BusinessConnect and SolutionsConnect
It's time to make bold moves.

DELIVERING CONFIDENCE TO SEIZE THE MOBILE OPPORTUNITY

Richard Paul
Mobile Services Executive

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Agenda

- The mobile imperative
- Industry innovations ‘Made with Mobile’
- Enterprise Considerations for mobile innovation

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THE MOBILE IMPERATIVE

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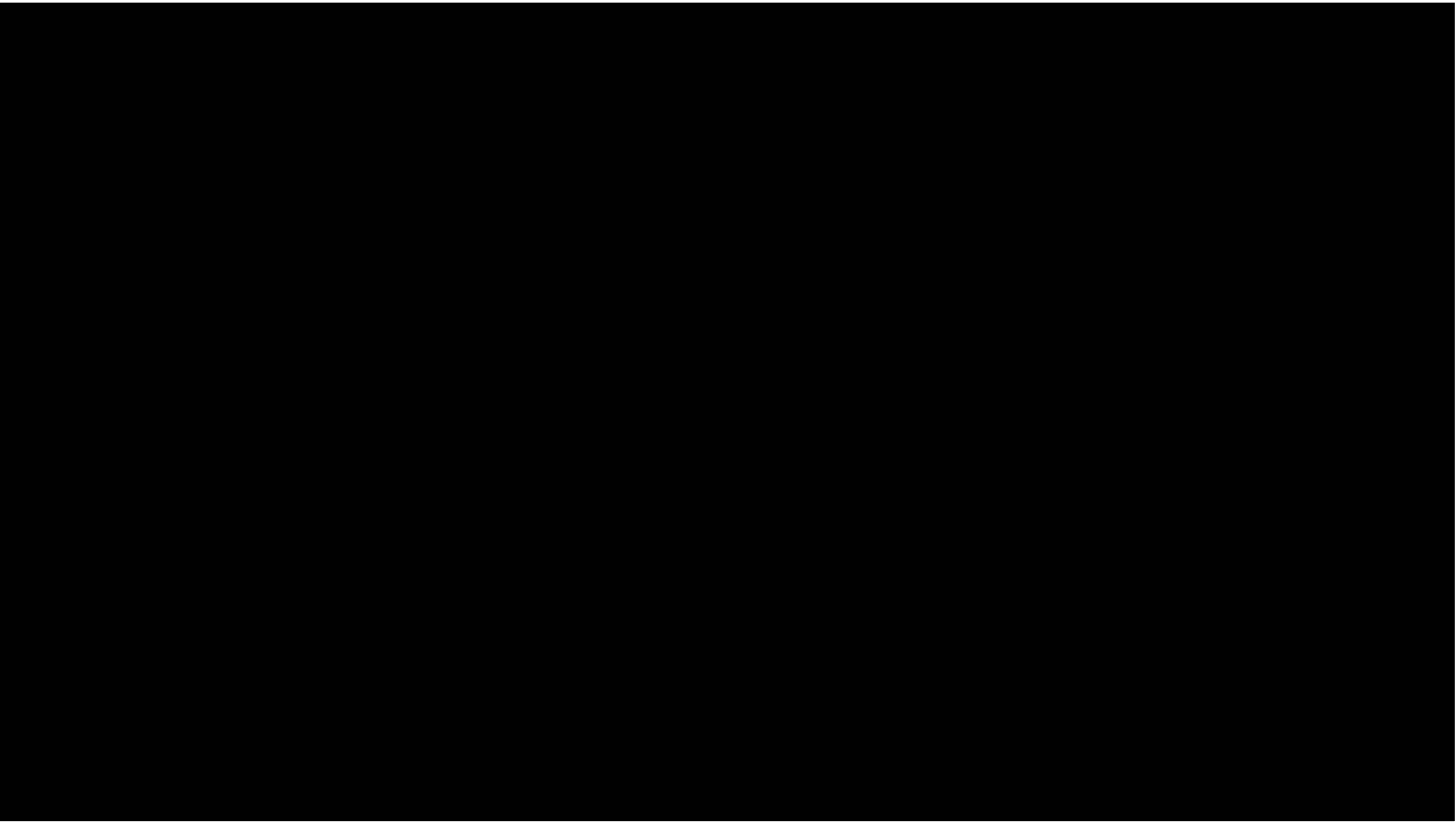

40%

OF PEOPLE USE SMART DEVICES

to log onto the web before getting out of bed in the morning

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The average mobile phone user checks their phone

