



PARTNER

## **Building Intelligent and Sustainability Scenario with SAP BTP**

### **EP320-SAP Analytics Cloud Maintenance Cost & Sustainability Planning**

#### **Exercise01 – Creating Public Dimensions and Planning Models in SAP Analytics Cloud**

This document will guide you step by step on the process of creating a Public Dimensions and Planning Models in SAP Analytics Cloud.

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## **DISCLAIMER**

All functionality presented here is subject to change and may be changed by SAP at any time for any reason without notice.

## **OBJECTIVE**

The objective of this exercise is to provide the steps needed to create SAP Analytics Cloud Public Dimensions and Planning Models.

## **SCENARIO**

This exercise follows the scenario you were introduced to in the demo Maintenance Cost & Sustainability Planning for Bagnoli & Co.

This exercise explains how to create public dimensions in SAP analytics cloud that can be used across the SAP Analytics Cloud Models.

The exercise also describes how to create SAP Analytics Cloud Planning Models utilizing the public dimensions created.

## ENVIRONMENT ACCESS – SAP ANALYTICS CLOUD

**Before the exercise, please obtain the Tenant details and Login Credentials of SAP Analytics Cloud provided to you as instruction below.**

**SAP Analytics Cloud** (To login SAP Analytics Cloud and perform the exercise.)

- Tenant URL
- Username: Your assigned User ID
- Password: Your assigned User Password

For the Bootcamp participants, please use the SAP Analytics Cloud tenant provided by SAP, and your assigned user id and password.

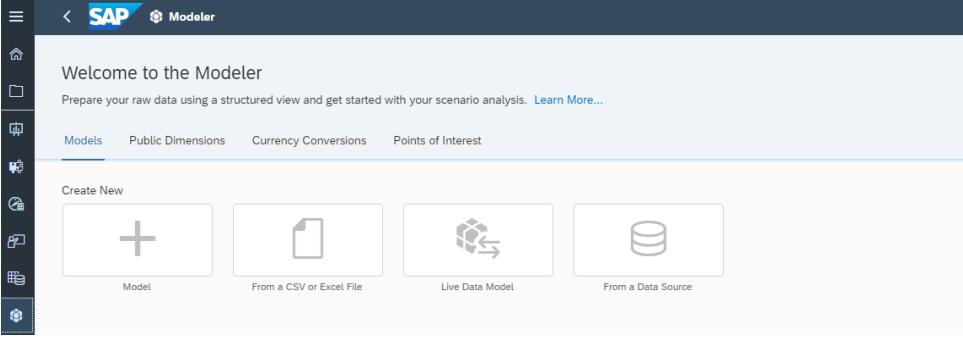
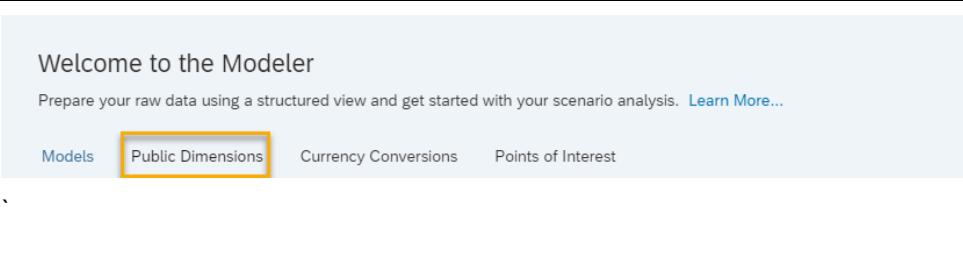
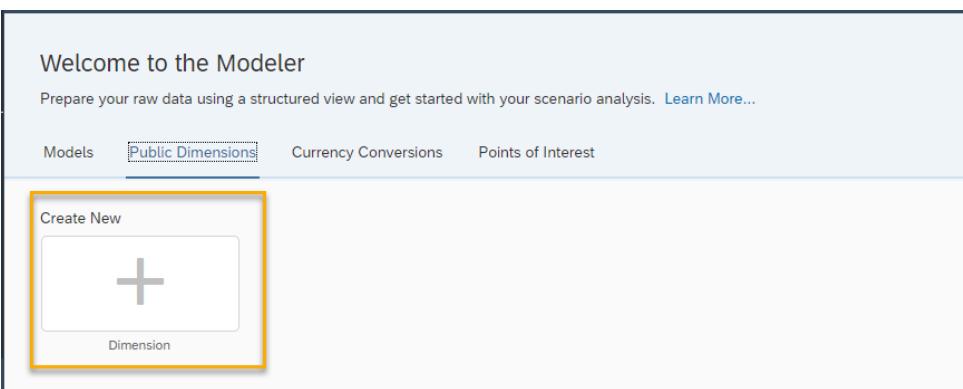
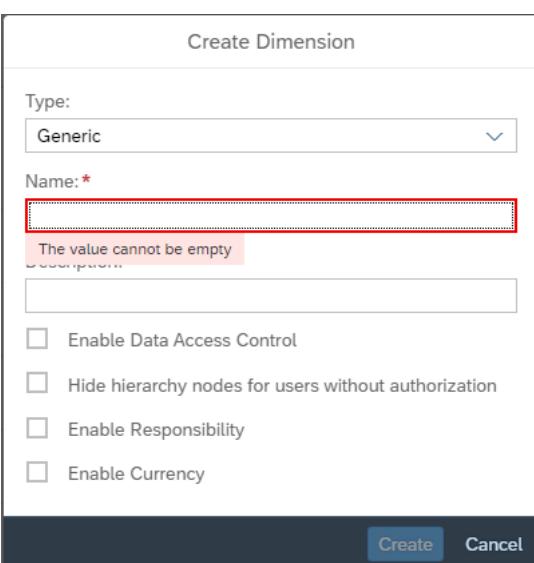
- The SAP Analytics cloud tenant URL is available in the dedicated Microsoft Teams > General (Channel) > System Access (Tab) > SAP Analytics Cloud (Section), which you have been invited.
- Your assigned user id and password for SAP Analytics Cloud are communicated individually via email.

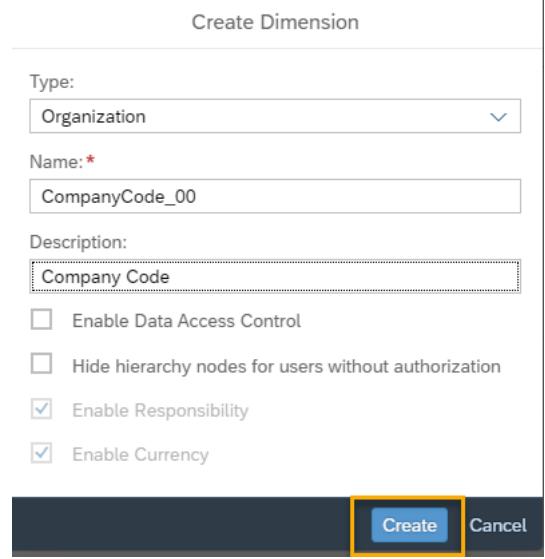
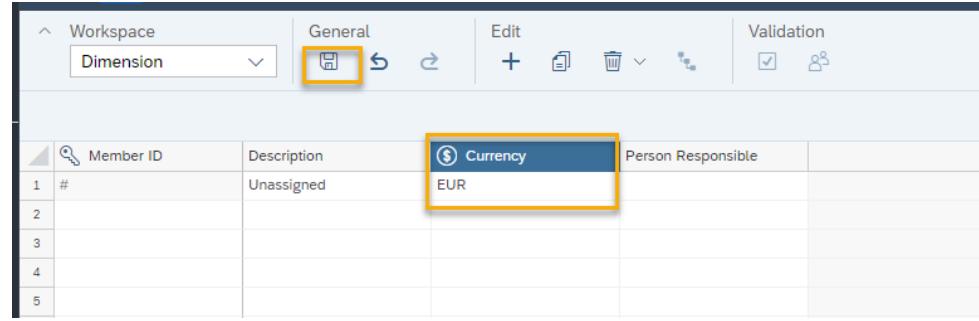
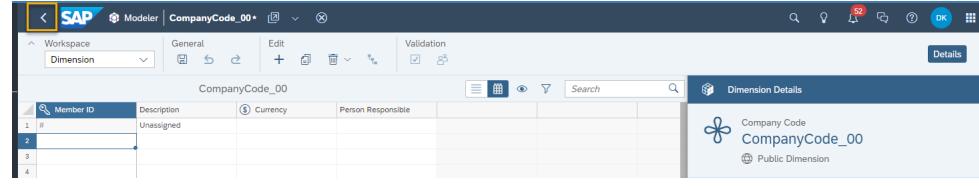
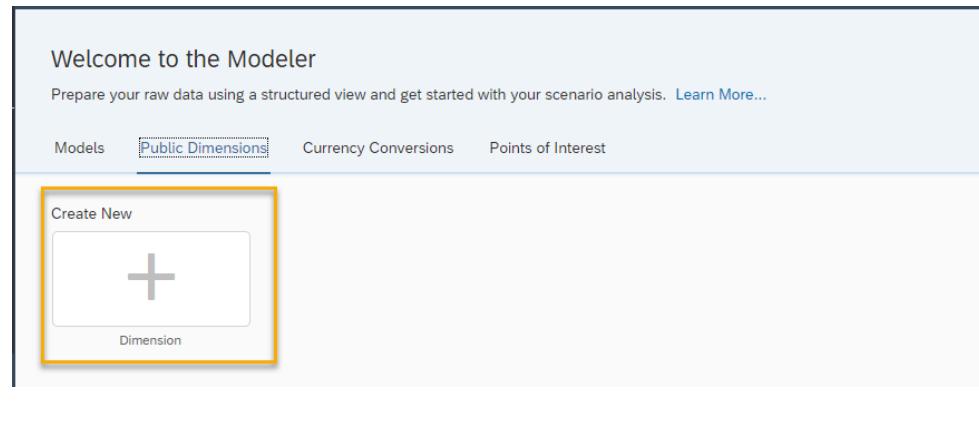
## PREREQUISITES

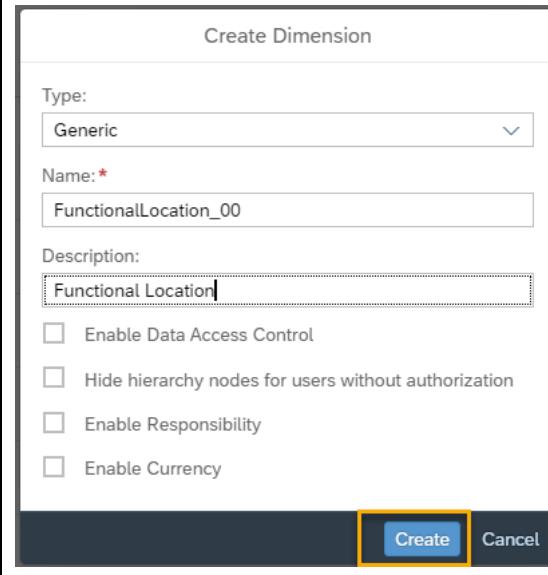
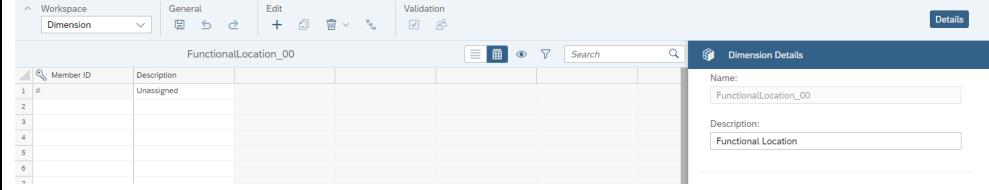
You have Access to SAP Analytics Cloud.

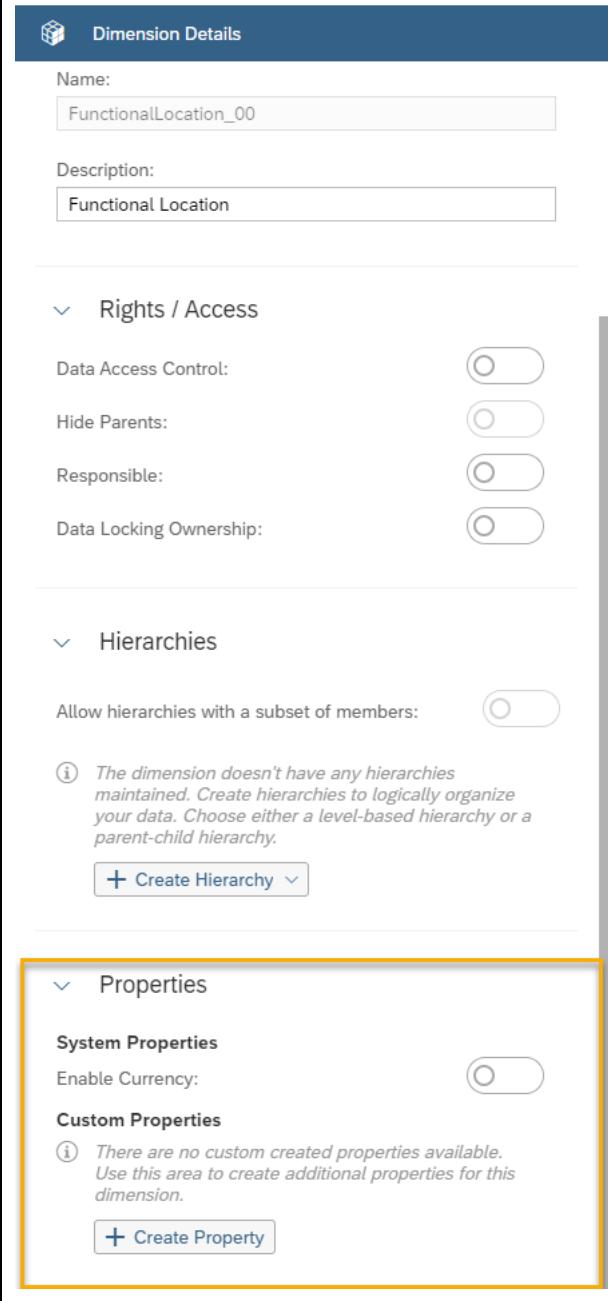
## EXERCISE STEP DETAILS

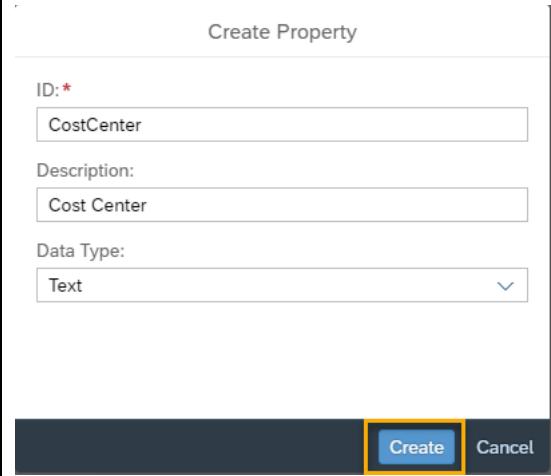
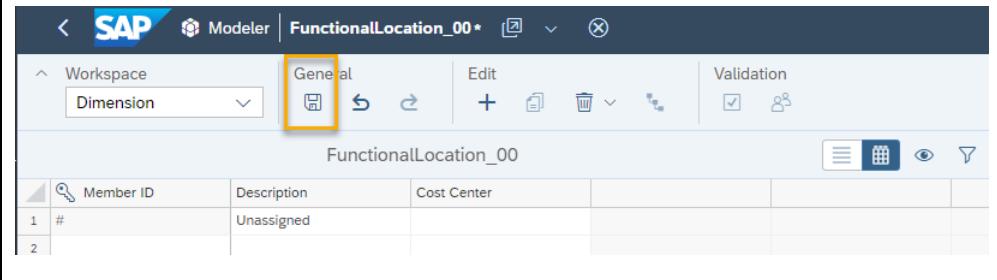
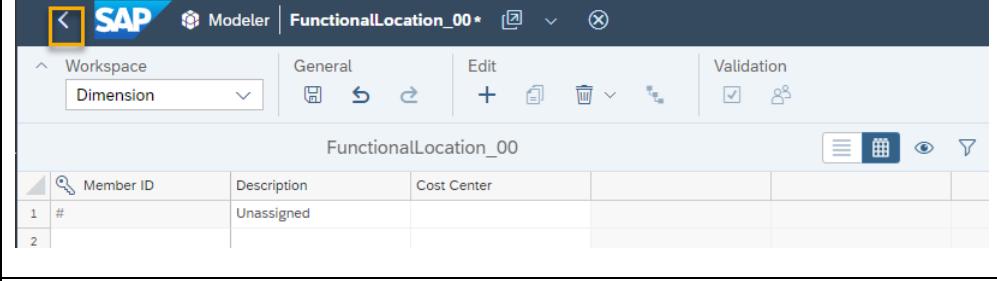
Explanation	Screenshot
<p>Log on to SAP Analytics Cloud with the given tenant URL and assigned user credential mentioned above.</p> <p>Go to the Home Screen.</p>	

