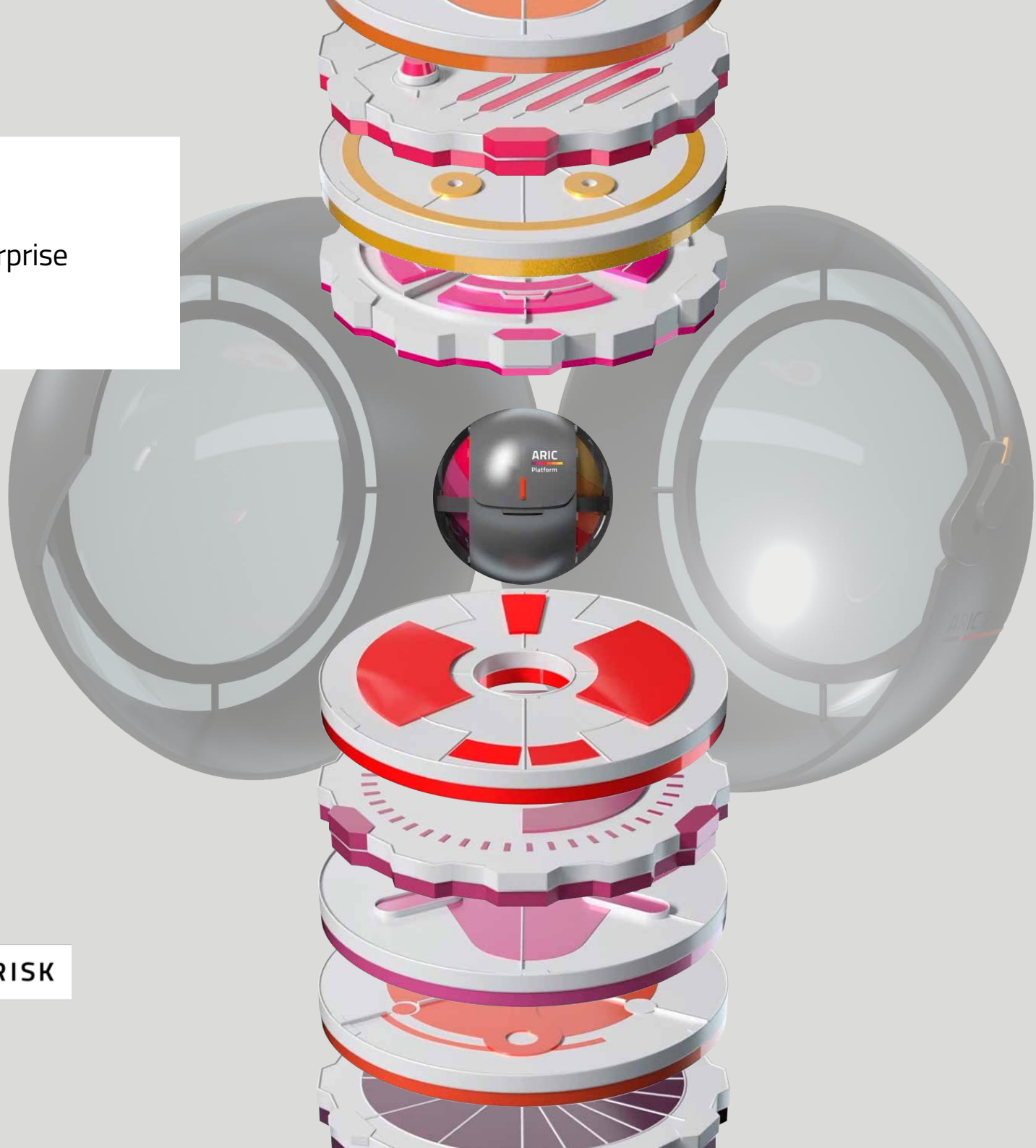# ARIC™ Risk Hub

The ultimate defense against Enterprise
Fraud and Financial Crime

**FEATURE
SPACE**

OUTSMART RISK

Only the Adaptive Survive

Financial institutions are in a front-line battle to report suspicious activity to regulators and to protect their customers.

