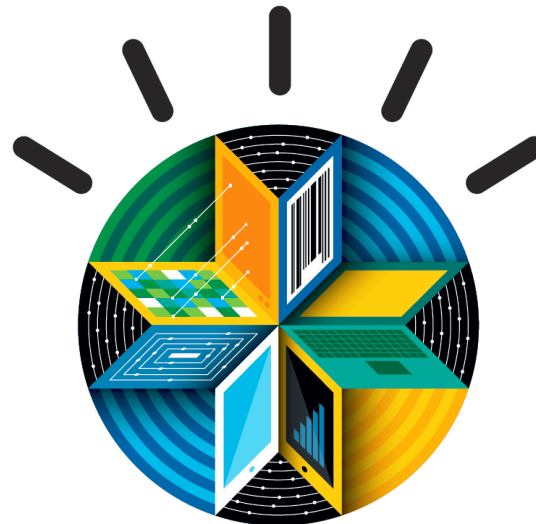


Michael Lackerbauer

IT Architect, IBM Mobile Foundation

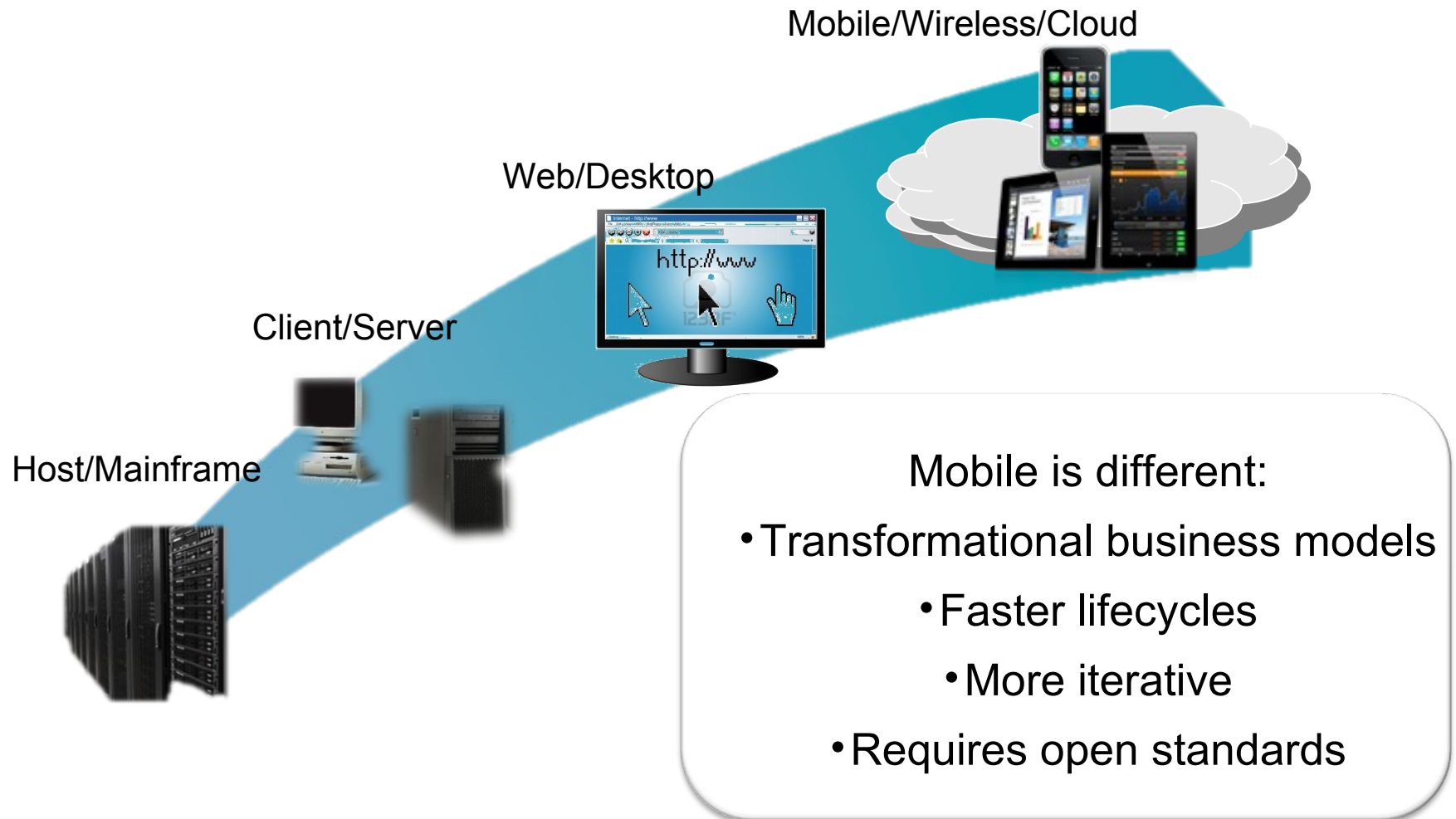
michael.lackerbauer@de.ibm.com

IBM Enterprise Mobile Strategy



IBM Mobile Labs Come to You

Mobile is a significant evolution of enterprise computing



With enormous opportunities

Business to Enterprise



- Increase worker productivity
- Improved claims processing
- Increase revenue with sales engagements
- Extend existing applications to mobile workers and customers
- Reducing fuel, gas, or fleet maintenance costs where relevant
- Increase employee and business partner responsiveness and decision making speed
- Resolve internal IT issues faster
- Reduce personnel cost (utilizing personal devices instead of corporate devices)

Business to Consumer



- Improve customer satisfaction
- Deeper customer engagement and loyalty
- Drive increased sales through Personalized offers
- Customer service
- Competitive differentiator
- Improve brand perception
- Deeper insight into customer buying behavior for up sell and cross sell
- Improve in store experience with mobile concierge services

But mobile also brings business and IT challenges

Enterprise Business Model Changes

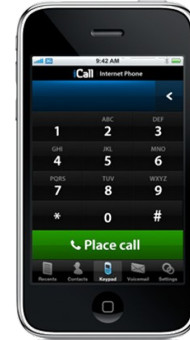
- New business opportunities based upon geolocation
- Anytime, anywhere business transactions
- Importance of social business interactions

App Development Lifecycle Complexity

- Complexity of multiple device platforms with fragmented Web, native, and hybrid model landscape
