

# ***UNIVERSITÉ DU MAINFRAME***

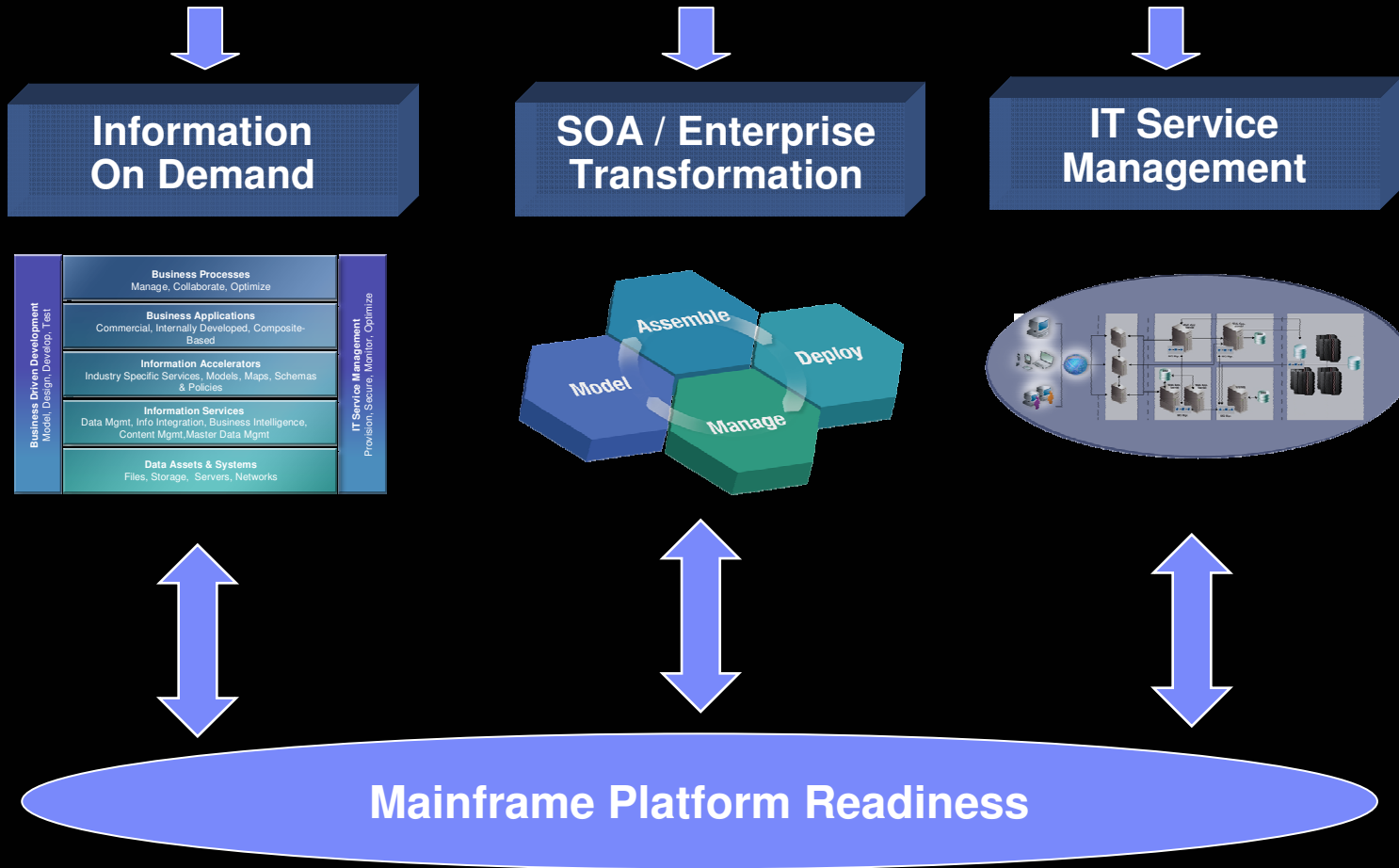
**Delivering Value  
with Mainframe Software**

