

Building a Chart-busting App

A Parks Associates Whitepaper



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The app has become the critical interface for a variety of content and services. In many ways, it is the primary means consumers interact with a brand. They can use apps for banking, navigation, shopping, and price comparison.

Currently 66% of U.S. broadband households own at least one smartphone, and nearly 50% own at least one tablet. One-fourth of households own both devices. And the consumer app ecosystem is not limited to mobile platforms: 26% now own a smart TV and 63% have a game console, both of which support apps.

A majority of U.S. broadband households

..... **57%**
now use apps on a regular basis



App Downloads and Usage

From the consumer perspective, users have the option of paying outright for an app (a paid app), subscribing to an app with recurring payments, or downloading a free app, which could generate revenue for the developer through advertising or in-app purchases.

With every major brand competing for relevance within the context of smartphone and tablet apps, having a top-rated app is critical for competitive advantage. However, the consumer market for apps has reached a level of maturity where simple functionality and convenience are not enough to ensure a successful app.

SMARTPHONE & TABLET OWNERS

download an average of two apps per month on these devices.

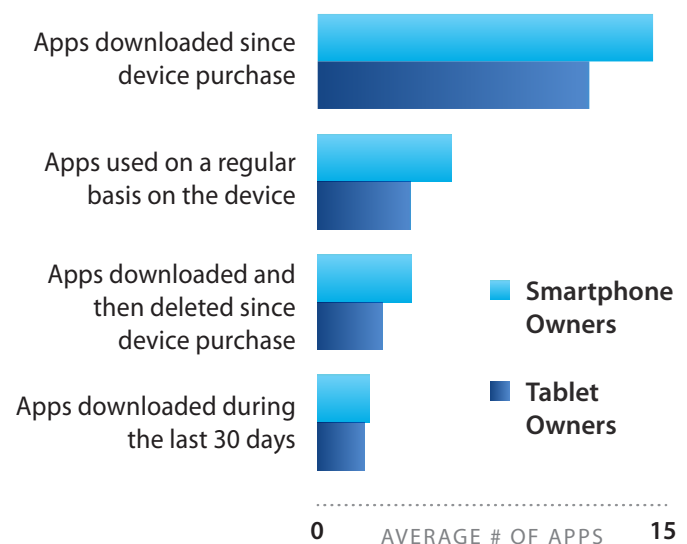
Even offering an app for “free” does not automatically guarantee attention in a maturing app market.

To succeed in an increasingly crowded field, developers, for both new and existing apps, *must determine* the optimal features, workflow, and functionality to ensure an engaging experience (i.e., a good rating or review by users).

Further, if an app is to appeal to a broad consumer base, it must work seamlessly across multiple CE platforms. The app ecosystem also includes smart TVs and connected game consoles. One in five households now owns at least one device in three out of the four app-supporting connected CE platforms: smartphone, tablet, smart TV, and connected game console. As connected CE adoption rises, consumers will expect access to their content and applications across all of their devices.

In-App Purchases on Mobile Devices

U.S. Broadband Households Owning Specified Mobile Device Type



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The App Gatekeepers

App stores are the most common, and most important, means for users to learn about apps.

APP DISCOVERY

Three of the four most common methods of app discovery are tied to APP STORES:

- ① **BROWSING AN APP STORE**
- ② **MOST POPULAR/TOP DOWNLOADED LISTS**
- ③ **USER REVIEWS**

The remaining discovery factor in the top four is “recommendations of friends and family,” which encompasses the important need to develop a “buzz-worthy” app, a difficult task given that other methods of app promotion are considerably less effective.

Only 13% of smartphone users rely on advertising as a significant source of app discovery.

Building an app that is both top rated and commonly shared is a challenge in app functionality and consumer targeting: the app provides a good experience to the end user and fulfills a specific need. Apple and Google’s app stores now each feature more than 750,000 apps. Clearly the 80-20 rule, or more accurately, the 98-02 rule, is in play. Being in the top-rated app list—and staying there—is the difference between success and irrelevance.