150x

PER DAY

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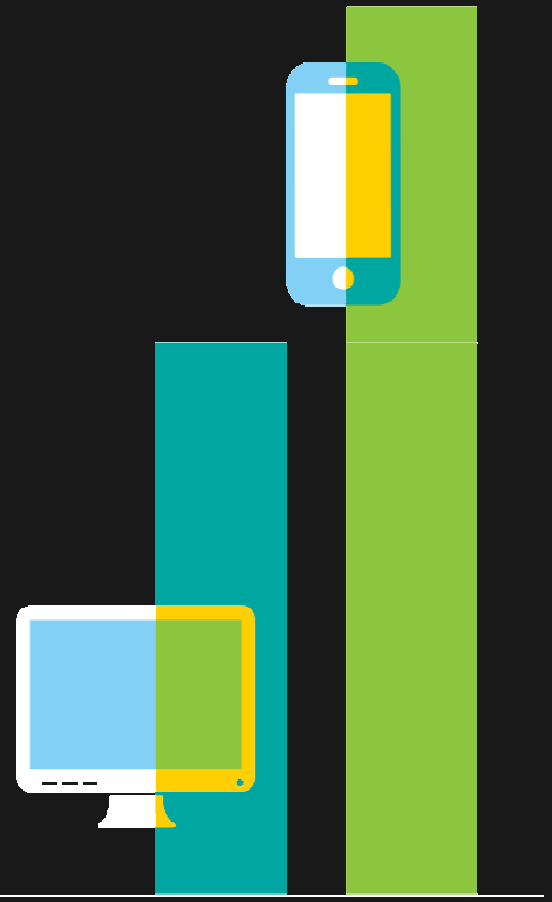
76%

OF EXECUTIVES

expect mobile to surpass desktop for key work activities within 3 years



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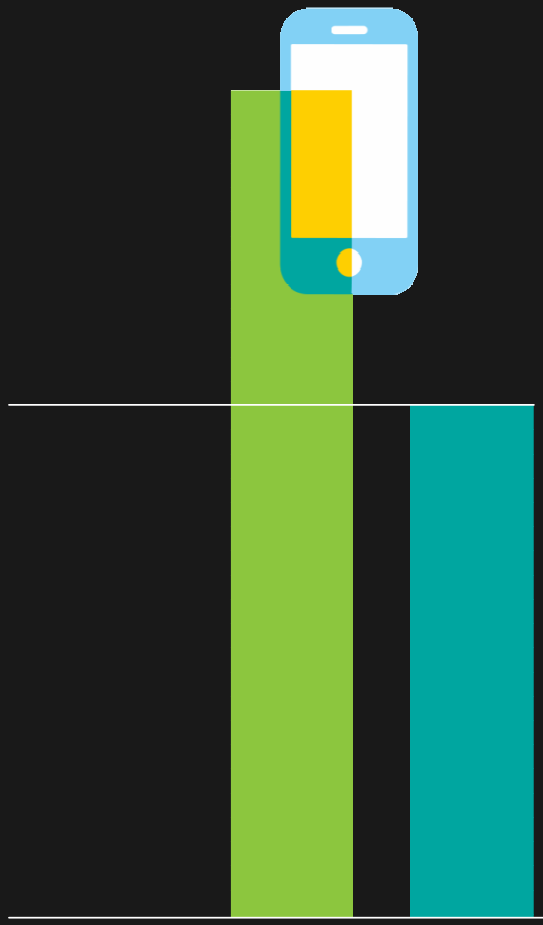

Industry experts predict that

BY 2015

2/3 OF THE WORKFORCE

will own a smartphone

40% OF THE WORKFORCE

will be mobile

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85% of Adults

who have completed a mobile transaction

IN THE PAST YEAR

expect the experience to be better on mobile than on a laptop or desktop computer

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Global M2M connections
will increase from 2 billion in 2011 to

