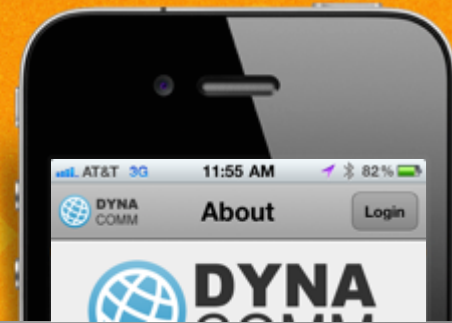


**BUILD HTML5 AND NATIVE
MOBILE APPS IN MINUTES**

OUR PLATFORM. YOUR VISION. ENDLESS POSSIBILITIES.



5 Things IT Needs to Know About Enterprise Mobile Apps

AnyPresence Webinar | September 2012

Speaker Intro: Richard Mendis



✉ rmendis@anypresence.com

[in linkedin.com/in/rmendis](https://www.linkedin.com/in/rmendis)

[@anypresence](https://twitter.com/anypresence)

CMO and Co-Founder, AnyPresence

VA-based company offering an enterprise mobile platform-as-a-service for accelerating mobile app development without platform lock-in

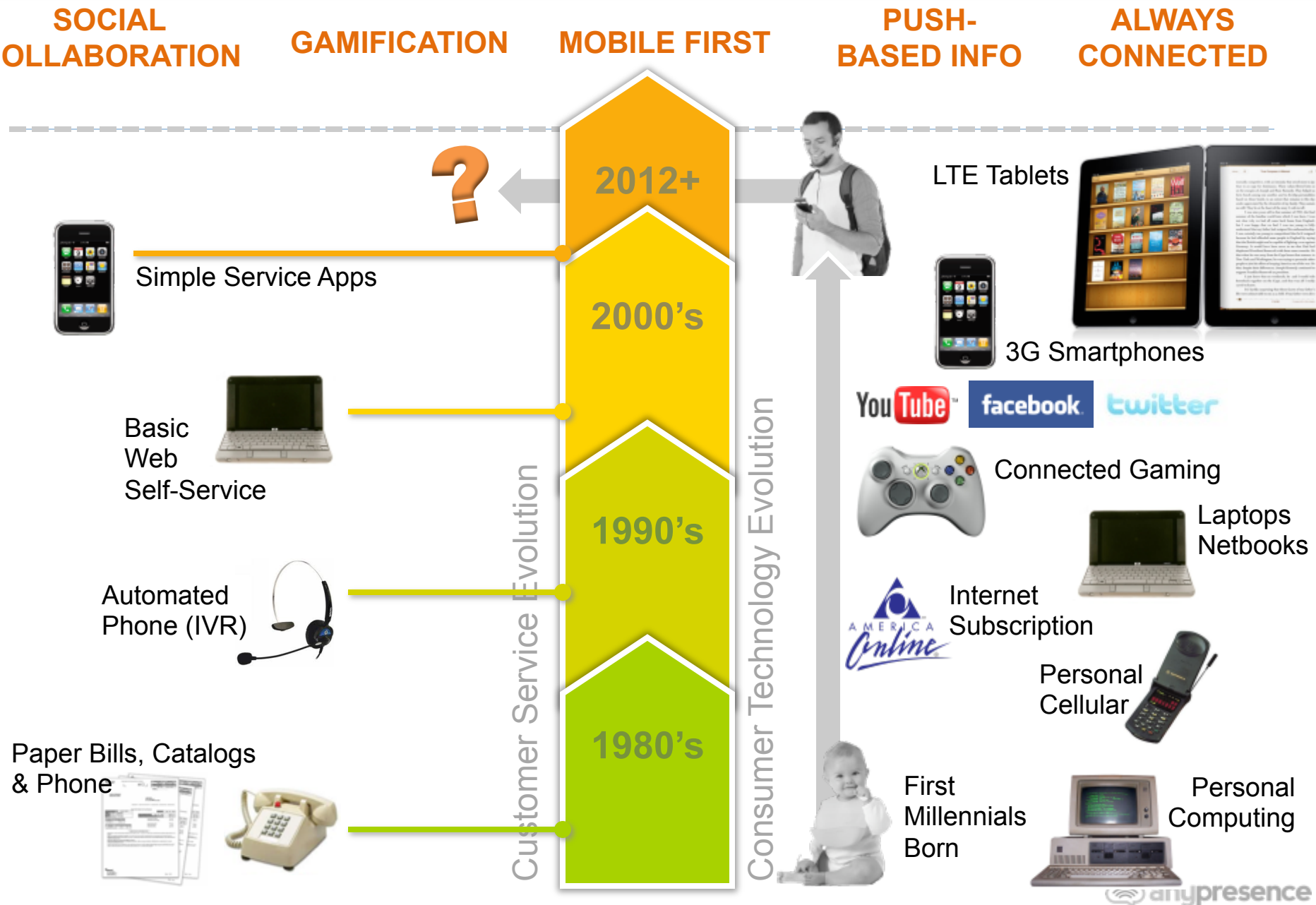
20+ years in enterprise software industry

- Speaker on enterprise mobility and SaaS topics
- VP of Solution Management at SAP
- CMO and Co-Founder, Clear Standards
- VP of Marketing at Current Analysis
- Product Line Manager, Siebel Systems
- BS Computer Science, University of Toronto

Agenda

- Market Trends (consumers and employees)
- Mobility Ecosystem
- 5 Things IT Needs to Know
 1. **Strategy:** *prioritize your use cases around ROI*
 2. **Design:** *poor design = poor adoption*
 3. **Development:** *reduce TCO with mobile platforms*
 4. **Testing:** *you've already underestimated this area*
 5. **Deployment:** *use app mgmt. solutions when possible*
- Summary

The Customer Experience “Engagement Gap”

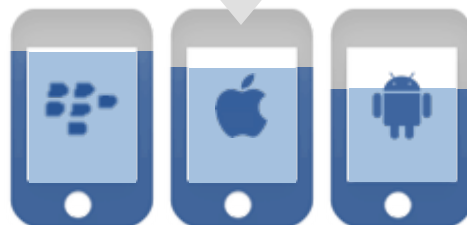


By the Numbers: Mobility in the Enterprise



50%

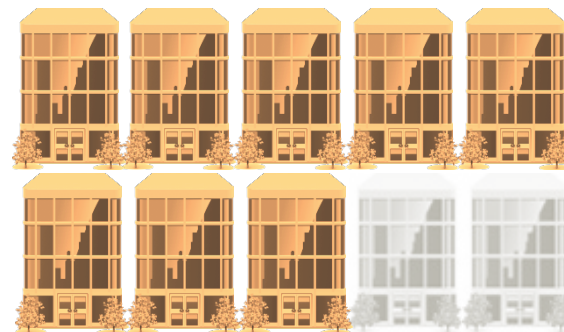
of all devices on the corporate network will be **mobile devices** by 2015



