

# Demand Forecast | Inbox

## INTRODUCTION

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- 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.
- Please continue to use **Demand Forecast\_Skill\_Username** Workspace.
- You will generate Recommendations considering the 12-week cumulative variance between Aera Forecast and Planer's Forecast and highlight the revenue impact.
- The data in the screenshots are illustrative, and values in the screenshots are not to be used to execute the hands-on. You are requested to input the data provided in the instructions

Following is the sequence of steps to be followed for executing this Hands-on:

1. Create Action Message Table
2. Define Categories and Sub-categories
3. Setup Status, Impact, and Actions
4. Load of Recommendations in action item table
5. Populate Recommendation Subject Area using Streams
6. Create Data View
7. Use Action Item Node to Populate the Inbox
8. Verify if Recommendations are Populated

## KEY TAKEAWAY

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- Design Inbox to showcase recommendations generated by Aera.
- Design and Configure Action Item.
- Defining recommendation workflow by creating categories and sub-categories.
- Configure the Action Item Node to populate Recommendations.

## EXPECTED RESULT

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- The screen below shows recommendations for the 12-week cumulative variance between Aera Forecast and Planner's Forecast, which is beyond a predefined threshold.

**Aera** **Inbox**

Demand\_Recommendation\_John

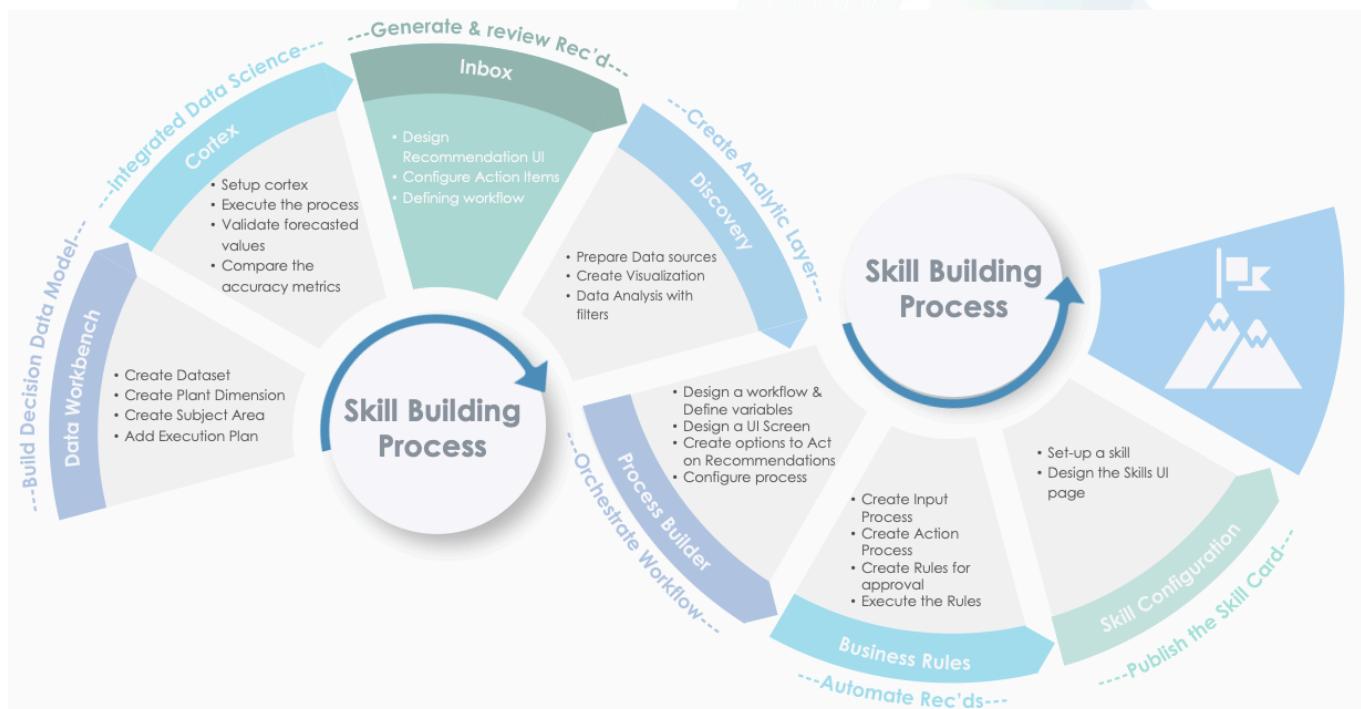
270 Pending 0 Complete

Select Filter

Displaying 270 items

Material Description	Plant Code	Planner Forecast	Aera Forecast	Recommendation	Variance
Assorted Chocolate Truffles	DC02	24032	20936	Update the demand plan for	12.88
Milk Chocolate Bar - 4.4oz	PL02	11092	18352	Update the demand plan for	65.45
Dark Chocolate 95% Cocoa Bar	PL01	47257	7287	Update the demand plan for	84.58
Assorted Chocolate Truffles	DC02	24378	12675	Update the demand plan for	48.01
Dark Chocolate Truffles Bag	DC03	1006	1341	Update the demand plan for	33.30
White Chocolate Bar - 4.4oz	DC03	45375	8894	Update the demand plan for	80.40
Dark Chocolate Gift Box - 20	PL01	40426	19931	Update the demand plan for	50.70
Dark Chocolate Sea Salt Bar	PL01	28213	13205	Update the demand plan for	53.20
Milk Chocolate Truffles Bag - 20	DC03	16017	19914	Update the demand plan for	24.33
Assorted Chocolate Truffles	DC02	25736	17979	Update the demand plan for	30.14
Milk Chocolate Truffles Bag - 20	PL02	38718	23130	Update the demand plan for	40.26
Dark Chocolate 70% Cocoa Bar	DC01	28144	13104	Update the demand plan for	53.44
Dark Chocolate Almonds Bar	DC03	37075	6865	Update the demand plan for	81.48
Milk Chocolate Truffles Bag - 20	DC02	14953	10937	Update the demand plan for	33.33
Dark Chocolate Truffles Bag	DC03	12971	17295	Update the demand plan for	33.34
Dark Chocolate 95% Cocoa Bar	DC03	15008	20241	Update the demand plan for	34.87
Milk Chocolate Truffles Bag - 20	DC03	16083	10056	Update the demand plan for	37.47

## SKILL BUILDING PROCESS



## TIPS AND TRICKS

1. Use the DESC function to retrieve the data types for both the fact and action item tables to ensure that the same data types are added.
2. Add details to all system and custom columns while configuring the action item node.
3. Save your work frequently to avoid losing any progress due to unexpected issues or errors.
4. If OwnerID is not visible, make sure to send an email to create a role for your category.
5. To prevent duplicate recommendations, please run the Populate recommendation process only once.

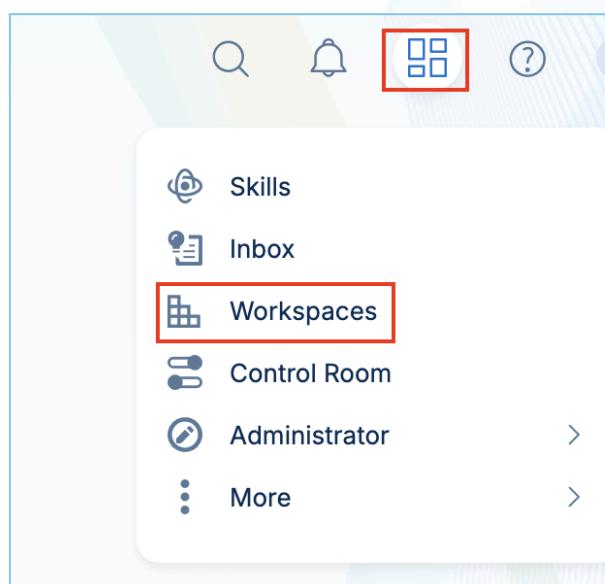
## ACTION/ STEPS

### Note

- The Steps **Populate Inbox** and **View Recommendation** require you to create an Inbox role.
- Only **Admins** can create a Role and assign them. On the Aera Sandbox, your User Type is configured as **Skill Developer**.
- For now, email the **Enablement Team** ([enablement@aerotechnology.com](mailto:enablement@aerotechnology.com)) with your Action Item name with category name, and the required permission (role) will be created and assigned to you.
- We also assign system user "**Aera**" to the above Role. This system user will be used later in the update function when an action is automated using business rules.

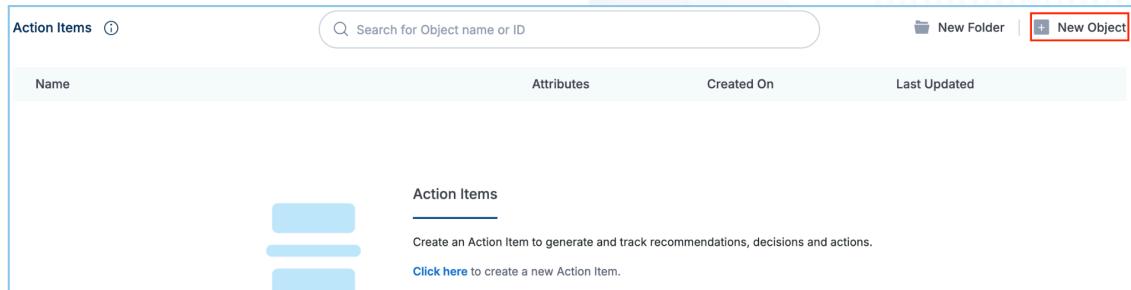
### Create Action Message Table

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.

3. From the Workspace Home, navigate to the "Action Items" menu. Now click on the '+ New Object' to create a **New Action Item**.



The screenshot shows the 'Action Items' list page. At the top right, there is a 'New Object' button with a red border. Below it, there is a search bar and a 'New Folder' button. The main area displays columns for 'Name', 'Attributes', 'Created On', and 'Last Updated'. A large blue callout box is overlaid on the page, containing the following text:

Action Items

Name Attributes Created On Last Updated

Action Items

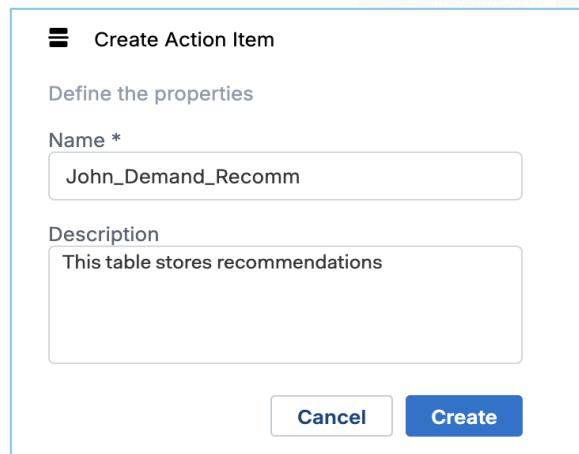
Create an Action Item to generate and track recommendations, decisions and actions.

[Click here](#) to create a new Action Item.

These Action Items allow you to configure all the necessary Decision Inbox master columns.

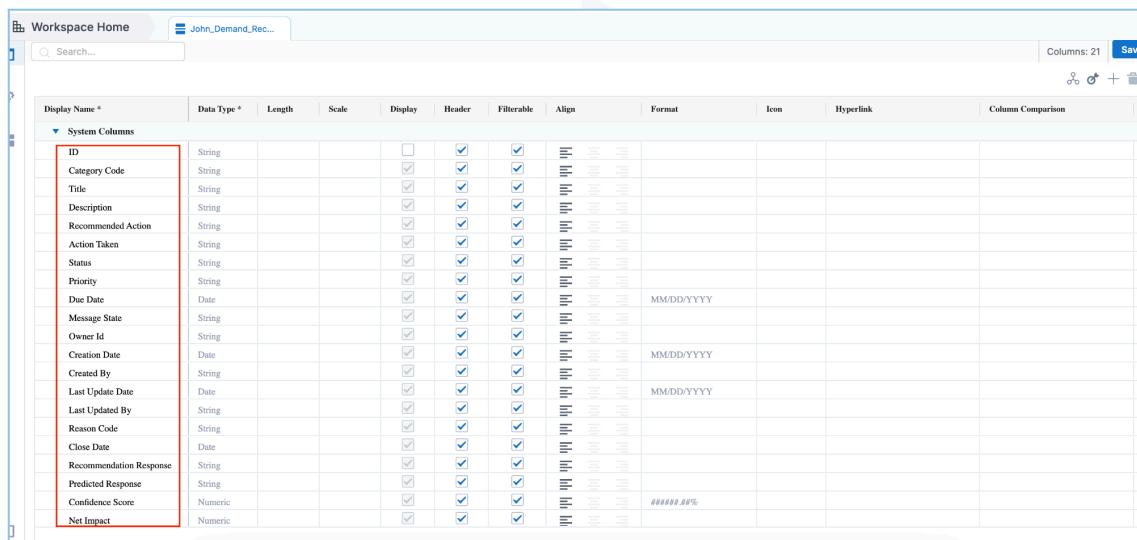
**Note:** This table stores the recommendations. This table is the source to populate the subject area(Demand Recommendation SA)

4. A new tab opens. Enter the Action Item name as '**<Username>\_Demand\_Recomm.**' Add a description: "This table stores Demand Plan recommendations. Then click "**Create.**"



The screenshot shows the 'Create Action Item' dialog box. It has a title 'Create Action Item' with a three-line icon. Below it is a section 'Define the properties'. It contains a 'Name \*' field with the value 'John\_Demand\_Recomm' and a 'Description' field with the value 'This table stores recommendations'. At the bottom are two buttons: 'Cancel' and 'Create' (which is highlighted with a blue background).

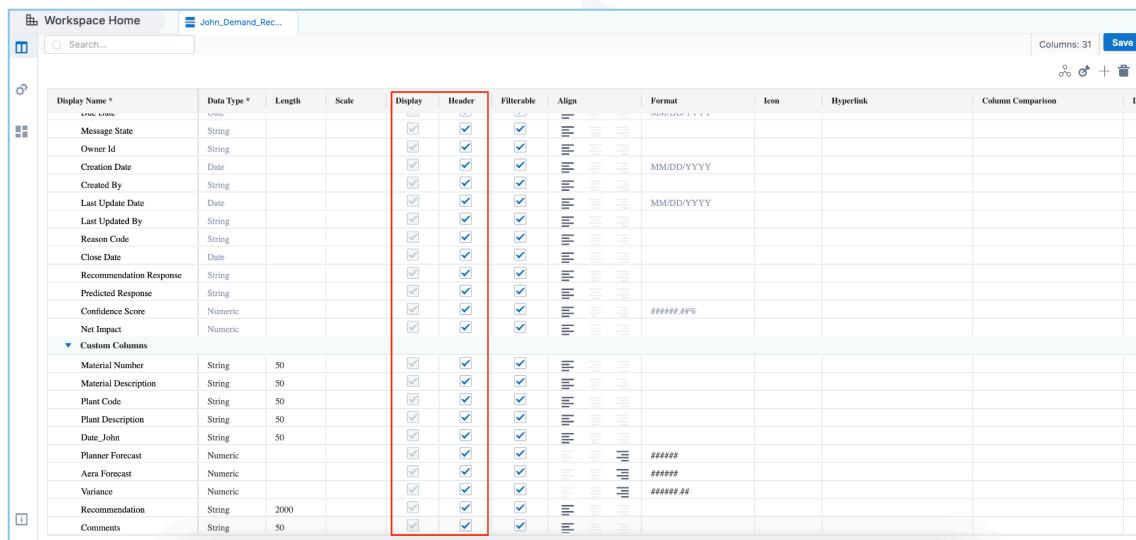
5. A new tab opens, displaying the default System columns. This table is used to store the generated recommendations.



6. Apart from the default columns, Add the following custom columns for Demand Recommendations by clicking on '+' icon to **Add new column**.

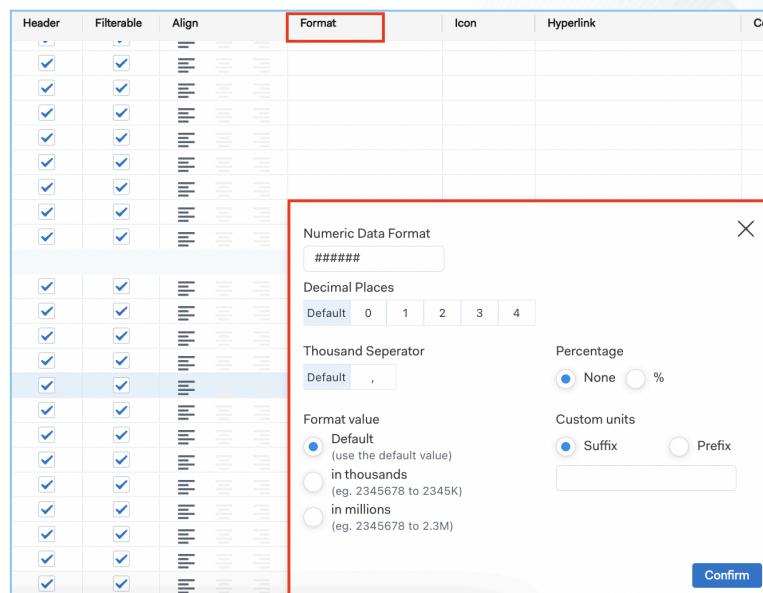
Display Name	Data Type	Length	Format
Material Number	String	50	
Material Description	String	50	
Plant Code	String	50	
Plant Description	String	50	
Date_Username	String	50	
Planner Forecast	Numeric		
Aera Forecast	Numeric		
Variance	Numeric		#####.##
Recommendation	String	2000	
Comments	String	50	

7. Ensure that the Display and Header columns are **enabled**, and then **save** your changes.



Display Name *	Data Type *	Length	Scale	Display	Header	Filterable	Align	Format	Icon	Hyperlink	Column Comparison
Message State	String			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	MM/DD/YYYY			
Owner Id	String			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	MM/DD/YYYY			
Creation Date	Date			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
Created By	String			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
Last Update Date	Date			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
Last Updated By	String			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
Reason Code	String			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
Close Date	Date			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
Recommendation Response	String			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
Predicted Response	String			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
Confidence Score	Numeric			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	#####.##%			
Net Impact	Numeric			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
▼ Custom Columns											
Material Number	String	50		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
Material Description	String	50		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
Plant Code	String	50		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
Plant Description	String	50		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
Date_John	String	50		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
Planner Forecast	Numeric			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	#####			
Aera Forecast	Numeric			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	#####			
Variance	Numeric			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	#####.##			
Recommendation	String	2000		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
Comments	String	50		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				

In the case of a numeric data type, we can use the **Format** Column to define additional formatting options.