**Paulo Carvao**

**IBM - Vice President, Worldwide  
Mainframe Software Sales**



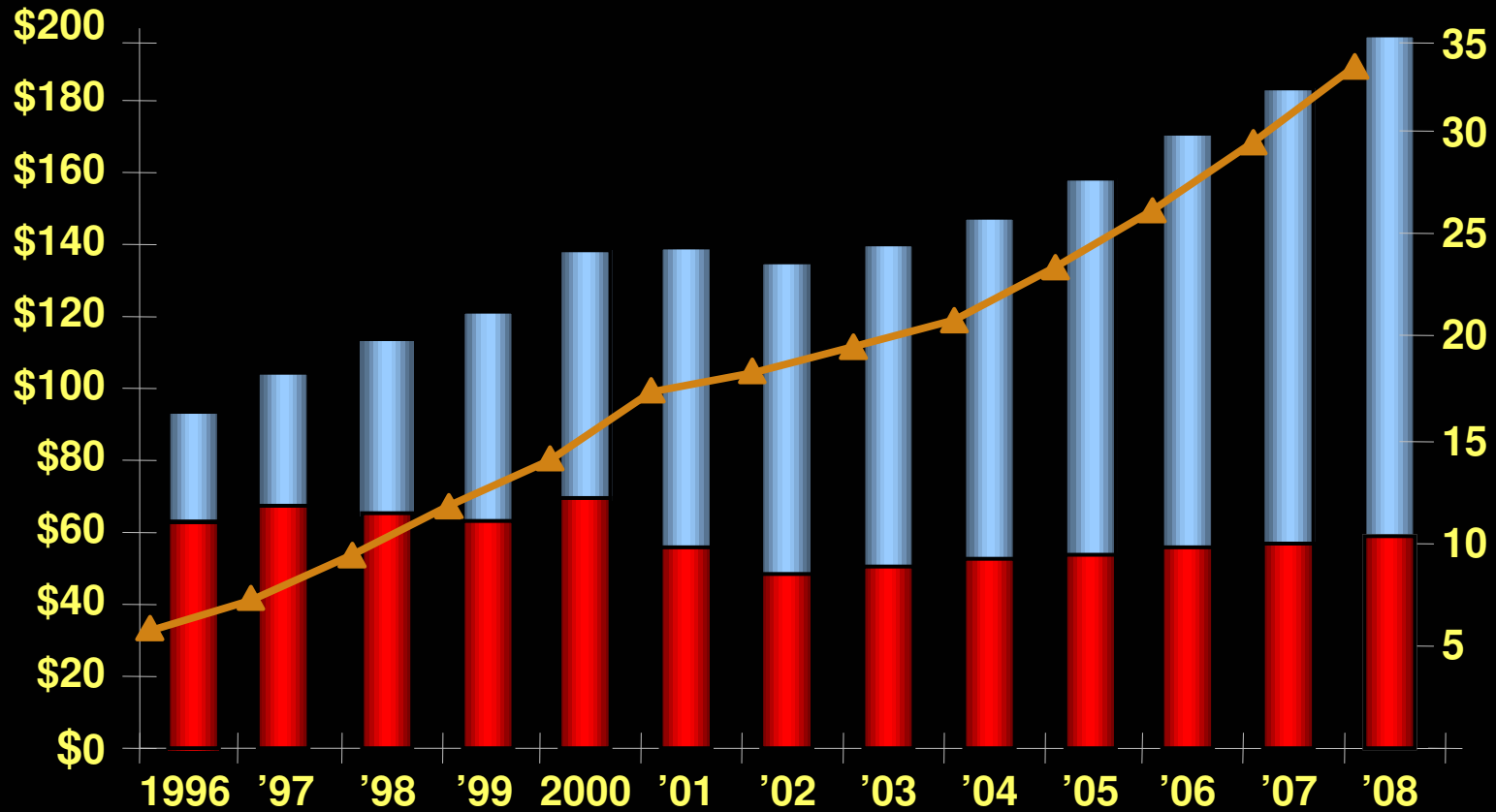
# Value of the Mainframe



# Cost of Complexity

Spending (US\$)

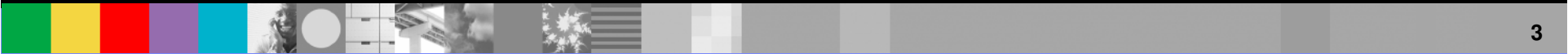
—▲— Installed Base (M Units)



