Name: Rashmitha Ravi Shetty
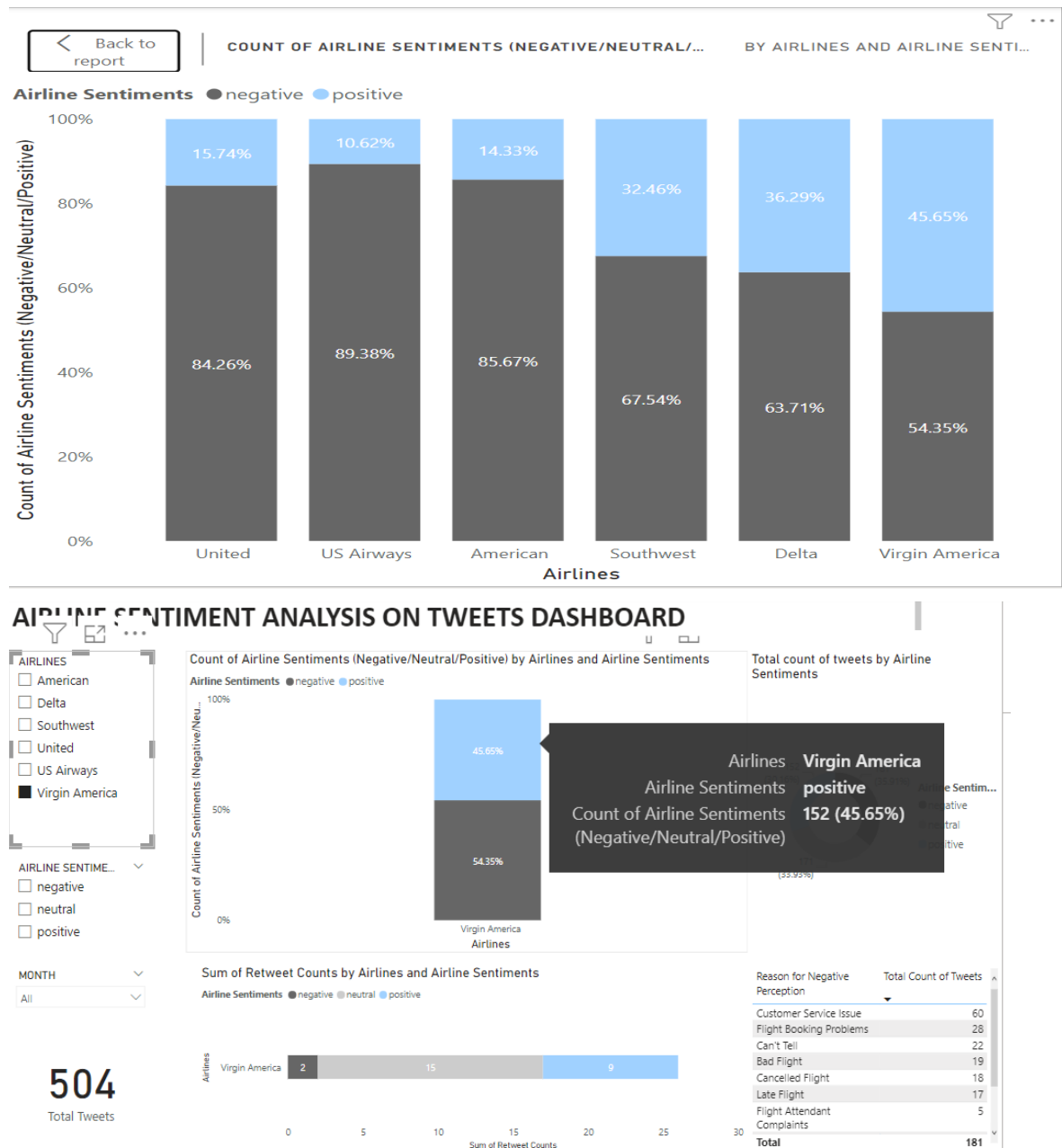
~~Assignment~~ Airline Sentiment Tweet Analysis

Tool used: **PowerBI**
Dashboard :

AIRLINE SENTIMENT ANALYSIS ON TWEETS DASHBOARD

AIRLINES
- [ ] American
- [ ] Delta
- [ ] Southwest
- [ ] United
- [ ] US Airways
- [ ] Virgin America

