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Oracle Mobile Platform

Demystifying the World of Enterprise Mobility with Oracle

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Oracle Development Tools

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San Francisco

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WORLD**

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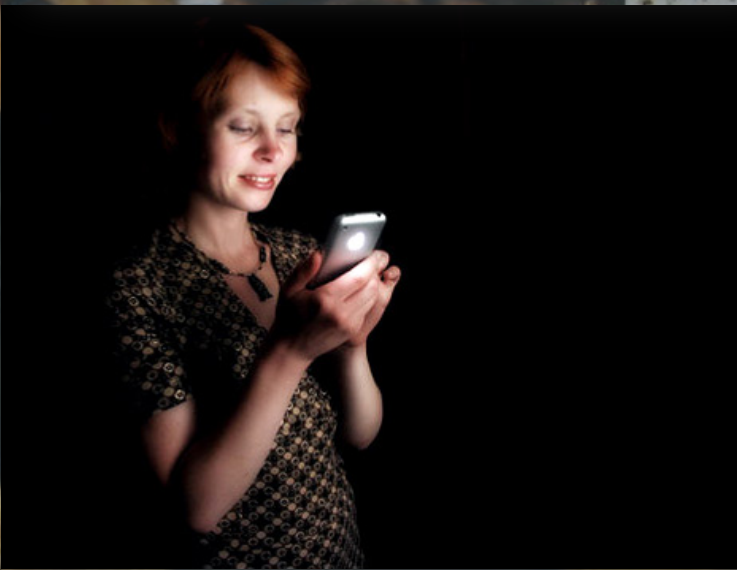
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2005

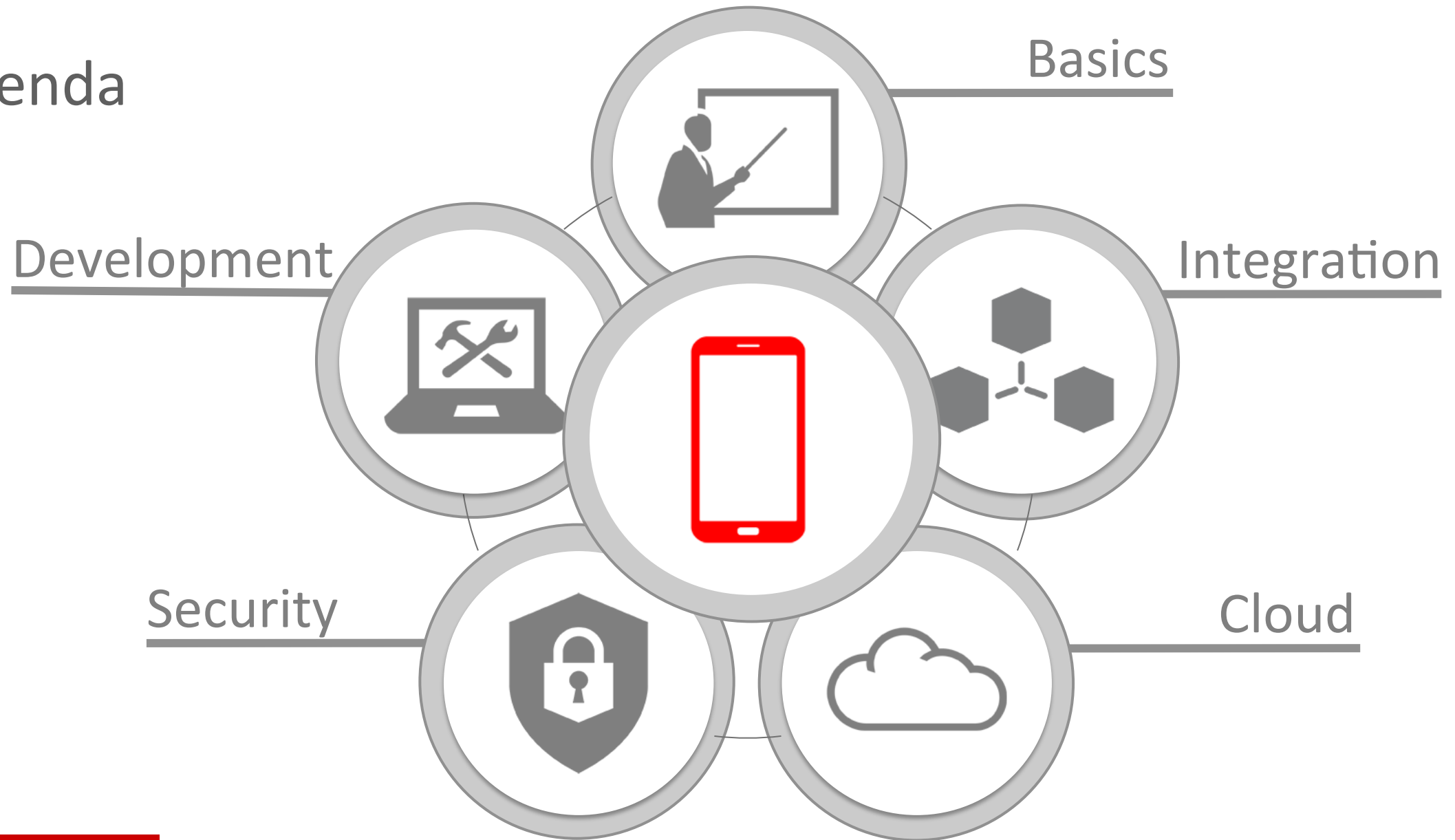


Dude! Is that like
a fliptop phone?!

2013



Agenda



A man with dark hair and a light beard is looking down at a white tablet he is holding. He is wearing a brown herringbone jacket over a light-colored sweater and has large black headphones around his neck. He is standing on a train platform with a white train blurred in the background. The text "Mobile Basics" is overlaid on the left side of the image.