- Connecting the enterprise back-end services in a secure and scalable manner
- Unique mobile requirements (user interface, connected/disconnected use, version upgrades, etc.)
- Faster time-to-market demands and iterative delivery

Mobile Security and Management

- Protection of privacy and confidential information
- Use of client-owned smartphones and tablets
- Visibility, Security & Management of mobile platform requirements



Top Mobile Adoption Concerns:

1. Security/privacy (53%)
2. Cost of developing for multiple mobile platforms (52%)
3. Integrating cloud services to mobile devices (51%)



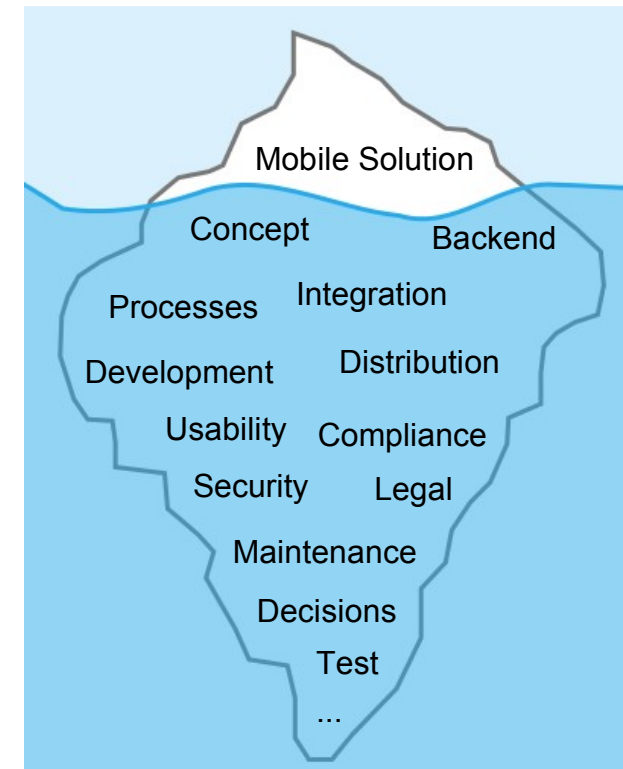
Source: 2011 IBM Tech Trends Report


<https://www.ibm.com/developerworks/mydeveloperworks/blogs/te>

User requirements for mobile solutions and what it means for the provider

User expectations vs. Enterprise constraints

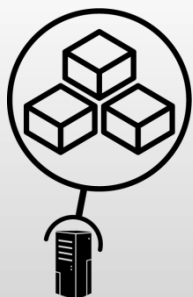
- High expectations of **usability, appearance and behavior**
- **Short and focused interactions**, interruptions are common
- Must be **usable when out of wireless coverage**
- **Context awareness** is the differentiator to provide the services the customer needs
- Offer **all features** provided on other channels, but adapted to the mobile needs
- **Mobile** does not necessarily mean on the go, it means **always with me**
- Highly **fragmented** set of devices and platforms
- Evolves fast, **frequent releases** and updates
- **Mobile is more than just apps**



 To meet the users' requirements and to provide and maintain enterprise-class mobile services a mobile strategy is needed!