AIRLINE SENTIME... ˅
- [ ] negative
- [ ] neutral
- [ ] positive

MONTH ˅
All ˅

14K
Total Tweets

Count of Airline Sentiments (Negative/Neutral/Positive) by Airlines and Airline Sentiments
Airline Sentiments ● negative ● positive

Airlines	negative	positive
United	84.26%	15.74%
US Airways	89.38%	10.62%
American	85.67%	14.33%
Southwest	67.54%	32.46%
Delta	63.71%	36.29%
Virgin America	54.35%	45.65%

Total count of tweets by Airline Sentiments

Airline Sentim...
- ● negative
- ● neutral
- ● positive

2K (16.13%)
3K (21....)
9K (62.67%)

Sum of Retweet Counts by Airlines and Airline Sentiments
Airline Sentiments ● negative ● neutral ● positive

Airlines	negative	neutral	positive
United	388		26
Delta	110	76	66
US Airways	207		32
Southwest	57	31	57
American	93	9	15
Virgin America	15	9	

Sum of Retweet Counts: 0 — 100 — 200 — 300 — 400

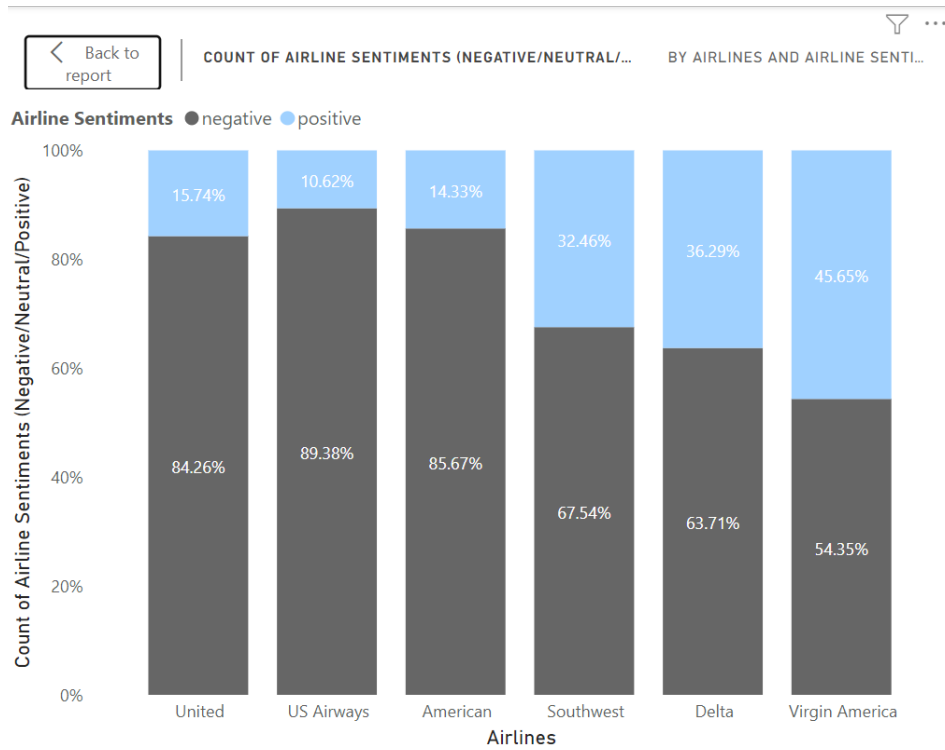| Reason for Negative Perception	Total Count of Tweets
Customer Service Issue	2891
Late Flight	1655
Can't Tell	1186
Cancelled Flight	835
Lost Luggage	719
Bad Flight	578
Flight Booking Problems	527
Flight Attendant	476
Total	**9089**

