# Understanding Sun Country Airlines' Customers

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### Who are our customers?

Sun Country Airlines has data about ticket purchases and their customers
Stronger customer relationship and more targeted marketing are benefits of knowing our customers



Segment customers to understand behavior and build positive relationships



Analyze flight data and member status



Five Customer Clusters

Understand how the five segments of customers differ



Membership Status

Analyze the membership program at Sun Country



Recommendations



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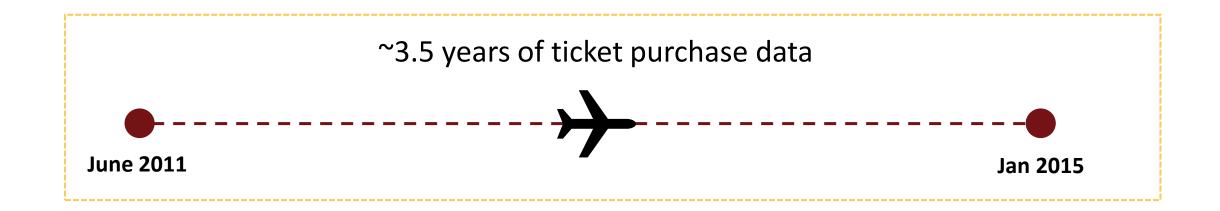


Membership Status

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Recommendations



3.4M

Ticket purchases in 3.5 years

~1.5M

Distinct customers

~14%

Repeat customers

~80%

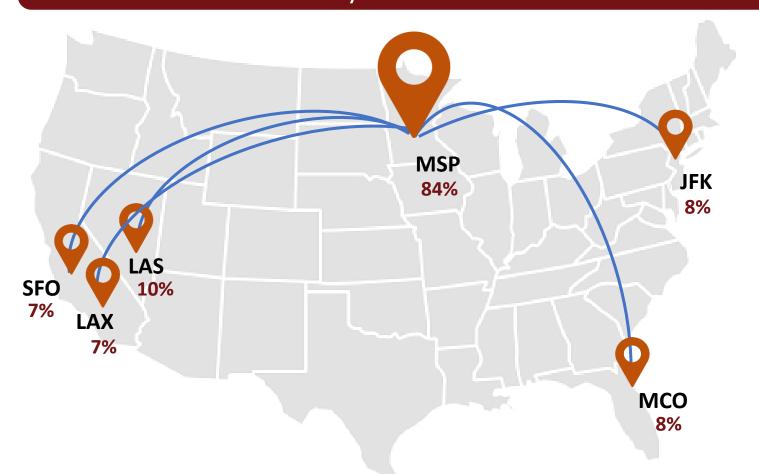
Tickets purchased by Ufly Members

17.5%

Customers are Ufly Members

### Understanding the Destinations

Most popular destinations for Sun Country Customers to fly from and to





Most Expensive place to fly
St. Maarten
\$732
On Average



Average Days Booked Before the Flight 46



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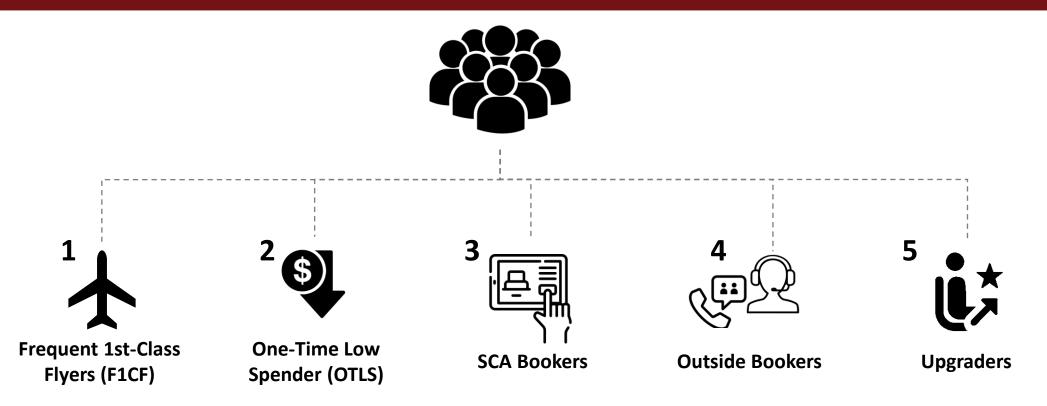
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Recommendations

