Data Modelling

- I hid the transaction and website_tracking_checkout table to prevent confusion when working. I now have the campaign, transaction_by_ads, and website_tracking_visits tables.
- I created a mesures table to house all my measures and KPIs.
- I checked the current relationships of all tables present to ensure they were related correctly.
- I created some new tables from the mapping tables.xls using Dax coding.

List of new tables created, and DAX code used;

```
    Gender target = DATATABLE (

            "gender target", STRING,
            "gender target code", STRING,
            {{"M", "Male"}, {"F", "Female"}}
• Device = DATATABLE (
     "device", STRING,
     "device target code", STRING,
     {{"TA", "Tablet"}, {"DT", "Mobile"}}
   )
 Type = DATATABLE (
     "type", STRING,
     "type desc", STRING,
     {{"U", "Unpublished"}, {"UL", "Unpublished Link"}}
   )
Country = DATATABLE (
     "country code", STRING,
     "country name", STRING,
     {{"CH", "China"}, {"HK", "Hongkong"}}
   )
```

```
Language Target = DATATABLE ( "language target", STRING, "language name",
   STRING.
     {{"MA", "Chinese"}, {"EN", "English"}}
   )
  ConnectionStatus = DATATABLE (
     "connection_status", STRING,
     "connection_desc", STRING,
     {{"CS0", "None"}, {"CS1", "Advanced"}}
   )
Age Target = DATATABLE (
     "age_target", STRING,
     "age_description", STRING,
     {{"0000", "Any-Any"}, {"2500", "25-Any"},{"1800", "18-Any"}}
   )
 Interest Target = DATATABLE (
     "interest", STRING,
     "interest Description", STRING,
     {
      {"I00", "None"},
      {"I01", "Specific- Alibaba"},
      {"I02", "Specific- Alibaba+ Footwear"},
      {"I03", "Specific-Alibaba+ Dress"},
      {"I04", "Specific- Alibaba + Winter"},
      {"I05", "Specific- Alibaba+ football"},
      {"I06", "Specific- Alibaba+ shoe"},
      {"I07", "Specific- Alibaba+ sports"},
      {"I08", "Specific- Alibaba+ Handbag"},
      {"I09", "Specific- Alibaba+ Online Shopping"},
```

```
{"I10", "Specific- Alibaba+ Sneakers"},
       {"I11", "Specific- Alibaba+ Alibaba accessory"},
       {"I12", "Specific- Alibaba+ Nike, Inc. +Adidas"},
       {"I13", "Specific- Alibaba+ Nike+ Markavip"},
       {"I14", "Specific- Alibaba+ Shoe+ Luxury goods"},
       {"I15", "Specific- Alibaba+ Association football"},
       {"I16", "Specific- Alibaba+ Luxury goods"},
       {"I17", "Specific- Alibaba+ Candy Crush Saga"},
       {"I18", "Specific- Alibaba+ Sales promotion"}
     }
Category_Target = DATATABLE (
     "category", STRING,
     "category name", STRING,
     {
       {"117", "AAA_sneakers"},
       {"0002", "AAA_flip flops"},
       {"0003", "AAA sandals"},
       {"0004", "AAA_lace ups"},
       {"0006", "AA pumps"},
       {"0007", "AA_sandals"},
       {"0008", "AA_boots"},
       {"845", "AA flat shoes"},
       {"0010", "AAA_sports shoes"},
       {"0011", "AAA_slip ons"},
       {"0012", "AA sports shoes"},
       {"0013", "AA flip flops"},
       {"0014", "AA trainers"},
       {"0015", "AAA_trainers"},
      {"0016", "AA_handbags"},
       {"0017", "AA comfort shoes"},
```

```
{"0018", "AA_sneakers"},
{"0019", "AAA_bags"},
{"0020", "AAA_small leather goods"},
