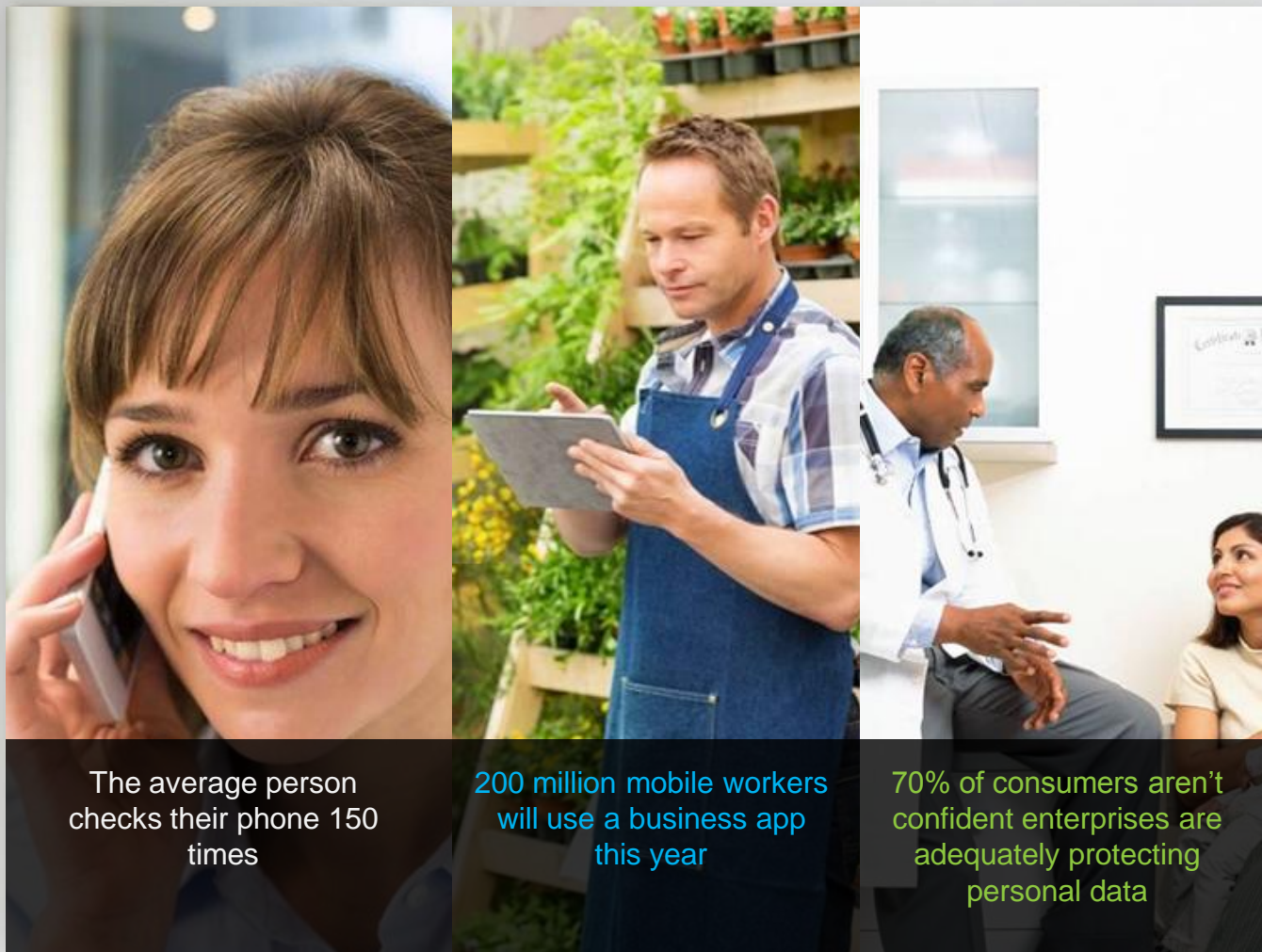


**IBM MobileFirst**

# The Cost of a Bad App

(and how to deliver a good one, fast)

