Enabling Information as a Service

Unleashing the Power of your Data

IBM Systems

The Information Challenge
Information is in Silos… Trusted Information is Not Available

Today's business challenges mandate a fresh approach to managing information.

Managing information in silos has become obsolete.

Globalization, M&As

Risk & Compliance,

Eroding Customer Loyalty,

Supply Chain Complexity,

Industry Transformations,

Cost Cutting…

Information Must Become a Strategic Asset

Multiple Versions of the Truth

Inaccurate, Untimely

Inconsistent

Incomplete, Inaccessible

Out of Context…

5X More Value *creation by organizations effective at using Information as an Asset*

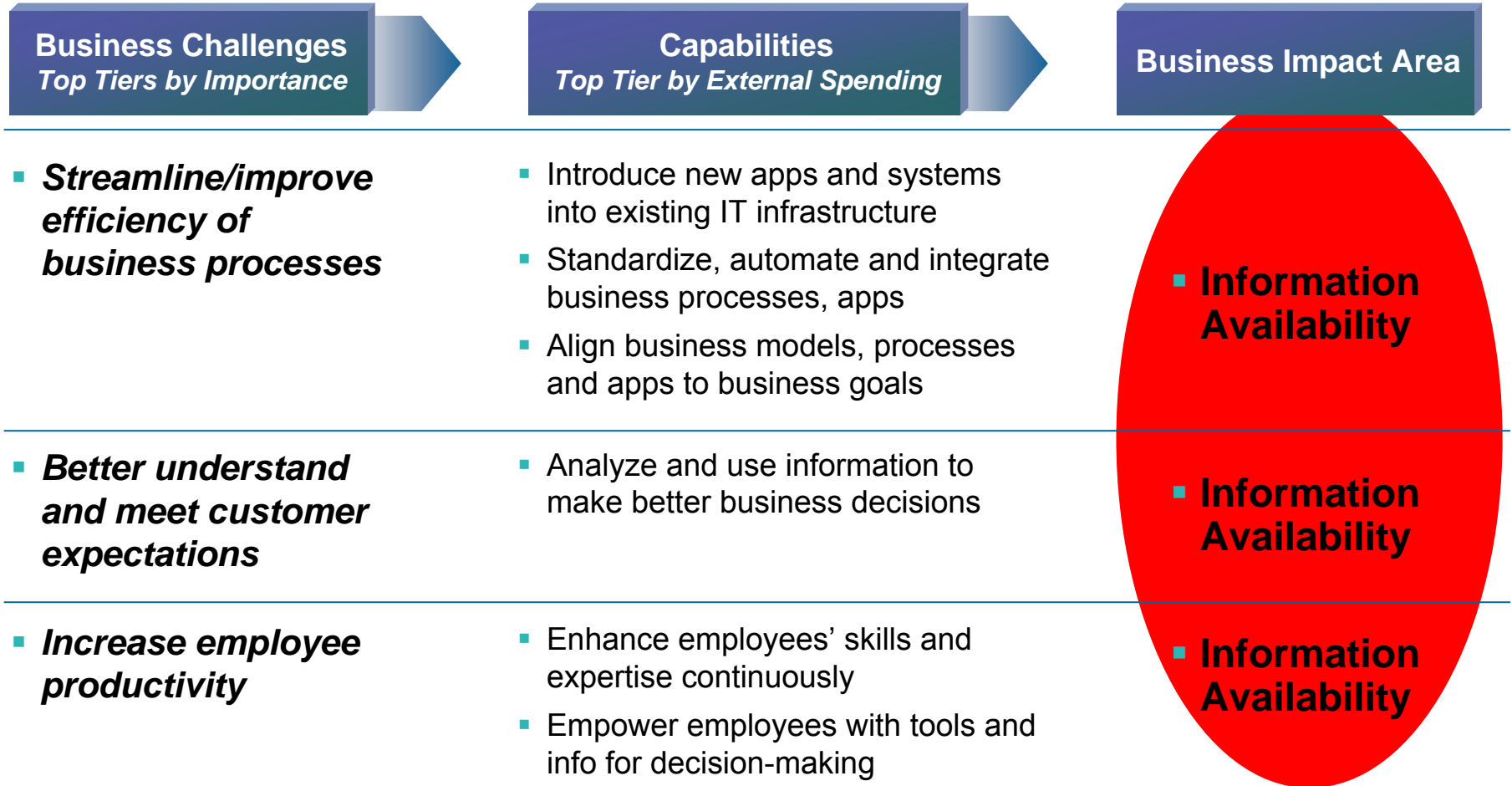**60%+** *of CEOs: Need to do a better job leveraging information*

