



CREDIT CARD FRAUD ANALYSIS

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Agenda

- Introduction
- Insights
- Recommendations

The background is a dark gray grid of small white dots. Overlaid on this grid are various numbers in a light gray, monospace font. Some numbers are larger and more prominent, while others are smaller and more faded. A solid red rectangle is positioned in the top right corner.

INTRODUCTION

In an era dominated by digital transactions, credit card fraud has emerged as a formidable threat to financial security and consumer trust. With technological advancements, the methods employed by fraudsters have become increasingly sophisticated, necessitating a proactive approach to detection and prevention.

This report embarks on a comprehensive analysis of credit card fraud, seeking to uncover the evolving trends, modus operandi of fraudsters, and the countermeasures that financial institutions and individuals can employ to safeguard their assets.

The background is a dark gray grid of small dots. Overlaid on this grid are various numbers in a light gray, monospace font. Some numbers are larger and more prominent, while others are smaller and more faded. A solid red rectangle is positioned in the upper right corner of the image.

INSIGHTS

- In this Dataset 6,30,894 total Credit Card transactions details is available in which 383 are Fraud transactions which is about 0.061% of the total transaction.

TOTAL TRANSACTIONS	
6,30,894	
FRAUD TRANSACTION	FRAUD PERCENTAGE
383	0.061%

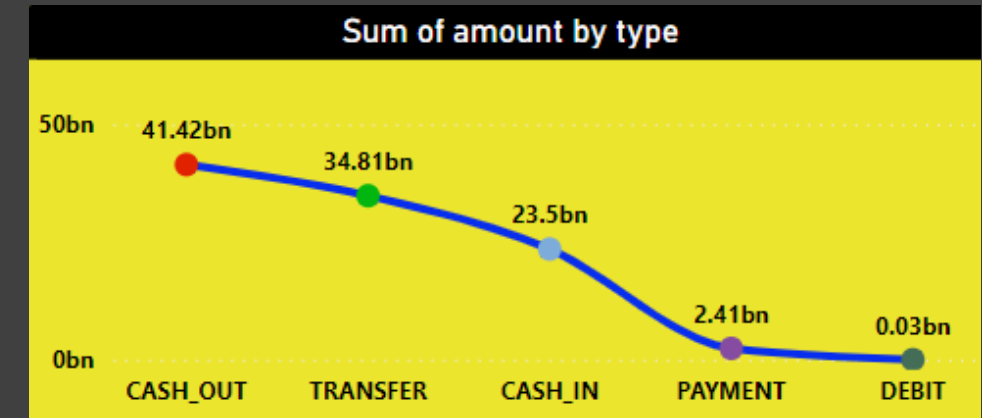
- Total Transaction amount is around 102bn where normal transaction is 101.83bn and Fraudulent transaction amount is 338 Million.

TOTAL TRANSACTION AMOUNT	
102bn	
FRAUD MONEY TRANSACTION	NORMAL MONEY TRANSACTION
338M	101.83bn

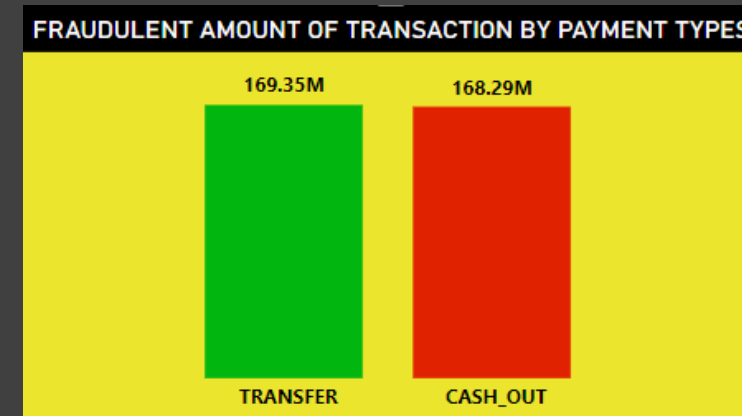
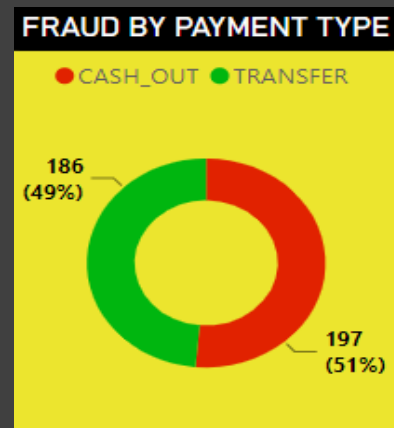
- Average Normal Transaction amount is 1,61,501 while Fraudulent Transaction amount is 8,81,588.