Customers are focused on a new set of mobile “client initiatives”

Client Initiatives



Build mobile applications
Connect to, and run backend systems in support of mobile

ING DIRECT

Save your money®

*ING Canada

News Analysis

ING Direct praises IBM's Websphere for role in its mobile banking app

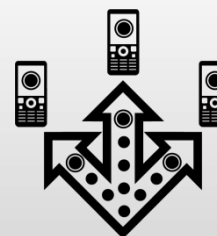
COMPUTERWORLD



Manage mobile devices and applications
Secure my mobile business



Concord Hospital improved patch compliance 50%, reduced software license costs 25%, and has not had a single malware infection since implementation of IBM Endpoint Manager for patch management and core protection



Extend existing business capabilities to mobile devices
Transform the business by creating new opportunities



The Wimbledon App transforms the fan experience at the tournament by combining GPS location data with analytics and live-action feeds of all the tennis action

Key Capabilities

- Mobile web app development
- Enterprise data, service, and application integration

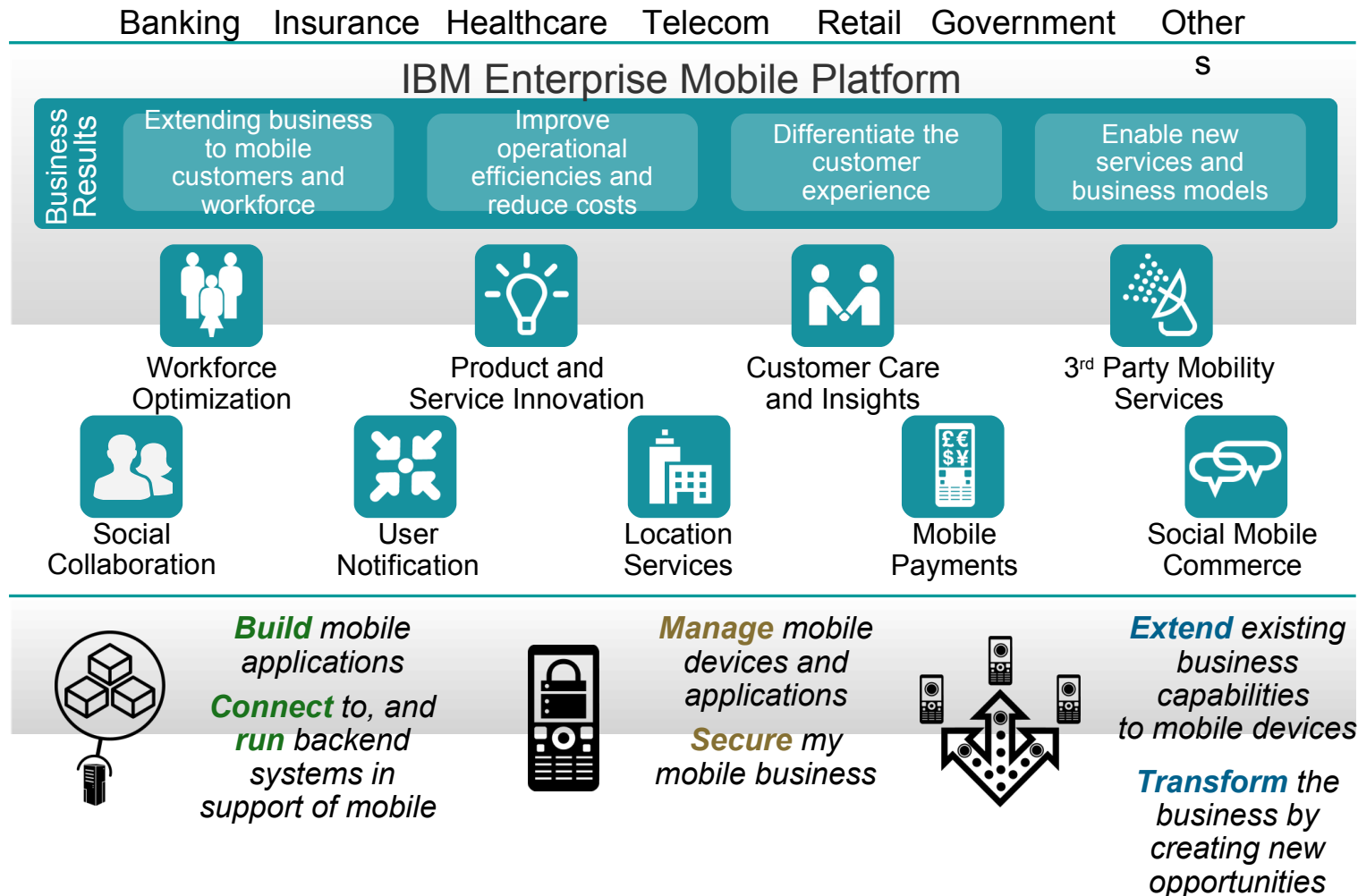
Key Capabilities

- Mobile Lifecycle Management
- Device analytics and control
- Secure Network Communications & Management

Key Capabilities

- Strategy and planning services
- Mobile-enabled solutions including analytics, commerce, and social business
- Services

Customers are looking for a mobile platform that solves their needs

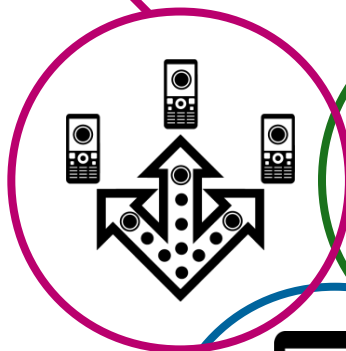


