

DATA VISSULIZATION & COMMUNICATION

ASSIGNMENT 2

PANDURANGA A

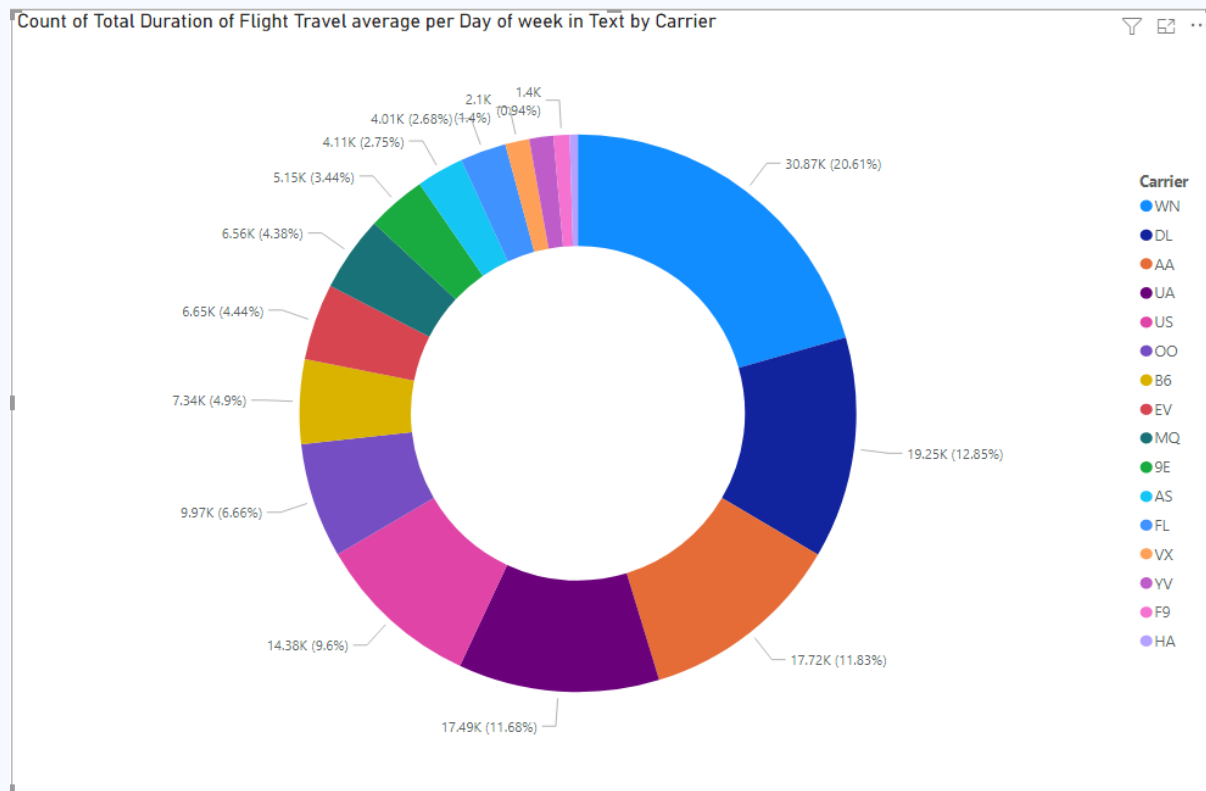
PGD IN BUSINESS ANALYTICS (2020 – 2021)

OUTLINE

1. All Outliners has been removed from the data
2. 24 hrs. Time format has been changed to 12 hrs time format for easy understanding
3. All Cancelled Flight data is take into count that the customer is unhappy with the flight service
4. I have calculated the flight duration for each flight data by finding the difference arrival and departure duration.

