

Digital Demystified: The Evolution of Mobile Apps

Let's take a look at how the mobile app marketplace has evolved from a glimmer in Steve Jobs's eye to the robust, billion-dollar space that it is today.

Introduction

Today, mobile users spend the vast majority of their time (about 86 percent of it) in mobile applications, fondly referred to as apps. A mobile app is a software application designed specifically to run on a mobile device. To understand apps' journey to ubiquity, let's start with their ancestor, the mobile web.

A Brief History of The Mobile Web

The mobile web is exactly as it sounds -- the World Wide Web on a mobile device, delivered via a mobile or wireless network. A mobile browser is a tool for accessing the mobile web, and mobile browsers are specifically designed and optimized for use on mobile devices. The first use of a mobile browser was reportedly in 1997 when Unwired Planet, which later became Openwave, distributed content via AT&T headsets¹. Today, the mobile browser is a staple across handheld devices, so much so that it is hard to remember a world without it.

The first mobile advertisement was distributed via SMS in 2000². Today, mobile advertising is a billion-dollar industry, but it's mobile in-app advertising, not the mobile web, that is fueling its growth.

For advertisers, the benefits of the mobile web include that it is readily available and easily found, it cannot be deleted (as opposed to apps), and mobile traffic is distributed across a variety of sites. But from its onset, the mobile web has been plagued with limitations, from both users' and advertisers' perspective.

Limitations of the mobile web include:

- A poor user experience that is notoriously buggy
- Slow load times
- Lack of cookies, the targeting method of choice in desktop web advertising
- Mobile ads and content can drain users' data plans

Apps help solve many of these issues by providing a better user experience, as well as new options for advertisers.

1997

The first use of a mobile browser

2000

The first mobile advertisement was distributed via SMS

Enter Mobile Apps

PDAs (personal digital assistants) paved the way for the smartphone as we know it. (Check out the timeline below for some milestones in mobile app history.) In the beginning, apps were limited to a few games and basic features like a clock and a calendar. These days, there's an app for almost everything--games, entertainment, news, fitness, communication, shopping, social media, time management, business tools--if you can imagine it, there's probably an app for it.

The Benefits of Mobile Apps

For users, mobile apps afford a host of advantages, many of which also benefit advertisers. The simple fact that people spend most of their time on mobile in apps is reason enough for many marketers to invest in in-app advertising.

The benefits of mobile apps versus the mobile web include:



They are often more user-friendly and better designed, since they are created specifically for a mobile experience — as opposed to non-mobile-optimized sites on the mobile web



They are usually faster



They can deliver a more personalized experience



They can be better for communication and allow for push notifications



They can work offline



They offer inventory for engaging ad formats designed specifically for the in-app experience, along with enhanced targeting capabilities

¹ Wikipedia, "Mobile browser," 11/2016, https://en.wikipedia.org/wiki/Mobile_browser

² Wikipedia, "mobile advertising," 11/2016, https://en.wikipedia.org/wiki/Mobile_advertising

History of Mobile Apps³

- 1973**
Martin Cooper of Motorola makes the world's first mobile phone call to Dr. Joel S. Engel of Bell Labs.
- 1983**
At the International Design Conference in Aspen, Steve Jobs predicts that someday we will have a software-distribution center that allows software to be purchased via phone lines.
- 1984**
Psion releases the first PDA. In 1991, Psion's Series 3 hit stores. This version looks more like what we think of when we picture PDAs.
- 1994**
The first smartphone, created by IBM, goes on sale. (It's fondly nicknamed Simon.) It featured a few apps, including a calculator, clock, fax, mail, and contact book, although they weren't actually called apps yet.
- 1997**
SNAKE, an addictive mobile app game, is featured on the Nokia 6100 phone.
- 2001**
The first iPod is released, and it comes with some apps, including Solitaire.
- 2003**
The Blackberry was released. It included wireless email, text messaging, web browsing, and other apps.
- 2007**
Game changer! Apple releases the iPhone.
- July 2008**
The first Apple App Store debuts with more than 500 apps.
- September 2008**
Just two months after the App Store's opening, Apple announces that there have been more than 100 million App Store downloads.
- October 2008**
Google launches Android.
- April 2009**
The third major app distributor launches, The Blackberry World Store.
- January 2011**
"App" is voted 2010's word of the year by the American Dialect Society.
- March 2011**
Amazon launches its app store.
- May 2012**
Angry Birds reaches one billion downloads. Six months later, Candy Crush arrives on the scene.
- October 2013**
Apple reveals that there are now one million apps in the Apple App Store.
- June 2014**
The Apple App Store reaches 75 million downloads.
- September 2016**
eMarketer reports that mobile users spend 86 percent of their time in apps.

