Mobilize the Mainframe for a Digital World

Put your business in motion.
Build a mobile enterprise with System z

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IBM

Mobile Is Changing Interactions And How Work Gets Done

People are transacting on mobile
- The average mobile phone user checks their phone 150 times a day

This data is helping organizations deliver new value
- By 2020, 90% of new passenger cars sold will have some form of vehicle mobile platform, up from 10% in 2012.

But the experience of mobile is not yet meeting expectations
- 80% of apps are used once then deleted

Mobile enterprises leverage this data, putting the right information into the right hands at the right times
- By 2015, 2/3 of the workforce will own a smartphone, and 40% of the workforce will be mobile

Mobile transactions are generating unprecedented amounts of data
- Global mobile data traffic will increase 26-fold between 2010 and 2015, reaching 6.3 exabytes per month by 2015

As a Result, Leaders are Redefining Their Agendas

73% of CEOs
Are prioritizing investments in customer insights

82% of CMOs
Plan to increase the use of social media

74% of CIOs
Say mobile solutions are part of their vision for increasing competitiveness

70% of COOs
Identify supply chain visibility as the top challenge in delivering on their agendas

Solving Key Business And IT Challenges with System z

Build *and deploy mobile applications efficiently*

- Developing apps that integrate with information from System z data
- Customer demands drive need to rapidly develop, deploy and update apps with stability and compliance
- Deploy apps that access back-end systems with optimal performance

Protect *and manage the mobile infrastructure to optimize performance*

- Protection of privacy and confidential information
- Policies for client-owned smartphones and tablets
- Visibility, security and management of end-to-end security
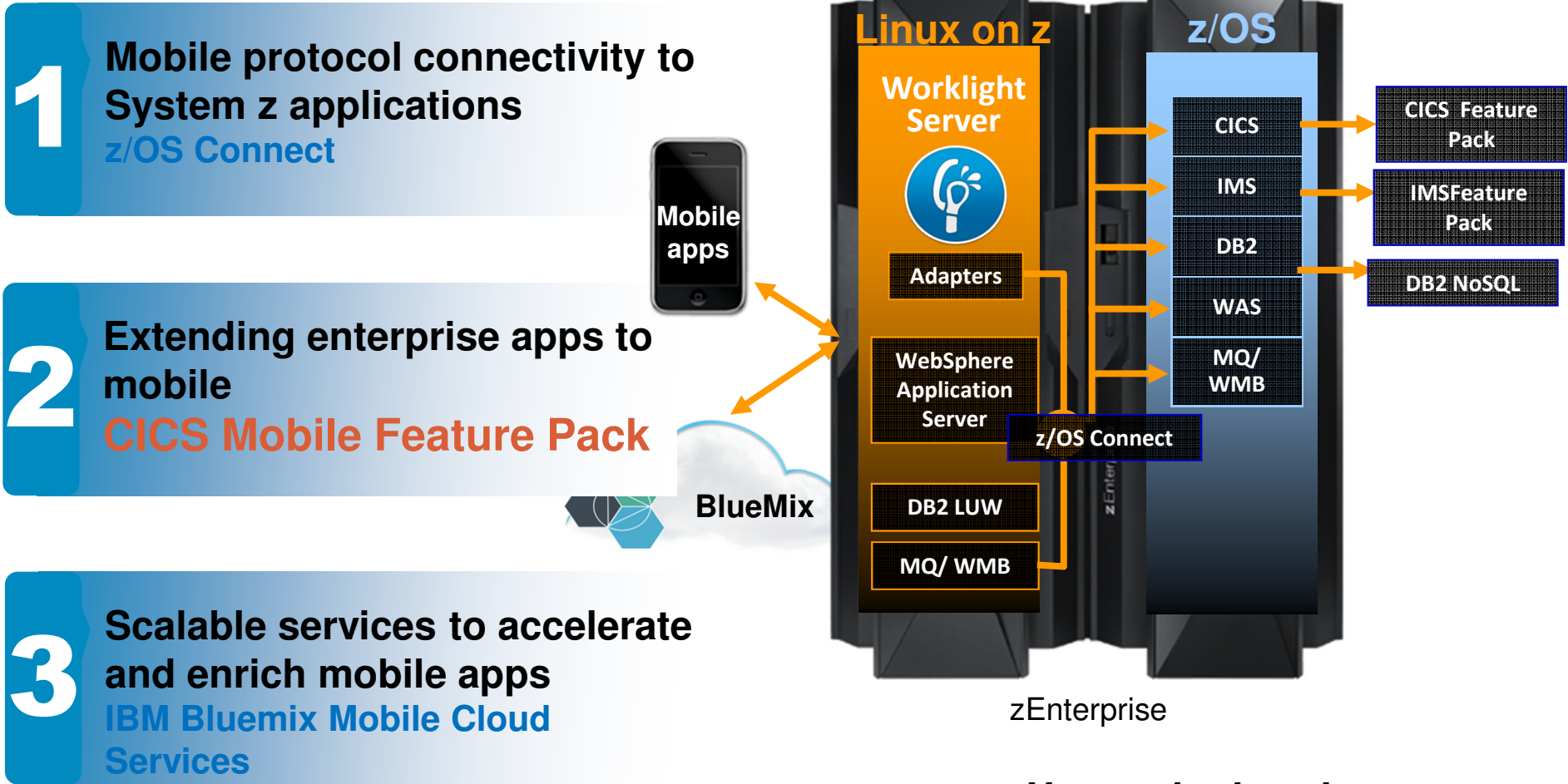- Infrastructure complexity from multiple device platforms

