Entersekt

CUSTOMER SUCCESS

Capitec Bank balances security with convenience using Transakt.

An innovative South African bank replaces hardware tokens with Entersekt's authentication technology, boosting security and usability

The challenge

Staying ahead but keeping it simple

The solution A highly intuitive authentication process free of OTPs



The conventional transaction authentication system Capitec Bank had been using required hardware tokens to deliver one-time passwords (OTPs) to its online banking users. These were neither convenient nor cheap, and did not match the increased functionality that newer solutions offered. The hardware token system increasingly became the target for phishing and man-in-the-middle attacks.

ONLINE BANKING AUTHENTICATION USING THE TRANSAKT APP

With these concerns in mind, in early 2012, Capitec Bank enlisted Entersekt to enhance its online banking authentication. Larger authentication vendors had proved too rigid and uninspired when it came to mobile innovation.

Powered by Entersekt's Transakt product, the bank's new interactive authentication service was released just months later, in August. As an optional alternative to the OTP-based authentication method, it allows Capitec's clients to authenticate online banking transactions using something they always carry with them: their mobile phones.

South Africa is a middle income economy, but mobile phone penetration is extremely high, sitting at around 154 percent. Capitec Bank has long looked to the mobile channel to increase client convenience and has implemented other ground-breaking mobile banking services to help bridge geographical and technological divides within the country. The bank recognized the Entersekt solution as something that fitted well with this approach.

The interface is extremely intuitive, presenting the client with simple "Accept/Reject" prompts on the phone for each transaction they initiate online. Behind this simple experience, there is some heavy-duty security technology at work. The Transakt security app uses X.509 digital certificates to uniquely identify every enrolled mobile phone and the service provider itself – so that both parties are verified to each other as legitimate. (The app is linked to the mobile device and not the SIM card, insulating Capitec's clients from SIM-swap fraud, which has climbed dramatically in South Africa in recent years.)



Client responses are sent out of band, so that phishing sites cannot intercept the communication. For further protection, Transakt encrypts all transmissions to and from the bank from end to end and includes the ability to digitally sign transactions, ensuring that only the registered account holder is able to authorize transactions on their account. This singular use of digital certificate technology is unmatched on the market anywhere in the world and thwarts phishing and man-in-the-middle/browser attacks.

REMOTE BANKING AUTHENTICATION WITH THE TRANSAKT SDK

In June 2014, Capitec Bank extended its use of Entersekt's technology, deploying this outof-band authentication functionality to the bank's subscription-free, PIN-protected remote banking app, built from the ground up using the Transakt SDK. This means that clients using the Internet and mobile channels are now protected with the same application, available for download from all approved app stores.

For the initial release, Capitec Bank chose to limit its remote banking offering to core on-the-go banking functionality, to ensure the app worked on the broadest range of mobile phones. Capitec's clients could view account balances and transaction history, create and pay beneficiaries, transfer funds between their accounts, and authenticate and digitally sign remote banking logins and sensitive transactions.

Having built a secure access channel between itself and each of its remote banking clients, all of whom it can uniquely identify, the bank has continued to expand its range of innovative new mobile offerings. Since the launch, its clients have gained the ability to top up mobile airtime and buy mobile data and SMS bundles for themselves or anyone else they know; buy prepaid electricity for their own use or someone else's; transfer money to anyone with a verified mobile telephone number; make multi-loan withdrawals; add recurring and future-dated payments; and stop lost or stolen cards. They can also mail their transaction history to anyone that requires it and forward their account details by email or SMS.

IN BRIFF

- No phishing, man-in-the-middle/browser, and SIM-swap attacks
- Deployed rapidly and scaled to millions with ease
- Increasing customer confidence in the mobile channel contributed to significant growth in the number and value of digital transactions
- Remote banking increased 46 percent year-onyear to 728 million transactions to February 2017 (ATM and branch transactions increased only 15% for the same period, to 330 million transactions)
- App boasts **90 percent** satisfaction rate and the bank regularly tops national customer service surveys
- Rated best digital bank, best mobile banking, and joint best Internet banking in South Africa in 2017
- Only banking app among the ten most popular apps downloaded in South Africa (between Instagram and Uber)
- Market share grew from 2 percent in 2007 to **25 percent** in 2017
- Client base **doubled** since 2012 to 9.3 million



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"We are determined to offer our

clients the best available security

when banking with us and for this

reason we have chosen the Entersekt

solution as it ensures leading edge

security combined with easy-to-use

Executive marketing and corporate

CAPITEC

Capitec Bank is a listed South

African retail bank (JSE:CPI) with

over R134 billion (US \$7.3 billion) in

assets. It serves 13.9 million clients

South Africa and through its remote

banking channels, which include an

online banking portal and a USSD-

based service. Its mobile banking

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having increased 69% to 327 million

transactions in the year to April 14,

2020. Visit capitecbank.co.za.

app has over 3.3 million active

from around 850 branches across

convenience."

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