Explanation	Screenshot
<p>Click on the Modeler Icon, The system opens SAP Analytics Cloud Modeler.</p> 	
<p>Click on Public Dimensions Tab to Navigate to the Public Dimension screen</p>	
<p>Click on Create New Public Dimension</p>	
<p>Pop Up to Create Public Dimension Appears</p>	

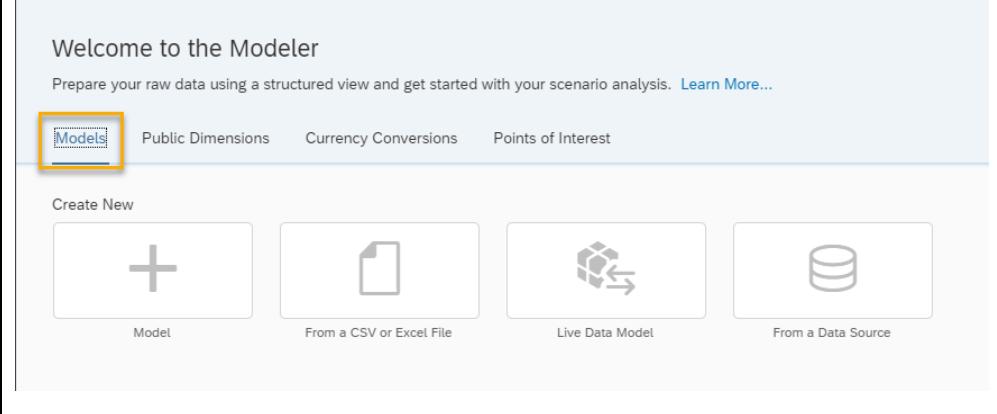
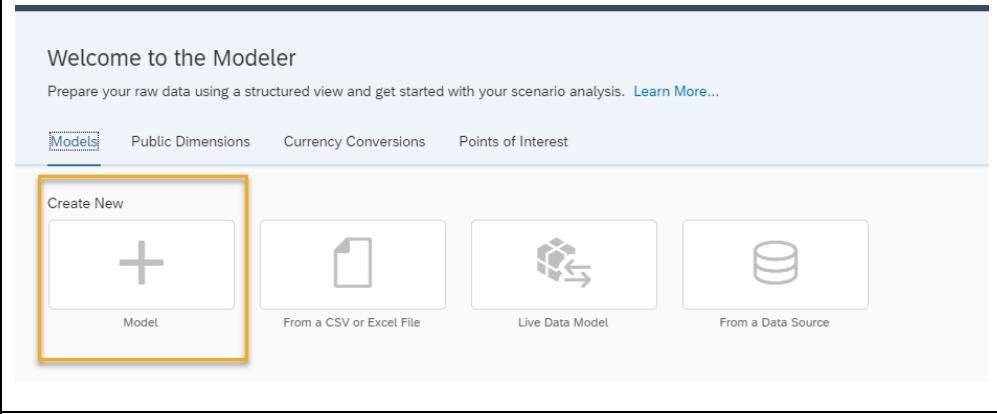
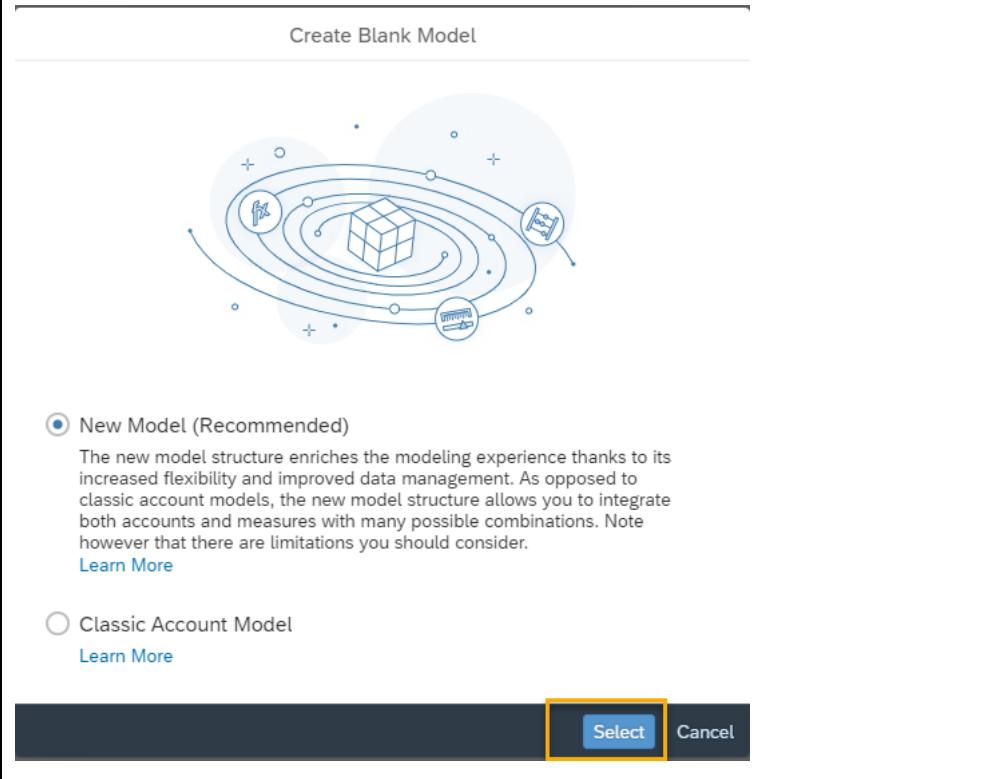
Explanation	Screenshot
<p>Provide Following Values and Click on Create</p> <ul style="list-style-type: none"> <li>• Type: Organisation</li> <li>• Name: CompanyCode_XX ( XX is the Participant ID)</li> <li>• Description : Company Code</li> <li>• Enable Currency and Enable Responsibility Options are selected by default</li> </ul>	
<p>The Screen to define Dimension opens with a dimension member # included. Maintain currency EUR for the # company code and click on Save to Save the newly created dimension</p>	
<p>Click Back to go back to the dimension definition screen</p>	
<p>In the Public Dimensions Screen Click on Create new Dimension</p>	

Explanation	Screenshot
<p>Provide Following Values and Click on Create</p> <ul style="list-style-type: none"> <li>• Type: Generic</li> <li>• Name: FunctionalLocation_XX</li> <li>• Description: Functional Location</li> </ul>	
<p>The Functional Location Dimension Definition screen opens</p>	

Explanation	Screenshot
<p>In the Details Sections navigate down to the section Properties and click on Create Property</p>	 <p>The screenshot shows the 'Dimension Details' configuration page. At the top, there are fields for 'Name' (FunctionalLocation_00) and 'Description' (Functional Location). Below these are sections for 'Rights / Access' and 'Hierarchies'. Under 'Hierarchies', there is a note about creating hierarchies and a 'Create Hierarchy' button. The bottom section, 'Properties', is highlighted with a yellow box. It contains two parts: 'System Properties' (with an 'Enable Currency' toggle switch) and 'Custom Properties'. The 'Custom Properties' section includes a note about creating additional properties and a 'Create Property' button.</p>

Explanation	Screenshot																				
<p>In the Create Property Dialogue box provide following and click on Create</p> <ul style="list-style-type: none"> <li>• Name: CostCenter</li> <li>• Description: Cost Center</li> <li>• Data Type: Text</li> </ul>																					
<p>Save the Dimension by clicking on Save</p>																					
<p>Click Back to go back to the dimension definition screen</p>																					
<p>Repeat the Dimension Creation process to create other public dimensions as described the table. ( XX is the participant ID)</p>	<table border="1" data-bbox="509 1389 1506 1649"> <thead> <tr> <th>Type</th> <th>Dimension ID</th> <th>Description</th> <th>Property</th> </tr> </thead> <tbody> <tr> <td>Generic</td> <td>CostCenter_XX</td> <td>Cost center</td> <td></td> </tr> <tr> <td>Generic</td> <td>Equipment_XX</td> <td>Equipment</td> <td>FunctionalLocation</td> </tr> <tr> <td>Generic</td> <td>MaintenanceCategory_XX</td> <td>Maintenance Category</td> <td></td> </tr> <tr> <td>Generic</td> <td>Plant_XX</td> <td>Plant</td> <td></td> </tr> </tbody> </table>	Type	Dimension ID	Description	Property	Generic	CostCenter_XX	Cost center		Generic	Equipment_XX	Equipment	FunctionalLocation	Generic	MaintenanceCategory_XX	Maintenance Category		Generic	Plant_XX	Plant	
Type	Dimension ID	Description	Property																		
Generic	CostCenter_XX	Cost center																			
Generic	Equipment_XX	Equipment	FunctionalLocation																		
Generic	MaintenanceCategory_XX	Maintenance Category																			
Generic	Plant_XX	Plant																			

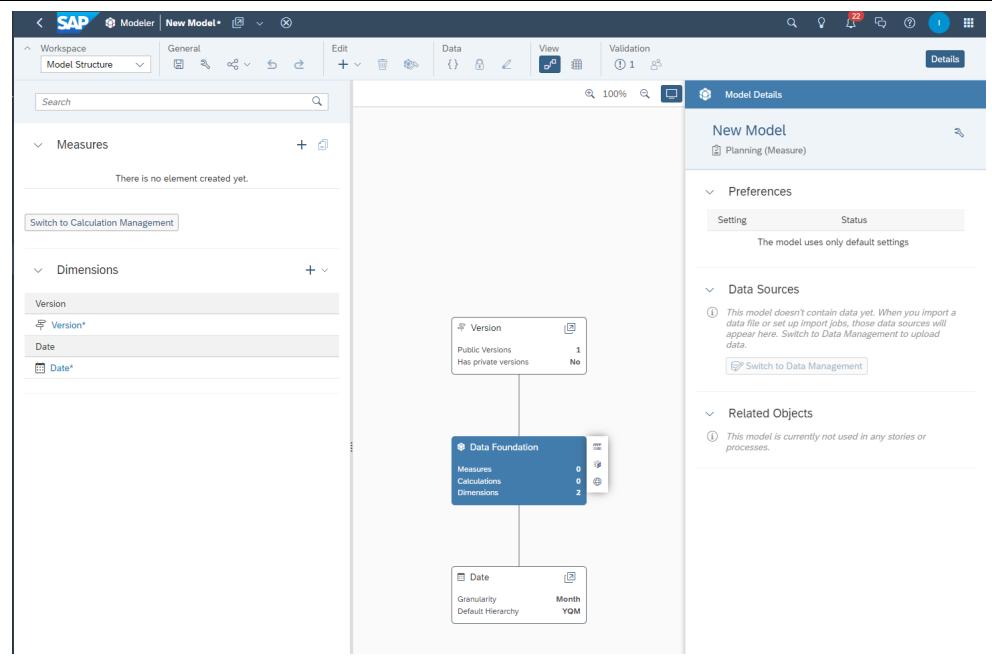
## Create SAP Analytics Cloud Model for Maintenance Cost Budgeting

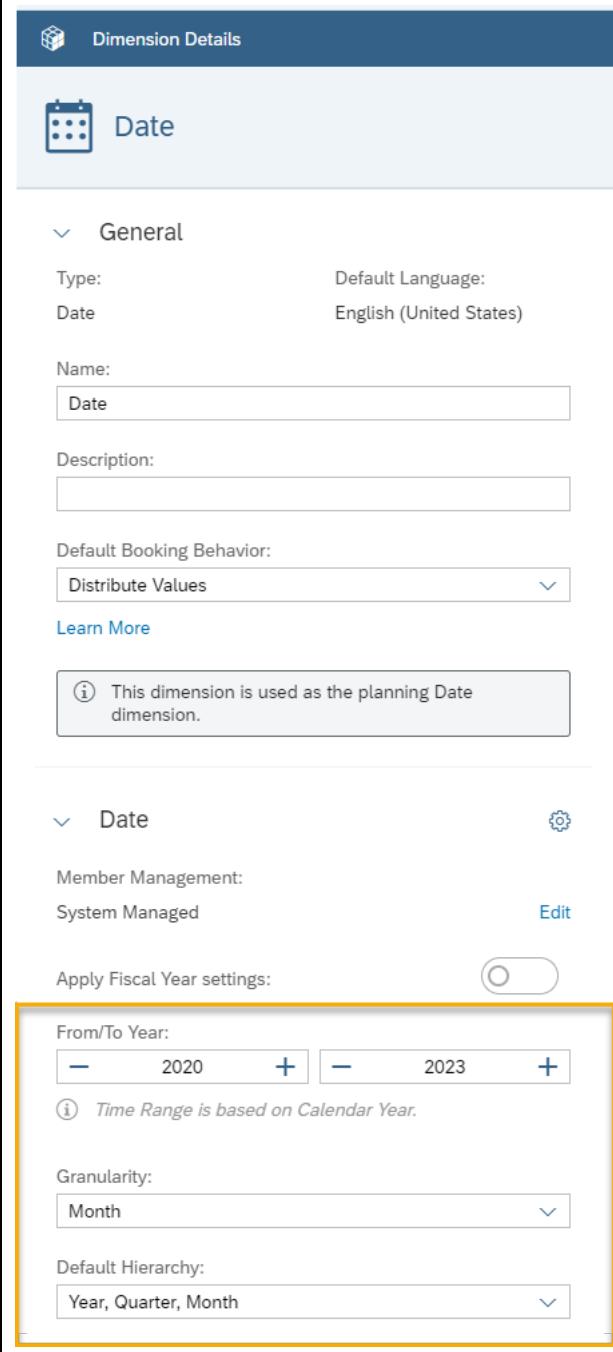
Explanation	Screenshot
Click on Models tab of SAP Analytics Cloud Modeler	
Click on Create New Model	
In the Model Creation popup choose New Model and click on Select	 <p>Create Blank Model</p> <p><input checked="" type="radio"/> New Model (Recommended)</p> <p>The new model structure enriches the modeling experience thanks to its increased flexibility and improved data management. As opposed to classic account models, the new model structure allows you to integrate both accounts and measures with many possible combinations. Note however that there are limitations you should consider.</p> <p><a href="#">Learn More</a></p> <p><input type="radio"/> Classic Account Model</p> <p><a href="#">Learn More</a></p> <p>Select Cancel</p>

