

# As Banking and Finance Mobile App Usage Soars, So Do Cyberthreats

Attackers attempt to exploit mobile app security and privacy vulnerabilities during the pandemic.



Consumers began embracing banking and finance mobile applications long before the pandemic. COVID-19 dramatically accelerated digital transformation and now people increasingly rely on mobile apps to deposit checks, send money to family and friends, pay bills, track spending, make investments and trade stocks.

A new report by Adjust and Apptopia shows average sessions in investment mobile apps surged 88% in the first half of 2020, while payment and banking app sessions increased by 49% and 26% respectively.<sup>1</sup>



**Average length of banking & payment app session**

8.35 minutes in 2020, up from 7.7 in 2019<sup>4</sup>

Not surprisingly, in-store visits to banks and other financial institutions sharply declined since the start of 2020 as banks temporarily closed branch locations, reduced hours and people sought to limit contact with others during the COVID-19 outbreak.<sup>2</sup> This shifting consumer behavior drove a 55% increase in financial app usage between December 2019 and April 2020, App Annie reported.<sup>3</sup>

## FinTech App Advances

Today, more than half of millennials and Boomers bank from their smartphones, according to Prosper Analytics.<sup>5</sup> While digital banks such as Chime, Monzo and Varo continue to make inroads, millennials also gravitate to the feature-rich mobile apps offered by the megabanks such as Bank of America, JPMorgan Chase and Wells Fargo.<sup>6</sup>

Artificial intelligence features such as Bank of America's mobile app virtual assistant enable users to interact via chat or text. Dubbed Erica, the AI assistant fielded 15 million client requests about monthly charges, credit scores and billing reminders in April alone. Erica also learned 60,000 coronavirus-related terms to help customers manage their cash flow, increase savings or watch their spending during the pandemic, *Bloomberg* reported.<sup>7</sup>

2020 has seen a boom in usage of mobile payment apps to make contactless payments due to health concerns with PayPal, Venmo, Zelle and others enjoying record growth.<sup>8</sup> For example, daily average users of the Square Cash app grew 59% year over year, the *New York Times* noted.<sup>9</sup>

Stock market and trading apps also gained heavy usage among U.S. users, rising 80% from late January to mid-

April, according to App Annie.

And in the insurance sector, mobile apps enable virtual claims adjustments. For example, customers can use their smartphones to photograph damage and submit claims rather than interact with adjusters in person. Allstate and Progressive tap sensors to offer usage-based insurance to those who drive less, while Lemonade uses AI anti-fraud measures to speed processing.<sup>10</sup>

## Mobile Payment App Usage Soars

Mobile app sessions of money transfer apps climbed by more than 10% during lockdown.<sup>11</sup>



## Safeguarding Customer Trust

Skyrocketing fintech app usage also coincides with a 283% surge of cyberattacks against banks in the early days of the pandemic, according to research from VMware.<sup>12</sup> The threat became so bad that in June, the FBI issued a warning about the dangers of malicious banking apps.<sup>13</sup>

Some of those attempts were successful. In July, a mobile-only bank called Dave disclosed that a third-party breach exposed the personal information of 3 million users. The bank prompted customers to reset their passwords and launched a manual security code review to identify and

**The FBI warned that cybercriminals were targeting mobile banking apps during the pandemic.**



**48%**  
of finance & banking apps leak sensitive data

fix flaws in its code base.<sup>14</sup> And more recently, about 2,000 users of the popular trading and investment app Robinhood reported compromised accounts. While Robinhood itself wasn't breached, hackers gained access by targeting users' personal emails.<sup>15</sup>

A NowSecure review of 250 popular Android mobile apps found that 48% of finance and banking apps leak some form of sensitive data such as username, geolocation or device information. An analysis of the top 100 mobile app downloads of 2020 shows that more than 60% have one or more security issues that fail security testing standards such as the OWASP Mobile Top 10 or OWASP API Top 10. In addition, 70% of mobile apps tested leak personal data that could violate CCPA or GDPR.

In times of crisis, consumer trust is critical. Financial institutions and fintech companies must quickly innovate while prioritizing mobile app security and

privacy to protect their customers. Mobile app developers can reduce risk from the start by applying best practices for security and privacy by design. In addition, testing for security, privacy and compliance issues throughout the software development lifecycle and periodic full-scope penetration testing are imperative for ensuring mobile apps meet the strictest security requirements.

Automated mobile application security testing tools enable AppDev, AppSec and DevSecOps teams to test apps on demand or perform continuous security testing directly in the development pipeline. The NowSecure solution analyzes risks of Android and iOS mobile apps so organizations can quickly address them and ultimately deliver high-quality secure mobile apps faster.

## About NowSecure

NowSecure offers a comprehensive suite of automated mobile appsec testing solutions, penetration testing and training services to reduce risk. Trusted by many of the world's most demanding organizations, NowSecure protects millions of app users across banking, insurance, high tech, retail, healthcare and government. The company is SOC2 certified and was recently named a mobile application security testing leader by IDC and a DevSecOps transformational leader by Gartner.

Visit [www.nowsecure.com](http://www.nowsecure.com) to discuss strategies for strengthening security of mobile banking, finance and insurance apps.

## SOURCES

- PR Newswire, "Global Fintech App Usage Grew Significantly in H1 2020, Accelerated by COVID-19," October 2020
- S&P Global Market Intelligence, "COVID-19 Reduces Branch Traffic, Spurs More Mobile Bank App Usage,"
- App Annie, "Economic Headwinds Prompt Demand for Finance Apps," May 2020
- Adjust and Apptopia, "The Mobile Finance Report 2020," October 2020
- Forbes, "Mobile Banking Is on the Rise Due to COVID-19, But Something Is Lacking from Most Bank Apps," September 2020
- Forbes, "Why Do 44% of Millennials Bank with Bank of America, Chase, and Wells Fargo? Mobile Banking" January 2020
- Bloomberg, "BoFA's AI Robot Learns 60,000 Ways to Talk About the Coronavirus," June 2020
- App Annie, "2020 Mobile App Finance Report," April 2020
- The New York Times, "When Your Last \$166 Vanishes: 'Fast Fraud' Surges on Payment Apps," October 11, 2020
- Future Mind, "Mobile Application Guide for the Insurance Industry," May 2020
- Apptopia, "The Transition to Digital Remittances Has Been Accelerated: Remittance Apps See Sharp Uptick in New Users," May 2020
- ZDNet, "COVID-19 Blamed for 283% Surge in Cyberattacks Against Banks," May 2020
- Credit Union Times, "FBI Alert: Lock Down Mobile Banking Apps," June 2020
- Bank Info Security, "Dave: Mobile Banking App Breach Exposes 3 Million Accounts," July 2020
- CNN, "Robinhood Says a Limited Number of Accounts Were Recently Hacked," October 2020