



**Authentifikation:**

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**Abschied von  
Passwörtern in Sicht.**



**Uwe Härtel auf der Profitcard 2022**

06/2022

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## Agenda.

- Kurzvorstellung Entersekt
- Was bedeutet "Passwordless"?
- Was ist FIDO?
- FIDO in Payments
  - FIDO in 3DS vs. Delegated Auth vs. Secure Payment Confirmation (SPC)
- Heutige Limitierungen und Ausblick

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**Kurzvorstellung.**



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# Frage 1

- Wer von Ihnen kennt Entersekt?

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## Who we are.

Backed by:



Founded in **2010**

**10x** faster authentication than SMS OTP

**75 million** enrolled users

**1 billion+** sessions secured every month

**8 office** locations around the world

**90+** banking clients

**99.99%** uptime

**18% higher** 3DS transaction success rate than industry average

### A few of our customers



### A few of our partners



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## What we do:

We authenticate payments without friction.

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Was bedeutet  
Passwordless?



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## 📌 Passwords: Vulnerable and inefficient.



**>15 billion**  
compromised credentials are currently in circulation globally



**5 billion**  
of these credentials are unique, without repeated username / password pairs



**100 000**  
data breaches as a result between 2018 and 2021

Without even looking at the costs of a cyberattack, the mere costs of password management, time lost by employees typing passwords and chasing the IT department when they fail, climbs up to \$70 per incident.



By the end of 2022, 60% of large businesses and all medium-sized companies will have cut their dependence on passwords by half. They are quickly realizing how insecure and inefficient they are.



Sources: [Digital Shadows Photon Research Team](#); [World Economic Forum](#)

## 📌 Passwords offer a frustrating user experience.



**58%**

of ecommerce customers in the U.S. have abandoned purchases due to the difficulty of managing passwords.



**28%**

stated that having to set up and remember a new password would stop them from opening an account.



**66%**

believe that on-device authentication methods are quicker and provide a better experience than using traditional two-factor authentication.



**86%**

of consumers are interested in using biometrics to verify their identity or to make payments.

Source: [FIDO Alliance Research Report](#)

## Passwordless enablers.



Mobile App (push-based notifications and QR codes)



Biometric authentication (Fingerprint, Windows Hello and Face ID)



Push USSD (over the MNO/Telco channel)



FIDO (security key and platform authenticator)




Risk-based authentication (silent signals)


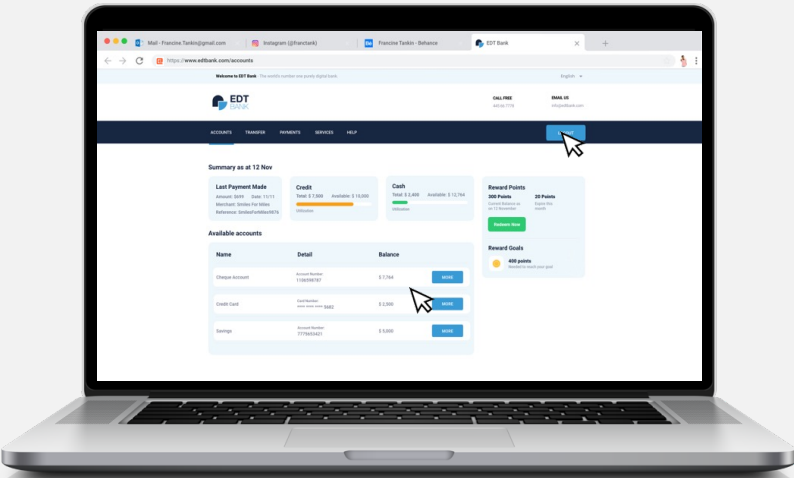
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## Out of Band Login – enabled by Mobile Authentication.



PASSWORDLESS AUTHENTICATION



**Secure out-of-band login**  
Entersekt enables a secure login using a push notification to the customer's registered device, using the bank app or a white-labelled authentication app.

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## Was ist FIDO?




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### Frage 2

- Wer kennt FIDO?
  - Nutzen Sie evtl. schon Windows Hello oder Apple Face ID zum Login?

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# FIDO in a nutshell.