**IBM.**



The average person  
checks their phone 150  
times

200 million mobile workers  
will use a business app  
this year

70% of consumers aren't  
confident enterprises are  
adequately protecting  
personal data

# The mobile mind shift



*The expectation that  
I can get what I want  
in my **immediate context**  
and **moments of need**.*

## Let's define mobile

- › Today, mobile apps are device-specific, and have the following characteristics<sup>1</sup>
  - **Offline capability**
  - **Mobile experiences**
  - **Multi-sensor interactions**
  - **Push notifications and messaging**
  - **Application integration**

1 = Source: "Mobile App Or Mobile Web? It's A Choice, Not A Battle", Forrester Research, December 17, 2013



The phone doesn't see itself as a PC.

The phone sees a phone.

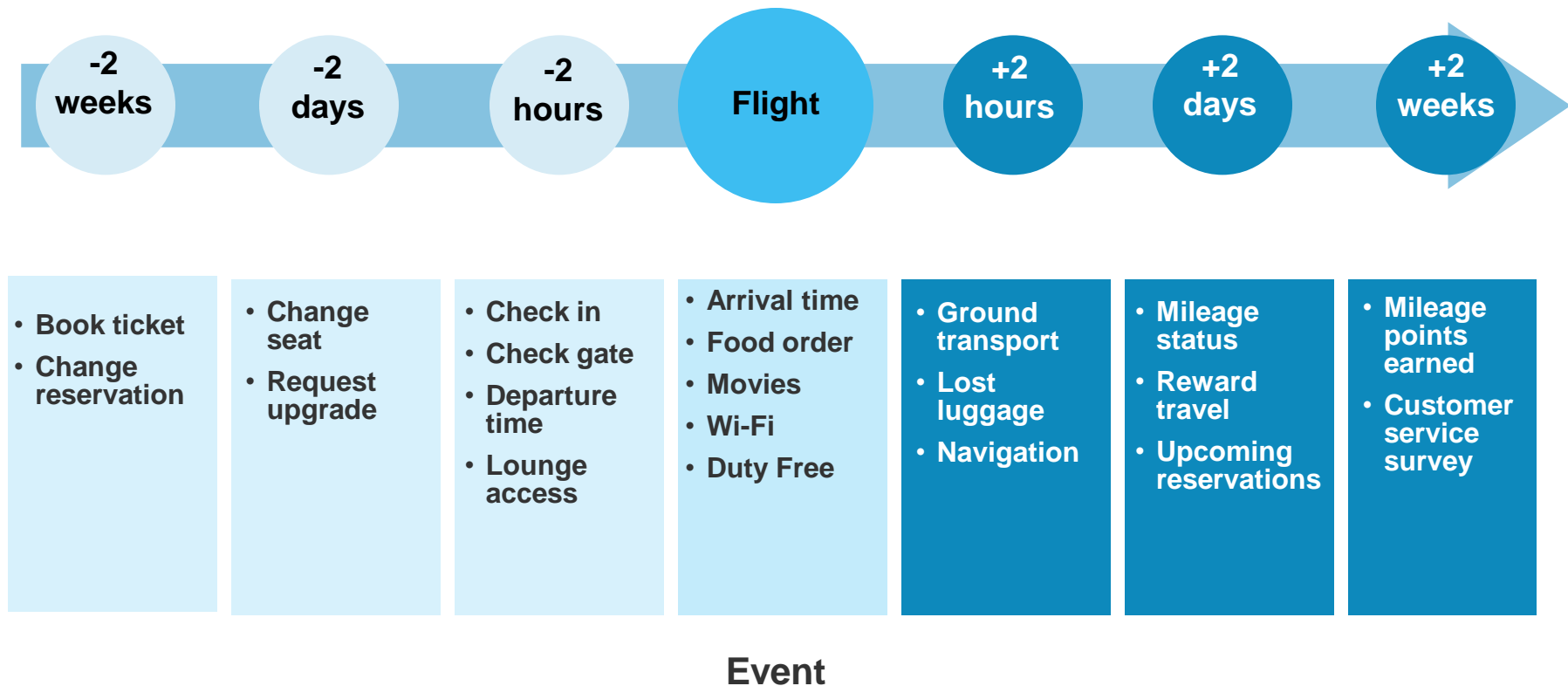




## A mobile moment is...

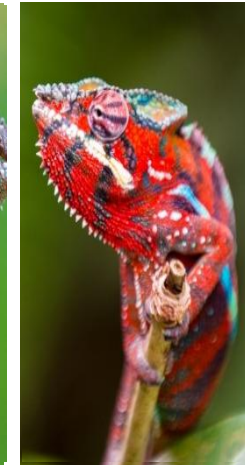
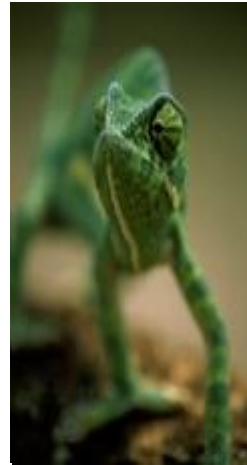
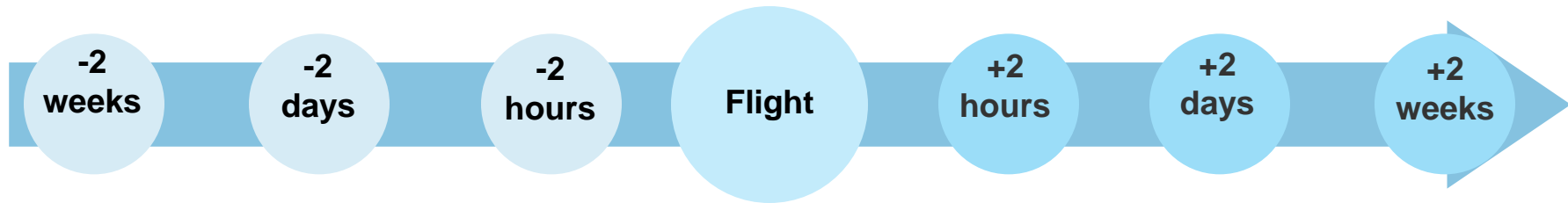
*A point in time and space when someone pulls out a mobile device to get what he or she wants immediately, in context.*

# Successful mobile apps engage users in their mobile moments





# Your experience needs to morph or “change its color” based on context



The  
Impact of  
Good and  
Bad  
Mobile  
Apps

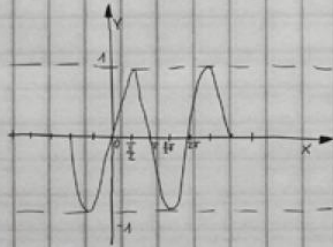
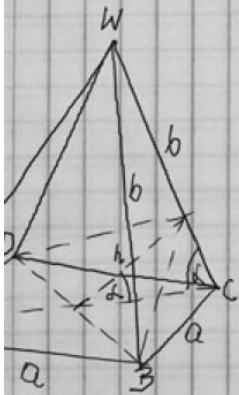
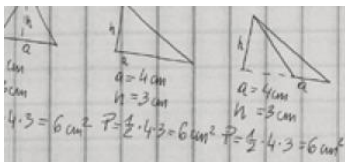
WHEN YOUR APP FAILS

63% OF YOUR CUSTOMERS COMPLAIN TO THEIR FRIENDS.

