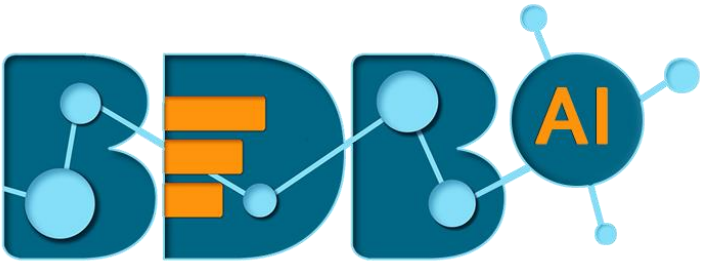


User Guide

Story R-6.0

Contents

1. About this Guide

1.1. Document History

The following table gives an overview of the most recent document updates:

Product Version	Date (Release Date)	Description
Story 2.0	February 21st, 2016	The first release of the document
Story 2.1	May 25th, 2016	Updated document
Story 2.5	November 9th, 2016	Updated document
Story 2.5.3	March 16th, 2017	Updated document
Story 3.0	August 31st, 2017	Updated document
Story 3.0	October 26th, 2017	Modified document
Story 3.2	February 2nd, 2018	Updated document
Story 3.5	April 15th, 2018	Updated document
Story 3.5.1	July 5th, 2018	Updated document
Story 3.6	August 20th, 2018	Updated document
Story 3.7	October 10th, 2018	Updated document
Story 3.8	December 1st, 2018	Updated document
Story 4.0	December 31st, 2018	Updated document
Story 4.2	March 25th, 2019	Updated document
Story 4.3	April 24th, 2019	Updated document
Story 4.4	June 7th, 2019	Updated document
Story 4.5	August 5th, 2019	Updated document
Story 4.6	November 15th, 2019	Updated document
Story 5.0	February 17th, 2020	Updated document
Story 5.2.0	August 21st, 2020	Updated document
Story 6.0	February 26th, 2021	Updated document

Note: The Story plugin was introduced as an integrated feature to the BDB Platform in the release of version 2.0 so, the '**Product Version**' displayed in the above table refers to the Platform Release version.

1.2. Overview

This guide covers:

- Introduction and steps to access the Story plugin
- Steps to create and modify a Story
- Options assigned to a Story

1.3. Target Audience

This document is aimed at business users who use the Story feature to create their business stories and get more profound insights into their business data.

2. Introducing Story

2.1. Introduction

The Story is an advanced data visualization feature of the BDB Platform. It helps the users to create rich, interactive data visualization to present complex, related data. The entire process of creating a story out of the selected data is easy, quick, and exciting. The users can choose a data source, 'drag and drop' the required values (Dimensions/Measures), and get promptly generated views based on the selected data values. Users can save relevant views on the storyboard to create their personalized stories.

2.2. Supported Web Browsers

The BDB Platform is a web browser-based application. The users can run the BDB Platform and its various plugins on the below given versions of the browsers:

Google Chrome	Latest Version (recommended web browser)
Mozilla Firefox/ Firefox ESR	Latest Version
Microsoft Edge	Latest Version
Apple Safari	10

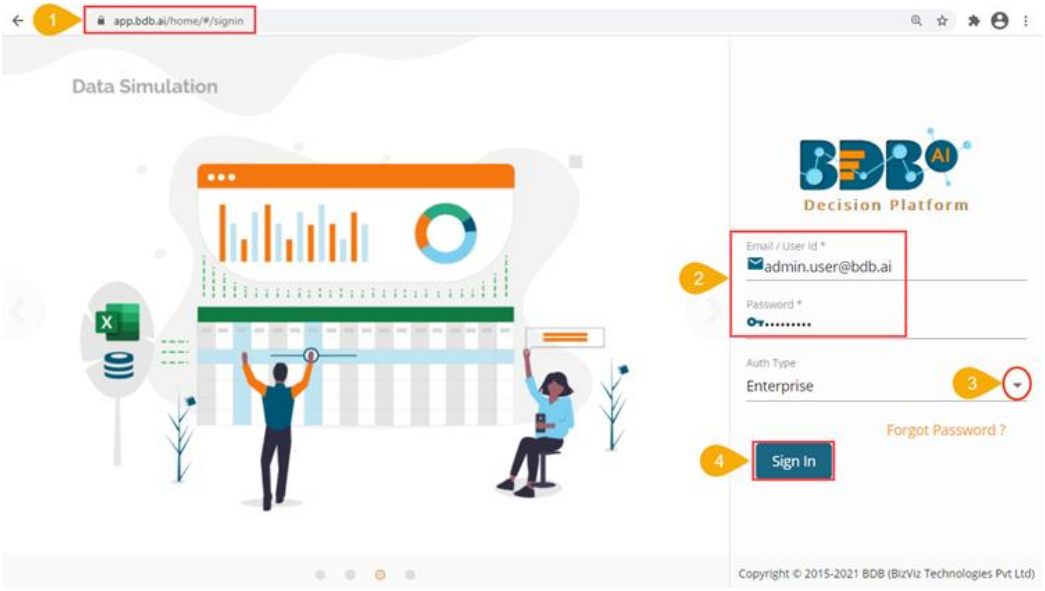
2.3. Prerequisites

- Basic understanding of the BDB Platform.
- Permission to access, create, and modify the Data Stores under the Data Center module of the BDB Platform.