## What is FIDO?

FIDO (Fast Identity Online) is a set of open standards that **enable users to easily authenticate to online services** in both mobile and desktop environments.

The FIDO protocols use **standard public key cryptography techniques** to provide stronger authentication reducing the reliance on passwords.


FIDO is supported by **Microsoft, Google, Apple, Amazon, Facebook** and of course **Enterspekt**.

## What is FIDO trying to achieve?


- Create a **global authentication standard**
- Enable users to **authenticate themselves on their preferred device (mobile, PC or USB), with biometrics.**
- **Stop phishing and man-in-middle attacks**
- Help to **eliminate passwords**

**NEW: Apple's Passkey w iOS16: multi-device and cross-channel**

**Mechanisms supported:**








**Platform Authenticators**  
Built into the device platform




**Roaming Authenticators**  
Implemented off the device

**Growing industry support:**








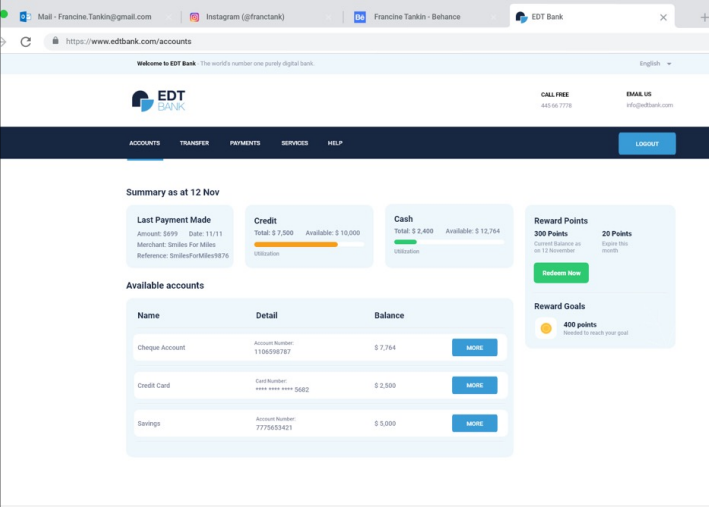
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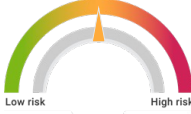
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# Biometric log-in (FIDO enabled):








Low risk      High risk

Biometric authentication

FIDO based biometric multi-factor challenge via a platform authenticator.

