Traveler Churn Analysis (Tableau)

- https://www.kaggle.com/datasets/tejashvi14/tour-travels-customer-churn-prediction/data

Dataset Description:

Attributes	Data type	Counts*	Values	Description
Age	int64	954	27 - 38 year olds	Age of user
FrequentFlyer	object	954	Yes // No // No Record	Whether Customer takes frequent flights
AnnualIncomeClass	object	954	High // Medium // Low Income	Class of annual income of user
ServicesOpted	int64	954	Range = 1 - 6	Number of times services opted during recent years
AccountSyncedToSocialMedia	object	954	Yes // No	Whether Company Account Of User Synchronized to Their Social Media
BookedHotelOrNot	object	954	Yes // No	Whether the customer book lodgings/Hotels using company services
Churn	int64	954	0 = Doesn't Churn // 1 = Churned	1- Customer Churns 0- Customer Doesn't Churn

Churn assumptions

- Assumes churn is defined by the app being deleted from the phone

Basic stat

- Total users in the dataset: 954
- Churn rate: 23%
- Users age: Median = 31 year-old / Avg = 32.11 year-old

Analysis

Analyzing relationships between churn behavior and frequent flyer status and/or hotel bookings.

Customers who booked hotels with us are less likely to churn

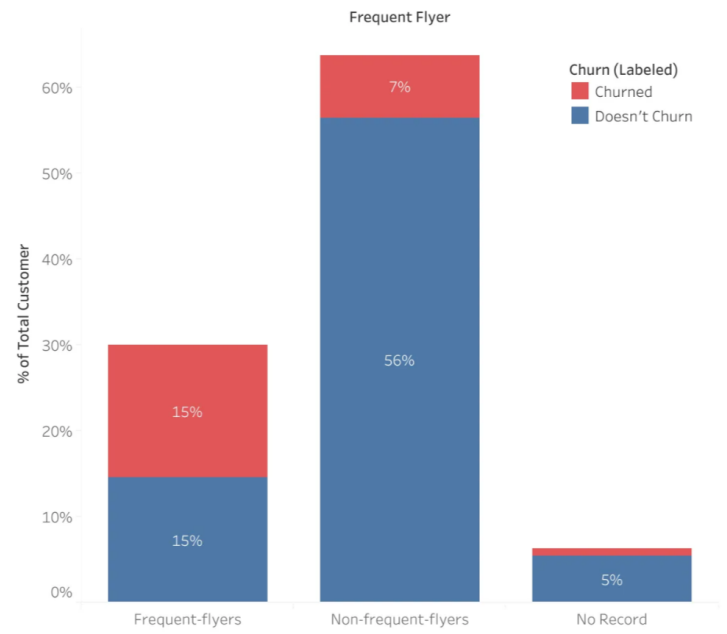**Frequent flyers (FFs) do not continue flying with us.**
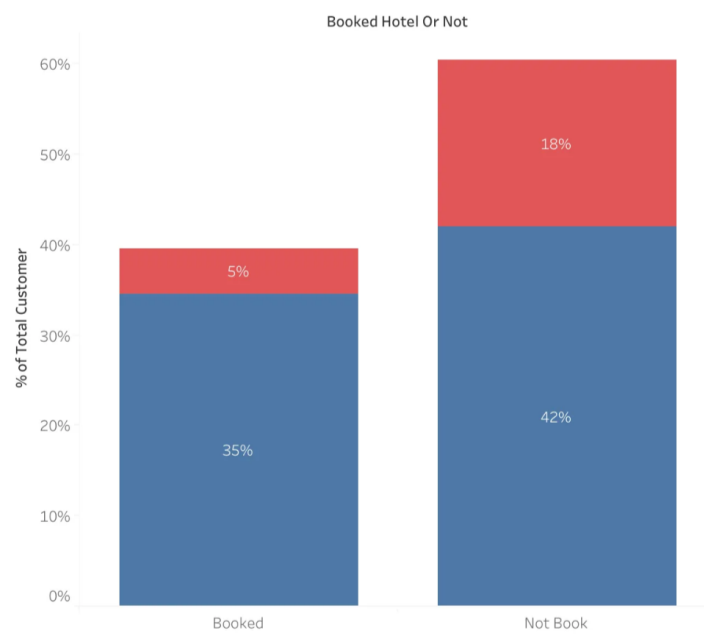
- 30%* of customers who **haven't** booked hotels with us churned

- 13% of customers who **have** booked hotels with us churned

  💡 Revealing an opportunity to boost retention through hotel + flight promotions.

