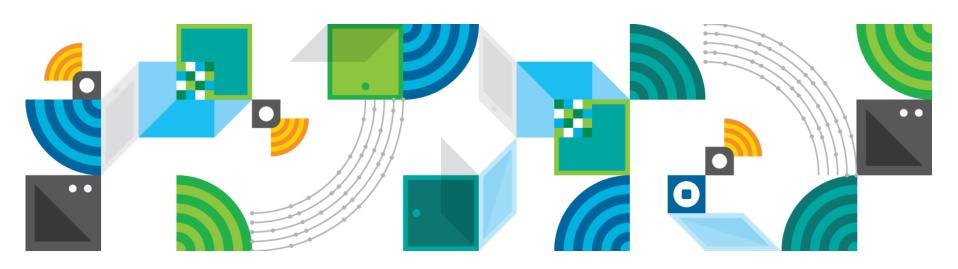


IBM MobileFirst: Put your business in motion

Rainer Pirker

MobileFirst Business Unit Executive Central & Eastern Europe







Mobile Adoption Continues to Explode

An average mobile phone user checks their phone 150X per day

There are 3X as many mobile phones in the world as there are computers.

40% of all University graduates are seeing BYOD Policy as an important decision factor for their future employer

90% of text messages

are read with in 3 minutes of

being delivered

More people in the world own mobile phones than toothbrushes.

> 6x
> more Smartphones sold than kids are born / day

> > Corporation

A Landmark Event - 1 Million Mobile Apps

(Apple, Android, Blackberry, Windows Marketplaces) Compiled by Mobilewalla

Current App Count Design

Top Android shore - Samsung Galaxy 2

18 43% Andreid, 28% Apple

Blackberry 43K

165M (S

March 2011 - Pad 2 released

Ages 667 minutes per user per month,

Top 10 Android apps account for 43% of all

Windows 35K

oct 2010 - Windows

1 in 4 downloaded apps used 11 times or more

Android 320K

June 2010 - 5B Ann Store downloads

April 1-App World ThetackBerry

140K Total Apps 🍩

81% App Store downloads are tree. 98% of Andreid dowleads are free

Apple 590K

15K Total Apps 🐵

net 2008 - Android Market numbes

May 2009 - 57K los Apps. 40% are games

😇 July 2008 - App Store launches w/ 500 Apps

June 2007 -

iPhone launches

App Count Sames: 94K ws, 31K android New 2011 - 7B Adroid downloads

Oct 2011 - 18B Annie downloads

18% Blackberry, 7% Windows

May 2011 - 3B Androld downleads

Feb 2011 - 5500M downloads

17% smartphone users report

using no agos en a regular basis

2013 - 2M ADDS

2012

Bec 2011- 1M Apps!

72% of iOS rev from in-app purchases

2011 Virtual goods app revenue - \$3B Aug 2011 - Average Android rev per app \$2437

17% have past more than \$20 for an ann

Jan 2011 - 10B Apple downloads

484K Total Apps

2.5 - Ave apps added per month

July 2010 - 1B Anstrold downloads Avg IOS owner downloaded 83 ams

1 in 4 downloaded agos are never used again

April 2010 - Apple released the first iPad.