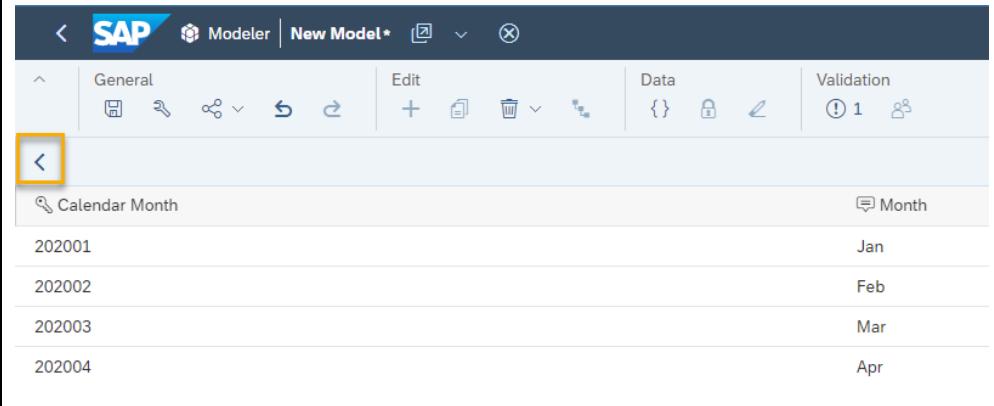
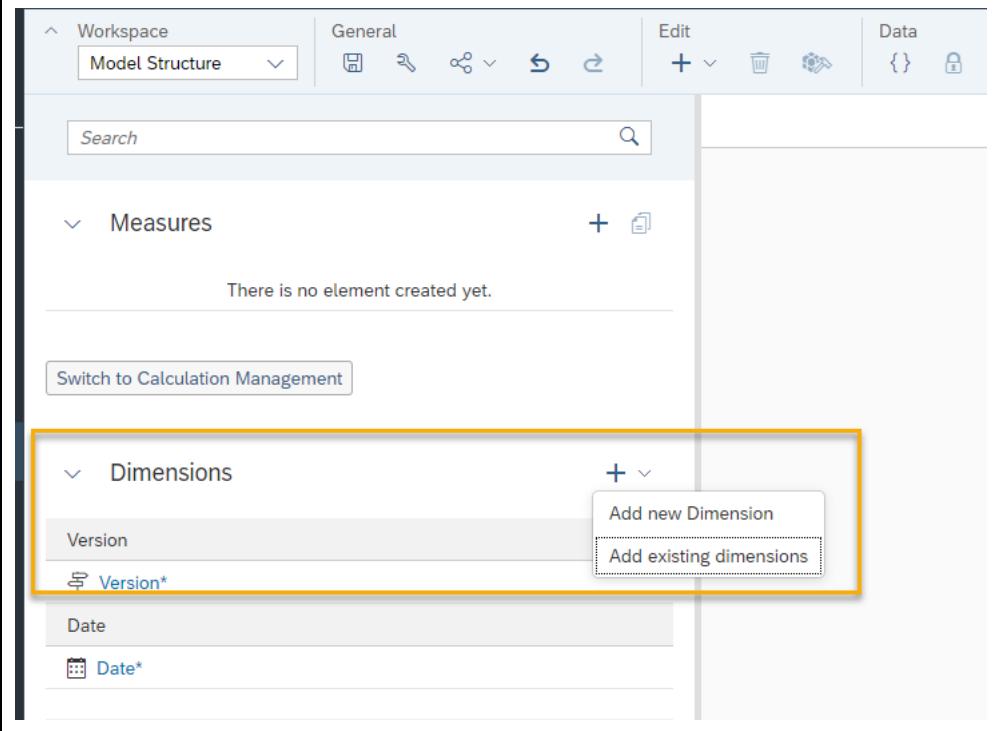
## Explanation

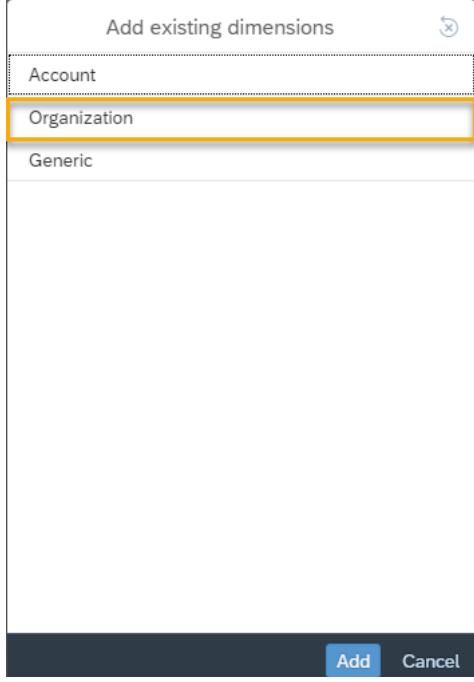
The system open Model Structure screen. Version and Date Dimensions are included by default

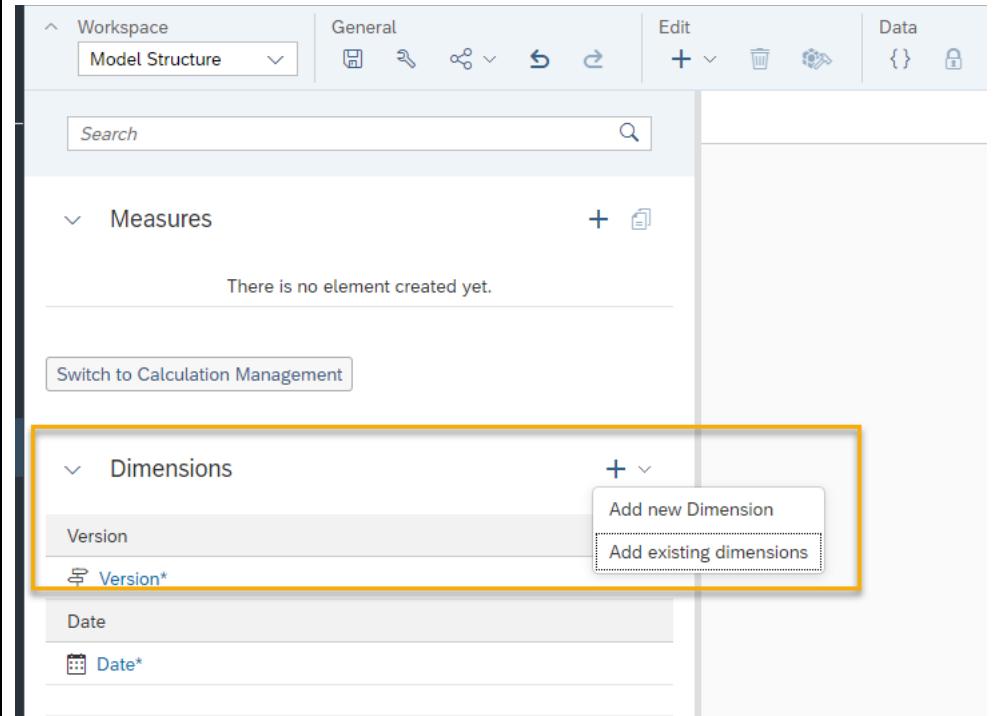
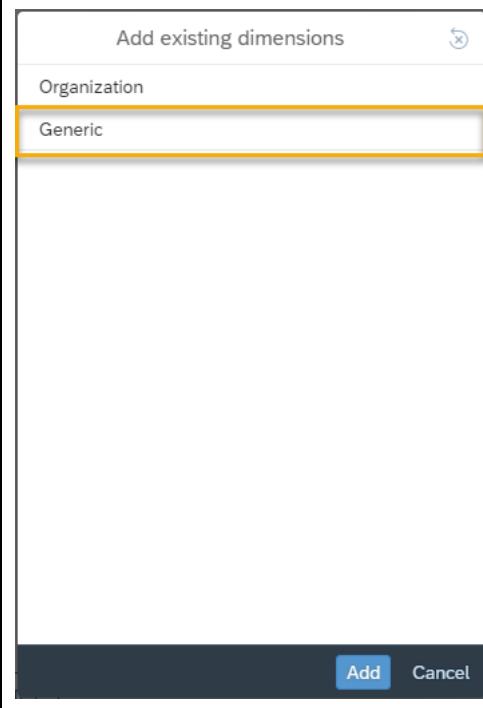
## Screenshot

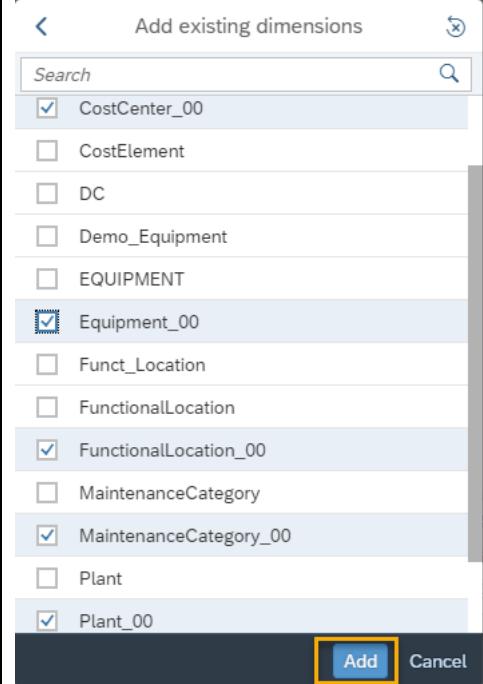


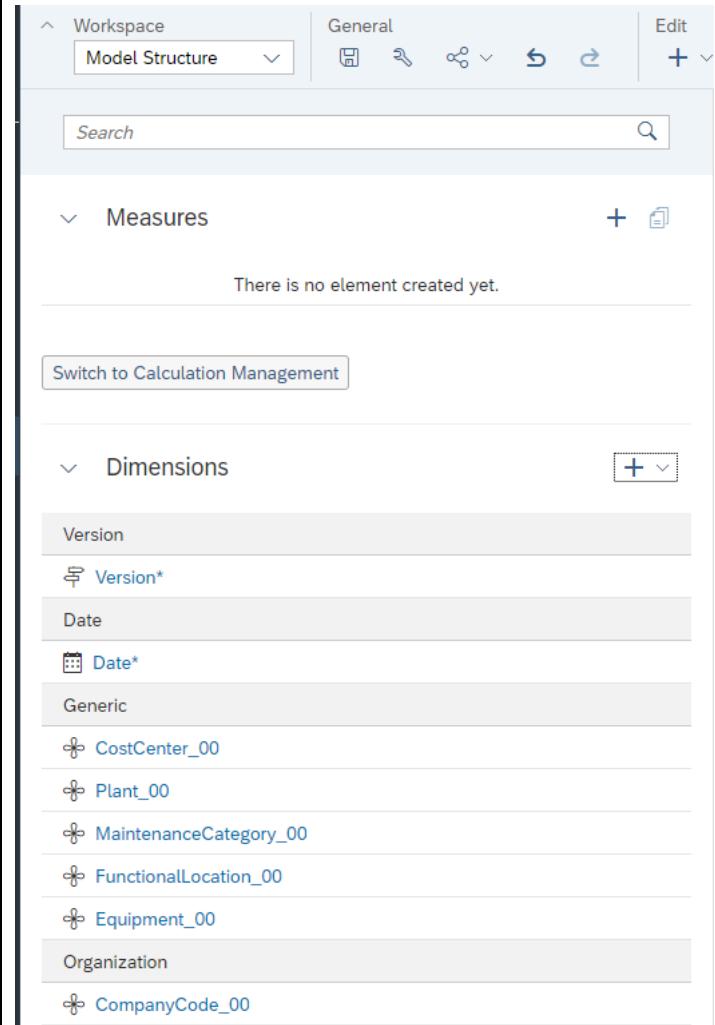
Explanation	Screenshot
<p>Click on the Date Dimension. In the Dimension Detail screen change the From/To years as 2020 - 2023</p>	 <p>The screenshot shows the 'Dimension Details' screen for the 'Date' dimension. The 'General' section includes fields for Type (Date), Default Language (English (United States)), Name (Date), and Description. A note states: 'This dimension is used as the planning Date dimension.' The 'Date' section shows Member Management as System Managed and has an 'Edit' button. A switch for 'Apply Fiscal Year settings' is shown. The 'From/To Year' range is set from 2020 to 2023. The 'Granularity' is set to Month, and the 'Default Hierarchy' is set to Year, Quarter, Month.</p>

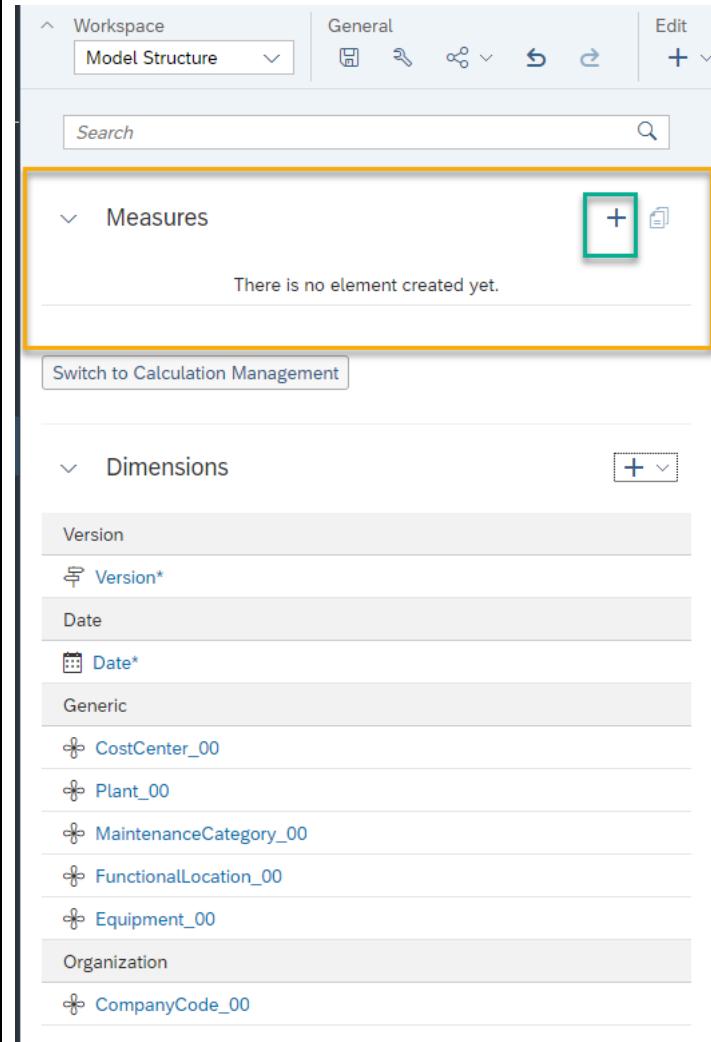
Explanation	Screenshot										
<p>Click Back  to go back to the Model Structure</p>	 <table border="1"> <thead> <tr> <th>Month</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Jan</td> <td>202001</td> </tr> <tr> <td>Feb</td> <td>202002</td> </tr> <tr> <td>Mar</td> <td>202003</td> </tr> <tr> <td>Apr</td> <td>202004</td> </tr> </tbody> </table>	Month	Value	Jan	202001	Feb	202002	Mar	202003	Apr	202004
Month	Value										
Jan	202001										
Feb	202002										
Mar	202003										
Apr	202004										
<p>In the model structure, Click  and choose Add existing dimensions to include dimensions in the model</p>	 <p>Workspace</p> <p>Model Structure</p> <p>General</p> <p>Edit</p> <p>Dimensions</p> <ul style="list-style-type: none"> <li>Add new Dimension</li> <li><b>Add existing dimensions</b></li> </ul> <p>Version</p> <p>Date</p>										

