Insights on :

1. Total No. of Flights by airline and airport on a monthly basis.

* We have 2 charts where the total number of flights by airline is represented by vertical bar chart and the total number of flights by airport is represented by horizontal bar chart. And we also have 3 drop downs each representing Month, Airline, and Airport.
* When we hover over one of the airlines, we can see the exact count of the total number of flights.
* WN Airlines has the highest number of flights of 850,000 on an average throughout the year 2015. VX Airlines has the lowest number of flights of 40,000 on an average. DL airline seems to be the 2nd highest Airline that has 590,000 flights.
* ATL has seen the highest total number of flights by the airport which is 0.25M, ORD seems to be the second highest origin airport which has seen 0.21M flights in 2015. And among all the listed airports ITH has the lowest number of flights which is only 12 flights.
* Since WN has the highest number of flights lets compare it with the total no. of flights by airports on monthly basis.
* So lets consider the month to be January, we can see that MDW airport has the highest number of flights from WN airline which is about 6.3K. Like wise we can see all the other airports with the number of flights from WN airline in the month of January. MDW airport continues to maintain highest number of flights from WN airline through out the year of 2015.
* Similar to airlines we can also compare the airlines by airport. Lets us take ATL into consideration as it has the highest number of flights. Compared to other airlines, DL has the highest number of flights from the origin Airport ATL which is around 162K and remains to be the highest through out the year.
* Comparing these two charts, we can say that WN and DL airlines are our biggest competitors and also since airports like ATL and ORD have the largest total number of flights by airport we should consider those locations to be our target origin airports.

2. On time percentage of each airline for the year 2015 and Airlines with the largest number of delays:

* Here on the left side we have a pie chart representing On time percentage by airline. And on the right side we have a Funnel chart representing the number of delays by airlines.
* Among all the various types of Airlines, HA airlines has the highest percentage of being on time and it also has the 2nd least number of delays. Where as the VX airlines which in the previous chart shows that it has the least number of flights among all the other airlines. And VX airlines is the 2nd highest airline to be on time and also has the least number of delays by the airlines which is around 16k. WN, which has the highest number of airlines, also has the highest number of delays by airlines which is around 332K, but the on time percentage is only 7.03%.
* Since VX and HA airlines have relatively less number of flights, it is easier to be on time and have less number of delays by airlines.

4. Cancellation reasons by airport:

* SO, we have the table which consists of Origin Airport, Cancellation Reason and also Cancellation Count. As we can see that DFW airport has the highest number of cancellations which is 4023 and the cancellation reason is by B().
* As in the previous chart it was evident that ATL airport had the highest number of flights, the majority of the flights have been cancelled due to reason B for 1472.
* The ORD Airport was also the 2nd highest to have total flights by airport and in this table it is shown that ORD in this table also comes in 2nd highest position in terms of cancellation reason by airport.
* And comparing all the reasons for cancellation of flights by airport, it is seen that highest number of flights have been cancelled due to reason B, and then reason C and then reason A and least was reason D.

5. Delay reason by Airport:

* This table shows the data regarding delay reasons due to Airport.
* The highest number of delays occurred at ATL Airport which was 467 delays. As we saw from previous charts, ATL also had the highest number of flights having origin Airport as ATL.
* Majority of the delays in ATL were caused by the Air System of the Airport that occurred 15 minutes and leading to 467 times of delay.
* ORD was the second highest Airport to have flights as their origin airport which were about 0.21M. ORD in this chart is also one of the airports that has higher number of delays by airport.
* It is seen in this table that ORD is the 3rd airport to have highest number of delays by airport which is around 442 times and majority of the delay was caused due to Air system delay that occurred 16 minutes.
* Since ITH had only 12 flights as their origin airport in the year 2015, this was the airport which has the lowest number of flights at airport on monthly basis.
* From analyzing this table, we can come to a conclusion that, the more the number of airlines using airports as their origin, higher the chances of getting delayed. As the Airport would have to control and take care of large number of flights. Lower the number of flights using airports as origin, there is less chances of getting delayed by the airport.

6. Airlines with most unique routes:

* This table it is categorized based on the airlines, flight number, day, month and including the origin and destination airports as well as airline wise count.
* On the top we have a drop where we can choose the airline we want to see to check the number of unique routes that the particular airline has.
* In this table we can see that DL airlines was the highest airline to have the most unique routes which was 370,033. The route was from MCO to ATL.
* The 2nd highest airline to have the unique routes was AA airline, which had 153,503 unique routes from DFW to PDX.
* As we know VX airlines which has the lowest number of flights compared to the other airlines, it also has the least unique routes among other airlines.
* From this we can conclude that though DL airlines has the highest unique routes, it is still visiting on of the highest airports to have the total number of flights which is ATL. So either the origin or the destination can be the unique area to travel to. Both cannot be unique.