

Optimise the Mobile Experience and Drive Competitive Advantage

Bill Loller, VP Mobile, IBM Tealeaf



A mobile enterprise needs...



Visibility into the customer mobile experience to improve conversions and grow revenue

Tealeaf CX Mobile

Industry-leading customer experience management solutions to mobile websites, native applications, and hybrid apps including support for HTML5.

- **Capture and high-fidelity replay of mobile gestures*** for mobile web sessions on iOS and Android-based devices help optimize users' experiences on mobile web applications .
- **Analyze mobile user behaviors and quantify business impact** of user struggles with IBM Tealeaf integrated solutions
- Add-on **Heatmap, Link Analytics, Form Analytics, and Attention Map analytics** for mobile-web applications



Mobile Analytics

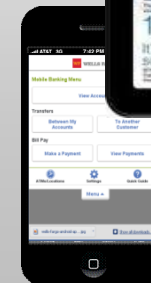
Native Apps



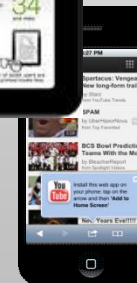
Mobile Web



Tablets



Hybrid Apps



HTML5

* Mobile gestures such as zoom in/out, pinch in/out, scroll left/right and orientation change

** Requires Tealeaf cxOverstat add-on

Mobile Trends



Mobile Driving Success/Failure

USA TODAY NEWS SPORTS LIFE MONEY TECH TRAVEL OPINION 75°

Facebook shares soar on earnings, mobile gains

Matt Krantz, USA TODAY 5 C

eBay Reports Solid Earnings Benefiting From Mobile

“eBay sees mobile as a game changer”

The Washington Post Politics Opinions Local Sports National World Business Tech

BUSINESS

The Washington Post
with Bloomberg

Posted at 01:34 PM ET, 10/19/2012

Google, Microsoft earnings illustrate mobile struggle #thecircuit



The Mobility Spectrum



Past → Present → Future? →



*Mobility is not about devices, it is about **People being increasingly Mobile**, and paradigms that enable them*



The Mobility Spectrum



Units Shipped



1985



Tethered & Tolerant

2000



Limited Flexibility

2008



Browse
AsYou Go

2011



Always On

Future

Ubiquitous Mobile Penetration

GLOBAL MOBILE TRENDS

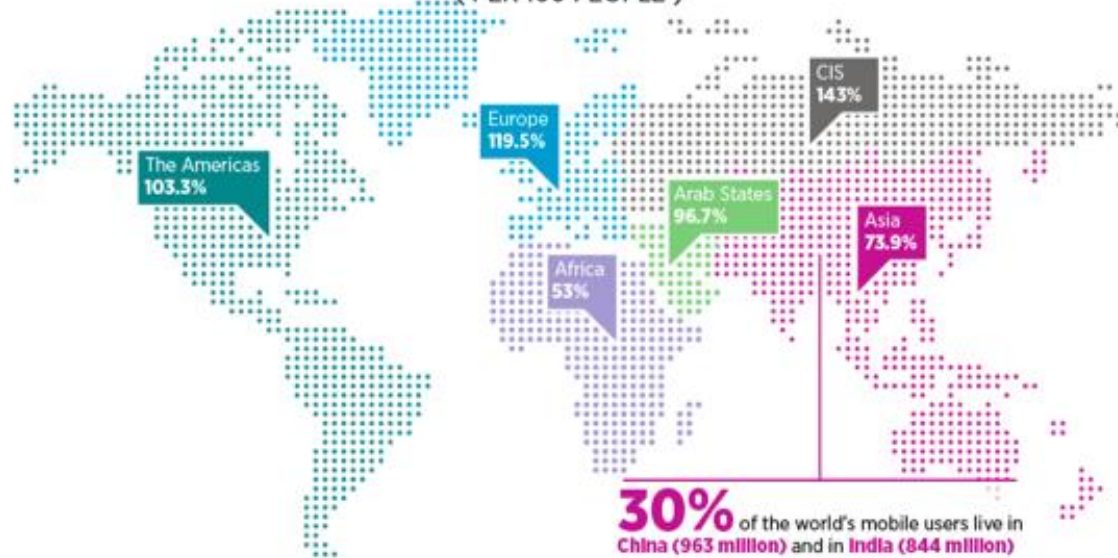


Out of the 7 billion people worldwide, 5.9 billion are mobile phone users
87%
 of the world's population have mobile phones!



Smartphone sales are up
63.1%
 from 2010
488.5 million units
 were sold in 2011

Mobile Users by % of Population (PER 100 PEOPLE)



70 million iPad users in US in 2013
 - eMarketer



Consumer Behavior Increasingly Mobile Focused

MOBILE WEB



There are
1.2 billion
 mobile web users worldwide, that's
17% of the global population

Mobile web subscription already
 outnumber fixed broadband
 subscriptions

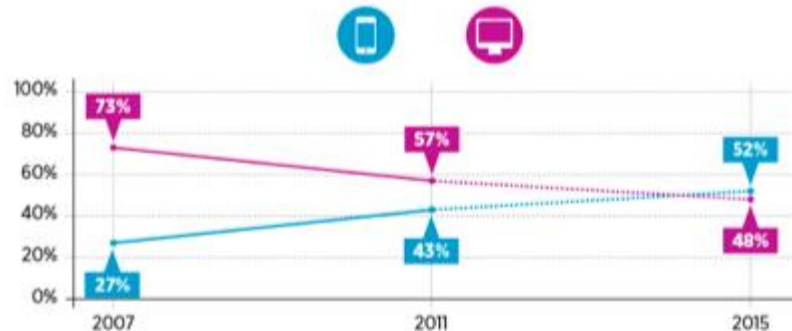
2:1



In January 2012,
8.5%
 of website hits came from a mobile device.
Double the amount
 compared to the same time last year!