> **Top 4 Categories** as a % of Total App Count

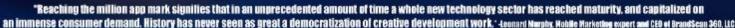
Entertainment 16%

Lifestyle 8%

Games 13%



2007





Meeting the customer call is your mission

Transform how customers engage with your brand



by leveraging technology disruptors



to deliver measurable results in customer revenue, profit, loyalty



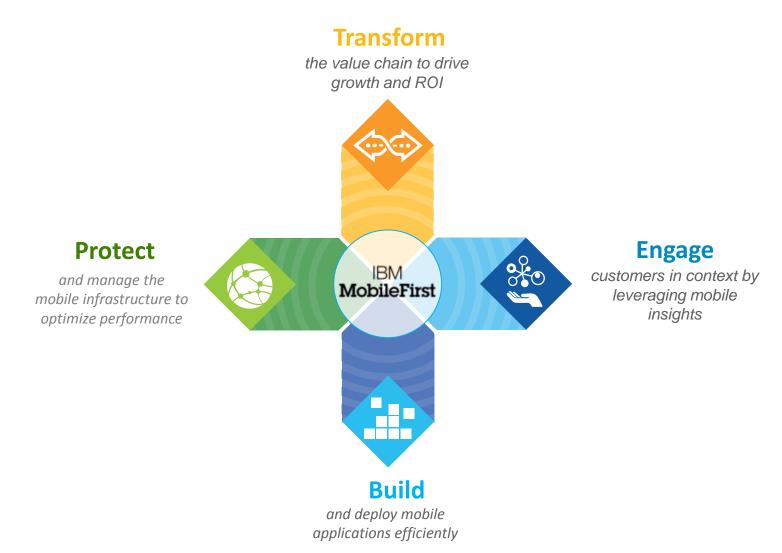
while leading organizational change



5



IBM MobileFirst Client Imperatives



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Today, most organizations have no choice but to focus mobile efforts "under the surface"





Historic announcement: Apple and IBM strategic partnership

Enterprise solutions for iOS



iOS Platform for iOS

Supply,
Activate, and
Manage



"We're scaling the enterprise down into the hands of the individual."

Ginni Rometty Chairman, President, and CEO, IBM "This is a radical step for enterprise and something that only Apple and IBM can deliver."

Tim Cook CEO, Apple



Gartner has recognized IBM as a leader in the Magic Quadrant for Mobile Application Development Platforms

Figure 1. Magic Quadrant for Mobile Application Development Platforms

Magic Quadrant for Mobile Application Development Platforms Ray Valdes, Van L. Baker, Richard Marshall, Jason Wong September 2, 2014

"The mobile application development platform market continues to grow, evolve and mature in response to escalating customer requirements. We assess the major vendors that enable enterprise IT developers to create mobile applications for customers, partners and employees."

This Magic Quadrant graphic was published by Gartner, Inc. as part of a larger research note and should be evaluated in the context of the entire report. The full report is available at http://ibm.co/13TU2Dm



As of September 2014



8 fundamental elements to creating a compelling mobile user experience





Creating a Compelling Mobile User Experience

To differentiate your offering, first understand what your audience wants.

Read the white paper (1.0 mb)

1. Always be relevant



Wimbledon: Innovating the fan experience for mobile





Challenges

Wimbledon needed to create an engaging and interactive experience across multiple digital platforms for the 2013 Wimbledon Championships while ensuring a secure, reliable and scalable infrastructure to handle peak traffic.

Solution

IBM Interactive created a custom mobile presence tailoring the content and user experience for each device and form factor.

Benefits

- ■App helps fans to feel part of the actions wherever they are, providing the latest news, scores, photos and tweets direct to their phone.
- ■Ensure appropriate scalability to manage the unpredictable nature of sporting events

Results

- Scales to support 500,000 concurrencies
- ■19.7m unique viewers and 433 million page views over Wimbledon fortnight

2. Keep it simple



China Railway's Ticketing System: large scale Worklight usage



"We believe Worklight as the MEAP can help China Railways effectively build a new secure mobile channel by end-to-end mobile lifecycle support"

Challenges

- •Scale: The mobile application is used as a new mobile channel of the on-line ticketing system for railway transport with peak number of 4 million tickets sold during holidays. For mobile channel during peak time in Spring Festival, the statistics are
 - 16 million downloads in two months
 - 1.6 million unique visitors in peak day
 - 0.3 million concurrent user in peak
 - 0.3 million tickets sold per peak day
 - 100 million daily hits in peak
- •Cost: Existing native application considered too costly for continuous evolution on multiple platforms
- •Security: App Authenticity is critical, since 3rd party browsers had hack their backend services on their website.

Solution

- •Worklight on WAS cluster can safely share the workload and easily to scale up for the peak time
- •The end-to-end mobile lifecycle support of Worklight help them gradually evolve their app independent by web skill and the direct update feature can ensure critical fix's delivery in critical situation.
- •App Authenticity check of Worklight can ensure no 3rd party can forgery the app to buy the ticket