NORMAL	FRAUDULENT
1,61,501	8,81,588

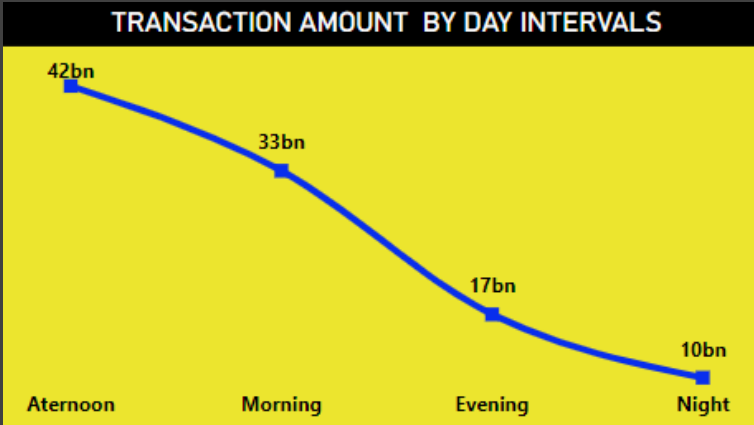
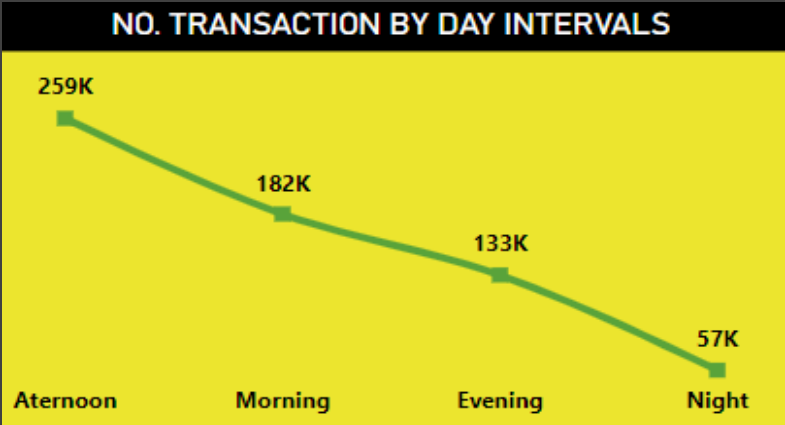
- Total Transaction is done by four type i.e., Cash out, Transfer, Cash In, Debit. In which money transaction by Cash out is 41.42Bn , by Transfer is 34.81bn, by Cash In is 23.5Bn and by Debit is 0.03Bn



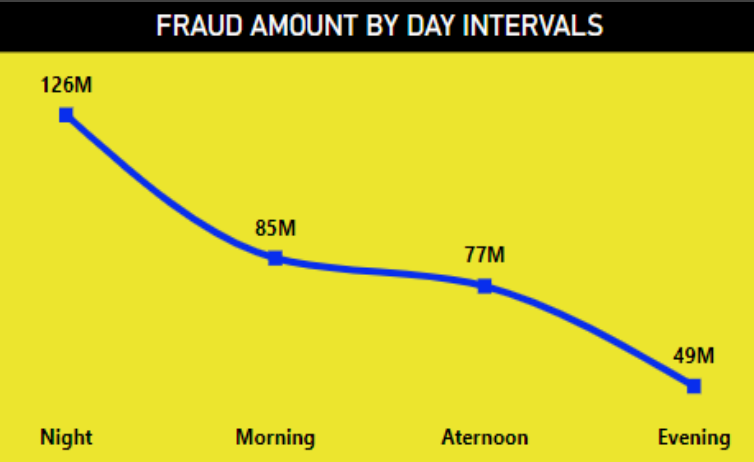
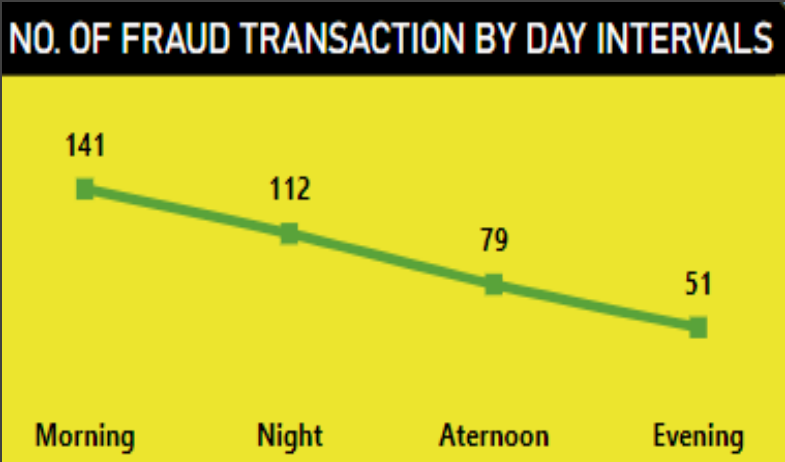
- In all the four types of transaction only in two types there is fraud i.e., Cash out and Transfer which is 168.29M and 169.35M.