Mobile Basics

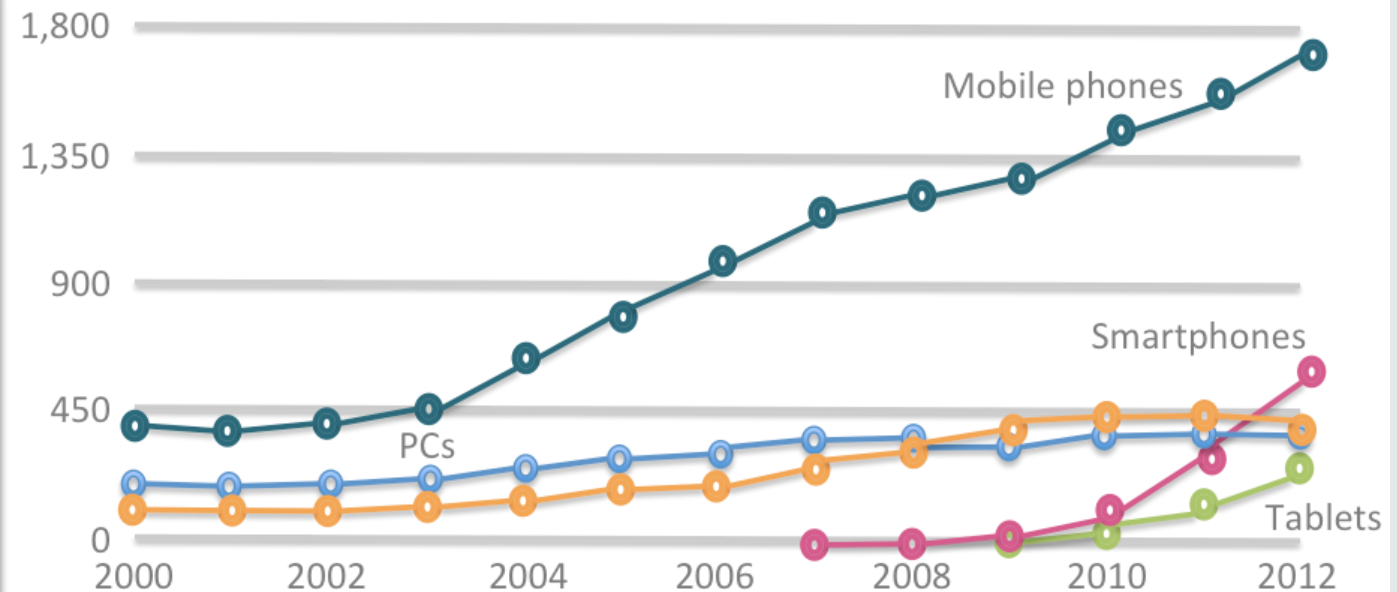
Mobile Growth

Mobile is Eating the World

- Consumer and enterprise PC sales have stagnated while tablets eat into the market
- Huge uptake of smart phones
- There's more growth to come as smart devices eat into the existing mobile market

Source: <http://www.slideshare.net/bge20/2013-11-mobile-eating-the-world>

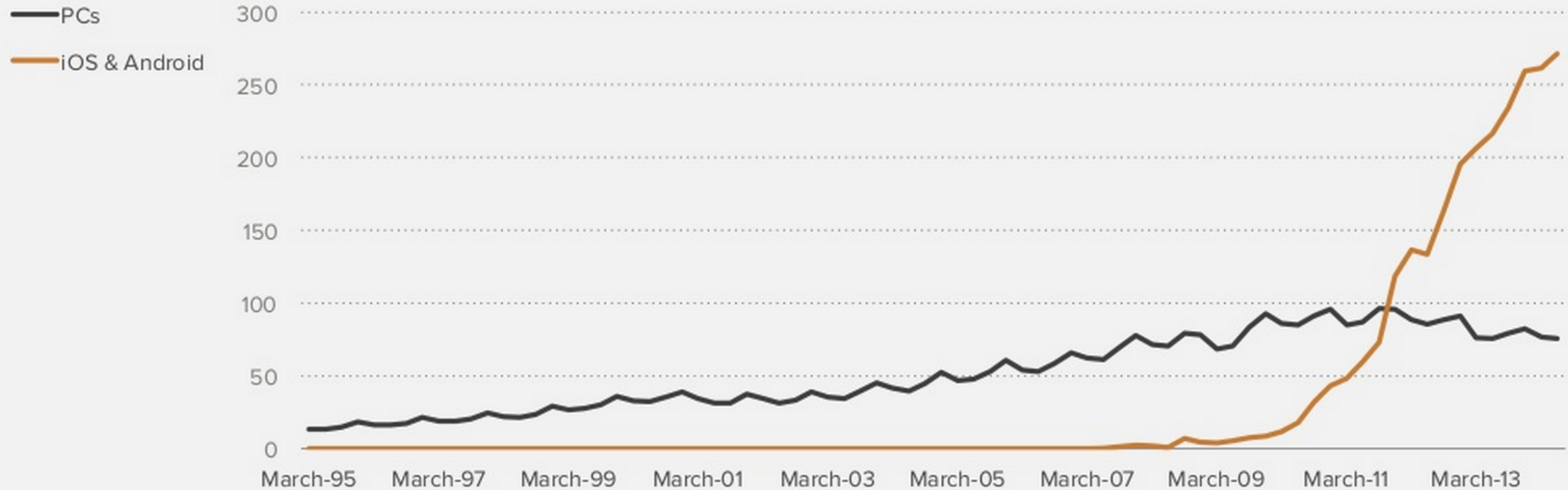
Global Annual Unit Sales (millions)



The smartphone industry dwarfs PCs

4bn people buying every 2 years instead of 1.6bn buying every 5 years

Quarterly unit shipments (m)

