Business in Motion

Jon Baxter IBM **MobileFirst**

06/03/2013

Mobile/Wireless/Cloud

Web/Desktop

Client/Server

Host/Mainframe
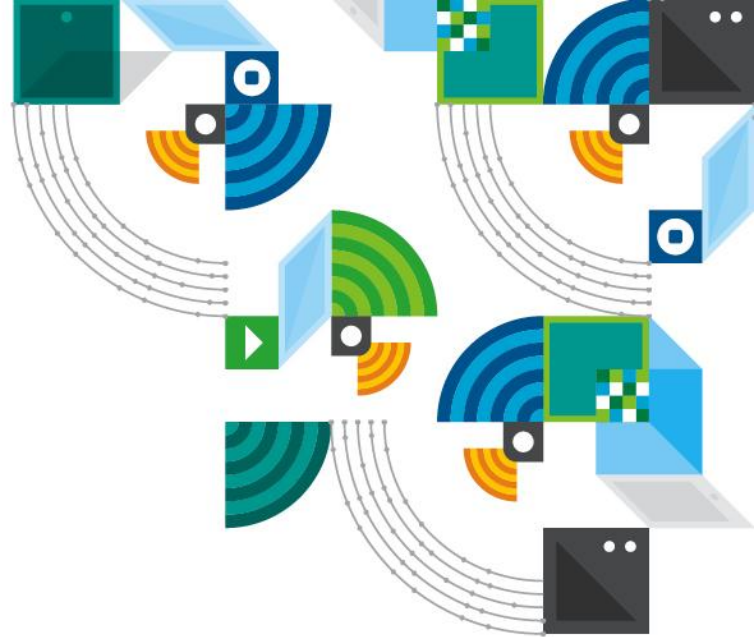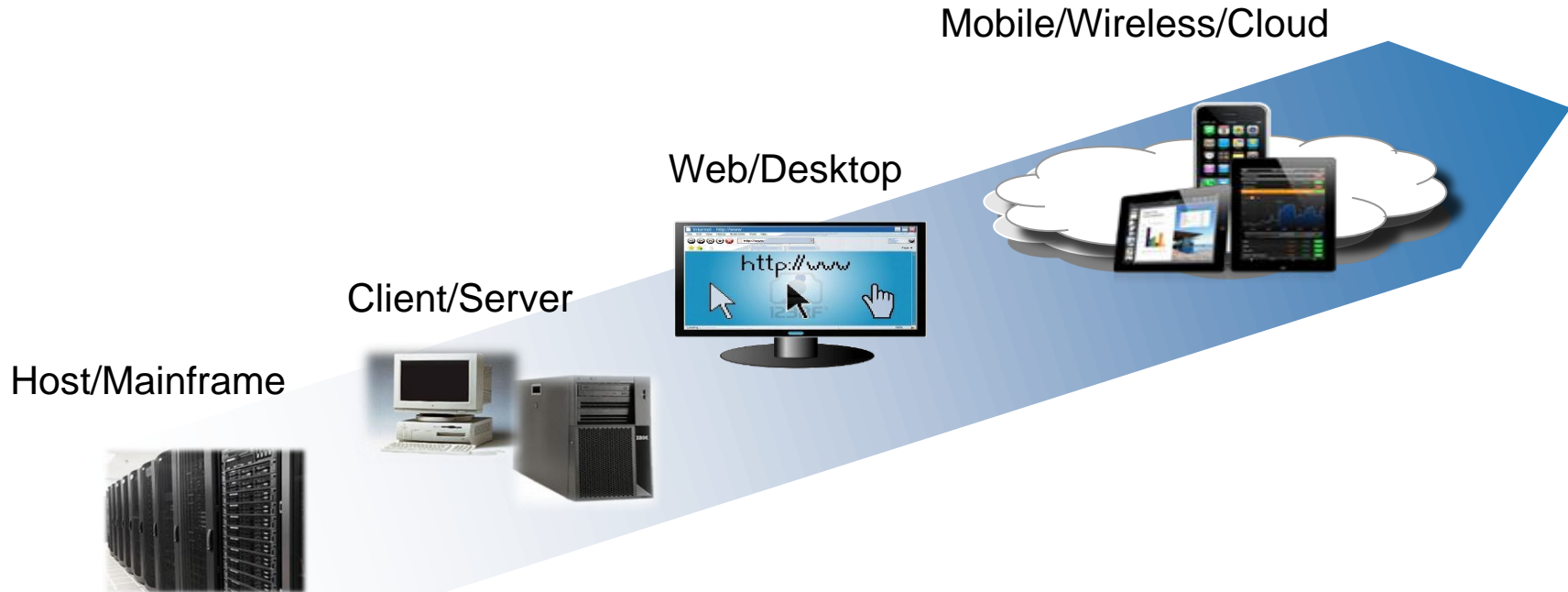
Mobile is the NEXT dominant phase of computing