■ New server spending (USM\$) 3% CAGR

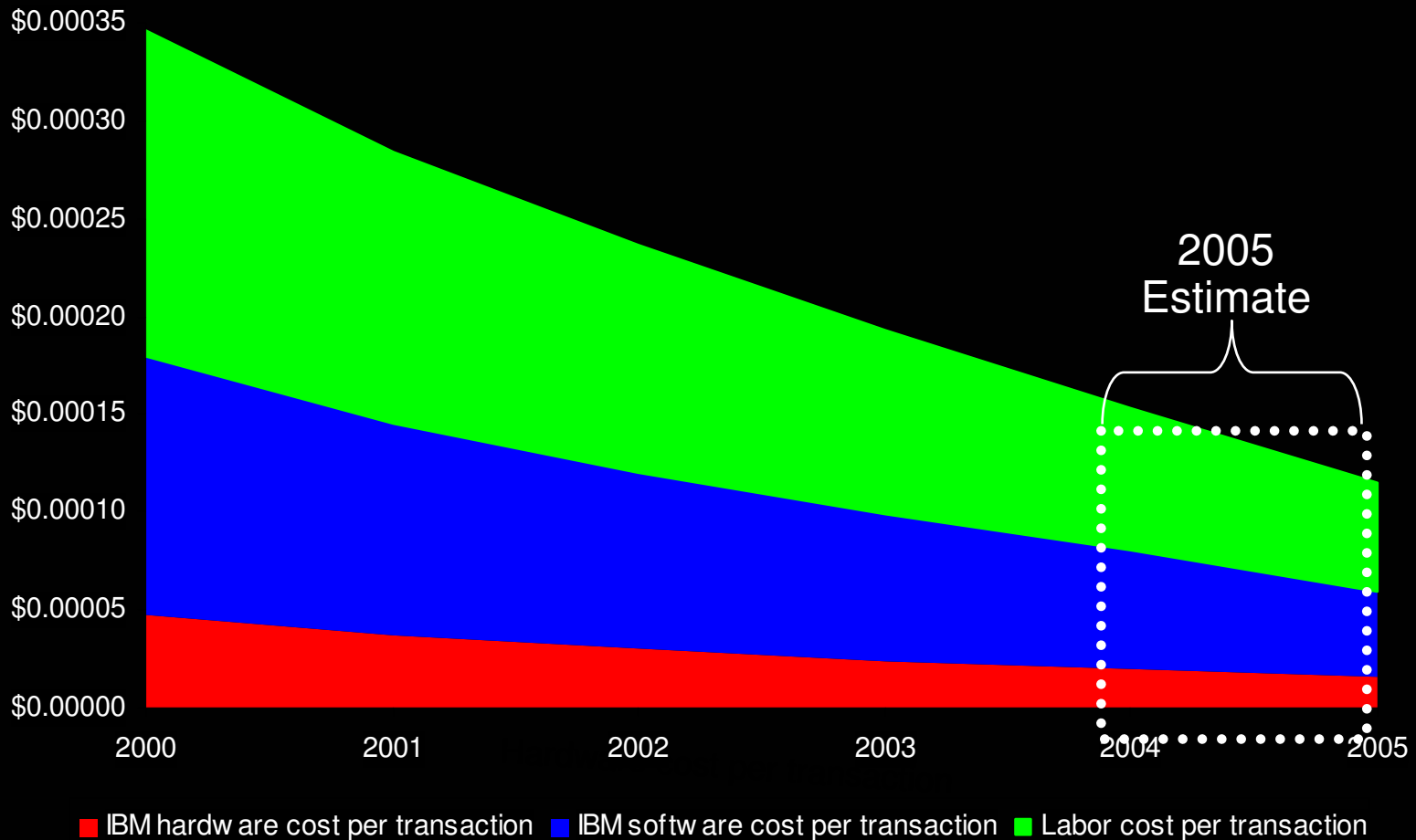
■ Cost of mgmt. & admin. 10% CAGR

Source: IDC



# Mainframe hardware, software & labor costs have decreased 17.3% per year

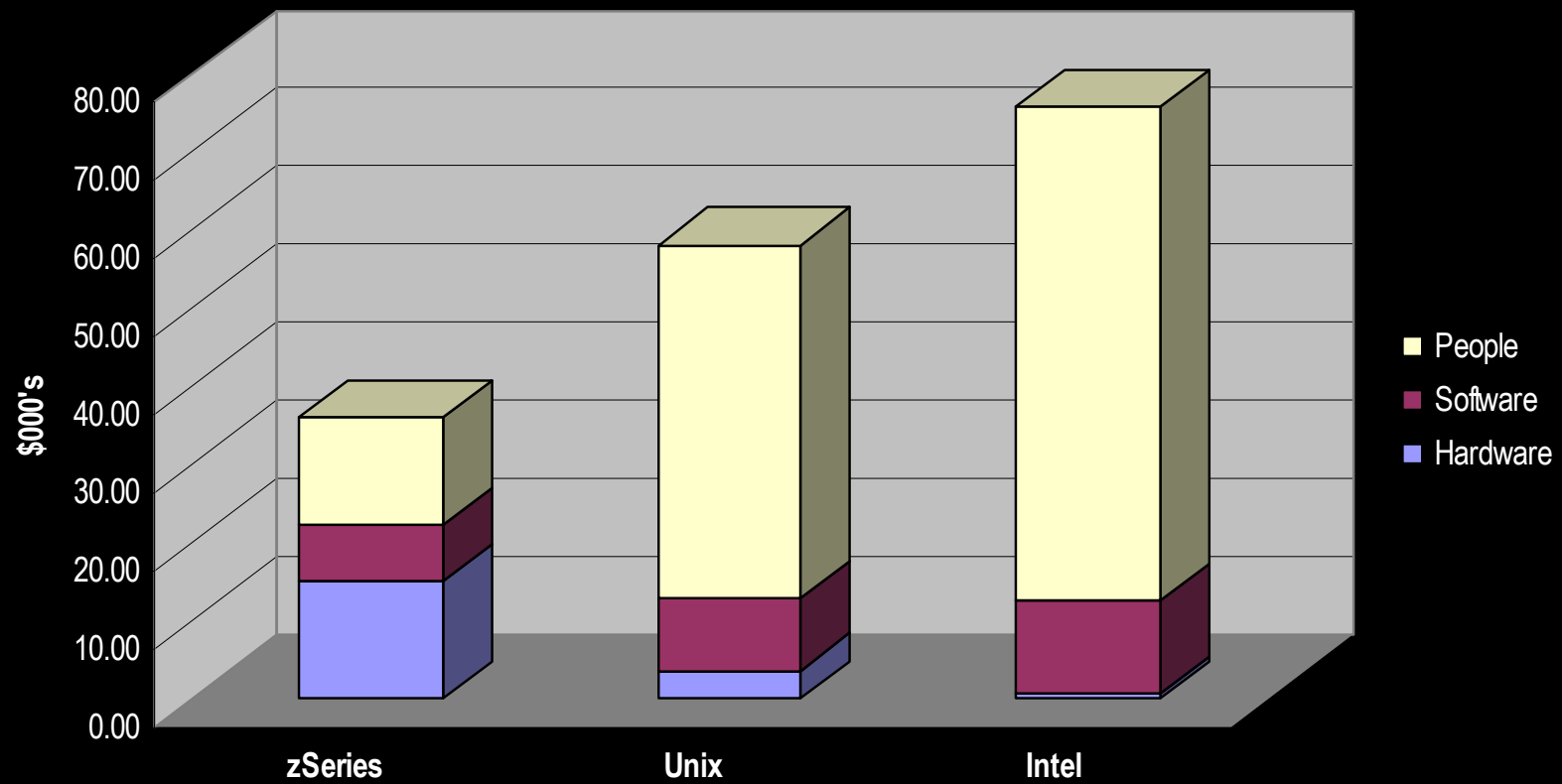
Decrease in average price per transaction YTY for the last 5 years



Source: zProject Office

# Total Cost of Operation

Total Cost of Operation (Year 1)



Example of a large financial institution running WebSphere

Source: Large financial customer study



# SOA is one of IBM's strategies to enable innovation

## Customers are adopting SOA on System z

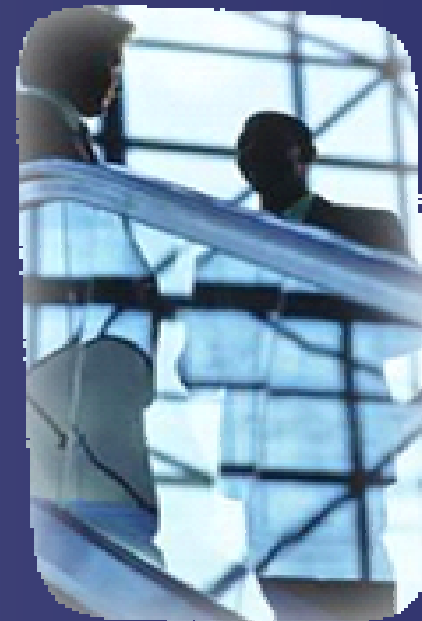
- ▶ *Over 300 customers deploying SOA on CICS Transaction Server V3.1 ... and the fastest uptake of any version of CICS TS*
- ▶ *WebSphere Application Server for zSeries had 21% growth in 2005.... and 25% penetration in z accounts*
- ▶ *zAAPs outperformed expectations by 36% in 2005*
- ▶ *New System z9 processor range from 26 to 18,000 MIPS*

## IBM's view of SOA is business centric

- ▶ People, process and information entry points
- ▶ Reuse and connectivity are critical

