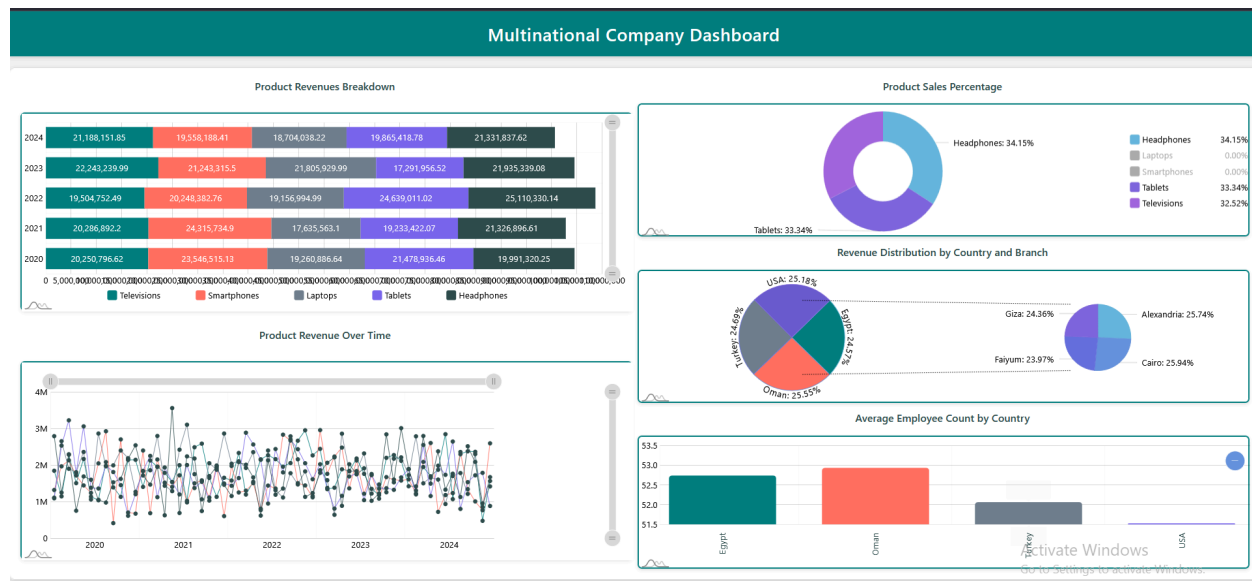# Amr Yasser Anwar
202301043

Report of DSAI 2023

Multinational Company Dashboard

This dashboard offers comprehensive insights into the performance and key metrics of a mall with multiple branches.

Client

The CEO of an electronic devices multinational company

Available Information Provided by Client

1. **Branches:**

   - **Egypt:** Cairo, Giza, Alexandria, Faiyum

- **Turkey:** Istanbul, Bursa, Ankara, Antalya

- **Oman:** Muscat, Sohar

- **USA:** Austin, New York, Chicago

2. **Products:**

   - Televisions, Smartphones, Laptops, Tablets, Headphones
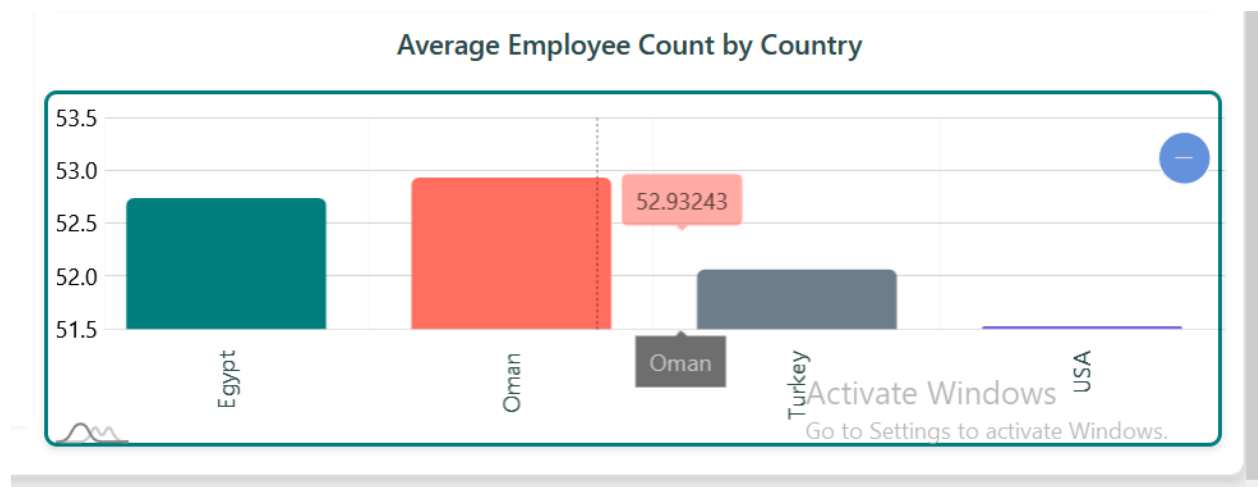
3. **Data Description:**

