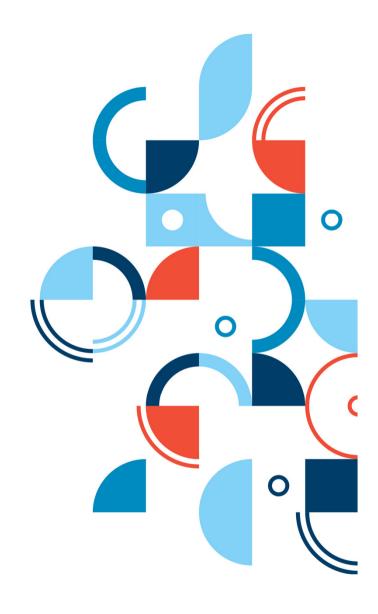
IMAC 2014

Introducing Mobility into the Enterprise Natalie Krivushenko

9 September 2014







Agenda

- Defining Mobility
- Mobility for the Enterprise
- IBM MobileFirst Solution
- Customer Stories

Apple + IBM Announcement



An increasing number of mobile workers

5.0%

CAGR of worldwide mobile workers from 2013-2020 mobile workers on a worldwide basis.

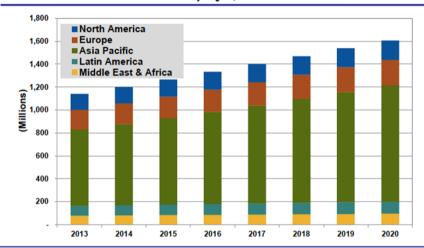
120 Million

Expected total mobile workers in Asia Pacific by 2020

172 Million

Expected total mobile workers in the Eurozone countries by 2020





(Sources: U.S. Census Bureau, European Commission, Navigant Research)

Results from the "Upwardly Mobile" Enterprise study:

Approximately 90% of all companies are looking to sustain or increase their investment in mobile technologies over the next 12-18 months

Changes in the Energy & Utility industry Workforce

11 Million

Utility workforce by 2020 at 6.7% CAGR

60%

Utility employees will leave due to retirement or other reasons

2.5 Million

Utility mobile workers by 2020, growing at CAGR of 10.2%

\$98 Million

Spending on mobile workforce software and applications by 2020

Mobile is Changing Interactions and How Work Gets Done

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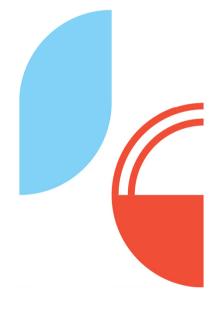




Fewer than half of all companies have a mobile strategy, and this is despite the fact that

73%

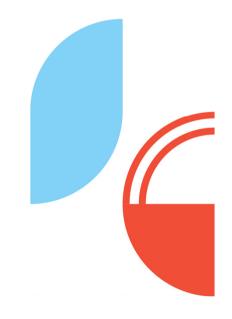
of strategy leaders have realized ROI on their investments.



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Mobility in the Enterprise

Mobile field workforce:

- Asset Maintenance and troubleshooting
- **Emergency Response**
- **Asset Operation**
- **Asset Construction**
- Safety and Compliance

Mobile Workers including BYOD:

- Mobile devices (phones, tablets) supporting various OS
- Access and Security
- Mobile Application development and management
- Software, Application, Hardware Management
- Communication

Mobile Customers:

- Customer applications for services
- **Customer Service**
- Social Media
- 3rd party applications and services









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The value of mobility

Customer Satisfaction

- Empower customers by providing access to work order status and expected resolution time
- Provide customer agents with access to data, technical data and documentation for resolution of work orders
- Enable communication with field workforce to quickly address customer requests





Workforce Efficiency

- Improve efficiency by route optimization and best practice processes
- Expand data exchanges and updates by enabling real time and secure updates by the field workforce



Decreased Cost of Ownership

- Utilize one integrated mobile platform for
 - Application development
 - Device management, and
 - Security and communication network
 - ...covering all jurisdictions and business units



Empowerment with Mobility across functions and business areas ...