Use of Mobile and Desktop Web

Mobile web surfing is estimated to overtake desktop web surfing by 2015



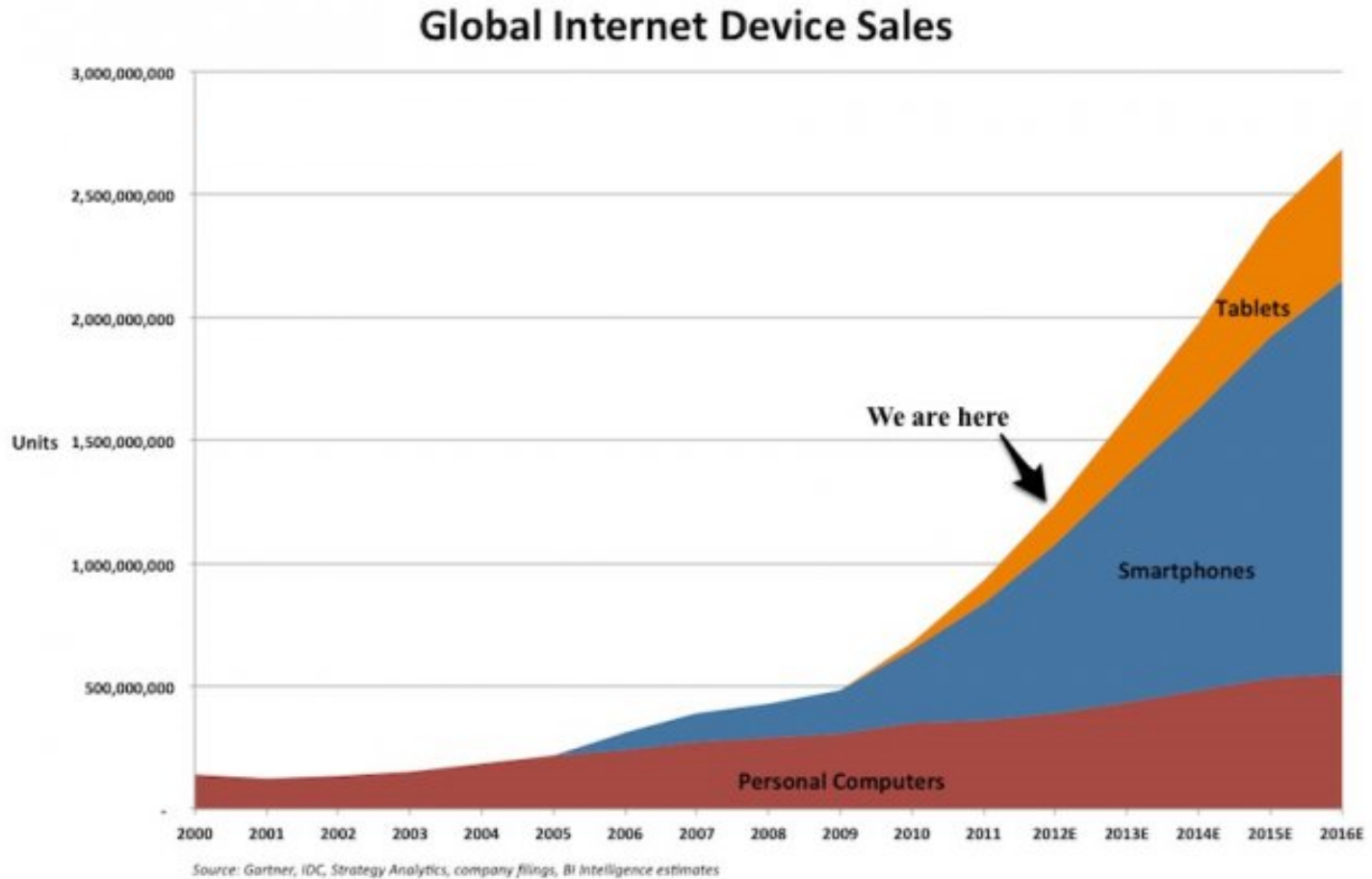
The iPhone is bigger than Microsoft



Source: APPL and MSFT SEC Filings



Tablets alone will surpass PC sales in 2 to 3 years





Tablets sold per day in Q1: ~502,000



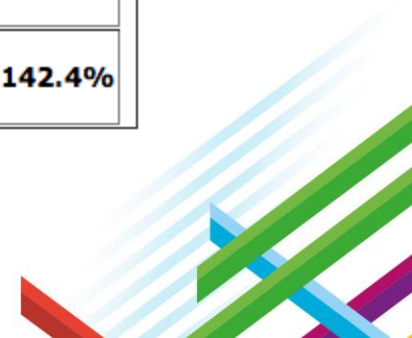
Babies born per day in Q1: ~370,000



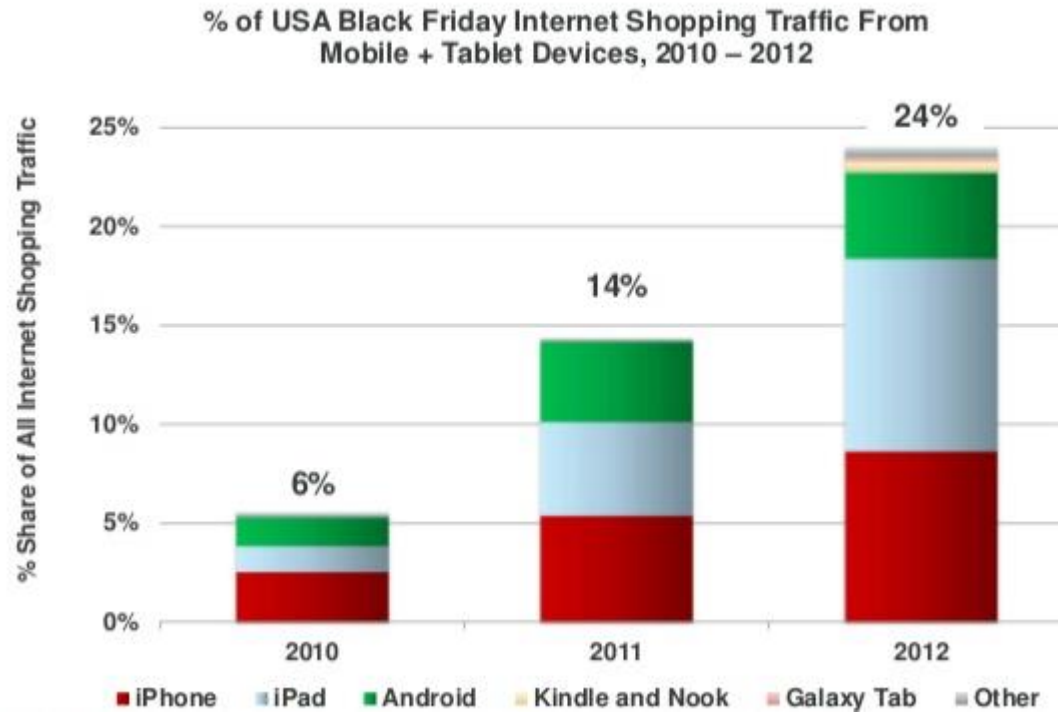
Q1 2013 Tablet Shipments - IDC

Top Five Tablet Vendors, Shipments, and Market Share, First Quarter 2013 (Shipments in millions)

Vendor	1Q13 Unit Shipments	1Q13 Market Share	1Q12 Unit Shipments	1Q12 Market Share	Year-over-Year Growth
1. Apple	19.5	39.6%	11.8	58.1%	65.3%
2. Samsung	8.8	17.9%	2.3	11.3%	282.6%
3. ASUS	2.7	5.5%	0.6	3.1%	350.0%
4. Amazon.com Inc.	1.8	3.7%	0.7	3.6%	157.1%
5. Microsoft	0.9	1.8%	0.0	N/A	N/A
Others	15.5	31.5%	4.9	24.1%	216.3%
Total	49.2	100.0%	20.3	100.0%	142.4%



