A woman with long brown hair, wearing a black blazer over a white collared shirt, is smiling and looking down at a smartphone she is holding with both hands. She is wearing a silver chain necklace and a pink beaded bracelet on her left wrist. The background is a blurred cityscape with tall buildings under a bright sky.

# Mobile Apps: What Consumers Really Need and Want

A Global Study of Consumers' Expectations and Experiences of Mobile Applications

## iPhone

Total sales: 209 million

**App downloads:**

30 billion<sup>1</sup>

## The Difference Between a Mobile App and a Mobile Website

Before we evaluate consumer preferences, it's important to understand the key differences between a mobile website and a mobile app, which are both accessed on handheld devices such as smartphones (e.g., iPhone, Android and Blackberry) and tablets.



A mobile website is similar to any other website in that it consists of browser-based HTML pages that are linked together and accessed over the Internet (for mobile, it's typically Wi-Fi, or 3G or 4G networks). The obvious characteristic that distinguishes a mobile website from a standard site is in the design, while a mobile app is built for a smaller handheld display and touch-screen interfaces. Like any website, mobile websites can display text content, data, images and video. They also access mobile-specific features, such as click-to-call (for dialing a phone number) or location-based mapping.



Average number of apps owned by a smartphone user is **41**, a rise of **28%** over last year.<sup>2</sup>

By contrast, mobile apps are actual applications that are downloaded and installed on your mobile device, rather than being rendered within a browser. Users visit device-specific portals such as Apple's App Store, Android Market or Blackberry App World to find and download apps for a given operating system. The app may pull content and data from the Internet, similar to a website. Or it may download the content so it can be accessed without an Internet connection.

With smartphone penetration now at 50 percent in the U.S., the world of apps is also seeing a rise in popularity: According to a new report from Nielsen, mobile consumers download more apps than ever before, with the average number of apps owned by a smartphone user now at 41, a rise of 28 percent from the 32 apps owned on average last year.

Despite the rise in app downloads, the amount of time that people spend with their apps has remained essentially flat: Collectively, apps are used for 39 minutes per day today, compared to 37 minutes in 2011.

### Current Market Share

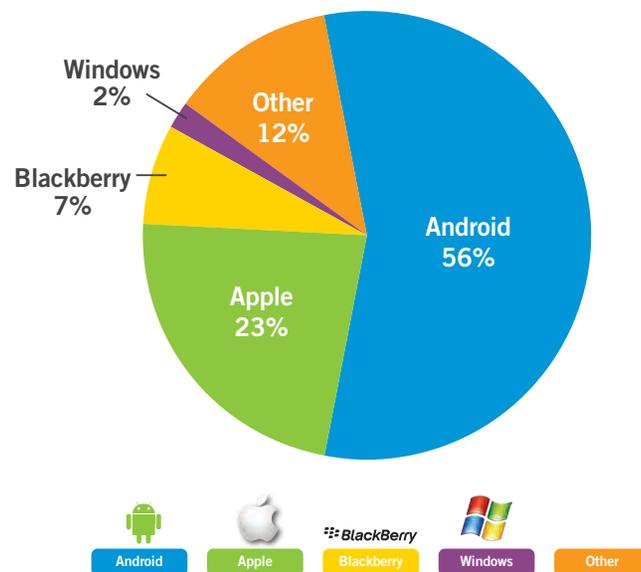


Figure 1: Current Market Share<sup>5</sup>



## Android

Total sales: 375 million

App downloads:

15 billion<sup>3</sup>

Apps truly are a global phenomenon with mass consumer appeal. Apple's App Store has now reached 25 billion downloads, tracking at 1 billion downloads a month.

As Figure 2<sup>4</sup> shows, the number of apps being downloaded has been escalating as smartphone use increases.

