

# **Combating Fraud**

How Financial Institutions are Fighting Back with Artificial Intelligence and Machine Learning

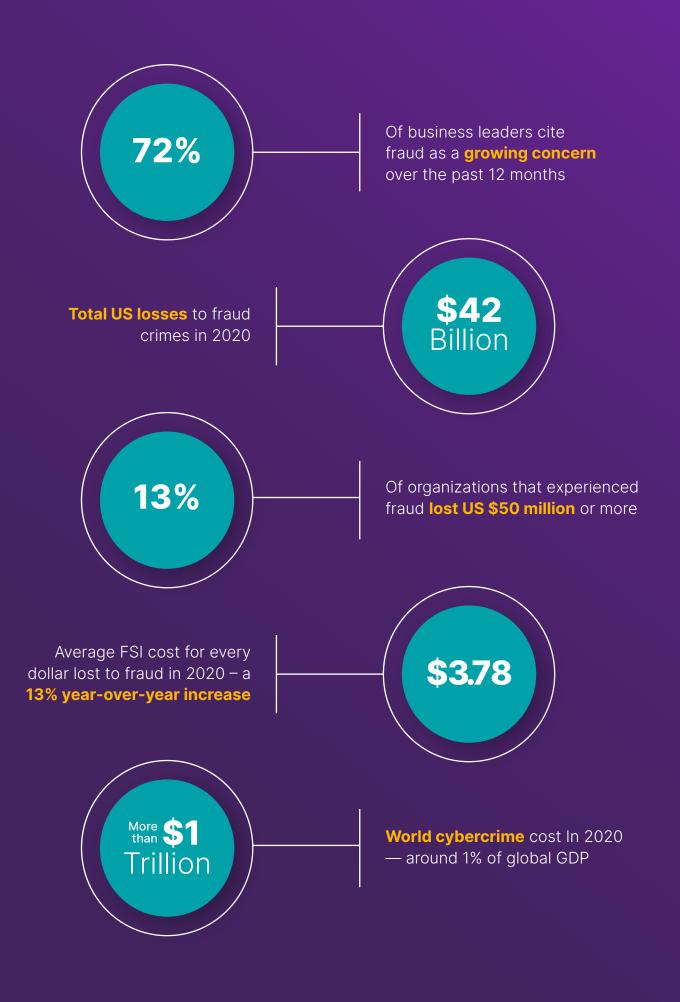


### **The Rise of Fraud in Financial Services**

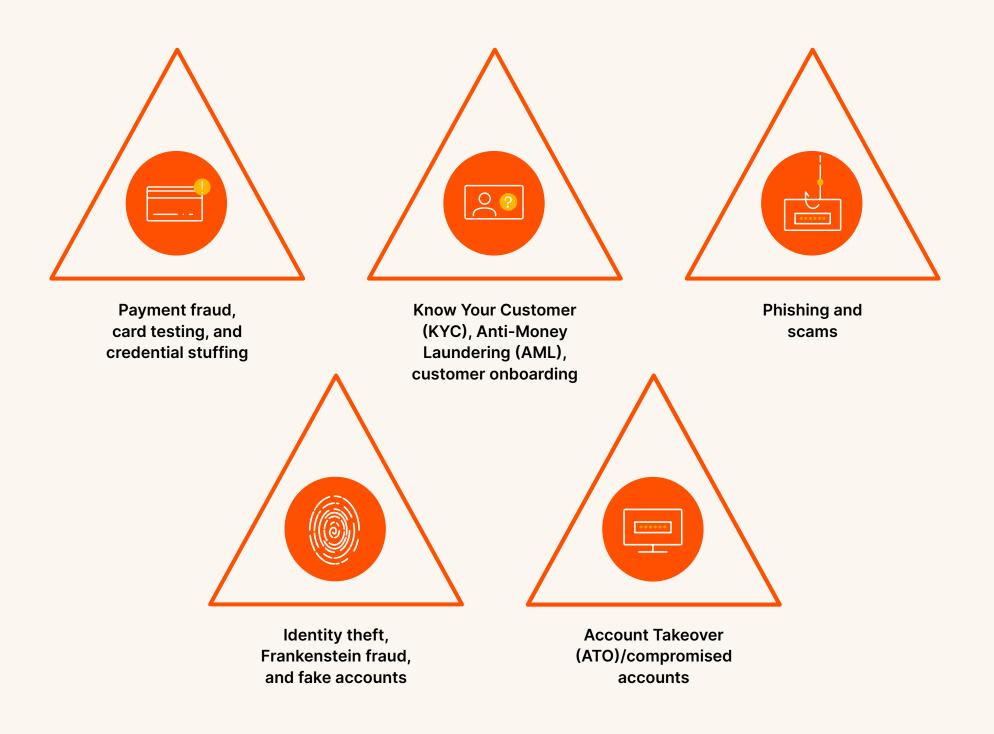
Faster transactions and evolving fraudster schemes are increasing complexity of detection and prevention



