

Mobile Apps: The Secret Weapon in Creating an Outstanding Subscriber Experience

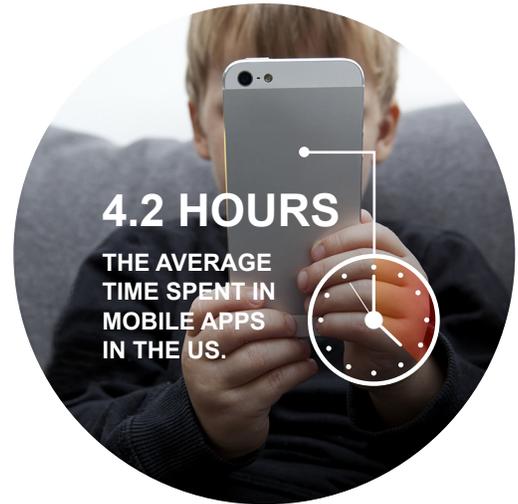
More than a decade after the first app store was launched in 2008, mobile apps are firmly entrenched in our everyday lives. Smartphone users worldwide downloaded 218 billion mobile apps in 2020 and by 2022 this number is projected to reach 258 billion.

EXECUTIVE SUMMARY

The advent of mobile apps forever changed how consumers interact with companies, products, and services, offering them greater convenience, personalization, and control, while giving brands new opportunities to engage consumers, drive revenue, and build loyalty. In the highly competitive market for broadband services, subscribers are not only looking for the highest performance at competitive prices, but also an outstanding experience that enriches how they connect, communicate, work, play, and live. Mobile apps can play an integral role in creating this connected lifestyle, providing significant benefits for subscribers and service providers alike.

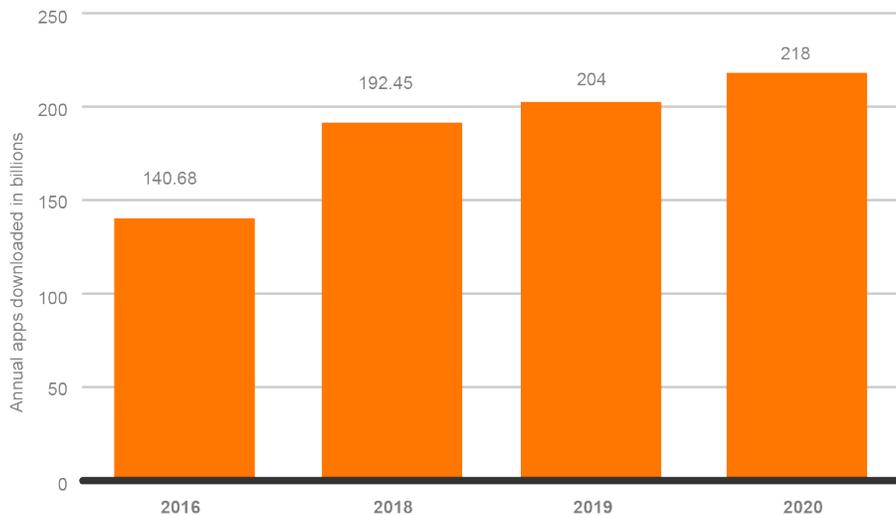
MOBILE APPS: ENTRENCHED IN EVERYDAY LIFE

Today, 85 percent of Americans—about 281 million individuals—own a smartphone, up from just 35 percent 10 years ago¹. And along with this smartphone surge, we have seen the explosive growth of mobile apps. More than a decade after the first app store was launched in 2008, mobile apps are firmly entrenched in our everyday lives. Smartphone users in the U.S. downloaded approximately 3.3 billion mobile apps in Q4 of 2020² and also increased their usage of apps—daily time spent using mobile apps was up 25 percent in Q1 2021 and **passed four hours per day**³.



Worldwide, 218 billion apps were downloaded in 2020 and by 2022 this number is projected to reach 258 billion⁴.

Number of mobile app downloads worldwide from 2016 to 2020 (in billions)



Sources

App Annie, TechCrunch
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Additional Information

Worldwide; App Annie; 2016 to 2020; iOS App Store, Google Play and third-party Android stores combined. Downloads are installs and updates are excluded

Consumers today rely on mobile apps across nearly every aspect of their personal and professional lives, taking advantage of convenient options for activities ranging from shopping to financial services, videoconferencing to distance learning, gaming to video streaming, fitness to telehealth, to name just a few. And while app habits may have shifted dramatically during the 2020 global health crisis, with strong growth in downloads of apps for business, medical, health and fitness, and education purposes, and far fewer downloads of travel and navigation-focused apps, one thing remains constant: people expect the presence and convenience of mobile apps.