OUTLINE OF INSIGHTS (PART 2)

1. Numerical Representation of month & year has been transformed into text
2. Based on the Total Delay (Departure & Arrival) Flight Data is considered as – late & Early Arrival

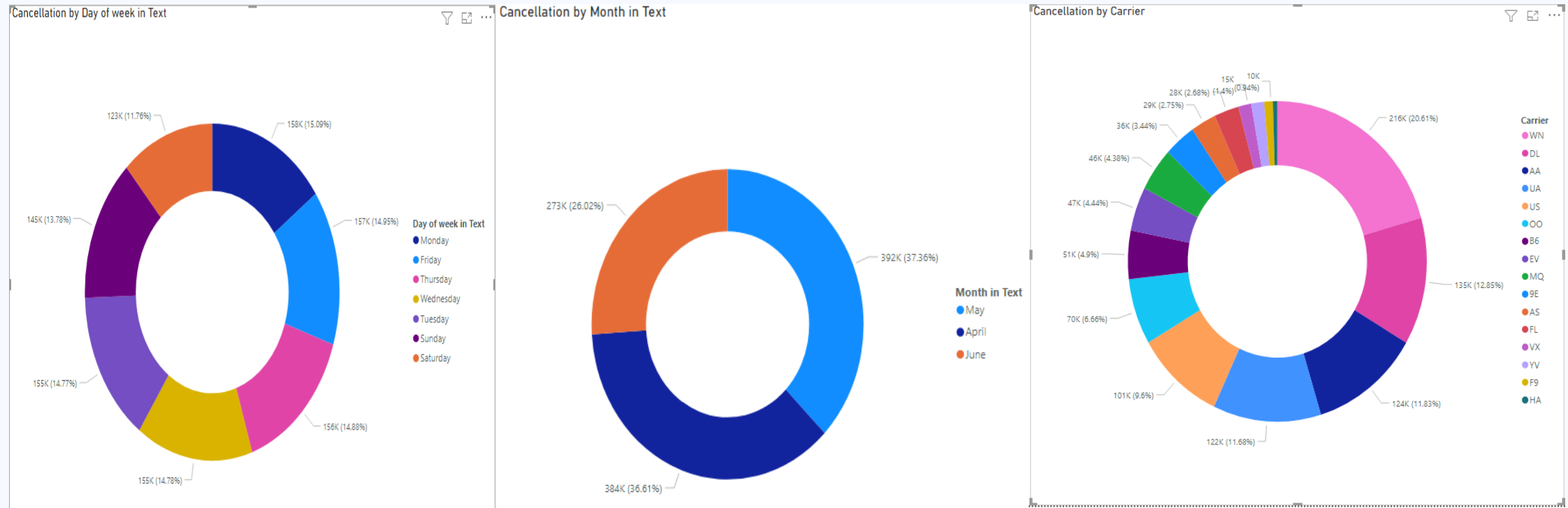


Total Flight Duration by a Carrier for the month of (April, May & June)

Formula used:

Count of Total Duration of Flight Travel average per Day of week in Text
 =
 AVERAGEX(
 KEEPFILTERS(VALUE('FILGHT RAW DATA'[Day of week in Text])),
 CALCULATE(COUNTA('FILGHT RAW DATA'[Total Duration of Flight Travel]))
)

