IBM MobileFirst Launch

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Executive Summary: Mobile First

TREND:
Exponential growth in smartphone adoption, applications and services is transforming the business landscape

- Mobile growth is forcing companies to rethink their business models
- A new emerging stack delivers high-fidelity mobile apps and services
- Mobile is inextricably linked to cloud delivered mobile apps and services
  - IT service and strategic outsourcing is increasingly becoming SaaS

OPPORTUNITY:
Use Mobile First to transform your business

- Mobile First is about re-imagining businesses around constantly connected employees and customers
- Adopt the emerging Mobile First software and systems, integrate with your Systems of Record, and differentiate your Systems of Engagement
- Consulting to transform your business to be Mobile First enabled

CHALLENGE:
Requires a novel blend of software, services and servers to achieve differentiation

- Ability to handle scale requirements associated with Mobile
- Providing end-to-end security throughout the Mobile First ecosystem
- Integrating mobile DevOps for multiple ecosystems
  - Transition to delivery model in the cloud including hybrid-on-premise

Mobile First will be at the core of software, services and systems

- **Mobile First** is about re-imagining businesses around constantly connected employees and customers
- It is accelerating the coherent integration of cloud, social, and analytics
- **Mobile First is** NOT "**Mobile Also**"
  - Not just another projection of back-end systems

  - Requires rethinking value in a larger ecosystem

  - Requires deep understanding of rapid industry shifts

  - Requires the creation of new models of customer value

  - Requires rapid creation of new solutions and integration models

Key Trends

- In 2012, **20% of IT spending will be driven by mobile, social networking, and big data analytics**

- By 2015, **the mobile worker population to reach 1.3 billion**, the US will have the largest percentage, but Asia will see the largest growth

- By 2015, the percentage of SAP organizations with a comprehensive, enterprise-wide mobile strategy will more than double from 32% to 67%

- 60% of large companies making their internal line-of-business applications accessible to workers on smartphones and tablet

Mobile First is driving new consumption patterns

Omnichannel
The physical, mobile, social, video, and web channels come together to enable a seamless experience that is responsive to a customer's constantly-shifting context

Context Fusion
Apps are used to perform a single task, based on the user's context (role, mobile event, location, ...)

App-centric
Users increasingly demonstrate a preference for apps that are downloaded from a single trusted source over mobile web browsing

Activity Bursts
Average app usage is 72 seconds

Apps Chained
50% of mobile sessions are composed of sequences of apps, manually "integrated" by the user

New consumption patterns place users at the center. Mobile provides a seamless experience across all channels (e.g., retail, banking, call centers).
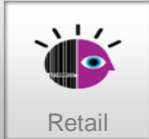
Augmented Reality

Web

Chat

Telephone

Tablet

Social

Smart TV

Physical World

Smartphone
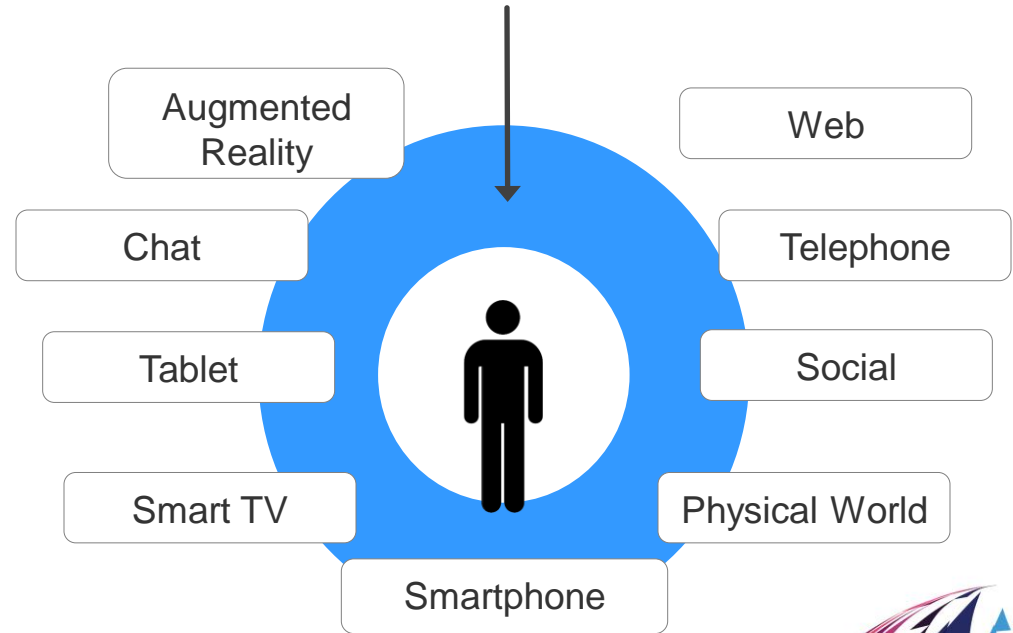
IBM MobileFirst Offering Portfolio