## Categories and Sub-Categories

1. To define categories and subcategories, click the **Categories** tab on the left.
2. Enter the category name "**Demand\_Recommendation\_<Username>**" along with the description "Demand Planning recommendations on comparing Aera Forecast with Planner Forecast" and Click **Create**

**Create New Category**

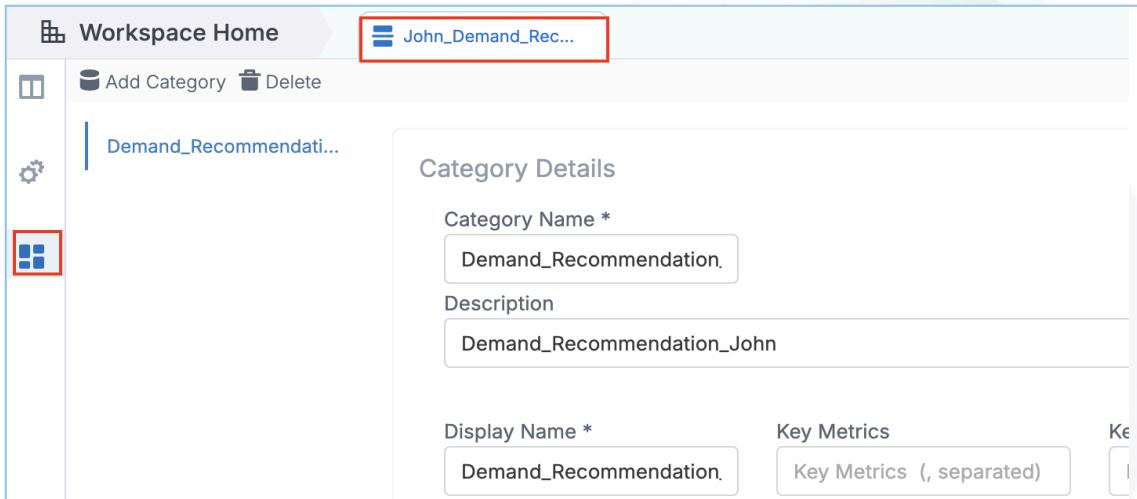
Name \*

Description

**Cancel** **Create**

3. A new Category will be created with the Display Name **Demand\_Recommendation\_<Username>**

Send an email to the **Enablement Team** mentioning the **Action Item Name** and the **Category name**. The enablement team ([enablement@aerotechnology.com](mailto:enablement@aerotechnology.com)) will create the necessary roles and assign them to you.  
The **Key Metrics** will get updated once the Impact Columns are created.



The screenshot shows the 'Workspace Home' interface. At the top, there's a navigation bar with 'Workspace Home' and a search bar containing 'John\_Demand\_Rec...'. Below the navigation bar, there are icons for 'Add Category' and 'Delete'. On the left, there's a sidebar with a gear icon and a blue square icon. In the center, there's a 'Category Details' section. It contains fields for 'Category Name \*' (set to 'Demand\_Recommendation.'), 'Description' (set to 'Demand\_Recommendation\_John'), 'Display Name \*' (set to 'Demand\_Recommendation.'), and 'Key Metrics' (set to 'Key Metrics (, separated)'). The 'Create' button is visible at the bottom right of the form.

**Categories** are labels used to group and organize recommendations in the Inbox.

Each category has a unique identifier and represents a distinct use case.

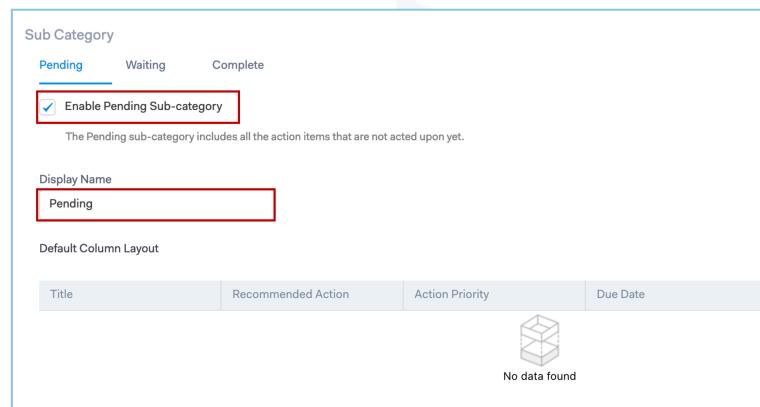
**Sub-categories** define the workflow of the recommendations. By default, there are three subcategories: **Pending**, **Waiting**, and **Complete**.

Sub-categories are mapped to action status to identify the state of a given recommendation:

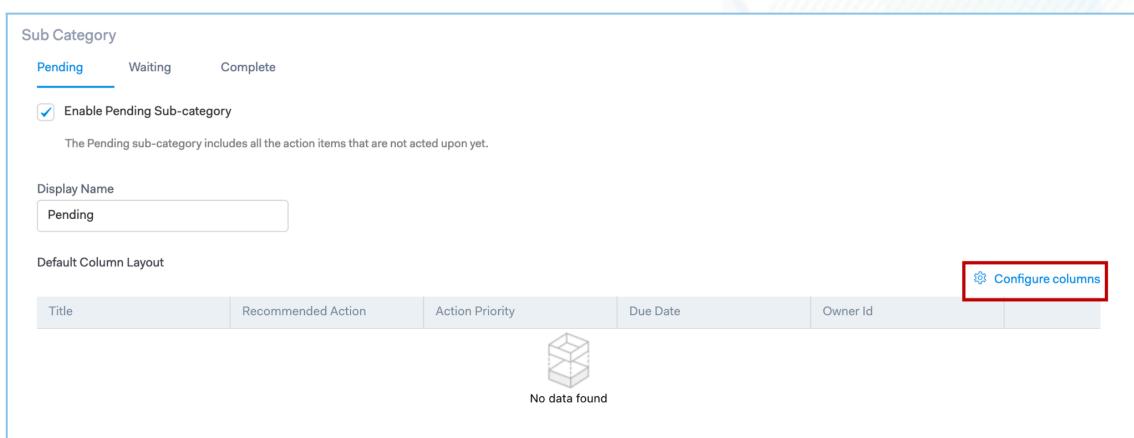
1. **Pending:** Recommendations have been generated but have not yet been reviewed.
2. **Waiting:** It includes all recommendations that have not been acted upon.
3. **Complete:** It includes recommendations that are completed.

For our Use Case, the waiting sub-category is disabled, and recommendations are to go from pending to complete.

4. Enable the **Pending** Sub-category and enter the Display Name as **Pending**.



5. Use the **Configure Columns** option to define **the Default Column Layout**.



For each subcategory, you can Configure Columns **that** need to be displayed. Use the Configure Option button available on the right.

To enable Users to take guided action, you provide the View Details UI Page for each recommendation.

You create the UI page using the Process Builder and UI Builder, and once the UI screen is configured, You can map it to this configuration screen.

6. Next, select the columns as shown below and click **Apply**.

Select and move the columns you want to display on the table

AVAILABLE COLUMNS

- Action Taken
- Category Code
- Close Date
- Comments
- Confidence Score
- Created By
- Creation Date
- Description

SELECTED COLUMNS

- Material Description
- Plant Description
- Planner Forecast
- Aera Forecast
- Recommendation**
- Variance

Freeze Column
Cancel
Apply

7. Ensure that the "**Waiting**" sub-category is unchecked.

**Sub Category**

Pending      **Waiting**      Complete

**Enable Waiting Sub-category**

The Waiting sub-category includes all the recommendation which is not acted upon yet.

Display Name

8. Next, Enable the **Complete** Sub-category and enter the Display Name as **Complete**.

**Sub Category**

Pending      Waiting      **Complete**

**Enable Complete Sub-category**

The Complete sub-category includes all the action items that are completed.

Display Name

Default Column Layout

Title	Recommended Action	Action Taken	Close Date
No data found	No data found	No data found	No data found

9. Use the **Configure Columns** option to define the Default Column Layout.

**Sub Category**

Pending      Waiting      **Complete**

**Enable Complete Sub-category**

The Complete sub-category includes all the action items that are completed.

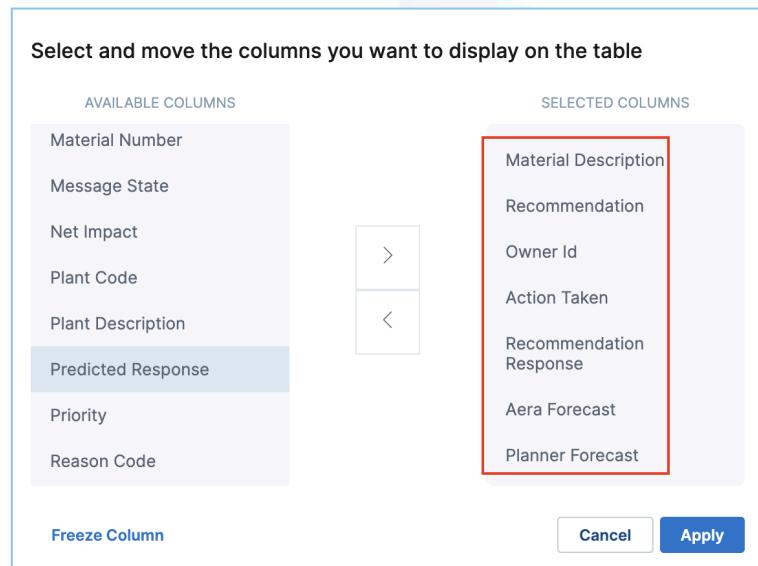
Display Name

Default Column Layout

Title	Recommended Action	Action Taken	Close Date	Owner Id
No data found	No data found	No data found	No data found	No data found

**Configure columns**

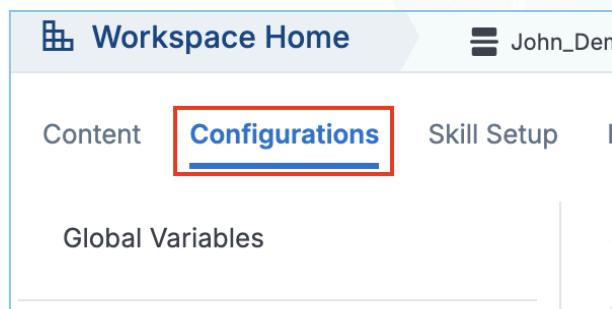
10. Next, select the columns as shown below and click **Apply**.



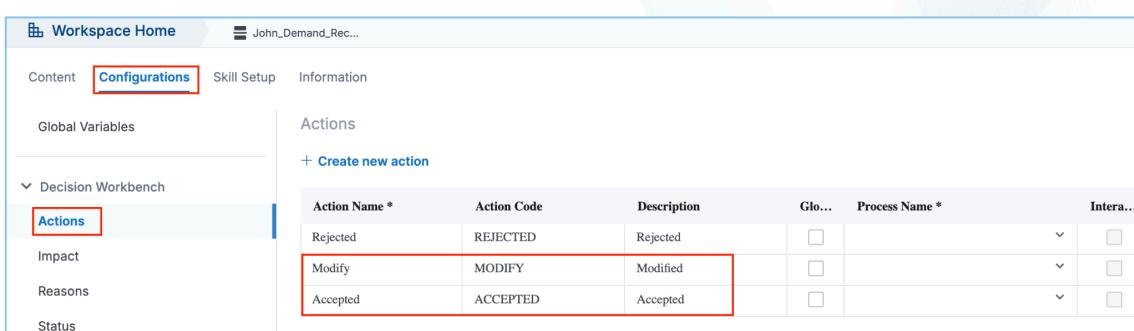
11. **Save** the configuration.

## Set up Status, Impact, and Actions

- From the Workspace, click **Configurations**. These options allow you to configure System Properties.



- Click **Actions**. (By default, only the **Rejected** Action is present.)
- Click the + **Create a new action**, add an action **Accepted**, and **Modify** as shown below.



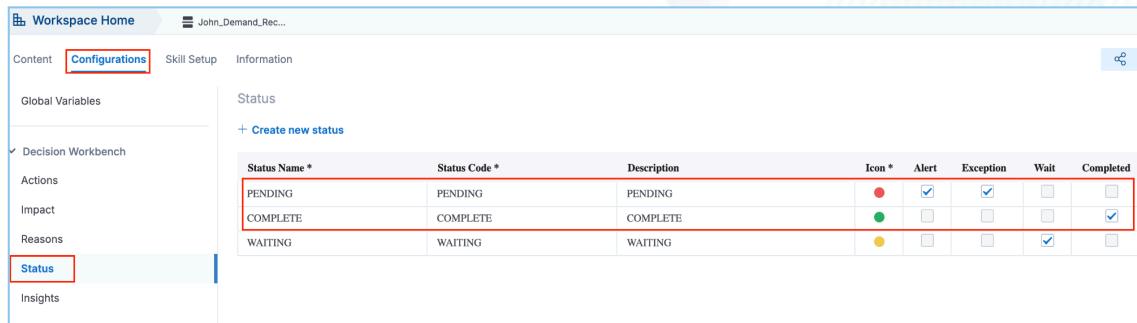
Action Name *	Action Code	Description	Glo...	Process Name *	Intera...
Rejected	REJECTED	Rejected	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Modify	MODIFY	Modified	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Accepted	ACCEPTED	Accepted	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- Next, Click **Status**. A list of all the valid statuses for recommendations is defined in Workspace -> Configurations -> Status.

**Note 1:** Action Taken and Status need to be mapped to enable the recommendation workflow. By default, three statuses are available: pending, waiting, and complete.

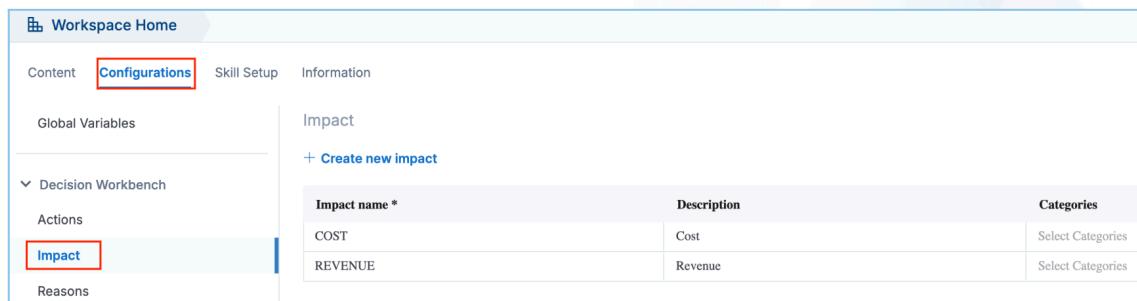
**Note 2:** In this use case, the Status and sub-categories labels are the same. Typically, status labels can be more than one per sub-category and are usually based on the action taken/Performed.

5. For Demand Recommendation, you will use 2 Statuses, i.e., **PENDING** and **COMPLETE**.
6. Ensure that the relevant columns are enabled.



Status Name *	Status Code *	Description	Icon *	Alert	Exception	Wait	Completed
PENDING	PENDING	PENDING	●	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COMPLETE	COMPLETE	COMPLETE	●	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
WAITING	WAITING	WAITING	●	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

7. Next, set the **Impact**. You can define a list of recommendation impacts in **Workspace > Configurations > Impact**.

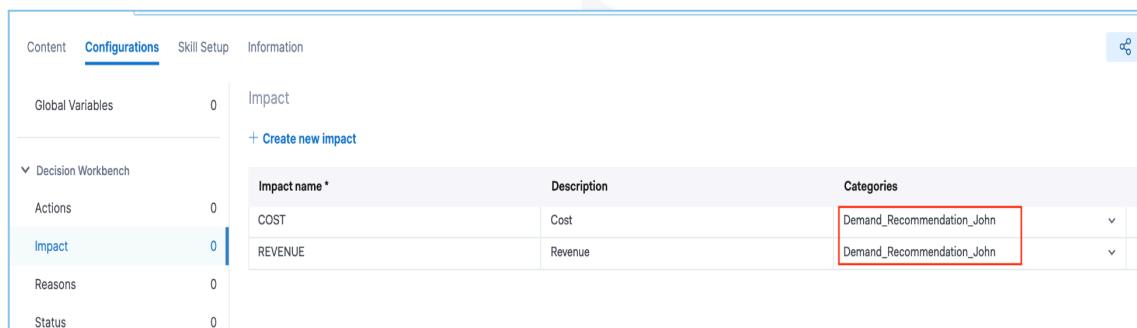


Impact name *	Description	Categories
COST	Cost	Select Categories
REVENUE	Revenue	Select Categories

For Demand Recommendation, Use two impacts, i.e., COST and REVENUE Impact. They can be created by clicking the +Create new impact button and providing a name and description of the impacts, i.e., cost for COST Impact and revenue for REVENUE Impact.