80% **77%** **61%**
permitted for corporate use

80%

of Fortune 500 companies are testing or deploying iOS



72%

of **small businesses** use mobile apps in operations



\$25B

Global Apps Market by 2015

\$17B

Global Enterprise Mobility Market by 2015

\$6.9B

North American Mobile Business Apps Market by 2014

TOP MOBILITY GOALS

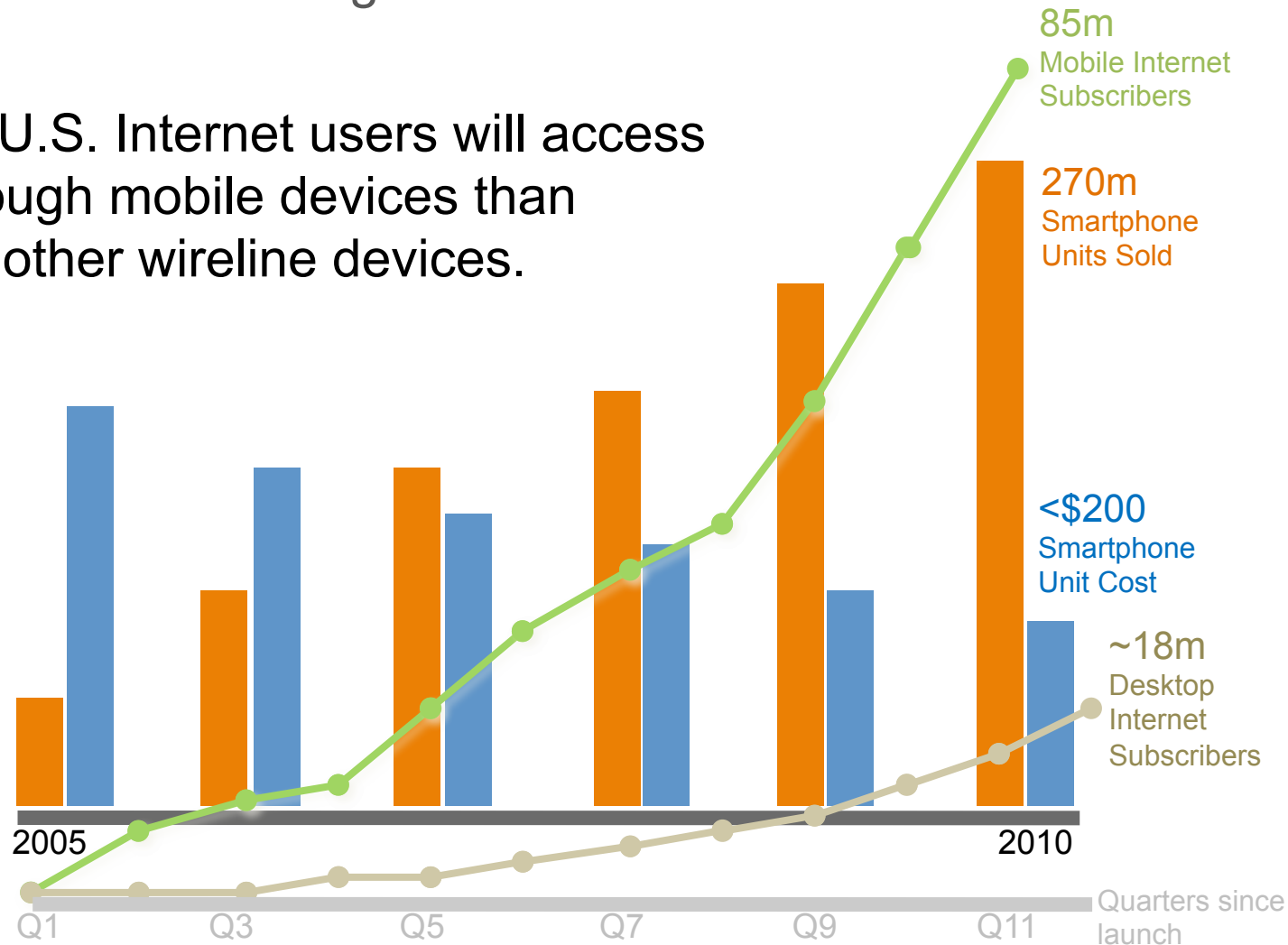
59% Increase in Sales/Service

42% Increase in Productivity

Mobile Web and Smartphone Adoption

Smartphone and tablet devices out-pacing PC as primary means for accessing email and Internet.

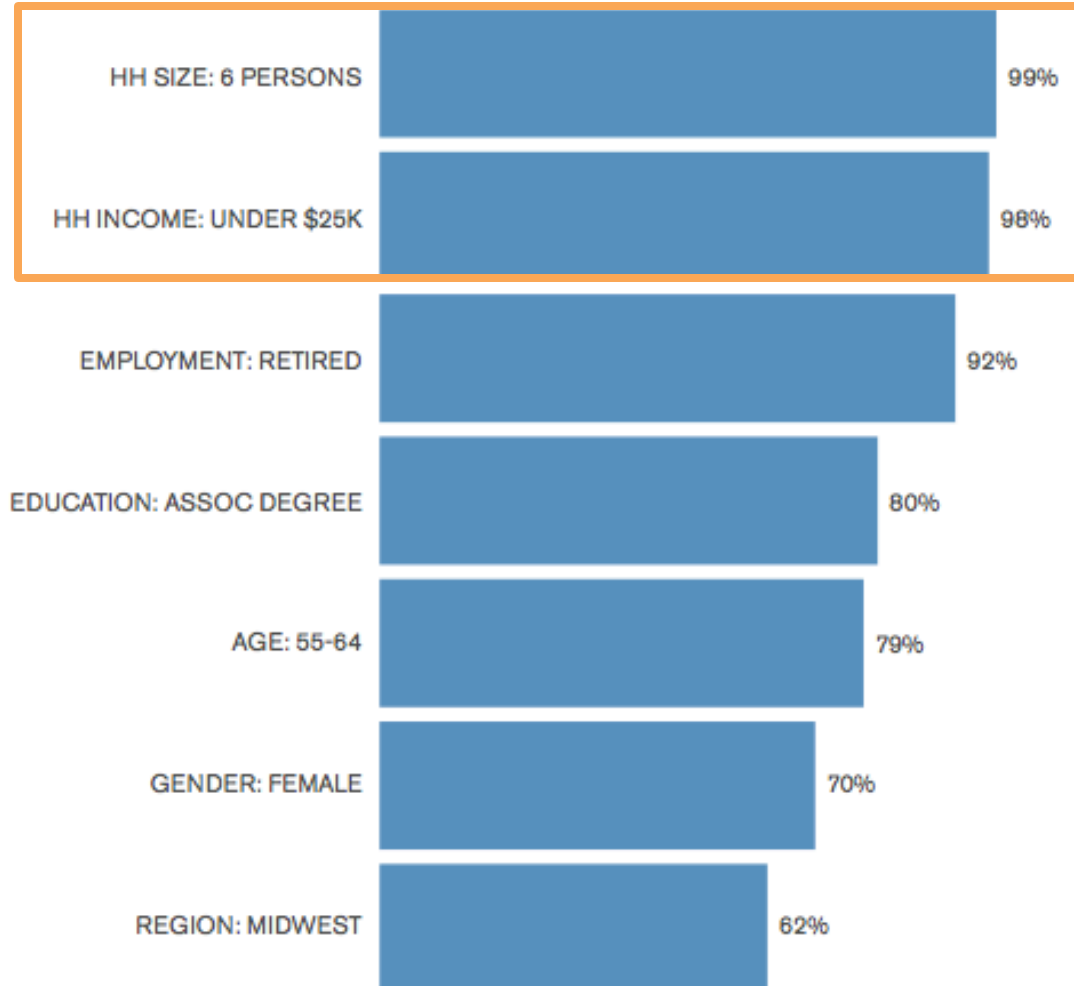
By 2015, more U.S. Internet users will access the Internet through mobile devices than through PCs or other wireline devices.



Smartphone Adoption Demographics

U.S. Fastest Growing Demographic Segments Among Smartphone Users

Source: comScore MobilenS, 3 mon avg. ending Dec-2011 vs. Dec-2010, U.S.

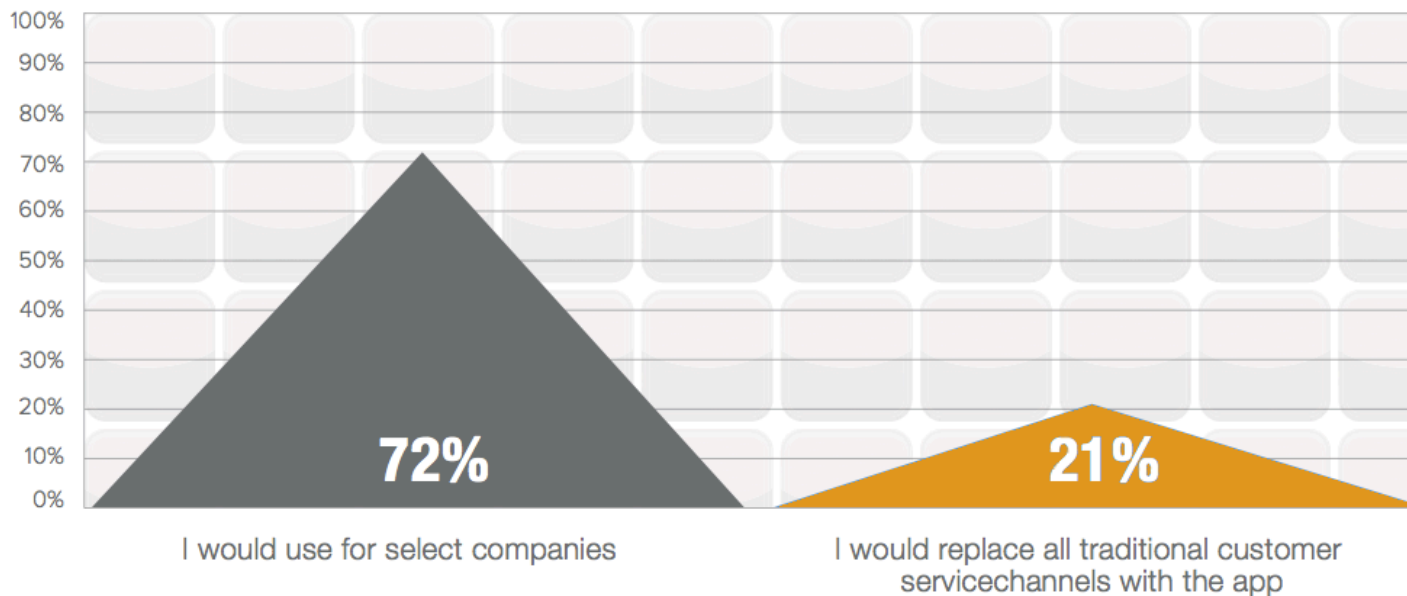


Consumer Demand is Clear

What types of customer service mobile apps in the following industries would you find most useful? Select all that apply.



Would you use mobile apps in place of traditional customer service channels (e.g. calling customer care) if the same services and assistance were available?



