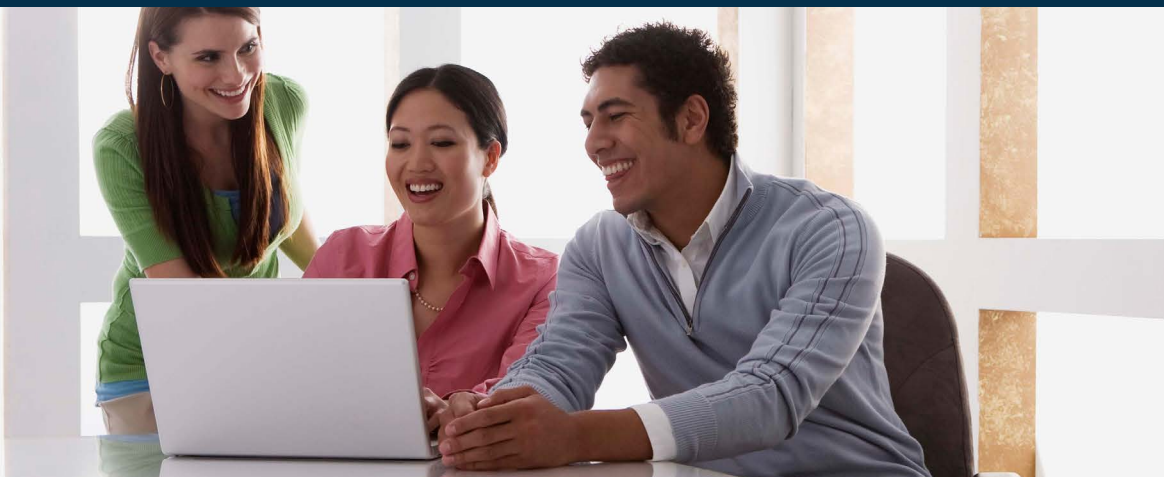


# Manage payment fraud risk while enhancing the customer experience



## Business Impact

Retailers and financial organizations have embraced new payment technologies to meet customer demands for speed and convenience. But the rise of mobile and online transactions introduces new risks – and with that, new requirements for fraud mitigation.

Payment providers are always seeking that optimal balance between reducing the false positives that cause unnecessary customer friction and the false negatives that lead to financial loss. Getting it right requires analytics – the predictive ability to detect anomalies that represent potential risks, while the customer is waiting.

## Challenges

- **Insufficient fraud detection systems.** Rules-based systems use static logic and flag too many legitimate customers – and fraudsters find ways to test and circumvent them.
- **Lack of predictive abilities.** Rules are often designed reactively to reflect knowledge from past known fraud. They can't spot emerging patterns of future fraud, as new methods can.
- **High business costs.** Excessive false positives cause customer friction and reputational damage. Inefficient investigative processes drive up costs and investigators' workload.
- **Organizational complexity.** The expansion of digital banking, multiple portfolios and related business lines across channels creates a more complex matrix of offerings to protect.

## The Issue

The payment landscape has been redefined with the global growth of digital payments and new payment technologies such as P2P payment apps and blockchain. With all these avenues of money transfer, fraudsters are continuously finding creative ways to uncover points of exposure and escape detection of illicit funds through mule accounts. As these emerging methods become the channels of choice, banks must adopt more effective fraud detection and prevention strategies – and fast.

Payment fraud accounts for large risks, both monetary and reputational. Payment providers have to tune fraud detection systems to stem losses from false negatives, but without annoying customers by declining valid transactions due to false positives.

With the sophistication and velocity of attacks, you need a way to correlate events and quickly apply machine learning to identify the greatest threats in real time so you can decide which alerts warrant action.

## The SAS® Approach

- **Strengthen data integration and handle higher data volumes.** Connect separate data sources regardless of format or source. Deliver faster results from growing data volumes by using in-memory processing – critical to real-time fraud detection.
- **Improve the customer experience.** Reduce false positives by profiling behaviors, using data across each transaction for greater accuracy at the account, customer and product levels.
- **Monitor, score and render decisions in real time.** Integrate with payment systems to score transactions in real time. Monitor new relationships using advanced analytics to detect subtle patterns of behavior, respond accurately in real time, prioritize suspicious cases and prepare to predict future risks.
- **Empower the system with artificial intelligence.** Confirm the most effective machine learning algorithms to improve fraud detection, using champion-challenger evaluation, simulation and estimation to assess the benefits.
- **Prove and improve operational efficiency.** Interactively query the data and generate networks with web-based data visualization. Measure program performance by monitoring custom KPIs in a dashboard environment.

SAS provides the highest level of fraud protection through the following capabilities:

- **Custom data integration** enables you to define your own path for how each incoming transaction is transformed, enriched and validated before being sent to the fraud management system.
- **A central decision hub** assesses activity at multiple levels, combines multiple analytical approaches and provides a unified view of an account/entity across the entire relationship.
- **Analysis of nonmonetary events** tells a lot about a user. The SAS "signatures" approach understands users' regular devices and navigation patterns, and evaluates this behavior every time a transaction is scored.
- **Hybrid, multilayered analytics** more accurately detects fraud. For example, anomaly detection and predictive analytics can uncover new forms of risk by examining what's happening right now, not just comparing it to the past.
- **Machine learning** adapts to changing behaviors in a population through automated model building. With every iteration, the algorithms get smarter and deliver more accurate results.
- **Alert management** intelligently prioritize alerts for triage, investigation and disposition. Investigators quickly see potential areas of interest and where to focus first, in scenario context.
- **Integrated case management** supports collaboration and intelligence sharing, as well as end-to-end case tracking and auditing. Spend less time dealing with data and more time taking action.

### PKO Bank Polski

#### Situation

PKO Bank Polski wanted a fraud management solution that could scale with the bank's growth, including the ability to handle ever-increasing volumes of transactions and data.

#### Solution

SAS provided the bank with an enterprise platform that covered all fraud typologies, including application monitoring, to increase efficiencies and improve detection.

#### Results

PKO Bank Polski was able to reduce losses by achieving higher levels of fraud prevention and fine-tuning to significantly reduce false positives and negatives. It also strengthened the bank's reputation for customer security in its local market, where it is now viewed as a leader in customer journey improvement.

### Improve customer service

What if you could maintain the same level of fraud prevention while simultaneously improving the customer experience by reducing false positives as much as 75%?

### Quickly capture changes in behavior that may indicate fraud

What if you could create unique customer "signatures" using variables from application, bureau, negative-file, derived-value and cross-product data at account, customer, product and network levels?

### Prevent fraud at payment initiation

What if you could score all transactions in real time to determine whether to accept, reject or defer payment to help prevent fraud before the money has exited the account?

### Protect the entire payments environment with a single, cloud-ready solution

What if you could securely and easily configure and adapt fraud models and strategies across products and channels to support your bank's specific needs?

### SAS Facts

- SAS customers make up 96% of banks in the Fortune Global 500®.
- More than 90% of the top 100 global banks use SAS.
- More than 3,100 financial institutions worldwide are SAS customers.
- SAS has more than 40 years of experience working with financial institutions all over the world.

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