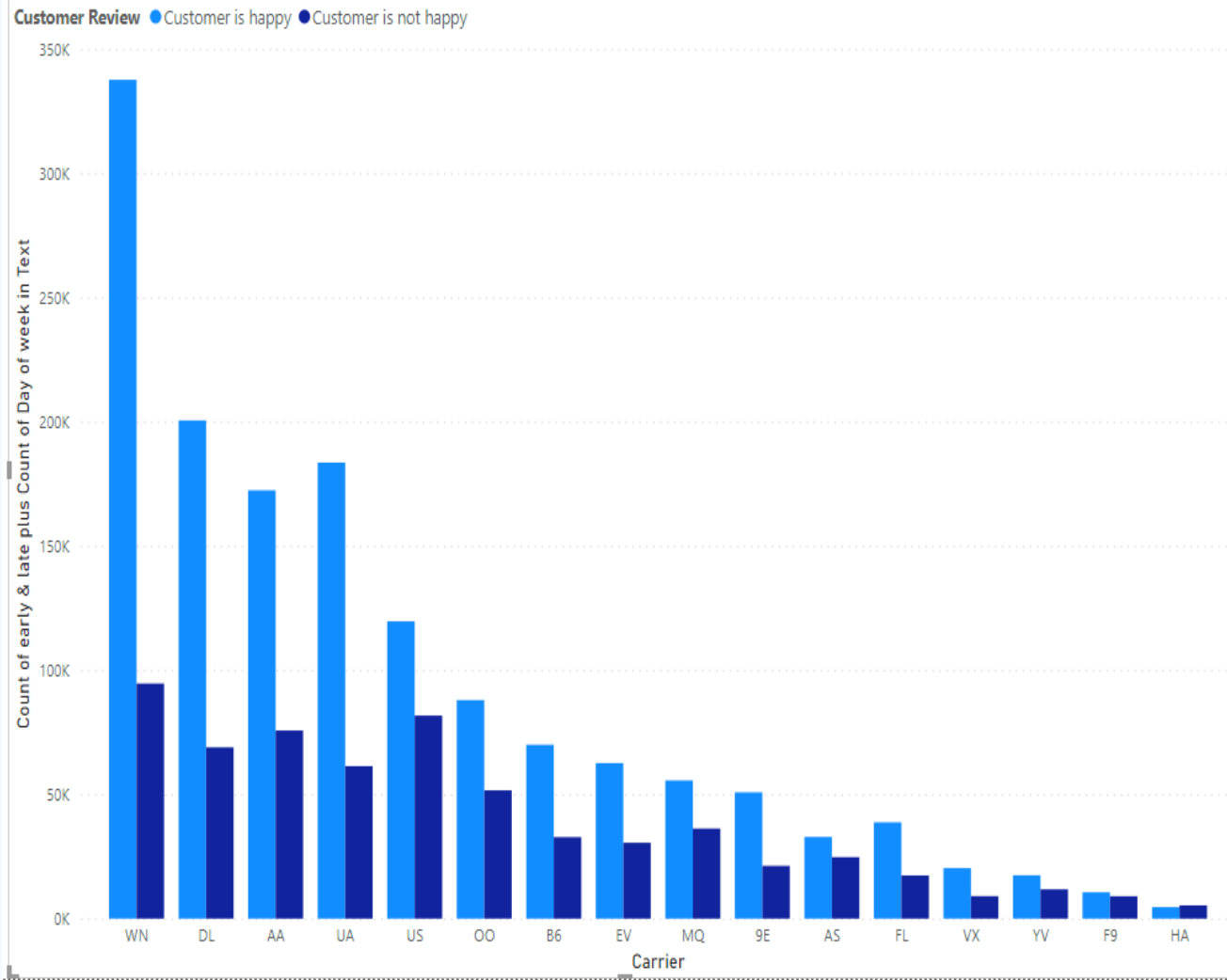
Total no flight cancelled by day of week & months (April, May & June) and based on Carrier



Formula used:

Count of Cancelled plus Count of Day of week in Text 2 =
 $\text{COUNTA}(\text{'FILGHT RAW DATA' [Cancelled]}) + \text{COUNTA}(\text{'FILGHT RAW DATA' [Day of week in Text]})$