“OVER 90% OF CONSUMERS WOULD REPLACE SOME OR ALL TRADITIONAL CUSTOMER SERVICE CHANNELS IF A MOBILE APP WERE AVAILABLE”

Generation X	"Millennials"
Born 1965-1976 51 Million	Born 1977-1998 75 Million
Reject Rules Mistrust Institutions PC Use Technology Multitask	Re-write the Rules Institutions Irrelevant Internet Assume Technology Multitask Fast

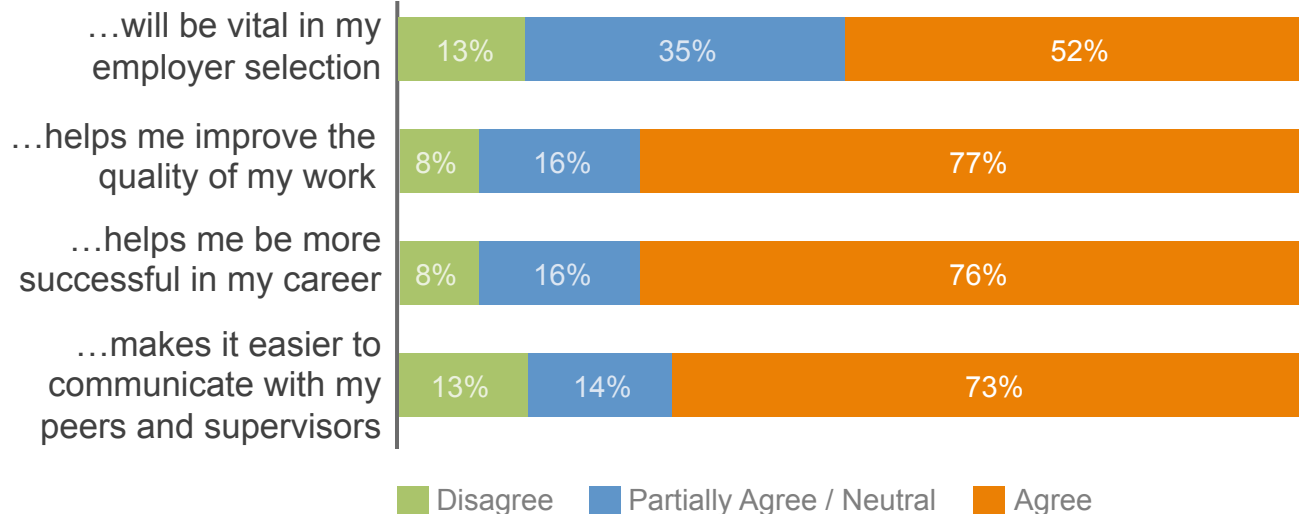


“One in five Millennials spend 50% of their work week away from the office. CIOs must do more to enable them.”

accenture

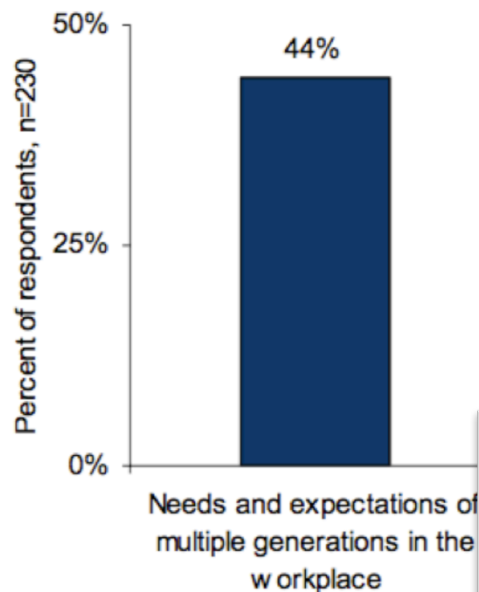
Millennials' Perception of Technology (US 18-27 year olds)

Technology...