Featurespace has built ARIC Risk Hub, an award-winning Centralized Risk Decision Engine for Fraud and Anti Money Laundering, to detect and prevent even the most sophisticated fraud and financial crimes.

ARIC™ Risk Hub

ARIC V3.17

TM

Multiple solutions to Outsmart Risk

The exponential growth in technology and digital interaction has not only changed customer expectations, it has criminals constantly changing their strategy to commit fraud and financial crime. It also means that modern businesses are no longer able to manage risk using traditional modeling techniques and business rules without accepting more risk to maintain customer experience expectations.

Featurespace's ARIC Risk Hub enables processors, banks and financial institutions to move beyond rules and static models and to take advantage of technology which converges data sets across multiple channels to allow a 360 degree view of their customers.

Our unique combination of advanced engineering, machine learning and automated deep behavioral learning techniques, deliver superior enterprise fraud and financial crime detection and prevention in real-time, without compromising customer experience.

Welcome to ARIC Risk Hub

Harness the power of machine learning

Adaptive Behavioral Analytics and Automated Deep Behavioral Networks - Featurespace's proprietary machine learning inventions - monitor real-time customer data and accurately spot suspicious activity, empowering risk teams to prioritize alerts and detect criminals in real-time.

Using advanced anomaly detection, ARIC accurately distinguishes between genuine and suspect behavior. This capability enables the immediate and precise recognition of good customers without blocking their activity, while also reducing customer friction.

500m
Consumers protected from risk

50.4bn
Events processed per year

75%
Reduction in false positive rates

Real Time
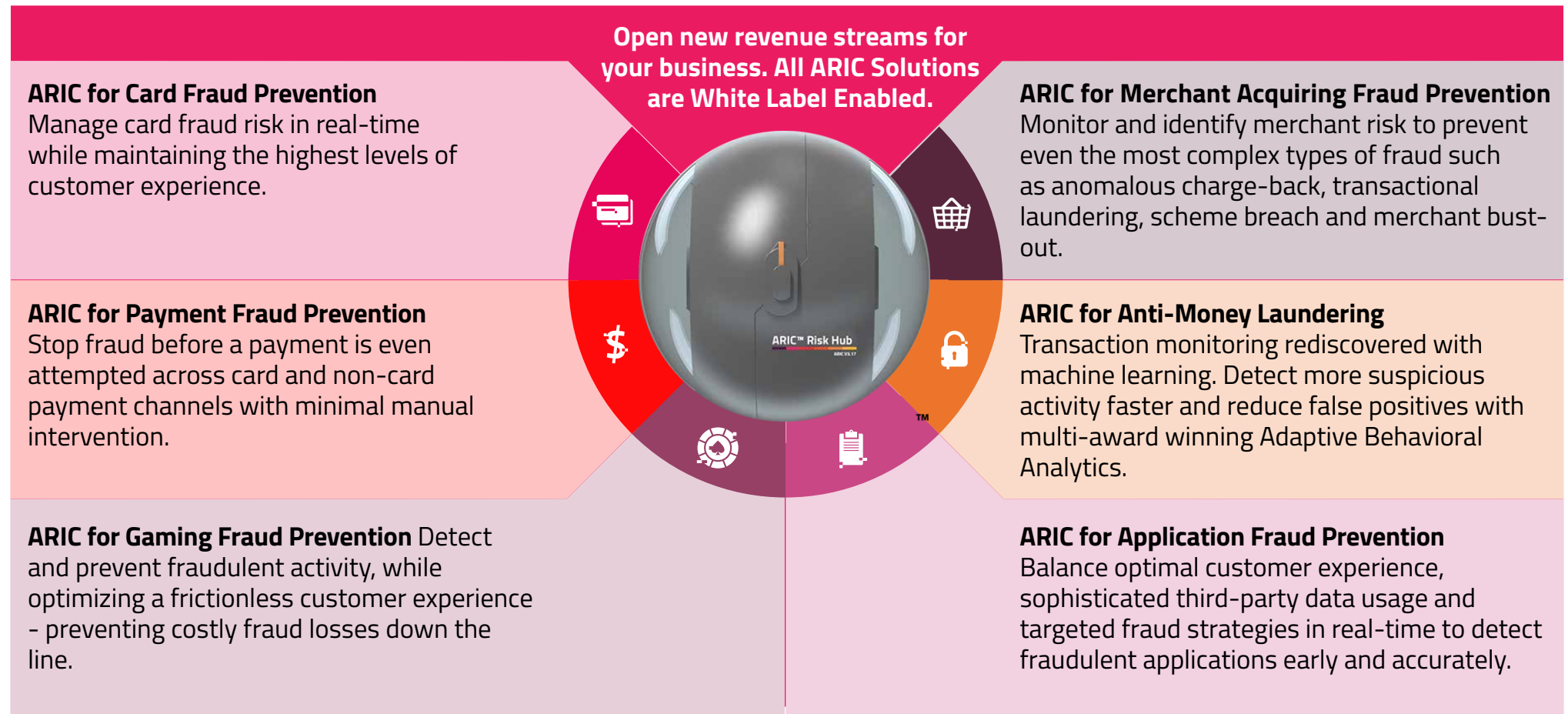Used to decision authorizations in leading global payment platforms

