102,1...
TOTAL AMOUNT

0.88M

AVG FRAUDUII FNT TR

0.16M

**AVG NORMAL TRANS..** 

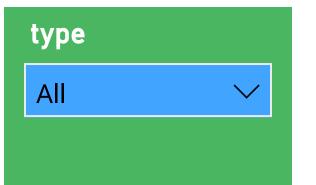
10M HIGHEST FRAUD AM...

**6M**HIGHEST NORMAL A...

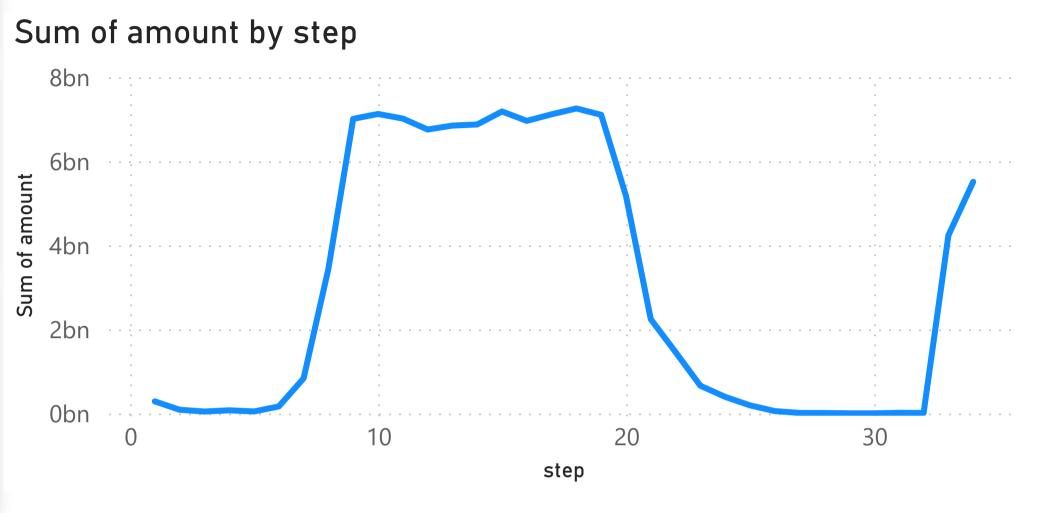
**-4M**DIFFERENCE IN NOR...

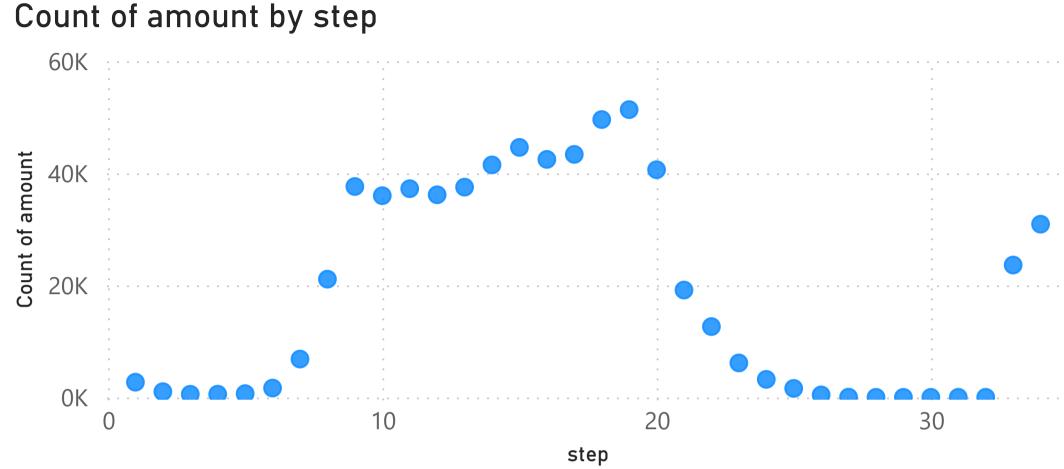
## **Anomaly Detection Analysis in Credit Card**

