

Demand Forecast | Discovery

INTRODUCTION

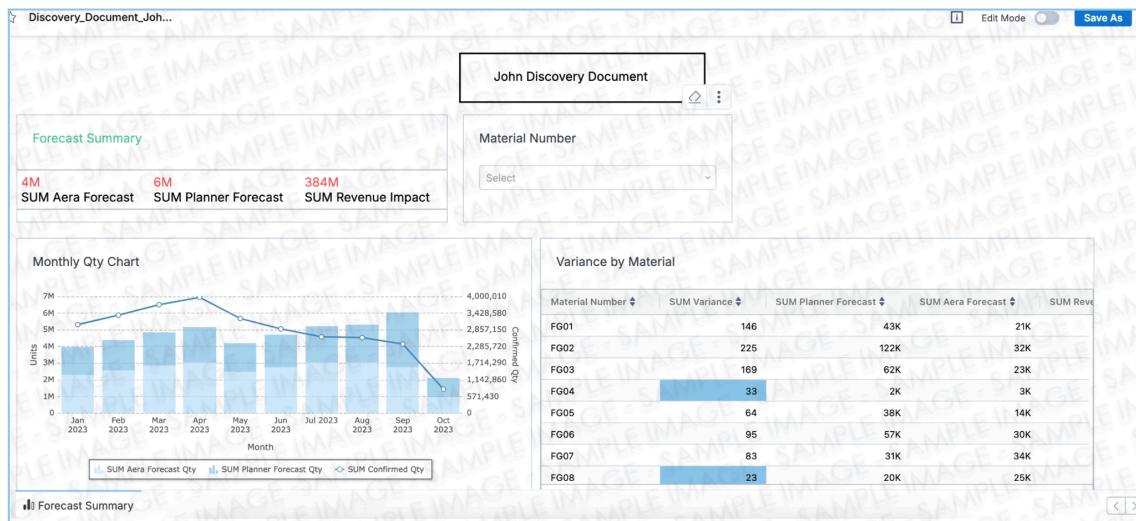
- This Hands-on Exercise is a part of **Building A Demand Forecast Skill**.
- The Steps for accessing the Sandbox are common across all the exercises.
- All the Subject Areas, Dimensions, and Measures required for this exercise have already been created and made available.
- The data in some of the Screenshots do not match the instructions and are illustrative. In such cases, you are requested to follow the instructions.

KEY TAKEAWAY

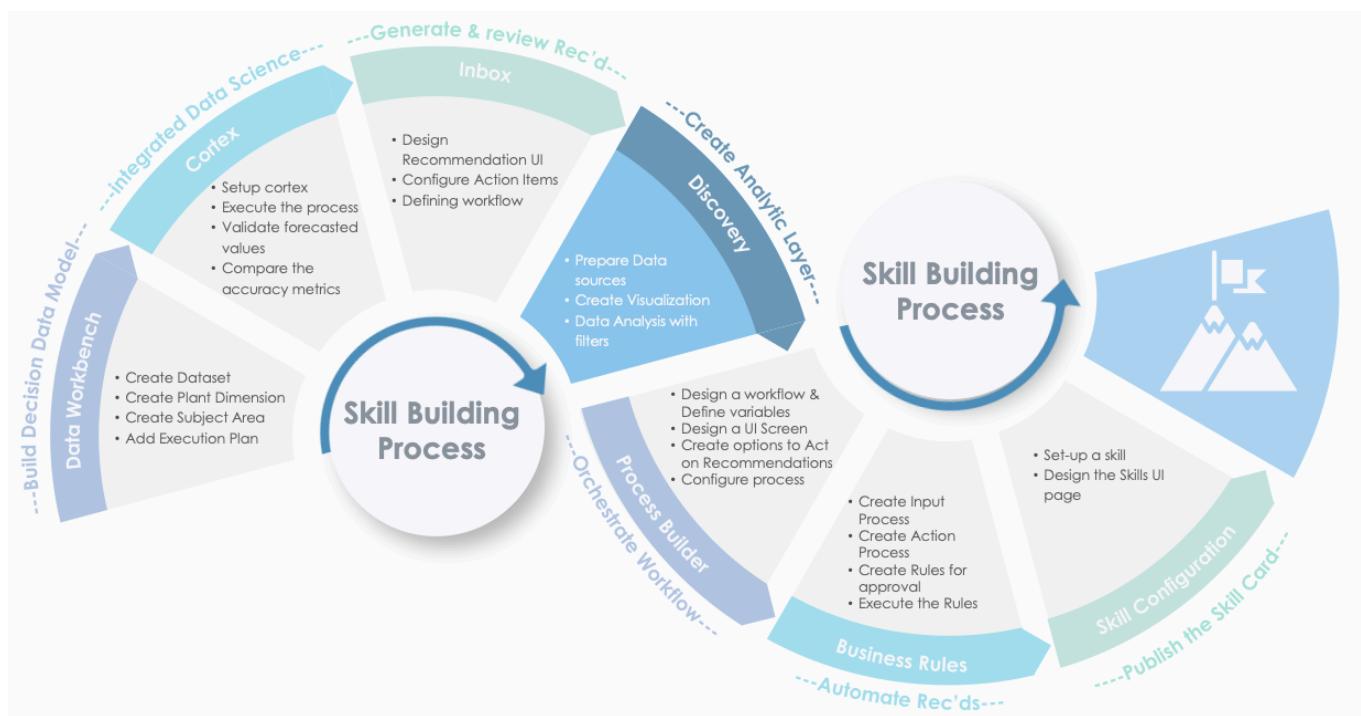
In this hands-on, you will learn to:

- Prepare Data sources
- Create Visualization
- Data Analysis with filters

EXPECTED RESULTS



SKILL BUILDING PROCESS



TYPICAL ERRORS

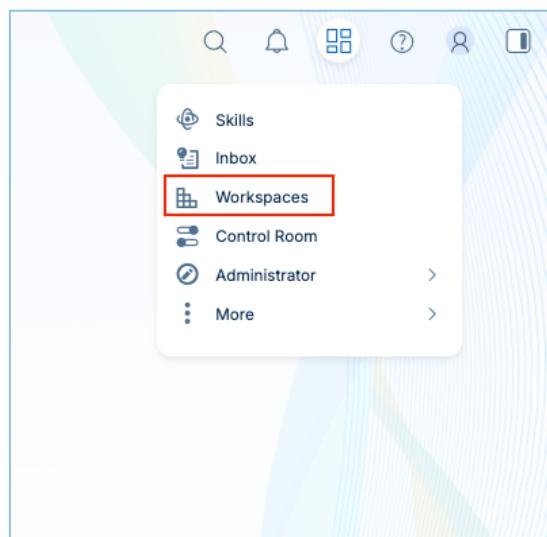
- Required dimensions and measures are not visible in the data view.

TIPS AND TRICKS

- While choosing the columns, make sure you are selecting the correct dimensions and measures.
- Ensure selection and mapping of correct dimensions.
- Make sure to save your work periodically to avoid losing any progress.

TASKS AND STEPS

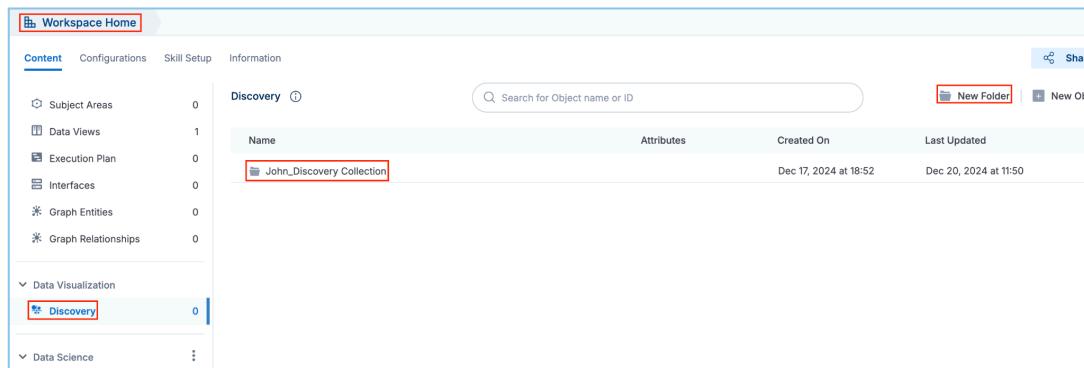
1. Click the **Aera Menu** icon on the Aera Decision Cloud and then click the **Workspaces**.



2. Go to the Workspace “ **Demand Forecast Skill_<Username>** ” that you created previously.

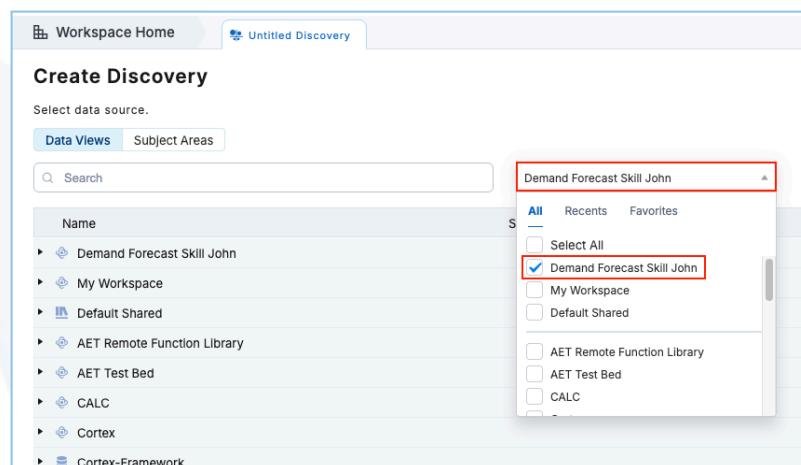
Prepare Data Sources

3. Go to the **Discovery** from the **Workspace Home** and click on the ‘new folder’ icon to create a new folder. Provide the name **<Username>_Discovery Collection**.

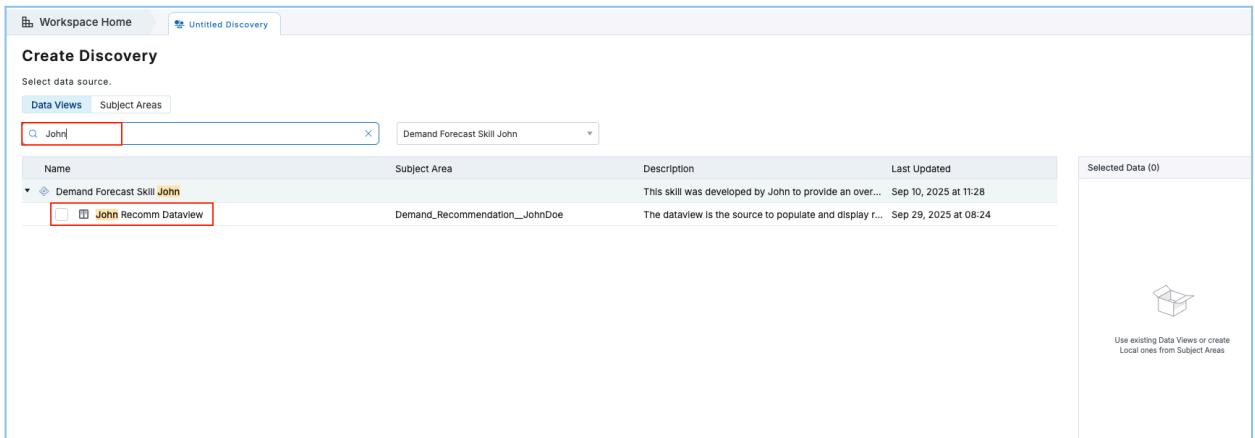


Name	Attributes	Created On	Last Updated
John_Discovery Collection		Dec 17, 2024 at 18:52	Dec 20, 2024 at 11:50

4. Next, right-click the folder to create a **Discovery**. On the Create Discovery page, select your workspace.

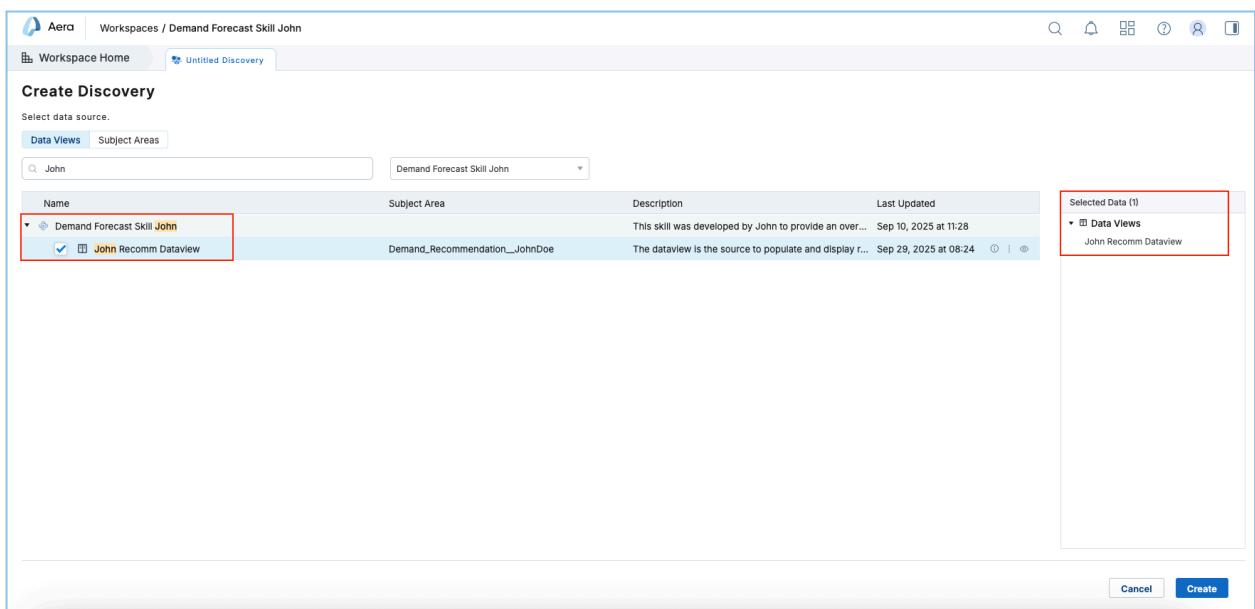


5. Within your workspace, search for the <Username>_Recomm_DataView.
6. Click the checkbox to add the selected data source.



