

# ***KPMG Data Analysis Project***

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# Executive Summary

This report summarizes the analysis conducted as part of the KPMG Data Analysis project using Microsoft Excel. The project aimed to understand customer behaviour, transaction patterns, and new customer potential using demographic and transactional data. The work was divided into six tasks.

## **Task 1: Data Cleaning**

- Removed duplicates and corrected inconsistencies in address, demographic, transaction, and new customer data.
- Standardized formats for state names, gender, and missing values.
- Ensured date formats and cleaned invalid entries in the transaction dataset.

## **Task 2: Customer Segmentation**

- **Wealth Segment:** The majority were in "Mass Customer" group; "High Net Worth" customers had the highest average tenure.
- **Gender Segmentation:** Male customers were more in number; females showed slightly higher average purchases over 3 years.
- **Job Industry:** Most customers came from Manufacturing and Financial Services; wealth segments varied by industry.

## **Task 3: Transaction Analysis**

- **Sales Trend:** Monthly sales analysis showed spikes around year-end, indicating seasonal buying patterns.
- **Brand & Product Performance:** "Giant Bicycles" and "Trek Bicycles" led in sales. Product Line revenue and price averages highlighted popular categories.
- **Customer Behaviour:** Top 10 customers generated a large share of revenue. Average purchase frequency was low across the customer base.

## **Task 4: New Customer Insights**

- **Demographics:** Most new customers fell under Mass and High Net Worth segments.
- **Location:** NSW and Victoria had the highest concentration of new customers.
- **Property Value:** Higher property valuations correlated with higher wealth segments.

## **Task 5: Customer Lifetime Value (CLV)**

- CLV was calculated using Average Purchase Value, Purchase Frequency, and Customer Lifespan (tenure).
  - Highest CLV was found in High Net Worth segment.
  - Job industry and tenure were positively associated with CLV.
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# Recommendations

## 1. Target High-Value Segments

- Focus on High Net Worth customers to maximize CLV.
- Create targeted marketing for professionals in high-value job industries.

## 2. Optimize Product Strategy

- Promote high-revenue brands like Trek and Giant.
- Consider bundling and upselling in high-performing product lines.

## 3. Regional Expansion

- Expand operations in NSW and Victoria based on new customer density.
- Customize outreach based on job industries prevalent in each region.

## 4. Boost Repeat Purchases

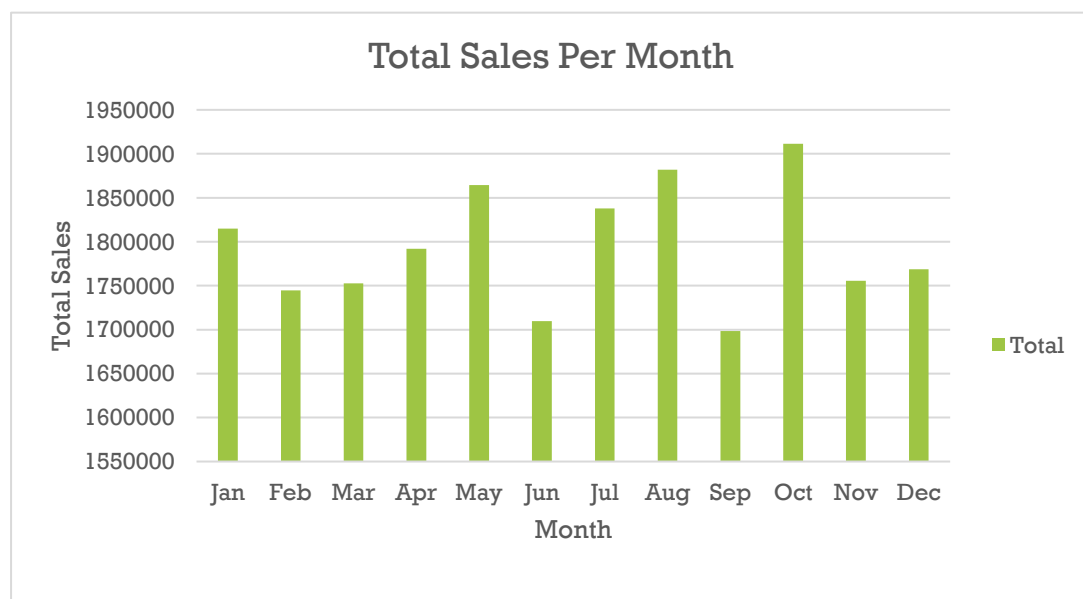
- Develop loyalty programs for customers with high APV but low frequency.
- Use email campaigns and personalized offers to improve retention.

## 5. Leverage Data Insights Continuously

- Implement dashboards and KPIs to monitor sales and customer behaviour.
- Use CRM tools for automated segmentation and targeting.

# Visuals & Charts

## 1) Total Sales per month



2) Sales per Brands



3) Average CLV per Wealth Segment

