The following steps for establishing, monitoring, and reporting on capital and operating expenditures for a financial analyst for the Business Sale team:

1. Establishing the Budget: The first step is to establish a budget for capital and operating expenditures. This can be done by analyzing the company's financial statements, identifying the areas where investments are needed and allocating funds accordingly.

2. Monitoring Expenditures: Once the budget is established, it is important to monitor expenses on a regular basis. This can be done by tracking expenses, reviewing financial statements, and analyzing cash flow.

3. Reporting on Expenditures: Finally, it is important to report on expenditures to the Business Sale team. This can be done by preparing financial reports, providing detailed analysis, and making recommendations for future investments.

Overall, with the help of AI tools, financial analysts can easily establish, monitor and report on capital and operating expenditures for the Business Sale team.

, here are two examples for each step:

1. Establishing the Budget:

Example 1: To establish the budget for capital expenditures for a specific department, you can use SQL queries to extract the relevant data from the database. For example:

```

SELECT SUM(amount) AS total\_capital\_expenses FROM expenditures WHERE type='capital' AND department='Sales' AND YEAR(date)=YEAR(CURDATE());

```

This query will return the sum of all capital expenditures for the Sales department in the current year.

Example 2: To establish the budget for operating expenditures for the entire company, you can use SQL queries to extract the relevant data from the database. For example:

```

SELECT SUM(amount) AS total\_operating\_expenses FROM expenditures WHERE type='operating' AND YEAR(date)=YEAR(CURDATE());

```

This query will return the sum of all operating expenditures for the entire company in the current year.

2. Monitoring Expenditures:

Example 1: To monitor the capital expenditures for a specific project, you can use SQL queries to extract the relevant data from the database. For example:

```

SELECT \* FROM expenditures WHERE type='capital' AND project\_name='Project X';

```

This query will return all the capital expenditures related to Project X.

Example 2: To monitor the operating expenditures for a specific department, you can use SQL queries to extract the relevant data from the database. For example:

```

SELECT \* FROM expenditures WHERE type='operating' AND department='Marketing';

```

This query will return all the operating expenditures related to the Marketing department.

3. Reporting on Expenditures:

Example 1: To generate a report on the total capital expenditures for each department, you can use SQL queries to extract the relevant data and generate a report. For example:

```

SELECT department, SUM(amount) AS total\_capital\_expenses FROM expenditures WHERE type='capital' GROUP BY department;

```

This query will return the total capital expenditures for each department.

Example 2: To generate a report on the total operating expenditures for each quarter of the year, you can use SQL queries to extract the relevant data and generate a report. For example:

```

SELECT QUARTER(date) AS quarter, SUM(amount) AS total\_operating\_expenses FROM expenditures WHERE type='operating' AND YEAR(date)=YEAR(CURDATE()) GROUP BY quarter;

```

This query will return the total operating expenditures for each quarter of the current year.

Here are some SQL statement examples for each of the ways to analyze the data:

1. Categorize and Group Expenses:

Example: To group expenses by category, you can use the following SQL statement:

```

SELECT category, SUM(amount) AS total\_expenses FROM expenditures GROUP BY category;

```

This query will return the total expenses for each category.

2. Monitor Expense Trends:

Example: To monitor expense trends over time, you can use the following SQL statement:

```

SELECT MONTH(date) AS month, SUM(amount) AS total\_expenses FROM expenditures WHERE YEAR(date) = YEAR(CURDATE()) GROUP BY MONTH(date);

```

This query will return the total expenses for each month in the current year.

3. Compare Actuals to Budget:

Example: To compare actuals to budget, you can use the following SQL statement:

```

SELECT category, SUM(amount) AS actual\_expenses, budgeted\_amount FROM expenditures WHERE YEAR(date) = YEAR(CURDATE()) GROUP BY category;

```

This query will return the actual expenses and budgeted amounts for each category in the current year.

