Task:
The Hop Shop

ACXIOM

THE BACKGROUND

- The Hop Shop is an up and coming alcohol supermarket that sells a wide range of beers, wines and spirits.

- They have supplied their latest 2 years' worth of transaction data, a table of all the products they sell with their classifications and price (although they do occasionally have special one-off items), and demographic data on their customers.

- The Hop Shop are interested in identifying new business opportunities and to understand their sales data. They are looking to use their data to drive insight that will in turn improve their marketing messages. In particular they are interested in identifying characteristics about their "premium" customers (those customers who transact most frequently).

THE DATA

- **product_table.csv** – This contains the products that The Hop Shop regularly stock and includes product classification, make (including their own HS brand) and price (in £'s)

- **customer_data.csv** – This contains a mixture of 1st party demographic data such as age and gender, and 3rd party survey data such as alcohol consumption and hobbies.

- **transaction_table.csv** – This contains the basic sales data that The Hop Shop records at the item level, including purchase date and price of sale.

- **data_dictionary.xlsx** – This contains a basic description of the variables across datasets.

THE TASK

Analysis & Insights:

- The Hop Shop have no analytical resource to analyse their data and are looking for insights and recommendations that will help them with their sales campaigns and advertising. Do some exploratory analysis on the data and report back any interesting insights.
- What areas of the business would you recommend that The Hop Shop focus on and why?
- What marketing campaigns would you recommend The Hop Shop run based on how customers transact with them?
- The Hop Shop are thinking about introducing a loyalty scheme to their premium customers. Do you think this would be a good idea and why?

Model Build:

- The Hop Shop want to target potential premium customers with additional advertising campaigns. Build a model which predicts whether a current customer is premium or not.
- Report back your model testing and justify your model choice.
- Predict your model to the unlabelled new customers file new_customers.csv

Deliverables:

- Prepare a PowerPoint for a 10-15 minute presentation summarising insights you have discovered and your recommendations.
- Provide all code used in completing the exercise.
- Provide new_customers.cs

Any questions, please contact allen.chan@acxiom.com