## Total App Downloads

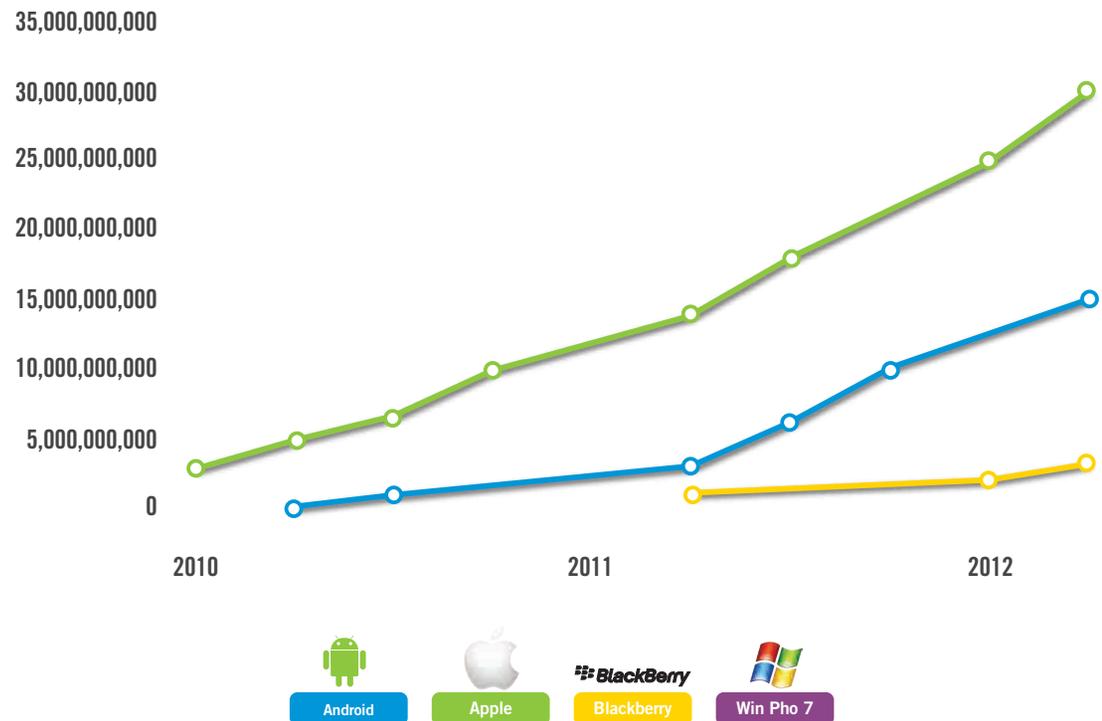


Figure 2: The increase in mobile app downloads



From games, social media and video to news, stock market and mind maps, the number of apps available in app stores is constantly growing. Figure 3<sup>6</sup> shows the four leading app stores, how many apps they offer and how quickly those numbers are growing.

## Total Apps Available

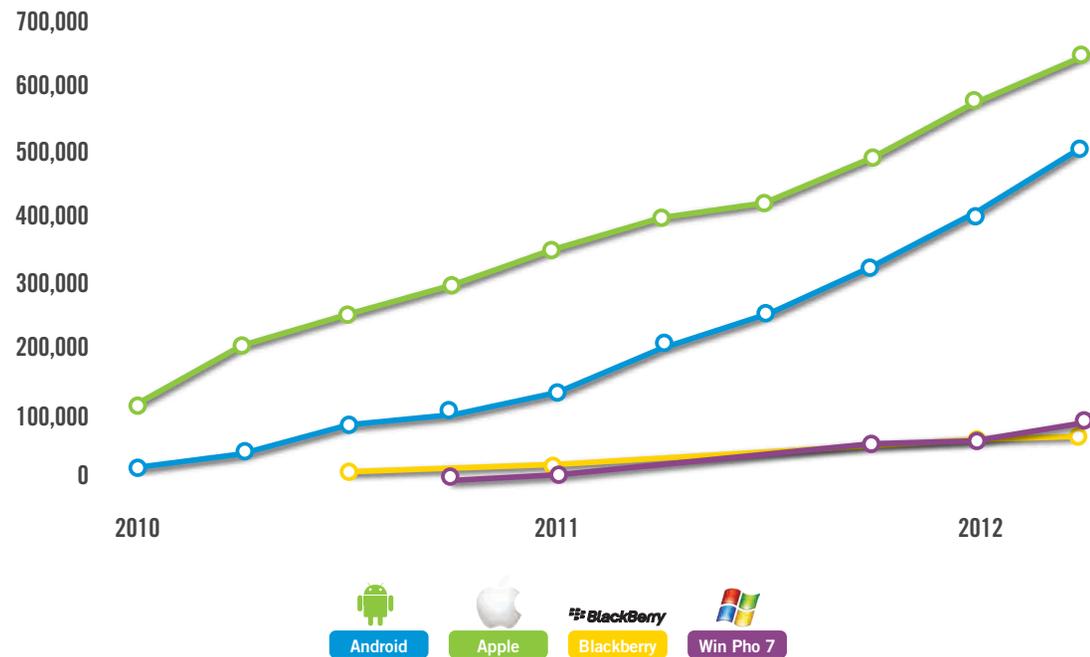


Figure 3: The growth in app availability



Consumers want their apps to take **full advantage** of the specific capabilities of their particular mobile devices.

