

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





Understanding the Data

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

Increasing Ufly membership and SCA website bookings



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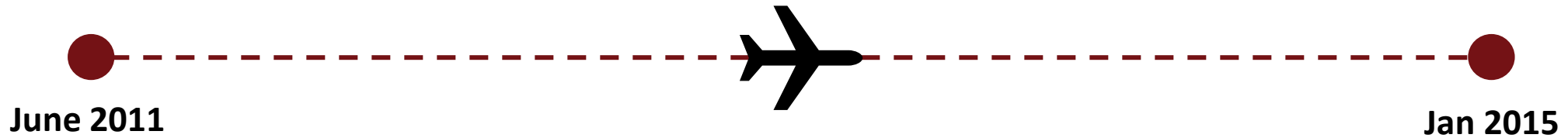


Recommendations

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Understanding the data

~3.5 years of ticket purchase data



3.4M

Ticket purchases
in 3.5 years

~1.5M

Distinct
customers

~14%

Repeat
customers

~80%

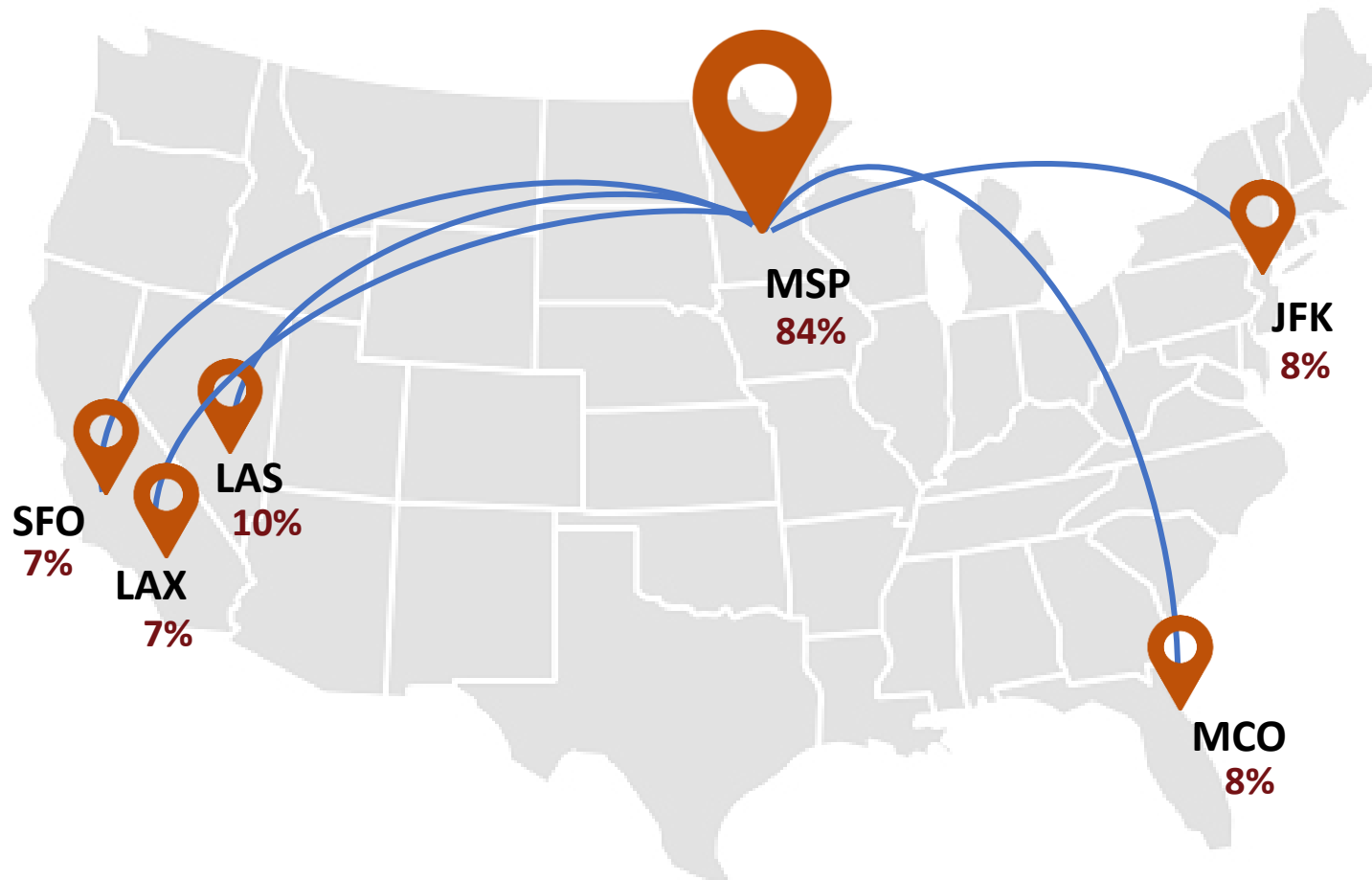
Tickets purchased
by Ufly Members

17.5%