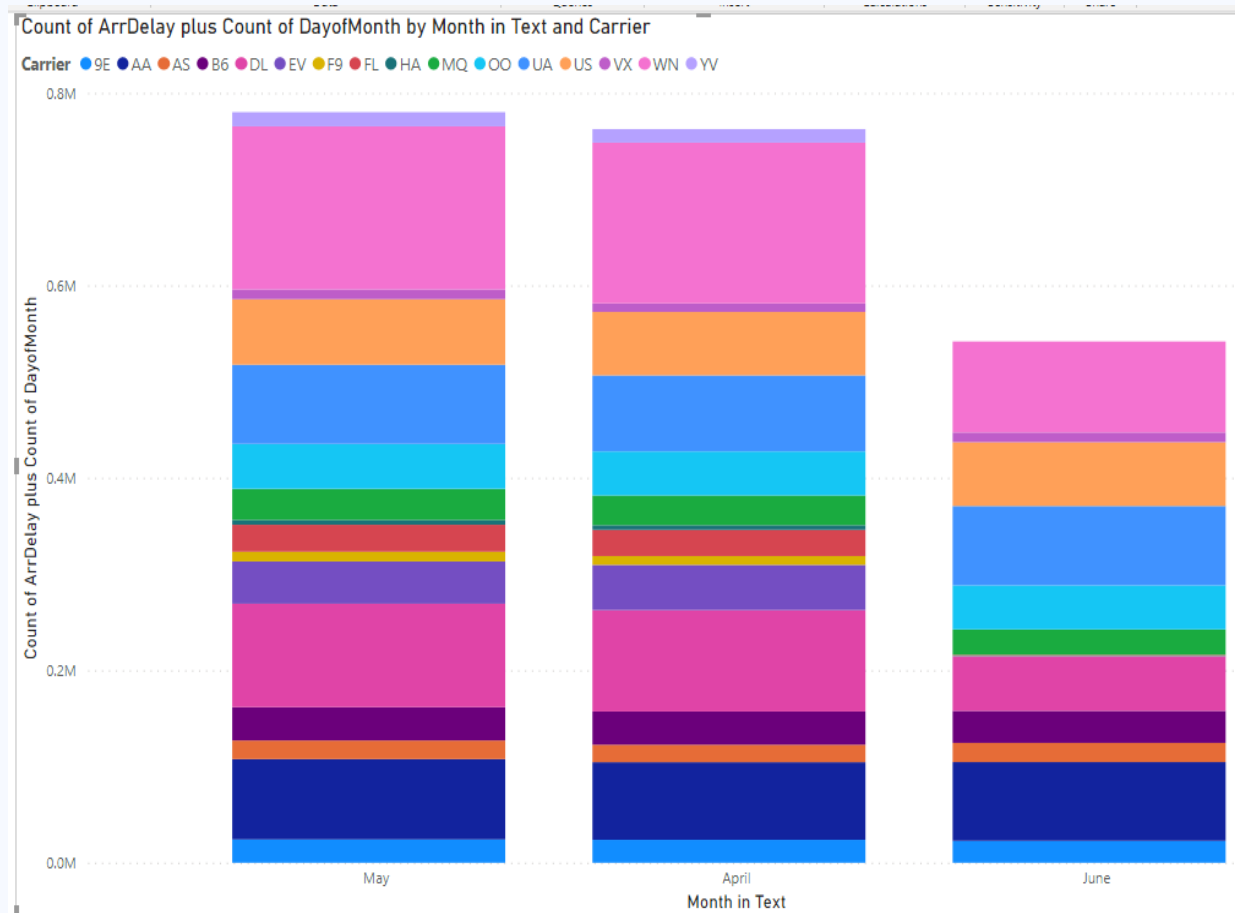
Count of early & late plus Count of Day of week in Text by Carrier and Customer Review



Customer Feedback based on Early & late Arrival

Formula used:

Count of early & late plus Count of Day of week in Text
=
COUNTA('FILGHT RAW DATA'[early & late]) +
COUNTA('FILGHT RAW DATA'[Day of week in Text])



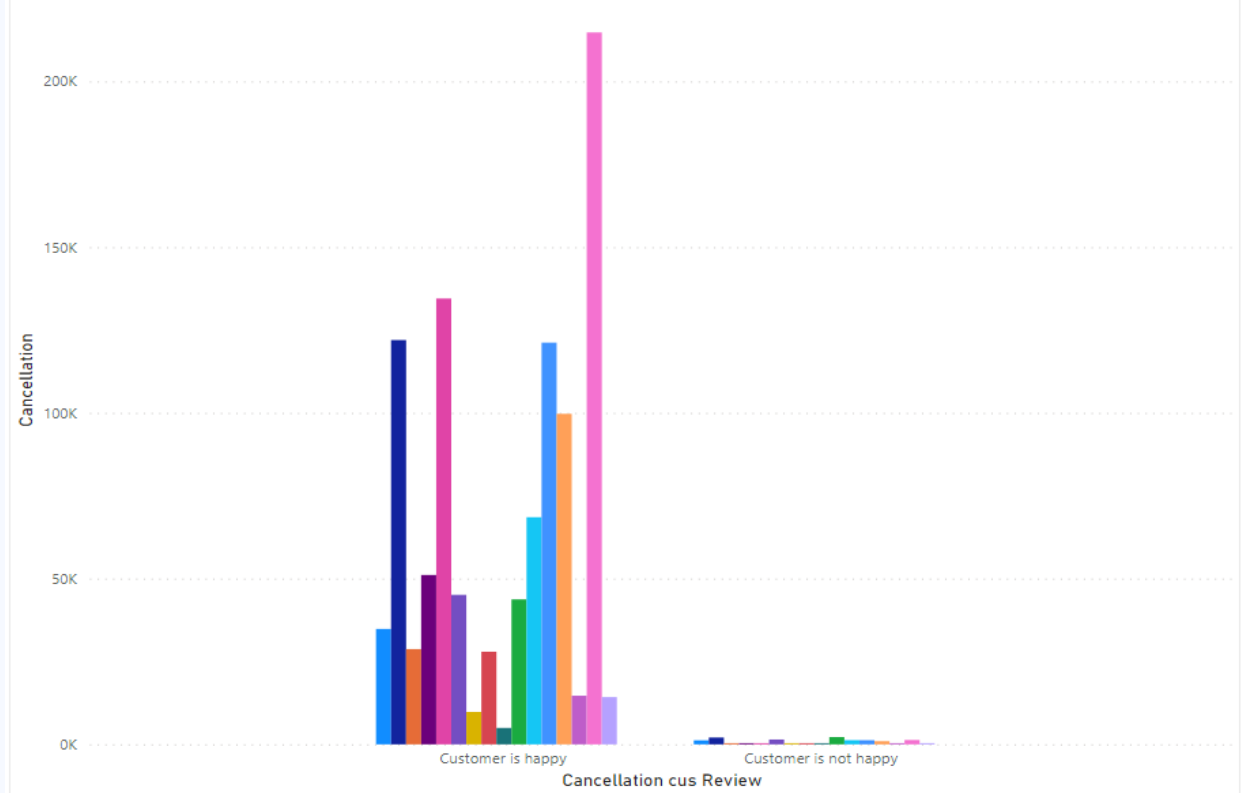
Arrival Delay Ratio by Month with Respective to the Carrier