³Sources for this timeline include: "The First Mobile Phone Call Was Made 40 Years Ago Today," by Zachary M. Seward, The Atlantic, 4/2015, <http://www.theatlantic.com/technology/archive/2013/04/the-first-mobile-phone-call-was-made-40-years-ago-today/274611/>; "First Smartphone Turns 20: Fun Facts About Simon," by Doug Aamoth, Time Magazine, 8/2014, <http://time.com/3137005/first-smartphone-ibm-simon/>; "Tracing the Evolution and History of Mobile Apps," by Mehul Rajput, Tech.co, 11/2015, <http://tech.co/mobile-app-history-evolution-2015-11>; "1983 to today: a history of mobile apps," by Matt Strain, The Guardian, 2/2015, <https://www.theguardian.com/media-network/2015/feb/13/history-mobile-apps-future-interactive-timeline>; "Infographic: The History of Mobile Apps," by David Cohen, SocialTimes, 2/2015, <http://www.adweek.com/socialtimes/infographic-history-of-mobile-apps-avg-technologies-matt-strain/614415>; Wikipedia - <https://en.wikipedia.org/wiki/BlackBerry>; https://en.wikipedia.org/wiki/Personal_digital_assistant; https://en.wikipedia.org/wiki/Mobile_Web; <https://www.emarketer.com/Article/Smartphone-Apps-Crushing-Mobile-Web-Time/1014498>

So What's Next For Apps?

Apps may be the future of mobile. Since people now spend the bulk of their mobile time in apps, ad tech players and advertisers will likely devote more resources to the app marketplace, driving more advancements in the space. For publishers, we'll get better at understanding the app discoverability process, what makes an app successful, and how publishers can create engaging apps with staying power.

In-app advertising is no longer reserved for performance marketers. Improvements in targeting, transparency, and attribution methods have led to a larger number of brands turning to in-app advertising for a greater number of reasons, including branding.

Apps will also play a crucial role in helping marketers reach their audiences, since people may electively provide information about themselves when they log on to apps. Apps will also help to inform cross-screen strategies in which marketers target users across a variety of devices and channels, including mobile apps, mobile web, desktop, and more.

The year 2016 marks the first time U.S. marketers will have spent more on digital advertising than on TV⁴. Mobile is one of the key factors driving this growth, and the apps are one of the key factors fueling mobile's ascension.

Most Downloaded Apps

In the U.S. between January-July 2016⁷

- 1 Messenger (59.7M)
- 2 Snapchat (54.5M)
- 3 Facebook (45.8M)



2M+

Apps available in the Apple App Store⁵

30M

Apps downloaded daily⁶

⁴ US Digital Ad Spending to Surpass TV this Year, eMarketer, 9/2016
<https://www.emarketer.com/Article/US-Digital-Ad-Spending-Surpass-TV-this-Year/1014469>
⁵ <https://www.statista.com/statistics/263795/number-of-available-apps-in-the-apple-app-store/>
⁶ <http://appadvice.com/appnn/2011/01/number-apps-downloaded-day-reaches-30-million>
⁷ <https://www.surveymonkey.com/business/intelligence/most-popular-apps-2016/>

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