App Revenues and Business Models

To create a chart-busting app that is also profitable, developers must consider business models carefully.

CURRENTLY

59%

of smartphone owners have at least one paid app on their phone

AND ONLY

20%

of smartphone owners

14%

of tablet owners use **only free apps**

PAID APPS provide up-front revenue potential, and consumers are not wholly averse to paid apps, with the right value proposition.

SUBSCRIPTIONS are a relatively new revenue model in the app world. Apple started supporting subscriptions in February 2011, and Google introduced this model in May 2012. *Subscriptions are popular for app categories involving digital content*—music, videos, books, Internet radio, newspapers, magazines, news feeds, etc. Apple’s app subscription policies, which limited subscription pricing and data sharing, hurt the company’s relationships with the content publishing industry and also slowed adoption of the in-app subscription model as a whole.

FREE APPS are becoming a critical tool for brands, from airlines to online shopping, in providing a sticky customer experience. To earn revenues on a “free app,” app developers can push in-app purchases and/or sell in-app advertisements. An app that is free to download but offers a variety of in-app purchase options can spur consumer engagement and generate ongoing revenues.

Within these models, developers have a range of monetization methods to choose from and have become increasingly creative in determining the most lucrative way to generate revenues. The initial question is whether to offer a free or a paid app, although the growing popularity of in-app purchases introduces a third alternative.

THE FEE-BASED APP MODEL once referred to one-time paid, premium download, but the category has expanded to include freemium and subscription.

THE FREEMIUM APP MODEL is popular among developers as a way to establish unique users and generate revenues. Freemium is widely used by game developers in particular as free games hook users who later upgrade to the paid version in order to enhance the gaming experience, but education, business, and lifestyle app categories have found revenue success as well.

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Consumer App Spending Trends

Smartphone app users currently spend, on average, over \$4 on apps in a 30-day period, up from \$2.46 last year

20% of smartphone app users

30% of tablet app users

have upgraded a freemium app to a paid version

15% of smartphone app users

23% of tablet app users

in U.S. broadband households have upgraded from a free app to a premium version within a 30-day period

AMONG THE AGE GROUPS

Consumers **18-24** download the **most** apps by volume

Consumers **25-44** spend **more** on mobile apps for both tablets and smartphones

The decision to offer a free versus a paid or subscription app should be made based on value, consumer interest, conversion rates, and targeted platform.

FREE APPS are monetized by increasing the use of a brand or product, increasing familiarity and loyalty to the brand, forging affinity for the full and paid version of an app, or by inserted advertisements.

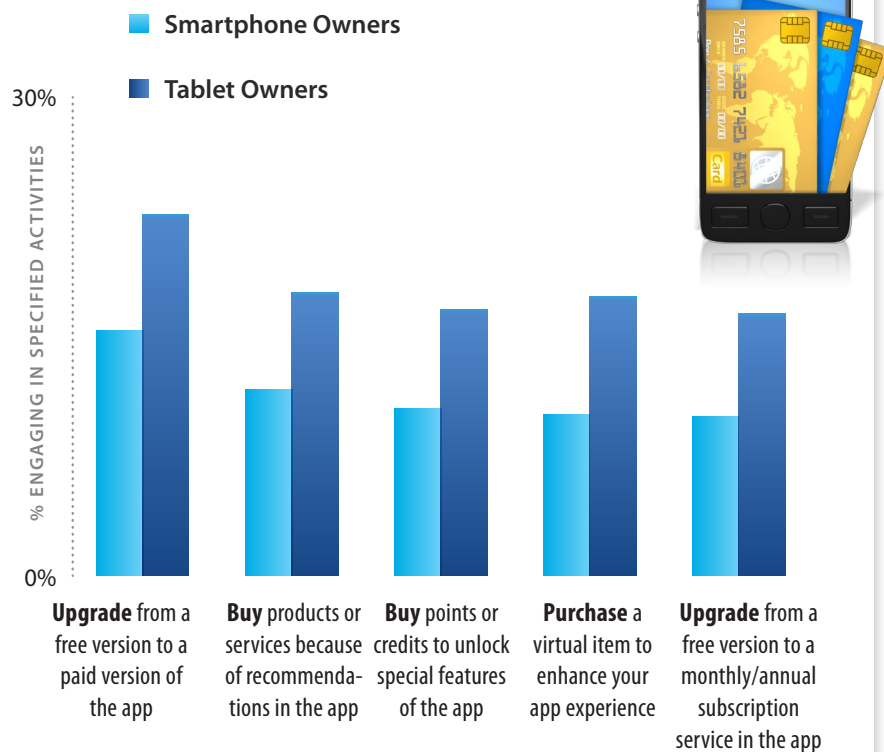
PAID APPS are typically purchased for prices ranging from \$.99 to \$10.00.