## Entry points are accelerated by SOA Foundation products including...

- ▶ 4 enhanced System z products
- ▶ 3 new System z products
- ▶ 2 new adapters



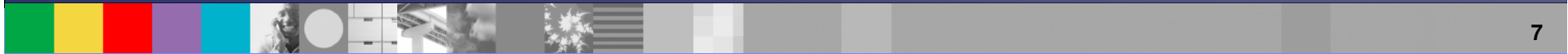
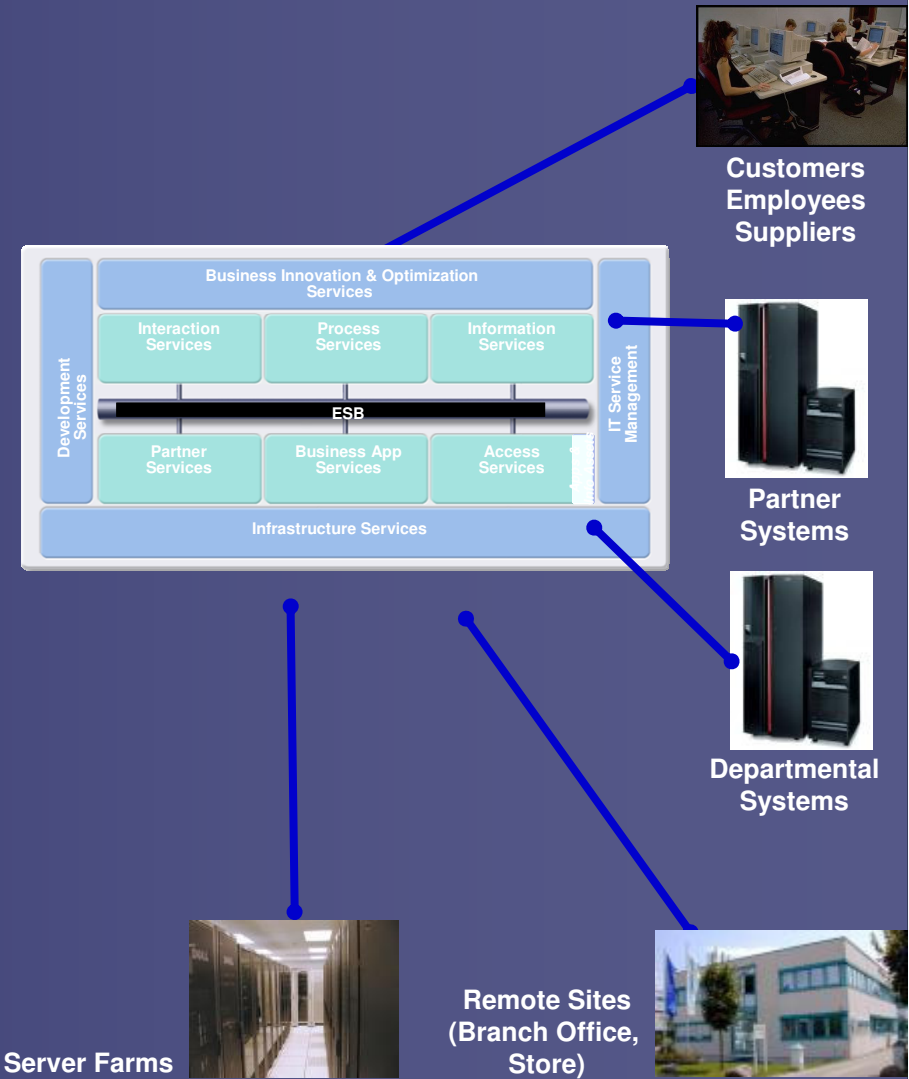
# Platform for Business Centric SOA – System z

## Architecturally compatible:

- SOA Reference Architecture
- Architectural services
- Communications and integration
- Process control
- Reuse of core assets
- Industry standards compliant

## Operationally superior:

- **Security** end-to-end in the enterprise
- **24/7 availability**
- Massive **scalability**
- **Automated recoverability**
- **Centralized** operations



# SOA & Mainframe: Made For Each Other

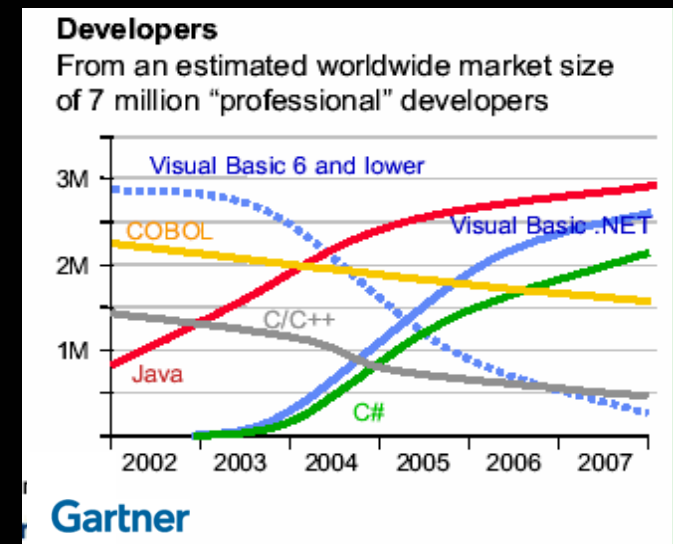
## Leverage What You Have

- **Significant business intelligence exists in legacy**

- ▶ "200 Billion lines of COBOL code in existence" *eWeek*
- ▶ "5 Billion lines of COBOL code added yearly" *Bill Ulrich, TSG Inc.*
- ▶ "Between 850K and 1.3 Million COBOL developers" *IDC*
- ▶ "Majority of customer data still on mainframes" *Computerworld*
- ▶ "Replacement costs \$20 Trillion" *eWeek*

- **Rewriting - is it an option?**

- ▶ How long will it take? (lose strategic benefit)
- ▶ Who will do it?  
(Who has the business knowledge?)
- ▶ Is the business model still accurate?
- ▶ How much will it cost? What's the risk?
- ▶ Performance