70% *of people's time can be spent searching for relevant information*

Sources: IBM Attributes & Capabilities Study, 2005; Client Interviews 2004; IBM CFO Study, 2006

Today's Business Challenges
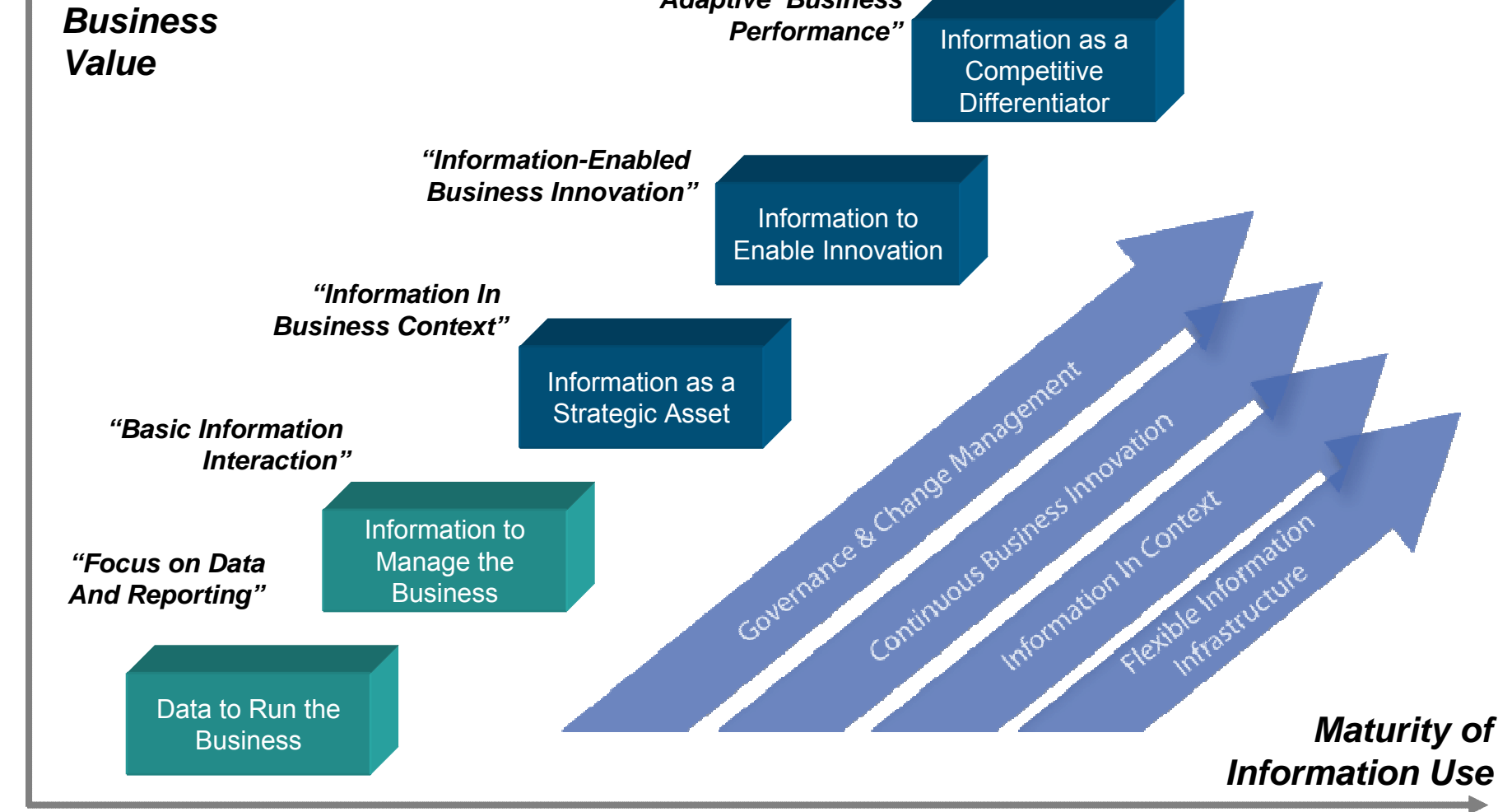## *Information Availability is the Top Priority*