### **Impact of Fraud in Financial Services**



#### **Types of Fraud Attacks**



#### Limits of Traditional Rules-Based Fraud Strategies

- Apply nearly 300 different rules on average to approve a single transaction
- Are manual, time intensive, and slow to respond to new threats
- Are unable to detect implicit correlations
- Overpower legacy systems when processing real-time data streams
- Become slower and more expensive as data sets are added



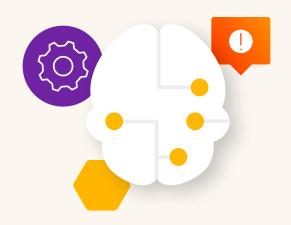


## Dangers of deploying only rules-based prevention and mitigation strategies

- Rigidity leads to false positives and false negatives
- Sophisticated fraud patterns are missed
- False positives lead to treating customers like fraudsters
- Damaging user experience with multiple verification steps

**33%** of U.S. consumers drop retail purchases after a false decline

#### Modern Approach to Combating Fraud in Financial Services



#### Machine learning based strategy

- Automatically detects anomalies
- Facilitates real-time processing
- Simplifies verification, reduces false positives
- Discovers hidden fraud by focusing on subtle pattern changes
- Enables algorithms to become more efficient and effective as data sets increase

#### What do Financial Institutions Need to Fight Fraud?



#### **Modern Data Infrastructure**

- Support for AI and machine learning across the enterprise and all data types
- Real-time data analytics to keep pace with automated attacks
- Ability to quickly identify and weed out false positives
- A solution that allows them to block malicious activity before it negatively impacts business

#### **How Pure Storage Helps Financial**

#### **Firms in the Battle Against Fraud**



#### Sophisticated data storage technology supports:

- $\checkmark$  Al and ML technologies to uncover increasingly sophisticated patterns
- ✓ Application of predictive and adaptive analytics techniques
- $\checkmark$  Integration of a variety of data sources and types
- Real-time monitoring and risk profile analysis to continuously score fraud risk

# Meets the challenge of increasing demand for big and fast data by providing:

- $\checkmark$  All-flash, 100% NVMe storage that scales as data needs increase
- Massively parallel and scalable file and object storage
- Predictable and consistent performance as data and processes increase
- $\checkmark$  Streamlined ingesting and analyzing of more data in real time
- ✓ Native multiprotocol support and non-disruptive scalability
- ✓ Data consolidation and simplified infrastructure management with a Modern Data Experience<sup>™</sup>

## Get the speed and simplicity at scale you need for modern fraud protection

See how Pure delivers enterprise-class, simple-to-manage data storage solutions for:

**Financial Services Firms** 

Smarter Infrastructure for AI.

#### References

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- Atlas VPN, 2021
- LexisNexis Risk Solutions 2020 True Cost of Fraud: Financial Services and Lending Study, 2021
- PwC's Global Economic Crime and Fraud Survey 2020
- 33% of US consumers drop retailers after a false decline. Here's how to prevent those losses, by Rafael Lourenco, 2020, Digital Commerce 360

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