



Flying Whales Airlines

Data Analysis Report



FlyingWhale Airline, a prominent international airline, seeks to enhance its business intelligence capabilities by analyzing Customer Flight Activity and Customer Loyalty History data. This analysis aims to optimize customer experience, understand travel patterns, and maximize the effectiveness of its loyalty programs.



Data overview



The analysis is based on two key datasets:

1. Customer Flight Activity:

- Loyalty Number: A unique identifier for each customer's loyalty account.
- Year and Month: Period details for analysis.
- Flights Booked: Number of flights booked by the member during the period.
- Flights with Companions: Number of flights booked with additional passengers.
- Total Flights: Combined total of Flights Booked and Flights with Companions.
- Distance: Flight distance traveled in kilometers during the period.
- Points Accumulated: Loyalty points earned in the period.
- Points Redeemed: Loyalty points redeemed during the period.
- Dollar Cost Points Redeemed: Dollar equivalent for points redeemed in Canadian Dollars (CDN).

2. Customer Loyalty History:

- Demographics: Country, Province, City, Postal Code, Gender, Education, Salary, Marital Status.
- Loyalty Card: Current loyalty card status.
- Customer Lifetime Value (CLV): Total invoice value for all flights ever booked by the member.
- Enrollment Details: Enrollment Type (Standard / 2018 Promotion), Enrollment Year, Enrollment Month.
- Cancellation Details: Cancellation Year and Month if applicable.



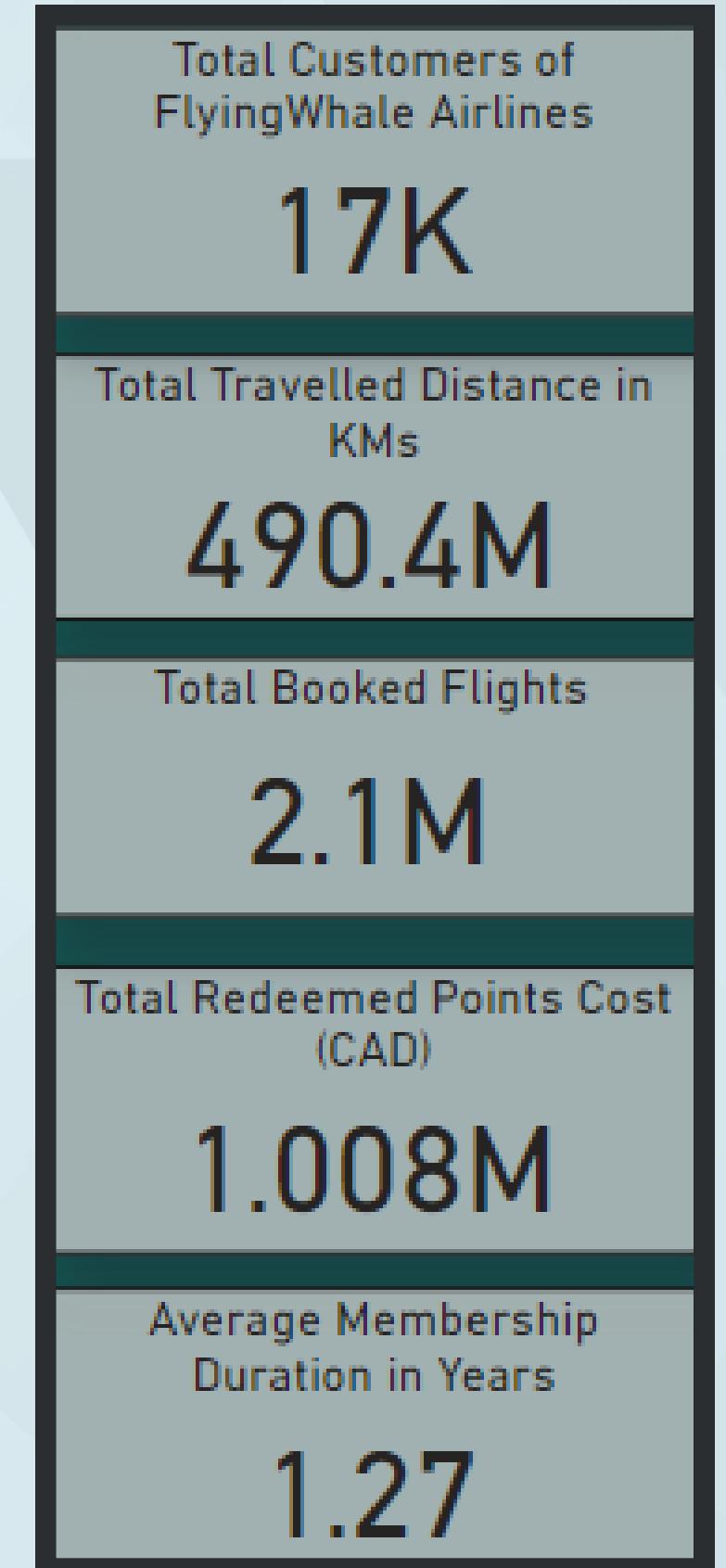
Analysis

The data is analysed using Power BI to generate key insights from customers' flight activity, their trends in booking flights keeping in view their demographics. The loyalty and lifetime values of memberships are also looked over to enhance customer experience and retention of enrollments.



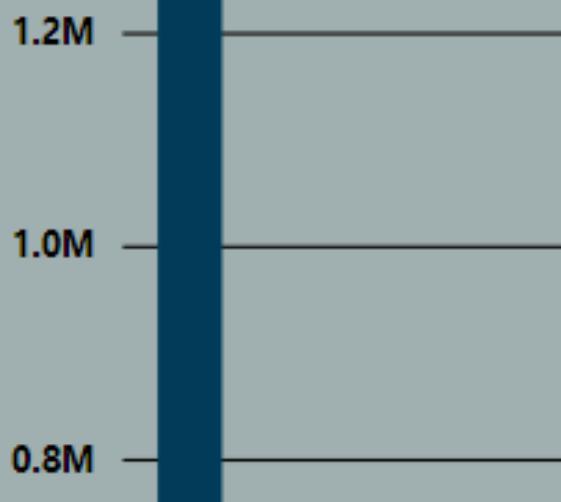
KPIs

- The total number of customers ever enrolled and used the flying whales airlines are 17000.
- The total distance travelled by this airline is 490 million KMs.
- 2M+ flights are booked for this airline.
- The customers have redeemed their accumulated points of worth 1M+ Canadian Dollars, which is a massive amount.
- Average membership duration of customers is 1.27 years.