18 BILLION

AT THE END OF 2022

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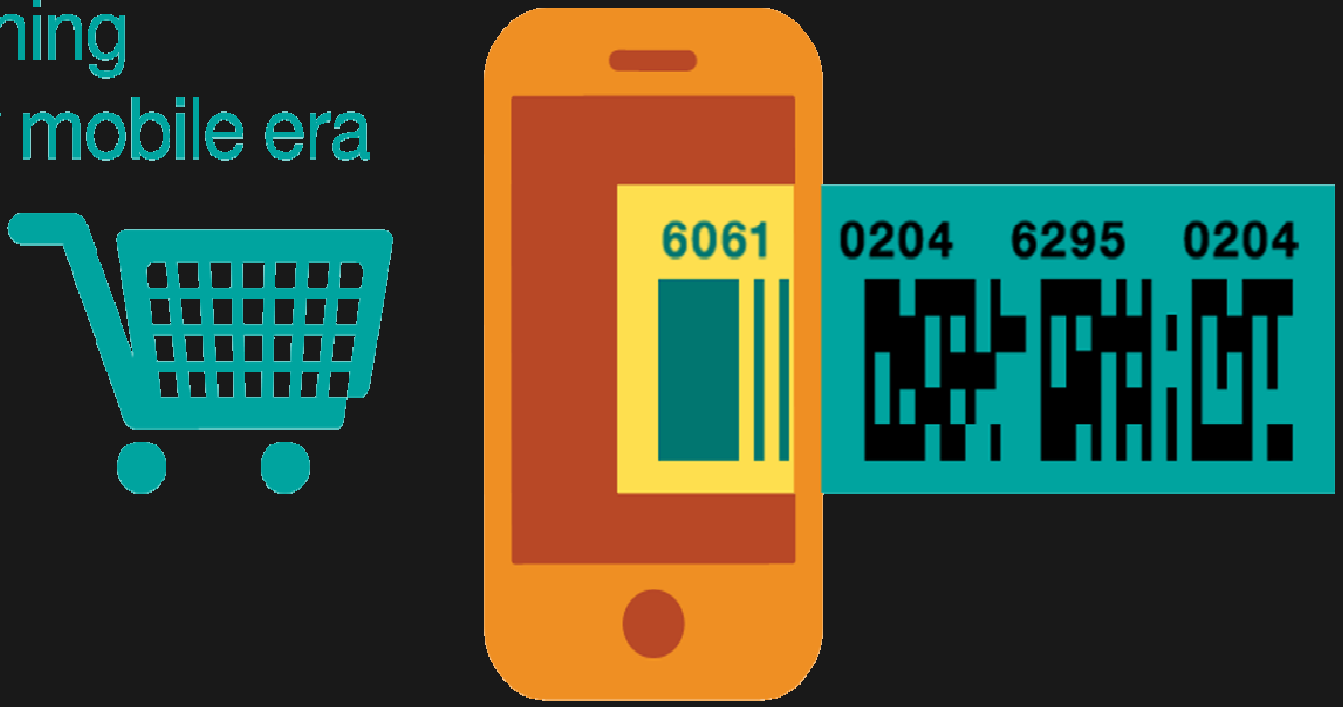
CONTINUOUS TRANSACTION OPPORTUNITIES

are defining the new mobile era



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$4.4 BILLION

Projected revenue from new products and services resulting from location-based mobile data

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The Next Generation of Enterprise Mobility

The convergence of a number of fast growing technologies, including mobile, present transformational opportunities for enterprises

More Innovation:
Develop new mobile enabled business models

More Experience:
Create more systems of engagement

More Productivity:
Increase employee responsiveness and decision-making speed

More Responsive:
Improve access and service levels

More Revenue:
Increase revenue through sales engagements

More Functionality:
Extend existing applications to mobile workers and customers

More Cost Savings:
Reduce operating costs (e.g., mobile check deposit) as well as personnel costs (e.g, utilizing personal-owned instead of corporate-issued devices)

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Industry innovations driven by mobile

- Energy and Mining
- Retail
- Banking
- Healthcare
- Government

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Mobile solutions support the natural resources business model

Increase labour productivity

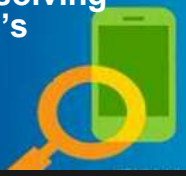
77%

Say that mobility impacts on improved asset productivity and performance.

Simplify processes and capture relevant data only

Optimise resources to increase production and capacity

Real time problem solving with SME's



Track movements of personnel

Improve communication and access to data

70%

Of mining and energy companies believe mobile solutions have prevented worker incidents and accidents.

74%

Say workers lives have been saved as a result of mobile solution deployments.