4. Analyze Variance:

Example: To analyze variance between actual expenses and budgeted expenses, you can use the following SQL statement:

```

SELECT category, SUM(amount) AS actual\_expenses, budgeted\_amount, SUM(amount) - budgeted\_amount AS variance FROM expenditures WHERE YEAR(date) = YEAR(CURDATE()) GROUP BY category;

```

This query will return the actual expenses, budgeted amounts, and variance for each category in the current year.

5. Benchmark Against Industry Standards:

Example: To benchmark expenses against industry standards, you can use the following SQL statement:

```

SELECT category, SUM(amount) AS total\_expenses, AVG(amount) AS avg\_expenses FROM expenditures WHERE YEAR(date) = YEAR(CURDATE()) GROUP BY category;

```

This query will return the total expenses and average expenses for each category in the current year. You can then compare these results to industry benchmarks.

6. Identify Cost Drivers:

Example: To identify cost drivers for each expense category, you can use the following SQL statement:

```

SELECT category, cost\_driver, SUM(amount) AS total\_expenses FROM expenditures GROUP BY category, cost\_driver;

```

This query will return the total expenses for each cost driver within each category.

7. Use Visualizations:

Example: To use visualizations, you can use SQL queries to extract the data and then use a visualization tool to create charts and graphs. For example, you could use the following SQL statement to extract the total expenses for each month:

```

SELECT MONTH(date) AS month, SUM(amount) AS total\_expenses FROM expenditures WHERE YEAR(date) = YEAR(CURDATE()) GROUP BY MONTH(date);

```

Then, you could use a visualization tool to create a line chart that shows the trend in expenses over time.

Also To not Forget this process in Excel steps and terms

Sure! Here's an explanation of how you can achieve the same data analysis using Excel:

Sure, I apologize for the formatting. Here are the explanations for how to create the same analyses in Excel, broken down by each analysis:

1. Categorize and Group Expenses:

- To group expenses by category in Excel, you can use the PivotTable feature.

- Select your data range, go to the "Insert" tab, and click "PivotTable".

- Drag the "Category" field to the "Rows" section and the "Amount" field to the "Values" section.

- This will give you a table with the total expenses for each category.

2. Monitor Expense Trends:

- To monitor expense trends over time in Excel, you can create a line chart.

- Select your data range, go to the "Insert" tab, and click "Line Chart".

- Select the data series you want to chart and Excel will create a line chart that shows the trend in expenses over time.

3. Compare Actuals to Budget:

- To compare actuals to budget in Excel, you can use a PivotTable again.

- Select your data range, go to the "Insert" tab, and click "PivotTable".

- Drag the "Category" field to the "Rows" section, the "Amount" field to the "Values" section, and the "Budgeted Amount" field to the "Values" section.

- This will give you a table with the actual expenses and budgeted amounts for each category.

4. Analyze Variance:

- To analyze variance between actual expenses and budgeted expenses in Excel, you can use a PivotTable with a calculated field.

- Select your data range, go to the "Insert" tab, and click "PivotTable".

- Drag the "Category" field to the "Rows" section, the "Amount" field to the "Values" section, and the "Budgeted Amount" field to the "Values" section.

- Right-click on the PivotTable and select "Fields, Items & Sets".

- Click "Calculated Field" and create a formula that subtracts the budgeted amount from the actual amount.

- This will give you a table with the actual expenses, budgeted amounts, and variance for each category.

5. Benchmark Against Industry Standards:

- To benchmark expenses against industry standards in Excel, you can use a bar chart.

- Select your data range, go to the "Insert" tab, and click "Bar Chart".

- Select the data series you want to chart and Excel will create a bar chart that shows the total expenses and average expenses for each category.

- You can then compare these results to industry benchmarks.

6. Identify Cost Drivers:

- To identify cost drivers for each expense category in Excel, you can use a PivotTable with multiple fields.

- Select your data range, go to the "Insert" tab, and click "PivotTable".

- Drag the "Category" field to the "Rows" section, the "Cost Driver" field to the "Columns" section, and the "Amount" field to the "Values" section.

