

12 August 2013

The Smarter Computing Choice for First-in-Enterprise Clients

Greg Lotko Vice President and Business Line Executive IBM System z





The world is constantly changing ...

Customer expectations have never been higher



They are better informed



They operate in a network of peers



They interact through a multitude of devices



They demand personalized service and offerings



Forward thinking businesses are building competitive advantage through a better customer experience



Innovating to build a better customer experience



Build intelligence into every client transaction

But 71% of CMOs are underprepared for the data explosion



Open access to mobile and social channels

But the growth and access extends beyond anything IT departments ever imagined.



Fast and cost effective delivery of new services

But 70% of IT budget is devoted to operations and maintenance



Build trust with your client that their data and identity will always be protected

But The average IT infrastructure is attacked nearly 60,000 times a day

In order to build a better customer experience, businesses have to address these key challenges ...



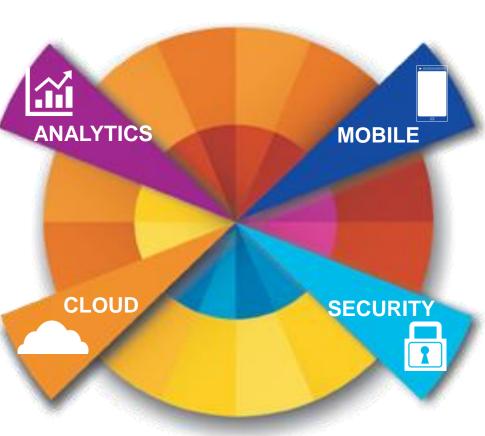
Capitalizing on transformative technologies ...

Integrate data, applications and analytics to:

- Build insight into the current transaction
- Manage exponential growth in data

Deploy robust highly scalable clouds to:

- Transform economics of IT
- Rapidly deliver new services



Design, deploy and integrate mobile applications to:

- Build mobility in to the business model and client experience
- Open up all channels of access at any time from anywhere

Apply the highest levels of security to:

- Create a trusted partnership with clients
- Avoid cost of breaches and damage to reputation

... to reshape the customer engagement model

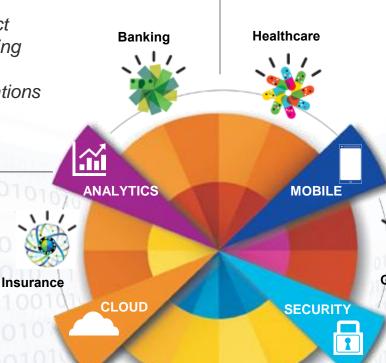


Exploiting these technologies improves customer experience across industries

Financial institutions detect fraudulent money laundering activities and offer reliable and secure mobile applications for anytime, anywhere banking services.

Insurers rapidly develop and provide new offerings at lower costs and discover suspicious claims before payment to minimize loss

Retailers boost revenue through discovery of customer buying behaviors and ensure compliance with Payment Card Industry (PCI) data security standards.



Healthcare payers and providers secure patient data and comply with HIPAA while creating real-time data insights to deliver more effective, preventative healthcare services at lower costs to patients.



City governments expand and coordinate and administer city services through citizencentric applications.



Education

Universities provide students secure, flexible virtual desktops and real-time access to university information systems to improve the student experience.



IBM continues to extend the role of zEnterprise to deliver strategic, differentiated capabilities and deeper client value

Data Ready

Enterprise data repository that integrates operational analytics for accelerated insight in one system

- Enterprise data hub for single version of the truth
- High-volume secure and reliable transaction processing
- Integrated, real-time operational analytics

Cloud Ready

6

Highly scalable, agile heterogeneous enterprise private cloud

- Elastic, virtually limitless expansion
- Shared everything design
- Secure hybrid computing with centralized management
- Built on open industry standards

Mobile Ready

Connecting backend systems to mobile devices to turn each interaction into an opportunity

- Build and connect to back end systems
- Secure and manage with the highest level of security
- Extend and transform capabilities to mobile devices

Security Ready

Trusted security and reliability for critical business processes, applications and data

- Ultimate data security protection
- Built-in cryptography
- Unmatched resiliency and availability





Organizations embracing these technologies are reshaping the value and customer experience they deliver









Scalable, secure cloud portal

enables efficient delivery of new services while cutting data center costs by 70% and support for 24X7 availability