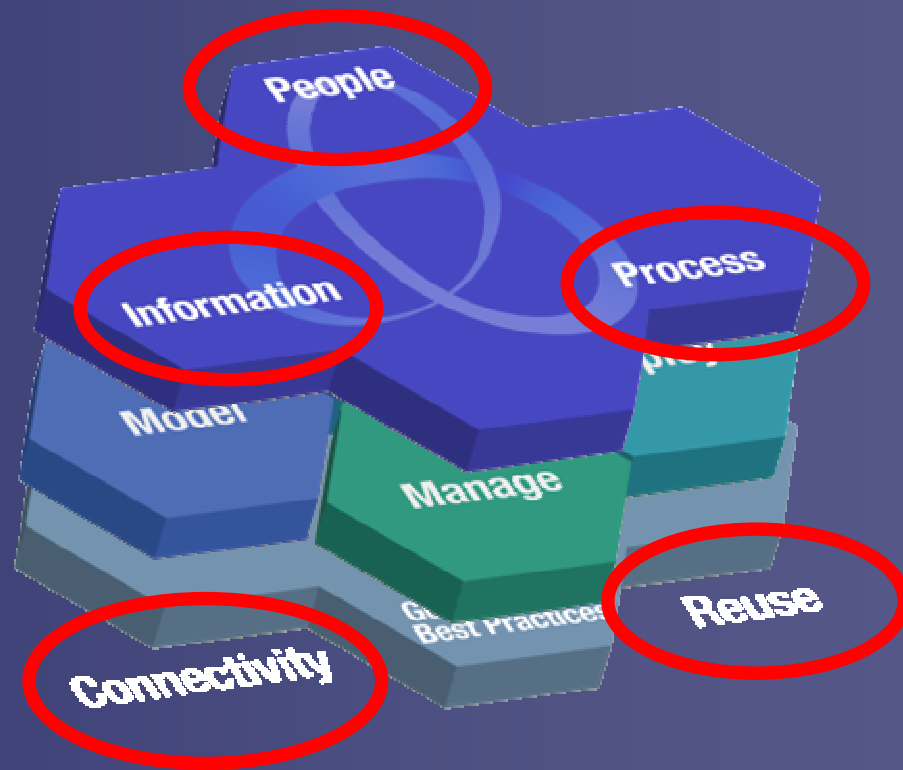


# SOA Entry Points

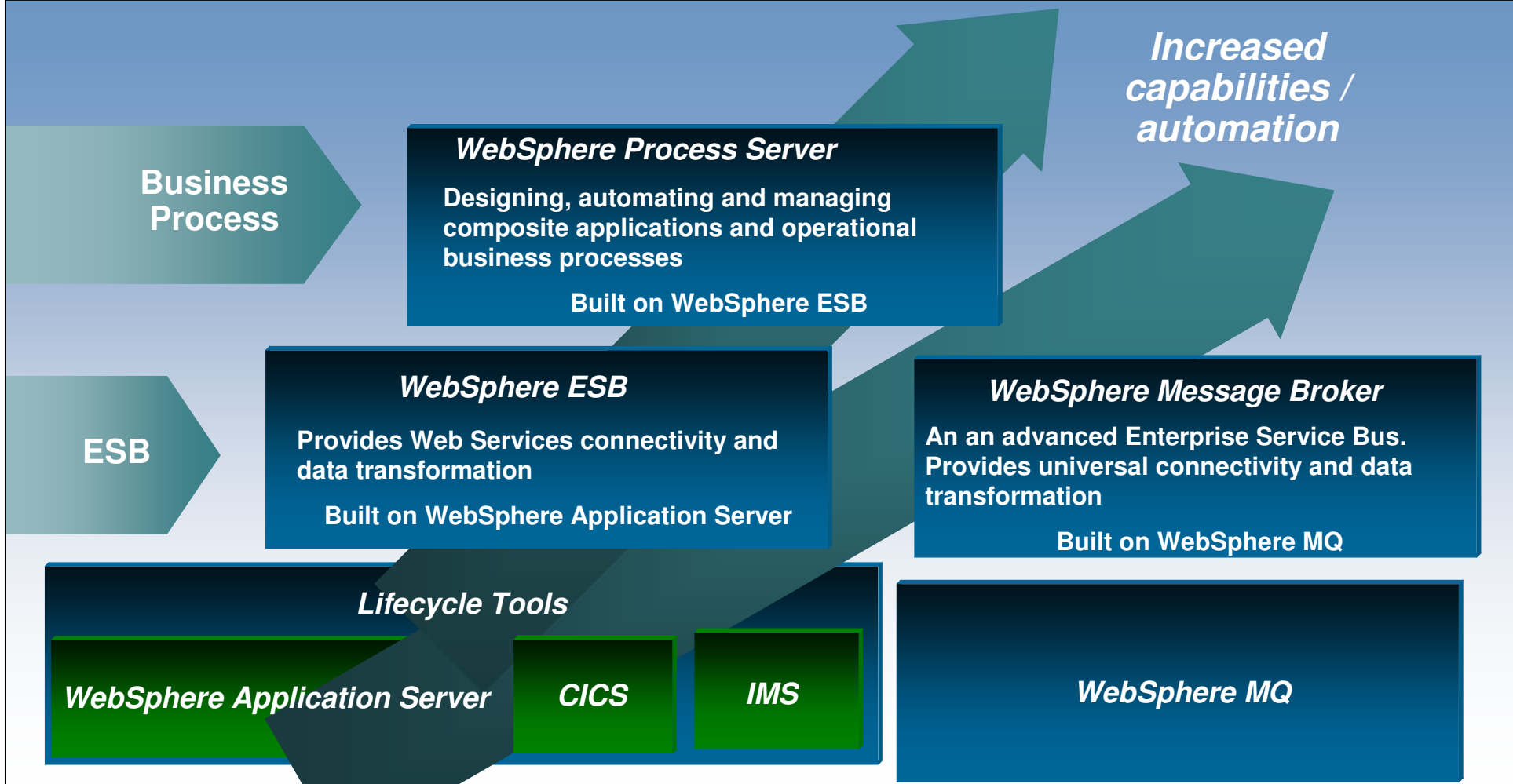
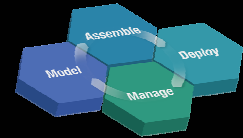
*System z as a platform for:*

- *Business services*
- *Business connectivity*
- *Process Management*

*While reusing your existing application and information assets*



# Flexible Options for a z SOA Environment



# Bank of Montreal Exploits its Re-usable Assets

## *Integration with the mainframe is essential for BMO's SOA*

### Actions & Benefits:

*To increase customer satisfaction, BMO needed a new teller application that integrated with its sales and CRM systems*

*"WebSphere was very attractive to us because of its ability to integrate with our existing main-frame legacy systems."  
— Randy Oswald, senior vice president, technology and solutions, BMO Financial Group*



*Used flexible **Web services** to transform core CICS systems to integrate with Siebel CRM*

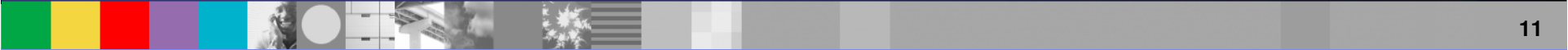


*Built an SOA using **WebSphere's** open standards for interoperability between disparate products and platforms*



