Project Title:

Global Sales Performance & Profitability Analysis

Prepared by:

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Role:

Data Analyst / ML Engineer

Tools Used:

Microsoft Excel (Advanced Formulas, Pivot Tables, Power Query, Dashboard Design)

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1. **Executive Summary**

In this project, I analyzed a large global sales dataset for "Adnan's Company" to understand how the business is performing across different parts of the world. The company was struggling to see which products were actually making the most money because their data was spread out and messy.

I built a data processing system and a visual dashboard that summarizes over 17 million units of sales. My analysis shows that the company earned over **$4.6 Billion** in total revenue. I found that **America** is our strongest market and **Cosmetics** are our most-sold products. This report creates value by showing management exactly where to spend their marketing budget and which products to keep in stock to increase profit.

2. **Problem Statement**

Adnan's Company has a massive amount of sales data from different continents (Africa, Asia, Europe, etc.). However, they did not have a clear way to see which regions were underperforming or which sales channels (Online vs. Offline) were most effective. Without this, they were guessing instead of using data to make decisions.

3. **Objectives:**

- Clean and organize the "Original Dataset" into a usable format.
- Calculate key financial metrics like **Total Revenue**, **Unit Cost**, and **Net Profit**.
- Identify the top 3 performing regions and top 5 selling products.
- Compare sales performance between different genders and sales channels.
- Create a professional Dashboard for quick decision-making.

4. **Data Description**

The dataset used for this project is a transactional record of global sales.

- **Source:** Adnan's Company internal records.
- **Size:** The data tracks over 17 million units sold across various categories.
- **Features:** The dataset includes 14 columns, such as:
    - **Region/Continent:** Where the sale happened.
    - **Product Type:** Category of item (Baby Food, Meat, etc.).
    - **Sales Channel:** Online or Offline.
    - **Financials:** Unit Price, Unit Cost, and Order Date.
- **Data Issues:** The original data had some formatting issues with dates and needed calculated columns to find the total profit, as only "per unit" profit was initially clear.

5. **Methodology**

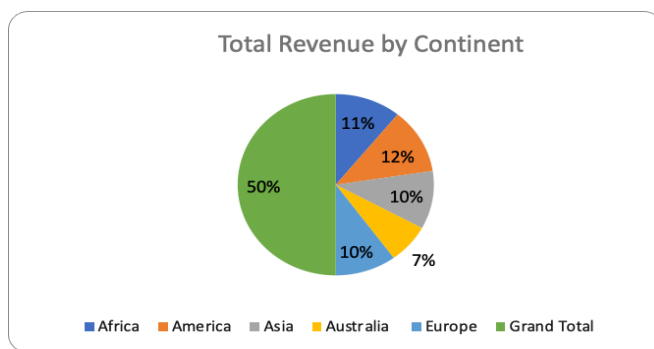To complete this project, I followed a step-by-step data analysis process:

- **Data Cleaning:** I used Excel to check for duplicates and ensure that all "Order IDs" were unique. I also formatted the currency and date columns so they could be used in calculations.