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Transform the Value Chain

NATIONAL GRID, International electricity and gas improved quality by driving efficiency

- Achieved **20% improvement in productivity** and hit all key **safety** requirements
- Increased points of data capture and **improve data accuracy and quality** for better work management
- Increased **travel time accuracy** from 60% to 99% on every job

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75%

OF MOBILE SHOPPERS

take action
after receiving
a location-based
message

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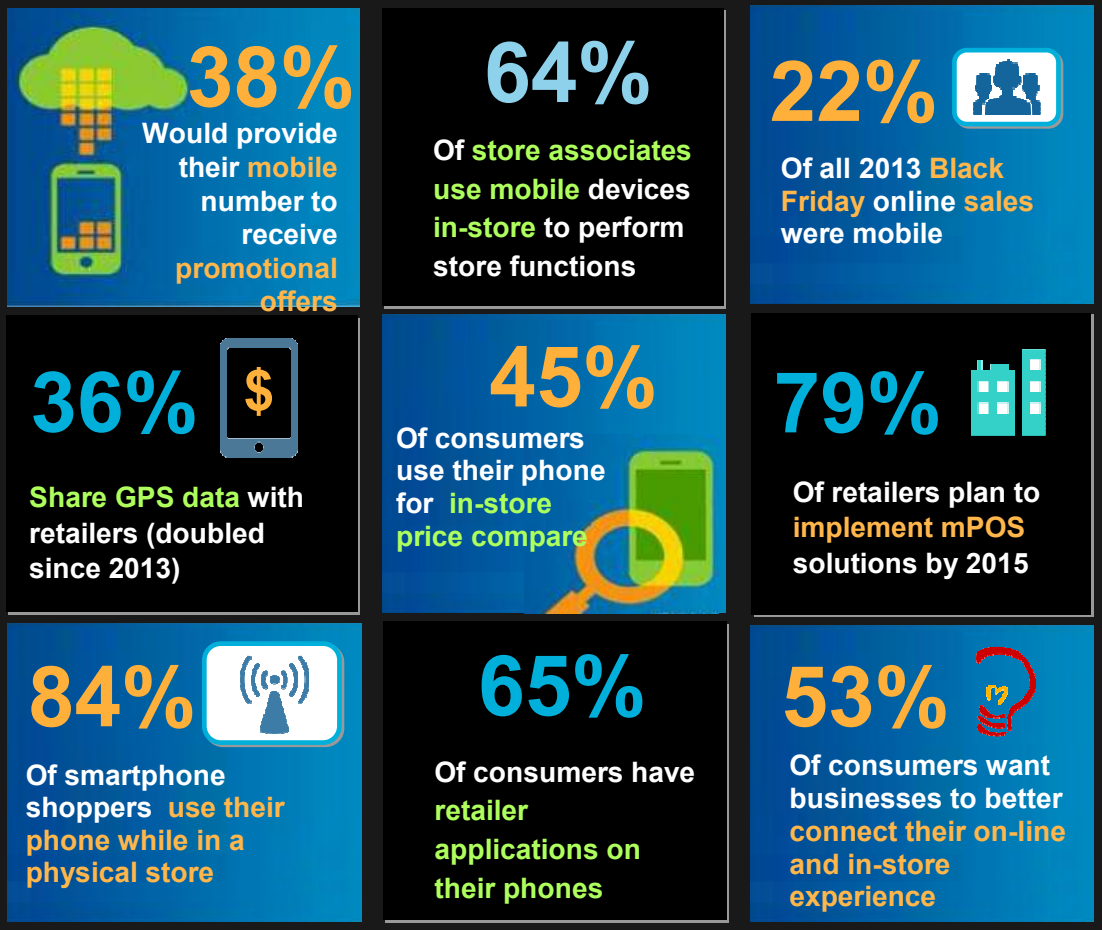
Mobile retail services are now a must-have service



Source: Mobile Industry Statistics, 2013 , Mobile Commerce and Engagement Stats

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Mobile Retail Innovation

Innovation in mobile retail continues to evolve customer engagement, processes, and new products and services

Broad categories of next-generation mobile use case enablement are emerging in retail

Customer Engagement and Experience

•Personalized, contextual enhanced experience for customer
•Cross-sales of related products, services or partners
•Loyalty wallet, group shopping and buying

Workforce Empowerment

•Associate productivity mobile tools, mobile optimized supply chains
•Social showrooming and listening
•Advisor rating & real-time feedback for training improvements

Process Innovation

• Mobile business processes and inventory handling
• In-store navigation, mobile checkout process changes
• Mobile friendly purchase / return / follow-up interactions

Analytics

•Digital customer profile data matched with physical profile data for a focused customer picture
•Real time, comprehensive operational data

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Deliver Contextually Relevant Experience

Large retailer delivers personalized and contextually relevant real-time shopping experiences based on known shopping patterns

I want **a retailer**

That helps me **find what I want**

And gives me **customized offers**

Before, not after, **I need them**

In order to maximize **my shopping experience**

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신당
6
Cold
Cold
₩1,170
₩2,400