The screenshot shows the 'Create Discovery' page. In the search bar, 'John' is typed. Below the search bar, a table lists data sources. One entry, 'Demand Forecast Skill John' under 'Demand Forecast Skill John', has a checkbox next to it. This checkbox is highlighted with a red border. The table columns are Name, Subject Area, Description, and Last Updated.

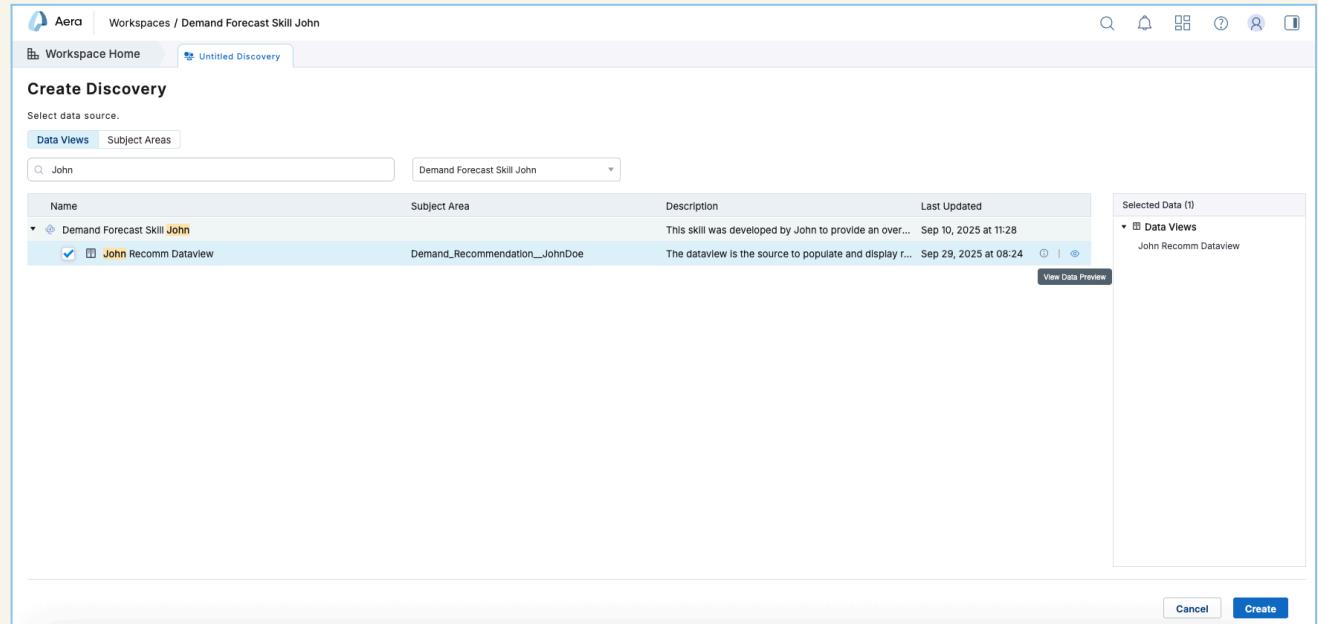
Name	Subject Area	Description	Last Updated
Demand Forecast Skill John	Demand_Recommendation__JohnDoe	This skill was developed by John to provide an over... The datasource is the source to populate and display r...	Sep 10, 2025 at 11:28 Sep 29, 2025 at 08:24
<input type="checkbox"/> John Recomm Dataview			



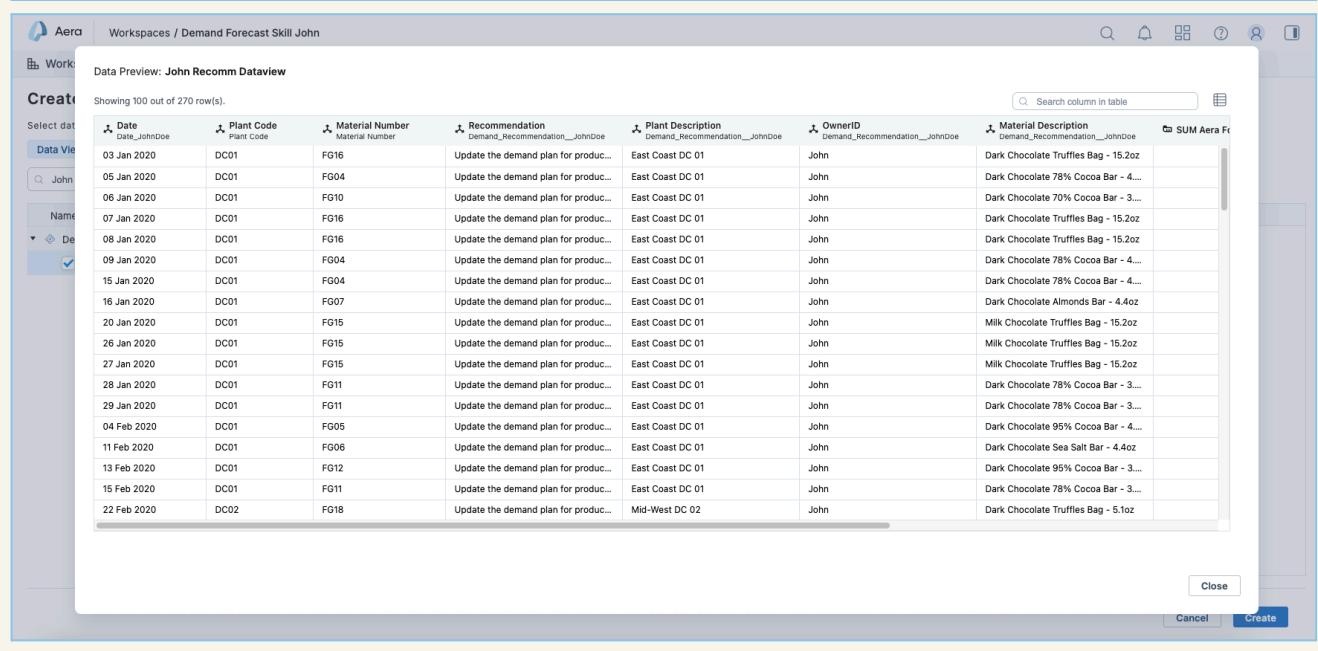
The screenshot shows the 'Create Discovery' page with the 'John Recomm Dataview' checkbox checked. The 'Selected Data (1)' section on the right shows a single item: 'Data Views' with the value 'John Recomm Dataview'. The 'Create' button is visible at the bottom right.

Selected Data (1)
<input checked="" type="checkbox"/> Data Views John Recomm Dataview

Note: Click on 'View Data Preview' to view the data present in your data view.

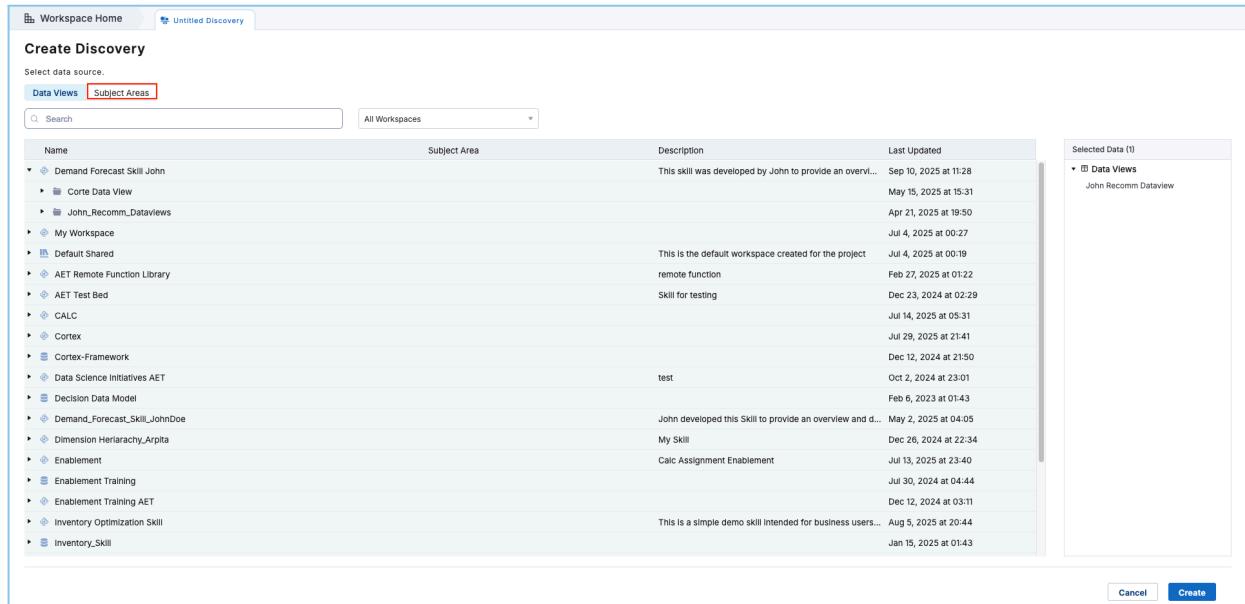


The screenshot shows the 'Create Discovery' page in Aera. The 'Data Views' tab is selected. A search bar at the top has 'John' typed into it. Below the search bar is a table with columns: Name, Subject Area, Description, and Last Updated. Two items are listed: 'Demand Forecast Skill John' and 'John Recomm Dataview'. The 'John Recomm Dataview' row is highlighted with a blue background and has a checkmark next to it. To the right of the table is a sidebar titled 'Selected Data (1)' which shows 'Data Views' and 'John Recomm Dataview'. At the bottom right of the main area are 'Cancel' and 'Create' buttons.



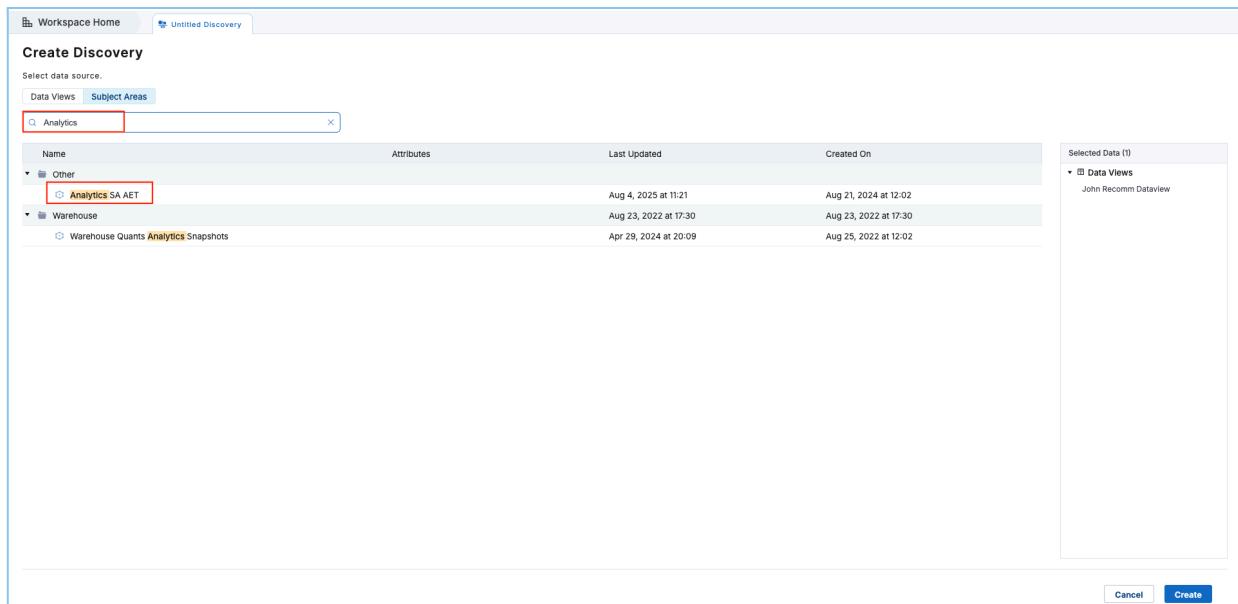
The screenshot shows the 'Data Preview: John Recomm Dataview' window. It displays a table with 270 rows of data. The columns are: Date, Plant Code, Material Number, Recommendation, Plant Description, OwnerID, Material Description, and SUM Aera F. The data shows various dates from January 2020 to February 2020, plant codes DC01 and DC02, material numbers FG04, FG06, FG08, etc., and recommendations like 'Update the demand plan for product...'. The preview window includes a sidebar with filters for 'Date', 'Plant Code', 'Material Number', 'Recommendation', 'Plant Description', 'OwnerID', 'Material Description', and 'SUM Aera F'. At the bottom right are 'Close', 'Cancel', and 'Create' buttons.

7. Add a second Data Source, which is an existing Subject Area.
8. Switch to the Subject areas section in your Create Discovery page.