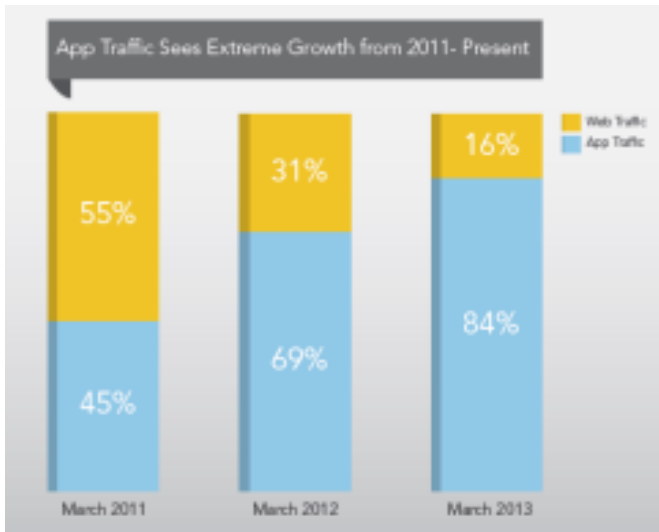
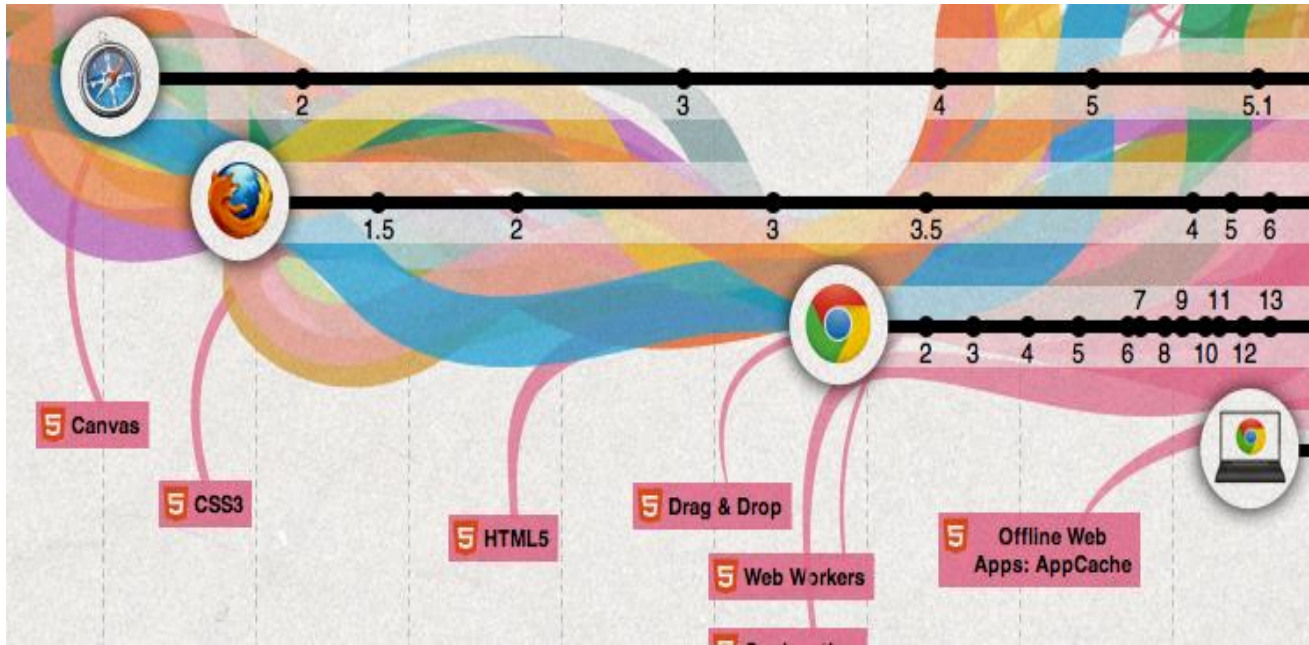
Mobile Commerce Surging



Source: Mary Meeker/KPCB



What's the future?

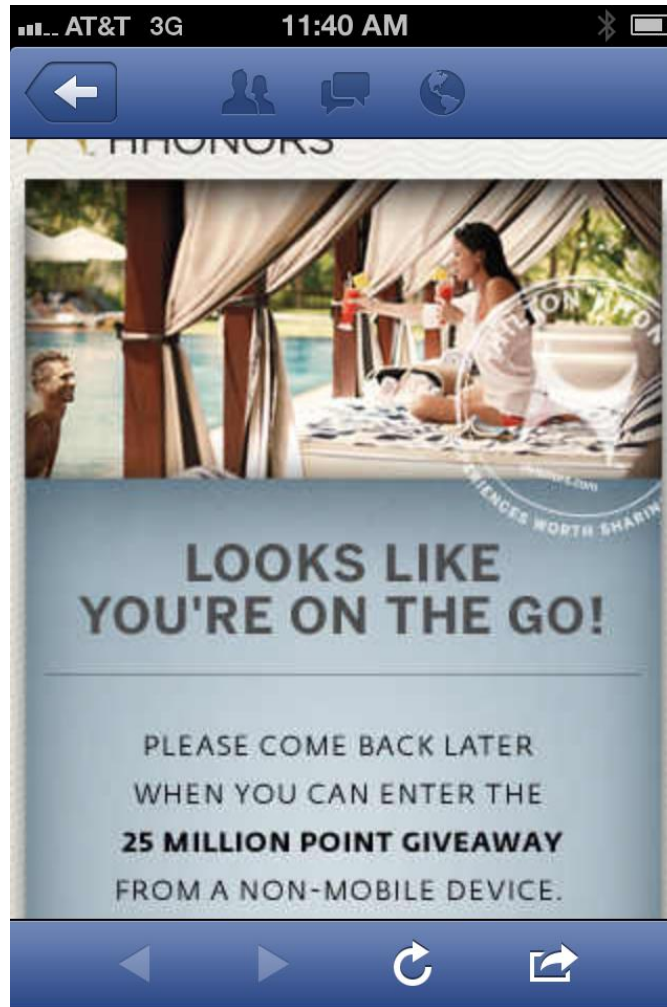


Expectations vs. Realities

85% of adults who have completed a mobile transaction in the past year ***expect the experience to be better than using a laptop or desktop*** computer

Yet 41% of comments about the top mobile companies expressed frustration

Consumer Mobile Expectations Are High



Consumer Mobile Expectations Are High



The screenshot shows the NFL Shop mobile website interface. At the top, the browser status bar indicates Verizon service, 3:24 PM, and 96% battery. The address bar shows the URL www.nflshop.com/product/index.jsp?productId. Below the browser, there are navigation tabs for Finance, CNN.com, Yahoo! Mail, Devil's To..., Amazon.c..., San Fr..., and Super Bo... The main header features the NFL Shop logo, a search bar, and navigation links for NFL.COM, CUSTOMER SERVICE, TRACK ORDER, REQUEST CATALOG, and CART (2 Items). A secondary navigation bar includes links for SIGN UP & SAVE 10%, NEW ARRIVALS, CUSTOM SHOP, COLLEGE, and OUTLET. The main content area is divided into two sections for 'SAN FRANCISCO 49ERS CONFERENCE CHAMPS GEAR' and 'BALTIMORE RAVENS CONFERENCE CHAMPS GEAR', each with a 'SHOP NOW' button. Below this, there is a message about downloading a flash player. The product details section includes tabs for PRODUCT INFO, FEATURES, and PRODUCT REVIEWS. The text describes a customizable NFL youth t-shirt. To the right, there are sections for AVAILABILITY (In stock, leaves warehouse in 2 - 3 full business days) and SHIPPING (Standard Ground Service Available). Below the product details is a 'Recently Viewed Products' section with four items: San Francisco 49ers Youth Custom Short Sleeve T-Shirt (\$17.99), Men's Nike Baltimore Ravens Joe Flacco Game Team Color Jersey (\$99.99 to 109.99), Men's Nike Baltimore Ravens Ray Lewis Super Bowl XLVII Game Team Color Jersey (\$119.99 to 129.99), and Men's Nike San Francisco 49ers Colin Kaepernick Super Bowl XLVII Game Team Color Jersey (\$119.99 to 129.99). At the bottom, there is a 'GO INSIDE THE NFL SHOP' banner with a 'SPECIAL OFFERS, SAVINGS ALERTS, AND MORE.' section and a 'Enter Here' button. The footer contains social media icons, contact information (1-877-NFL-SHOP), and various links like Privacy Policy, Terms & Conditions, and My Account.



