

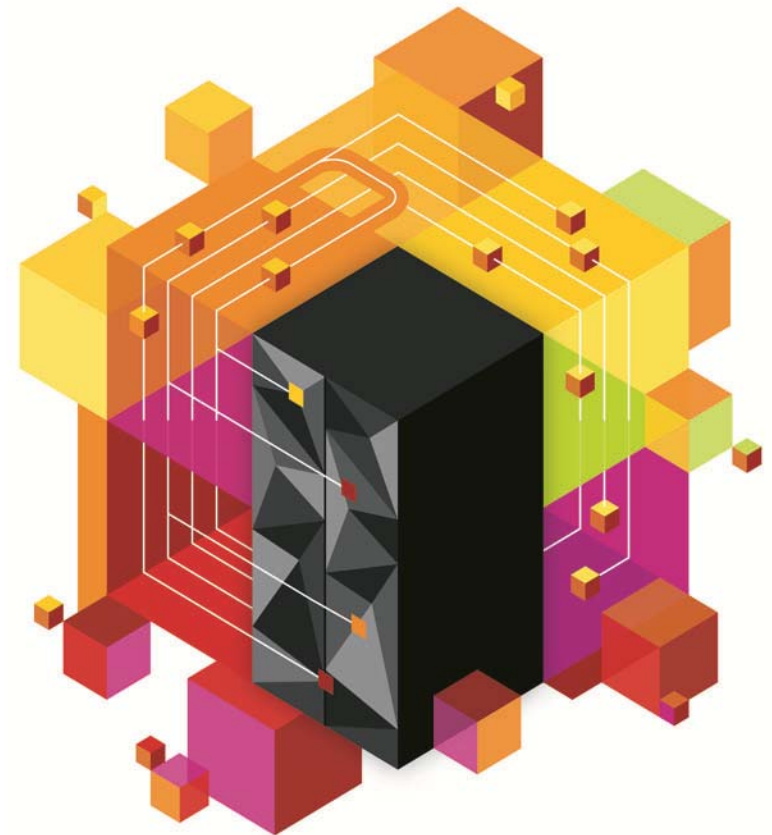


# System z Software Strategy and Direction

## Top Ten Trends for System z *A customer perspective*

**Ray Jones**

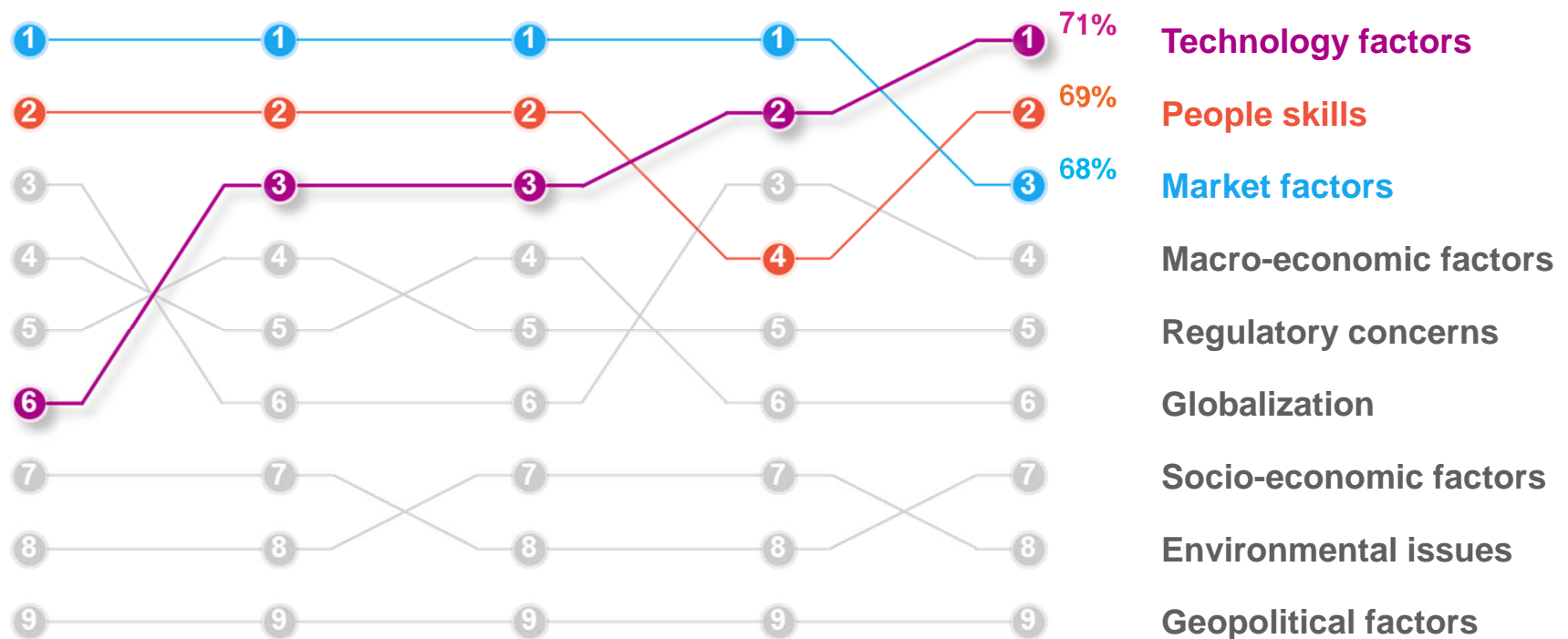
**Vice President, System z software sales**