**Note:** If the Impacts have already been created, review and change the categories.

8. Choose the **category** for **Demand\_Recommendation\_<Username>** from the drop-down menu, then press Enter.



Content   **Configurations**   Skill Setup   Information

Global Variables   0   Impact

+ Create new impact

Decision Workbench

Actions   0

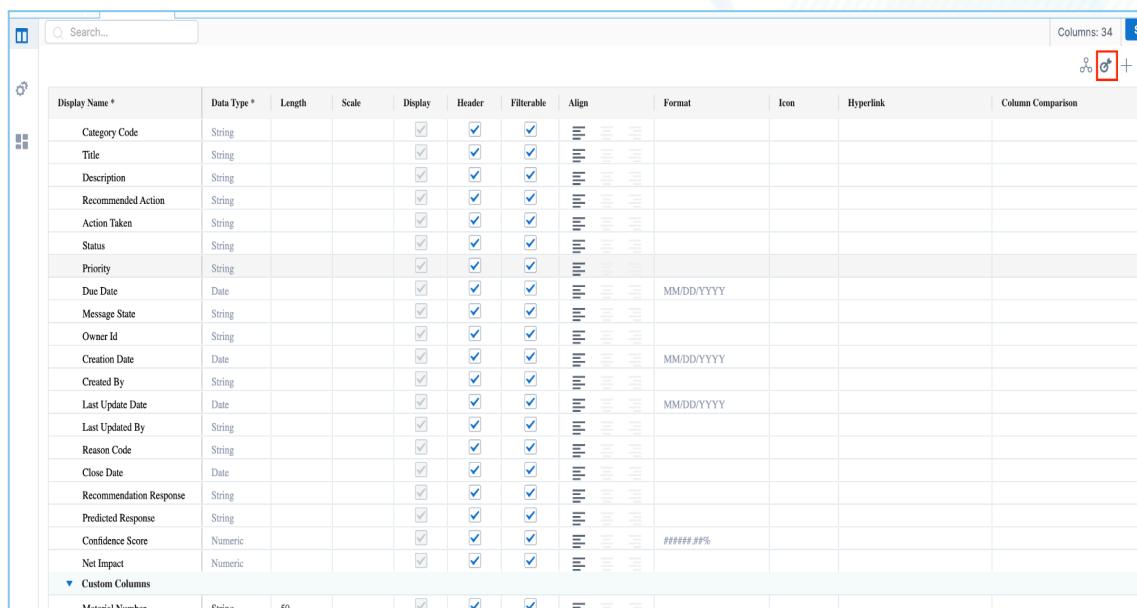
**Impact**   0

Reasons   0

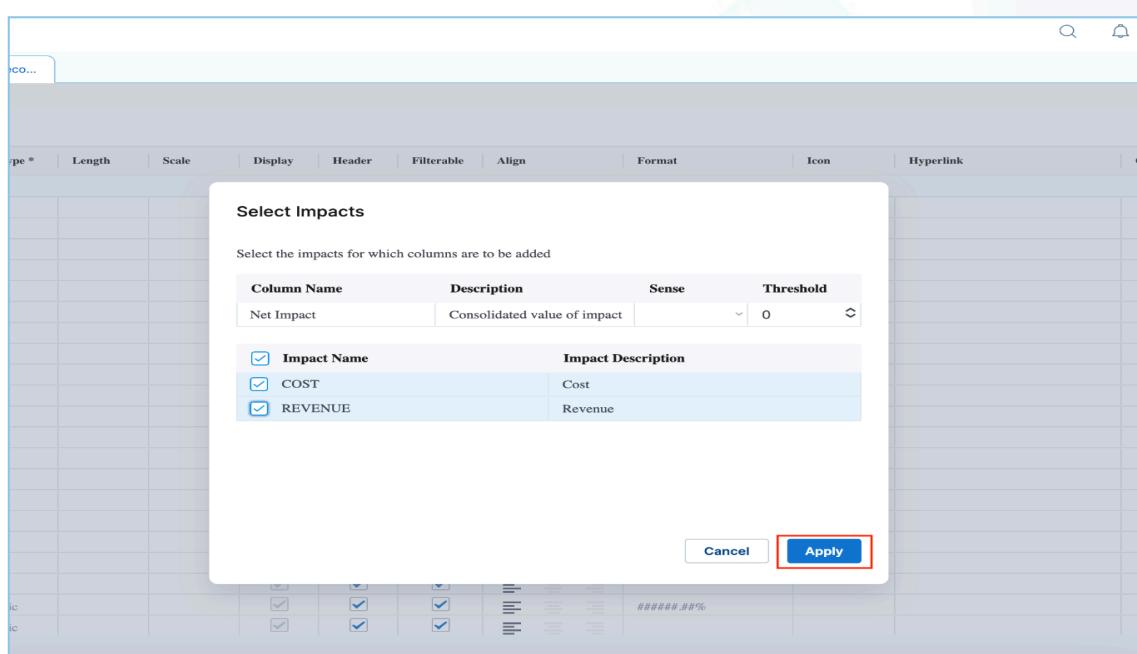
Status   0

Impact name *	Description	Categories
COST	Cost	Demand_Recommendation_John
REVENUE	Revenue	Demand_Recommendation_John

9. Now, go back to the Action Item menu, where the custom columns were initially created. Click the **Add Impact Column**, select the impacts created, and click **Apply**.



Display Name *	Data Type *	Length	Scale	Display	Header	Filterable	Align	Format	Icon	Hyperlink	Column Comparison
Category Code	String			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					
Title	String			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					
Description	String			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					
Recommended Action	String			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					
Action Taken	String			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					
Status	String			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					
Priority	String			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					
Due Date	Date			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		MM/DD/YYYY			
Message State	String			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					
Owner Id	String			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					
Creation Date	Date			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		MM/DD/YYYY			
Created By	String			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					
Last Update Date	Date			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		MM/DD/YYYY			
Last Updated By	String			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					
Reason Code	String			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					
Close Date	Date			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					
Recommendation Response	String			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					
Predicted Response	String			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					
Confidence Score	Numeric			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		#####.##%			
Net Impact	Numeric			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					
Material Number	String	50		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					



Select Impacts

Select the impacts for which columns are to be added

Column Name	Description	Sense	Threshold
Net Impact	Consolidated value of impact		0

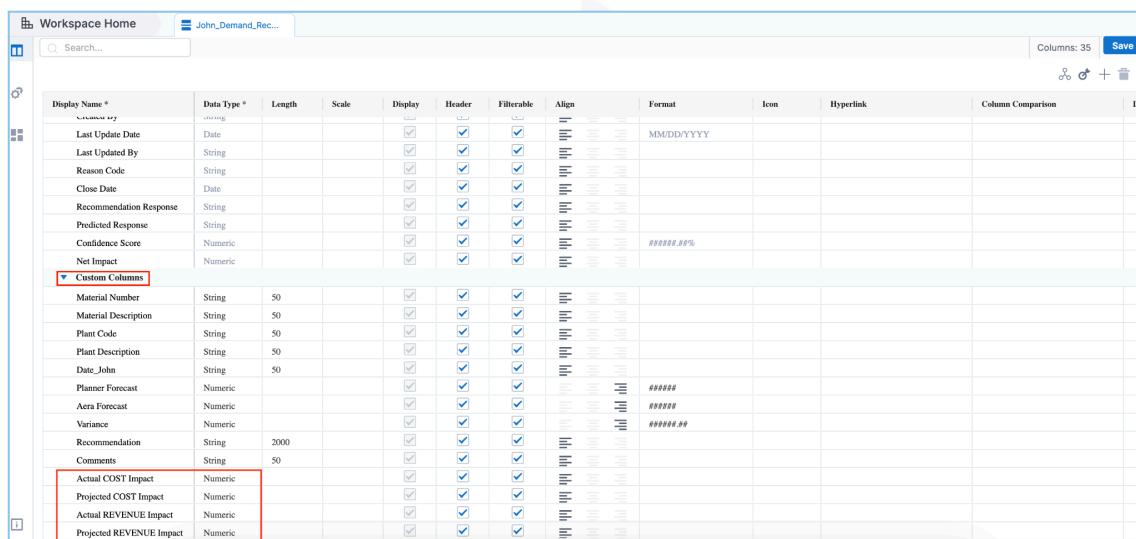
Impact Name      Impact Description

COST      Cost

REVENUE      Revenue

Cancel   **Apply**

10. This will create additional custom columns in your Action item.



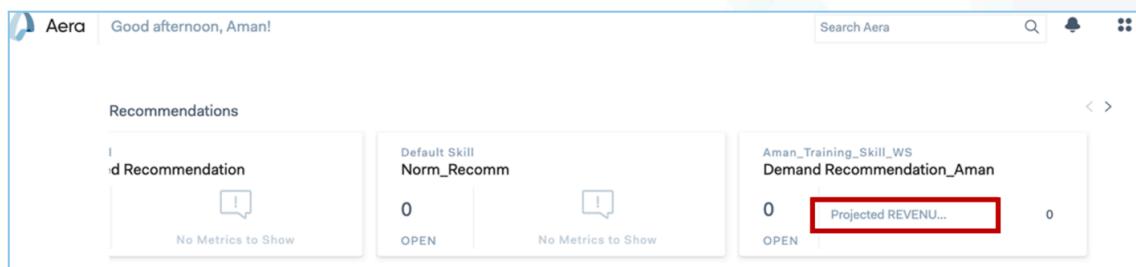
Display Name *	Data Type *	Length	Scale	Display	Header	Filterable	Align	Format	Icon	Hyperlink	Column Comparison
Last Update Date	Date			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	MM/DD/YYYY			
Last Updated By	String			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
Reason Code	String			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
Close Date	Date			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
Recommendation Response	String			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
Predicted Response	String			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
Confidence Score	Numeric			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	#####.##%			
Net Impact	Numeric			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
<b>Custom Columns</b>											
Material Number	String	50		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
Material Description	String	50		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
Plant Code	String	50		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
Plant Description	String	50		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
Date_John	String	50		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
Planner Forecast	Numeric			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
Aera Forecast	Numeric			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
Variance	Numeric			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
Recommendation	String	2000		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
Comments	String	50		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
Actual COST Impact	Numeric			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
Projected COST Impact	Numeric			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
Actual REVENUE Impact	Numeric			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
Projected REVENUE Impact	Numeric			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				

11. Now go to the Category menu and add the **PROJECTED\_REVENUE\_IMPACT** to Key Metrics.



Add Category	Delete	Save
Demand_Recommendation...		
Category Details Category Name * <input type="text" value="Demand_Recommendation."/> Description <input type="text" value="Demand_Recommendation_John"/>		
Display Name *	Key Metrics	Key Columns
<input type="text" value="Demand_Recommendation"/>	<input style="border: 2px solid red;" type="text" value="PROJECTED_REVENUE_IMPACT"/>	<input type="text" value="Key Columns (, separated)"/>
Category Identifier		
CTG_DEMAND_RECOMMENDATION_JOHN		

All the KPIs mentioned under **Key Metrics** are visible within the Skill card on the Aera homepage. You will be able to see them once you have completed the **Configure the Skill Hands-on exercise**. A Sample Screenshot is displayed below.

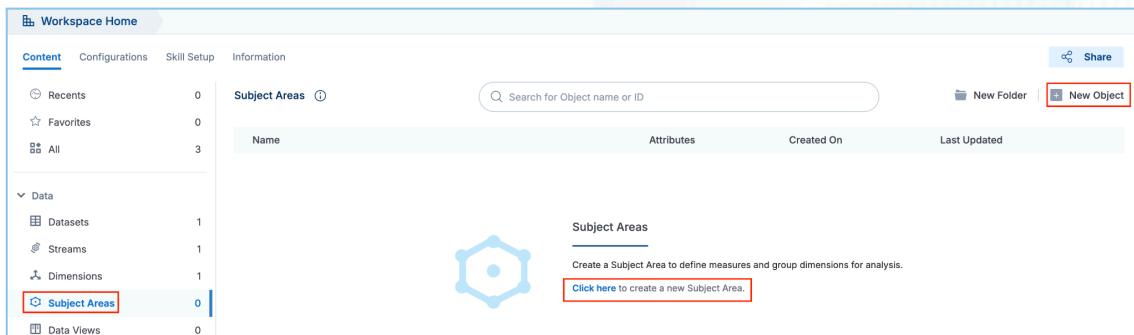


## Loading of Recommendation

Recommendations are transactions, and this needs to be converted into a Fact Table or have a dedicated Subject Area for Recommendations. Use streams to map the business logic and generate recommendations.

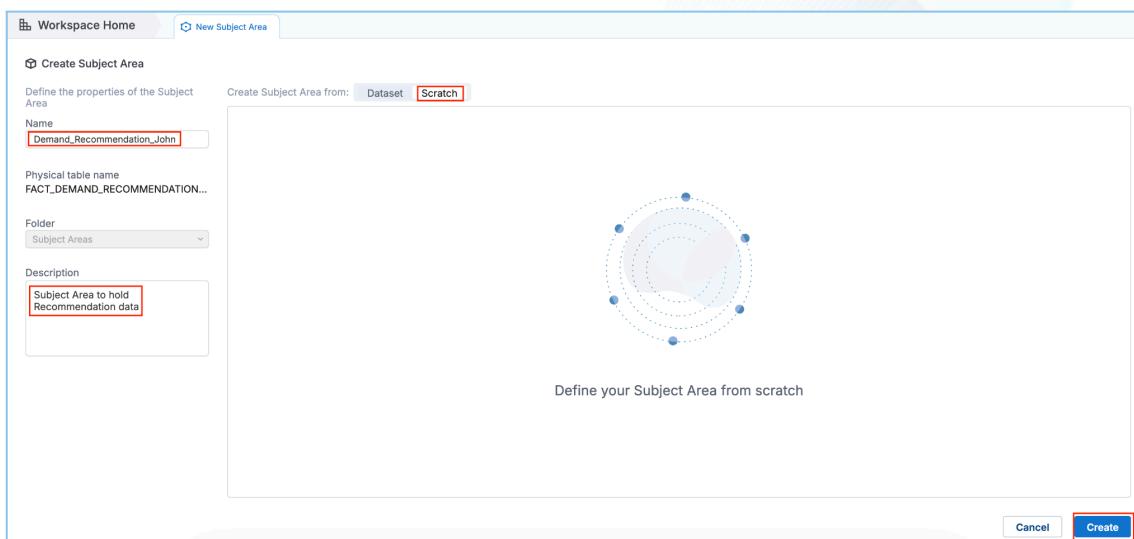
**Note:** The Base objects have already been created and will be needed to populate the recommendation.

- To create a new Subject Area, go to the **Content** section and click on “**Click here to create a new Subject Area.**” Alternatively, you can click “**+ New Object**” on the right side of the Subject Area panel.



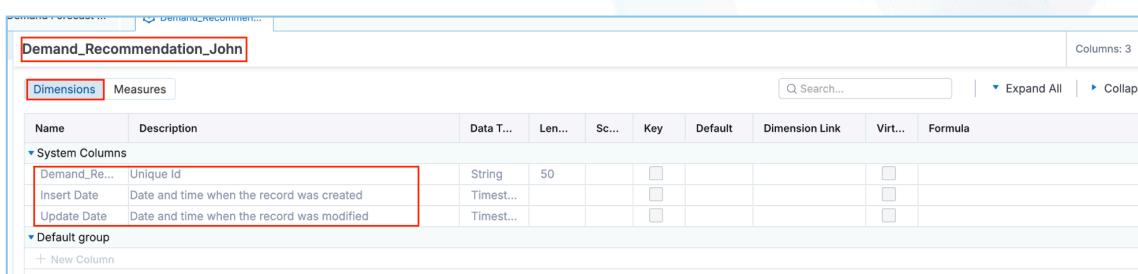
The screenshot shows the Aera Workspace Home interface. In the Content sidebar, under Data, the 'Subject Areas' item is highlighted with a red box. On the main page, there is a 'Subject Areas' list with one entry: 'Name'. Below the list is a large blue hexagonal icon labeled 'Subject Areas'. To its right, a callout box says 'Create a Subject Area to define measures and group dimensions for analysis.' and contains a link 'Click here to create a new Subject Area.'

- In the new window, enter the Subject Area name as **Demand\_Recommendation\_<Username>**. Provide a description: Subject Area to hold Recommendation data, select **Scratch**, and click **Create**.



The screenshot shows the 'Create Subject Area' dialog box. It has fields for 'Name' (set to 'Demand\_Recommendation\_John'), 'Physical table name' (set to 'FACT\_DEMAND\_RECOMMENDATION...'), 'Folder' (set to 'Subject Areas'), and 'Description' (set to 'Subject Area to hold Recommendation data'). Below these fields is a large white area with a circular dashed line and several small dots, labeled 'Define your Subject Area from scratch'. At the bottom right are 'Cancel' and 'Create' buttons, with 'Create' being highlighted by a red box.

- The subject area page is displayed with default **Dimensions**.

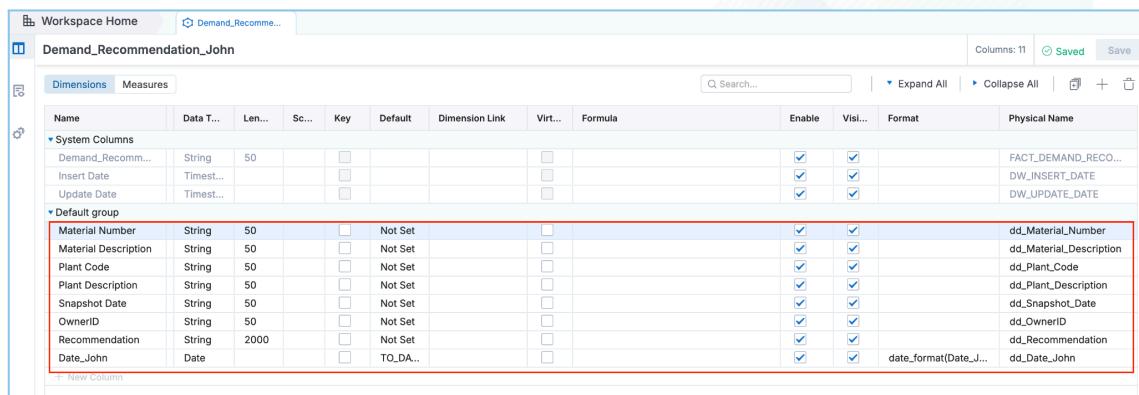


The screenshot shows the 'Demand\_Recommendation\_John' subject area page. The 'Dimensions' tab is selected. A table lists three system columns under the 'Default group': 'Demand\_Recommendation\_Id' (Unique Id, String, 50), 'Insert Date' (Date and time when the record was created, Timestamptz), and 'Update Date' (Date and time when the record was modified, Timestamptz). The 'Dimensions' tab is highlighted with a red box.