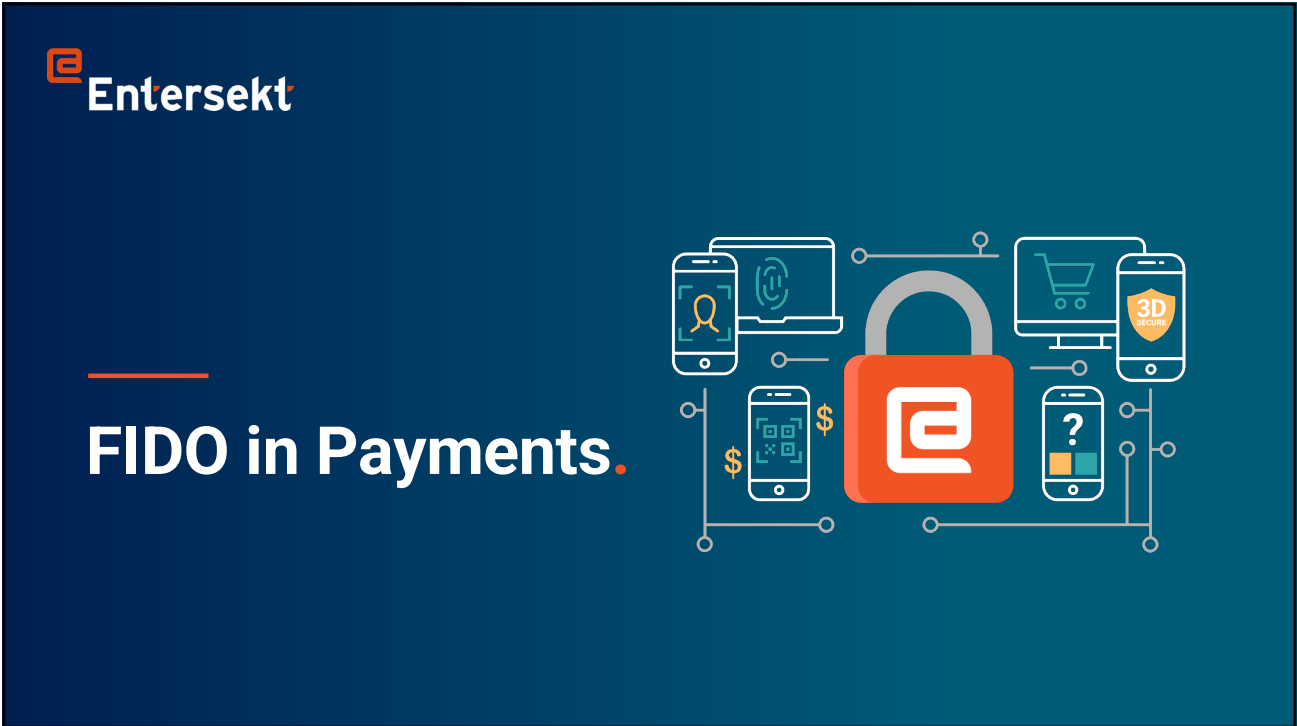


**Login Successful**

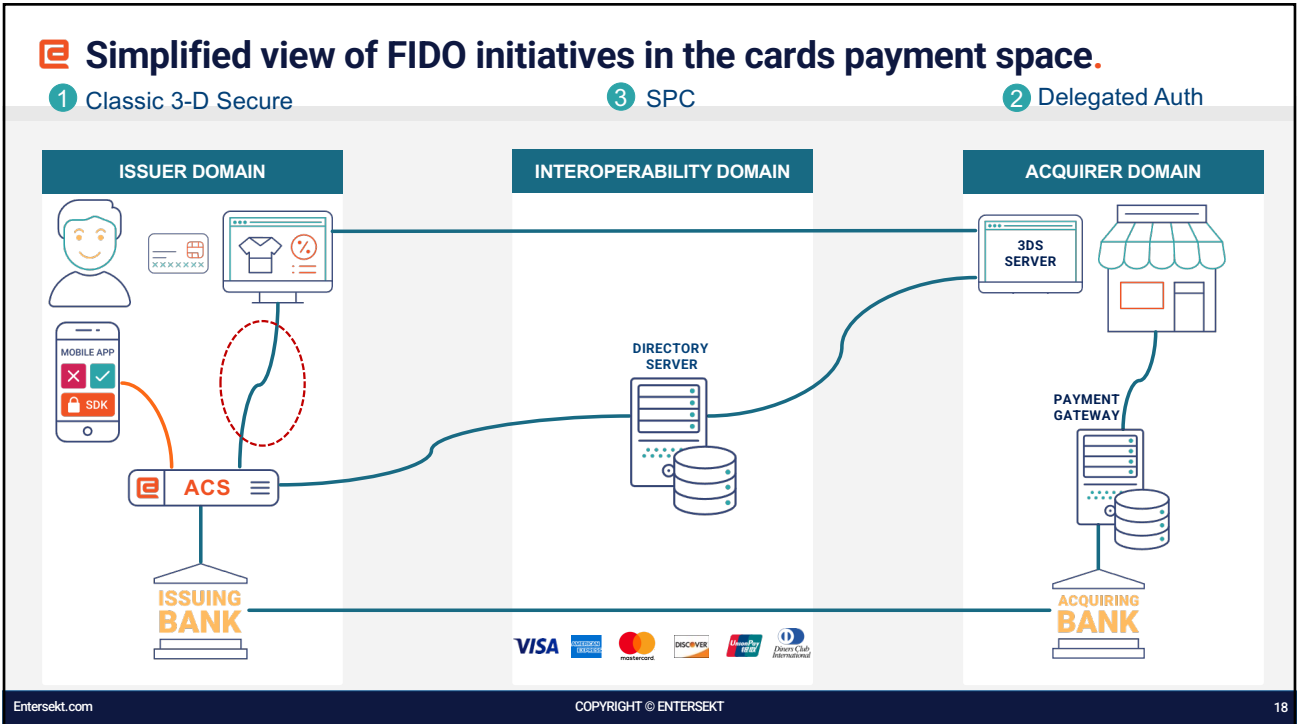
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## Pluscard showcase: FIDO in 3DS payments.



