**SQL Statements**

**First Business Process**

* Frequent Flyers management system to analyze the frequent flyer behavior and monitor his activity to ensure him the best experience.

**SQL Statements that measures KPIs**

* What flights the company’s frequent flyers take.  
    
  Select Count (FreqFlyer\_key)

from **Freqflyer\_segment\_fact**  **FR** join **Flight\_DIM FL**

on FR.Flight\_key = FL.Flight\_key

group by Destination\_airport

order by Count(frequent\_flyer\_key) desc;

This statement will get the most frequent flight.

* How often they upgrade.  
  select class\_flown\_key – class\_purchase\_key   
  from **Freqflyer\_segment\_fact** where FreqFlyer\_key = 100

If +ve value then upgrade

If -ve value then downgrade   
if 0 no change

* How they earn and redeem their frequent flyer miles.  
  we can measure how many miles they’ve earned from   
  select sum(segment\_mile\_flown)

from **Freqflyer\_segment\_fact**   
group by freqFlyer\_key ;  
  
select class class\_name, rank from Freqflyer\_segment\_fact  Fc  
join Class**\_**of**\_**service**\_**DIM C  
ON Fc.class\_key= C.class\_key  
join FreqFlyer**\_**changable**\_**DIM FD

on FC. FreqFlyer\_key= FD.FreqFlyer\_key

And by applying this equation and knowing the customer rank and class,  
we’ll be able to calculate the gained Miles

Gained Miles= (Actual Miles \* class\_type\_factor \* customer\_rank\_factor).

Then gained miles can be exchanged with actual flight with the same number of miles.

* Whether they respond to special fare promotions.   
    
  To get customers who responded to special promotions:

select distinct ( FreqFlyer\_key)  
from **Freqflyer\_segment\_fact**

where promotion\_id is not null

To get all the customers who got promotions either they used it or not

select distinct ( ferqFlyer)

from **Promotion\_per\_freqflyer\_Factless**  
  
To get the customer who got promotions but didn’t use it we can subtract the first data set from the second using Minus.

* What proportion of these frequent flyers have gold, platinum or titanium status.

## Select FreqFlyer\_key , rank\_name from **Freqflyer\_segment\_fact** **F join FreqFlyer\_changable\_DIM D on** F**.** FreqFlyer\_key = D. FreqFlyer\_key join **Proportion\_rank\_dim on** rank\_id = rank\_key ;

**Second Business Process**

* Reservation and profit analysis

**SQL Statements that measures KPIs**To get how much sales made on September first from Website.

Select sum(price) , count(ticket)  
from Sales\_fact S  
join date\_dim D on   
D.date\_key= S.date\_key   
where full\_date = ’01-sep-22’  
and sales\_channel\_key=1

**Third Business Process**

* Analysis of customer care service

**SQL Statements that measures KPIs**

To get the agents performance.   
  
Select sum(feedback)/(count(\*)\*5) \*100  
from Customer\_inquiries\_fact  
group by AGENT\_KEY

Knowing that the feedback is a number from 1 to 5 given by each customer made an interaction.