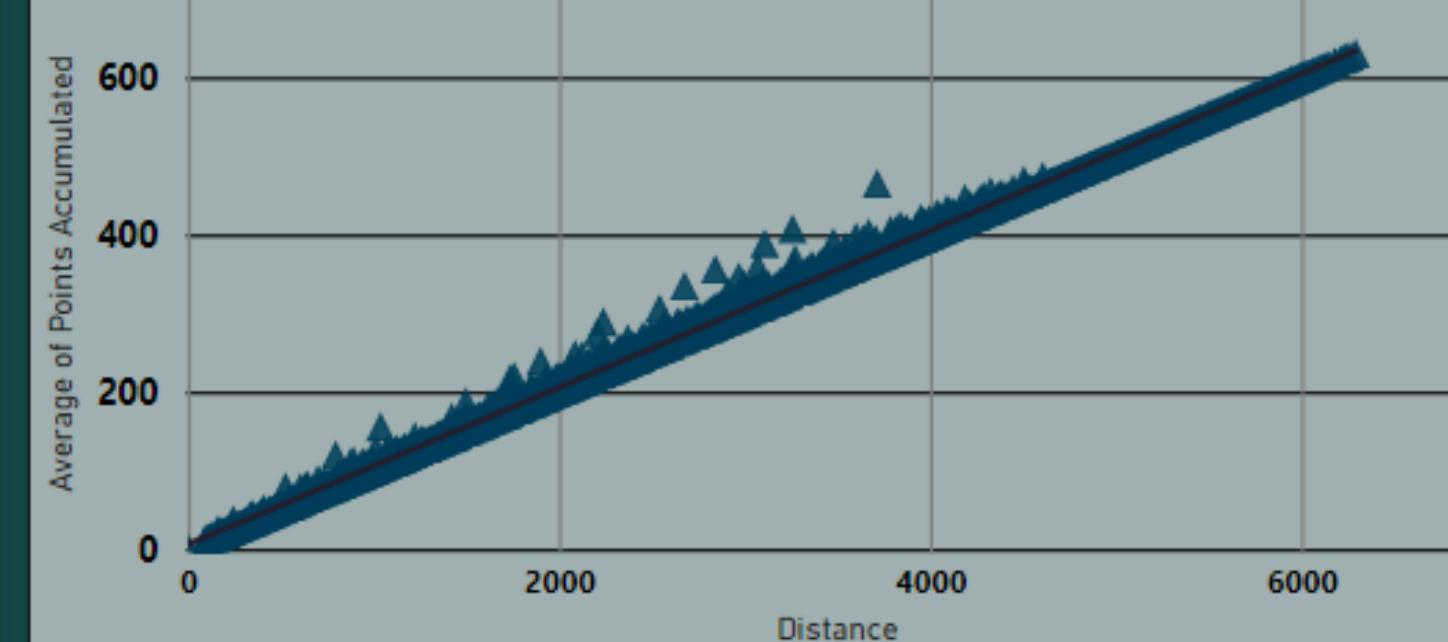


Total Flights by Education

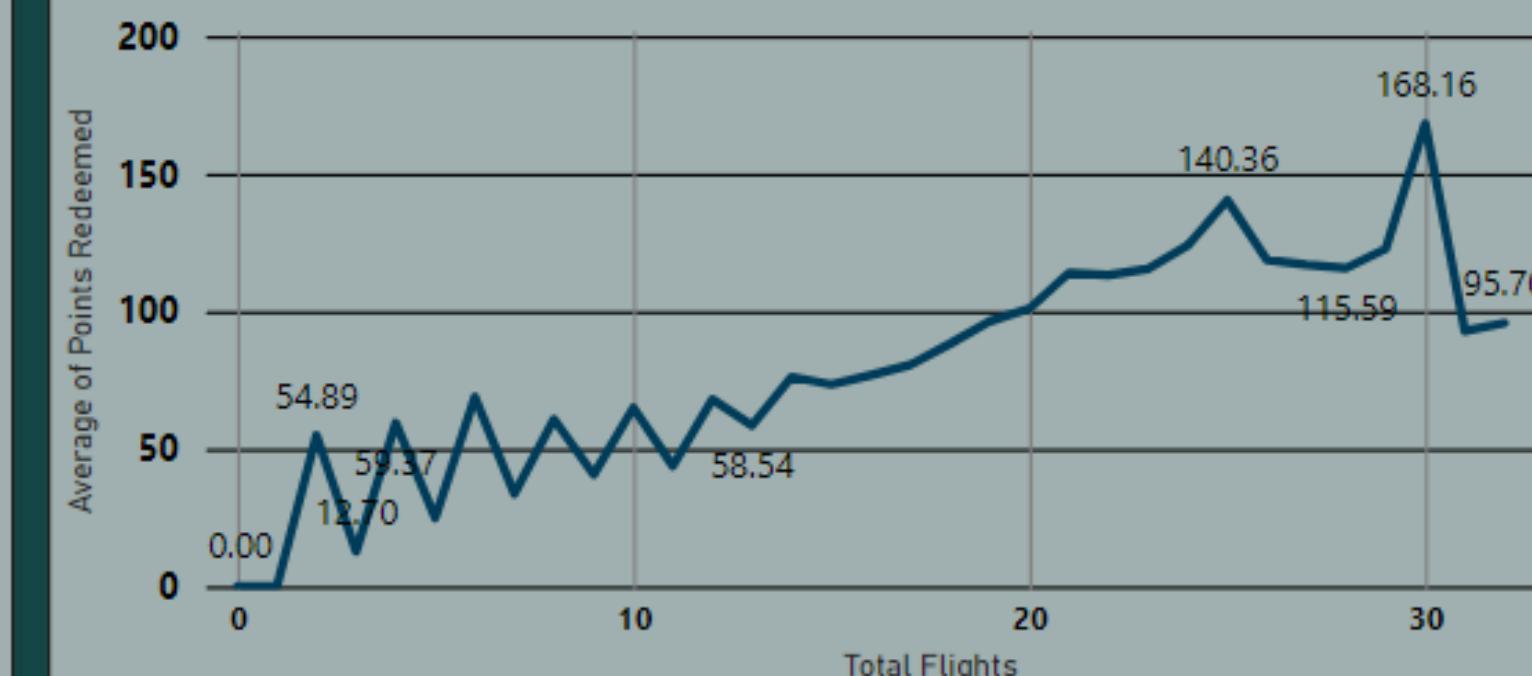
1.30M



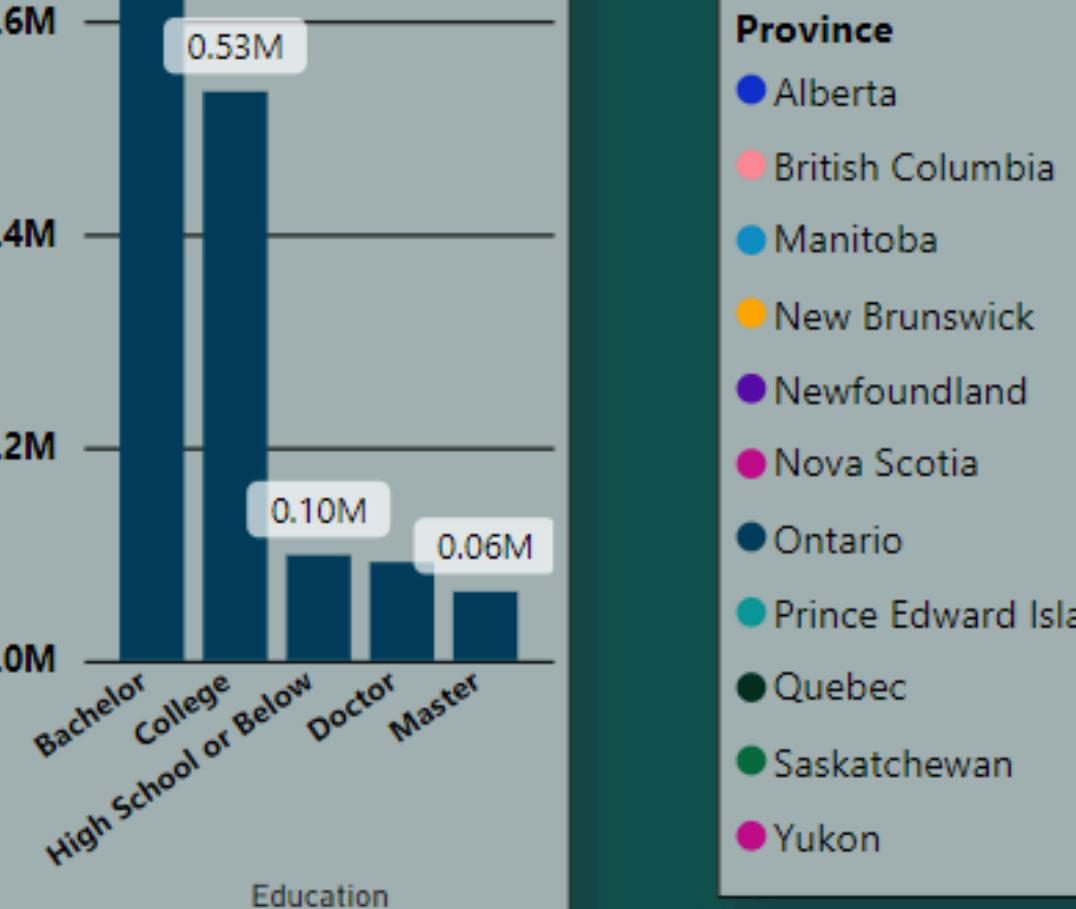
