolidation once again
- 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!
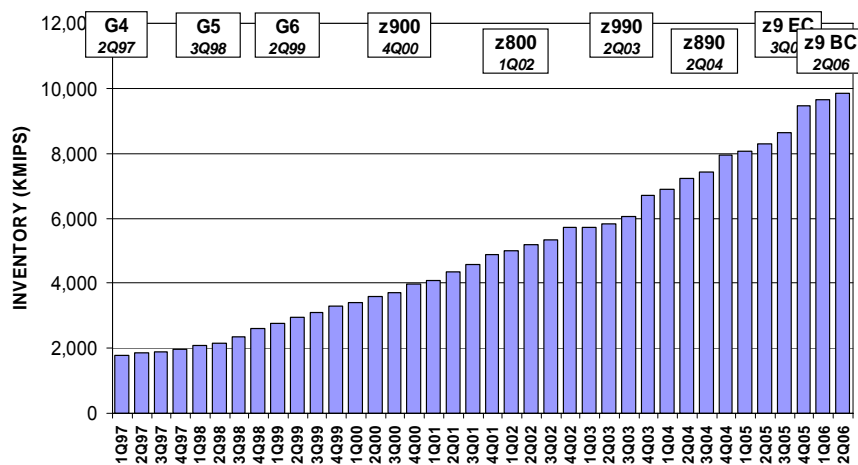
IBM System z Economy of Scale

■ Near-linear scalability	up to 900,000+ concurrent users
■ "Mean Time Between Failure"	measured in decades versus months
■ ¼ network equipment costs	virtual versus physical
■ 1/25th floor space	400 sq. ft. versus 10,000 sq. ft
■ 1/20 energy requirement	$32/day versus $600/day
■ 1/5 the administration	< 5 people versus > 25 people
■ Highest average resource utilization	> 70% versus < 15%
■ Highest concurrent workload	hundreds of applications versus few

Customers Are Installing More MIPS

| G4 2Q97 | G5 3Q98 | G6 2Q99 | z900 4Q00 | z800 1Q02 | z990 2Q03 | z890 2Q04 | z9 EC 3Q0 | z9 BC 2Q06 |

INVENTORY (KMIPS)

12,00
10,000
8,000
6,000
4,000
2,000
0

1Q97 2Q97 3Q97 4Q97 1Q98 2Q98 3Q98 4Q98 1Q99 2Q99 3Q99 4Q99 1Q00 2Q00 3Q00 4Q00 1Q01 2Q01 3Q01 4Q01 1Q02 2Q02 3Q02 4Q02 1Q03 2Q03 3Q03 4Q03 1Q04 2Q04 3Q04 4Q04 1Q05 2Q05 3Q05 4Q05 1Q06 2Q06

CAGR 1997-2005 = 22%   *Source: IBM STG Finance*

Average Size of Mainframe Systems WW is Increasing

Source: IBM SWG & STG Finance
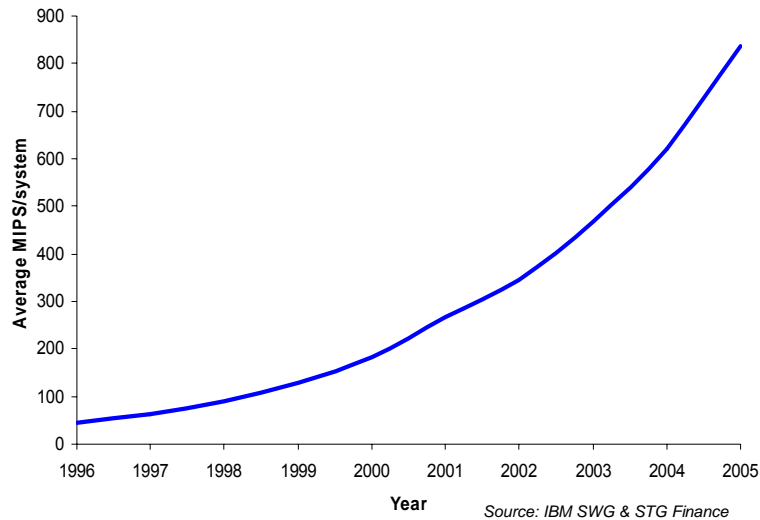
System z Today