Name	Subject Area	Description	Last Updated
Demand Forecast Skill John		This skill was developed by John to provide an overview...	Sep 10, 2025 at 11:28
Corte Data View			May 15, 2025 at 15:31
John_Recomm_Dataviews			Apr 21, 2025 at 19:50
My Workspace			Jul 4, 2025 at 00:27
Default Shared		This is the default workspace created for the project	Jul 4, 2025 at 00:11
AET Remote Function Library		remote function	Feb 27, 2025 at 01:22
AET Test Bed		Skill for testing	Dec 23, 2024 at 02:29
CALC			Jul 14, 2025 at 05:31
Cortex			Jul 29, 2025 at 21:41
Cortex-Framework			Dec 12, 2024 at 21:50
Data Science initiatives AET			Oct 2, 2024 at 23:01
Decision Data Model			Feb 6, 2023 at 01:43
Demand_Forecast_Skill_JohnDoe		John developed this Skill to provide an overview and d...	May 2, 2025 at 04:05
Dimension Hierarchy_Arpita		My Skill	Dec 26, 2024 at 22:34
Enablement		Calc Assignment Enablement	Jul 13, 2025 at 23:40
Enablement Training			Jul 30, 2024 at 04:44
Enablement Training AET			Dec 12, 2024 at 03:11
Inventory Optimization Skill		This is a simple demo skill intended for business users...	Aug 5, 2025 at 20:44
Inventory_Skill			Jan 15, 2025 at 01:43

9. Search for **Analytics SA AET** subject area, then select the subject area.



Name	Attributes	Last Updated	Created On
Analytics SA AET		Aug 4, 2025 at 11:21	Aug 21, 2024 at 12:02
Warehouse Quants Analytics Snapshots		Aug 23, 2022 at 17:30	Aug 23, 2022 at 17:30
		Apr 29, 2024 at 20:09	Aug 25, 2022 at 12:02

10. Select the columns listed below. Preview the columns and toggle the refresh icon to view the Metadata.

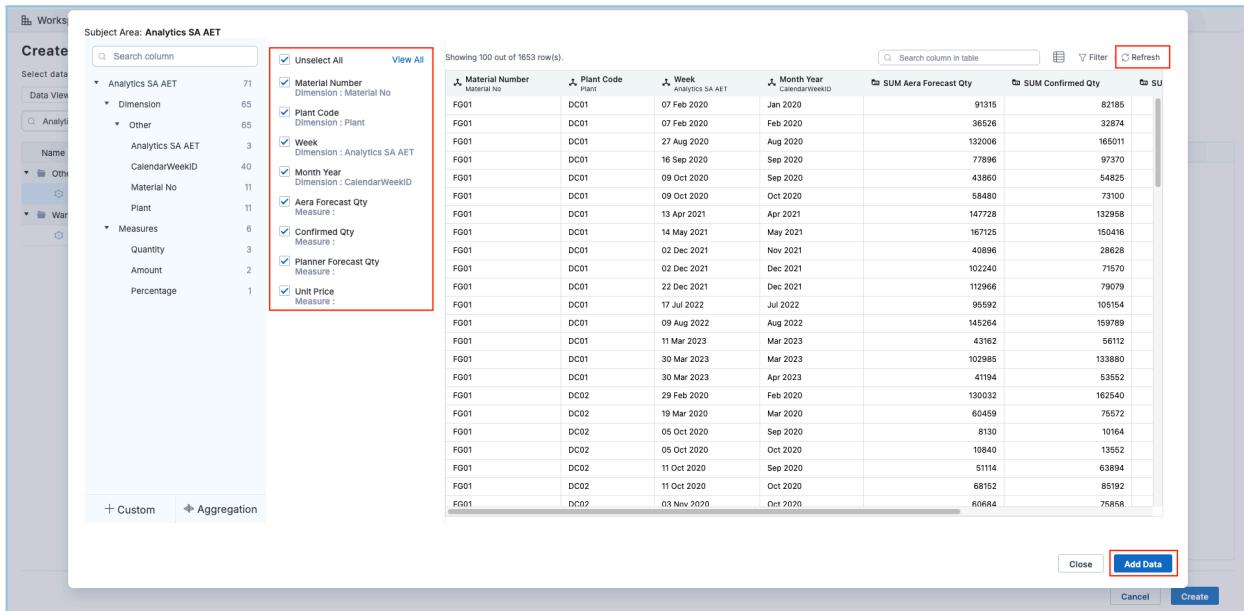
Dimensions:

Material No.Material Number
Plant.Plan Code
Analytics SA AET.Week
CalendarWeekID.Month Year

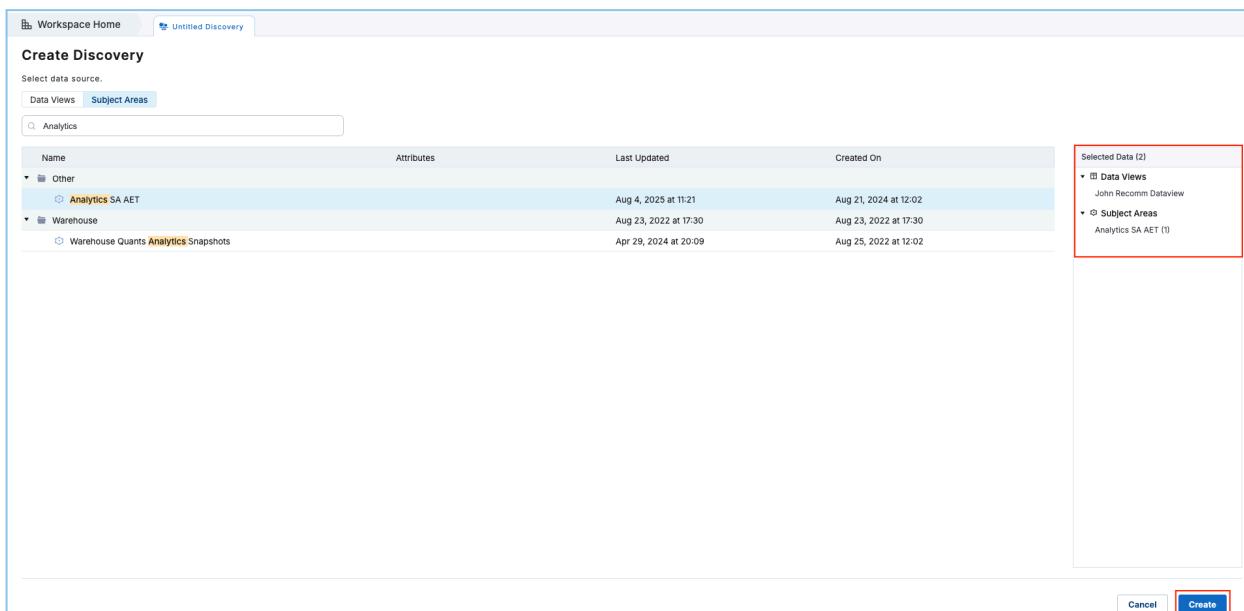
Measures:

Aera Forecast Qty
Planner Forecast Qty
Confirmed Qty
Unit Price
Net Sales Order Value

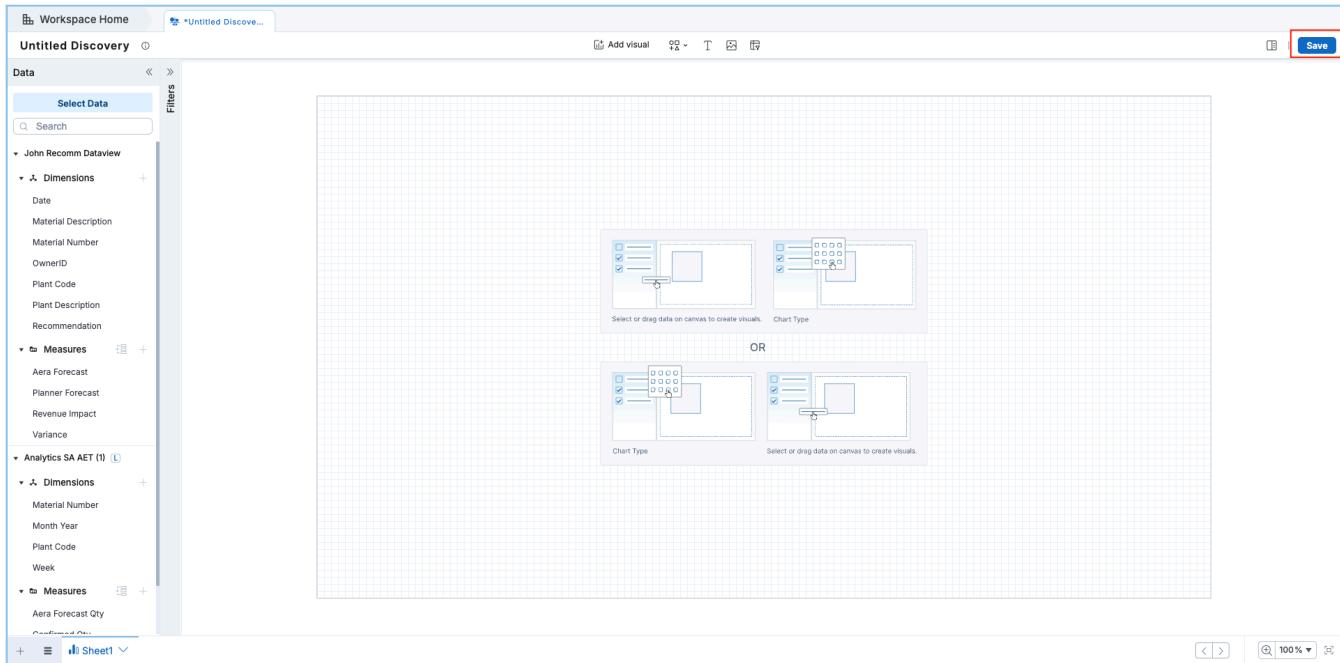
11. Once done, click on '**Add Data**'.



12. Once two data sources, which are **<Username>_Recomm_Dataview** and **Analytics SA AET**, have been added, click on **Create**.

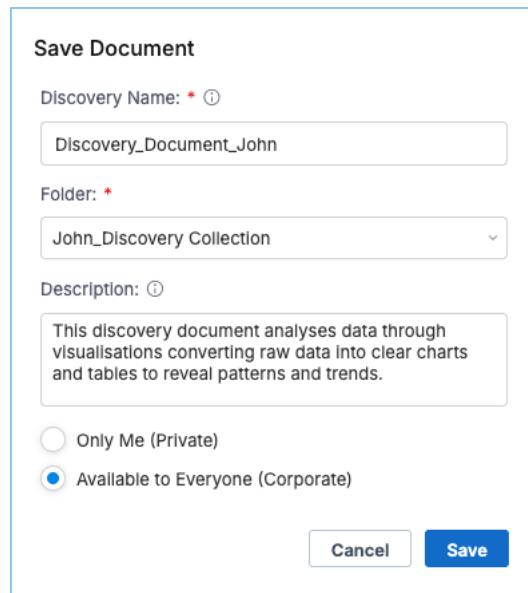


13. The Discovery Document page is displayed. Click '**Save**'.



The screenshot shows the Aera Discovery interface. On the left, the 'Data' pane lists various dimensions and measures from different data sources. In the center, there's a canvas area with two chart types displayed. On the right, there's a 'Save' button highlighted with a red box.

14. Provide the name as **Discovery_Document_<Username>** and a description.



Save Document

Discovery Name: * ⓘ

Folder: *

Description: ⓘ

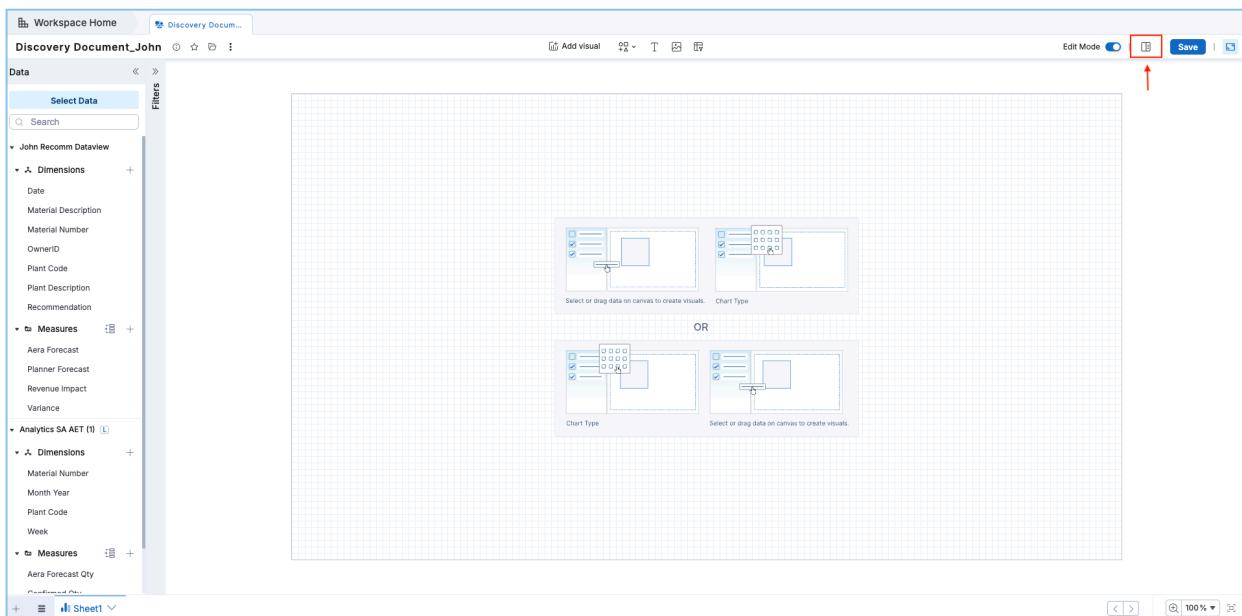
This discovery document analyses data through visualisations converting raw data into clear charts and tables to reveal patterns and trends.

Only Me (Private)
 Available to Everyone (Corporate)

[Cancel](#)
Save

Note: This discovery sheet is saved as "**Available to Everyone**"; hence, it can be accessed and referenced for various skills.