### THE CHALLENGE

Authenticating payments without a mobile app

- Some customers were not using mobile devices to authenticate payments.
- They required a two-factor authentication solution that did not rely on a mobile device.
- PSD2 strong customer authentication (SCA) requirements had to be met.



PLUSCARD needed a solution that would enable customers to shop online and pay with their cards without having to use an app for two-factor authentication.



### THE SOLUTION

A world-first in FIDO-enabled browser authentication, powered by Entersekt

A hardware token solution based on the open FIDO standard

Secure and effective

SCA solution for customer w/o smartphone or reluctant to use App

Mobile/App independent

Customers can choose from a range of compliant authentication options

More user choice



### KEY RESULT

From having **0** options Reaching more than **12%** of app-less customers

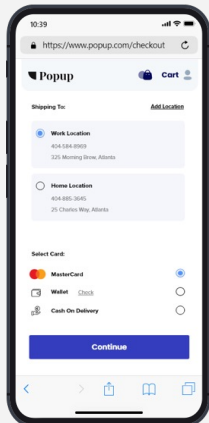
By implementing Entersekt's FIDO-enabled solution, PLUSCARD were able to reach 12% of their app-less customer base that they had no prior solution for.

"Customers without a mobile device now have the option to approve their online payments conveniently and securely with the FIDO token. So far, this is a unique alternative to app-based authentication in the German market."



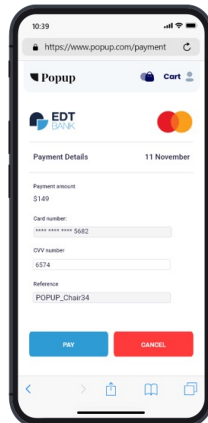
Thomas Niederauer,  
Product Manager

## Biometric authentication: FIDO payment with platform authenticators.



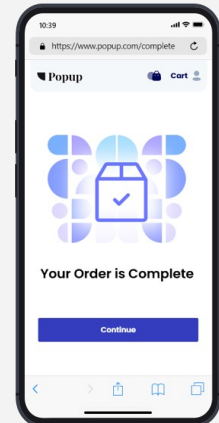
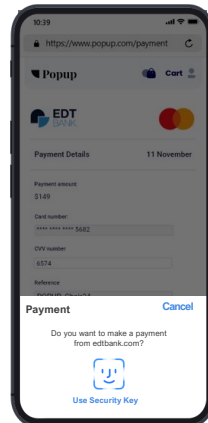
### Payment method

The customer selects the appropriate payment method.



### Payment authentication

The customer is asked to allow edtbank.com to use the native biometric capability of the device.



### Order complete

The customer can now continue shopping or close the website.

## Secure Payment Confirmation (SPC) - Demo.

The screenshot shows a checkout page for 'MyStore'. The main heading is 'Checkout'. Below it, there are two sections: 'HOW WOULD YOU LIKE TO PAY?' and 'ORDER SUMMARY'.

**HOW WOULD YOU LIKE TO PAY?**

- Credit Card:** Selected. Card number: 5454 5454 5454 5454. Expiry date: 03/30. CVC / CVV: 737. Total: €60.98.
- Android Pay:** Unselected.
- Bank Transfer (BE):** Unselected.
- Bank Transfer (FR):** Unselected.

**ORDER SUMMARY**

Item	Price
Polo shirt	€24.99
Headphones	€35.99
<b>Total</b>	<b>€60.98</b>

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## Secure Payment Confirmation (SPC) and FIDO.

### ✓ News from the specifications side:

- for EMV 3DS 2.3, EMVCo has collaborated with the World Wide Web Consortium (W3C) and the FIDO Alliance to include support for **WebAuthn (Web Authentication) and SPC (Secure Payment Confirmation)** that issuers and merchants can use within the EMV 3DS flow to better determine the legitimacy of a transaction in order to reduce the risk of fraud.
- EMVCo has also published the **EMV 3DS Secure Browser Best Practices** that support the **iframe security requirements in EMV 3DS v2.3** and address how content is embedded or framed on the webpage when a consumer is completing authentication.

