

# FlyingWhale Airline Data Analysis



# Airline Data Analysis Dashboard

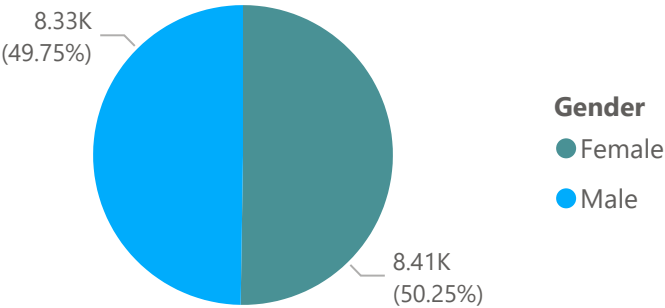
2M  
Sum of Total Flights

490M  
Sum of Distance

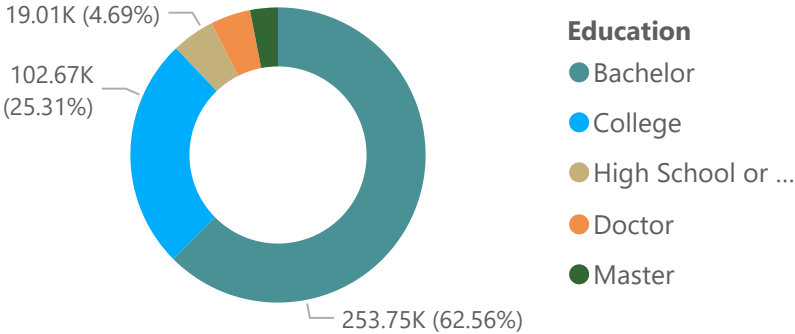
16.74K  
Count of Loyalty Number

7.99K  
Average of CLV

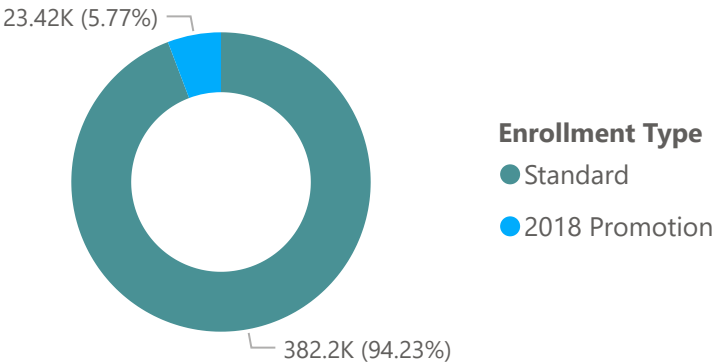
Count of Loyalty Number by Gender