Average Accumulated Points by Distance



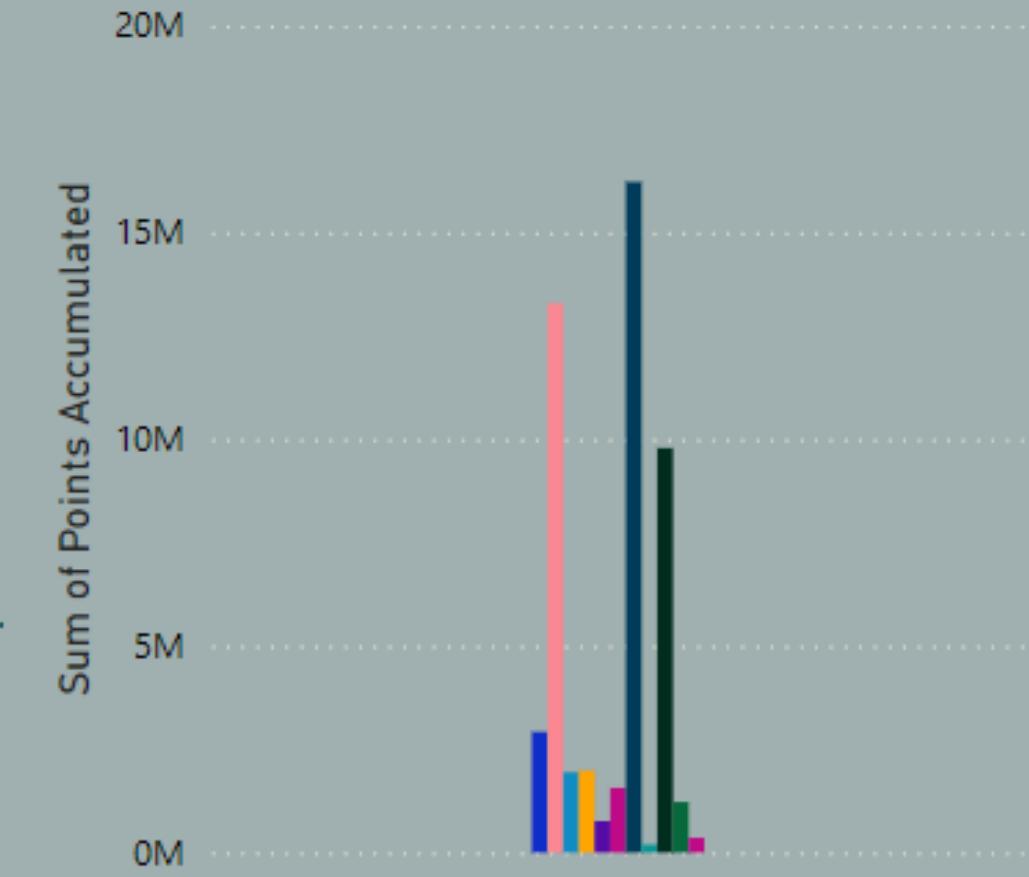
Average Points Redeemed by Total Flights