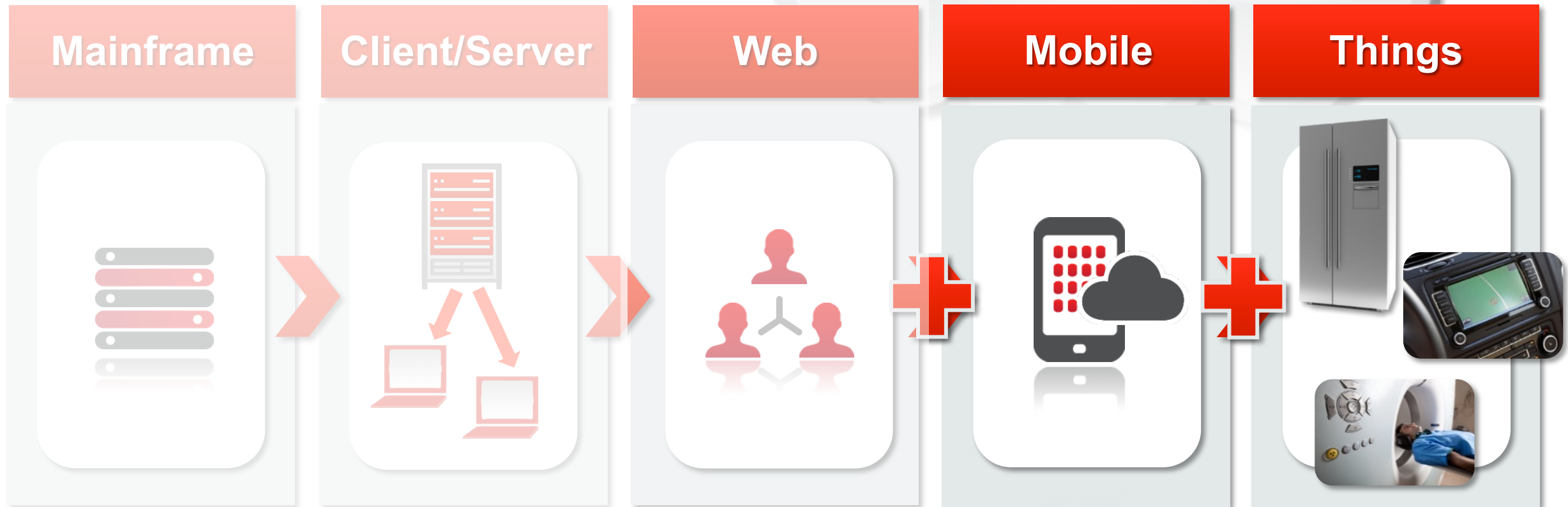


Source: <http://www.slideshare.net/a16z/mobile-is-eating-the-world-40841467>

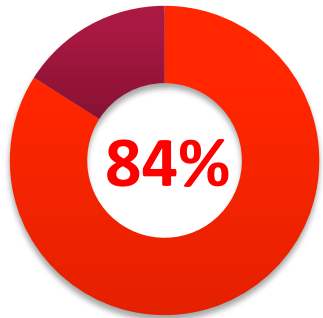
Source: Gartner, Apple, Google, a16z

Evolution

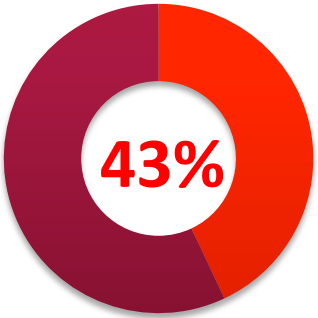
The New Normal



CIO Mobility Opinions

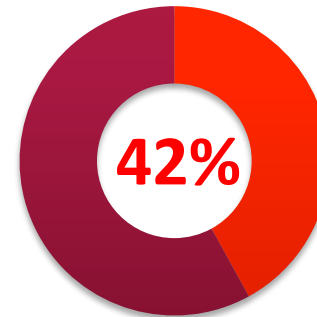


84% said **mobility** would significantly **improve customer interactions**

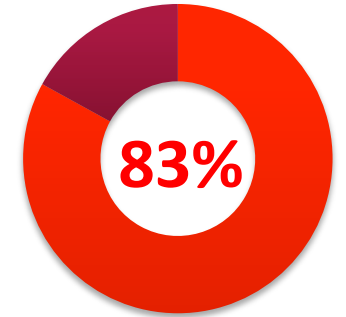


43% said **mobility** would improve customer service with **instant data**

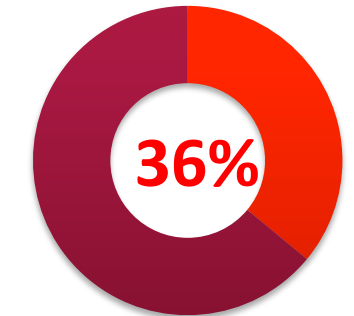
42% rank **mobility** as one of their **top five priorities**



83% said **mobility** would significantly **affect their overall business**



36% are **engaging customers** via mobile device & services



Source: The Accenture Mobility CIO Survey 2013

Devices

Are you supporting the new 'Normal'?



Phone



Phablet



Tablet



Things

Some images courtesy of Apple Computer, Inc.

Convergence

Do you still carry these separately?



Alarm



Book



Calculator



Calendar



Camera



Compass



GPS



Map



Music Player



Notebook



Video Camera



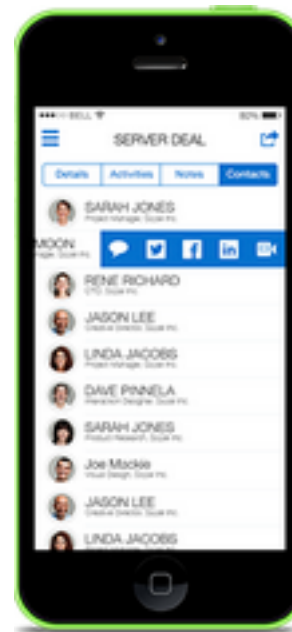
Watch

Apps

Do you have an app for that?



Mobile Web



Native

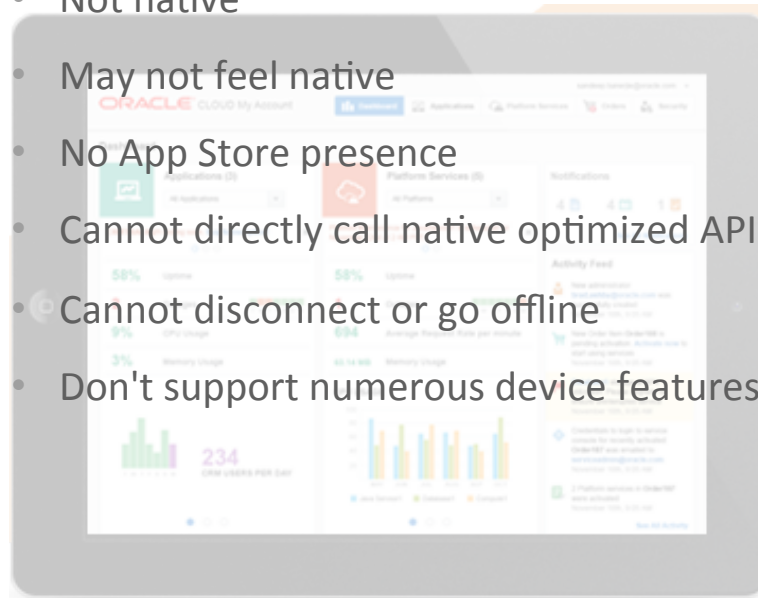


Hybrid

Apps

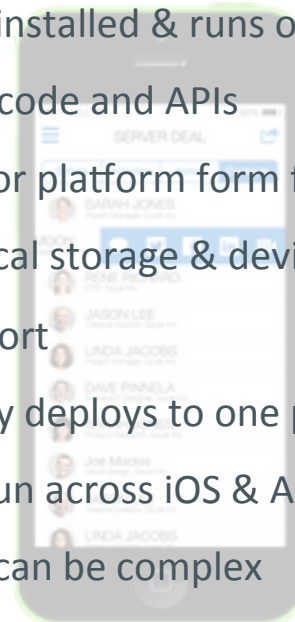
What do I use for my app?