IBM strategy addresses client mobile initiatives

Extend & Transform

Extend existing business capabilities to mobile devices

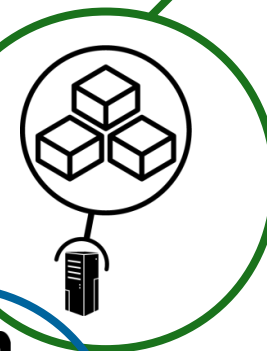
Transform the business by creating new opportunities



Build & Connect

Build mobile applications

Connect to, and **run** backend systems in support of mobile



Manage & Secure

Manage mobile devices and applications

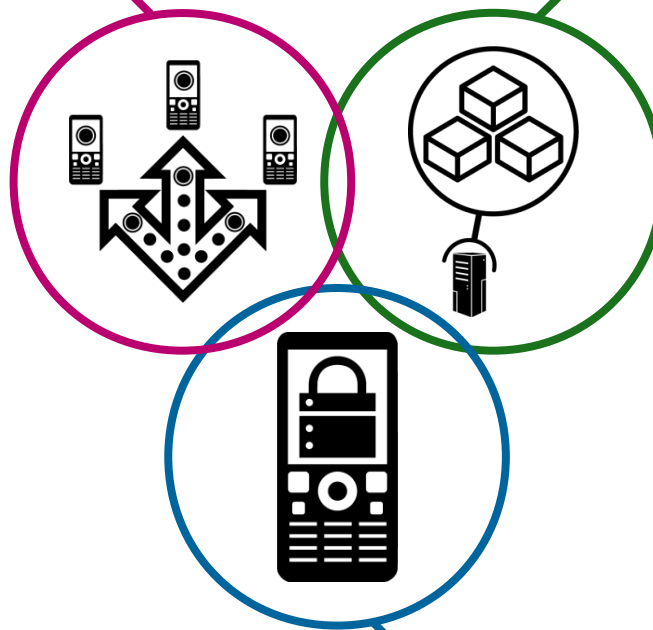
Secure my mobile business



The core of a broad mobile portfolio from IBM

Extend & Transform

- Strategy and planning services
- Mobile-enabled solutions including analytics, commerce, and social business
- Implementation and hosting services
- Pre-built analytics, commerce, and social business apps
- IBM Interactive user interface design services
- Physical device management services



Build & Connect

- Development and testing of mobile apps (native, hybrid, web/HTML5/Dojo/Sencha/jQuery)
- Traceability and collaboration across requirements, code and testing
- Tools for Mobile Software Development Lifecycle (SDLC)
- Large shared codebase across multiple devices and environments
- Integrated device SDKs
- Runtime skinning for apps
- Enhanced connections to enterprise data and apps
- Integration with device capabilities
- Packaging and publishing mobile apps for app stores and marketplaces
- Unified push notification framework
- Aggregated user statistics and event reporting for monitoring and analytics