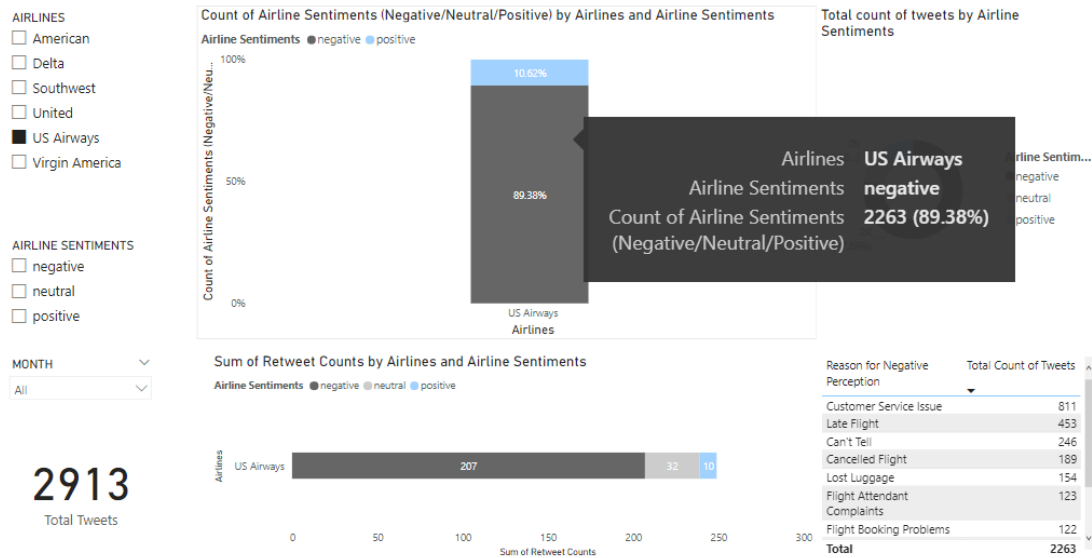1. **Which airline has the better/positive perception of their customers? Why?**

Answer: Virgin America has the most positive perception of its customers. The number of tweets with positive sentiments is the highest i.e., 152 out of 504 This contributes 45.65% of total tweets for the airline and is the highest amongst all the airlines

2. Which is the least favorite/negative perception? Why?

Answer:
US Airways is the least favorite airline amongst it's customers as it has a maximum number of tweets with negative sentiments. 2262 tweets out of 2913 are negative. The contribution towards the negative perception is 89.38 % of the total tweets tagged for US Airways which is the highest possible negative perception of a airline.

3. Are there specific 'fans/champions' or 'detractors' for each brand that stand out? Is that important?

Fans:

AIRLINES   ⌄

☐ American
☐ Delta
☐ Southwest
☐ United
☐ US Airways
☐ Virgin America

AIRLINE SENTIMENT
☐ negative
☐ neutral
■ positive

name	American	Delta	Southwest	United	US Airways	Virgin America	Total
SMHillman		11					11
Logunov_Daniil					10		10
NoviceFlyer				7			7
kbosspotter		6					6
NickTypesWords		6					6
georgetietjen	5						5
JetBlueNews		5					5
The_Playmaker20	3			1	1		5
ClassyMalick		4					4
Gouwerijn				4			4
gwen1013				4			4
mariobonifacio		4					4
matthewhirsch		2		1		1	4
MaxwellAMooney		4					4
MeeestarCoke	4						4
miaerolinea		1				3	4
Mtts28	4						4
sundialtours	2			1	1		4
AliBessette		3					3
AnnCompton				3			3
barrysterling	3						3
BattierCClpuppy				3			3
BFarraye		3					3
BorjaAngoitia1		3					3
bostongarden		3					3
Easy_E_				3			3
ErinMBarlow		3					3
flemmingerin	3						3
itsjessme_				3			3
Total	336	544	570	492	269	152	2363

Detractors:

name	American	Delta	Southwest	United	US Airways	Virgin America	Total
otisday	28						28
_mhertz	16			11			27
throthra				24			24
rossj987					23		23
weezerandburnie	14				9		23
chagaga2013	18						18
ElmiraBudMan					18		18
GREATNESSEOA	10				8		18
scoobydoo9749			18				18
ThatJasonEaton		18					18
Aero0729	14			2			16
jasemccarty	2			1	12		15
MeeestarCoke	6				9		15
thomashoward88	2				13		15
worldwideweg					15		15
Allisonjones704					14		14
arthurhasher		14					14
riricesq					14		14
Evan_Flay				13			13
Heavenlychc9			13				13
luvthispayne			13				13
Old_bauer		12			1		13
agoldenbrown	12						12
CLChicosky					12		12
farfalla818	12						12
tannapistolis					12		12
davisesq212		11					11
flemmingerin	11						11
HaileyUrban	11						11
Total	**1960**	**955**	**1186**	**2633**	**2263**	**181**	**9178**