Maintenance, Operations, Construction & Inspection

- Eliminate manual data work processes
- Optimize routing
- Track via spatial locations and mapping



- Implement best practices & efficient work processes
- Provide asset knowledge and history
- Enable just-in-time training and procedure references
- Improve workforce safety
- Enable real-time environmental and safety reporting

Engineering

- Increase visibility of data
- Provide real time status updates
- Create standardized data for analysis
- Connect to specific facility assets to assess operability or take a reading
- Plan with accuracy
- Track performance metrics

Dispatch/Back office

- Provide real time status or notification on events
- Avoid post event data entry
- Enable rapid re-prioritization
- Map real time field resource deployment
- Handle greater volume
- Enable online learning





Empowerment with Mobility across functions

and business areas ...

Bring your own device (BYOD)

- Unified management across devices
- Selective wipe of corporate data
- Configuration & enforcement of password policies, encryption, VPN access & camera use
- Streamlined workflow between development & operations with an integrated Enterprise App Store
- Optimize telecom expenses with detailed usage analyses
- End-user portal for management of mobile equipment, carrier plans, and usage tracking
- On-premises or managed service delivery

Customer Support



- Provide real time status information for customer inquiries
- Automate supply chain process
- Interfaces for connectivity, outages, and scheduling
- Ensuring the customers issues are resolved by the first visit
- Inform customers of upcoming issues, outages, etc.

Security / Compliance

- Regulatory compliance
- Protection and access to data and applications
- Secure two-way communications and corresponding infrastructure
- Allow / disallow data storage, document sharing Hardware & Software management

But they face a number of challenges during this process IMAC 2014 IBM.

Users

- •Mobile integration of business applications and processes
- Implementing best practices
- Security of devices and access
- BYOD devices

Complexity

- Support of multiple devices and operating systems
- Security of devices and data
- Access and update of data and analytics
- Design and development of mobile applications

Security

- Regulatory compliance
- Protection and access to corporate data and back-end applications
- Device and communication security
- Enforcing user authentication and encryption per application
- Allow / disallow data storage, document sharing, etc.



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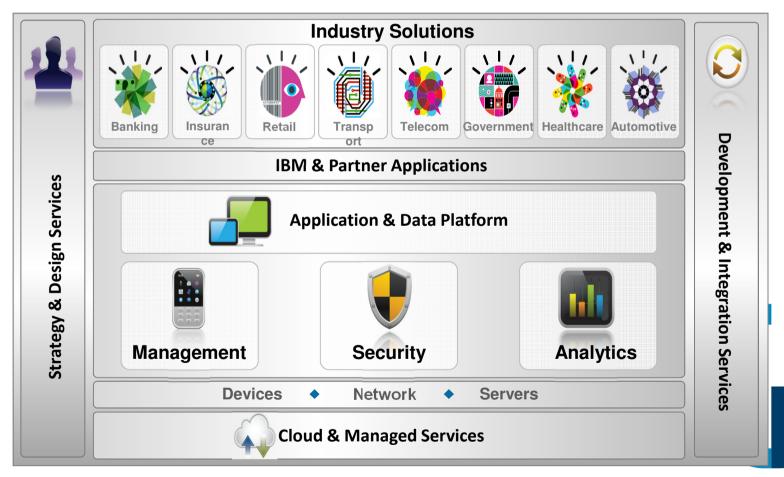
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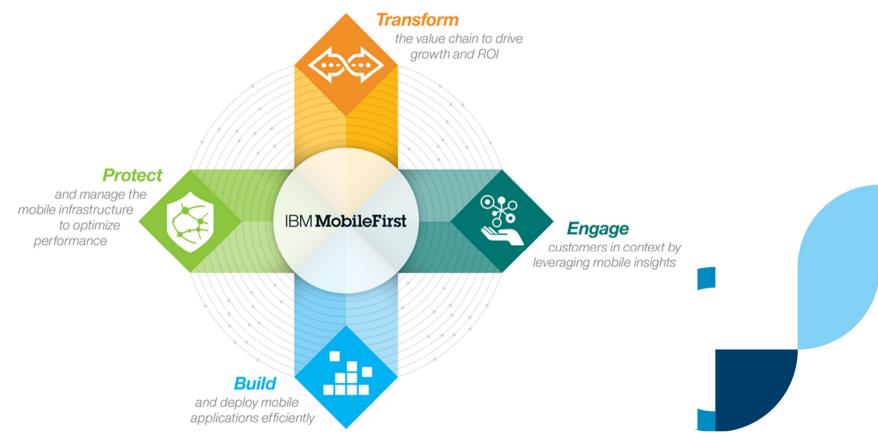
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IBM MobileFirst Integrated Offering Portfolio