Manage & Secure

- Device analytics and control
- Mobile environment analytics
- Endpoint & data protection
- Secure network communications & management
- Mobile lifecycle management
- Provisioning & configuration management
- Mobile security & Access management
- Mobile security intelligence
- Private app stores and Catalogs
- Device inventory & policy management
- Encrypted local device data storage

A deeper look at **Build & Connect** capabilities

Extend & Transform

***Extend** existing business capabilities to mobile devices*

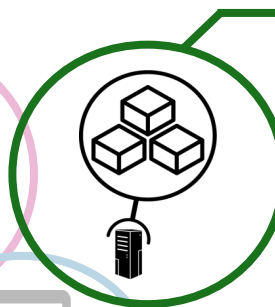
***Transform** the business by creating new opportunities*



Build & Connect

***Build** mobile applications*

***Connect** to, and **run** backend systems in support of mobile*



Manage & Secure

***Manage** mobile devices and applications*

***Secure** my mobile business*



Customers can now build enterprise mobile applications that:

- Run on multiple mobile devices
- Connect to enterprise back-end applications and information systems
- Fulfills fast time-to-market requirements and can be rapidly updated with new releases
- Deliver high quality user experience

Worklight

an open, complete, and advanced mobile application platform for HTML, hybrid, and native applications

Customer spotlight with Lotte



- Rich hybrid app with over 100 screens
- Native implementation for augmented reality and security
- Ported Android to iOS in a 3-4 weeks

Worklight Application Types

Browser Access

Written in HTML5 JavaScript and CSS3. Quick and cheap to develop, but less powerful than native.



Browser Access

Hybrid Apps - Web

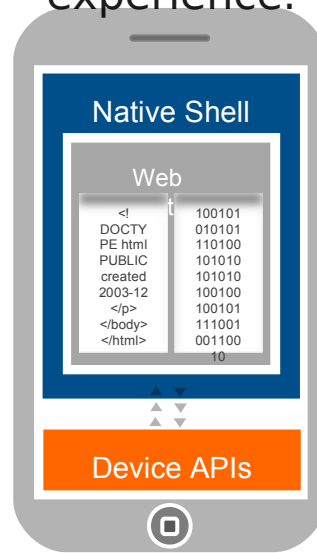
HTML5 code and Worklight runtime libraries packaged within the app and executed in a native shell.



Downloadable

Hybrid Apps - Mixed

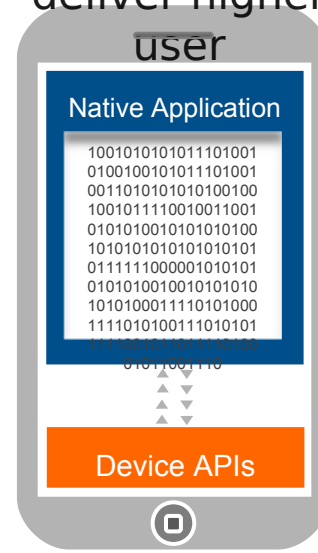
User augments web code with native language for unique needs and maximized user experience.



