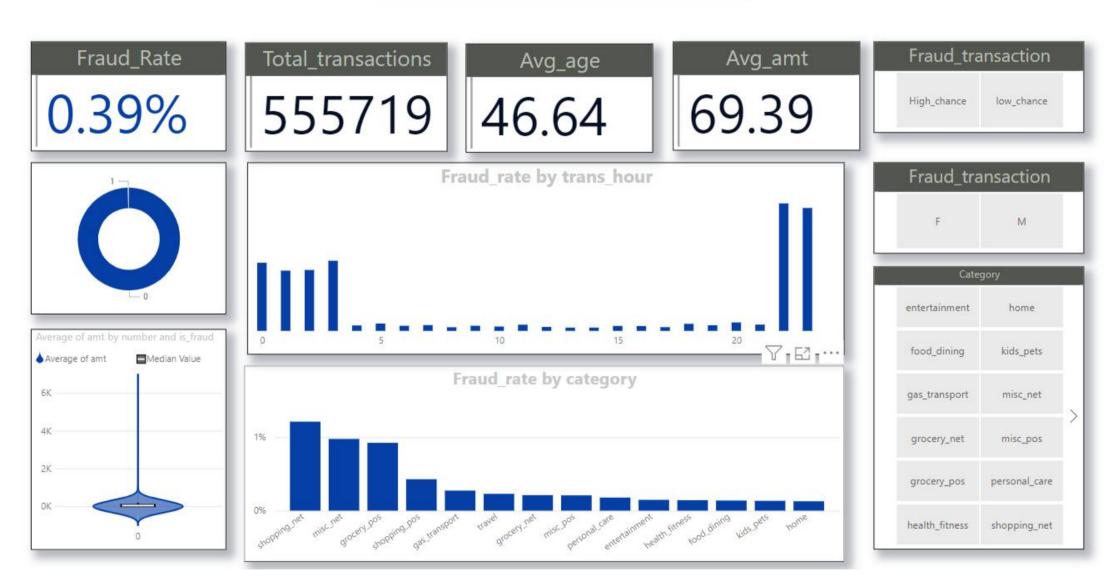
## **CC Transactions Fraud Detection**



category
shopping_net
misc_net
grocery_pos
shopping_pos
gas_transport
travel

trans_hour	fraud_rate
22	1.94%
23	1.87%
3	1.07%
0	1.04%
2	0.93%
1	0.92%
20	0.13%
	0.39%

chance	fraud_rate	category
High_chance	0.48%	entertainment
High_chance	0.43%	food_dining
High_chance	0.69%	gas_transport
High_chance	0.58%	grocery_net
Total	0.39%	

trans_month	fraud_rate
10	0.55%
9	0.49%
8	0.47%
6	0.44%
11	0.40%
7	0.37%
12	0.18%
	0.39%

fraud_rate ▼	state
1.66%	AK
1.22%	СТ
0.88%	ID
0.83%	н
0.73%	MT
0.66%	DC
0.63%	IN
0.39%	

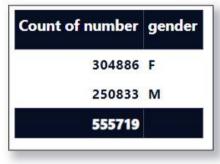
fraud_rate ▼	trans_day
0.70%	4
0.69%	5
0.62%	8
0.60%	25
0.54%	11
0.50%	12
0.46%	7
0.39%	

fraud_rate	gender	Avg_age
0.38%	F	46.57
0.39%	М	46.72
0.39%		46.64

Average of Age	is_fraud
46.63	0
48.74	1
46.64	

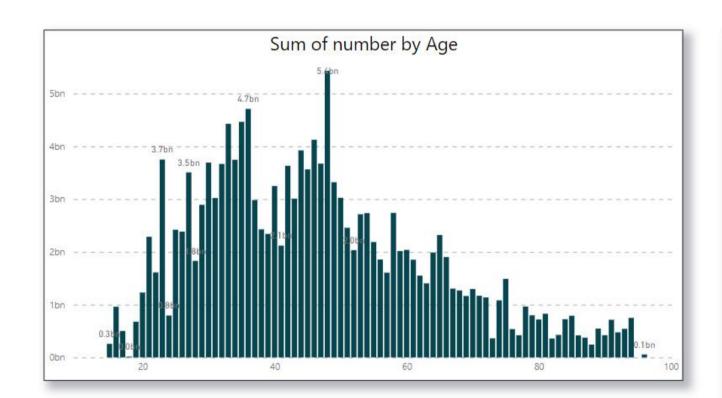
category	Count of number
entertainment	40104
food_dining	39268
gas_transport	56370
grocery_net	19426
grocery_pos	52553
health_fitness	36674
home	52345
Total	555719

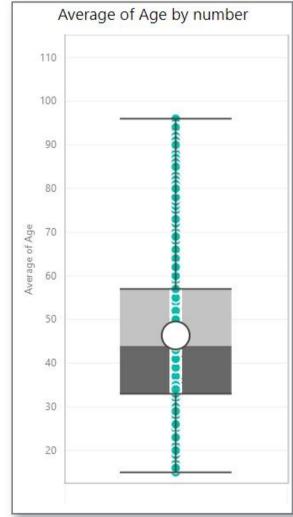
Count of number	merchant
803	fraud_Abbott-Ro
766	fraud_Abbott-Ste
762	fraud_Abernathy
838	fraud_Abshire PL
414	fraud_Adams, Ko Kuhlman
789	fraud_Adams-Ba
555719	