Total Points Redeemed



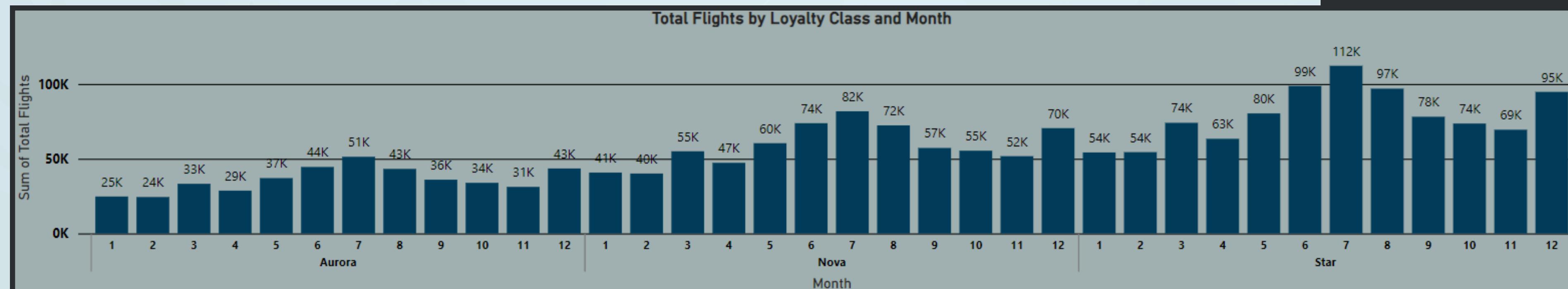
Total Accumulated Points

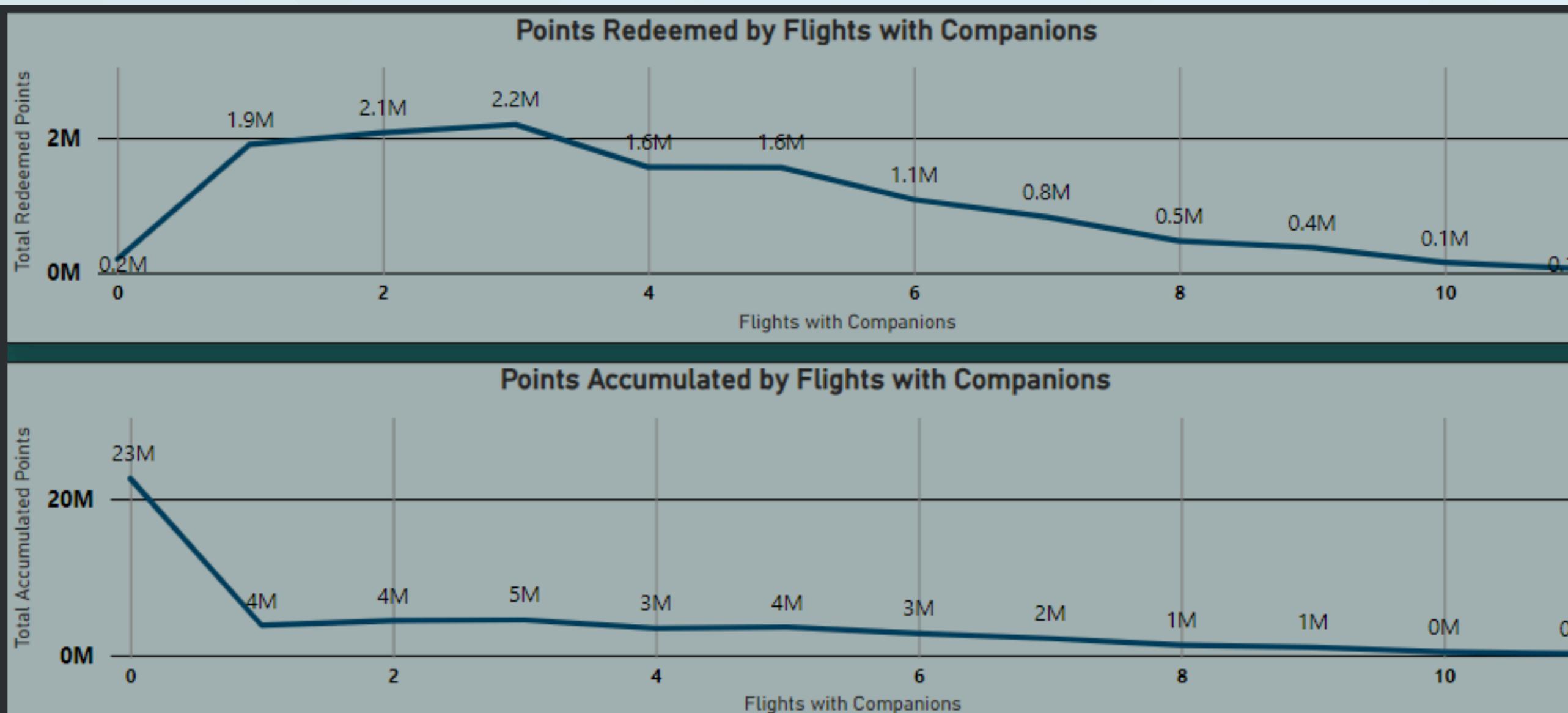
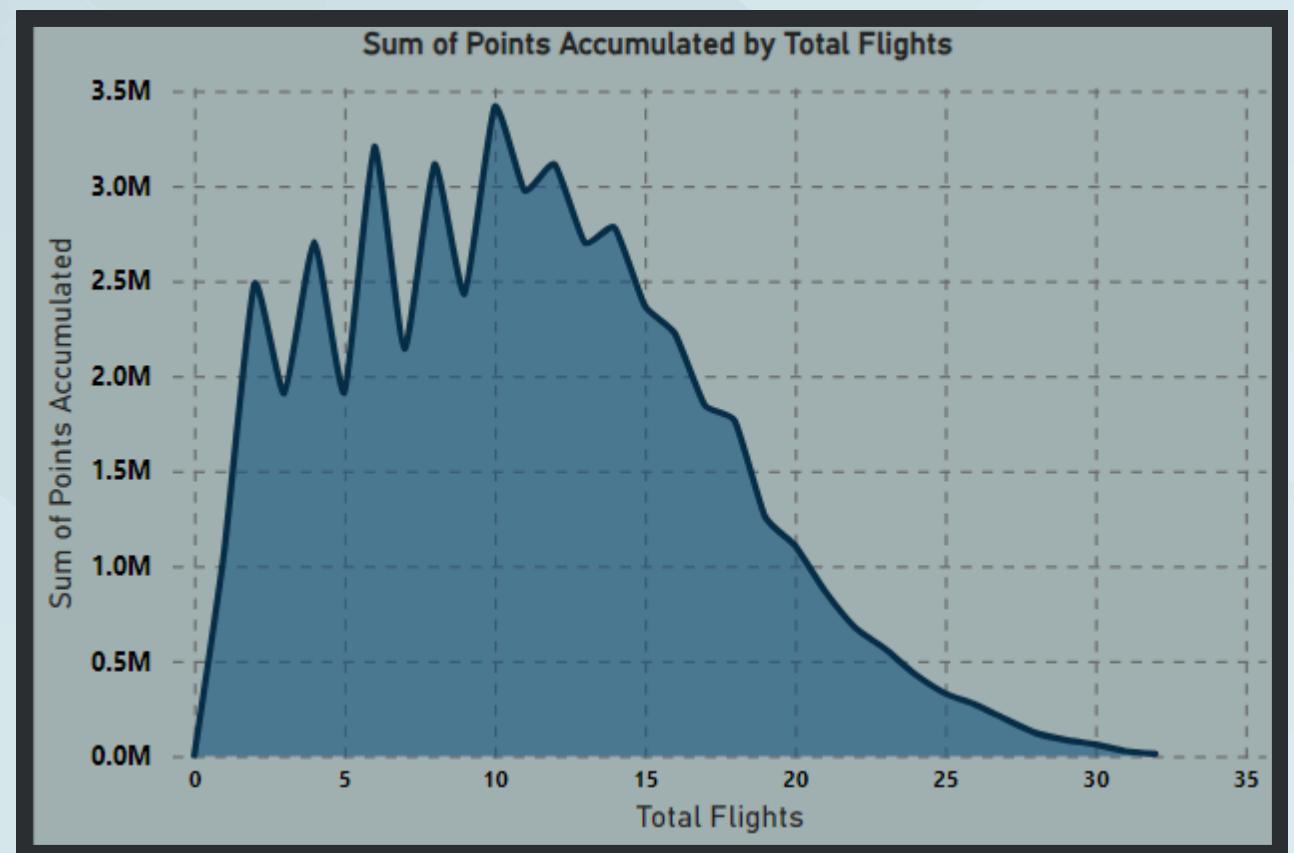


Findings

The study of data shows that:

- There is a strong positive correlation between the distance travelled and the points accumulated by customers. However the points redeemed by members with their total booking have slight ups and downs.
- It is seen that Ontario is accumulating and redeeming the most points.
- For each Loyalty Class, the most popular month for booking of flights is July and more than 50% of the members booking these flights are Bachelors by education.





