KPMG: Job Simulation with Forage

Task 2: Data Analytics

Task Overview

What you'll learn

- How to gain a deep understanding of the data, the client's business and their processes

What you'll do

- Review business information and data
- Complete an analysis of their dataset using Excel
- Write an Executive Summary of your analysis

Here is the background information on your task

Wondermarket is a German retail supermarket which has opened up 50 stores across the UK within the last 10 years. They are seeing a huge amount of growth, but as they are growing they are also spotting a lot of inefficiencies.

They have provided us with some datasets and it is your job as a data analyst to prepare, analyse, visualise and extract insights from the data, relevant to their expectations. The client's expectations from this task are:

- They want to know which stores are performing best and which ones are performing worst
- They want to understand the regions with the largest opportunity for growth if they were to open a new store
- They want to understand what top 5 products they should sell in a new store to maximise profit when they first open

A large part of a data analyst's job is to translate technical insights and concepts into relatable and understandable terms and outcomes for the client. Therefore, having a deep understanding of the data, the client's business and their processes is important to complete this task.

Here is your task

1. **Business understanding**
   First, you should read through the company background document to gain an understanding of the client, Wondermarket, their business challenges and their business processes. This should take 5-10 minutes.
2. **Exploratory data analysis**
   After this, you should start exploring the dataset provided. This exercise is for you to gain an understanding of their data, how it relates to their business, the statistical properties of the dataset and for you to start formulating how you can use the dataset to address the clients expectations. You can use any tool that you prefer for this, including Excel, Python and R. Make use of visualisations and charts to support your understanding at this stage! This should take 15-20 minutes.
3. **Problem solving**
   Now you have a full understanding of the business and its data, it is now your job to extract insights from the data in order to address each of the 3 expectations from the client. In order to properly address each expectation, you may be required to aggregate or make calculations on the original datasets. To provide evidence of your insights, please make use of visualisations, calculations and metrics that you feel are appropriate. You can use any tool that you prefer for this, including Excel, Python and R. This should take 20-30 minutes.
4. **Presentation of results**
   Finally, we need to present the insights back to the client in a clear, concise and relatable format. We would like you to present your insights in the form of an executive summary slide. Use the additional resources for help when creating this slide. This should take 10-15 minutes.

https://www.youtube.com/watch?v=vbzpQfDIMG4

Executive summary guideline.

- He said the final takeaway is "Executive summary synthesis or summaries what you want your audiences to leave with on one page and the executive summary is the most important slide in your presentations".
- There's three key insights to focus on when creating an executive summary:
- 1. Executive summary is concise (don't put too much information on it, I would say a maximum 5 first level bullets and sub-bullets)
- 2. Focus on the insights "the so what's",
- 3. While sometimes it might be helpful to provide a little bit of context in one sentence of what you have done, then the majority of your executive summary should focus on the answer, the results, the insights that add value. New insights that are not already fact.

Executive summary presentation guidelines:

Title Slide

- **Title:** "Executive Summary - Wondermarket"
- **Subtitle:** Date and your name or team's name
- **Visuals:** Company logo and a relevant, clean background image

Store Performance (Top 5 vs. Bottom 5)

- Create a bar chart or a side-by-side comparison chart showing revenue and quantity sold for the top 5 and bottom 5 stores.

Summary:

Top 5 Stores:

- Highlight metrics such as total revenue, average quantity sold, and any standout products or promotions contributing to their performance.
- Mention any best practices or strategies these stores employ that could be replicated.

Bottom 5 Stores:

- Detail the metrics where these stores are underperforming.
- Identify any common challenges or issues, such as supply chain problems or local market conditions.
- Suggest potential improvements or corrective actions.

Regional Growth Opportunities

- Use a heatmap or a bar chart to display revenue by region.

Summary:

- Identify top-performing regions with high revenue growth potential.
- Discuss any trends or factors driving growth in these regions, such as population density, economic conditions, or local preferences.
- Recommend regions for new store openings or increased marketing efforts based on the data.

Top 5 Products for New Stores

- Create a bar chart showing the top 5 products by profit.

Summary:

- Describe why these products are top performers, such as high-profit margins, popularity, or low return rates.
- Discuss potential for these products in new stores and how they align with Wondermarket's sustainability goals.
- Suggest promotional strategies or stock levels based on the analysis.

Recommendations and Next Steps

Recommendations:

- Based on your analysis, suggest actionable steps for improving underperforming stores and optimizing supply chain management.
- Recommend specific regions for expansion and explain why they are promising.
- Propose product stocking strategies and potential marketing initiatives for new stores.

Next Steps:

- Outline the steps for implementing your recommendations, including any further analysis or data collection needed.
- Suggest a timeline and key stakeholders involved in the implementation process.