Engage *customers in context by leveraging mobile insights*

- Clients operate in a "4 screen" world
- Leverage mobile information to deliver deeper engagement
- Analytics on System z extending to mobile apps

Transform *the value chain to drive growth and ROI*

- New process and business designs required for transformation opportunities
- Rapid and disruptive innovation shortening time to value requirements

Connecting mobile apps on the zEnterprise

1 **Mobile protocol connectivity to System z applications**
z/OS Connect

2 **Extending enterprise apps to mobile**
CICS Mobile Feature Pack

3 **Scalable services to accelerate and enrich mobile apps**
IBM Bluemix Mobile Cloud Services

Mobile apps

BlueMix

Linux on z

Worklight Server

Adapters

WebSphere Application Server

z/OS Connect

DB2 LUW

MQ/ WMB

z/OS

CICS

IMS

DB2

WAS

MQ/ WMB

CICS Feature Pack

IMSFeature Pack

DB2 NoSQL

zEnterprise

Unmatched scale to support millions of transactions per day

Philippines bank **RCBC** transforms IT to gain 1.2M customers in one year

Build
and deploy mobile
applications
efficiently

Solution
Developed mobile solutions using IBM Worklight platform and Rational Team Concert software workflow to track the development process, from code checkout to promotion to the target environment which extended their business beyond traditional brick-and-mortar branches
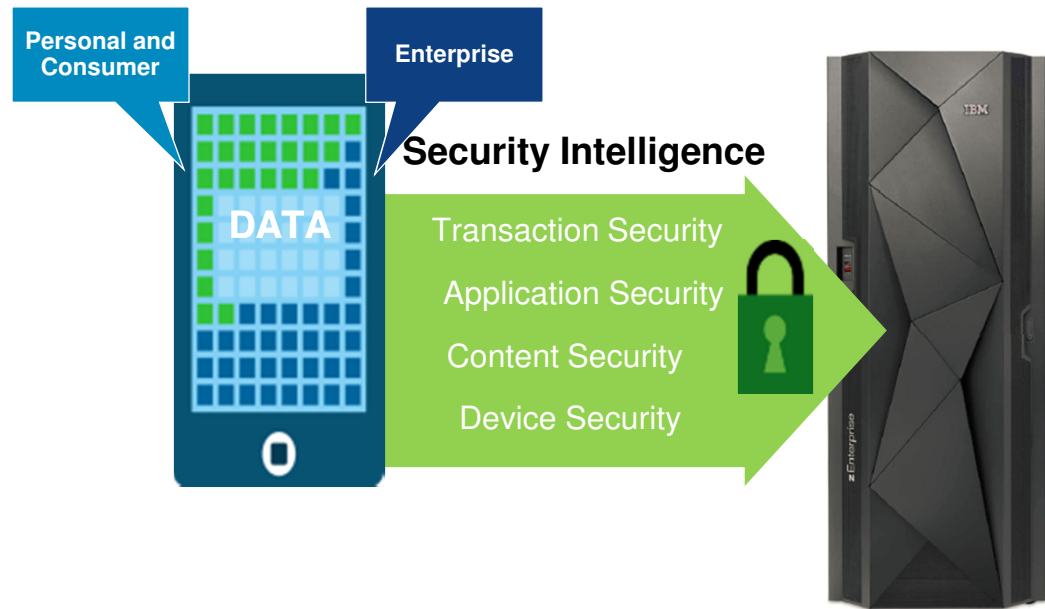
Benefits
Reduced new product launch times by 50 percent and increased its readiness to effectively compete in the marketplace, moving two to three years ahead of its competition.

