



# **PAIN POINTS**



Two-factor authentication legally required



Risk of fraud via man-inthe-middle, OTP-hijacking, phishing, etc.



Hard to detect fraudulent log-in attempts from a different device



Bad user-experience with OTP

# **BUSINESS OBJECTIVES**

Smartphone has become a key channel to reach clients in unbanked and underbanked regions in a cheap and easy way. Investments in digital development today help to reduce costs of interaction with bank clients in future.

For urban bank clients mobile channel is the most popular way to interact with the bank 24/7 without any delay. That is why banks are doing their best to deliver good user-experience in a banking app while security requirements make it hard.

In perspective of a balance between UX and security, the crucial step is transaction authentication. Usually banks use a combination of mobile static password (mPIN) with Touch ID

or Face ID, or some OTP-based authentication solutions — like SMS or push-codes or OTP-based soft-tokens embedded into the banking app. All of these authentication methods do not perform integrity control checks of operation. This can lead to transaction details replacement within man-in-the-middle attacks. Moreover, OTP-based authentication makes it possible to hijack OTP via social engineering techniques as well as via spyware installed and operating in a silent mode.

From a user perspective, these methods are also not really user-friendly — it takes from 10 to 20 seconds to confirm operation with OTP-based solutions or mPIN + Touch ID.

## SOLUTION DESCRIPTION

PayConfirm is a fully software-based authentication solution based on asymmetric cryptography. It can be used for log-in, money transfer or any type of secure confirmation in any digital banking channels. Being embedded into a mobile app, it will help to offer strong client authentication without OTP – confirmation will be based on a secure key that cannot be extracted from a mobile device. Access to the key is strongly protected with the secret known by the client only, such as touch ID, face ID or password.

Moreover, each confirmation is linked with exact transaction details, so what you see is what you sign. Thus, client will see the real traction details on the confirmation step, even if s/he followed to some fake page.

PayConfirm helps to collect up to 70 secure prams about the device, so if any spyware is installed, it will be detected as well as attempt to log-into the account from a different device – all of this data will be provided to the bank server.



Thus, you don't need OTP to perform legally-compliant strong two-factor authentication in mobile — device itself (something you have) and the secret like Touch ID (something you are) will allow to comply with regulation requirements without any stress on the client side.

This all will be done in one tap on the smartphone screen with PayConfirm mobile SDK embedded into the banking app.

### **VALUE PROPOSITION**

2 SECONDS

confirmation vs approx. 15 seconds with mPIN or OTP 30%

annual cost-reduction comparing to SMS OTP

**75**<sup>%</sup>

of fraud-reduction in 3 months

70

secure params about the device

#### **ABOUT US**

Airome Technologies is a Singapore-based developer of cybersecurity solutions for digital banking and e-document management systems. The company provides secure client-server software to confirm or digitally sign any type of operations, including bank transactions or e-documents, on a mobile device. Our solution lowers the risk of unauthorised transactions caused by manin-the-middle, phishing, or social engineering attacks.

Our mission is to enable our customers to provide user-friendly, secure and cost-effective digital services.