name	Virgin America	Total
GunsNDip	6	6
wmrrock	5	5
ChrysiChrysic	4	4
total_janarchy	4	4
jnardino	3	3
khartline	3	3
RyScanlon	3	3
aaronkurlander	2	2
BeLeather	2	2
borknagar	2	2
contimike	2	2
davidhfe	2	2
finslippy	2	2
Gr8Fratsby	2	2
joyabsalon	2	2
MarwaYousofzoy	2	2
MaximWheatley	2	2
miekd	2	2
MOCBlogger	2	2
perMicah	2	2
propsonline	2	2
richeyvicious	2	2
snellbell	2	2
taygarrett	2	2
usagibrian	2	2
AdamSinger	1	1
alanzeino	1	1
Alex_Ricardo	1	1
alexrkonrad	1	1
Total	**181**	**181**

American:
        fans/champions: georgetietjen by 5 tweets

Detractors: otisday by 28 tweets

Delta:

fans/champions: SMHillman by 11 tweets

Detractors: ThatJasonEaton by 18 tweets

Southwest:

fans/champions : AnnCompton, itsjessme_, MinderJoan, WalterFaddoul by 3 tweets

Detractors: scoobydoo9749 by 18 tweets

United Airlines:

fans/champions : NoviceFlyer by seven tweets

Detractors : throthra by 24 tweets

US Airways:

fans/champions: Logunov_Daniil by ten tweets

Detractors: rossj987 by 23 tweets

Virgin America:

fans/champions: miaerolinea by three tweets

Detractors: GunsNDip by six tweets

Detractors and Fans of each brand play a vital role in the brand's growth. It's essential to retain positive comments and reduce the negative perception by improving service. In the above case, we can see that the highest number of detractor tweets is seen for American Airlines by user otisday (28 tweets), and SMHillman is the fan with the highest no. of positive tweets (11 tweets) for Delta airlines. A brand's sales get affected by such factors when an active user tweets.

