# Storyboard

<Intro/Question-> Presentation point"
We use airlines in case of going far away. It is very convenient to go there in timely manner.

There are more than 1400 airlines in the world.
We somehow choose one of them and sometimes we continue on using that company.

How people select the airline among a bunch of airlines?
In general, it is easy to rely on Airline ranking which shows passenger numbers.

Are there any relationship between passenger number ranking and customer satisfaction ranking?
Let's see what correlations there are.

<Point>
This will help for reader to select which airline to chose since this presentation.
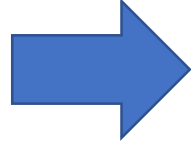
"Overall Ranking"
In 2018, there are 889 million people used airlines in the United States. There are more than 19 major airline company in the U.S.

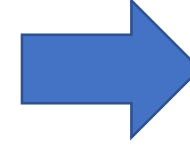Do you know which airline had the most passengers in 2018 ?
That is Southwest airline.
How did they get many passengers ?
In other word, how customer select airlines?
At first let's check airline ranking from customer point of view.

<Graph> Airline Ranking

" CS(Customer Satisfaction) Ranking"
There are several CS ranking site in Website.
Every site is not same result.
Of course there are different criteria to assess.
It does not seem to have correlation between passenger numbers ranking and CS ranking.

So in terms of criteria,
What items customers emphasize to choose airline?

<Point>
Ranking is various.

<Graph> Customer Satisfaction (Popularity) Ranking

"Re-Assessment by another angle"
Back to the pie chart, by re-grouping items,
Airline's convenience such as route network, baggage support and mileage program is put weight on rather than just airfare.

<Point>
Current visualization on the web is misleading to reader to see which is the best to choice the airline.

<Graph> Customer selection by grouping(Pie chart)
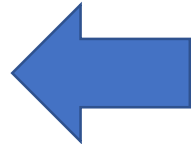
" Price comparison" -> Cheapness is really good?
I used 6 airlines' samples to see which airlines' fee is the cheapest using 3 pattern.
One is the trip is coming soon, meaning ticket through airlines could be high. Second one is the trip which happens 2months later.
By having some grace, what differences among airlines can be seen?
Third one is the trip which happens 4 month later from now.

By seeing the results, though small sample.
Only the price might not be the factor to select the
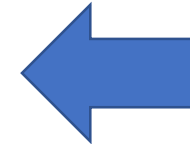
" Customer Choice Criteria"
According to Forbes data, The most emphasizing point by customers is "airline fee".
But, Is that really only the matter to choice a airline to use?

Using top ranked airlines' and low ranked airlines' airline fare through the official site, I checked if the high ranked airlines' fee are cheap than low ranked airlines' one.

<Graph> Customer selection(Pie chart)

"Other Factor"
Are there any factors other than price?
For example, Let's check others using South West and Alaska airline sample that are major popular airline company.

According to the customer survey at their airlines, not only airlines fee but also their services such as mileage and baggage supports they provide to customers.

<Graph>Another factor at Southwest and JetBlue

"Conclusion"
At least, Airline customer satisfaction does not always reflect on the airlines' passenger number, meaning that there is not exact correlation between passengers' number and customer satisfaction ranking.
From data visualization analysis point of view, only price does not reflect on popularities, combination of services are key factors that they are the top ranked airlines.
Data visualization is important to show reader with correct information without any bias.
In this case, most of airlines' customer refer to airfare as the high priorities though actually it is airline's services.
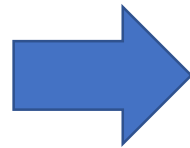
"Takeaway and action to reader"
From data visualization point of view, sometimes it shows different images though they are using same data. There could be a possibility that people have different decision makings. Not just seeing the graph only, but checking correlation or any other source from comparison perspective will help us to think correct way.

From topic perspective, People tend to stick to have same airline. But depending on your priority, you had better check and try to use the other airline. This could not only expand your knowledges but also airline can have a chance to grow by providing new good services for new customers.