- Click the **+ New Column** option in the Default group or the '+' icon on the right to add the **Dimensions** listed below:

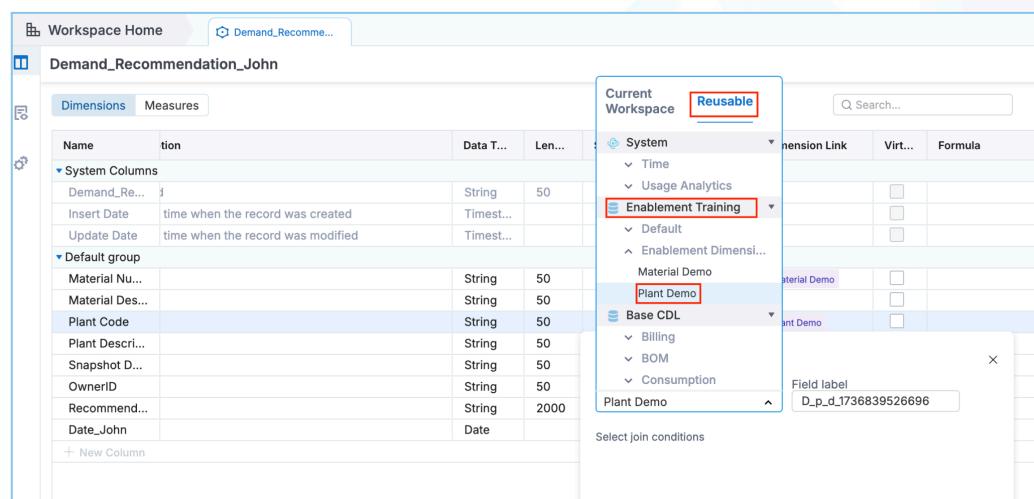
Column Name	Data Type	Length	Physical Name
-------------	-----------	--------	---------------

Plant Code	String	50	dd_Plant_Code
Snapshot Date	String	50	dd_Snapshot_Date
Material Number	String	50	dd_Material_Number
Material Description	String	50	dd_Material_Description
Plant Description	String	50	dd_Plant_Description
Recommendation	String	2000	dd_Recommendation
OwnerID	String	50	dd_OwnerID
Date_Username	Date		dd_Date_Username



The screenshot shows the Aera workspace interface for the 'Demand\_Recommendation\_John' table. The table structure includes system columns like Demand\_Recomm..., Insert Date, and Update Date, and a default group of columns for various identifiers and descriptions. The 'Date\_John' column is highlighted with a red border.

5. Add dimension link for **Plant Code**, click on dimension link, navigate to **Reusable>Enablement Training>Enablement Dimensions** and select **Plant Demo**.



The screenshot shows the Aera workspace interface with the 'Reusable' tab selected. In the 'Enablement Training' section, 'Plant Demo' is selected under 'Enablement Dimensions'. This indicates that a dimension link is being established between the 'Plant Code' column and the 'Plant Demo' dimension.

6. Then add a join clause on **Demand\_Recommendation\_John.Plant Code = Plant\_Demo.Plant Code**.

**Dimension Link**

Select dimension: Plant Demo      Field label: Enter an alias (optional)

Select join conditions:

Demand_Recommendation_John	Plant Demo
Column	= Column

**Add join clause**      **Cancel**      **Confirm**

**Note:** Linking Dimension Attributes to the subject area helps in aggregation. We employ a join mechanism to do this.

**Dimension Link**

Select dimension: Plant Demo      Field label: Enter an alias (optional)

Select join conditions:

Demand_Recommendation_John	Plant Demo
Plant Code	= Plant Code

**Add join clause**      **Cancel**      **Confirm**

- Similarly, add for Material Number, click on the dimension link, navigate to Resuable>Enablement Training>Enablement Dimensions and select **Material Demo**. Then add a join clause:  
**Demand\_Recommendation\_John.Material Number = Material\_Demo.Material Number.**

**Dimension Link**

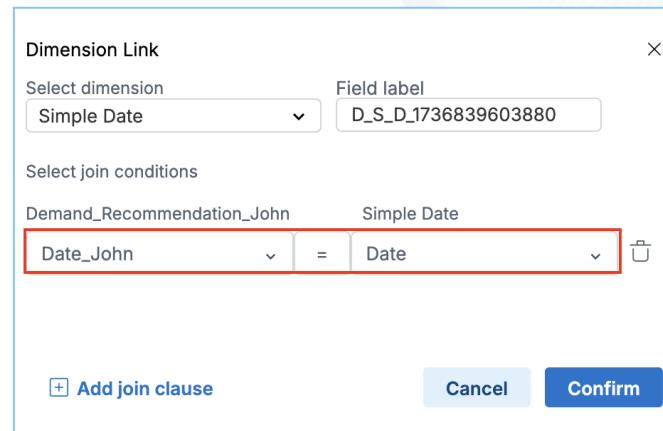
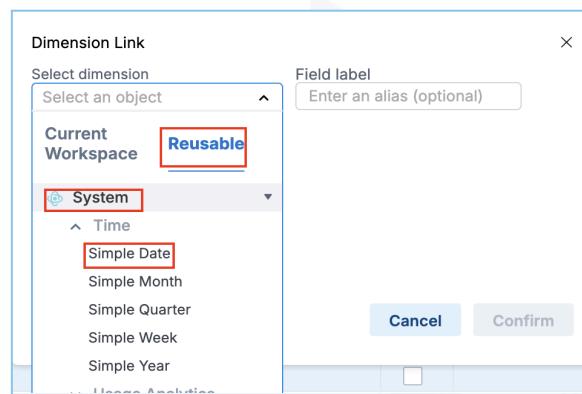
Select dimension: Material Demo      Field label: Enter an alias (optional)

Select join conditions:

Demand_Recommendation_John	Material Demo
Material Number	= Material Number

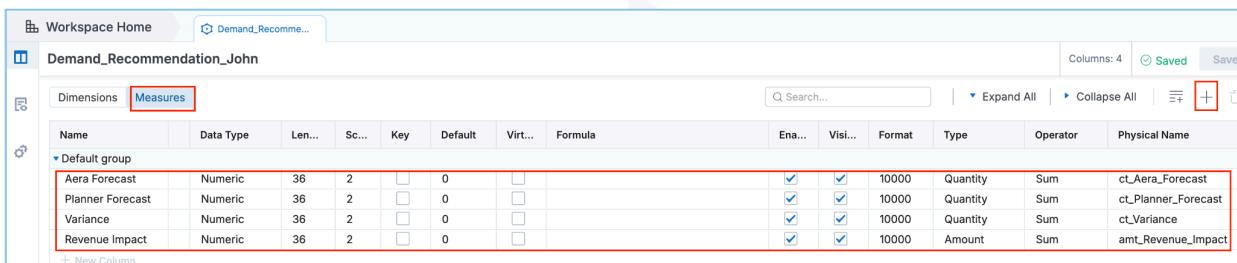
**Add join clause**      **Cancel**      **Confirm**

- Similarly, do the same for **Date**, click on the dimension link, navigate to **Resuable>System>Time**, and select **Simple Date**. Then add a join clause,  
**Demand\_Recommendation\_John.Date\_<Username> = Simple Date.Date.**



9. Switch to the **Measures** tab. Click the + icon at top right corner to add the Measures listed below:

Column Name	Data Type	Length	Type	Operator	Physical Name
Aera Forecast	Numeric	36	Quantity	SUM	ct_Aera_Forecast
Planner Forecast	Numeric	36	Quantity	SUM	ct_Planner_Forecast
Variance	Numeric	36	Quantity	SUM	ct_Variance
Revenue Impact	Numeric	36	Amount	SUM	amt_Revenue_Impact

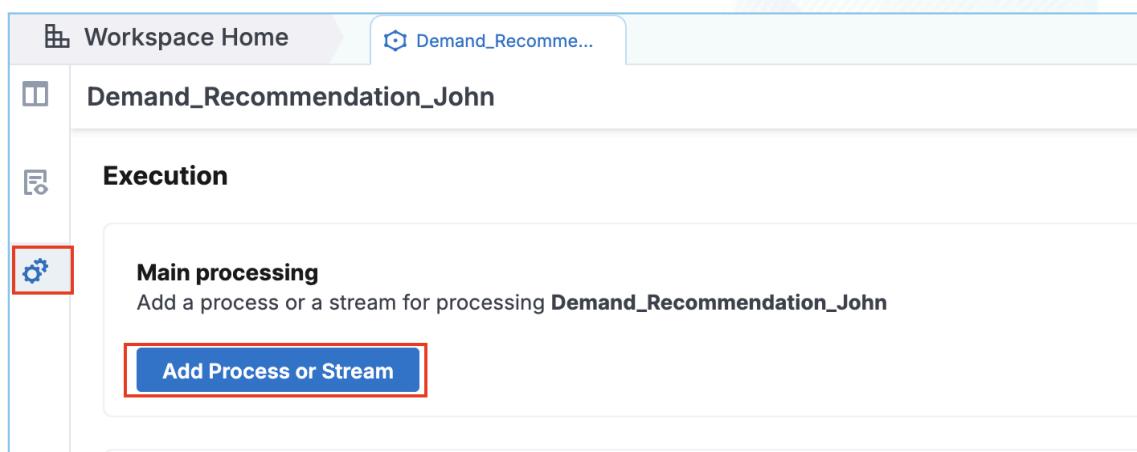


Name	Data Type	Len...	Sc...	Key	Default	Virt...	Formula	Ena...	Visi...	Format	Type	Operator	Physical Name
Default group													
Aera Forecast	Numeric	36	2	<input type="checkbox"/>	0	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	10000	Quantity	Sum	ct_Aera_Forecast
Planner Forecast	Numeric	36	2	<input type="checkbox"/>	0	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	10000	Quantity	Sum	ct_Planner_Forecast
Variance	Numeric	36	2	<input type="checkbox"/>	0	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	10000	Quantity	Sum	ct_Variance
Revenue Impact	Numeric	36	2	<input type="checkbox"/>	0	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	10000	Amount	Sum	amt_Revenue_Impact

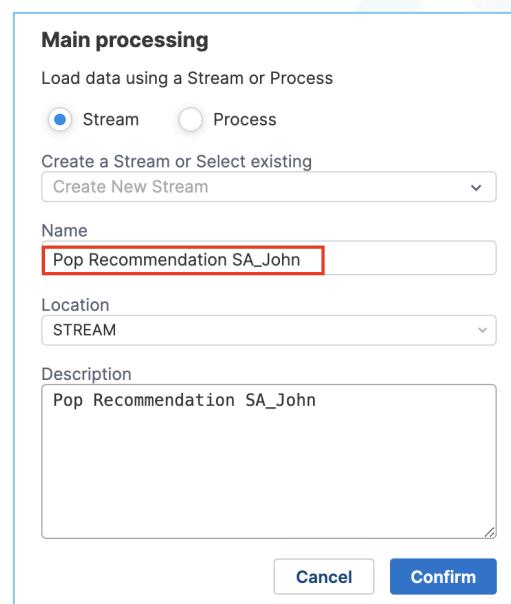
10. Click **Save**.

## Populate Subject Area using Streams

1. Navigate to the **Execution** tab on the left. In the Main Processing section, click on '**Add Process or Add Stream**'.



2. Select Stream > Create New Stream. Provide the stream name as **Pop Recommendation SA\_<Username>** and click the **Confirm**.



Main processing

Load data using a Stream or Process

Stream  Process

Create a Stream or Select existing  
Create New Stream

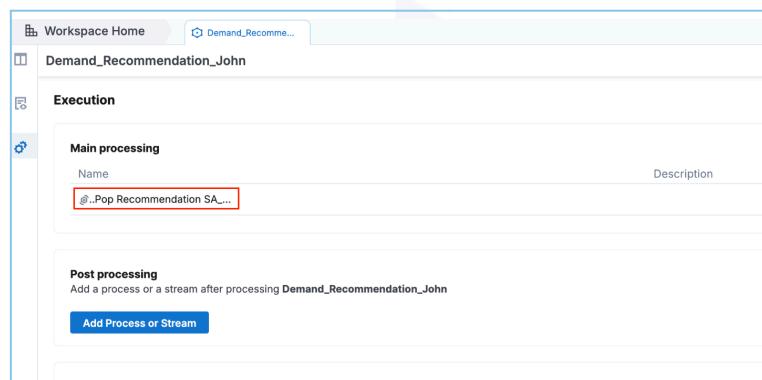
Name

Location  
STREAM

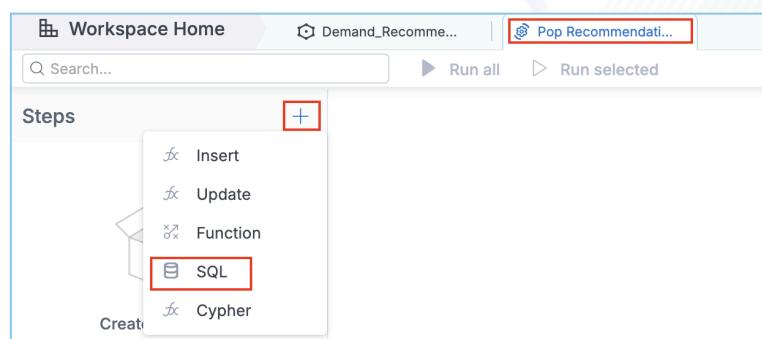
Description  
Pop Recommendation SA\_John

Cancel Confirm

3. The stream gets added. Click the Stream **Pop Recommendation SA\_<Username>**



4. In the new **Pop Recommendation SA\_<Username>** tab, click the + icon and select **SQL** step.



5. Add 6 SQL steps to the stream. For each step, perform the below actions

- a. Click on the Step name and **Rename** it as given below

For example, rename the first SQL step as **Cumulative Forecast - Planner**.

- b. Replace the variables highlighted in **red** below with the ones you create.

## Create Temporary Table

### Step 1 Cumulative Forecast - Planner

```
/*Getting cumulative planner forecast for next 12 Weeks*/
drop table if exists temp_planner_forecast_<username>;
create table temp_planner_forecast_<username>
as
select
DD_MATERIAL_NUMBER,
DD_PLANT_CODE as DD_PLANT,
DD_WEEK as DIM_DATE_<USERNAME>,
sum(CT_FORECAST_QTY) as sum_planner_forecast
from fact_planner_forecast
where DD_WEEK <= CURRENT_DATE
group by DD_MATERIAL_NUMBER,DD_WEEK,DD_PLANT_CODE;
```

### Step 2 Cumulative forecast- Aera

```
/*Getting cumulative Aera forecast for next 12 Weeks*/
drop table if exists temp_aera_forecast_<username>;
```

```

create table temp_aera_forecast_<username>
as
select DD_MATERIAL_NUMBER,DD_WEEK,DD_PLANT,sum(CT_FORECAST_QTY) as sum_aera_forecast
from fact_aera_demand_forecast a
where DD_WEEK <=current_date
group by DD_MATERIAL_NUMBER,DD_PLANT,DD_WEEK;

```

### Step 3 Refresh Subject area

```

/*Deleting the Recommendation Run for the same date if exists*/
delete from FACT_DEMAND_RECOMMENDATION_<Username>
where DD_Snapshot_Date = current_date;

```

## Populate Fact Table

### Step 4 Populate Subject Area

```

/*Recommendation Generation */
insert into FACT_DEMAND_RECOMMENDATION_<Username>
(FACT_DEMAND_RECOMMENDATION_<Username>ID
,DW_INSERT_DATE
,DW_UPDATE_DATE
,DIM_MATERIAL_NUMBER
,DIM_PLANT_CODE
,DIM_DATE_<USERNAME>
,CT_AERA_FORECAST
,CT_PLANNER_FORECAST
,CT_variance
,DD_SNAPSHOT_DATE
,DD_OWNERID)
select distinct
ifnull(CAST( UPPER( HASH_SHA1( UPPER( TRIM( LEADING '0' FROM IFNULL(DD_MATERIAL_NUMBER, '')) || '|^|' || IFNULL(DD_PLANT, '') || '|^|' || IFNULL(DD_Snapshot_Date, '') || '|^|' || 'SAP ECC EURO' ))) AS VARCHAR(40) ), '00000000000000000000000000000000') as
FACT_AERA_FORECASTID,
current_timestamp,current_timestamp,
DD_MATERIAL_NUMBER,DD_PLANT,DIM_DATE_<USERNAME>,Aera_Forecast,Planner_Forecast,sum_variance as variance_percentage,DD_Snapshot_Date,
'Username' as ownerID /*Replace 'Username' with your own name*/
from
(
select a.DD_MATERIAL_NUMBER,a.DD_PLANT,a.DD_WEEK as DIM_DATE_<USERNAME>,
a.sum_aera_forecast as
Aera_Forecast,b.sum_planner_forecast as Planner_Forecast,
case when b.sum_planner_forecast = 0 then 0 else
100*abs((a.sum_aera_forecast-b.sum_planner_forecast)/b.sum_planner_forecast) end as
sum_variance,
current_date as DD_Snapshot_Date
from temp_aera_forecast_<Username> a inner join temp_planner_forecast_<Username> b
on a.DD_MATERIAL_NUMBER = b.DD_MATERIAL_NUMBER
and a.DD_PLANT = b.DD_PLANT
and a.DD_WEEK = b.DIM_DATE_<USERNAME>) x