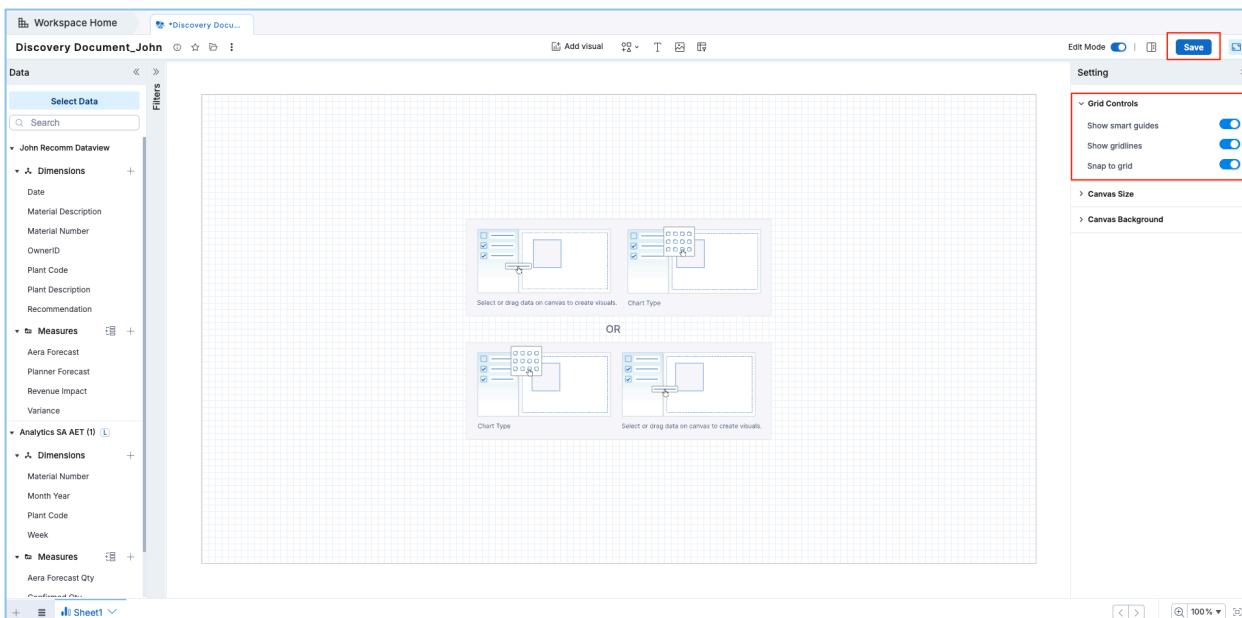
15. Click on the Settings icon to display the Grid Control options.



The screenshot shows the Aera Discovery Document workspace. On the left, the Data pane is expanded, showing various dimensions and measures. The main area is a canvas where two charts have been created: a treemap and a sunburst chart. The top right corner features an 'Edit Mode' button, which is highlighted with a red box and an arrow pointing to it.

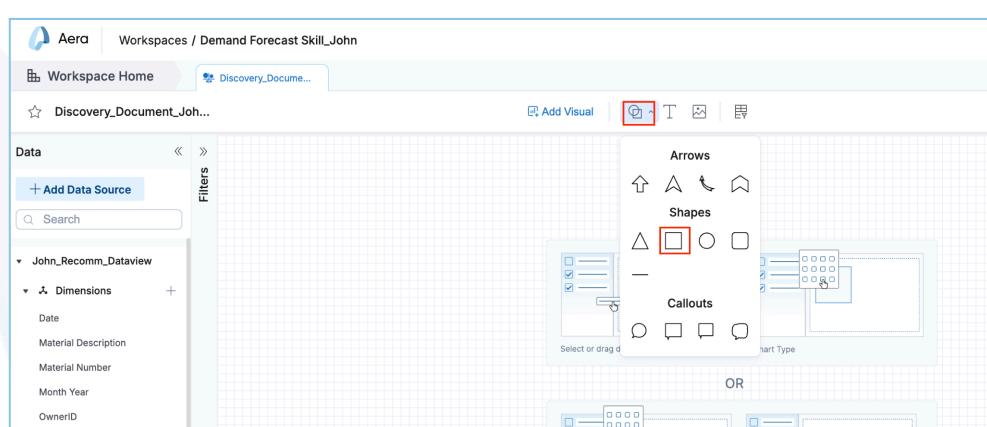
16. Expand the Grid Controls and toggle on all options.

17. Click **Save**.

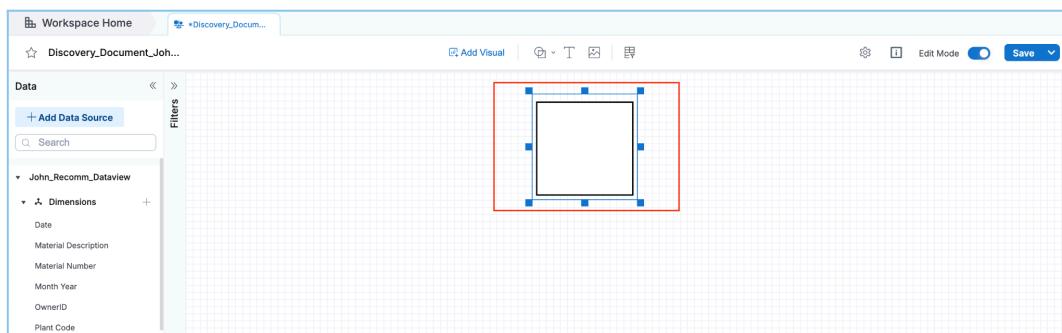


The screenshot shows the Aera Discovery Document workspace with the 'Setting' panel open. The 'Grid Controls' section is highlighted with a red box, showing three toggle switches: 'Show smart guides', 'Show gridlines', and 'Snap to grid'. The 'Save' button is also highlighted with a red box.

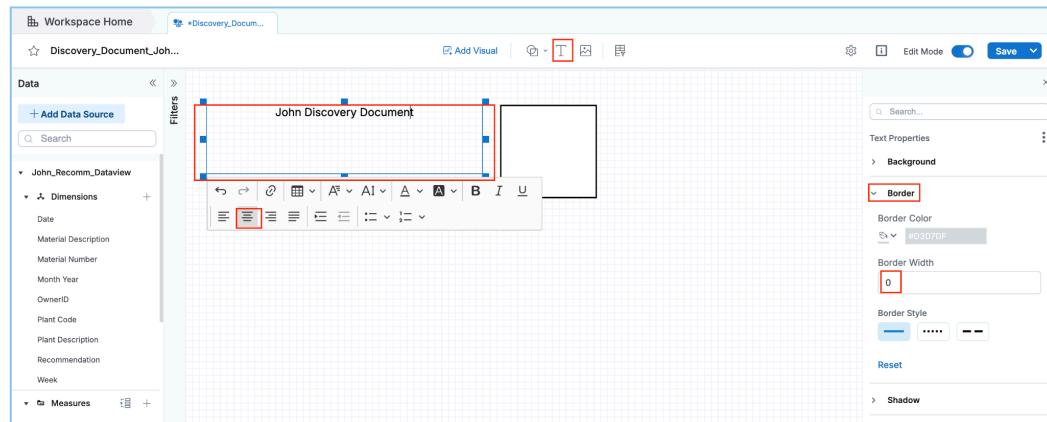
18. Add a **Square shape** to the sheet and position it at the centre.



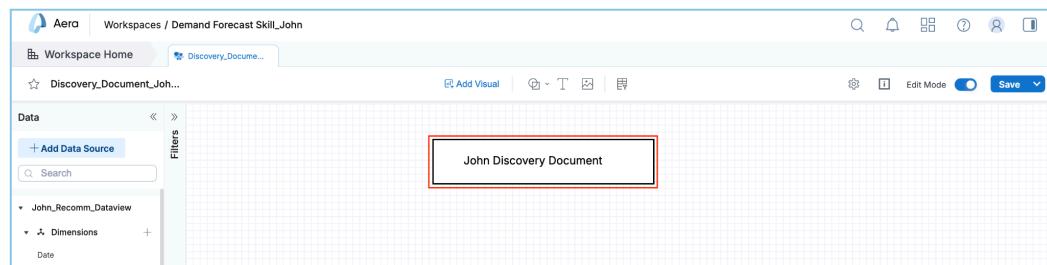
The screenshot shows the Aera workspace with the canvas. A square shape has been added to the canvas and is positioned at the center. The 'Shapes' section of the ribbon is highlighted with a red box.



19. Add a text box, provide the text <Username> Discovery Document, and set the border width to 0 in the text properties.



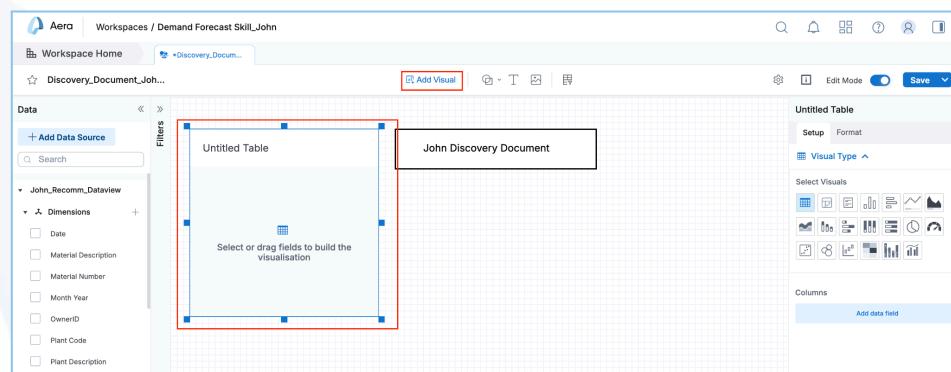
20. Drag the text box onto the square shape and adjust accordingly. Save the document.



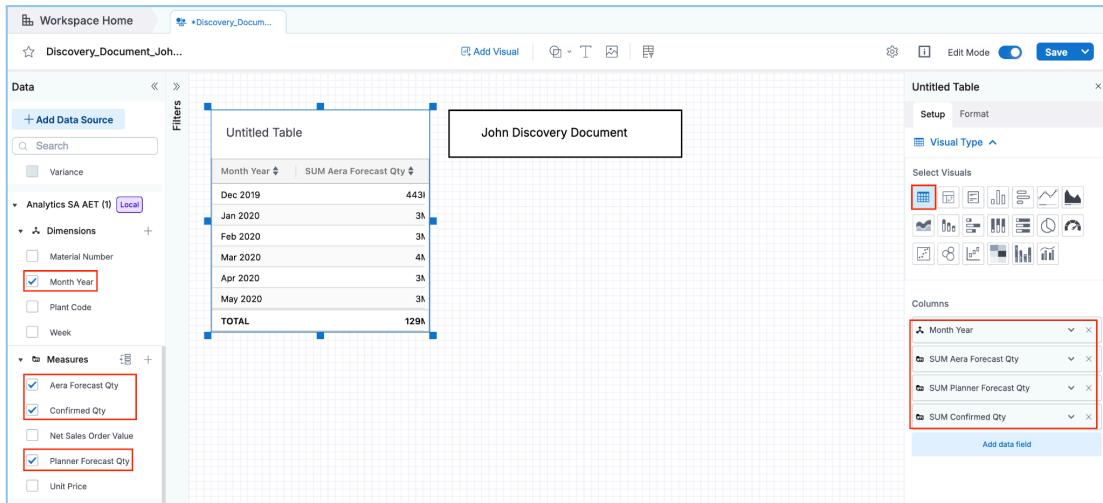
Create Visualizations

Create Visual 1 | Monthly Quantity

1. Add a visual to the sheet.



2. From Analytics SA AET, choose **Month Year**, **Planner Forecast Qty**, **Aera Forecast Qty**, and **Confirmed Qty**. By default, the visual type is in table format.



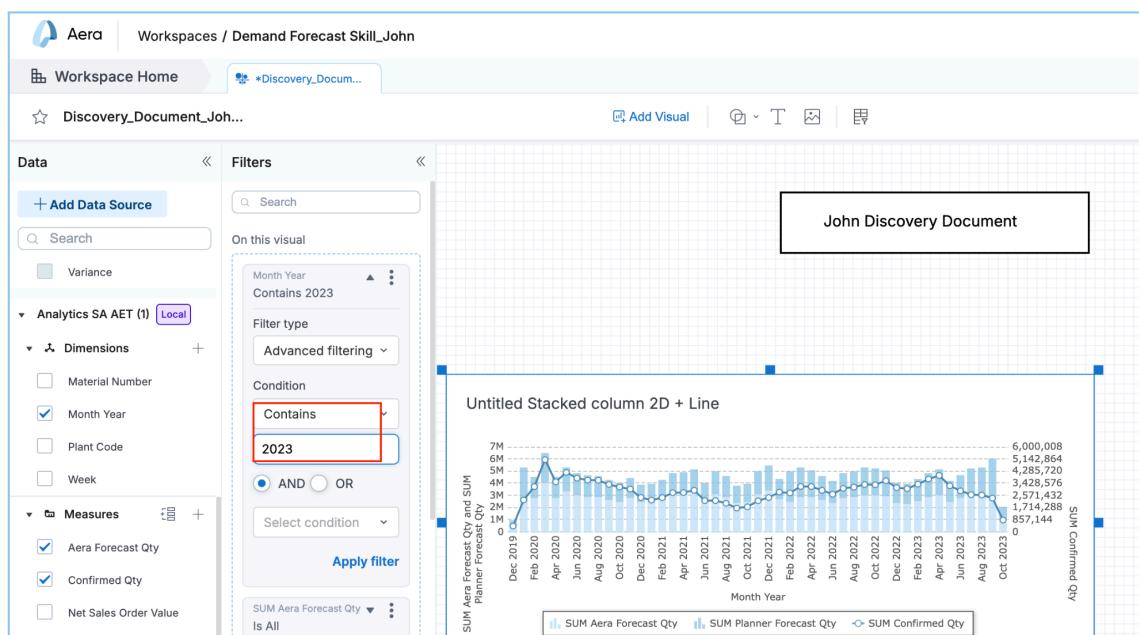
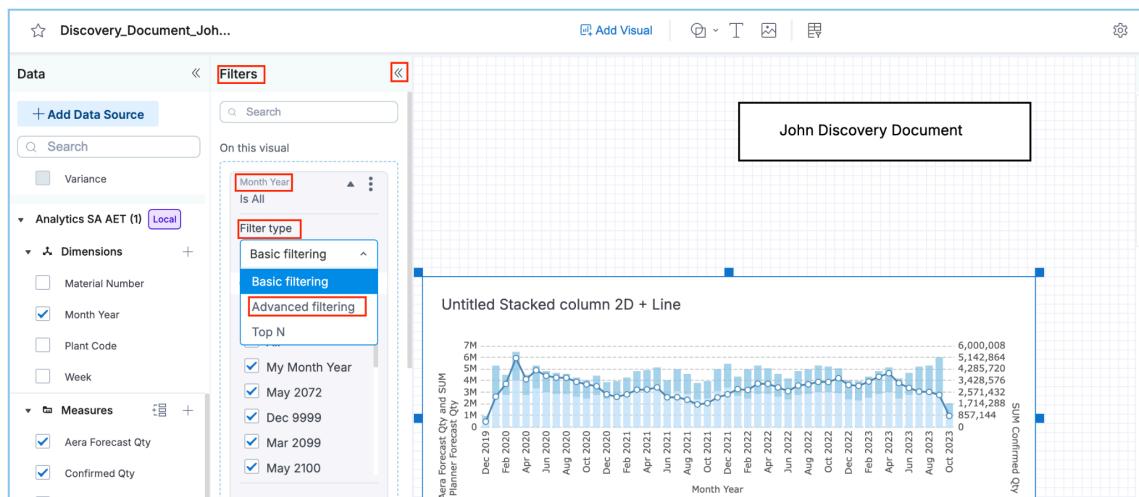
Month Year	SUM Aera Forecast Qty
Dec 2019	443k
Jan 2020	3k
Feb 2020	3k
Mar 2020	4k
Apr 2020	3k
May 2020	3k
TOTAL	129k