Count of Loyalty Number by Education

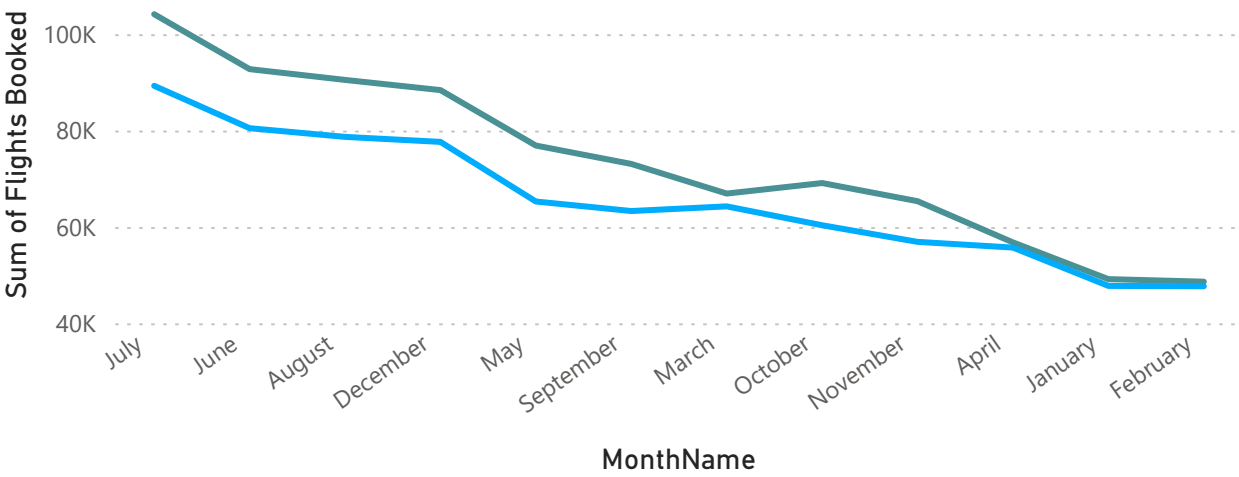


Count of Loyalty Number by Enrollment Type



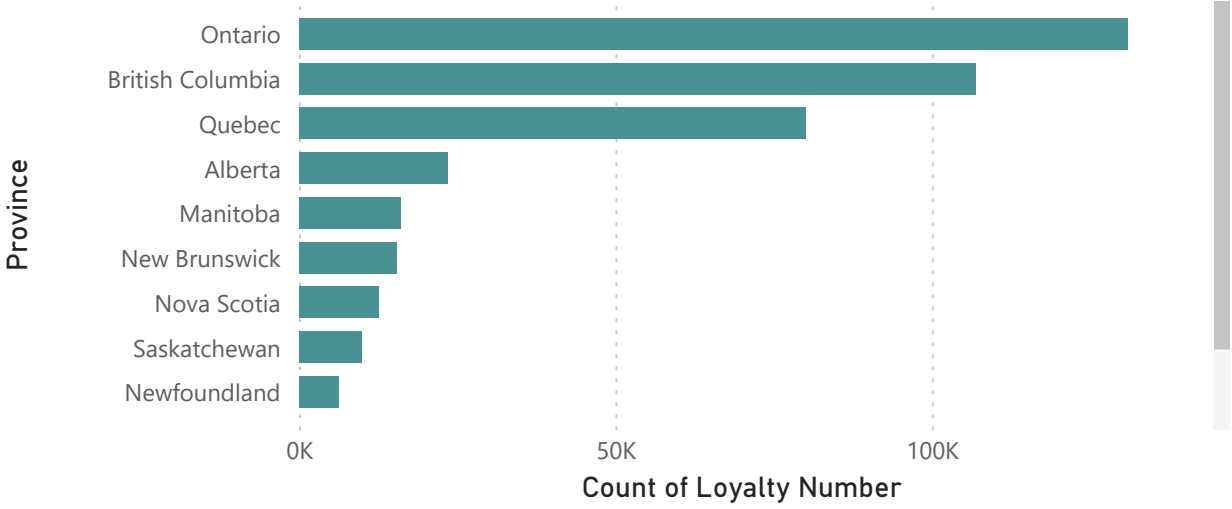
Sum of Flights Booked by MonthName and Year

Year ● 2018 ● 2017



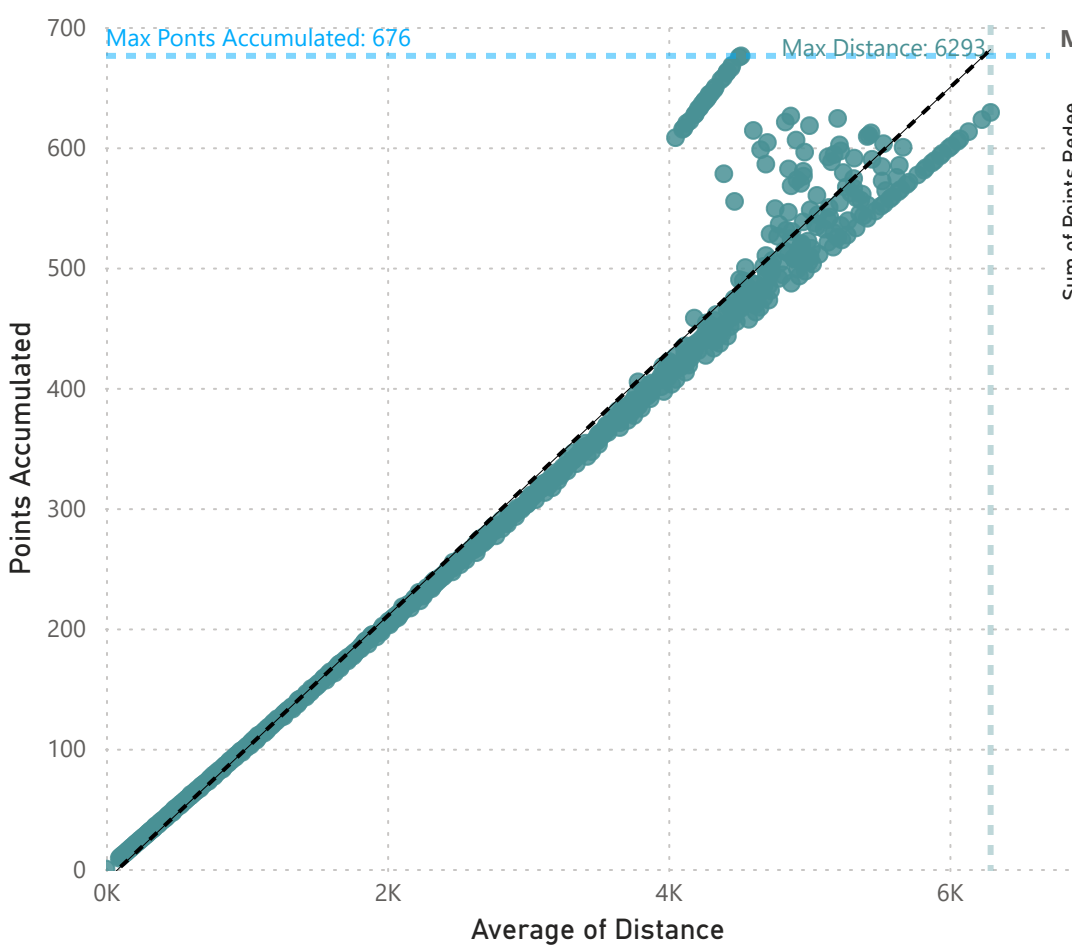
Count of Loyalty Number by Province and Country