The number of mobile payment users worldwide reached

245.2 MILLION

in 2013, up from
200.8 MILLION in 2012

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Mobile retail banking services are a must-have service

Mobile banking is the most important deciding factor when switching banks (32%)

More important than fees (24%) or branch location (21%) or services (21%)… a survey of mobile banking customers in the U.S. [1]

43%

of 18-20 year olds have used a mobile banking app in the past 12 months

#1 Channel

Mobile banking channel development is the #1 technology priority of N.A. retail banks (2013)

70%

of customers are willing to provide their banks with more personal information in exchange for context aware products

29%

Cash-based retail payments in the U.S. have fallen from 36% in 2002 to 29% in 2012

90%

Of mobile banking app users use the app to check account balances or recent transactions

$1tn

The mobile payments market will eventually eclipse $1 trillion by 2017

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Retail banks are facing new competitive threats

Mobile Money Ecosystem

Agile 'non-banks' are entering the mobile money ecosystem with leaner customer-centric offerings

Mobile First Banking

Streamlined products and services

SIMPLE

green dot

GO

Bluebird

Mobile Payment

Making or receiving payments via mobile devices

PayPal

Square

payvia MOBILE PAYMENTS

T-Mobile

Mobile Commerce

Sourcing, marketing, buying, selling and transactions via mobile devices.

amazon.com

ebay now

NORDSTROM

Personal Financial Management (PFM)

Budgeting, Saving goals, spending analysis tools

mint

YODLEE

Budget Boss

- The traditional relationship between the bank and the customer is being threatened across various fronts. As a result banks are losing the opportunity to cross-sell or up-sell products and services
- There is the risk of supplanting banks by building relationships with customers in one area, like payments, and expanding into the traditional retail banking space (e.g., savings and deposits)

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Mobile Banking Innovation

Innovation in mobile retail banking continues to evolve customer engagement, processes, and new products and services

Mobile Marketing & Analytics (Visa Offers)

The program enables retailers and financial institutions of all sizes to deliver customized and differentiated offers to Visa cardholders at the point-of-sale. Visa analyzes cardholders' purchases and offer customized deals and discounts that match cardholders' spending habits

Social Banking (ING Direct)

Integrates mobile banking with Facebook for added convenience. Users can receive account notifications within Facebook for a more unified experience

Mobile Payments (P2B – NFC)

La Caixa enables contactless payment through TAP Visa stickers attached to the back of a mobile phone and carry an EMV chip with encrypted card data

Customers complete transactions or withdrawal through frictionless interactions with in-store terminal

Mobile Wallet (Serve)

Amex's mobile wallet offering provides the benefits of a debit card to which you can transfer funds from any bank or through P2P. Customers can send money via email, Facebook, mobile app or SMS, create sub-accounts for families

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mHealth initiatives are driving better outcomes across all stakeholders

*"To change behavior, mobile health applications …need to address disconnects between long-term intentions and moment-to-moment choices. The most effective tools will creatively instantiate well-evidenced behavior-change principles with **data mining, social networking, location awareness** and other capabilities of mobile technologies."*
Margaret Morris PhD, Sr Researcher, Intel

Environment

1.5m
Errors per year in the way medication is prescribed or taken

30m
Wearable health devices shipped in 2012 (+37% over 2011)

20%
of patients consume 80% of costs

Opportunities

45%
Reduced mortality rate due to remote monitoring

47%
Reduction in overnight hospital stays due to proactive coordinated care

8%
Reduction in total cost per patient attributed to mhealth initiatives

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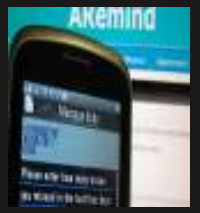
Several mHealth initiatives and technologies dominate the discussion

While wearables are gaining significant attention, there are a number of other technologies and engagement models that are gaining traction.

Remote Monitoring (wearables)

- **AIQ Clothing** – wearable electrodes paired with Bluetooth connectivity for continuous remote monitoring of health conditions
- **Preventice** – body sensor that allows physicians to monitor a patient's physiological data
- **Fitbit Force** – wireless activity and sleep wristband

Mobile Medication Management / Adherence



- **ARemind** – service platform that sends patient scheduled medication reminders as dynamic, personalized SMS
- **MyMedSchedule** – secure medication schedule and reminder application
- **RxmindMe** – reminder application for medication, vitamins, and supplements

Remote Diagnosis (Telemedicine)

- **MobileCT Viewer** – medical imaging application enabling anytime, anywhere viewing of patient cases, optimizing the medical imaging workflow
- **TeleSteth** – Platform to allow healthcare professionals to share heart, lung, and airway sounds with colleagues using the internet or a private network
- **Airstrip** – Collection of mobile services allowing physicians to monitor patient status information away from medical centers in real time

Social Health

- **Alliance Health Networks** – condition-specific social networks serving over 1 million members across more than 50 health conditions
- **Ozmosis** – care collaboration platform that enables hospital systems and life science firms to drive greater collaboration within care teams
- **MyHealthTeams** – mobile-optimized condition-specific community portals to connect individuals with local businesses and support networks.