Top consumer struggles

Inability to complete a transaction
Search functionality
User interface



63% of all online adults would be less likely to buy from a company via other purchase channels if they experienced a problem conducting a mobile transaction.



Mobile Commerce: Utter Frustration



@bevan - _____ mobile is down. Not letting me checkout. CS says it's a known problem. On BlackFriday? I just missed two deals!!



*@gdomdom - @_____ Your app sucks for trying to shop!!!
Get your mobile act together*

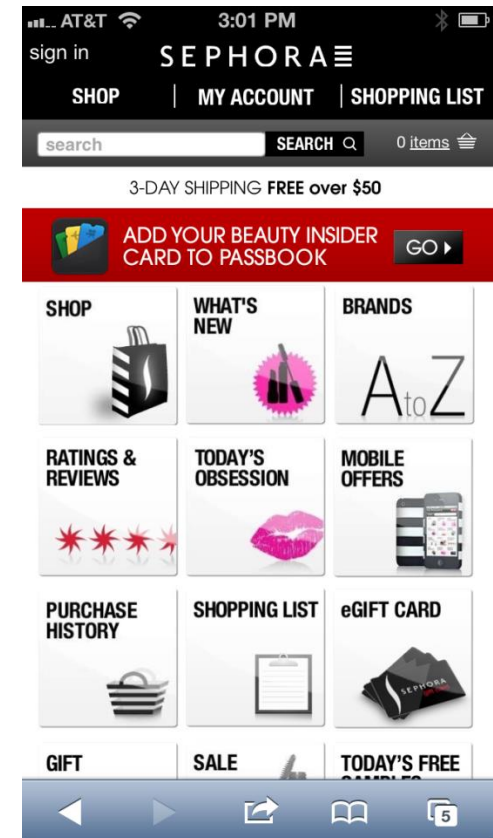
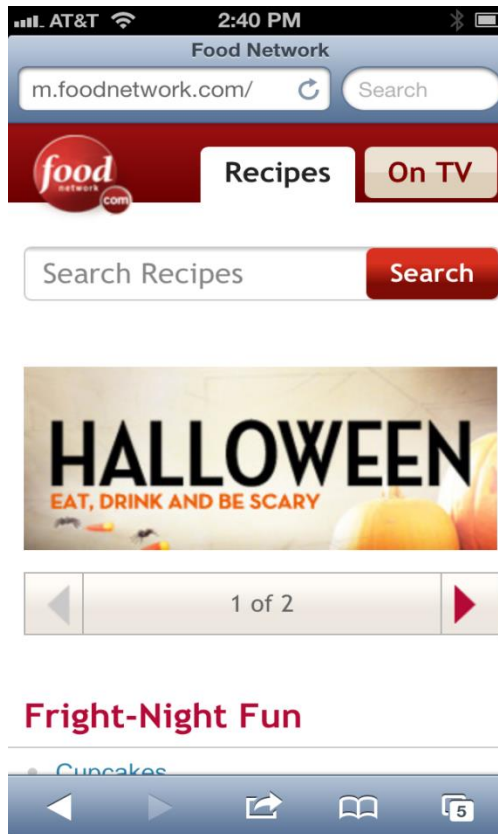


@christenfolsen - Dear _____, please fix the mobile version of your website or I am going to kill you.

Mobile Stars

Some companies are getting mobile right and people are talking about it

- Convenience
- Ease of use
- Time savings



Mobile Commerce: Pure Delight



@beccbrown - Wow, just did half my #Christmas shopping on the bus, using my #iPhone _____ app. #ihearttech #blackfridaybedamned



@LiveLoveLaugh88 - I'm like a fiend with these _____ deals... setting alarms on my phone and checking _____ app every 15 mins. #BlackFriday



@eclat521 - Well- that's my boy's Xmas presents ordered, from my phone, thanks to _____ app. Too easy!

Lessons Learned

Mobile consumers are task oriented

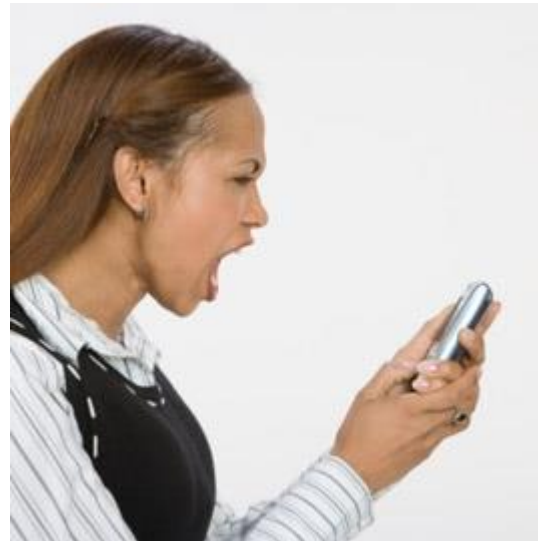
Give them the essentials

Give it to them consistently (match mobile and regular web site)

Make it readable

Serve it up quickly

Even if you do all of this.....

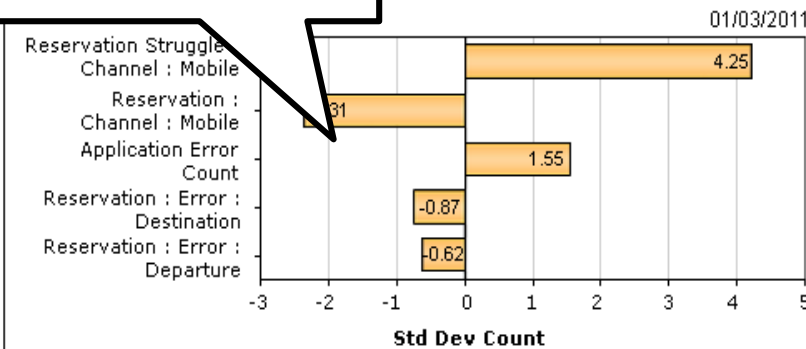


Product Overview

Mobile dashboard

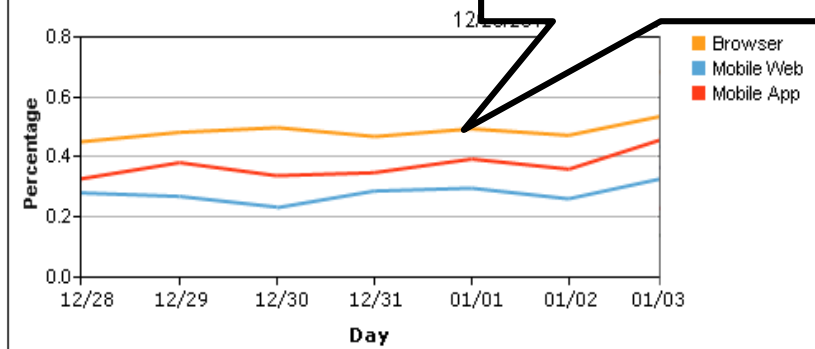
Automatic detection of mobile customer struggle