Source: A commissioned study conducted by Forrester Consulting on behalf of IBM

Base: 1048 Consumers in US, Canada, UK and India who use mobile apps  
Source: "IBM Mobile App Consumer Survey", a commissioned study conducted by Forrester Consulting on behalf of IBM, September, 2014

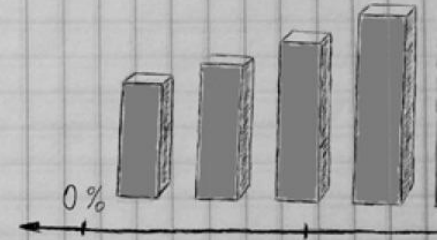
First, you think you know what your customers want, but you probably don't.



$\frac{\pi}{2}$	$\frac{\pi}{4}$	$\frac{\pi}{3}$	$\frac{\pi}{2}$	$\frac{\pi}{2}$
$0^\circ$	$45^\circ$	$60^\circ$	$90^\circ$	$180^\circ$
	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{3}}{2}$	1	0
	$\frac{\sqrt{2}}{2}$	$\frac{1}{2}$	0	-1
	1	$\sqrt{3}$	-	0
	1	$\frac{\sqrt{3}}{3}$	0	-

## What is a good app?

- A good app serves an immediate, transactional purpose (*context matters*)
- A good app works quickly, all of the time *and* doesn't crash (*performance rules!*)
- A good app is secure without hindering response time, stability and performance (*security and performance*)



Source: "IBM Mobile App Study", a commissioned study conducted by Forrester Consulting on behalf of IBM, September, 2014

## The goodness of a good app

- **Consumers respond well to a good app**
  - **58%** -- would purchase products from the company that owns/issued/sold the software.
  - **72%** -- would tell their friend about their positive experience/impression.
- **Employees also respond well to a good app**
  - **38%** -- average increase in employee productivity
  - **40%** -- average increase in partner productivity
  - **30%** -- average reduction in the cost of a process or project

Base: 1048 Consumers in US, Canada, UK and India who use mobile apps, and 200 IT and business decision-makers involved in mobile application strategy, development, and/or procurement  
Source: "IBM Mobile App Consumer & Enterprise Surveys", a commissioned study conducted by Forrester Consulting on behalf of IBM, September, 2014

## What's the cost of not getting it right?

- **Consumers react decisively to a bad experience across touch points:**
  - **65%** -- would not purchase products from the company that owns/ issued/sold the software.
  - **63%** -- would tell their friend about their negative experience/ impression.
  - **50%** -- will uninstall the app if they have problems Generally less willing to interact with the company on its website or via social media.
- **Employees:**
  - Get stuck and can't continue doing their work when the app doesn't **WORK** (*or spend additional time working around the app's poor performance*).
  - Do not adopt the app as a productivity tool, yielding the enterprise no productivity gains.






Base: 1048 Consumers in US, Canada, UK and India who use mobile apps, and 200 IT and business decision-makers involved in mobile application strategy, development, and/or procurement  
Source: "IBM Mobile App Consumer & Enterprise Surveys", a commissioned study conducted by Forrester Consulting on behalf of IBM, September, 2014

# 10 Categories of Cost

Category	Impact on Cost
<b>Development Resources</b> <i>The Cost of the Resource Developing the App</i>	
<b>Delivery timeframe</b> <i>How Quickly The App Can Be Developed &amp; Delivered</i>	
<b>App Complexity</b> <i>How Ambitious Is the Function of the App</i>	
<b>Cross-Platform Capability</b> <i>The Ability to Write an App once and Deploy on Multiple Platforms</i>	
<b>Frequency of App Updates</b> <i>How Many Times Per Year an App is Updated</i>	

Source: "IBM Mobile App Study", a commissioned study conducted by Forrester Consulting on behalf of IBM, September, 2014

