

Project

Requirements

CEO:

1. Profit / loss of a product vs Country.
(profit development in a tooltip), hovering over country.
2. Overall development of the revenue
3. Profit of all categories / subcategories
(Matrix Visual with data bars).

Marketing & Products Team

- > Total sales amount YTD.
- > Difference in profit compared to previous year.
- > Summary Page.
 - Details page (drill down):
 - > List of orders (order date, order quantity, revenue, profit product and country).
- > Customer Analysis page
 - > average profit per customer and how it changed over time
 - > Top 10 customers in terms of Revenue.

> Eraa Page:

- > Development in Revenue of different categories over time.
- > Profit margin development over time and what are profit making Categories , subCategories and products .

DAY 1

Data Loading : Load All the data files.

Data Transformations :

SALES:

- > Data Combining (Sales 2017, 2018, 2019, 2020)
- > Select first Row as header in all Sales tables .
- > Remove Last column (Column ABC) from Sales 2017.
- > Append (sales 2017, 2018, 2019, 2020) as Sales
- > Change datatype in the combined sales Table (Auto detect)
 - > Change order date to Date.

Sales Territory:

- > First row as header
- > Change data type.

Customer:

- > First row as header
- > Remove null, n/a customer Key
- > Remove column Postal
- > Change data type.

Product:

- > First row as header
- > Remove Column 10 (All null values).
- > Change data type.

Reseller :

- > First row as header
- > Remove column 6, 7, 8 (All nulls)
- > Remove Postal Code
- > Split the city / state / country columns into individual columns (city, state, country). , delimiter (/)

Sales Order (not needed) :

- > First row as header.

Now close & APPLY

Create Data Model :

- > Consider Sales as Facts tables.
- > And Remaining (Customer, sales territory, Product, Reseller) as dimension table.
- > Customer → Sales (1 to Many, Customer-key)
- > Product → Sales (1 to Many, Product key)
- > Sales Territory → Sales (1 to many, Sales Territory Key).
- > Reseller → Sales (1 to Many, Customer-key)
- > Sales order → Sales (1 to many, SalesOrderLineKey)

Note : Create an additional date table

Creating Measures :

- > Create a revenue measure
- > Create a Profit measure.
- > Create a revenue and profit YTD measure.

DAY 2

Creating Visual (CEO Requirements) :

- > For 1st problem statement (understand profit / Loss for products in each country).

Used a tree map with

Category > Country

Details > Categories

Values > Profit

- > Then setup a tooltip page with a line chart (profit vs order date), and set show tooltip on country.

- > Can also implement a slicer visual for country.
- > For 2nd problem statement implement a line chart of Revenue Vs ordDateKey.
For better understanding add a zoom slider.
- > For 3rd problem statement add a matrix visual.
Rows > subCategory
Column > Category
Profit > Values.
- > Additionally implement data bars in cell elements Formatting, choose a suitable color for better readability and clear differentiation.

Marketing Team :

Page : Marketing Team 1

> Visual: Total Sales YTD

Plot a line graph with Date on x-axis
and measure Revenue YTD on Y axis.

> Visual: Comparison of profit :

- > Create a measure Previous year profit and use DATEADD function in the measure
- > Now in table visual select date , Profit measure, Previous year profit Measure
- > Create an additional measure difference and use it in table visual.

Page : Details

- > Select a table visual , use orderdate key, Product and other required details .
- > Now in page information change the page type to drillthrough .
- > Set Drillthrough from
 - > Orderdate key
 - > Country
 - > Product .

Page : Customer analysis

Visual : Average profit per customer

- > Create a measure average profit per customer . using already existing measure Profit and divide it by distinct count of customer .
- > Now plot this visual against the date .

Visual : Top 10 customers By Revenue.

- > In a table visual select customer key and Revenue.
- > Now tap on visual, go to filters and filter customer key > Top N values > Filter using Revenue > apply filter.

Page : Marketing team 3

Visual : Revenue per Category

- > Select Line chart
- > On y-axis use Revenue measure
- > On x-axis use Date
- > In Legend use category.

Visual : Profit Margin Development over time :

- > Create a measure to calculate profit Margin, by using existing measure Revenue and profit.
- > Now plot this profit Margin measure against Date in a line chart . (Y-axis = profit margin, x - axis = date).

Visual Profit Making Category, subCategory, Products

- > Select a multi row card visual
- > For profit making Category (use Profit as category in fields)
- > Select the visual click on filters > Tap on product > Show items (select is greater than) and set value as 0.
- > Similarly for sub category and products.