**Business Analysis with Excel: Project Presentation**

**1. Introduction**

This project focuses on analysing coffee order data using Excel. The objective is to create an interactive dashboard that provides insights into the coffee ordering trends and patterns, helping businesses make informed decisions.

**2. Data Source**

The data for this project comes from a dataset titled "Coffee Orders Data." It includes 3 sheets – “products”, customers” and “orders”.

“products” sheet contains columns –

1. Product ID (unique is for each Coffee type)
2. Coffee Type - A short name of the coffee type
3. Roast Type – Whether the coffee lightly roasted (L), medium roasted (M) or dark roasted (D)
4. Size – in Kg
5. Unit Price
6. Price Per 100g
7. Profit

“customers” contains –

1. Customer id – Unique Id for each customer
2. Customer Name
3. Email
4. Phone Number
5. Address Line
6. City
7. Country
8. Postcode
9. Loyalty Card – Whether the customer holds a loyalty or not.

“orders” contains –

1. Order Id – Unique ID against each order
2. Order date
3. Customer ID
4. Product ID
5. Quantity

This data serves as the foundation for the analysis and dashboard creation.

**3. Data Preparation**

Data preparation involved several steps:

* **Collate All the Data**: Ensuring all the required data points are available in a single worksheet to work on.
* **Formatting Dates**: Standardizing date formats for consistency.
* **Creating Necessary Columns**: Adding columns to facilitate analysis, such as calculating sales, categorizing products.

**4. Dashboard Features**

The dashboard includes several interactive features:

* **Dynamic Filtering** –

1. Users can filter data timeline
2. Roast Type
3. Size and
4. Loyalty Card

through which the user can see the “Total Sales Over Time”, “Sale By Country” and the “top 5 Customers”

* **Interactive Charts**: Visual representations of data that update based on user selections.
* **Summary Metrics**: Key performance indicators (KPIs) displayed prominently for quick reference.

**5. Key Metrics**

The dashboard analyses several key metrics:

* **Total Sales**: The overall revenue generated from coffee orders.
* **Orders by Type**: Breakdown of orders by different coffee products.
* **Sales Trends**: Analysis of sales patterns over time.
* **Countries**: Country-wise total sales for each coffee type, size and loyalty card holders.
* **Customers**: Top 5 customers and their contribution to the Total Sales.

**6. User Interaction**

Users can interact with the dashboard in various ways:

* **Applying Filters**: Select specific date ranges, product types, loyalty card holders and size of the pack to narrow down the data.
* **Viewing Dynamic Charts**: Charts update automatically based on the filters applied, providing real-time insights.

**7. Insights and Findings**

From the analysis, several insights were derived:

* **Popular Products**: Identifying the most frequently ordered coffee products.
* **Peak Ordering Times**: Determining when the highest volume of orders occurs.
* **Customer Preferences**: Understanding preferences based on order data.

**8. Conclusion and Future Work**

The project successfully demonstrates the power of Excel for business analysis through an interactive dashboard. Future enhancements could include:

* **Adding More Data**: Incorporating additional datasets for a more comprehensive analysis.
* **Advanced Metrics**: Developing more sophisticated metrics and KPIs.
* **Enhanced Visualizations**: Improving chart designs and adding new types of visualizations.