3. Change the visual to **Stacked Column 2D+ Line** and ensure all columns are correctly added to relevant axis. Also, align the position of the visual by dragging it down.

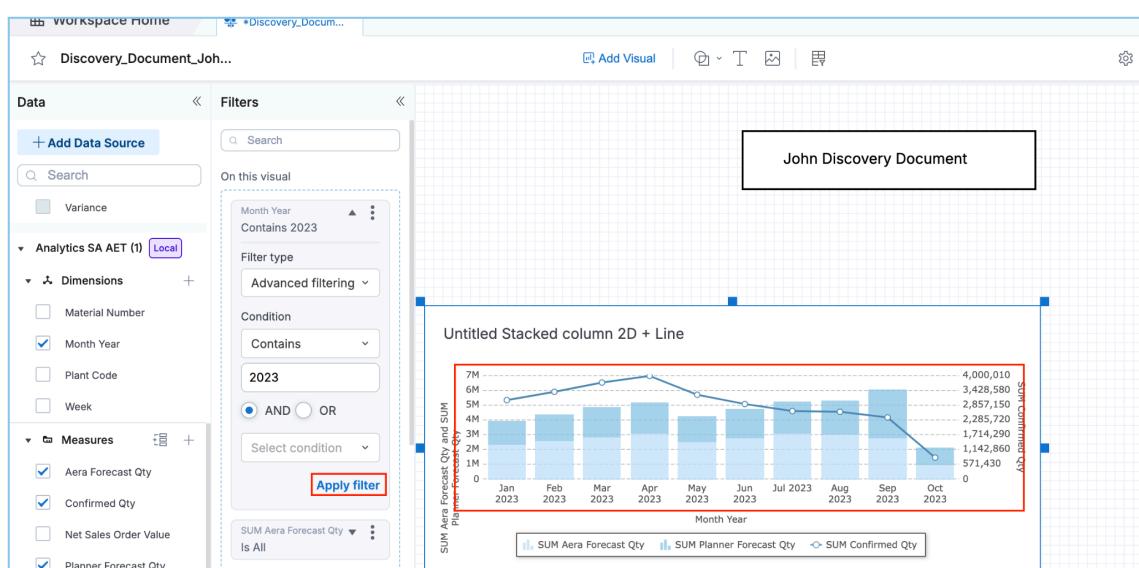


Setup Filters

1. Click on **Filters**, and in the **Month Year** section, change the filter type to Advanced Filtering, setting it to '**contains**' for the year '**2023**'.



2. Then click on **Apply Filters** and see the changes in the visualization.



Formatting the chart

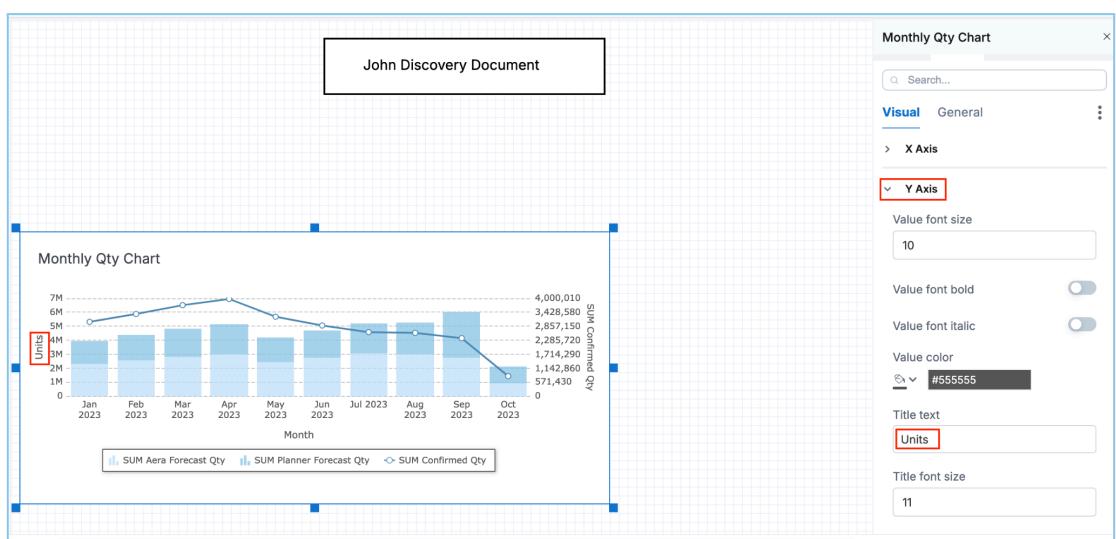
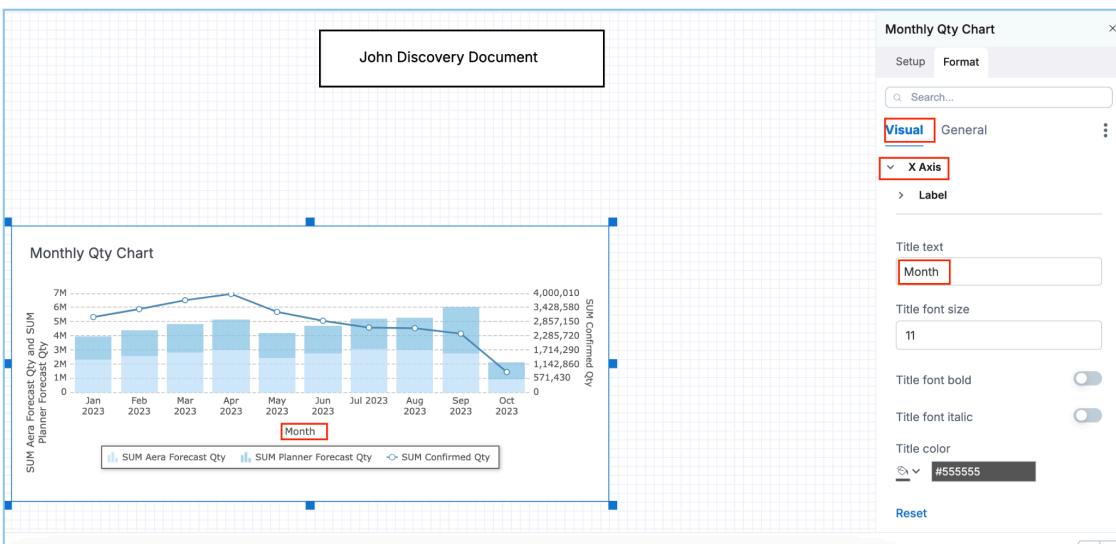
1. Navigate to the **Format** tab and go to the **General** sub-tab.



2. Provide the **title text** name as **Monthly Quantity**.



3. Similarly, change the title names for X-axis and Y-axis by clicking on the **Visual** sub-tab. **Save** the document.



Create Visual 2 | Variance by Material

- Similarly, add another visual by dragging the columns from the left panel from <Username>_Recomm_Dataview. Add **Material Number** and all Measures.

John Discovery Document

Monthly Qty Chart



Month	SUM Aera Forecast Qty	SUM Planner Forecast Qty	SUM Confirmed Qty
Jan 2023	3,428,580	2,857,150	2,285,720
Feb 2023	3,428,580	2,857,150	2,285,720
Mar 2023	3,428,580	2,857,150	2,285,720
Apr 2023	3,428,580	2,857,150	2,285,720
May 2023	3,428,580	2,857,150	2,285,720
Jun 2023	3,428,580	2,857,150	2,285,720
Jul 2023	3,428,580	2,857,150	2,285,720
Aug 2023	3,428,580	2,857,150	2,285,720
Sep 2023	3,428,580	2,857,150	2,285,720
Oct 2023	3,428,580	2,857,150	2,285,720

Untitled Table

Material Number	SUM Variance	SUM Planner Forecast
FG01	886	886
FG02	708	708
FG03	479	479
FG04	644	644
FG05	560	560
FG06	532	532
FG07	599	599
FG08	319	319
FG09	531	531
TOTAL	14K	14K

Untitled Table

Material Number	SUM Variance	SUM Planner Forecast
FG01	886	886
FG02	708	708
FG03	479	479
FG04	644	644
FG05	560	560
FG06	532	532
FG07	599	599
FG08	319	319
FG09	531	531
TOTAL	14K	14K

Visual Type

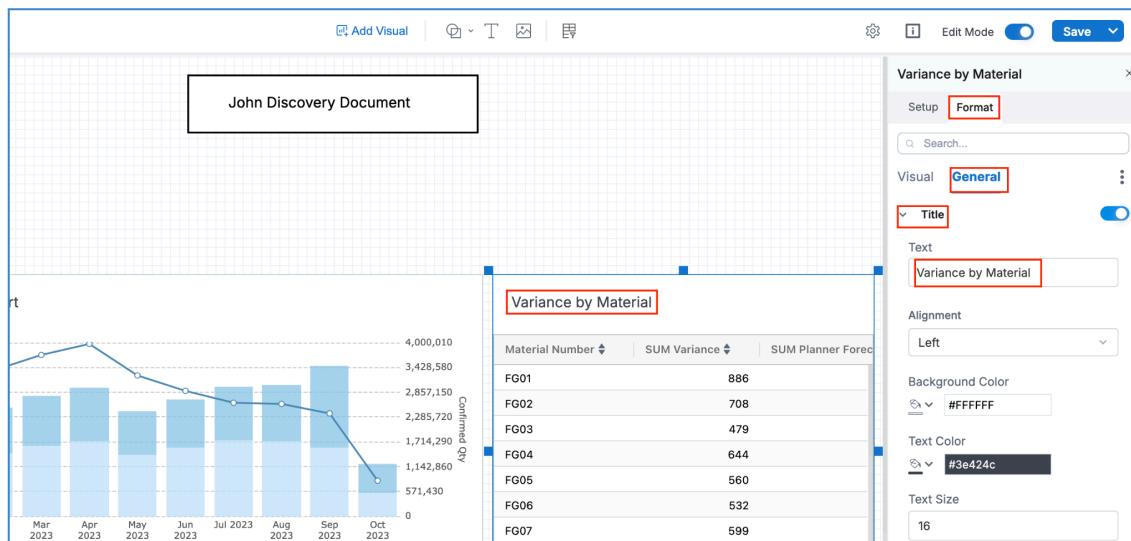
Select Visuals

Columns

- Material Number
- SUM Variance
- SUM Planner Forecast
- SUM Aera Forecast
- SUM Revenue Impact

Add data field

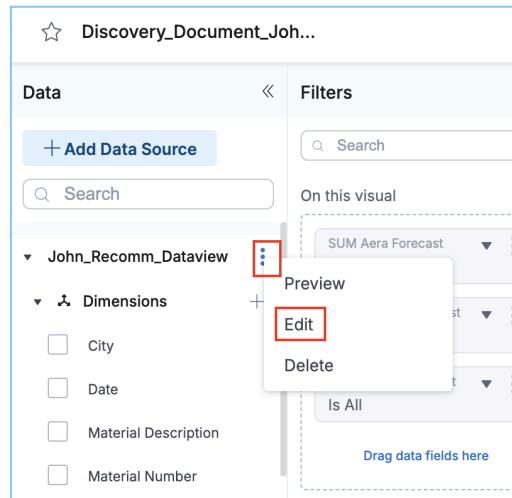
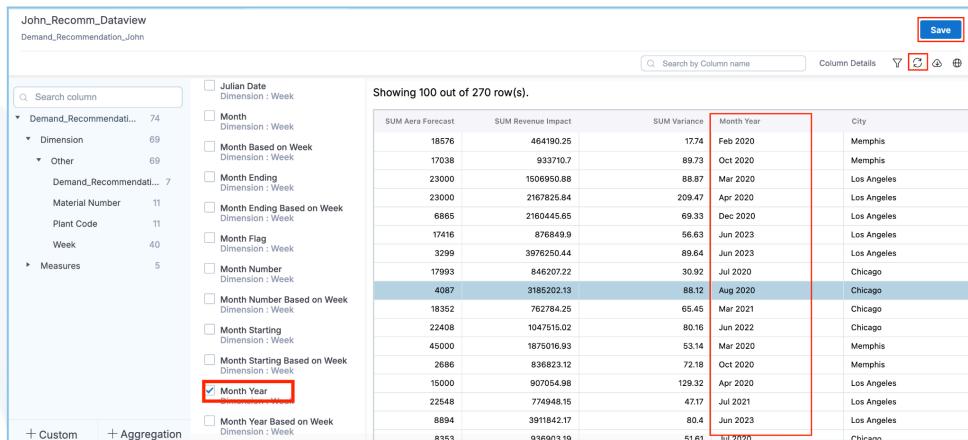
2. Rename the visual title **Variance by Material** and **Save** the document.