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Mobile adoption is changing the business of government

Reality

81%

Of US Federal workers say mobile devices increase productivity

In 2014

More people will access the internet with their mobile than a desktop

Reaction

35%

Of new government applications will be mobile

1/3

Of citizens accessing government websites are logging in from phones or tablets

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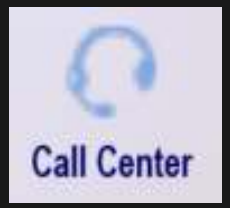
The economic value of mGovernment

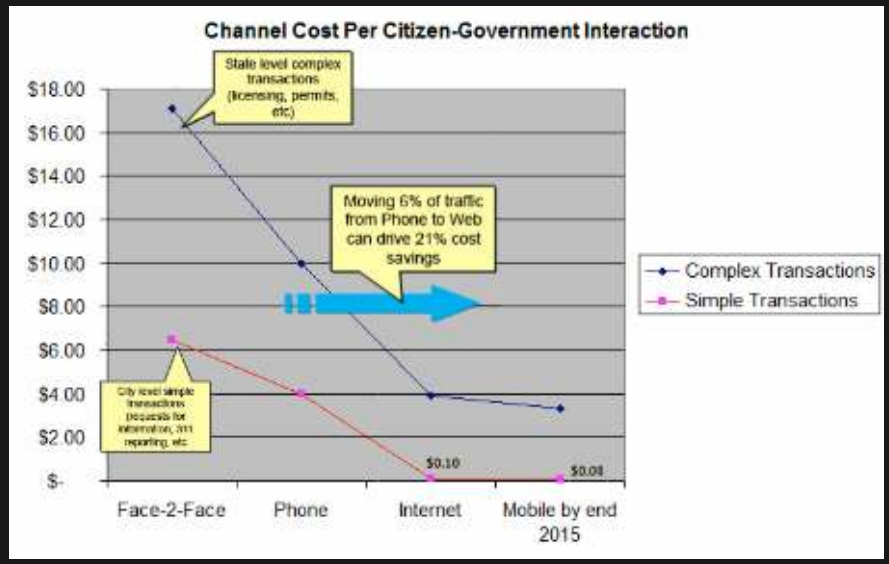
*Total Transactions – **2%***
*Total Cost – **9%***



*Total Transactions – **24%***
*Total Cost – **84%***

*Total Transactions – **74%***
*Total Cost – **6%***

*Total Transactions – **?***
*Total Cost – **?***



Source: *City of Hamilton, Ontario*

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Leverage Industry Transformations

Region of Eindhoven captures data from cars and road sensors to notify commuters via smart phone app

VVV EINDHOVEN

I want to tag things through auto ID technologies like RFID

Sense things through sensors and actuators

Shrink things through developments in miniaturization and nanotechnology

Create Thinking Things by imbedding processing power

and **Power things** through advances in energy efficiency, storage and generation

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TOP 5
CONNECTED APPS PROJECTED BY 2020

- → Car
- → Clinical monitoring
- → Security
- → Assisted living
- → Pay as you drive insurance

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Enterprise considerations for mobile innovation

