



# Sigma Fraud Score

## For Identity Verification & Fraud Risk Prevention

*Sigma: noun the eighteenth letter of the Greek alphabet ( $\Sigma, \sigma$ ), symbol 1. mathematical sum 2. standard deviation*

### The Problem



#### Changing Demographics

1.5 billion millennials and 3+ billion adults are "thin file" worldwide



#### Data Breaches

Over 2 billion identities have been stolen worldwide



#### Ever-evolving Fraud

Attacks on new accounts grow 3x as transaction fraud detection matures



#### Ongoing Friction

Authentication tools undermine a seamless digital and mobile experience

### Sigma Fraud Score

Socure's breakthrough Sigma Fraud Score (SFS) solutions are machine learning models trained with detailed performance data across a consortium of clients for identity fraud risk prediction. By using consortium data sets, hence the name Sigma, models can be trained on confirmed fraud instances across a broad set of Socure's customers delivering the most robust, comprehensive & accurate models attainable in the market today. Sigma Fraud Score models achieve the highest fraud capture rates with the lowest false positive rates available in the industry, consistently capturing >70% of the riskiest 2-3%.

Sigma Fraud Score models are built and managed using AIDA, Socure's patented identity verification bot. AIDA continuously explores live digital data, correlating thousands of identity data points on- and offline, and then uses the power of machine learning (ML) to create a holistic, accurate customer identity profile. AIDA uses a broad array of data sources across the consumer's entire identity, including email, phone, online/social, device, address, IP, geolocation along with traditional offline credit header, DMV and insurance data to generate more than 5,000 predictive variables. These variables are fed into Socure's SFS machine learning models to provide unsurpassed third party and synthetic fraud detection, identity verification coverage and accuracy.

### Benefits

Socure's Sigma Fraud Score benefits include:

- Fully optimized, generalizable solution (vs. legacy solutions which require months of custom effort to build and evaluate)
- Leveraging of data and insights across a consortium of 250+ leading industry clients (vs. a limited, single company view) from financial services, e-commerce, payroll, shared marketplaces, and more
- Live feedback data monitoring across Socure's client base to ensure highest performance levels and to provide input for model performance improvements

## How to Use Sigma Fraud Scores

Socure's Sigma Fraud Score is particularly adept at providing day-0 identity verification, and can also help with specific identity verification or authentication needs as new identities are presented. Socure clients rely on the Sigma Fraud Score as the core piece of information for their fraud prevention decision logic. SFS models specifically aim at rank-ordering applicants with the highest likelihood of committing identity/third-party fraud—such as looking at the riskiest 2-3% of the applicant population. The SFS model also returns an extensive set of reason codes that explain the reasoning behind the scores. Together, the Sigma Score and the reason codes can be used by banks, card issuers, lenders, and more for application decisioning that is based on their individual level of risk tolerance—all from a single RESTful API. Socure continuously improves model performance based on direct client feedback on the performance of the scores and reason codes. Additionally, Socure employs a contributory and proprietary alert list database to notify clients of confirmed and declined identities that are reported by other customers across the consortium. Socure's solutions are refined using the hundreds of millions of known outcomes processed by our platform each month.

## Sigma Fraud Scores Available for Immediate Deployment

### SIGMA

Sigma is Socure's main fraud score model. It is a cross-industry model that leverages the breadth of data that is available from from Socure's production clients. Sigma provides customers with a strong general model that can be deployed across their entire business.

**CLIENTS CONSISTENTLY INCREASE AUTO-ACCEPT RATES BY >40%, REDUCE FRAUD LOSSES BY >70% AND REDUCE MANUAL REVIEW TIME/KNOWLEDGE BASED AUTHENTICATION BY > 75%.**

### SOCURE FRAUD CAPTURE PERFORMANCE

Actual Results

Percentage of Population	Fraud Capture/ False Positives Rate
.5%	40.05% (1:3)
2%	67.26% (1:1)
3%	72.44%
5%	81%



### SIGMA CREDIT CARD

Industry specific model developed using consortium data from Socure's card issuing production clients.

**TOP 10 CREDIT ISSUER REDUCED FRAUD BY 85% SAVING OVER \$50M IN FRAUD LOSSES.**



### SIGMA MONEY TRANSFER

Industry specific model developed using consortium data from Socure's money transfer production clients.

**TOP 5 INTERNATIONAL MONEY TRANSFER PROVIDER REDUCED FRAUD BY 45%, ALONG WITH A 70% DECREASE IN MANUAL REVIEW AND A 20% DECREASE IN FALSE POSITIVE RATES.**



### SIGMA CONSUMER LENDING

Industry specific model developed using consortium data from Socure's consumer lending production clients.

**TOP 5 DIGITAL LENDER, OVER A FOURTEEN MONTH PERIOD AND HUNDREDS OF THOUSANDS OF NEW APPLICANTS SINCE IMPLEMENTING SOCURE, EXPERIENCED 1 IDENTITY RELATED FRAUD INCIDENT.**



Contact [sales@socure.com](mailto:sales@socure.com) to learn more about how Socure can transform your business.

[SOCURE.COM](https://www.socure.com)