PAID APPS are priced similarly across platforms, but tablets owners have a higher percentage of paid apps than do smartphone owners.

In-App Purchases on Mobile Devices

U.S. Broadband Households

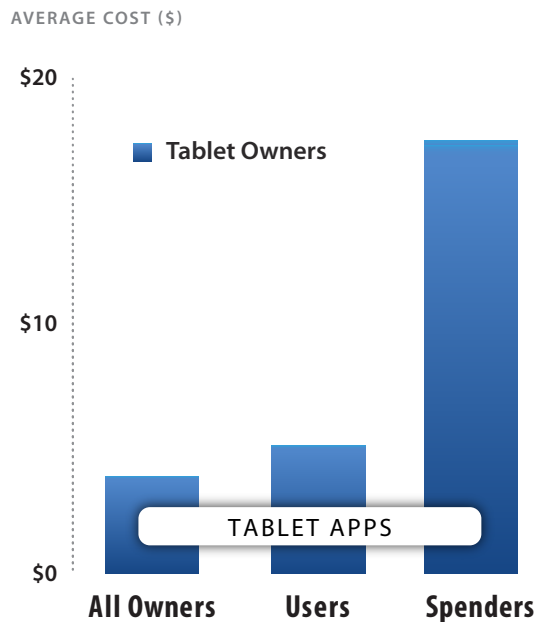
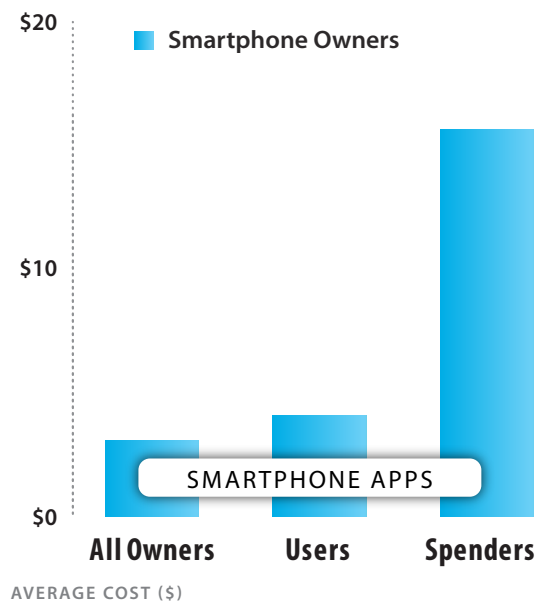
"When using apps, how many times during the last 30 days did you do the following?"



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In-App Spending: 30 Days

U.S. Broadband Households



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IN-APP PURCHASE—Like the freemium model, the in-app purchase model is common in gaming apps where virtual items help users gain higher levels of game play (although this business model is gaining popularity among dating apps as well). In-app purchase business models follow the same revenue share structure as fee-based downloads but are much more effective at encouraging consumer engagement and recurring revenues.

