



AIRLINE SATISFACTION

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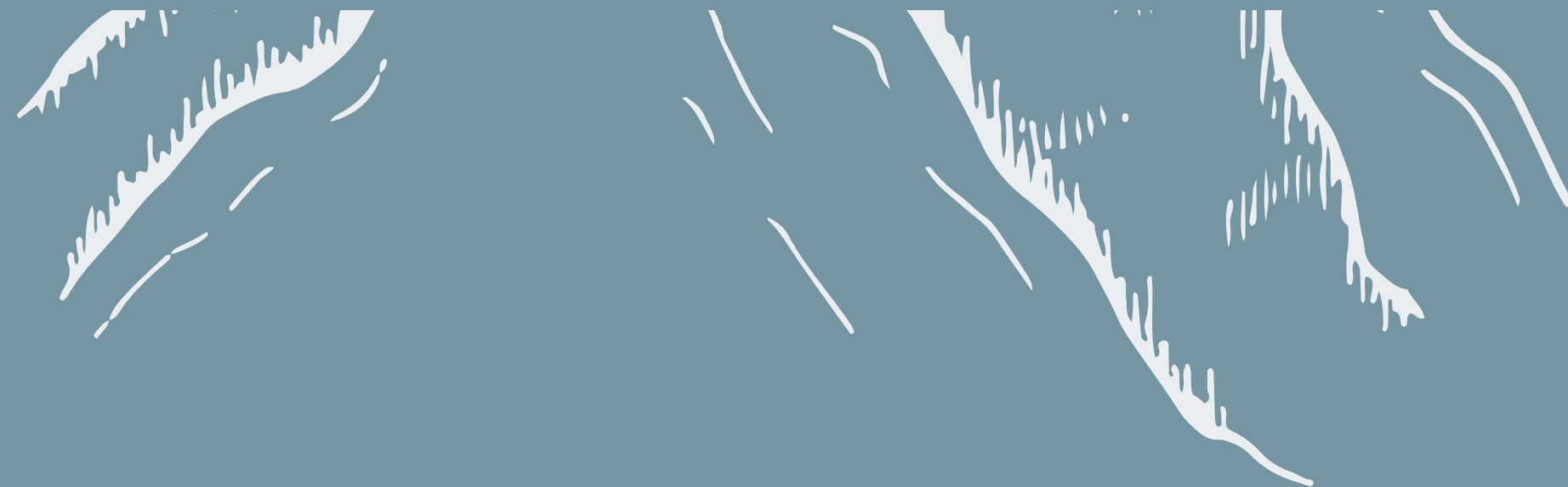


TABLE OF CONTENTS

- The Question
- Our Data Set
- Demographic Variables
- Satisfaction Variables
- The Why
- Original Attempt
- Original Findings
- Revised Hypothesis
- Regressions and Marginal Effect



- Inflight Entertainment Analysis
- CLV
- Entertainment Activations
- Seat Comfort Analysis
- Seat Comfort Activations
- Conclusion
- Thank You & Questions

THE QUESTION

HOW CAN AN AIRLINE SUCCESSFULLY
INCREASE OVERALL CUSTOMER
SATISFACTION?

KAGGLE: INVESTICO AIRLINE DATA

This dataset includes consolidated customer flight details and feedback ratings from previous flights.

It aims to predict future customer satisfaction levels based on various service factors.

Highlight areas that require greater emphasis to increase overall customer satisfaction.



