### **CityMart Retail Sales 2023 - My Approach**

**Category: Sales**

**Tools Used: Tableau, SQL, Google Sheets**

**Objective:**

This analysis explores CityMart’s retail sales data from 2023 to uncover insights into customer behaviour, product preferences, and sales trends. The goal is to optimise inventory, enhance marketing strategies, and improve customer segmentation, with a focus on profitability and growth.

**Key Questions Answered:**

* What are the overall sales trends, including peak periods and seasonal fluctuations?
* How do customer demographics (age, gender) influence purchasing behaviour?
* Which product categories perform best by revenue and quantity sold?
* What is the relationship between purchase quantity and total spending?
* Are pricing strategies consistent across categories?

**Data Source:**

The dataset is a synthetic representation of retail data, including transaction records, customer demographics, and product details, offering insights into sales performance, customer preferences, and category trends.

**Approach:**

1. **Data Cleaning:**

* Imported data into Google Sheets for initial review.
* Standardised column formats and created new fields (e.g., Age Group, Month).
* Checked for duplicates and prepared data for analysis.

2. **Data Analysis:** Using SQL for deeper exploration:

* **Sales Performance**: Aggregated data by month, gender, and age group to identify trends (e.g., peak sales in May, low sales in September).
* **Category Performance**: Analysed revenue and quantity sold for top-performing categories: Electronics, Clothing, and Beauty.
* **Customer Behaviour**: Investigated spending and purchase quantity trends based on demographics.
* **Demographic Group Analysis**: Grouped data by gender and age for specific product categories.

**3. Data Visualisations:** Created interactive Tableau visualisations for deeper exploration:

* **Stacked Bar Chart**: Displaying total spending across categories.
* **Dynamic Filters**: Allowing filtering by total spend, average spend, and product quality.
* **Bar Charts**: Comparing gender- and age-based spending across product categories.
* **Timeline**: Visualising spending trends over time with focus on peak periods.

**Key Findings:**

1. Seasonal Trends

* **Peak Sales**: Highest sales in May (£53,150) and October, driven by Electronics and Clothing.
* **Low Sales**: March and September recorded lower sales, presenting an opportunity for targeted promotions.

2. Gender-Based Insights

* **Females**: Spent £232,840, dominating Beauty and Clothing purchases.
* **Males**: Spent £223,160, primarily on Electronics, particularly high-value items.

3. Age-Based Insights

* **18-23 Age Group**: £69,235 in spending, with strong preferences for Beauty and Clothing.
* **60-64 Age Group**: £44,815 in spending, with significant high-value Electronics purchases.

4. Product Category Performance

* **Beauty**: £143,515 in sales, peaking in July with preference from the 18-23 age group.
* **Clothing**: £155,580 in sales, peaking in May, driven by the 18-29 age group.
* **Electronics**: £156,903 in sales, peaking in May, with notable spending from the 60-64 age group.

5. Pricing Trends

* **Affordable Range (£25–£50)**: Steady demand, particularly in Clothing.
* **Premium Range (£300–£500)**: High sales in Electronics and Clothing during May and December.

**Recommendations:**

1. **Optimise Seasonal Campaigns**:
   * May: Promote Beauty and Clothing.
   * October: Focus on Electronics.
   * March & September: Introduce flash sales or bundle deals to drive demand.
2. **Gender-Specific Strategies**:
   * **Females**: Focus on Beauty and Clothing promotions.
   * **Males**: Highlight Electronics, offering bundles and feature-driven marketing.
3. **Age-Specific Engagement**:
   * **18-23**: Leverage social media for Beauty and Clothing promotions.
   * **60-64**: Offer discounts on high-value Electronics with extended warranties.
4. **Inventory Optimisation**:
   * Increase Beauty stock for July, Electronics for May and December.
   * Avoid overstocking during low-demand months like March and September.
5. **Loyalty Programs**:
   * Introduce a loyalty programme for repeat customers, especially the 18-23 and 42-47 age groups.
   * Launch cross-category promotions (e.g., Beauty + Clothing, Electronics + Accessories) to encourage larger purchases.

**Conclusion:**

Focusing on identified seasonal trends, demographics, and product preferences will allow CityMart to enhance sales, improve customer satisfaction, and drive long-term growth.