- The Timing of the transactions is categories in four type i.e., Morning, Afternoon, Evening and Night. Highest to lowest number of transactions and also the amount is Afternoon, Morning, Evening and Night respectively.



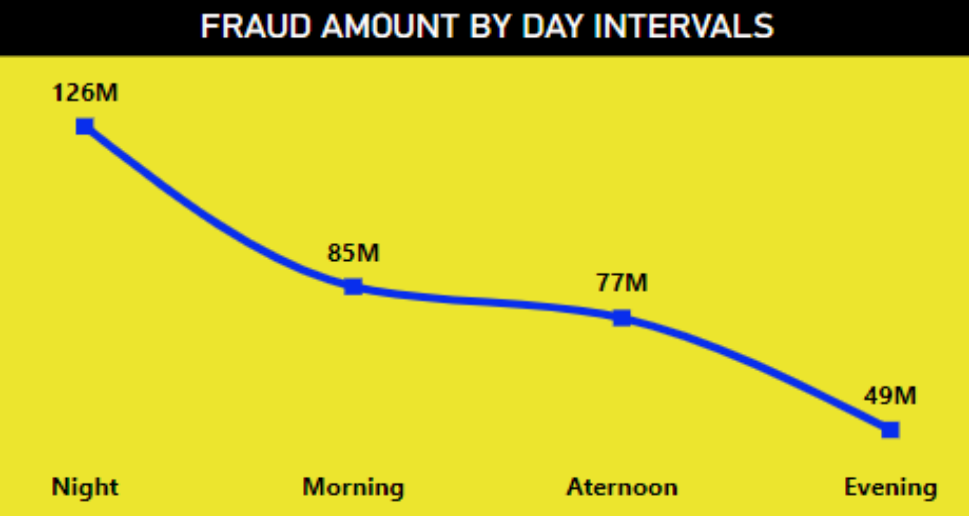
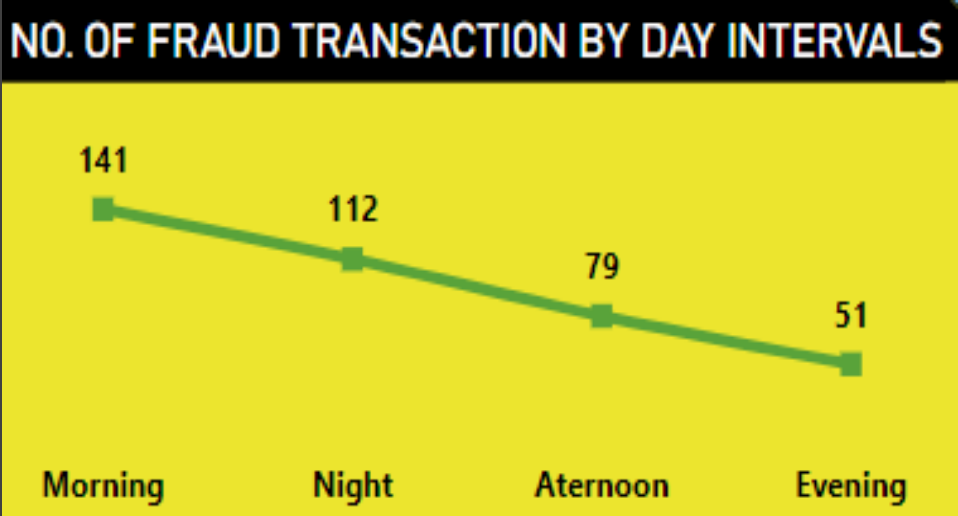
- Most Fraud has been done from Highest Number of transaction to lowest number is Morning, Night, Evening and Aternoon while the amount is Night, Morning, Aternoon and Evening.