Downloadable

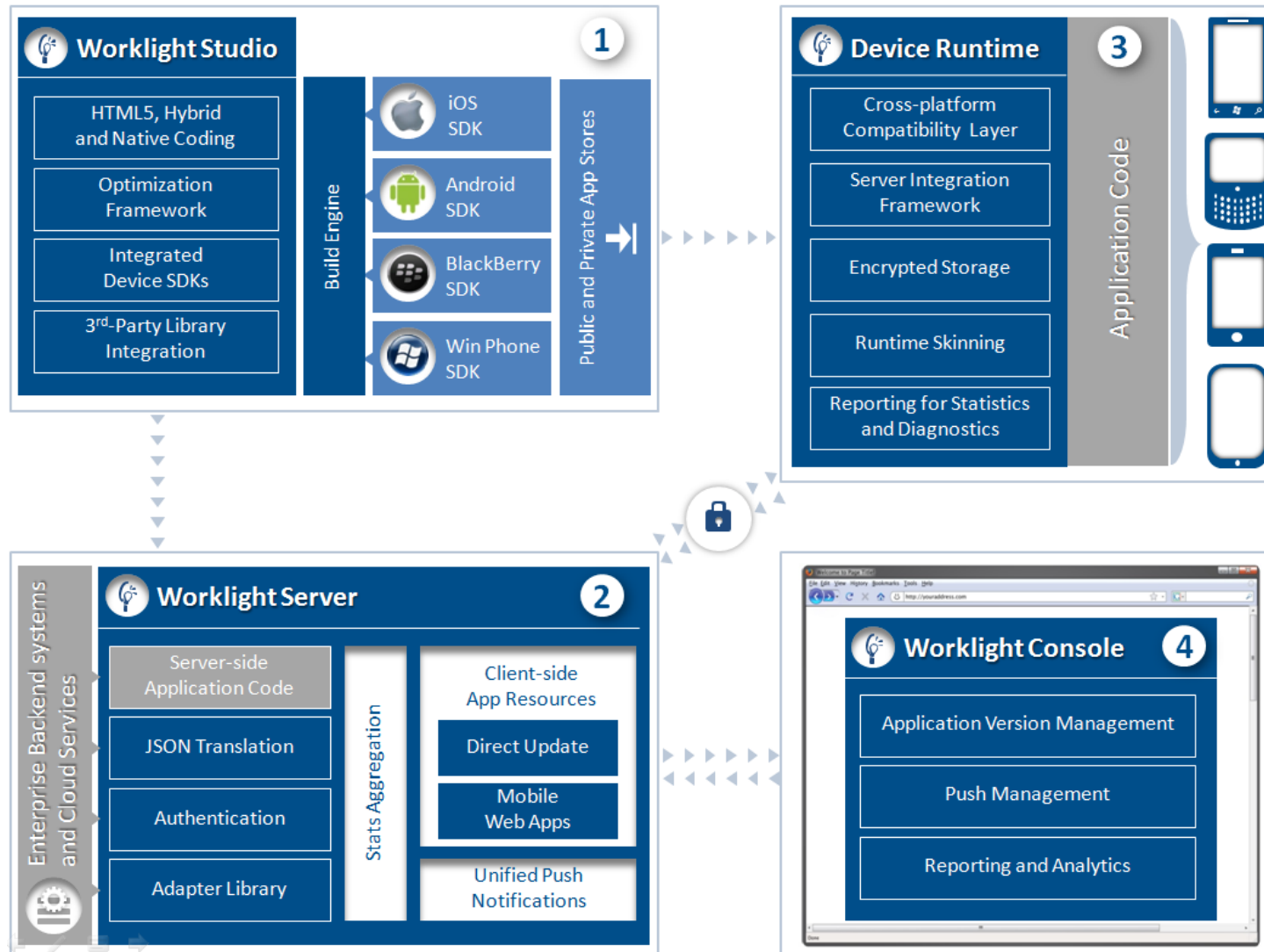
Native Apps

Platform-specific. Requires unique expertise, pricy and long to develop. Can deliver higher user



Downloadable

IBM Worklight v5.0



Worklight Highlights

- **Single Shared Codebase**
Efficient cross-platform development
- **Security**
Supports enterprise requirements (i.e. authentication, encryption, ..)
- **Backend Integration (Adapter)**
Central integration point into the enterprise
- **Unified Push Notification**
Device independent notifications
- **Centralized Build**
Ensure proper builds