Insights :

I would suggest the customer as Business analyst to avoid WN, DL, UA, US Carrier to travel and in turn suggest MQ, FL, F9 & AS for quicker travel as there very less count arrival delay and the customer are also happy with the service.

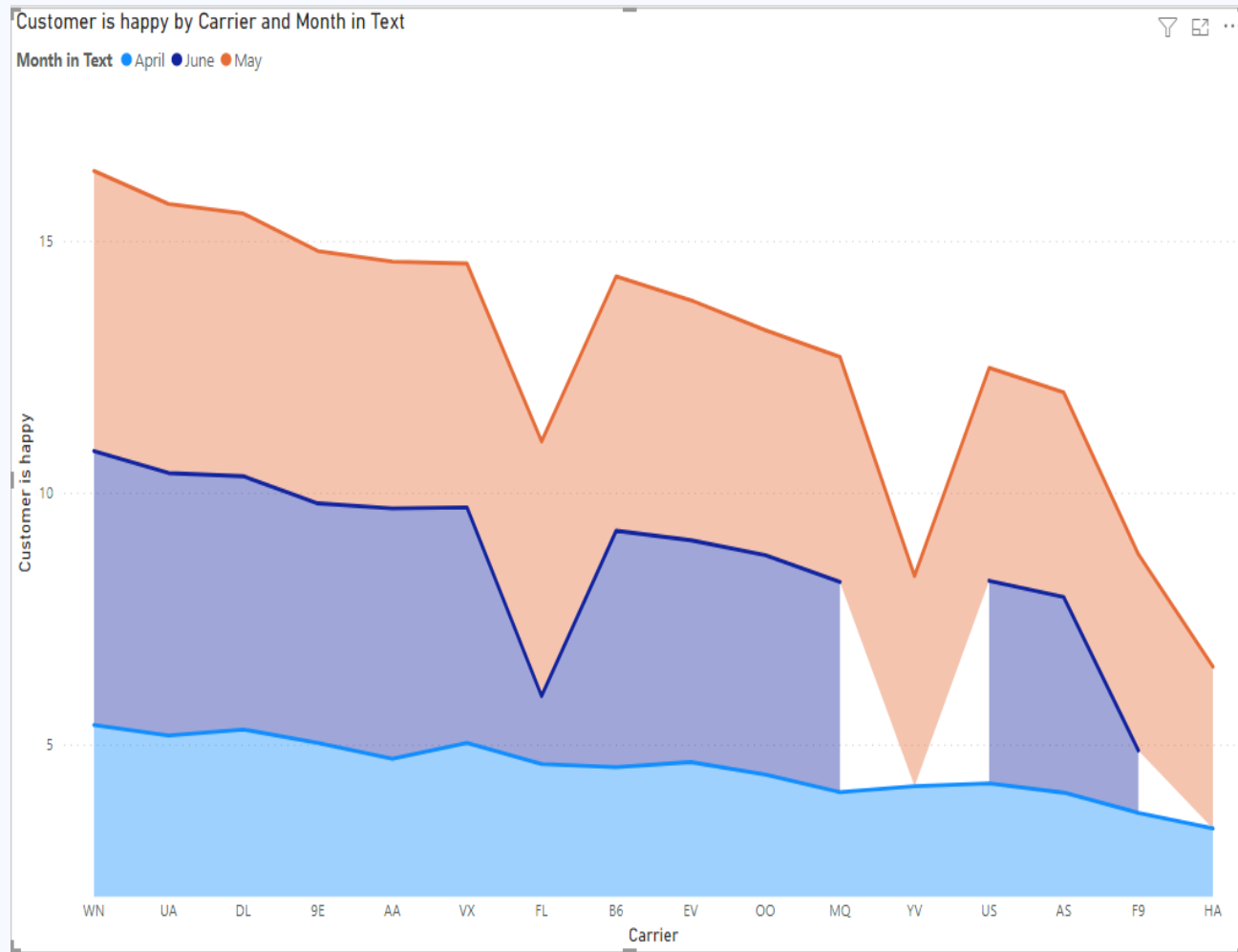
Cancellation by Cancellation cus Review and Carrier