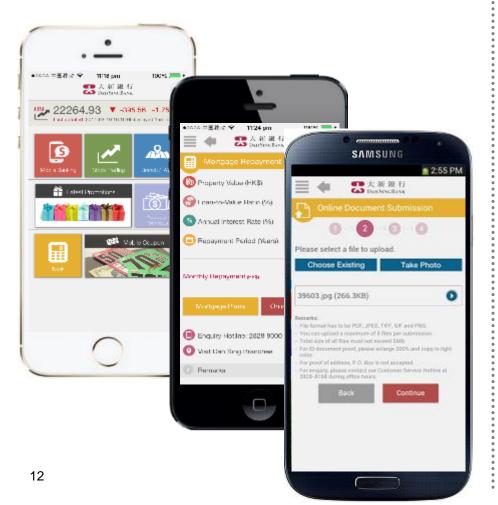
Benefits

- •Easy to scale out to handle the peak time's traffic
- •Able to develop mobile apps quickly and efficiently, responsive for critical fix at anytime, supporting future business growth at a lower cost than its previous provider could offer
- Avoid illegal 3rd party app's visits

3. Build richer experiences



Why IBM: Dah Sing Bank (DSB) is impressed by IBM's thought leadership in "mobile business", strong delivery capability, deep understanding of the regulatory requirements



Challenges

Targeting on young professionals who are tech-savvy, DSB determines that mobile channel is essential to sustain business growth. Its visionary goal is to not only building a mobile banking app, but also establish a platform to help them deliver and capture the desirable client experience

IBM Solutions

- Mobile Integrated Development Environment (Worklight): integrate with DSB core banking system; streamline mobile development cycle with agility to incorporate new features fast; simplify testing with simulators to support more mobile platforms at lower cost
- Robust Application Architecture for Mobile Banking: meet HKMA regulatory requirements in mobile banking application design
- Innovation in Mobile Coupon Program: design mobile coupon features

Client Benefits

- ✓ Low support cost on multiple devices across platform (iOS & Android). The exciting DSB APP is now available on both Google Play and Apple Store
- ✓ Fast time-to-market with flexibility to enhance mobile banking functions with short release cycle





Air Canada rouge – Soars ahead with a wireless in-flight entertainment service

Eliminates the costs

of purchasing, maintaining and replacing seatback entertainment screens



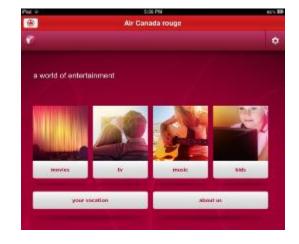
Saves hundreds of thousands

of dollars in fuel annually by cutting several pounds off the weight of each airplane seat



as mobile technology evolves and offers a wide range of fresh content





The transformation: Air Canada rouge became the first carrier in North America that allows passengers to be entertained on their own wireless devices with onboard content. The airline saves fuel from lower weight and reduces system installation and maintenance costs.

"The MobileFirst solution developed by the IBM team helps us deliver a differentiated in-flight entertainment experience for our passengers while keeping a tight rein on our costs so that we can continue offering competitive fares."

—Anton Vidgen, Senior Director, Customer and Technology, Air Canada rouge

5. Optimise for mobile



MyCoop





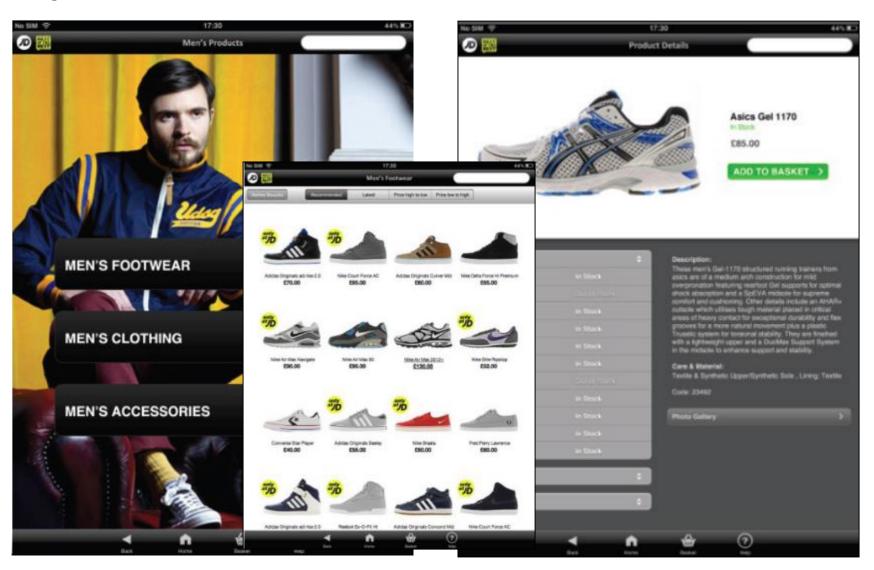


https://www.youtube.com/watch?v=jKknSJzU9IY

6. End to end experience



JD Sports







7. Be more social

- Mobile and social have grown/exploded together
 - Over 500 million mobile monthly active Facebook users
- Understand how this fits with your mobile proposition (and brand)....then capitalise on it
- Become part of the conversation by allowing your users an open voice on your digital channel
- Turn users into advocates of your brand