With a well-designed mobile app, subscribers have an important tool that can give them full control over their broadband service—right in the palm of their hand.

Among the key functions that consumers are looking for in an app, self-service ranks high on the list. A 2020 Zendesk report on customer experience trends bears this out, noting that more than two-thirds of customers want self-service options so that they can resolve as many issues as possible themselves. However, the report also found that less than 30 percent of companies offer self-service, live chat, social messaging, in-app messaging, bots, or peer-to-peer communities⁵. This gap underscores an important opportunity for companies to provide in-demand, self-service capabilities for their customers, differentiating themselves from the competition. And according to a Bain & Company study, customer satisfaction increases by eight percent on average when customers become aware of self-service offerings—even more impetus to ensure that customers have the ability to help themselves⁶.

Understanding the benefits that can accrue from having an app available for your business or service is critical in developing a strategy to transform your customer experience. Apps represent an important channel for engaging with your customers, whether you're enabling them to conduct transactions, providing self-service capabilities, offering new services or products, or sharing information. It's clear that having a mobile app can pay off for companies: a consumer survey by

Chartwell found the use of mobile apps increases customer loyalty by 15 percent⁷. Companies that are not able to address this demand place themselves at a distinct competitive disadvantage.

KEEPING SUBSCRIBERS CONNECTED AND ENGAGED

As with many other industries, such as banking, retail, travel, and hospitality, mobile apps have become table stakes for broadband service providers (BSPs) of all sizes. The broadband industry has embraced the power of mobile apps, with major carriers and smaller players alike investing in the mobile app experience, providing subscribers apps that keep them connected and engaged with the services for which they pay.

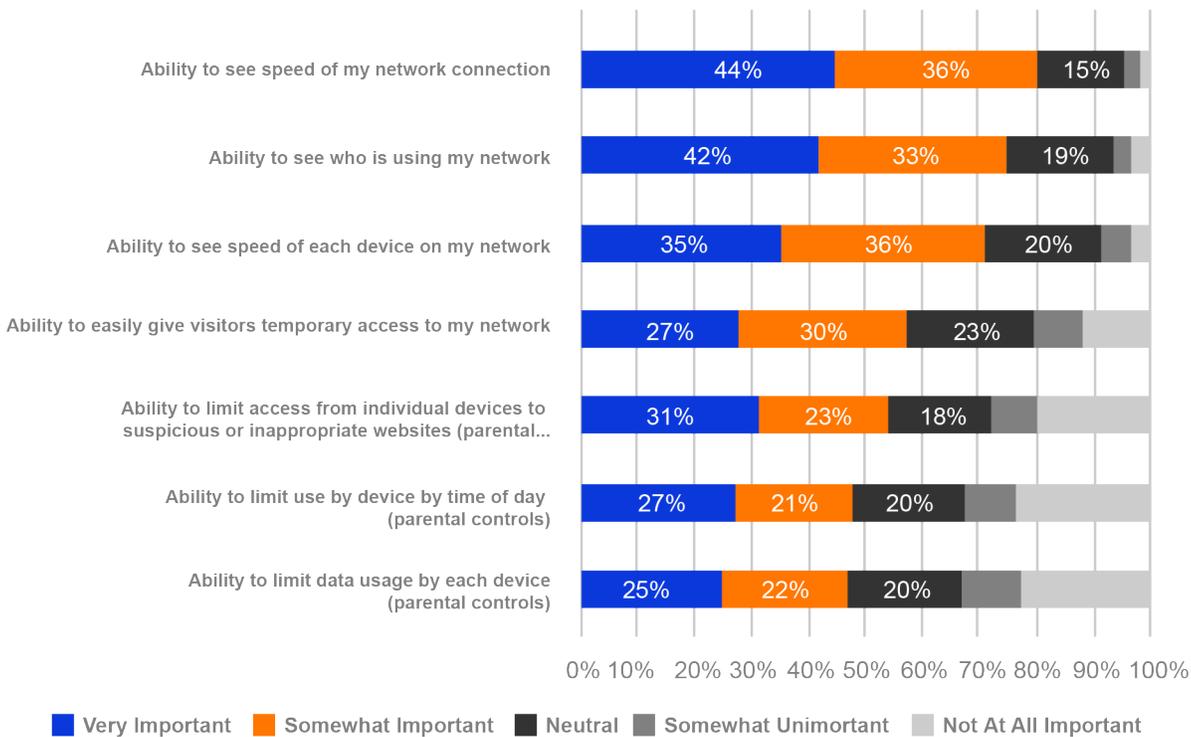
With a well-designed mobile app, subscribers have an important tool that can give them full control over their broadband service—right in the palm of their hand. With their app, subscribers can activate service, set up and manage their home networks, stream video content, manage their accounts, pay bills, connect to public Wi-Fi hotspot networks, and much more. These apps provide a high level of user engagement, as subscribers interact with the services directly through their devices rather than by telephone or in person.