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## Simplified view of payment authentication in e-commerce.

CLASSIC 3-D SECURE	SECURE PAYMENT CONFIRMATION	DELEGATED AUTHENTICATION
<ul style="list-style-type: none"> <li>▪ User authentication delegated to Issuer by Merchant.</li> </ul> <p><b>Benefits</b></p> <ul style="list-style-type: none"> <li>▪ Industry standard is in place.</li> <li>▪ Wide adoption of the standard.</li> <li>▪ Experience can be driven by Issuers, merchants get benefit.</li> <li>▪ Serves the long tail of the market well.</li> </ul> <p><b>Challenges</b></p> <ul style="list-style-type: none"> <li>▪ Poor issuer implementation affects merchant's success rates.</li> <li>▪ Inconsistent implementations.</li> <li>▪ Mega merchants want to control UX.</li> </ul>	<ul style="list-style-type: none"> <li>▪ User authentication performed by Merchant with Issuer token.</li> </ul> <p><b>Benefits</b></p> <ul style="list-style-type: none"> <li>▪ Merchant UX, Issuer Authentication.</li> <li>▪ Standard is defined by EMVCo and W3C.</li> <li>▪ Can serve both the needs of mega merchants and the long tail of the market well.</li> </ul> <p><b>Challenges</b></p> <ul style="list-style-type: none"> <li>▪ Support for this standard is still low, only Chrome currently.</li> <li>▪ Requires issuer and merchant changes for implementation.</li> </ul>	<ul style="list-style-type: none"> <li>▪ User authentication delegated to Merchant and trusted by Issuer.</li> </ul> <p><b>Benefits</b></p> <ul style="list-style-type: none"> <li>▪ Merchant takes full control of UX – creates consistency.</li> <li>▪ Merchant consumer auth experience re-used for payments – multiple auths avoided.</li> </ul> <p><b>Challenges</b></p> <ul style="list-style-type: none"> <li>▪ No industry standard is in place.</li> <li>▪ Issuers are not comfortable being cut out of experience.</li> <li>▪ Issuer can still decide to challenge – multiple auths!</li> <li>▪ Not particularly well suited for long tail of the market.</li> </ul>

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## Frage 3

- Wie sehen Sie das Erfolgspotential von Delegated Authentication gegenüber Secure Payment Confirmation (SPC)?