8. Smart evolution

- Technology is evolving rapidly with significant new device and platforms updates coming along every three-six months
 - You must have a capability to provide updates regularly
 - Have an optimised delivery and maintenance approach to cope with the fragmentation





- User expectations on mobile are constantly evolving around:
 - Security
 - Privacy
 - Role of mobile
- It is key to let your users help you
 - Involve them in the process
 - Don't forget your own people are users too





Join the mobile conversation

Internet: http://www.ibm.com/mobilefirst

Get Social: http://www.facebook.com/ibmmobile

http://www.linkedin.com/groups/IBM-Mobile-4579117

http://www.twitter.com/ibmmobile

http://asmarterplanet.com/mobile-enterprise/

Youtube: http://www.youtube.com/IBMmobileenterprise

Download: http://www.ibm.com/developerworks/mobile/



Thank you!







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@RainerPirker



http://www.linkedin.com/pub/rainer-pirker/0/a33/b40

19



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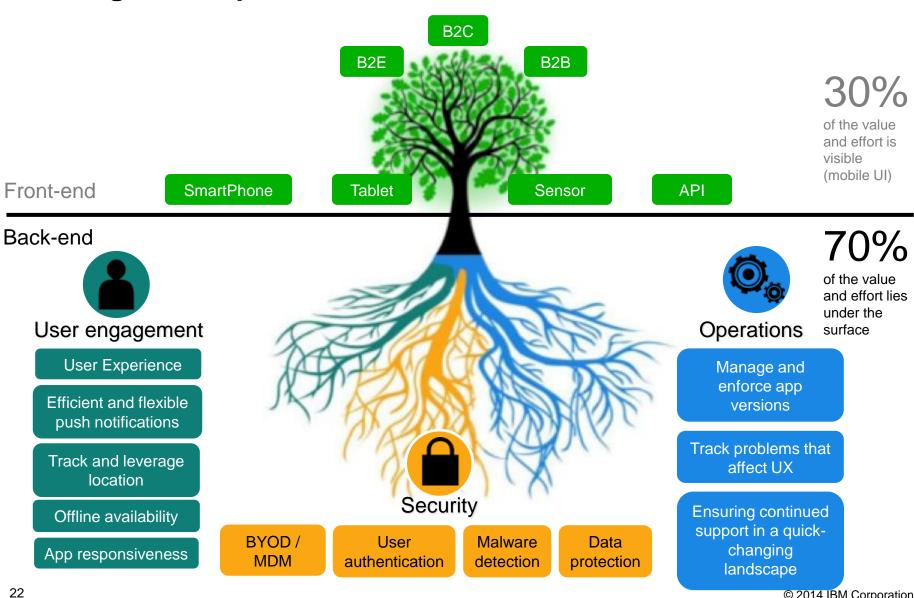


Backup





Mobile goes deeper than front-end UI





The IBM Mobile Enterprise Development Lifecycle

The industry's most complete mobile software ecosystem

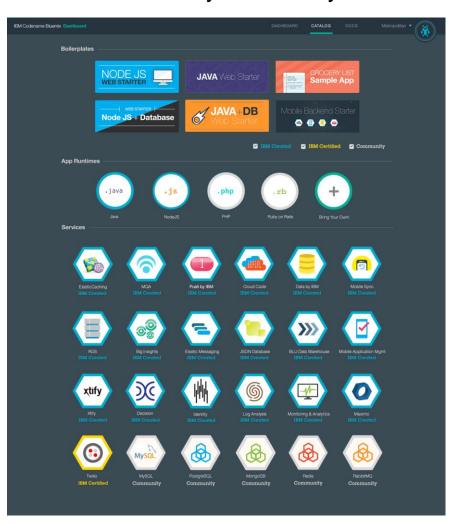




IBM BlueMix

https://ace.ng.bluemix.net

A rich set of mobile ready APIs that you can mix and match to power your App



Run Code

The developer can chose any language runtime or bring their own. Just upload your code and go.

