Risk – What comes next

Technobank Conference, March 2023

Nexi Croatia

About me

- 8 years of industry experience in “fighting fraud”
- 4.5 years working as Data Scientist in Nexi Croatia
- Enjoys traveling and discovering the world

“AI as a powerful force for improving the efficiency of fraud detection.”

Significant increase in eCommerce payments open doors for fraudsters creativity, which lead us to new fraud patterns.

Payment approval through:

- **A**uthentication
- Authorization

Customer Experience
smooth, quick and frictionless payment’s approval

Our strategy in fighting fraud

Approaches

Standard: Real Time Systems, Static Rules, Black/White lists, Card/Merchant block, Multibanking/multicurrency solution, Fraud Case Management system

Advanced: Machine Learning / AI
Customer profiles

Machine Learning

The NEW - LightGBM model, a gradient boosted decission-tree machine learning framework, **Supervised learning, Customer profiling** (6+ months of authorization history, 200+ features created)

The new model detects up to 4 time more fraud transactions with 25% less false positives.

“ML model’s benefit”

Increased transaction revenue

Lower number of false positive alerts

Lower reputation damage

Efficient targeting of new treats

Better fraud outcomes

Better user experience

Risk scoring platform

… supporting

- Continuous enhancement of ML score models
- Easy retraining and deployment of models
- Creation of new features
- Several custom models in PROD

… applicable for the implementation

- Fraud issuing
- Fraud acquiring
- Anti-Money Laundering (AML)
- Risk based authentication (RBA)
- …

About me

- 18 years of industry experience
- 10 + Senior Product Manager in Nexi Croatia
- Playful mother of three daughters, documentary lover and social butterfly

Risk-Based Authentication

Benefits

Issuers

Reduction of challenges against cardholders and thus reduced abandonment rate

A notable increase in successful online authentications and transactions

Fewer complaints from clients

Cardholder

A better, frictionless online shopping experience

Faster and uncomplicated online shopping

Increased customer confidence in online shopping

Nexi Solution Features

Issuer Transaction Risk Analysis (TRA) processing using RBA Rule Engine

- rules based on **authentication data, historical data, hotlists** and **aggregations**
- Possibility to improve the decisioning using a **risk score** as an input into RBA Rule Engine

Acceptance of the acquirer requested exemptions

- Issuer can opt to either challenge all acquirer-based exemptions enforcing SCA or use the risk-based approach, allowing low risk authentication requests with the appropriate exemption to go through as frictionless.

Application of Low-Value Payment Exemption

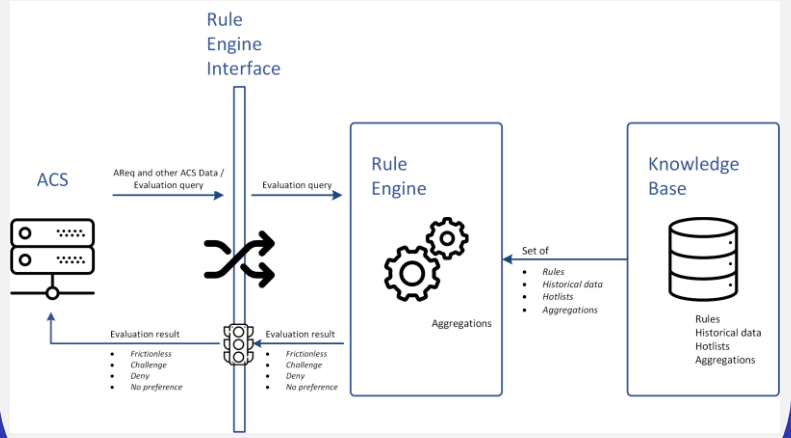
- For the transaction < €30 and the transactions # using this exemption <= 5, or the cumulative does not exceed €100.
- Possibility to **exchange counters and limits in real time with authorization systems**

