**Q. State the problem described by the client & desired outcomes.**

Our client is the regional manager for western and northern Michigan across over 60 restaurants that have a turnover of approximately $200 million a year and he is quite new to the job. It was noticed that over the last 3 years, McD was losing 5% of their customer traffic which was close to 20,000 people a year. To increase sales, McD did a widespread study and decided to introduce the All-day breakfast menu regardless of equipment constraints in the kitchens.

The client would like to assess if the All-day breakfast program was successful in driving footfall. With the data available to us, we need to derive insights in order to help the client decide if the program was a success and if they should continue running the program. Since the program was run on a limited number of breakfast items, we need to provide evidence that would help decide if the program should be continued for all breakfast items. The desired outcome is to increase customer traffic and revenue.

**Q. Describe your hypothesis identifying the business drivers (influences).**

**Pricing** – McD breakfast items are priced lower than other items on the menu. Hence, driving an all-day breakfast campaign should increase footfall.

**Cross-selling** – Customers who purchase breakfast food during lunch hours also add non-breakfast items to their order. In this case, the campaign is successful as it is not only attracting absent customers but also driving sales of non-breakfast items

**Promotion** – We can attribute the drop in customer traffic even after introducing the all-day breakfast menu to the fact that the advertising and promotion for the campaign was ineffective and did not reach potential target groups

**Competition** – The sales have taken a hit regardless of the all-day breakfast menu because competitor outlets like Burger King/KFC/Chick-fil-A are running promotions offering sandwiches and like items at comparable or competitive prices

**Inflation** – Inflation should drive up sales for McD as grocery prices would rise up faster than fast food thus increasing the number of incoming price conscious customers

**Demography** – Outlets situated in areas with younger population who prefer American breakfast tend to have more sales as they tend to live on a budget and prefer to go meals. We can also analyse the spending patterns of people from different demographic groups

**Service and Operations** – The sales is compared across a number of stores at different locations to identify if the campaign did not work as a whole or did not work at a particular outlet owing to bad customer service or operation issues. The franchises need to provide the same quality and standards as that of the corporate owned McD outlets

**Sales of existing non-breakfast items** – The introduction of the all-day menu did not affect the sales of other best-selling non-breakfast items on the menu like the Big Mac but rather drove in more sales via the breakfast items

**Q. Identify variables available that relate to business drivers.**

After looking at the data, we can identify that the following variables can be used to determine the above mentioned hypotheses

**owner\_label** – can help us compare the difference between sales at corporate owned outlets and franchises

**rest\_key, rest\_label, region\_label, Address, City, Zip, State, County, latitude, longitude, REST\_TYPE**  – can help us understand how store location can affect sales and also helps us compare and draw relations between sales across stores

**REST\_HISP\_CONS\_MKT, REST\_AFR\_AMR\_CONS\_MKT, REST\_ASIAN\_CONS\_MKT, incomeq\_label, urban\_label, social\_label, lstage\_label, ppop\_09q\_label, pgrowthq\_label** – gives us demographic information and helps us determine its influence

**REST\_DRV\_THRU\_TYP** – helps us determine how operations impact sales

**wavg\_price** – gives us pricing information and helps us determine correlation between price and sales and also compare the sales of differently priced items

**urws, totunits, adus, agc, upt** – sales and transaction information ties it all together and helps us study how the other attributes influence sales and hence estimate the effectiveness of the campaign

**item\_desc** – helps us differentiate between breakfast and non-breakfast items