OUR
DATA
SET

DEMOGRAPHIC VARIABLES



GENDER



**TRAVEL
TYPE**



**CUSTOMER
TYPE**



CLASS



**CUSTOMER
SATISFACTION**



AGE

SATISFACTION VARIABLES



**FLIGHT
DISTANCE**



**SEAT
COMFORT**



**GATE
LOCATION**



**INFLIGHT
WIFI**



**FOOD &
DRINK**



**IN FLIGHT
ENTERTAIN
MENT**



**ONLINE
SUPPORT**



**LEG
ROOM**



**BAGGAGE
HANDLING**



**ONLINE
BOARDING**



**CHECK-IN
SERVICE**



**ONBOARD
SERVICE**



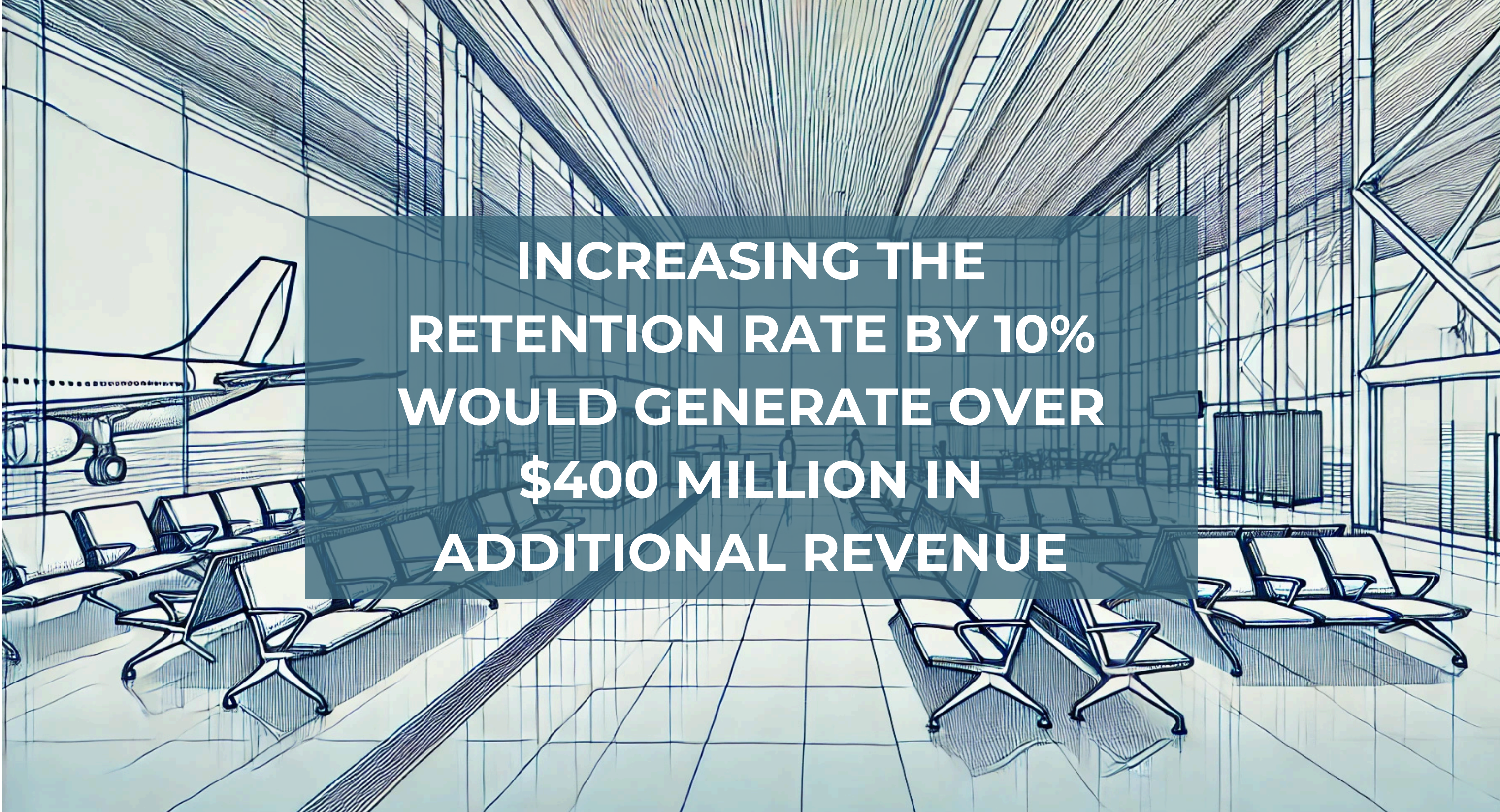
**CLEANLI-
NESS**



