

How Retailers Could Lose Customers from Bad Mobile App Security

Mobile application security and privacy vulnerabilities that expose sensitive data jeopardize brand reputation.



Brick-and-mortar retailers and restaurants welcomed back customers into their establishments but many of today's consumers have grown accustomed to using mobile apps to order everything from groceries and takeout dining to clothing and home improvement supplies. Meanwhile, travel and hospitality mobile app usages rebounded as travel restrictions eased up.

Retailers, grocers, food delivery services and travel and hospitality companies significantly expanded their mobile presence in recent years by launching or enhancing mobile apps with new features to meet demand, improve customer service and grow revenue. But those apps must safeguard consumer privacy or the companies risk damaging their businesses.

Mobile Shopping Surges

Overall, consumers spent more than 100 billion hours on shopping apps in 2021, an 18% increase from the previous year.¹ Nearly everyone shops more on their smartphones than they did a year ago thanks to convenience, time savings, 24x7 availability and ease of checkout.² Among surveyed consumers, 80% said it's more fun to shop via mobile apps than websites.

Digital-only storefronts such as Amazon, eBay, Shop and Wish and mobile apps from traditional retailers



26%
of U.S. Starbucks retail transactions are made via its mobile app.³

such as Kohls, Target and Walmart make it easy for people to shop from the comfort of their couches. In fact, mobile apps drive click-and-collect transactions, one of the fastest growing segments of e-commerce, according to eMarketer. Click-and-collect sales, also known as buy online, pickup in store, soared 107% in 2020 and were expected to grow another 15% in 2021.⁴

Top 10 Mobile Shopping Apps

mCommerce had a big year in 2021. These retailers had the most U.S. downloads from the Apple® App Store® and Google Play™ in the category, according to Apptopia.⁵



People also hunger for food delivery services such as DoorDash, Grubhub, Postmates and Uber Eats, driving rising usage of food delivery mobile apps. Downloads increased 30% year-over-year in 2020 and rose 10% through Q3 2021, according to Adjust.⁶

Not surprisingly, travel and hospitality app traffic dropped during the height of the pandemic. But travel apps made a huge comeback as countries relaxed border restrictions and vaccinations made it possible

for people to go on long-awaited getaways. Worldwide travel app downloads hit 1.95 billion in the second half of 2021, nearing pre-pandemic levels of 2.08 billion in the second half of 2019.⁷ Meanwhile, U.S. airline mobile app sessions increased 69% in 2021.⁸



66%

of popular retail mobile apps have privacy issues.⁹

Consumer Mobile Apps Boost Convenience

Innovations in shopping, travel and hospitality apps improve convenience and help keep consumers safe. Some recent enhancements include:

- **Contactless service:** Delivery services DoorDash, Grubhub, Instacart and Postmates added no-contact delivery options to their apps and grocer apps from Kroger and Walmart offer mobile checkout and curbside delivery. Hilton, Hyatt, Marriott and Virgin Hotels allow guests to use their phones as digital room keys and check in and out without visiting the front desk.¹⁰
- **Interactive livestream shopping events:** Retailers such as Newegg¹¹ and Verishop¹² rolled out livestream events on their mobile apps. Verishop consumers can watch and interact with experts and influencers and receive style tips and discounts on products.
- **Augmented reality:** Retailers such as Macy's offer augmented reality features in their mobile apps to help customers shop and virtually try on clothes and other merchandise.¹³

Security and Privacy Issues Abound

As retail, travel and hospitality brands increase their reliance on mobile apps, they must address mounting security and privacy threats. Security and privacy vulnerabilities can result in lost business, tarnished brand reputation and regulatory fines.

Shopping apps fuel the e-commerce boom sparked by COVID-19.

A NowSecure benchmark review of 465 popular retail apps found that 66% have privacy risks. 45% had high-risk vulnerabilities, 88% used dangerous permissions and 41% leaked personally identifiable information.¹⁴ And keep in mind these recent mobile app security breaches or vulnerabilities that were discovered:

- The **BrewDog** mobile app leaked personal data on 200,000 shareholders and customers of the brewery and pub chain for 18 months. A problem with the app's token-based authentication system exposed user data including birthdates, addresses, number of shares owned and types of beer purchased.¹⁵
- Mobile parking app **ParkMobile** exposed personal data of 21 million customers, including phone numbers, license plate numbers, hashed passwords and mailing addresses.¹⁶
- An **Amazon Ring Neighbors** app security flaw revealed locations and addresses of Ring users who posted to the app.¹⁷

Protecting Mobile Apps and Mobile Customers

Retail, travel and hospitality brands can better protect their customers by adopting best practices for secure mobile app development. 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 to discover strategies for strengthening the security of retail, travel and hospitality mobile apps without slowing down developers.

 NowSecure™
MOBILE APP TRENDS

SOURCES

¹ App Annie, "State of Mobile 2022," January 2022

² Business of Apps, "People Are Using Mobile Devices and Apps to Shop More Conveniently," Nov. 19, 2021

³ Indigo Digital, "How Starbucks Is Using Mobile Apps to Significantly Increase Sales," June 10, 2021

⁴ eMarketer, "Why Mobile Retail Apps are One Key to Holiday 2021's Winners and Losers," Oct. 13, 2021

⁵ Apptopia, "Worldwide and U.S. Download Leaders 2021," Dec. 27, 2022

⁶ Adjust, "Food Delivery App Boom Continues Following Lockdown-Driven Growth," Nov. 1, 2021

⁷ App Annie, "State of Mobile 2022," January 2022

⁸ Apptopia, "U.S. Airline App Sessions Soar 69% YoY in November and 34% over 2019 Numbers," Dec. 6, 2021

⁹ NowSecure, "Mobile RiskTracker," Jan. 12, 2022

¹⁰ Hotel Technology News, "Virgin Hotels Upgrades Its Mobile App With Contactless Features," July 2020

¹¹ PYMNTS.com, "Retail Newegg Rolls Out Mobile Livestream Shopping Platform," Oct. 7, 2021

¹² Verishop, "Verishop Launches New Livestream Shopping Feature on Social Commerce Platform," June 14, 2021

¹³ Business Insider, "Retailers are Turning to Virtual Fitting Rooms," August 2020

¹⁴ NowSecure, "Mobile RiskTracker," Jan. 12, 2022

¹⁵ Bleeping Computer, "BrewDog Exposed Data for Over 200,000 Shareholders and Customers," Oct. 8, 2021

¹⁶ Krebs on Security, "ParkMobile Breach Exposes License Plate Data, Mobile Numbers of 21M Users," April 12, 2021

¹⁷ TechCrunch, "Amazon's Ring Neighbors app exposed users' precise locations and home addresses," Jan. 14, 2021