- Not native
- May not feel native
- No App Store presence
- Cannot directly call native optimized APIs
- Cannot disconnect or go offline
- Don't support numerous device features



Mobile Web

- Application installed & runs on device
- Uses native code and APIs
- Optimized for platform form factor
- Access to local storage & device services
- Offline support
- Solution only deploys to one platform
- Cannot be run across iOS & Android
- Code reuse can be complex
- Portability requires work
- You'll need both iOS & Android developers



Native

- Application installed on device
- HTML5, CSS3, JS
- Runs within a native web container
- Inherently cross platform
- Utilizes existing skillsets
- Access to local storage and device services
- Code reuse and portability simplified

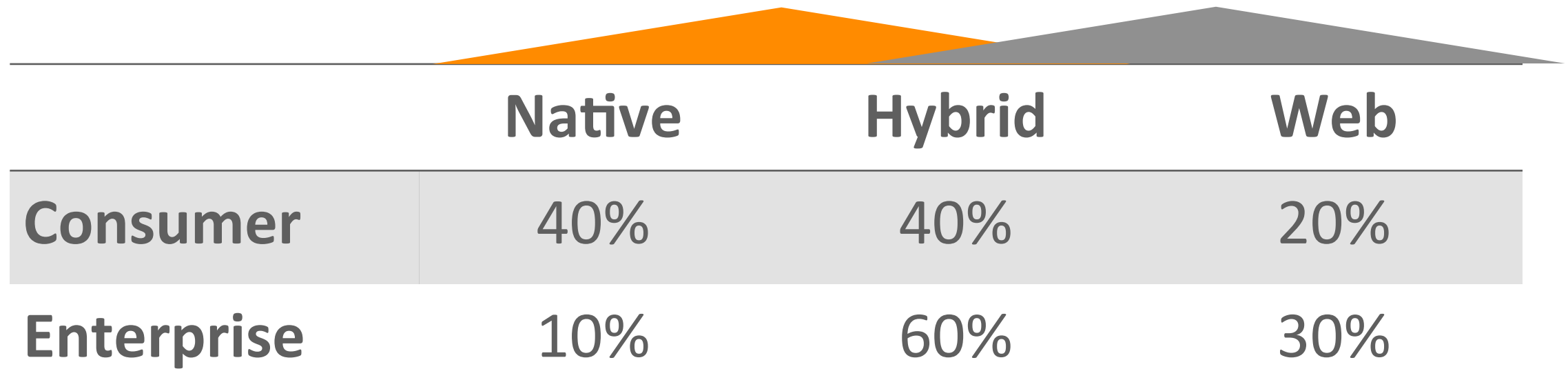


Hybrid

Choice

It depends on your perspective

Native in the app stores Developed w/ web technologies



2015 Consumer vs. Enterprise split

Source: Gartner, Inc.

Mobile First

Are you future friendly?

- Focus on Mobile Needs
- Remember Bandwidth Limits
- Have a Responsive Layout
- Remember Touch Ability
- Be Input Friendly

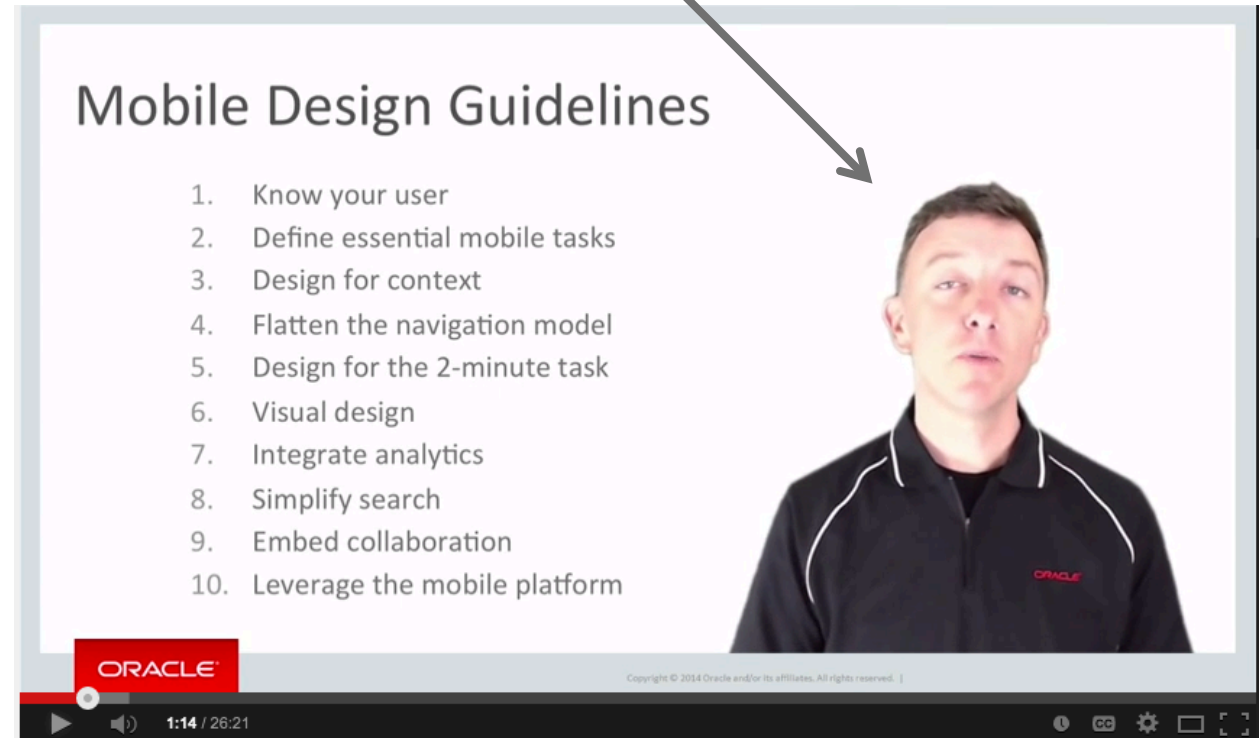


Principles

Are you designing for your Mobile user?

- Know your end user
- Define Mobile task
- Design for context
- Flatten navigation model
- Design for 2 minutes
- Visual design
- Integrate analytics
- Simplify search
- Embed collaboration
- Leverage Mobile platform

*Absolutely no credibility
without a beard*



<http://bit.ly/1Bch45B>

Guidelines

Do you need Mobile design resources?



