



IBM SolutionsConnect 2014

A New Era of Smart

Feb 19-2014 | Thailand



IBM MobileFirst Offering Portfolio





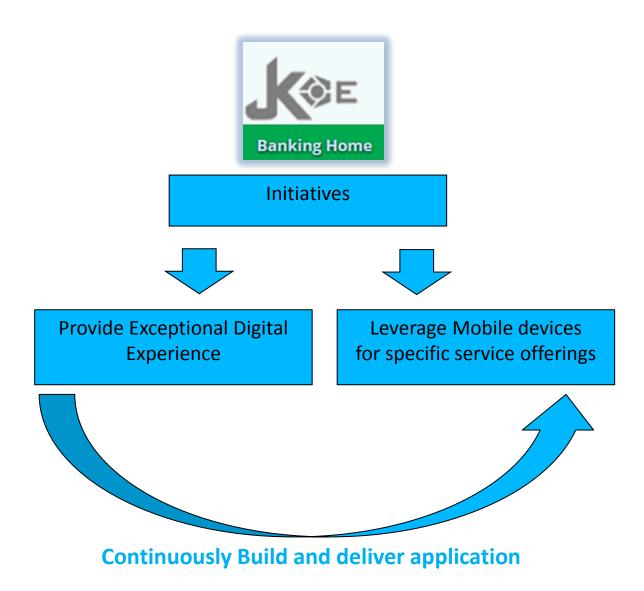




Scenario Context

- JKE Bank is a global financial institution serving clients across the world.
- JKE Bank provides a set of web-based, self-service applications, enabling its customers to access account information and other important services, minimizing the need to contact a call center or walk into a branch
- JKE Bank would like to build it's brand image by revamping the digital experience on all their channels
- JKE is embarking on a transformation program to provide exceptional digital experience to their customers
- This would involve creating great user experience on their web portal, regardless of form factor, as well as offer specific services leveraging inherent capability of mobile devices







1 Mobile Analytics

2 Responsive UI Design

3 Mobile Application Delivery



Poll Question

How do you know if your customers are struggling with your web or Mobile App?

- A. Don't Know
- B. Call center complaints
- C. Social Media complaints
- D. Poor rating and comments



- Catherine is a world class marketeer who works for JKE Bank. She serves in the bank's eChannels division.
- Catherine leads a team that recently started promoting its banking services portal on tablet devices.
- Catherine sources most of the marketing execution and support of the bank's public websites and social media to digital agencies.
- JKE Bank, with the help of its agency, made the decision to leverage its standard web portal for tablet audiences, as well





- Catherine receives an email which alerts her to a mounting problem with the bank's tablet users.
- Catherine turns to her dashboard and drills down on the issue that indicates customers are increasingly spending an unusually long time on the website but failing at trying to login.
- As she replays and employ usability analytics features, Catherine detects struggle using the heat map and scroll map overlays on the pages.





- She sees that users are repeatedly failing at the login screen. Next, Catherine observes that most of these users are also ultimately not scrolling to the area where the log-in error message is located because the user is zoomed in too tightly.
- Catherine then is able to isolate the issue to a segment of users for which the usability and content layout is not optimized for tablet experiences, especially mini tablet form factors.



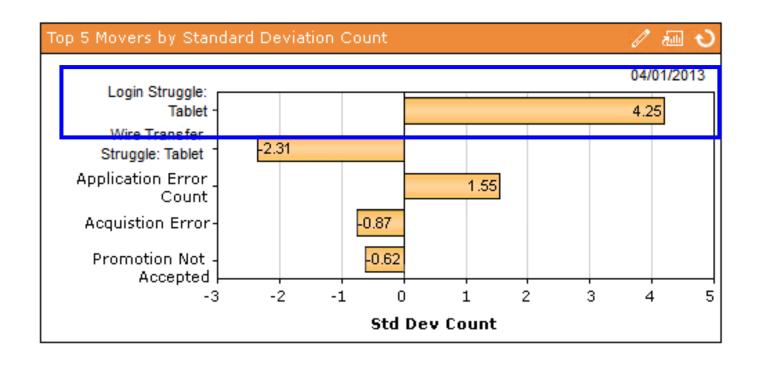


- Catherine determines this is a worthwhile issue to fix based on the inordinately high number of users affected.
- She has the system email a sample offending session to Peter, the website project manager with one of the bank's digital agency.
- Peter then accesses the replay and proceeds to redesign the page for a more optimal experience on tablets based on access to qualitative behavioral analytics.

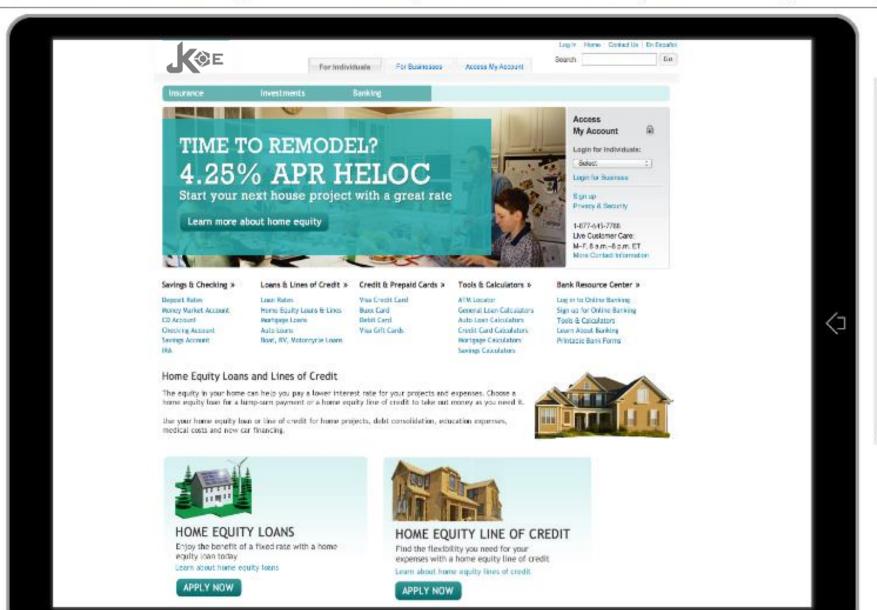


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BX

Browser: Safari Browser Platform: Apple iOS Browser Major Version: iOS 6.2

Traffic Type: Tablet

TO REMODEL? % APR HELOC next house project with a great rate about home equity

Loans & Lines of Credit »

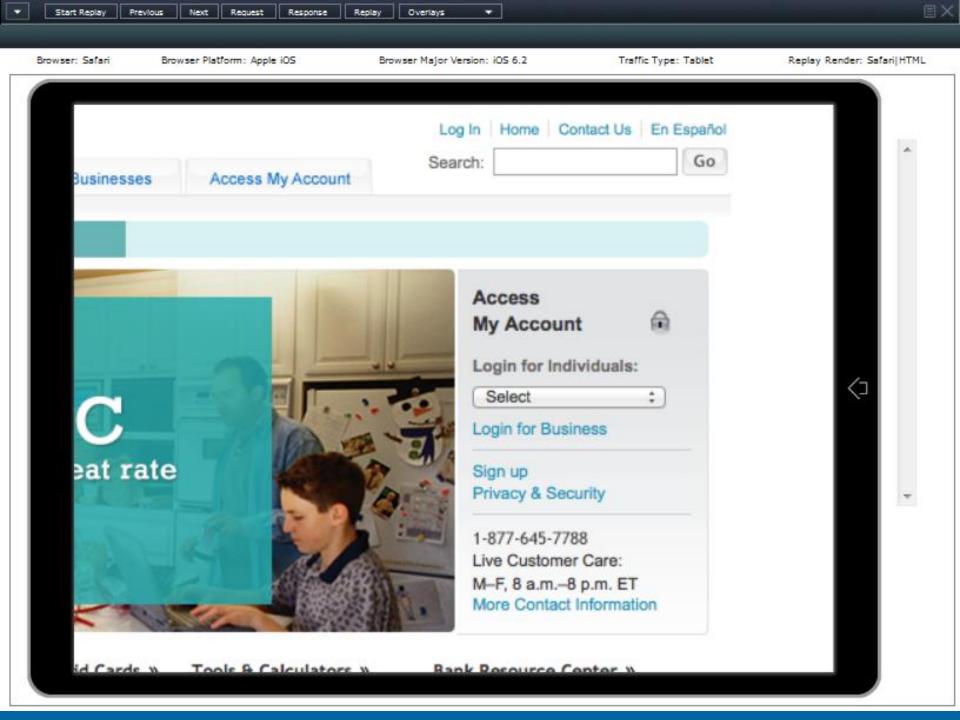
Loan Rates Home Equity Loans & Lines Mortgage Loans Auto Loans Boat, RV, Motorcycle Loans