PARKS ASSOCIATES' APP DATA

Twenty-eight percent of smartphone app users make in-app purchases and spend approximately \$16 per month. Tablet users are slightly more active in-app purchasers and spend around \$17 per month.

Parks Associates forecasts nearly **6 billion instances** of in-app purchases in 2016, the majority of which occurring in free apps.

That same year, revenues from in-app purchases will account for nearly \$12 billion of the \$20.8 billion in app revenues in North America.

IN-APP ADVERTISING—The in-app advertising model has been slow to develop due to uncertainty of the medium's effectiveness and other mitigating such as lack of scale and limited audience reach.

THE ADVERTISING MODEL IS GAINING TRACTION, especially as consumer research show high ad recall rates among app users:



Roughly one-third of tablet and smartphone app users recall seeing ads in their apps

20-25% of smart TV and game console app users recall seeing ads *but their response rates are very high:*

84% of recallers on a smart TV responded to in-app ads

72% of recallers on a game console responded to in-app ads

App Development Process

THE STAGES OF APP DEVELOPMENT:

- Developer tools and software license fees
- Development, debugging, and testing labor (*first two stages account for approximately 55% of development costs*)
- UX design (*approximately 10% of development costs*)
- Marketing (*approximately 10% of development costs*)
- Management (*costs included with developer tools and software license fees*)

Developers use varying approaches to create and deploy connected device apps. The main technical components include authoring language and development environment.

Presently, there is no standardized technology infrastructure in place to deploy an app across all connected device platforms.

Each major smartphone, tablet, and connected TV platform has a specific authoring language, development environment, software development kits (SDKs), set of application programming interfaces (APIs), and distribution source.

Programming, Development, and Monetization

USING EXISTING PROGRAMMING SKILLS (i.e., experience with a specific authoring language and development environment) provides a fundamental advantage for developers seeking multiplatform app deployment. Using existing assets and knowledge base speeds up the development process considerably and allows a developer to bring an app to market more rapidly. It costs developers time and money to learn a new technology standard or recode an app product for a new device platform.

LOW-COST DEVELOPMENT is equally important to developers, particularly small or novice developers with limited investment capital. The availability of open-source licenses reduces development costs. In some cases, developing an app for a new CE platform adds 50% to development budgets. The largest development expense cited by developers is coding time; that is, paying personnel to develop, debug, and test an app.

Tapping into **TURNKEY MONETIZATION SOLUTIONS** is core to developer success as these revenues will support app development, management, and distribution. In order to generate the highest possible revenues, app developers depend on the leading distribution channels App Store and Google Play because these services offer the primary monetization options and generate the highest app revenues.

App developers determine revenue models and set app prices, but they share a portion of their revenues with the app store. The standard revenue split between app owners and app distribution services is 70/30 — 70% goes to the developer and the app store keeps 30%.



App Testing—Consumer Validation

Proper consumer validation is now equally important to an app's success, and developers need to integrate this factor throughout their development process, not just in the testing phase. Understanding a consumer segment starts with knowledge about their habits, usage, and preferences, both in general and specific to the action targeted by the app in development. As illustrated in the following case study, understanding core consumer behaviors—banking behaviors, in this case—provides key findings that can then expand to the broader population of users and create a common language for surveys and testing.

CASE STUDY—JACK HENRY & ASSOCIATES

Jack Henry & Associates, Inc. (JHA), develops, maintains and supports critical data processing solutions for community banks. In order to facilitate its mobile banking app design and development process, JHA needed a statistically valid third-party needs assessment of app features. Working with JHA, Parks Associates designed a study to determine consumer needs and test specific app features qualitatively, through a series of focus groups, and quantitatively, through an Internet-based consumer survey.