STYLE

Learn the Mobile style



COMPONENTS

Use MAF building blocks



PATTERNS

Find design solutions



EXAMPLES

View demos and samples

A photograph of four business professionals in a modern office setting. On the left, a man with grey hair in a blue shirt and grey blazer looks down at a document. Next to him, a man with a beard and glasses, wearing a red checkered shirt and a grey cardigan, is gesturing with his hands while speaking. Behind him, a man with dark hair and a beard, wearing a blue and white striped shirt, looks on. On the right, a woman with dark curly hair, wearing a white button-down shirt, is looking down at the document. The background shows a bright office with circular pendant lights.

Mobile Development

Cross Platform Development

What is the hybrid app made of?



HTML 5



CSS 3



JavaScript



XML

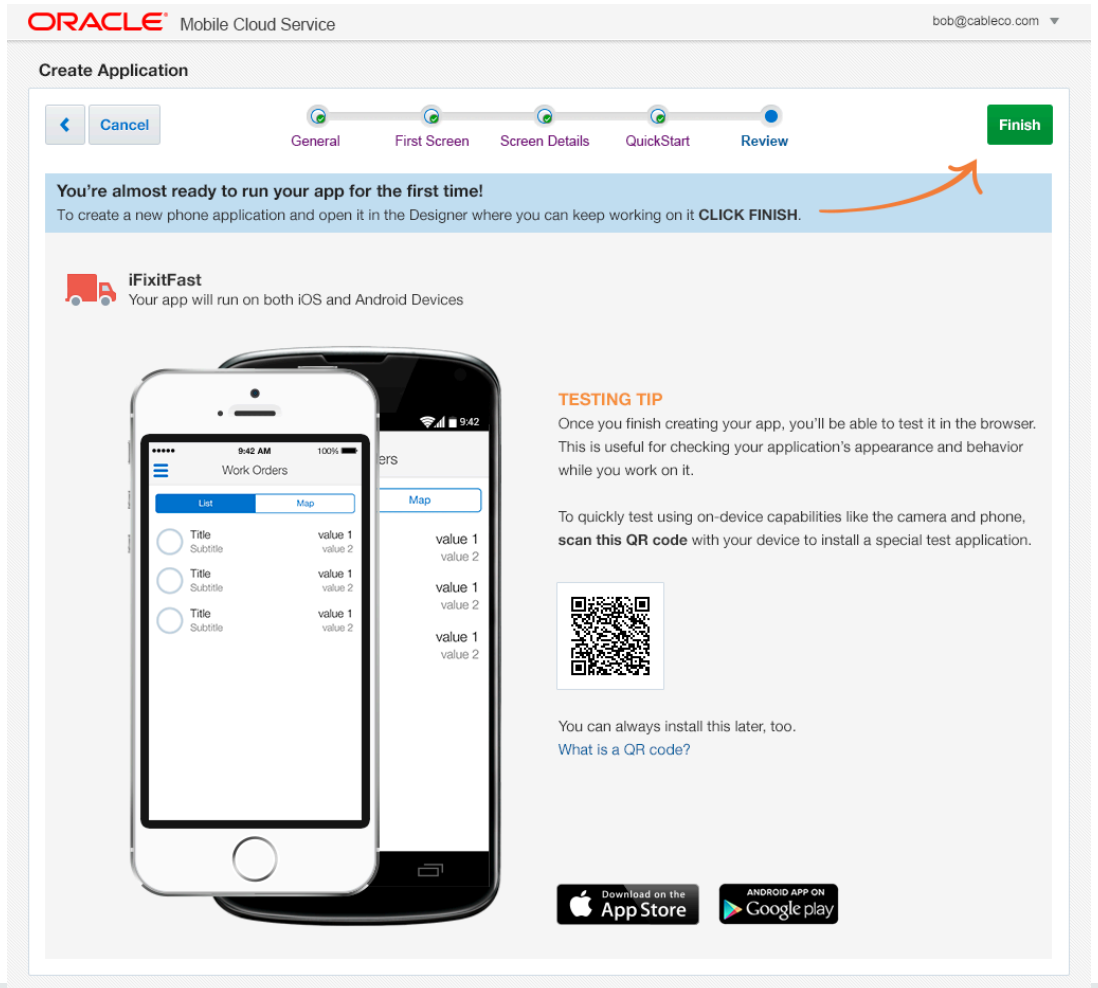


Java

Build Your Own App

BYOA – accelerate your app building

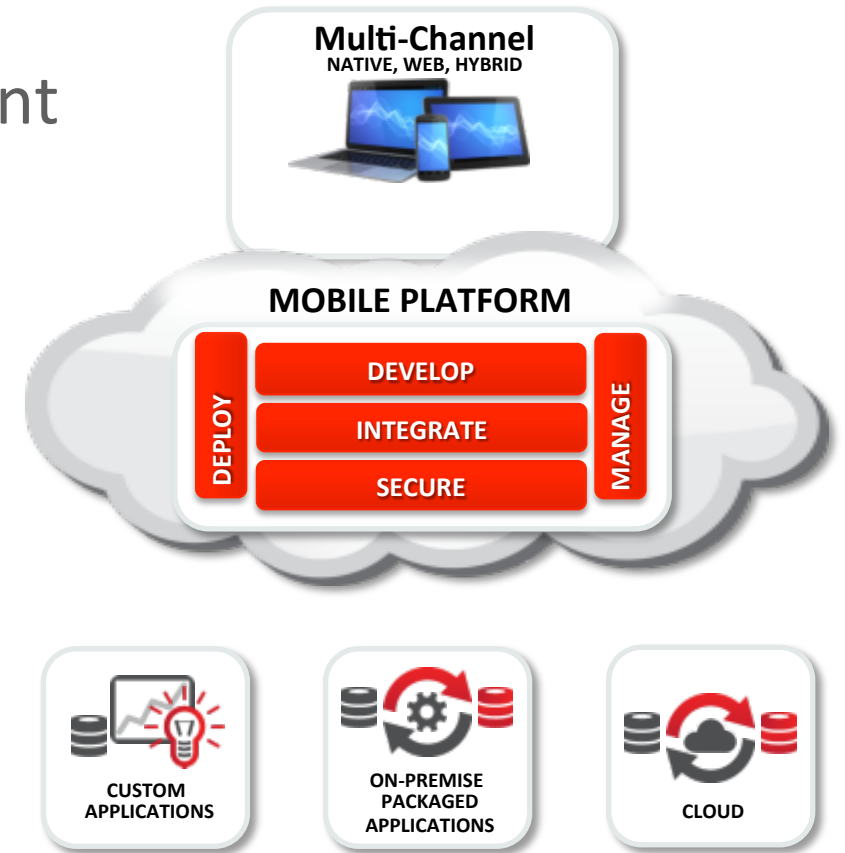
- Empower Business Analysts
- Use WYSIWYG features
- Use native UI components
- Create basic task flows
- Apply custom styles
- Use imported business logic