A deeper look at **Manage & Secure** capabilities

Extend & Transform

Extend existing business capabilities to mobile devices

Transform the business by creating new opportunities



Build & Connect

Build mobile applications

Connect to, and *run* backend systems in support of mobile



Manage & Secure

Manage mobile devices and applications

Secure my mobile business

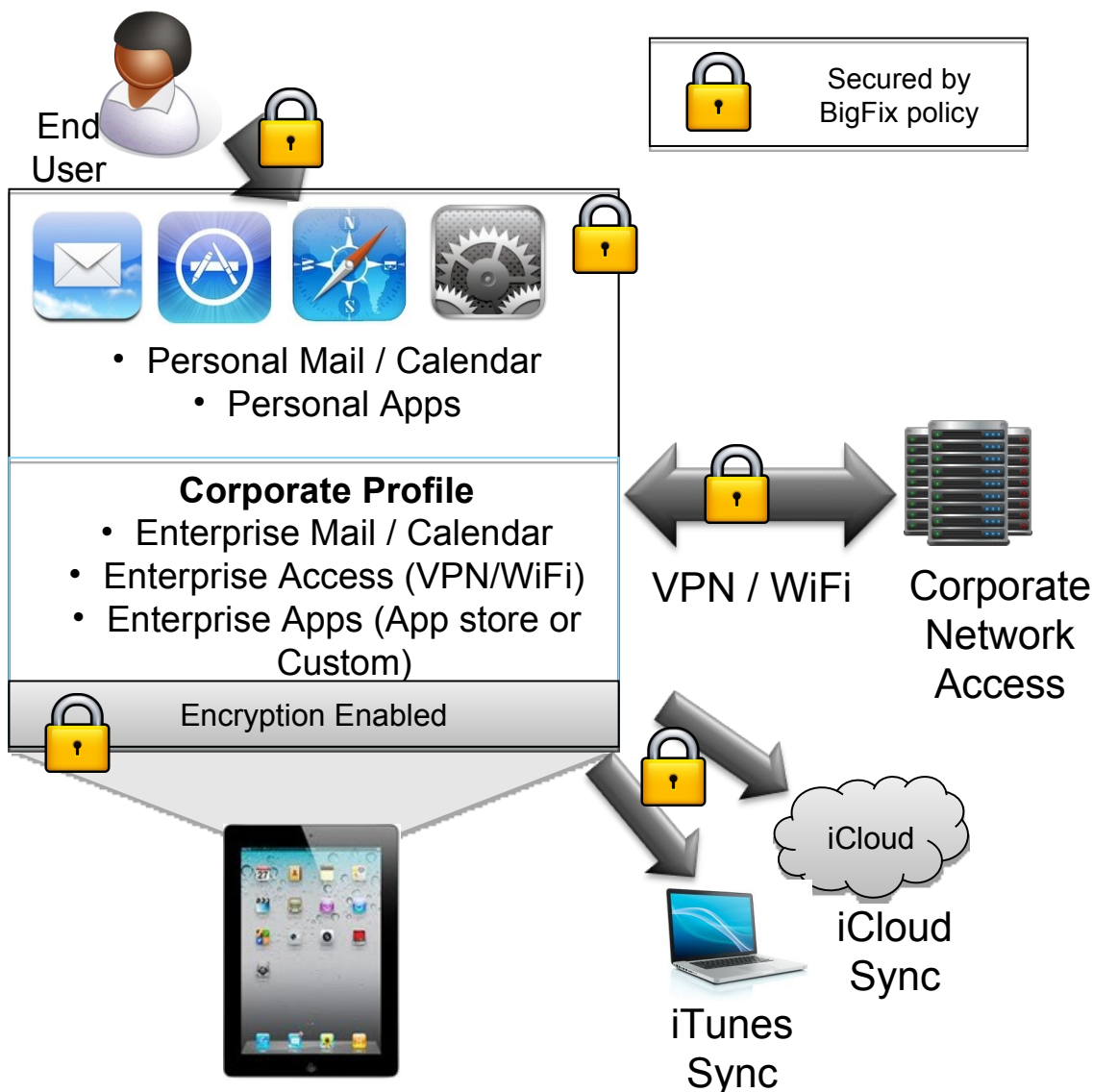


Customers can now:

- Use IBM Endpoint Manager for mobile visibility, security and management
- Use IBM Security Access Manager to authenticate and authorize mobile users and devices
- Utilize managed services for complete mobile landscape management

IBM Endpoint Manager for Mobile Devices –
extending visibility, control and automation for mobile

Managing Mobile Devices



IBM Endpoint Manager for Mobile Devices

Enable PW Policies

Enable Device Encryption

Force encrypted backup

Disable Sync

Corporate Access, email access, and App access contingent on Policy Compliance!

Wipe if lost / stolen

Wipe corporate data if employee leaves company (selective wipe)

A deeper look at **Extend & Transform** capabilities

Extend & Transform

Extend existing business capabilities to mobile devices

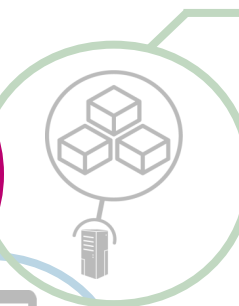
Transform the business by creating new opportunities



Build & Connect

Build mobile applications

Connect to, and **run** backend systems in support of mobile



Manage & Secure

Manage mobile devices and applications

Secure my mobile business



Customers can now

- Use our strategy and planning services to build a mobile strategy and transform their business
- Use our industry frameworks and solutions delivered via software, strategy, managed services and business process consulting
- Use mobile to engage their own customers in new ways with WebSphere Commerce and IBM Social Collaboration software

Social collaboration software

mobile access to enterprise social collaboration

IBM has a presence in today's mobile app store ecosystems

Some of the IBM apps currently available for download from the Apple App Store

Social Business



IBM Lotus Notes Traveler
(email, calendar, contacts)



IBM Connections (social)**



IBM Sametime (IM, UC)**



IBM Lotuslive Meetings



IBM Symphony (doc viewer)