Scalable, cost effective mobile banking solution

brings the branch to the client and enables personalized services to support 10M new customers

Enhanced data analytics hub

leverages co-location
of data to provide fast
access to vital
insights for
development of new
products & services

Cryptographic coprocessors

execute 2B secure financial transactions / year with enterprisewide encryption services and 24x7 availability

Delivering a better customer experience at enterprise scale requires choosing the right underlying IT infrastructure



University of Arizona Pharmacy

Kevin Barber Associate Director, Medication Management Center College of Pharmacy, University of Arizona





What we do and the role of technology



UA's Medication Management Center is a first-of-its kind pharmacist-run call center providing medication therapy management services that increase the quality of health care and help reduce healthcare costs.

Pharmacists and pharm techs use the systems to gather information on medications to help patients.

Therefore, our technology solution need to be:

- •Reliable / always on
- Scalable
- Flexible
- Economical



What's in a name?

Only System z could deliver ...

- Extreme levels of scalability to handle growing workloads
- Low administrative overhead, including simplicity of adding new Linux partitions
- Stability and reliability without a lot of care and feeding
- •Flexibility to adapt to our changing requirements and new business opportunities
- Affordability with the business class



"We want to focus on our application and service to our patients...not maintaining hardware and software."



Benefits with zEnterprise



- Batch update process reduced from 50 hours to 4 hours
- One weekend to conduct migration to Linux on z was simple and easy to take advantage of all of its capabilities
- VM/SP has just done its job flawlessly
- The V7000 SAN that was installed with zEnterprise enabled quick use of some of its capabilities (such as SSD's to support key portions of the database) to economically improve performance



The importance of technology choice

Technology Economics: Across sectors, organizations with higher mainframe use demonstrate ...

- An average of 31% lower IT Cost of Goods
- · Computational growth that is roughly 3x more economically efficient

... over distributed server heavy organizations

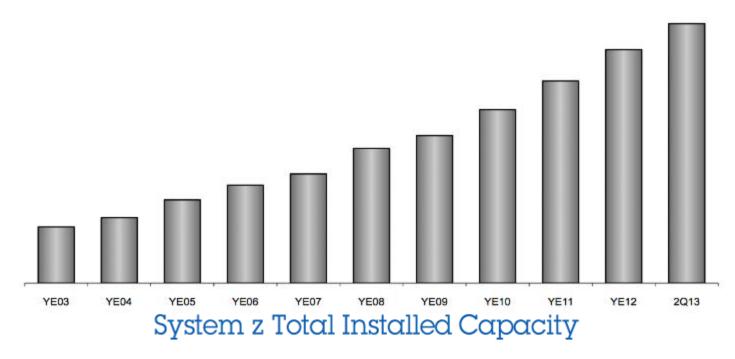
28% Isss IT spend per barrel of oil	68% lower IT cost per loan approval
67% less cost per teller transaction	48% lower IT cost per credit card transaction
27% lower IT cost per retail store	31% less IT spend per vehicle for automotive companies
30% 🄀 less IT spend per airline passenger mile	27% less IT cost per hospital bed

... in the long run the marketplace rewards those that make the optimum use of the right computing resources in the right way as evidenced by business performance.

Dr. Howard Rubin, Chief Executive Officer and Founder, Rubin Worldwide Technology Economics: The impact of Your Computing Strategy in Real Business Terms; 2012 Rubin Worldwide.



The Momentum is Growing around zEnterprise...



23%

MIPS growth and 10% revenue growth yearto-year 210+

new accounts since 3Q10 zEnterprise launch, with 1/3+ in growth markets 275+

hybrid computing units shipped since 3Q10 3/4+

of Top 100 clients have installed IFLs 1,000+

schools in 67 countries are part of the IBM Academic Initiative for System z® 7,400+

ISV apps run on IBM System z; 55 new ISVs added in 1H13

[IFL = Linux-on-z Only Engine]



Now we are extending and enhancing the zEnterprise portfolio to bring new value to enterprises of all sizes ...