Mobile Demo_012511 / 1a. CalAir Dashboard

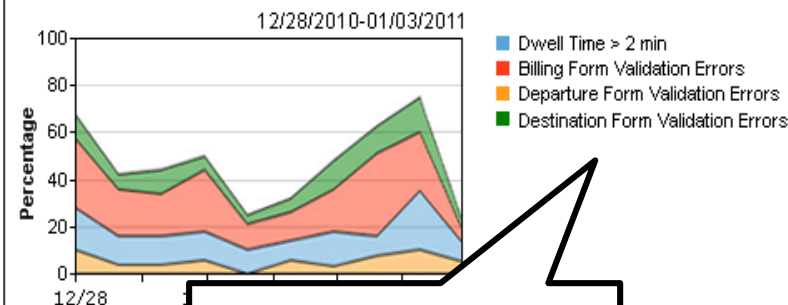


Cross channel analytics: web, app, mobile site

Conversion by Channel

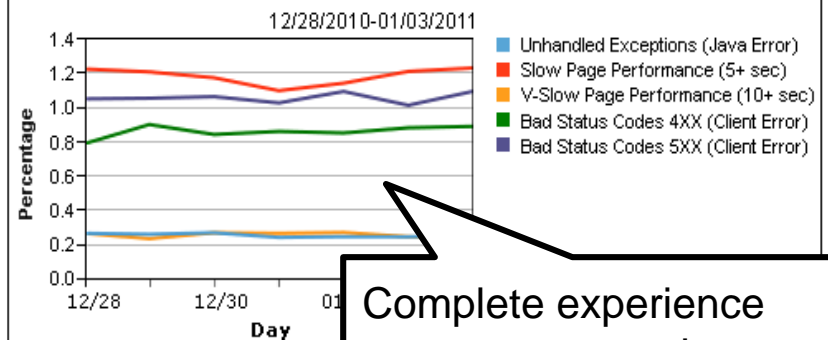


Usability Issues



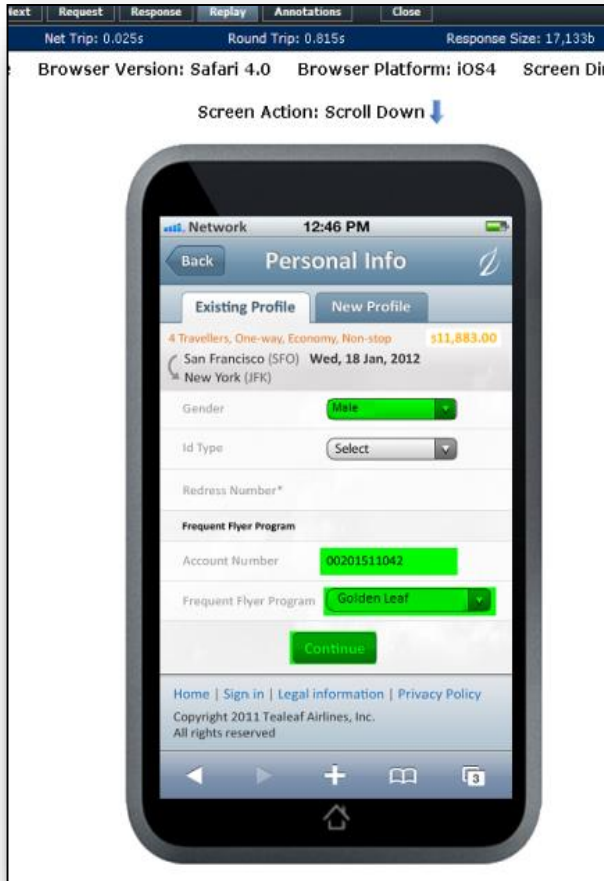
In screen visibility (orientation, swipe, form entry, clicks) to track usability issues

System Issues

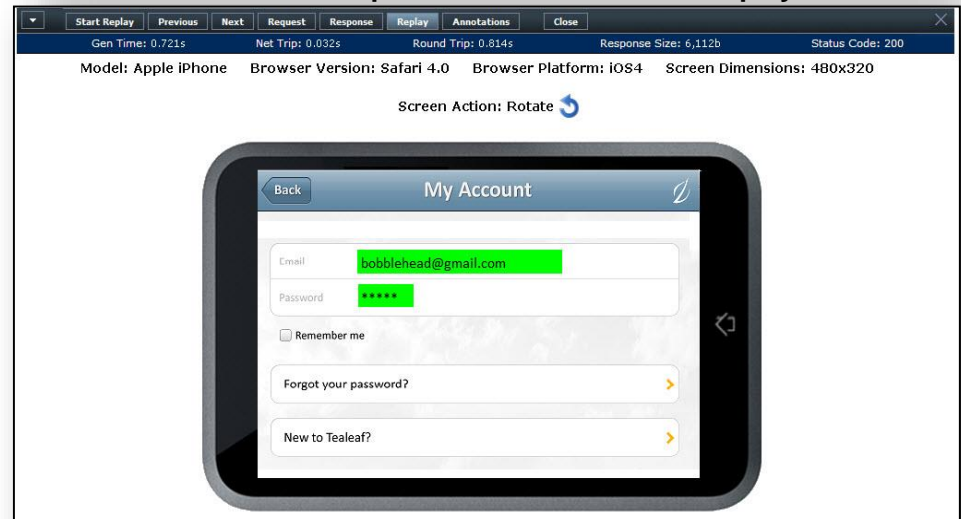


Complete experience capture: user actions, application, environmental and network data

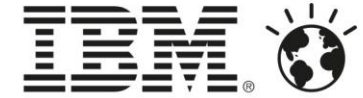
Mobile Web



Orientation-Specific Enhanced Mobile Replay



Mobile DOM Rendering



The screenshot shows a web browser window with the following details:

- Navigation:** Start History, Previous, Next, Reload, Response, History, DevTools
- Page:** 1 home.page, 2 http://m.strausandplesser.com/, 3 http://m.strausandplesser.com/, 4 http://m.strausandplesser.com/, 5 http://m.strausandplesser.com/, 6 http://m.strausandplesser.com/, 7 Search results for: 'Seng1134', 8 Straus and Plesser, 9 Straus and Plesser
- Page Info:** Gen Time: 0.545, Net Trip: 0.008, Round Trip: 0.554, Response Size: 24,588b, Status Code: 200
- Browser Info:** Browser: Safari, Browser Platform: iPhone OS, Browser Major Version: Safari5.1, Traffic Type: MOBILE, Reply Renderer: ChromeHTML

The mobile site content includes:

- Header:** Straws & Plesser logo, search bar, and navigation links (Home, My Account, My Cart, My Wishlist, My Orders, My Account, My Profile, My Address, My Payment, My Language, My Cart).
- Main Banner:** 'Magento end of summer SALE!' with 'Home Improvement' category.
- Product Listings:** 'Anastria' (Limited Offer 20% OFF), 'Buy Canon KZBEL' (Starting at \$499), 'FREE SHIPPING on orders over \$50', 'Get Soiling Products' (listing various items like 'Blue Ledge', 'Red High Heels', 'Dustbuster', 'Laptop', 'Shower Head', 'Socks', 'Sneakers', 'Sunglasses', 'Socks', 'Sneakers', 'Socks', 'Sneakers'), 'POPULAR TWO'S' (listing 'General Handy SEXY', 'General Handy SEXY', 'General Handy SEXY', 'General Handy SEXY'), 'COMMUNITY POLL' (What is your favorite Magento feature?), and 'NEW ACCEPTING PayPal'.
- Footer:** 'Home | Customer Service | Site Map | Site in French | My account | Contact Us | Mobile Version | © 2012 Straws & Plesser. All rights reserved. This is a demo store. Any orders placed through this store will NOT be honored or fulfilled.'

Waiting for williamson-ibm...



