>Eradicating mobile banking app fraud in Africa and the Caribbean_

Prominent African and Caribbean mobile bank overcomes security crisis with Build38

Summary

After facing a significant security incident of unauthorized withdrawals executed via their mobile banking app, the bank required an urgent solution and response to this security emergency.

The company obtained a temporary license for Build38 and quickly implemented the mobile app security platform. As soon as it was deployed, all attacks ceased immediately. For the next four months, the security conducted an in-depth survey of security solutions on the marketplace and found Build38 to be the most comprehensive, confirming they had made the right decision and prompting them to acquire a permanent license for Build38.

Industry
Financial services
Mobile Banking

Region
Americas, Caribbean,
Africa, Ghana

Insights
Leading mobile-first bank
in Africa and the Caribbean

Key challenges

- Swift action required for a critical mobile banking app security emergency, due to PC-based smartphone emulator exploitation
- Mitigate financial loss and protect reputation from unauthorized withdrawals via the mobile banking app
- Rapid, efficient implementation of mobile app security to address current and potential future attacks

The solution

In three weeks, Build38 was successfully implemented and deployed globally to all mobile banking consumers. The project included integrating Build38's Mobile App Self-Protection into the app, deploying Build38's Active Hardening, and configuring the cloud-based Mobile Threat Intelligence console for enhanced monitoring and response capabilities. The orchestrated series of emulator-based attacks on the mobile banking app was effectively neutralized.

Business benefits

- Industry-record mobile app security implementation, ensuring the eradication of security breaches and preventing further reputational or financial losses
- 50% reduction in mobile attacks, as the fortified platform no longer appeals to fraudsters
- Continuous monitoring of attempted attacks, now in the low thousands, with just 1% of active devices causing incidents

Empowering customers in Africa and the Caribbean with mobile banking

The bank is a prominent financial institution operating in Ghana and the Caribbean region, including Trinidad and Tobago, Guyana, the Cayman Islands, and Grenada.

The largest African-held banking institution in the Caribbean, the company provides a comprehensive range of financial services, including retail and corporate banking, mortgages, credit and debit card services, and pension management.

The bank's mobile app is a critical part of its business. In Africa, most consumers only have access to the internet via their phone. And with Africa still very rural, consumers are often very far from a physical branch. Providing a stellar and safe mobile banking experience is thus critical to any bank's success and business in Africa today.

Urgent response required for critical mobile app security emergency

In November 2021, the bank's mobile banking platform faced a significant security incident. Unauthorized withdrawals were made via the mobile banking app, causing financial losses and reputational damage.

Upon investigation, it was discovered that hackers were exploiting PC-based smartphone emulators, which allowed them to execute hacking techniques more efficiently than on mobile devices.

🛡 Build38 recommended by top security consultant

At the time, the bank's security team was working with a security consultant. The consultant had run across the same security breach, and the use of PC-based emulators, at another financial institution. That other institution rapidly implemented Build38's mobile app security platform and the emulator-based attacks were stamped out immediately.

The consultant strongly recommended that the bank deploy Build38's Mobile App Security Platform immediately. The bank's security team sprang into action, conducting the necessary due diligence on Build38, and securing the approval of top management to rapidly purchase a provisional license for the solution in order to deploy and resolve the emergency situation as quickly as possible.

A fast, smooth emergency implementation and successful penetration tests

With the help of Build38's professional services team, the mobile development team successfully implemented the mobile app security solution in three weeks.

The implementation involved

- Integrating Build38's Mobile App Self-Protection software into the mobile application
- Deploying Build38's Active Hardening server
- Configuring Build38's cloud-based Mobile Threat Intelligence console to arm the bank's security and fraud management professionals with monitoring and response capabilities
- Penetration tests and emulator-based attacks on the mobile banking app, all of which were effectively repelled

Build38 eliminates security breaches once and for all

In less than 4 weeks, the solution was fully up and running, and had been deployed to all of the company's mobile banking customers worldwide. Once implemented, the attacks ceased immediately.

The bank continued using Build38's provisional license for four months without any new successful security breaches. This time period allowed the team to conduct a comprehensive comparison of Build38 against alternative solutions, confirming they had made the right decision. Satisfied with their findings and the solution's performance, they acquired a permanent license for Build38.

Since then, the bank's mobile application has remained free of significant security breaches.

CISO & Head of Operational Risk

>Mobile app attacks have surged in West Africa, especially with the introduction of Bluetooth contactless payments, but our mobile bank has remained breach-free since deploying Build38_

Ensuring continued security excellence

A collaborative partnership from beginning to end

The collaboration between Build38, the development team, and the consultant went smoothly during the initial emergency deployment of Build38. Since then, the partnership has remained equally cohesive.

24/7 customer support

The bank benefits from the security provider's 24/7 customer support. Anytime their team needs support from Build38, they log a ticket into the security provider's portal, and are instantly connected to a web chat with a Build38 mobile app security expert.

Fending off mobile device vulnerabilities

Mobile devices themselves may possess vulnerabilities that can be exploited to jeopardize the security of cryptographic keys stored within apps. For instance, when a device is rooted or jailbroken, it becomes more accessible for attackers to breach sensitive data, including keys. Build38 is specifically engineered to fend off mobile device vulnerabilities.