Mobile trends

Mobile First is NOT "**Mobile Also**"

- Smartphones & Tablets have become the device of first choice
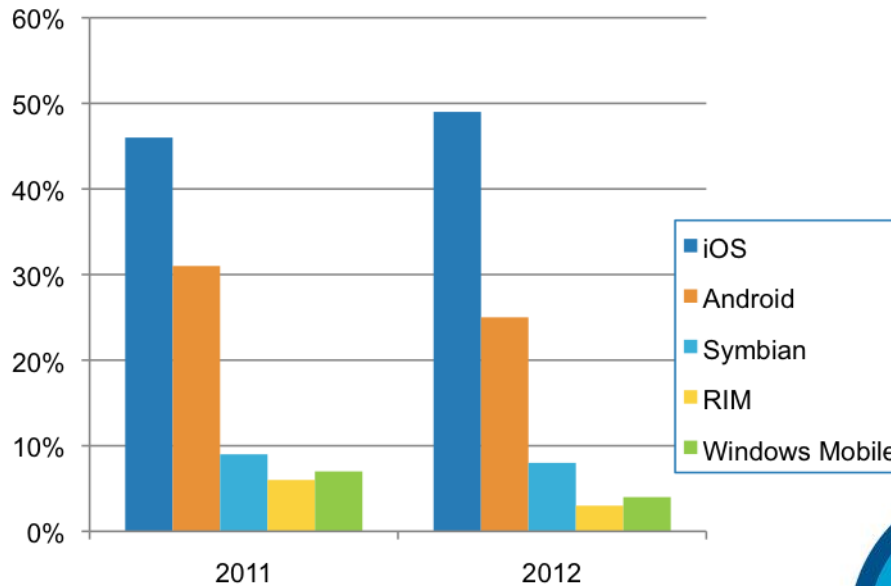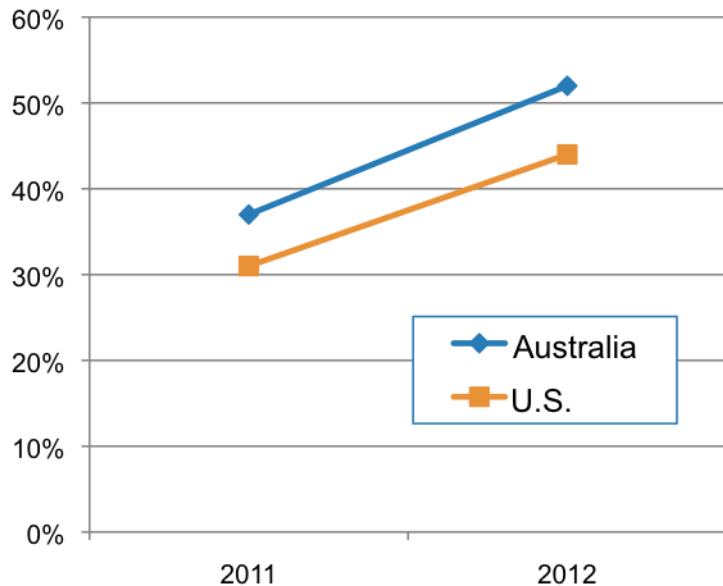- 4G represent 0.9% of devices consuming 19% of data traffic – Cisco
- As per IDC

	2011	2012	2013	2014	2015	2016
Smartphones	8,303,702	9,422,322	11,337,219	13,360,355	14,759,954	15,556,992
Tablets	1,538,319	3,030,548	4,219,831	4,547,946	4,751,806	4,849,103
PCs	5,906,029	4,855,743	4,447,903	4,245,906	4,126,542	4,036,159
	15,748,050	17,308,613	20,004,953	22,154,207	23,638,302	24,442,254