Mobile Usability

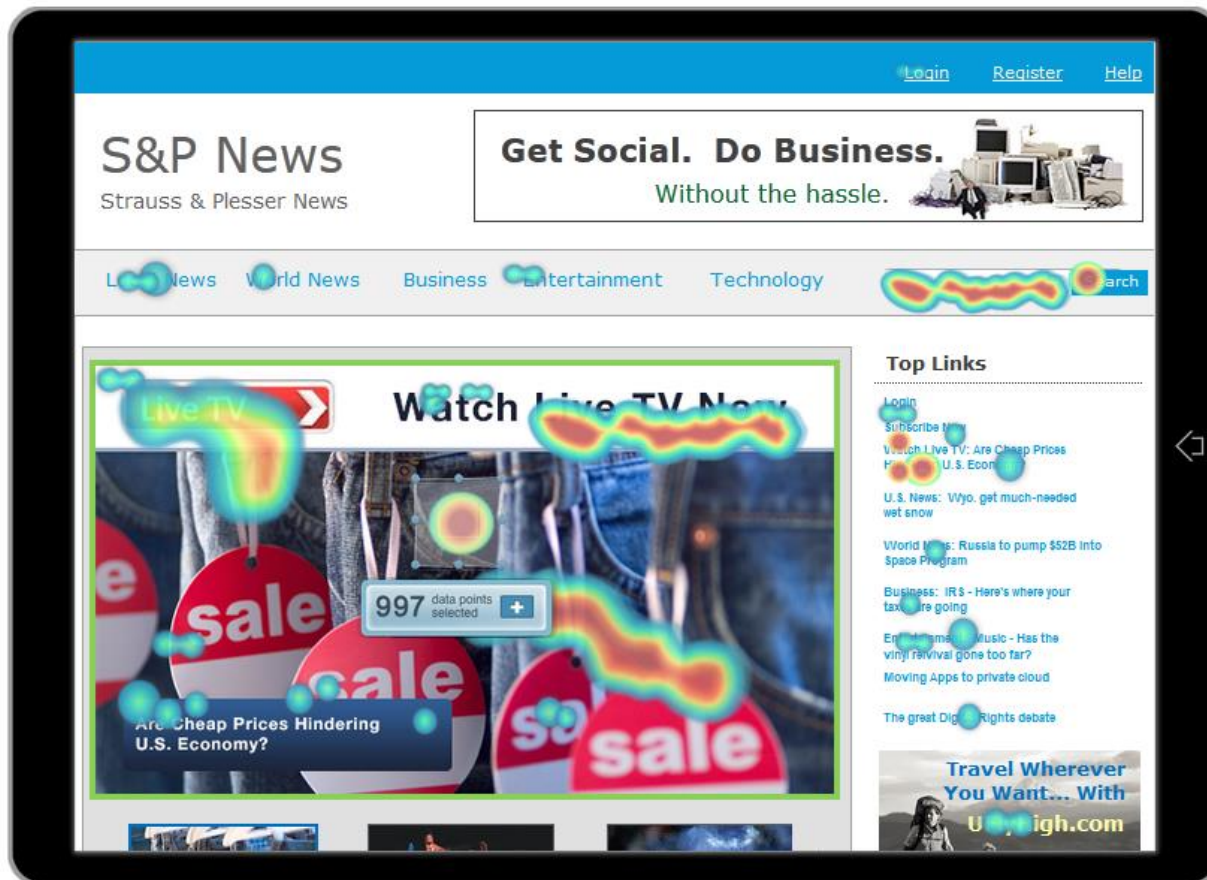
IBM Tealeaf CX

Search Online Help [Q] Admin [?] IBM

Start Replay Previous Next Request Response Replay Overlays

04/01/2013 Filter by data: Campaign Success Drill down selector: [icon]

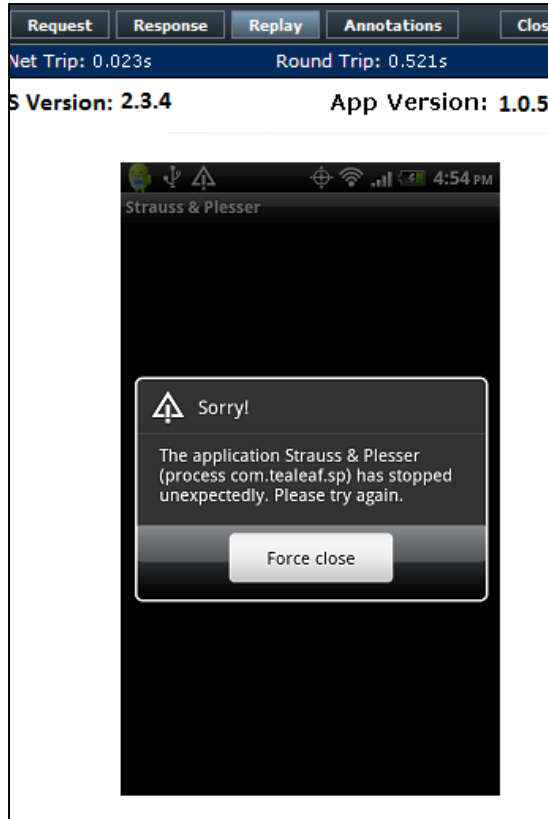
Browser: webExplorer Browser Platform: Tablet OS Browser Major Version: webExplorer 6.0 Traffic Type: Tablet Replay Render: Chrome|HTML



The screenshot shows the S&P News website on a tablet. The page features a blue header with 'Login', 'Register', and 'Help' links. Below the header is a navigation bar with categories: 'News', 'World News', 'Business', 'Entertainment', and 'Technology'. A search bar is located on the right side of the navigation bar. The main content area includes a 'Watch Live TV Now' section with a heatmap overlay showing high interaction in the 'Live TV' button and the text 'Watch Live TV Now'. Below this is a featured article titled 'Are Cheap Prices Hindering U.S. Economy?' with a heatmap overlay showing high interaction in the article title and image. To the right of the main content is a 'Top Links' section with a heatmap overlay showing high interaction in the 'Login' link. At the bottom of the page is a banner for 'Travel Wherever You Want... With U.S. igh.com'.



Native Apps



```

Browser: NoUserAgentHeaderFound
Traffic Type: NoU

KspITLB=0
RspITLA=31504
ConnSpeed=197308
ConnType=DSL
WS_Generation=1217
WS_Grade=ExcellentWS
WS_GradeEx=0
NT_Total=31504
NT_Grade=ExcellentNT
NT_GradeEx=0
RT_Total=32721
RT_Grade=ExcellentRT
RT_GradeEx=0

[urlfield]
Android=ImageTest

[RequestBody]
{"serialNumber":30,"messageVersion":"0.0.0.2","sessions":[{"startTime":1333644402188,"id":"4879AEF317C446D3B5AD99B4EE66754C"},
{"offset":25479,"type":6,"contextOffset":4827,"exception":{"description":"divide by zero","stackTrace":["java.lang.ArithmeticException: divide
com.tealeaf.sp.activities.BaseActivity.crashTheApp(BaseActivity.java:61)\n\tat com.tealeaf.sp.activities.BaseActivity.onOptionsItemSelected(B
android.app.Activity.onOptionsItemSelected(Activity.java:2264)\n\tat com.android.internal.policy.impl.PhoneWindow.onOptionsItemSelected(Phon
com.android.internal.view.menu.MenuitemImpl.invoke(MenuitemImpl.java:145)\n\tat com.android.internal.view.menu.MenuBuilder.performIt
com.android.internal.view.menu.IconMenuView.invokeItem(IconMenuView.java:553)\n\tat
com.android.internal.view.menu.IconMenuView.performClick(IconMenuView.java:122)\n\tat android.view.View$PerformClick.run(V
android.os.Handler.handleCallback(Handler.java:587)\n\tat android.os.Handler.dispatchMessage(Handler.java:92)\n\tat android.os.Looper.loop(
android.app.ActivityThread.main(ActivityThread.java:3906)\n\tat java.lang.reflect.Method.invokeNative(Native Method)\n\tat java.lang.reflect
com.android.internal.os.ZygoteInit$MethodAndArgsCaller.run(ZygoteInit.java:840)\n\tat com.android.internal.os.ZygoteInit.main(ZygoteInit.ja
dalvik.system.NativeStart.main(Native Method)\n"],"name":"class java.lang.ArithmeticException"}]}],"clientEnvironment":{"mobileEnvironm
{"keyboardType":"NO_KEYS","brand":"verizon","fingerPrint":"verizon/snyder_vzw/cdma_snyder;2.3.6/6.5.1-167_DHD.14_M2-5/111228-