Importantly, apps offer consumers the self-service capabilities they are looking for. They have greater visibility into their connected home experience along with an enhanced ability to understand network performance while also managing users and settings, creating additional wireless networks, establishing network parental controls, and more. But what's key to a BSP-offered mobile app is that subscribers now have the ability to identify, diagnose and resolve network-related issues on their own, circumstances that previously would have required at least a call to customer support, or possibly even a truck roll. When you consider the time and cost associated with something as simple as resetting a user password—Gartner Group research indicates that between 20 percent to 50 percent of all tech support calls are for password resets, while Forrester Research found that the average tech support labor cost for a single password reset is about \$70⁸—it's even more evident that mobile apps provide a valuable win-win for subscribers and the BSPs that serve them.

THE ANATOMY OF A CONNECTED HOME APP

When surveyed by the Broadband Multimedia Marketing Association (BMMA), consumers in the U.S. and Canada were clear on what matters to them in a BSP-provided mobile app. Topping the list was their ability to see the speed of their network, who's using their network, and how devices were performing on the network.



Source: BMMA 2021 Consumer Benchmarking Project. Used with permission. 2021 n = 828 (411 United States; 417 Canada)⁹

The BMMA consumer benchmarking results highlight the importance of providing subscribers with an app that's designed to give them the high level of insight and control over their network and the devices attached to it that they desire, while also providing features that will enhance their Wi-Fi experience and drive higher engagement with your brand. Core functions for a connected home app typically include:

- **SIMPLE SUBSCRIBER ONBOARDING**
Quickly register and configure Wi-Fi service, including SSID and password management.
- **PERFORMANCE TESTING**
Run bandwidth tests to check network speed.
- **NETWORK MAPPING**
View a map of the network.
- **CONNECTED DEVICE VISIBILITY**
See which devices are currently connected to the network.
- **USER-DEVICE ASSOCIATION**
Associate specific devices with specific users.
- **ACCESS CONTROL AND DEVICE MANAGEMENT**
Grant access and control for connected devices, as well as setting up guest networks.
- **PARENTAL CONTROLS**
Create profiles and set usage boundaries to protect children.
- **TRAFFIC MONITORING**
Monitor traffic on the network to see which devices are using the most data.



Further functionality might include the ability to perform tasks associated with managing additional connected home devices, such as thermostats, indoor and outdoor lighting, surveillance cameras, and video doorbells, among others.

Of course, there's scope to augment the core functionality with more extensive capabilities for home network security and parental controls. For instance, a BSP could offer network-level security that provides malicious website protection, anti-virus and anti-ransomware packet inspection, and intrusion detection. Additionally, for households with children, subscribers would value—and pay a premium for—enhanced capabilities that would allow them to take actions based on the user or device, such as pausing the internet connection for individual devices, blocking and filtering content and applications, and scheduling specific times of day during which internet and application usage is limited or blocked for individual users.

BREAKING THROUGH THE NOISE AND BUILDING BRAND EQUITY

In today's multi-channel world, consumers are subjected to a tsunami of communications via email, SMS, web, and voice, all competing for their attention,

and in many cases, their wallets. Mobile apps can play an important role in helping BSPs break through the noise to establish a direct, one-on-one connection with subscribers and drive greater engagement.