***Improved productivity & efficiency** with reduced operating costs using WebSphere integration on z/OS*

Capabilities used: WebSphere Message Broker, WebSphere Application Server, CICS

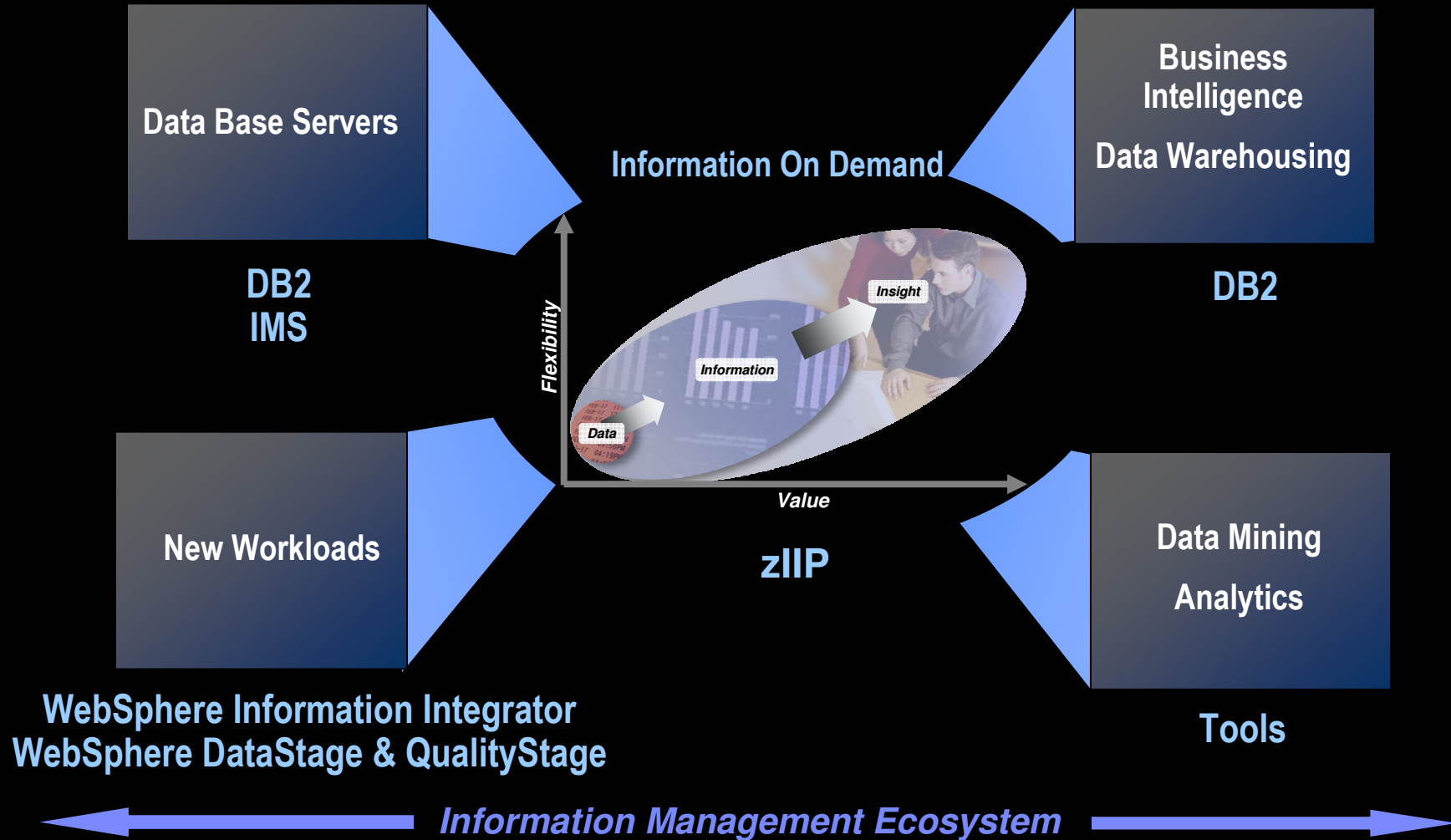


# Critical Business Initiatives Depend on Information

- **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



# World's Best Data Servers



# New IBM System z Integrated Information Processor (IBM zIIP)

- New specialty engine for the System z9 mainframe (available in 2Q06)
- Designed to help improve resource optimization and lower the cost of ownership for eligible workloads
- z/OS manages and directs the work between the general purpose processor and the zIIP
- DB2 for z/OS V8 will be first exploiter of the zIIP, requirements
  - ▶ System z9 Enterprise or Business Class
  - ▶ z/OS 1.6 or later (with web downloads)
  - ▶ DB2 for z/OS V8 (with enabling PTFs available in June)



# Information on Demand and System z

- ***Unleash existing information assets for new applications***
  - Data Serving in an SOA environment
  - Meet Unique Service Level requirements
    - Availability, Scale, Security
  - Enabled by open standards
    - The mainframe is an open platform supporting open standards which is why you can use this as an enterprise data server and realize the value of z.
    - JDBC, ODBC, SQLJ, Web Services, DRDA...
- ***Simplify IT infrastructure***
  - ▶ Optimize existing information and physical resources
  - ▶ Virtualized information placement
- ***Optimize IT costs***
  - ▶ Leverage zSeries TCO advantages
  - ▶ Skill and infrastructure utilization





# Bundesministerium für Inneres (BMI, Austrian Ministry of the Interior)



## Business Challenge

- Government initiative to promote IT services and improve efficiency
  - Centrally stored data that's instantly and securely available all over the country

## Solution

- DB2 UDB v8 for z/OS enabled
  - Homogeneous data based design in implementation
  - DB2 Administration tool replaced several home grown tools
  - WebSphere is an essential building block as they move towards SOA