   - **Columns:** Year, Month, Branch, Product, SalesQuantity, Revenue, EmployeeCount, ProductPrice.

   - **Time Range:** 2020 to 2024.

Questions Answered by the Dashboard

1. What is the average employee count across different countries?

2. What is the overall sales performance of the company over the years?

3. How has the sales revenue for each product changed over time?

4. How do different branches compare in terms of sales and revenue?

5. What is the distribution of revenue across countries and branches?

6. What is the sales count percentage for each product?

7. Which products contribute the most to the overall revenue?

8. How has the sales quantity and revenue for each product changed over time?

Visualizations

1. Employee Average Count by Country - Bar Chart

- **Axis Titles:**
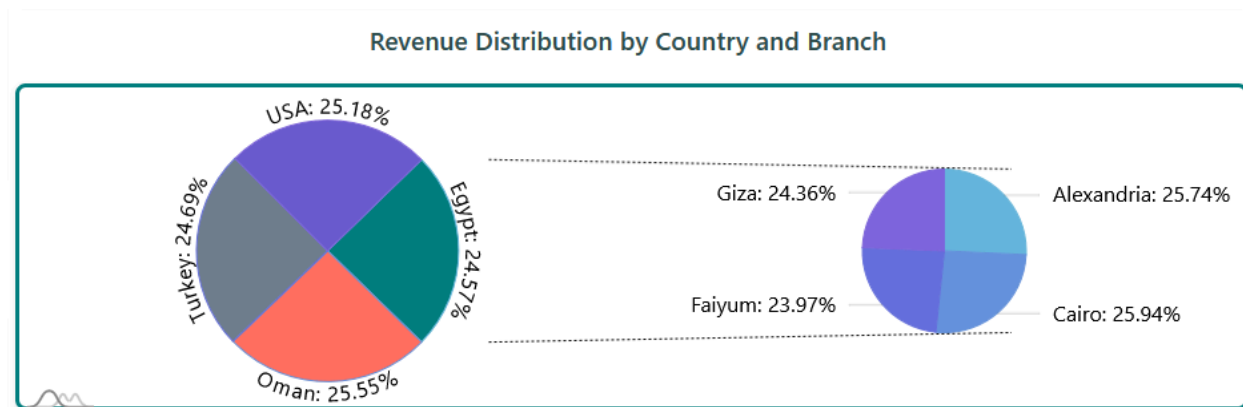
  - X-axis: Country

  - Y-axis: Average Employee Count
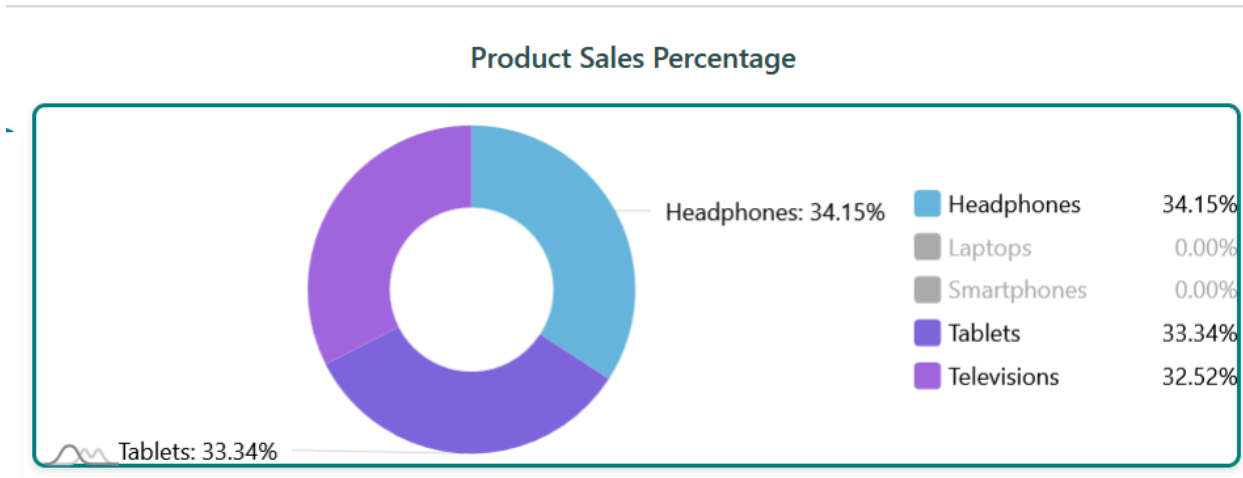
- **Legend** Country Names