```

Best Practices

Common Mistakes

Not accounting for size/width of the finger

Visual overload

Making user fill out long forms

Not accounting for device width

Heavy or too many image files

Not using CSS3/HTML5 (reduces need for images)

Opaque design – user can't figure out what is happening

Not setting a home screen icon

Making pages non-zoomable



Best Practice: Make It Easy

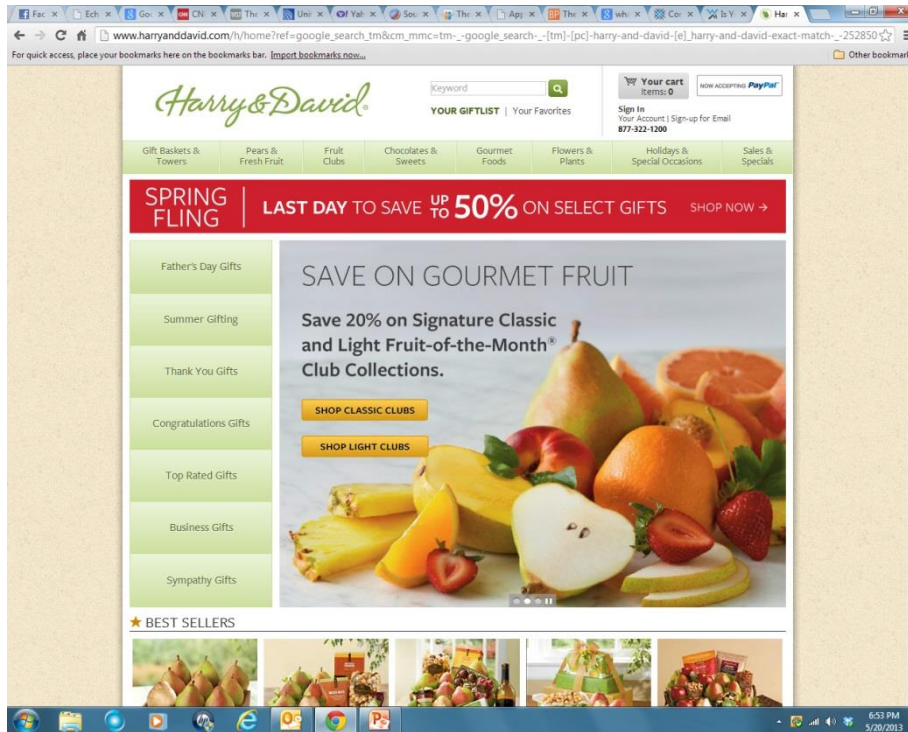
✓ As the research shows, only 17 percent of mobile users feel the ease of use is what they'd expect.

✓ There's a huge opportunity to make ease of use a competitive advantage, whether for mobile sites or apps.





Make it easy: Design for mobile



Best Practice: Listen

- ✓ Customers have lots of ways of telling you (and everyone else) what works and what doesn't—app store reviews, Twitter, Facebook, etc. They are sharing critical information.
- ✓ Be open to learning and optimizing from what they are saying.

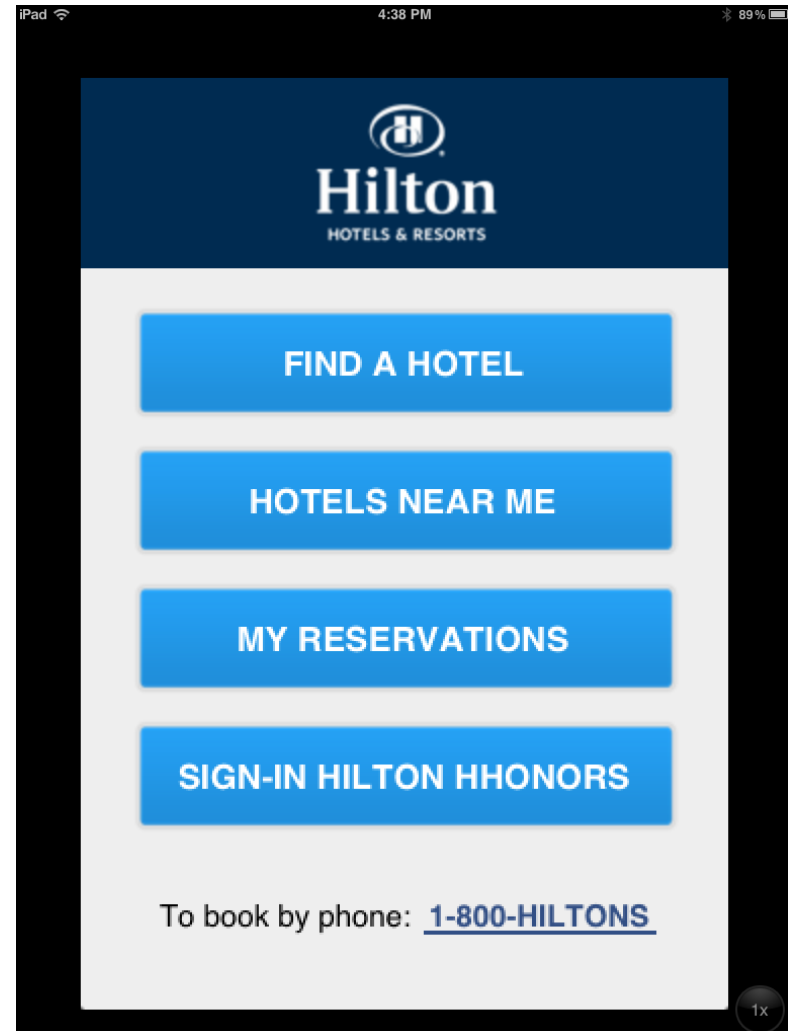
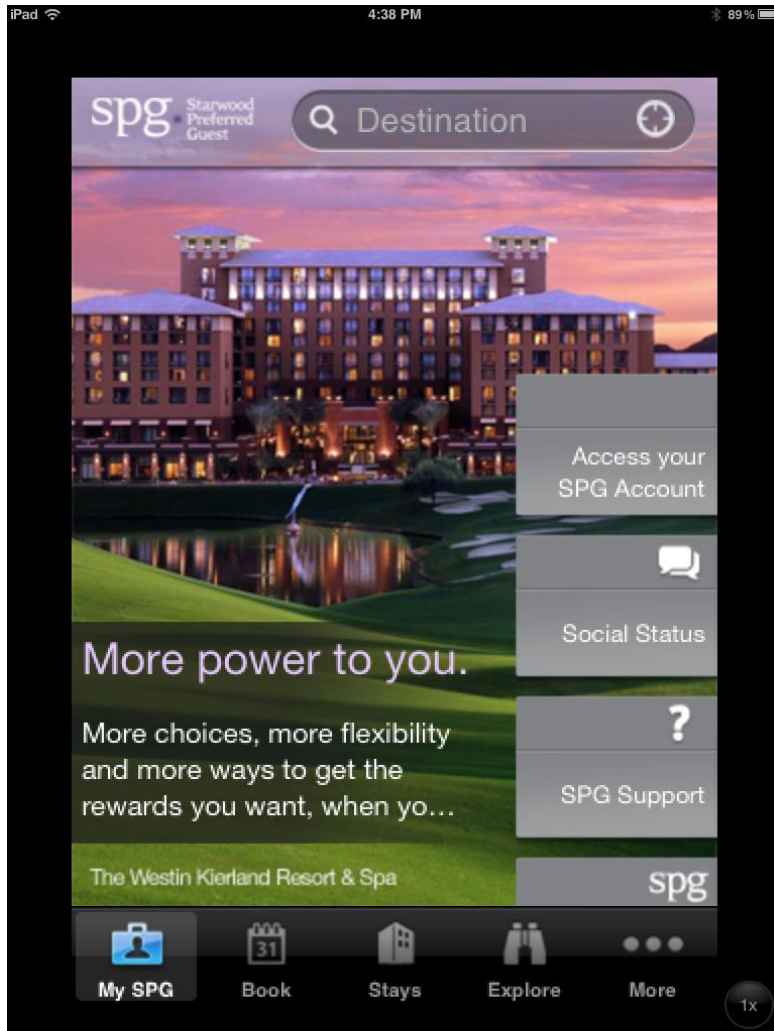