75%
Fraud attacks blocked as they occur with a 5:1 false positive ratio

100%
Suspicious Activity Reports (SARs) caught from working top 5% of prioritized alerts

ARIC™ Risk Hub Solutions

ARIC Risk Hub offers multiple solutions for fraud and Anti-Money Laundering analysts to spot suspicious activity, and prioritize alerts that are explainable for confident decision making. All solutions are available with out of the box rules and models as well as customized models.

Open new revenue streams for your business. All ARIC Solutions are White Label Enabled.

ARIC for Card Fraud Prevention
Manage card fraud risk in real-time while maintaining the highest levels of customer experience.

ARIC for Merchant Acquiring Fraud Prevention
Monitor and identify merchant risk to prevent even the most complex types of fraud such as anomalous charge-back, transactional laundering, scheme breach and merchant bust-out.

ARIC for Payment Fraud Prevention
Stop fraud before a payment is even attempted across card and non-card payment channels with minimal manual intervention.

ARIC for Anti-Money Laundering
Transaction monitoring rediscovered with machine learning. Detect more suspicious activity faster and reduce false positives with multi-award winning Adaptive Behavioral Analytics.

ARIC for Gaming Fraud Prevention Detect and prevent fraudulent activity, while optimizing a frictionless customer experience - preventing costly fraud losses down the line.

ARIC for Application Fraud Prevention
Balance optimal customer experience, sophisticated third-party data usage and targeted fraud strategies in real-time to detect fraudulent applications early and accurately.