## 10 Categories of Cost (continued)

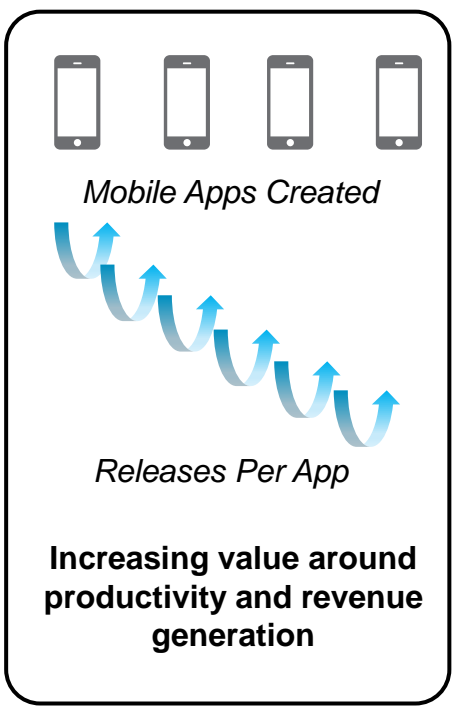
Category	Impact on Cost
<b>App Testing</b> <i>The Level and Intensity of Testing</i>	
<b>Data Integration</b> <i>Integrating The App with Back-End Systems</i>	
<b>Platform Analytics</b> <i>Visibility Into Performance of the App</i>	
<b>Mobile App Security</b> <i>The Right Balance of Security and Access</i>	
<b>Process Change Management</b>	

Source: "IBM Mobile App Study", a commissioned study conducted by Forrester Consulting on behalf of IBM, September, 2014




# A year in the life of a Good, Average and Bad app approach

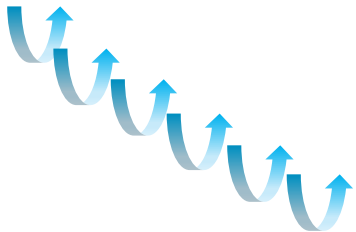
Development approaches with the same annual mobile app budget can produce vastly different results



Mobile Apps Created

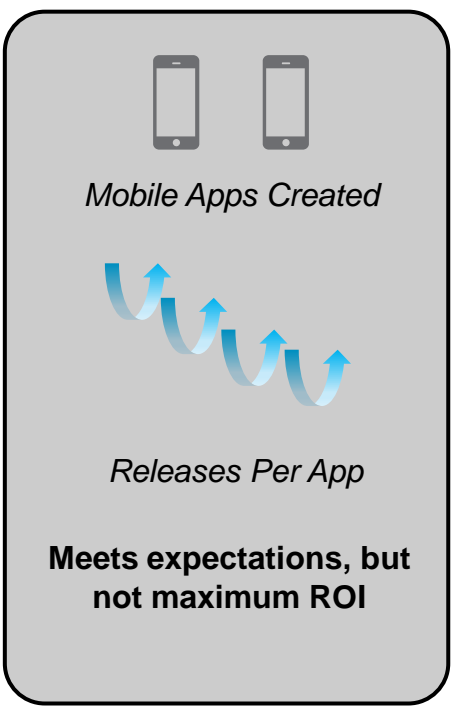


Releases Per App




Increasing value around productivity and revenue generation

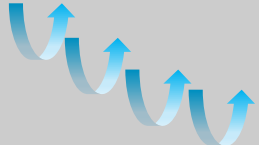
**Optimal**



Mobile Apps Created



Releases Per App



Meets expectations, but not maximum ROI


**Average**



Mobile Apps Created



Releases Per App



Misses productivity and revenue opportunity; may present risks to brand and/or security

**Suboptimal**

Source: "IBM Mobile App Study", a commissioned study conducted by Forrester Consulting on behalf of IBM, September, 2014

...As are the negative impacts of getting them wrong

Based on survey results and qualitative interviews


**Organizations risk doubling their costs**

**2x**

**to deliver an app if they are not mindful of  
the 10 drivers of cost**

**With a limited annual budget and growing demand for internal employee and external customer apps, organizations that deliver apps more cost-effectively can do more their budget — leading to more revenue generation opportunities and productivity gains.**