Country ● Canada

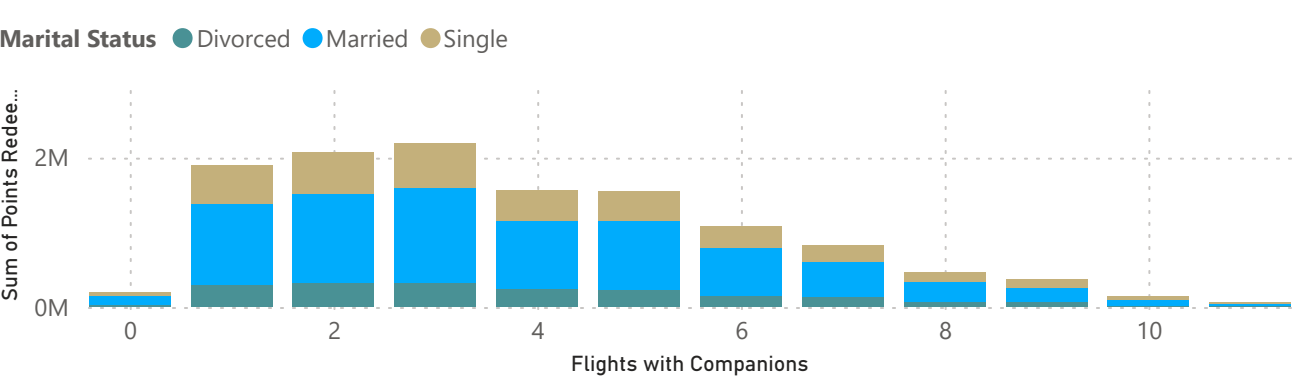


# Flight Activity Analysis

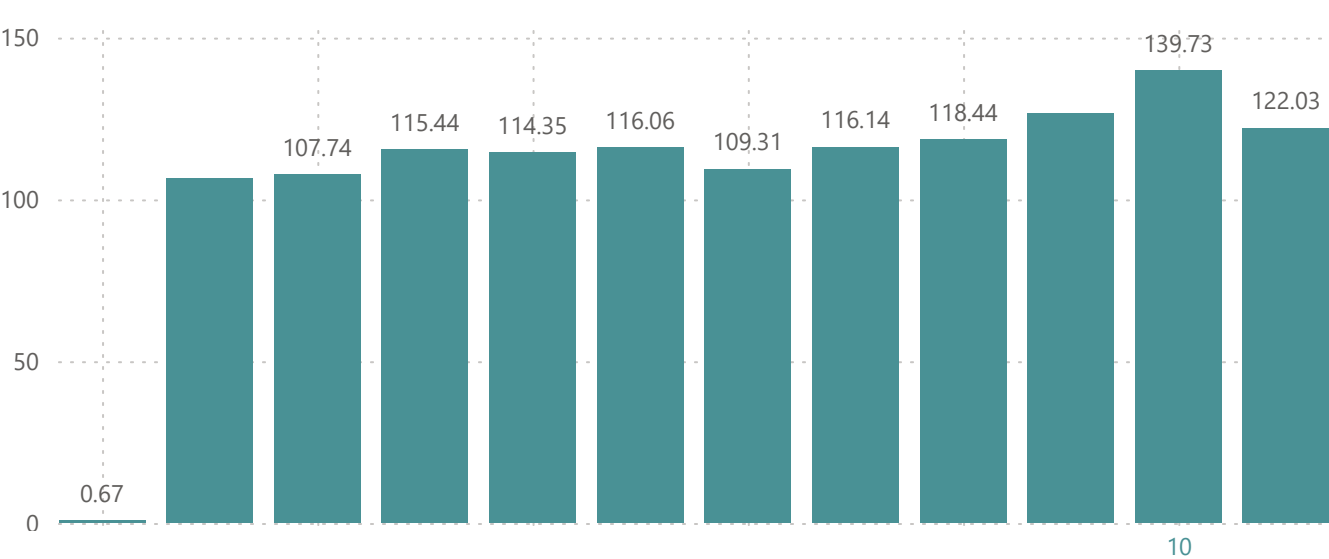
Average of Distance by Points Accumulated



Sum of Points Redeemed by Flights with Companions and Marital Status



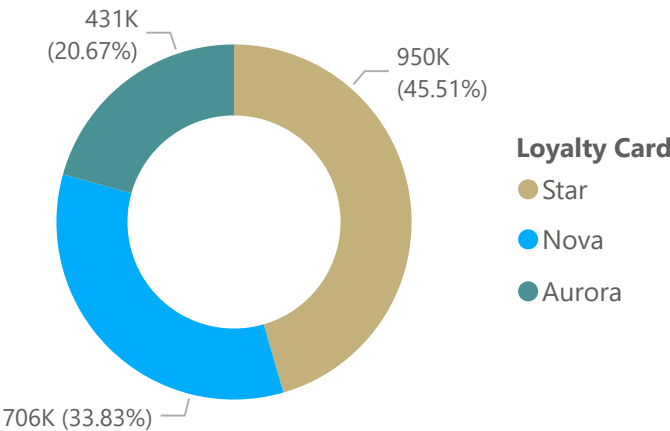
Average of Points Redeemed by Flights with Companions



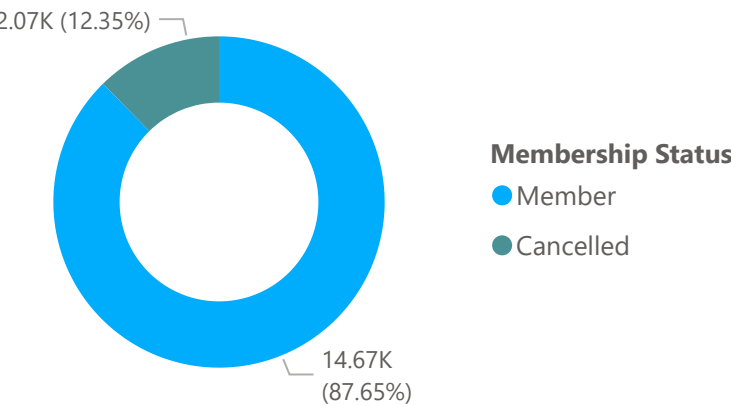
- There is a strong positive correlation between average distance travelled and loyalty points accumulated.
- Married people are seen to travel frequently based on the history of points redeemed.
- At 139.73, a group of 10 companions had the highest Average of Points Redeemed and was 20,750.28% higher than individual travelling alone, which had the lowest Average of Points Redeemed at .67.
- Across all 12 Flights with Companions, Average of Points Redeemed ranged from .67 to 139.73.

