

CASE STUDY

A Top-5 U.S. Card Issuer Realizes \$10M Annual Uplift by Detecting New Account Fraud and Accepting More Credit Card Applications Using Behavioral Biometrics

Less Fraud, Less Friction, More Customers



Problem:
A Top-5 credit card issuer suffered from millions of dollars in fraud losses caused by the use of stolen personal information or synthetic IDs in the application process. Their existing fraud detection model was based on traditional means of verifying identity including personal data and device reputation.

Solution:
The issuer adopted the BioCatch behavioral biometrics platform to capture user cognitive and physical digital behavior and leverage real-time risk scores and behavioral indicators within their machine-learning based model. This added a new layer of visibility, enabling them to decipher between legitimate applicants and cybercriminals with a greater level of confidence.

Results:

- 12x**
Generated 12x ROI by accepting more credit card applications, decreasing operational costs, and reducing fraud losses
- \$10M**
Realized \$10M annual uplift by detecting new account fraud and safely acquiring more customers
- 99.93%**
Of applicants approved by BioCatch were confirmed genuine, increasing customer acquisition
- 90%**
Increased fraud detection rate to over 90%



Preventing Account Opening Fraud

A top-5 U.S. card issuer experienced a growing level of online account opening fraud, despite using a wide array of cyber defenses to monitor, analyze, and prevent fraudulent activity during the online application process. The issuer utilized multiple lines of defense including KYC personal data checks, device reputation service and phone, email, and address analysis, yet still experienced millions of dollars in fraud losses.

Fraudulent activity observed included the use of stolen or synthetic identities that relied on a combination of stolen personal information and false details, such as a real Social Security number and name with a fake address, phone number, and email.

To solve this problem, the global credit card powerhouse adopted BioCatch Account Opening Protection to monitor behavior throughout the application process. With over a decade of behavioral data and a deep understanding of the way fraudsters behave, the BioCatch platform is able to distinguish between a legitimate user and an impostor in real time and prevent fraudulent applications from going through.

After implementing the BioCatch technology into their online application process, the credit issuer generated immediate ROI. Through BioCatch's real-time risk scores, the credit issuer gained a critical layer of visibility that enabled them to detect a significant amount of fraudulent applications that existing solutions were not flagging, increasing their overall detection rate to more than 90%.



Reducing Friction With Behavioral Biometrics

The global card issuer prides themselves on customer service, and although their first priority was to minimize fraud risk, improving the customer experience played a significant role in their decision to move forward with adopting the BioCatch platform.

In online credit card applications, when information on the application does not match, the bank employs manual procedures to validate the application, including an attempt to contact the applicant. This inevitably leads to high rates of abandonment of valuable potential customers.

After implementation, BioCatch helped reduce the number of applications that had to be manually verified by analyzing positive signals such as high data familiarity with personal details (such as name and date of birth), low familiarity with data that isn't normally top of mind (such as an account number), low familiarity with the application flow , and hesitancy around elements that require a thorough process to complete.



Increasing Customer Acquisition



Like many other credit card issuers and financial institutions today, the issuer faced a challenge in finding the right balance between reducing fraud losses and accepting more applications. If a card application is erroneously detected as suspicious, it isn't automatically accepted and may be canceled if the user does not follow through on a high-friction control process. In fact, a valid application that is not accepted is oftentimes costlier than fraud for card issuers and other entities aiming to move their onboarding process to the digital channel.

Using BioCatch low scores, the card issuer was able to reduce false declines gaining an additional \$1M per year in otherwise lost revenue from genuine customers who had abandoned the application during the high-friction control process. Further, less than 0.07% of the applicants approved using the low-risk scores were later identified as fraudulent.



Innovating For The Future

The issuer's current fraud detection system deferred a high rate of senior applications for manual review, impacting the experience for higher credit customers and contributing towards application abandonment.

Although ~40% of fraud occurred in applications where the declared age was above 60, the issuer's current controls and procedures significantly impacted their ability to acquire a large number of genuine customers.

BioCatch worked in lockstep with the issuer to launch additional innovative capabilities, including Age Analysis, to combine user and population profiling to determine user intent and emotional state in context of the activity. The BioCatch Age Analysis capability assesses factors in which behavioral patterns shift with age, such as the time required to shift from the Control key to a letter key during data input, mobile device orientation, and swiping patterns. These indicators are then used to determine a confidence level that the user is over 60 years old and identify discrepancies between the reported age and analyzed age.

After incorporating age-related features into the risk model, the BioCatch risk scores were further optimized. Taking into consideration the sessions that were given the highest possible risk score, the BioCatch solution was able to detect 20% more fraudulent applications at this level alone.

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BioCatch is the leader in Behavioral Biometrics which analyzes an online user's physical and cognitive digital behavior to protect individuals and their assets. Our mission is to unlock the power of behavior and deliver actionable insights to create a digital world where identity, trust and ease seamlessly co-exist. Leading financial institutions around the globe use BioCatch to more effectively fight fraud, drive digital transformation and accelerate business growth. With over a decade of analyzing data, over 60 patents and unparalleled experience, BioCatch continues to innovate to solve tomorrow's problems. For more information, please visit www.biocatch.com

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