Industry Solutions

Banking	Insurance	Retail	Transport	Telecom	Government	Healthcare	Automotive

Mobile Applications & Services

IBM Mobile Foundation

Mobile App Platform	Mobile Analytics	Mobile Security	Mobile Mgmt

Cloud Operating Environment

Consulting & Implementation Services

Industry Experience

Banking	Mobile banking Mobile payments Customer servicing
Insurance	Customer & agent care Mobile claims Mobile marketing
Retail	Mobile commerce Next generation shopping experience Mobile marketing
Travel & Transport	Mobile commerce Customer experience management Maintenance & operation management
Healthcare	Closed-loop "Circle of Care" Membership management & claims Spending analysis & reporting
Government	Unified first response management Mobile-enable government agents Citizen self-service
Automotive	Connected Car Next gen automotive retail experience Automotive finance
Telco	Subscription & service management Mobile device management & analytics Field service management

Mobile Claims
Document damages and process claims from the site of the incident

Closed-loop "Circle of Care"
Enable seamless interactions among care providers and patients

Connected Car
Provide safer, more efficient vehicle operations and management

Four Major Software Capabilities

IBM MobileFirst

Mobile App Platform

Lead Offering:
- IBM Worklight
- Rational Test Workbench

Add-ons:
- IBM Cast Iron
- IBM Mobile Development Lifecycle Solution

What this gets our clients:
- High end branded apps for B2C & B2E – Native or hybrid
- Middleware that supports the mobile channel
- Automation to help build high quality apps for many devices

Mobile Analytics

Lead Offering:
- IBM Tealeaf CX Mobile

Add ons:
- CoreMetrics

What this gets our clients:
- Improve mobile experience by tracking applications usage "through the eyes of the users"
- Optimize user experience
- Determine where the "fault" lies when servicing apps

Mobile Security

Lead Offering:
- IBM Security Access for Mobile
- IBM AppScan for mobile

Add ons:
- WebSphere DataPower

What this gets our clients:
- Contextual access control through the mobile channel
- Check for application source & runtime behavior to identify risks
- A robust gateway for the mobile channel

Mobile Management

Lead Offering:
- IBM Endpoint Manager for Mobile Devices
- IBM Worklight AppCenter

What this gets our clients:
- Manage devices & application distribution
- Ensure compliance with corporate policies
- A single infrastructure for managing all their IT endpoints (mobile alongside PCs & servers)
- Manage mobile applications via the Worklight AppCenter including provisioning, direct updates and user management

Services Capabilities

IBM MobileFirst

IBM Global Business Services - Mobile

- **Mobile Enterprise Strategy.** Develops an enterprise level mobile business vision as well as a portfolio of mobile capabilities and applications, resulting in an actionable roadmap that optimizes mobile opportunities and accelerates time to market.

- **Mobile & Multi-Channel Strategy.** Helps clients define effective B2C multi-channel strategies that include effective use of Mobile technology.

- **Mobile Design and Development.** Design and development of custom Mobile solutions work ng closely with IBM's award-winning "IBM Interactive" design agency to ensure every solution we build embodies the best user experience possible.

- **Enterprise Solutions for Mobile.** Plan and implement solutions to key enterprise Mobile concerns, such as Mobile Device Management , Security & Enterprise App Stores

- **Mobile Testing.** Helps clients manage the increasingly complex task of testing their evolving mobile application portfolio against disparate devices and form factors.

IBM Global Technology Services - Mobile

- **IBM Mobile Enterprise Services for Managed Mobility**
  Device Management

- **IBM Mobile Infrastructure Strategy and Planning**
  Infrastructure planning

- **IBM Mobile Application Platform Management**
  managed apps

- **IBM Network Infrastructure Services for Mobile**
  network optimisation and planning

- **IBM Mobile Security Services**
  Managed Security Services

Mobile Apps – Top Challenges

Creating rich, yet cost-effective mobile apps in a fragmented technological landscape.

