

Credit Card Campaign

Analyzing 18,000 existing Bank Customers

Advertising method

- *Post Card*
- *Letter*

Reward type

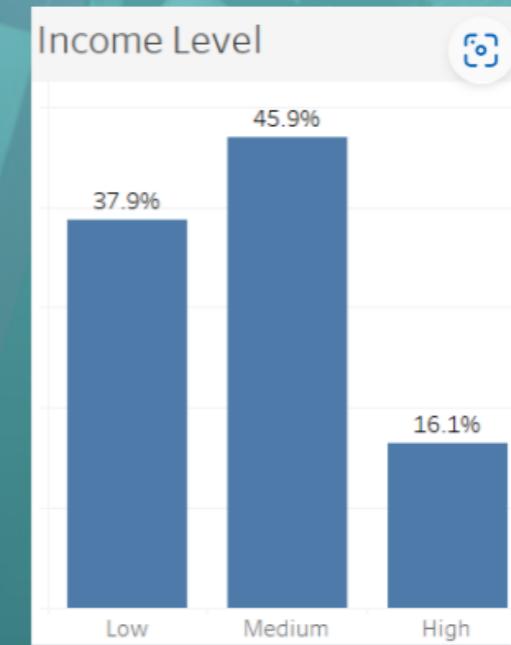
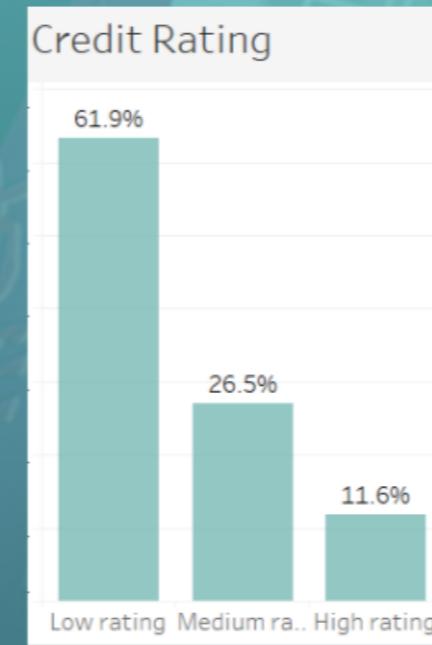
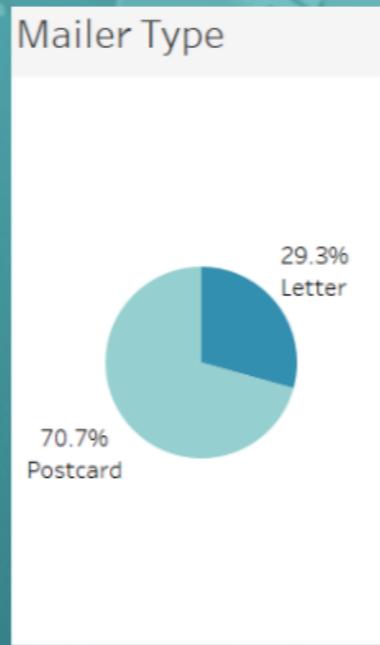
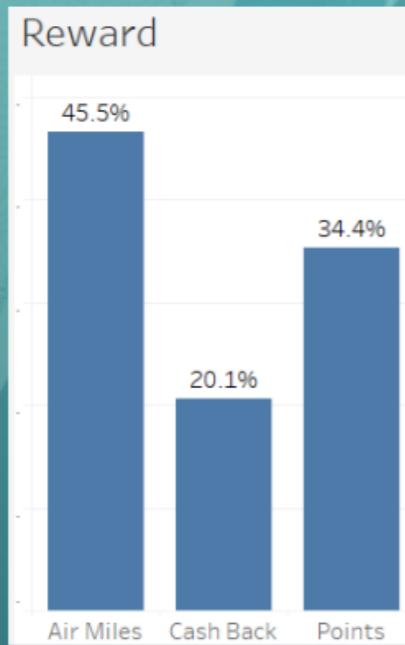
- *Miles*
- *Cash back*
- *Points*