Customers are
Ufly Members

Understanding the Destinations

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



The average proportion of customers flying from or to that destination



Airports Served

73

Most Expensive place to fly

St. Maarten

\$732

On Average



Average Days Booked
Before the Flight

46



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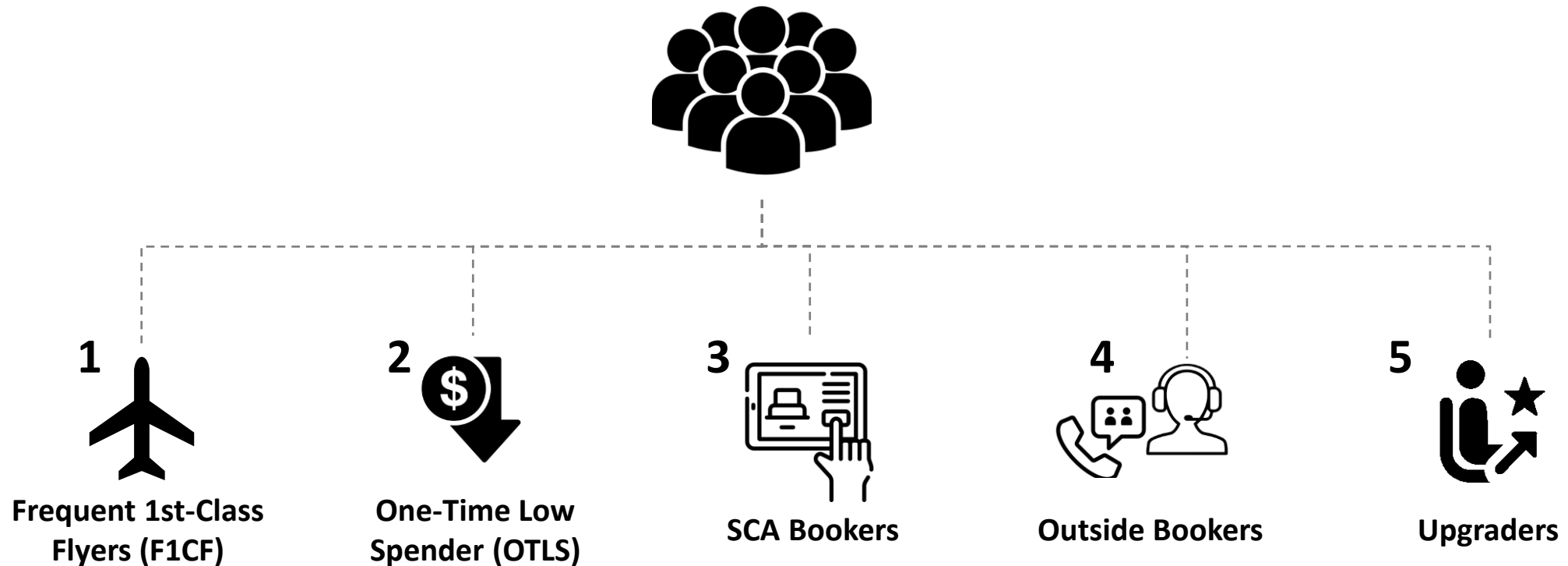


Recommendations

Increasing Ufly membership and SCA website bookings

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 1st- 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