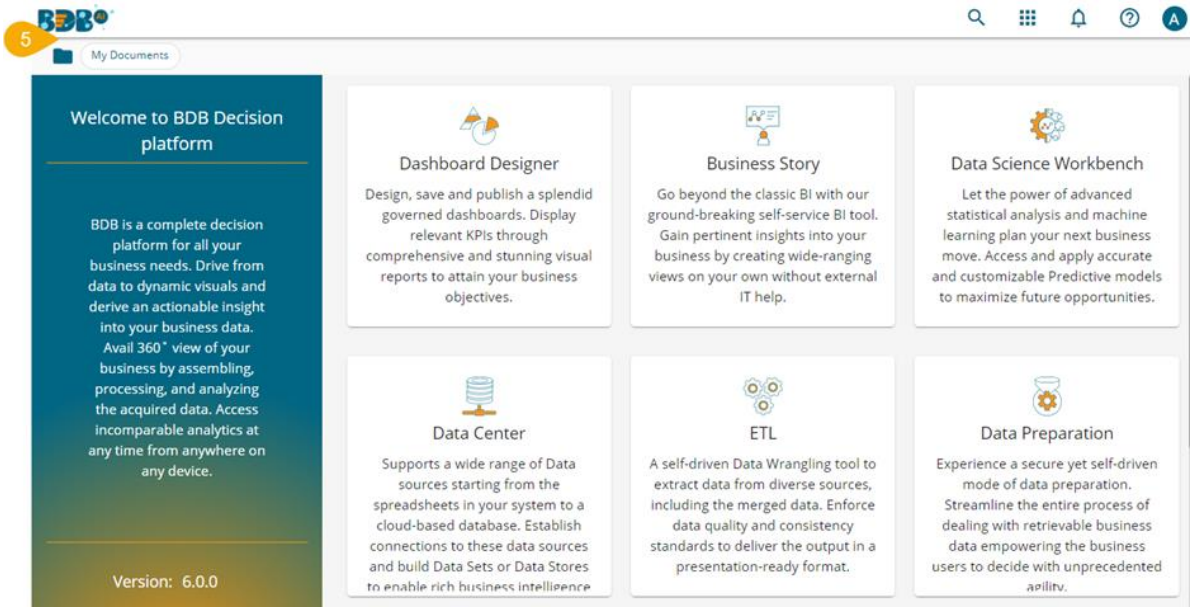
3. Getting Started with Story

This section covers how to access the Story plugin using the BDB Platform.

i) Open the BDB Enterprise Platform Link: https://app.bdb.ai
ii) Enter your credentials to log in to the platform.
iii) Select an Auth-Type using the drop-down menu ('**Enterprise**' is the default authentication type).
iv) Click the '**Sign In**' option.

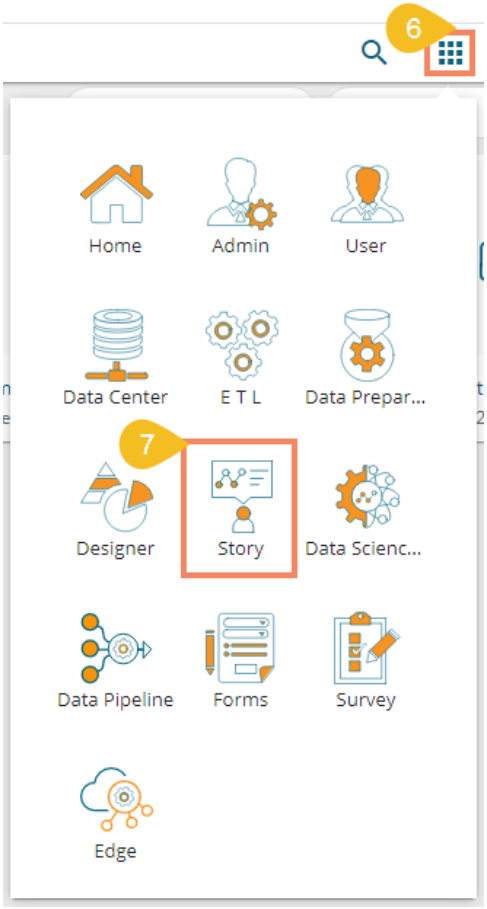


v) BDB Platform homepage opens.



Note: The above screen opens only for those newly created users who have not yet created any document using the BDB Platform.

vi) Click on the '**Apps**' menu icon.
vii) Select the '**Story**' plugin from the Apps menu.



Note: The number of plugins displayed in the Apps menu is reliant on the user permissions.

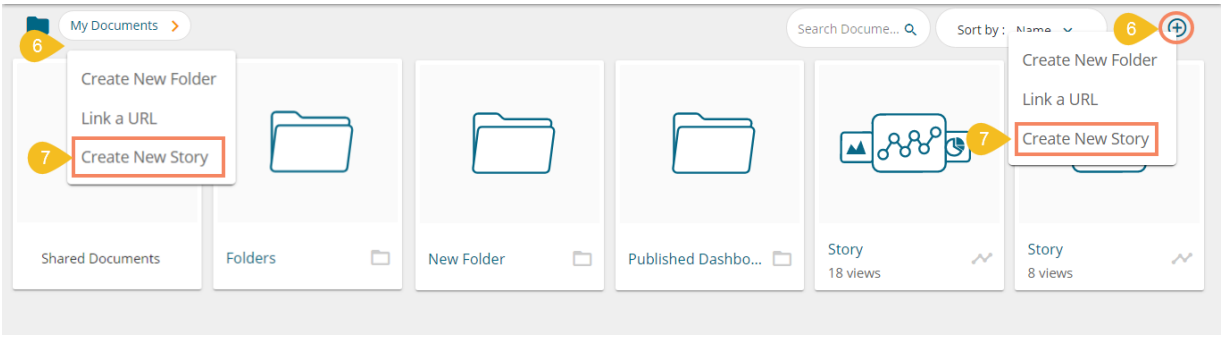
OR

Right-click anywhere on the My Documents or Public Documents blank space to get the context menu.

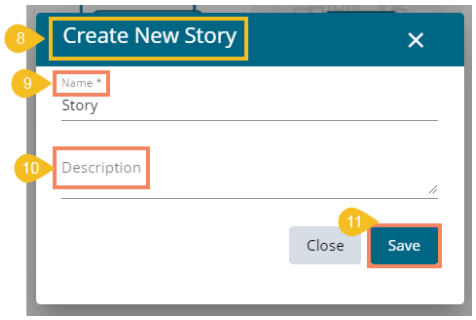
OR

Click the Options icon to open the context menu.