A Feature-rich Enterprise Risk Management Platform

ARIC Risk Hub can be cloud or on-premise deployed

Adaptive Behavioral Analytics

Data

ARIC Risk Hub
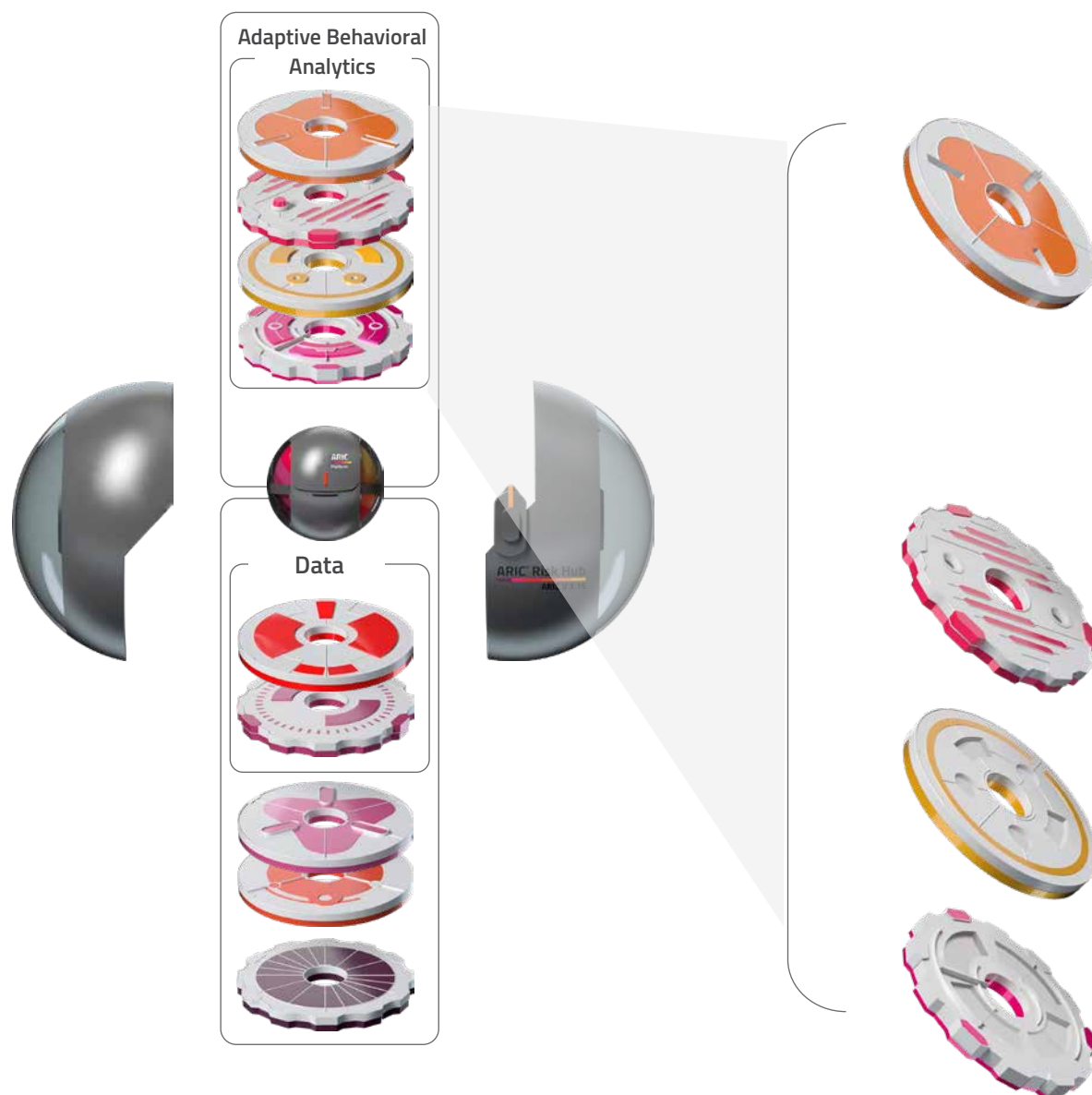
ARIC Adaptive Machine Learning Models and Automated Deep Behavioral Networks

Designed to understand anomalies by putting events into context, automatically detecting and preventing new and even the most sophisticated types of fraud and financial crime.

ARIC offers both productized and custom-built models - tried, tested, and deployed by some of the world's leading financial institutions. Featurespace's deep domain expertise provides financial institutions with cutting-edge technology to proactively manage fraud tactics. Productized, out of the box Fraud Models available include; Instant Payments, Bill Payments, ACH, Check, Wire, Person to Person (P2P), Debit Card, Commercial Card and Credit Card payments (inclusive of Card Present and Card-not-Present), ATM transactions, and other online banking initiated payment types.

ARIC Open Modeling Environment

A world-class platform for developing and deploying your own models using a suite of User Interface based and Command Line tools. First class performance reporting for third-party model formats (PMML, H20 or TensorFlow) within the platform, enables data science teams to evaluate model performance, make adjustments of the most competitive algorithms and deploy the most accurate model possible.