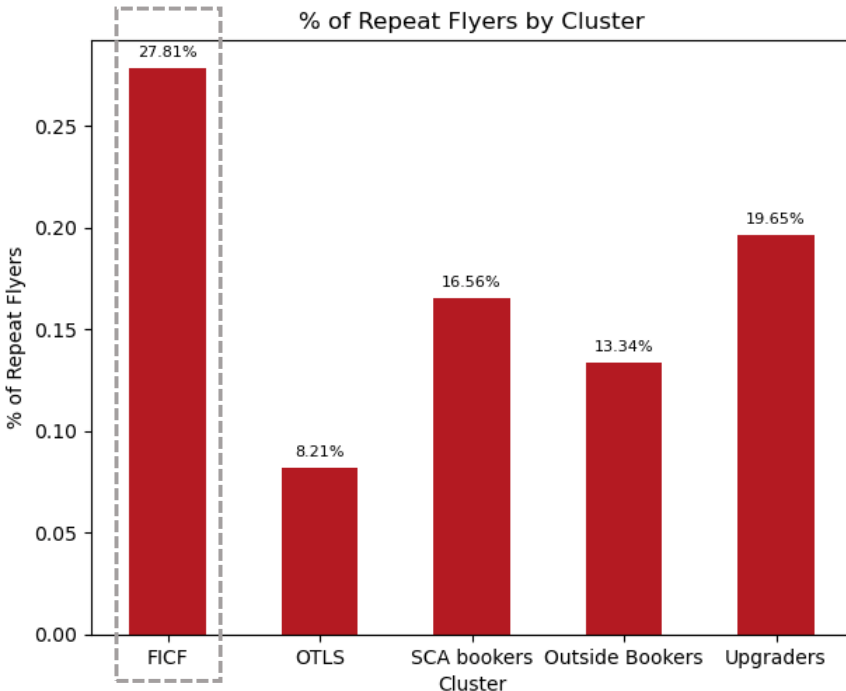
Over \$200 higher than rest
of clusters

Membership Proportion

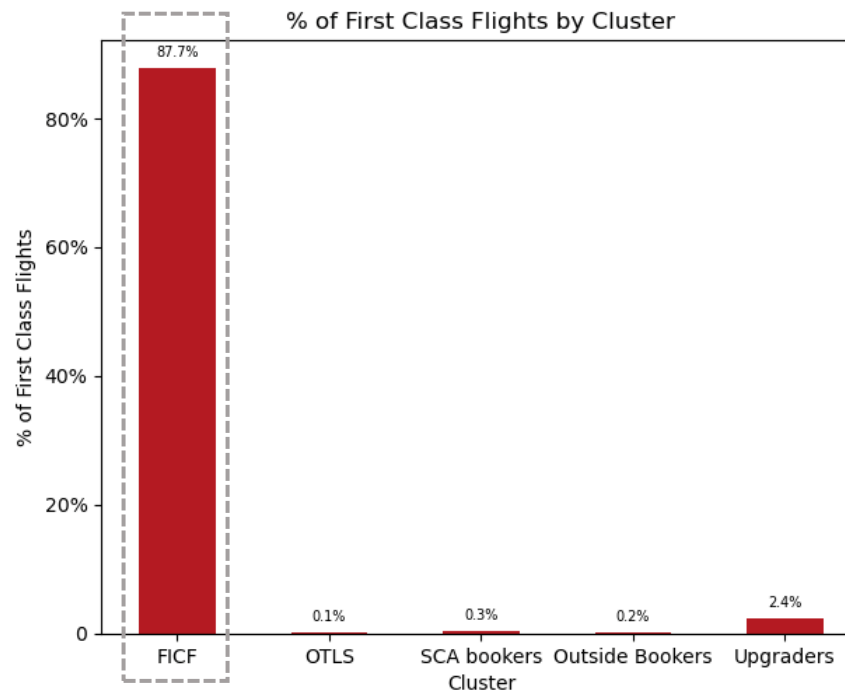
38%

- Standard Members: 97.3%
- Elite Members: 2.7%

% of Repeat Flyers by Cluster



% of First Class Flights by Cluster

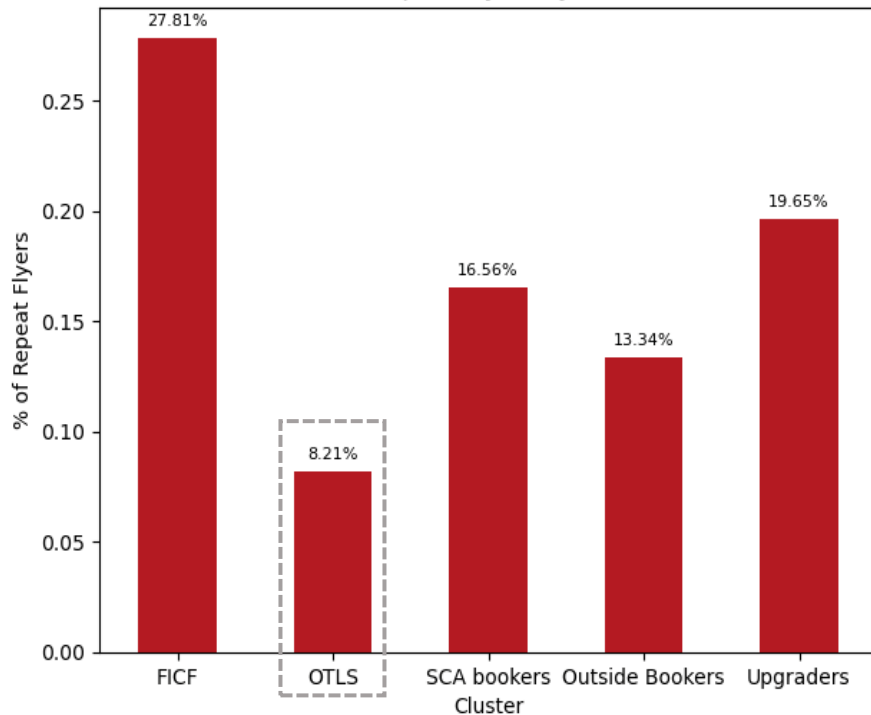