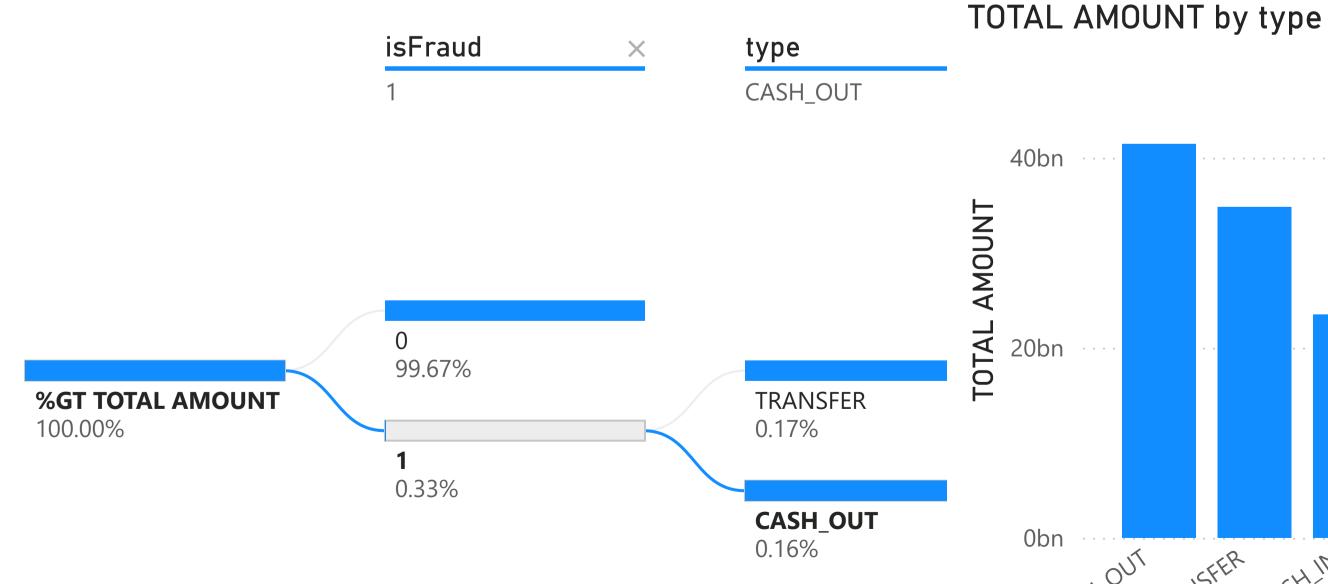


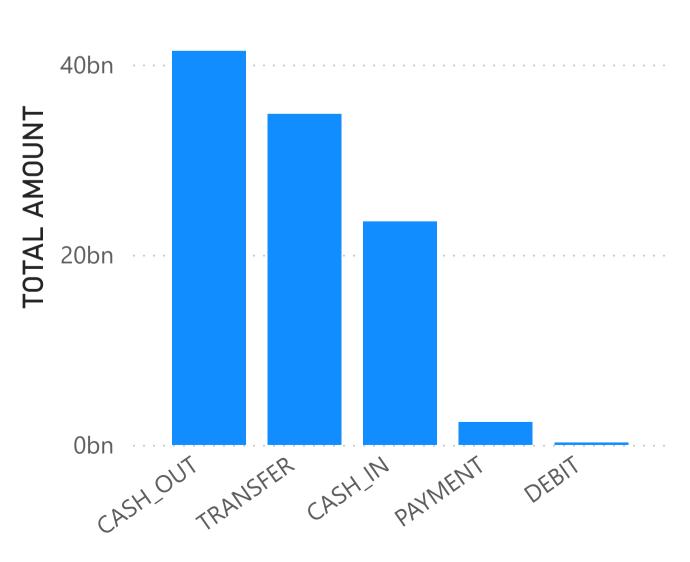












At 7,255,071,578.26, 18 had the highest Sum of amount and was 743,856.60% higher than 30, which had the lowest Sum of amount at 975,200.92.

18 accounted for 7.10% of Sum of amount.

Across all 34 step, Sum of amount ranged from 975,200.92 to 7,255,071,578.26.

type



	nameOrig	nameDest	type	Sum of amount	Sum of newbalanceOrig	Sum
	C1439740840	C875288652	TRANSFER	10000000.00	9,887,819.06	
	C2050703310	C1622860679	CASH_OUT	10000000.00	0.00	
	C29118015	C1379703840	CASH_OUT	10000000.00	0.00	
	C351297720	C766681183	CASH_OUT	10000000.00	0.00	
	C416779475	C380259496	TRANSFER	10000000.00	1,861,008.32	
	C7162498	C945327594	TRANSFER	10000000.00	2,930,418.44	
	C1071702423	C28783325	CASH_OUT	9887819.06	0.00	
	C1548903046	C2065423383	TRANSFER	9887819.06	0.00	
	C1612816859	C836514715	CASH_OUT	6648389.90	0.00	
	C67311634	C674603923	TRANSFER	6648389.90	0.00	
	C890128330	C1192472312	TRANSFER	6419835.27	0.00	
	C135832352	C2009346140	TRANSFER	6188514.81	0.00	
	C686187434	C1562904239	CASH_OUT	6188514.81	0.00	
	C2022065686	C460989529	TRANSFER	6072832.27	0.00	
	C293394374	C1856036778	TRANSFER	5677662.29	0.00	
	C1588880909	C1570256460	CASH_OUT	5460002.91	0.00	
	C666654362	C1726301214	TRANSFER	5460002.91	0.00	
	C574755786	C1737918957	TRANSFER	5082871.40	0.00	
	C551242513	C66893623	TRANSFER	5077695.81	0.00	
	C1520365660	C1308026520	CASH_OUT	5021186.54	0.00	
	C1848562108	C1803198527	TRANSFER	5021186.54	0.00	
	C59768119	C1387210478	TRANSFER	4923413.80	0.00	
	Total			102165491896.61	572,888,177,554.4	type

type CASH\_IN CASH\_OUT DEBIT PAYMENT TRANSFER

isFraud, type, step ∨ □ 0

631K allMeasure

TOTAL NO OF TRANSACTIONS total\_no\_of\_fraud\_transaction allMeasure %offraudtransaction CASH\_IN 137157 630894 CASH\_OUT 0.03% 224013 197 630894 DEBIT 4769 630894 213374 630894 PAYMENT 0.03% TRANSFER 51581 186 630894 **Total** 630894 383 630894 0.06%

## INSIGHTS

- The visualizations are used to derive the following insights:
- The total number of transactions recorded is 630894 with 383 fraud transactions. The percentage of fraudulent

transactions is 0.06%.

- The fraud transactions happened only in cash-out type and transfer-type payments.
- The total number of transactions that happened in cash-out type payments is 224K with 197 fraud transactions. The

percentage of fraudulent transactions for cash-out payments is 0.09%.

- The total number of transactions that happened in transfer-type payments is 52K with 186 fraud transactions. The
- percentage of fraud transactions for transfer payments is 0.36%.
- The highest number of frauds happened in transfer-type payments which means that proper safety is to be ensured

for this payment type along with the cash-out type.

- The maximum fraud amount was 10M and was done with 6 individuals.
- 3 different customers were targeted twice with the maximum fraud amount of 828720 at once.
- The total amount is approximately 102 billion.
- The most used payment type is cash-out with 224K transactions and a total amount of