```

```
where abs(sum_variance)>0;
```

### Step 5 Adding dimension Attribute

```
/*Adding Material Description*/
update FACT_DEMAND_RECOMMENDATION_<Username> f
set f.DD_MATERIAL_DESCRIPTION = d.MATERIAL_DESCRIPTION
from FACT_DEMAND_RECOMMENDATION_<Username> f inner join dim_material_demo d
on f.dim_material_number =d.material_number;

/*Adding Plant Description*/
update FACT_DEMAND_RECOMMENDATION_<Username> f
set f.DD_PLANT_DESCRIPTION = d.PLANT_DESCRIPTION
from FACT_DEMAND_RECOMMENDATION_<Username> f inner join dim_plant_demo d
on f.DIM_PLANT_CODE =d.PLANT_CODE;

/*Adding Recommendation*/
update FACT_DEMAND_RECOMMENDATION_<Username> f
set f.DD_RECOMMENDATION = 'Update the demand plan for product::'
'||DD_MATERIAL_DESCRIPTION||' at Location ::'||DD_PLANT_DESCRIPTION||'. Click View
Details for more information';

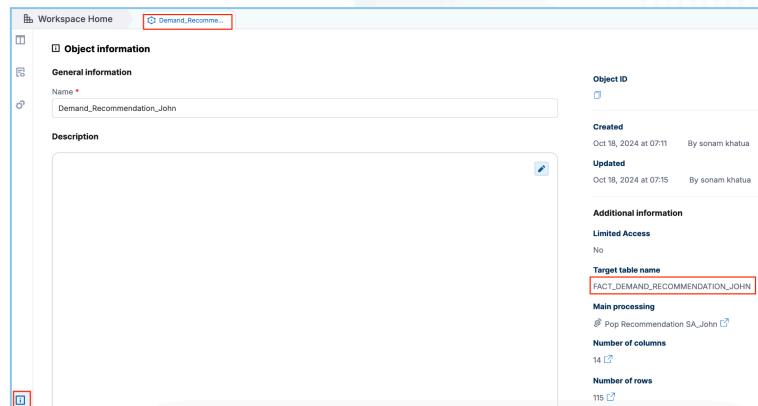
/*Adding OwnerId*/
update FACT_DEMAND_RECOMMENDATION_<Username> f
set f.DD_OWNERID = 'Username'/*Replace 'Username' with your own name*/
```

**Note:** As part of Adding Impact KPIs, only Projected Revenue Impact is being populated.

### Step 6 Adding Impact KPIs

```
/*Calculating Revenue Impact */
update FACT_DEMAND_RECOMMENDATION_<Username> f
set f.AMT_REVENUE_IMPACT = Abs((CT_AERA_FORECAST-CT_PLANNER_FORECAST))*a.avg_unit_price
from FACT_DEMAND_RECOMMENDATION_<Username> f inner join
(
/*Calculating Unit Price for Material at a given Plant*/
select DD_MATERIAL_NUMBER,DD_DELIVERING_PLANT,avg(Unit_Price) as avg_unit_price
from
(
select DD_MATERIAL_NUMBER,DD_DELIVERING_PLANT,
case when CT_CONFIRMED_QTY = 0 then 0 else CT_NET_SALES_ORDER_VALUE/CT_CONFIRMED_QTY end
as Unit_Price
from fact_sales_orders ) a
group by DD_MATERIAL_NUMBER,DD_DELIVERING_PLANT ) a on
f.DIM_MATERIAL_NUMBER = a.DD_MATERIAL_NUMBER and
f.DIM_PLANT_CODE = a.DD_DELIVERING_PLANT;
```

- To find the names of your target tables, navigate to the **Demand\_Recommendation\_<Username>** tab and select the **About** option (i).

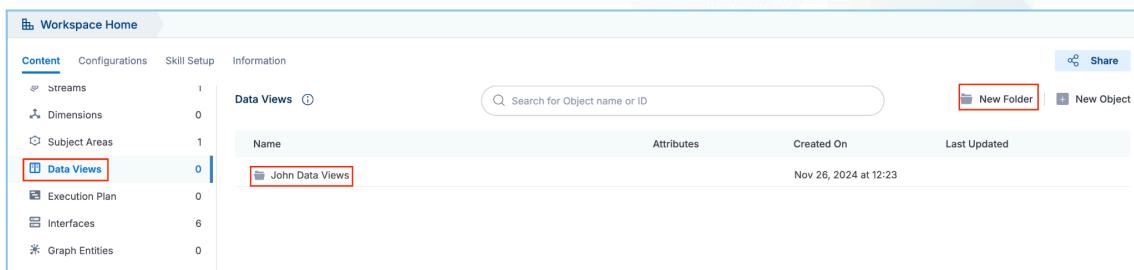


The screenshot shows the 'Object information' panel for a stream named 'Demand\_Recommendation\_John'. The 'Target table name' field is highlighted with a red box and contains the value 'FACT\_DEMAND\_RECOMMENDATION\_JOHN'.

- Once all the steps are added, **save** the stream and click **Run All**.

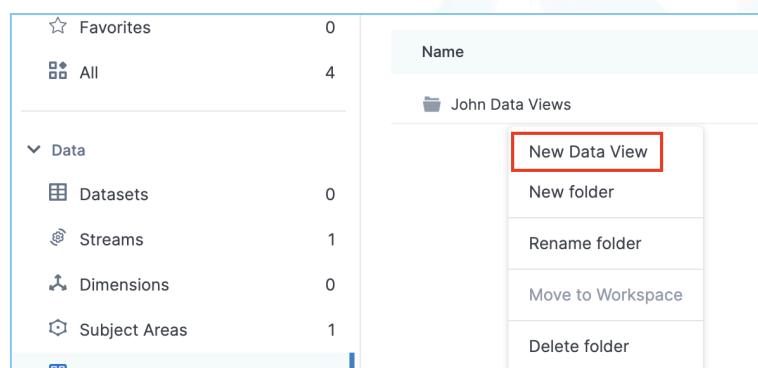
## Create Data View

- Navigate to the **Content**, select **Data Views** section, and create a new folder called "<Username> Data Views" by clicking the '**+ New Folder**' on the right.



The screenshot shows the 'Content' page with the 'Data Views' section selected. A new folder named 'John Data Views' is being created, and the 'New Folder' button is highlighted with a red box.

- To create a new data view, right-click on the folder and select "**New Data View**" from the menu.



The screenshot shows a context menu for the 'John Data Views' folder. The 'New Data View' option is highlighted with a red box.

- Search for the subject area you have created named **Demand\_Recommendation\_<Username>**, then click on **Create**.

Workspace Home Untitled Data View

### Create Data View

Select data source

John

Name	Attributes	Last Updated	Created On
Demand_Recommendation_JohnDoe		Sep 29, 2025 at 13:12	Sep 29, 2025 at 12:48
Demand_Recommendation_John		Jul 23, 2025 at 16:52	Dec 12, 2024 at 19:44
Inventory_SA_John		Jul 16, 2025 at 17:30	Jul 16, 2025 at 17:10
New_SA_John		Jul 23, 2025 at 16:52	Jun 14, 2024 at 11:29
New_SA_JohnDoe		Sep 9, 2024 at 16:28	Sep 9, 2024 at 16:24
SA_John		Apr 7, 2025 at 15:14	Apr 7, 2025 at 15:14
Sales Order _JohnDoe		Jul 23, 2025 at 16:52	Apr 17, 2024 at 16:28
Sales Orders John		Sep 9, 2024 at 16:24	Sep 3, 2024 at 22:57

Cancel Create

4. Select the columns mentioned below and then refresh the page.

Demand\_Recommendation\_John.Material Description

Demand\_Recommendation\_John.Plant Description

Demand\_Recommendation\_John.OwnerID

Demand\_Recommendation\_John.Recommendation

## Material Number

Plant Code. Plant Code

Date\_<Username>.Date

Aera Forecast

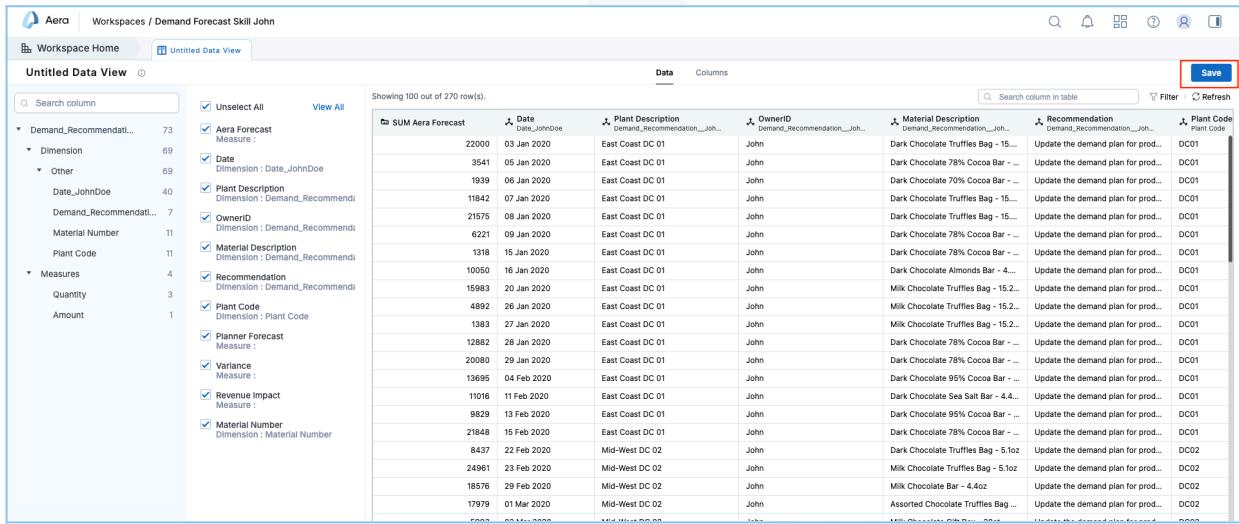
## Planner Forecast

## Variance

## Revenue Impact

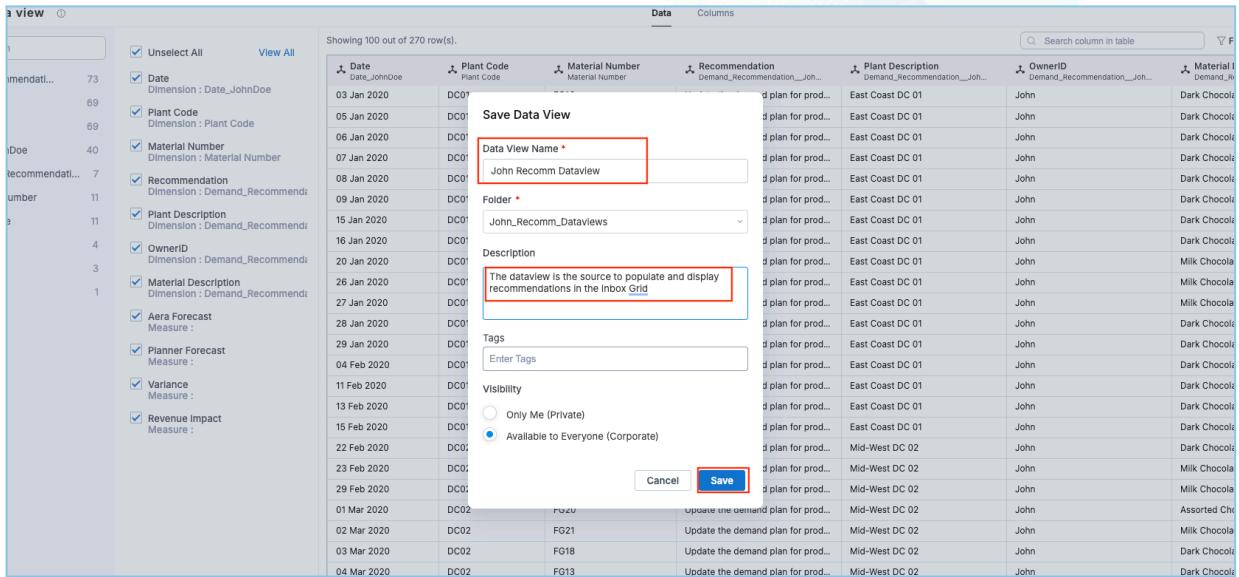
Untitled Data View		Data														
		Columns														
		Showing 100 out of 270 row(s).														
Search column	Unselect All	View All	Date	Plant Code	Material Number	Recommendation	Plant Description	OwnerID	Materi		Save					
Demand_Recommendati...	73	<input checked="" type="checkbox"/>	Date Dimension : Date_JohnDoe	Plant Code Dimension : Plant Code	Material Number Dimension : Material Number	Recommendation Dimension : Demand_Recommendi...	Plant Description Dimension : Demand_Recommendi...	OwnerID Dimension : Demand_Recommendi...	Materi...		Save					
Dimension	69	<input checked="" type="checkbox"/>	Plant Code Dimension : Plant Code	Material Number Dimension : Material Number	Recommendation Dimension : Demand_Recommendi...	Plant Description Dimension : Demand_Recommendi...	OwnerID Dimension : Demand_Recommendi...	Materi...			Refresh					
Other	69	<input checked="" type="checkbox"/>	Material Number Dimension : Material Number	Recommendation Dimension : Demand_Recommendi...	Plant Description Dimension : Demand_Recommendi...	OwnerID Dimension : Demand_Recommendi...	Materi...									
Date_JohnDoe	40	<input checked="" type="checkbox"/>	Recommendation Dimension : Demand_Recommendi...	Plant Description Dimension : Demand_Recommendi...	OwnerID Dimension : Demand_Recommendi...	Material Description Dimension : Demand_Recommendi...	Aera Forecast Measure :	Planner Forecast Measure :	Variance Measure :	Revenue Impact Measure :						
Demand_Recommendati...	7	<input checked="" type="checkbox"/>	Plant Code Dimension : Plant Code	Material Number Dimension : Material Number	Recommendation Dimension : Demand_Recommendi...	Plant Description Dimension : Demand_Recommendi...	OwnerID Dimension : Demand_Recommendi...	Materi...								
Material Number	11	<input checked="" type="checkbox"/>	Material Number Dimension : Material Number	Recommendation Dimension : Demand_Recommendi...	Plant Description Dimension : Demand_Recommendi...	OwnerID Dimension : Demand_Recommendi...	Materi...									
Plant Code	11	<input checked="" type="checkbox"/>	Recommendation Dimension : Demand_Recommendi...	Plant Description Dimension : Demand_Recommendi...	OwnerID Dimension : Demand_Recommendi...	Material Description Dimension : Demand_Recommendi...	Aera Forecast Measure :	Planner Forecast Measure :	Variance Measure :	Revenue Impact Measure :						
Measures	4	<input checked="" type="checkbox"/>	OwnerID Dimension : Demand_Recommendi...	Material Description Dimension : Demand_Recommendi...	Recommendation Dimension : Demand_Recommendi...	Plant Description Dimension : Demand_Recommendi...	Planner Forecast Measure :	Variance Measure :	Revenue Impact Measure :							
Quantity	3	<input checked="" type="checkbox"/>	Material Description Dimension : Demand_Recommendi...	Plant Description Dimension : Demand_Recommendi...	OwnerID Dimension : Demand_Recommendi...	OwnerID Dimension : Demand_Recommendi...	Variance Measure :	Revenue Impact Measure :								
Amount	1	<input checked="" type="checkbox"/>	Planner Forecast Measure :	Variance Measure :	Revenue Impact Measure :											

5. You can view the generated recommendations along with the other columns. Click "**Save**".



The screenshot shows a Data View titled "Untitled Data View". On the left, there is a sidebar with a search bar and a list of dimensions and measures selected for the view. The main area displays a grid of 100 rows of data, each containing columns for Date, Plant Description, Demand Recommendation, and various product details like Material Description, Recommendation, and Plant Code. A red box highlights the "Save" button in the top right corner of the grid header.

6. Provide the name <Username>\_Recomm\_DataView and a description for the data view. Click '**Save**'.



The screenshot shows the "Save Data View" dialog box. It includes fields for "Data View Name" (containing "John Recomm DataView"), "Folder" (containing "John\_Recomm\_Dataviews"), and a "Description" field with the text "The dataview is the source to populate and display recommendations in the Inbox Grid". A red box highlights the "Save" button at the bottom right of the dialog.

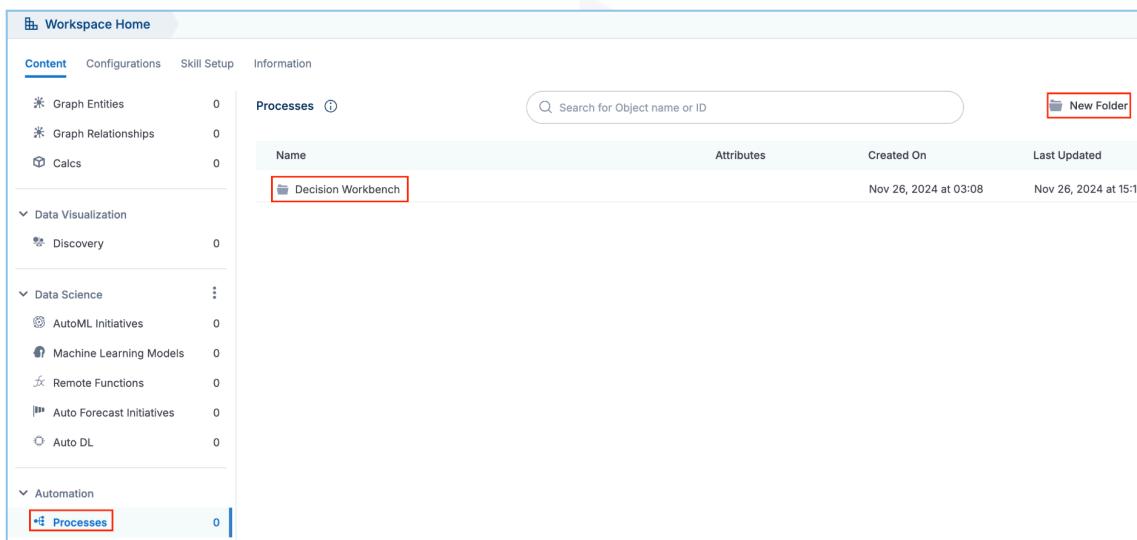
7. The Data View is created successfully.