- 50%** of FFs churned

- compared to only 11% of non-FFs

  💡 Suggesting that we are not the top choice for frequent flyers

*Calculation = 18% / (18% + 42%) = 30%

**Calculation = 15% / (15% + 15%) = 50%

Two − dimension Analysis

FFs who haven't booked hotels with us have the highest probability of churn followed by FFs who have booked hotels with us

Booked Hotel Or Not

Frequent Flyer	Booked	Not Book

1. **2.**

Frequent-flyers   44%   54%

3. **4.**

Non-frequent-flyers   5%   17%

Churn (Labeled)
- Churned
- Doesn't Churn

% Churn
- 8%
- 15%
- 20%
- 25%
- 30%
- 37%
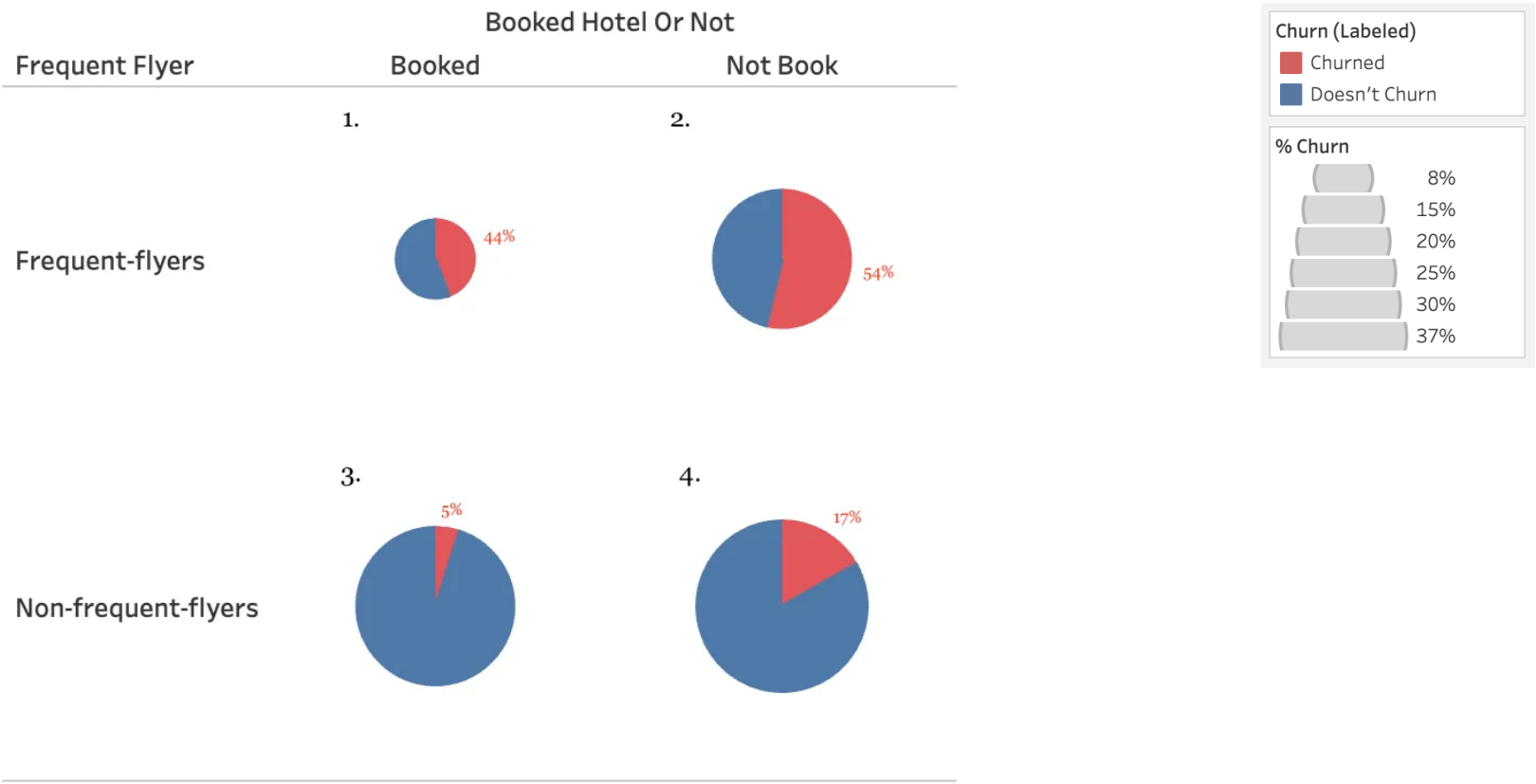
Priority	Target group	Problem statement	Data evidence	Recommended next steps
1	Frequent-flyers + Not Book (2)	We are **not top-of-mind** compare to our competitors **for frequent travelers** in both flight and hotel	54% of FFs who have not book hotels with us churned	- Assess the availability and convenience of **competitor offerings aimed at frequent travelers** - Launch marketing/promotional campaigns to increase top-of-mind awareness
2	Frequent-flyers + Booked (1)	Even when we acquired **FFs** through hotels, they **are not staying**	44% of FFs who have booked hotels with us churned	- Review customer experiences by **analyzing complaint data and customer satisfaction** scores to identify areas for improvement.
3	Non-frequent-flyers + Not Book (4)	More non-frequent flyers who have not booked hotels with us are churning.	17% of non-frequent flyers who have not booked hotels with us have churned, compared to 5% of those who have.	- Identify high-risk customers and offer targeted hotel promotions to reduce churn.