Adaptive Rules Engine

Utilize Adaptive Behavioral Analytics technology for adaptive rules which can be authored and configured by your risk analysts.

Sandbox

Author new rules, models and thresholds - and test the impact of these changes against production data.

Adaptive Behavioral Analytics

Data

ARIC Risk Hub
ARIC V X.XX
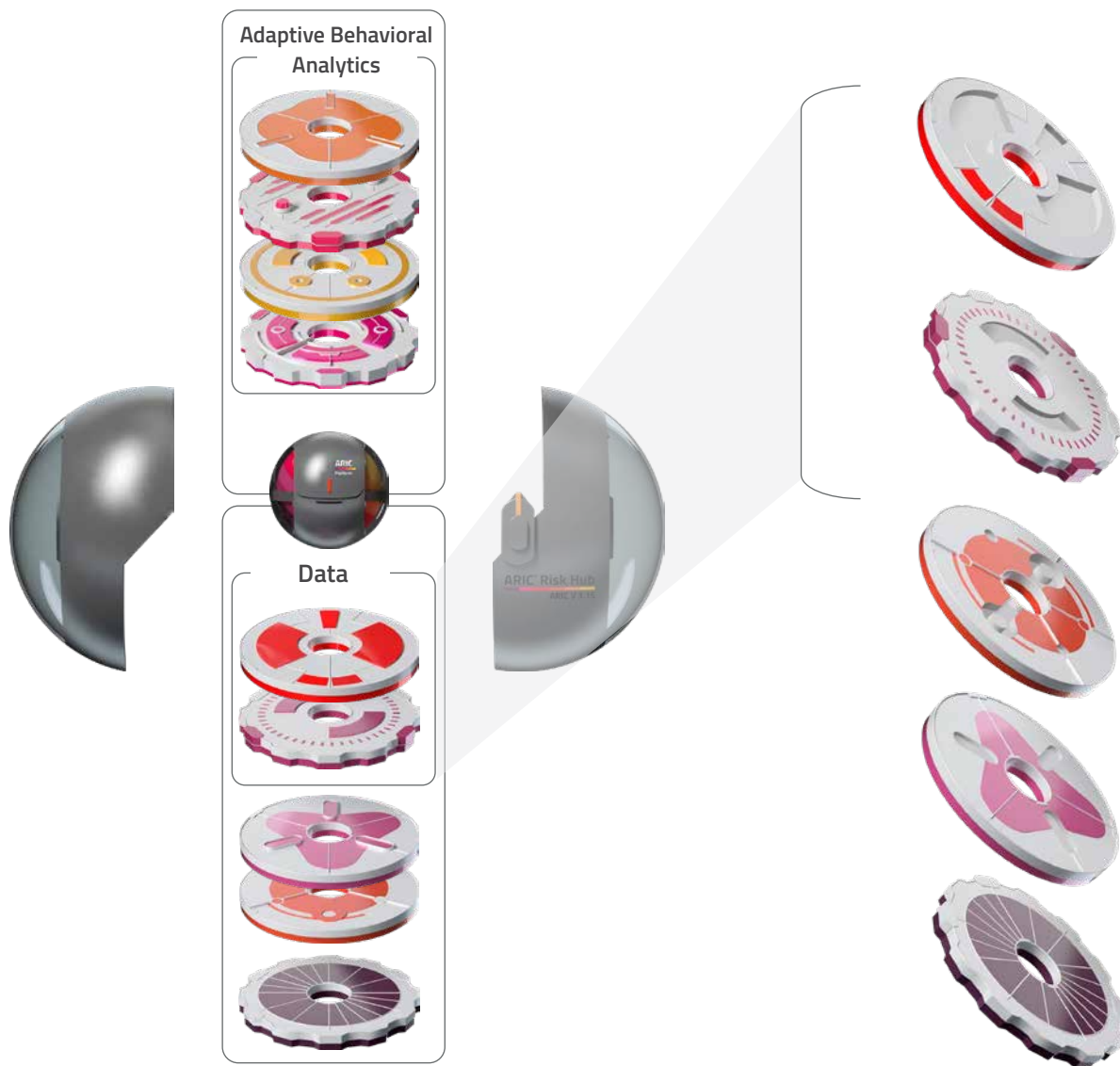
Customer Data

Ingest, process and analyze customer data in real-time or batch across thousands of events per second, according to your business needs.