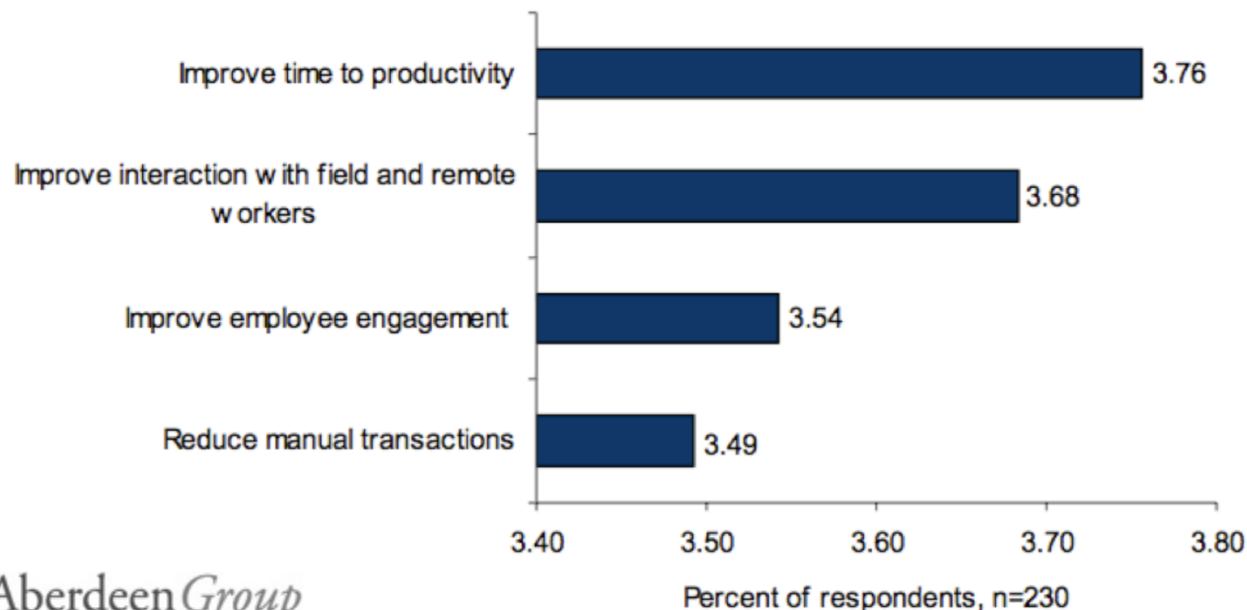
Mobile HCM Drivers and Goals

Figure 2: Pressures Driving the Adoption of Mobile Tools in HCM



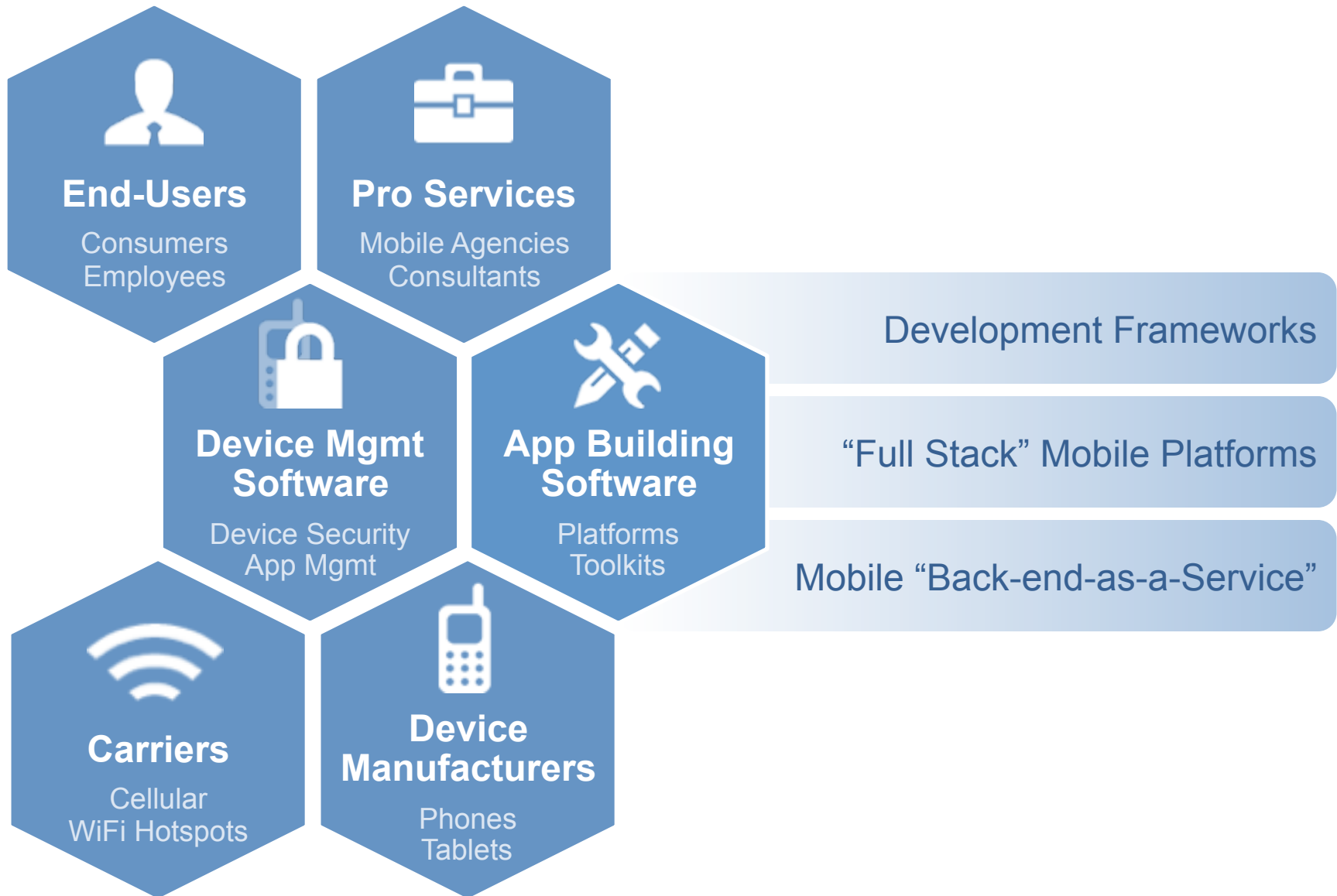
Aberdeen Group
A Harte-Hanks Company

Figure 3: Most Important Goals for Mobile HCM Strategy



Aberdeen Group
A Harte-Hanks Company

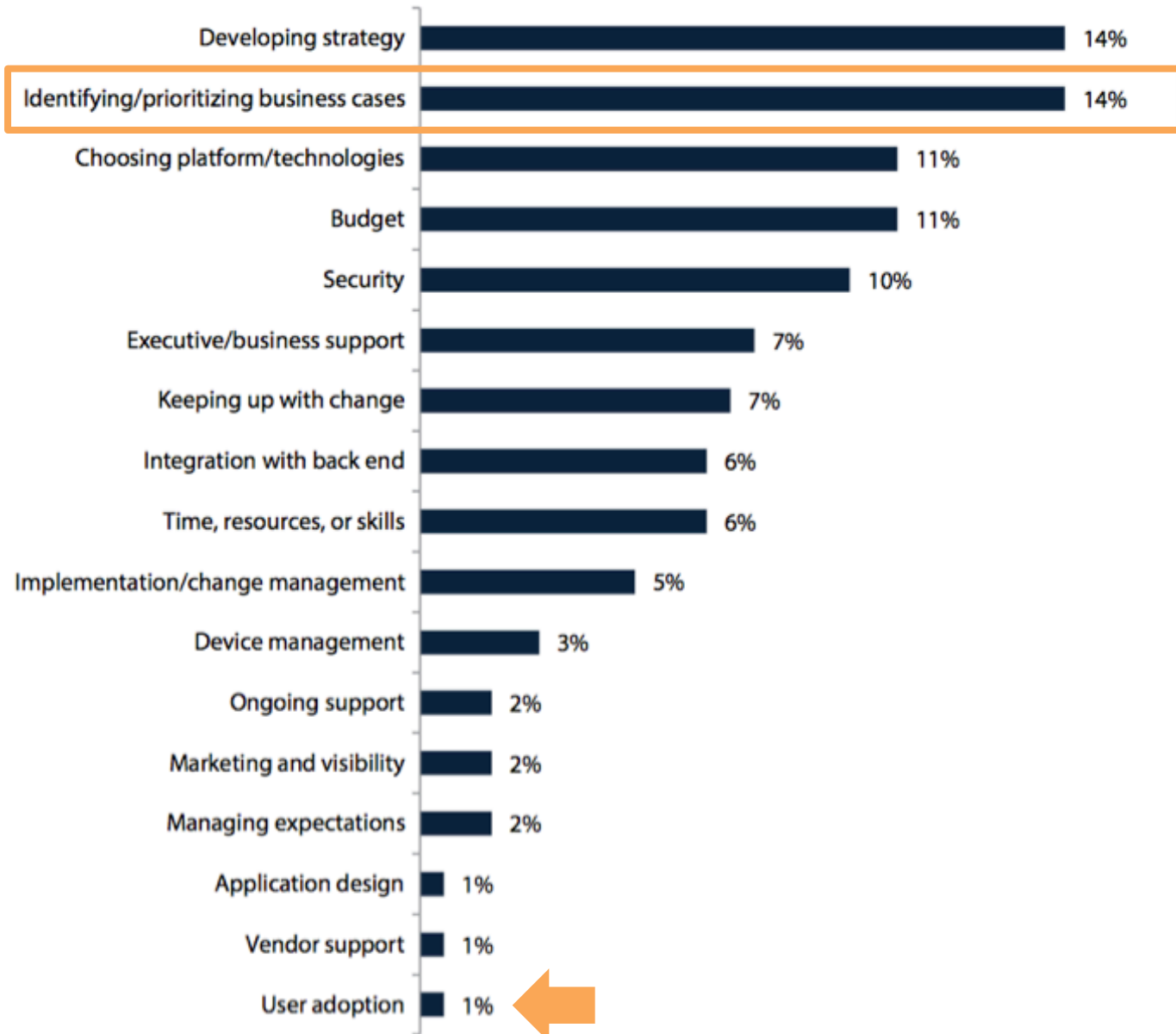
Enterprise Mobility Ecosystem





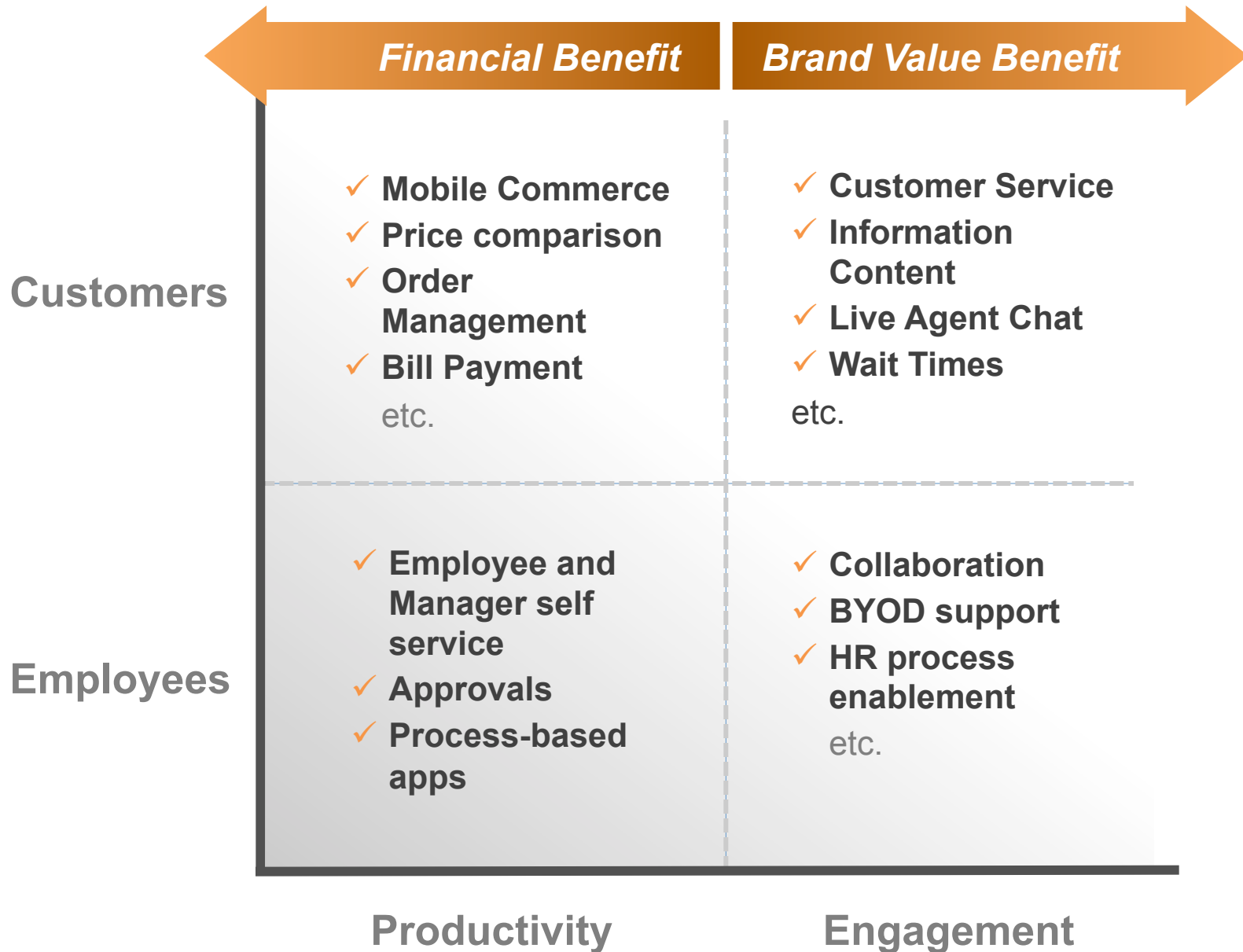
Strategy

Top Challenges to Building a Mobile Strategy

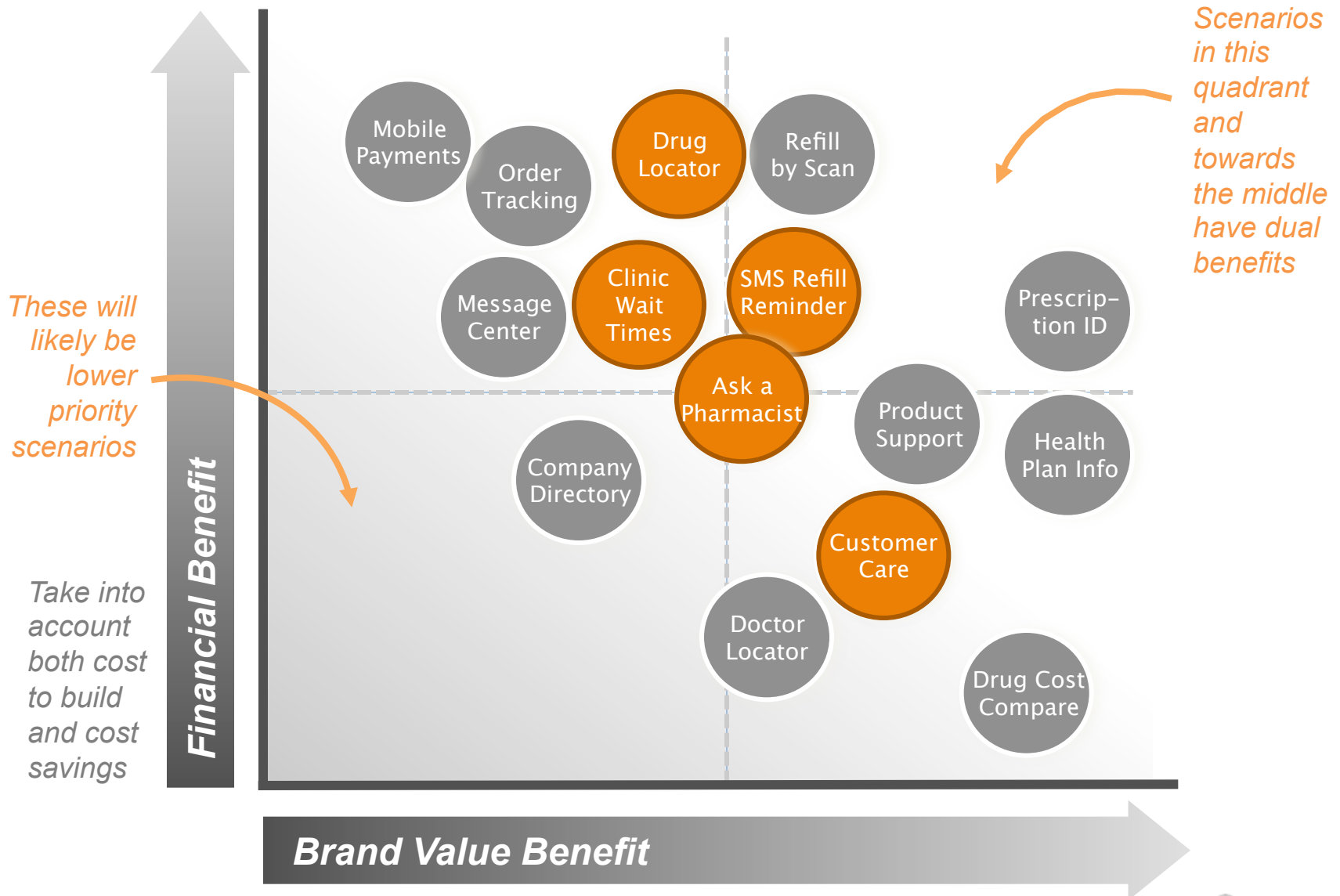


Source: Insider Research & Netcentric Strategies

Mobile Scenario Domain Areas



Mobile Scenario Prioritization – Example Method



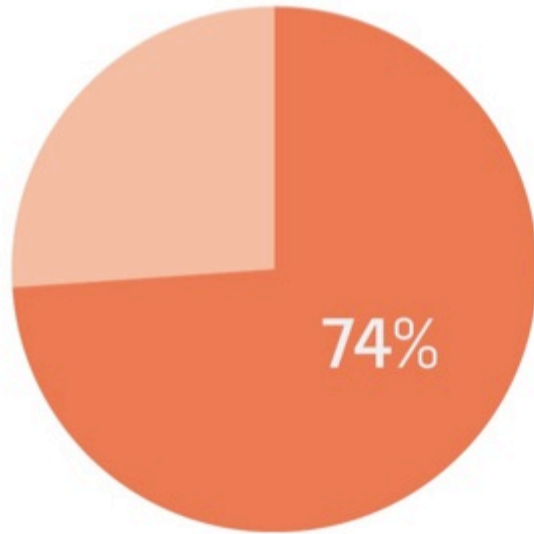


Design

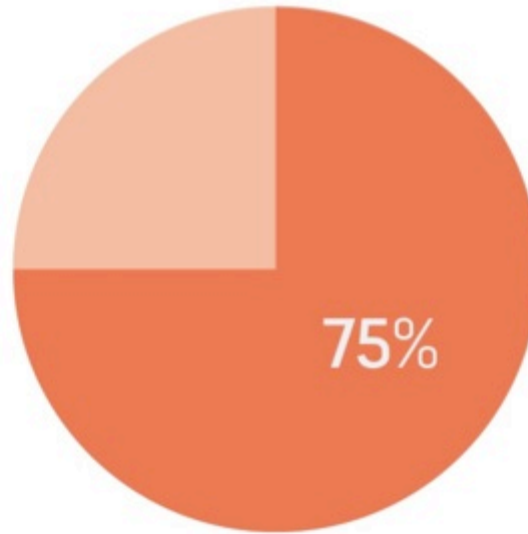
Usability is Critical to Mobile App Adoption

Usability and experience are more important to mobile app users than brand name alone.