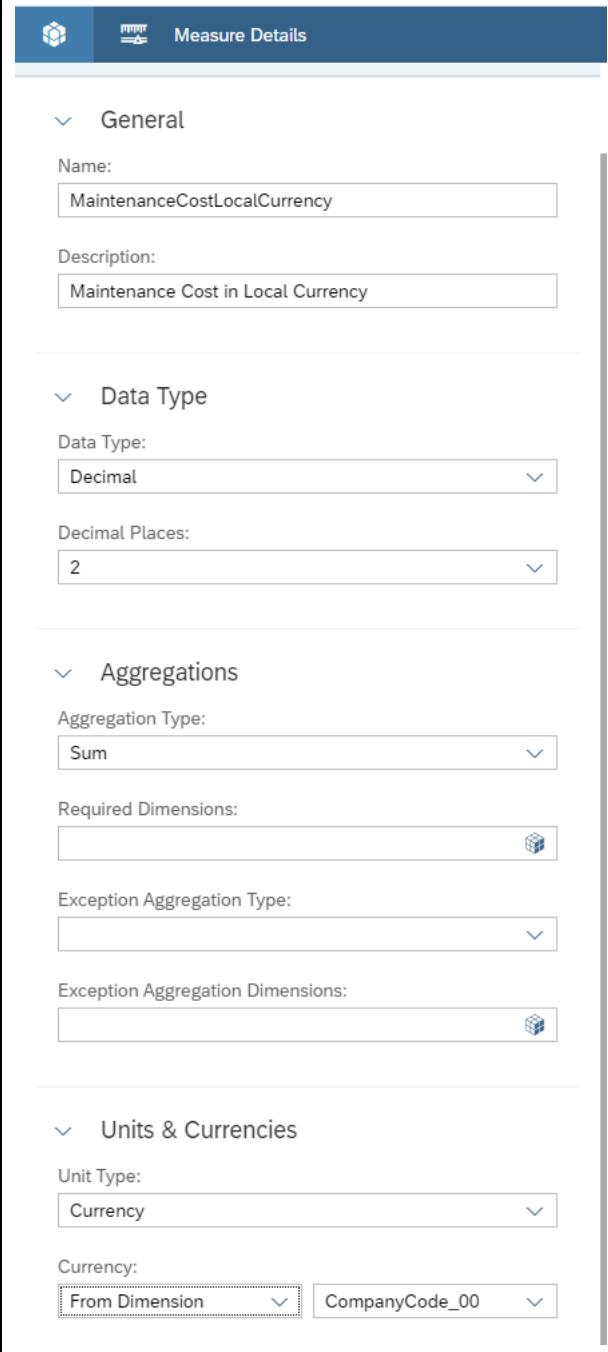
Explanation	Screenshot
Click on Organisation Dimension	 <p>Add existing dimensions</p> <p>Account</p> <p>Organization</p> <p>Generic</p> <p>Add Cancel</p>
Select Company Code Dimension created in previous exercise and click on Add. Company Code dimension gets added to the model	 <p>Add existing dimensions</p> <p>Search</p> <p>CompanyCode_00</p> <p>Add Cancel</p>

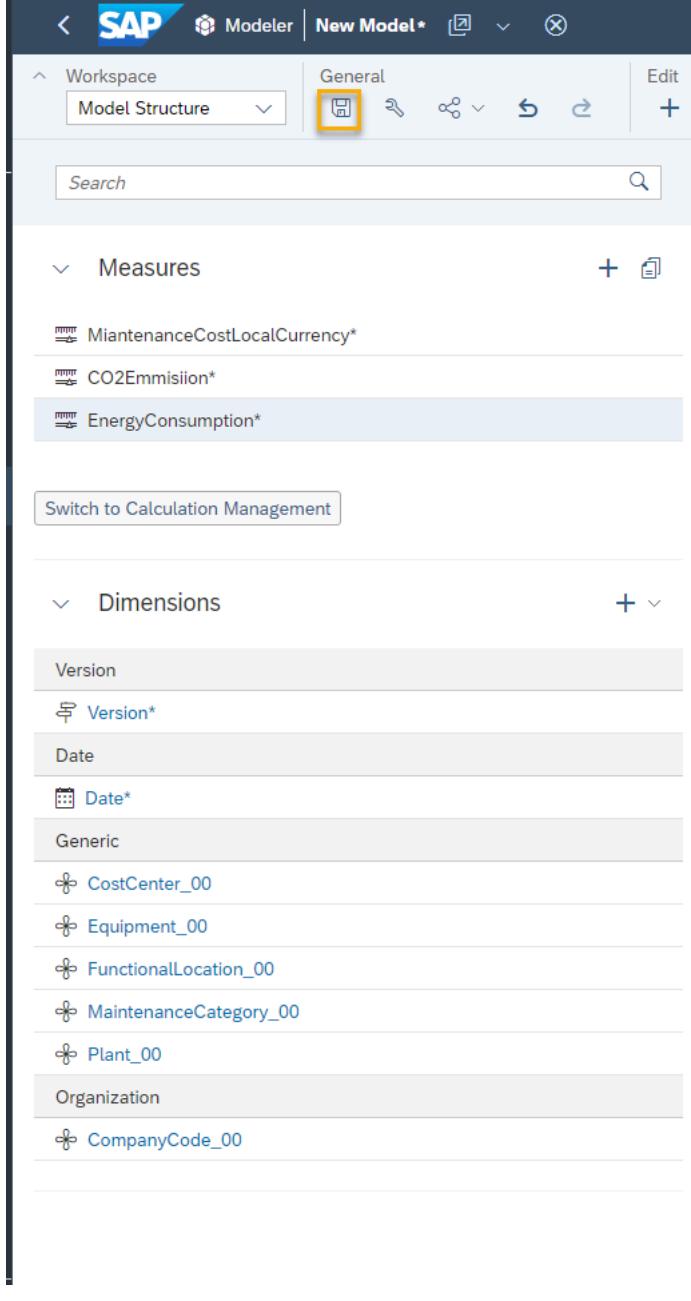
Explanation	Screenshot
<p>In the model structure, Click  and choose Add existing dimensions to include dimensions in the model</p>	 <p>The screenshot shows the 'Model Structure' workspace. At the top, there's a toolbar with 'General' and 'Edit' tabs. Below the toolbar is a search bar. Under the 'Measures' section, it says 'There is no element created yet.' A button labeled 'Switch to Calculation Management' is present. The main area is titled 'Dimensions'. It lists 'Version' and 'Date' as existing dimensions. To the right of 'Version' is a dropdown menu with 'Add new Dimension' and 'Add existing dimensions' options, both of which are highlighted with a yellow box.</p>
Click on Generic	 <p>The screenshot shows a modal dialog box titled 'Add existing dimensions'. It has a header with 'Add existing dimensions' and a close button. The main area is titled 'Organization' and contains a list with 'Generic' selected, highlighted with a yellow box. At the bottom of the dialog are 'Add' and 'Cancel' buttons.</p>

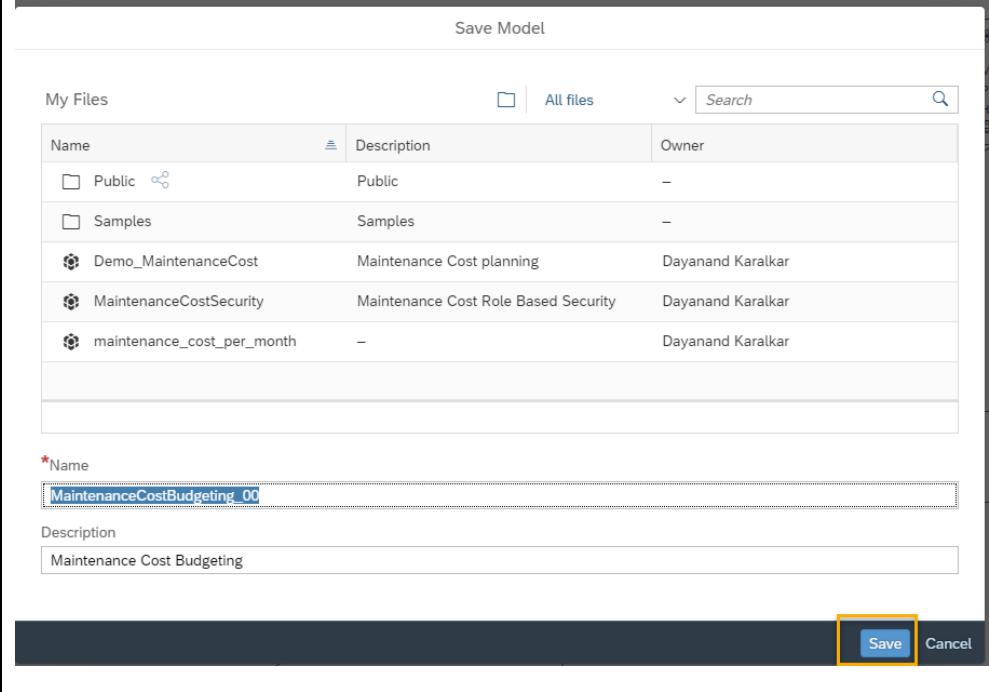
Explanation	Screenshot
<p>Select the following Generic Dimensions Created in the last Exercise and Click on Add,</p> <ul style="list-style-type: none"> <li>• Cost Center</li> <li>• Plant</li> <li>• FunctionalLocation</li> <li>• Equipment</li> <li>• MaintenanceCategory</li> </ul>	

Explanation	Screenshot
<p>Selected dimensions will be added to the Model</p>	 <p>The screenshot shows the SAP Fiori Model Structure workspace. The top navigation bar includes 'Workspace' (dropdown), 'General' (tab), and 'Edit' (button). A search bar is present. Below the navigation is a 'Measures' section with a '+' button and a note: 'There is no element created yet.' A 'Switch to Calculation Management' button is available. The main area is titled 'Dimensions' with a '+' button. It lists several dimension types: 'Version' (with a mandatory field 'Version*'), 'Date' (with a mandatory field 'Date*'), 'Generic', 'CostCenter_00', 'Plant_00', 'MaintenanceCategory_00', 'FunctionalLocation_00', 'Equipment_00', 'Organization', and 'CompanyCode_00'. Each dimension type has a corresponding icon.</p>

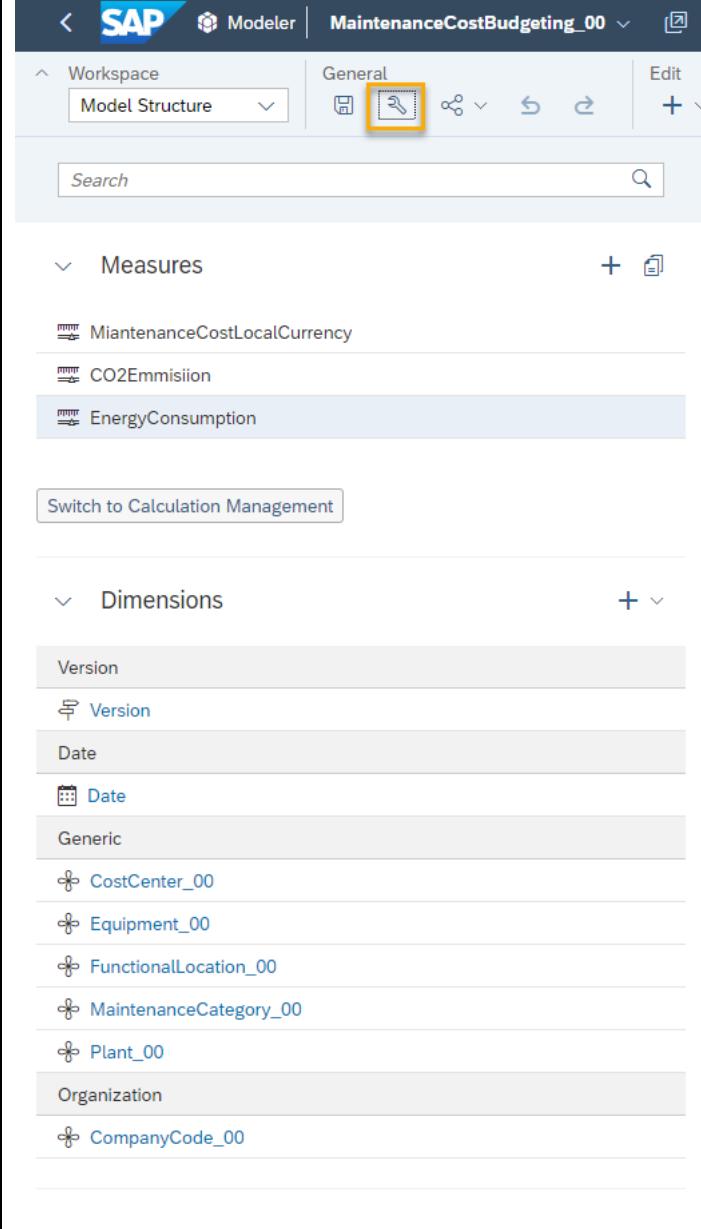
Explanation	Screenshot
<p>Click  to add Measures to the model</p>	 <p>The screenshot shows the SAP Fiori Model Structure workspace. At the top, there's a toolbar with icons for search, refresh, and edit. Below it is a search bar. The main area is divided into sections: 'Measures' and 'Dimensions'. The 'Measures' section has a green-bordered '+' button. Below it, a message says 'There is no element created yet.' The 'Dimensions' section also has a '+' button and lists several dimension types: Version, Date, Generic, CostCenter_00, Plant_00, MaintenanceCategory_00, FunctionalLocation_00, Equipment_00, Organization, and CompanyCode_00.</p>

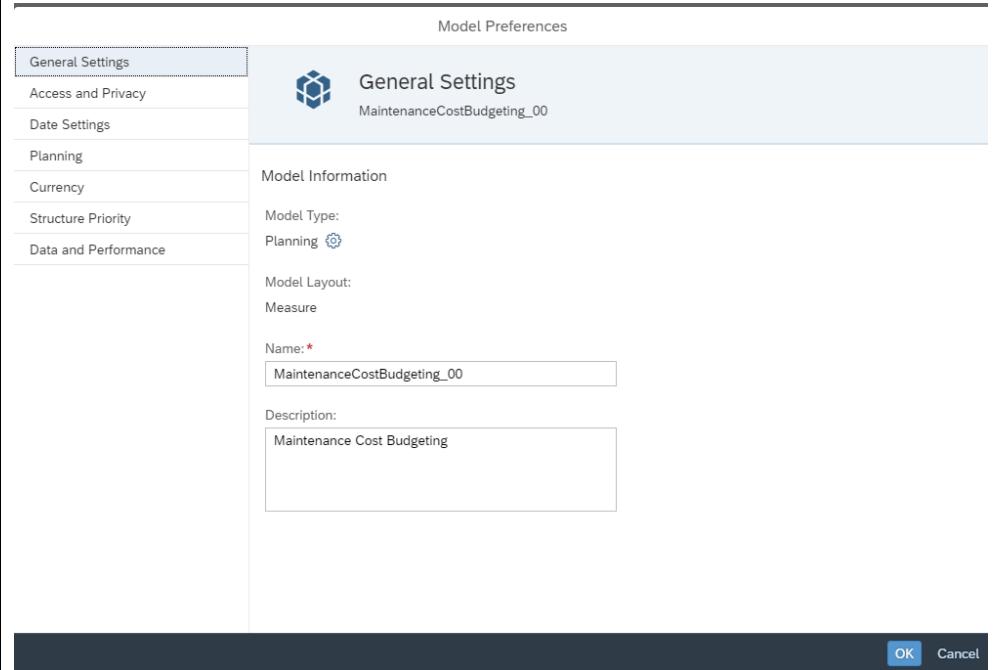
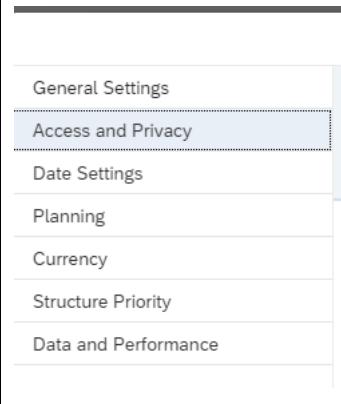
Explanation	Screenshot												
<p>Provide the Following information,</p> <ul style="list-style-type: none"> <li>• Name: MaintenanceCostLocalCurrency</li> <li>• Description: Maintenance Cost in Local Currency</li> <li>• Data Type: Decimal</li> <li>• Decimal:2</li> <li>• Aggregation: Sum</li> <li>• Unit Type: Currency</li> <li>• Currency: From Company Code</li> </ul>	 <p>The screenshot shows the 'Measure Details' screen in SAP Fiori. The top navigation bar has icons for Home, Back, and Measure Details. The main area is titled 'Measure Details'.</p> <p><b>General:</b></p> <ul style="list-style-type: none"> <li>Name: MaintenanceCostLocalCurrency</li> <li>Description: Maintenance Cost in Local Currency</li> </ul> <p><b>Data Type:</b></p> <ul style="list-style-type: none"> <li>Data Type: Decimal</li> <li>Decimal Places: 2</li> </ul> <p><b>Aggregations:</b></p> <ul style="list-style-type: none"> <li>Aggregation Type: Sum</li> <li>Required Dimensions: (empty)</li> <li>Exception Aggregation Type: (empty)</li> <li>Exception Aggregation Dimensions: (empty)</li> </ul> <p><b>Units &amp; Currencies:</b></p> <ul style="list-style-type: none"> <li>Unit Type: Currency</li> <li>Currency: From Dimension: CompanyCode_00</li> </ul>												
<p>Repeat the Steps to add following new measures</p>	<table border="1" data-bbox="509 1626 1504 1826"> <thead> <tr> <th>Name</th> <th>Description</th> <th>Data Type</th> <th>Aggregation</th> </tr> </thead> <tbody> <tr> <td>CO2Emmission</td> <td>CO2 Emmission in Kgs</td> <td>Decimal . Decimal Places : 2</td> <td>Sum</td> </tr> <tr> <td>EnergyConsumption</td> <td>EnergyConsumption in KWH</td> <td>Decimal . Decimal Places : 2</td> <td>Sum</td> </tr> </tbody> </table>	Name	Description	Data Type	Aggregation	CO2Emmission	CO2 Emmission in Kgs	Decimal . Decimal Places : 2	Sum	EnergyConsumption	EnergyConsumption in KWH	Decimal . Decimal Places : 2	Sum
Name	Description	Data Type	Aggregation										
CO2Emmission	CO2 Emmission in Kgs	Decimal . Decimal Places : 2	Sum										
EnergyConsumption	EnergyConsumption in KWH	Decimal . Decimal Places : 2	Sum										

