First ◆ Tech

How Featurespace's technology powered First Tech's successful 'Arrest Fest'

We helped First Tech Federal Credit Union catch a major ATM fraud ring after implementing our ARIC™ Risk Hub and adaptive rules. They were so thrilled, they made 'Arrest Fest' t-shirts to celebrate the 32 suspects identified and 7 arrests! Thanks to our technology, we didn't just stop fraud – we helped put real handcuffs on real criminals, protecting First Tech's members and other financial institutions from an emerging threat.

Founded in 1952, First Tech Federal Credit Union has grown into a forward-thinking financial institution serving over 700,000 members from the world's leading technology companies.

With a history rooted in innovation, First Tech partners with more than 900 firms, including tech giants like Microsoft, Amazon, Google, and Intel.

The challenge

pre ARIC

First Tech's fraud prevention strategy faced challenges requiring a major overhaul. The existing system was inefficient and left the credit union vulnerable to new sophisticated fraud risks, demanding a more integrated solution.

- **Maintenance downtime:** Extensive maintenance downtime with no visibility into fraud occurrences for up to 72 hours.

- **Fragmented alert system:** Siloed rules and models, and unconsolidated alerts under the same account. This led to operational confusion and increased effort, as activities from different days appeared as separate alerts, making it difficult to piece together a comprehensive picture of alerted activity and subsequent investigations.

- **Customer interactions:** The system provided limited transparency in gaining a holistic 360° view of each member.

- **Lack of biometric behavioral data:** The system did not ingest biometric behavioral scoring, forcing the team to switch between multiple systems.

- **Enhanced fraud trends:** With fraud evolving fast and attacks becoming more sophisticated, there was an increasing need for a solution that could detect fraud in real time.

The objectives

To address these critical vulnerabilities, First Tech made the strategic decision to implement Featurespace's ARIC Risk Hub as their enterprise-wide fraud prevention solution for payments.

The primary objectives focused on three key outcomes:

Reducing false positives to improve operational efficiency

Increasing fraud capture rates through better detection capabilities

Reducing fraud alerts through more effective fraud mitigation strategies

The strategy

First Tech implemented a strategic, phased approach to enhance fraud prevention across all payment channels, including streamlining their data analytics, technology and reporting resources. The initiative began with the development of adaptive rules capable of identifying subtle patterns in real-time member behavior, significantly strengthening their fraud defense system.

Since deploying ARIC in 2022, First Tech have prevented 129% more transactional losses, with continued improvements of 30% more transactions intercepted in 2024 vs 2023 thanks to the platform's adaptive analytics.

As First Tech's membership grew, it transitioned into implementing Adaptive Behavioral Analytics (ABA), a machine learning model that shifts from traditional rule-based fraud detection to a dynamic, member-centric approach. This innovative approach enabled the creation of unique behavioral profiles for each member, enhancing First Tech's understanding and adaptation to individual behavior patterns.

This strategy not only improved First Tech's ability to identify and prevent fraudulent activities but also optimized their fraud management processes, resulting in substantial financial savings and enhanced member protection.

Why First Tech chose Featurespace

Featurespace's cloud native technology was an enabler of First Tech's rapid fraud prevention deployment, delivering immediate value and allowing them to stop fraud faster. Featurespace was selected to replace the incumbent solution provider due to several capabilities that aligned with First Tech's vision for comprehensive fraud prevention:

- Cross-functional monitoring capabilities
- Full member-level view across channels
- Advanced risk modeling, and adaptive machine learning
- Deep understanding of First Tech's needs
- Integration with biometric behavioral solutions and key providers

Industry leading results

post ARIC

First Tech's implementation of ARIC Risk Hub has yielded significant business benefits, showcasing a remarkable improvement in fraud detection and prevention.

84%
less dollars lost to fraud 2022-2024

35%
reduction in alert volumes

15%
increase in fraud capture rates

100%
uptime and minimal latency in the effective management of **over $40m** in attempted fraudulent transactions in 2023

As a result of implementing Featurespace, we no longer have a backlog in our incidence queue, and our rules are generating much more effective alerts.

Chelsey Batchelor,
First Tech FCU Team Lead,
Fraud Analyst

ARIC™ Risk Hub

Celebrating success

First Tech uncovered an ATM fraud scheme in October 2023 where an organized fraud ring was recruiting individuals to open accounts and deposit counterfeit checks, particularly during holiday weekends. Their fraud team responded by activating a new adaptive rule within the ARIC Risk Hub, employing a cross-channel detection strategy. The team made sure to deploy the rule ahead of the next Holiday weekend.

That Friday, First Tech detected suspicious activity at multiple ATMs and took swift action. Working with law enforcement in real-time and implementing targeted security measures, they disrupted a fraud ring that had attempted to cash over $307,000 in fraudulent checks. The operation resulted in 7 arrests across 3 ATMs which led to the subsequent identification of 32 suspects in total across 10 ATM locations. First Tech was able to seize and recover all funds withdrawn.

The success stemmed from First Tech's ability to simulate and validate rule changes using historical data before live deployment whilst maintaining a seamless banking experience for its members.

Continuing to partner together

First Tech plans to expand its automation integrations, leveraging the existing data and decisioning performed in Featurespace to build out an enterprise-wide fraud management solution to monitor all payment rails and incorporate additional channels such as card and AML.

The continued automation of processes will facilitate more efficient member communication and case creation, reducing operational costs and freeing up valuable time for other core objectives.

Interested in finding out how ARIC Risk Hub can protect your business and customers?
Get in touch with our team for a demo.

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FEATURE SPACE
A Visa Solution