- PayPal partnering with offline retailers – non-bank financial transactions
- Mobile apps as a different rather than another channel
  - Vs web duplication
  - Disaster recovery (CFA)
- Enterprise app store
  - Field Force automation
  - New employee
  - Role based aggregated at the enterprise
- Mobile is evolving 8x faster than the Internet did
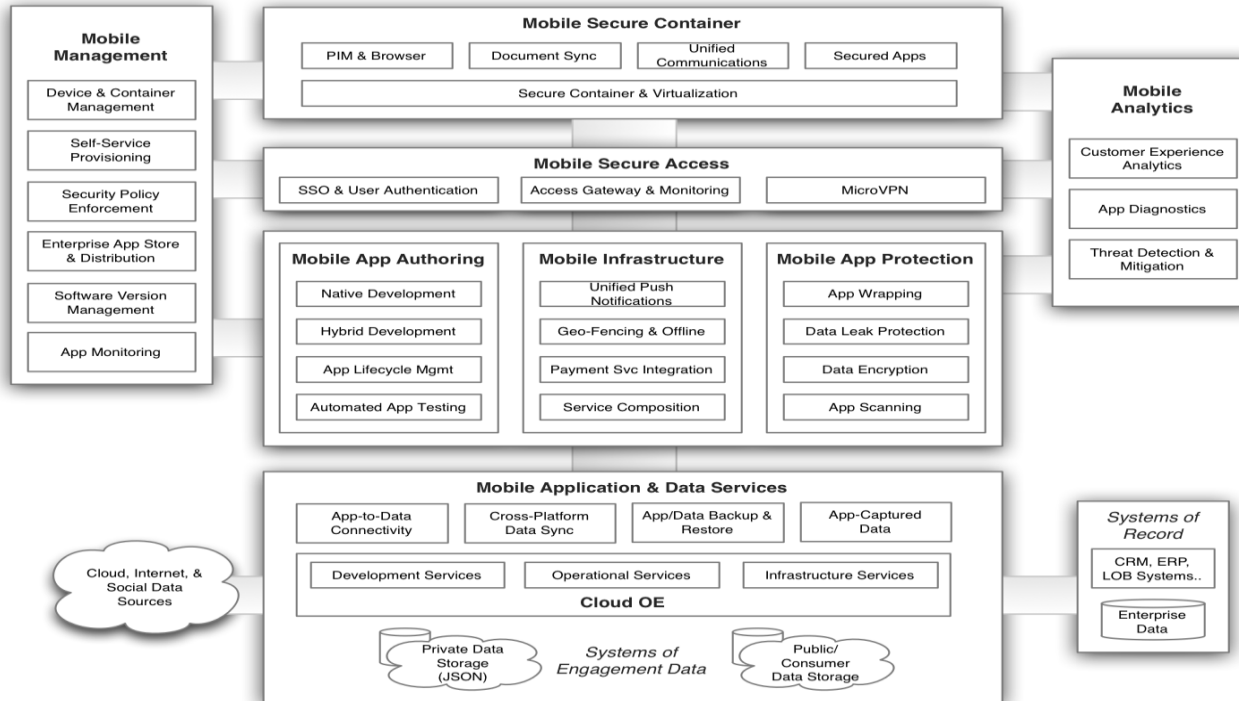
Multitude of platforms

Smartphone Adoption %

Mobile Marketecture

Mobile Management
- Device & Container Management
- Self-Service Provisioning
- Security Policy Enforcement
- Enterprise App Store & Distribution
- Software Version Management
- App Monitoring

Mobile Secure Container
- PIM & Browser
- Document Sync
- Unified Communications
- Secured Apps
- Secure Container & Virtualization

Mobile Secure Access
- SSO & User Authentication
- Access Gateway & Monitoring
- MicroVPN

Mobile App Authoring
- Native Development
- Hybrid Development
- App Lifecycle Mgmt
- Automated App Testing

Mobile Infrastructure
- Unified Push Notifications
- Geo-Fencing & Offline
- Payment Svc Integration
- Service Composition

Mobile App Protection
- App Wrapping
- Data Leak Protection
- Data Encryption
- App Scanning

Mobile Analytics
- Customer Experience Analytics
- App Diagnostics
- Threat Detection & Mitigation

Mobile Application & Data Services
- App-to-Data Connectivity
- Cross-Platform Data Sync
- App/Data Backup & Restore
- App-Captured Data
- Development Services
- Operational Services
- Infrastructure Services
- **Cloud OE**

Cloud, Internet, & Social Data Sources

Private Data Storage (JSON)

Systems of Engagement Data

Public/ Consumer Data Storage

Systems of Record
- CRM, ERP, LOB Systems..
- Enterprise Data

Software innovation used to be expensive…

> " *When I built my first company in 1999 it cost **$2.5 million** in infrastructure just to get started and another **$2.5 million** in team costs to code, launch, manage, market and sell our software. So it's not surprising that typical "**A rounds**" of venture capital were **$5 to $10 million**."*

Mark Suster, GRP Partners

…but software innovation costs 90% less than it used to.