# Technology is king

For the first time, CEOs identify technology as the most important external force impacting their organizations





## What's keeping CIOs up at night in 2013?

**24B**

connected devices  
by 2020 with  
mobile devices  
surpassing PCs

**1 in 3**

business leaders  
frequently make  
critical decisions  
without the  
information they need

**8ZB**

of data by 2015

**80%**

of new apps will be  
distributed/deployed  
via the cloud

**\$7.2M**

per incident for a  
security breach  
(on average)

**#1**

factor for success is  
the right technology  
(CEO, CMO and Student  
Study)



# Top 10 Things you did not know System z can do...

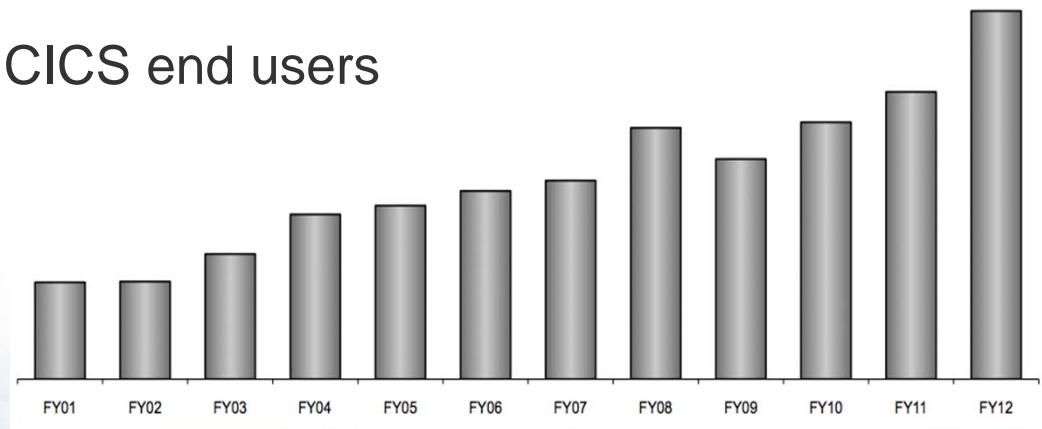


## Transaction Processing

30  
Billion+

transactions per day valued  
at over \$1 trillion per week

30 Million+ CICS end users



**MIPS Growth**

New! CICS Transaction Server for z/OS  
V5.1 Trial Version



## Transaction Processing

### Datev

Delivered a high level of performance to their customers by using a Java-based web service environment in CICS along with business rules managing over three million transactions/day



**15%**

increase in application speed with enhanced customer service

**20%**

Increase in processing capacity



## Data management

**1/3** reduction in cost when implementing a data management solution on System z



**Merging** of operational and analytical data for real-time business decisions

**#1** CIOs strategic focus over the next 3-5 years is enabling data insight

**New! DB2 11 and IMS 13 QPP**





## Data Management

### Marriott

Analyzes petabytes of data to provide the industry's best customer experience based on the business intelligence and booking rules that rewards their loyal customers.



**18%** Jump in internet shopping

**Instantaneous**  
order fulfillment at any time  
and from any point





**SAP**

# Days to hours

to refresh, clone or install  
complete SAP systems

# Expedite selected queries

On SAP data



**NEW!** Entry cloud configuration for SAP  
solutions on zEnterprise





# SAP

## Arburg

Developed an integrated SAP software environment allowing for flexibility, performance, and growth of SAP applications



**80%**

reduction in energy cost  
with zEnterprise 114

**Real time**

testing of programs using current  
data



## Consolidation

Up to **290** virtualized x86 cores on a single IFL core

**3000+** applications available for Linux on System z

Less than **\$.70** per day for a virtual server on System z

**NEW! z/VM 6.3 Preview**





## Consolidation

### Baldor Electric Company

Consolidated 200 servers from a recent acquisition to ONE zEnterprise 196 with three zIIP processors supporting an IBM DB2 database running on z/OS, along with 16 IFL processors for z/VM and Linux.