Through features such as push notifications and in-app messaging, BSPs can use their mobile apps to interact with subscribers to communicate new offers, upsell value-added services, provide reminders and helpful tips, notify them of potential service issues, and share important company news. These methods allow BSPs to engage with subscribers through a channel with greater opportunity for impact, as communications through mobile apps have been found to deliver higher engagement and conversion rates in comparison to traditional marketing or communication channels.

Further, a mobile app that is personalized and branded to your company with your logo and colors becomes a seamless part of your service. By facilitating a positive subscriber experience, mobile apps help to elevate the perception of the BSP's brand on a daily basis, creating a virtuous circle of engagement, satisfaction, and loyalty.

LOWER SUPPORT COSTS FOR THE BSP, HIGHER SATISFACTION FOR THE SUBSCRIBER

For BSPs, one of the most important benefits of having a subscriber-facing mobile app is the ability to reduce support costs. Self-service capabilities provided through the app can help subscribers address a range of issues on their own—changing SSIDs, resetting passwords, checking connectivity, setting up guest networks, or managing parental controls and security—reducing the number of or length of support calls, and reducing unnecessary truck rolls. All of this translates to greater efficiency and lower costs for the service provider, as well as lower churn and higher satisfaction—factors that significantly contribute to the business case and ROI for mobile apps.

Overall benefits to a subscriber's experience when a mobile app is provided:

- Control at their fingertips
- Added convenience
- Heightened security and safety
- Increased satisfaction
- An elevated experience with your brand

Overall benefits BSPs report when a mobile app is provided:

- Higher brand engagement
- A pronounced reduction in support calls and related cost savings
- A platform to deliver notifications and service information to increase engagement
- A foundation to deliver new services
- Increased ARPU when new services are introduced

CONCLUSION

Smartphones, mobile devices, and apps are now ubiquitous, and companies that don't provide apps for their services are at a competitive disadvantage, akin to a mobile carrier providing only flip phones for their service in the age of the smartphone. Consumers have become progressively accustomed to engaging with companies, stores, and services through mobile apps that put control at their fingertips.

Accordingly, BSPs are ideally positioned to meet subscriber expectations by providing mobile apps that allow users to control and manage their connected home experience while helping providers build brand equity, deliver new services, and increase revenue. Furthermore, when mobile apps are provided, the number of support calls can be dramatically reduced, while customer satisfaction and loyalty increase. A BSP mobile app strategy creates a win-win scenario for both subscribers and the provider.

Broadband Service providers that do not capitalize on opportunities to facilitate easy use of their services or those that do not keep up with technology trends run the risk of being marginalized and ignored. Mobile apps that enable convenience, control, and build brand loyalty are now required for any BSP that intends to compete and win in today's dynamic marketplace.

FOR MORE INFORMATION

To gain insight on the impact that offering a mobile app can have for your subscribers and your broadband business, visit <https://www.calix.com/platforms/exos/exos-systems/calix-smart-home-app.html>

1 Mobile Fact Sheet, Pew Research Center, <https://www.pewresearch.org/internet/fact-sheet/mobile/>

2 Q4 2020 Store Intelligence Data Digest, Sensor Tower, <https://go.sensortower.com/rs/351-RWH-315/images/Sensor-Tower-Q4-2020-Data-Digest.pdf>

3 Time spent in apps surged by up to 80% in selected markets between Q1 2019 and Q1 2021, <https://www.appannie.com/en/insights/market-data/q1-2021-market-index/>

4 Number of mobile app downloads worldwide from 2016 to 2020, <https://www.statista.com/statistics/271644/worldwide-free-and-paid-mobile-app-store-downloads/>

5 Zendesk Customer Experience Trends Report 2020, <https://d1eipm3vz40hy0.cloudfront.net/pdf/cxtrends/cx-trends-2020-full-report.pdf>

6 "Why Every Utility Needs a Mobile Application," Energy Central, <https://energycentral.com/c/cc/why-every-utility-needs-mobile-application>

7 "Why Every Utility Needs a Mobile Application," Energy Central, <https://energycentral.com/c/cc/why-every-utility-needs-mobile-application>

8 Does Password Reset on a Service Desk cost us money? Yes it does. Wake up!!!, LinkedIn, <https://www.linkedin.com/pulse/does-password-reset-service-desk-cost-us-money-yes-wake-vijay-shankar/>

9 Source: BMMA 2021 Consumer Benchmarking Project. Used with permission. 2021 n = 828 (411 United States; 417 Canada)