Third-Party Orchestration

Integrate ARIC Risk Hub with a wide range of third-party enterprise systems.

Reporting

Multiple levels of reporting to meet your business needs such as integrating with your existing Business Intelligence tools or reporting software.

User Interface

Easy, intuitive access to investigate tools, incident and alert management and network analysis.

Multi-tenancy

Unlock new business opportunities with mega Multi-tenancy. On-board and manage multiple tenants in a single instance of ARIC.

Offer your customers the most advanced enterprise fraud and financial crime protection available

ARIC White Label
Multi-tenant Enabled

Powered by the multi-award winning ARIC Risk Hub, ARIC White Label protects your clients from suspect transactions across all payment types and channels.

A customizable user interface to match your brand, configurable analyst dashboard, and tiered user access are some of the embedded functionality immediately available to best support your customers.

A complete ARIC™ Risk Hub experience to your customers

- Scores all types of transactions

- Zero model degradation - no retuning required

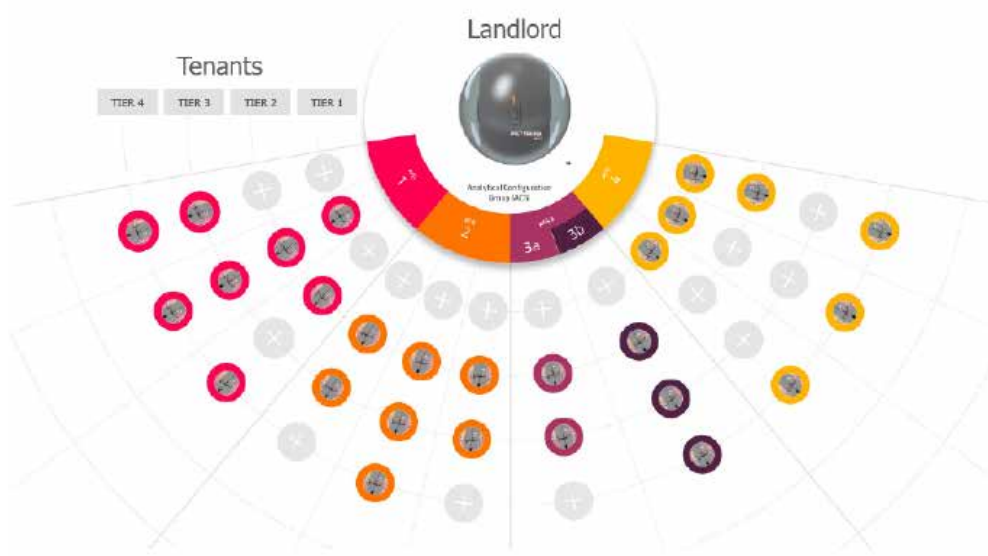- Best performing models in the industry

- Automatically detects new types of fraud

- Dramatically reduces number of false positives

Unlock new business opportunities with mega Multi-tenancy

Provision several individual customer instances from one multi-tenant configuration, offering immediate access to cutting-edge fraud and financial crime prevention technology. All while maintaining access control and accessibility to various combinations of functionality. In addition, with a multi-tenant architecture, a provider only has to run updates once to distribute upgrades across all tenants.

High volume, low latency event processing

30 milli seconds	**3800 txn/s**	**40 billion**
Average response time	Real-time processing for multi-tenancy	Events per year sized for multiple customers

Fraud Case Study: Top 25 US Bank

In search of the best fraud solution, this top 25 US Bank chose Featurespace after extensive market research and a successful proof of concept. ARIC was proved as a flexible, reliable solution to solve their business needs.