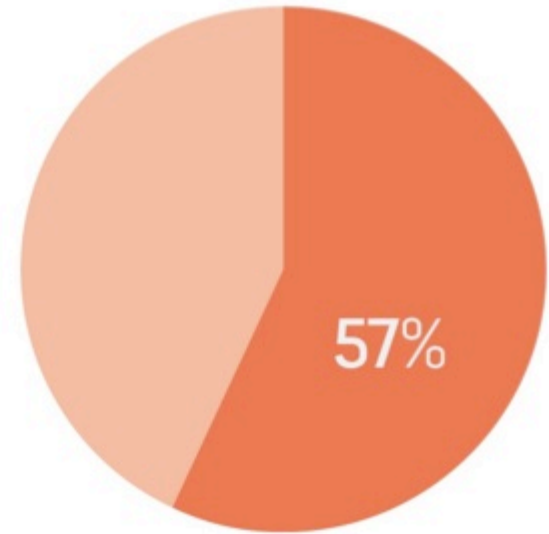
People download apps based on the following considerations:



74% think it should be easy to use



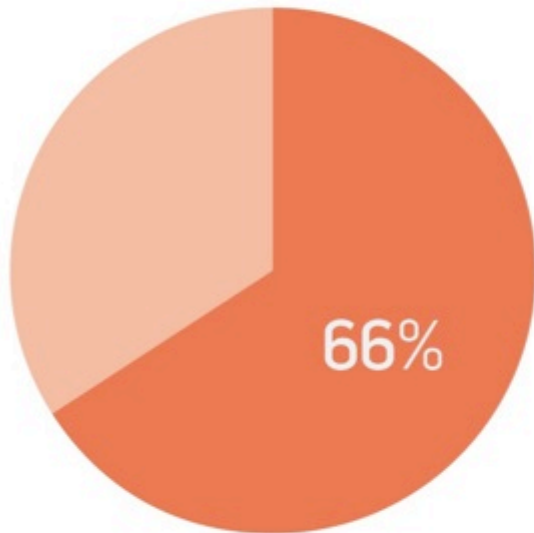
75% think it should do exactly what they want it to do



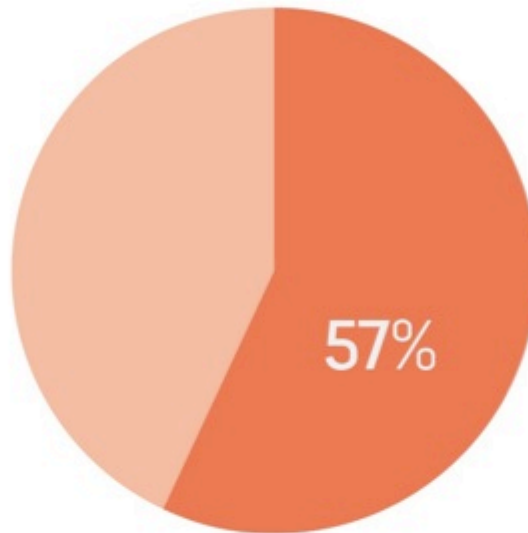
57% think it should be well designed

Positive Experience Drives More Customers

Experience is important — mobile app users look to others for recommendations on mobile apps:



66% have downloaded an app based on a review or recommendation



57% have recommended an app because of a positive experience



Development

Mobile Development Challenges

Mobile platform fragmentation

- New devices and operating system versions released every year

Complexity of development

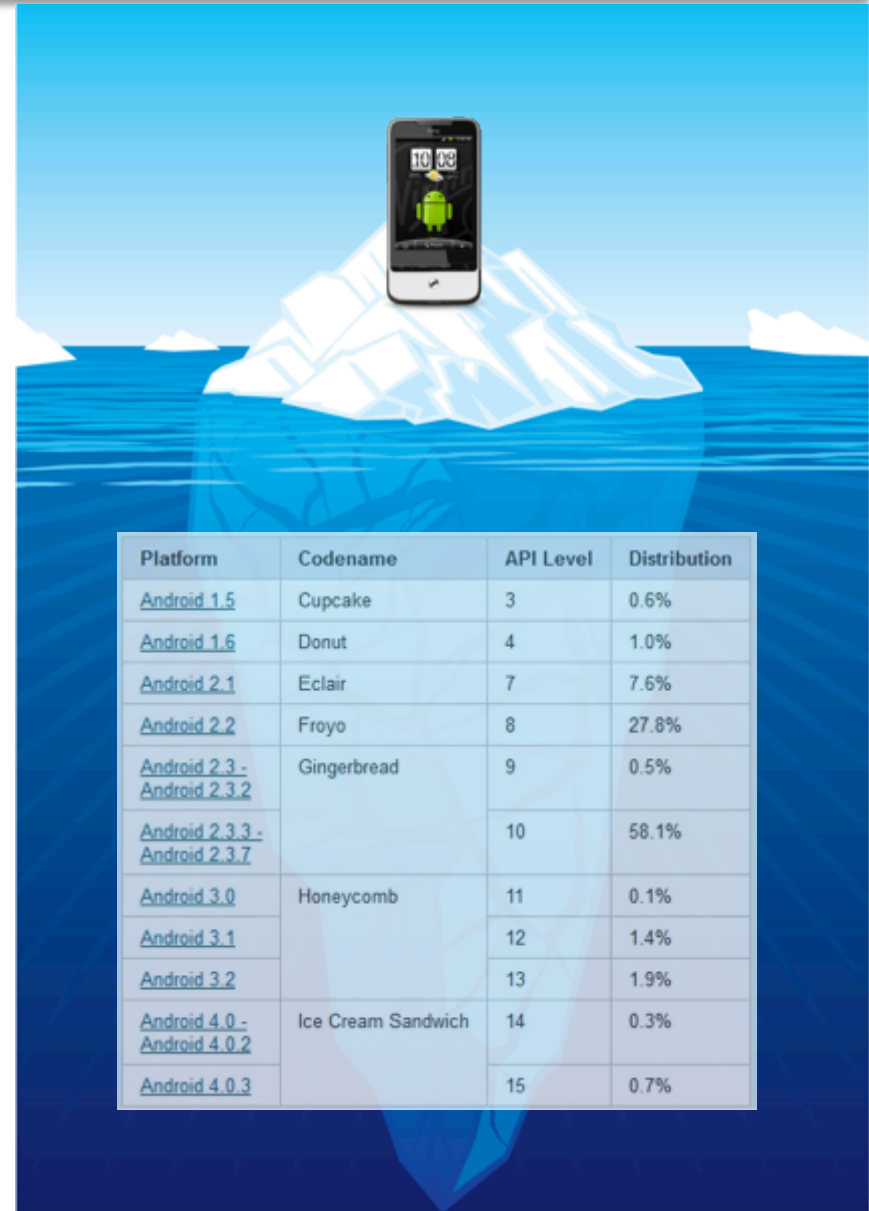
- Need specialized skill-sets for each platform: difficult for non-mobile developers to build apps