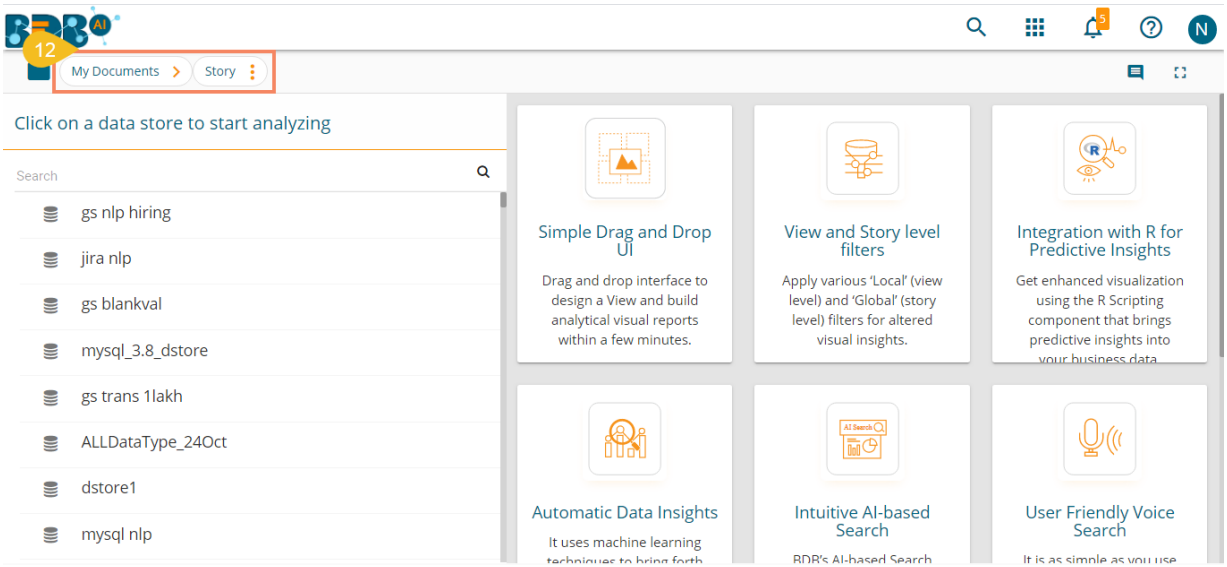
Select the '**Create Story**' option from the context menu.



viii) The '**Create New Story**' window opens.
ix) Enter a title for the story document.
x) Describe the story document (optional).
xi) Click the '**Save**' option.

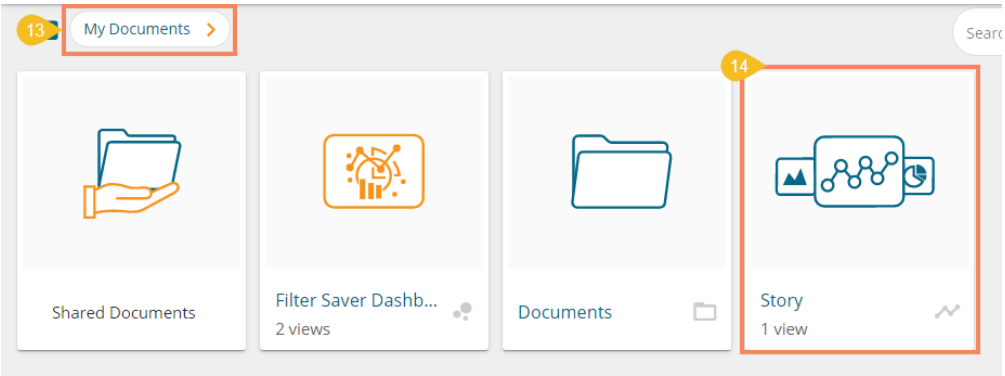


xii) The story document gets created, and the following page opens by default.



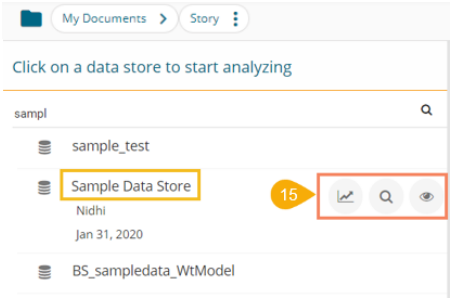
xiii) Navigate back to space where the story document creation was intended (i.e., Navigate to '**My Documents**' space).

xiv) The newly created Story document gets added to space.

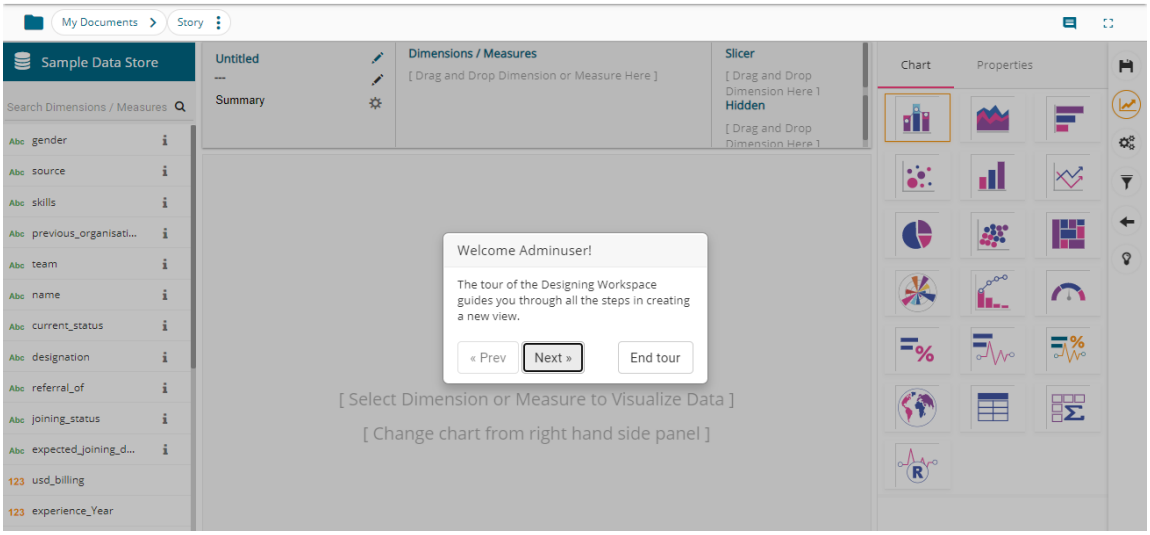


xv) While selecting a data store, the user gets three options to begin working with the newly created story:

1. View Design
2. BDB Search
3. Data Insights

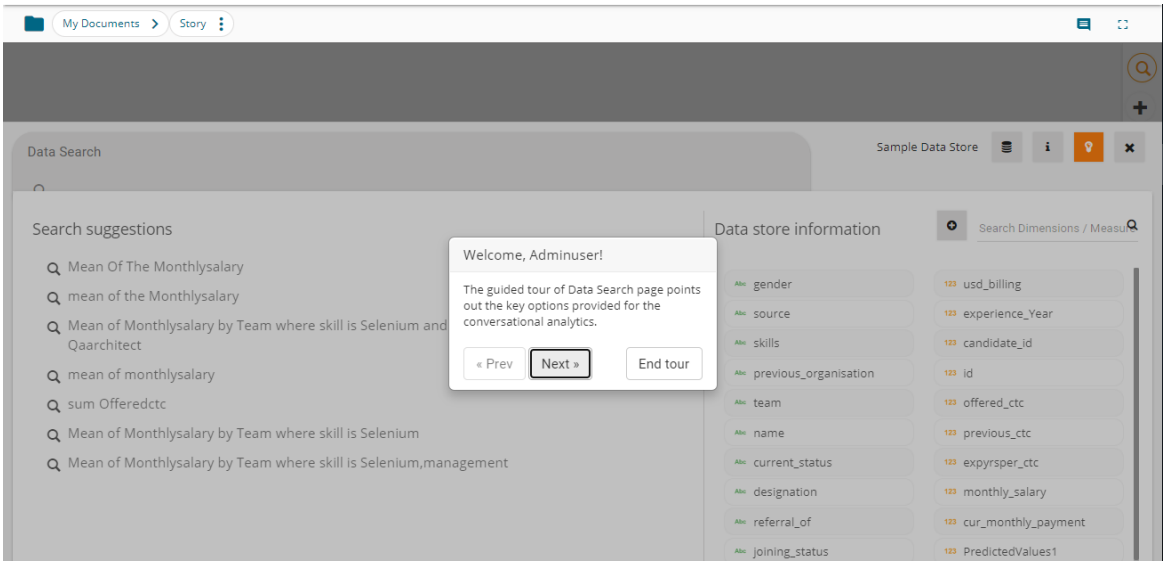


1. **View Design**: It redirects the user to the Designing Workspace where through drag and drop of the required dimensions and measures, a new view gets created for the newly-created story.



Please refer to the '**Designing a New View**' section of this document for a detailed understanding of the View Design option.

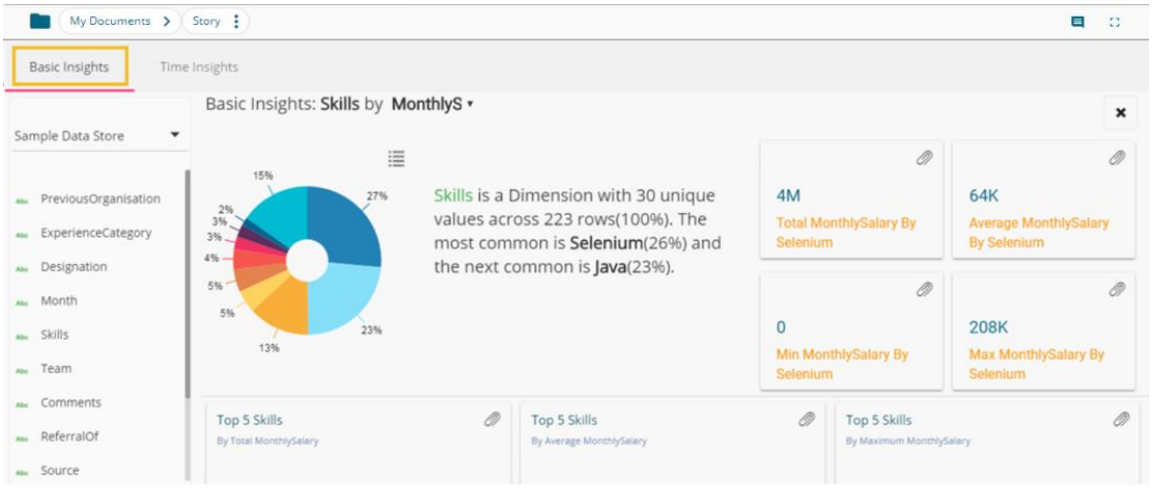
2. **BDB Search**: It redirects the users to approach the newly created business story using the '**BDB Search**' functionality.



Please refer to the '**BDB Search**' section of this document to get the detailed information of the BDB Search.

Note: By clicking the '**Close BDB Search Dialog**' ✖ icon, the user gets the Storyboard screen.

3. **Data Insights**: It redirects the user on a new page displaying the basic data insights which can be edited by selecting different dimension or measure.



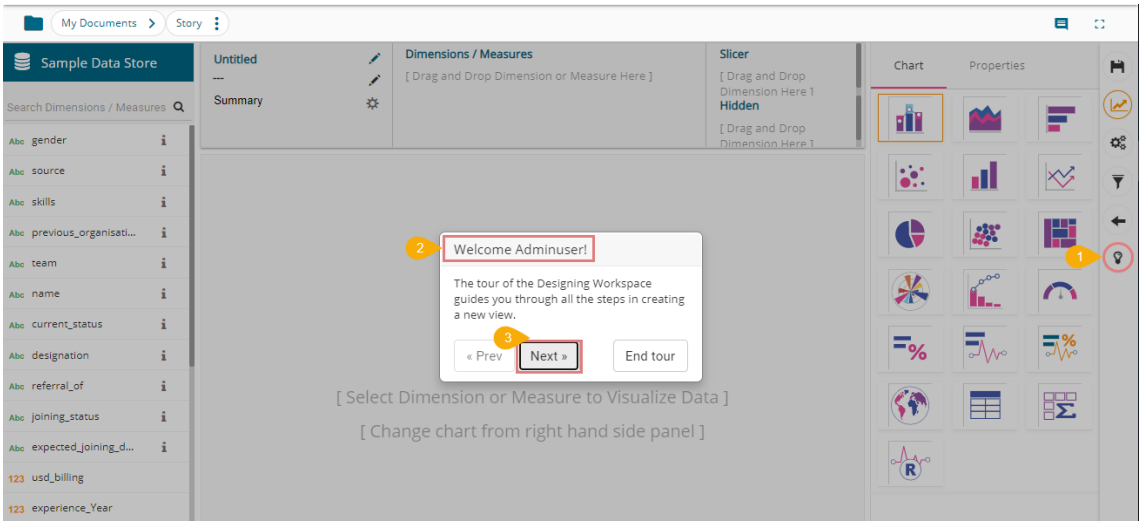
Please refer to the '**Data Insights**' section of this document to get detailed information on the data insights functionality.