Connecting the enterprise back-end services in a secure and scalable manner

Controlling the growing portfolio of applications deployed "in the wild"

IBM Worklight
Mobile Application Development Platform

- **Flexible development, back-end integration and ongoing management** of rich, cross-platform mobile apps using standards-based technologies and tools

- **Mobile-optimised middleware** delivering an enterprise-grade services layer that meets the needs of mobile employees and customers

Fast and cost-effective development, integration and management of rich, cross-platform mobile applications

IBM Worklight
Rich, cross-platform application development

Key capabilities:

- ➤ Multi Platform Native, Web & Hybrid app dev
- ➤ Support for new device OS releases
- ➤ Open approach to 3rd-party integration
- ➤ Strong authentication framework
- ➤ Encrypted offline availability
- ➤ Enterprise back-end connectivity
- ➤ Unified push notifications
- ➤ Data collection for analytics
- ➤ Direct updates and remote disablement
- ➤ Packaged runtime skins

IBM Worklight Overview
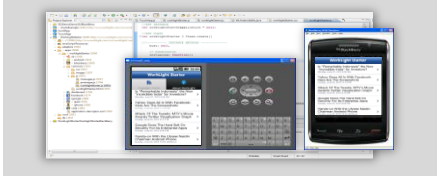
Worklight Studio
The most complete, extensible environment with maximum code reuse and per-device optimization
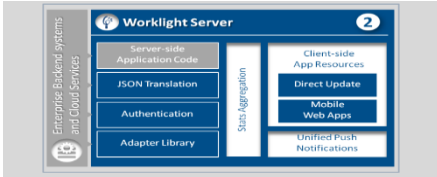
Worklight Server
Unified notifications, runtime skinning, version management, security, integration and delivery
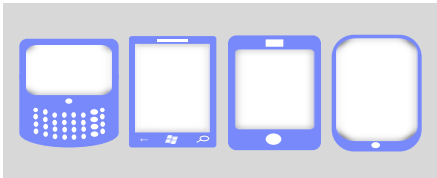
Worklight Runtime Components
Extensive libraries and client APIs that expose and interface with native device functionality

Worklight Console
A web-based console for real-time analytics and control of your mobile apps and infrastructure