The most anticipated impact of business investing in IT has become information availability

Business Challenges *Top Tiers by Importance*	Capabilities *Top Tier by External Spending*	Business Impact Area
Streamline/improve efficiency of business processes	• Introduce new apps and systems into existing IT infrastructure • Standardize, automate and integrate business processes, apps • Align business models, processes and apps to business goals	• **Information Availability**
Better understand and meet customer expectations	• Analyze and use information to make better business decisions	• **Information Availability**
Increase employee productivity	• Enhance employees' skills and expertise continuously • Empower employees with tools and info for decision-making	• **Information Availability**

Source: IBM Attributes & Capabilities Study, 2005

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Changing the Game with Information
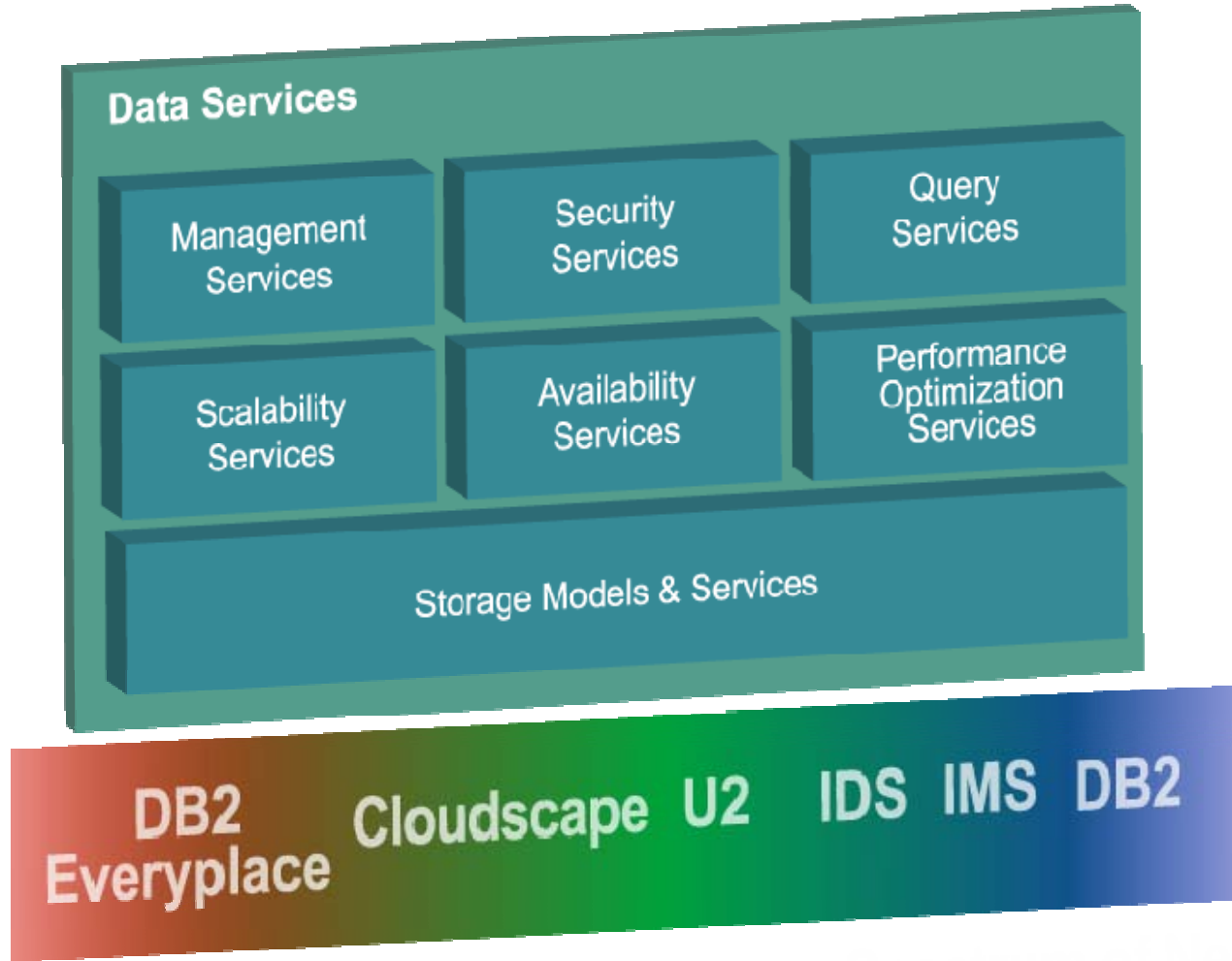## *Maturity Model Provides a Roadmap for Defining New Value*

