

# Reduce payment fraud losses while lowering associated costs



## Business Impact

"... protection from fraud is the most important factor when cardholders choose [a] card to use for making a payment."

*Mobile Wallet Fraud Mitigation: Finding the Path Forward*, Javelin, March 2016

Payment fraud is becoming a costly problem for banking. Forrester estimates that US e-Commerce fraud loss ranges between .85 and .9 percent of revenue, and predicts US online sales will reach \$414 billion by 2018. Without an improvement in the fraud loss rate, US e-Commerce fraud losses will increase to approximately \$3.6 billion by 2018.\*

Poor economic conditions, the emergence of new payment types and the growth in electronic payments, such as ACH and wire, have opened up new opportunities for payment fraud. Perpetrators are continuously looking for - and finding - creative ways to outsmart the system. As business customers move toward more electronic payment vehicles, fraudsters likely will take advantage of the anonymity of such payments. They will become the channels of choice unless banks adopt effective fraud detection and prevention strategies.

## Challenges

- **Insufficient fraud detection systems.** Rules-based systems flag too many legitimate customers; fraudsters discover ways to circumvent the system.
- **Lack of predictive abilities.** Rules-based systems can't identify future likelihood of fraudulent activity.
- **High operational costs.** Too many false positives, inefficient investigative processes, and lack of speed in transaction authentication.
- **Organizational complexity.** An increase in electronic banking, multiple portfolios and related business lines across channels.

## The SAS® Approach

Your best defense against payment fraud is to focus on detecting suspicious activity and hidden relationships in the vast amount of transactional data generated daily. SAS delivers software and services to help you:

- **Enhance information credibility** by integrating disparate data sources regardless of format, and applying data quality techniques to ensure accuracy.
- **Better monitor the behavior of individuals to incrementally detect fraud and reduce false positives** by using data across all of a customer's accounts and transactions to generate more accurate profiles at the account, customer and product levels.
- **Find payment fraud faster** with real-time integration to authorization systems and on-demand scoring of 100 percent of purchase, payments and nonmonetary transactions.
- **Uncover hidden relationships, detect subtle patterns of behavior**, prioritize suspicious cases and predict future risks using advanced analytics - including champion-challenger, simulation, estimation and unlimited rule-writing capabilities.
- **Improve investigator efficiency** with web-based data visualization to perform interactive queries and generate reports.
- **Measure anti-fraud program performance** by defining and monitoring KPIs via a dashboard environment.
- **Deliver faster results from increasing volumes of data** by utilizing distributed environments (such as Hadoop), which are critical to fraud assessment.

\* The Forrester Wave™: Enterprise Fraud Management, Q1 2016

## A proven foundation coupled with industry best practices

The industry-leading SAS® Enterprise Financial Crimes for Banking lets you develop a cohesive strategy for control, discovery, prioritization and deterrence with comprehensive:

- Data management capabilities that handle data at the enterprise level, along with:
  - A flexible API that describes all transactions according to who was involved, type of activity, where the transaction originated, why the transaction was approved or declined, and how the transaction was authenticated.
  - The ability to deal with nonstandardized transactions and different business policies.
- Detection and alert-generation tools that offer multiple analytic techniques for:
  - Setting up rules to flag suspicious activities.
  - Scoring 100 percent of transactions (purchase, payment and nonmonetary).
  - Detecting abnormal patterns that may indicate previously unknown fraud.
  - Capturing all payment behavior from all sources via a unique signature technology.
  - Using predictive modeling to uncover new fraud based on previous fraud profiles.
  - Linking multiple parties based on associative behavior or common ownership.
  - Automatically routing suspicious cases for further review.
- **Alert-management capabilities** provide the ability to issue Business Process Management to external systems to effectively triage alerts. High-risk indicators can be triaged in an efficient operational environment before issuing them.

- **Fraud network analysis** for going beyond individual views to analyze all related activities and relationships at a network dimension so you can uncover previously hidden linkages that would otherwise go undetected.
- **Case management capabilities** systematically facilitate investigations and enable the capture and display of all pertinent information, either via your existing case management system or the enterprise case management system offered by SAS. Alerts can be assembled from multiple monitoring systems to be associated with common individuals or entities. Automatically prioritize and route suspicious cases to the appropriate team members.
- **Machine learning** automatically adapts to changing patterns within the data, enabling more accurate predictions to improve your fraud loss rates.

SAS transformed the collective wisdom of fraud managers around the world into a solution that can be tailored to each local implementation to avoid preconceptions, prejudices or customizations that are only applicable in one country.

## Case Study: HSBC

### Situation

HSBC was looking for a way to reduce its global losses from fraud, lower associated costs and increase customer confidence.

### Solution

SAS provided HSBC with a technology infrastructure for preventing, detecting and managing financial crimes by scoring and accepting or rejecting millions of transactions a day in real time - at the point of sale.

### Results

HSBC achieved significantly lower incidents of fraud across tens of millions of accounts, significantly exceeding aggressive objectives.

## Improve customer service

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

## 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?

## Score transactions in real time

What if you could score all transactions in real time to determine whether to accept, reject or defer payment to help prevent fraud at points of sale before the money is gone out of the account?

## Adapt strategies to regional practices

What if you had the ability to easily configure and adapt your fraud strategies to regional business practices and your bank's specific needs?

You can. SAS gives you THE POWER TO KNOW®.

## SAS Facts

- SAS customers make up 97 percent of banks in the Fortune Global 500®.
- More than 3,100 financial institutions worldwide are SAS customers.
- SAS has more than three decades of experience working with financial institutions all over the world.

To contact your local SAS office, please visit: [sas.com/offices](http://sas.com/offices)