Carrier 9E AA AS B6 DL EV F9 FL HA MQ OO UA US VX WN YV



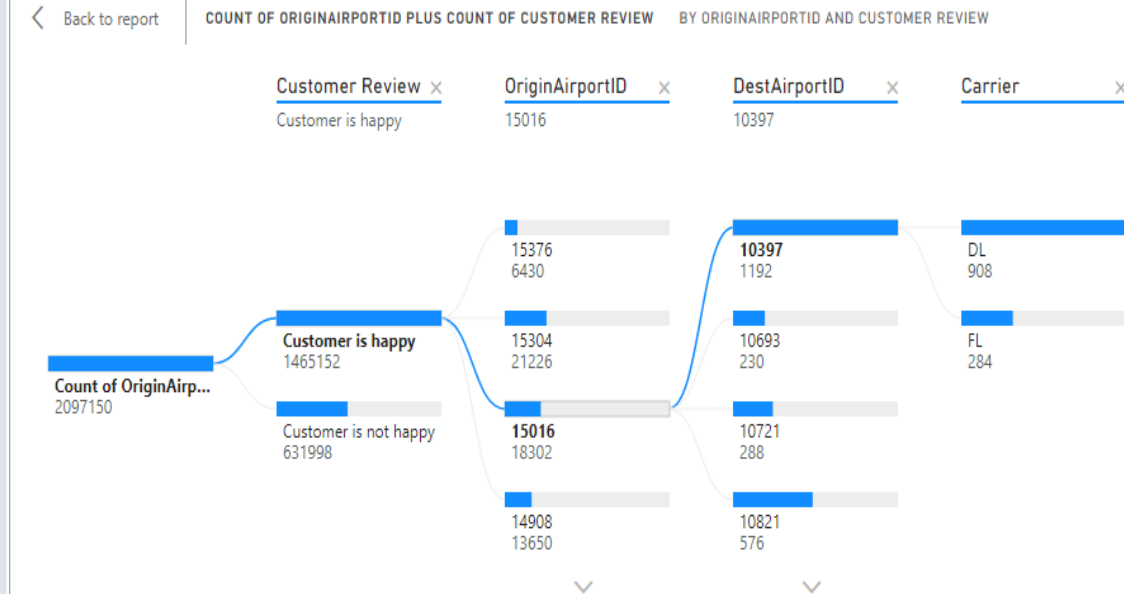
Cancellation Customer
feedback with respective
by Carrier

Cancellation cus Review	9E	AA	AS	B6	DL	EV	F9	FL	HA	MQ	OO	UA	US	VX	WN	YV
Customer is happy	34819	121974	28736	51096	134516	45105	9783	27945	4951	43738	68524	121193	99721	14674	214782	14249
Customer is not happy	1211	2063	60	285	208	1458	28	108	11	2188	1261	1250	947	9	1319	363