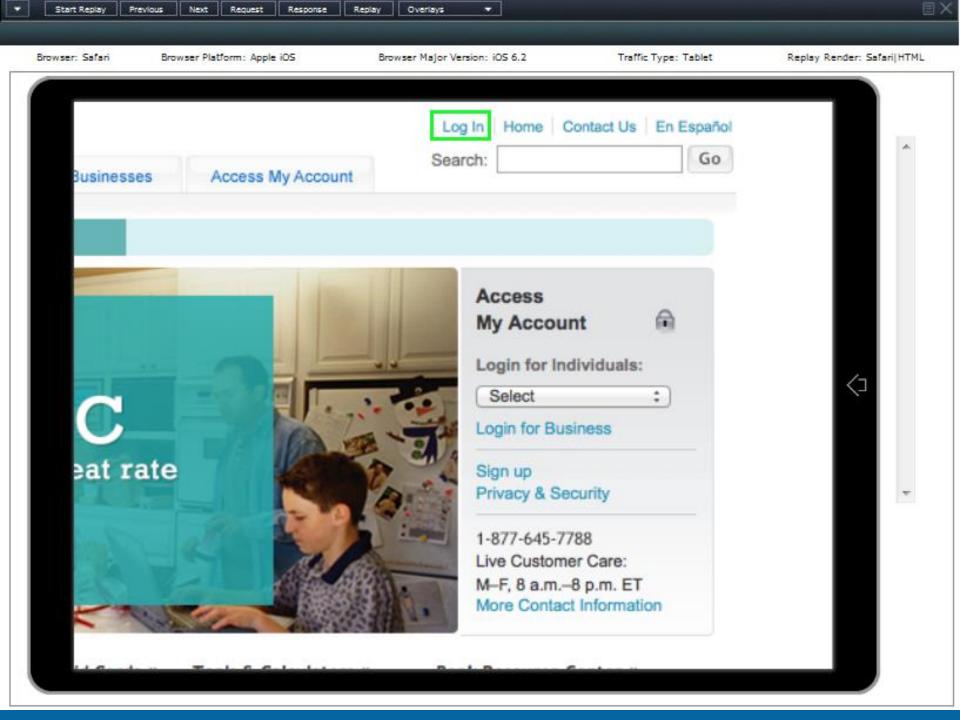
Credit & Prepaid Cards »

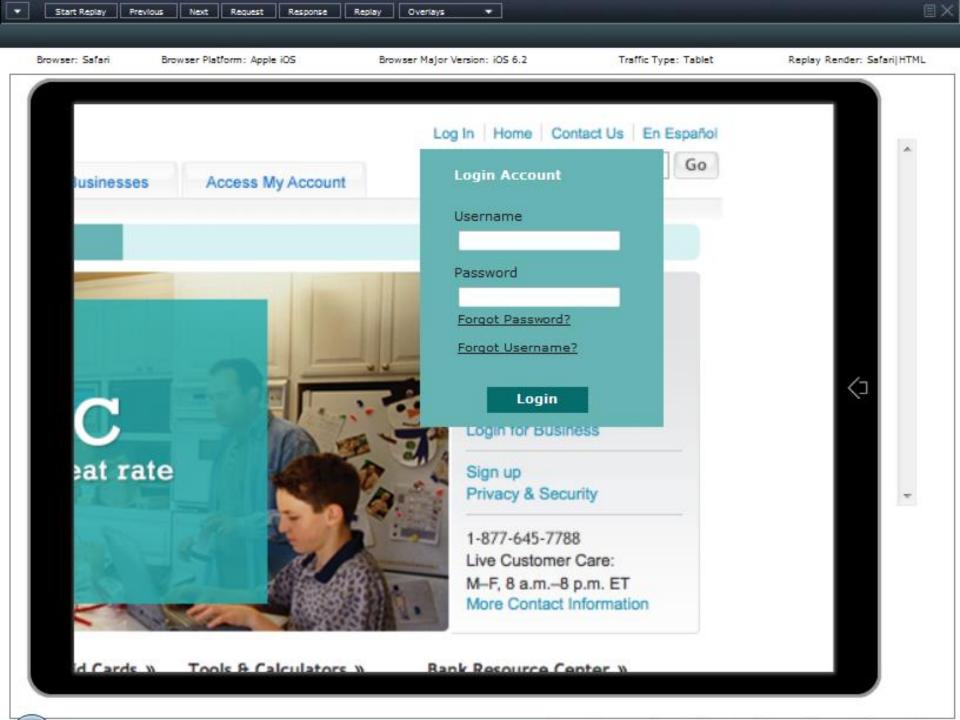
Visa Credit Card Buxx Card Debit Card Visa Gift Cards

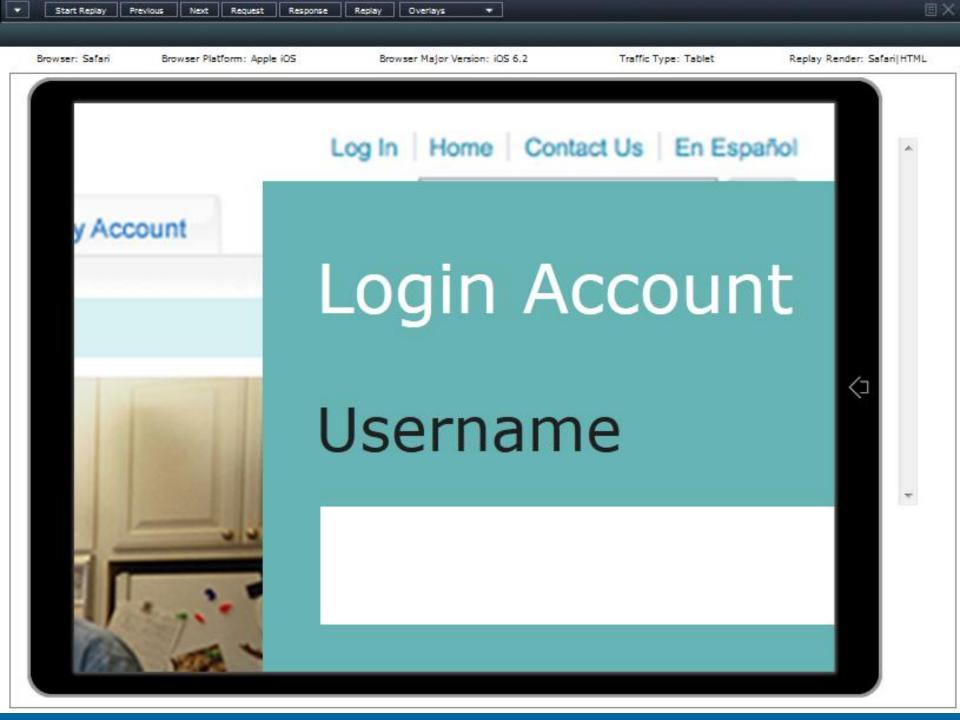
Tools & Calculators »

ATM Locator General Loan Calculators Auto Loan Calculators Credit Card Calculators Mortgage Calculators Savings Calculators







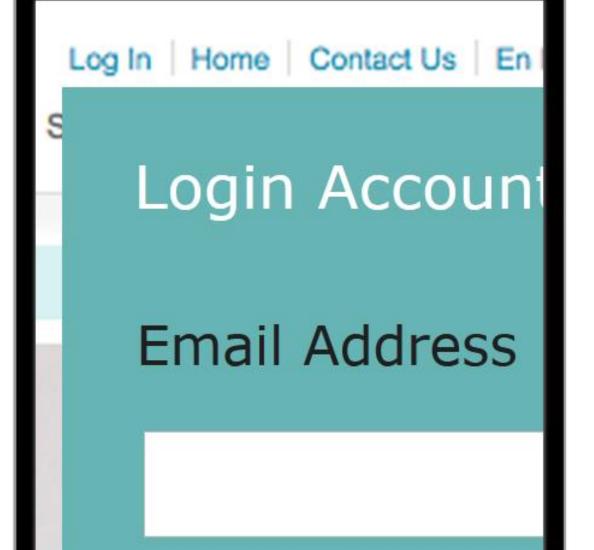


EX

Browser: Safari Browser Platform: Apple IOS Browser Major Version: IOS 6.2 Traffic Type: Tablet Replay Render: Safari HTML

