**Coffee Sales Dashboard Report**

**Introduction**

This report presents a comprehensive overview of the "Coffee Sales Dashboard" created using Microsoft Excel. The dashboard provides insights into coffee sales trends over time, highlights top-performing countries, and identifies key customers who contribute the most to the sales. This report will walk you through the data sources, methods of data extraction, calculation methodologies, visualizations, and slicers used to make the dashboard dynamic and interactive.

**Data Sources and Structure**

The dashboard is built on three main tables:

1. ***Customers***: This table contains customer information, including Customer ID, Name, Email, Phone Number, Address, City, Country, Postcode, and Loyalty Card status.

2. ***Products***: This table contains product details such as Product ID, Coffee Type, Roast Type, Size, Unit Price, Price per 100g, and Profit.

3. ***Orders***: This is the primary data table that includes Order ID, Order Date, Customer ID, Product ID, Quantity, and various other columns that provide detailed information about the orders.

**Data Extraction**

***Customer Information***: Key customer details such as Customer Name, Email, Country, and Loyalty Card status were extracted from the *Customers* table using the XLOOKUP function. This allows for easy mapping of customer data to the corresponding orders.

***Product Information***: Product details, including Coffee Type, Roast Type, Size, and Unit Price, were retrieved from the *Products* table using the INDEX-MATCH function. This ensured the correct product details were linked with the orders based on the Product ID.

**Currency Conversion**

***Unit Price (INR):*** The Unit Price was converted to Indian Rupees (INR) using an appropriate exchange rate formula. This conversion was necessary to make the data more relatable to an Indian context, and it allowed for a consistent representation of sales values across the dashboard.

**Sales Calculation**

***Sales (INR)***: The sales value for each order was calculated by multiplying the quantity of the product ordered by the Unit Price (INR). This provided the total revenue generated from each order in INR.

**Conditional Columns**

***Coffee Type Name & Roast Type Name***: New columns were created for Coffee Type Name and Roast Type Name using **IF conditions** on the Coffee Type and Roast Type columns. This allowed for cleaner and more intuitive labels within the dashboard, making it easier for users to interact with the data.

**Dashboard Visualizations**

Three main visualizations were created using Pivot Tables and Charts. These visualizations provide a holistic view of coffee sales across various dimensions:

1. **Coffee Sales Over Time**: This line graph showcases the sales trends of different coffee types (e.g., Arabica, Excelsa, Liberica, and Robusta) over the years. It provides a clear visual representation of how sales have fluctuated from 2019 to 2022, highlighting peak sales periods and any seasonal trends.

2. **Top 3 Countries in Total Sales**: This column chart ranks the top-performing countries in terms of total sales, with the United States leading, followed by Ireland and the United Kingdom. The chart offers an insightful comparison of sales performance across different regions.

3. **Top 5 Customers by Sales**: Another column chart ranks the top 5 customers who have spent the most money on coffee purchases. This chart helps identify key customers, which could be valuable for targeted marketing or loyalty programs.

**Interactive Slicers**

To enhance the interactivity of the dashboard, three slicers were added:

1. **Roast Type Name**: This slicer allows users to filter the dashboard based on different roast types (e.g., Dark, Light, Medium). Users can instantly update the visualizations to reflect sales data for a specific roast type.

2. **Loyalty Card**: This slicer filters the data based on customers who have a loyalty card. This feature helps distinguish between loyal customers and new customers, providing insight into how the loyalty program impacts sales.

3. **Size**: The Size slicer allows users to filter the data based on product sizes (e.g., 0.2 Kg, 0.5 Kg, 1.0 Kg, 2.5 Kg). This helps us to understand the popularity of different product sizes and their contribution to overall sales.

**Conclusion**

The Coffee Sales Dashboard provides a comprehensive overview of coffee sales trends, top-performing countries, and high-value customers. By utilizing Excel's powerful functions such as XLOOKUP and INDEX-MATCH, and by incorporating interactive elements like slicers, the dashboard enables users to gain valuable insights into the data. The visualizations offer a clear representation of sales patterns and customer behavior, helping decision-makers to make informed choices and strategize effectively.

This report documents the steps taken to create the dashboard, highlighting the key components that make it a useful tool for analyzing coffee sales data.