# Personal Project 3

## **Project Instructions:**

#### Introduction:

Welcome to the Data Analysis and Market Understanding Project! In this project, you will dive into real-world datasets and perform data analysis to derive meaningful insights for marketing decision-making. The project is divided into two major parts: Data Analysis and Market Understanding with Marketing Recommendations.

## **Beginning Tips:**

- Read Carefully: Begin by thoroughly reading the project instructions to understand the scope and objectives.
- Understand the Dataset: Familiarize yourself with the provided datasets and their attributes. Understanding the data is crucial for effective analysis.
- Tools and Technologies: Note the suggested tools and technologies for each part of the project. If you are unfamiliar with any of them, consider exploring tutorials or documentation.
- Stay Organized: Keep your work organized. Use separate tabs in Excel for different analyses and label your files clearly.
- Ask Questions: If any part of the instructions is unclear, don't hesitate to ask questions. Clarity is key to successful completion.

## Embrace the freedom, data maestro, and let the exploration begin! 2 🔝



• You will be working as an individual in this part of the project. You are free to analyze the data in the way you think is correct.

## Part 1 - Data Analysis (E-commerce):

#### Introduction:

Welcome to part 1 - Data Analysis! In this venture, you will embark on a data-driven journey, delving into Pakistan's E-Commerce Dataset to unearth valuable insights. The primary goal is to equip you with the skills needed to analyze, interpret, and derive meaningful conclusions from a large dataset. This project is divided into two primary components: Data Analysis and Market Understanding with Marketing Recommendations.

#### Data source:

#### Pakistan's\_E-Commerce\_Dataset

- Geographic Location: Pakistan
- Time Period: March 2016 August 2018
- Data Source: Commerce-e marketplace in Pakistan
- Data Set: Detailed information on half a million online trade orders in Pakistan, including item details, shipping method, payment methods, product categories, order date, SKU (Product ID), price, quantity, total amount, and customer ID.

### This Part divided into three tasks:

- 1. Exploring and Analyzing the Data (python and Tableau)
- 2. Summary of Findings Report (KPI, decision making, etc..)
- 3. For submission PDF + streamlit project

#### 1. Data Analysis - Exploring and Analyzing the Data:

- Engage in Exploratory Data Analysis (EDA) using Python within a notebook format, incorporating both statistical and visual analysis techniques.
- Using Tableau, develop a sophisticated and visually striking dashboard, that effectively communicates key insights to your superiors, showcasing your analytical skills and creativity. As well as your vast skills in Tableau.

## Part 2: Data Analysis - Summary of Findings:

- Identify Key Insights:
  - Dive into the dataset to uncover three pivotal insights that stand out to you.
- Logical Explanations:
  - Craft logical explanations for each insight, demonstrating your analytical thought process.
- Showcase Analytical Thinking:
  - Use your findings to showcase your analytical prowess and ability to derive meaningful insights from data.

#### **Guidelines:**

To achieve the desired outcome in this section Ensure the following deliverables are met:

- EDA in notebook format using python, pandas, matplotlib, seaborn Etc. (the notebook should be transformed to PDF)
- Tableau rich dashboard (and other relevant features as learned and implemented during class sessions)
- A document in pdf format with your conclusions and summary.

## Part 2 - Business analytics

## **Section 1 - Management Report**

#### Introduction:

In this section, your focus shifts to analyzing Google Analytics data for the "Fly" website, a company specializing in low-cost flights abroad. The goal is to extract meaningful insights from key traffic sources, essential performance indicators, and propose marketing recommendations for the upcoming year, 2020.

#### **Data Source:**

An excel file with data is attached for analysis. Dive into the Google Analytics data for the "Fly" website, exploring user interactions in 2019. The Excel file contains a table with essential traffic sources like direct visits and Google Organic. Get ready to uncover insights and shape the path for strategic marketing recommendations!

## **Analysis and Reporting:**

As CMO analyst, the company's CMO asked you to provide her with a report that summarizes the key and important results in your eyes, as well as the marketing insights and recommendations for 2020.

- Please prepare the report in the following tab, "Management Report".
- Since the CMO wants to present the report to the CEO and senior management, you should present the key points in your eyes in a concise and visual way as much as possible.
- Emphasize the key insights that the CMO should focus on.

#### **Guidelines:**

- Create a new tab in the attached Excel file labeled "Management Report."
- Present your main points concisely and visually on this tab.
- Utilize charts, graphs, and tables to enhance the visual appeal of your report.
- Clearly label and explain each visual representation to ensure understanding.
- Structure your report logically, starting with key traffic sources, followed by KPIs, insights, and concluding with marketing recommendations

## <u>Section 2 - Market Understanding and Marketing Recommendations for</u> Digital Banking Service

This exercise is primarily a conceptual exploration that showcases your business acumen and strategic thinking. It's important to note that the insights generated will be based on your thoughtful analysis and <u>not a data source</u>.

#### Introduction:

In this part of the project, we will focus on a digital banking service, specifically Digital Account Management in Israel. Your task is to identify the target audience, understand their motivations and barriers, suggest effective messaging, and propose data collection methods for analysis.

A customer establishing a digital banking service in Israel seeks your insights on the relevant target audience and measuring success in service enrollment. You are expected to analyze one of the following services:

#### **Banking Services Details:**

- Account Management
- Loans
- Securities Trading

#### For the chosen service:

- Identify the target audience for one service and briefly explain your choice.
- 2. Describe the motivations and barriers of that audience.
- 3. Propose website messaging for users exploring the service.
- 4. What data, for measuring and analysis, should be collected about user behavior on the website, in order to improve the percentage of service enrollees among site visitors?