

# SCENARIO OPTIMIZER™

## SCENARIO OPTIMIZATION

With Feedzai's advanced Scenario Optimizer™ feature, data scientists can simultaneously test and measure changes in the performance of multiple rules, lists, and models before deployment. This enables data scientists to be able to determine the impact of new or changed rules and models.

A combination of rules and models could create unnecessary friction in the payment process when the intention is to prevent more fraud. With a deeper understanding of the interaction between rules and models, businesses can prioritize the placement of rules and models to optimize the performance of the entire system and solve for specific KPIs such as fraud detection rate and false positives.



## PREDICTABLE RESULTS

Endlessly testing rules and models and getting inconsistent results can be a frustrating experience. Rather than constantly iterating to match the performance in production to the testing environment, data scientists can now test the entire system as if it were the production environment, so the performance of the system is just as though it would be seen when it is deployed. This leads to improved predictability and increased accuracy.

## THE MOST POWERFUL WAY TO MEASURE RISK

Scenario Optimizer™ allows data scientists to measure fraud and performance KPIs of the system as a whole, as well as the system broken down by each business segment or workflow element. Data scientists can:

- Check the processing time for a block of rules and models.
- Make decisions considering compromises between the added value of a rule block or model depending on the computational costs vs the additional improvement in detection rates.

Metrics per Breakdown						
poscountrycode	# Precision	# Recall	# FPR	# F1 Score	# TNR	# FNR
All	100.00%	60.78%	0.00%	75.60%	100.00%	39.22%
All	98.98%	68.55%	0.02%	81.00%	99.98%	31.45%
124	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%
136	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%
484	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%
840	98.91%	69.62%	0.02%	81.72%	99.98%	30.38%

DECREASE MODEL ITERATION TIME BY UP TO **20%**

### ITERATE MODELS FASTER AND MORE RELIABLY

By measuring the impact of each change, data scientists can know how to iterate quickly and make updates with more predictability and reliability in the process.

### IMPROVE RULE AND MODEL PERFORMANCE

Trying new and different scenarios helps data scientists produce models with better accuracy and understand the value of new or changed rules and models.

### OPTIMIZE FOR SPECIFIC BUSINESS KPIS

By testing different combinations of rules, lists and models, data scientists can calibrate for KPIs such as fraud detection or reduced false positive rates.