#### Customers divided into Five Clusters

#### We can distinctly divide customers into 5 Clusters

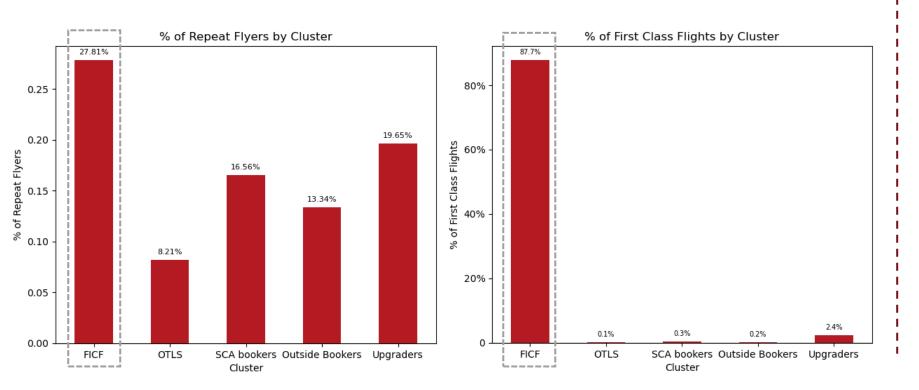


- Utilized the exploratory clustering algorithm of k-Means to cluster customers into natural groups
- k-Means algorithm was chosen for its simplicity and power to work on complex datasets

### 1. Frequent 1<sup>st</sup>- Class Flyers (F1CF)

#### **Flying Behavior**

- 27.8% customers in this cluster book repeatedly (more than once) with Sun Country
- 87.7% flights taken are first class flights



**Cluster Size** 

37k



Average Amount Spent/Flight

\$622

Over \$200 higher than rest of clusters

**Membership Proportion** 

38%

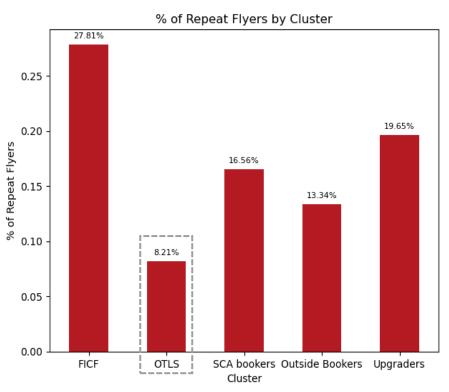
Standard Members: 97.3%

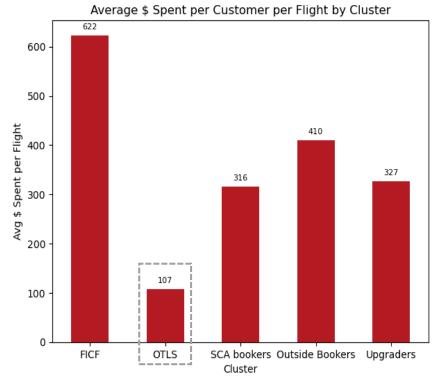
Elite Members: 2.7%

### 2. One Time Low Spenders (OTLS)

#### **Flying Behavior**

- Only 8.2% customers in this cluster book repeatedly (more than once) with Sun Country
- The average amount spent per flight is \$107, lowest among all clusters





Cluster Size 380k



Average number of flights per customer

1.87

Lowest among all clusters

**Membership Proportion** 

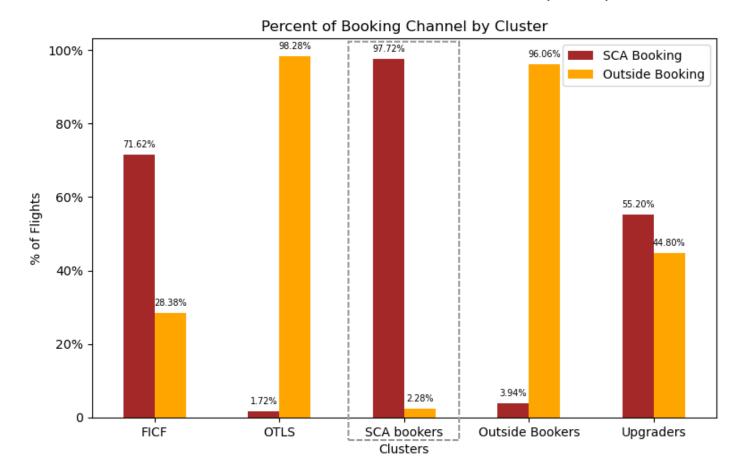
**7**%

Lowest among all clusters

#### 3. SCA Bookers

#### **Channel of Booking**

 Customers in this cluster book exclusively on the two SCA websites – SCA Website and SY Vacation (~99%)



