

The Asseco logo is displayed in a white, stylized, sans-serif font against a dark blue background.

## Case Study

# Smooth user experience with ultimate security according to 3D Secure 2.0 - How Asseco improved mobile payment transaction authorization for Credem clients

As lines between shopping, purchasing, and paying continue to blur, the importance of a smooth transaction authorization user experience throughout the bank's ecosystem is on the rise. According to recent [research by Baymard institute](#) analyzing more than 5000 webshop transactions discovered that users abandoned 21% of carts because of the complicated transaction authorization.

Credem is one of Italy's main bank groups known for combining technological innovation and individual customer needs with an in-house IT department developing their bank ecosystem across digital payment channels and more than 600 locations thus serving thousands of small and corporate businesses and private clients. It is an innovative enterprise with the

proposition "Passion and Responsibility", which is based mainly on listening to their customers' needs.

Like many other banks, Credem used 3D Secure protocol to authorize the transactions made online or mobile from their Visa and Mastercard accounts.

The introduction of the PSD2 regulation applied to online payments with credit cards (also through the introduction of the two-factor SCA) has pushed Credem to innovate its systems used for 3DS.

The logo for TriDES2 by Asseco. It features a blue padlock icon on the left, followed by the text "TriDES2" in a large, bold, blue font, and "by asseco" in a smaller, blue font below it.

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### AI Risk Management

In answer to Visa and Mastercard demands for a smoother, better user experience when authorizing online payments, Asseco developed TriDES2 payment authentication solution to reduce customer friction during online and mobile payments. AI and Machine Learning determine the risk factor of each specific

transaction using real-time and historical user and transaction data at the merchant and the issuing bank. If a transaction falls within predicted user scenarios and risk parameters, the additional authentication step is completed without user participation.

# Benefits

## AI Risk-based authentication for maximum transaction security

TriDES2 enhances the risk-based authentication capabilities of merchants and issuers through richer data exchanges and real-time transaction and historic data sharing during every transaction. AI determines the risk attached to a particular transaction and, based on the risk level, whether or not the user should go through additional authentication steps.

Each transaction gets screened for specific risk elements, like:

- The value of the transaction
- New or existing customer
- Transactional history
- Behavioral history
- Device information

Through a rich data exchange between the merchant and issuing bank at the time of the transaction, AI decides whether a user needs to go ahead with additional 3D Secure authentication steps.

When the system detects something out of the ordinary: a new card number or a new device, it asks for additional authorization.

Since most users tend to revisit their favorite shops or mobile services, TriDES2 improved the user experience manifold, cutting the transaction authorization time and improving sales by 10% within the first month of implementation.



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### Improved user experience and merchant conversion

The PSD2 authorization protocol with two-factor SCA could generate a certain resistance in the insertion in the end user despite being designed to guarantee greater security in transactions.

After seeing the issues user side as well as the merchant side, as a bank that listens carefully to its clients, Credem wanted to fix these issues on 3DS1 even before they

updated to TriDES2, tasking Asseco to solve the pain-points of the transaction, namely having to enter a response generated by a token after each payment, before they updated their entire authorization process through the introduction of authentication based on push notifications sent to a specific dedicated app developed by Asseco itself.

“Asseco displayed an admirable level of expertise and desire to evolve our user experience with online payment authentication when we discussed options and steps of 3DS1 upgrade and TriDES2 inclusion. Their dedication and unique flexibility solved the majority of our problems even before the update since they emulated TriDES2 authentication process within 3DS1, thus reducing friction and increasing merchant results and satisfaction. Incredible effort and level of cooperation on their behalf.”

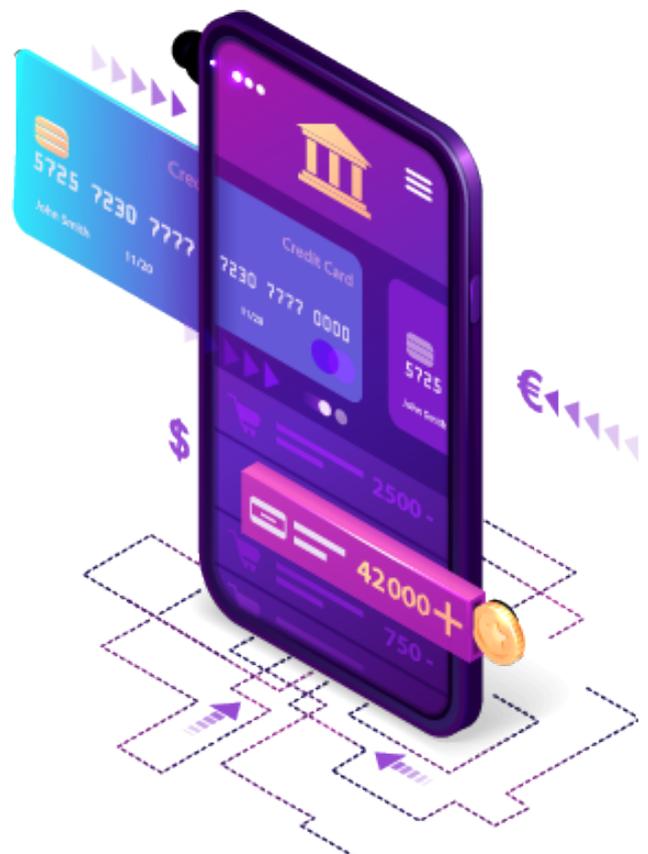
Roberto Panisi,  
Head of Payments Systems, Credem bank

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Improved 3DS1 (which the bank still uses alongside with 3DS2), also helped with TriDES2 onboarding, considering most clients did not even feel the switch, since the authorization process was almost the same for both versions, allowing a smooth transition, instead of onboarding glitches and service downtime.

The Asseco team was very aware every second of downtime costs millions and see it as their job to prevent such loss from happening.

TriDES2 allows merchants to protect multiple platforms with easy integration into their systems, including mobile applications while delivering all of the security benefits that the 3DS1 protocol provided.



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### Ecosystem wide integration with ease

TriDES2 is SCA compliant Two Factor Authentication and in line with PSD2 regulation for financial institutions following the EMV® 3-D Secure Protocol, PCI DSS, PCI 3DS Core Security Standard, and GDPR - all certificates and security standards used in the current online payment

market are included. Since Credem bank uses Asseco to run TriDES2 as SaaS, every update and subsequent need for certification is covered reducing the need for capital investments in hardware, staff, and certificates proving as a cost-effective solution.

“Leading the TriDES2 implementation within Credem bank posed several unique challenges to our team: Can we move the Tier III Datacenters for one of the largest Italian banks outside Italy? Can we hotwire the 3DS1 authorization process making it easier on the user and safer for the banks and merchants while updating tools needed to ensure PSD2 compliance for card payments? Can TriDES2 migration and onboarding be performed without causing pain to the clients and merchants? I am proud to say we did it all - Credem data now runs on 2 Tier III Data centers on two different tectonic plates, providing online payment authorization faster and safer than ever before.”

[Luka Mićanović](#),  
Outsourcing Manager, Asseco SEE