Note: By clicking the '**Close Insights**' ✖ icon, the user gets the Storyboard screen.

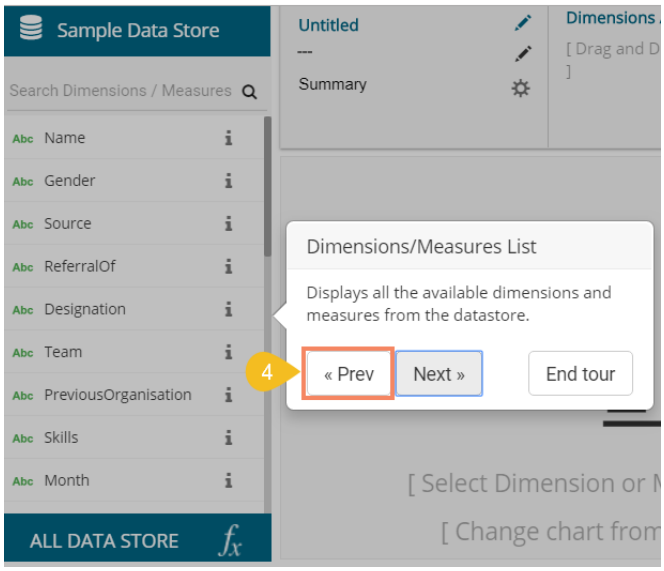
3.1. Guided Tour

This functionality helps new users to understand the Business Story plugin and workflow.

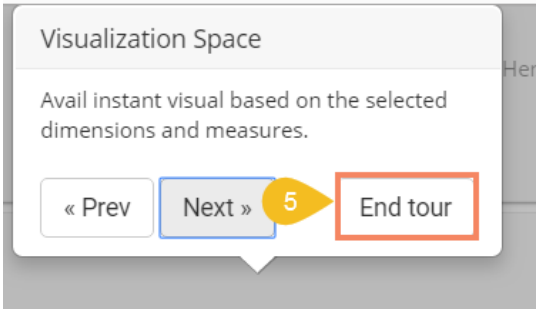
1. The users need to click the '**Start Tour**' icon to begin the guided tour for an existing Business Story. (The Guided tour window opens by default for a newly created Business Story.)
2. The user gets a dialog window prompting to lead them through all the significant functionality provided on the page.
3. Click the '**Next**' option to proceed in the Guided Tour.



4. Click the '**Prev**' option to go back to the guided tour.



5. Click the '**End Tour'** option to end the guided tour.



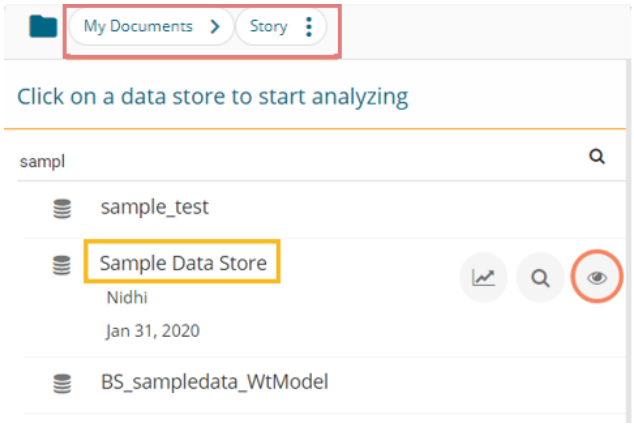
Note:

a. The users can end the tour at any given point by clicking the '**End tour**' option from the guided tour window.
b. The Guided Tour option is provided on the Design, BDB Search, Analyse View, and Storyboard pages to assist the users.

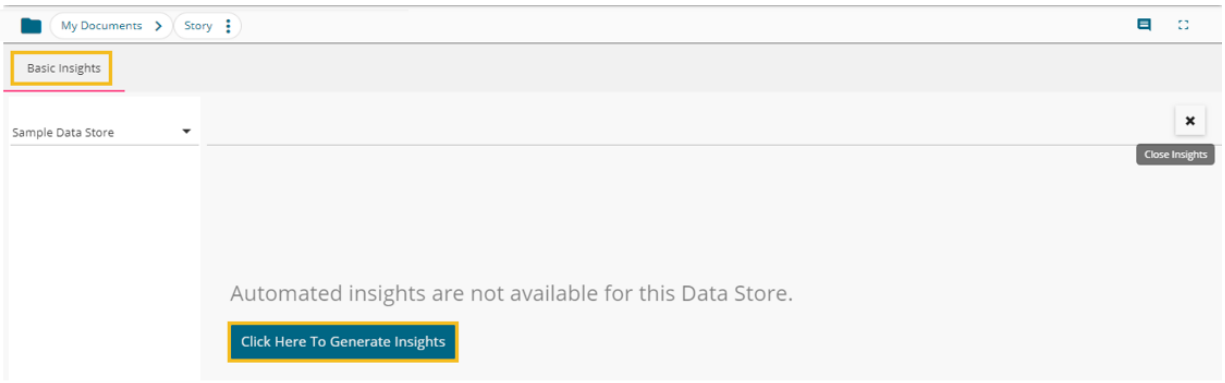
4. Data Insights

The Data Insights option instantly generates the dimension based basic data insights for the selected data store.

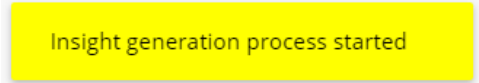
i) Select a Data Store from the story landing page.
ii) Search and select a Data Store from the available choices.
iii) Click the '**Data Insights**' icon provided next to the selected data store.