Challenges
RCBC needed an IT infrastructure to support a core-banking system that would help the bank improve efficiency, launch products faster and provide anywhere-anytime mobile access to banking products and services.

Protect and manage the mobile infrastructure to optimize performance

IBM MobileFirst

With System z:

- Instrument applications with security protection from mobile to back-end systems

- Secure mobile transactions from customers, partners and suppliers

- Preserve native device experience without compromising security

- Separate personal and business data

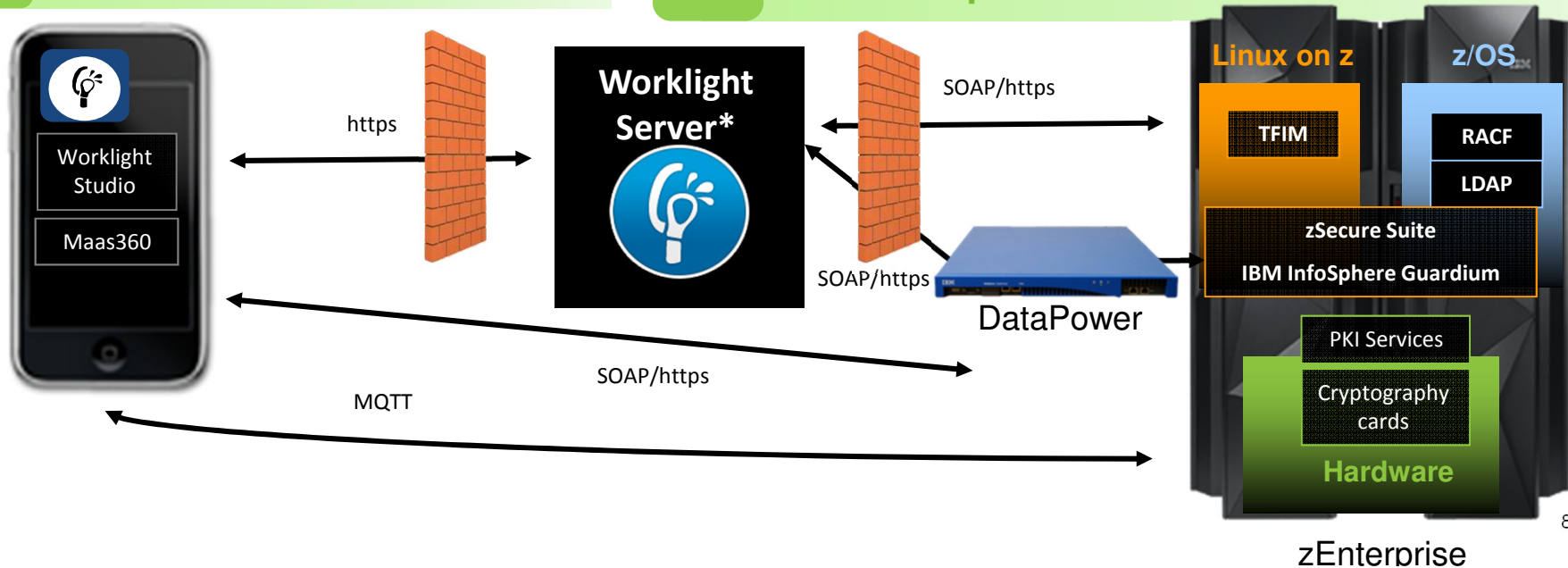- Provide intelligent access based on risk and location