2. One Time Low Spenders (OTLS)

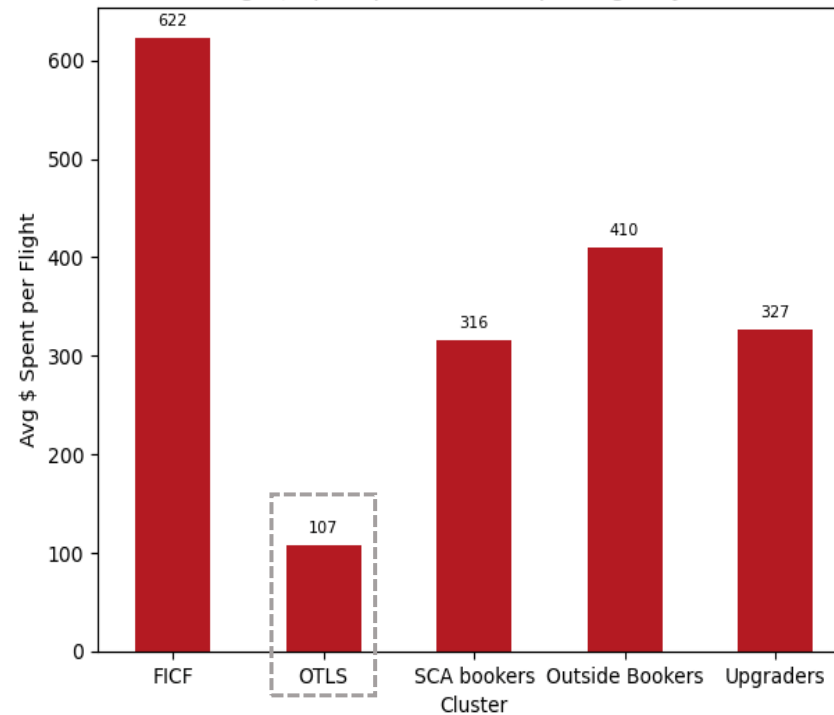
Flying Behavior

- **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

% of Repeat Flyers by Cluster



Average \$ Spent per Customer per Flight by Cluster



Cluster Size
380k



Average number of
flights per customer
1.87

