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Understanding the Intricacies of Financial Black Swan Events:

How to handle detection, prevention and response

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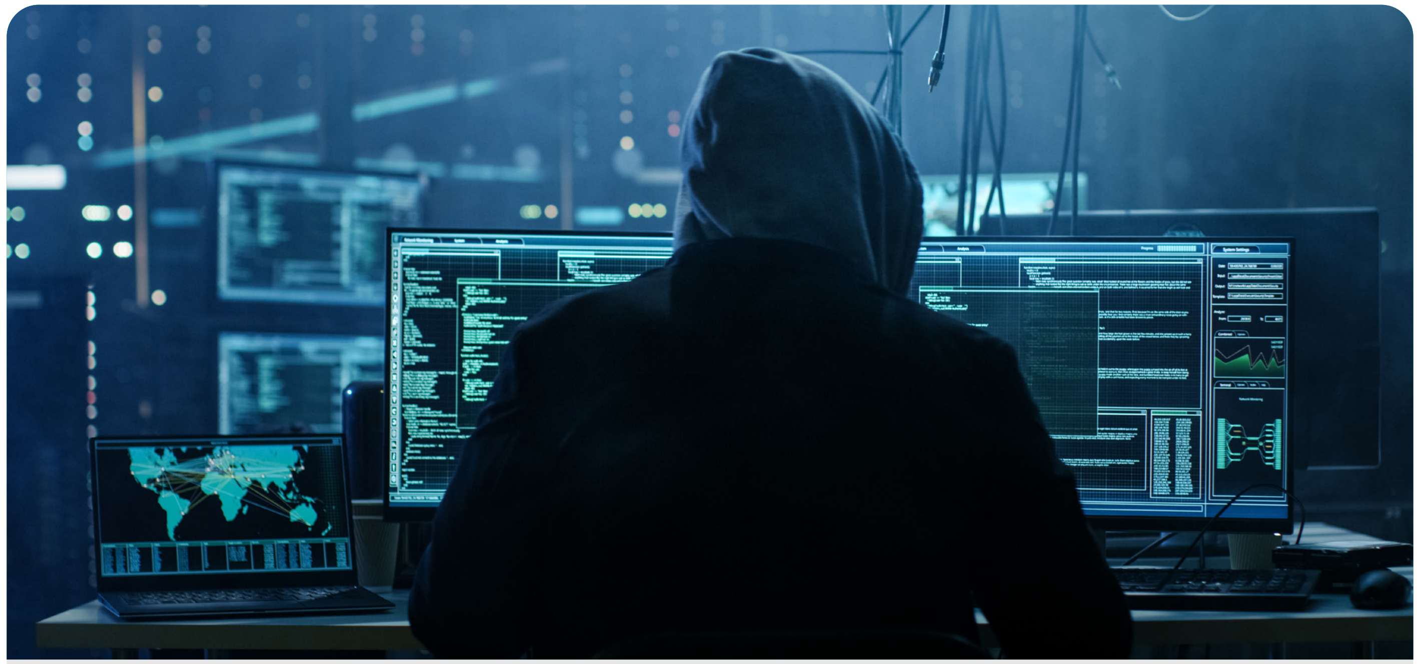

Financial industry cybercrimes are most definitely on the rise. Black Swan events can also be a form of cybercrime in the financial world but, by their very nature, are much more difficult to foresee or predict.

What exactly is a Black Swan event?

According to the Corporate Finance Institute , the concept was first coined in 2001 by former Wall Street trader Nassim Nicholas Taleb who wrote about it in his book 'Fooled by Randomness' and later expanded upon it in his 2007 book 'The Black Swan: The Impact of the Highly Improbable' . It is defined as a highly improbable event characterized by three things: it is unpredictable, it carries a massive impact and severe and widespread consequences, and after the Black Swan event occurs people tend to rationalize the event as having been predictable (which is known as 'hindsight bias').

The truth is that Black Swan events are not intrinsically good or bad, and do not only apply to negative events. But, in recent years, they have certainly taken on negative connotations. Moreover, they don't necessarily happen just in the world of finance. But, when they do, there can be dramatic ramifications and deeply negative results which can include massive financial losses, severe regulatory implications and often massive fines, and a dilution of the brand value and reputation of an organization which must inspire trust. With a Black Swan event, it is impossible to know what it will look like, or when it will occur, or who will execute the event – a political adversary, foreign organization, disgruntled ex-employee or an unknown would-be criminal. They are replete with multiple unknowns and the impact is usually tremendous.

Moving from respond to prevent

Consequently, prevention has become a prime directive, rather than a mindset of "if it happens, we'll worry about it and remediate it then." Getting in front of such an unpredictable, unknowing, chaos-producing Black Swan event can be tricky but can save a financial institution from irreparable harm. So, what can you do? First, understand the importance of the mindset shift from respond to prevent.

Financial institutions are foundational to our society and serve many functions, including safeguarding our monetary way of living. They are increasingly expected to act more and more as the police of financial crimes. The world is speeding up and money can be funneled across the globe in seconds. You need to have automated protections in place to assume, by sheer default, that things will go wrong. So, what can financial industry crisis management professionals do? Here's what we recommend:

- Test your systems frequently – Conduct dry runs and assume you are getting breached. Conducting such fire drills can expose vulnerabilities.
- CIOs will smartly gather their best people as part of mock drills -- Get angry with the team and tell people what they should be looking for, such as anomalies or non-financial events that may/may not initially look suspicious. Sometimes, you will be looking for those needles in the haystack.
- Keep up to date - Be aware of general trends and insights you can derive.
- Understand what individual customers do and do not do - Customers' activities are dynamic and flowing in real-time. But red flags can be actions such as: new card issuance, checking balances, log in attempts, and/or an address change.
- Build resilience or fusion centers – Use these to aggregate data which may now be siloed across business units. This data can be anonymized so personal data/customers are not identified. However, using the aggregated data to see what's 'normal' and what is suspicious can be key.
- Understand the data you are viewing – Learning curves will always be a reality but observing what is normal activity versus an anomaly allows you to train your systems to red flag items.
- Don't fret if you don't have very many years of historical data to review -- Start with what you do have and keep a keen eye on everything.

Understand what prevention does/does not entail

Black Swan events are real. But most firms that can help you monitor, assess and analyze toward building your defenses and help prevent their occurrence, are not in 'blocking mode'. They do not interfere with systems or build Black Swan prevention applications from the ground up. Rather, these companies grab a small part of a bank, for example, and monitor real-time data. There are generally no new interfaces required and monitoring techniques sit on top of company silos and listen to the static and noise to understand what's going on.

Additionally, there is no one-size-fits-all approach. Most monitoring systems learn from the data received and don't care about single account fraud. Rather they look at the trends occurring atop of accounts. They can determine what banking apps are relevant and can ignore fields or enrich fields and the data, to see if a customer has a mortgage, for example.

The bottom line: Assume some type of Black Swan event WILL happen. Define how you can protect yourself, not just respond when it is already too late. You need to be ready at all times because you won't know precisely what a Black Swan event will look like. Moreover, when a Black Swan event occurs, not all parts of a bank need to be closed off, as some assume is the right thing to do. Just the malicious parts should be closed, keeping parts not affected happily chugging along.

By implementing kill switch technology, such as the one from Capture, you can manage a Black Swan event in the heat of the moment, enabling you to keep the bank open when under attack.

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