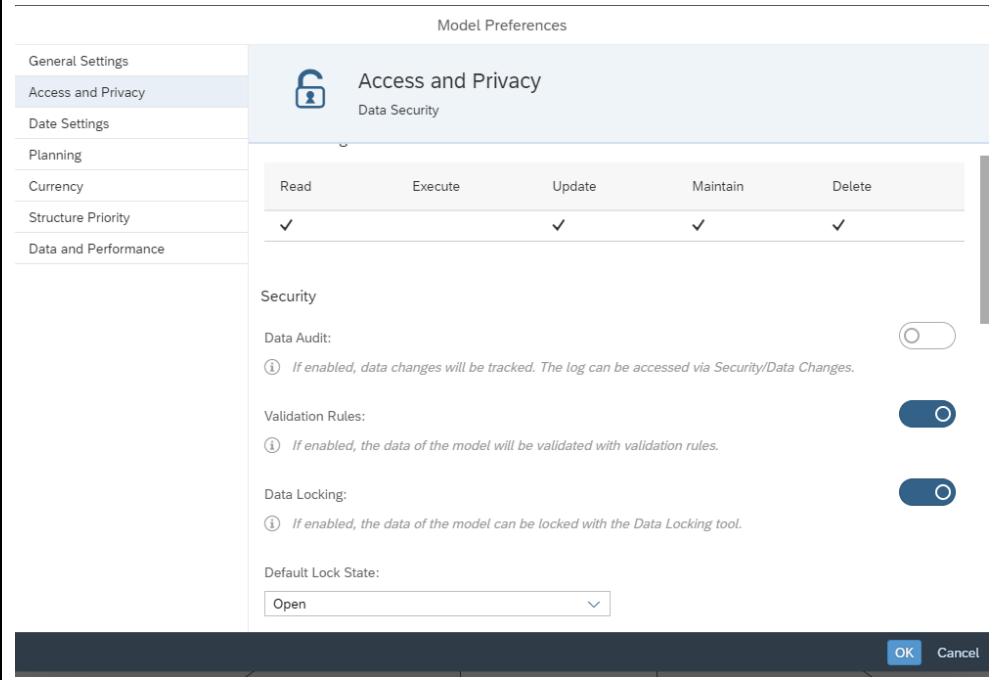
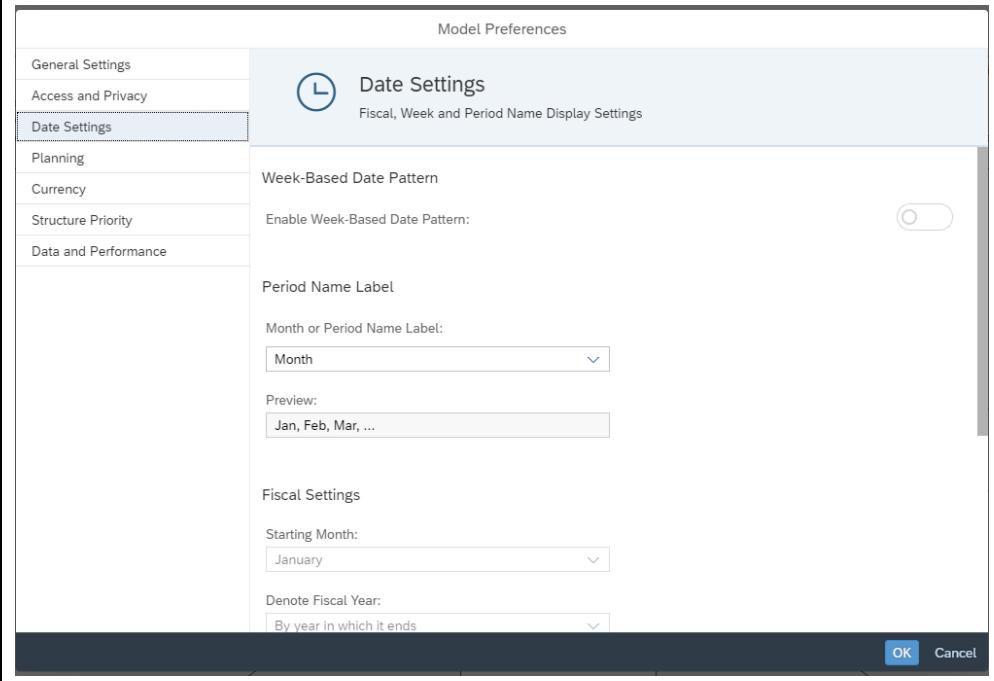
Explanation	Screenshot
<p>Click On Save to Save the Model</p>	 <p>The screenshot shows the SAP Modeler interface. The top navigation bar includes the SAP logo, 'Modeler', 'New Model*', and various icons for workspace management. The main area is titled 'General' and contains sections for 'Measures' and 'Dimensions'. The 'Measures' section lists three items: 'MaintenaceCostLocalCurrency*', 'CO2Emmision*', and 'EnergyConsumption*'. The 'Dimensions' section lists several dimensions: 'Version', 'Date', 'Generic', 'CostCenter_00', 'Equipment_00', 'FunctionalLocation_00', 'MaintenanceCategory_00', 'Plant_00', and 'Organization'. A 'Save' icon (a blue square with a white 'S') is highlighted with a yellow box in the top right corner of the General tab. A search bar is also visible at the top.</p>

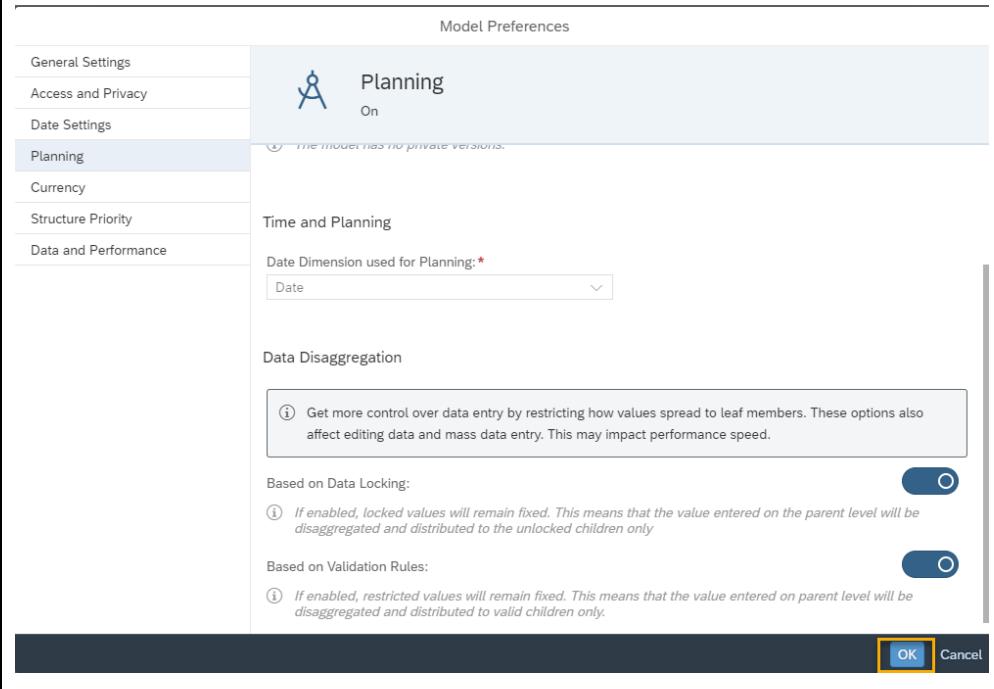
Explanation	Screenshot																		
<p>The Save Model screens opens. Provide name and description and Click on Save.</p> <p>Name: MaintenanceCostBudgeting _XX ( XX is the Participant ID)</p> <p>Description: Maintenance Cost Budgeting</p>	 <p>Save Model</p> <p>My Files</p> <table border="1"> <thead> <tr> <th>Name</th> <th>Description</th> <th>Owner</th> </tr> </thead> <tbody> <tr> <td>Public</td> <td>Public</td> <td>-</td> </tr> <tr> <td>Samples</td> <td>Samples</td> <td>-</td> </tr> <tr> <td>Demo_MaintenanceCost</td> <td>Maintenance Cost planning</td> <td>Dayanand Karalkar</td> </tr> <tr> <td>MaintenanceCostSecurity</td> <td>Maintenance Cost Role Based Security</td> <td>Dayanand Karalkar</td> </tr> <tr> <td>maintenance_cost_per_month</td> <td>-</td> <td>Dayanand Karalkar</td> </tr> </tbody> </table> <p>*Name  <input type="text" value="MaintenanceCostBudgeting_00"/></p> <p>Description  <input type="text" value="Maintenance Cost Budgeting"/></p> <p style="background-color: #2e3436; color: white; padding: 5px; text-align: right;"> <span style="border: 1px solid #2e3436; padding: 2px 5px; margin-right: 5px;">Save</span> <span>Cancel</span> </p>	Name	Description	Owner	Public	Public	-	Samples	Samples	-	Demo_MaintenanceCost	Maintenance Cost planning	Dayanand Karalkar	MaintenanceCostSecurity	Maintenance Cost Role Based Security	Dayanand Karalkar	maintenance_cost_per_month	-	Dayanand Karalkar
Name	Description	Owner																	
Public	Public	-																	
Samples	Samples	-																	
Demo_MaintenanceCost	Maintenance Cost planning	Dayanand Karalkar																	
MaintenanceCostSecurity	Maintenance Cost Role Based Security	Dayanand Karalkar																	
maintenance_cost_per_month	-	Dayanand Karalkar																	

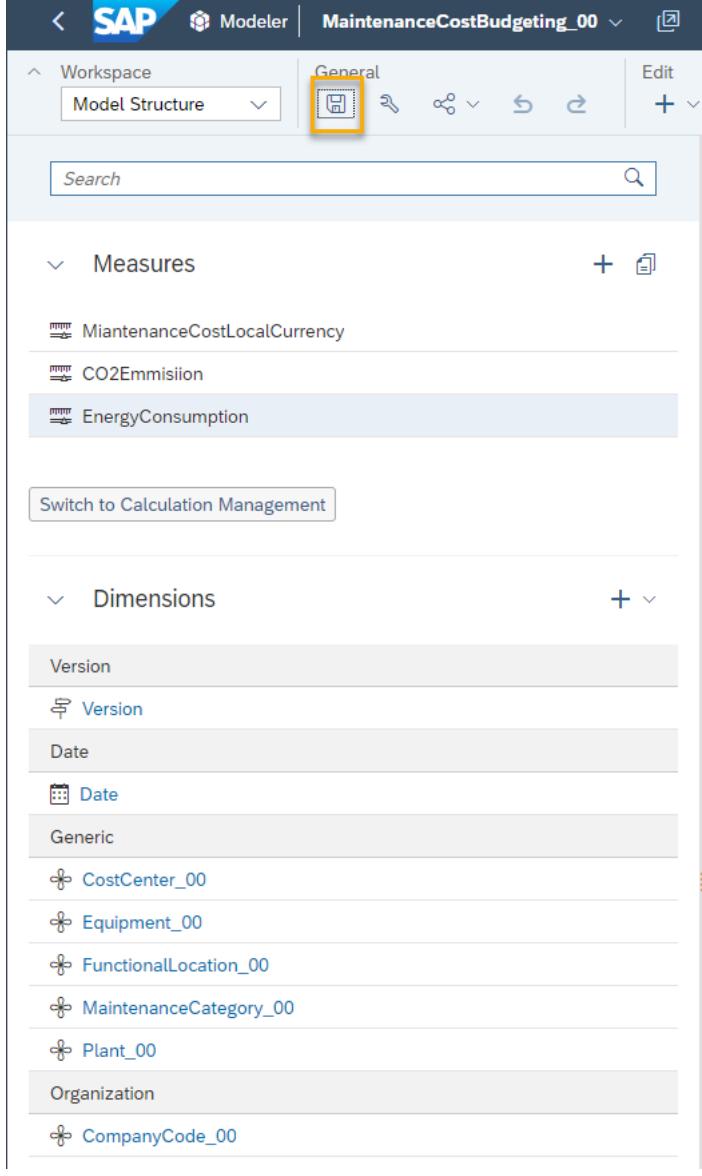
## Maintain Model Preference

Explanation	Screenshot
<p>Click on  ( Model Preferences)</p>	 <p>The screenshot shows the SAP Modeler interface with the title bar "SAP Modeler" and the workspace name "MaintenanceCostBudgeting_00". The top navigation bar includes "Edit" and a "+" button. Below the navigation bar is a search bar with a magnifying glass icon. The main area is divided into sections: "Measures" and "Dimensions". The "Measures" section contains items like "MiantenanceCostLocalCurrency", "CO2Emmmision", and "EnergyConsumption", with "EnergyConsumption" currently selected. The "Dimensions" section contains items like "Version", "Date", "Generic", "CostCenter_00", "Equipment_00", "FunctionalLocation_00", "MaintenanceCategory_00", "Plant_00", and "Organization", with "CompanyCode_00" currently selected.</p>