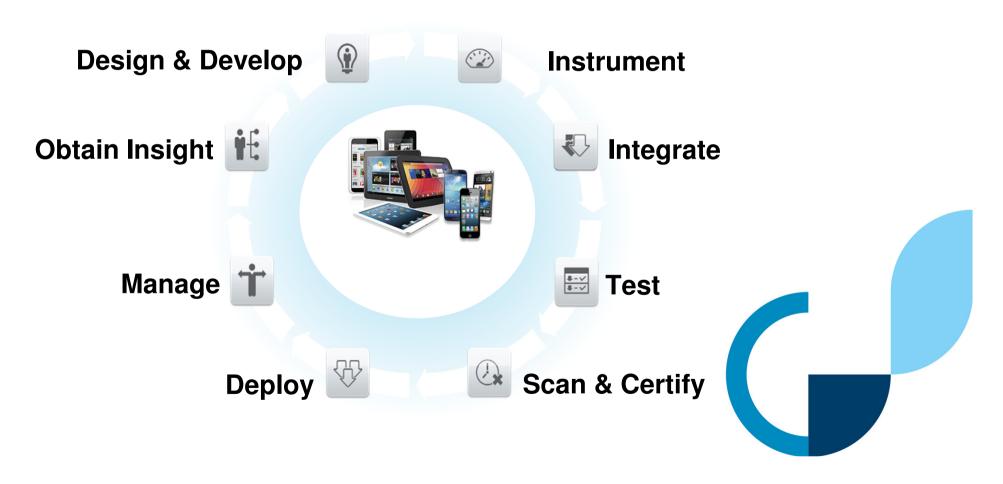


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IBM'S MobileFirst is helping Enterprises through 4 entry points to excel with mobile



The IBM mobile application development lifecycle



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By focusing on three critical areas



Develop A Mobile Strategy

- Develop a mobile strategy
- Assessment of mobile maturity across the organization
- Establish A Mobile Enterprise
 Architecture



Develop Mobile Applications

- ■Provide the platform to build, connect and run a portfolio of mobile apps on various OS
- Manage and secure mobile applications and data
- Extend existing business capabilities

3

Enable Mobile Application & Device Management

- Mobile integration to back-end systems
- Alignment of design and development of application, deployment and the application lifecycle management.
- Ensure acceptance of the users



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Top 3 Use Cases

1

Develop A Mobile Strategy –
 Assessing mobile maturity and establish mobile enterprise architecture

2

• **Develop Mobile Applications** — Utilizing a mobile platform and supporting multiple mobile devices and operating systems

3

 Enable Mobile Application & Device Management – Integrate to backend systems, and ensure acceptance of users

Develop A Mobile Strategy

IBM MobileFirst Strategy & Design Services to build the mobile vision and strategy across the organization

Description

- Develop a mobile strategy and establish a mobile enterprise architecture
- Assessment of mobile maturity across the organization
- Ensure an organizations mobility projects yield measureable business value
- Link mobile investments to ROI and IT strategy
- Develop actionable roadmap for mobile initiatives in phases with defined milestones
- Balancing strategy and tactical recommendations addressing:
 - Device type
 - Platform
 - Infrastructure
 - Integration requirements

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Utility Case Study: Developing a Mobility Strategy & Roadmap

A large utility firm asks IBM to help develop its five-year mobility roadmap

About:

Serving over 7 million electric customers and 500K gas customers with over \$110 billion in assets around the world. This utility includes power generation (fossil, renewable, nuclear), transmission and distribution, natural gas distribution and retail.