Material Number	SUM Variance	SUM Planner Forecast
FG01	886	
FG02	708	
FG03	479	
FG04	644	
FG05	560	
FG06	532	
FG07	599	

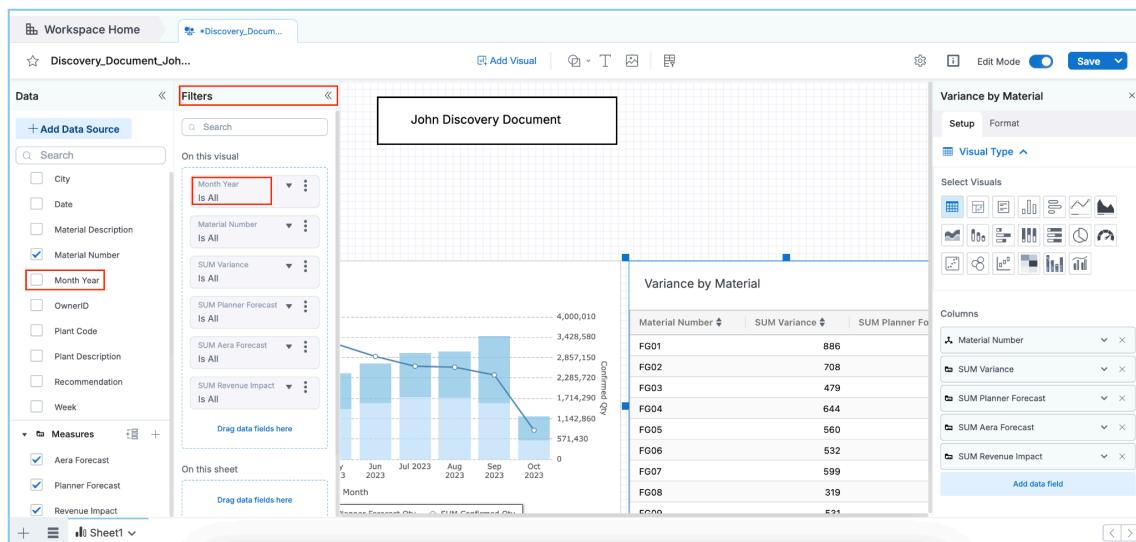
Setup Filters

1. Make sure to include the **Month Year** dimension in `<Username>_Recomm_DataView`. If it is not present, click on the three-dot icon to edit the data view, select Month Year, then update and save the data view.

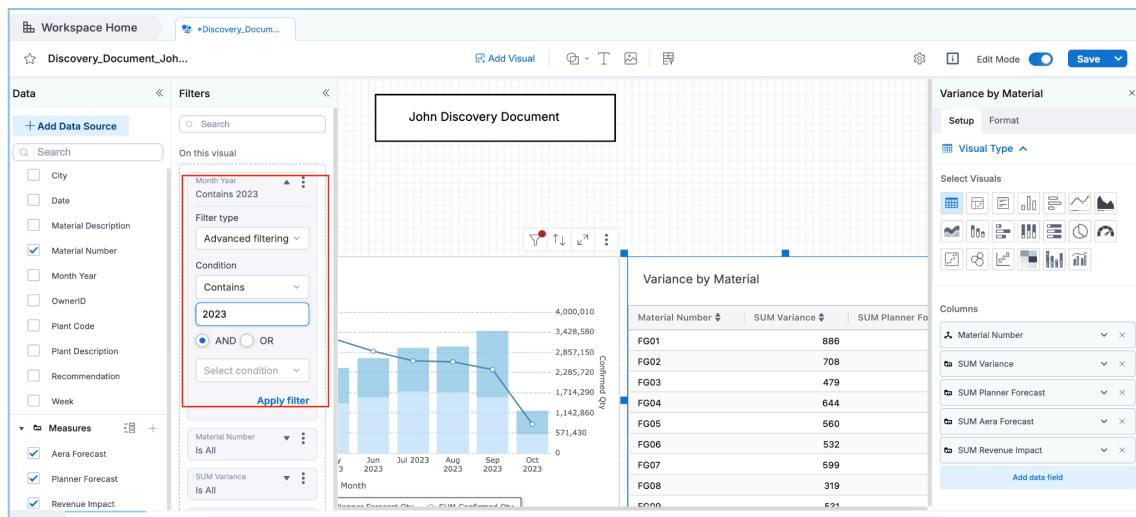
2. Please refresh the page to obtain the necessary dimensions in your data view.

3. Add a filter to this visualization by dragging the **Month Year** dimension from <Username>_Recomm_DataView to the '**On this Visual**' field.



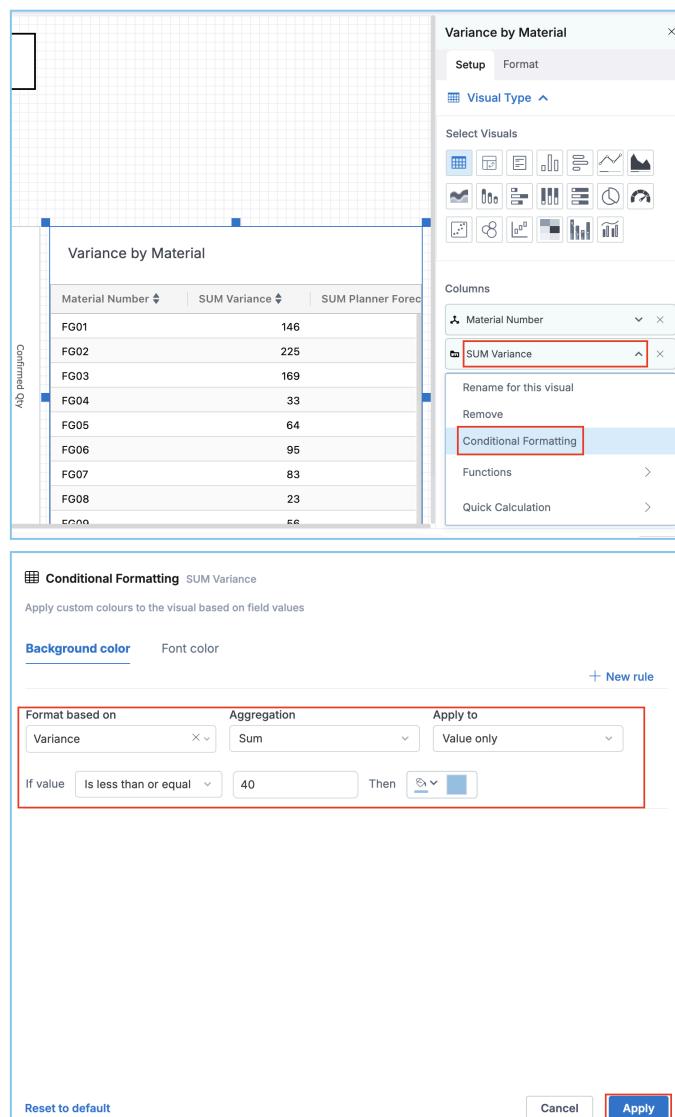
Material Number	SUM Variance	SUM Planner Fo
FG01	886	
FG02	708	
FG03	479	
FG04	644	
FG05	560	
FG06	532	
FG07	599	
FG08	319	
FG00	£21	

4. Apply the same filter condition that we used in the previous steps.



Formatting the table

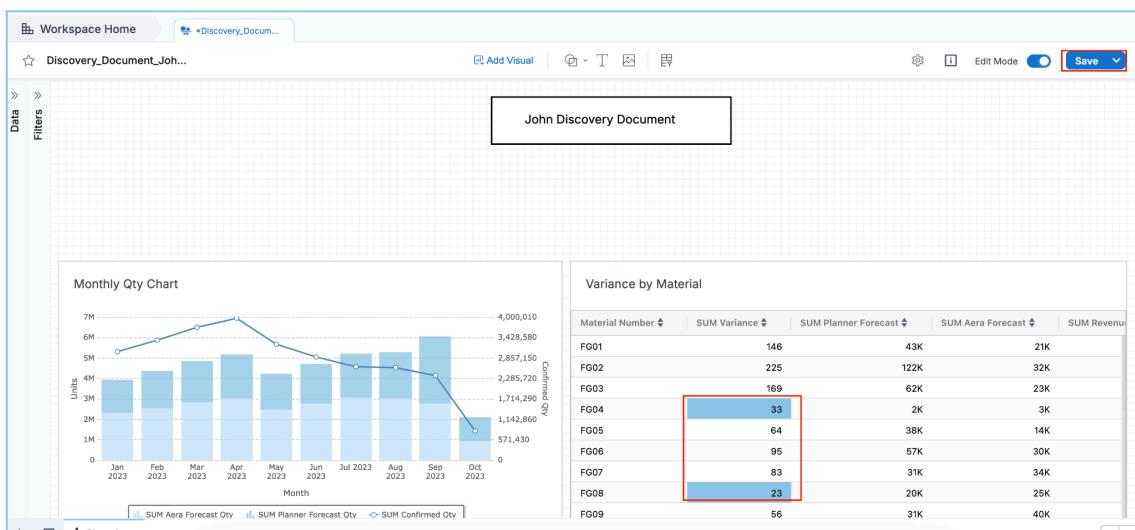
1. Add **Conditional formatting** for the **Variance** column in the Setup tab and add a Formula. Then click **Apply**.



The screenshot shows the 'Variance by Material' visual in edit mode. The visual displays a table of data with columns: Material Number, SUM Variance, and SUM Planner Forecast. The 'SUM Variance' column is currently selected for conditional formatting. The conditional formatting dialog is open, showing a rule where the background color is applied if the value is less than or equal to 40. The 'Apply' button is highlighted.

Material Number	SUM Variance	SUM Planner Forecast
FG01	146	
FG02	225	
FG03	169	
FG04	33	
FG05	64	
FG06	95	
FG07	83	
FG08	23	
FG09	56	

- Once conditional formatting is applied, save the discovery document.

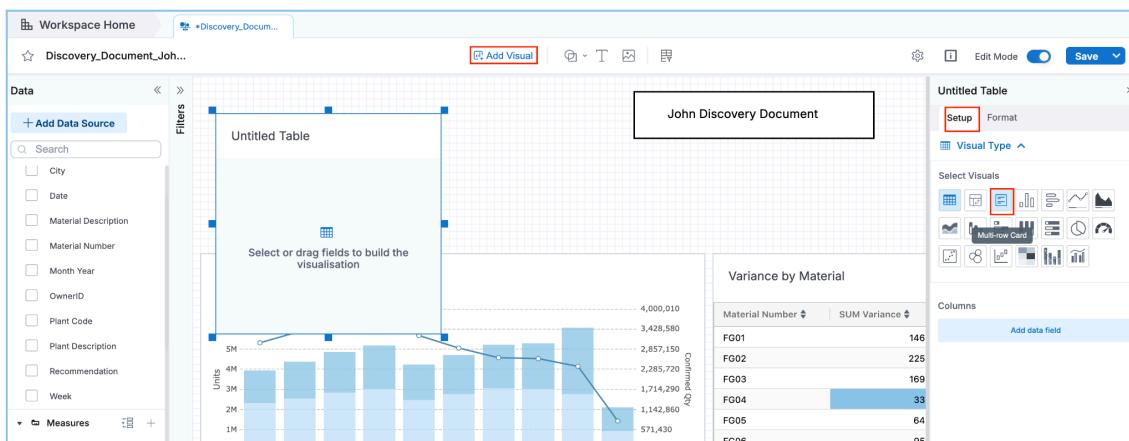


The screenshot shows the 'Discovery_Docum...' document in edit mode. The 'Save' button is highlighted. The document contains two visual components: a 'Monthly Qty Chart' showing monthly quantity data from Jan 2023 to Oct 2023, and a 'Variance by Material' table. The 'Variance by Material' table has the same data as the previous screenshot, with the 'SUM Variance' column highlighted for conditional formatting. The 'Apply' button in the conditional formatting dialog is also highlighted.