Nuances of mobile design

- Mobile apps require different design and interaction
- Can't have one app per system; must consolidate functions

Hidden costs of maintenance

- Adding new features is costly across multiple platforms



HTML5 Gains Momentum (but is not on par with native yet)

HTML5: What Marketers Need to Know

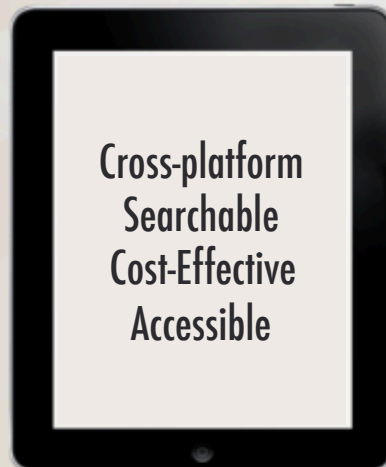
You've likely heard the term 'HTML5' a lot recently, but what does it mean for marketers? HTML5 is a browser-based programming language that can make your content more accessible and interactive, with app-like usability and mobile-friendly delivery. The growth of HTML5 is undeniable, and its benefits for marketers are clear. Here's more:

HTML



of developers are already using HTML5 ⁽¹⁾

Key benefits for marketers ⁽²⁾



Cross-platform
Searchable
Cost-Effective
Accessible



of U.S. mobile users prefer to use the browser vs. native apps ⁽³⁾

Main features of HTML5 ⁽⁴⁾



Rich Media
Geolocation
Native-like Behavior
Swipe and Touch

Mobile Application Types

	Native	Web (HTML5)	Hybrid
Best for	apps that need to perform quickly, work well offline, and access many phone capabilities	apps that are always connected to source systems, and need to run across many device types	apps that need to access some phone capabilities, and are mostly connected
Benefits	<ul style="list-style-type: none">• looks like other native apps• fast response time• works well offline• can be found through app stores• access to all native capabilities• push notification capable	<ul style="list-style-type: none">• single app for all devices• don't need to learn multiple mobile development tools• can make updates available instantly to all users	<ul style="list-style-type: none">• some benefits of native apps• can embed a web page into a native app view for faster development across platforms

Top Services Used by Mobile App Developers

Many app features driven by back-end services...



1. Push Notifications **67.8%**



8. Custom Objects **33.2%**
(fields)



2. Social integration **60.0%**



9. Clients **32.4%**



3. Users **48.6%**
(user and password admin)



10. Photo collections **31.8%**
(storage)



4. Photos **38.6%**



11. Chat **30.3%**



5. Status updates **37.2%**



12. Check-ins **29.2%**



6. Ratings, reviews, likes **36.0%**



13. Posts **28.5%**




7. Places **35.0%**
(points of interest)



14. Email templates **22.7%**

Mobile Development Approaches

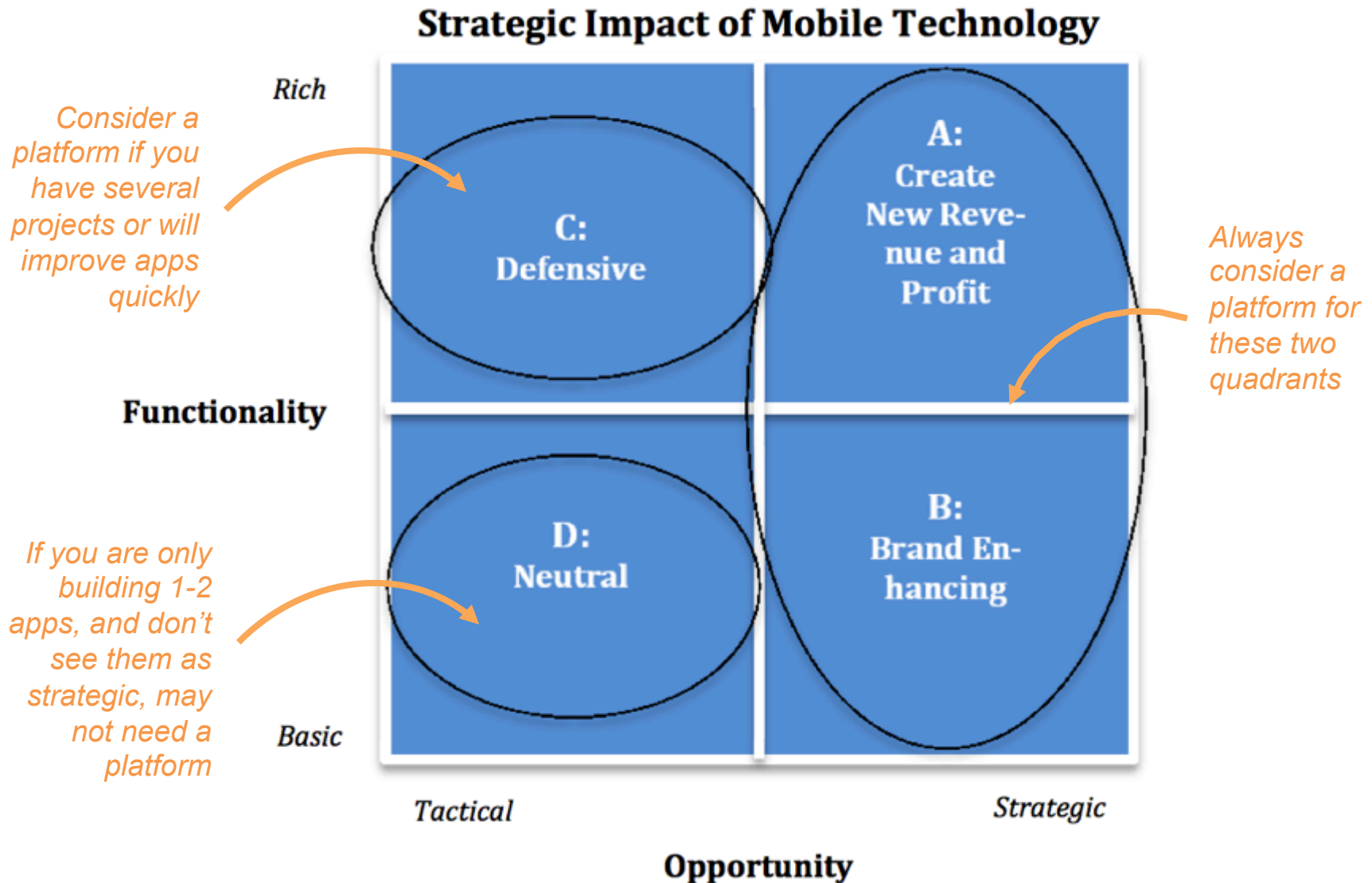
Approach	Pros	Cons
1. Build using native tools from scratch	✓ Unlimited flexibility	✗ Highest TCO ✗ Slowest to market ✗ Difficult to maintain
2. Build using an full-stack mobile platform	✓ Lower TCO ✓ Minimal coding ✓ Multi-device support	✗ UI limitations ✗ Platform lock-in
3. Build using a mobile back-end platform	✓ Lower TCO ✓ Unlimited UI flexibility ✓ Reusable APIs	✗ Custom code for each mobile UI



