SIM Swap Monitoring - an Effective Weapon for Account Takeovers

SIM swapping is one of the most damaging types of fraud imaginable because it gives fraudsters control of a user’s device. Criminals can drain accounts, purchase products, and transfer money, all in a matter of a couple hours. Very often, these account takeovers (ATOs) are carried out by compromising common two-factor authentication methods, including SMS OTP (one-time password) using social engineering, malware, or SS7 hacks.

WHY SIM SWAP MONITORING?

SIM swapping exists to circumvent two-factor authentication. By rerouting a one-time passcode to a different device, an account takeover becomes possible. Looking at the metadata behind a phone number, including the date and last time a number was ported, is important to understanding fraudulent activity.

For example, if a number was ported to a new device an hour ago and then the associated account tried to initiate a $100,000 transaction, this might be cause for concern. Red flags would be raised, and your platform could choose to block the transaction.

THE VALUE OF SIM SWAP DETECTION

In today’s world, mobile users often change their devices, either because they’re upgrading or replacing a lost or stolen device. SIM swapping takes advantage of this dynamic to initiate unauthorized device changes with the intent to take over an account.

Any financial service, bank, cryptocurrency or other fintech business using SMS or outbound call OTPs in authentication strategies should deploy SIM swap detection as a minimum layer of security.

TeleSign saved one of our largest fintech customers over $1M in yearly account takeover fraud after just two months of using our Phone ID API with SIM swap monitoring.
SIM SWAP MONITORING WITH PHONE ID

TeleSign’s PhoneID API allows you to get detailed and actionable global phone number and subscriber data intelligence to strengthen authentications, evaluate fraud risks, and enhance the user experience.

Answer critical questions about users by using their phone numbers to get actionable data intelligence about their device, contact information, and more. Phone number data intelligence can help strengthen and validate the user verification process, reduce fake accounts, inform risk models, and improve conversions and accuracy of collected information.

The PhoneID API cleans and reformats a submitted phone number and instantly returns phone device type, telecom carrier name and phone registration information. Additional data attributes are available for configuration via add-ons to best fit your specific use case.

The SIM Swap add-on allows you to find out whether or not the SIM for a given phone number has been swapped and if so, at what point. The date and time of the swap is recorded. In addition, TeleSign evaluates how likely it is that the SIM swap was for a fraudulent reason using a scale from 1-4. Scale values are:

1. **Very Low Risk**: a swap did not occur, or it occurred more than 15 days ago
2. **Low Risk**: a swap occurred sometime between the last three and 14 days
3. **Medium Risk**: a swap occurred in the last 72 hours
4. **High Risk**: a swap occurred the same day

TELESIGN VERSUS OTHER SIM SWAP FRAUD SOLUTIONS

TeleSign, an industry-leader in two-factor identification (2FA), has mastered the advanced intelligence required to ensure and successfully detect SIM swapping. Through our longstanding history working with the largest international web properties, our cross-customer fraud intelligence and our global mobile network operator (MNO) network, we have access to insights on billions of phone numbers. Our SIM Swap coverage extends to over 16 countries, with more than 40 MNOs integrated into our platform.

Most other companies don’t provide a SIM swap “risk” score. They only tell you if a SIM card has been swapped. We were the first to initiate this kind of detailed risk monitoring for SIM swapping and serve multiple industries in addition to fintech, including one of the largest publicly traded social media platforms in the world today.