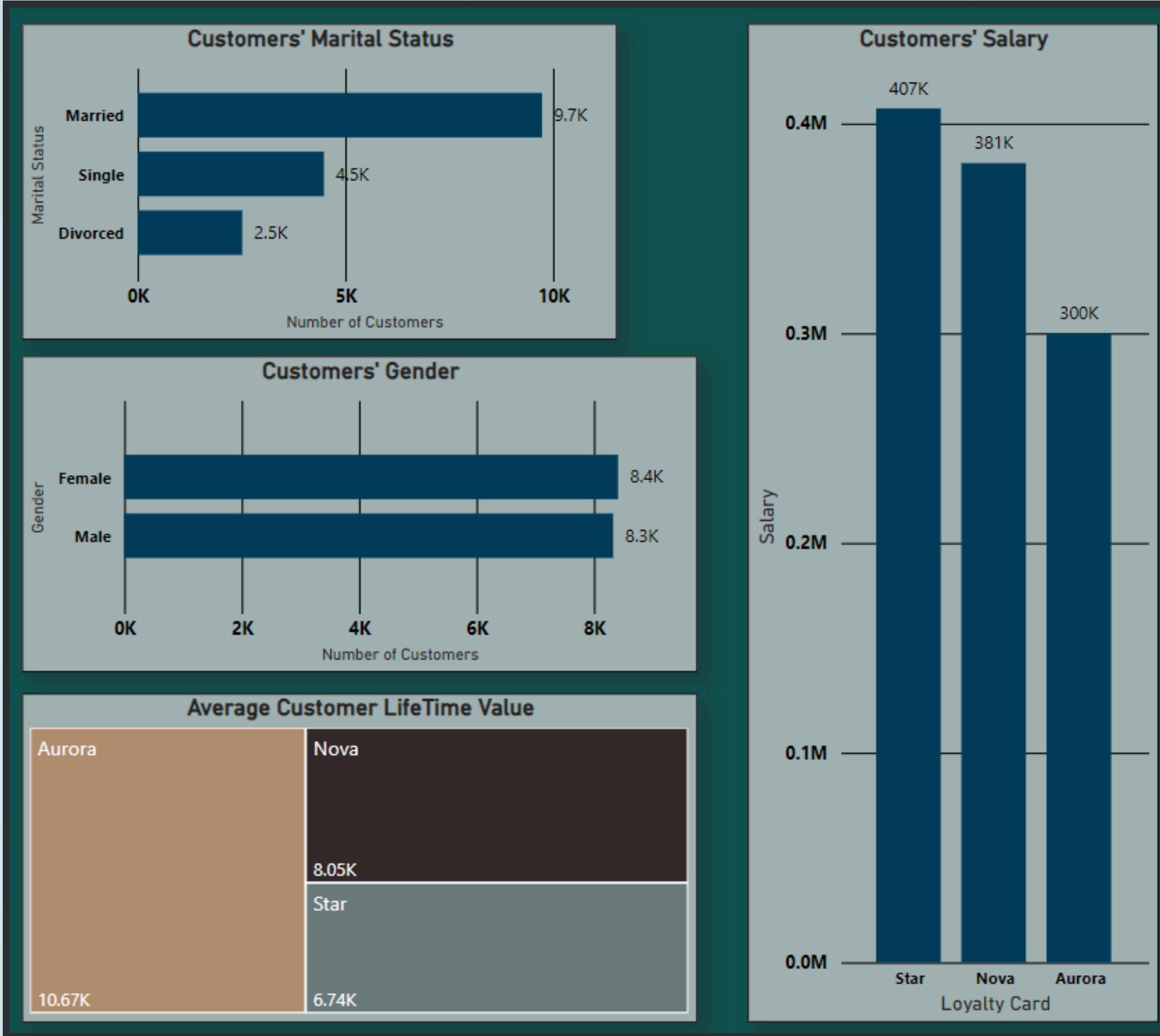
Most of the points are gathered by members with 10 flights altogether, and it is seen that they are travelling alone for half of the flights to earn these points.

These members are seen utilizing the points when booking the other half of flights with some partners.

It means that there is a ratio of 1:1 for travelling alone and with companions and accumulating and redeeming points at the same time.

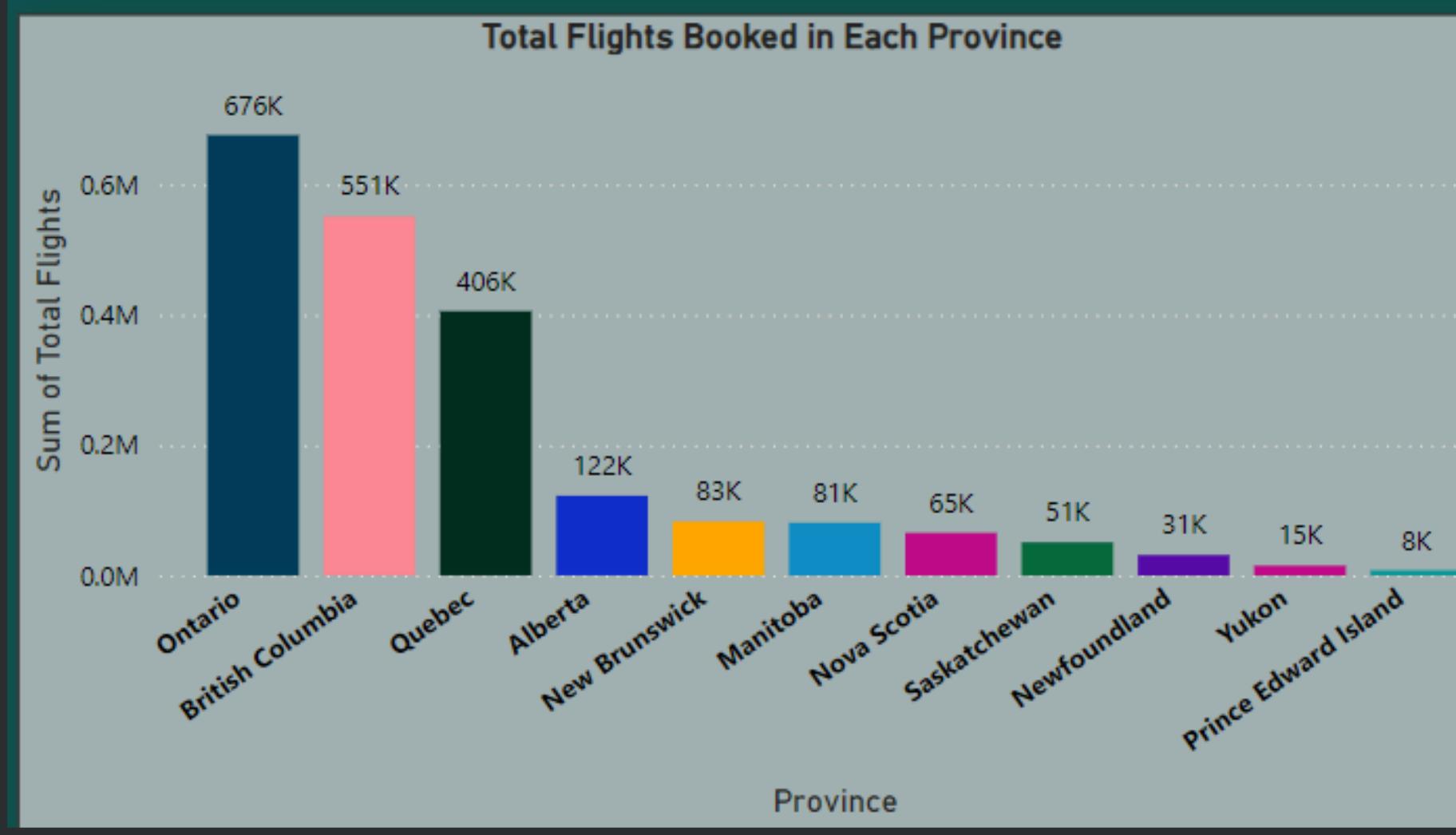
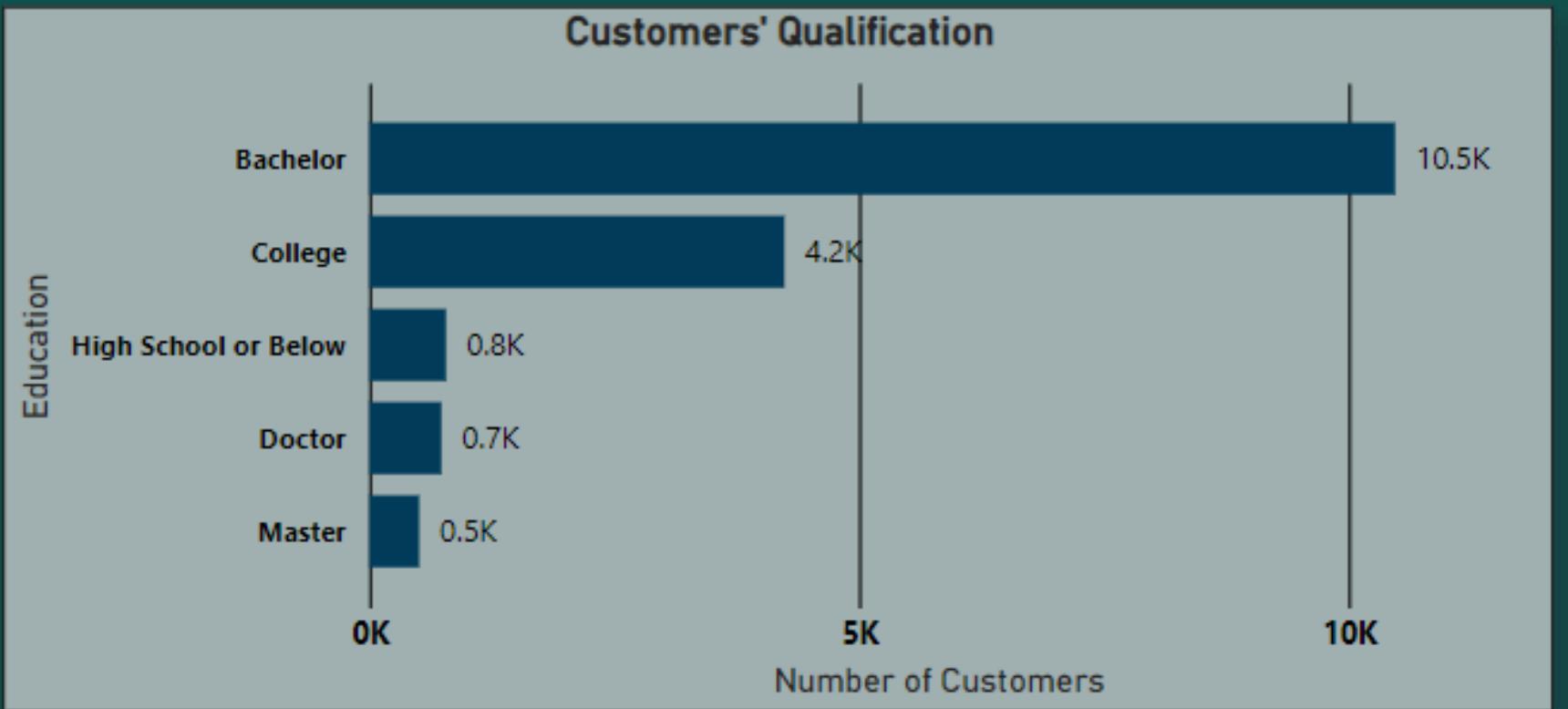
While, overall graphs says that the most points are redeemed by members reserving 3 flights with companions.