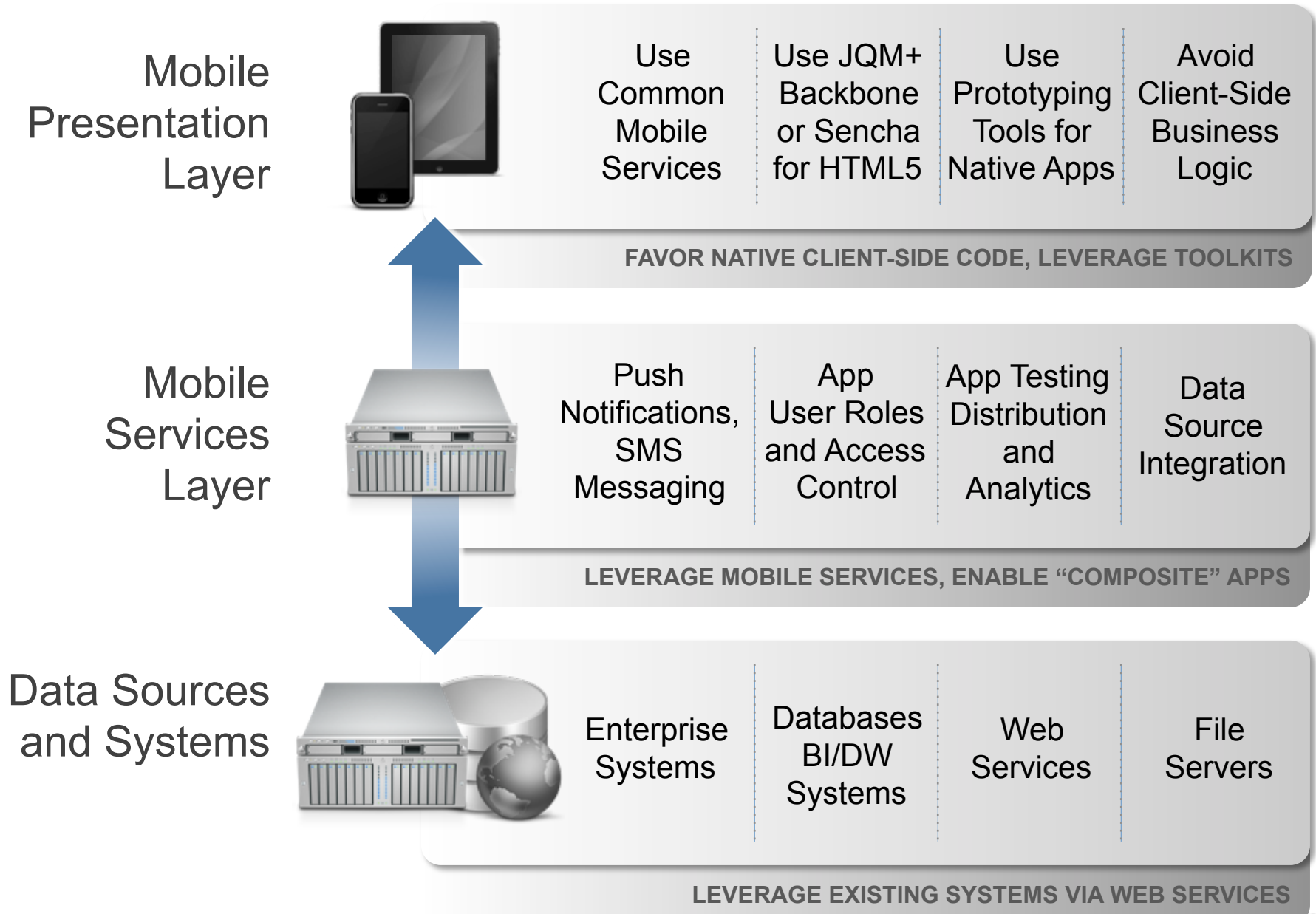
70% of mobile apps *created between 2008-2011 will become obsolete and candidates for re-development by YE2012*

By 2014 up to **40% of Fortune 1000 organizations** *will employ a mobile enterprise application platform for app building*

When Should I Consider a Mobile Platform?



Mobile Architecture Best Practices





Testing

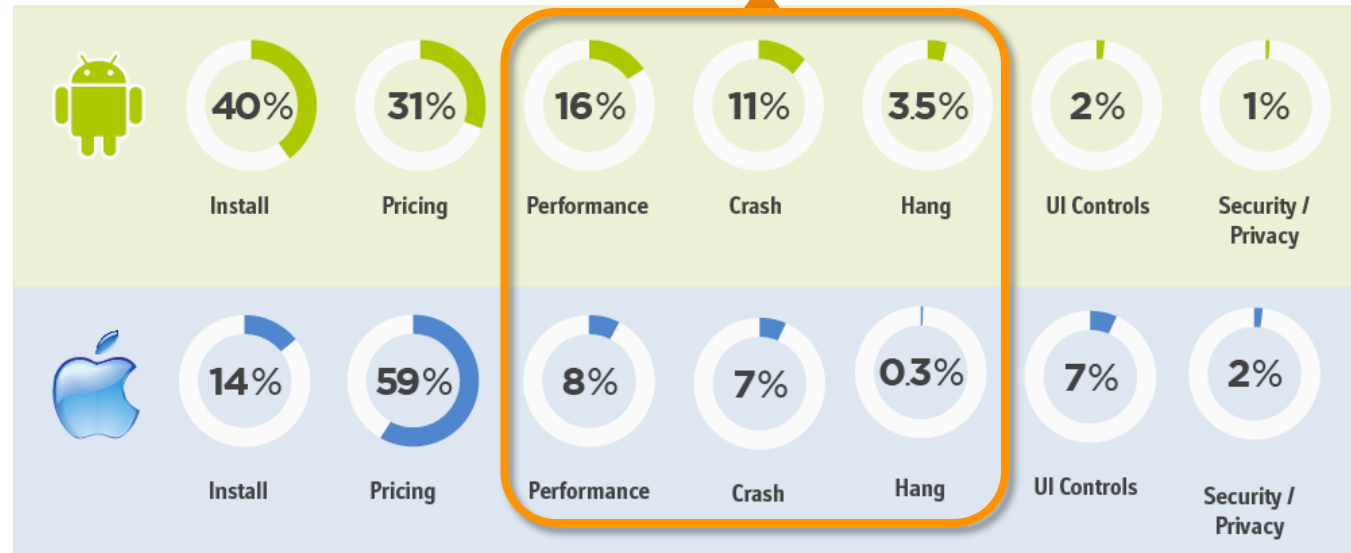
Why Focus on Testing?

Insufficient testing leads to **poor app stability**

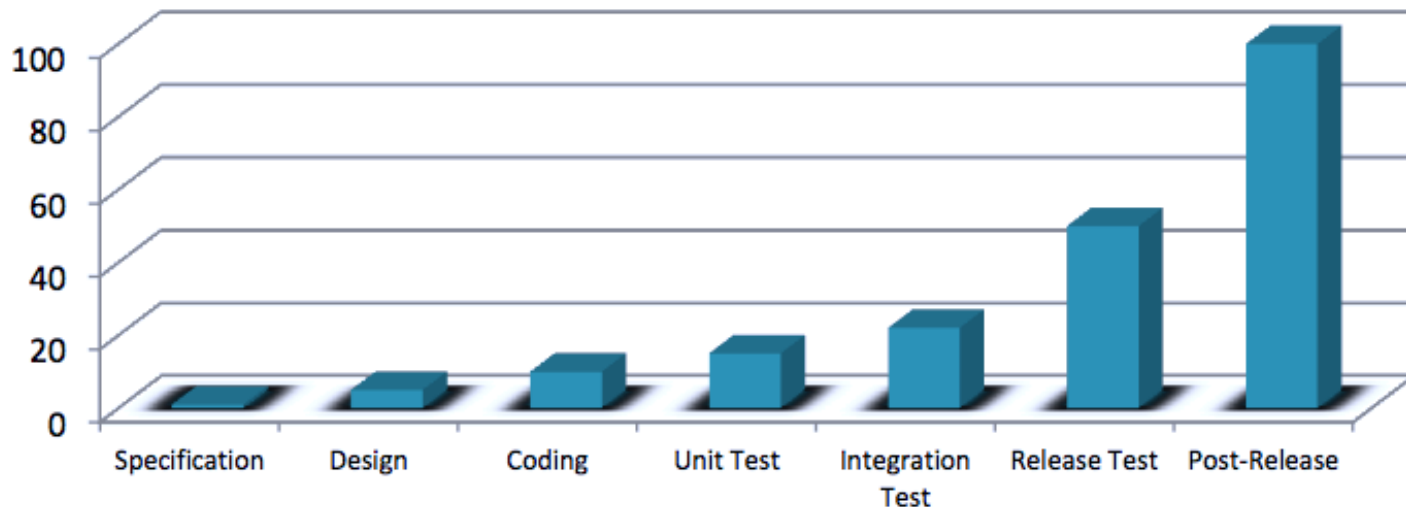
...which leads to **low adoption and ratings**

...which, in the mobile world, is almost **impossible to recover from**

15% to 30% of negative comments based on performance, crashes or hangs



Relative cost of defect, by time of discovery



“Fragmentation” (why you are underestimating test effort)

