

# Banking and Finance Must Strengthen Mobile App Security This Year

61% of fintech apps have privacy issues that could potentially expose the sensitive data of millions of customers.



The banking and finance industry has embraced digital transformation and consumers increasingly use mobile apps to deposit checks, send money to friends and family, pay bills, get loans, track spending and make investments.

Globally, finance app downloads grew 28% in 2021, according to App Annie.<sup>1</sup> The COVID-19 outbreak accelerated adoption and consumers discovered the convenience and perks of mobile banking.

More than half of U.S. consumers (59%) use more mobile apps now to manage their money than before COVID-19, and 73% now view financial technology as the new normal.<sup>2</sup> In fact, the percentage of Americans using fintech surged from 58% in 2020 to 88% in 2021.<sup>3</sup> Among Generation Z, 56% conduct their banking via mobile apps.<sup>4</sup>



Generation Z members use an average of **4.6 fintech apps.**<sup>5</sup>

## FinTech App Advances

Startup financial companies and traditional banks have fueled new fintech services and features. Digital banks or neobanks like Chime, Monzo and Varo have emerged with innovations such as eliminating monthly and overdraft fees and delivering paychecks sooner. The incumbent banks responded to competition by building and enhancing mobile app features.

Credit Suisse in late 2020 launched a mobile banking app that encompasses all the financial services customers need, including

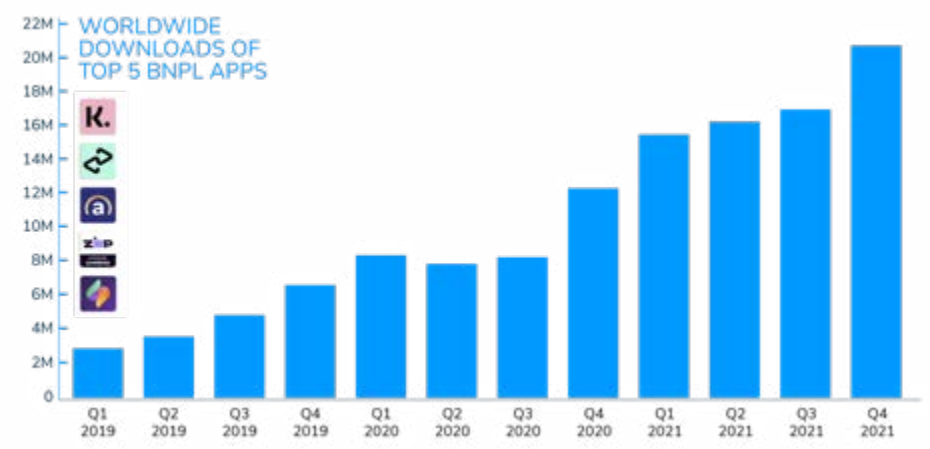
investment accounts, financial planning services, products that help manage mortgages and pensions and live customer support. The app attracted 100,000 new customers, driving \$1 billion in new assets in a single year.<sup>6</sup>

Artificial intelligence (AI) features such as Bank of America's virtual assistant Erica enable users to interact via voice or text to obtain account information, trade stocks, receive billing reminders and conduct other banking. In the third quarter of 2021, 22.9 million customers used Erica, a 44% increase from the previous year.<sup>7</sup>

2021 also saw a boom in usage of Buy Now, Pay Later (BNPL) apps from the likes of Affirm, Afterpay and Klarna and cryptocurrency apps that allow people to buy, sell and store crypto. Stock trading apps

## Buy Now, Pay Later Apps Reach New Heights

Offering a new twist on layaway plans, Buy Now, Pay Later apps soared in popularity. Apptopia reported the apps enjoyed a strong 2021 holiday shopping season.<sup>8</sup>



dominated investment apps in 2018 to 2020, but cryptocurrency apps overtook stock trading apps in overall downloads during the first half of 2021 (51% of downloads vs. 43%).<sup>9</sup>