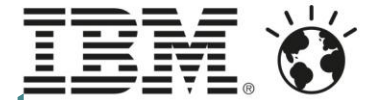
Best Practice: Simplify

- ✓ Move from doing things because they are cool to doing things that help customers buy on mobile devices.
- ✓ Think twice before opting for complex processes and always consider your mobile service from the perspective of your customers.
- ✓ For instance, consider implementing forms that shift orientation from vertical to horizontal in order to enable easier data entry.



Simplify: KISS





Three ways to get started with IBM MobileFirst

1

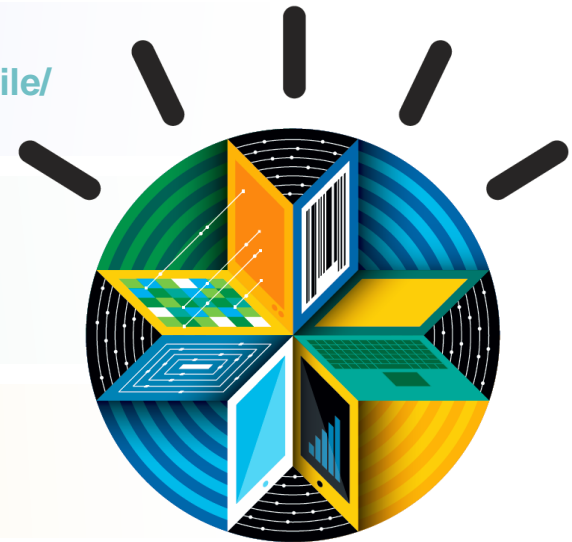
Visit IBM Tealeaf webpage:
<http://www.tealeaf.com/products/mobile/cxmobile/>

2

Learn more:
ibm.com/mobilefirst
[#IBMMobile](https://twitter.com/IBMMobile)
facebook.com/IBMMobile

3

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



IBM®



Legal Disclaimer

- © IBM Corporation 2011. All Rights Reserved.
- The information contained in this publication is provided for informational purposes only. While efforts were made to verify the completeness and accuracy of the information contained in this publication, it is provided AS IS without warranty of any kind, express or implied. In addition, this information is based on IBM's current product plans and strategy, which are subject to change by IBM without notice. IBM shall not be responsible for any damages arising out of the use of, or otherwise related to, this publication or any other materials. Nothing contained in this publication 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 this presentation 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 this presentation 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. Nothing contained in these materials is intended to, nor shall have the effect of, stating or implying that any activities undertaken by you will result in any specific sales, revenue growth or other results.
- If the text contains performance statistics or references to benchmarks, insert the following language; otherwise delete:
Performance is based on measurements and projections using standard IBM benchmarks in a controlled environment. The actual throughput or performance that any user will experience will vary depending upon many factors, including considerations such as the amount of multiprogramming in the user's job stream, the I/O configuration, the storage configuration, and the workload processed. Therefore, no assurance can be given that an individual user will achieve results similar to those stated here.
- If the text includes any customer examples, please confirm we have prior written approval from such customer and insert the following language; otherwise delete:
All customer examples described are presented as illustrations of how those customers have used IBM products and the results they may have achieved. Actual environmental costs and performance characteristics may vary by customer.
- Please review text for proper trademark attribution of IBM products. At first use, each product name must be the full name and include appropriate trademark symbols (e.g., IBM Lotus® Sametime® Unyte™). Subsequent references can drop "IBM" but should include the proper branding (e.g., Lotus Sametime Gateway, or WebSphere Application Server). Please refer to <http://www.ibm.com/legal/copytrade.shtml> for guidance on which trademarks require the ® or ™ symbol. Do not use abbreviations for IBM product names in your presentation. All product names must be used as adjectives rather than nouns. Please list all of the trademarks that you use in your presentation as follows; delete any not included in your presentation. IBM, the IBM logo, Lotus, Lotus Notes, Notes, Domino, Quickr, Sametime, WebSphere, UC2, PartnerWorld and Lotusphere are trademarks of International Business Machines Corporation in the United States, other countries, or both. Unyte is a trademark of WebDialogs, Inc., in the United States, other countries, or both.
- If you reference Adobe® in the text, please mark the first use and include the following; otherwise delete:
Adobe, the Adobe logo, PostScript, and the PostScript logo are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States, and/or other countries.
- If you reference Java™ in the text, please mark the first use and include the following; otherwise delete:
Java and all Java-based trademarks are trademarks of Sun Microsystems, Inc. in the United States, other countries, or both.
- If you reference Microsoft® and/or Windows® in the text, please mark the first use and include the following, as applicable; otherwise delete:
Microsoft and Windows are trademarks of Microsoft Corporation in the United States, other countries, or both.
- If you reference Intel® and/or any of the following Intel products in the text, please mark the first use and include those that you use as follows; otherwise delete:
Intel, Intel Centrino, Celeron, Intel Xeon, Intel SpeedStep, Itanium, and Pentium are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.
- If you reference UNIX® in the text, please mark the first use and include the following; otherwise delete:
UNIX is a registered trademark of The Open Group in the United States and other countries.
- If you reference Linux® in your presentation, please mark the first use and include the following; otherwise delete:
Linux is a registered trademark of Linus Torvalds in the United States, other countries, or both. Other company, product, or service names may be trademarks or service marks of others.
- If the text/graphics include screenshots, no actual IBM employee names may be used (even your own), if your screenshots include fictitious company names (e.g., Renovations, Zeta Bank, Acme) please update and insert the following; otherwise delete: All references to [insert fictitious company name] refer to a fictitious company and are used for illustration purposes only.

Thank You!