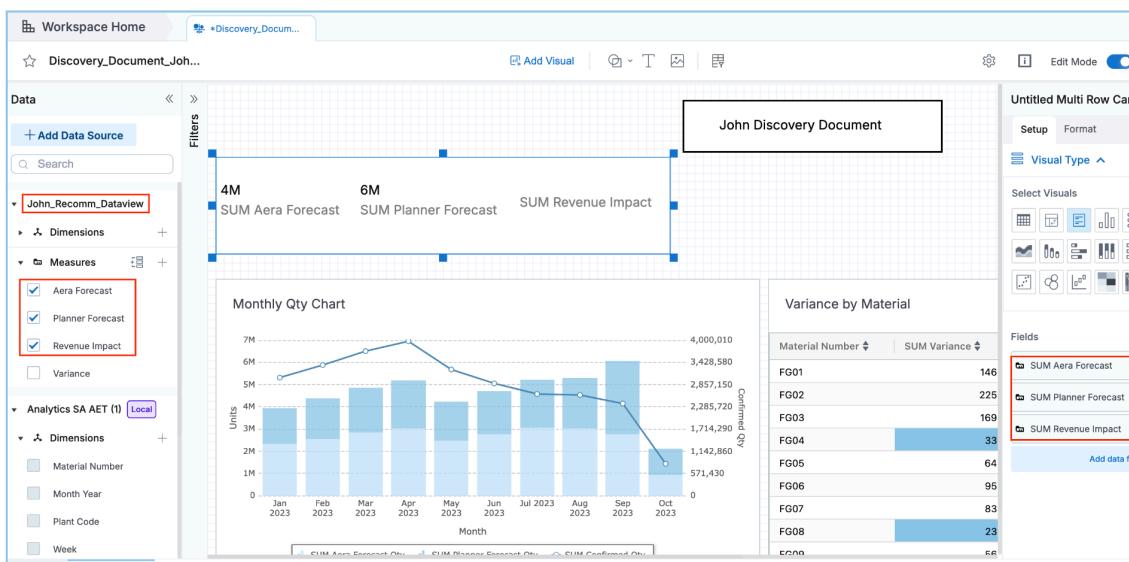
Material Number	SUM Variance	SUM Planner Forecast	SUM Aera Forecast	SUM Revenue
FG01	146	43K	21K	
FG02	225	122K	32K	
FG03	169	62K	23K	
FG04	33	2K	3K	
FG05	64	38K	14K	
FG06	95	57K	30K	
FG07	83	31K	34K	
FG08	23	20K	25K	
FG09	56	31K	40K	

Create Visual 3 | Forecast Summary

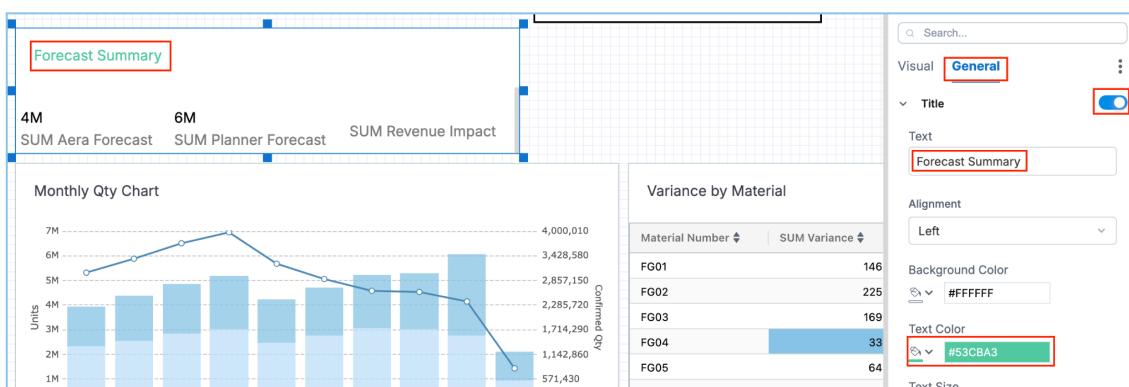
- Click on Add Visual and choose **Multi-row Card** visual type from the **Setup** tab.



2. From <Username>_Recomm_DataView, select “**Aera Forecast**,” “**Planner Forecast**” and “**Revenue Impact**” under the Measures section.



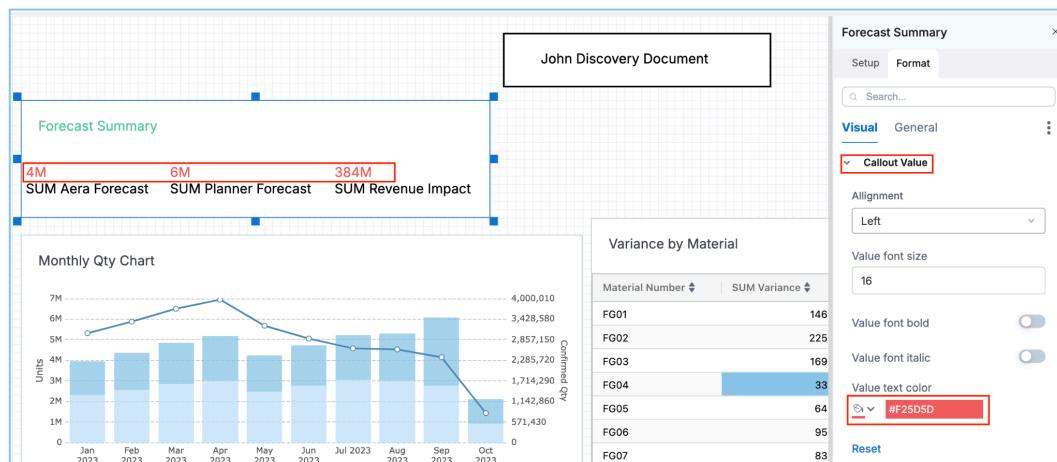
3. To change the card's title, navigate to the General sub-tab and rename it to "**Forecast Summary**." Additionally, update the font color.



Formatting the visual

1. Go to the **Visual** sub-tab, change the **Value Text Color** to Red in the "Callout Value" section, and set the **Gap** to 0 and the **Label Text Color** to Black in the "Callout Labels" section.

Note: Enable the toggle button if it is currently disabled. After adding the visuals to the sheet, align them for improved visualisation.



Forecast Summary

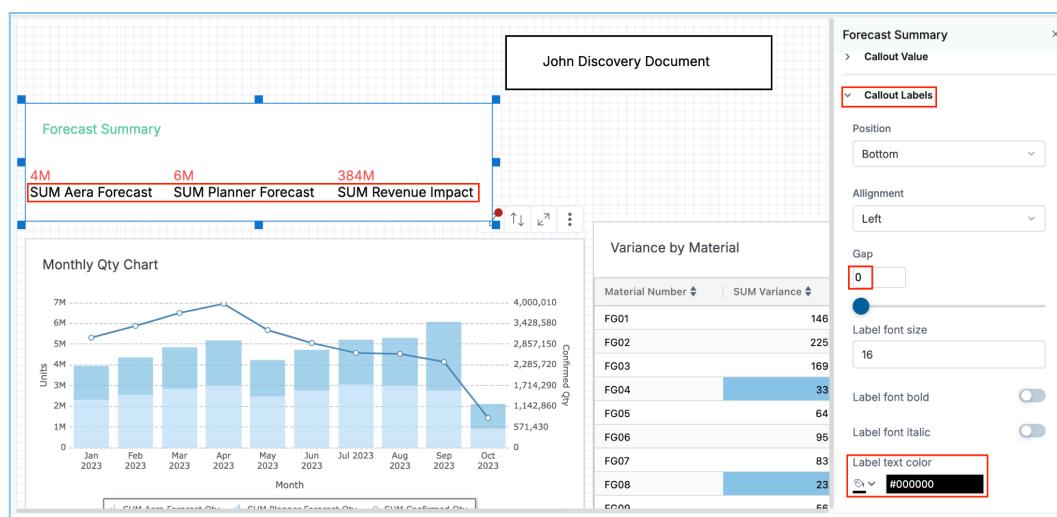
4M
SUM Aera Forecast 6M
SUM Planner Forecast 384M
SUM Revenue Impact

Monthly Qty Chart

Material Number	SUM Variance
FG01	146
FG02	225
FG03	169
FG04	33
FG05	64
FG06	95
FG07	83

Callout Value

Value text color: #25D5D



Forecast Summary

4M
SUM Aera Forecast 6M
SUM Planner Forecast 384M
SUM Revenue Impact

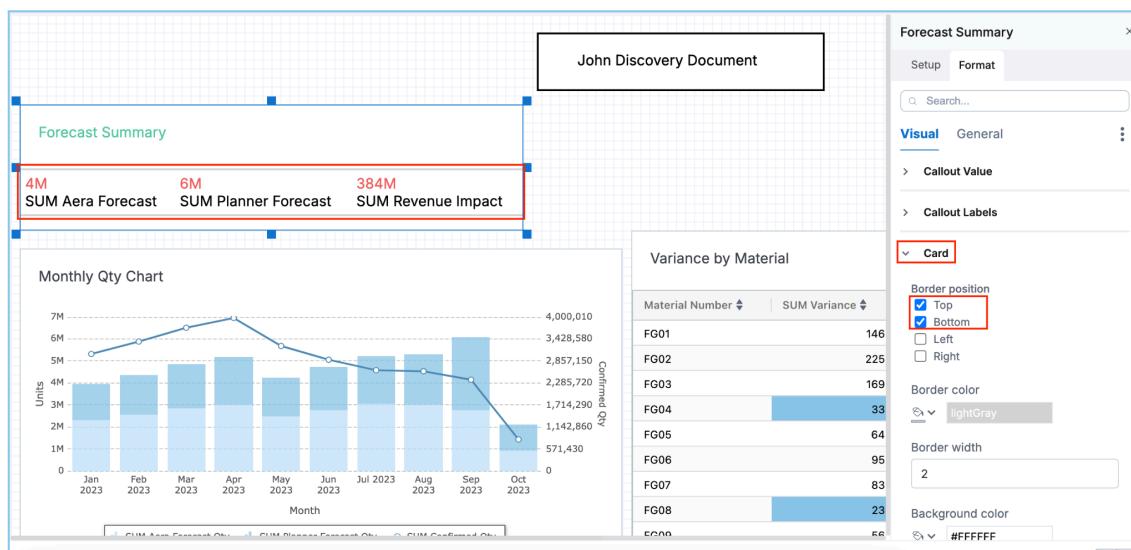
Monthly Qty Chart

Material Number	SUM Variance
FG01	146
FG02	225
FG03	169
FG04	33
FG05	64
FG06	95
FG07	83
FG08	23

Callout Labels

Label text color: #000000

- In the **Card** section, choose **Top** and **Bottom** to update the border position.



Forecast Summary

4M
SUM Aera Forecast 6M
SUM Planner Forecast 384M
SUM Revenue Impact

Monthly Qty Chart

Material Number	SUM Variance
FG01	146
FG02	225
FG03	169
FG04	33
FG05	64
FG06	95
FG07	83
FG08	23

Card

Border position: Top, Bottom

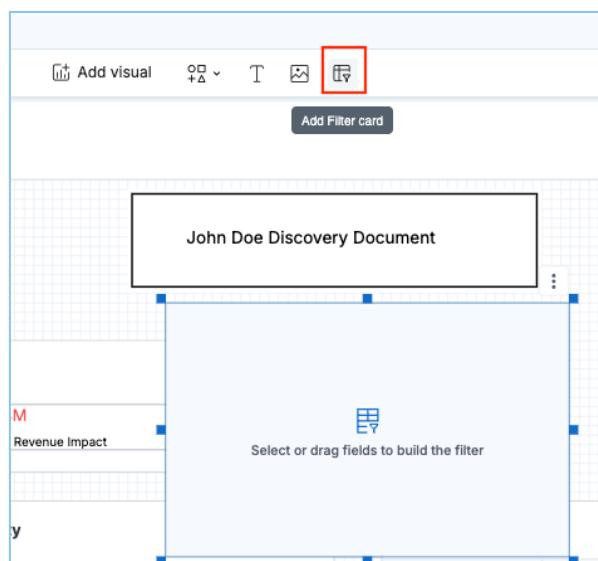
Border color: lightGray

Border width: 2

Background color: #FFFFFF

Data Analysis with Filters

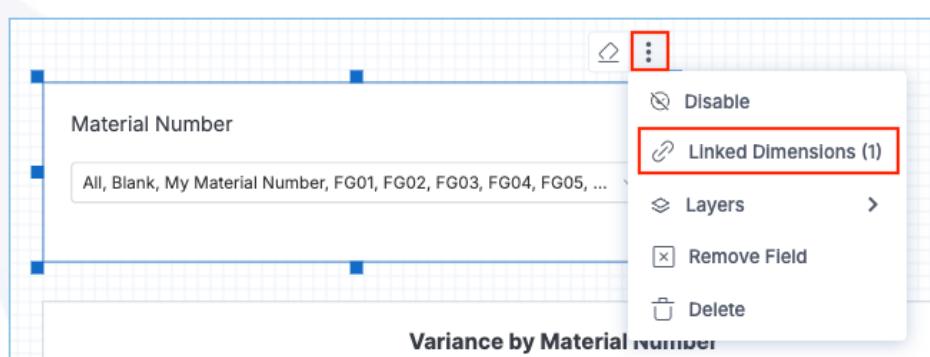
- Add a **filter** card to the discovery sheet.



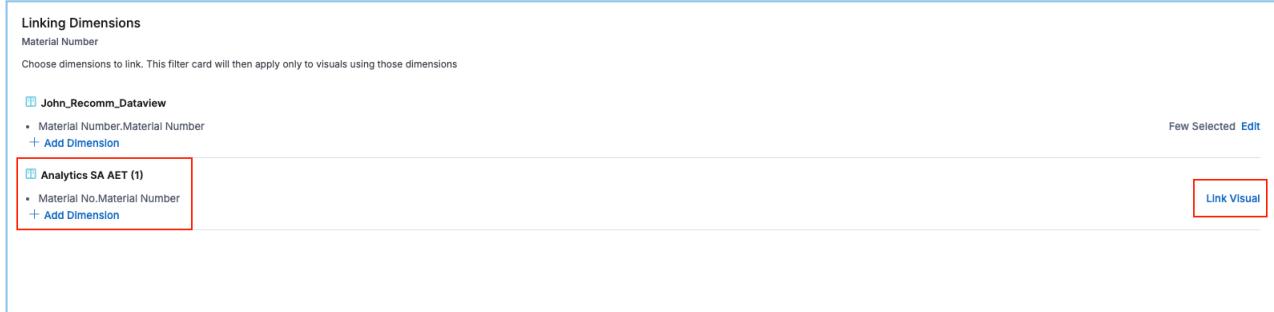
- Select **Material Number** dimension from <Username>_Recomm_DataView to add to the filter card.