Worklight Studio
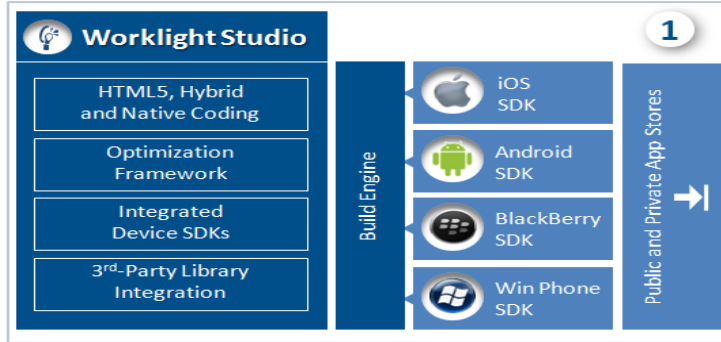
- Eclipse-based IDE
- Combining native and standard web technologies in one multiplatform app
- Environment-specific optimization
- 3rd-party libraries integration
- Device SDK integration
- Back-end connectivity utilities
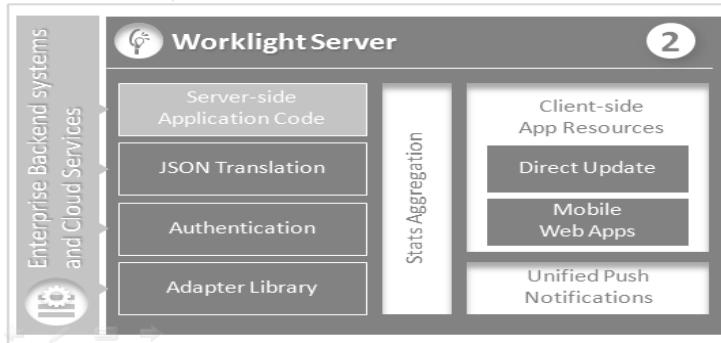
Single Shared Codebase
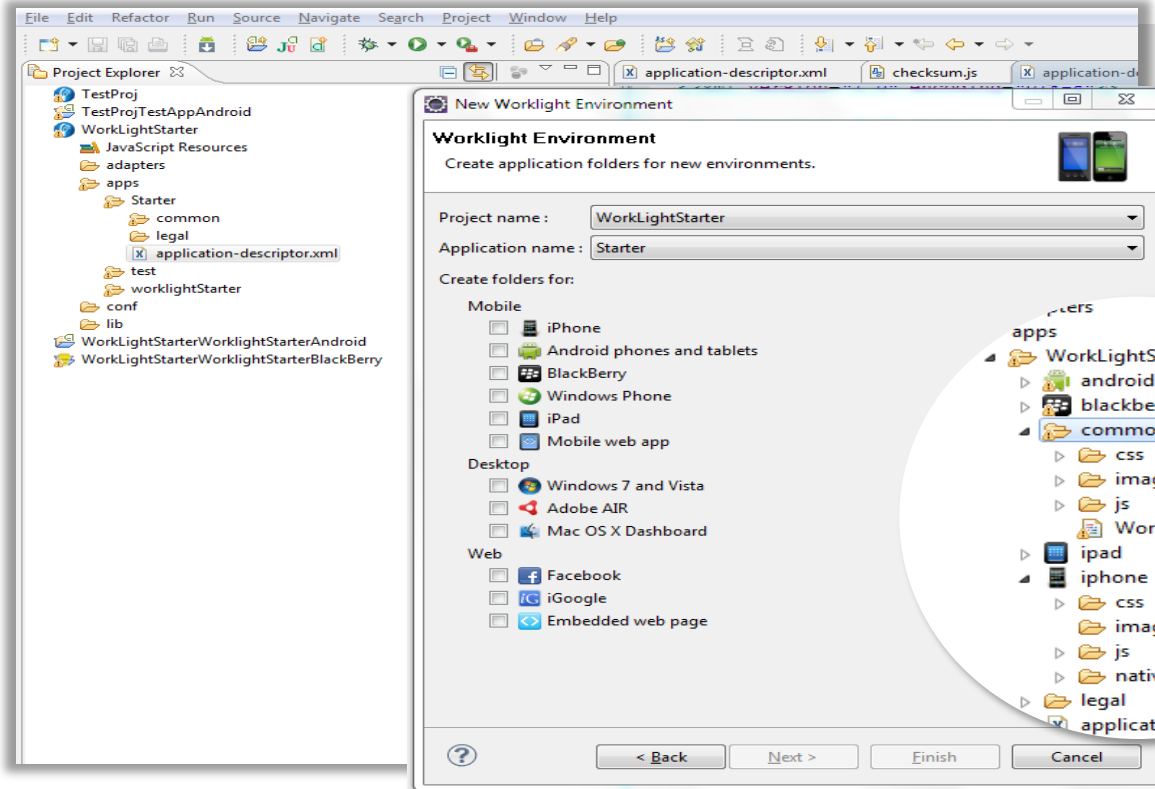
Common code placed in primary file

Environment optimisation code is maintained separately

Worklight Runtime Architecture
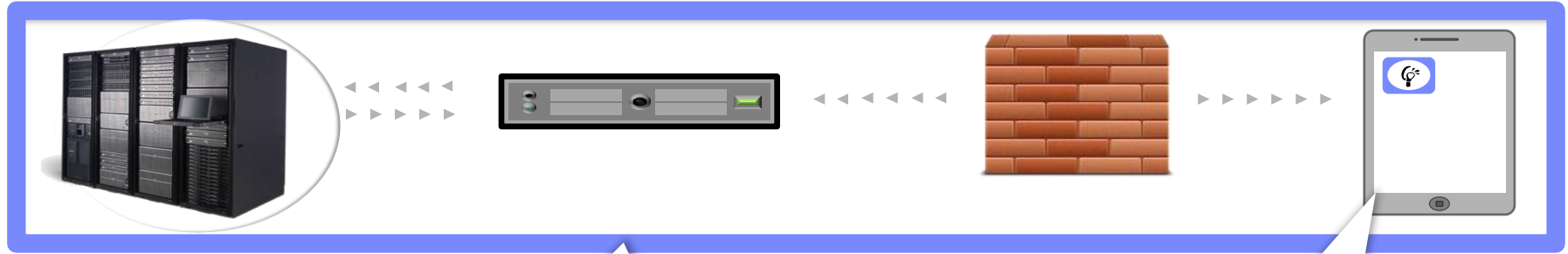
Worklight Server
- Server-side Application Code
- JSON Translation
- Authentication
- Adapter Library
- Stats Aggregation
- Client-side App Resources
  - Direct Update
  - Mobile Web Apps
- Unified Push Notifications