\{"0021", "AA\_small\ leather\ goods"\},
{"0022", "AAA_shirts"},
{"325", "AA_dresses"},
{"0024", "AA_tops"},
{"0025", "AAA_t-shirts & vests"},
{"0026", "AA_cardigans & sweaters"},
{"0027", "AAA_tops"},
{"0028", "AAA_polo shirts"},
{"0029", "AAA_hoodies & sweatshirts"},
{"0030", "AA_jackets & coats"},
{"0031", "AA_jeans"},
{"0032", "AA_t-shirts & vests"},
{"0033", "AA_skirts"},
{"0034", "AAA_jackets & coats"},
{"0035", "AA pants & leggings"},
{"0036", "AAA_cardigans & sweaters"},
{"0037", "AA_lingerie & nightwear"},
{"0038", "AAA_jeans"},
{"0039", "AAA_pants & chinos"},
{"0040", "AAA_sunglasses"},
{"0041", "AA_sunglasses"},
{"0042", "AAA_watches"},
{"0043", "AA_watches"},
{"0044", "AA_jewellery"},
{"0045", "AA_jumpsuits & playsuits"},
{"0046", "AA\_shorts"},
{"0047", "AAA_underwear & socks"},
{"0048", "AAA_dress shop"},
{"0049", "AAA_shorts"},
```

```
{"0050", "AAA_swimwear"},
{"0051", "AA_swimwear & beachwear"},
{"0052", "AA_arabian clothing"},
 \{ "0053", "AAA\_bottoms" \}, \\
{"0054", "AA_bottoms"},
{"0055", "BB_electronic accessories"},
{"0056", "AA_electronic accessories"},
{"0057", "AA_maternity clothing"},
{"0058", "AAA_sports bags"},
{"0059", "AAA_nightwear"},
{"0060", "BB_trainers"},
{"0061", "AA_headwear"},
{"0062", "AA_plus size clothing"},
{"0063", "AA_dress shop"},
{"0064", "BB_sports bags"},
{"0065", "AA_sports bags"},
{"0066", "AA_belts"},
{"0067", "AAA_headwear"},
{"0068", "AAA_jewellery"},
{"0069", "AAA_belts"},
{"0070", "AAA_electronic accessories"},
{"0071", "BB_bags"},
{"0072", "BB_dress shop"},
{"0073", "BB_watches"},
{"1393", "AAA_wintershoes"},
{"0074", "AAA_sports shoes_football"},
{"0075", "AA_newproducts"},
{"0076", "AAA_newproducts"},
{"0077", "AA_shoes"},
{"0078", "men_shoes"},
{"0005", "AAA_performance"},
{"0079", "AA_dresses_party"},
```

```
{"0080", "AAA_bags_shoes"},
      {"0081", "AA bags shoes"},
      {"0082", "AA_bags"},
      {"0083", "BB_shoes"}
    }
   )
CustomAudiences_Target = DATATABLE (
     "custom audience", STRING, "CustomAudiences Description", STRING,
    {
      {"CA01", "CustomAudience1"},
      {"CA02", "CustomAudience2"},
      {"CA03", "CustomAudience3"},
      {"CA04", "CustomAudience4"},
      {"CA05", "CustomAudience5"},
      {"CA06", "CustomAudience6"}
    }
Campaign_name = DATATABLE (
     "campaign name", STRING,
    {
      {"WAWatches"},
      {"WSDress"},
      {"MSSlipons"},
      {"MSSneak"},
      {"MSBNikmix"},
      {"MSWinter"},
      {"WSSports"},
      {"MSSports"},
      {"WSShoes"},
      {"MSNikmix"},
```

```
{"MSFootball"},
   {"WCParty"},
   {"MSBADIO"},
   {"WSNewprod"},
   {"WSFlats"},
   {"MSToms"},
   {"WSToms"},
   {"WSHandbags"},
   {"MSBKT75001"},
   {"MSSliponsBrand"},
   {"MSSportsBrd"},
   {"MSFootballBrd"},
   {"MSSKLTFAD"},
   {"MSRmxMLSF"}
 }
)
```

- Date = CALENDARAUTO()
- Campaign_Creation_ Date = CALENDARAUTO()

I then related the newly created tables to the campaign_export,transaction_by_ad, and website_tracking_visits tables by using the manage relationship function in the home tab. The relationship cardinality between the new tables to the 3 fact tables is a many to one relationship.

This is to enable filtering on all 3 facts tables.