Credit rating chosen

- *Low*
- *Medium*
- *High*

offer accepted	offer declined
1023 (5.68%)	16,977 (94.32%)

The most influential parameters



- *Air Miles and Points are much more effective as a reward*
- *Sending offers by postcard over 2 times more efficient*
- *The lower credit rating is - the higher chances that the offer will be accepted*
- *Customers with higher income less likely to accept new credit card*

offer accepted

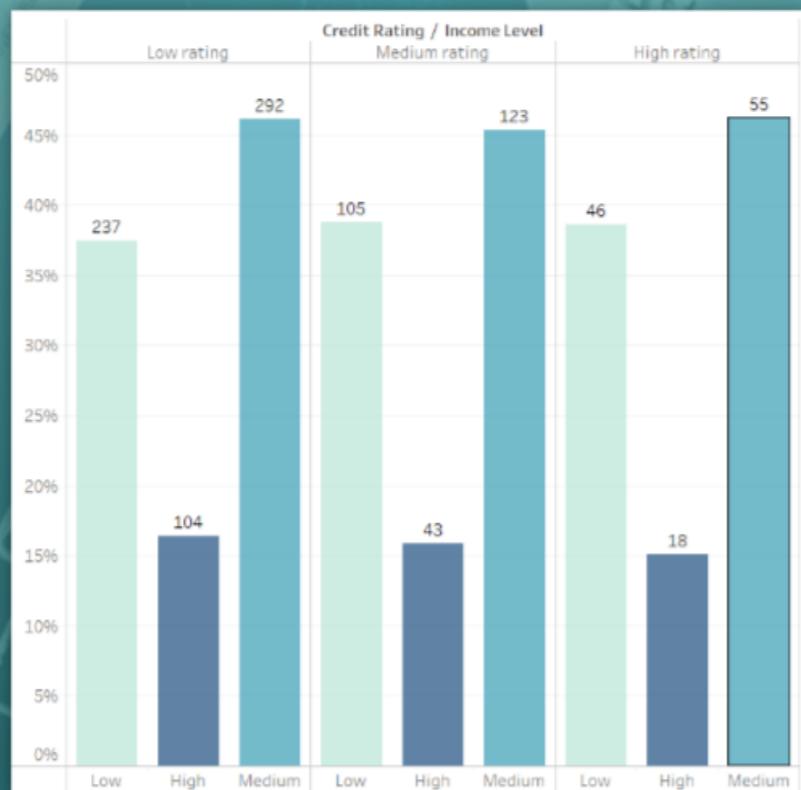
2023 (5.68%)

offer declined



There could be some reasons

- ~ 95% of our customers already own 1 or more credit cards
- Their income is too high (customers with high income ~2.4 times less likely to accept credit card offer)
- Customers with high credit rating would only accept offer in 1.96% cases



Side note 1:

	high credit score	medium credit score	low credit score
high income	15.13%	15.87 %	16.43 %
medium income	46.22 %	45.39%	46.13 %
low income	38.66%	38.75%	37.44 %

Side note 2:

We did not spot significant correlation with other parameters that we had (such as amount of houses owned, average balance, size of household)

Machine Learning Model

94.3% vs 5.7 % Class imbalance

Best performing model: Gradient Boosting

	True	False
NO	71.12 % (2659)	22.70 % (693)
YES	77.3 % (2358)	28.88% (1081)

Overall Accuracy 74%



Conclusions

As the next step, we could:

- Run the next campaign and advertise our offer to new, potential customers
- Promote our offer to current customers without credit card
- Use post-card as a main mailing option
- Make an accent on Travel Miles and Points as our reward
- Advertise our credit cards online and by e-mail