SQL QUESTIONS

1. Determine the number of ads which have generated leads on the site per day.

select distinct(date\_of\_lead), count(ad\_id) as TotalAdds

from total\_leads

GROUP BY date\_of\_lead order by date\_of\_lead;

1. Determine the YoY growth of leads in county Dublin from 2018 to 2020 (use lag).

select

d.years, d.total,

d.total - LAG(d.total) OVER ( ORDER BY d.years ) AS YOY\_Difference,

trunc(((d.total - LAG(d.total) OVER ( ORDER BY d.years ))\*1.0)/(LAG(d.total) OVER ( ORDER BY d.years ))\*100.0,2) AS YOY\_Growth

from(

select DATE\_PART('year',date\_of\_lead) as years, count(leads) as total

from total\_leads

where county='Dublin' and DATE\_PART('year',date\_of\_lead) between 2018 and 2020

group by DATE\_PART('year',date\_of\_lead)

order by years) as d

TABLEAU TASK

Having gone through the data set there were few anomalies that were detected,

* It was observed from the data that the highest leads generated from the individual ads were belonging to the “standard” package type than the premium or featured suggesting a deviation from the usual trend that the featured generated more leads than premium which in turn generated more leads than standard package. This might have occurred due to false documentation or any other error.
* When considering the total leads generated from the entire data set,the data shows that the leads generated from standard is higher than that of other packages which also doesn’t align with the general trend

In order to answer the question “Assess the impact on purchasing a more expensive Ad type in terms of generating more leads than a Standard ad.” , from the given data, the ads which were common to all the package types was considered for better comparison. The result obtained can’t be based out as a fact as the number of ads that were common to all the package types was very small and also there is a possibility of the data being wrong. Hence we cannot arrive at a proper conclusion and more data would be required to determine if upgrading to a higher cost package will generate more leads.

Regarding the design principles, The dashboard and the rules set out are on point. The colors chosen are not too bright on the eye but also at the same time convey the meaning clearly. One thing I noticed is that the area background part is not following the standard color scheme order.