## Key Findings

**The vast majority of users (85 percent) preferred mobile apps over mobile websites.**

- Apps are perceived as more convenient (55 percent), faster (48 percent) and easier to browse (40 percent).

**Slightly more than half of users have experienced a problem with a mobile app. Among those who have experienced a problem:**

- 62 percent reported a crash, freeze or error.
- 47 percent experienced slow launch times.
- 40 percent have tried an app that simply would not launch.

**Users will not tolerate a problematic mobile app, and will abandon it after only one or two failed attempts.**

- 79 percent would retry a mobile app only once or twice if it failed to work the first time.

**Dissatisfied users are driven to competitive apps and will spread unfavorable reviews in person and online.**

- If dissatisfied with the performance of a mobile app, 48 percent of users would be less likely to use the app again.

**Users expect mobile apps to launch not just quickly, but faster than mobile versions of websites.**

- 78 percent expect mobile apps to load as fast as — or faster than — a mobile website.

**Mobile app users value app store ratings.**

- 84 percent of users say app store ratings are important in their decisions to download and install a mobile app.



Consumers want **proactive** and **relevant** information and services.

## What Do Consumers Really Need or Want?

The answer to that question is ever changing. When it comes to apps, however, there are a few basics. Consumers want:

- Easy access to product and store information
- Help planning and navigating trips
- The ability to communicate in real time

Consumers want to download an easy-to-navigate app that delivers a suite of key functionalities and mobile services through an intuitive, entertaining user interface. They expect an app to identify what device they are on and present them with the right set of options and functionality for that particular device. Consumers want proactive and relevant (to them) information and services within the context of their location at a particular time.

An app has to push out personalized content, offers and perks based on their interests, while providing the ability to share offers, news and product recommendations virally on their social networks. The caveat here is that bad experiences will also be shared. This is actually reason enough to ensure apps perform at as high a level as possible.

## Mobile Apps or Mobile Sites?

Apps are thought to make our life easier, doing things such as streamlining our calendars and grocery lists, offering entertainment while we're stuck in line, and making it easy to collaborate with coworkers. Consumers associate apps with productivity. They bank, pay bills, shop, reserve hotels and make travel plans, while, of course, staying productive and connected with both home and the office.



85% of consumers prefer mobile apps over mobile websites.

When consumers were asked about the benefits of using a mobile app versus a mobile website (a website that is specifically designed to be viewed on a mobile device), the majority (85 percent) said they preferred mobile apps primarily because apps are more convenient, faster and easier to browse. However, only 28 percent say mobile apps offer a better user experience.

## Mobile Apps vs. Mobile Websites

Net Benefits of Mobile Apps vs. Mobile Website:  
85%

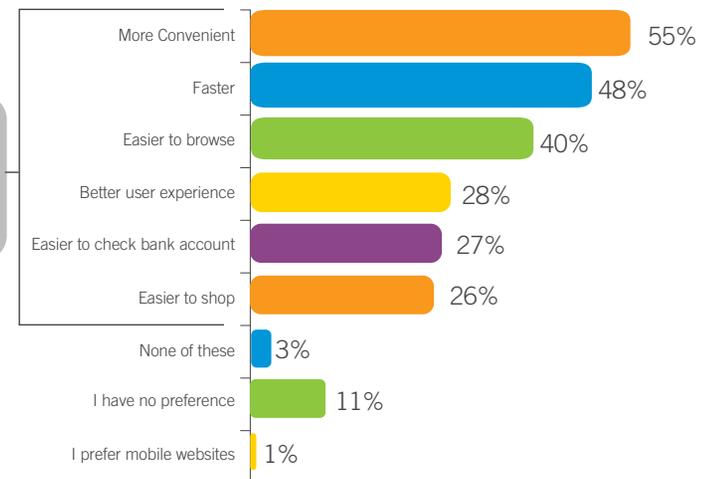


Figure 4: Mobile apps vs. mobile websites



64% of mobile phone time is spent using apps

## Issues are Common for Mobile Apps

When consumers were asked if they had encountered a problem (app crashes, freezes, errors, or either slow to load or won't load) accessing a mobile app within the last six months, 56 percent said yes. Among those who have experienced a problem, 62 percent reported a crash, freeze or error; 47 percent experienced slow launch times; and 40 percent reported an app that would not launch.