Challenge

As the largest digital-only bank in the US, and one of the 25 largest banks in the country, this bank was open to new fraud types, such as synthetic ID application fraud.

The bank had a set of rules that screened applications for fraud, but as the business grew the bank recognized that its existing process was stretching operational resources and was not flexible enough to provide effective protection.

The bank's main challenge was handling 87 data feeds that were going into its engine, and the various screens that investigators had to work to review a case.

Results

ARIC was tested on this data set and provided a complete profile of each customer in real-time, using over 80 available data feeds.

Fraud detection improved up to 85% with machine learning algorithms ingesting both batch data and real-time data.

85%
fraud detection rate improvement

1:1.4
false positives ratio

Outcome

With ARIC Risk Hub, the bank can now view a complete profile of each customer in real-time, using over 80 available data feeds including:

- Featurespace's proprietary data collectors capturing in-session client behavior on device using Adaptive Behavioral Biometrics

- All customer activities (e.g. account updates, transactions and returns) Third-party providers (e.g. data enrichment and credit scores)

- Risk-score alerts such as log-ins to online banking or new payee set-up in real time

- Improve fraud detection to up to 85% with machine learning algorithms ingesting both batch data and real-time data

AML Case Study: Tier 1 Global Bank

In search of the best AML solution, this Tier 1 global bank selected Featurespace following a head-to-head challenge to demonstrate the benefits of machine learning coupled with automation.

Challenge

The bank used a rule-based AML transaction monitoring solution. They had a complex data set where it was difficult to spot suspicious activity with rules alone.

The bank's existing solution generated a monthly batch of alerts with a high volume of false positives. Which required manual consolidation and time-consuming investigation, resulting in operational fatigue.

Results

We tested ARIC on this complex data set, comparing the results against the existing solution.

We found that ARIC generated fewer alerts and uncovered a lot more SARs.

One third of SARs were spotted one month earlier than with existing rule-based solution.

12%
Reduction in overall alerts

133%
Existing SARs caught

1/3
of SARs spotted
1 month
earlier than existing system

Outcome

The bank chose to deploy ARIC as Featurespace:

- **Delivered better results than all other solutions tested**

- **Tailored the solution closely to their needs**

- **Satisfied the bank's model governance process**

- **Provided seamless integration of ARIC into the bank's environment**

- **Enabled easy future deployment of additional use cases with ARIC platform integration**

ARIC will help the bank control their risk exposure and increase efficiency in AML transaction monitoring. Having a machine learning solution in place that monitors good customer behavior increased confidence that they were better placed to fight financial crime and able to demonstrate this to the regulator.

"We are delighted to be partnering with Featurespace, a business with world-class machine learning technology. We are always looking to work with innovative companies and are confident that this partnership will deliver superior outcomes for our customers by preventing more fraudulent transactions whilst reducing the number of genuine transactions that are declined."

worldpay

About Featurespace

Born out of 30 years of research at Cambridge University

Trusted by the most respected banks and payments companies in the world

"Featurespace ARIC named "best in class" among the new generation of AML solutions in the 2019 AITE report "AIM Evaluation: Fraud and AML Machine Learning Platform Vendors."

Aité

World leaders in machine learning for solving risk challenges

Unique real-time machine learning methodology

Multi-award winning platform and best machine learning models

Inventors of Adaptive Behavioral Analytics and Automated Deep Behavioral Networks

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Find out more

Book your demo of ARIC Risk Hub

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FOR ENTERPRISE
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THE SUNDAY TIMES
TECH
TRACK
100
2019
HISCOX

Aite
AITE IMPACT MATRIX (AIM)
BEST IN CLASS
"AIM Evaluation: Fraud and AML Machine
Learning Platform Vendors.", AITE, 2019

2018
STEVIE
GOLD
WINNER
AMERICAN
BUSINESS AWARDS

The
Card &
Payments
Awards
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