DevOps

Development, monitoring, deployment and logging tools allow the developer to run the entire application

APIs and Services

A catalog of open source, IBM and third party APIs services allow a developer to stitch together an application in minutes.

Cloud Integration

Build hybrid environments. Connect to on-premises systems of record plus other public and private clouds. Expose your own APIs to your developers.

Built on IBM SoftLayer

Runs on top of IBM's leading infrastructure as a service.



How we're describing IBM's approach to security



Device Security Content Security Application Security Transaction Security · Enroll, provision and configure · Restrict copy, paste and share **Software Development Lifecycle** Access devices, settings and mobile Integrated Development Mobile Access Management Integration with Connections, policy Environment SharePoint, Box, Google Drive, · Identity Federation Windows File Share · Fingerprint devices with a iOS / Android Static Scanning API Connectivity unique and persistent mobile · Secure access to corporate **Application Protection** device ID **Transactions** mail, calendar and contacts App Wrapping or SDK Container Remotely Locate, Lock and Mobile Fraud Risk Detection Secure access to corporate Wipe lost or stolen devices · Hardening & Tamper Resistance intranet sites and network Cross-channel Fraud Detection IBM Business Partner (Arxan) Enforce device security · Browser Security / URL Filtering compliance: passcode. Run-time Risk Detection encryption, jailbreak / root Malware, Jailbreak / Root, Device · IP Velocity ID. and Location detection Mobile Malware · Whitelist / Blacklist Applications

Advanced threat detection with greater visibility

Security Intelligence



Spectrum of mobile app development approaches

Pure web Hybrid Pure native Mostly **Native** Mobile Pre-HTML5 + native, shell **Pure** web site package native UI some enclosing native d HTML5 **Enhanced** HTML5 (browser external **Enhanced** access) resources screens m.site New **(** Web-native continuum

- HTML5, JS, and CSS3 (full site or m.site)
- Quicker and cheaper way to mobile
- Sub-optimal experience

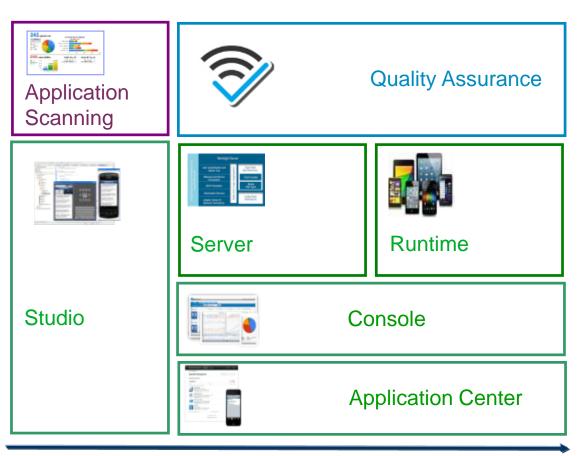
- HTML5, JS, and CSS
- Usually leverages
 Cordova
- Downloadable, app store presence, push capabilities
- Can use native APIs

- As previous
- + more responsive, available offline
- Web + native code
- Optimized user experience with native screens in startup and during runtime, controls, and navigation
- App fully adjusted to OS
- Some screens are multiplatform (web) when makes sense
- App fully adjusted to OS
- Best attainable user experience
- Unique development effort per OS, costly to maintain



Introducing the new IBM Worklight Platform

Integrated mobile app development with continuous delivery



Application Scanning

Detect code security vulnerabilities at the time of development

Quality Assurance

Collect beta test feedback, crashes and analyze user sentiment

Foundation

Development, Runtime, Operations Console & Private Store

Development

Continuous Delivery



What's in IBM Worklight Foundation?

Formerly IBM Worklight 6.2

Development



Studio

Leading tools for native and hybrid development that maximize code reuse, accelerate development, and promote team work

Delivery



Server Gateway for engagement, security and analytics



Runtime Client APIs for native, hybrid and web apps



Operational Console

UI for deployment, management, and real-time operational analytics, push notifications



Application Center

A non-MDM, cross platform private mobile application store

Accelerate Web, Native, and Hybrid Development

- Rich infrastructure, enabling developer focus on business logic
- Preview, simulation, and testing tools for shortening development lifecycle
- Mechanisms to industrialize app development