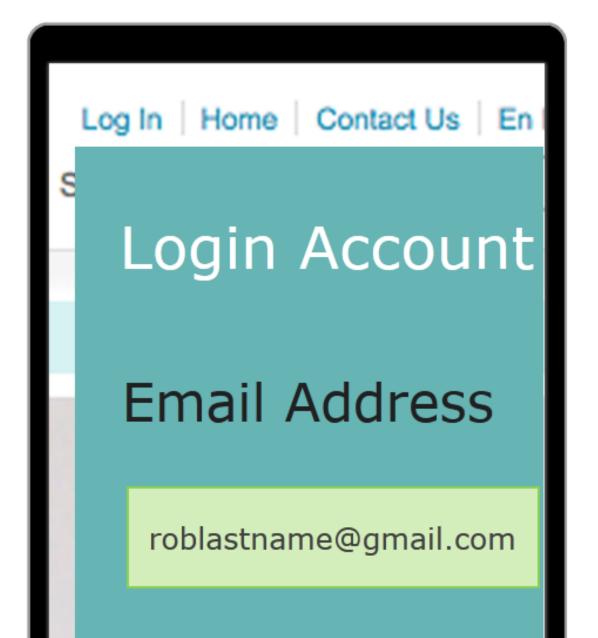
Screen Action: Rotate

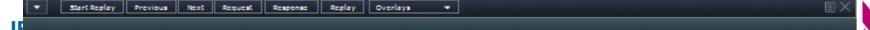




X

Browser: Safari Browser Platform: Apple IOS Browser Major Version: IOS 6.2 Traffic Type: Tablet Replay Render: Safari|HTML





Browser: Safari Browser Platform: Apple IOS Browser Major Version: IOS 6.2 Traffic Type: Tablet Replay Render: Safari HTML

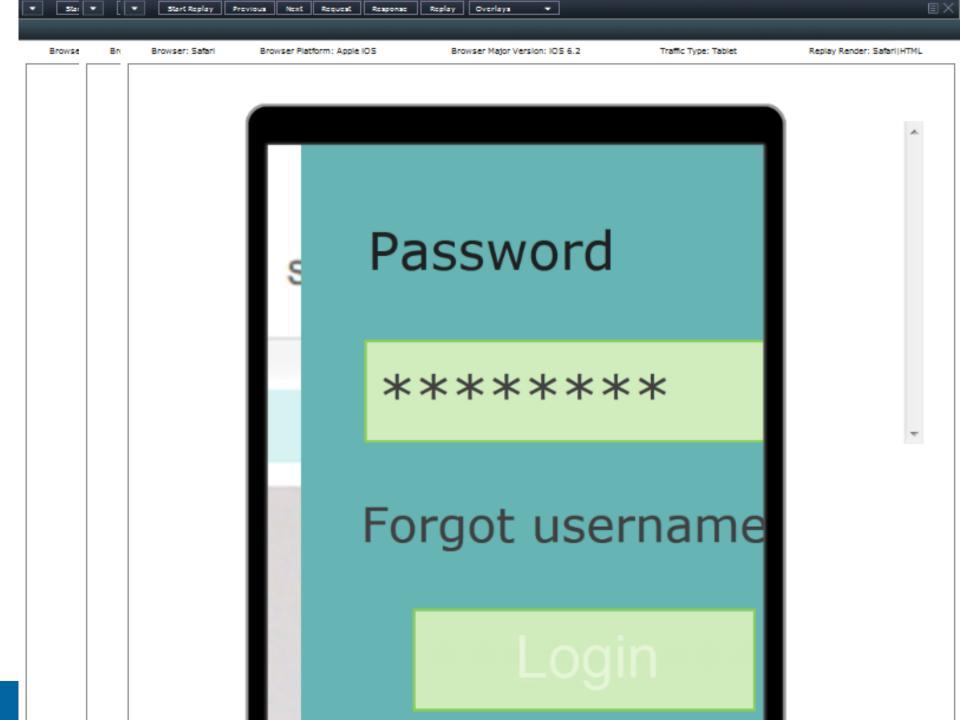


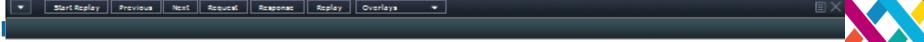
Password

Forgot username

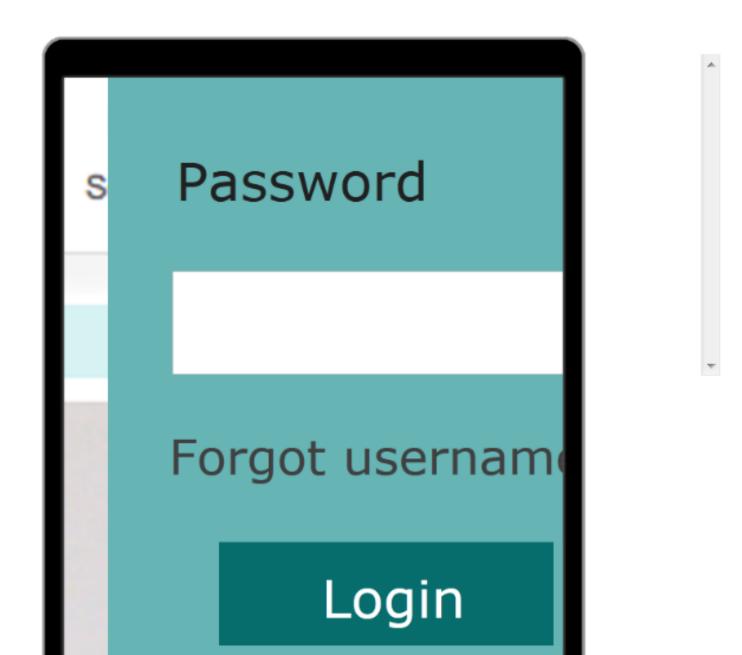
Login







Browser: Safari Browser Platform: Apple IOS Browser Major Version: IOS 6.2 Traffic Type: Tablet Replay Render: Safari | HTML





Browser: Safari

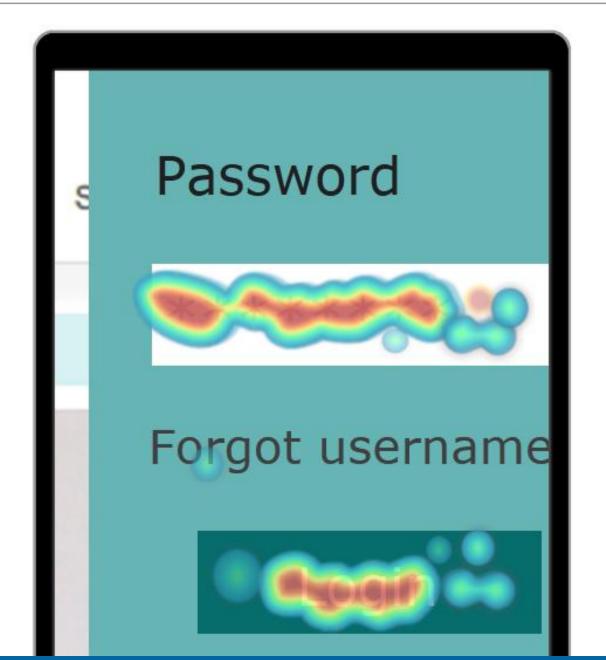
Start Replay Previous Next Request Response Replay (Heat Map •

