Project Title	**Financial Performance Dashboard**
Tools	Tableau Desktop
Technologies	Business Analyst
Project Difficulties level	intermediate

Dataset : Dataset is available in the given link. You can download it at your convenience.

Click here to download data set

Finance Analytics Tableau Project

Project Overview

The Finance Analytics Tableau project aims to provide comprehensive insights into the financial health of a company. This dashboard will include key financial metrics, trend analysis, and performance indicators to support data-driven decision-making.

Objectives

- Analyze revenue and expenses over time.
- Monitor key financial ratios.
- Track budget vs. actual performance.
- Visualize financial KPIs such as profit margins, return on assets, and debt-to-equity ratio.

Data Collection and Preparation

Sample Data:

Assuming we have the following sample datasets in CSV format:

- `financials.csv`
- `budget.csv`

financials.csv

csv
Copy code

```
Date,Revenue,Expenses,Net Income,Assets,Liabilities,Equity
2023-01-01,100000,80000,20000,500000,300000,200000
2023-02-01,110000,85000,25000,520000,310000,210000
...
```

budget.csv

csv
Copy code

```
Date,Budgeted Revenue,Budgeted Expenses
2023-01-01,95000,78000
2023-02-01,105000,82000
...
```

Data Integration and Cleaning

Assume the data is clean and properly formatted. Load the CSV files into Tableau.

Tableau Dashboard Development

Setting Up Tableau:

1. **Connect to Data Sources**: Load the CSV files into Tableau.
    - Go to `Data` > `Connect to Data` > `Text File` and select your CSV files.

Creating Visualizations

1. **Revenue and Expense Analysis**:
    - **Revenue and Expenses Over Time**: Line chart.
    - **Net Income Over Time**: Area chart.
2. **Financial Ratios**:
    - **Profit Margin**: Bar chart.
    - **Return on Assets**: Line chart.
    - **Debt-to-Equity Ratio**: Line chart.
3. **Budget vs. Actual Performance**:
    - **Budget vs. Actual Revenue**: Dual-axis line chart.
    - **Budget vs. Actual Expenses**: Dual-axis line chart.
4. **Key Financial KPIs**:
    - **Current Ratio**: KPI card.
    - **Quick Ratio**: KPI card.
    - **Debt-to-Equity Ratio**: KPI card.

Example Tableau Calculations

Calculated Fields:

Profit Margin:

tableau

Copy code

```
[Net Income] / [Revenue]
```

1.

Return on Assets:

tableau

Copy code

```
[Net Income] / [Assets]
```

2.

Debt-to-Equity Ratio:
tableau
Copy code
```
[Liabilities] / [Equity]
```

3.

Current Ratio:
tableau
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```
[Assets] / [Liabilities]
```

4.

Quick Ratio:
tableau
Copy code
```
([Assets] - [Inventory]) / [Liabilities]
```

5.

Building the Dashboard

1. **Layout and Design**: Arrange visualizations logically with filters and interactive elements.

Sample Dashboard Layout:

- **Main Dashboard Overview**:
  - KPIs: Total Revenue, Total Expenses, Net Income, Profit Margin.
  - Links to detailed dashboards: Revenue & Expenses, Financial Ratios, Budget vs. Actual, Financial KPIs.

Creating Visualizations in Tableau

1. **Revenue and Expense Analysis Dashboard**:

Revenue and Expenses Over Time: Create a line chart.

tableau

Copy code

```
1. Drag `Date` to Columns.
2. Drag `Revenue` and `Expenses` to Rows.
3. Change the mark type to `Line`.
```

-

Net Income Over Time: Create an area chart.

tableau

Copy code

```
1. Drag `Date` to Columns.
2. Drag `Net Income` to Rows.
3. Change the mark type to `Area`.
```

-

2. **Financial Ratios Dashboard**:

Profit Margin: Create a bar chart.

tableau

Copy code

```
1. Drag `Date` to Columns.
2. Drag `Profit Margin` (calculated field) to Rows.
3. Change the mark type to `Bar`.
```

-

Return on Assets: Create a line chart.

tableau

Copy code

```
1. Drag `Date` to Columns.
```

```
2. Drag `Return on Assets` (calculated field) to Rows.
3. Change the mark type to `Line`.
```

-

Debt-to-Equity Ratio: Create a line chart.

tableau

Copy code

```
1. Drag `Date` to Columns.
2. Drag `Debt-to-Equity Ratio` (calculated field) to Rows.
3. Change the mark type to `Line`.
```

-

3. **Budget vs. Actual Performance Dashboard**:

Budget vs. Actual Revenue: Create a dual-axis line chart.

tableau

Copy code

```
1. Drag `Date` to Columns.
2. Drag `Revenue` to Rows and create a dual-axis.
3. Drag `Budgeted Revenue` to the second axis.
4. Synchronize the axes and change the mark type to `Line`.
```

-

Budget vs. Actual Expenses: Create a dual-axis line chart.

tableau

Copy code

```
1. Drag `Date` to Columns.
2. Drag `Expenses` to Rows and create a dual-axis.
3. Drag `Budgeted Expenses` to the second axis.
4. Synchronize the axes and change the mark type to `Line`.
```

-

4. **Key Financial KPIs Dashboard**:

Current Ratio: Create a KPI card.

tableau

Copy code

```
1. Drag `Current Ratio` (calculated field) to the view.
2. Change the mark type to `Text`.
```

-

Quick Ratio: Create a KPI card.

tableau

Copy code

```
1. Drag `Quick Ratio` (calculated field) to the view.
2. Change the mark type to `Text`.
```

-

Debt-to-Equity Ratio: Create a KPI card.

tableau

Copy code

```
1. Drag `Debt-to-Equity Ratio` (calculated field) to the view.
2. Change the mark type to `Text`.
```

-

Deploying and Sharing the Dashboard

1. **Publish the Dashboard**:
   - Go to `Server` > `Publish Workbook`.
   - Select your Tableau Server or Tableau Online.

Sample Dashboard

Below is a sample image of the Finance Analytics Tableau dashboard.

Summary

This guide provides a detailed overview of creating a Finance Analytics Tableau dashboard. By following the steps and using the provided code snippets, you can build a comprehensive financial dashboard that helps in making data-driven decisions. If you need more specific visualizations or have additional data, you can expand on this foundation to include other relevant metrics and insights.

Sample report

Finance Report Dashboard

Hello Everyone,
I made this Finance Dashboard in Power BI with the Finance Excel Workbook provided by Microsoft on their Website.

Problem Statement

- The goal of this Power BI Dashboard Project is to analyze the financial performance of a company using the provided Microsoft Sample Data.
- To create a visually appealing dashboard that provides an overview of the company's financial metrics enabling stakeholders to make informed business decisions.

Sections in the Report

Report has Multiple Section's from where you can manage the Data, Like :

- Report Data can be sliced by Segments, Country and Year to show Particular Data.
- It has cards showing Total Units Sold, Total Gross Sale and Total Profit.
- It has a Clustered Bar Chart with Year on X-Axis and Profit on Y-Axis showing Profit Quarterly.
- And Lastly, It has a Area Chart showing Months on X-Axis and Profit on Y-Axis showing profit Monthly.
- I have also included a Reset Button at the Top to clear all Slicer's.

- To use it hold CTRL and then click it to reset the Slicer's.

Getting Started

- Clone the repository to your local machine using the following command :

git clone https://github.com/TheMrityunjayPathak/FinanceReportDashboard.git