Personal and Consumer

Enterprise

DATA

Security Intelligence

Transaction Security

Application Security

Content Security

Device Security

Enterprise Applications and Cloud Services

Securing mobile apps for sensitive data on System z

1 **Unified management and security control for mobile devices**
Fiberlink MaaS360
Trusteer

2 **Enforce web and mobile security policies**
IBM DataPower
IBM CastIron

3 **Protect against fraudulent and unauthorized access**
IBM Security Access Manager for Mobile

4 **Security foundation for System z mobile workloads**
IBM Security zSecure Suite, RACF, LDAP,
IBM Security QRadar SIEM,
IBM InfoSphere Guardium

Worklight Studio

Maas360

https

Worklight Server*

SOAP/https

SOAP/https

DataPower

SOAP/https

MQTT

Linux on z

TFIM

z/OS

RACF

LDAP

zSecure Suite

IBM InfoSphere Guardium

PKI Services

Cryptography cards

Hardware

zEnterprise

8

UK's saving and mortgage **Nationwide** transformed from legacy core systems to a modern, real-time, multi-channel banking system

Solution

Used DB2 for z/OS to enable to operate in real-time and across multiple channels with resiliency and stability for managing millions of accounts. Used IBM security tools to manage different levels of access rights with ease.

Benefits

24/7 availability to support anytime, anywhere banking services, shorter time-to-market for new accounts, and ample scalability to support Nationwide's ambitious growth plans.

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Challenges

Nationwide knew that it needed to transform its service offerings to embrace new channels and personalized products.
Customers demanded an always-on, multi-channel banking system

Engage customers in context by leveraging mobile insights

IBM MobileFirst

With System z:

- Quickly create and deploy personalized mobile campaigns and gain insights with analytic information from System z

- Maximize brand value by integrating the physical and digital experiences of mobile customers

- Receive timely, informative and interactive information to support decision-making, regardless of location.

Analytics solutions for mobile apps in the zEnterprise

1 **Informative and interactive business intelligence**
IBM SPSS and Cognos Solutions for Linux on System z

2 **Complex queries in seconds**
IBM DB2 Analytics Accelerator for z/OS

3 **Visibility into the customer mobile experience to optimize app design**
IBM Tealeaf

Providing superior customer service at **Banca Carige** by launching innovative mobile services and analytics

Engage
customers in context by
leveraging mobile
insights

Solution

Banca Carige built an analytics environment and a new mobile banking service using IBM software on IBM zEnterprise EC12 mainframes, which provide round-the-clock availability and high security

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Benefits

Launching new services meets changing customer demands, while the proven underlying technology accelerates deployment and reduces risk; consolidating to a single platform cuts cost and complexity. .

Challenges

Banca Cariage needed to develop an improved understanding of consumer behavior through analytics, and launch new mobile services that engage and retain customers through great service.

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Transform
the value chain to drive
growth and ROI

IBM MobileFirst

Can Help You:

- Design new engagement models placing the customer first

- Use cost-effective workload mobile pricing on System z for competitive advantage

- Use Linux on z solutions to build new business models that drive revenue

In essence,
Reinvent Business with Mobile

Transform your mobile apps with System z

1 **Collaborate with IBM mobile experts and design new System z mobile innovation**