Browser Platform: Apple IOS

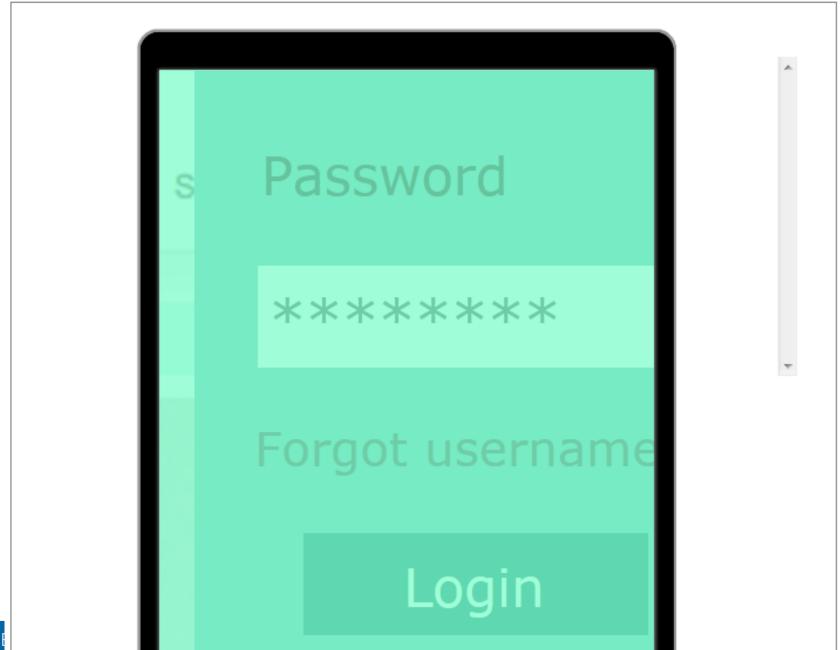
Browser Major Version: IOS 6.2

Traffic Type: Tablet

Replay Render: Safari HTML

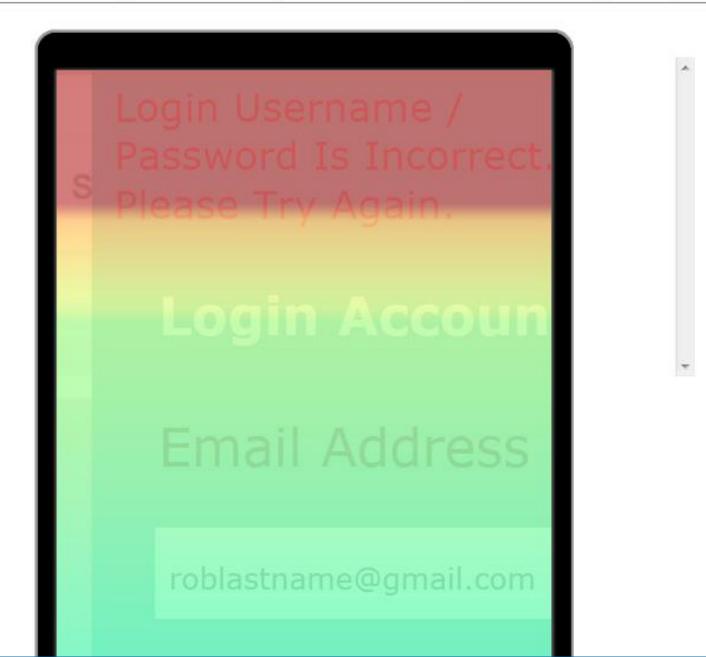














Collaborate by email sample offending sessions to IT

Report > Session List > Page List								Ema	il R	epla
Show query strings										
Session S	ummary					_	_			
TLTSID		3ECE27EB63405EA03DFE570DA44D9074		Session ID					22921	
Page Cou	nt	8		Session Start				08/28/20	013 00:30:20	J
Total Ever	nts	73		Duration					00:00:00	J
Connectio	n Type	DSL		Cancelled Pages					0	1
Avg Roun	d Trip	0.218	(s)	Avg Page Gen					0.210	(s)
Avg Netwo	ork Trip	0.000	(s)	Avg View Time					0.000	(s)
Page	Events	URL		Status	RT Time No	et Time G	en Time	View Time	Size	
1	•••• × ● 🌠	/spholiday			404	0.001	0.000	0.001	00:00:00	1
2	la l	/store/			200	0.680	0.062	0.618	00:00:00	32
<u>3</u>	• In	/store/index.php/olympus-stylus-750-7-1mp-digital	al-camera	.html	200	0.824	0.040	0.784	00:00:00	46
4	10	/store/index.php/electronics/digital-cameras			200	1.055	0.049	1.006	00:00:00	56
<u>5</u>	• In	/store/index.php/catalog/product/view/id/48/s/kodak-easyshare-c530-5mp-digital-camera/category/12/			200	0.880	0.040	0.840	00:00:00	46
<u>6</u>		/store/index.php/checkout/cart/			200	2.001	0.046	1.955	00:00:00	47
<u>z</u>		/store/index.php/checkout/cart/			200	1.457	0.042	1.415	00:00:00	47
8	THE SECTION SECTION AND A SECTION AND A SECTION ASSESSMENT OF THE PROPERTY OF	/store/index.php/checkout/cart/			200	1.594	0.042	1.552	00:00:00	47

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1 Mobile Analytics

2 Responsive UI Design

3 Mobile Application Delivery



Poll Question

Do you have a mobile content strategy?

- A. Yes
- B. No
- C. We are going to have one soon.



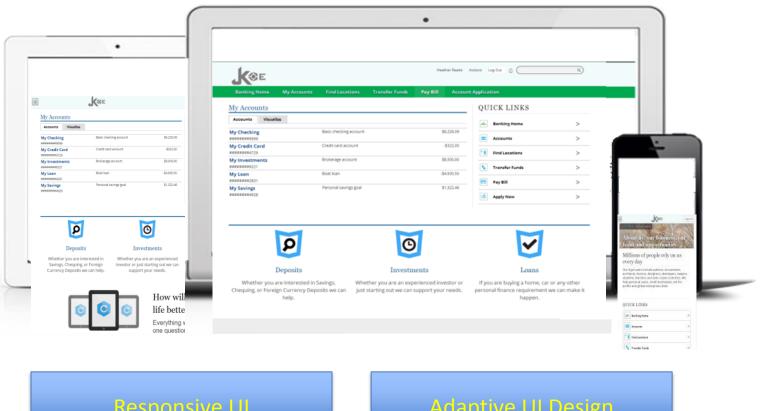
Poll Question

Have you identified key services and information to serve the mobile interfaces you will target?

- A. Yes
- B. No
- C. Can't say



Let's See How JKE Bank can Address this Business Problem...



Responsive UI

Adaptive UI Design

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Meet Sandra

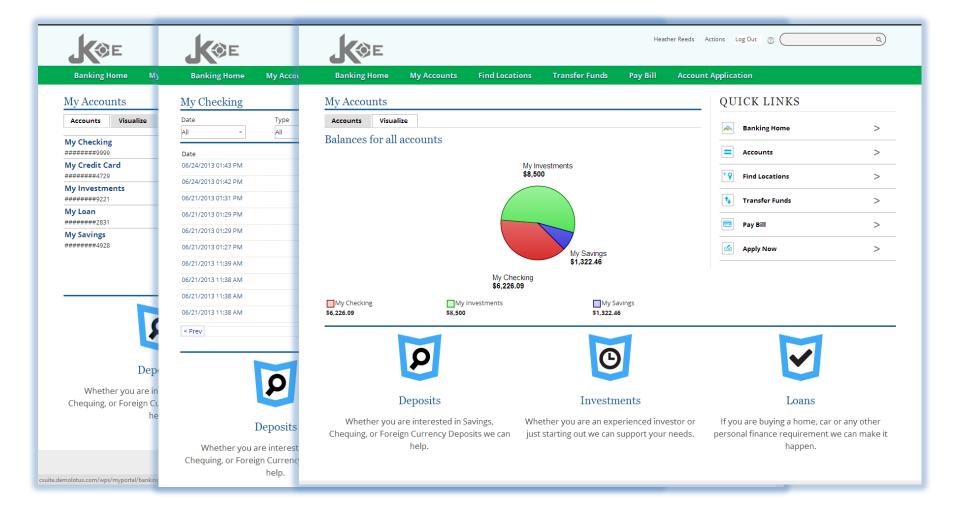
She is a valued customer



She needs an Exceptional Digital Experience while banking anytime and anywhere



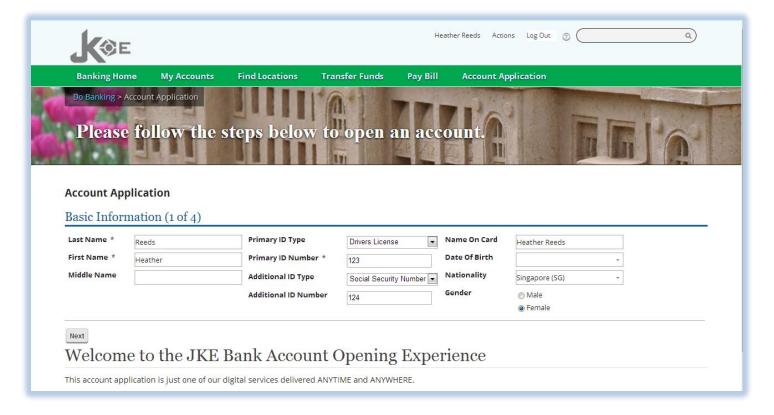
Her banking details on her laptop



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She starts a new account application at home



But realizes she has an appointment...

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An email to re-engage

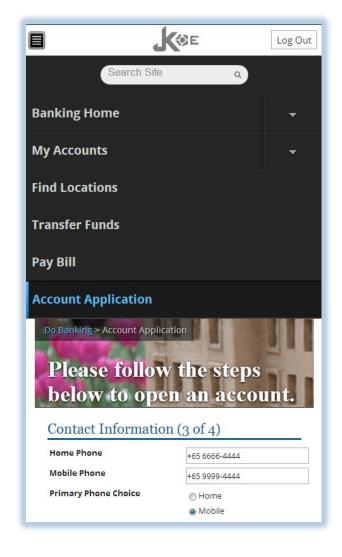
	<u>To</u> :	Heather_Reeds@email.com,					
	Cc:						
	Bcc:						
	Subject:	JKE Bank - Application Finished?					
	Default cu	stom expiration date: 11/07/2014					
Hi Heather, We noticed your application for a new account was not completed. Would you like to continue the application? If so we have preserved your data and you can start where you left off by clicking here. Thanks for banking with JKE Bank							

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Smartphone to enter details? No problem.