Facilitate App Security and Trust

- · Server-enforced authentication
- App authenticity and user-app-device binding
- Secure and syncable on-device storage
- · App version enforcement

Support Mobile Operations

- Operational analytics with efficient data acquisition
- Offline and online event management integration
- · Remote user and app control without MDM

Engage Users with the Enterprise

- Integrate with the enterprise & codeless access to systems
- Unified push and SMS notifications
- Geo-location and context collections and intelligence

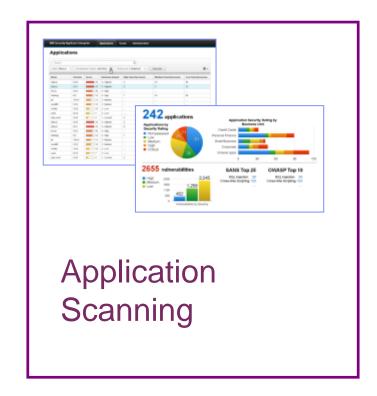


Introducing IBM Worklight Application Scanning

Based on AppScan v9.0

Detect vulnerabilities at the time of code change to reduce risk of data leakage and breaches

- A single Eclipse Integrated Development Environment (IDE). Scan existing code projects or Worklight Studio projects
- Native and hybrid mobile applications support
- Enhanced JavaScript analysis, which includes improved performance and additional framework support
- Optionally connect to IBM Security
 AppScan Enterprise Server to share scan configurations, filters, and custom rules across all projects





Introducing IBM Worklight Quality Assurance

Delivers mobile app quality across a fragmented environment with end user feedback and quality metrics available at every stage of development.

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





Fiberlink – Total Enterprise Mobility Management



Experts in delivering mobile management and security as a service



Over 3500 existing customers

- ✓ Mobile Device Management
 - Broad range of mobile OS support
- ✓ Mobile Application Management
 - · SDK and App-Wrapping
- ✓ Dual Persona Container Support
- ✓ Secure Productivity Suite
 - Secure Mail
 - Secure Browser
- ✓ Secure Document Sharing
- ✓ Enterprise App Catalog
- √ SaaS Offering

Recognized Market Leadership

★ Recognized as a market leader by Gartner 2013 MDM Magic Quadrant















Why Fiberlink?



Simple and fast with an exceptional experience

SaaS implementation provided 100% Day Zero iOS7 support in every customer environment



Seamless integration with your infrastructure

Comprehensive corporate directory and email (On-Prem or Cloud) integration in under an hour



Provenapproach to cloud mobility management

Only FISMA certified MDM platform.



Device Management & Security App Management & Security Enterprise DLP & Security

Comprehensive layered security

A complete solution to secure the device, the app, and the data.

Reduce Management Cost

Quickly deploy, enroll and manage devices, apps and docs with automatic updates without additional hardware costs or maintenance hassles.

Improve productivity & employee satisfaction

Provide end-to-end accessibility so your employees can truly take the business wherever they go.

Improve Security Compliance & Reduce Risk

Protect data by enforcing policies and providing device and application security on BYOD and business-issued devices.



Capability: Security - Trusteer at a glance

Trusteer's mission is to provide businesses, their employees and their customers the most effective Cybercrime prevention solutions that are easy to deploy, manage and use

Organization

- Privately held organization founded in 2006
- With offices in Boston, MA and Tel Aviv, Israel
- Approximately 236 employees (Dec. 2012)

Capabilities and Technology

- Consistent Web Fraud Detection leader based on vision and ability to execute
- Proven Cloud-based (SaaS) portfolio of offerings
- Solutions extending to mobile risk prevention
- Tens of millions of protected endpoints

Customers

- More than 300 customers worldwide
- Deep penetration in global financial sector: 7/10 top US banks, 9/10 top UK banks, 5/6 top Canadian banks, 2/4 top Australian banks
- Well established ISV and business partners

Representative Customers



















































Xtify - Real-time personalized mobile push notifications anywhere leveraging behavioral targeting analytics and defined business logic



Allows marketers determine, in real-time, the best personalized message for each live customer interaction and send **location-based messages to mobile devices** – <u>via native apps and mobile web</u> –mapped to current campaigns

Increase **online conversions** with personalized offers and recommendations across mobile web, and app sessions





Send personalized emails



Provide call center agents with real-time data



Display relevant offers on ATMs, kiosks, and points of sale



Personalized messages via **Facebook apps** and other **social media platforms**