# Loyalty Segmentation: *Segmentation of customers based on loyalty card status*

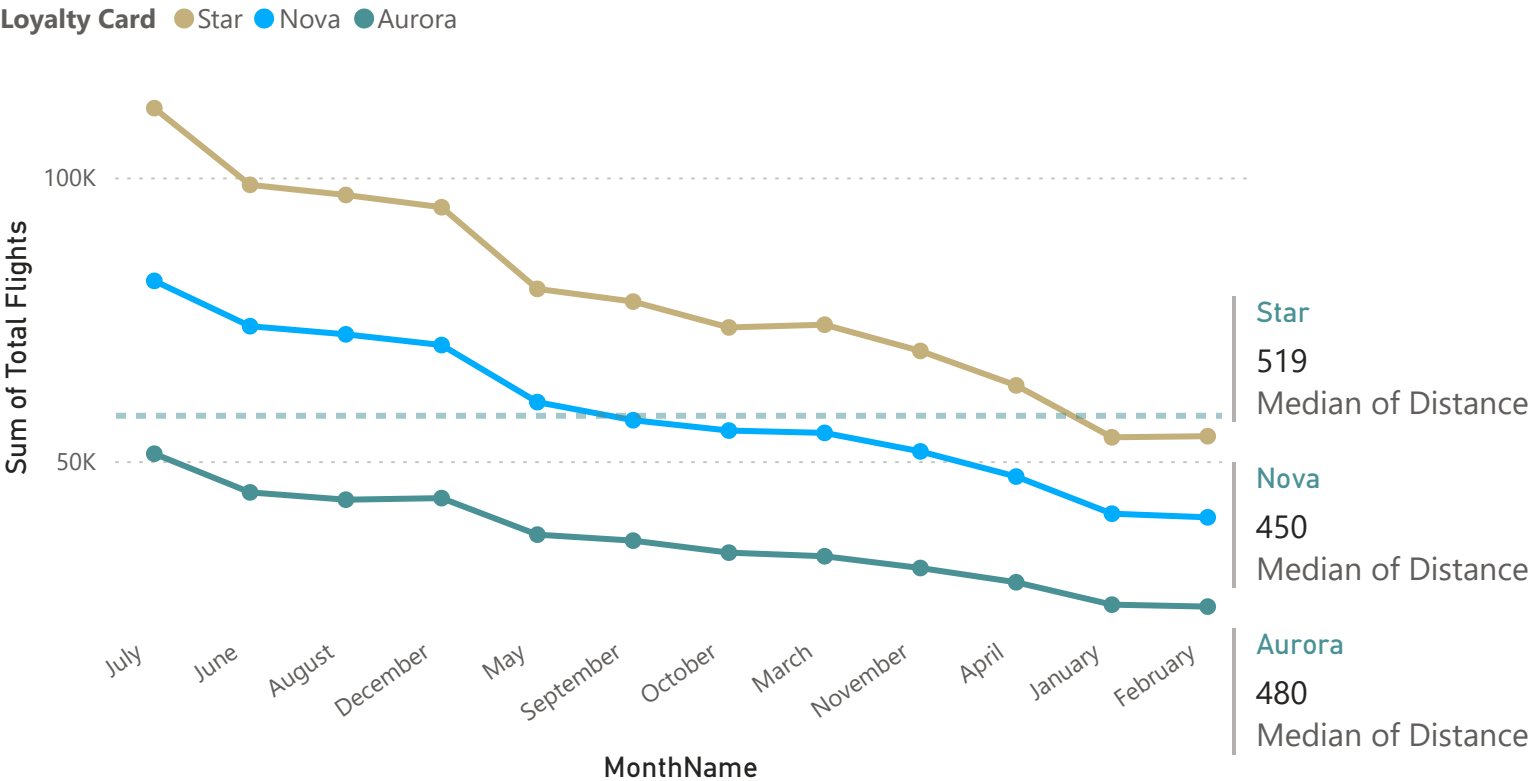
Sum of Total Flights by Loyalty Card



Count of Loyalty Number by Membership Status



Sum of Total Flights by MonthName and Loyalty Card



Star card members had the highest ratio of travel history with a total of 950040 flights taken, followed by Nova at 706167 and Aurora at 431482.

July in Loyalty Card Star made up 5.38% of Sum of Total Flights.

Star had the highest average Sum of Total Flights at 79170, followed by Nova at 58,847.25 and Aurora at 35,956.83.

Star had the highest Sum of Total Flights at 950040, followed by Nova at 706167 and Aurora at 431482.

Star accounted for 45.51% of Total Flights booked.

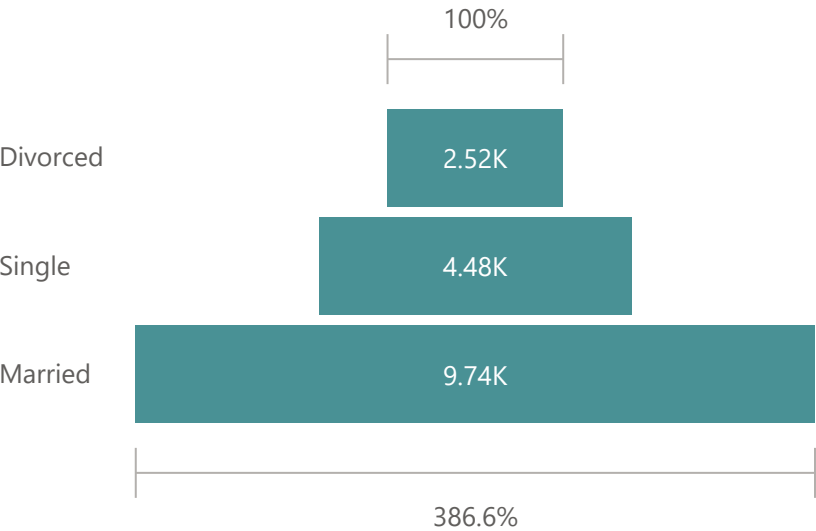
# Demographics and Behavioral Analysis of customers