Have you had problems with a mobile app within the last 6 months? If so, what types?

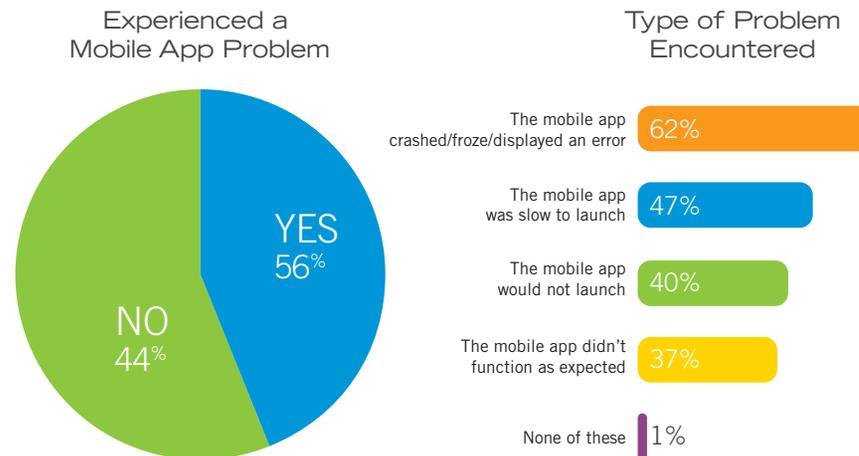


Figure 5: Mobile app problems

Users quickly notice apps that are slow or likely to break (whether because of downtime, crashes, etc.), and this impairs both usage and brand perception. Users expect a mobile app to be fast and responsive; if it's not, it will get poor reviews, low ratings and low adoption numbers.



79% of consumers will retry a mobile app only once or twice if it fails.

While 79 percent of consumers would retry a mobile app only once or twice if it failed to work the first time, only 16 percent would give it more than two attempts. Poor mobile app experience is likely to discourage users from using an app again.

When consumers were asked what action would they take if dissatisfied with the performance of a mobile app, 48 percent said they would be less likely to use the app again. Consumers would also be less likely to purchase from the company and more likely to switch to a competitor's app, tell others about their poor experiences and give the app a low rating on the app store.

### Key takeaway:

Offer a seamless experience between mobile sites, mobile apps and traditional online channels. As in traditional online experiences, you can increase mobile user satisfaction and engagement through optimized design, functionality and ease of use — from the mobile home page to checkout.

#### Consumer reaction to poor mobile app experiences

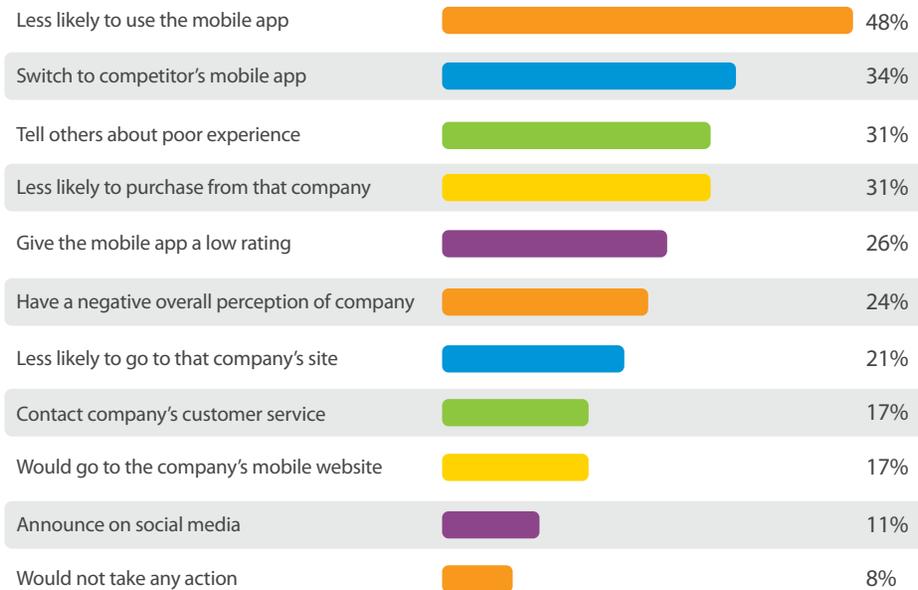


Figure 6: Consumers' reactions to poor experiences



4 out of 5 users expect an app to launch in 3 seconds or less.