Join me more z news from 3-4 p.m. in Room 209 (Hynes Convention Center)

- New Software and Industry Solutions for Cloud, Analytics, Mobile and Security
- The New IBM zEnterprise® BC12 (zBC12) & DS8870 BC Configuration
- The New Enterprise Linux® Server
- New Hardware Innovations for the zEC12 & zBC12
- New and enhanced zHybrid capabilities
- New Operating Systems releases with z/OS® 2.1, z/OSMF 2.1 and z/VM 6.3

Building a better customer experience for business advantage with zEnterprise



zEnterprise can help your organization unlock new opportunities with analytics, cloud, mobile and security



Energize your data and applications by integrating real-time insights and optimizing for mobile access

Save money and deliver new services with an efficient, robust cloud foundation

Secure it all with confidence with industry leading protection

































Brazilian Portuguese











ありがとうございました

Japanese



Trademarks

The following are trademarks of the International Business Machines Corporation in the United States and/or other countries.

IBM* Genelco* WebSphere*
IBM (logo)* Guardium* z/OS*

Cognos* SPSS* DataPower* System z*

The following are trademarks or registered trademarks of other companies.

Adobe, the Adobe logo, PostScript, and the PostScript logo are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States, and/or other countries.

Cell Broadband Engine is a trademark of Sony Computer Entertainment, Inc. in the United States, other countries, or both and is used under license therefrom.

Intel, Intel logo, Intel Inside, Intel Inside logo, Intel Centrino, Intel Centrino logo, Celeron, Intel Xeon, Intel SpeedStep, Itanium, and Pentium are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

IT Infrastructure Library is a registered trademark of the Central Computer and Telecommunications Agency which is now part of the Office of Government Commerce.

ITIL is a registered trademark, and a registered community trademark of the Office of Government Commerce, and is registered in the U.S. Patent and Trademark Office.

Java and all Java based trademarks and logos are trademarks or registered trademarks of Oracle and/or its affiliates.

Linear Tape-Open, LTO, the LTO Logo, Ultrium, and the Ultrium logo are trademarks of HP, IBM Corp. and Quantum in the U.S. and

Linux is a registered trademark of Linus Torvalds in the United States, other countries, or both.

Microsoft, Windows, Windows NT, and the Windows logo are trademarks of Microsoft Corporation in the United States, other countries, or both.

OpenStack is a trademark of OpenStack LLC. The OpenStack trademark policy is available on the OpenStack website.

TEALEAF is a registered trademark of Tealeaf, an IBM Company.

Windows Server and the Windows logo are trademarks of the Microsoft group of countries.

Worklight is a trademark or registered trademark of Worklight, an IBM Company.

UNIX is a registered trademark of The Open Group in the United States and other countries.

* Other product and service names might be trademarks of IBM or other companies.

Notes:

Performance is in Internal Throughput Rate (ITR) ratio based on measurements and projections using standard IBM benchmarks in a controlled environment. The actual throughput that any user will experience will vary depending upon considerations such as the amount of multiprogramming in the user's job stream, the I/O configuration, the storage configuration, and the workload processed. Therefore, no assurance can be given that an individual user will achieve throughput improvements equivalent to the performance ratios stated here.

IBM hardware products are manufactured from new parts, or new and serviceable used parts. Regardless, our warranty terms apply.

All customer examples cited or described in this presentation are presented as illustrations of the manner in which some customers have used IBM products and the results they may have achieved. Actual environmental costs and performance characteristics will vary depending on individual customer configurations and conditions.

This publication was produced in the United States. IBM may not offer the products, services or features discussed in this document in other countries, and the information may be subject to change without notice. Consult your local IBM business contact for information on the product or services available in your area.

All statements regarding IBM's future direction and intent are subject to change or withdrawal without notice, and represent goals and objectives only.

Information about non-IBM products is obtained from the manufacturers of those products or their published announcements. IBM has not tested those products and cannot confirm the performance, compatibility, or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

Prices subject to change without notice. Contact your IBM representative or Business Partner for the most current pricing in your geography.

This information provides only general descriptions of the types and portions of workloads that are eligible for execution on Specialty Engines (e.g, zIIPs, zAAPs, and IFLs) ("SEs"). IBM authorizes customers to use IBM SE only to execute the processing of Eligible Workloads of specific Programs expressly authorized by IBM as specified in the "Authorized Use Table for IBM Machines" provided at

www.ibm.com/systems/support/machine_warranties/machine_code/aut.html ("AUT"). No other workload processing is authorized for execution on an SE. IBM offers SE at a lower price than General Processors/Central Processors because customers are authorized to use SEs only to process certain types and/or amounts of workloads as specified by IBM in the AUT.

^{*} Registered trademarks of IBM Corporation