Objectives:

- Provide usable information to or from where it is needed
- Provide opportunities to reduce paper, reduce hardware complexity and maintenance, reduction in manual data entry and data errors, workforce and process

Results:

- Mobile strategy for Distribution, Transmission and Gas business
- High-level, phased roadmap for implementing specific infrastructure and application components recommended for the near-term five year period that supports the long-term vision
- Five year investment plan for the mobile strategy that includes potential O&M savings opportunities
- Readiness assessment, including skillset, infrastructure, and architecture gaps
- Alignment with the organizations' data strategy, including the data analytical aspect of usable information delivery



2 Develop Mobile Applications

IBM MobileFirst utilizes a mobile platform and supporting multiple mobile devices and operating systems

Description

- Provide the platform to build, connect and run a portfolio of mobile applications
- Develop mobile applications that best address business needs, and integrate to the enterprise data, services, applications and systems.
- Manage and secure mobile applications and data on a variety of mobile devices and OS
- Extend existing business capabilities

Utility Case Study: Florida Power & Light

About:

Improve FPL.com multi-digital channel for transaction services

Florida Power and Light (FPL) is a subsidiary of NextEra Energy, serving 4.5 million customers, 11,000 employees and is the largest utility in Florida and one of the alregets regulated utilities in the United States.

Objectives:

- Business Case on overall Multi-Digital Channel re-design strategy to enhance primarily mobile functionality of key "transactional" services such as:
 - o Pay Bill Online
 - Move/Add/Connect/Start Service
 - Registration for both Web and Mobile
- Reduce customer care calls and improve customer service
- Overhaul FPL.com and improve the foundational architecture of Customer Portal

Results:

- Single platform for web, mobile phone and tablet applications was established
- Services oriented architecture for IT flexibility and agility
- Business process transformation to address B2C and B2B and B2E applications
- Prioritized mobile applications development, with near-term initiatives based on FPL's strategy



Enable Mobile Application & Device Management

Enable Mobile Application & Device Management – Integrate to backend systems, and ensure acceptance of users

Description

- Secure integration of mobile applications to enterprise data, applications and services.
- Alignment of the design, development and deployment of mobile applications to business requirements and strategy.
- Management of the entire mobile lifecycle, from device to the application and infrastructure.
- Appropriate controls and analytics across all devices
- Acceptance of mobility devices, applications and work processes by users, including workforce and customers.
- Secure network communications with effective management

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Case Study: A large utility migrated from traditional endpoints to mobile devices

About:

Serving 4.5 million customers, this electric company of 25,000 employees is a leader in clean energy, while exceeding reliability standards and keeping consumer costs below average.

Objectives:

- The utility is experiencing a migration from traditional endpoints to mobile devices.
- Essential to keep OpEX costs down to stay competitive, while improving operations and maintaining its reliability standards
- In addition to managing its 25K empmloyees the utility was in the process of improving its customer portal, and required the architecture for its Customer Portal

Results:

- IBM's mobile foundation enable the utility to keep total cost of ownership (TCO) low and provide an easy platform for adding-on mobile device management capabilities
- Integration with Maximo Enterprise Asset Management and Remedy improved existing workprocesses
- Enabled rapid increase and deployment of new mobile functionalities
- Provided the tools to support a responsive and agile development team
- Expected to grow to over 20,000 managed mobile devices



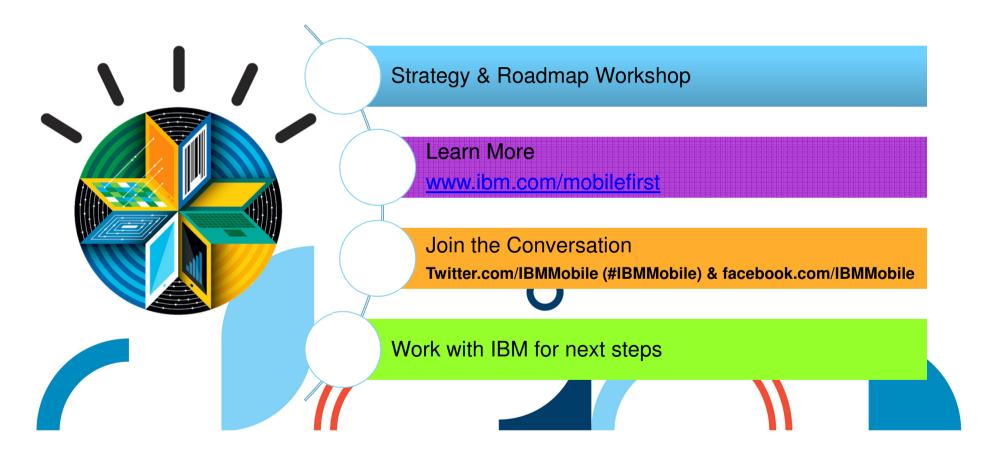
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Next steps on journey towards MOBILITY



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