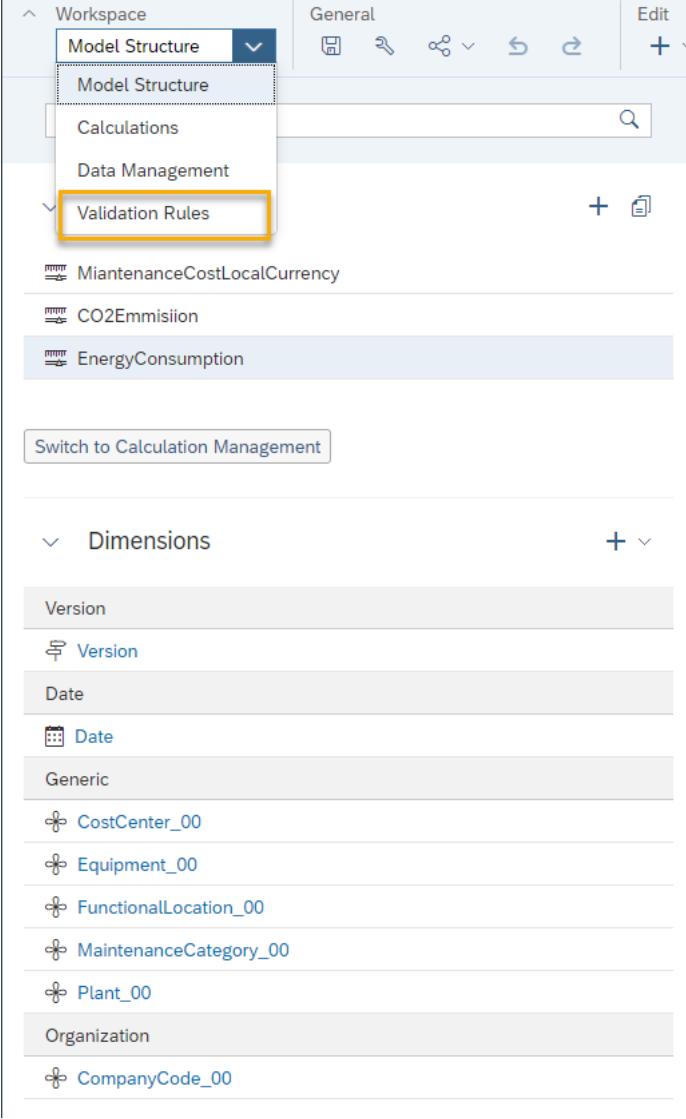
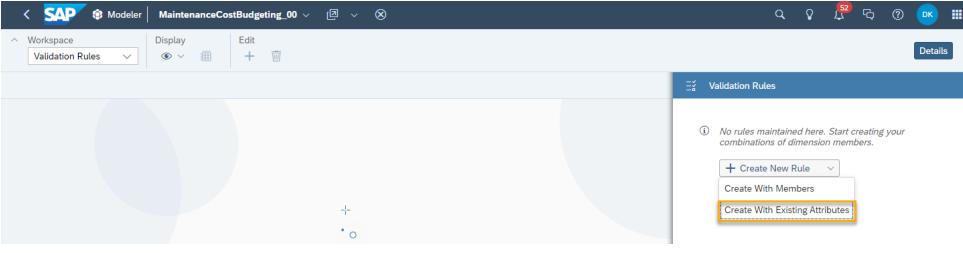
Explanation	Screenshot
<p>The Model Preference screen opens</p>	 <p>Model Preferences</p> <p><b>General Settings</b></p> <p>MaintenanceCostBudgeting_00</p> <p><b>Model Information</b></p> <p>Model Type: Planning</p> <p>Model Layout: Measure</p> <p>Name: * MaintenanceCostBudgeting_00</p> <p>Description: Maintenance Cost Budgeting</p> <p>OK Cancel</p>
<p>Click on the Access and Privacy</p>	 <p>General Settings</p> <p><b>Access and Privacy</b></p> <p>Date Settings</p> <p>Planning</p> <p>Currency</p> <p>Structure Priority</p> <p>Data and Performance</p>

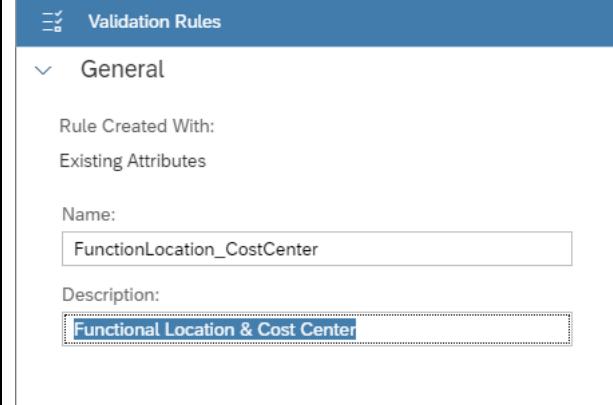
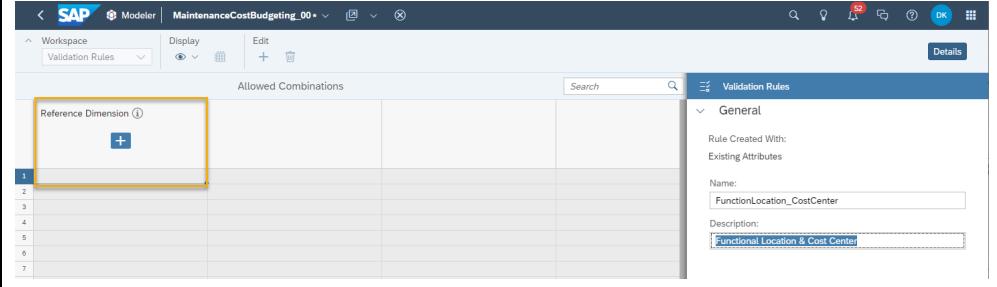
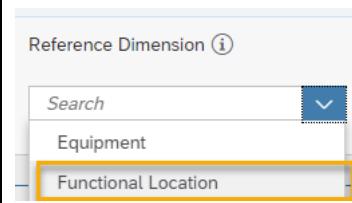
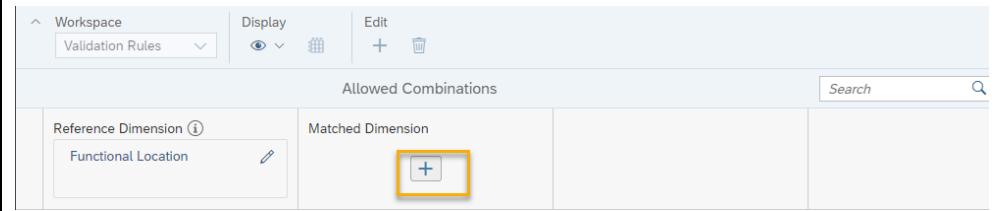
Explanation	Screenshot
<p>Make Following Settings,</p> <ul style="list-style-type: none"> <li>• Validation Rules: On</li> <li>• Data Locking: on</li> <li>• Default Lock State Open</li> </ul>	
<p>Click On Date Settings and observe the values. Keep the default setting</p>	

Explanation	Screenshot
<p>Click on Planning and observe the values. Keep the default setting and click OK</p>	 <p>The screenshot shows the 'Model Preferences' dialog box. On the left is a sidebar with navigation links: General Settings, Access and Privacy, Date Settings, <b>Planning</b>, Currency, Structure Priority, and Data and Performance. The 'Planning' link is highlighted. The main area is titled 'Planning' with a status 'On'. Below it is a note: 'The model has no private versions.' A section titled 'Time and Planning' contains a dropdown menu set to 'Date'. Under 'Data Disaggregation', there's a note: 'Get more control over data entry by restricting how values spread to leaf members. These options also affect editing data and mass data entry. This may impact performance speed.' Two toggle switches are shown: 'Based on Data Locking' (on) and 'Based on Validation Rules' (on). At the bottom right are 'OK' and 'Cancel' buttons, with 'OK' being highlighted with a yellow box.</p>

Explanation	Screenshot
<p>Click on Save to Save the Model</p>	 <p>The screenshot shows the SAP Modeler interface with the title bar "MaintenanceCostBudgeting_00". The top navigation bar includes "Workspace" (set to "Model Structure"), "General" (selected), and "Edit" buttons. A yellow box highlights the "Save" icon (a blue square with a white 'S') in the toolbar. Below the toolbar is a search bar. The main area is divided into sections: "Measures" (with items "MaintenancCostLocalCurrency", "CO2Emmision", and "EnergyConsumption"), "Dimensions" (with items "Version", "Date", "Generic", "CostCenter_00", "Equipment_00", "FunctionalLocation_00", "MaintenanceCategory_00", "Plant_00", and "Organization"), and a "Switch to Calculation Management" button.</p>

## Validation Rules

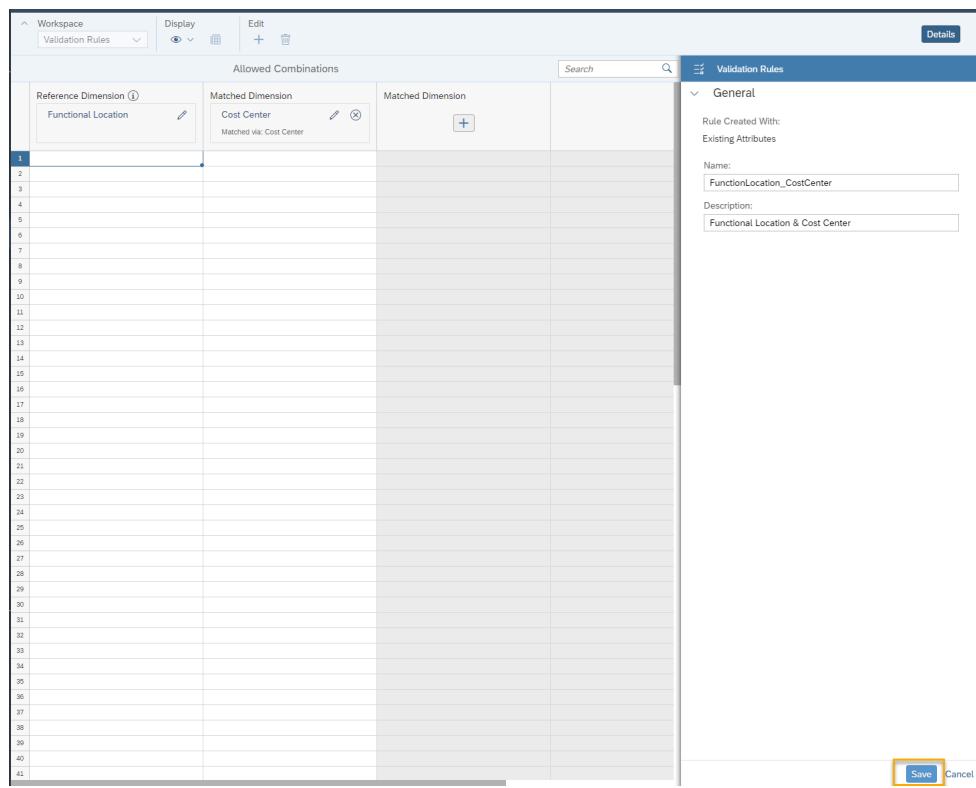
Explanation	Screenshot
<p>Click on Validation Rules in the Worksapce</p>	 <p>The screenshot shows the SAP Modeler interface. In the top-left corner, there's a dropdown menu labeled 'Workspace' with 'Model Structure' selected. Below it, a sidebar lists several categories: 'Model Structure' (selected), 'Calculations', 'Data Management', and 'Validation Rules'. The 'Validation Rules' item is highlighted with a yellow box. To the right of the sidebar, there's a search bar and some navigation icons. Below the sidebar, there are three collapsed sections: 'MaintenanceCostLocalCurrency', 'CO2Emissision', and 'EnergyConsumption'. A button labeled 'Switch to Calculation Management' is visible. Underneath these sections, there's a section titled 'Dimensions' with a '+' icon. Below 'Dimensions', there are several collapsed dimension groups: 'Version', 'Date', 'Generic', 'CostCenter_00', 'Equipment_00', 'FunctionalLocation_00', 'MaintenanceCategory_00', 'Plant_00', 'Organization', and 'CompanyCode_00'.</p>
<p>The Validation Rule definition screen opens. Click on Create New Rules-&gt; Create With Existing Attributes</p>	 <p>The screenshot shows the 'Validation Rules' screen in SAP Modeler. At the top, there's a header with the workspace name 'MaintenanceCostBudgeting_00'. Below the header, there's a toolbar with 'Validation Rules' selected. On the right side, there's a panel titled 'Validation Rules' with a message: 'No rules maintained here. Start creating your combinations of dimension members.' Below the message, there are three options: '+ Create New Rule', 'Create With Members', and 'Create With Existing Attributes'. The 'Create With Existing Attributes' option is highlighted with a yellow box.</p>

Explanation	Screenshot
<p>Provide Name: FunctionLocation_CostCenter</p> <p>Description Functional Location &amp; Cost Center</p>	
<p>Click  to Add Reference Dimension</p>	
<p>Select Functional Location</p>	
<p>Click  to add Matched Dimension</p>	
<p>Select Attribute Cost Center Matched to Dimension Cost Center and click OK</p>	<p>Match FunctionalLocation_00 Attribute to a Dimension</p> <p>Attribute from FunctionalLocation_00:</p> <p>Cost Center  matched to </p> <p> </p>