Business Intelligence & Analytics



Coremetrics for Mobile



IBM Cognos Mobile

Commerce



IBM Sterling Integrator Mobile



IBM Sterling Store Associate Mobile



IBM Sterling TMS Carrier Mobile



IBM Sterling Field Sales Mobile



IBM Sterling Order Management
Administration Mobile



IBM Sterling Control Center Mobile



IBM Sterling InFlight Data
Management Mobile

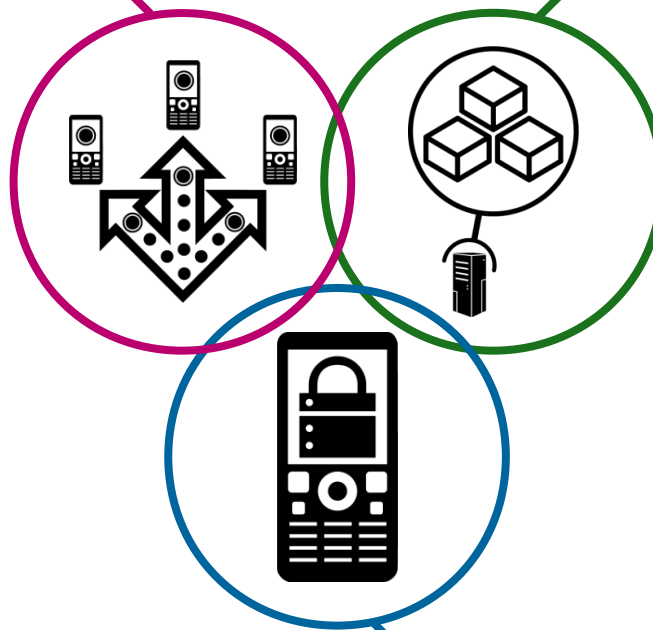


IBM Sterling Document
Tracking Mobile

The core of a broad mobile portfolio from IBM

Extend & Transform

- Strategy and planning services
- Mobile-enabled solutions including analytics, commerce, and social business
- Implementation and hosting services
- Pre-built analytics, commerce, and social business apps
- IBM Interactive user interface design services
- Physical device management services



Build & Connect

- Development and testing of mobile apps (native, hybrid, web/HTML5/Dojo/Sencha/jQuery)
- Traceability and collaboration across requirements, code and testing
- Tools for Mobile Software Development Lifecycle (SDLC)
- Large shared codebase across multiple devices and environments
- Integrated device SDKs
- Runtime skinning for apps
- Enhanced connections to enterprise data and apps
- Integration with device capabilities
- Packaging and publishing mobile apps for app stores and marketplaces
- Unified push notification framework
- Aggregated user statistics and event reporting for monitoring and analytics

Manage & Secure

- Device analytics and control
- Mobile environment analytics
- Endpoint & data protection
- Secure network communications & management
- Mobile lifecycle management
- Provisioning & configuration management
- Mobile security & Access management
- Mobile security intelligence
- Private app stores and Catalogs
- Device inventory & policy management
- Encrypted local device data storage

Delivering mobile critical success factors



Open

standards-based and future ready



Governed

proactive end-to-end security;
centralized deployment,
management, maintenance and
support for applications, devices and
infrastructure



Integral

business processes and systems are
completely integrated from the mobile
access points to the back-end systems

Try it today!

IBM Worklight Developer Edition

ibm.co/worklightde

IBM Endpoint Manager for Mobile Devices 30 day trial

ibm.co/EndpointMgrTrial

IBM WebSphere Cast Iron WebAPI Builder 90 day trial

bit.ly/CastIronTrial



© Copyright IBM Corporation 2012. All rights reserved. The information contained in these materials is provided for informational purposes only, and is provided AS IS without warranty of any kind, express or implied. IBM shall not be responsible for any damages arising out of the use of, or otherwise related to, these materials. Nothing contained in these materials is intended to, nor shall have the effect of, creating any warranties or representations from IBM or its suppliers or licensors, or altering the terms and conditions of the applicable license agreement governing the use of IBM software. References in these materials to IBM products, programs, or services do not imply that they will be available in all countries in which IBM operates. Product release dates and/or capabilities referenced in these materials may change at any time at IBM's sole discretion based on market opportunities or other factors, and are not intended to be a commitment to future product or feature availability in any way. IBM, the IBM logo, Rational, the Rational logo, Telelogic, the Telelogic logo, and other IBM products and services are trademarks of the International Business Machines Corporation, in the United States, other countries or both. Other company, product, or service names may be trademarks or service marks of others.