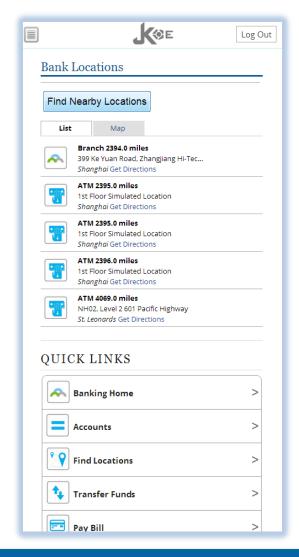




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Sandra can complete the details on-the-go and get aided by her GPS on the closest branch where she can finalize process.

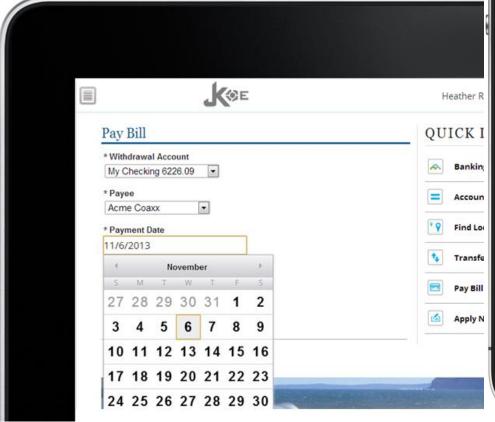


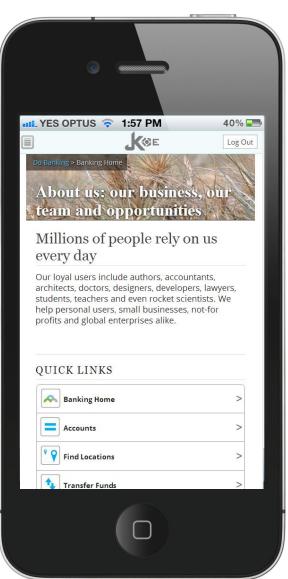


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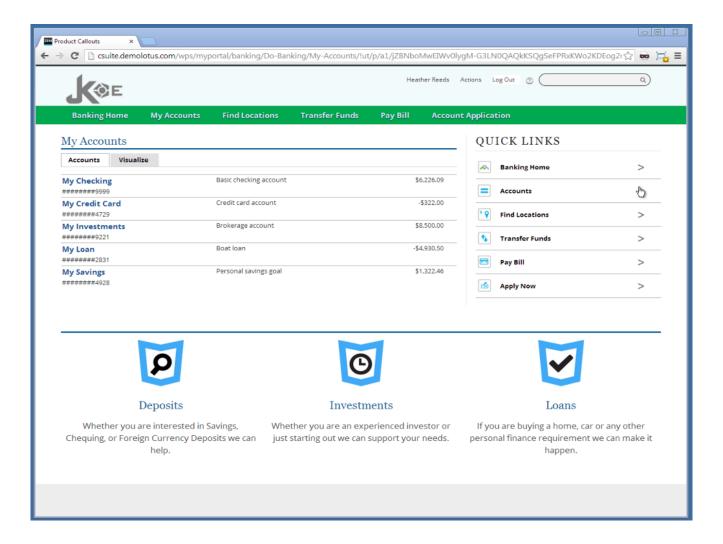
Sandra is never stopped from accessing JKE Bank. Mobile access is anytime and anywhere.







Quick interlude...let's see it in action





Meet Garland

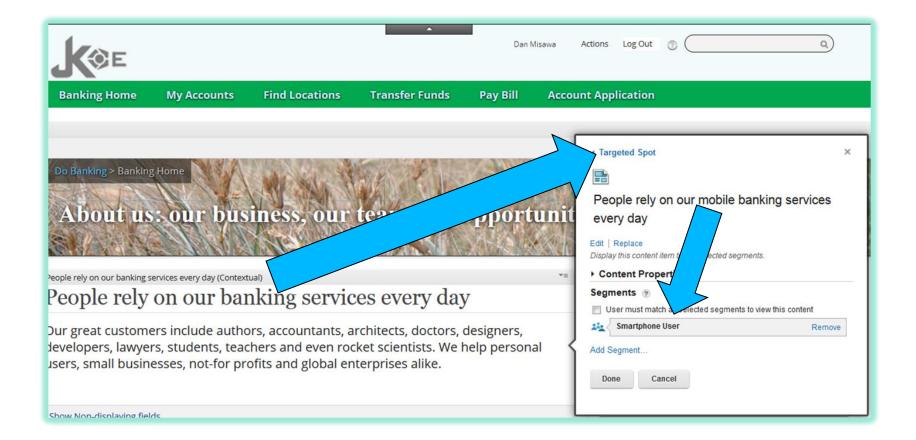
He is a Channels Representative



He needs the bank to have the right message for the right channel

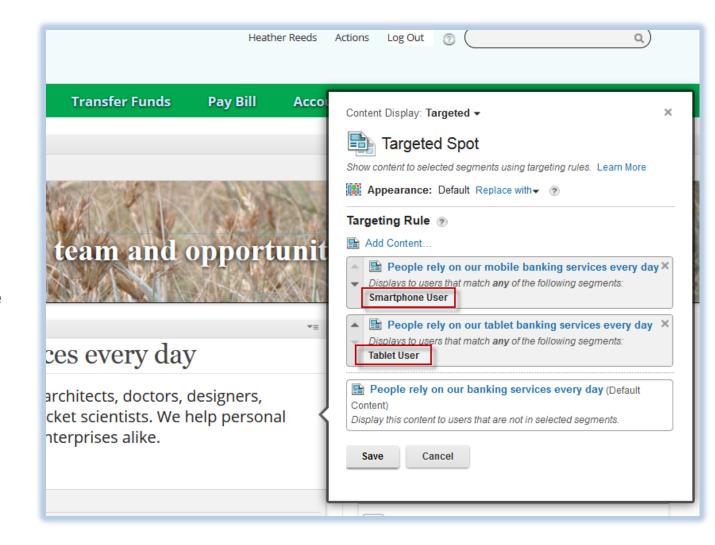


Garland needs to make his content appropriate for the channel with targeting features

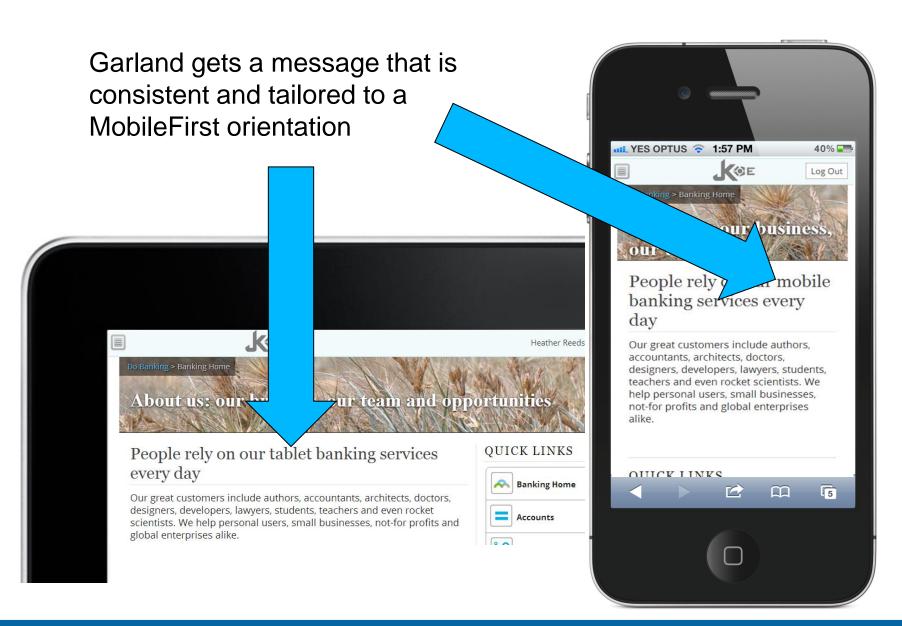




Garland configures the targeting in WYSIWYG interface and inline to the page













2 Responsive UI Design



3 Mobile Application Delivery

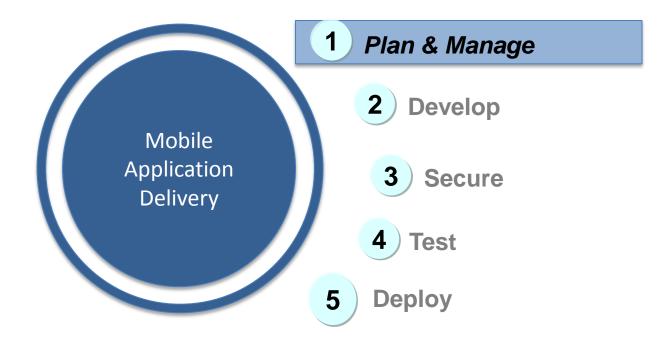


Poll Question -4

Mobile Application Developers in my organization:

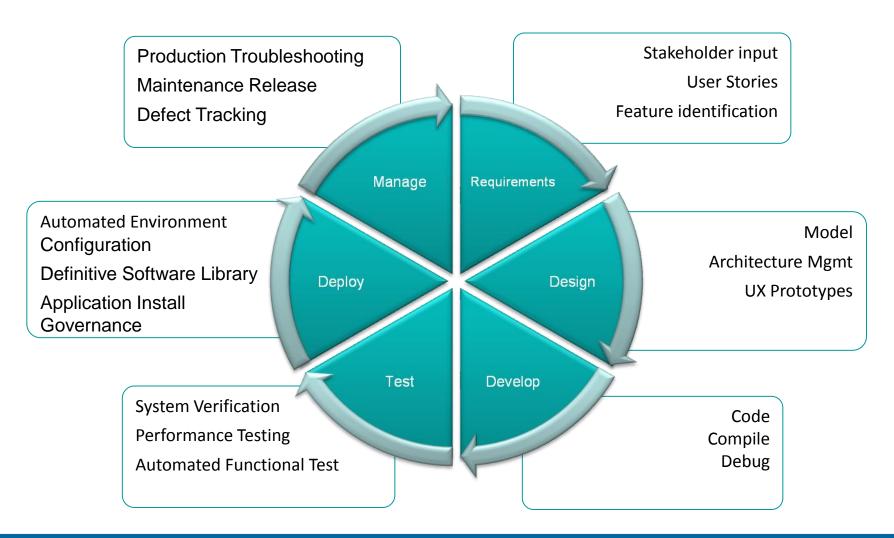
- A. Less than 5
- B. Between 5-10
- C. More than 10



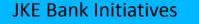




Multichannel Software Development is MORE than Coding





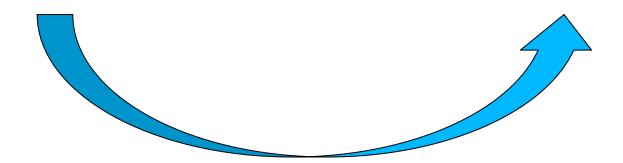






Provide Exceptional Digital Experience

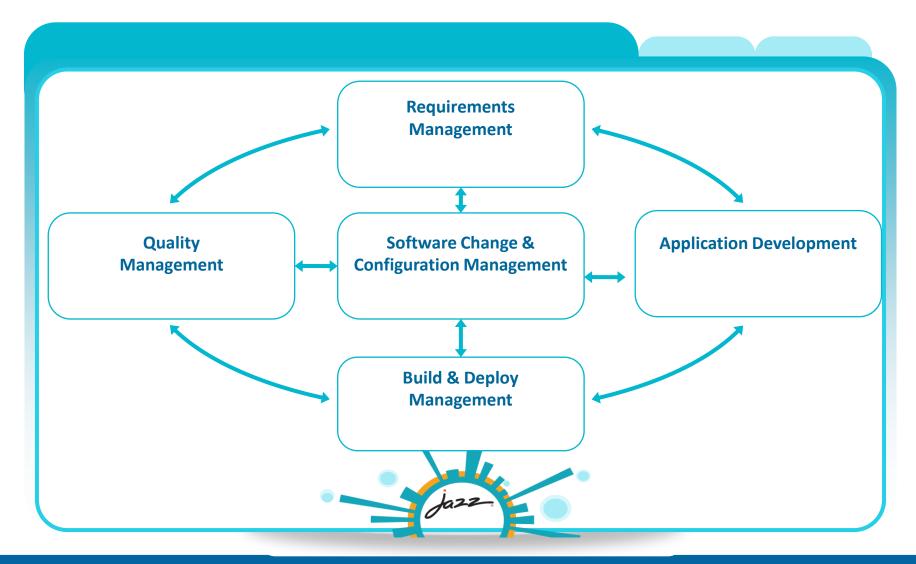
Leverage Mobile devices for specific service offerings



Continuously Build and Deliver Application

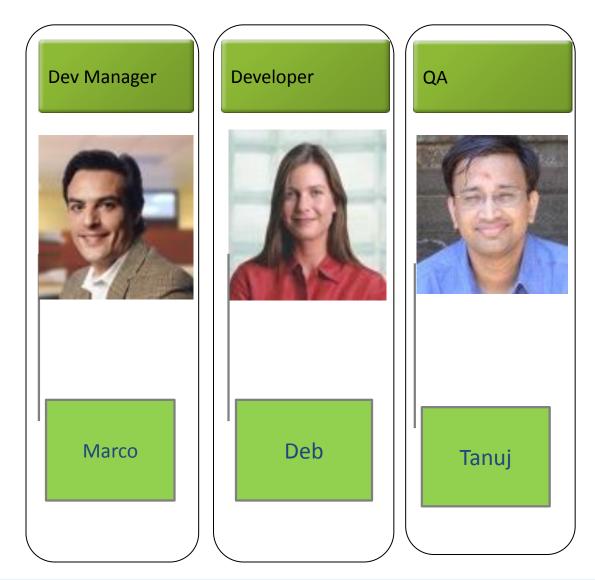


IBM Solution for Application Delivery on Multichannel





Building Exceptional User Experience on Multiple Channels



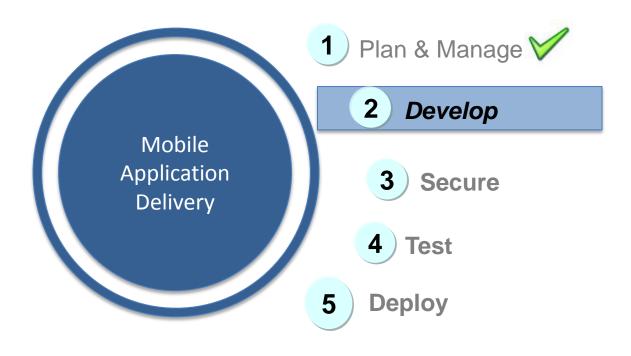


Continuously Build and Deliver Application

Scene 1

- It has been noticed that there are many users who are struggling with the mobile application because there are several dozen charities to choose from.
- There also have been request from many that they would like to donate to charities that nearby to their location so that they can contribute to community – aligned to a requirement previously captured but not yet implemented.
- Both the initiative has been passed on to development to incorporate into the next release of the mobile application.
- The development manager Marco looks at the new request and passes it on to a Business Analyst. Business Analyst documents the complete requirements document.
- Marco approves the requirement after a review and gives it to user experience designer.
- The UI designer creates UI Sketches. **Marco** approves the UI Sketches and assigns the **Deb** to implement the story.







Poll Question

Do you have a standardize Mobile Application platform for developing enterprise Mobile application?

- A. Yes
- B. No
- C. Can't say



Leverage Mobile Devices for Services offerings

Scene 2

- Deb gets a notification of a new task on her dev environment. She looks at Use Case requirements, User Sketches, Traceability links and understands the impact of the change. Deb accepts the task and provides an estimate of the effort.
- **Deb** checks out project file from source control configuration, builds the UI, codes and does unit testing. Deb also checks the vulnerability of the application code that she is writing.
- Deb then delivers the modifications to merge with code of other people.



IBM MobileFirst Platform: Build, Connect, Run, Test





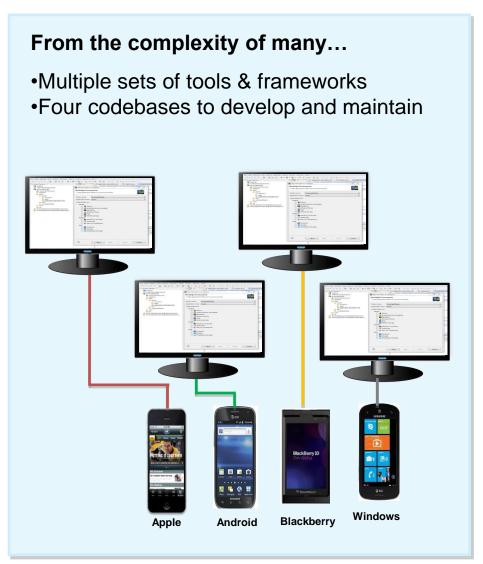








Multi-platform Development with a Shared Codebase



To the simplicity of one

- One development environment
- One codebase to develop and maintain



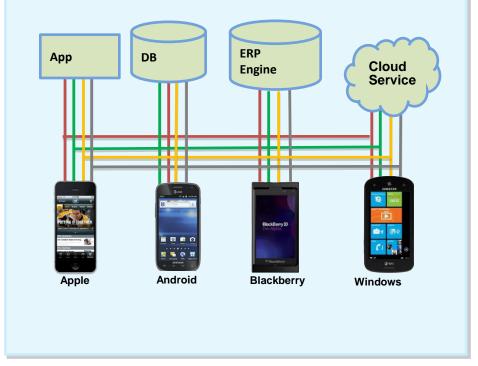
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Controlled Back-end Integration