**EASE OF
ONLINE
BOOKING**



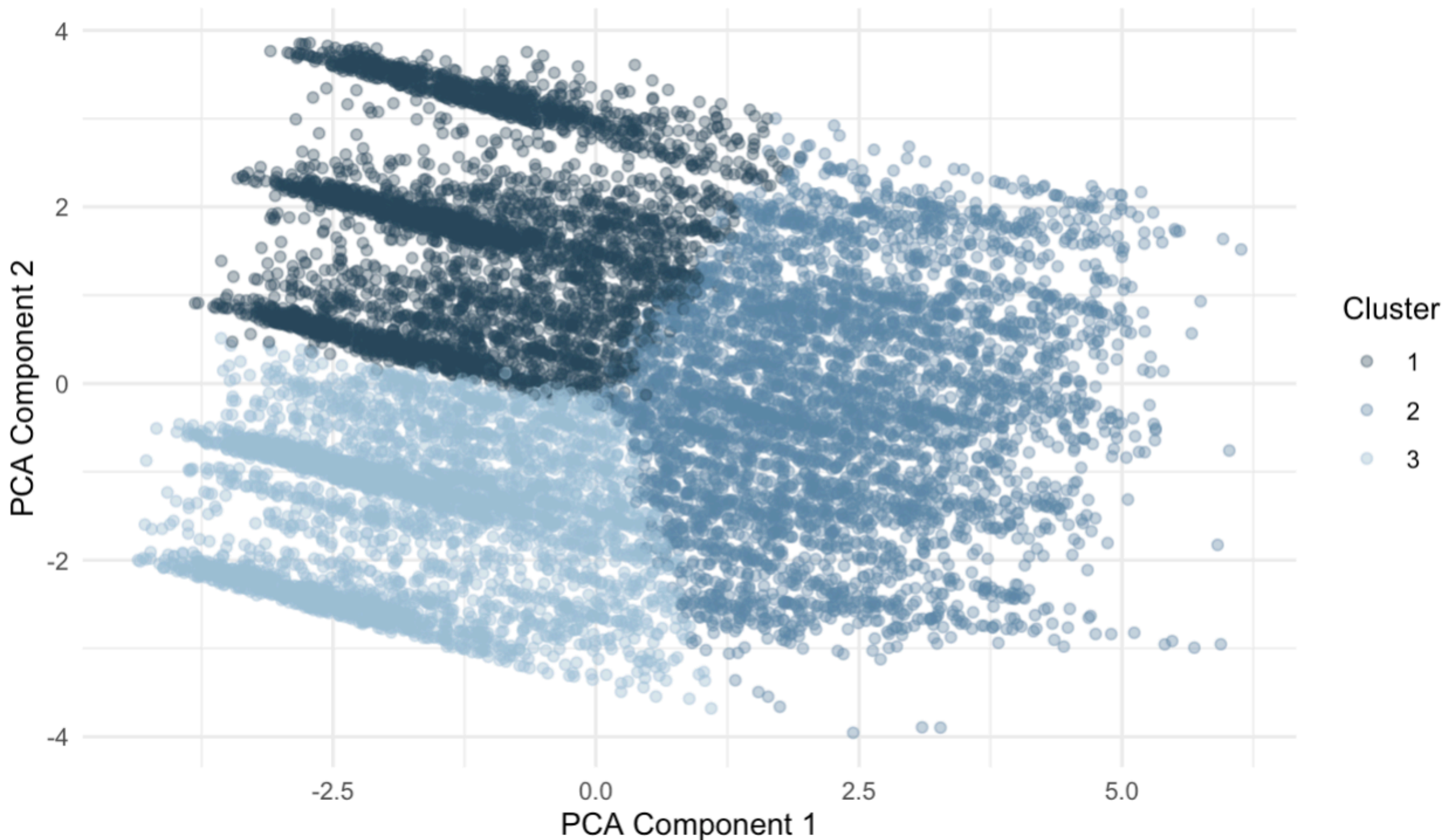
**DEP. & ARR.
CONVEN-
IENCE**



**INCREASING THE
RETENTION RATE BY 10%
WOULD GENERATE OVER
\$400 MILLION IN
ADDITIONAL REVENUE**

OUR ORIGINAL PLAN

Scatter Plot of Top 2 PCA Components (10% Sample)



SUMMARY

With a goal to define market segments, our original model segmented people based on their satisfaction among all the different variables.

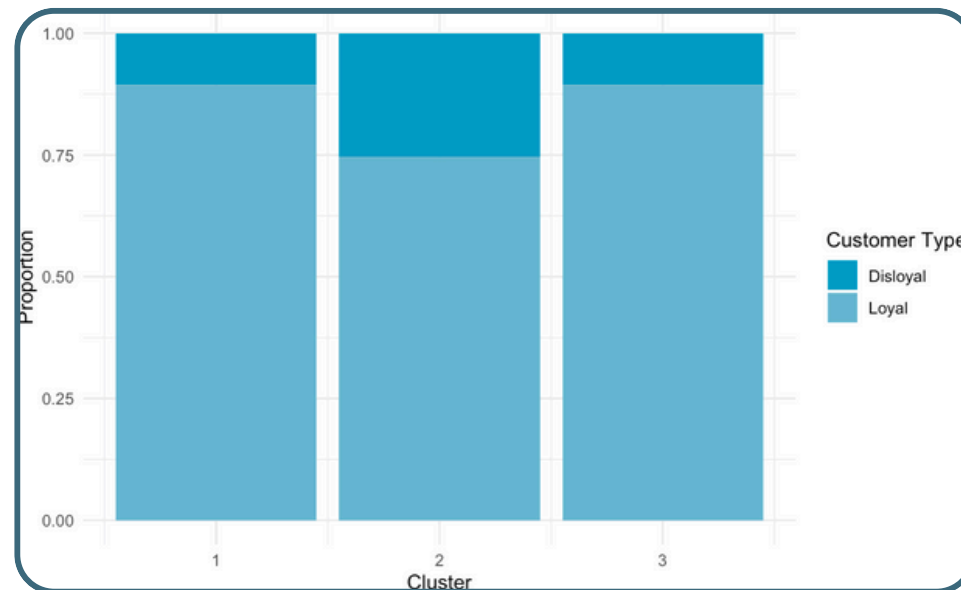
APPROACH:

1) PCA

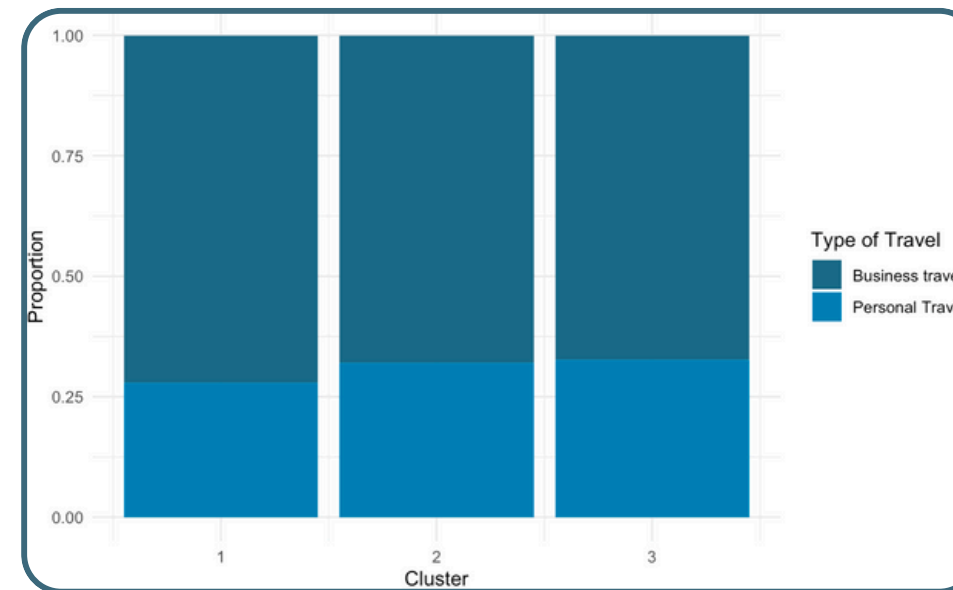
2) REGRESSIONS

3) MARGINAL EFFECTS

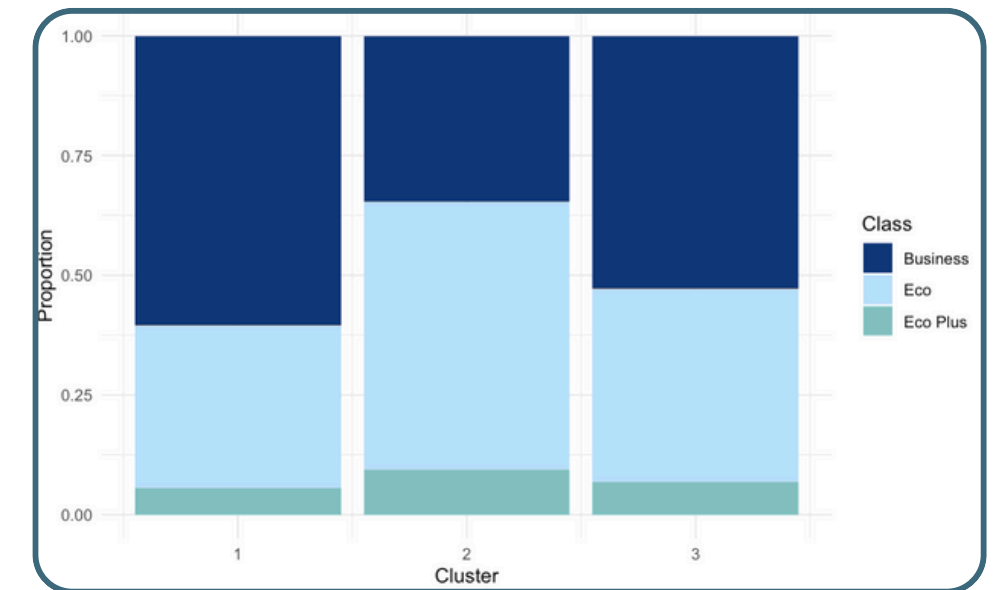
SEGMENT SATISFACTION BY:



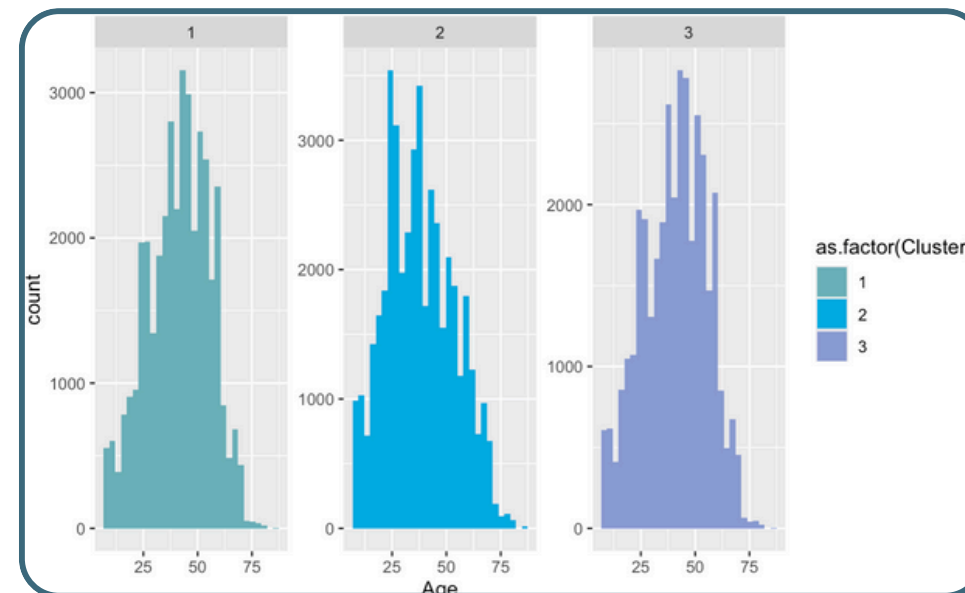
CUSTOMER TYPE



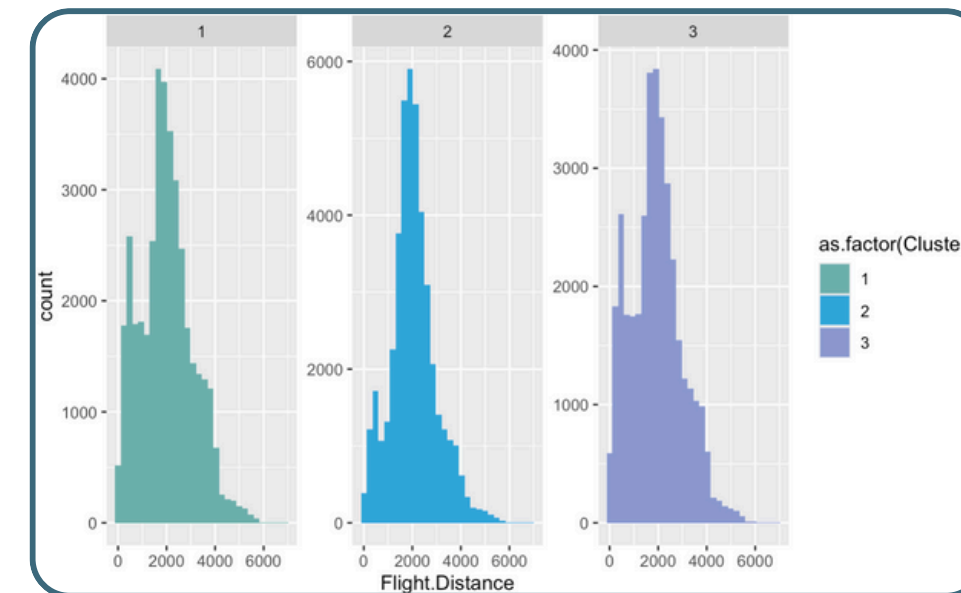
TRAVEL TYPE



CLASS



AGE



FLIGHT DISTANCE



OUR REVISED HYPOTHESIS:

TO BETTER TARGET SPECIFIC CUSTOMER SEGMENTS, WE RE-ASSESSED TARGETING BASED ON DEMOGRAPHIC FACTORS WITHIN FLIGHT SATISFACTION VARIABLES.

REGRESSION AND MARGINAL EFFECTS

Variable	Male	Female
(Intercept)	-1.07	-1.00
Seat.comfort	0.05	0.05
Departure.Ar	-0.06	-0.04
Food.and.dri	0.01	0.01
Gate.locatio	0.01	-0.01
Inflight.wifi.s	-0.02	-0.01
Inflight.enter	0.14	0.09
Online.suppc	0.02	0.02
Ease.of.Onlir	0.06	0.04
On.board.ser	0.04	0.05
Leg.room.ser	0.03	0.04
Baggage.han	0.00	0.01
Checkin.serv	0.03	0.03
Cleanliness	0.00	0.00
Online.board	-0.01	0.01

GENDER

Variable	Personal	Buisness T
(Intercept)	-0.94	-1.07
Seat.comfort	0.13	0.03
Departure.Ar	-0.09	0.00
Food.and.dri	-0.03	0.01
Gate.locatio	0.00	-0.02
Inflight.wifi.s	-0.02	-0.01
Inflight.enter	0.11	0.11
Online.suppc	0.03	0.02
Ease.of.Onlir	0.05	0.05
On.board.ser	0.04	0.05
Leg.room.ser	0.04	0.03
Baggage.han	0.00	0.01
Checkin.serv	0.02	0.04
Cleanliness	0.00	0.01
Online.board	-0.01	0.01

TRAVEL TYPE

Variable	Eco	Buisness Cla	Eco Plus
(Intercept)	-1.05	-0.94	-1.02
Seat.comfort	0.11	0.02	0.09
Departure.Ar	-0.05	-0.02	-0.06
Food.and.dri	-0.01	0.02	0.01
Gate.locatio	0.00	-0.01	0.02
Inflight.wifi.s	-0.02	-0.01	-0.02
Inflight.enter	0.11	0.09	0.10
Online.suppc	0.02	0.02	0.02
Ease.of.Onlir	0.06	0.04	0.07
On.board.ser	0.04	0.04	0.04
Leg.room.ser	0.03	0.05	0.02
Baggage.han	0.00	0.01	0.00
Checkin.serv	0.03	0.03	0.03
Cleanliness	0.00	0.00	-0.01
Online.board	-0.02	0.02	-0.01

