

Supply Chain Data Analysis



I have Supply Chain Data I Want Analysis It With Power BI



Analyzing supply chain data in Power BI can be a powerful way to uncover insights and optimize processes. Could you share more details about the dataset? For example:

- What key metrics or KPIs are you interested in (e.g., inventory levels, delivery times, costs)?
- Are there specific goals for the analysis (e.g., reducing bottlenecks, tracking performance)?
- What data attributes are included (e.g., supplier, product, region, date)?

This will help in crafting a tailored analysis approach.



I have Po Dashboard Requirements and Table Columns



Great! Share the details of your PO (Purchase Order) dashboard requirements and the table columns. This information will help in designing a structured and effective Power BI dashboard to meet your needs. Include details such as:

1. Dashboard Requirements

- Key Performance Indicators (KPIs) to be tracked (e.g., PO cycle time, total PO value, on-time delivery).
- Visualizations needed (e.g., bar charts, pie charts, maps).
- Filters or slicers (e.g., date range, supplier, product category).

2. Table Columns

- The columns in your dataset (e.g., PO number, supplier name, order date, delivery date, item description, quantity, unit price, etc.).

This information will guide the design and implementation process.



Po Dashboard Requirement

1. PO Qty monthly and year to date with different category (Approval status) ,Division(SMD,SEN....) ,Purchase order status and Payment terms
2. Value monthly and year to date.
3. Rejected, Approved, Average approved time, monthly and year to date.
4. Rejected PO by reasons and the department/position(Table).
5. Delivery time.

6.Open PO along with aging , value, No by division.

7.Time between PO Received Date and PO Date.

Data Columns Name:-

Purchase order

Vendor account

Vendor name

Purchase type

Project Name

Approval status

Purchase order status

Currency

Purchase total

Payment requests total

Posted payments total

Received Amount

Invoiced Amount

Remaining Received

Remaining Invoiced

Received %

Invoiced %

PO Date

Method of payment

Terms of payment

Division

Legal Entity

Category

Help me how can I make analysis(calculations DAX) and visualizations(Charts and Slicers) on this data ?



Creating the **PO Dashboard** in Power BI involves designing visuals, defining calculations using DAX, and structuring slicers for interactivity. Below is a step-by-step guide for each requirement:

1. PO Quantity (Monthly & Year-to-Date)

Calculations (DAX):

1. Monthly PO Quantity:

DAX

```
PO Qty Monthly =  
CALCULATE(SUM('Table'[Purchase total]),  
    DATESMTD('Calendar'[Date]))
```

2. Year-to-Date PO Quantity:

DAX

```
PO Qty YTD =
CALCULATE(SUM('Table'[Purchase total]),
    DATESYTD('Calendar'[Date]))
```

Visualization:

- **Column Chart:** PO Quantity by Category, Division, Approval Status, Purchase Order Status, and Payment Terms.
- **Slicers:** Filters for Year, Month, Category, Division, and Approval Status.

2. Value (Monthly & Year-to-Date)

Calculations (DAX):

1. Monthly Value:

DAX

```
PO Value Monthly =
CALCULATE(SUM('Table'[Purchase total]),
    DATESMTD('Calendar'[Date]))
```

2. Year-to-Date Value:

DAX

```
PO Value YTD =
CALCULATE(SUM('Table'[Purchase total]),
    DATESYTD('Calendar'[Date]))
```

Visualization:

- **Card Visuals:** Display total values for Monthly and YTD PO Value.
- **Line Chart:** Value trends over months.

3. Rejected, Approved, and Average Approval Time (Monthly & YTD)

Calculations (DAX):

1. Rejected PO Count:

DAX

```
Rejected PO Count =
CALCULATE(COUNTROWS('Table'),
```

```
'Table'[Approval status] = "Rejected")
```

2. Approved PO Count:

DAX

```
Approved PO Count =  
CALCULATE(COUNTROWS('Table'),  
  'Table'[Approval status] = "Approved")
```

3. Average Approval Time:

Assuming approval time is captured in a calculated column:

DAX

```
Average Approval Time =  
AVERAGE('Table'[ApprovalTime])
```

Visualization:

- **Bar Chart:** Rejected vs. Approved (Monthly & YTD).
- **Card Visual:** Average Approval Time.

4. Rejected PO by Reasons and Department

Calculations (DAX):

1. Count by Reason:

DAX

```
Rejected PO by Reason =  
CALCULATE(COUNTROWS('Table'),  
  'Table'[Approval status] = "Rejected")
```

Visualization:

- **Table Visual:** Columns include Rejected PO, Reason, and Department/Position.

5. Delivery Time

Calculations (DAX):

1. Delivery Time (Days):

DAX

```
Delivery Time =
DATEDIFF('Table'[PO Date], 'Table'[Delivery Date], DAY)
```

Visualization:

- **Histogram:** Delivery Time distribution.
- **Line Chart:** Average delivery time by month.

6. Open PO (Aging, Value, and Count by Division)

Calculations (DAX):

1. Aging:

DAX

```
Aging =
DATEDIFF('Table'[PO Date], TODAY(), DAY)
```

2. Open PO Value:

DAX

```
Open PO Value =
CALCULATE(SUM('Table'[Remaining Received]),
    'Table'[Purchase order status] = "Open")
```

3. Open PO Count by Division:

DAX

```
Open PO Count =
CALCULATE(COUNTROWS('Table'),
    'Table'[Purchase order status] = "Open")
```

Visualization:

- **Bar Chart:** Aging vs. Division.
- **Matrix:** Division, Value, and Count.

7. Time Between PO Received Date and PO Date

Calculations (DAX):

1. Time Difference (Days):

DAX

```
PO Received Time =  
DATEDIFF('Table'[PO Date], 'Table'[PO Received Date], DAY)
```

Visualization:

- **Line Chart:** Trend of time difference over months.
- **Card Visual:** Average time.

General Visualizations

1. Dashboard Filters (Slicers):

- Category
- Division
- Approval Status
- Payment Terms
- Time Period (Year, Month)

2. Summary Cards:

- Total PO Value
- Open PO Value
- Rejected PO Count

3. Interactive Reports:

- Add drill-through pages for deeper analysis of divisions, categories, or approval status.

4. Data Model Notes:

- Ensure you create a proper **Calendar Table** for time intelligence.
- Relate the Calendar Table to your dataset using the ``PO Date``.

Let me know if you need help implementing these steps or any specific calculation!