## Expectations: Mobile Apps vs. Websites

As always, consumers want fast, pleasing experiences — and mobile apps are no exception. When asked how quickly consumers expect mobile apps to load and become usable (after the initial installation), more than three-quarters of app users said they expect mobile apps to load as fast as, or faster than, a mobile website. Four out of five app users expected an app to launch in three seconds or less.

### Compared to mobile websites, how quickly should a mobile app load?

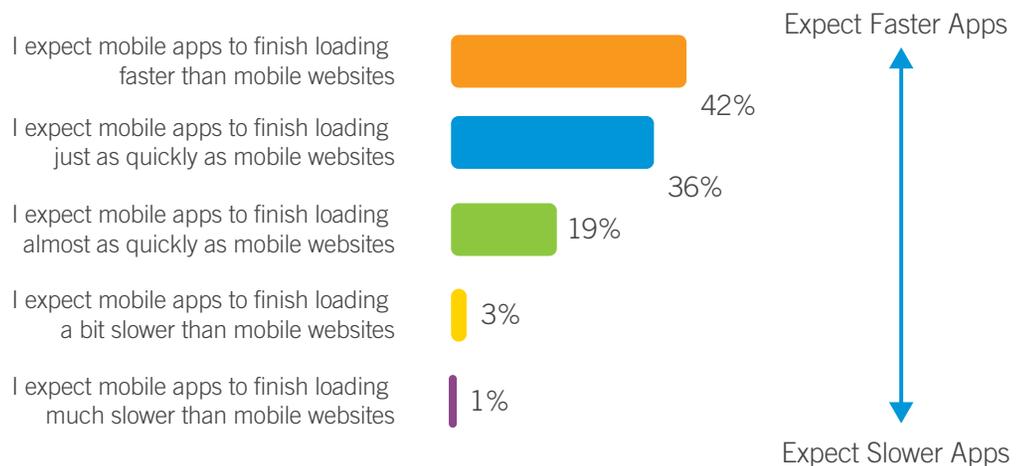


Figure 7: Consumers and app speed



The median expected load time for a mobile app to launch is **2 seconds**.

## How quickly should a mobile app launch?

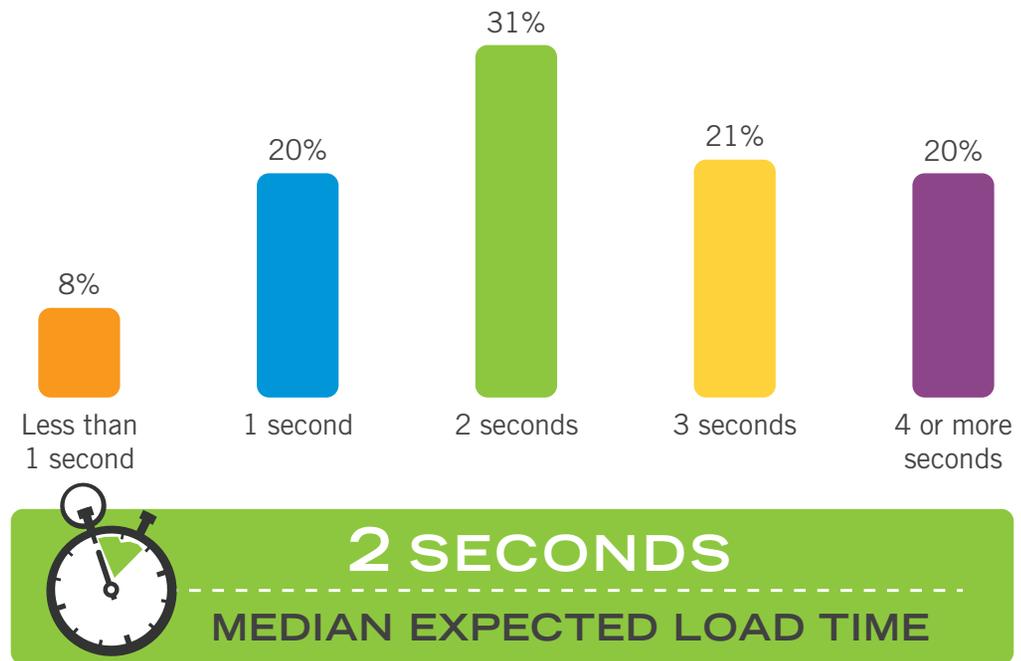


Figure 8: How long will consumers wait?

