**Dashboard Design**

Using some charts we tried to show and retrieve some information using our data to use them later.

* + **4 Cards** to represent
    - Number of Countries that have customers use the website
    - Number of Customers that have make orders
    - Total of Sales
    - The Average of the unit price
  + **Donut Chart** showing the number & percentage of customers in each country
  + **Column Chart** that shows the top 10 best-selling products & their Sales
  + **Area Chart** represent a line of sales over time (01/2011 to 12/2011)

**Insights**

**Country-wise Distribution:** A significant majority of the customer base, approximately 89.17%, comes from the United Kingdom. This highlights the dominance of the UK market in overall sales, with smaller contributions from other countries like Germany, France, and Spain.

**Top Products:** Products such as the “Regency Cakestand 3 Tier” and “White Hanging Heart T-light Holder” stood out as top-selling items, accounting for a significant portion of the total sales. This insight could guide marketing strategies or inventory planning by focusing on these high-demand items.

**Sales Trends:** The time series analysis revealed several peaks, with noticeable increases during certain months, possibly indicating promotional campaigns, holiday seasons, or other sales-driving factors. Understanding these trends can help businesses plan future sales campaigns more effectively.

**Challenges**

During the development of this Power BI dashboard, several challenges emerged, both in terms of data handling and utilizing Power BI’s features effectively:

**Data Complexity:** One of the main challenges was managing the large and diverse dataset.

Ensuring that the relationships between various tables were correctly established was crucial.

**Visual Representation:** Choosing the right visualizations to convey the most meaningful insights was also challenging.

Ensuring that the visuals were both informative and easy to interpret was essential.

**User Interaction:** Creating intuitive and interactive elements (e.g., slicers for country or product categories) that made the dashboard more user-friendly was a learning curve.

Ensuring that users could explore the data efficiently while maintaining responsiveness and accuracy of the visuals posed another challenge.