CLASS

Variable	Loyal	Disloyal
(Intercept)	-0.98	-0.89
Seat.comfort	0.05	0.18
Departure.Ar	-0.08	0.01
Food.and.dri	0.02	-0.01
Gate.locatio	0.03	-0.01
Inflight.wifi.s	-0.01	0.00
Inflight.enter	0.09	0.00
Online.suppc	0.02	0.00
Ease.of.Onlir	0.04	0.02
On.board.ser	0.05	0.01
Leg.room.ser	0.04	0.00
Baggage.han	0.01	0.01
Checkin.serv	0.03	0.02
Cleanliness	0.00	0.01
Online.board	0.02	-0.01

CUSTOMER TYPE

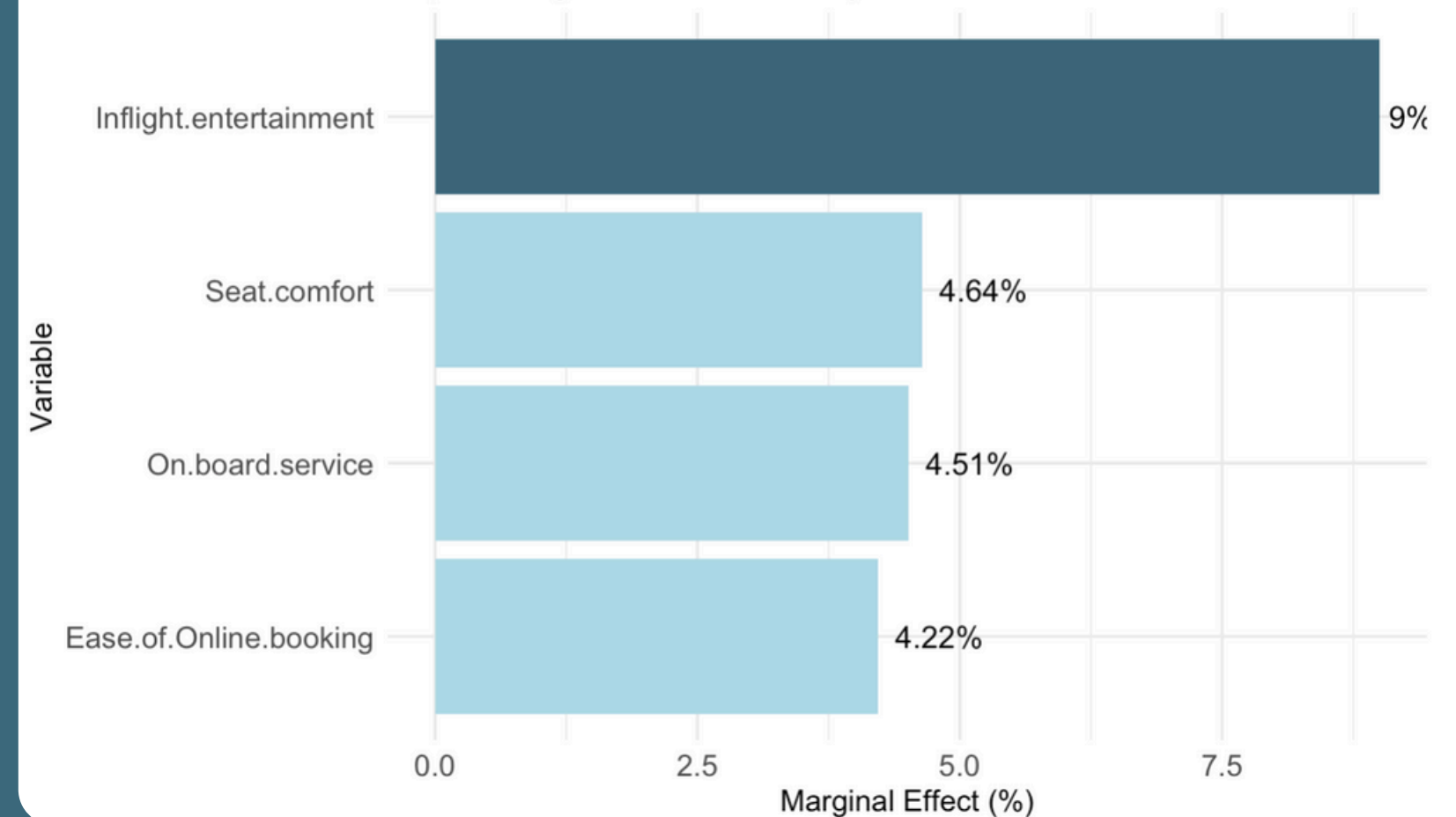


IN FLIGHT ENTERTAIN- MENT

GROUPING BY LOYALTY

- By increasing the rating of in flight entertainment by one unit, we would expect to see a 9% increase in their predicted satisfaction for loyal customers
- In flight entertainment has the largest marginal effect for the predicted satisfaction for loyal customers
- We want to capitalize on this opportunity to increase satisfaction for loyal customers