Aurora  
480  
Median of Distance

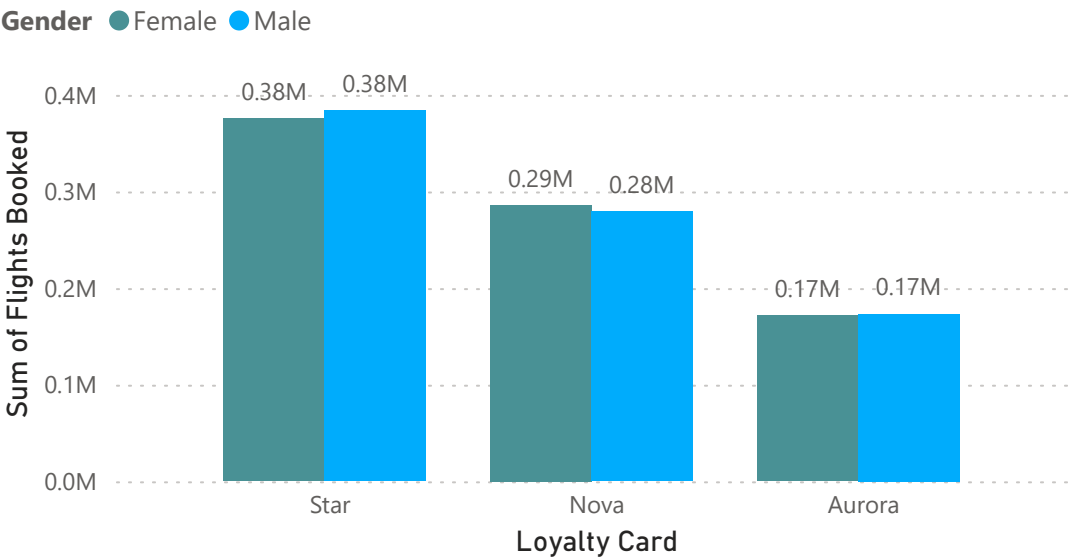
Nova  
450  
Median of Distance

Star  
519  
Median of Distance

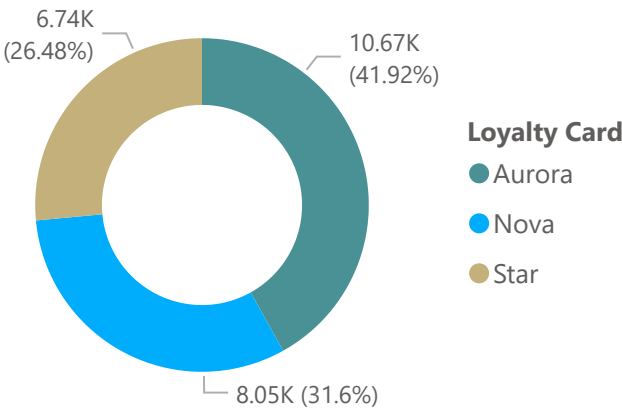
Count of Loyalty Number by Marital Status



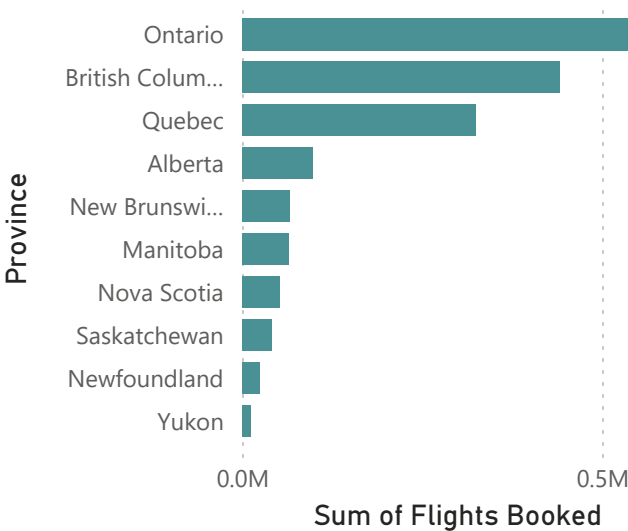
Sum of Flights Booked by Loyalty Card and Gender



Average of CLV by Loyalty Card



Sum of Flights Booked by Province



Total Sum of Flights Booked was higher for Male (836166) than Female (832998).

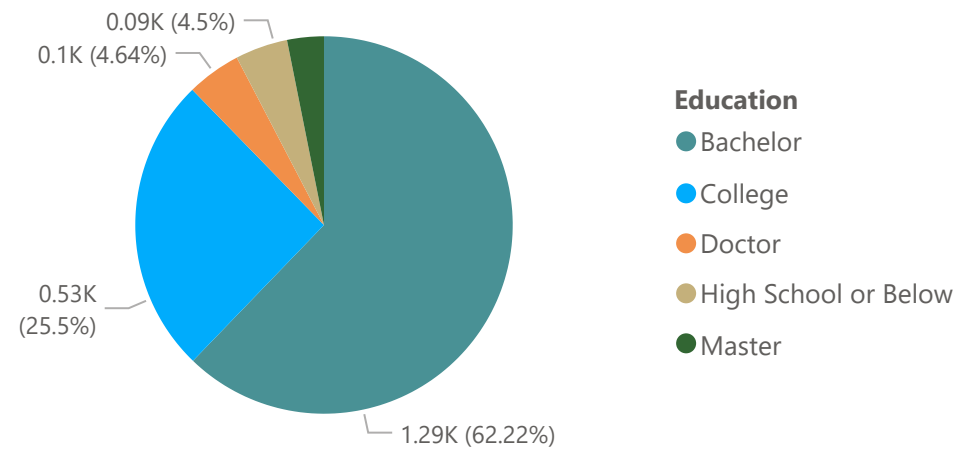
Star in Gender Male made up 22.99% of Sum of Flights Booked.