- This will give you a table with the total expenses for each cost driver within each category.

7. Use Visualizations:

- To use visualizations in Excel, you can create charts and graphs using your data.

- Select your data range, go to the "Insert" tab, and click the chart or graph type you want to create.

- You can then customize the chart or graph to fit your needs.

- For example, to create a line chart that shows the trend in expenses over time, you would select your data range and click "Line Chart".

Also for step 7. Let’s add the steps for Tableau

Yes, I can number each step for better clarity:

7. Use Visualizations:

1. To use visualizations in Tableau, connect to your data source and create a new worksheet.

2. Once you have your data connected, drag and drop the necessary fields onto the "Columns" and "Rows" shelves to create a chart or graph.

3. You can also add filters, sort the data, and create calculated fields to customize your visualization.

4. Tableau offers a wide range of chart and graph types, so you can choose the one that best fits your needs.

5. For example, to create a line chart that shows the trend in expenses over time, you would select the "Line Chart" option from the "Show Me" menu.

6. Drag the "Date" field to the "Columns" shelf and the "Amount" field to the "Rows" shelf.

7. You can then customize the chart by adding labels, changing the colors, and adjusting the axis scales to fit your data.

Speaking of Tableau these are the steps

:

1. Categorize and Group Expenses:

- Connect to your SQL database and create a new data source in Tableau.

- Drag the "expenditures" table onto the "Drag tables here" section.

- Drag the "category" field to the "Columns" section and the "amount" field to the "Rows" section.

- This will give you a table with the total expenses for each category.

2. Monitor Expense Trends:

- Connect to your SQL database and create a new data source in Tableau.

- Drag the "expenditures" table onto the "Drag tables here" section.

- Drag the "date" field to the "Columns" section and the "amount" field to the "Rows" section.

- Right-click on the "date" field and select "Month" to view expenses by month.

- This will give you a line chart that shows the trend in expenses over time.

3. Compare Actuals to Budget:

- Connect to your SQL database and create a new data source in Tableau.

- Drag the "expenditures" table onto the "Drag tables here" section.

- Drag the "category" field to the "Columns" section, the "amount" field to the "Rows" section, and the "budgeted\_amount" field to the "Rows" section.

- This will give you a table with the actual expenses and budgeted amounts for each category.

4. Analyze Variance:

- Connect to your SQL database and create a new data source in Tableau.

- Drag the "expenditures" table onto the "Drag tables here" section.

- Drag the "category" field to the "Columns" section, the "amount" field to the "Rows" section, and the "budgeted\_amount" field to the "Rows" section.

- Right-click on the "amount" field and select "Add Table Calculation".

- Select "Difference From" and choose the "budgeted\_amount" field.

- This will give you a table with the actual expenses, budgeted amounts, and variance for each category.

5. Benchmark Against Industry Standards:

- Connect to your SQL database and create a new data source in Tableau.

- Drag the "expenditures" table onto the "Drag tables here" section.

- Drag the "category" field to the "Columns" section, the "amount" field to the "Rows" section, and the "amount" field to the "Rows" section again.

- Right-click on the second "amount" field and select "Add Table Calculation".

- Select "Average" to calculate the average expenses for each category.

- This will give you a table with the total expenses and average expenses for each category.

6. Identify Cost Drivers:

- Connect to your SQL database and create a new data source in Tableau.

- Drag the "expenditures" table onto the "Drag tables here" section.

- Drag the "category" field to the "Columns" section, the "cost\_driver" field to the "Columns" section, and the "amount" field to the "Rows" section.

- This will give you a table with the total expenses for each cost driver within each category.

7. Use Visualizations:

- Connect to your SQL database and create a new data source in Tableau.

- Drag the "expenditures" table onto the "Drag tables here" section.

- Drag the "date" field to the "Columns" section and the "amount" field to the "Rows" section.

- Right-click on the "date" field and select "Month" to view expenses by month.

- Select the "Line Chart" option from the "Show Me" menu.

- This will give you a line chart that shows the trend in expenses over time.