**Note:** In the Data Workbench exercise, you created a workspace named <Demand Forecast Skill\_Username> In the branch <Month YY>. Please ensure you are in the same branch while working on the Decision Inbox exercise.

If you missed creating the branch earlier, start by creating it and then proceed to add the process.

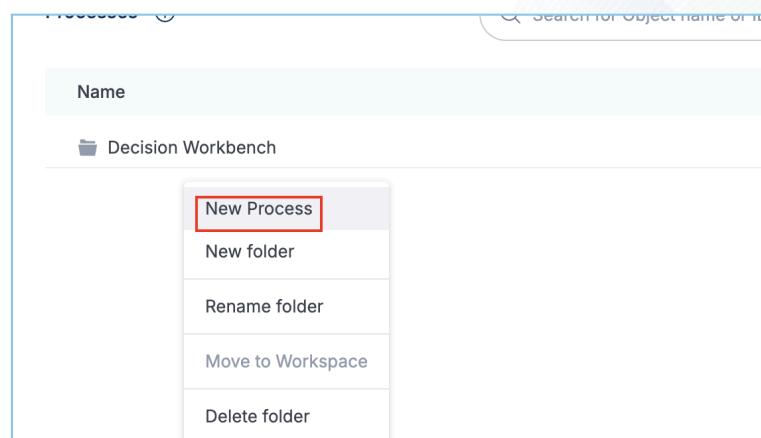
## Use Action Item Node to Populate the Decision Inbox

1. Navigate to the **Processes** section within the **Content** tab, then click the '**+ New Folder**' in the right panel to create a new folder and name it **Decision Workbench**.



The screenshot shows the Aera Workspace Home interface. The left sidebar has sections for Content, Configurations, Skill Setup, and Information. Under Content, there are categories: Graph Entities (0), Graph Relationships (0), Calcs (0), Data Visualization (Discovery 0), Data Science (AutoML Initiatives 0, Machine Learning Models 0, Remote Functions 0, Auto Forecast Initiatives 0, Auto DL 0), and Automation (Processes 0). The 'Processes' category under Automation is selected and highlighted with a red box. The 'Decision Workbench' folder within the Processes category is also highlighted with a red box. The main area shows a table with columns: Name, Attributes, Created On, and Last Updated. One row is visible: 'Decision Workbench' with attributes '0', 'Nov 26, 2024 at 03:08', and 'Nov 26, 2024 at 15:11'. A search bar at the top right says 'Search for Object name or ID' and a 'New Folder' button is also present.

- Next, Right-click the **Decision Workbench** folder to create a **New Process**.



- In the New Process Dialog box, enter the name **Populate recommendation** and click **Create**. You will be directed to the newly created process page.

**New Process**

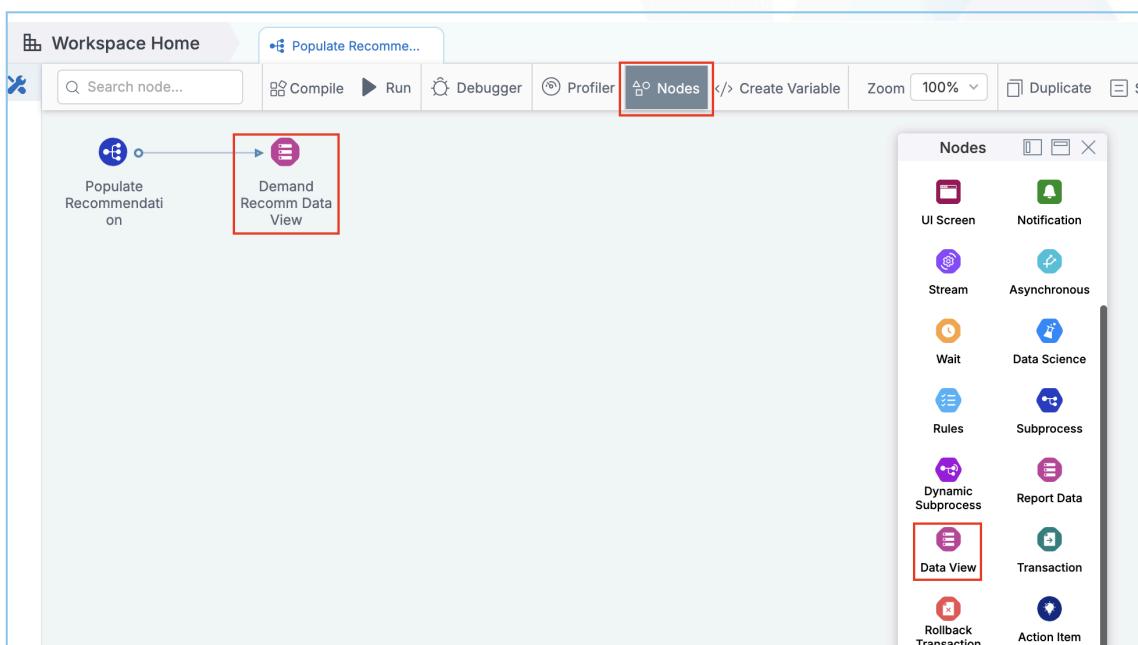
Enter a unique name and select a folder

**Process Name \***

**Target Folder \***

**Create**

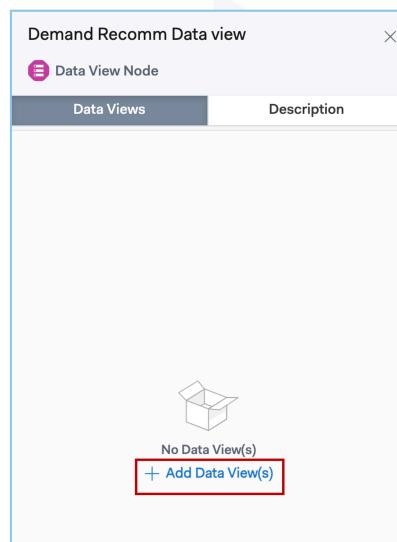
4. You're now on the Process Page. The **Populate recommendation** node is displayed. Click the **Nodes** tab at the top.
5. In the Nodes window, drag the Data View Node onto the Populate Recommendation Node, and rename it to "**Demand Recomm Data View**."



6. Close the **Nodes** window and click on the **Demand Recomm Data View** Node.

## Configure data source from Data View

1. In the Data View property panel on the right, click "**Add Data Views**" to select your desired Data View.



2. Search the Data view you created in your workspace **Demand\_Forecast\_Skill\_<Username>**, **<Username>\_Recomm\_DataView**, and click on **Select Data View**.

Name ↑	Last Modified	Created	Creator
<input checked="" type="checkbox"/> John_Recomm_DataView Demand_Recommendation_John	Jul 22, 2024 at 3:05 pm	Jul 22, 2024 at 2:56 pm	John Doe

3. The Data View page is displayed. Click on Generate Variables

Copy of John\_Recomm\_Dataview  
Demand\_Recommendation\_John

Variable Enter value or select variable Generate variable

Showing 100 out of 270 row(s).

Material Number	Material Description	Plant Code	Plant Description	Recommendation
FG01	Milk Chocolate Bar - 4.4oz	DC02	Mid-West DC 02	Update the demand plan for product
FG01	Milk Chocolate Bar - 4.4oz	DC02	Mid-West DC 02	Update the demand plan for product
FG01	Milk Chocolate Bar - 4.4oz	DC03	West Coast DC 03	Update the demand plan for product
FG01	Milk Chocolate Bar - 4.4oz	DC03	West Coast DC 03	Update the demand plan for product
FG01	Milk Chocolate Bar - 4.4oz	DC03	West Coast DC 03	Update the demand plan for product
FG01	Milk Chocolate Bar - 4.4oz	DC03	West Coast DC 03	Update the demand plan for product
FG01	Milk Chocolate Bar - 4.4oz	DC03	West Coast DC 03	Update the demand plan for product
FG01	Milk Chocolate Bar - 4.4oz	DC03	West Coast DC 03	Update the demand plan for product
FG01	Milk Chocolate Bar - 4.4oz	DC02	Mid-West DC 02	Update the demand plan for product
FG02	White Chocolate Bar - 4.4oz	DC02	Mid-West DC 02	Update the demand plan for product
FG02	White Chocolate Bar - 4.4oz	DC02	Mid-West DC 02	Update the demand plan for product
FG02	White Chocolate Bar - 4.4oz	DC03	West Coast DC 03	Update the demand plan for product

4. Provide the name of the variable as **Input\_Variable\_for\_recomm** and click **Add**.

Generate variable

Input\_Variable\_for\_recomm

Cancel Add

5. The Input process variable name is visible now, click **Done**.

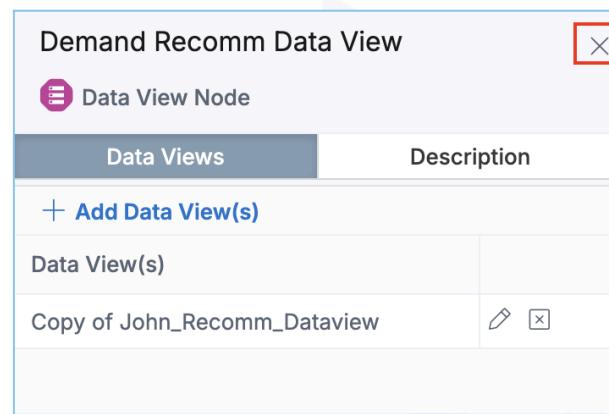
Copy of John\_Recomm\_Dataview  
Demand\_Recommendation\_John

Variable Input\_Variable\_for\_recomm Update variable

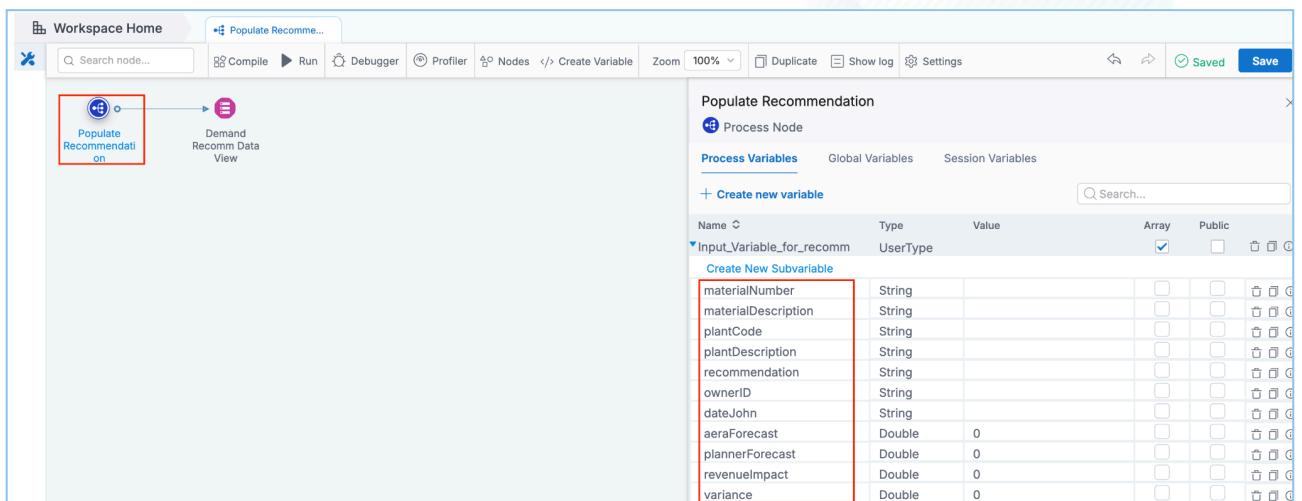
Showing 100 out of 270 row(s).

Material Number	Material Description	Plant Code	Plant Description	Recommendation
FG01	Milk Chocolate Bar - 4.4oz	DC02	Mid-West DC 02	Update the demand plan for product
FG01	Milk Chocolate Bar - 4.4oz	DC02	Mid-West DC 02	Update the demand plan for product
FG01	Milk Chocolate Bar - 4.4oz	DC03	West Coast DC 03	Update the demand plan for product
FG01	Milk Chocolate Bar - 4.4oz	DC03	West Coast DC 03	Update the demand plan for product
FG01	Milk Chocolate Bar - 4.4oz	DC03	West Coast DC 03	Update the demand plan for product
FG01	Milk Chocolate Bar - 4.4oz	DC03	West Coast DC 03	Update the demand plan for product
FG01	Milk Chocolate Bar - 4.4oz	DC03	West Coast DC 03	Update the demand plan for product
FG01	Milk Chocolate Bar - 4.4oz	DC03	West Coast DC 03	Update the demand plan for product
FG01	Milk Chocolate Bar - 4.4oz	DC02	Mid-West DC 02	Update the demand plan for product
FG02	White Chocolate Bar - 4.4oz	DC02	Mid-West DC 02	Update the demand plan for product
FG02	White Chocolate Bar - 4.4oz	DC02	Mid-West DC 02	Update the demand plan for product
FG02	White Chocolate Bar - 4.4oz	DC03	West Coast DC 03	Update the demand plan for product

6. Close the **Demand Recomm Data View** properties window.



7. Next, click on the "**Populate Recommendation**" node to check if the recommendation variable has been created with the necessary sub-variables.



8. Click on "**OwnerId**" and enter "**Username**" in the Value field.

Name	Type	Value	Array	Public
materialNumber	String		<input type="checkbox"/>	<input type="checkbox"/>
materialDescription	String		<input type="checkbox"/>	<input type="checkbox"/>
plantCode	String		<input type="checkbox"/>	<input type="checkbox"/>
plantDescription	String		<input type="checkbox"/>	<input type="checkbox"/>
recommendation	String		<input type="checkbox"/>	<input type="checkbox"/>
ownerId	String	John Doe	<input type="checkbox"/>	<input type="checkbox"/>
dateJohn	String		<input type="checkbox"/>	<input type="checkbox"/>
aeraForecast	Double	0	<input type="checkbox"/>	<input type="checkbox"/>
plannerForecast	Double	0	<input type="checkbox"/>	<input type="checkbox"/>
revenueImpact	Double	0	<input type="checkbox"/>	<input type="checkbox"/>
variance	Double	0	<input type="checkbox"/>	<input type="checkbox"/>

The OwnerID column captures the user responsible for taking action on the recommendations. There are three options to populate this field:

**Variable:** The value can be populated from the data used to trigger the creation of a recommendation. For example, Jane Doe

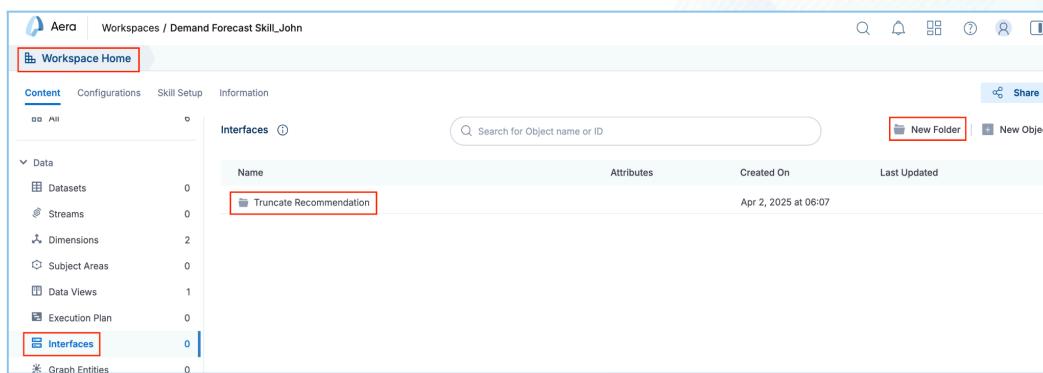
**User:** A specific user can be selected from the list of users with access to the particular recommendation category.

**Condition:** Users can be identified based on certain conditions. Ex, if the Plant Region is equal to EUROPE, then OwnerID would be "Jane Doe"

**Note:** In this scenario, we will select the **User** option. The user selected or populated in this field must have access to the recommendation category.