Average Sum of Flights Booked was higher for Male (278722) than Female (277666).

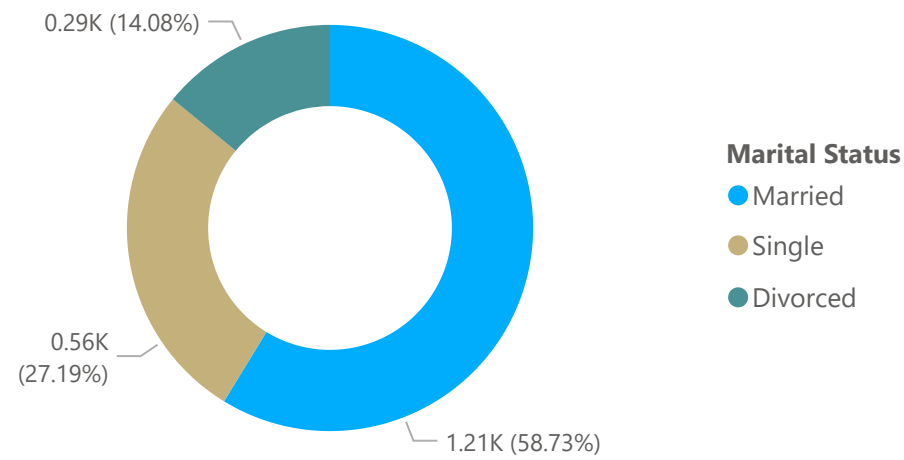
Sum of Flights Booked for Male and Female diverged the most when the Loyalty Card was Star, when Male were 8098 higher than Female.