Trusted Merchant Listing Processing

- Allows issuers to apply trusted beneficiaries exemption

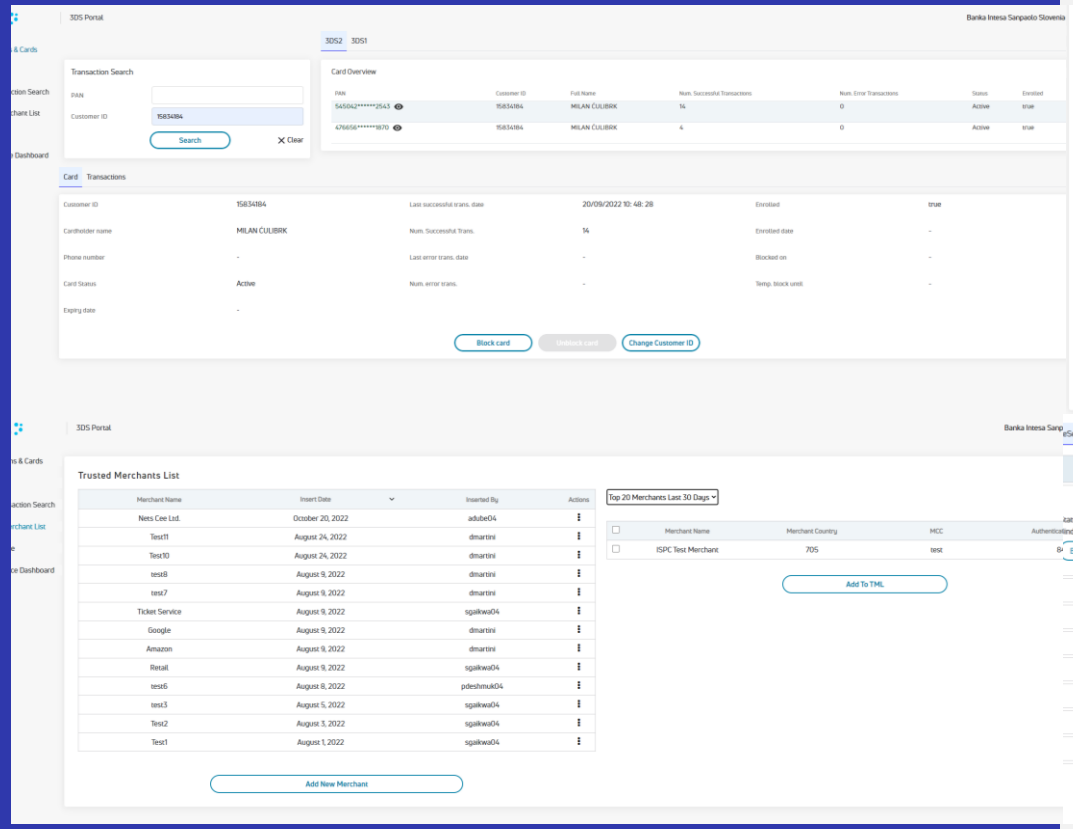
Rule Engine

The product enables Issuers to perform one of the required checks to decide whether they can provide frictionless 3DS authentication for every authentication request, case by case, based on rules defined in the Rule Engine.