# System z Management In an SOA Enterprise

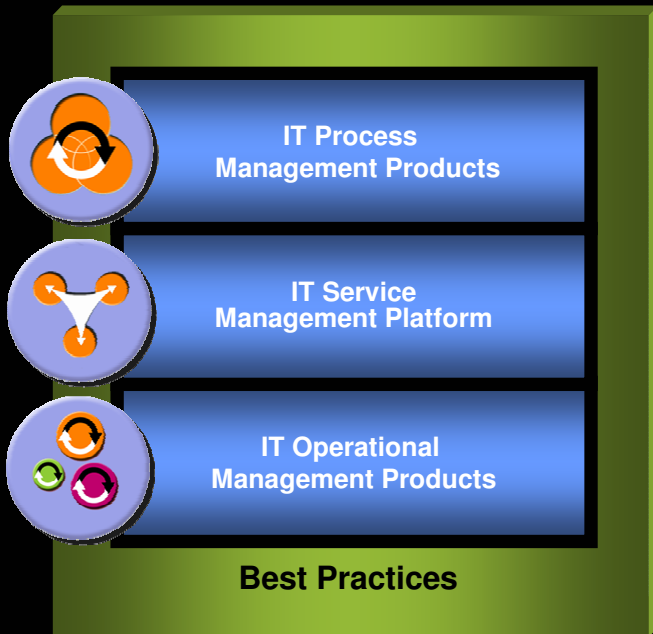
- **Changing role of the mainframe**
  - ▶ From platform of legacy applications to host of core business services & data
  - ▶ System z can no longer be viewed as an island
- **End to End Scope**
  - ▶ To manage and secure business services mean to manage the resources from end to end
  - ▶ Enterprise-wide tools and skills are now basic needs
- **“z-Centric” to “z-Inclusive”**
  - ▶ The solutions that made System z secure, resilient and continuously available now need to apply to the whole enterprise



# ITSM: Manage Complexity and Deliver Higher Level of Service

System z technologies enhancing an enterprise solution  
 Key acquisitions accelerating the management portfolio

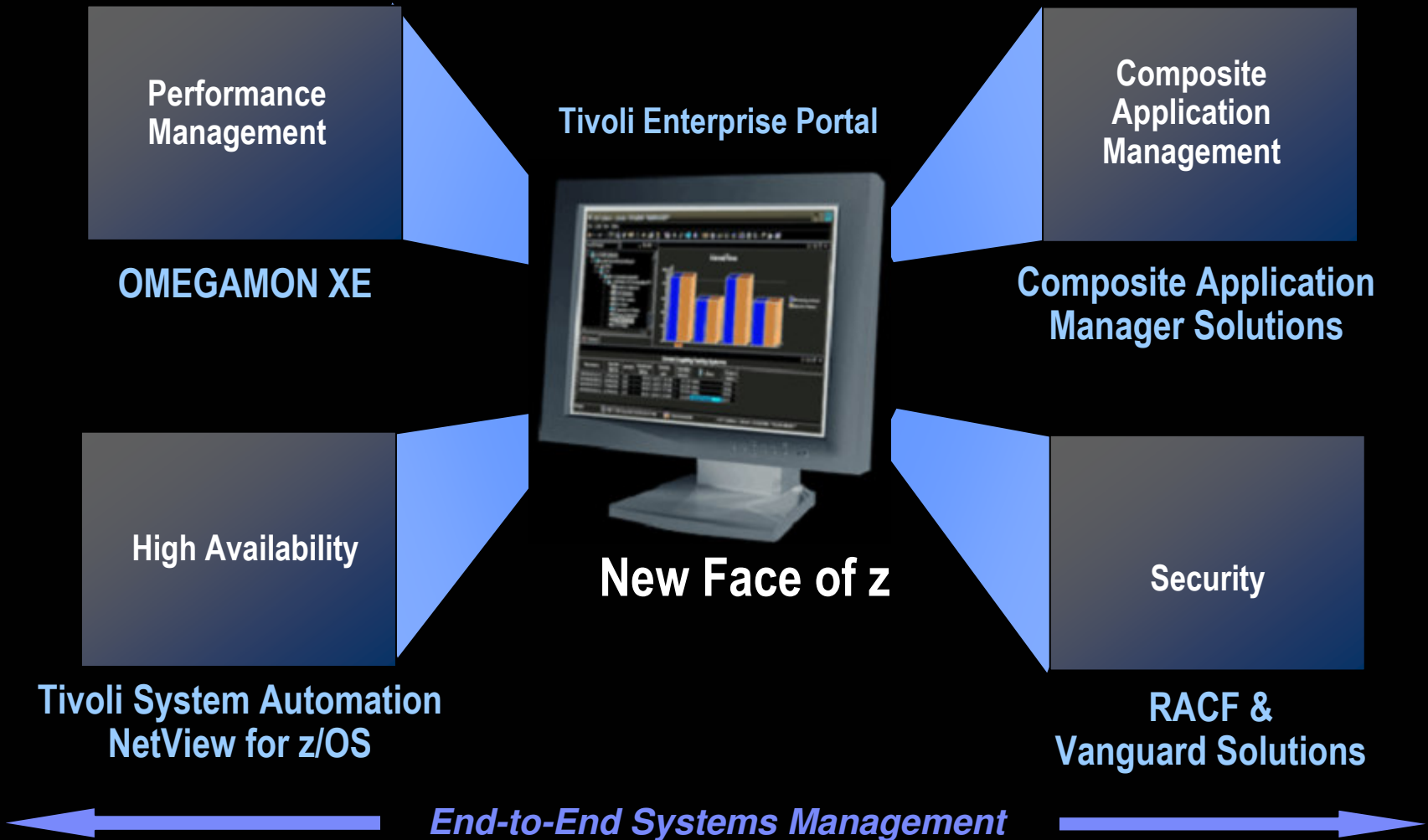
## IT Service Management



	<ul style="list-style-type: none"> <li>Enhance On Demand Offerings</li> <li>Improved end-to-end management</li> <li>Breadth and depth of System z offerings</li> </ul>
	<ul style="list-style-type: none"> <li>Enhance composite application management</li> <li>Deep dive J2EE skills</li> </ul>
	<ul style="list-style-type: none"> <li>End-to-end software asset management, from System z to distributed</li> </ul>
	<ul style="list-style-type: none"> <li>IT chargeback to lines of business</li> </ul>



# IT Service Management to Meet the Challenge



# What Our Customers Are Saying...

***“ With their new IT Service Management strategy, IBM Tivoli is now really focused on the big picture – not only delivering tools, but an integrated combination of tools, sharing their data through a central database and supporting ITIL processes.”***