Help securing Bluetooth vulnerabilities

The development team needed help securing the app's new Bluetooth contactless payment capabilities. They were able to instantly get expert advice and support from the Build38 experts in contactless payment.
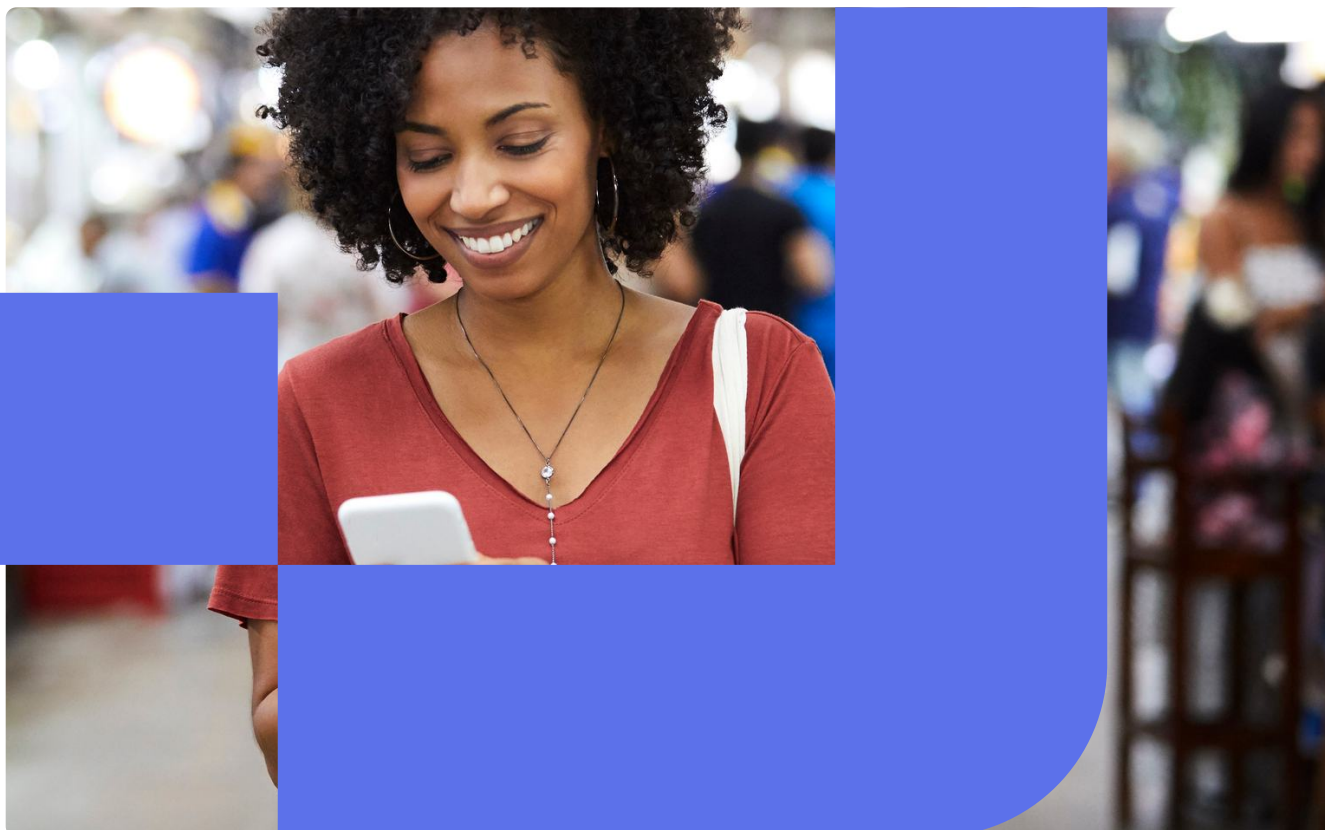
Zero significant mobile app breaches since implementing Build38

The bank has also reported a 50% reduction in attacks, as the fortified platform deters fraudsters

Superior protection with seamless integration

Since implementing Build38, there have been no significant mobile app security breaches at the bank. Developers now seamlessly integrate Build38 Master Code Protection software into new releases of the mobile banking app as a matter of course.

Moreover, mobile attacks have seen

- A 50% reduction, as the fortified platform no longer appeals to hackers
- Monthly attempted attacks drop to the low thousands, with just 1% of active devices causing these incidents, thanks to Build38's Threat Intelligence console, which allows the bank's security and fraud team to monitor for and respond to threats on an ongoing basis

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About Build38

The Build38 Mobile App Security Platform empowers businesses to effectively counter security attacks targeting their mobile apps. The platform stands out with its advanced Mobile App Self- Protection, cryptography and AI-driven Active App Hardening, and cloud-based Mobile Threat Intelligence.

Build38 streamlines compliance requirements, expedites certification processes, and eliminates the need for extensive security expertise within mobile app teams. It uniquely caters to the rigorous security requirements of various mobile applications, including mobile-first banking apps, SoftPOS apps, digital ID apps, digital wallets, car key apps, eHealth apps, crypto wallets, and many other application types.

Trusted by industry-leading mobile app companies, the integrated, yet modular, system guarantees zero-trust security across the entire mobile technology stack, encompassing the app, network, and backend infrastructure.

For more information, visit www.build38.com.