Appendix

Frequent flyers are not flying with us

## Users who churned were not inactive
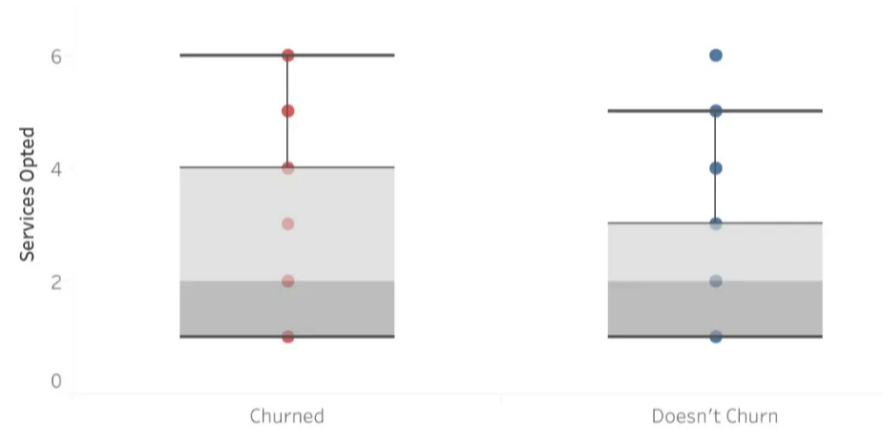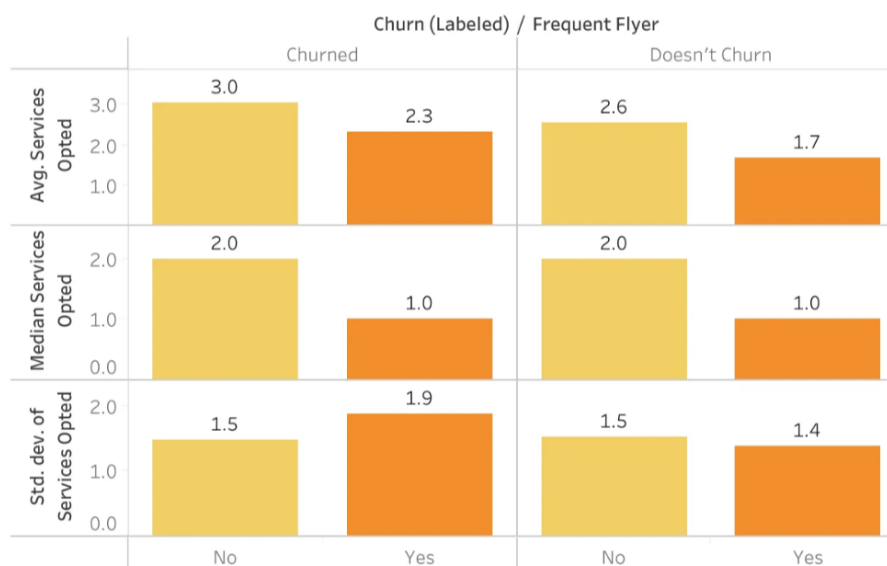
- There are more users who churned that flew with us more than 2 times

- (Non-FFs vs. FFs) Frequent flyers booked our service, on average, **less** than non frequent travelers for both churned and not-churned customers.