Demographic Analysis



- According to the status, loyalty card Star is the most popular with most offers and facilities, then comes the Nova and Aurora is the least with opportunities.
- However, Aurora carries most loyal customers with greatest lifetime value, and the salary status of Star Card holders is greatest compared to Aurora.
- Most Customers are married but the gender does not have any significant impact on the airlines.

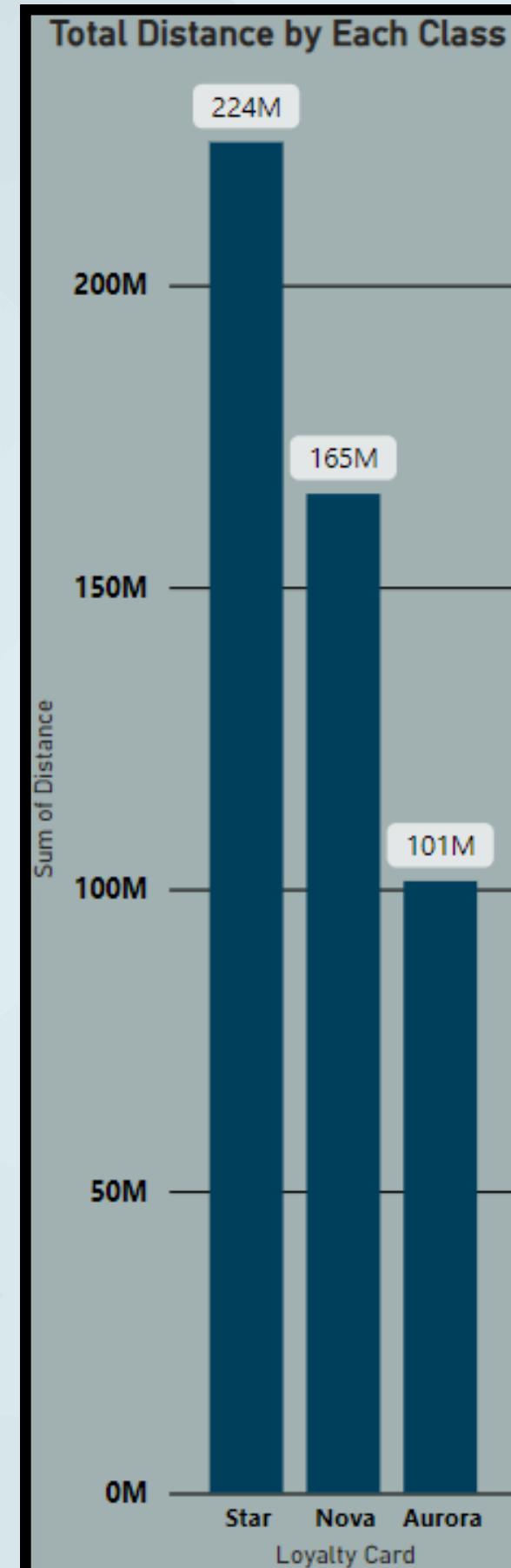
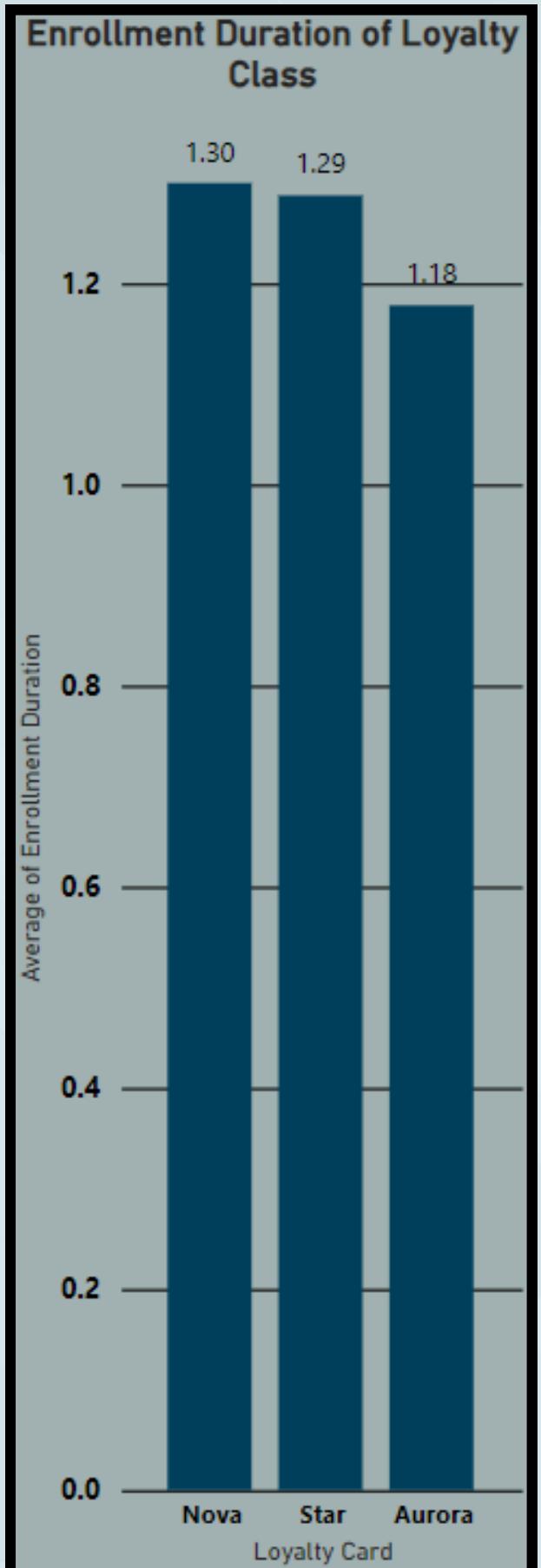