4. What else does the data tell you?

Answer: The given data tells us that the airlines need to focus on Customer Service and try to schedule their flights on time, and in case of a delay, they should provide customers with the necessary facilities. The data also tells that negative tweets have been retweeted most often compared to positive and Neutral ones.
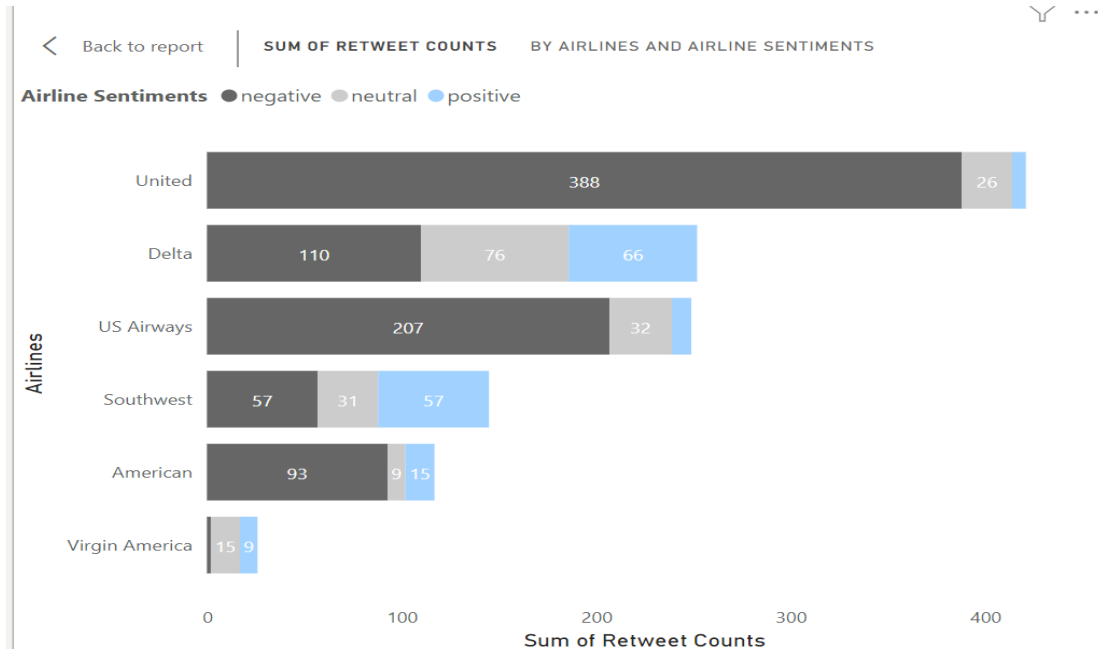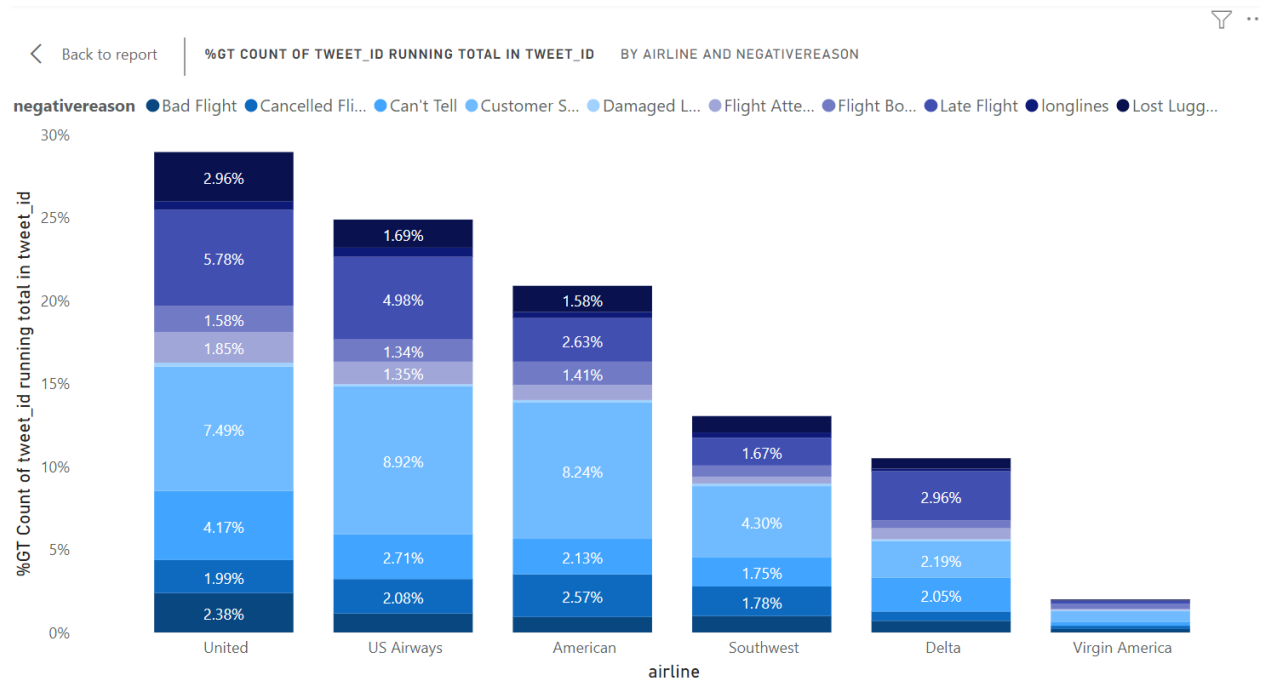

The data also tells that a maximum no. of tweets were observed for United Airlines (3822 tweets) and the lowest no. of tweets for Virgin America. We can infer the sales for each brand through this comparison.

5. **Are there specific strategies and tactics you can develop and employ – as the brand – to improve your sentiment among your customers, based on this data?**

From the above graph, we can infer that the maximum Negative Tweets were due to Bad Customer service and Late flights. Thus, providing exceptional customer service is critical for any airline brand to improve customer sentiment. The customer experience should be seamless and hassle-free, from booking a flight to arriving at the destination. The airline should ensure that its staff is well-trained, friendly, and helpful to customers. Effective communication is another aspect that brands can focus on. Airlines can communicate effectively and promptly with customers regarding flight schedules, delays, cancellations, and other relevant information.