Top 4 Marginal Effects for Loyal Customers



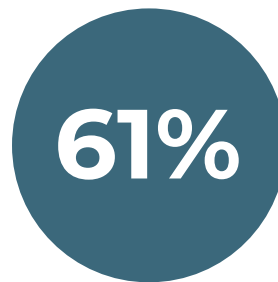
CUSTOMER LIFETIME VALUE

ASSUMING

- \$10 Margin
- 100 Million Customers

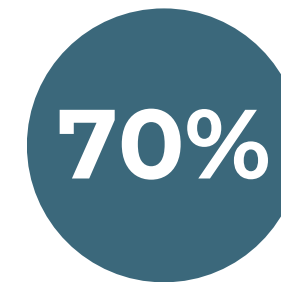
Increasing retention from 61% to 70% (a 9% marginal effect) would boost Customer Lifetime Value (CLV) by \$5. With a customer base of 100 million, a 10% market share increase, would amount to a gain of \$500 million.

ORIGINAL



CLV- \$13
\$1,077 Million

POTENTIAL



CLV- \$18
\$1,528 Million

ACTIVATIONS



STREAMING SERVICE PARTNERSHIP

New partnership with Hulu to elevate the in-flight entertainment experience for our loyal customers. Frequent flyers value a premium entertainment experience, and by offering exclusive Hulu content, we're enhancing their travel experience with more variety and quality.



BENEFIT

By increasing the rating of in-flight entertainment by 1, we would expect to see a 9% increase in their predicted satisfaction for loyal customers.



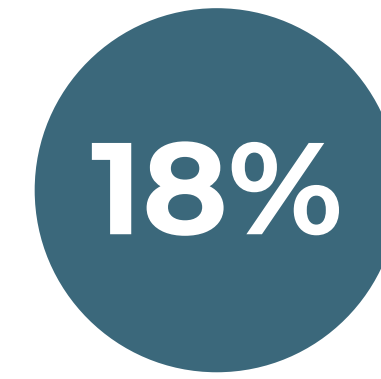
SEAT COMFORT

TAKEAWAYS

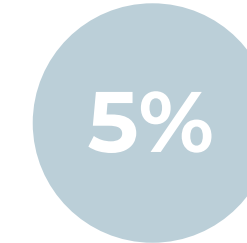
Looking at each variable's marginal effect in association with satisfaction, we can see that disloyal, eco & eco+, and personal travelers all value seat comfort significantly more than their counterparts.

From this information, we will deduct that the customer who lets seat comfort dictate their satisfaction while traveling is an infrequent and less practical flyer. They are someone traveling for an occasion, not day to day.

CUSTOMER TYPE

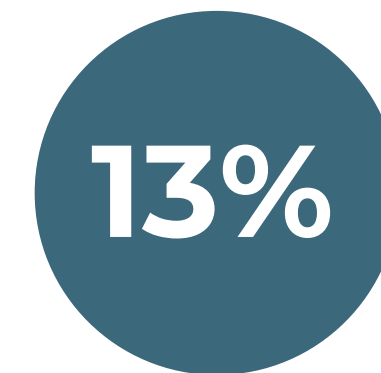


Disloyal

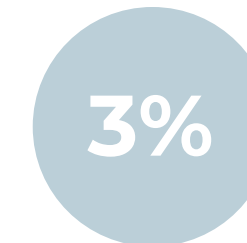


Loyal

TRAVEL TYPE

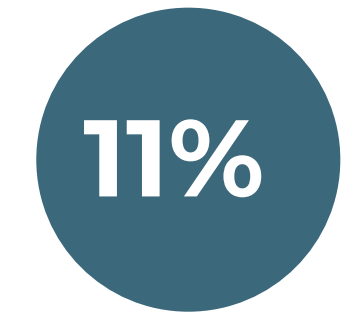


Personal

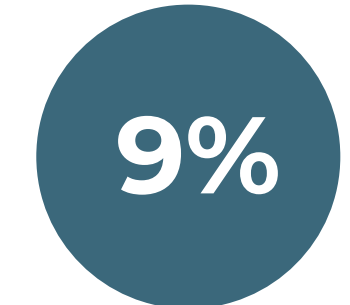


Business

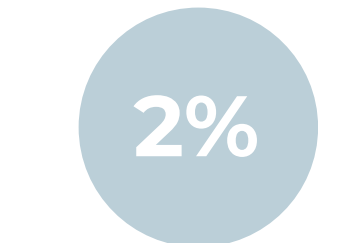
CLASS



Eco



Eco+



Business

ACTIVATIONS



LOYALTY PROGRAM FOR SEAT UPGRADE

To capitalize on this segment of infrequent, personal travelers who prioritize seat comfort, we recommend offering a deal where customer's who join the airline's loyalty program today get first pick on their seat for a set duration of time. This will allow customers to have liberty over their spot on the airplane while increasing frequent customers for the airline.