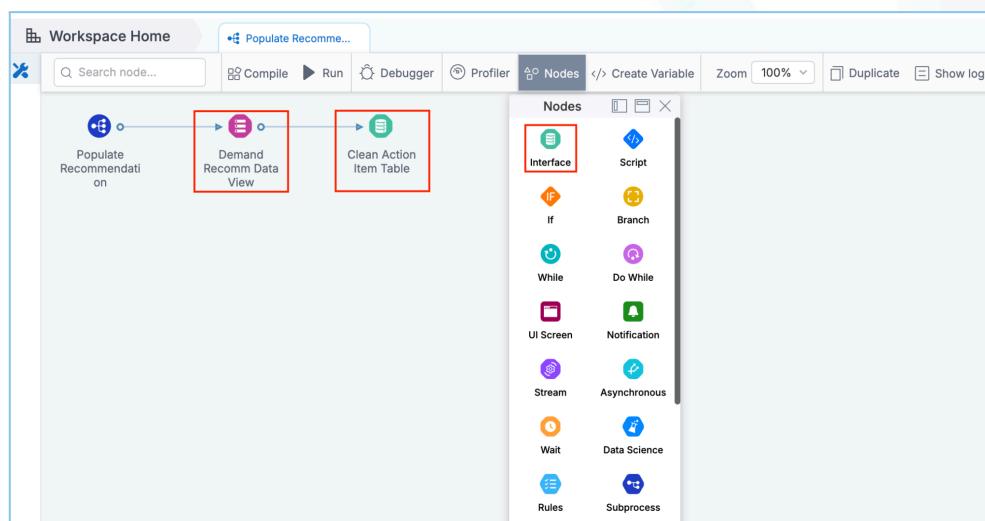
## Truncate Action Item Table

1. Go to Workspace Home and click on **Interfaces**. Create a new folder by the name **Truncate Recommendation**.

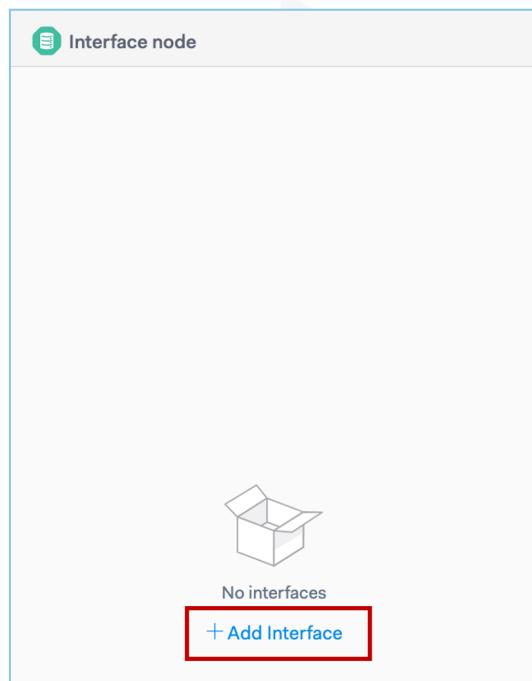


The screenshot shows the Aera Workspace Home interface. On the left, there's a sidebar with categories like Data, Datasets, Streams, Dimensions, Subject Areas, Data Views, Execution Plan, and Interfaces. The 'Interfaces' category is highlighted with a red box. The main area shows a table titled 'Interfaces' with one row. The row has a 'Name' column containing 'Truncate Recommendation' (also highlighted with a red box), and columns for 'Attributes', 'Created On' (Apr 2, 2025 at 06:07), and 'Last Updated'. At the top right, there are buttons for 'New Folder' and 'New Object', both highlighted with red boxes.

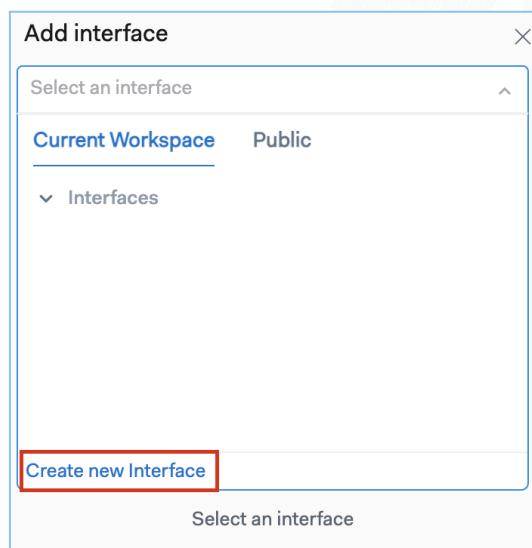
2. Go back to the process, drag the **Interface node** onto the Demand Recomm Data View node, then rename it to **Clean Action Item Table**.



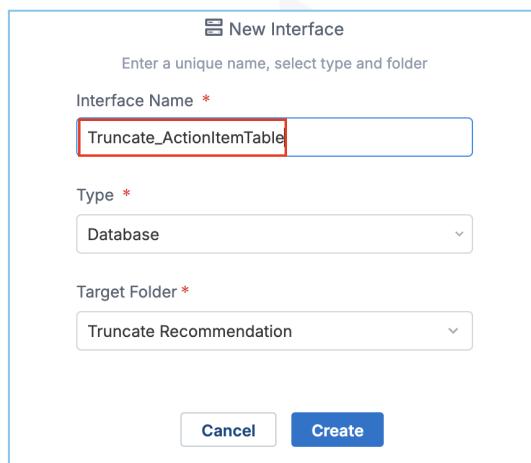
3. Close the **Nodes** window and click on the **Clean Action Item Table** Node.
4. On the **Interface Node** property panel displayed on the right, click on **Add Interface** to create a new Interface.



5. A new window opens, asking you to add an interface. Click the dropdown and then click the **Create New Interface** option.



6. In the **Create New Interface** window, give the Interface Name as **Truncate\_ActionItemTable**
7. Make sure the Interface Type is **Database**, and choose the Folder that you created earlier in the interface panel: **Truncate Recommendation**.
8. Click **Create**.



New Interface

Enter a unique name, select type and folder

Interface Name \*

Type \*

Database

Target Folder \*

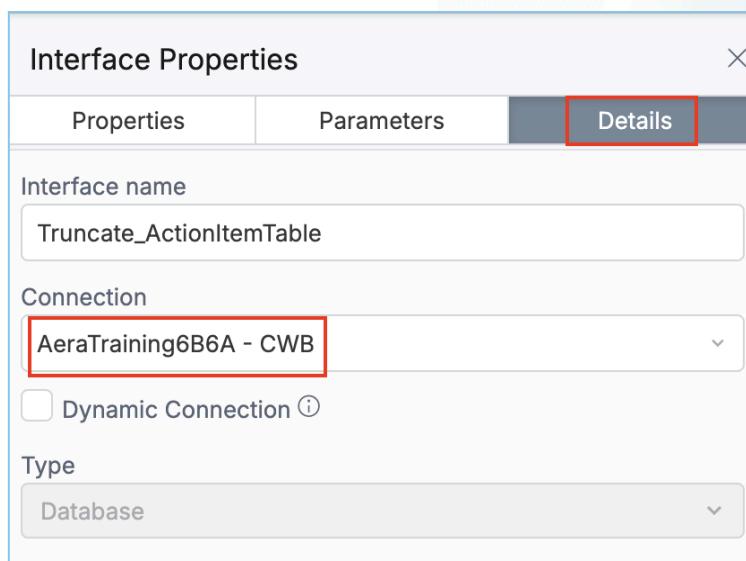
Truncate Recommendation

Cancel Create

- A new tab, **Truncate\_ActionItemTable**, opens up along with the Interface properties window on the left.

## Configure the Interface Node

- Go to the **Details** tab in this window, and from the connection dropdown, choose the **CWB** connection. Click **Save**.



Interface Properties

Properties	Parameters	Details
------------	------------	---------

Interface name

Truncate\_ActionItemTable

Connection

AeraTraining6B6A - CWB

Dynamic Connection

Type

Database

Choose the connection ending with - **CWB**

- On the left side of the interface Properties, copy and paste the below query to truncate the action item table to avoid duplicate records. Click **Save**.

```
truncate table actionmessage_<Username>_Demand_Recomm;
```

Replace the Action Item name highlighted in Red with the Action Item.

**Note:** The truncation of the action item table in the Decision Workbench is typically done to manage and refresh the data that is displayed. This process ensures that outdated or

irrelevant data is removed, allowing for the most current and relevant recommendations or tasks to be displayed.

## Configure Action Item Node

- Click on "**Create new variable**" to set up a Process status variable for use in the Action Item Node.

Populate Recommendation					
Process Node					
Process Variables		Global Variables	Session Variables		
<a href="#">+ Create new variable</a>				<input type="text"/> Search...	
Name	Type	Value	Array	Public	
Input_Variable_for_recomm	UserType		<input checked="" type="checkbox"/>	<input type="checkbox"/>	  
materialNumber	String		<input type="checkbox"/>	<input type="checkbox"/>	  
materialDescription	String		<input type="checkbox"/>	<input type="checkbox"/>	  
plantCode	String		<input type="checkbox"/>	<input type="checkbox"/>	  
plantDescription	String		<input type="checkbox"/>	<input type="checkbox"/>	  
recommendation	String		<input type="checkbox"/>	<input type="checkbox"/>	  
ownerID	String	John Doe	<input type="checkbox"/>	<input type="checkbox"/>	  
dateJohn	String		<input type="checkbox"/>	<input type="checkbox"/>	  
aeraForecast	Double	0	<input type="checkbox"/>	<input type="checkbox"/>	  
plannerForecast	Double	0	<input type="checkbox"/>	<input type="checkbox"/>	  
revenueImpact	Double	0	<input type="checkbox"/>	<input type="checkbox"/>	  
variance	Double	0	<input type="checkbox"/>	<input type="checkbox"/>	  

- Provide the name **Output\_Var** and select its type as **UserType**. Ensure that this variable is not an **Array**.

Populate Recommendation					
Process Node					
Process Variables		Global Variables	Session Variables		
<a href="#">+ Create new variable</a>				<input type="text"/> Search...	
Name	Type	Value	Array	Public	
Input_Variable_for_recomm	UserType		<input checked="" type="checkbox"/>	<input type="checkbox"/>	  
Output_Var	UserType		<input type="checkbox"/>	<input type="checkbox"/>	  

- Next, Click the Output\_Var and create the following Sub Variables:

Name: status

Type: String

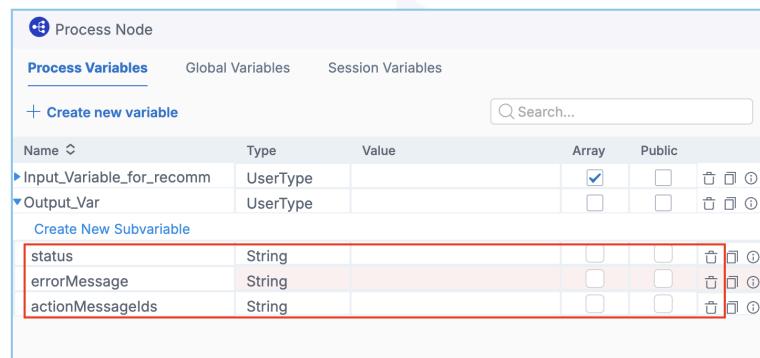
Name: errorMessage

Type: String

Name: actionMessageIds

Type: String

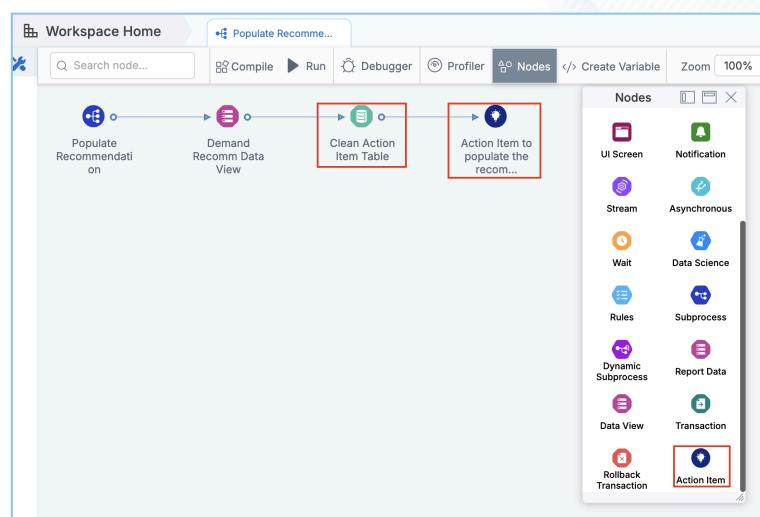
These variables are case-sensitive hence, use the naming convention as shown.



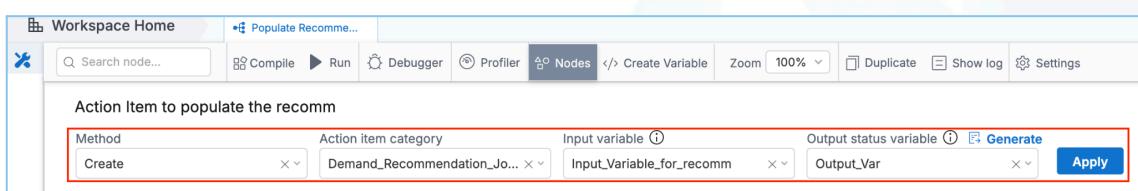
Process Variables

Name	Type	Value	Array	Public
Input_Variable_for_recomm	UserType		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Output_Var	UserType		<input type="checkbox"/>	<input type="checkbox"/>
Create New Subvariable				
status	String		<input type="checkbox"/>	<input type="checkbox"/>
errorMessage	String		<input type="checkbox"/>	<input type="checkbox"/>
actionMessageIds	String		<input type="checkbox"/>	<input type="checkbox"/>

4. Click **Save** and close the process variables property panel.
5. Next, drag the **Action Item node** over the Interface node and rename the node as **Action Item to populate recomm.**



6. Click on the **Action Item to populate the recomm** node, select the following details, and then click **Apply**.



Action Item to populate the recomm

Method	Action item category	Input variable	Output status variable	Generate
Create	Demand_Recommendation_Jo...	Input_Variable_for_recomm	Output_Var	<input checked="" type="checkbox"/>

7. The **System columns** and **Custom columns** will be displayed.
8. In the **System columns** tab, provide the details as shown below, and click **Save**.

Action Item to populate recomm

Method: Create Action item category: Demand\_Recommendation\_John Input variable: Input\_Variable\_for\_recomm Output status variable: Output\_Var

System Columns  Custom Columns  Selected columns

	Variable	Expression	Condition
<input checked="" type="checkbox"/> Title	Variable	Expression	Condition
<input checked="" type="checkbox"/> Description	Variable	Expression	Condition
<input checked="" type="checkbox"/> Recommended Action	Variable	Mnemonic	Condition
<input checked="" type="checkbox"/> Status	Variable	Mnemonic	Condition
<input checked="" type="checkbox"/> Priority	Variable	Mnemonic	Condition
<input checked="" type="checkbox"/> Due Date	Variable	Expression	Condition
<input checked="" type="checkbox"/> Owner Id	Variable	User	Condition
<input type="checkbox"/> Net Impact	Variable	Expression	Condition

Demand Recommendation John Doe details

Detailed view of Demand Forecast

ACCEPTED

PENDING

High

-5

John Doe

9. Next, select **Custom Columns**, update the details as shown, and click **Save**.

Action Item to populate the recomm

Method: Create Action item category: Demand\_Recommendation\_John Input variable: Input\_Variable\_for\_recomm Output status variable: Output\_Var

System Columns  Custom Columns  Selected columns

	Variable	Expression	Condition
<input checked="" type="checkbox"/> Material Number	Variable	Expression	Condition
<input checked="" type="checkbox"/> Material Description	Variable	Expression	Condition
<input checked="" type="checkbox"/> Plant Code	Variable	Expression	Condition
<input checked="" type="checkbox"/> Plant Description	Variable	Expression	Condition
<input checked="" type="checkbox"/> Date_John	Variable	Expression	Condition
<input checked="" type="checkbox"/> Planner Forecast	Variable	Expression	Condition
<input checked="" type="checkbox"/> Aera Forecast	Variable	Expression	Condition
<input checked="" type="checkbox"/> Variance	Variable	Expression	Condition

Action Item to populate the recomm

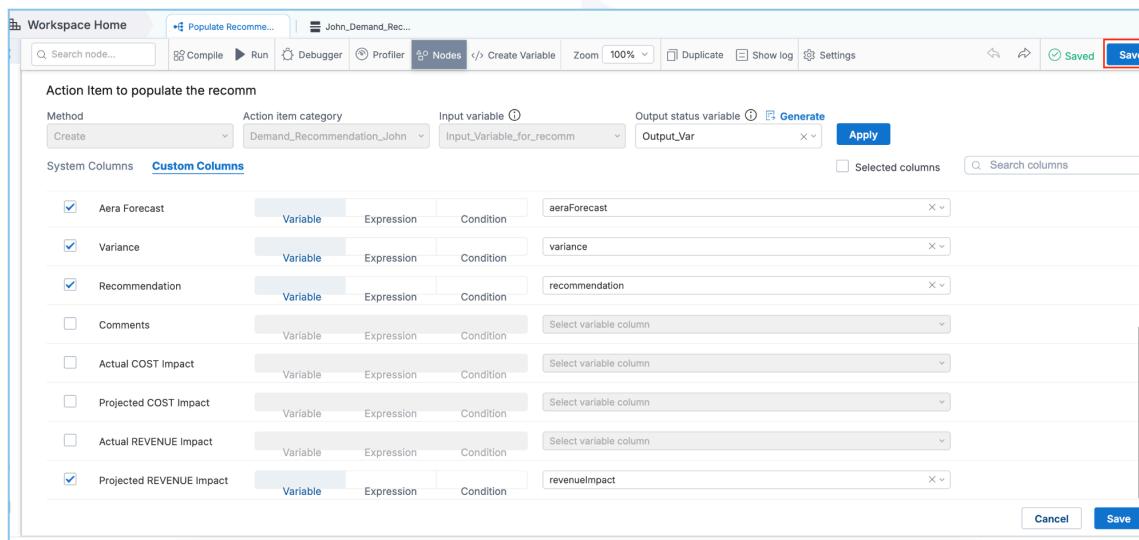
Method: Create Action item category: Demand\_Recommendation\_John Input variable: Input\_Variable\_for\_recomm Output status variable: Output\_Var

System Columns  Custom Columns  Selected columns

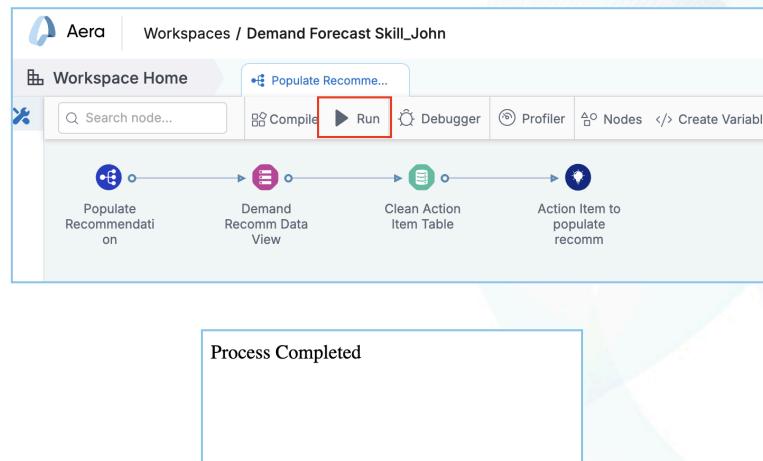
<input checked="" type="checkbox"/> Aera Forecast	Variable	Expression	Condition	aeraForecast
<input checked="" type="checkbox"/> Variance	Variable	Expression	Condition	variance
<input checked="" type="checkbox"/> Recommendation	Variable	Expression	Condition	recommendation
<input type="checkbox"/> Comments	Variable	Expression	Condition	Select variable column
<input type="checkbox"/> Actual COST Impact	Variable	Expression	Condition	Select variable column
<input type="checkbox"/> Projected COST Impact	Variable	Expression	Condition	Select variable column
<input type="checkbox"/> Actual REVENUE Impact	Variable	Expression	Condition	Select variable column
<input checked="" type="checkbox"/> Projected REVENUE Impact	Variable	Expression	Condition	revenueImpact

10. The Action Item Node configurations are saved.

11. Now Click **Save** on the top right to save the process.

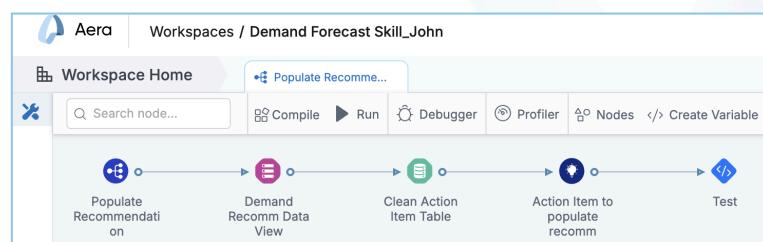


12. Click the "**Run**" button at the top of the process window. A new tab will open, displaying the message "Process Completed."