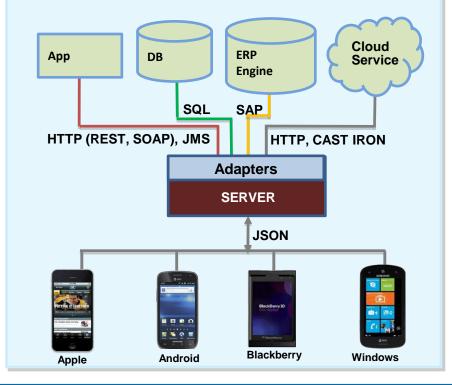
From multiple point-to-point integrations

- Multiple sets of integrations to enterprise resources to build and maintain
- YOU manage caching, synchronization and end-to-end encryption



To streamlined, transparent access

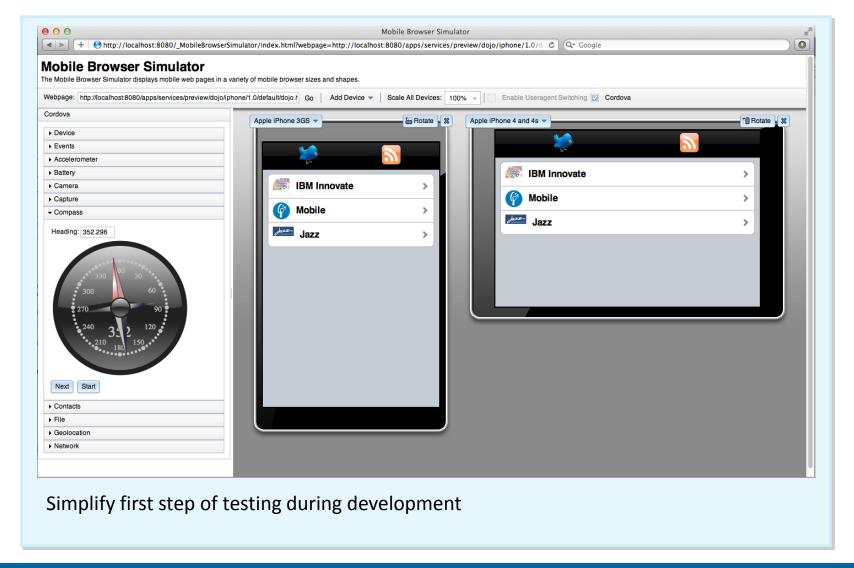
- Transforms enterprise data into mobile-friendly, JSON format
- The server manages update, data synchronization and end-to-end encryption



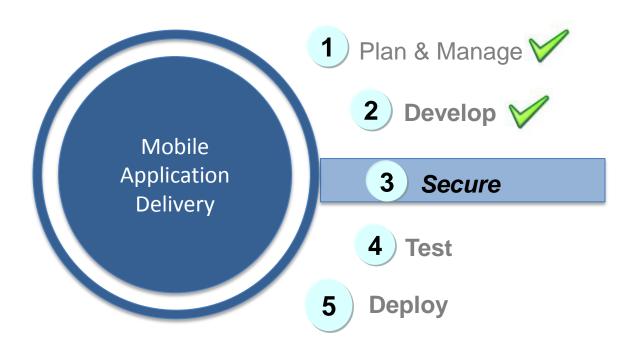
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Rich Mobile Simulator for Hybrid Applications









Poll Question -6

What is your current approach to testing the security requirements for mobile applications?

- A. Perform a manual test on infrequent basis
- B. Testing using outsourced pentest services on periodic basis
- C. Incorporated into SDLC through automated tools
- D. No specific testing specifically for security use cases



IBM MobileFirst's Approach to Security



Device Management

Security for endpoint device and data

Network, Data, and Access Security

Achieve visibility and adaptive security policies

Application Layer Security

Develop and test applications

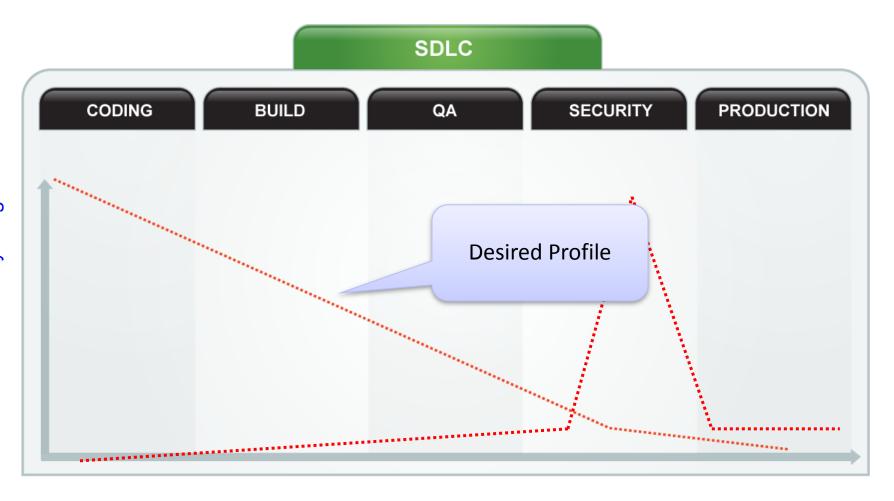


Security Testing within the Application Cycle





Security Testing within the Application Cycle





IBM MobileFirst Security: Make Application Secure by Design

Advanced Security Assessments

Dynamic Analysis

- Analysis of a running/ deployed application
- Key requirements
 - Threat coverage: WASC, OWASP Top 10, etc
 - Web Services/ SOA
 - Web 2.0 & Rich Internet Applications

Static Analysis

- Scanning source code for security issues
- Key requirements
 - Application/language support
 - Ease of use for non-security users (developers and build managers)

Runtime & Hybrid Analysis

- Glass box testing with runtime analysis
- Automated correlation of static & dynamic results
- Key requirements
 - Precise & Actionable results
 - Broad threat coverage

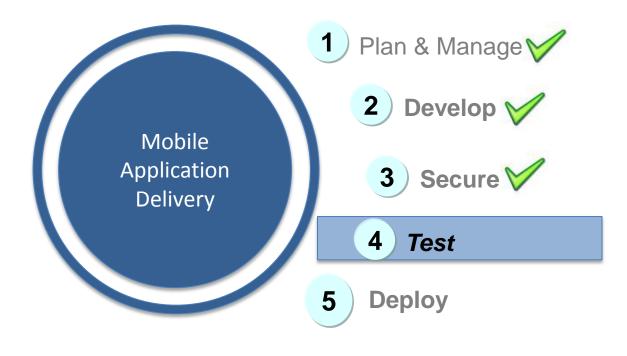
Collaboration & Governance in Application Lifecycle

Security testing, shared results, assign ownership



Track corrections and integrate with development systems





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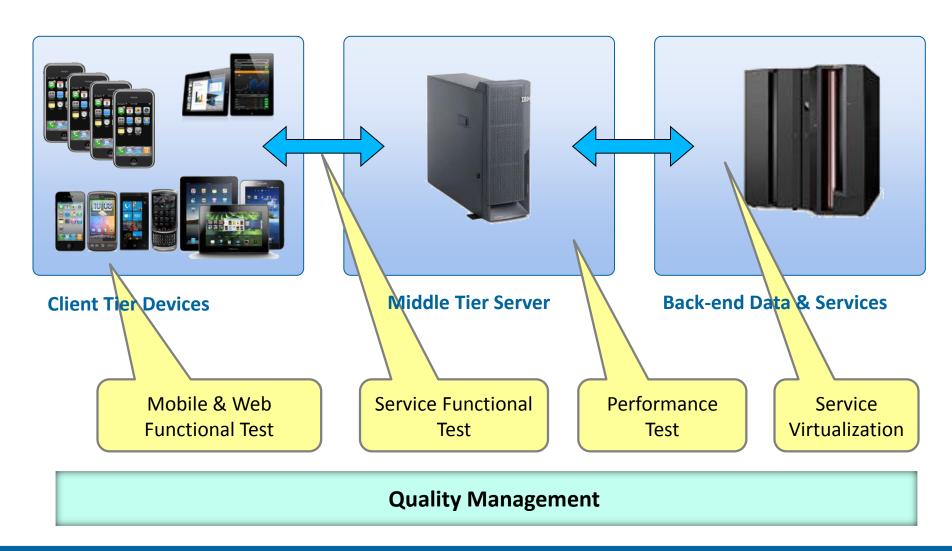
Leverage Mobile Devices for Services offerings