Business Value

"Focus on Data And Reporting"

Data to Run the Business

"Basic Information Interaction"

Information to Manage the Business

"Information In Business Context"

Information as a Strategic Asset

"Information-Enabled Business Innovation"

Information to Enable Innovation

"Adaptive Business Performance"

Information as a Competitive Differentiator

Governance & Change Management

Continuous Business Innovation

Information In Context

Flexible Information Infrastructure

Maturity of Information Use

Information as a Service
Moving from a project-based to a flexible architecture (SOA)

Tools & Applications

Dashboards

In-line, Real-time

Insight

Insightful Relationships

Master Data, Entity Analytics, Decision Portals, Exec Dashboards, Industry Data Models

Master Data

Standards based: e.g., XQuery, JSR170, JDBC, Web Services...

Data & Content

Extracted or Real-Time

Information as a Service
(Information Virtualization)

Heterogeneous Applications & Information

SAP

Point Content Management Application

Internally Developed

PeopleSoft.

and more…

DB2

IMS

IBM Content Manager

xyz…

Oracle

Addressing the spectrum of data serving needs

Information On Demand
Key Value Proposition for System z Customers

- **Enhanced capabilities in DB2 for z/OS, IMS, and Tools**
  - ► Mission critical databases and applications platform
  - ► Optimize IT infrastructure
  - ► Lower total cost of Ownership
  - ► Streamline Compliance and Auditability

- **Open Connectivity and Information On Demand**
  - ► Leverage your data and applications with Information integration and Virtualization
  - ► Leverage unstructured content
  - ► Achieve ROI with solution accelerators

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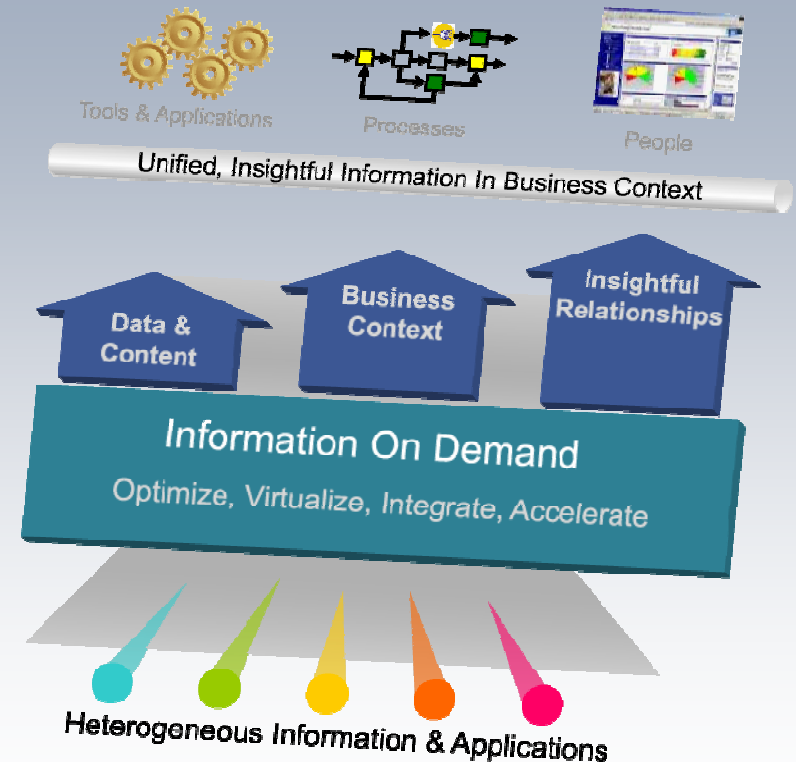
Where You Put Your Information Matters
Flexible, Reliable, Scalable, Manageable, Affordable

"It's easier to manage the mainframe than a bunch of Windows servers. We have a smaller staff running the mainframe and those functions run 80% of our business."