# Enrollment and Cancellation Trends

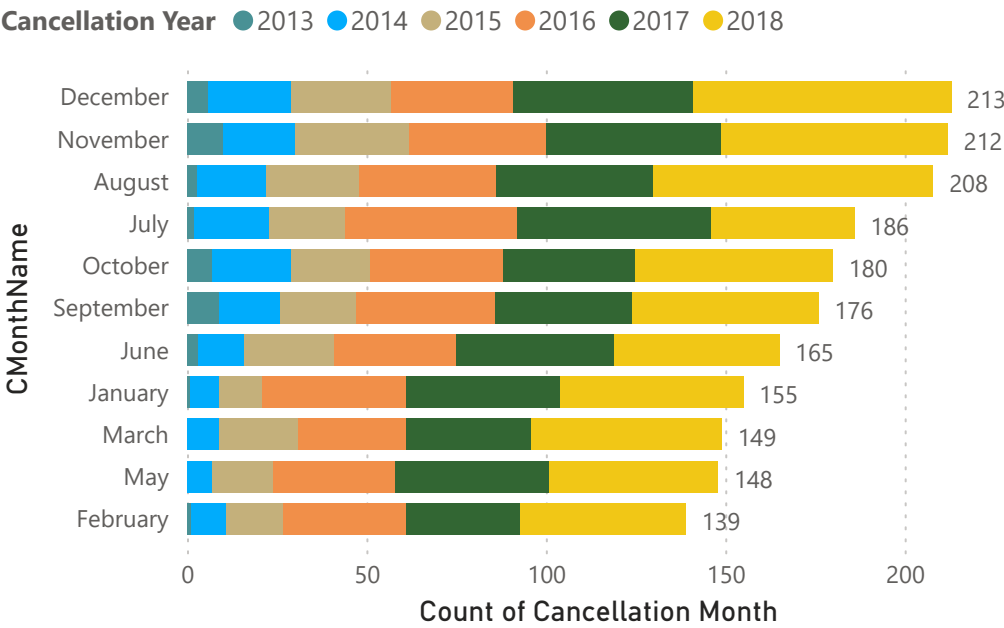
Count of Membership Status by Education



Count of Membership Status by Marital Status



Count of Cancellation Month by CMonthName and Cancellation Year



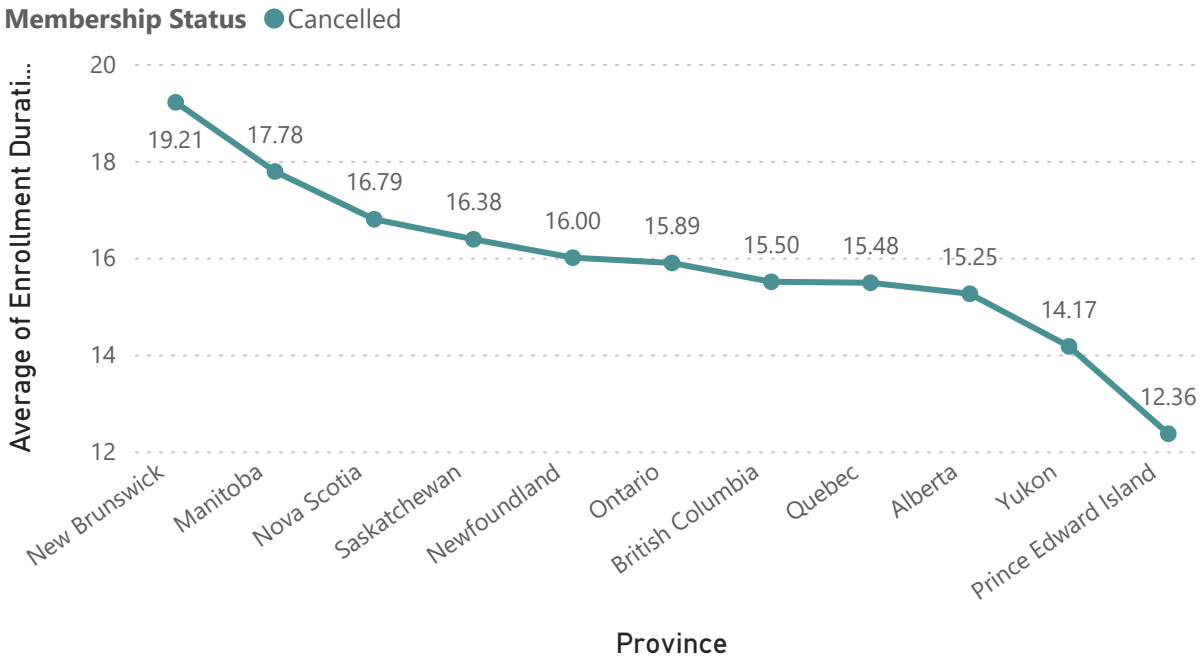
Cancellation trend has increased exponentially each year with most cancellations happening in December, November and August.

By Education level, Bachelor students accounted for 62.22% of membership cancellations.

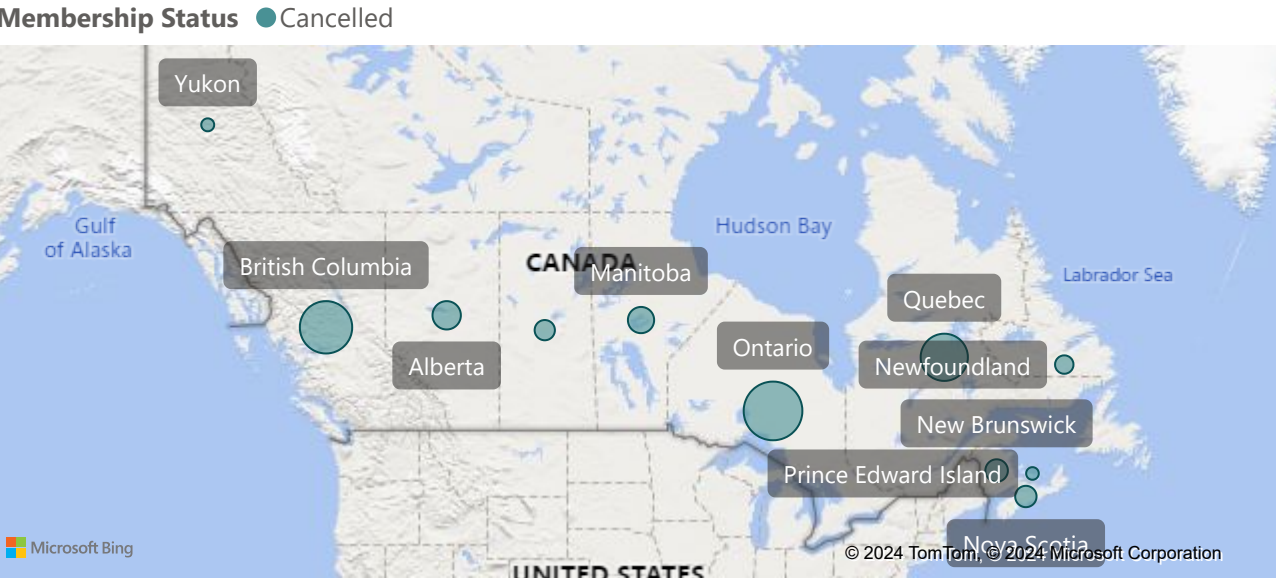
Married people account for more than 50% of the membership cancellations

| City           | Enrollment Duration (Till Date) Months | Enrollment Duration Till Date | CLV      | Member   |
|----------------|--|-------------------------------|----------|----------|
| Vancouver      | 67                                     | 5 years 7 months              | 1,898.68 | Cancelle |
| Tremblant      | 8                                      | 1 years 8 months              | 1,940.98 | Cancelle |
| West Vancouver | 22                                     | 2 years 10 months             | 2,004.35 | Cancelle |
| Vancouver      | 33                                     | 2 years 9 months              | 2,004.35 | Cancelle |
| Vancouver      | 49                                     | 4 years 1 months              | 2,009.77 | Cancelle |
| St. John's     | 19                                     | 1 years 7 months              | 2,086.61 | Cancelle |
| West Vancouver | 44                                     | 4 years 8 months              | 2,113.86 | Cancelle |
| Thunder Bay    | 8                                      | 0 years 8 months              | 2,117.99 | Cancelle |
| Montreal       | 8                                      | 0 years 8 months              | 2,124.17 | Cancelle |
| Vancouver      | 8                                      | 1 years 8 months              | 2,141.75 | Cancelle |
| Montreal       | 39                                     | 3 years 3 months              | 2,142.89 | Cancelle |
| Toronto        | 8                                      | 1 years 8 months              | 2,144.92 | Cancelle |
| West Vancouver | 8                                      | 0 years 8 months              | 2,150.91 | Cancelle |
| Regina         | 8                                      | 1 years 8 months              | 2,154.07 | Cancelle |
| Montreal       | 8                                      | 1 years 8 months              | 2,155.21 | Cancelle |
| Toronto        | 8                                      | 0 years 8 months              | 2,179.43 | Cancelle |