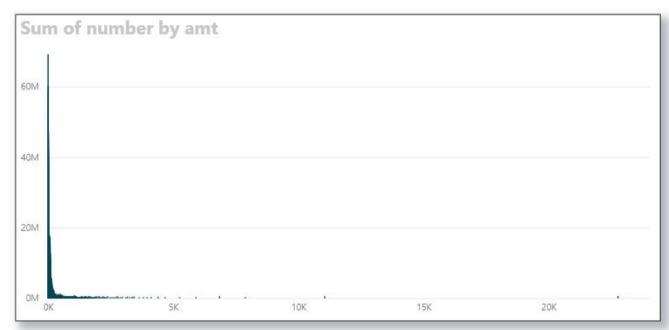


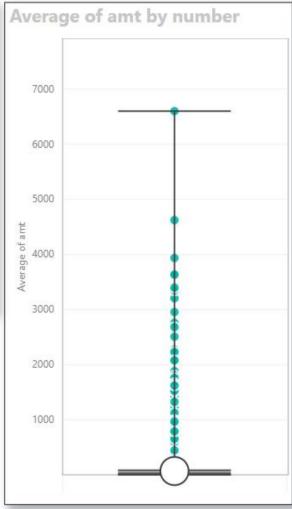
job
Academic librarian
Accountant, chartere
Accountant, chartere
Accounting technicia
Acupuncturist
Administrator

Count of number	city
208	Achille
828	Acworth
223	Adams
897	Afton
222	Akron
423	Albany
454	Albuquerque
555719	

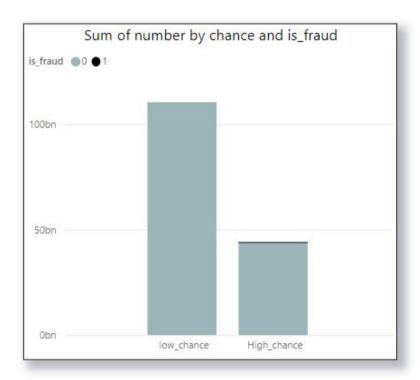








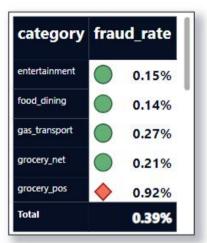
is_fraud	High_chance	low_chance	Total
0	28.27%	71.73%	100.00%
1	85.50%	14.50%	100.00%
Total	28.49%	71.51%	100.00%



is_fraud	F	М	Total
0	54.87%	45.13%	100.00%
1	54.27%	45.73%	100.00%
Total	54.86%	45.14%	100.00%



chance	fraud_rate
High_chance	<b>1.16</b> %
low_chance	0.08%
Total	0.39%



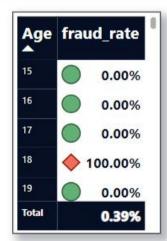
gender	frau	ıd_rate
F		0.38%
М	<b>\Q</b>	0.39%
Total		0.39%

trans_month	frau	ıd_rate
6	<b>\Q</b>	0.44%
7		0.37%
8	$\Diamond$	0.47%
9	<b>\Q</b>	0.49%
10	$\Diamond$	0.55%
11		0.40%
Total		0.39%









category	Avg_age	Count of number	fraud	rate	chance	Average of amt
shopping_net	47.40	12333	<b>\Q</b>	3.50%	High_chance	103.93
misc_net	47.87	8902	<b>\langle</b>	2.66%	High_chance	89.76
grocery_pos	47.54	17664	<b>A</b>	2.35%	High_chance	118.44
shopping_pos	47.69	14064		1.32%	High_chance	82.79
gas_transport	48.49	18895		0.69%	High_chance	63.45
travel	49.03	4379		0.66%	High_chance	110.42
personal_care	47.65	9960		0.61%	High_chance	48.44
misc_pos	45.75	10317		0.60%	High_chance	62.37
grocery_net	39.63	6520		0.58%	High_chance	53.47
entertainment	47.79	10669		0.48%	High_chance	64.11
health_fitness	46.82	9118		0.46%	High_chance	53.73
Total	46.64	555719		0.39%		69.39

Count of number	Age	percentage_total
963	15	0.17%
3471	16	0.62%
1858	17	0.33%
12	18	0.00%
2479	19	0.45%
4388	20	0.79%
555719		100.00%

percentage_total	is_fraud	Count of number
99.61%	0	553574
0.39%	1	2145
100.00%		555719

Count of number	percentage_total	trans_day
22440	4.04%	28
22198	3.99%	30
21815	3.93%	29
21619	3.89%	22
21436	3.86%	27
21151	3.81%	21
19426	3,50%	7
555719	100.00%	

age_total	percer	trans_hour	Count of number
5.18%		23	28798
5.14%		16	28563
5.11%		22	28388
5.08%		21	28205
5.08%		14	28204
5.07%		13	28178
5.05%		17	28064
100.00%			555719

percentage_total	trans_month	Count of number
25.11%	12	139538
15.97%	8	88759
15.45%	7	85848
13.07%	11	72635
12.51%	9	69533
12.48%	10	69348
5.41%	6	30058
100.00%		555719