Bill Homa, CIO, Hannaford Brothers

"What we are looking for is the flexibility to quickly respond to business changes. The mainframe will be a transaction engine that the insurance company's business partners will access through SOA."

John Campbell, Senior VP and CIO, American Modern Insurance Group

"The industry tried, 'Let's everyone get off of the mainframe,' in the late 90s.
It didn't work because there are many organizations that need that level of power.
Mainframes have been used for applications insulated from the public security breaches of newer technologies. It's a natural to expose those transactions
as services."

Phil Murphy, Principal Analyst at Forrester Research

"System z is clearly becoming a cornerstone of SOA strategy. This is a seismic shift from just a few years ago when the role of the mainframe had been reduced to 'legacy' applications."

Feedback from zSummit attendee

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Information Services

Data Services
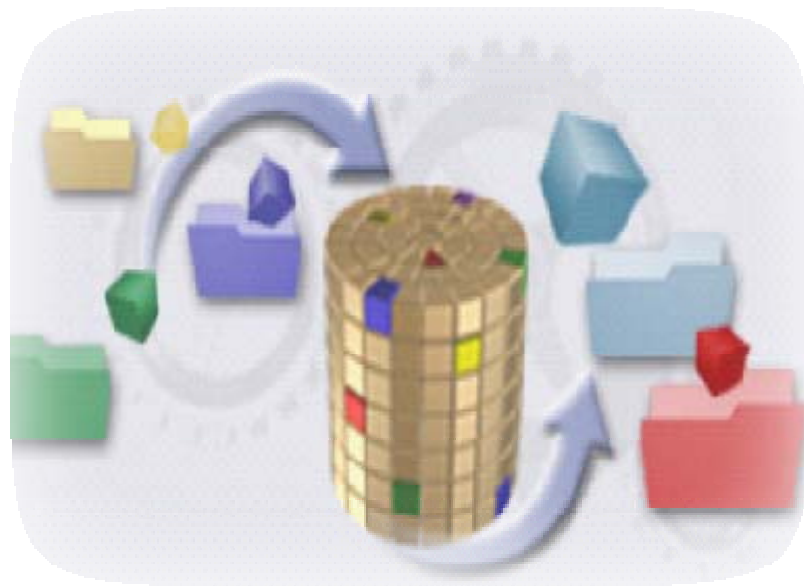
DB2 for z/OS

The power and function of an open, industry standard data server
with zSeries' industry leading availability, performance, and security

What it takes to be the industry's most extreme data server

- Continuous application availability measured in years
- Ability to process over 1B SQL transactions per hour
- Uninterrupted growth from 1 byte to over a peta-byte
- Serving 100s of applications for 100,000s of users
- US Government's highest security classification (zSeries platform)
- Support for industry standards: XML, Web services, Java, C, COBOL
- Support for complex business applications: SAP, PeopleSoft, Siebel

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Baldor Electric Company

BALDOR
MOTORS • DRIVES • GENERATORS

Challenge

Core SAP R/3 Enterprise Resource Planning (ERP) software was spread across multiple systems, creating an environment that was increasingly complex and expensive to support.

Value

- Near continuous availability
- Perform regular systems management activities with server still in production
- Reduced cost & complexity
- IT spending reduced from 1.7% to 1.2% of sales

Solution

- Baldor selected IBM DB2 for z/OS V8 and DB2 Connect Application Server Edition V8.2.
- They consolidated their SAP servers to a single machine, allowing them to quickly assign and reassign resources to support user demand.
- Weighing heavily in the decision: no mainframe downtime since 1997

HVBInfo -- HypoVereinsbank AG

Challenge:

HVBInfo provides IT services for HypoVereinsbank, one of the three largest banks in Europe and the leading real estate financier. Their 2400 branches serve 8 million customers. Their challenges were to:

- Deliver a true 24x7 application environment with access to updated, consistent and secure data
- Upgrade database platform to improve stability, availability, and performance
- Exploit 64-bit accessibility and achieve better integration with DB2 software applications

Business Benefits:

- **Increased flexibility in application environment**

- **Ability to integrate Java applications easily**

- **20 to 30% decrease in time to market for new banking applications**

- **Significant cost savings are projected**

Solution:

HVBInfo upgraded to DB2 for z/OS V8 on an existing eServer System z platform and improved availability and data sharing. The solution also includes:
- DB2 Connect Enterprise Edition, V7 and V8
- DB2 QMF, V8
- DB2 Administration Tool for z/OS, V7

Technology Benefits:

- **DB2 for z/OS V8 provides automated resolution of database logical page list and virtual storage constraint relief**
- **DB2 Connect accesses data on workstations**
- **DB2 QMF retrieves specific data stored in a data warehouse**
- **DB2 Admin Tool manages objects, tables, indexes through online schema evolution**

DB2 and IMS Tools

Our first focus is still:
Reducing your Total Cost of Ownership

- Reducing TCO by using technology to improve efficiency
- Focused value of the platform, not the value of the tools

2005- Reduce your TCO

2005- Autonomic Computing

2005- End to End Monitoring

2003- Integration of products, new capabilities, better performance

2003- New version exploitation

2001-2002 Product replacements

2000- Reduce your TCO

Today's IBM DB2 Tools for z/OS and Multiplatform Product Portfolio

Utilities Management

- DB2 Utilities Suite
- DB2 Automation Tool
- DB2 Automation Toolkit SAP Edition
- DB Cloning Tool
- DB2 High Performance Unload

Database Administration

- DB2 Administration Tool
- DB2 Object Comparison Tool
- Data Encryption for DB2 and IMS
- DB2 Thread Expert
- DB2 Administration Toolkit SAP Edition
- auditing tool (SOD)
- DB2 Change Management Expert

Performance Management

- OMEGAMON XE DB2 Performance Expert
- OMEGAMON XE DB2 Performance Monitor
- DB2 Buffer Pool Analyzer
- DB2 Query Monitor
- DB2 SQL Performance Analyzer
- DB2 PerformanceToolkit SAP Edition
- DB2 Performance Expert

Information Integration

- DB2 DataPropagator
- SQData
- WebSphere II Replication
- WebSphere II Classic Federation
- WebSphere II Event Publisher
- WebSphere DataStage
- WebSphere QualityStage

Recovery Management

- Application Recovery Tool for IMS and DB2 Databases
- DB2 Archive Log Accelerator
- DB2 Change Accumulation Tool
- DB2 Log Analysis Tool
- DB2 Object Restore Tool
- DB2 Recovery Expert

Application Management

- DB2 Path Checker
- DB2 Bind Manager
- DB2 Data Archive ExpertDB2 Table Editor
- DB2 Web Query Tool
- DB2 Test Database Generator

Day 1 V9 Support !

Available on zSeries(shown on chart in black)
Available on zSeries and multiplatforms (LUW)
Currently available only on multiplatforms (LUW)

DB2 Tools continuing to address TCO

- **DBA Time = Money**

  - ► **Tuning for performance**
  - ► **Optimizing repetitive tasks**
  - ► **Managing Complexity**
  - ► **Complying with regulations and auditing**

- **Time savers**
  - ► **OMEGAMON XE DB2 Performance Expert**
    - Tunes DB2 systems
    - Finds performance problems
    - Eliminates bottlenecks

  - ► **DB2 Utilities enhancements**
   - V8 zIIP exploitation
    - vDB2 9 volume based utilities

  - ► **DB2 Thread Expert**
    - Cancels threads on DB2 objects needed by DB2 Utilities, provides audit info, helps troubleshoot

  - ► **DB2 Regulatory Compliance Suite**
    - Combines multiple tools, including Data Encryption for DB2 and IMS Databases, into a comprehensive compliance solution. An SOD for a new auditing tool was announced in June 2006.
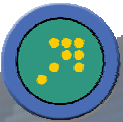
Critical Business Initiatives Depend on Information
Information Intense Business Problems

- *Master Data Management*
  - Single view of the customer and product
  - Gain control of disparate silos
- *Business Analysis and Discovery*
  - Deeper insight into buying behavior
  - Efficient, consumer driven supply chain
- *Business Transformation*
  - Partner collaboration
  - Real time information based decision
- *Worker Productivity*
  - Information accessible to every user when and where they need it… both structured and unstructured
- *Risk & Compliance*
  - Loss and Fraud prevention
  - Government regulations and taxes