This screenshot shows the 'Discovery Document John_Doe' workspace. The left sidebar displays the 'Data' pane with a 'Select Data' section and a 'Filters' section. In the 'Select Data' section, the 'Material Number' dimension is highlighted with a red box. In the 'Filters' section, a filter card titled 'John Doe Discovery Document' contains the 'Material Number' dimension, also highlighted with a red box. The main area of the workspace shows a 'Forecast Summary' card with four metrics: SUM Aera Forecast (4M), SUM Planner Forecast (6M), SUM Revenue Impact (384M), and SUM Variance (14K). Below it is a 'Monthly Quantity' chart showing monthly forecasted quantities from July 2023 to October 2023. To the right is a 'Variance by Material Number' table listing various material numbers with their corresponding variance values.

- Click on the three-dot icon to view more options for the filter card, and select '**Linked Dimensions**'.



4. Click on '**Link Visual**' to link the dimensions to the visual with a data source of Analytics SA AET (1). This ensures that when a filter is applied to the filter card, it affects all selected visuals with different data sources.



Linking Dimensions

Material Number

Choose dimensions to link. This filter card will then apply only to visuals using those dimensions

John_Recomm_Dataview

- Material Number.Material Number
- + Add Dimension

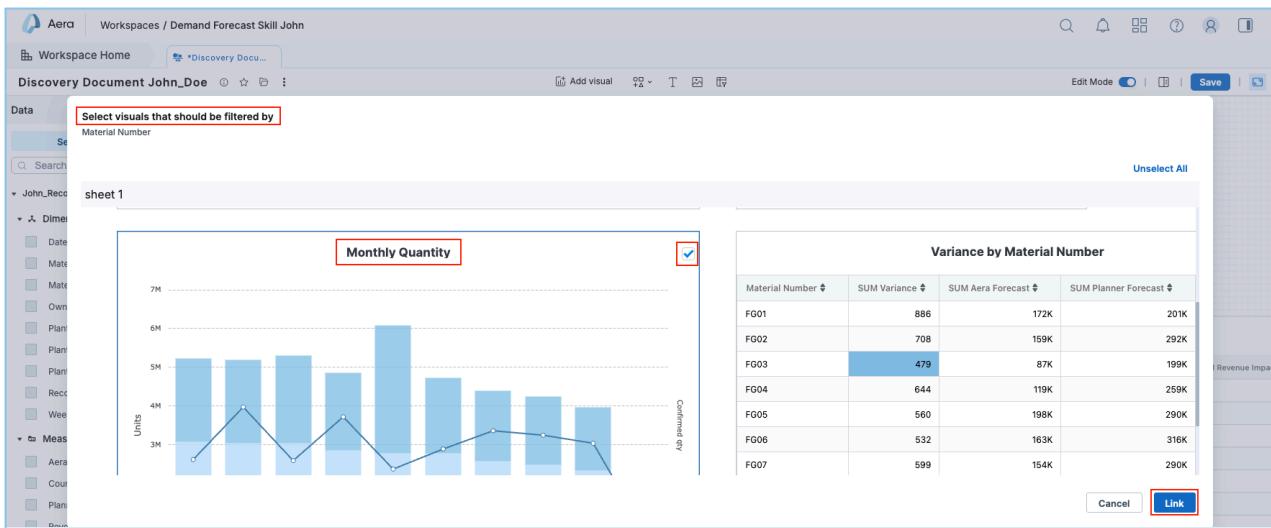
Analytics SA AET (1)

- Material No.Material Number
- + Add Dimension

Few Selected Edit

Link Visual

5. In the Select visuals page, select the **Monthly Quantity** visual and click on **Link**.



Aera Workspaces / Demand Forecast Skill John

Workspace Home +Discovery Docu...

Discovery Document John_Doe

Data

Select visuals that should be filtered by

Material Number

sheet 1

Monthly Quantity

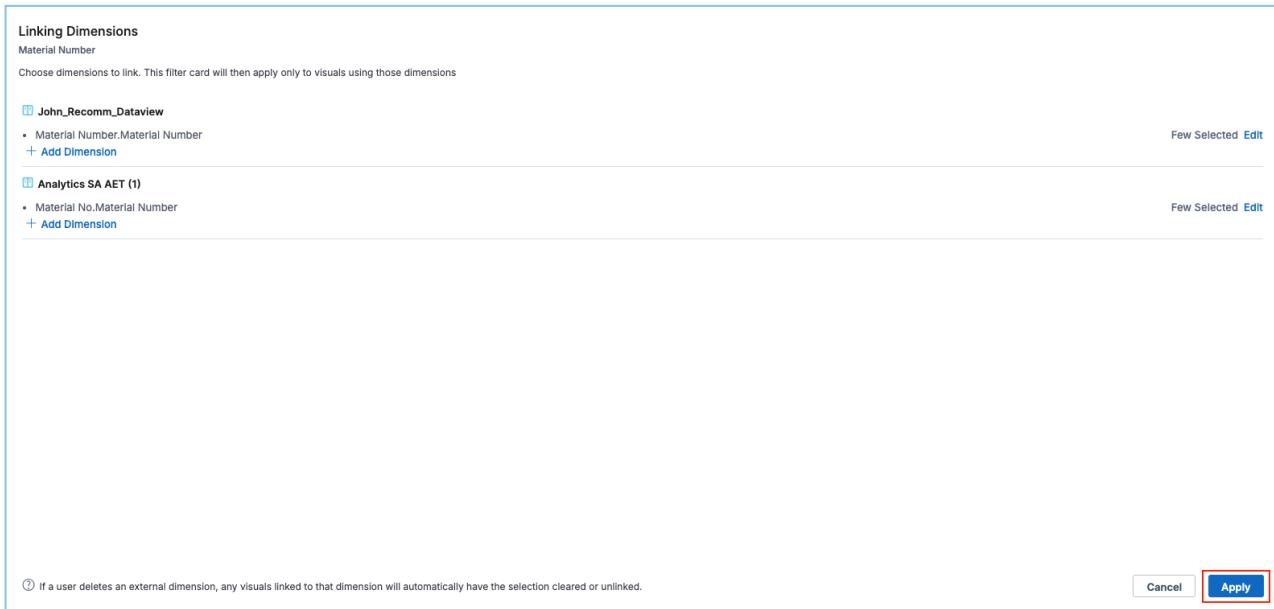
Variance by Material Number

Material Number	SUM Variance	SUM Aera Forecast	SUM Planner Forecast
FG01	886	172K	201K
FG02	708	159K	292K
FG03	479	87K	199K
FG04	644	119K	259K
FG05	560	198K	290K
FG06	532	163K	316K
FG07	599	154K	290K

Unselect All

Cancel Link

6. After adding the dimension links, click on **Apply**.



Linking Dimensions

Material Number

Choose dimensions to link. This filter card will then apply only to visuals using those dimensions

John_Recomm_Dataview

- Material Number.Material Number
- + Add Dimension

Analytics SA AET (1)

- Material No.Material Number
- + Add Dimension

If a user deletes an external dimension, any visuals linked to that dimension will automatically have the selection cleared or unlinked.

Cancel Apply

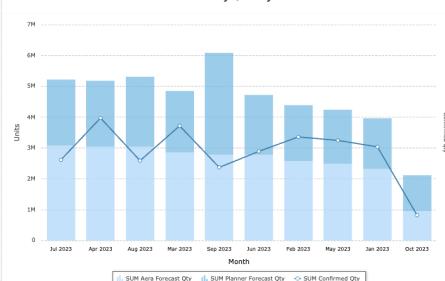
7. To rename the filter card, double-click on its name and change it to "Material Number."

Discovery Document John_Doe

Forecast Summary

SUM Aera Forecast	SUM Planner Forecast	SUM Revenue Impact	SUM Variance
4M	6M	384M	14K

Monthly Quantity



Variance by Material Number

Material Number	SUM Variance	SUM Aera Forecast	SUM Planner Forecast	SUM Revenue Impact
FG01	886	172K	201K	18M
FG02	708	159K	292K	21M
FG03	479	87K	199K	12M
FG04	644	119K	259K	20M
FG05	560	198K	290K	17M
FG06	532	163K	316K	17M
FG07	599	154K	290K	21M
FG08	319	120K	198K	12M
FG09	531	133K	241K	17M
FG10	515	111K	216K	20M
TOTAL	14K	4M	6M	384M
AVG	625	172K	267K	17M

Total Records: 23

Discovery Document John_Doe

Forecast Summary

SUM Aera Forecast	SUM Planner Forecast	SUM Revenue Impact	SUM Variance
4M	6M	384M	14K

Monthly Quantity

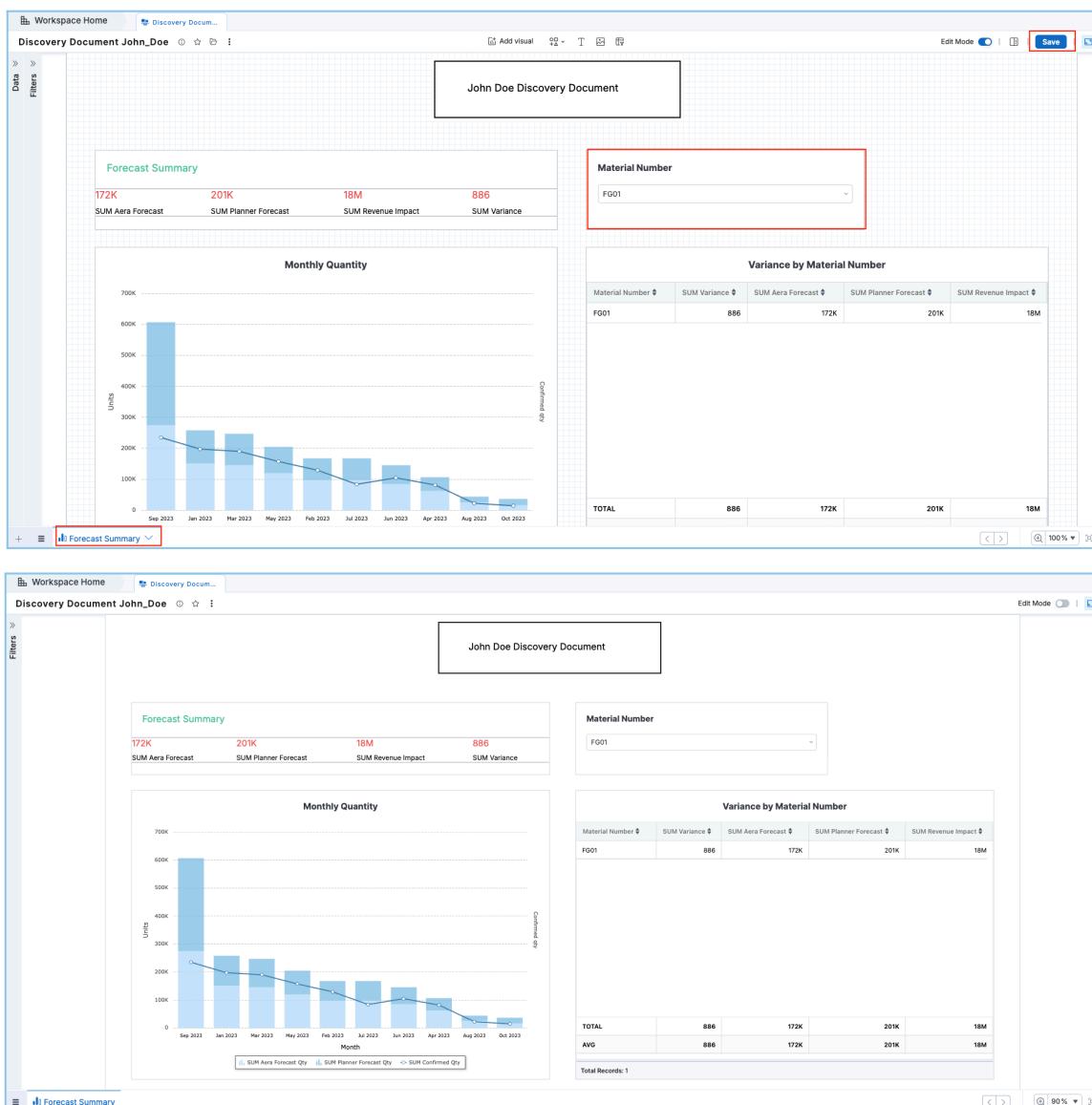


Variance by Material Number

Material Number	SUM Variance	SUM Aera Forecast	SUM Planner Forecast	SUM Revenue Impact
FG01	886	172K	201K	18M
FG02	708	159K	292K	21M
FG03	479	87K	199K	12M
FG04	644	119K	259K	20M
FG05	560	198K	290K	17M
FG06	532	163K	316K	17M
FG07	599	154K	290K	21M
FG08	319	120K	198K	12M
FG09	531	133K	241K	17M
FG10	515	111K	216K	20M
TOTAL	14K	4M	6M	384M
AVG	625	172K	267K	17M

Total Records: 23

- Adjust the size of the filter card and select values to test the filters. Rename the sheet by double-clicking and providing the name '**Forecast Summary**', then save the document.



The screenshot displays two views of a discovery document for material FG01 in the Aera workspace.

Left View:

- Forecast Summary:**

172K	201K	18M	886
SUM Aera Forecast	SUM Planner Forecast	SUM Revenue Impact	SUM Variance
- Monthly Quantity:**

A bar chart showing monthly quantity from Sep 2023 to Oct 2023. The Y-axis represents Units (0 to 700K). The X-axis represents Month. The chart shows a general downward trend over time.

Right View:

- Material Number:**

FG01

- Variance by Material Number:**

Material Number	SUM Variance	SUM Aera Forecast	SUM Planner Forecast	SUM Revenue Impact
FG01	886	172K	201K	18M
TOTAL	886	172K	201K	18M

SUMMARY

In this hands-on exercise, you have:

- Prepared data from various sources, including selecting relevant columns.
- Created visualizations by setting up different charts and tables.
- Formatted the visuals for clarity and better presentation.
- Analyzed the data comprehensively and added filter cards for interactive exploration.