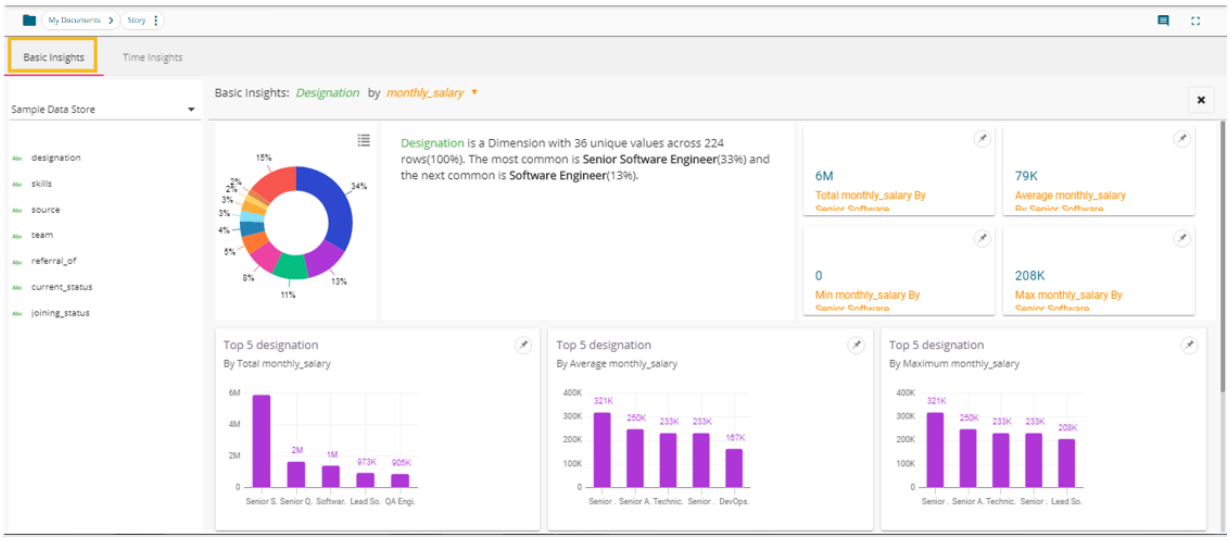
iv) The following page opens if the Data Insights are not generated for the concerned Data Store.
v) The user needs to click the '**Click Here to Generate Insights**' option to get automated insights for the concerned data store.



vi) A message appears to notify that the insights generation process started.



vii) A new page opens, displaying basic data insights based on the default selection of dimension and measure. E.g., Charting components in the following image presents data for a combination of 'Previousorganization' and 'MonthlySalary' respectively selected as dimension and measure.

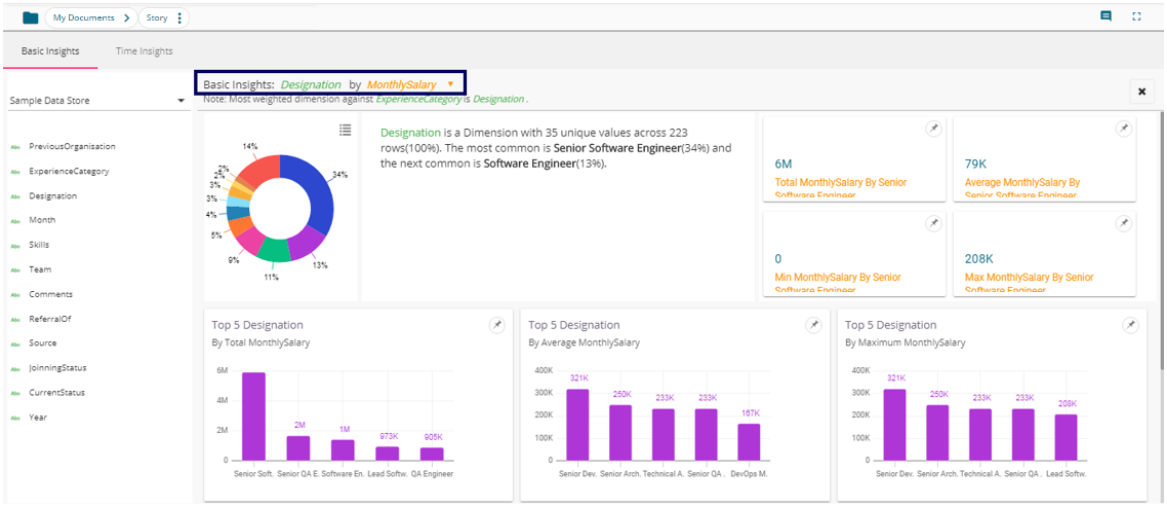


viii) The user can alter the displayed data insights by changing the selected dimension or measure.

a. Changing Dimension Selection

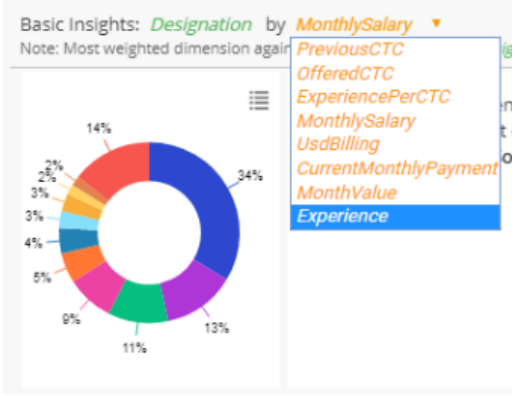
i. Select another dimension by clicking on a dimension value from the displayed list.
ii. The charts displaying the fundamental data insights get changed instantly.

E.g., The following image displays a change in the data insights based on the selection of a new dimension. The image shows data from various perspectives based on a combination of 'Designation' and 'MonthlySalary'.

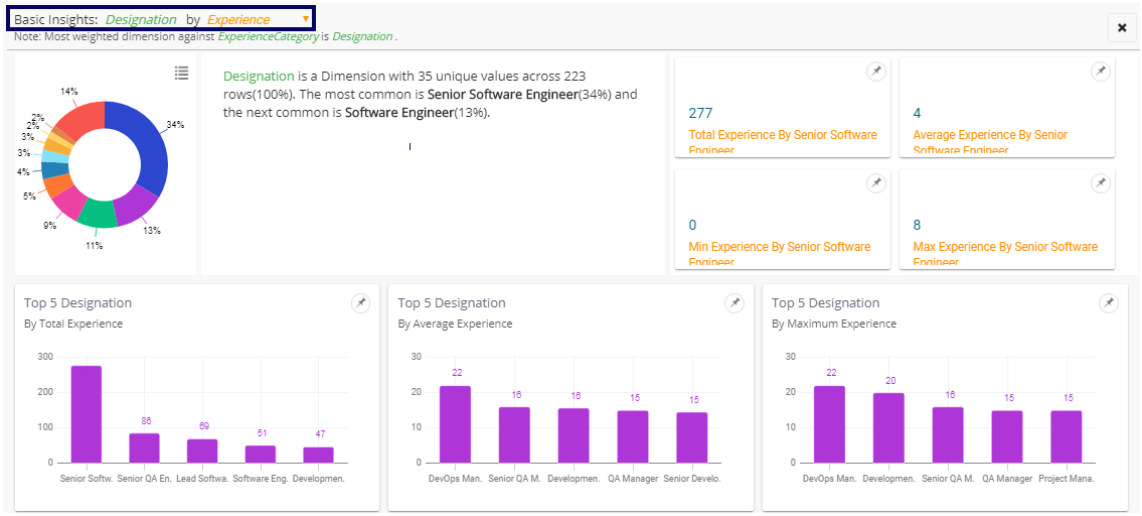


b. Changing Measure Selection

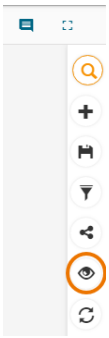
i. A drop-down menu on the top displays the available list of measures.
ii. The user can select another measure.