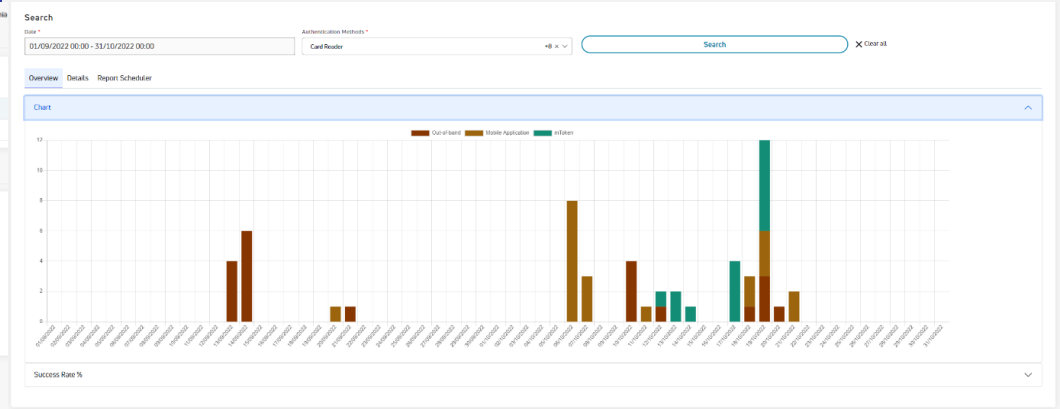


3DS Portal: A single point of 3DS & RBA management for the issuer

Cards and transactions reviewing

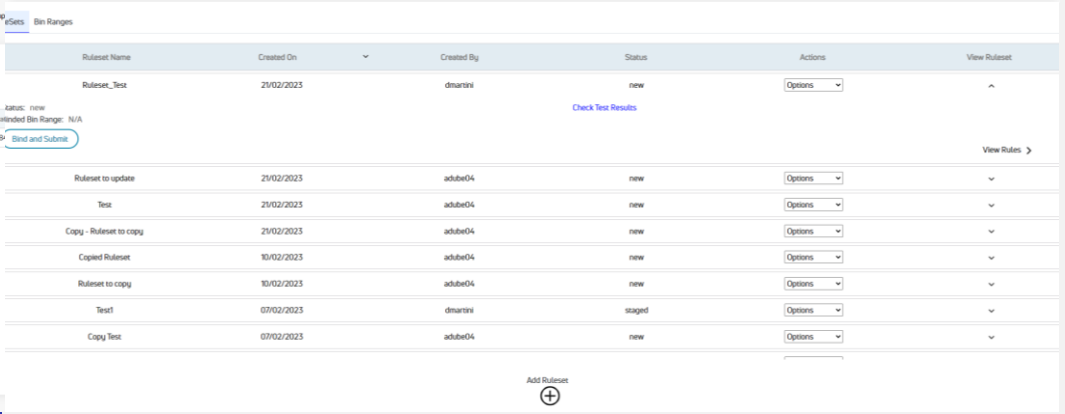


Reporting



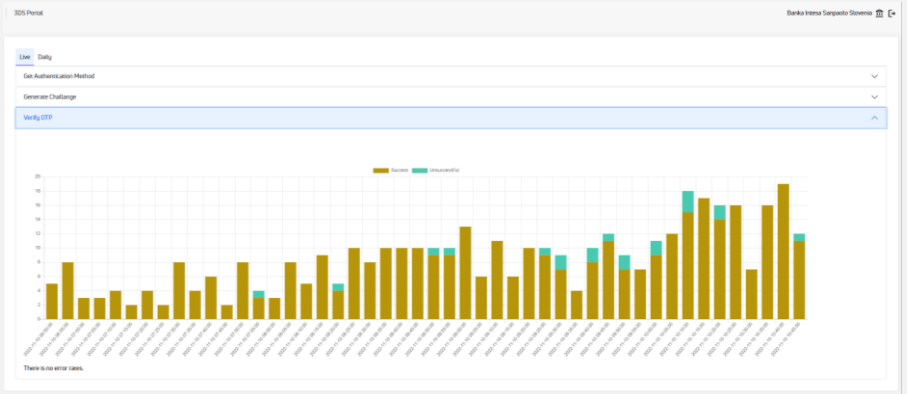
Issuer‘s Trusted Merchant List management

RBA Rule Engine & Issuer‘s rules management

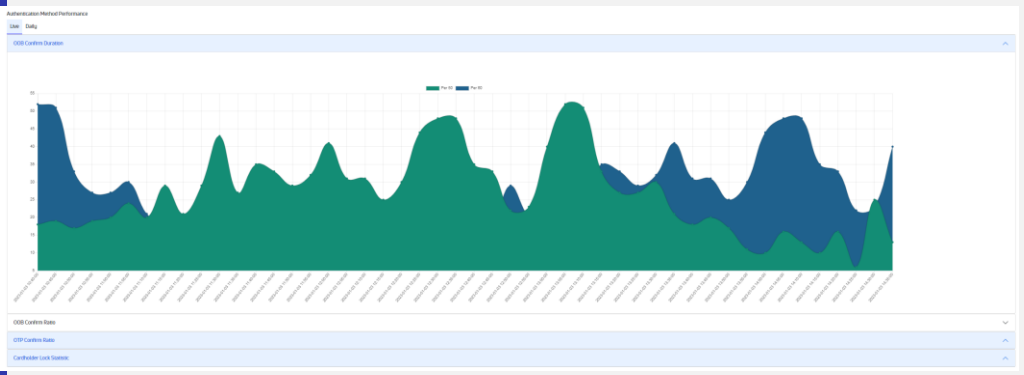


3DS Portal: Issuer‘s performance measurements

Authentication providers success rate



Processing duration



Authentication methods performance

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