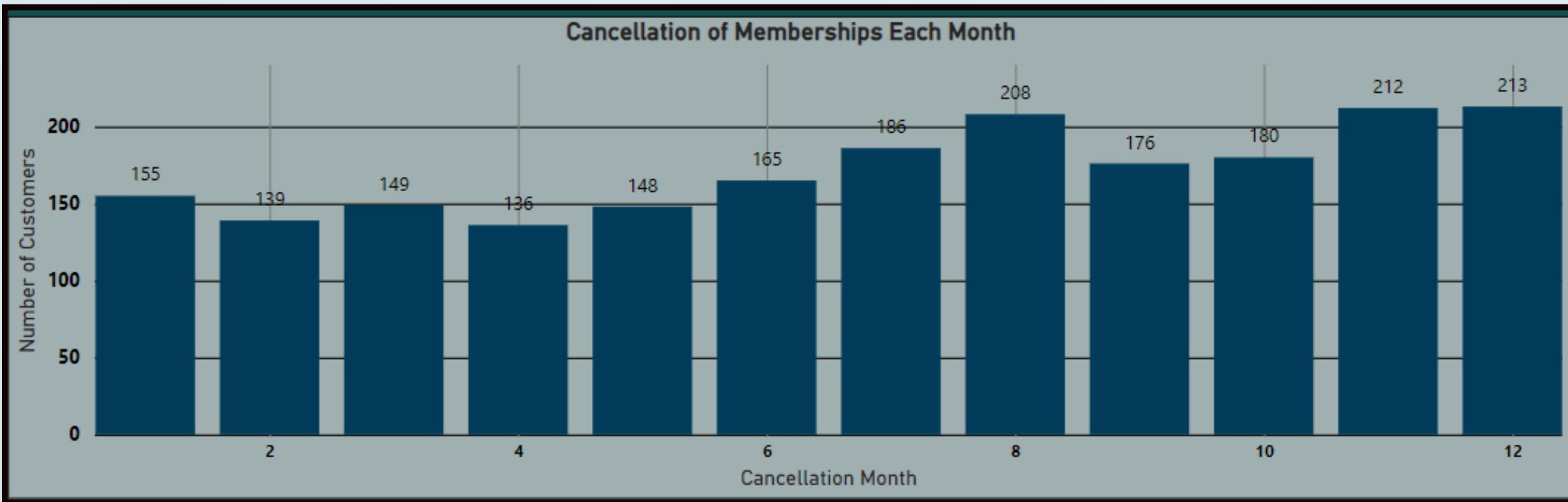
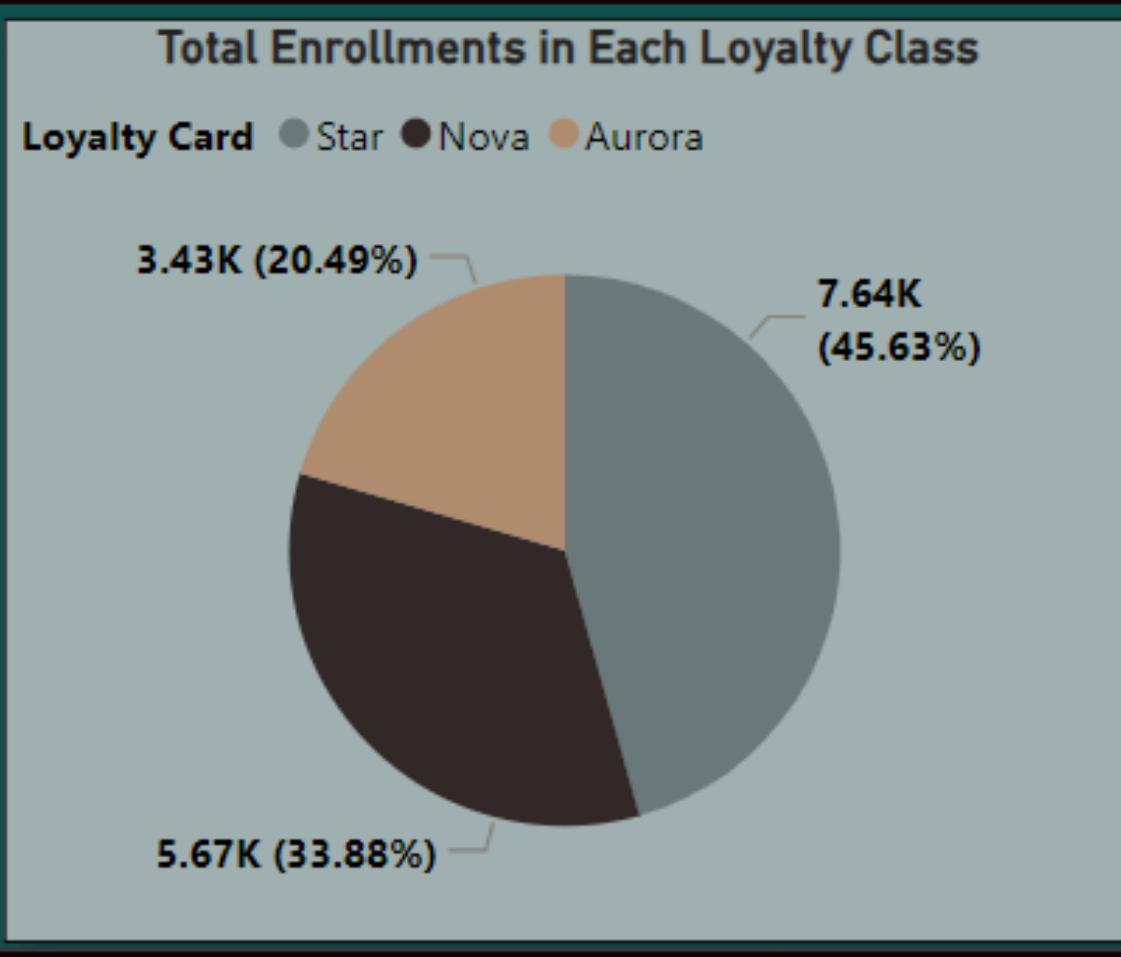
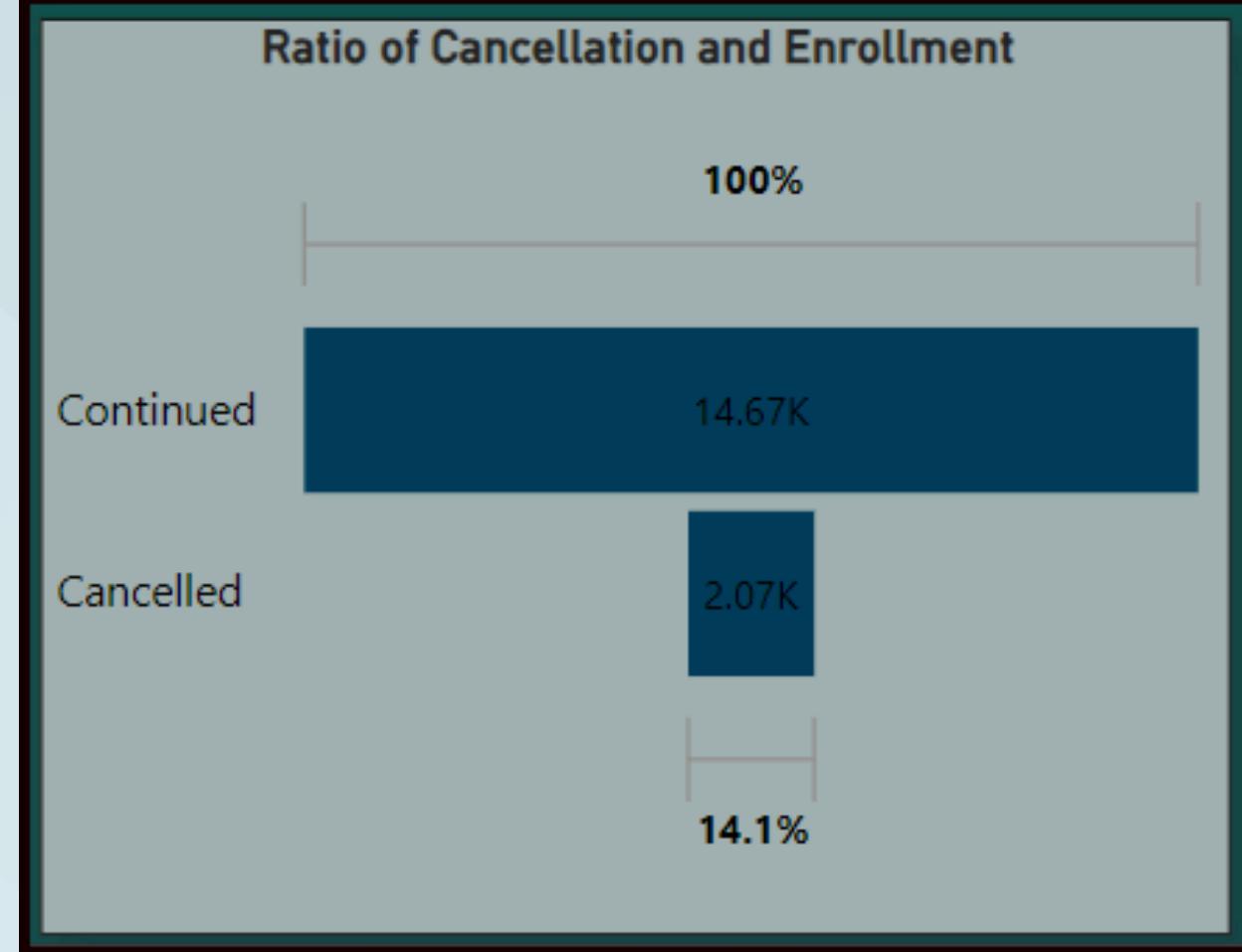
- Majority of the flights are booked from and towards Ontario. In Ontario, 35% customers are with Nova cards, having the highest salaries and 50% of the customers are Star.
- Quebec, with 3k+ customers has equal number of all loyalties.
- 45% customers of Flying whale airlines are Star Card Holders , 34% of them are Nova holders and only 21% are Aurora holders.
- It is seen that Aurora contains the most prominent and loyal member to flying whale airlines.