Device Runtime
- Phone**Gap**
  - • Cross Platform Technology
- **Worklight**
  - • Security and Authentication
  - • Back-end Data Integration
  - • Post-deployment control and Diagnostics

Application Code

Worklight Console

- Application Version Management
- Push management
- Usage reports and analytics
- Reports of custom application events
- Configurable audit log
- Administrative dashboards for:
  - Deployed applications
  - Installed adapters
  - Push notifications
- Data export to BI enterprise systems
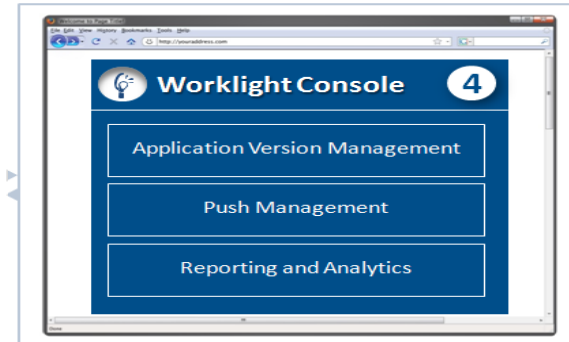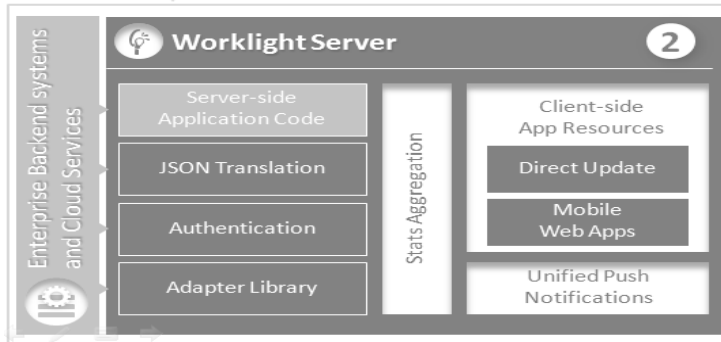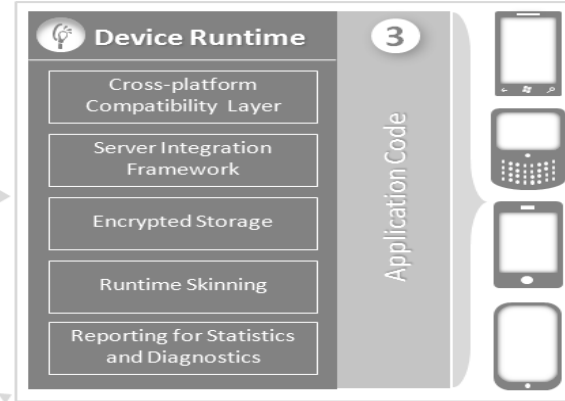
ING Direct creates a "bank branch in your pocket"
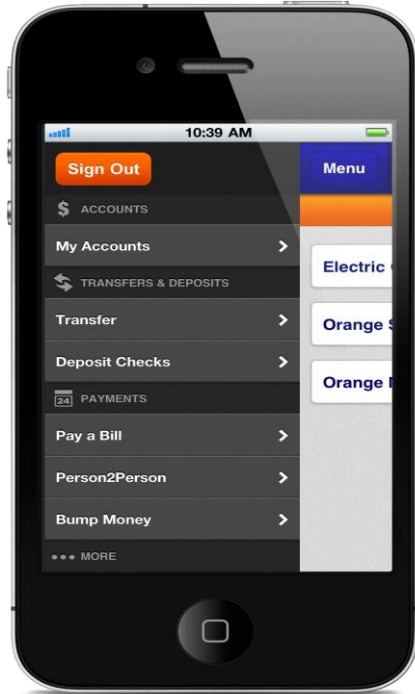
- New customer experience with mobile as the channel