### Key takeaway:

Strive for optimized satisfaction levels in both mobile web and app channels. Higher satisfaction levels correlate with higher engagement, purchase frequencies and amounts across all categories. It is essential to determine mobile user preferences by device and activity type.



Optimize your app for the devices your customers use most.

When it comes to mobile apps for smartphones and tablets, performance does matter. Most mobile app users said that if an app frustrates them, they would give it a bad review.

### How important is mobile app performance?

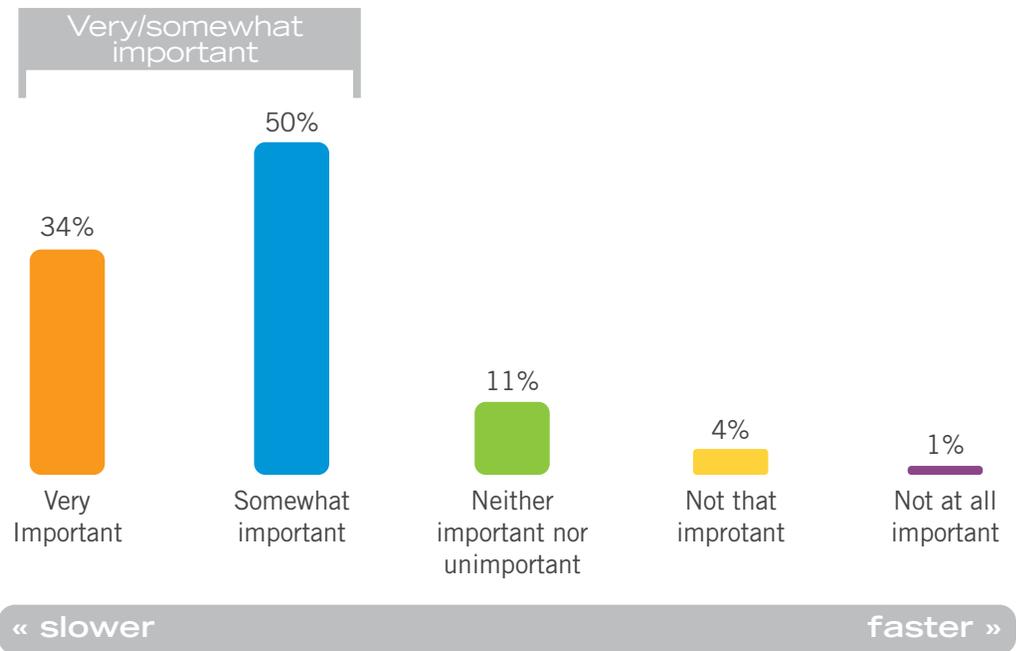


Figure 9: How important is mobile app performance?

### Key takeaway:

Prioritize based on customer profile. Use data to determine which device your customers are using the most and optimize your mobile app for that device.



Apps that **look great** but **perform poorly** can **damage your brand**.



## User Experience Is Critical

While mobile apps may be efficient and convenient, consumers are not afraid to vocalize (or tweet) complaints about an app's shortcomings — even minor ones. With users expecting greater experiences in mobile apps more than ever, fulfilling those expectations doesn't just happen: It takes a conscious effort throughout every stage of the design and development processes to get it right.

Performance is a crucial contributor to dependable mobile app user experience, so it should be considered a key driver in the design process. Mobile applications need to focus on a core utility, and they need to be fast and reliable in order to be valuable.

While stunning visuals attract customers by making a great first impression, a long-lasting relationship depends on the quality of each encounter, which is heavily influenced by how the app performs. An application that looks stunning but performs poorly can damage integrity.

## Maximize Revenue and Engagement

Across the globe, the mobile channel is growing fast. People in every country are buying more and more advanced mobile devices, companies are launching smartphone apps by the thousands, and businesses and consumers alike are using mobile phones for everyday activities (i.e., checking the weather, taking advantage of discounts, shopping, or sending and receiving financial information).

The success of smartphones and — more recently — tablets such as the iPad, along with the Apple, Android and BlackBerry app stores, has led consumers to conclude mobile apps are a must-have. Delivering fast, reliable mobile experiences is critical for businesses seeking to take advantage of the opportunity provided by increased mobile access.