- **Questions Answered:** 1

- **Colors:** amCharts 5 default colors

2. Country and Branch Revenue - Exploding Pie Chart

Revenue Distribution by Country and Branch

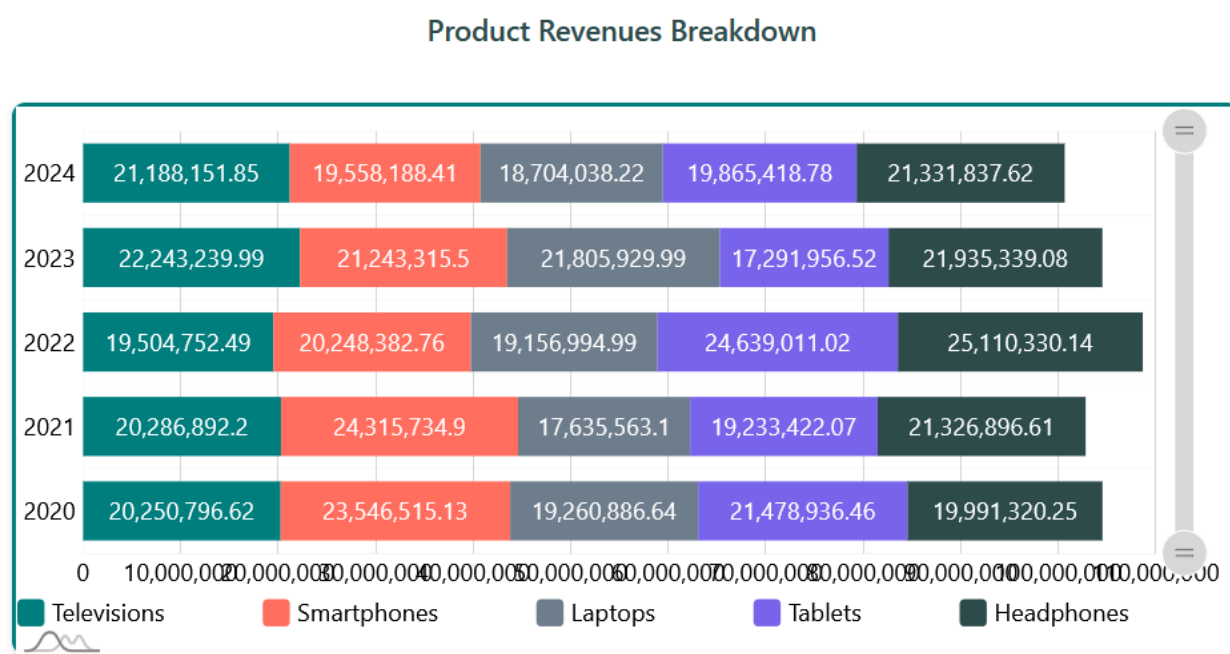- **Legend:** Country and Branch Names

- **Interaction:** Clicking on a country rotates the pie and updates the smaller pie to show branches of the selected country.