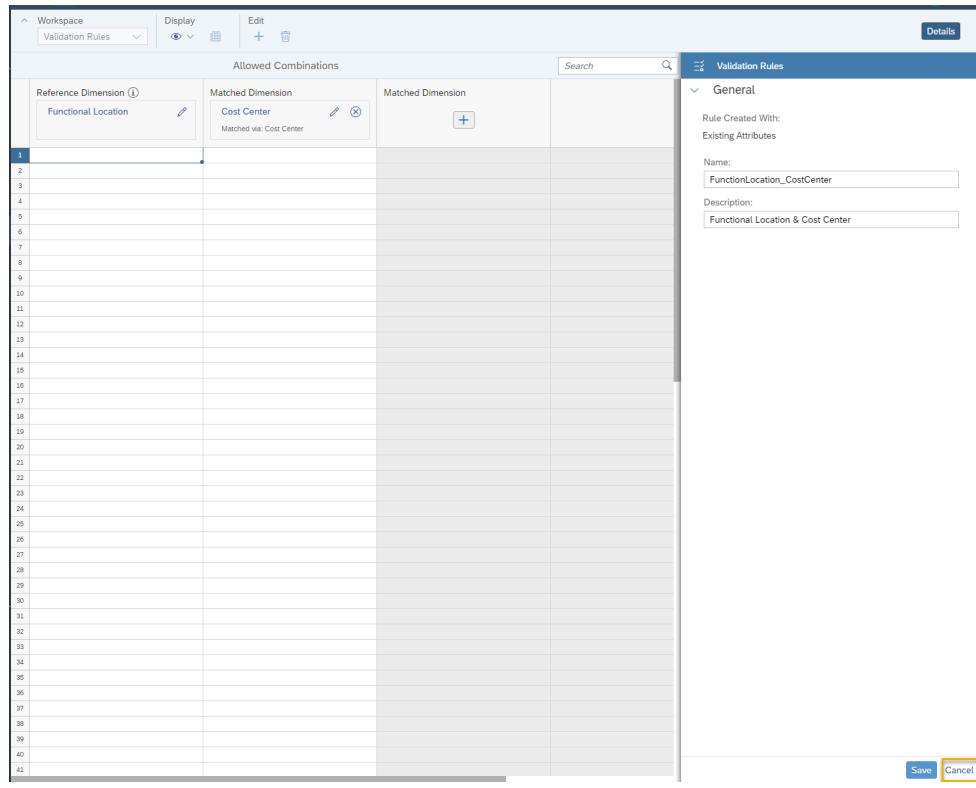
## Explanation

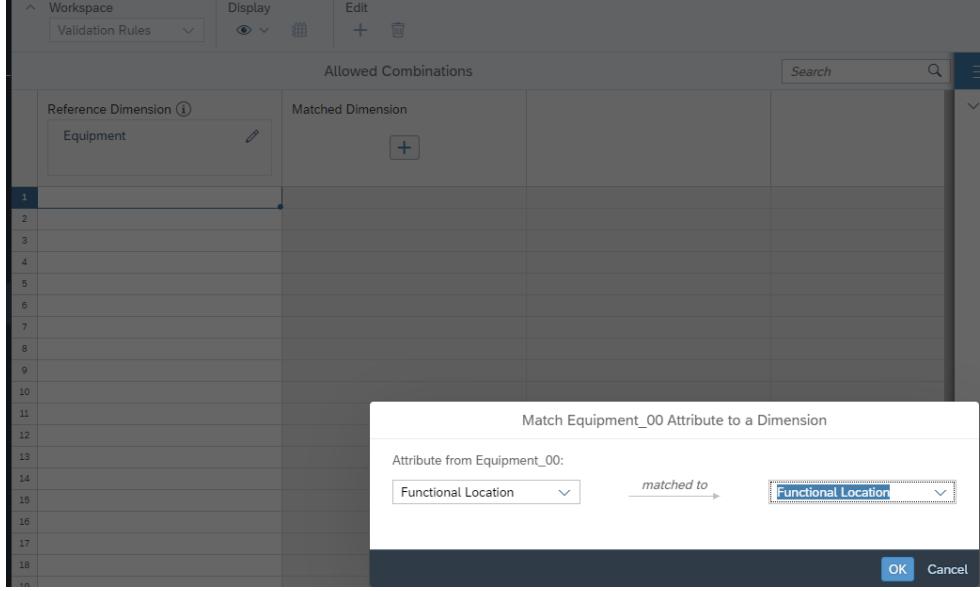
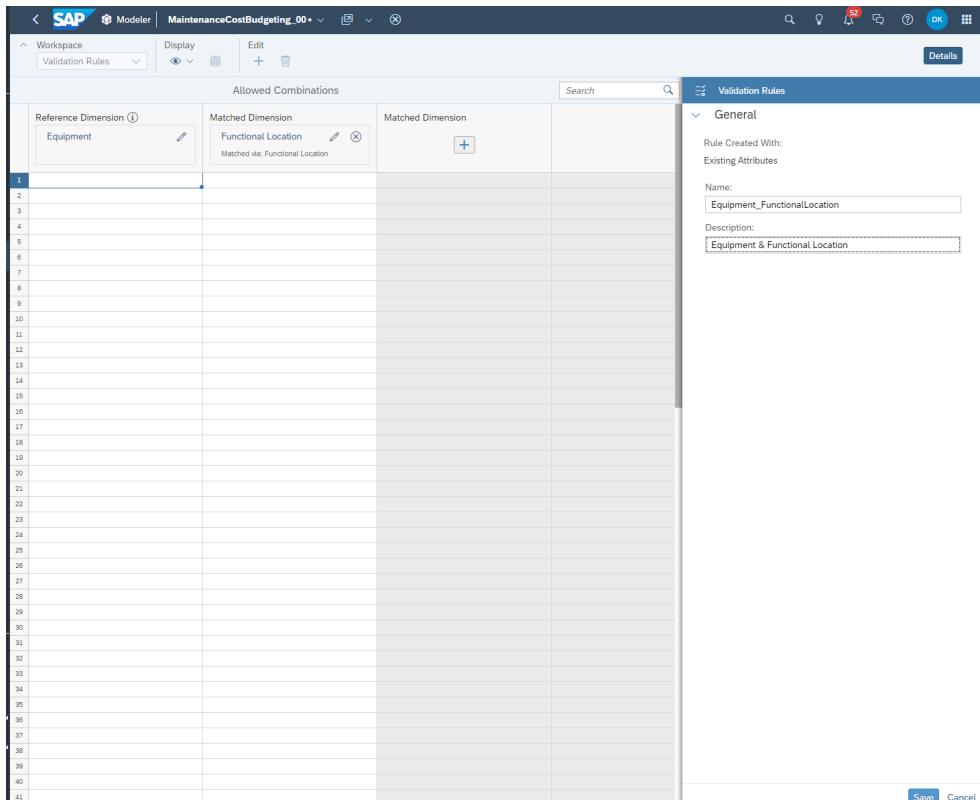
Click on Save to Save the validation Rule

## Screenshot

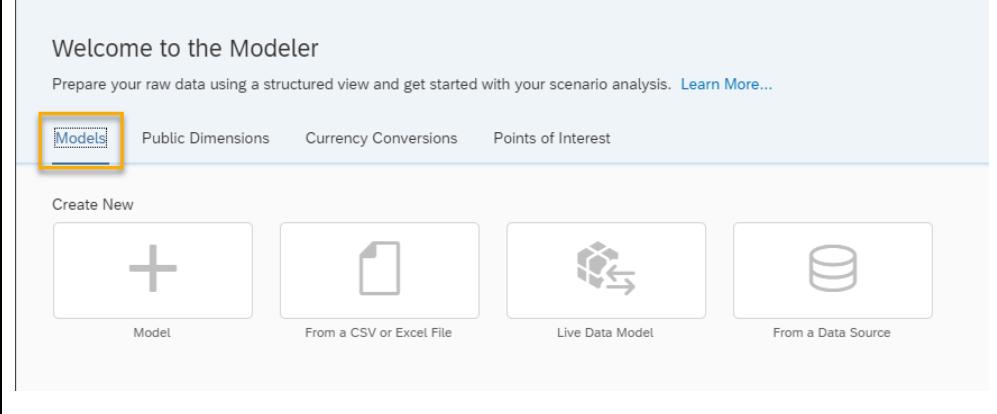
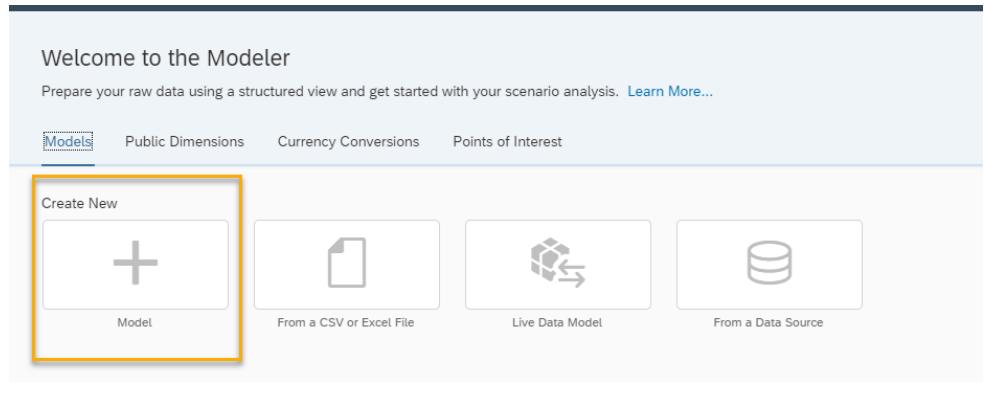
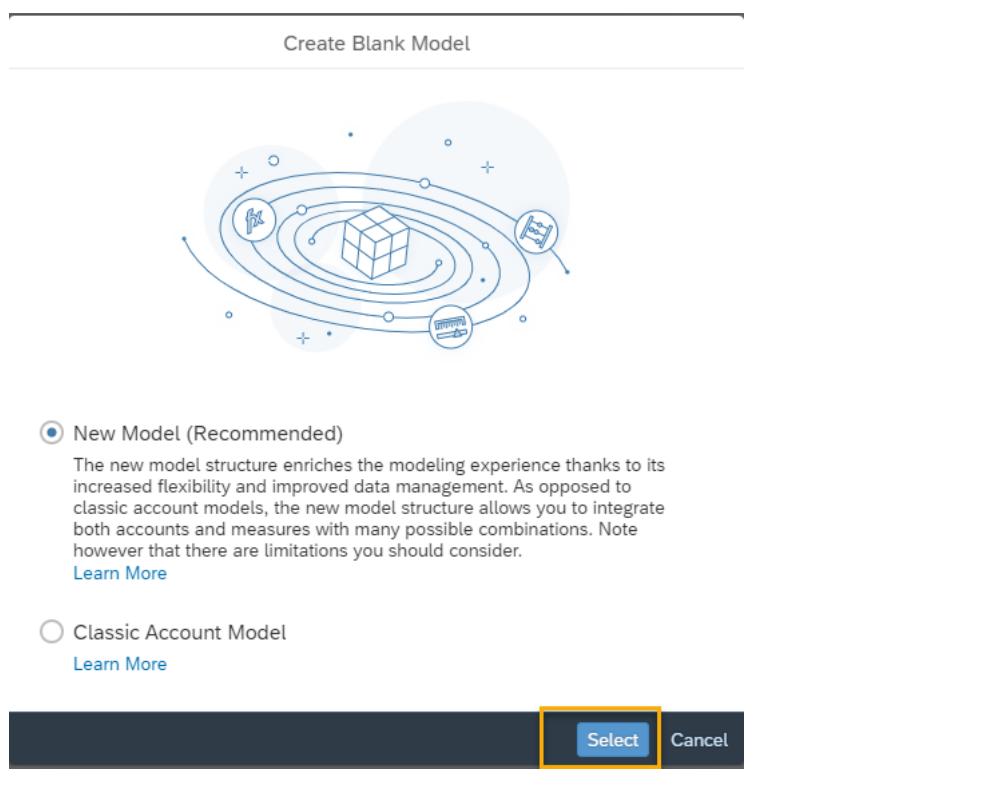


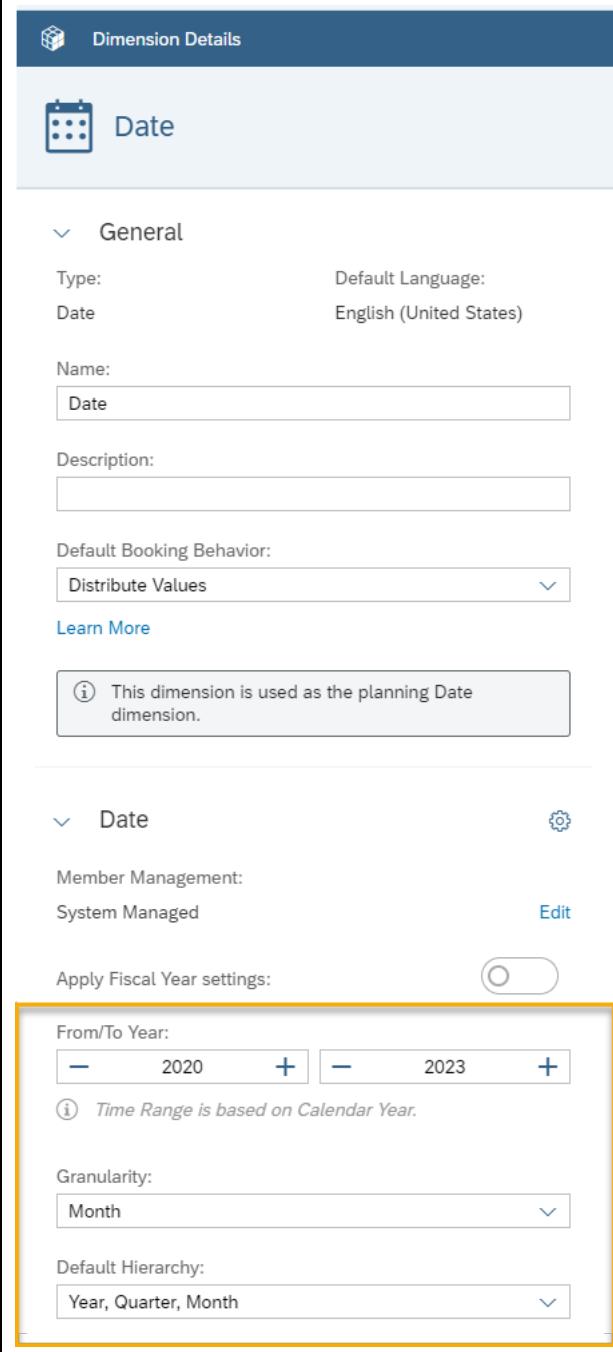
Click Cancel to navigate back to the Define Validation Rule Screen.

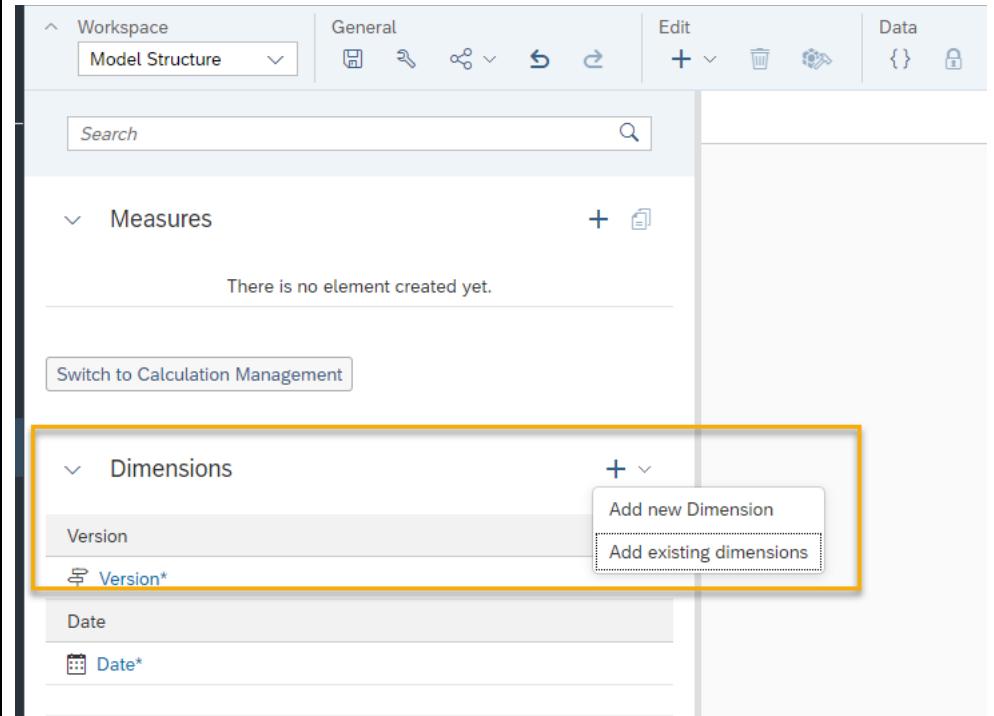
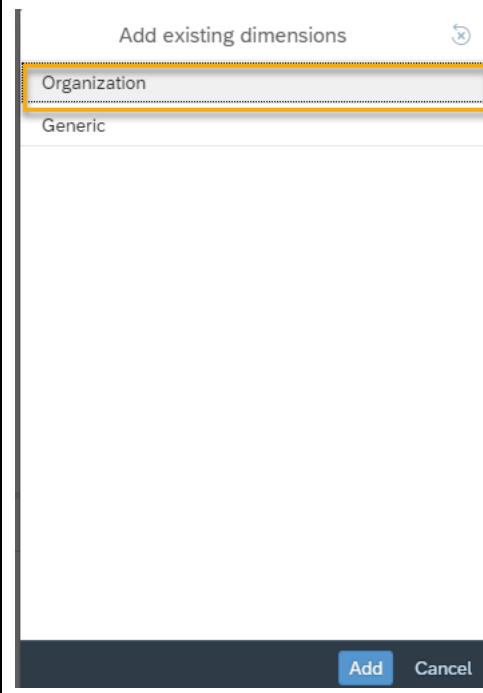


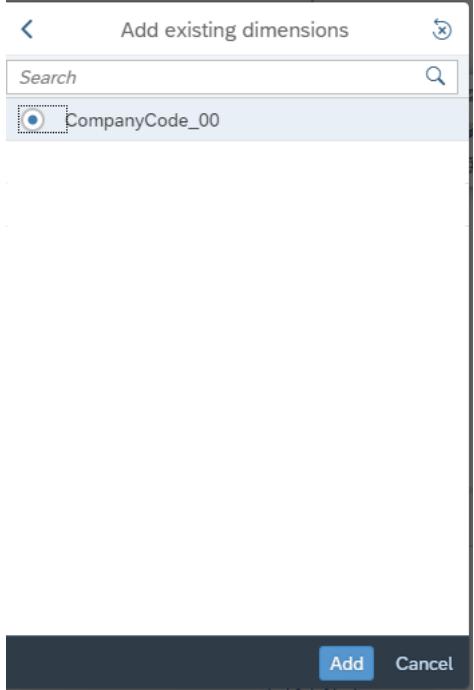
Explanation	Screenshot
<p>Repeat the Steps to define validation rule for Equipment and Functional Location</p>	
	