Are you meeting customers' performance expectations?

**How do you evaluate the quality of the mobile web experiences you deliver? Ask yourself:**

- Is your app performing to users' expectations?
- Do your mobile applications perform as intended across the devices and networks your customers use?

**Organizations need to identify and resolve mobile application performance issues to maximize mobile business results by:**

- Monitoring mobile application performance for all your end users
- Measuring real-user experience for mobile-web iOS and Android mobile applications
- Using real-time, dynamic alerting on failed synthetic transactions, response time, transaction and object failures, and byte limits
- Quickly isolating problems by browser type, device type, operating system, geography, ISP and connection type
- Capturing details about failed transactions to quickly identify the root cause down to the line of application code
- Isolating problems based on user segments and groups across geographies, networks and devices

Businesses that embrace the mobile opportunity, offer the most usable features, and provide the fastest, most consistent performance will emerge as mobile leaders in their category.

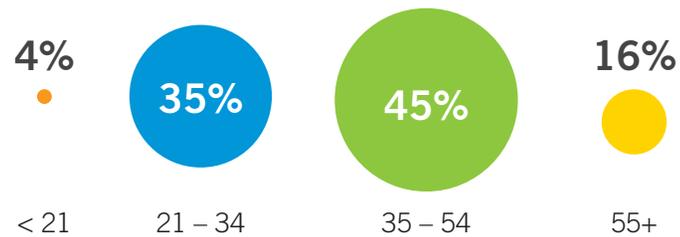


## Survey Methodology

Compuware commissioned Equation Research to conduct an online study to understand mobile application usage, expectations and experiences. Interviews were conducted October 19-25, 2012. Survey results may have a margin of error of +/-1.6 percent at a 95 percent level of confidence.

The survey sample equals 3,534 total respondents (1,002 in the U.S., 509 in the U.K., 509 in France, 508 in Germany, 502 in India and 504 in Japan) who are smartphone/tablet users that used a mobile application in the past six months that required an Internet connection.

### Age



### Gender



### Income



Figure 10: Survey respondents by age, sender and income



## What kind of mobile device do you use?

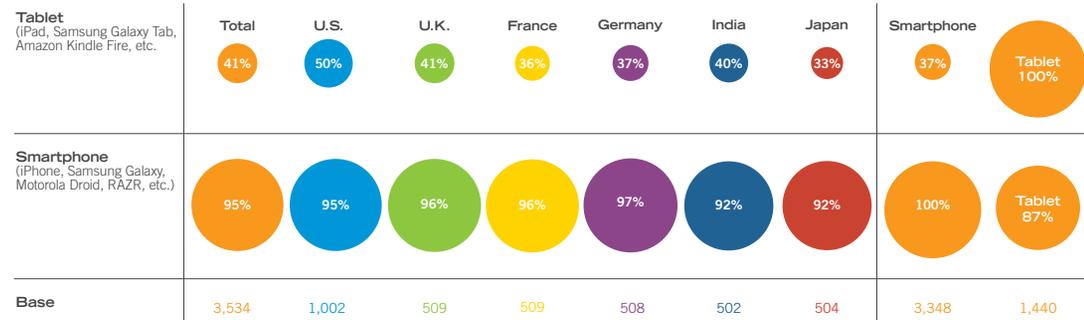


Figure 11: Mobile device ownership by country

Are you meeting your mobile customers' website performance expectations?  
 Take the Compuware Website Performance Test for iPhone and find out:  
<http://www.gomez.com/mobile-website-performance-test/>



## Resources

1. iPhone, Mobile Statistics, June 2012. <http://www.mobilestatistics.com/mobile-devices/>
2. 'App Store Stats: 400 Million Accounts, 650,000 Apps', Mashable, June 2012, <http://mashable.com/2012/06/11/wwdc-2012-app-store-stats/>
3. Android, Mobile Statistics, June 2012. <http://www.mobilestatistics.com/mobile-devices/>
4. Total App Downloads, Mobile Statistics, June 2012, <http://www.mobilestatistics.com/mobile-statistics/>
5. Current Market Share, Mobile Statistics, June 2012, <http://www.mobilestatistics.com/mobile-statistics/>
6. Total Available Apps, Mobile Statistics, June 2012, <http://www.mobilestatistics.com/mobile-statistics/>