Scene 3

- Tanuj now needs to test the application which is already built and deployed on the server.
- Tanuj does the regression testing of the mobile application on various devices. Tanuj also uses MQA (Mobile Quality Assurance)
- Tanuj then rechecks by running the automated test scripts and approves of the quality
- The application is ready to be deployed

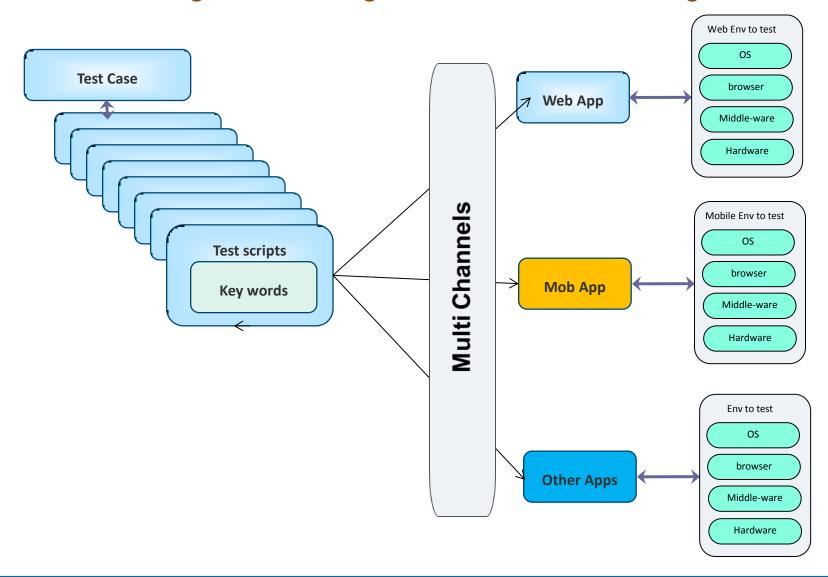


Testing the End-to-end Mobile and Web Solution





Meeting the Challenge of Multichannel Testing





Mobile Test Automation with IBM Rational Test Workbench

Mobile Test Automation

- Support for native, and hybrid applications running on Android and iOS
- Natural language test and visual test editing
- Simplified IDE and mobile device clients for test authoring, execution, and reporting
- High-fidelity capture an replay of multi-touch events

Eclipse Client integration

- Mobile Test Automation
- Support for Selenium web GUI test automation
- Multi-channel test scenarios
- Integration with Rational Quality Manager and the IBM Worklight mobile development platform

End-to-end mobile testing

- Testing of middle-tier and back end-services
- Virtualization of middle-tier and back-end systems
- Performance testing of your integration infrastructure





IBM Rational Test Workbench mobile test automation support

Platform Support

Android version 2.2 to 4.2 iOS version 6.x

Application Support

Native Applications and Hybrid applications using jQuery Mobile

Runtime Target

Android on physical devices and emulators iOS on iPhone/iPad emulator

Test representation

Natural language with visual editing using application screen shots

Advanced features

True object recognition with verification of any object property
Support for localized strings
Simplified data-driven testing

7A New Era of Smart IBM.



Introducing IBM Mobile Quality Assurance (beta) Continuously deliver high quality mobile applications



What's New

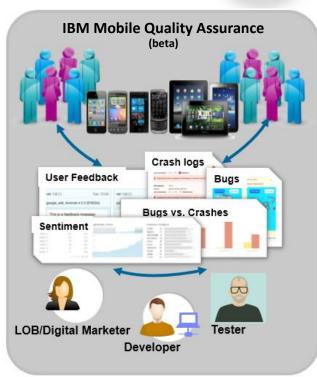
- End user feedback and quality metrics available at every stage of development
- App quality assurance in a fragmented and complex environment

Features/Business Value

- Evidence-based prioritization enable business and IT to collaborate on mobile strategy and user experience
- Over the air app distribution get the latest in the hands of testers as soon as it is available
- **Frictionless bug reporting** spend every minute on testing latest and greatest builds, not the hassles
- In-app crash reporting rapid understanding of why an app fails
- Sentiment analysis mine app ratings and reviews to extract actionable feedback before they go viral(coming soon)

Client Benefits

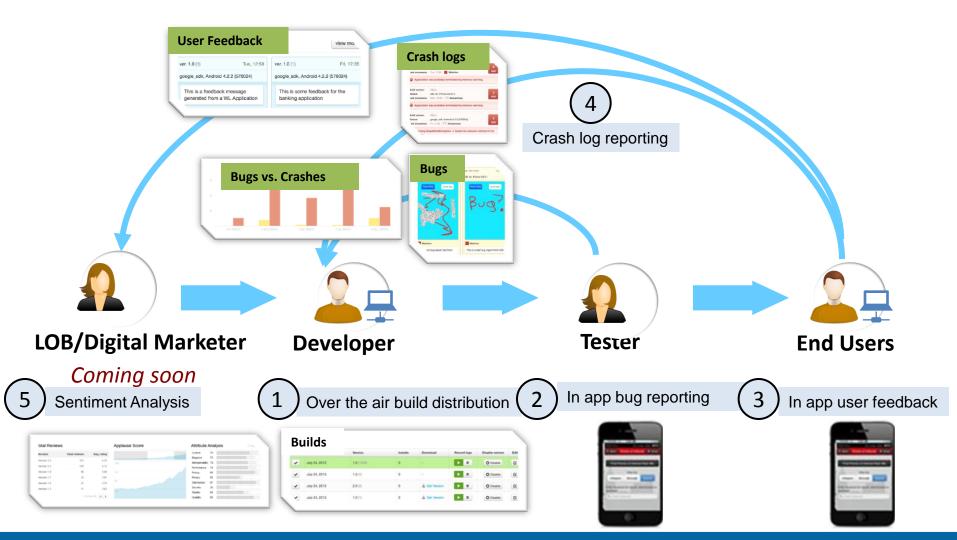
- Improve mobile app quality with holistic visibility into user experience, including bugs, crashes, feedback, and user sentiment
- Proactively manage quality risks through rapid assessment of issues and reduced cycle time



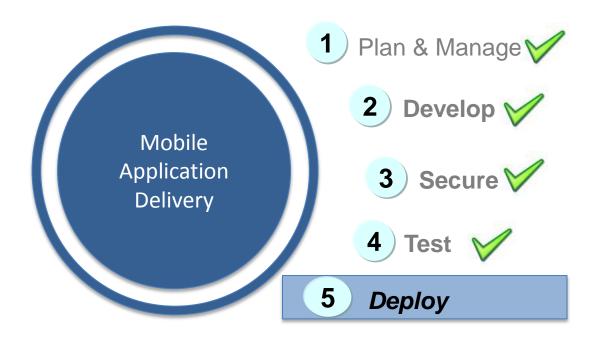
"What you are talking about doing is fantastic. You have a very powerful approach here and it will drive a lot of what people will want to do in the market"



Mobile Quality Assurance features that support the Use Cases

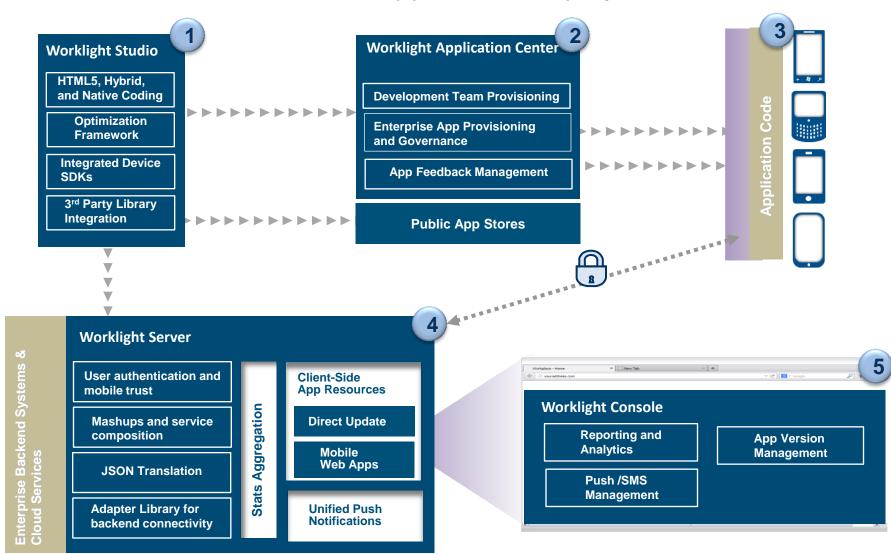








IBM Mobile Application Deployment









2 Responsive UI Design



3 Mobile Application Delivery





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Thank You