- Creates new revenue generation opportunity

- Simplify consumer experiences

- Re-use existing mobile-optimized web content

- Support multiple mobile platforms consistently on a tight schedule
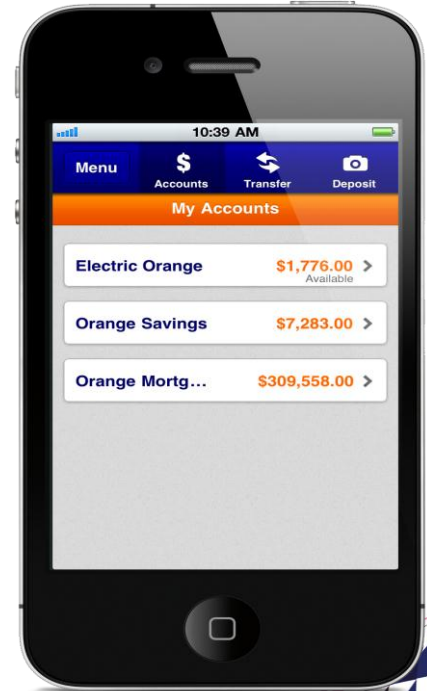
Customer Spotlight – Lotte

Public Utility

Adding Mobile Devices Without Adding Infrastructure

Serving 4.5 million customers in the southwestern region of the United States, this electric company of 25,000 employees is a leader in clean energy while exceeding reliability standards and keeping consumer costs below average. They are experiencing a migration from traditional endpoints to mobile devices.

Customer Needs

- Support 20,000+ mobile devices
- Corporate and employee-owned, many platforms and OS versions
- High availability for certain devices used in the field
- Adherence to Internal security policies, external regulations

Key Features & Outcomes

- Scalability to 250,000 endpoints room to grow
- Added mobile devices to existing IEM deployment in days
- Ability to integrate with Maximo, Remedy
- Responsiveness and agility of product and product team

IBM Office of the CIO

Extending Corporate Access

"IBM's BYOD program "really is about supporting employees in the way they want to work. They will find the most appropriate tool to get their job done. I want to make sure I can enable them to do that, but in a way that safeguards the integrity of our business."

Jeanette Horan, IBM CIO

Customer Needs

- Support BYOD for a variety of mobile platforms securely for a highly mobile population
- Scale to hundreds of thousands of devices

Key Features & Outcomes

- 120,000 mobile devices, 80,000 personally owned, supported in months
- Integrated Lotus Traveler, IBM Connections, IBM Sametime, and IBM Endpoint Manager

IBM MobileFirst

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Mobile Applications & Services
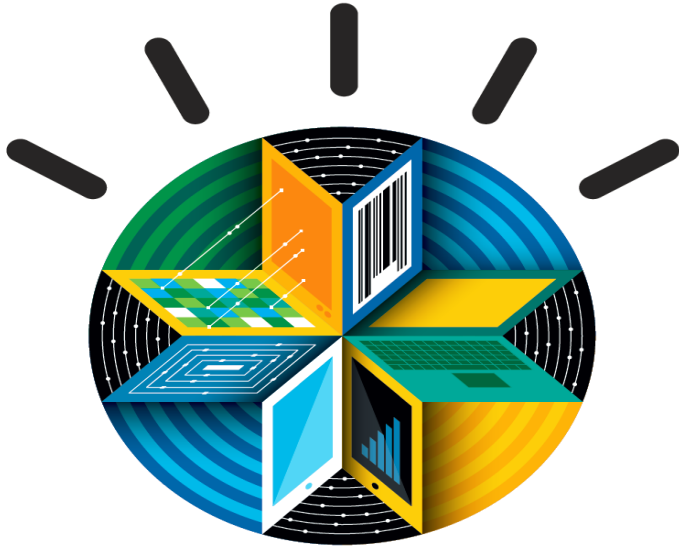
IBM Mobile Foundation

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Cloud Operating Environment

Consulting & Implementation Services

Next Steps

- Learn more at:

  www.ibm.com/mobile-enterprise

  - Access white papers and webcasts
  - Get product and services information
  - Download and begin using IBM Endpoint Manager

- Talk with your IBM representative or IBM Business Partner to find the right next step for you