Mobile Application Development Platform

MADP – or MEAP: Mobile Enterprise Application Platform

- Set of Products & Services for Mobile Development
- Manage Development to Devices & Platforms
- Provides Full Lifecycle Solutions
- Integrates Middleware with Client Applications



Oracle Mobile Application Framework Overview

Productivity boosting mobile development framework

- Build Once, Run on Multiple-Platforms
- Simpler UI development
- Java, JavaScript, and HTML5-based application development
- Choice of development tools
- Offline-capable: SQLite with Encryption
- Full Access to Native Device Features
- Modular, Reusable Components



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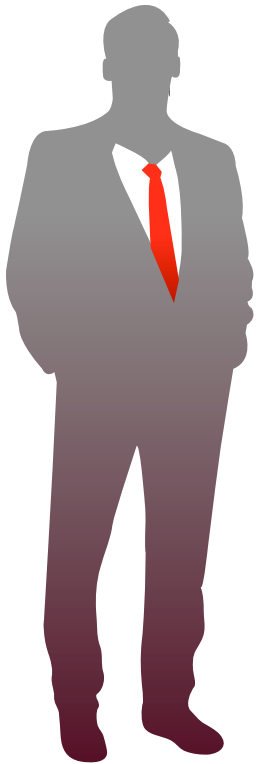


Mobile Integration

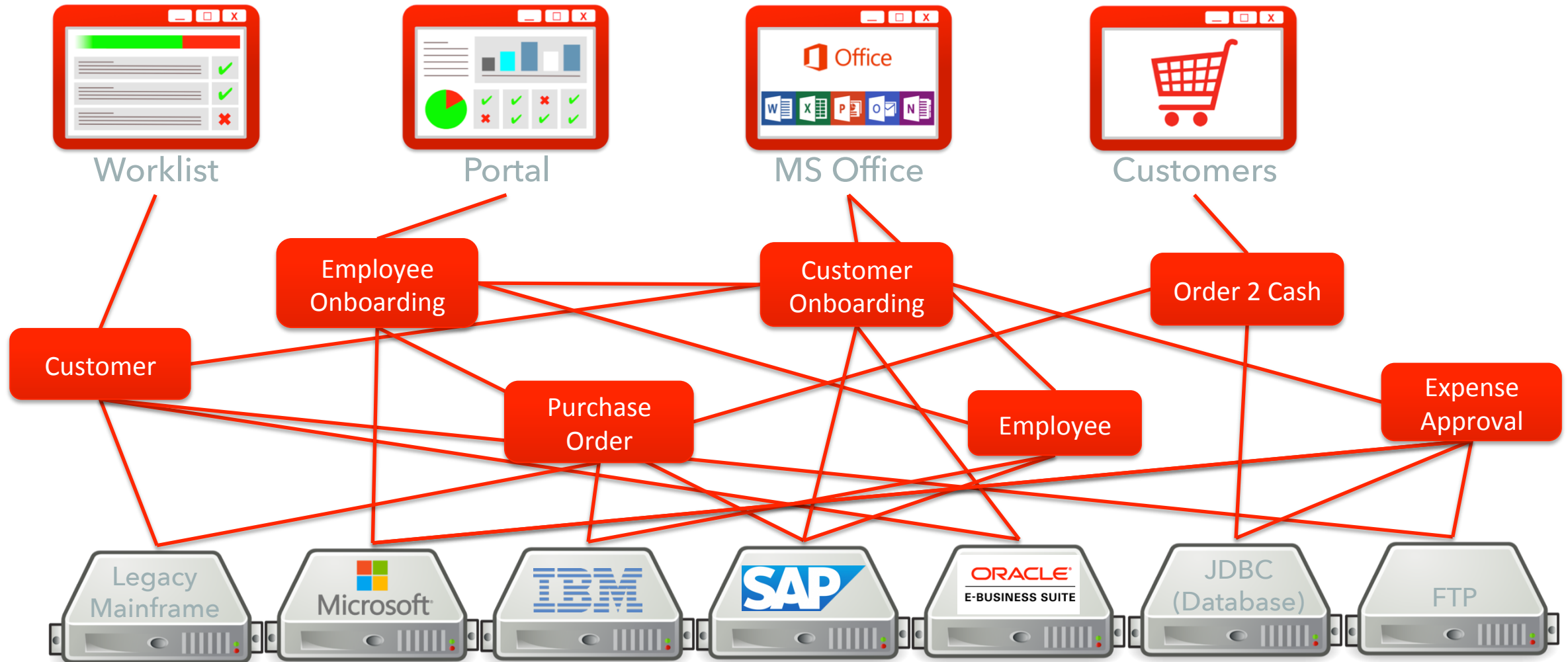
In context of mobile, Oracle keeps on mentioning OSB as a best practice?

What's OSB?