Cluster Size **617k** 



Average Amount Spent/ Flight \$316

**Flying Behavior** 

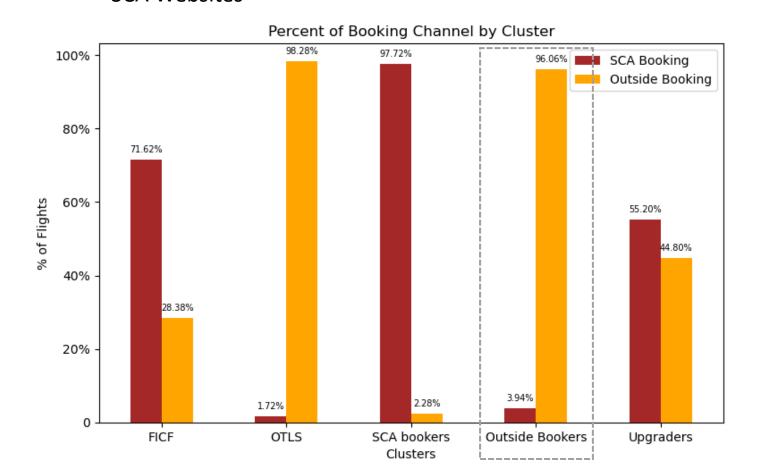
16.6%

customers in this cluster fly repeatedly (more than once) with Sun Country

#### 4. Outside Bookers

#### **Channel of Booking**

 Customers in this cluster book exclusively through non-SCA Websites



Cluster Size 415k



#### **Membership Proportion**

11%

Second to lowest among all clusters

**Flying Behavior** 

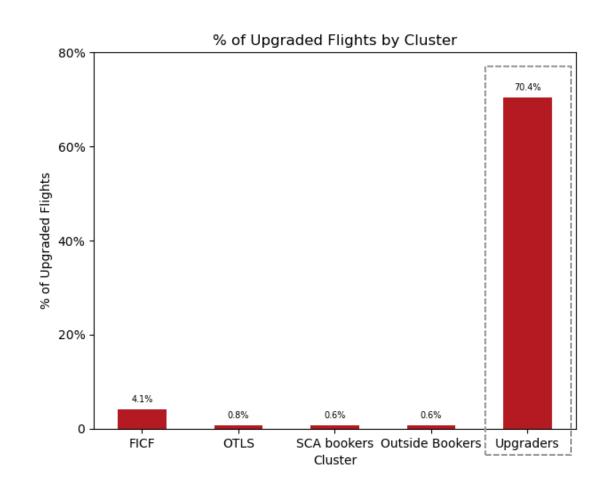
**Q3** 

Time of the year these customers fly most

#### 5. Upgraders

#### **Percent of Upgrades Availed**

Customers in this cluster avail maximum upgrades



Cluster Size **78k** 



Average Amount Spent/ Flight

\$316

**Flying Behavior** 

19.6%

Customers flying repeatedly (more than once) with Sun Country

3.5%

First class flights purchased

### Cluster Summary

	Frequent 1st-Class Flyers (F1CF)	One-Time Low Spenders (OTLS)	SCA Bookers	Outside Bookers	Upgraders
Number of Customers	37k	380k	617k	415k	79k
% of Current Ufly Members	38%	7%	25%	11%	31%
Average amount spent on a flight	\$622	\$107	\$316	\$410	\$327
Average flights taken per customer	2.47	1.87	2.19	2.48	2.57
% of flights booked on SCA Website	70%	1%	99%	2%	51%
% of Repeat Flyers	27.8%	8.2%	16.6%	13.3%	19.6%
% of First-Class flights purchased	87.7%	0.1%	0.3%	0.2%	2.4%