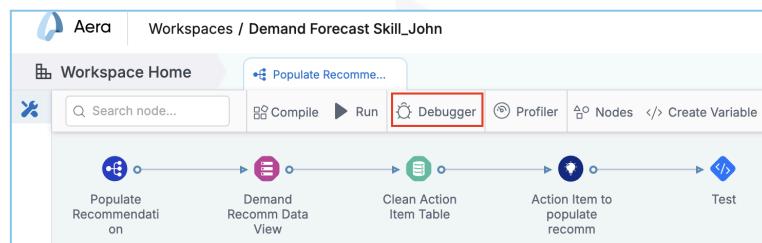


## Run the Steps if the recommendations are NOT populated

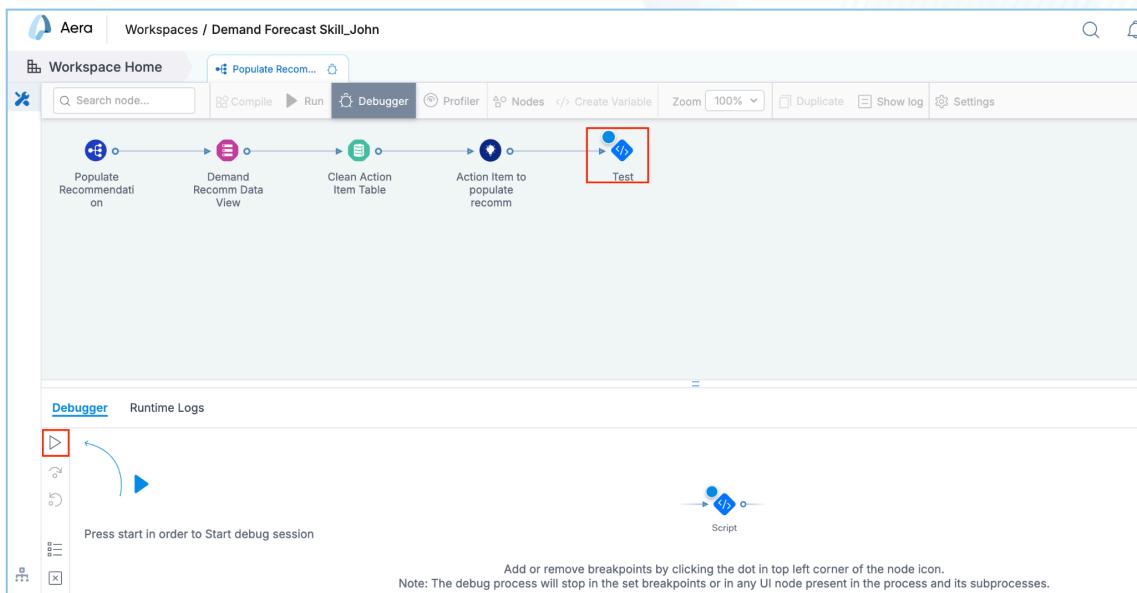
1. Close the Action Item Nodes page and return to the main process. From the nodes tab, drag the **Script** node over the **Action Item** node.
2. Provide the name **Test** and then click **Save**.



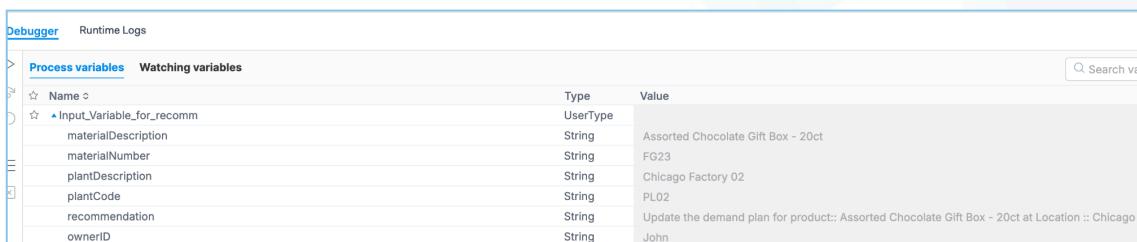
3. Click on **Debugger**.



- Click on the dot next to the **Test** node and run the Debugger.

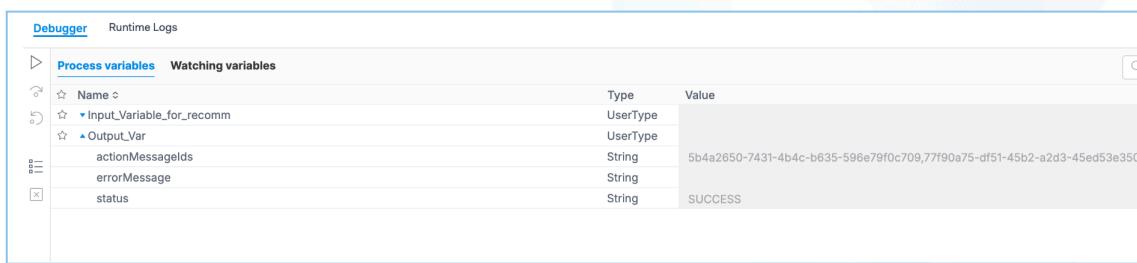


- Review the information shown as part of the input and output variables.



The screenshot shows the "Process variables" tab in the debugger. It lists variables under "Watching variables" with their types and values:

Name	Type	Value
<input checked="" type="checkbox"/> Name	UserType	
<input checked="" type="checkbox"/> Input_Variable_for_recomm	String	Assorted Chocolate Gift Box - 20ct
materialDescription	String	FG23
materialNumber	String	Chicago Factory 02
plantDescription	String	PL02
plantCode	String	
recommendation	String	Update the demand plan for product: Assorted Chocolate Gift Box - 20ct at Location :: Chicago F
ownerID	String	John



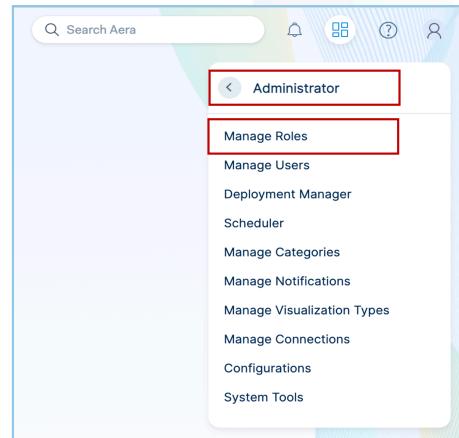
The screenshot shows the "Watching variables" tab in the debugger. It lists variables with their types and values:

Name	Type	Value
<input checked="" type="checkbox"/> Name	UserType	
<input checked="" type="checkbox"/> Input_Variable_for_recomm	UserType	
<input checked="" type="checkbox"/> Output_Var	String	5b4a2650-7431-4b4c-b635-596e79f0c709,77f90a75-df51-45b2-a2d3-45ed53e350
actionMessageIds	String	
errorMessage	String	SUCCESS
status	String	

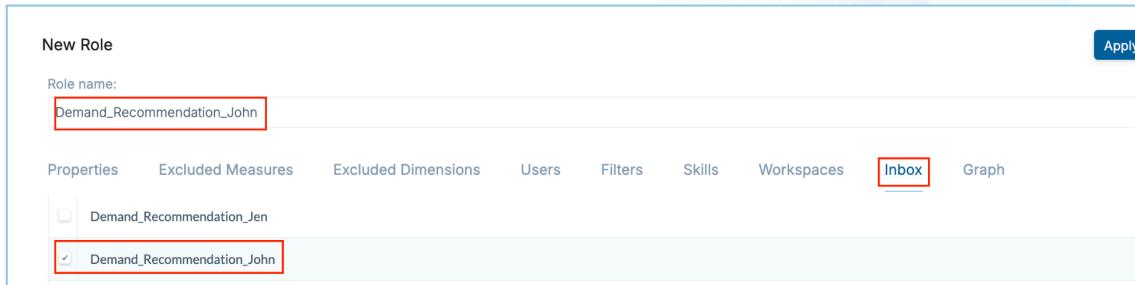
## Create and Assign Role to a Category

The three steps of Assigning a role are reproduced here for you to review, and you are not required to carry out this task.

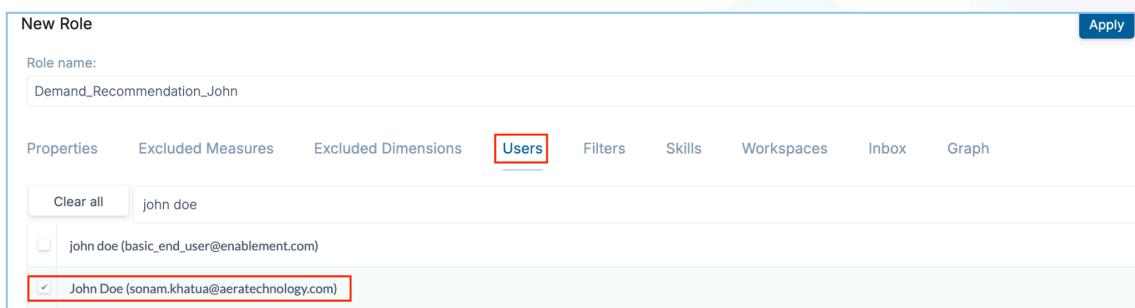
- On the main page, select **Manage Roles** under the user dropdown in the upper right-hand corner of the screen.



- Create a new role with the name **Demand\_Recommendation\_<Username>** and select the **Demand Recommendation\_<Username>** in the **Inbox selection**.



- Select the users to assign to this role and click **Apply**.

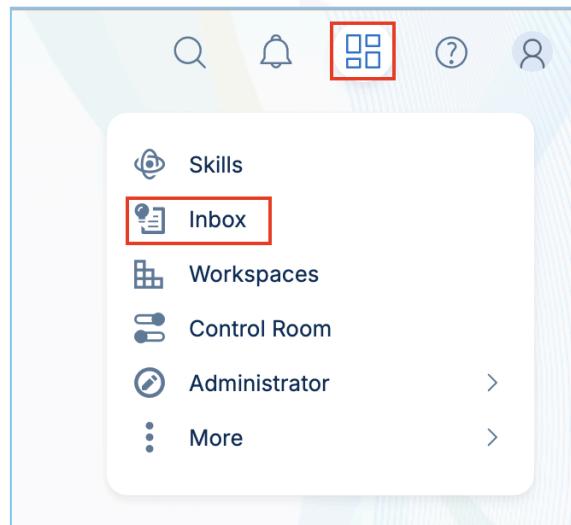


The setup for the recommendation skill is now complete, and we can now go to the Inbox and see the recommendation that was created.

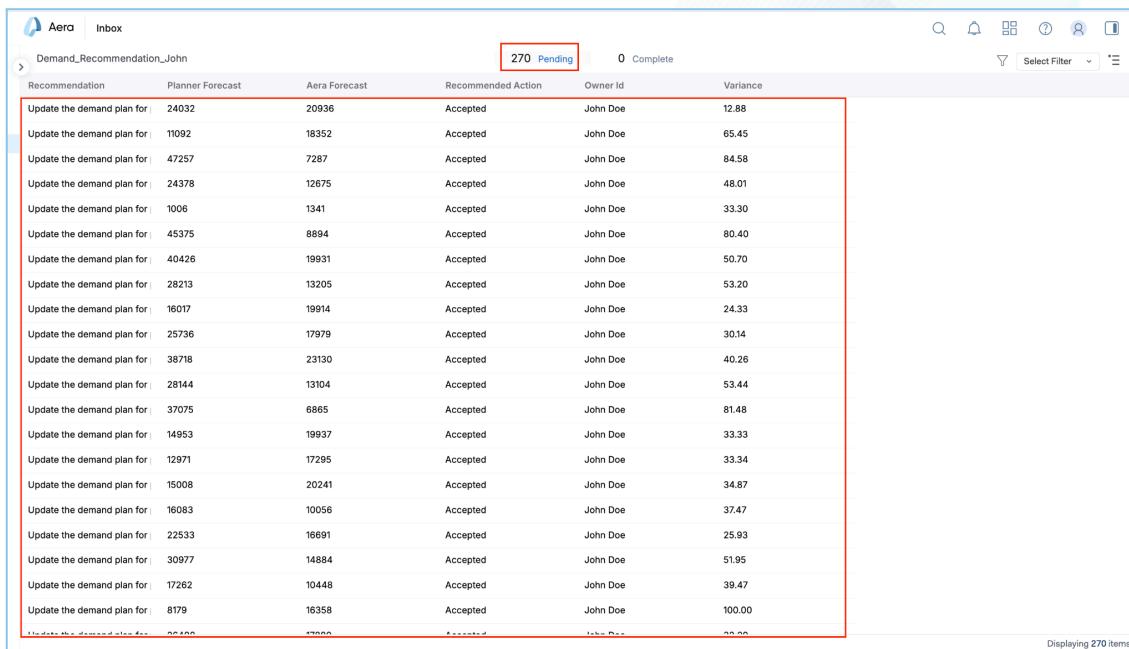
## View Recommendation in Inbox

To view the recommendation on receiving a confirmation that the role is assigned to you, follow the steps detailed below:

- Go to the Aera Menu and click **Inbox**.



2. All the configured recommendations present in the project and assigned to the user role will be visible.



Recommendation	Planner Forecast	Aera Forecast	Recommended Action	Owner Id	Variance
Update the demand plan for 24032	20936		Accepted	John Doe	12.88
Update the demand plan for 11092	18352		Accepted	John Doe	65.45
Update the demand plan for 47257	7287		Accepted	John Doe	84.58
Update the demand plan for 24378	12675		Accepted	John Doe	48.01
Update the demand plan for 1006	1341		Accepted	John Doe	33.30
Update the demand plan for 45375	8894		Accepted	John Doe	80.40
Update the demand plan for 40426	19931		Accepted	John Doe	50.70
Update the demand plan for 28213	13205		Accepted	John Doe	53.20
Update the demand plan for 16017	19914		Accepted	John Doe	24.33
Update the demand plan for 25736	17979		Accepted	John Doe	30.14
Update the demand plan for 38718	23130		Accepted	John Doe	40.26
Update the demand plan for 28144	13104		Accepted	John Doe	53.44
Update the demand plan for 37075	6865		Accepted	John Doe	81.48
Update the demand plan for 14953	19937		Accepted	John Doe	33.33
Update the demand plan for 12971	17285		Accepted	John Doe	33.34
Update the demand plan for 15008	20241		Accepted	John Doe	34.87
Update the demand plan for 16083	10056		Accepted	John Doe	37.47
Update the demand plan for 22533	16691		Accepted	John Doe	25.93
Update the demand plan for 30977	14884		Accepted	John Doe	51.95
Update the demand plan for 17262	10448		Accepted	John Doe	39.47
Update the demand plan for 8179	16358		Accepted	John Doe	100.00

## SUMMARY

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In this hands-on exercise, you have:

- Configured the Inbox to display Aera's recommendations.
- Created and configured Action Items to enable actionable outcomes from the recommendations
- Defined the recommendation workflow by creating categories and sub-categories for better recommendation lifecycle management.
- Configured the Action Item Node to populate recommendations dynamically

- Used specific roles to control access and tailor how recommendations are viewed.