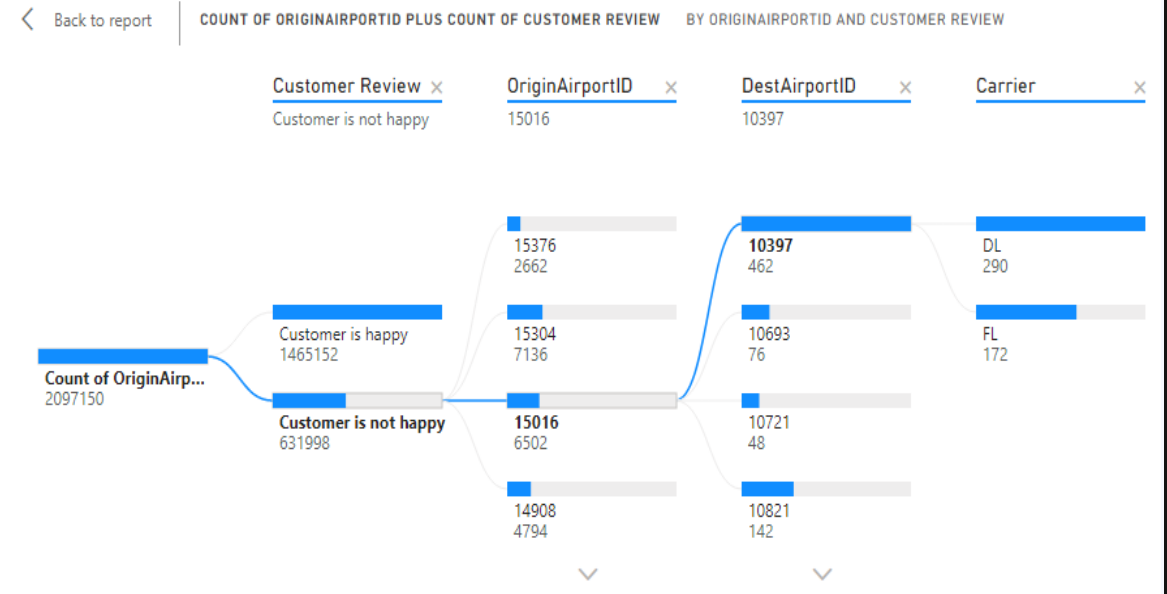


Customer is happy with carrier service based on the month

INSIGHT FOR THIS SLIDE PLS REFER SLIDE 11



Customer Review	Count of OriginAirportID plus Count of Customer Review
Customer is happy	
15376	6430
15304	21226
15016	
10397	
DL	908
FL	284
10693	230
10721	288
10821	576
14908	13650
Customer is not happy	631998



Customer Review	Count of OriginAirportID plus Count of Customer Review
Customer is happy	1465152
Customer is not happy	
15376	2662
15304	7136
15016	
10397	
DL	290
FL	172
10693	76
10721	48
10821	142
14908	4794

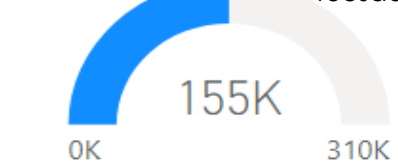
The Previous Slide Describes difference between

- Customer is Happy vs Customer is not Happy
- I have related with the no of customer is happy with the same Orgin Airport ID, DEST Airport ID and same carriers
- This formulation of data help the airport authorities to develop and reduce cancellation, arrival delay and departure delay
- This will also help me to identify the root cause error and customer satisfaction.

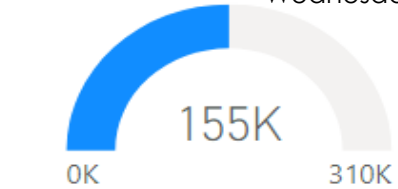
total flights Monday



total flights Tuesday



total flights Wednesday



total flights Thursday



total flights Friday



Key influencers

What influences
Month in Text to
be

Top segments

April ?

When...the likelihood of Month in
Text being April increases
by

Customer Review is
Customer is not happy

1.04x

Key influencers

What influences
Month in Text to
be

Top segments

June ?

When...the likelihood of Month in
Text being June increases by

Customer Review is
Customer is not happy

1.02x

Key influencers

What influences
Month in Text to
be

Top segments

May ?