BNPL apps have grown in popularity because they enable consumers to stretch their dollars by paying for purchases through multiple interest-free payments. Apptopia reports downloads of BNPL apps increased 68% in 2021 with Klarna dominating and Affirm growing the most in Q4.<sup>10</sup> Mobile payment apps PayPal, Venmo, Zelle and others also continue to enjoy strong growth.<sup>11</sup>

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>12</sup>

## Safeguarding Customer Trust

Skyrocketing fintech app usage coincided with a surge of cyberattacks against banks.<sup>13</sup> The threat became so bad that the FBI warned about the dangers of malicious mobile banking apps.<sup>14</sup>

A few well-known banking and finance mobile apps suffered security and privacy challenges in 2021:

- **Chase Bank** disclosed that a technical bug in its mobile app and website leaked customer information to other customers, including names, account numbers, statements and transactions.<sup>15</sup>
- **Klarna** announced that a faulty configuration change in its mobile app allowed users to see details of other users' accounts for 31 minutes.<sup>16</sup> Users were able to see other users' personal information, such as mailing addresses, purchases, payment methods and partial bank details.<sup>17</sup>



**61%**  
of banking and finance  
apps have privacy risks.<sup>18</sup>

Those breaches were disclosed but it's possible many more went unreported or undiscovered. A January 2022 NowSecure benchmark review showed 796 of the most popular banking and finance mobile apps were rife with security vulnerabilities. 99% of all apps had security risks with 37% having high-risk vulnerabilities, 76% used dangerous permissions and 40% used weak cryptography.<sup>19</sup>

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 secure coding and privacy by design. In addition, continuous monitoring for security, privacy and compliance issues throughout the software development lifecycle and periodic full-scope penetration testing are imperative for ensuring mobile apps meet strict security requirements.

## The FBI warned that cybercriminals targeted mobile banking apps during the pandemic.

Automated mobile application security testing tools empower AppDev, AppSec and DevSecOps teams to test apps on demand or perform integrated security testing directly in the development pipeline. NowSecure Platform 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 app security and privacy 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 SOC certified and was named a mobile security testing leader by IDC and a DevSecOps transformational leader by Gartner.

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



## SOURCES

<sup>1</sup> App Annie, "State of Mobile 2022," January 2022

<sup>2</sup> Plaid, "The Fintech Effect: Spotlight on COVID-19," September 2020

<sup>3</sup> Plaid, "The Fintech Effect: Fintech's Mass Adoption Moment," October 2021

<sup>4</sup> American Banking Association, "Preferred Banking Methods Infographic," October 2021

<sup>5</sup> Plaid, "The Fintech Effect: Fintech's Mass Adoption Moment," October 2021

<sup>6</sup> InvestmentNews, "Credit Suisse Grabs \$1 Billion in Assets with New Mobile App," November 2021

<sup>7</sup> PYMNTS.com, "Bank of America Says Zelle Users Have Grown 24% YoY," October 2021

<sup>8</sup> Apptopia, "Benchmarking the Global Mobile Retailing Landscape," 2022

<sup>9</sup> SensorTower, "Sensor Tower's 2021 State of Asset Management Apps Report," July 2021

<sup>10</sup> Apptopia, "Benchmarking the Global Mobile Retailing Landscape," 2022

<sup>11</sup> App Annie, "2020 Mobile App Finance Report," April 2020

<sup>12</sup> Future Mind, "Mobile Application Guide for the Insurance Industry," May 2020

<sup>13</sup> ZDNet, "COVID-19 Blamed for 263% Surge in Cyberattacks Against Banks," May 2020

<sup>14</sup> Credit Union Times, "FBI Alert: Lock Down Mobile Banking Apps," June 2020

<sup>15</sup> BleepingComputer, "Chase Bank Accidentally Leaked Customer Info to Other Customers," Aug. 2021

<sup>16</sup> Klarna, "May 27 Incident Report," June 2021

<sup>17</sup> PC Magazine, "Klarna Under Investigation Following May's Major Security Breach," July 2021

<sup>18</sup> NowSecure, "Mobile RiskTracker," Jan. 12, 2022

<sup>19</sup> NowSecure, "Mobile RiskTracker," Jan. 12, 2022