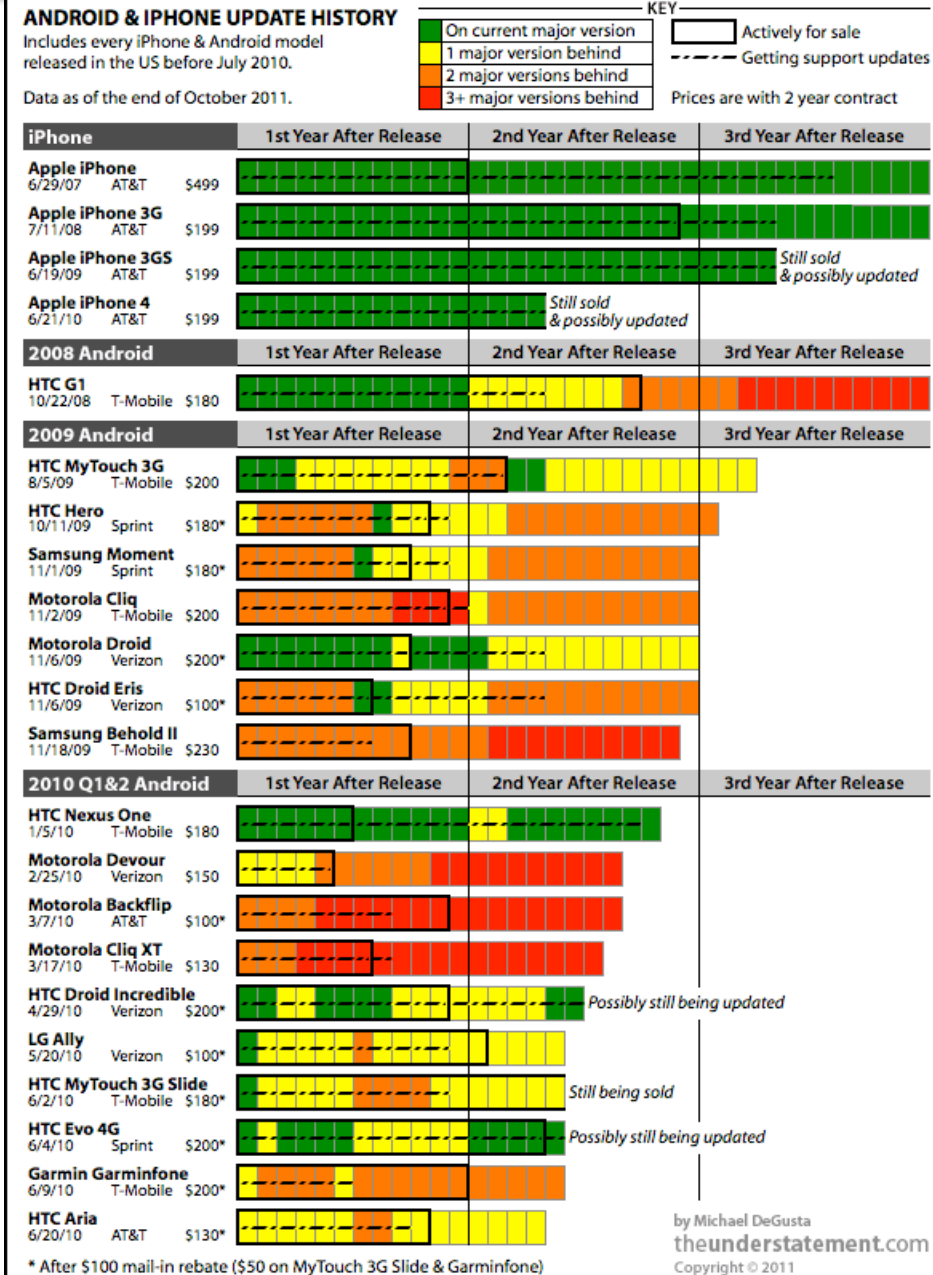
Test Early, Test Often

Use Real Devices

Simulators are insufficient for production readiness: they produce inconsistent results when compared with actual devices

“Four-factor mobile testing”

- ✓ *multiple devices (form factors)*
- ✓ *multiple operating systems*
- ✓ *multiple connection types*
- ✓ *multiple carriers*

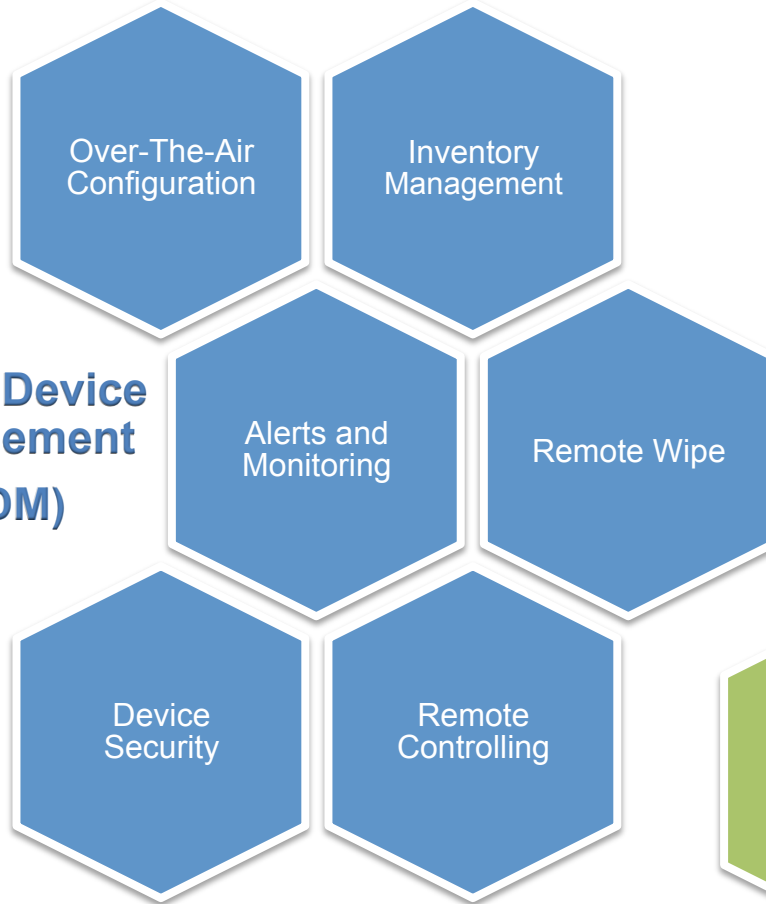




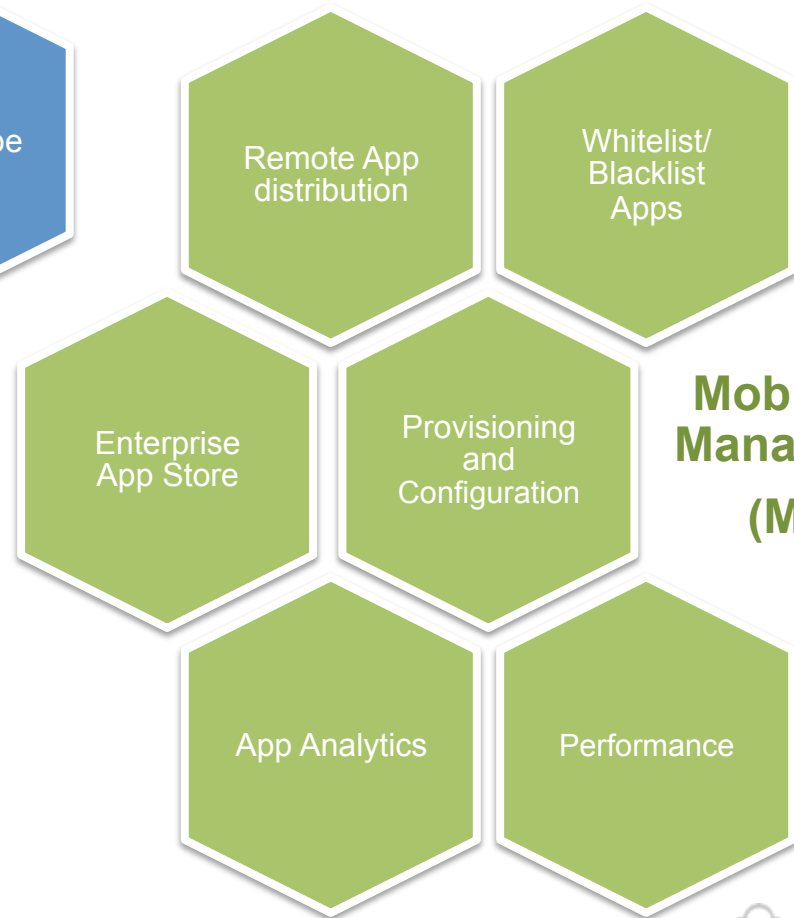
Deployment

Enterprise Mobility Management Ecosystem

Mobile Device Management (MDM)



Mobile App Management (MAM)





MDM Provides Centralized Device Security and Control

“in 2016 350 million employees will use smartphones, 200m will bring their own device”

-Forrester

- ✓ Configure devices over the air for remote employees
- ✓ Secure data, and enable remote wipe in case of loss
- ✓ Remote troubleshooting
- ✓ Manage telecom-related expenses
- ✓ Provide secure access to sensitive corporate data

 **71%** support, tolerate, or plan BYOD support
ONLY 29% said BYOD is prohibited 

NO CONSENSUS ON OPERATING SYSTEM

APPLE IOS **29.59%**
MICROSOFT **27.21%**
ANDROID **24.02%**
BLACKBERRY **14.79%**
SYMBIAN **2.28%**
WEBOS **1.37%**
OTHER **0.73%**



THE FUTURE IS MOBILE DEVICE MANAGEMENT (MDM)

78% of organizations identified mobile device management solutions as extremely or very important part of their IT offerings in the next two years



BUT MDM IS NOT WIDELY IMPLEMENTED TODAY

31% of organizations don't use BYOD enabling technology 
16% said they used desktop virtualization solutions 
15% said they used MDM solutions 
14% use WebApps 



MAM Provides Benefits Across the App Lifecycle

Mobile devices now critical business tools

71% discussing custom mobile applications

71%

66% Discussing a corporate 'app store'

66%

59% Running line-of-business applications

59%

"Private enterprise app stores will be deployed by 60% of IT organizations by 2014"

-Gartner

- ✓ Easier distribution during testing phase
- ✓ App configuration management
- ✓ App performance analytics and crash reporting
- ✓ App usage analytics
- ✓ Easier deployment and control for employee-facing apps
- ✓ Curated internal app store

It's about agility

Efficiency



Workforce effectiveness



Reduce time to accomplish tasks



- Market Trends (consumers and employees)
- Mobility Ecosystem
- 5 Things IT Needs to Know...
 - 1. Strategy:** *prioritize your use cases around ROI*
 - 2. Design:** *invest in design for user adoption*
 - 3. Development:** *reduce TCO with mobile platforms*
 - 4. Testing:** *test early and test often*
 - 5. Deployment:** *use MAM during testing phase*



Thank You!



Richard Mendis

rmendis@anypresence.com

1-800-817-5217 ext. 105

11800 Sunrise Valley Drive, Suite 420

Reston, VA 20191

www.anypresence.com