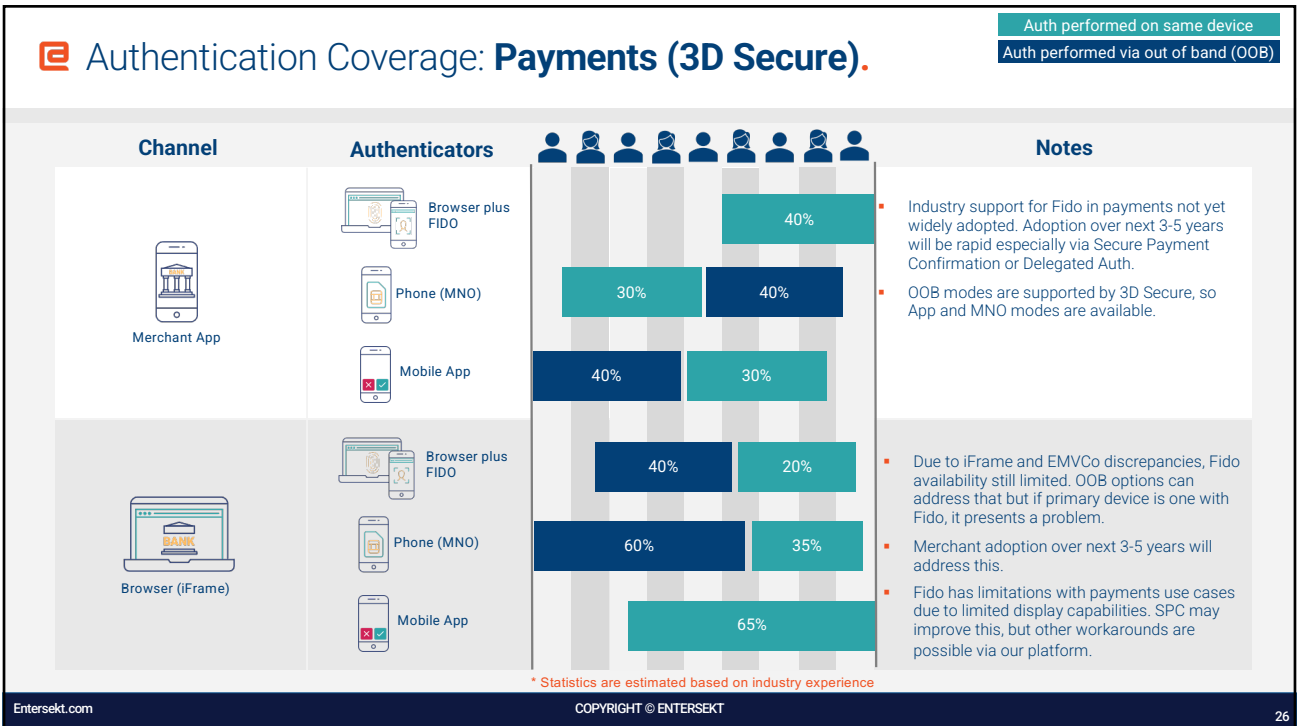
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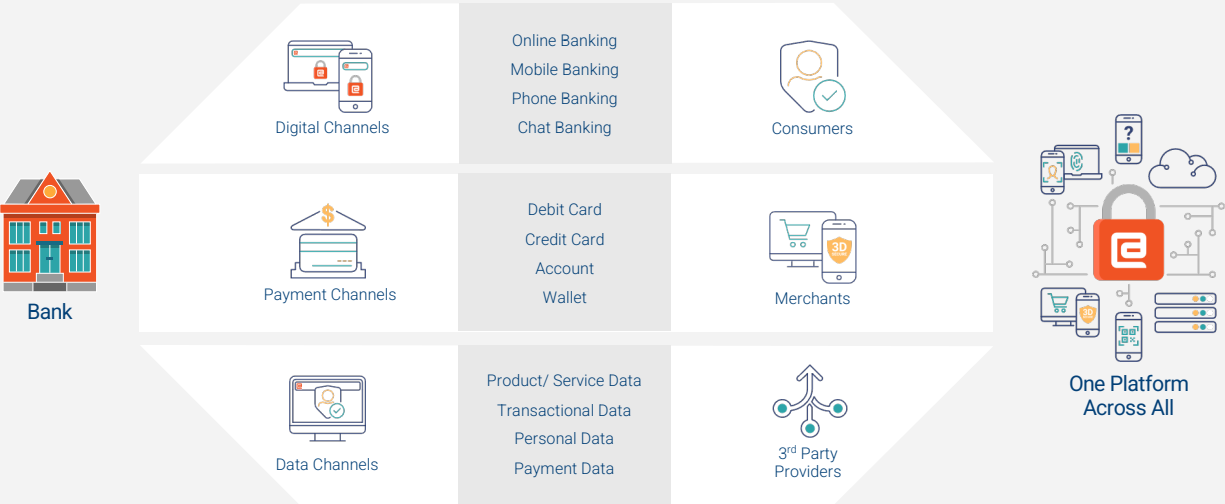
# Heutige Limitierungen und Ausblick.

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## **How** we do it: A single platform to secure all your channels **Cross-Channel.**



**Bank**

**Digital Channels**  
Online Banking  
Mobile Banking  
Phone Banking  
Chat Banking

**Payment Channels**  
Debit Card  
Credit Card  
Account  
Wallet

**Data Channels**  
Product/ Service Data  
Transactional Data  
Personal Data  
Payment Data

**Consumers**

**Merchants**


**3<sup>rd</sup> Party Providers**

**One Platform Across All**

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## **In summary.**



### **A single platform to secure all your channels**

Our **cross-channel, context aware platform** is the new standard of authentication to provide advanced security and a consistently good user experience.

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### **It's a journey**

Digital channels keep evolving. It is our passion to keep financial institutions one step ahead of the fraud curve and to relentlessly push ourselves to improve the experiences of customers online.

We're excited to embark on this **journey with you, towards the best user experience underpinned by industry leading security!**

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The power of **trust.**

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