Source: "IBM Mobile App Study", a commissioned study conducted by Forrester Consulting on behalf of IBM, September, 2014

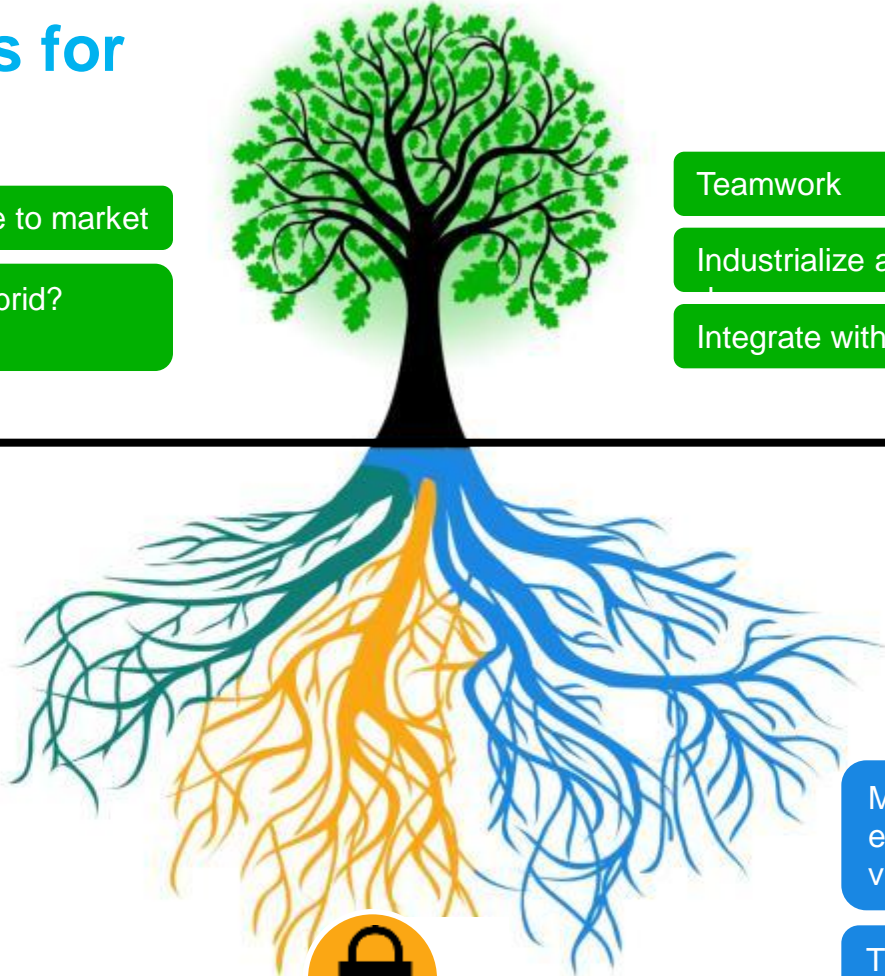
A black smartphone is the central focus, displaying the text "Now, how to deliver a good app -- fast" on its white screen. The phone is placed on a dark wooden surface. In the background, to the left, is a white coffee cup on a saucer. To the right, a rolled-up newspaper is visible, with some text in Cyrillic script. The background is softly blurred.

Now, how  
to deliver  
a good  
app -- fast

# Building blocks for good apps

Front-end

Back-end



Short time to market

Web? Hybrid?  
Native?

