

In this END-TO-END EXCEL PROJECT I will gather the data first transform it then use Pivot Table and Pivot Chart to build a dynamic interactive coffee sales dashboard.

DASHBOARD VISUALS:

In this Dashboard I am going to have

- one Line Chart with Total Sales broken down by four coffee types
- a Bar Chart with Total Sales broken down by the 3 countries US, UK and Ireland where coffee is sold
- **top 5 customer Bar Chart**
- a Timeline that the user can use to manipulate these visuals
- a Slicer showing roast type names
- a Slicer for size of sold packages
- a slicer showing whether or not the customers have a loyalty card

EXCEL WORKBOOK USED:

CoffeeOrdersData.xlsx (database on Coffee Bean Sales) made up of Orders, Customers and Products worksheets

FIRST STEPS > GATHERING AND TRANSFORMING DATA

- populating Orders sheet's cells from column F to column M by means of XLOOKUP and the dynamic INDEX MATCH function to be able to get the needed values from Customers and Products sheets

```
=XLOOKUP(orders!C2, customers!$A$1:$A$1001, customers!$B$1:$B$1001)
```

```
=IF(XLOOKUP(orders!C3, customers!$A$1:$A$1001, customers!$C$1:$C$1001)= 0, "",  
(XLOOKUP(orders!C3, customers!$A$1:$A$1001, customers!$C$1:$C$1001)))
```

```
=INDEX(products!$A$1:$G$49, MATCH(orders!$D2, products!$A$1:$A$49, 0), MATCH(orders!$E1, products!$A$1:$G$1, 0))
```

- populating the column Sales by multiplying Quantity and Unit Price
- populating and categorising the newly created column called Coffee Type Name in the Orders sheet showing the Full Coffee type Names

```
=SWITCH(TRUE(), I2 = "Rob", "Robusta", I2 = "Exc", "Excelsa", I2 = "Ara", "Arabica", I2 = "Lib",  
"Liberica")
```

- populating and categorising the newly created column called Roast Type Name in the Orders sheet showing the Full Roast type Names

```
=SWITCH(TRUE(), J2 = "M", "Medium", J2 = "L", "Light", J2 = "D", "Dark", "")
```

- formatting cells and checking for duplicates values

SECOND STEPS > PIVOT TABLE (ALT N V T) AND PIVOT CHART

- **First Pivot Table > Sales broken down by Year, Month and Coffee Type Name**
- **Line Chart > Sales Over Time**
- **Insert and formatting Timeline > Pivot Chart Analyse > Insert Timeline**
- creating a new column called Loyalty Card in the Orders sheet to see whether customers have a Loyalty Card

=XLOOKUP([@[Customer Name]], customers!\$B\$1:\$B\$1001,customers!\$I\$1:\$I\$1001)

- clicking either into the Pivot Table or Pivot Chart and Refresh
- Inserting and formatting 3 Slicers showcasing Size, Roast Coffee Name and Loyalty Card
- Bar Chart showing Sales broken down by Country
- Bar Chart with top 5 customers generating most sales
- Making slicers and timeline filter all of the visuals > Timeline / Slicers > Report Connections
- Adding protected specific cells within the Orders, Customers, Products worksheets to prevent users from changing data > Review Tab > Protect Worksheet
- Protecting the Structure of the entire workbook to prevent unwanted changes, such as moving, deleting, renaming or adding sheets > Review Tab > Protect Workbook