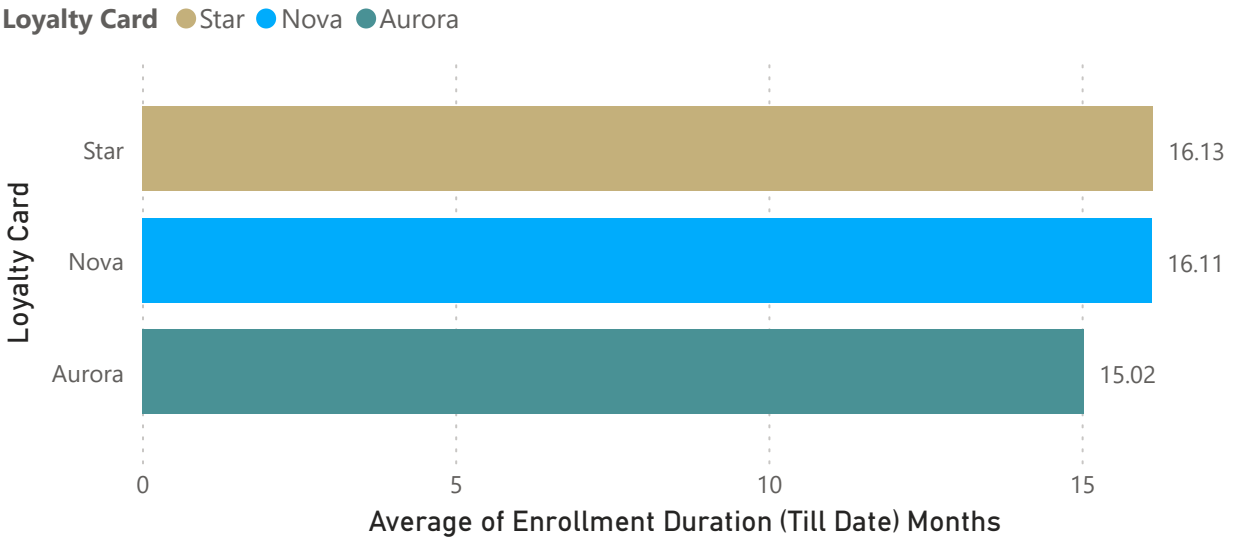
Average of Enrollment Duration (Till Date) Months by Province and Membership Status



Count of Enrollment Duration (Till Date) Months by Province and Membership Status



Average of Enrollment Duration (Till Date) Months by Loyalty Card and Loyalty Card



# Flying Whale: Insights Derived

- **Seasonal Trends:** Most cancellations occur in December, November, and August.
- **Demographic Factors:** Bachelor students account for the majority (62.22%) of membership cancellations, followed by married individuals who represent over 50% of cancellations.
- **Loyalty Card Type:** Variations in cancellation durations exist among different loyalty card types, with the Star card having the highest average enrollment duration among cancellations.
- **Gender Disparities:** The total sum of flights booked is higher for males than females, with significant proportions of flights booked by Star card members in the male gender category.
- **Companion Bookings:** Members redeem significantly higher average points for companion bookings compared to individual travelers.
- **Retention Strategies:** Proactive retention strategies tailored to demographic and behavioral patterns can help mitigate cancellations and enhance customer loyalty.



## Recommendations for improving enrollment and retention for FlyingWhale Airline:

- 1. Personalized Loyalty Programs:** Develop personalized loyalty programs tailored to different demographics and travel behaviors identified in the analysis. For example, offer exclusive benefits or rewards that align with the preferences of bachelor students or married individuals.
- 2. Enhanced Member Communication:** Implement targeted communication strategies to engage members at different stages of their journey. Send personalized offers, updates, and reminders via email, SMS, or app notifications to keep members informed and engaged.
- 3. Improved Customer Experience:** Focus on enhancing the overall customer experience to increase satisfaction and loyalty. This could include streamlining the booking process, offering seamless travel experiences, and providing exceptional customer service both online and offline.
- 4. Incentivize Companion Bookings:** Encourage members to book flights with companions by offering additional rewards or benefits for group travel. Highlight the advantages of traveling with companions, such as increased loyalty points or discounts on future bookings.
- 5. Retention Campaigns:** Implement targeted retention campaigns to re-engage members who are at risk of canceling their memberships. Use data-driven insights to identify patterns and triggers for cancellations, and proactively reach out to these members with personalized offers or incentives to encourage them to stay.
- 6. Continuous Analysis and Optimization:** Regularly analyze customer feedback, enrollment trends, and cancellation patterns to identify areas for improvement. Continuously optimize loyalty programs, communication strategies, and customer experiences based on these insights to ensure long-term success.
- 7. Segmented Marketing Campaigns:** Develop segmented marketing campaigns based on loyalty card status, demographics, and travel behaviors. Tailor messaging and offers to different customer segments to maximize relevance and effectiveness.
- 8. Enhanced Benefits and Rewards:** Regularly review and update the benefits and rewards offered through the loyalty program to ensure they remain attractive and competitive. Consider adding new perks, partnerships, or redemption options to incentivize enrollment and retention.
- 9. Educational Campaigns:** Provide educational resources and information to members about the value of loyalty programs and how to maximize their benefits. Increase awareness of exclusive offers, promotions, and features available to loyal customers.
- 10. Social Proof and Testimonials:** Showcase success stories, testimonials, and social proof from satisfied members to highlight the benefits of the loyalty program and inspire others to enroll or remain active.

By implementing these strategies, FlyingWhale Airline can improve enrollment rates, increase member retention, and ultimately drive long-term loyalty and profitability.