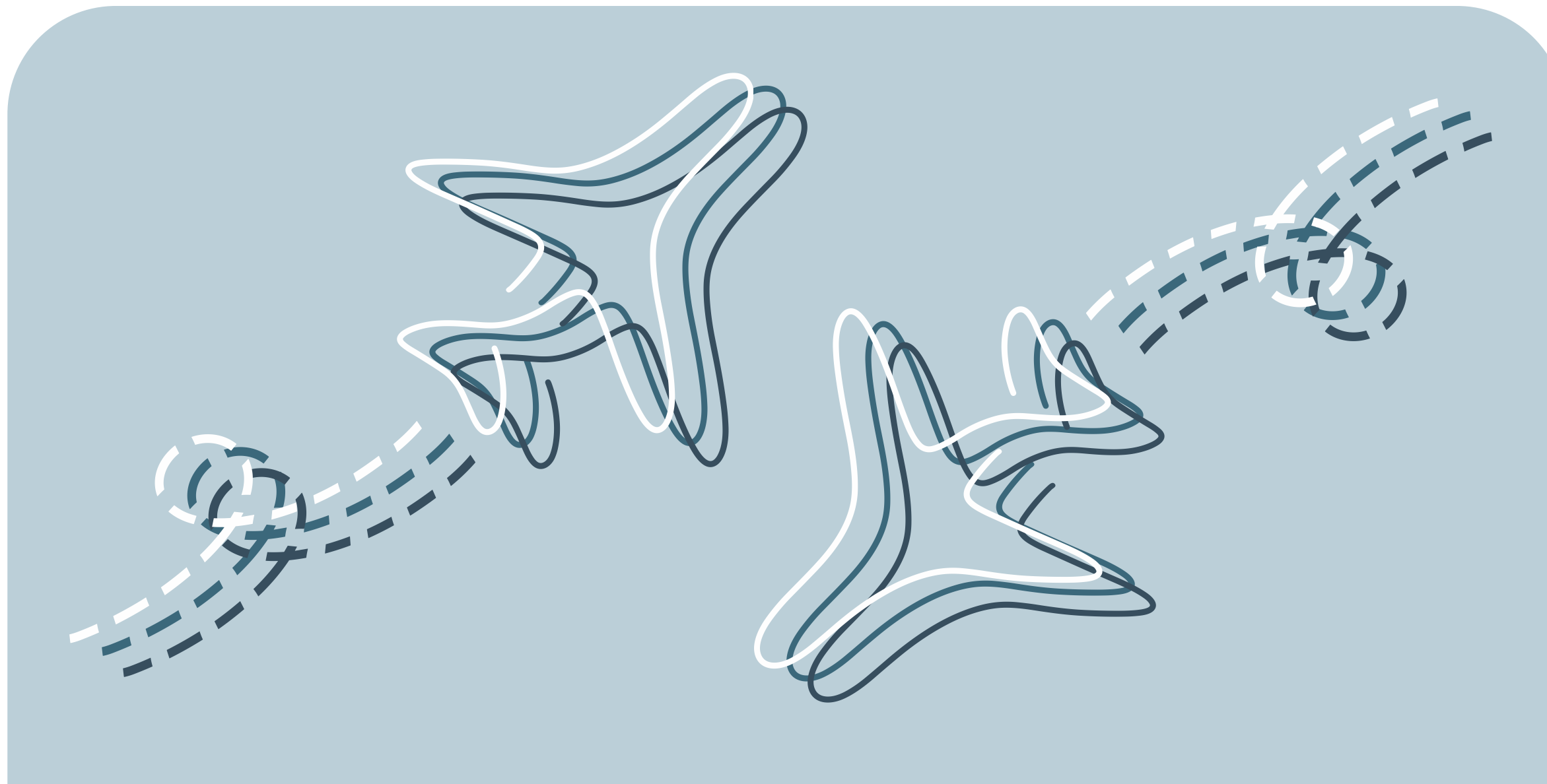


BENEFIT

By focusing on improving infrequent flyer's experiences with seat comfort, we will be driving customer acquisition. To retain the newly acquainted customers, we will continue the initial offering with seat improvement deals when the customer's travel pattern slows.

A stylized illustration of a coastal scene. The sky is light blue with several white, fluffy clouds. The water is depicted with horizontal lines and wavy patterns, suggesting waves. There are several rocks of different shapes and sizes scattered across the water and along the shoreline. The overall style is simple and graphic.

CONCLUSION



THANK YOU!
QUESTIONS?