Lowest among all clusters

Membership Proportion
7%

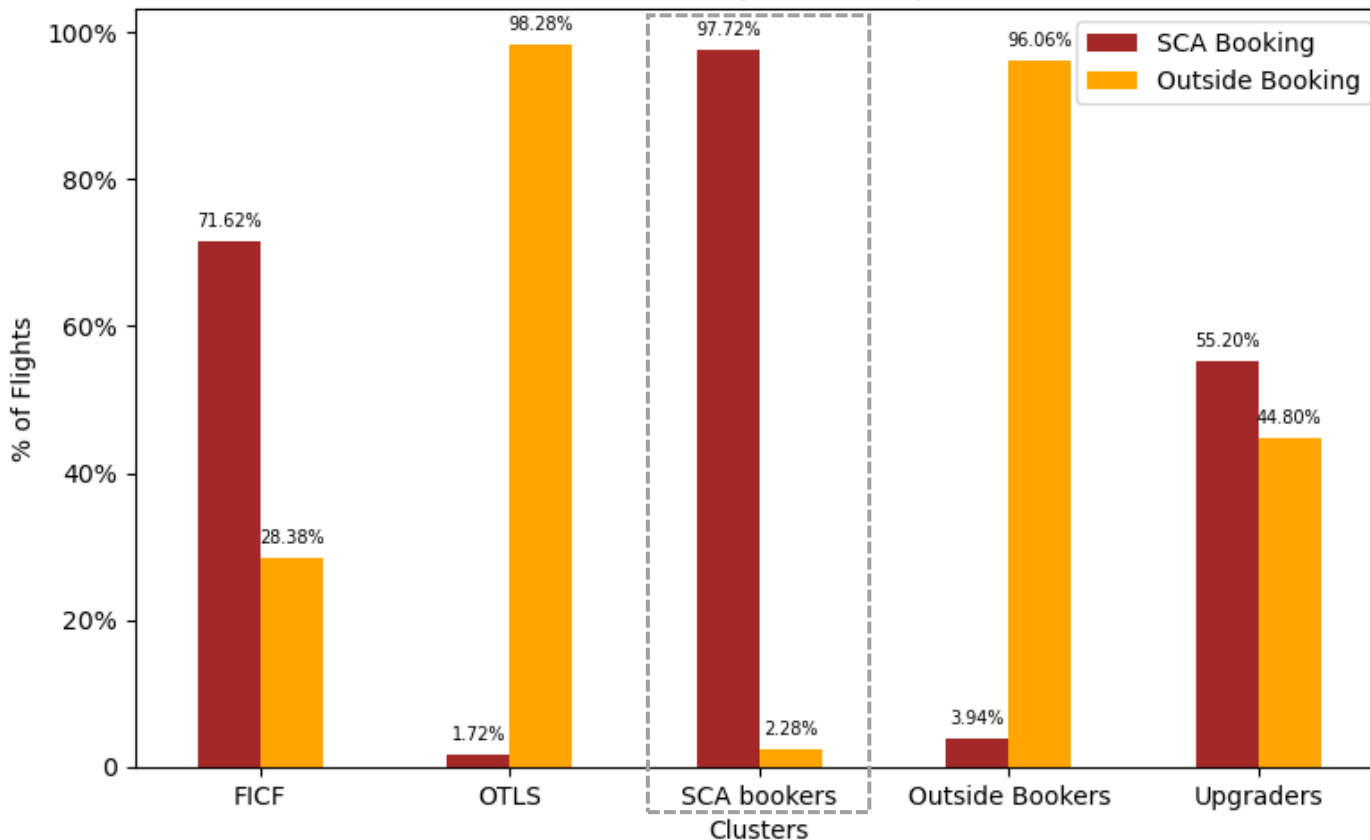
Lowest among all clusters

3. SCA Bookers

Channel of Booking

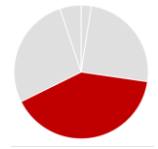
- Customers in this cluster book exclusively on the two SCA websites – SCA Website and SY Vacation (~99%)