- **Questions Answered:** 5

- **Colors:** amCharts 5 default colors

3. Sales Count Percentage - Donut Chart

Product Sales Percentage

- **Legend:** Product Names

- **Questions Answered:** 6, 7

- **Colors:** amCharts 5 default colors

4. Product Revenue - Line Graph

Product Revenues Breakdown

Year	Televisions	Smartphones	Laptops	Tablets	Headphones
2024	21,188,151.85	19,558,188.41	18,704,038.22	19,865,418.78	21,331,837.62
2023	22,243,239.99	21,243,315.5	21,805,929.99	17,291,956.52	21,935,339.08
2022	19,504,752.49	20,248,382.76	19,156,994.99	24,639,011.02	25,110,330.14
2021	20,286,892.2	24,315,734.9	17,635,563.1	19,233,422.07	21,326,896.61
2020	20,250,796.62	23,546,515.13	19,260,886.64	21,478,936.46	19,991,320.25

0   10,000,000 20,000,000 30,000,000 40,000,000 50,000,000 60,000,000 70,000,000 80,000,000 90,000,000 100,000,000 110,000,000

■ Televisions ■ Smartphones ■ Laptops ■ Tablets ■ Headphones

- **Axis:**
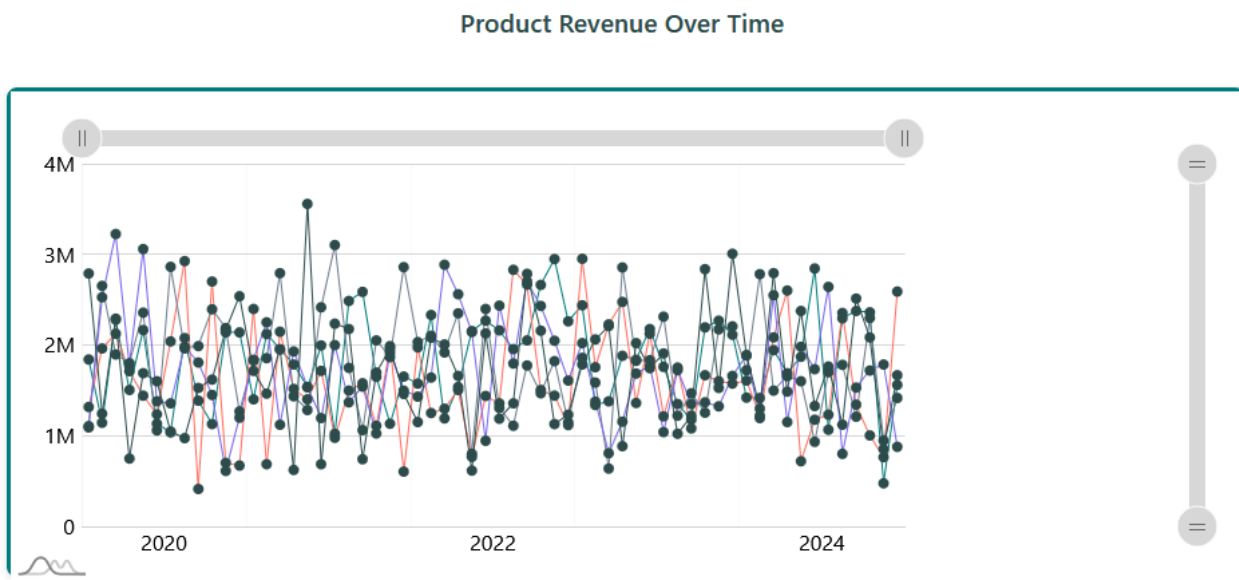
  - X-axis: Year-Month

  - Y-axis: Revenue

- **Legend:** Products. Hovering over a product highlights its line, and hovering over a point shows the exact revenue value. Includes horizontal sliders for selecting a time range or moving vertically along values.

- **Questions Answered:** 3, 8

- **Colors:** amCharts 5 default colors

5. Product Revenue Breakdown - Stacked Bar Chart

Product Revenue Over Time

- **Axis:**

  - X-axis: Revenue

  - Y-axis: Year

- **Legend:** Products. You can hide a category by clicking the square beside the product name.

- **Questions Answered:** 2, 4

- **Colors:** amCharts 5 default colors

Positioning

Left Half:

1. **Stacked Bar Chart (Product Revenue Breakdown):** Positioned at the top for a quick overview of product revenue breakdown.

2. **Line Chart (Product Revenue Over Time:** Positioned below the stacked bar chart to show revenue trends over time.

Right Half:

1. **Donut Chart (Sales Count Percentage):** Positioned at the top for a quick view of sales count distribution.

2. **Exploding Pie Chart (Revenue Distribution by Country and Branch):** Positioned in the middle to highlight distribution across countries and branches.

3. **Bar Chart (Average Employee Count by Country):** Positioned at the bottom to show average employee count across different countries.

Future Work:

- Dynamic Data Integration

- Responsive Design

- Dashboard Theming by users