- (Churn vs. Doesn't Churn) Users who churned booked our service, on average, **more** than not-churn users, suggest problems with customer experiences
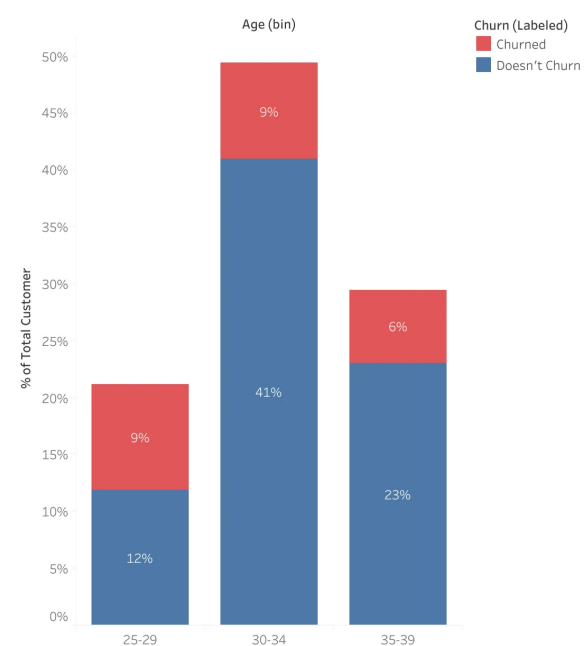
💡 These support the hypothesis about 1. Inability to appeal to frequent travelers 2. Issues with user experiences/competitor offers

Social media sync plays no significant role in churning behavior
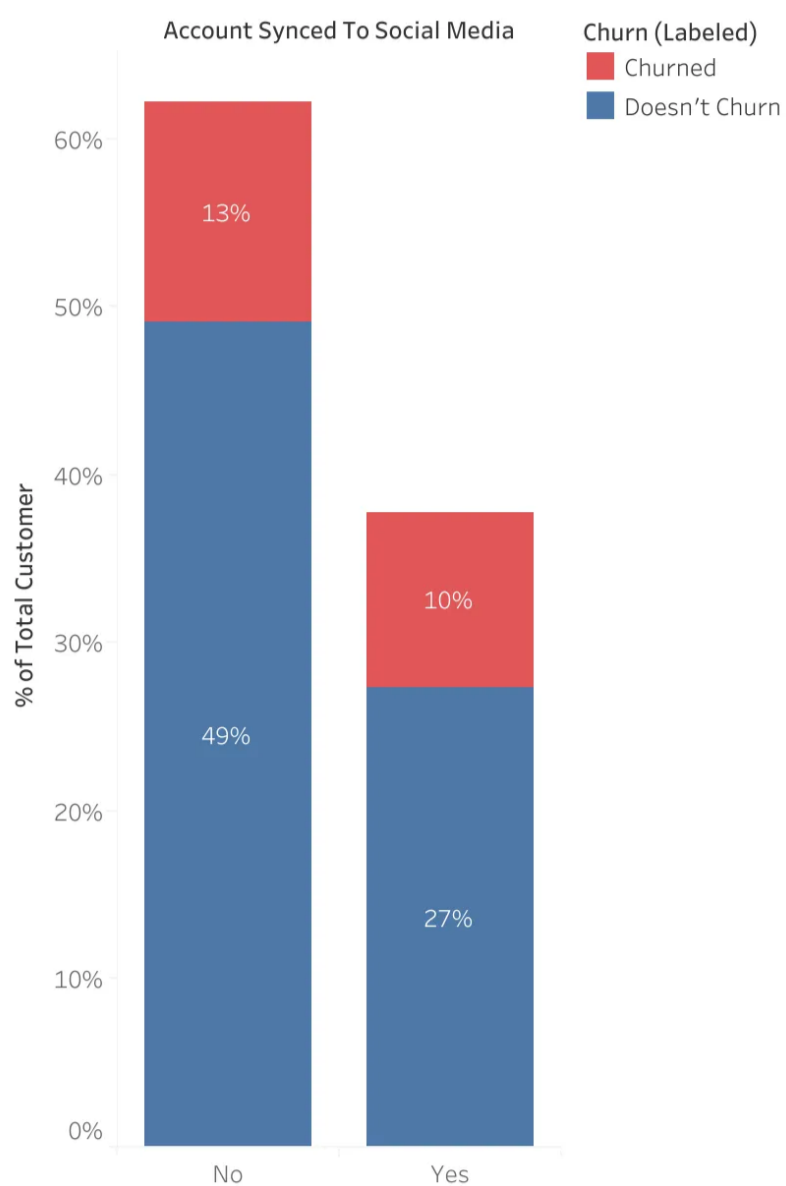
All age groups have a similar churn rate

- The churned frequent flyers are either low or high-income

💡 This insight can feed into customized promotional offers that fit people with different size of income stream

All high-income users are frequent travelers and more than half churned

Annual Inco..

Frequent Flyer

Churn (Labeled)
- Churned
- Doesn't Churn

High Income

% of Total Customer

- 10%
- 7%

Middle Income

% of Total Customer

- 36%

Low Income

% of Total Customer

- 6%
- 8%
- 5%
- 20%

Frequent-flyers | Non-frequent-flyers | No Record