- BYOD
- Security
- User Adoption
- Big Data
- Business Value

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81%

OF EMPLOYED ADULTS

use at least one personally owned electronic device for business

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IBV Study found that

SECURITY

WAS THE #2 CONCERN

related to implementing
mobile within the enterprise

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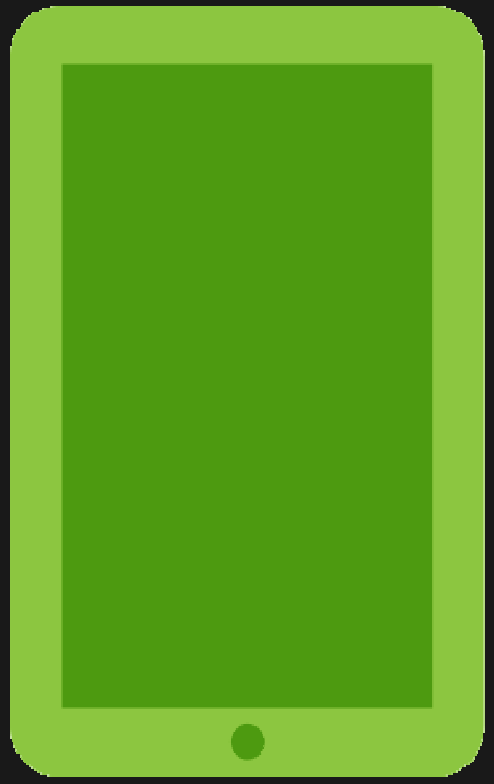
Industry experts predict that

BY

2018

70%

of the workforce will use a tablet or tablet hybrid



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80%

OF MOBILE APPS

are used once,
then deleted

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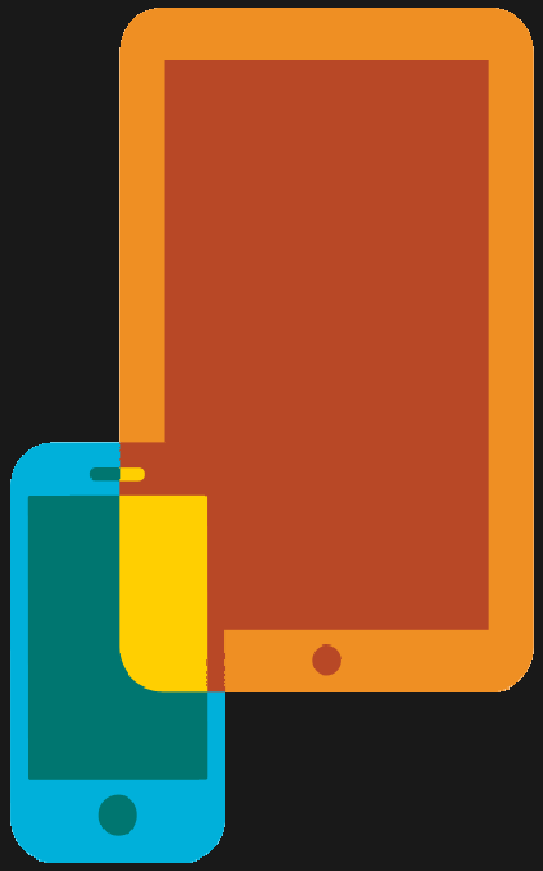
90%

OF USERS USE MULTIPLE SCREENS

as channels come together to create integrated experiences



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5

PETABYTES OF DATA

Are generated every day by mobile phone subscribers around the world

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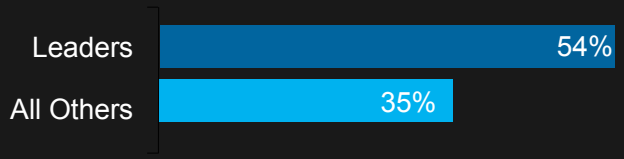
Furthermore, Mobile strategy leaders are much more likely to deliver superior financial results

Breakdown by Revenue Growth - Outperformers

How does the revenue growth of your organization compare to your industry peers over the last 3 years?

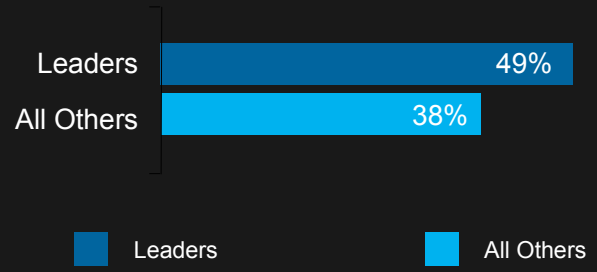
Breakdown by Profitability - Outperformers

How does the profitability of your organization compare to your industry peers over the last 3 years?