Parks Associates conducted three focus groups with a total of 28 smartphone owners. Over the three two-hour sessions, researchers gained insight into consumers' online and mobile banking behaviors, including the unmet needs and pain points of existing mobile banking apps. Researchers also obtained feedback on JHA's proposed app's functionality and design. The ability to talk with real consumers in the focus groups also afforded JHA and Parks Associates the ability to discover unexpected insights into customer expectations of mobile banking products. Furthermore, feedback from the focus groups guided the development of the quantitative survey, by scoping the project appropriately and prioritizing the functions and features that most needed further testing.

Building on the focus group results, Parks Associates developed and fielded an Internet-based consumer survey to over a thousand smartphone owners. The survey was designed to validate key findings of the focus groups and to provide a statistically valid representation of consumer opinions on mobile banking app functionality in general, as well as specific design elements of the JHA app. Dealing with a sample base of over a thousand respondents allowed researchers to provide JHA with nuanced insights on different consumer opinions based on demographic data and other relevant consumer segments.

Conclusion

Consumers are acquiring app-based devices at a torrid pace, and the number of apps available to them is increasing exponentially.

It is difficult to get attention in this crowded market, making the one-size-fits-all model difficult if not near impossible to deploy successfully.

The current market phase favors specialization, with apps targeted to a specific consumer segment (*e.g., movie enthusiasts*) or function (*e.g., online banking*).

Introducing a new app should be part of an ongoing process of consumer testing and segmentation, as crowded app stores make app discovery difficult and continued engagement challenging. App developers need to aim not just for a large user population but a high level of user engagement. Increasing the number of users is just a process, but effective monetization for both new and existing apps requires ongoing user engagement, especially as free-to-paid continues to be the dominant model for apps.

ABOUT THE AUTHORS



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Jennifer Kent is part of the Digital Health and Mobile Product research team. She studies mobile industry trends including wireless carrier strategies, next-generation networking, and mobile consumer devices. Her digital health research focuses on digital health records and devices, fitness and wellness applications, and mobile healthcare trends. Since joining Parks Associates in 2009, Jennifer has also worked on the consumer research team, analyzing consumer data related to various areas of the digital home and consumer electronics industries.

Jennifer earned her BA in politics from the Catholic University of America in Washington, D.C., and her MA in church-state studies from Baylor University in Waco, TX. She is currently a doctoral candidate at Baylor University for a PhD in Religion, Politics and Society.

INDUSTRY EXPERTISE: Digital Health Products and Services, Portable and Mobile Access Platforms and Applications



Heather Way, Senior Research Analyst

As an analyst at Parks Associates, Heather's core research focus includes evaluating and providing strategic assessments of advanced advertising technology, platforms, management systems, buying/selling services, and data analytics. Heather also covers the connected device application ecosystem.

Prior to joining Parks Associates, Heather worked in the media industry holding positions as Director of Advertising, media planner and buyer, national TV sales representative, and training coordinator. Additionally, Heather taught as an adjunct professor at the University of North Texas. Heather is cited in top-tier industry trade publications such as Ad Age, Adweek, MediaPost Publications, USA TODAY, and Businessweek. She regularly presents Parks Associates research findings at major conferences such as Digital Hollywood, Digital Media Conference, APPNATION, and Parks Associates' CONNECTIONS™ conference.

INDUSTRY EXPERTISE: Advanced Advertising (TV, Internet, mobile, gaming, social media), Consumer Advertising Effectiveness and Preference, Advertising Metrics and Reporting, Connected Apps, TV Companion Apps and Second-screen Advertising

ABOUT PARKS ASSOCIATES



Parks Associates is an internationally recognized market research and consulting company specializing in emerging consumer technology products and services. Founded in 1986, Parks Associates creates research capital for companies ranging from Fortune 500 to small start-ups through market reports, primary studies, consumer research, custom research, workshops, executive conferences, and annual service subscriptions.

The company's expertise includes new media, digital entertainment and gaming, home networks, Internet and television services, digital health, mobile applications and services, consumer electronics, energy management, and home control systems and security.

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ATTRIBUTION

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