***- Andres Golombek, IT Production, Commerzbank***



***“ Tivoli software offers a comprehensive solution across many different disciplines and platforms. It is a much better approach for us than implementing many different infrastructure management tools from many different vendors.”***

***- Thorsten Liedtke, Systems Administrator, HSBC***



***“ The Tivoli suite of products has been (and will continue to be) integral to the bank in providing objective system data and other information to measure our progress. The integration of the Tivoli suite of products into our infrastructure plays a key role in our ITIL success.”***

***- Tony Flora, Sr VP Global Services and Fulfillment Group***



# Mainframe Charter



## Innovation

*Provide leadership in innovation to enhance the use of IBM eServer System z to support increasingly integrated and flexible business processes for the on demand business.*



## Value

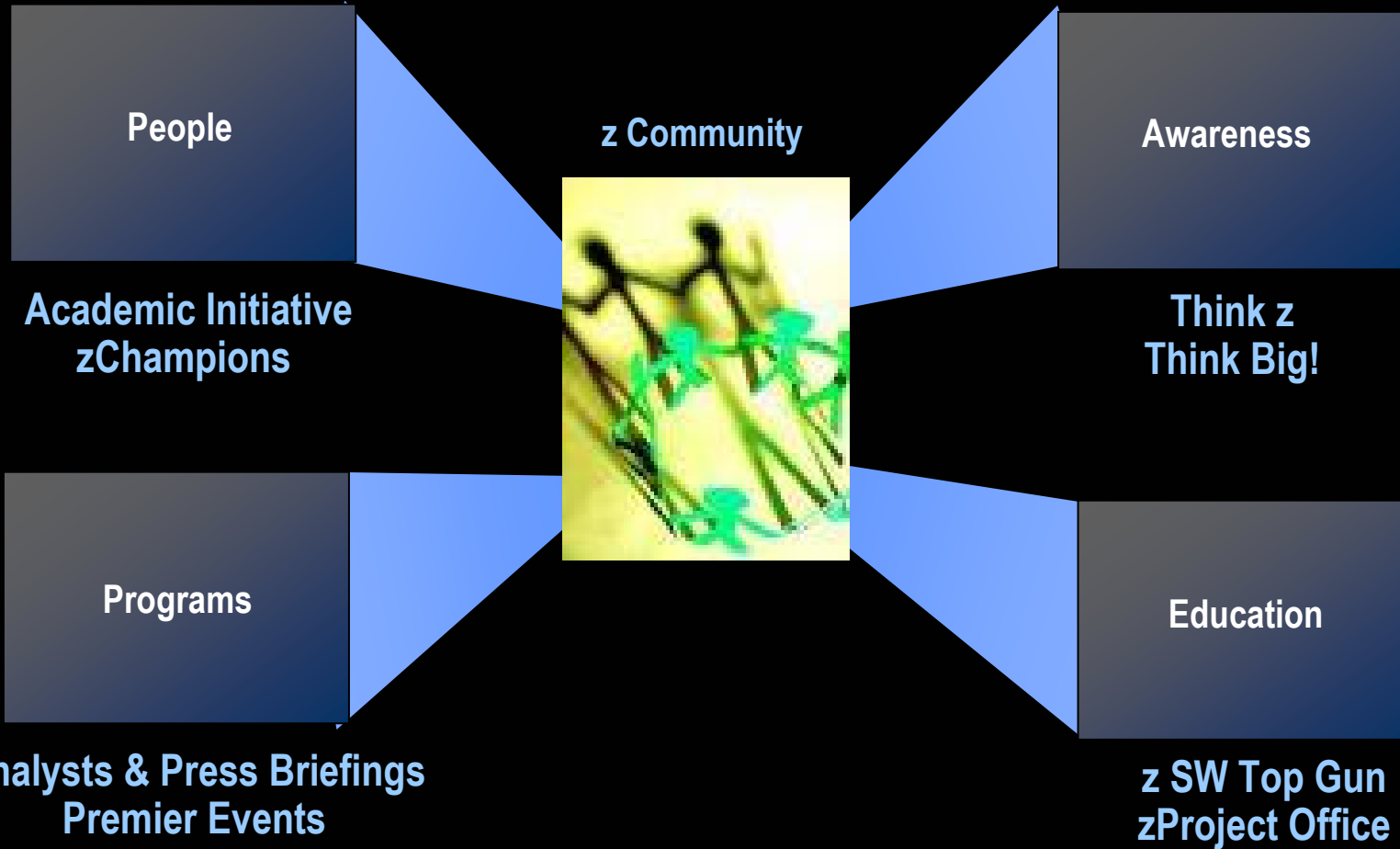
*Enhance the value proposition and lower the cost of computing of System z solutions in a way that is compelling, clear, and consistent.*



## Community

*Support programs designed to foster vitality in the System z community, helping to promote a strong application portfolio and world-class support services.*

# Growing the z Community



*Investment for the Future*



## How you can get the maximum value from your mainframe

1. Move past the “sweet-spot”
  - ▶ Grow core-business MIPS
2. Use the latest technology and pricing
  - ▶ Upgrade to IBM System z (z890, z990, z9 EC or BC)
  - ▶ Add specialty processors
  - ▶ Exploit sub-capacity pricing
  - ▶ Utilize Sysplex Aggregation
3. Maximize usage
  - ▶ Drive mainframes at 90% utilization, 24 hours by 7 days
4. Minimize other costs (availability, security, integration, asset utilization, ...)
5. Save on labor costs

**CONSOLIDATE MORE WORKLOAD ON TO THE IBM System z**



## In Closing...

- IBM is committed to bringing System z solutions that expand System z capabilities while enhancing its proven strengths
- We have transformed the core middleware in the platform to help you implement:
  - ▶ Services Oriented Architectures
  - ▶ Information on Demand
  - ▶ IT Service Management
- Our mainframe tools drive:
  - ▶ Cost substitution and reduction via utility ISV replacement
  - ▶ A technology roadmap to fully exploit the modern middleware
  - ▶ Mode productivity for your staffs to discover, assemble, deploy and manage composite applications
- Our focus also includes:
  - ▶ More skills in the market via academic initiatives and customer partnerships
  - ▶ A re-energized ISV program