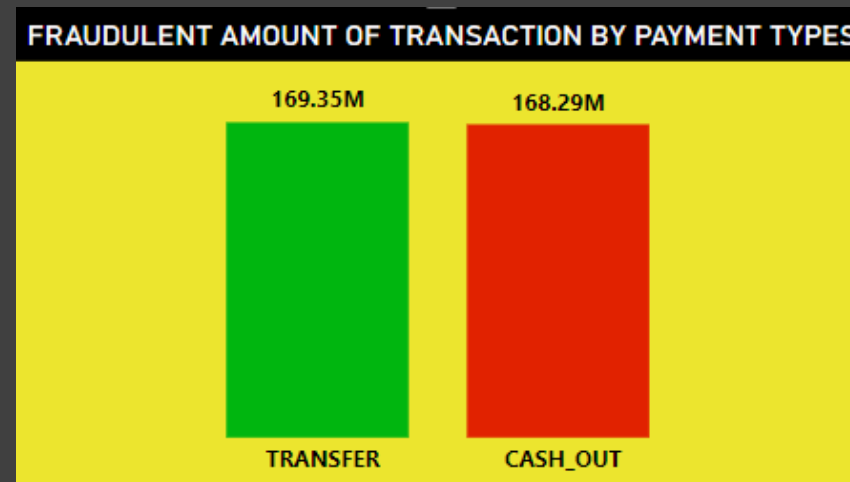
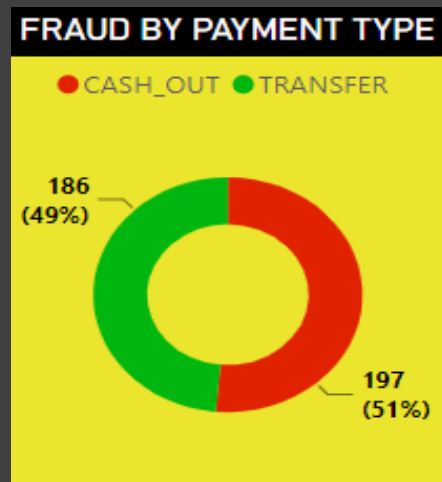
RECOMMENDATIONS

- As we can see the chances for a fraud is more in the Morning and in the Night than Afternoon and Evening so we should take care of not being frauded while making transactions in these day Intervals of time. We should double check and confirm all the details while making a transaction in these interval of days where fraud chances are more.

Whereas in second table we can see that in the Night time the transaction amount is very high that is in total 112 transactions the amount 126M is frauded that means high amount is being transacted in this interval of time. So for not being frauded we should take care that we are not doing transaction of a large amount in these day intervals.



- Payment types are categorized in four parts in which only in two of them fraudulent transactions are made i.e., Transfer and Cash Out which is 51% and 49% respectively and the amount that is being frauded by these types is also approximately same so to avoid being frauded by someone try to avoid these types of transaction until some security is increased and if you are making these transactions make sure to double check all the details before making the transactions.



Additional Things to Avoid Credit Card Frauds

- Never share your credit card details, including the card number, expiration date, CVV, or PIN, with anyone through email, phone calls, or social media.
- Be cautious about sharing personal information online and only do so on secure and trusted websites.
- Create complex passwords for your online accounts, including your credit card accounts. Use a combination of upper and lower case letters, numbers, and special characters.
- Regularly review your credit card statements for any unauthorized or suspicious transactions. Report any discrepancies to your bank or credit card provider immediately.
- Set up alerts for your credit card transactions. Many banks offer notifications for purchases over a certain amount or for online transactions.
- Do not click on links or download attachments from suspicious emails. Legitimate organizations will never ask you for sensitive information through email.
- Avoid making online purchases or accessing your credit card accounts over public Wi-Fi networks. Use a secure and trusted connection.
- Keep your computer and mobile devices protected with up-to-date security software to guard against malware and phishing attacks.
- Only make online purchases from reputable and well-known websites. Avoid using your credit card on unfamiliar or suspicious-looking sites.
- Enable two-factor authentication for your online accounts, including your credit card accounts, if the option is available. This adds an extra layer of security.
- Obtain and review your credit reports from major credit bureaus at least once a year. Look for any unusual activity that might indicate fraud.
- Don't write down your credit card details or PIN and avoid carrying them unnecessarily. Store physical cards in a secure place.

Thank You !