

ANTI-FRAUD ASSESSMENT & RECOMMENDATIONS FOR MULTINATIONAL GAMING PLATFORMS

THE CHALLENGE

Our client, a multinational gaming platform provider, was experiencing a significant increase in fraudulent activity following the introduction of several new features and a general focus on growth. Lacking any deep expertise to tackle fraud, aware that they needed an end to end solution to track and investigate fraud, and anxious to act quickly to reduce losses and maintain their rating with payment process providers, our client needed help. They chose FiveBy based on our previous track record in implementing programs for software companies to reduce fraud and increase revenue.

THE SOLUTION

FiveBy kicked off the engagement by delivering an end to end fraud assessment of the client's platform, including both immediate and longer-term solutions to address fraud as well as an analysis of current adversaries attacking the platform. The assessment included interviewing key stakeholders to understand the challenges with current platform security, and mapping an ideal 'legitimate user behavior' model. Following research of past and current incidents and analysis of commerce across the site, FiveBy extended the client's user-behavior model by superimposing evidence of fraudulent behavior over normal user data for comparison. This approach provided information to map out chokepoints where the client's platform was vulnerable to fraud, and example of typical fraudulent behavior. The chokepoints were designed to minimize friction in customer activity while raising the bar dramatically against attackers.

Using this data FiveBy recommended several anti-fraud solutions to the client, and worked with the client to deploy these solutions which included:

- Tighter security protocols at account creation as well as login/logout.
- Consolidation of siloed data into a dedicated database.
- A unique, petabyte-scale behavior analysis system that uses machine learning techniques to automatically score and flag accounts for risk-likelihood based on past and present user behavior, allowing for just-in-time security controls that specifically target high-risk accounts, addressing risks while minimally impacting normal users' experiences.

- Ongoing work focuses on both implementation and adaptation to the changing tactics of attackers trying to work around newly implemented security controls.

RESULTS TO DATE

FiveBy's work has proven beneficial to the client already with significantly decreased chargebacks, decreased fraudulent payouts and dramatic reduction in account takeover attacks (ATO). The behavior analysis system now implemented has allowed for swift and flexible responses to fraudulent attacks as or before they occur, allowing for minimal disruption of user experience. Since starting the project, FiveBy has supported:

- Shutdown of a Dark Web operation that automatically created and sold fraudulent platform accounts used to bolster a user's subscriber count.
- Segmentation of user-populations based on intraplatform commercial behavior to quickly and accurately close down fraudulent traffic.
- Legal efforts against fraudsters using underground forums.
- Data-based analyses for decision making on features and prioritization of engineering investments.
- Implementation of rulesets based on fraud indicators for automation of a large percentage of response activity.

FiveBy's unique experience in delivering end-to-end anti-fraud solutions enabled us to deliver anti-fraud solutions in a manner that the client understood and which minimized impacts to growth, thus allowing for rapid and effective turnarounds in the client's approach to fraud.

BROADER APPLICATION

While FiveBy's work with the client is far from complete, we already see where we could apply learnings to help other clients. Gaming platform providers, streaming providers, and web-based service providers could all benefit from a similar data focused approach to user behavior to reduce fraud and increase revenue.