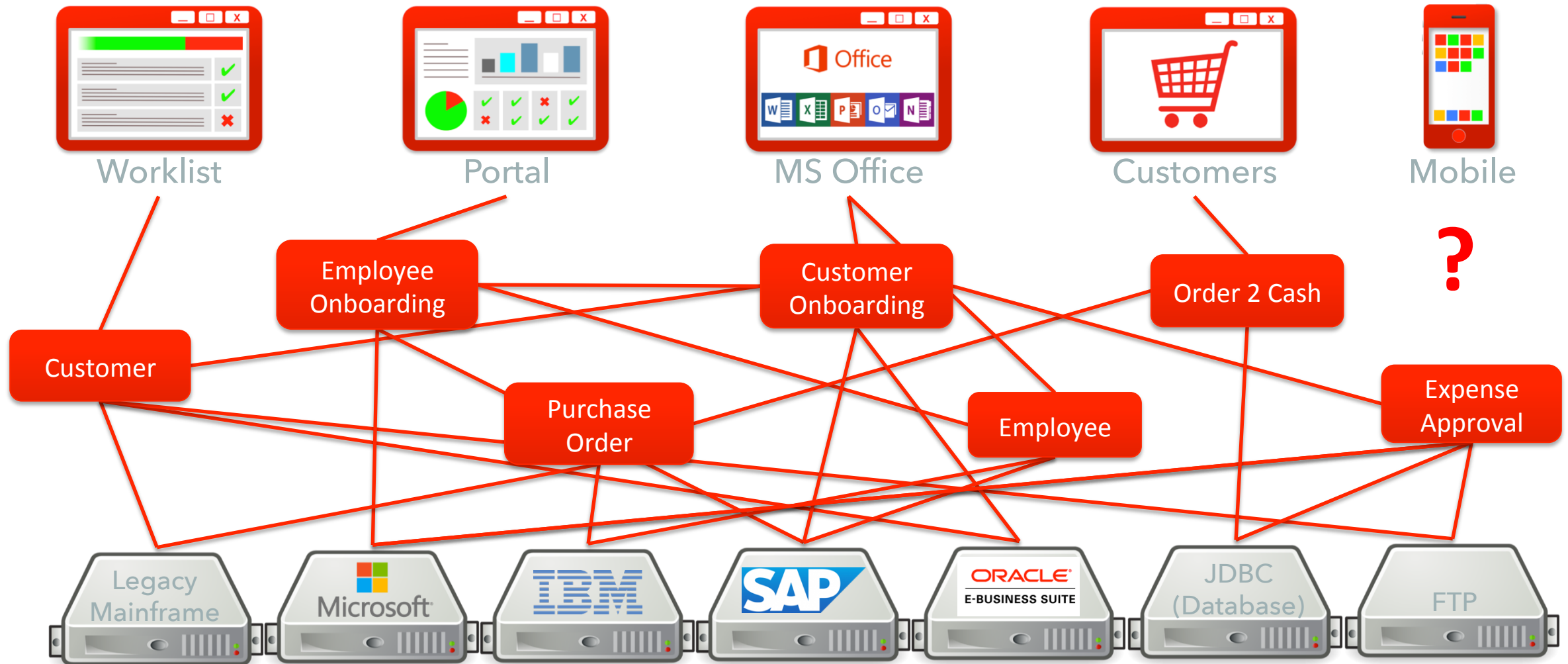
What's this got to do with mobile?