Breakdown by Net Profit Margin - Outperformers

On average, what was your organization's annual net profit margin over the past 12 months? (percent indicating companies with a profit margin 8% or greater)



Source: Institute for Business Value, Mobile Enterprise Study

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73%

OF MOBILE LEADERS

had measurable ROI
from mobile initiatives

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IBM has helped transform

NEARLY 4,000 COMPANIES

with mobile

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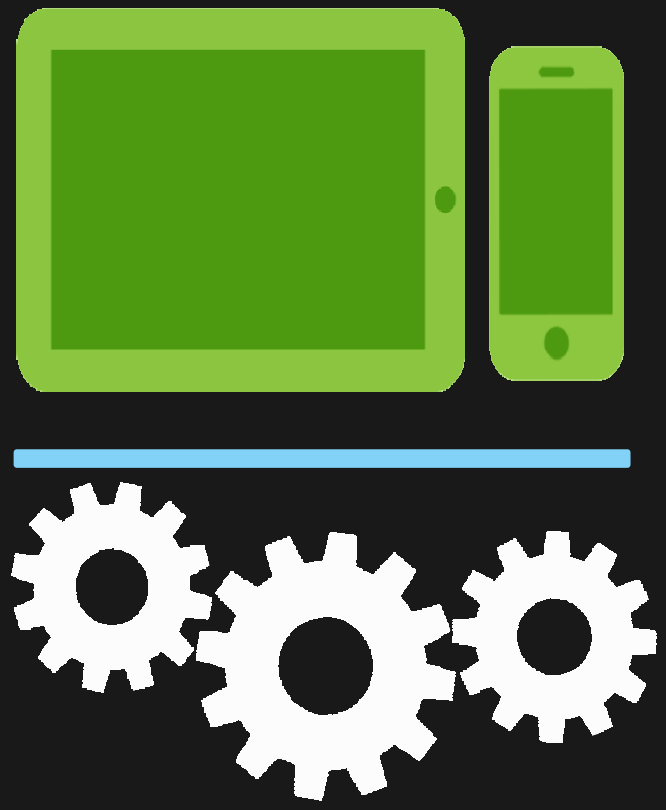

IBM was named A LEADER

in Mobile Application Development Platforms by

Gartner

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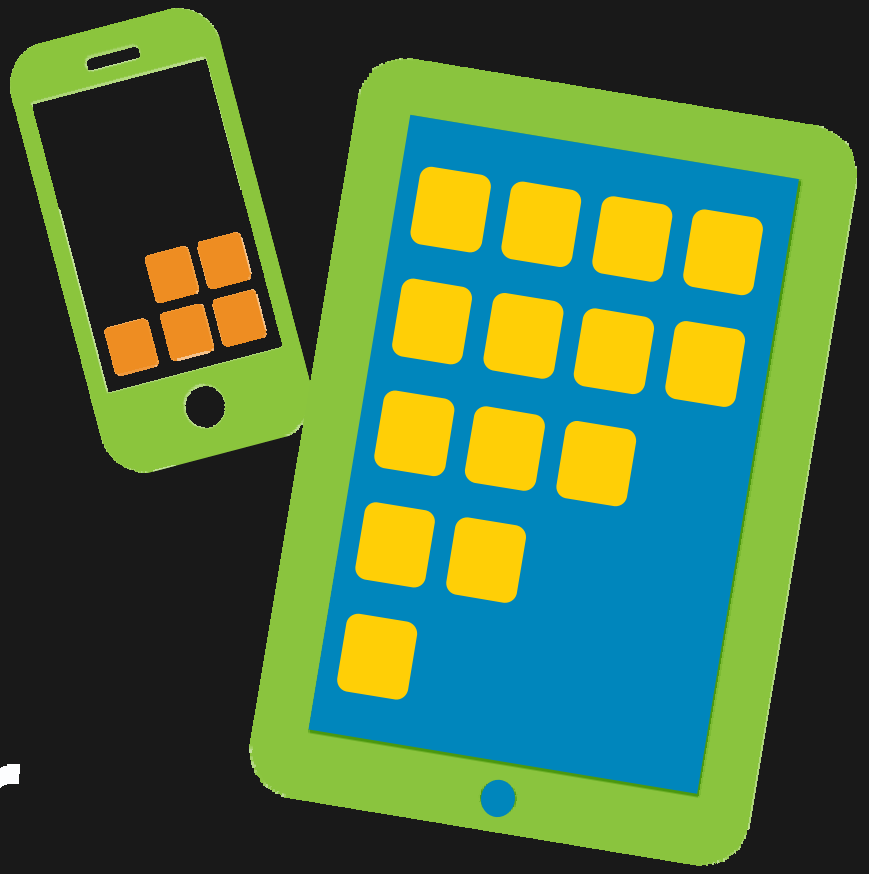
IBM was cited AS A LEADER

in app design and managed services by

FORRESTER®

Gartner



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200+
IBM SOFTWARE APPS

are available today in App Stores,
with almost **1,000,000 downloads**

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IBM's Industry-leading MobileFirst Portfolio

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BusinessConnect and SolutionsConnect

It’s time to make bold moves.

THANK YOU

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