IBM Information Management software
Unmatched Breadth and Depth of Capabilities

**Information Delivered On Demand
Based on Services Oriented Architecture**

- *Data Services*
  - Data Servers, Warehouses, Tools…
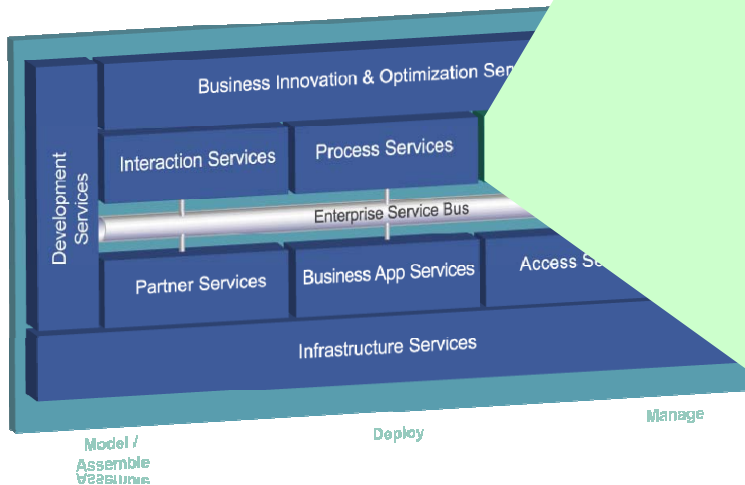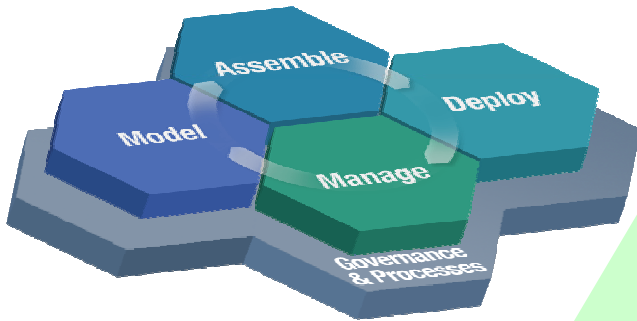
**#1, #2 in Share
450,000+ Clients**

- *Content & Discovery Services*
  - Content Mgmt Svcs
  - Discovery Services

**#1 in Share
13,000+ Clients**

- *Information Integration Services*
  - Quality Services
  - Transformation Services
  - Federation Services
  - Metadata Services

**#1 in Share
5,000+ Clients**

- *Business Information Accelerators*
  - Master Data Management
  - Entity Analytics
  - Information Warehousing
  - Industry Models

**Leading Space
1,000+ Clients**

Optimize Infrastructure, Skills & Cost
System z Excellence

Agencia Tributaria
Principal Contactar Novedades Enlaces Ayuda Buscador

"…We can adapt more quickly to change and build a more reliable infrastructure…"

Benedicto Gallego
IT Service Manager

Endress+Hauser

"…Migrating SAP to System z resulted in what we hoped for: better performance, systems management, security, and reduced costs…"

Werer Hofmann
Mgr. Data Centre & Networks

Online Services
for Citizen Care

Operational
Consolidation

Capital & Risk Mgmt. Agents
Demand High Availability

Cost Effective
Service & Compliance

Swiss Re

"…We have an SLA with a maximum outage per week of ~1 minute. DB2 and System z provides the required availability and excellent performance…"

Erwin Schaefer
Engineer

CRÉDIT AGRICOLE

"…By centralizing our global operations, we expect to achieve a 30% reduction in costs and gain the ability to provide highly-secure services to other banks..."

Jacques Bourachot
Credit Agricole

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AIX*	IBM*	System z9
CICS*	IBM eServer	Tivoli*
DB2*	IBM logo*	WebSphere*
DB2 Connect	IMS	z/Architecture
DB2 Universal Database	OMEGAMON*	z/OS*
Distributed Relational Database Architecture	On Demand Business logo	z/VM*
DRDA*	Parallel Sysplex*	zSeries*
ESCON*	QMF	
FICON*	RMF	
GDPS*	System z	
HiperSockets		

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