Enrollment and Cancellation



- In terms of enrollments and cancellation, Aurora does not seem to be a loyal class, but as far as the activity and demographics is analyzed they are the most useful to flying whales.
- The nova card holders are the oldest customers of the airlines with the longest enrollment duration. However the longest distance travellers are the Stars, which might be due to the facilities and points they are earning on their card.



Findings

- Out of the total enrollments of members, more than 14% of the customers have cancelled their memberships after approximately 15 months of their enrollment.
- The most common month for the cancellation is August and for enrollments is May. It can be assumed that the people are booking flights for summer vacations and cancelling memberships afterwards.
- The cancellation and enrollment pattern is same for both years 2017 and 2018.

Insights and Suggestions

- Since Ontario is the most prominent member of Flying Whale, there should be an acknowledgement discount on flight bookings for this province and offers on group and family bookings during peak months for a greater profit.
- To engage new members for enrollments, a limited time package should be launched.
- Adapt to more targeted marketing strategies to promote travel during off-peak times and prepare for increased demand during peak periods.
- For Yukon, Newfound Land and Prince Edward Island, more awareness and discounts should be offered on redeeming points.
- Aurora card holders have greatest lifetime value and are the most loyal customers in terms of travelling but less points accumulating. Their flight experience should be made more promising with increase in benefits and improved customer service in an economical price range for retention.
- Price range should be increased for Star cards, with added offer on prompt booking and cancellation of flights without deduction.
- Special discount offers should be launched for the month of August to avoid cancellations of memberships.
- Less taxes should be applied in May for increased flight bookings and enrollments.
- Feedbacks after specific flight durations should be taken for improvement and also for reason of cancellation of memberships.
- Track the success of campaigns and promotions over time. Refine marketing campaigns based on the most successful enrollment periods and channels.





Conclusion

The analysis provides actionable insights into customer behavior, loyalty program effectiveness, and areas for improvement. By leveraging these insights, FlyingWhale Airline can enhance its customer experience, optimize its loyalty program, and drive greater customer satisfaction and retention.