Less than **500ms**  
for SAP applications

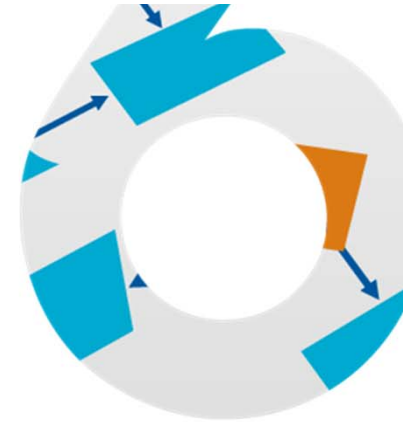
**50%** reduction in the size of  
the data center



**Resiliency**

**Zero-second**

recovery point objective (no data loss)



**Integrated encryption**

infrastructure from server to  
operating systems

**Flashcopy**

to provide back up during  
operations

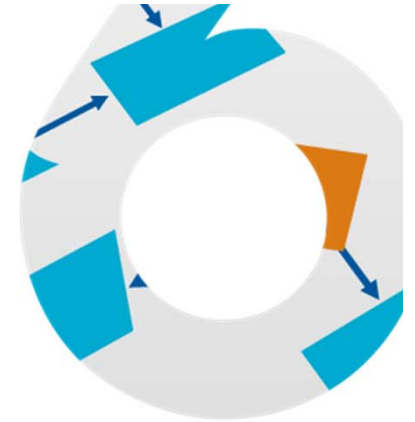
**NEW! z/OS and z/OSMF 2.1 Preview**



## Resiliency

### Shelter Mutual Insurance Company

Moved its largest, most complex, and most intensive agent-facing application from Windows to Linux on System z without any failures



# 5 minutes

to create virtual development and production environments





## Security



**Highest** class of security certification (EAL5+)

**Hardware  
Cryptography**

in each general purpose CP and IFL, and via the new Crypto Express4S coprocessors

**NEW! IBM Secure zSecure Suite V1.13.1**



## Security

### Vantiv

A the #1 processor of pin debit transactions in the U.S., they use the cryptographic coprocessors to create enterprise-wide encryption service



More than **75,000**  
production encryption  
keys

**2 Billion +**  
crypto transactions per  
day averaging 50  
ms/transaction



## Modern Application Development

# Develop once

distribute to any platform



**COBOL, PL/1, C/C++,  
Java** all available on System z

**NEW!** Rational Developer for System z V8.5.1



## Modern Application Development

### HSBC Bank

One of the world's largest bank, modernized their development processes using graphical interfaces and automating manual processes for identifying and resolving application failures.



Increased  
programmer  
productivity by up  
to **30%** and cut  
development costs



## Mobility

Up to **45%**

increase worker productivity with related increase in employee, partner and customer satisfaction and loyalty for use of mobile apps



**24 Billion** devices connected to the internet by 2020

**534 Billion** dollars in mobile transactions by 2015

**NEW! IBM Worklight 5.0**

**NEW! MQ mobile Client**





## Mobility

### University of Florida

Providing students and faculty real time information on their mobile devices including class schedules, textbooks, academic dates, grades, emergency information and campus map



**55,000+**

users accessing mobile applications

**1 Million**

transaction per day





## Cloud Computing

Up to **70%**

less cost than a typical x86 scale-out architecture for cloud solution on System z



## Superior scalability

for a single zCloud for Call Centers with 35,000 users and sub-second response times

**NEW!** Cloud Ready for System z



## Cloud Computing

### Nationwide

Consolidated its distributed servers to Linux virtual servers running WebSphere application server, DB2, and z/VM on System z, creating a multi-platform private cloud optimized for all its different workloads.



**80%**

reduced power, cooling and floor space requirements

**\$15 million**

reversed expenditure on distributed server landscape over three years



## Analytics

90%

of the data on the planet was created in the last two years



## Real time scoring

of transactional data

Up to 80x

faster for complex queries

**NEW! IBM DB2 Analytics Accelerator V3.1**



## Analytics

### Aetna

With 30 million new members planned in 2013, the IBM DB2 Analytics Accelerator increases the speed at which it can access, assimilate and report on vast amounts of new customer data



**No tuning**

of data with data directly  
into the accelerator

**3 hours to 6 seconds**  
for complex queries



# The Death of the mainframe was a bit premature

“I predict that the last mainframe will  
be unplugged on March 15, 1996.”

– Stewart Alsop, March 1991





## System z – advanced technology

- Most reliable and fastest system for mission critical workloads
- Most secure system with 99.999% reliability
- Most sophisticated data warehousing and analytics solutions with the fastest query performance in the market
- Unified platform for rapid development of applications
- Only system to enable x86, POWER, and System z applications under a centralized management system
- Ideal platform for a “cloud in a box” and mobile