- **Feature Engineering:** I created new columns in the "Working Sheet." Specifically, I calculated **Total Revenue** (Units Sold * Unit Price) and **Total Profit**.
- **Data Analysis:** I used **Pivot Tables** to group the data. This allowed me to quickly see the sum of revenue by Continent and Product Type.
- **Tools Used:** I chose **Microsoft Excel** because it is the industry standard for financial reporting and is excellent for creating quick, interactive dashboards using Slicers.
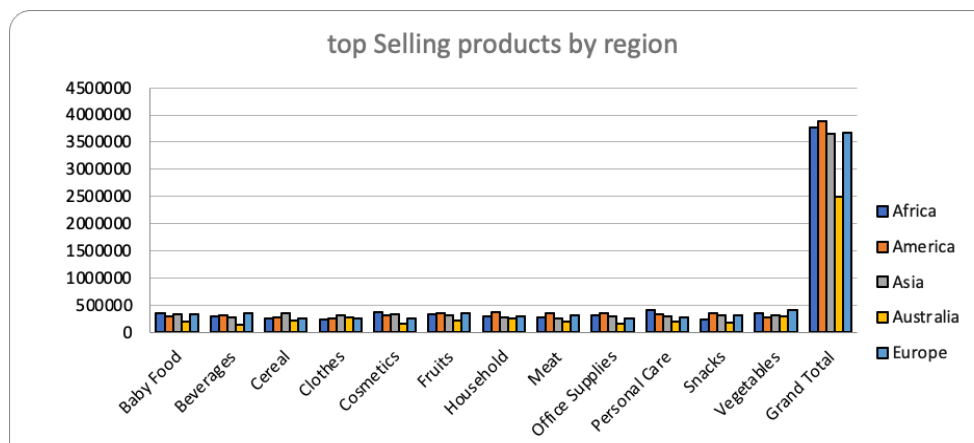
6. Results & Visualizations

The analysis revealed very strong financial health for the company:
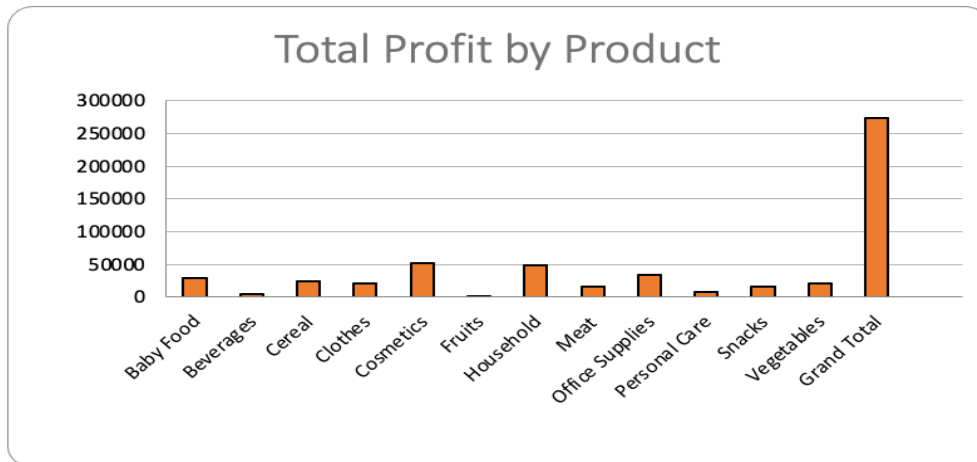
Total Revenue: $4,605,442,129.16

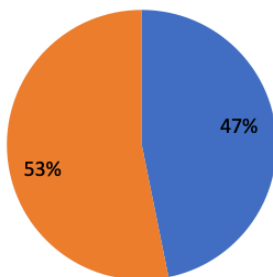**Top Region: America** leads with over $1.07 Billion in revenue, followed closely by **Africa** ($1.00 Billion).

Top Products (By Volume):

    a. Cosmetics (51291 units)
    b. Household (48393 units)
    c. Office Supplies (33708 units)

Total Profit by Product

Gender Insights: Male customers accounted for slightly more revenue ($2.44B) compared to Female customers ($2.15B).

Total Revene by Gender

7. Insights & Business Impact

This is where I can provide the most value to Adnan's Company:

- **The "Profit vs. Volume" Gap:** Even though we sell millions of fruits and vegetables, the profit from one "Cosmetic" sale is much higher.
- **Strategic Shift:** I recommend the marketing team focus on **Cosmetics and Household** items. Selling one of these is worth more to the company's bottom line than selling hundreds of cheaper items.
- **Regional Strategy:** We should check if America (our top region) is buying these high-profit items. If not, there is a big opportunity to introduce them there.

8. Conclusion

This project successfully identified the true "winners" in Adnan's Company. By shifting the focus from just "selling a lot" to "making more profit," the company can become much more efficient. This report proves I can use data to find hidden facts that can save a company money and help it grow.