iii. The data insights reflect changes based on the selected measure.



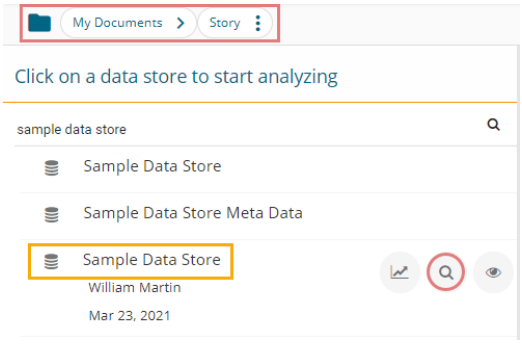
Note: The user can access the Data Insights icon from the vertical panel provided on the Storyboard page.



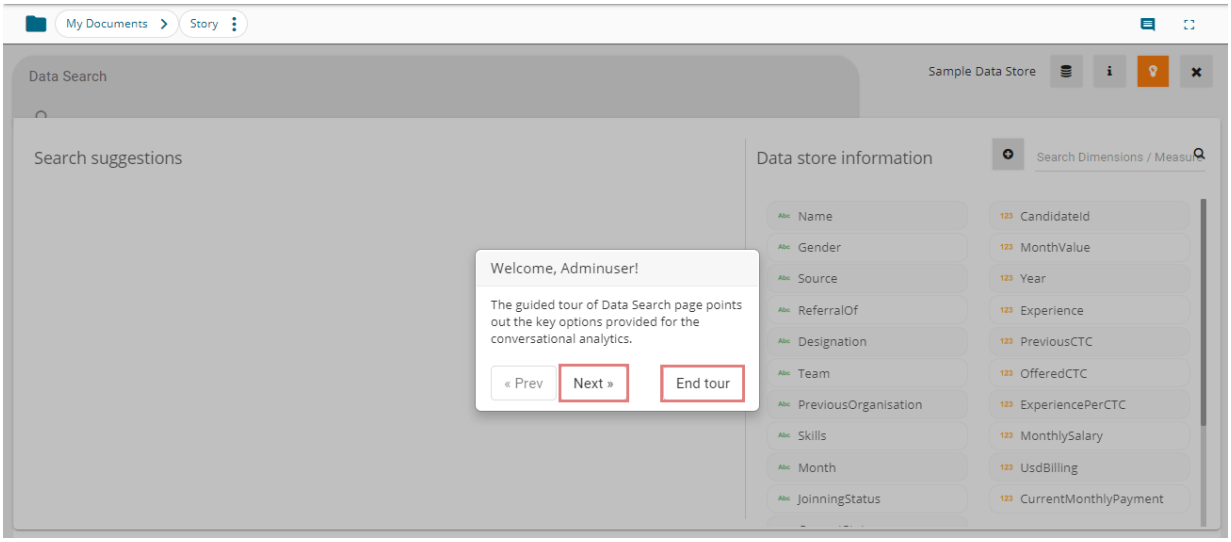
5. Data Search

The AI-based **Search** option helps users to quest for specific data all through the selected datastore and instantly displays the query results. The users can further save these search results to the current storyboard to immediately build an insightful data story.

i) Navigate to the story landing page.
ii) Search and select a Data Store from the available list.
iii) Click the '**BDB Search**' icon provided next to the selected data store.



iv) The Data Search page opens (with the Guided Tour dialog window).
v) The users can take a tour by using the '**Next**' option or close the tour by clicking on the '**End tour**' option.

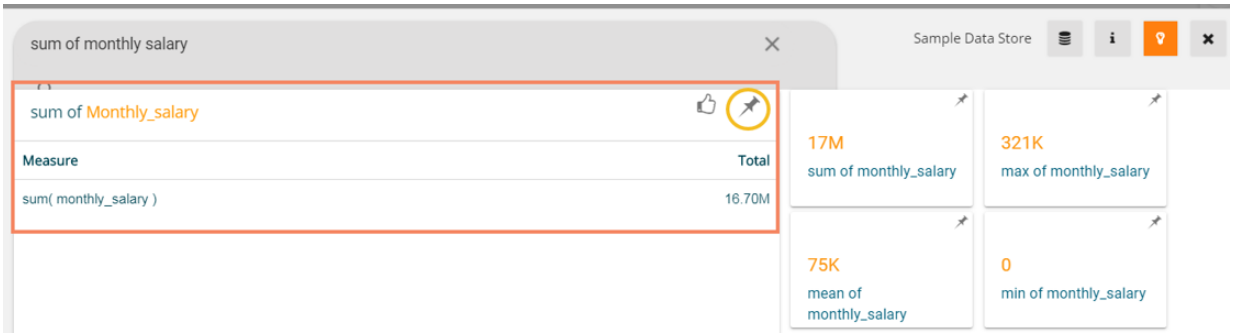


vi) The user gets autosuggestions while typing a query in the Data Search bar.