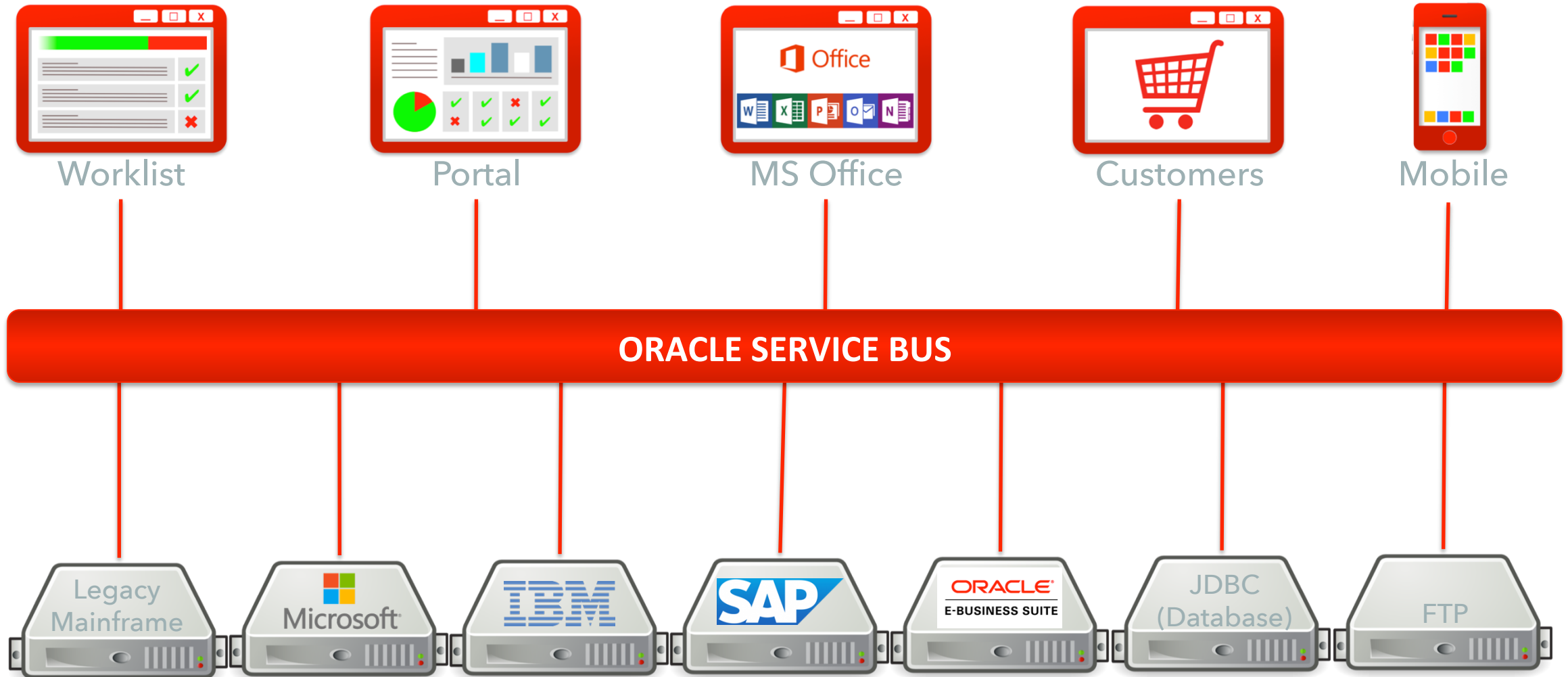
An Evolved Enterprise Architecture



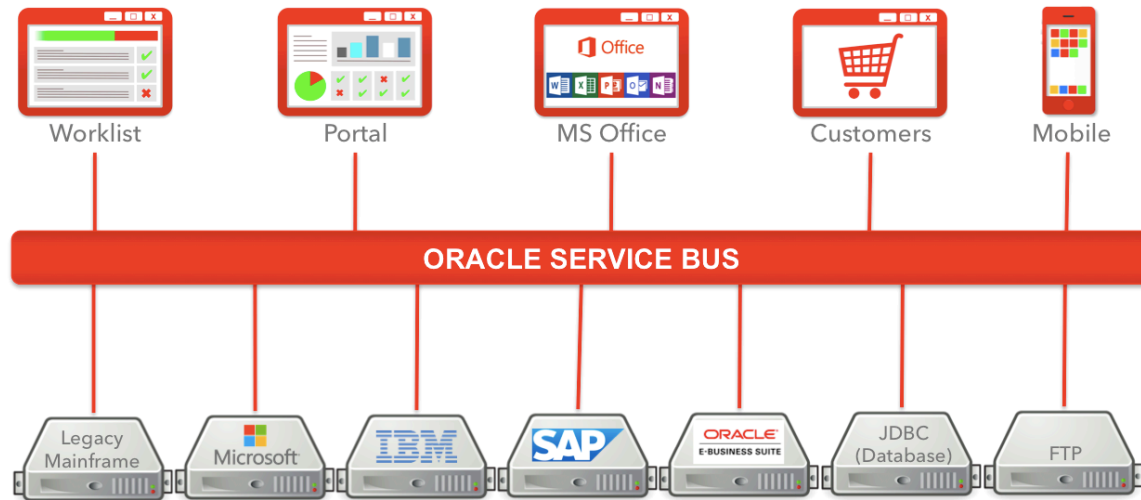
Accommodating Mobile



Oracle Service Bus



Oracle Service Bus



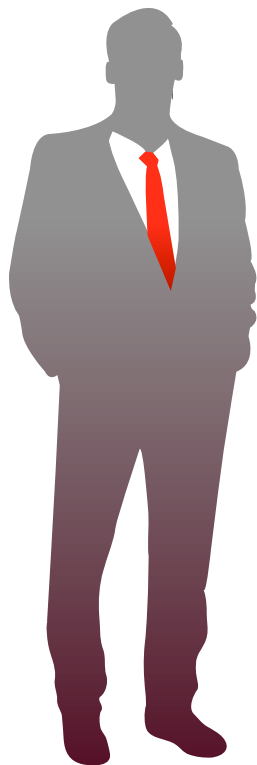
- **Loose coupling** – replaces direct coupling with a flexible **proxy service**
- **High availability** – **business services** access multiple endpoints to protect against failure
- **Message flow** – data can be routed, transformed, composed, validated
- **Connectivity** – beyond web services adapters connect to EBS, AQ, JDBC, HTTP/S, JCA, JMS, WSRM, MQ, SMPT, FTP, File, Tux, EJB

A man and a woman are in a modern, open-plan office. The man, with curly hair and a beard, is wearing a blue and white plaid shirt. The woman, with dark curly hair, is wearing a teal t-shirt. They are both looking at a tablet held by the woman. The background shows several wooden desks with computers and papers, and large windows letting in natural light.

Mobile Security

Welcome to the mobile security acronym soup!

And it's all your fault!





Mobile Device Management (MDM)

- **Enterprise-class** - part of Enterprise Mobility Management (EMM)
- **Centrally managed** – configured, monitored & secured
- **Over-The-Air distribution** - apps, data, config
- **Secure** – all of device, reduced risk & support costs







Bring Your Own Device (BYOD)

- **BYO device** - staff can use their own devices to access enterprise systems – (or the business can't stop them)
- **Staff satisfaction** – (MDM is not an option)
- **Risks** – lost devices, leaked information, malware...



Mobile Threat Management (MTM)

- **Mobile protection** from
 - Stolen & lost devices
 - Malware
 - Jail-broken devices
 - Session hijacking
 - Denial of Service
 - QR code spoofing
 - Infection from a PC
 - And many many more...



Mobile Application Management (MAM)

- **Secured corporate apps** - not device
- **App co-existence**
 - Consumer apps installed & run as per normal
 - Corporate apps are separately installed & secured
- **Staff satisfaction & secure enterprise apps**
- **Technical challenge** – how to secure apps
 - Developer integration of an SDK
 - Mobile virtualization
 - App wrapping & containerization



Containerization

- Apps deployed/**wrapped in a secure container**
- Automatically adds **additional features**
 - App, data & over the wire encryption
 - Data leakage protection (e.g. disable screenshots)
 - SSO & authentication via corporate infrastructure
 - Mobile policy enforcement (e.g. geofencing)
 - Remote management & app wipe
 - Access to corporate systems
- Employee's other apps are left in tact



Corporately Owned, Personally Enabled (COPE)

- Enterprise offers a **range** of mobiles
- **Staff satisfaction** - permits both corporate and personal use
- **Corporate benefits**
 - Small set of devices makes for easier IT support
 - Enterprise owns the device
 - Enterprise has right to disconnect/wipe the device



Enterprise Mobile Management (EMM)

- BYOD or COPE
 - Mobility is an enormous **enabler** for staff
 - And a **security risk**
- Managing your mobile landscape is essential

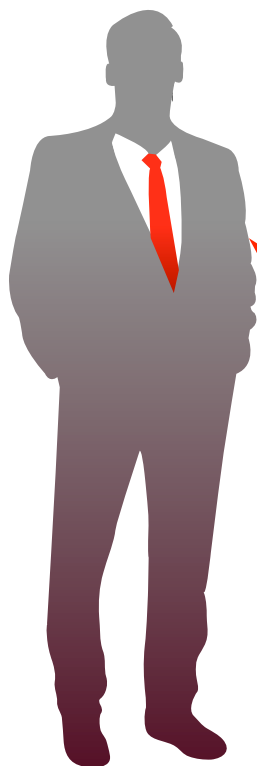


Welcome to the mobile security acronym soup!



And it's all your fault!

Chris: don't forget the punchline!



Introducing: Oracle Mobile Security Suite

Extend Identity to Enterprise Mobility

Enterprise-Grade Mobile Security

- Extend Enterprise Identity Services to Enable Mobile Security with Consistent Policies
- Seamless Single Sign-on For Custom Applications On Mobile Devices
- Allow Management of Corporate & Personal Apps/Data On Any Mobile Devices
- Reduce Costs, Reduce Risks & Increase Agility With Platform Approach

BYOD
MANAGEMENT

IDENTITY &
ACCESS
MANAGEMENT

MANAGED
APPLICATION
CONTAINER



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A man in a grey suit, blue shirt, and striped tie is looking down at a tablet computer. He is standing in a modern office with large windows in the background. The text "Mobile Cloud" is overlaid on the left side of the image.

Mobile Cloud

MBaaS: Mobile BackEnd as a Service

- **JaCaaS** - Hopefully not "Just another Cloud as a Service"
- Bundled or targeted cloud services
 - Specifically aimed at **mobile development**
 - **Common mobile services**: Identity, integration, service orchestration, messaging, data synchronization, data storage, SDKs, analytics
 - Basically all the stuff you can't be bothered writing & hosting yourself
 - Part of a complete **Mobile Application Development Platform (MADP)**
- **Accelerates projects** by off-loading much effort to common services
- **Enterprise grade** MBaaS focus heavily on connectivity with back end enterprise systems, & scalability

Introducing: Oracle Mobile Cloud Services

Mobile Enable Enterprise Applications

- Cloud-based integration hub
- Simplify integration for mobile developers
 - Automatic RESTful services
 - Connection to back-end systems
 - Authentication, cache, sync, push, data transformation



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Hardware and Software

Engineered to Work Together

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