IBM MobileFirst Studios

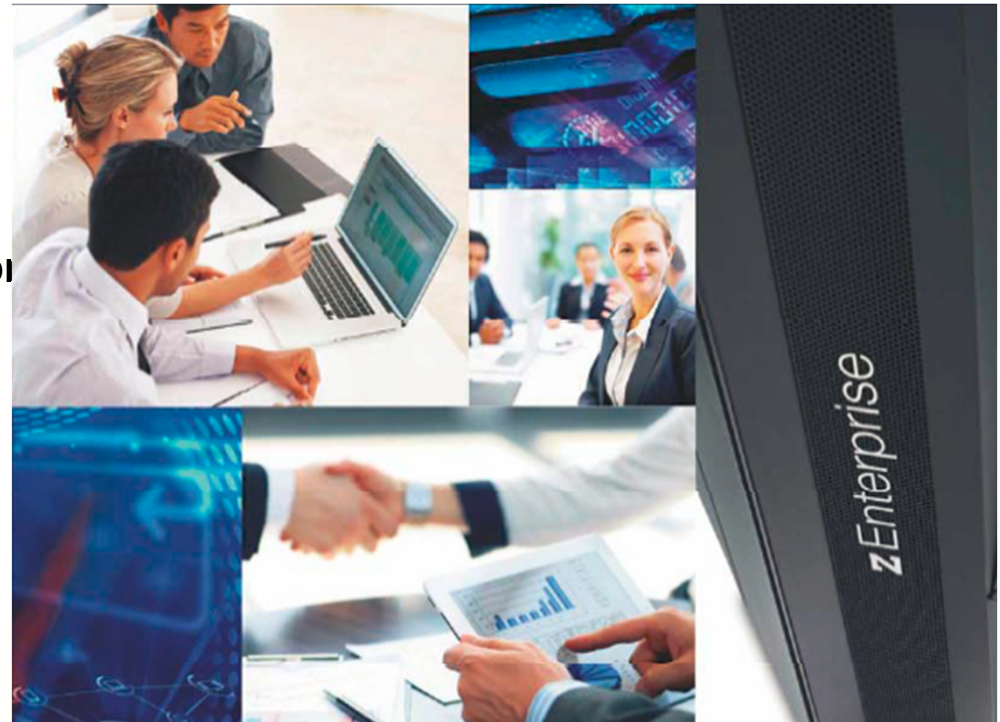**2** **Develop cost-effective mobile solution with System z**

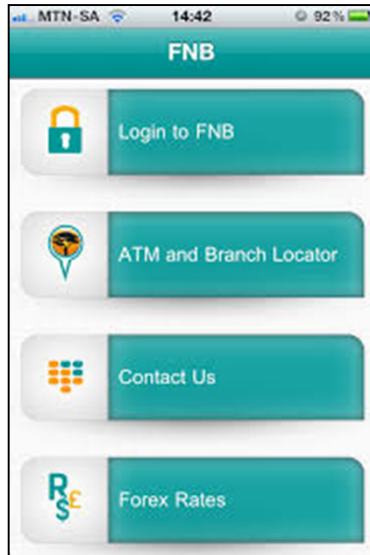**IBM Workload Pricing on System**

3 **Accelerate the Mobile Transformation Journey with System z solutions**

IBM Ready Apps

Linux on System z solutions

FNB drives unprecedented growth and performance in mobile banking

Transform
the value chain to drive
growth and ROI

Challenges

in South Africa, more people have cellphones and smart mobile devices than bank accounts. FNB wanted to launch a reliable, secure and highly responsive mobile channel before its competitors, and looked for a platform that would enable very short time-to-market.

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Solution

FNB integrated a new Java-based mobile front-end directly with tried-and-trusted business logic and core banking services running on IIMS on an IBM zEnterprise EC12 server. IBM IMS Enterprise Suite Connect APIs for Java and C and IBM IMS Enterprise Suite SOAP Gateway manage links between the channel applications and core functionality and data on the mainframe.

Benefits

Rapid deployment enabled FNB to gain first-mover advantage in the market, gaining the number one spot for mobile banking. Ultra-low average end-to-end response times of 30 milliseconds ensure snappy performance for mobile banking users. Fast, secure and reliable mobile banking generates more business for FNB and reduces its average cost per transaction.

IBM MobileFirst with System z provides seamless connection to Systems of Record

BUILD and deploy to back-end systems to access mission critical data for enhanced customer experience

PROTECT critical data with military strength security solutions from app to mainframe

ENGAGE customers with the fastest analytics capabilities for the enterprise

TRANFORM enterprise business with packaged mobile solutions and services

Up to **60%** improvement in mobile transaction throughput with System z

Client Successes with Digitial

Plan and Measure → **Develop and Test** → **Release and Deploy** → **Monitor and Optimize**

Laminar Medica reduced new product development time and costs by 25%, contributing to 10% increase in competitive wins