Teamwork

Industrialize app

Integrate with SDLC

30%  
of the value and effort is visible (mobile UI)



## User engagement

Connect to back-end

Efficient and flexible push notifications

Track and leverage location

Offline availability

B2E app distribution



## Operations

Manage and enforce app versions

Track problems that affect UX

Ensuring continued support in a quick-changing landscape

70%  
of the value and effort lies under the surface



## Security

Push upgrades

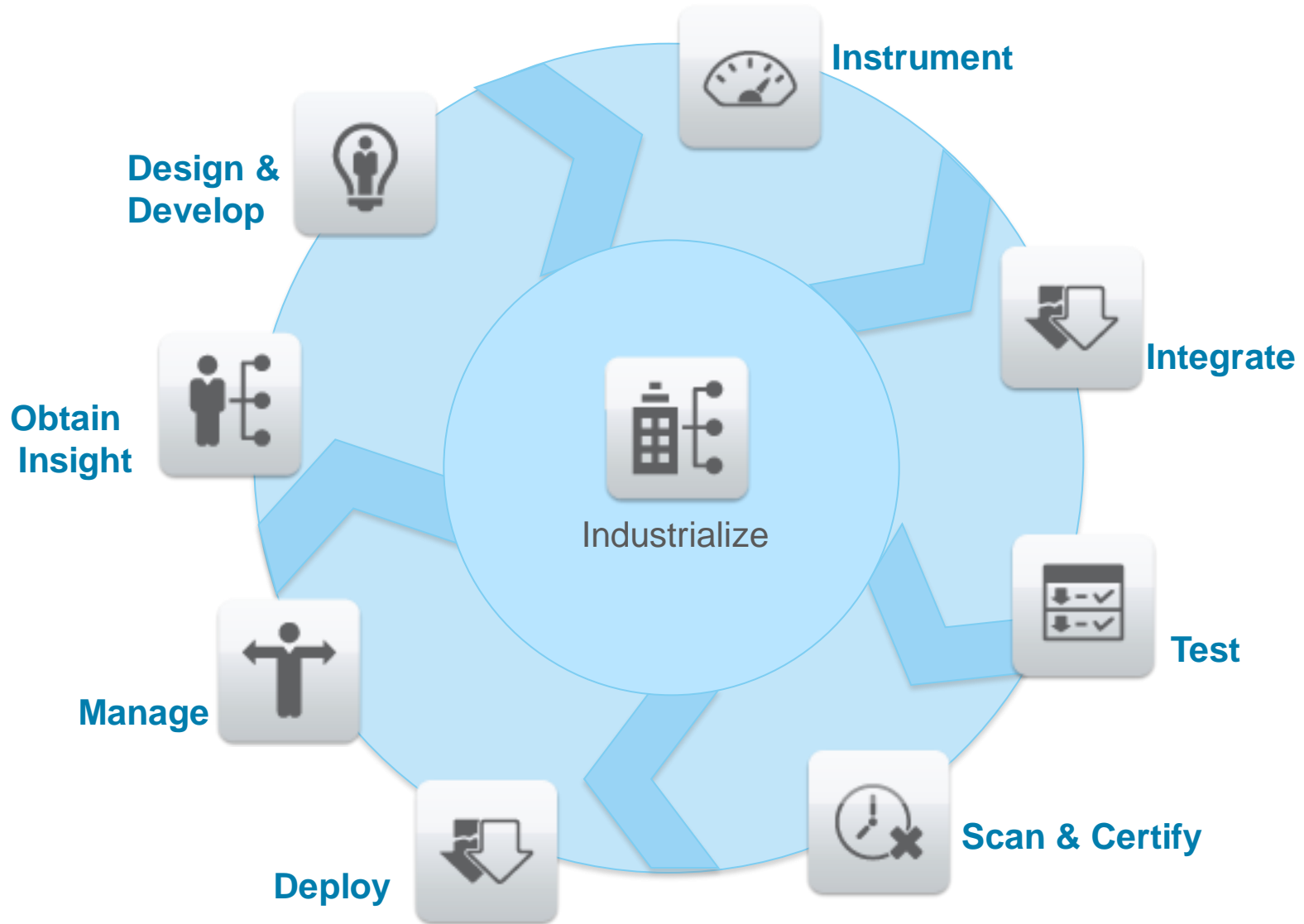
User authentication

Malware detection

Data protection



# The mobile enterprise development lifecycle





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

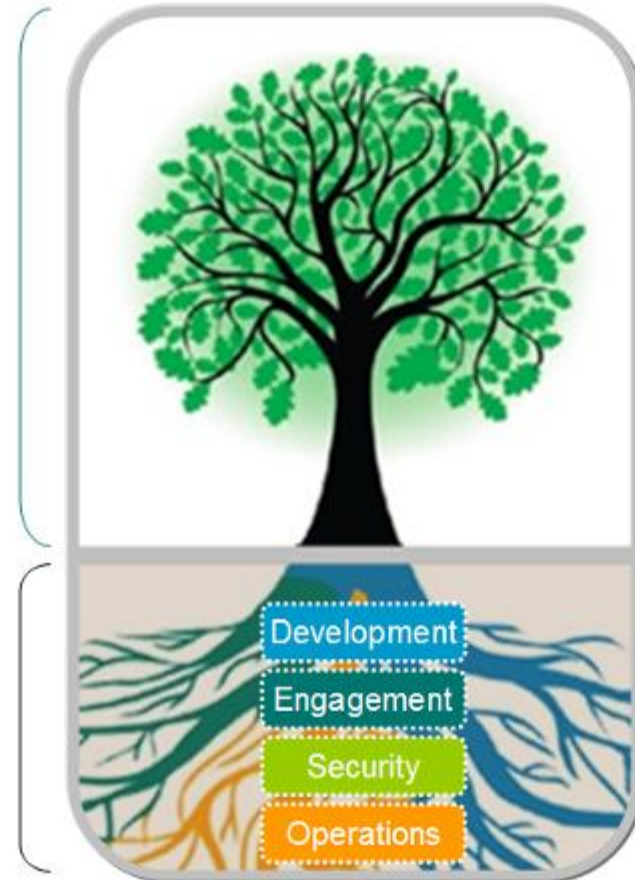
IBM MobileFirst reduces your mobile back-end effort so that you can focus on creating value where it matters most – your customers’ experiences



70% of value lies in  
User  
experience



Back-end  
effort



Maximize effort on user experience  
Minimize effort on back end



## How IBM enables the delivery of a good mobile app

### IBM MobileFirst Platform

Efficiently build, secure, continuously improve and operate mobile apps that make a difference for customers or employees

- **Cross-platform or dedicated native development**
- **Essential backend infrastructure**
- **One platform, get it your way: cloud; on premise; iOS edition**

### IBM MobileFirst Protect

Seamlessly secure and manage your devices, applications, content and transactions

- **Advanced mobile management**
- **Secure productivity suite**
- **Secure gateway access**
- **Secure document sharing**
- **Advanced threat protection and prevention**

### IBM ExperienceOne

Understand, engage and optimize mobile customer interactions to maximize the moments that matter most

- **Push notification and mobile campaign management**
- **Mobile customer experience analytics, and digital analytics**
- **Intelligent location detection**
- **Mobile store and commerce**



## Get started with IBM MobileFirst



Try the **IBM MobileFirst Platform**  
[ibm.com/developerworks/mobile](http://ibm.com/developerworks/mobile)



Learn more about the evolution of enterprise mobile  
and **IBM MobileFirst Software Services** at  
[ibm.com/mobilefirst](http://ibm.com/mobilefirst)



Schedule a meeting for IBM to talk to you about your  
mobile strategy



A close-up photograph of a person's hand holding a white smartphone. The hand has light pink nail polish. The phone's screen is black and displays the text "IBM MobileFirst" in white, bold, sans-serif font. The background is blurred, showing a person with brown hair wearing a white shirt.

**IBM MobileFirst**