- 490 of IBM's top 500 customers use CICS
- Over 95% of Fortune 1000 companies use IMS
- DB2 for System z is in 25 of the top 25 worldwide banks, 23 of the top 25 US retailers, 9 of the top 10 global life/health insurance providers
- IMS and CICS systems execute over 80 billion transactions a day
- System z increased market share 14 points while Sun, HP, and others fell over past 5 years
- 60% of System z revenue is driven by new workloads (Java, Linux, Database, SOA)

The New Mainframe – Getting Better All the Time

- Platform for Service Oriented Architecture

- Modern Application Development Tools

- Data integration built on rock-solid technology

- A new generation of system management tools

- Best Qualities of Service

- The industry benchmark for Secure computing

- Industry-leading Disaster Recovery capabilities

- The lowest Cost of Ownership through centralized computing

New Mainframe Ecosystem Initiatives

- ISV program for System z
  - ▶ Free technical support and use of System z for porting
  - ▶ Go to market support
  - ▶ Via IBM's Partner World Industry Network

- IBM academic initiative for mainframes
  - ▶ 250 colleges and universities, 300 professors
  - ▶ 20,000 new skills by 2010

Momentum for New Mainframe Applications is Building

Mainframe customers building and deploying new applications
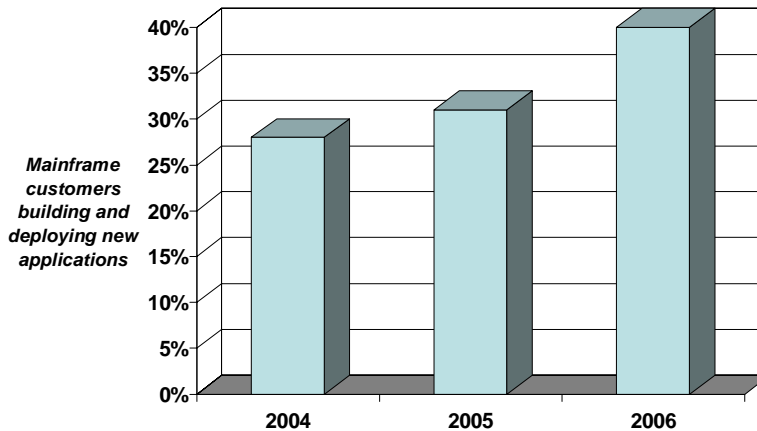
Source: Evans Data Corp, Enterprise Development Survey, Winter 2005

Mainframe or Distributed – or Both

- Distributed Model is driven by application isolation and rapid deployment
  - ► Unrestricted build and test in a non-shared environment
  - ► Low impact to critical operations
  - ► Less sensitivity to change control and comprehensive system test requirements

- Side-effects of improper application of Distributed Computing
  - ► Proliferation of Servers
    - − In many cases 1000s of servers with low utilizations
  - ► Spiraling Labor Costs, Software Costs, and Power/Cooling Costs
  - ► Difficult Security and Disaster Recovery
  - ► Data and process synchronization challenges
    - − Interoperability problems

Meet On Demand Insurance (ODI)

> **We need to transform from a regional insurance company to a global insurance company**
>
> **We need to work better with brokers, underwriters, and customers**
>
> **We need to increase revenue and improve profits**

**On Demand Insurance
CEO**

On Demand Insurance – I/T Challenges

> **Our business direction will require significant new solutions**
>
> **Should I use distributed solutions or do more with my mainframe?**

**On Demand Insurance
CIO**

On Demand Insurance

So, how can the mainframe help me meet my business objectives?

**On Demand Insurance
CEO**

Agenda

Introduction	**09:30 – 9:45**
Unlock the Value of Mainframe Assets using SOA	**9:45 – 10:25**
Productive Tools for Application Development	**10:25 – 10:55**
BREAK (15 minutes)	**10:55 – 11:10**
Information on Demand	**11:10 – 12:00**
The New Face of Mainframe Operations	**12:00 – 12:30**
LUNCH (1 Hour)	**12:30 – 13:30**
The Mainframe Design Point – Fundamentally Better	**13:30 – 14:20**
The New Face of Mainframe Security	**14:20 – 15:05**
BREAK (20 Minutes)	**15:05 – 15:20**
Keeping You Business Running When Disaster Strikes	**15:20 – 15:40**
Consolidate and Save with Mainframe Linux	**15:40 – 16:05**
When the Mainframe Really Is the Lowest Cost Platform	**16:05 – 16:30**
Rational Tools on System z	**16:30 - 17:00**