

Evolution of card fraud

Credit card fraud means that someone uses your credit card or its information for stealing your funds and or to make purchases in your name. With credit cards becoming the most popular way of making purchases, credit card fraud has also become an issue. there exist many types of credit card frauds, which all should be taken seriously. Some of the types are more popular than others.

Credit card frauds have two categories, card-present and card-not-present frauds. card-present means that the credit card has to be present during the fraud. Credit card skimming is one of the only card-present frauds. It requires a physical device and the presence of the credit card itself. Skimming works so that the credit card is placed into the card reader and the card reader has a skimming device that captures the credit card's pin and information leading to the hacker being able to make purchases with the credit card. Phishing is also a credit card fraud type that is an online scam where fraudsters send fake emails or messages pretending to be from legitimate organizations and they encourage to give away sensitive information like the credit card details.

Identity theft is also a popular credit card fraud type in which a malicious actor uses someone's personal information to open a new credit card and makes purchases in their name. other popular credit card fraud types are also CNP frauds and of course stolen or lost cards.

Credit card fraud is the most common type of identity theft that American citizens fall victim to, and these cases just keep going up. On the other hand Europe has seen a significant decline in card fraud.

from 2008 to 2019 card frauds have generally been increasing due to the fact that there has been a significant increase in card transactions and also an increasing relevance in card-not-present payments, which are done online. Card-not-present frauds have seen a significant increase from 2009 to 2019 due to the fact that online transactions have increased significantly.

In 2009 card-not-present scams were the most popular scams. These included the likes of credit card skimming and credit card cloning, since ATMs and POS's were much more popular in 2009. Due to near field communication technology and card-not-present technologies, also threats like eavesdropping, man-in-the-middle attacks, and phishing attacks have become possible and increasingly popular.

Due to the new card-not-present technologies transactions like online transactions have become increasingly more popular while point of sale transactions have been decreasing. The increasing implementation of EMV chips in credit cards have significantly decreased skimming attacks, since the EMV certified cards make sure that the cards cannot be cloned, meaning that skimming attacks have been significantly reduced from 2009 to 2019. Due to the EMV chips, physical transactions like paying with a physical card in a card reader, or using an ATM are much more safe in 2019 compared to 2009.

E-commerce and the internet have in general increased the risk of fraud significantly. Due to online payments raising the amount of transactions and payments made, the attackers also have more points of entry than ever before to make use of fraud. Online transactions becoming popular have also increased the types of card fraud significantly. Covid-19 pandemic raised the popularity of online transactions and it is still growing, meaning that fraud is also increasing.

Preventing data breaches is crucial in preventing card fraud since data breaches might include sensitive information like the user's credit card number, passwords etc. with this information hackers might be able to perform transactions with the user's credit card and also perform other malicious acts. Payment card tokenisation helps to prevent these situations since the sensitive card data in the data that is breached is replaced with a non-sensitive token, so the attacker can't get access to the sensitive card information.