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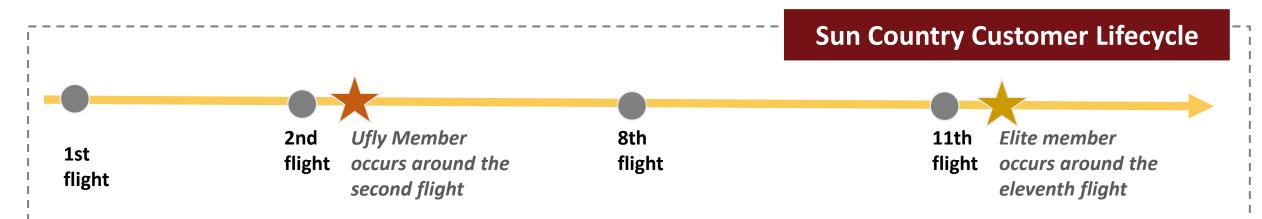


Recommendations

### Membership Statistics

	Non - Members	Standard Members	Elite Members
Average number of flights	2.08	2.54	11.08
Percent of repeat flyers	10%	24%	63%
Average Bookings SCA	41%	73%	72%
Average spent per flight	\$307	\$337	\$459

#### What does it take to be a member?



- Membership is attained through earning points by spending on Sun Country Airlines
- In terms of flight bookings, on average a customer attains Elite status when they take 11 flights
- On average, elite members spend \$170 more on a flight
- High number of flights taken on Sun Country support that Elite members are loyal to Sun Country

High spend and high number of flights make Elite customers most profitable to Sun Country Devising strategy to increase elite membership can increase profits



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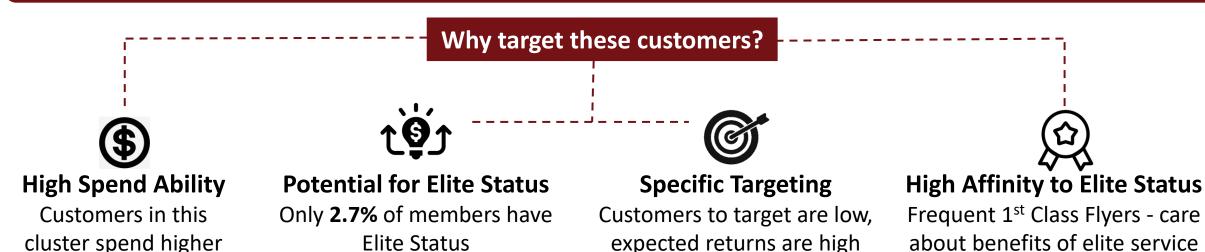


Recommendations

### 1. Target Potential Elite Members in F1CF

Average member customer in F1CF			
	Standard Member	Elite Member	
Amount Spend per flight	\$635	\$675	Difference not huge
Number of flights taken	3	10	Elite take 230% more flights
Lifetime Amount Spent	\$1980	\$6680	Elite spend ~\$4600 more

Target non/standard members in F1CF who have taken **7-9 flights** to convert them to elite status



#### 2. Drive Outside Booking Members to SCA Websites\*

~99%

Bookings from outside channels

\$460

Avg Spend (2<sup>nd</sup> highest)

11%

Membership Proportion

36%

Members who are repeat flyers

#### Target members of this cluster with incentives when booking on SCA website

- Selectively targeting only members for their repeat flying behavior to build loyalty
- Drive these members to SCA websites by incentivizing with higher reward points when bookings made on SCA websites

Increased traffic on SCA websites and a nudge to book more flights from points gained

<sup>\*</sup> SCA Website bookings include the channels SCA Website and SY Vacation portal

## Appendix

### Data Cleaning



#### Age

- 43k records with missing age
- 5k records have Age < 0 and Age > 100

*Drop missing and outlier records* 



#### Gender

- 43k records with missing gender
- Distinct values M, F, U, NA

Drop missing records



#### **Postal Code**

- Represents where the booking was made from
- 80% missing values

Drop column due to high missing %

#### How to define a customer?

**Encrypted Name** 

Gender Code

Birth Date ID

1.5M

Customers purchased tickets with Sun Country Airlines

• Use the above columns to identify unique Sun Country customers