Mobile development and delivery challenges

1. Delivering for multiple platforms

2. Deliver high quality apps

3. Frequency & Intensity

4. Integrating with Enterprise business models

Customer Ratings

▶ Average rating for the current version: ★★★★★ 18 Ratings
▼ Average rating for all versions: ★★★★★ 1903 Ratings

★★★★★ 236
★★★★ 110
★★★ 235
★★ 242
★ 1080

Mobile Lifecycle

Delivering for multiple platforms

|	**Apple iOS**	**Android**	**Blackberry OS**	**Windows Phone**
Languages	Objective-C, C, C++	Java (some C, C++)	Java	C#, VB.NET and more
Tools	Xcode	Android SDK	BB Java Eclipse Plugin	Visual Studio, Windows Phone development tools
Packaging format	.app	.apk	.cod	.xap
App stores	Apple App Store	Google Play	Blackberry App World	Windows Phone Marketplace

Deliver high quality apps

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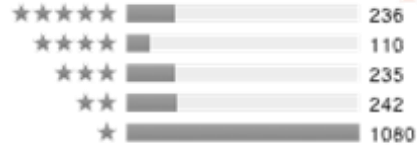
Deliver high quality apps

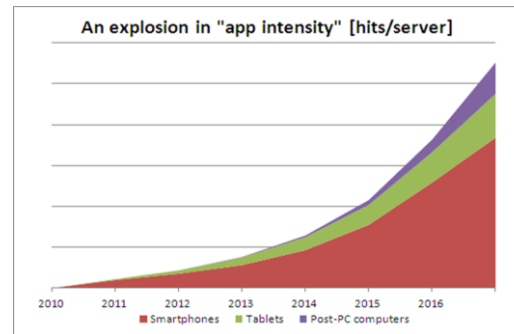# Deliver high quality apps

Native

Web

Hybrid

Frequency & Intensity

- Mobile devices are driving significant capacity management issues

- Great apps get refreshed often – sometimes with disastrous results !

- **Activity Bursts**
  Average app usage is 72 seconds

- Network & Infrastructure scaling

An explosion in "app intensity" [hits/server]

2010 2011 2012 2013 2014 2015 2016
■ Smartphones ■ Tablets ■ Post-PC computers

Video: Visa Inc. - IBM Smarter Planet Leadership Series

http://www.youtube.com/watch?v=8M8RoxBvkSY&feature=youtu.be

It's about the Business Model not the Device

- Mobile Apps Aren't just mobile apps
- MiiBrand

- New Business Models will be driven by Integrating Mobile with the enterprise
  - App dev & testing
  - Integration and Messaging
  - Security & Translation Services
  - Real Time Business Analytics
  - Business Rules Management

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Mobile Lifecycle

- API exposure & management
- Biometrics
  - Fingerprints,Voice,Touch
- Sensors
  - Pressure, chemical, infrared, heat, Cardio, Blood, Ultrasound
  - Non GPS Location services
- Payment
  - Paypal, NFC
  - Non Scan Ticketing models
- Consolidation
  - Identification & security
  - Loyalty programs
- Augmented reality
  - night vision, product data, DIY guide
- NEW alliances & models

Introducing

IBM **MobileFirst**

IBM MobileFirst Portfolio

Strategy & Design Services

Industry Solutions

Banking	**Insurance**	**Retail**	**Transport**	**Telecom**	**Government**	**Healthcare**	**Automotive**

IBM Interactive - App Design & Development

App Development & Testing Platform

Management

Security

Analytics

Cloud & Managed Services

Infrastructure Services

Services Capabilities

IBM MobileFirst

IBM Global Business Services – Mobile

- **Mobile Enterprise Strategy**

- **Mobile & Multi-Channel Strategy**

- **Mobile Design and Development**

- **Enterprise Solutions for Mobile**

- **Mobile Testing**

IBM Global Technology Services – Mobile

- **Mobile Enterprise Services for Managed Mobility**

- **Mobile Infrastructure Strategy and Planning**

- **Mobile Application Platform Management**

- **Network Infrastructure Services for Mobile**

- **Mobile Security Services**

Software Capabilities

IBM MobileFirst

Mobile App Platform

Lead Offering:
- IBM Worklight
- Rational Test Workbench

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

Value:
- 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

Value:
- 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

Value:
- 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

Value:
- 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

Summary

- Organisations are moving from 'Mobile Also' to 'Mobile First'

- Barrier to entry can be low & low risk / high reward

- There will be winners and losers and game changers

- There is value in exposing Brand and Corporate assets

- Mobile is different & is returning value

- There is an urgent need for an Enterprise Strategy & Architecture view of Mobile.

- IBM MobileFirst can help