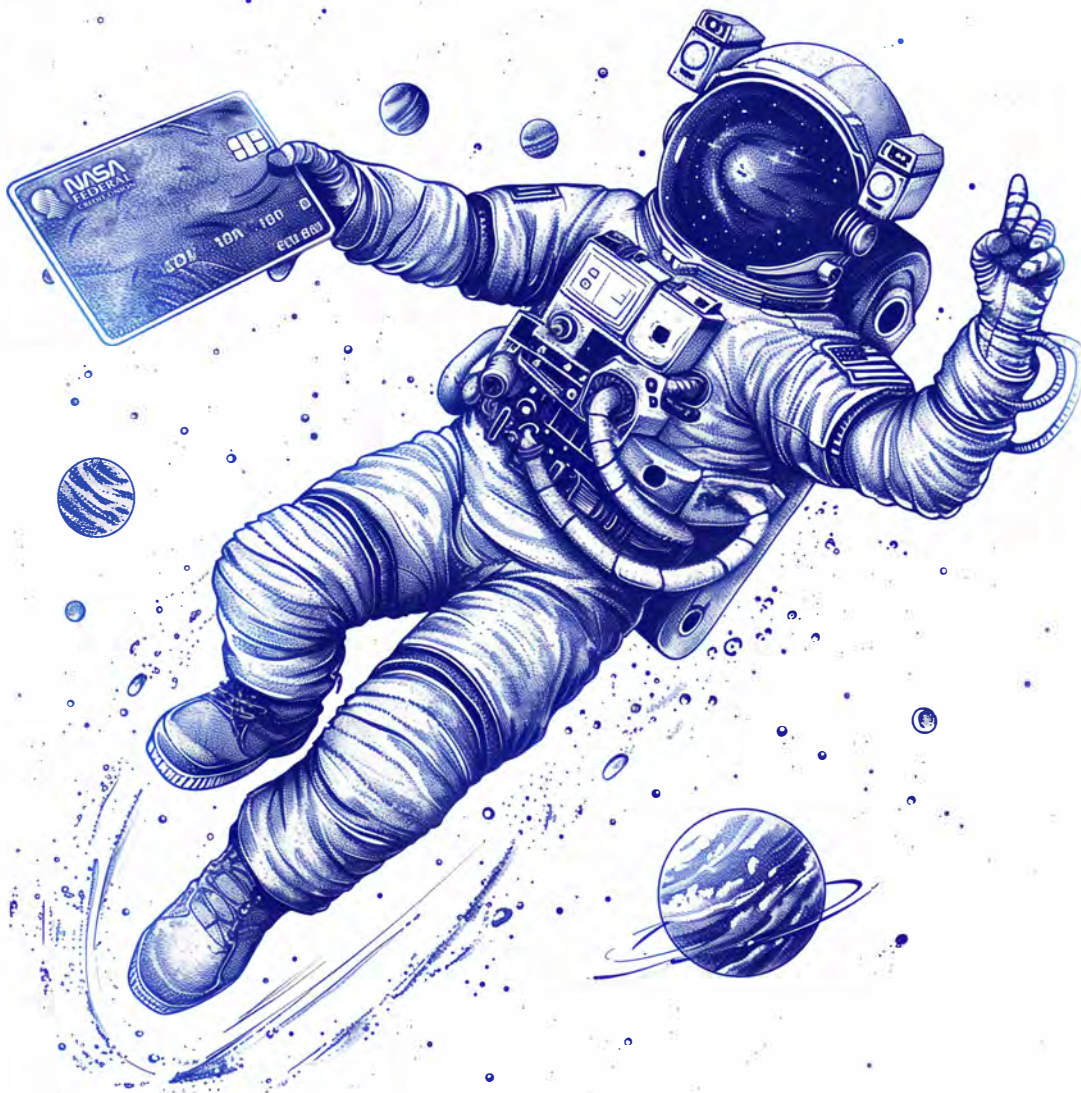# NASA Federal Credit Union's Transformation

With DataVisor's Fraud and Risk Management Solutions

DATAVISOR ✕ **NASA FEDERAL CREDIT UNION**

Background

NASA Federal Credit Union, chartered in 1949, is a not-for-profit financial cooperative fully owned by its members, committed to serving their collective interests. With the noble mission of providing optimal financial services to its vast membership, NASA FCU has grown impressively, both in scale and in the scope of services offered. As of today, it boasts a strong membership of 240,000 individuals across the nation, supported by a robust $5.4 billion in assets.

This expansive growth, however, introduced complex challenges in managing digital fraud risks. Realizing the need for a transformative approach, NASA FCU sought to centralize and upgrade its fraud management systems. Their search for a solution that could integrate their diverse fraud scenarios under one umbrella led them to DataVisor. Known for its sophisticated and scalable fraud management solutions, DataVisor was selected to equip NASA FCU with advanced tools for a more secure, efficient, and member-focused financial service experience.