When...the likelihood of Month in
Text being May increases by

Customer Review is
Customer is happy

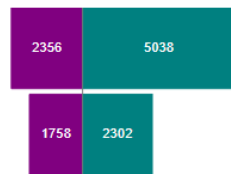
1.06x

Count of EARLY & LATE ARRIVAL based
Delay average per Day of week in Text by EARLY
& LATE ARRIVAL based on Total Delay and Carrier

AS B6

Early Arrival

Late Arrival

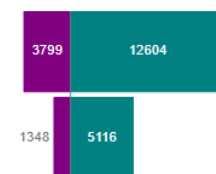


Count of EARLY & LATE ARRIVAL based
Delay average per Day of week in Text by EARLY
& LATE ARRIVAL based on Total Delay and Carrier

9E AA

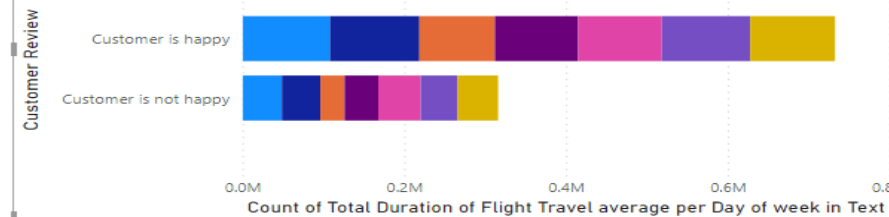
Early Arrival

Late Arrival

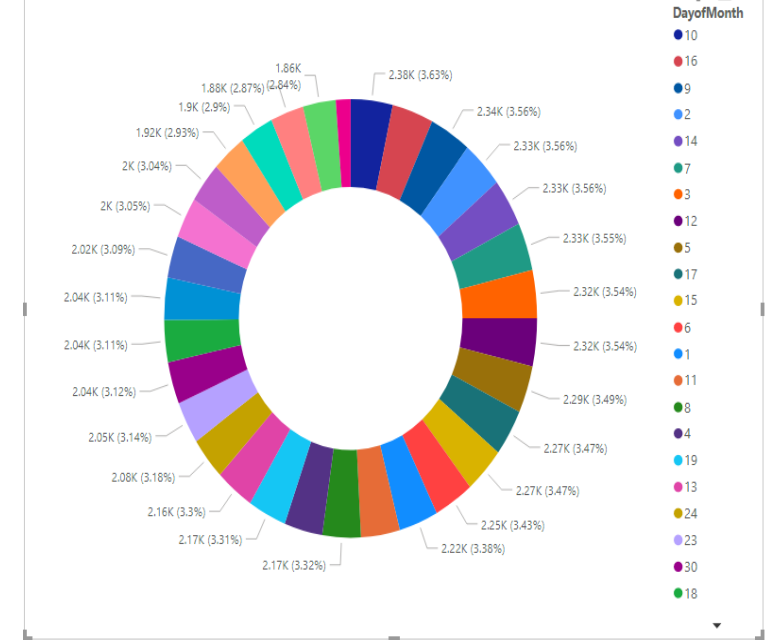


Count of Total Duration of Flight Travel average per Day of week in Text by
Review and Day of week in Text

Day of week in Text Friday Monday Saturday Sunday Thursday Tuesday Wednesday



Count of Total Delay Duration average per Carrier by DayofMonth



DASH BOARD INSIGHTS & RECOMMENDATION

- As per the total flights in week there are many flights running on the start and end of the week, so I recommend to take flights on mid of the week thus customer aren't over priced
- Key Influencer the highest no of customer was not happy in the month April & June hence I recommend to travel during May month
- I recommend to take flights during Tuesday and Wednesday based on the flights duration and customer satisfaction
- I recommend not to take flights on Thursday and Friday on any part of the month
- I recommend to take flights in middle of the month rather than beginning and end of the month since the flights have many delay duration as per comparison between carrier avg delay duration vs day of the month

Recommendation

- DL, WN, AA has highest flight duration when compared with YV,F9, HV. Thus I recommend customer to take flights of YV,F9, HV for cheapest flight rates and to avail best service the customer can go for DL, WN, AA carrier.
- Based on the Cancellation of the flights with the day of the week, month and carrier. I recommend the customer to take flights during Saturday and Sunday, June, YV, F9, HA
- Based on the customer feedback customer is happy with the wn dl and aa carrier when compared to other carrier hence, to avail best service I recommend these carrier
- Based on the customer feed back I recommend customer not to take the flight carrier of FL, YV in the month of June and may since there very low customer has rated customer is happy