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Leumi Card Simplifies Mobile App Authentication

with Behavioral Biometrics

↓ 01 Initial situation

Leumi Card experienced considerable demand for its online mobile wallet service. However, several challenges drove its need to find a new, frictionless path to secure mobile transactions:

– Increased regulatory requirements for second-factor authentication for high-risk transactions;

– Improving the digital experience by striking a balance between successful fraud prevention and smoother interactions. Previous solutions required multiple data entry factors, including user names, passwords, and identification codes when accessing accounts or making transactions, leading to low adoption rates and transaction abandonment;

– Managing risk. Previously, companies worldwide found that increasing EMV availability led to increased card-not-present (CNP) fraud.

"The Behavioral Biometrics technology allowed Leumi Card to significantly reduce the possibility of fraud by both humans and bots, while remaining unobtrusive and simultaneously enhancing their ability to perform transactions. In fact, we experienced a reduction in transaction abandonment by not requiring multiple layers of authentication, providing a frictionless user experience."

Ohad Maimon
EVP Business Development & Strategy, Leumi Card

Leumi Card

About the client

Leumi Card Ltd. issues credit cards and offers clearing services. Its products include Multi, Leumi Card Free, Cash Card, and World Signia.

The company also provides Gift Card, Y-Card, and Visa Plus in Israel. In addition, it offers services for organizations and workplaces; merchant acquiring services; and credit solutions, including loans, payment discounts, multi business, acquisition cards, and supplier cards.

The company was founded in 2000 and is based in Bnei Brak, Israel.

↓ 02 The solution and how it works

After considerable due diligence, Leumi Card selected our behavioral biometrics platform to address all these concerns. Delivering passive, continuous authentication, it ensures a seamless process with no user impact during mobile transactions.

Our mobile-optimized solutions require no active enrollment; they are easy to implement and provide real-time alerts when suspicious activity is detected from login to logout. The technology analyzes how individual users physically interact with their mobile devices, building an individual profile for each user based on more than 100 unique attributes of the user-device interaction, including finger pressure, swipe speed, device movement, gesture boundaries, typing patterns, etc., to continuously verify user identity.

Once enough data is captured, these behavioral biometrics can be verified in real time and used to determine whether the card owner is the one operating the app or if a criminal or automated bot is attempting fraud.

The real-time analysis delivers a risk score from 0 to 1,000, where 0 is certain the profile does not belong to the user and 1,000 is certain the profile does belong to the user.

Leumi Card's risk management team oversaw the integration into the existing fraud-prevention mechanism. They set the thresholds for access, denial, or step-up authentication while we never see the name or any other personal details of the cardholder.

During the pilot, our SDK was embedded in the Leumi Card app to create profiles during cardholders' initial sessions. Our identity verification continuously monitors every in-app activity in addition to the initial login stage.
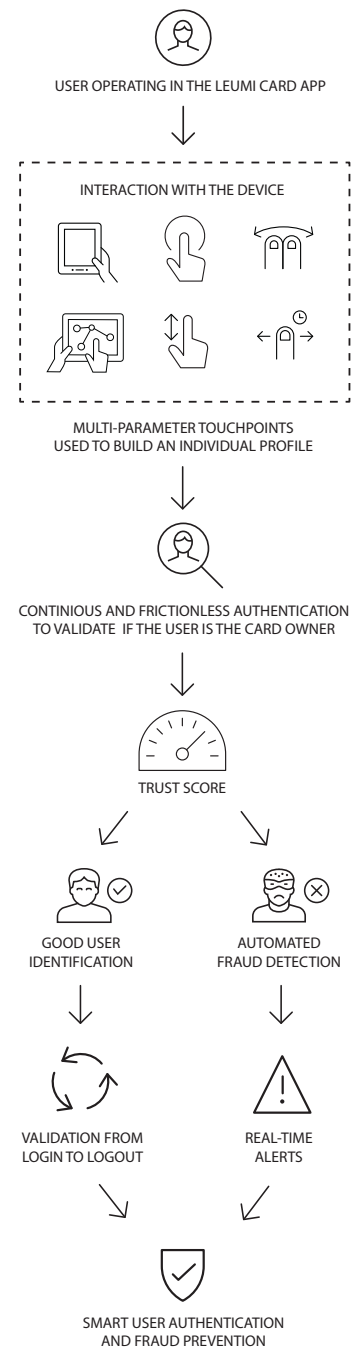
↓ 03 The result

Leumi Card initiated integration of our SDK in its digital wallet at the end of 2015. This was completed in March 2016, with final integration in all its Android and iOS platforms. The successful integration achieved:

– **Reliable application:** More than 90% accuracy after only a few gestures were captured in the app/login

– **Increased functionality:** Preliminary results show significant user adoption and an increase in transactions

– **Improved customer experience:** „Password-free" authentication in over 60% of the sessions

– **Regulation compliance:** Using behavioral biometrics as a 2nd factor for stronger authentication

USER OPERATING IN THE LEUMI CARD APP

INTERACTION WITH THE DEVICE

MULTI-PARAMETER TOUCHPOINTS
USED TO BUILD AN INDIVIDUAL PROFILE

CONTINIOUS AND FRICTIONLESS AUTHENTICATION
TO VALIDATE IF THE USER IS THE CARD OWNER

TRUST SCORE

GOOD USER
IDENTIFICATION

AUTOMATED
FRAUD DETECTION

VALIDATION FROM
LOGIN TO LOGOUT

REAL-TIME
ALERTS

SMART USER AUTHENTICATION
AND FRAUD PREVENTION

Our Services

Evaluation of existing payment, fraud and risk architecture by industry experts, considering the client's whole digital value chain

Analysis of present threats and fraud patterns to determine and execute optimizations to the existing fraud prevention setup

Simple solution integration in the given fraud prevention architecture, through a passive deployment without active enrollment from the end user

A solution in cooperation with **SECURED**TOUCH

Arvato Financial Solutions is partner and shareholder of SecuredTouch

Would you like more information? Feel free to contact us.

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