**KPMG Data Analysis Using MS Excel**

**Course: Data Management and Analysis with MS Excel**

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**Project Overview**

This project is part of the **Data Management and Analysis with MS Excel** course and focuses on analyzing customer demographics, transactions, and new customer data using Microsoft Excel. The goal is to gain insights into customer behavior and business performance through data cleaning, analysis, and visualization techniques.

**Dataset**

The dataset used for this project is the [**KPMG Dataset**](https://docs.google.com/spreadsheets/d/1LxuheMo6rwzA1yq1r-gN5sKqTFcWZG7J/edit?gid=1445114962#gid=1445114962), which includes Customer Demographics, Transactions, New Customer list, and Customer Address data.

**Objectives**

* Perform data cleaning and preparation
* Analyze customer demographics and spending patterns
* Identify trends in transactions and customer segments
* Create meaningful visualizations using Excel charts and pivot tables

**Methodology**

1. **Data Cleaning**: Handling missing values, removing duplicates, and structuring the data.
2. **Data Analysis**: Using pivot tables, formulas, and functions to derive insights.
3. **Visualization**: Creating charts and graphs for better representation of trends.

**Executive Summary and Recommendations**

**Objective:**  
Summarize key findings from customer segmentation, transaction analysis, new customer insights, and CLV analysis. Provide actionable recommendations for business strategies.

* 1. **Summary of Key Insights:**

**Customer Segmentation & CLV Analysis:**

* Male and female customers have the highest Customer Lifetime Value (CLV) compared to customers with unknown gender, indicating strong long-term engagement.
* Male customers tend to have a slightly higher CLV than female customers.
* Male customers in the telecommunications, IT, and entertainment industries have higher CLV compared to other sectors.

**Transaction Analysis:**

* A noticeable increase in sales was observed in May, August, and October due to factors such as promotions and favorable economic conditions.
* Total sales amount to 21,532,172, with an average transaction value of 1,107.
* The Solex brand has the highest average list price compared to other brands.

**New Customer Insights:**

* The highest influx of new customers comes from the state of **NSW** showing a growing market potential.
* In the past three years, the potential revenue of the female gender has been slightly higher than that of the male gender for bike-related purchases.

**2. Recommendations:**

**Marketing Strategies for High-Value Segments:**

**Targeted Campaigns** – Focus marketing efforts on high CLV customers, offering exclusive discounts or loyalty programs.

**Personalized Offers** – Use demographic-based promotions to engage female customers with retention incentives.

**Business Expansion Opportunities:**

**Regional Expansion** – Invest in advertising and distribution channels in QLD, and VIC state where new customer growth is strongest.

**Product Line Growth** – Introduce new variations of best-selling premium products to attract high CLV customers.

**Product & Service Improvements:**

**Improve product:** Enhance the product offerings of Norco Bicycles and Ohm Cycles to boost sales.

**Improve Customer Experience** – Enhance after-sales support and streamline online purchasing for repeat customers.

**Subscription Models** – Consider subscription-based offerings for frequently purchased products to improve retention.