EXL EQ 2018

January 2018

Provide compelling shopping experience to consumers in a shopping center using data analytics

One of the retail technology companies in the US is doing a pilot with a shopping center company, 'ABC'. ABC owns and operates a chain of shopping centers across the U.S. and is doing this pilot with a view to test out the concept of the 'Mall of the future', i.e. provide truly differentiated and personalized shopping experience. One of their biggest investments is in the property at San Francisco. The San Francisco center is home to more than 100 retail stores and attracts a footfall of close to a million every month. In the last 5 years, the San Francisco center has seen a decline in revenue even though the footfall has not reduced.

Mr Y, the head of San Francisco center property has conducted various studies which show that a big driver of the drop in revenue is the emergence of online shopping and the improved shopper experience on digital channels. Many shoppers indulge in showrooming – visit a store to examine a product before buying it online at a lower price.

To stay relevant in a highly digital world, Mr Y wants to revamp the shopper experience in his center by creating an amalgam of digital and physical experiences in a shopping mall. In an effort to do this, the center wants to make physical shopping frictionless by introducing personalized ad screens, center navigation systems, conversational commerce, etc. As an initial step towards tailoring these cutting edge experiences, Mr Y wants to build foundational shopper knowledge by doing the following:

- Developing an understanding of shopper's store and location preferences inside the shopping center
- Predicting shopper's in-store browsing / showrooming preferences to create compelling experience in the mall
- Targeting the right shoppers based on the above predictions to generate maximum ROI for venue's marketing efforts

The retail technology company has partnered with EXL to build this foundational knowledge. Mr. Y and his team will provide the following data to EXL:

- Geo location data (Ping Information) of shopper's movement inside the mall based on indoor positioning technologies (Sept'15 - Aug'17)
- Shopping mall's store – latitude / longitude mapping
- Shopping mall's store – store category mapping
- Demographic data of shoppers visiting the mall

EXL will help Mr. Y understand shopper preferences from the above data that will help answer the following questions:

- Which are the top stores / store categories that these shoppers visit?
- Do certain types of demographic segments of shoppers like to visit specific store categories or during specific time periods (hour of day/ day of week / day of month etc.)?
- Are certain types of stores visited during a particular time of the day / day of the week / during holiday season.(considering the US federal holidays)

EXL will build an algorithm that will support all offerings that Mr Y has on his roadmap and help the center turn around their revenue numbers.

The following output is expected of the teams working on this case study:-

Find out the Top Store Visited and Top Fine Category visited by each Shopper ID and list the methodology on how visits are identified.

Please use **EXL_EQ_2018_Output_Template_Round1.xlsx** only for your responses.