## Create SAP Analytics Cloud Model for Sustainability Planning

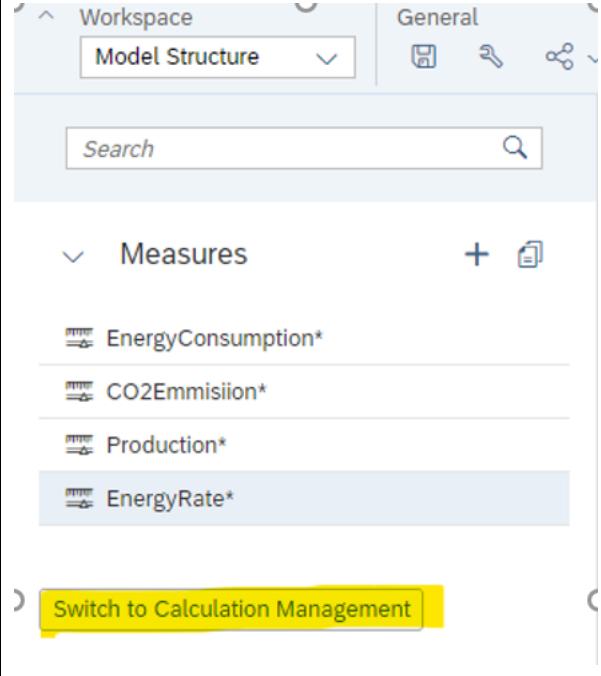
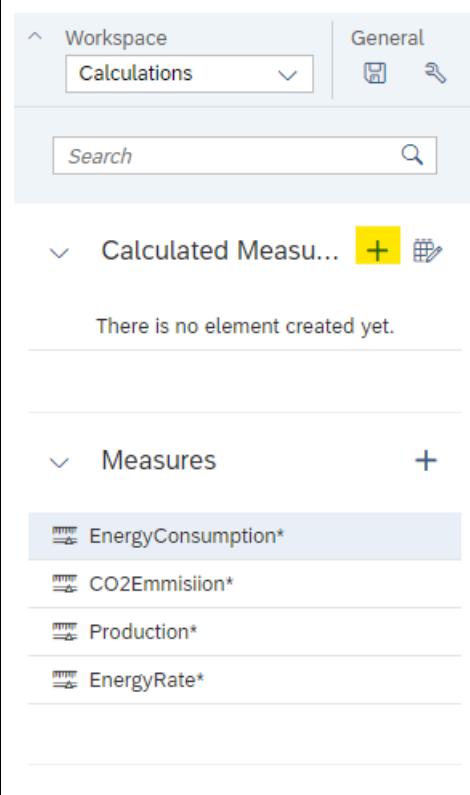
Explanation	Screenshot
Click on Models tab of SAP Analytics Cloud Modeler	 <p>Welcome to the Modeler</p> <p>Prepare your raw data using a structured view and get started with your scenario analysis. <a href="#">Learn More...</a></p> <p><b>Models</b> Public Dimensions Currency Conversions Points of Interest</p> <p>Create New</p> <ul style="list-style-type: none"> <li><b>Model</b> (highlighted with a yellow box)</li> <li>From a CSV or Excel File</li> <li>Live Data Model</li> <li>From a Data Source</li> </ul>
Click on Create New Model	 <p>Welcome to the Modeler</p> <p>Prepare your raw data using a structured view and get started with your scenario analysis. <a href="#">Learn More...</a></p> <p><b>Models</b> Public Dimensions Currency Conversions Points of Interest</p> <p>Create New</p> <ul style="list-style-type: none"> <li><b>Model</b> (highlighted with a yellow box)</li> <li>From a CSV or Excel File</li> <li>Live Data Model</li> <li>From a Data Source</li> </ul>
In the Model Creation popup choose New Model and click on Select	 <p>Create Blank Model</p> <p><input checked="" type="radio"/> <b>New Model (Recommended)</b></p> <p>The new model structure enriches the modeling experience thanks to its increased flexibility and improved data management. As opposed to classic account models, the new model structure allows you to integrate both accounts and measures with many possible combinations. Note however that there are limitations you should consider.</p> <p><a href="#">Learn More</a></p> <p><input type="radio"/> <b>Classic Account Model</b></p> <p><a href="#">Learn More</a></p> <p><b>Select</b> Cancel</p>

Explanation	Screenshot
<p>Click on the Date Dimension. In the Dimension Detail screen change the From/To years as 2005 - 2023</p>	 <p>The screenshot shows the 'Dimension Details' screen for the 'Date' dimension. The 'General' section includes fields for Type (Date), Default Language (English (United States)), Name (Date), and Description. A note states: 'This dimension is used as the planning Date dimension.' The 'Date' section shows Member Management as System Managed and has an 'Edit' button. A switch for 'Apply Fiscal Year settings' is shown. The 'From/To Year' range is set from 2020 to 2023. The 'Granularity' is set to Month, and the 'Default Hierarchy' is set to Year, Quarter, Month.</p>

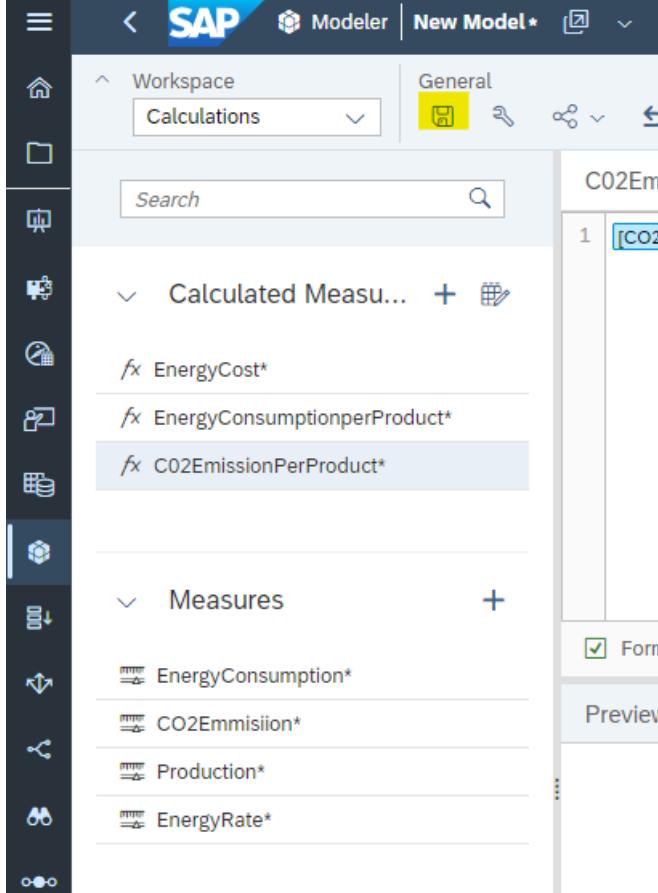
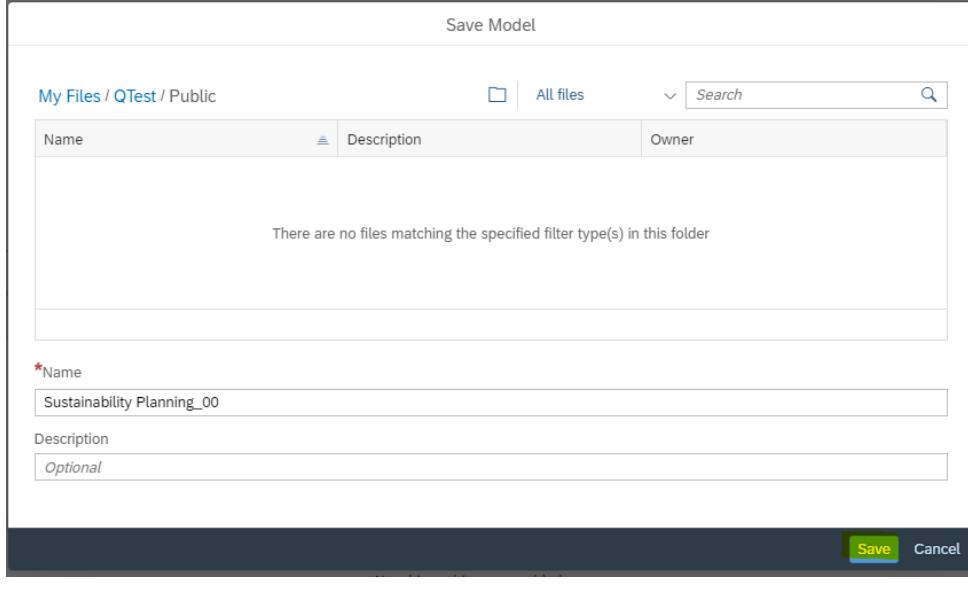
Explanation	Screenshot
<p>In the model structure, Click  and choose Add existing dimensions to include dimensions in the model</p>	 <p>The screenshot shows the 'Model Structure' workspace. At the top, there's a toolbar with 'Workspace' set to 'Model Structure', 'General' tab selected, and various icons for search, refresh, and edit. Below the toolbar is a search bar. The main area has a tree view with 'Measures' expanded, showing a message: 'There is no element created yet.' Below 'Measures' is a button 'Switch to Calculation Management'. Under 'Dimensions', there's a dropdown menu with 'Add new Dimension' and 'Add existing dimensions' options. The 'Add existing dimensions' option is highlighted with a yellow box.</p>
<p>Click on Organization</p>	 <p>The screenshot shows a modal dialog with the title 'Add existing dimensions'. Inside the dialog, there's a list with 'Organization' selected and highlighted with a yellow box. Other items in the list are 'Generic'. At the bottom of the dialog are 'Add' and 'Cancel' buttons.</p>

Explanation	Screenshot
<p>Select the Company Code dimension created in previous exercise and click ADD</p>	
<p>Click + to add Measures to the model</p>	

Explanation	Screenshot																
<p>Provide the Following information,</p> <ul style="list-style-type: none"> <li>• Name: EnergyConsumption</li> <li>• Description: Energy Consumption in KWH</li> <li>• Data Type: Decimal</li> <li>• Decimal:2</li> <li>• Aggregation: Sum</li> </ul>	<p>The screenshot shows the 'Measure Details' page in a Power BI interface. At the top, there are icons for a gear and a chart, followed by the title 'Measure Details'. Below the title, there is a section for a measure named 'EnergyConsumption' with the description 'Energy Consumption in KWH'. The page is divided into sections: 'General', 'Data Type', and 'Aggregations'. In the 'General' section, the name is set to 'EnergyConsumption' and the description is 'Energy Consumption in KWH'. In the 'Data Type' section, the data type is set to 'Decimal' and the decimal places are set to '2'. In the 'Aggregations' section, the aggregation type is set to 'Sum'. There is also a 'Required Dimensions' section which is currently empty.</p>																
<p>Repeat the Steps to add following new measures</p>	<table border="1"> <thead> <tr> <th>Name</th> <th>Description</th> <th>Data Type</th> <th>Aggregation</th> </tr> </thead> <tbody> <tr> <td>CO2Emission</td> <td>CO2 Emission in Kgs</td> <td>Decimal . Decimal Places : 2</td> <td>Sum</td> </tr> <tr> <td>Production</td> <td>Production</td> <td>Decimal . Decimal Places : 2</td> <td>Sum</td> </tr> <tr> <td>EnergyRate</td> <td>Energy Rate per KWH</td> <td>Decimal . Decimal Places : 2</td> <td>Sum</td> </tr> </tbody> </table>	Name	Description	Data Type	Aggregation	CO2Emission	CO2 Emission in Kgs	Decimal . Decimal Places : 2	Sum	Production	Production	Decimal . Decimal Places : 2	Sum	EnergyRate	Energy Rate per KWH	Decimal . Decimal Places : 2	Sum
Name	Description	Data Type	Aggregation														
CO2Emission	CO2 Emission in Kgs	Decimal . Decimal Places : 2	Sum														
Production	Production	Decimal . Decimal Places : 2	Sum														
EnergyRate	Energy Rate per KWH	Decimal . Decimal Places : 2	Sum														

Explanation	Screenshot
<p>Click on <a href="#">Switch to Calculation Management</a> to create calculations</p>	 <p>The screenshot shows the 'Model Structure' tab selected in the top navigation bar. Below it is a search bar. Under the 'Measures' section, there are four items: 'EnergyConsumption*', 'CO2Emmision*', 'Production*', and 'EnergyRate*'. At the bottom of the list, there is a yellow box highlighting the 'Switch to Calculation Management' button.</p>
<p>Click on  next to Calculated Measures to add new Calculation</p>	 <p>The screenshot shows the 'Calculations' tab selected in the top navigation bar. Below it is a search bar. Under the 'Calculated Measures' section, there is a message: 'There is no element created yet.' Under the 'Measures' section, there are four items: 'EnergyConsumption*', 'CO2Emmision*', 'Production*', and 'EnergyRate*'. The 'EnergyConsumption*' item is highlighted with a gray background.</p>

Explanation	Screenshot									
<p>Provide the Following information,</p> <ul style="list-style-type: none"> <li>• Name: EnergyCost</li> <li>• Description: Energy Cost</li> </ul>	<p>The screenshot shows the SAP Business Modeler Properties dialog for a Calculated Measure named "EnergyCost". The dialog is divided into sections: "General" and "Aggregations". In the "General" section, the "Name" field is set to "EnergyCost" and the "Description" field is also set to "EnergyCost".</p>									
<p>In formula area type dimensions EnergyConsumption * EnergyRate</p> <p>Note: Typing dimensions name will auto fill for selection</p>	<p>The screenshot shows the SAP Business Modeler formula editor. The formula "EnergyConsumption * EnergyRate" is entered. A tooltip appears, listing available dimensions: "[EnergyConsumption]" (Energy Consumption), "[EnergyRate]" (Energy Rate per KWH), and "LENGTH". A note at the bottom says: "Formula could not be computed: [EnergyConsumption] * en. Try rewriting the formula."</p>									
<p>Repeat and add following Calculated Measures and Formulas</p>	<table border="1" data-bbox="510 1476 1488 1712"> <thead> <tr> <th>Name</th> <th>Description</th> <th>Formula</th> </tr> </thead> <tbody> <tr> <td>EnergyConsumptionperProduct</td> <td>Energy Consumption per product</td> <td>[EnergyConsumption] / [Production]</td> </tr> <tr> <td>CO2EmissionPerProduct</td> <td>CO2 Emission Per Product</td> <td>[CO2Emission] / [Production]</td> </tr> </tbody> </table>	Name	Description	Formula	EnergyConsumptionperProduct	Energy Consumption per product	[EnergyConsumption] / [Production]	CO2EmissionPerProduct	CO2 Emission Per Product	[CO2Emission] / [Production]
Name	Description	Formula								
EnergyConsumptionperProduct	Energy Consumption per product	[EnergyConsumption] / [Production]								
CO2EmissionPerProduct	CO2 Emission Per Product	[CO2Emission] / [Production]								

Explanation	Screenshot
<p>Click On Save to Save the Model</p>	 <p>The screenshot shows the SAP Modeler interface. On the left is a vertical toolbar with icons for home, folder, search, and various model elements. The main workspace is titled 'General' and shows two sections: 'Calculated Measures' and 'Measures'. Under 'Calculated Measures', there are three items: 'EnergyCost*', 'EnergyConsumptionperProduct*', and 'C02EmissionPerProduct*'. Under 'Measures', there are four items: 'EnergyConsumption*', 'CO2Emmision*', 'Production*', and 'EnergyRate*'. To the right of the workspace, there is a preview area labeled 'C02Em' with a single row containing '1 C02'. Below the preview are buttons for 'Form' (checked) and 'Preview'.</p>
<p>The Save Model screen opens. Provide name and description and Click on Save.  <b>Name:</b> Sustainability Planning_XX ( XX is the Participant ID)  <b>Description:</b> Sustainability Planning Model</p>	 <p>The screenshot shows the 'Save Model' dialog box. At the top, it says 'Save Model'. Below that is a file browser showing 'My Files / QTest / Public' with a search bar. A message says 'There are no files matching the specified filter type(s) in this folder'. The main area has fields for 'Name' (containing 'Sustainability Planning_00') and 'Description' (containing 'Optional'). At the bottom are 'Save' and 'Cancel' buttons.</p>