Highlight of Case Study Results

40%
Reduction in manual review alert volume

85%
Reduction in manual review time

20%
Increase in fraud detection precision

Challenges

Originally, NASA Federal Credit Union operated with a decentralized structure in fraud management, where each department managed its own solutions and controls. This setup, while functional, led to a certain level of fragmentation and inefficiencies in their approach to fraud management. Recognizing the limitations of these disjointed systems, NASA FCU embarked on a strategic shift. The head of the fraud prevention department spearheaded the initiative to centralize fraud mitigation into a single, streamlined group. This move was crucial in transforming their approach, focusing on standardizing and integrating various point solutions into one comprehensive system.

Parallel to the centralization effort, NASA FCU faced the challenge of accommodating a wide range of fraud use cases with a singular, robust solution that delivers substantial ROI. The credit union required a system not just scalable and robust, but also flexible enough to effectively manage risks in diverse operational areas. This included safeguarding member applications, loan applications, and different payment types like credit cards, ACH, and wire transfers. The sought-after solution needed to combine these varied elements under a unified platform, ensuring a seamless and efficient fraud detection and prevention mechanism across the entire enterprise.

Solutions

NASA Federal Credit Union's partnership with DataVisor introduced a comprehensive solution to their fraud management challenges. Here are the key components of the solution

- **Centralized Intelligence Hub**
  DataVisor's data orchestration approach merges diverse data sources into one system, creating a unified view of customers and facilitating a more holistic view of fraud risks. This data orchestration is vital for comprehensive analysis and informed decision-making.

- **Advanced Machine Learning Models**
  DataVisor implemented both supervised and unsupervised Machine Learning (ML) models. The supervised ML model was built using the aggregated transaction data, allowing for the detection of known fraud patterns. When some instances of fraud were still slipping through, DataVisor activated its unsupervised ML model, which quickly

started identifying new, emerging fraud clusters, enhancing the overall fraud detection capabilities.

- **Rules Engine**
  NASA FCU leveraged Rules Engine to quickly and effortlessly create complex, targeted rules, tailored to specific fraud scenarios. With reliable and thorough testing mechanisms in place, these rules were securely deployed. Additionally, NASA FCU benefited from real-time performance tracking, allowing for timely adjustments and informed decision-making, thus maintaining an effective and adaptable fraud strategy.

- **Knowledge Graph**
  The tool feeds various in-house and third-party data into the system, analyzing it to uncover hidden relationships. Knowledge Graph enables NASA FCU to visually identify and scrutinize elements like IP addresses, device IDs, and external bank accounts linked to potential fraudulent activities, even in accounts that previously had no fraud instances.

- **Feedback Loop Enhancement**
  DataVisor's support for postback files has been instrumental in streamlining operations at NASA FCU. For instance, NASA uses these files to automatically identify and deny fraudulent online loan applications, significantly reducing manual workload and improving operational efficiency.

Results

By moving to DataVisor's centralized and cohesive platform, NASA FCU has evolved from a manually intensive and fragmented fraud mitigation approach to an adaptable and proactive enterprise-level framework. This significant shift has brought about a range of improvements:

- The retirement of overlapping point solutions has not only simplified the overall control framework but also resulted in considerable cost savings for the credit union.

- The adoption of dynamic workflows and intelligent differentiation between low-risk and high-risk transactions on DataVisor's platform has streamlined NASA FCU's user experience, effectively balancing member convenience with enhanced transaction security.

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- The volume of alerts that require manual review has decreased by 40%, leading to more streamlined and efficient operational processes.

- The time dedicated to manual reviews of alerts has been significantly reduced by 85%, enhancing the overall efficiency of the fraud management team.

- The implementation of DataVisor's solutions has resulted in a 20% increase in the precision of fraud detection, demonstrating the effectiveness of the platform in identifying and preventing fraudulent activities.

Customer testimonial

Partnering with DataVisor has enabled us to create a centralized intelligence platform for our fraud management. This transformation has greatly enhanced our fraud detection capabilities and operational efficiency, allowing us to focus more on our members' needs.

Doug Nahas
Chief Operating Officer

About DataVisor

DataVisor is the world's leading fraud and risk management platform that enables organizations to respond to fast-evolving fraud attacks and mitigate risks as they happen in real time. Its comprehensive solution suite combines patented machine learning technology with native device intelligence and a powerful decision engine to provide protection for the entire customer lifecycle across industries and use cases. DataVisor is recognized as an industry leader and has been adopted by many Fortune 500 companies across the globe.