China Merchants Bank profits from a unified collaboration platform

INTER Versicherungsgruppe increases productivity in application development

SIBRA GmbH keeps a vital project within budget and on time

Sandhata increased productivity 100%, and added tens of millions in new revenue

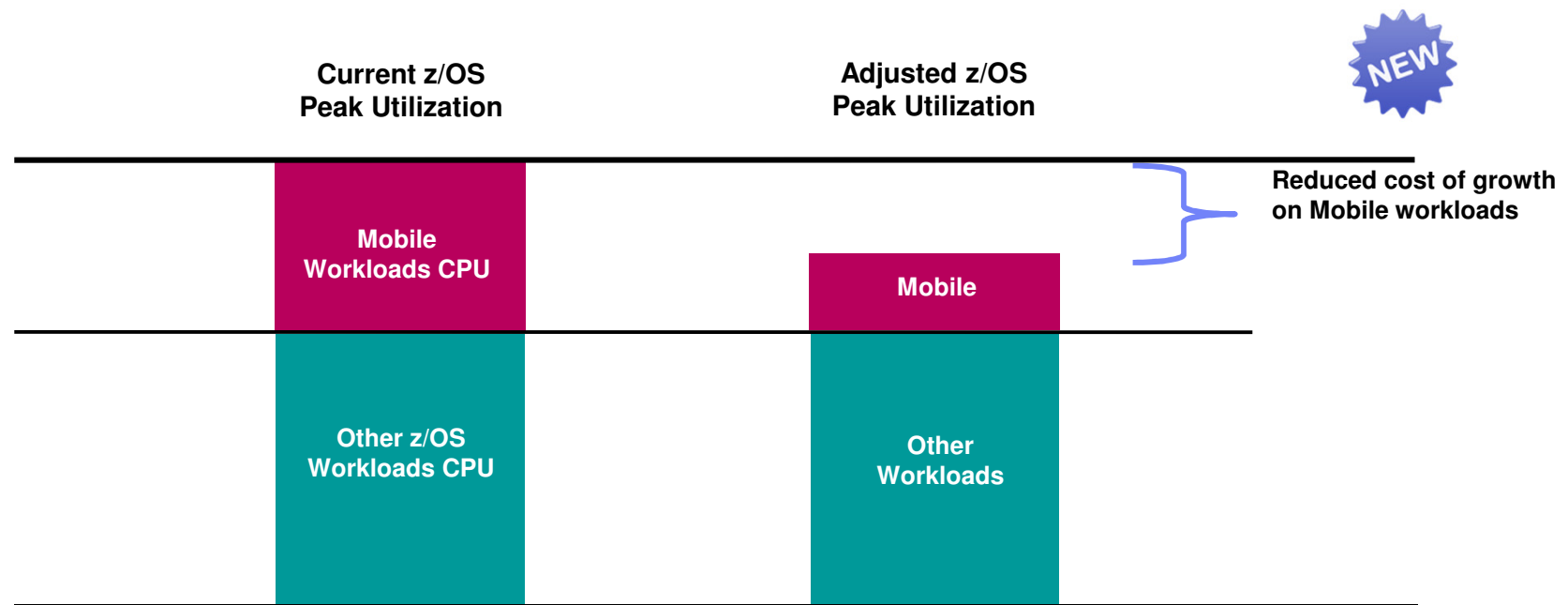**IBM Watson** team is reducing delivery cycles from 9 weeks to 3 weeks, & has achieved zero maintenance window downtime

Nationwide improved code quality 50%, reduced end-user downtime by 70%, and increased on-time delivery 90%

IBM CICS development team simplifies software builds and helps support agile development, improve collaboration

Aon Integramark establishes a dynamic SOA environment that automates data synchronization

A healthcare information provider cuts deployment time down to minutes

Sky Bet monitors the online customer experience to increase overall revenues

New System z Mobile pricing enables IT investments to scale with the growth & business returns of mobile

- Reduce z/OS peak MSUs attributable to mobile workloads -- up to 60%
- No Infrastructure Changes Required… (such as separate LPARs)

Current z/OS Peak Utilization

Adjusted z/OS Peak Utilization

NEW

Mobile Workloads CPU

Mobile

Reduced cost of growth on Mobile workloads

Other z/OS Workloads CPU

Other Workloads

- Customers must tag and track z/OS CPU seconds from mobile workloads.
- New MWRT tool replaces SCRT and will subtract mobile CPU seconds from peaks.
- Announcement letter.

Thank you