Percent of Booking Channel by Cluster



Cluster Size

617k



Average Amount
Spent/ Flight

\$316

Flying Behavior

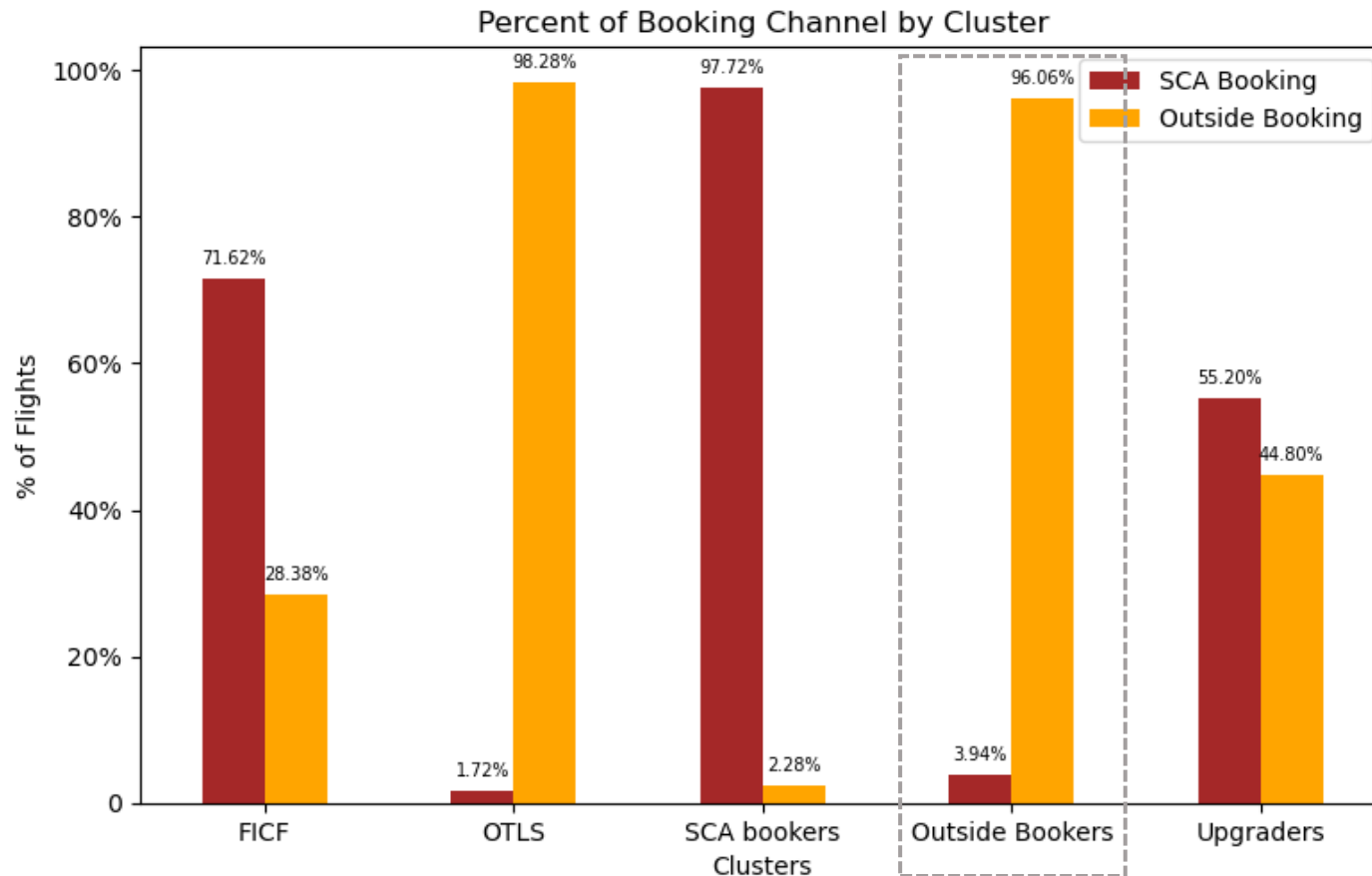
16.6%

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

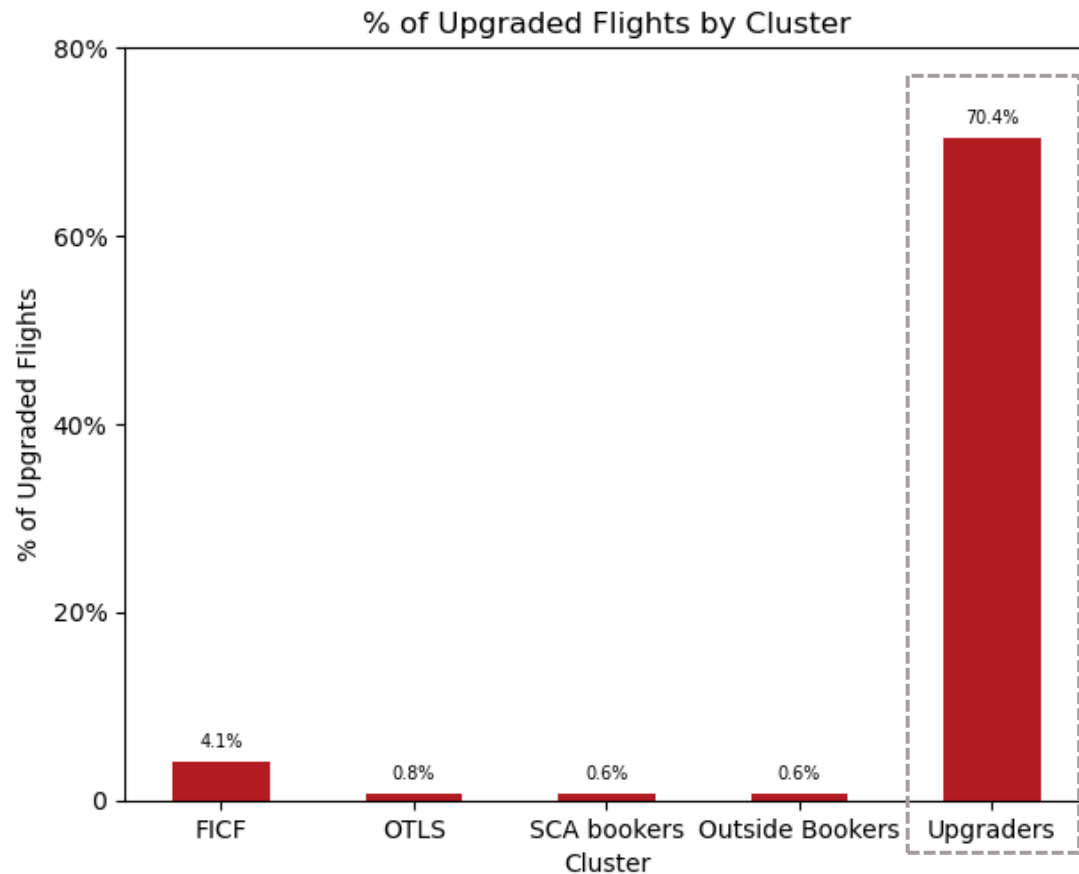
Q3

Time of the year these
customers fly most

5. Upgraders

Percent of Upgrades Aailed

- 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

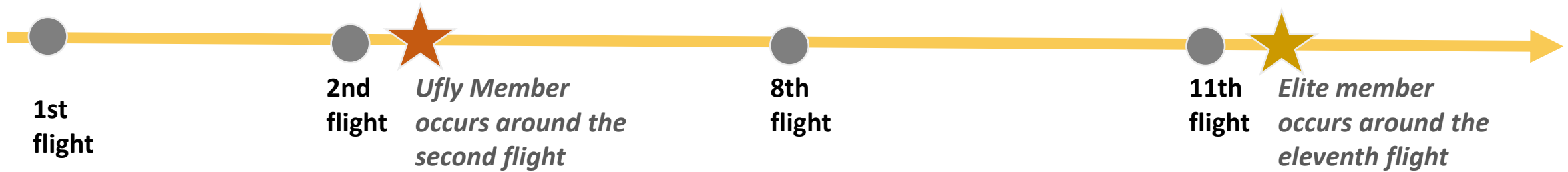
Increasing Ufly membership and SCA website bookings

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?

Sun Country Customer Lifecycle



- 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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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

Why target these customers?



High Spend Ability

Customers in this cluster spend higher



Potential for Elite Status

Only **2.7%** of members have Elite Status



Specific Targeting

Customers to target are low, expected returns are high



High Affinity to Elite Status

Frequent 1st Class Flyers - care about benefits of elite service

2. Drive Outside Booking Members to SCA Websites*

~99%

Bookings from
outside channels

\$460

Avg Spend
(2nd 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

* SCA Website bookings include the channels SCA Website and SY Vacation portal

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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

- Use the above columns to identify unique Sun Country customers



1.5M

Customers purchased tickets
with Sun Country Airlines