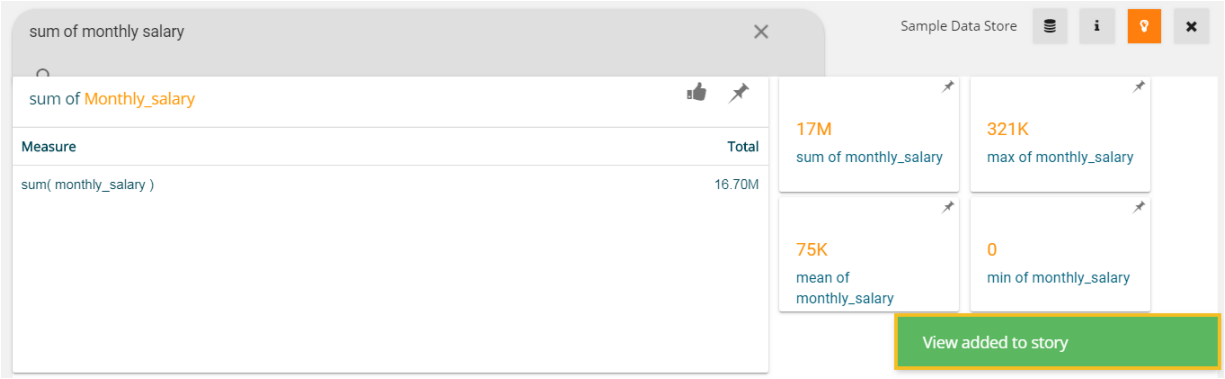
vii) After typing a specific query or selecting a search query from the search suggestions, click the '**Search**' icon.

viii) The search result instantly reflects beneath the search bar.

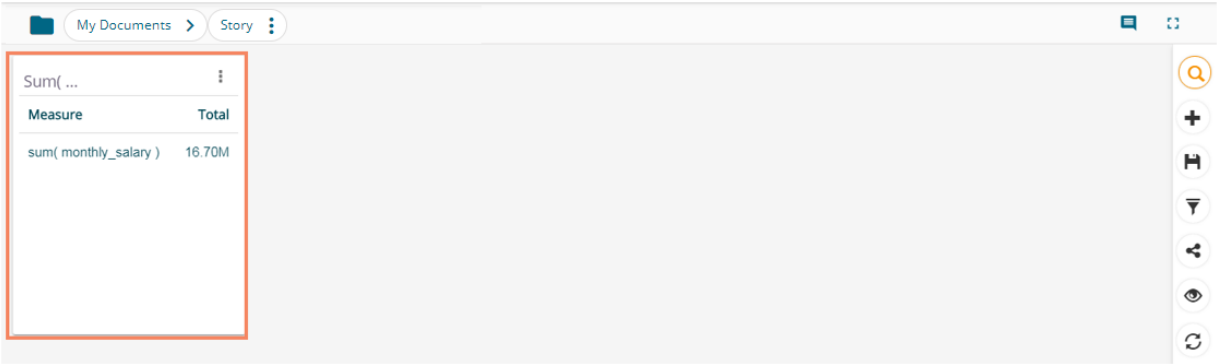
ix) Click the '**Add to story**' icon.



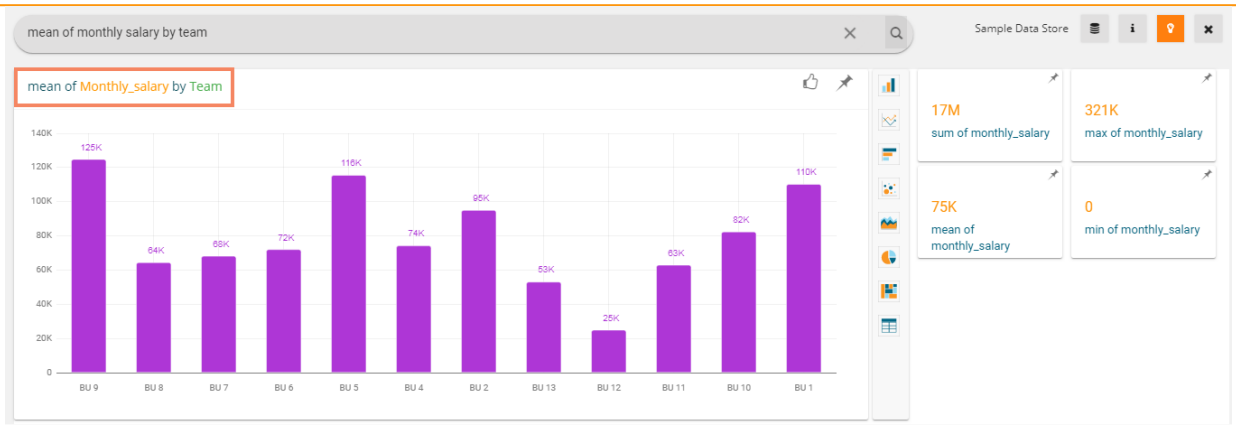
x) A notification message appears.



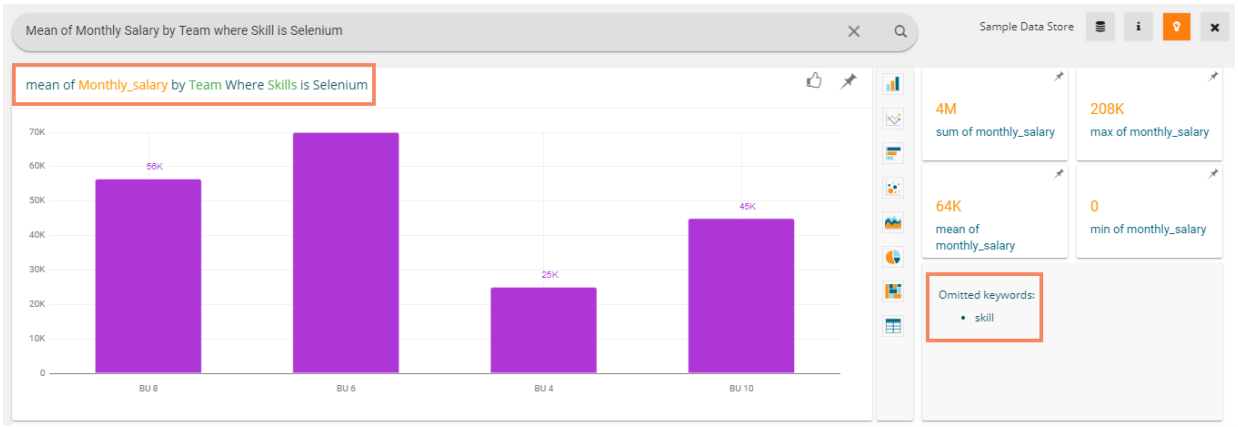
xi) The selected view gets added to the storyboard.



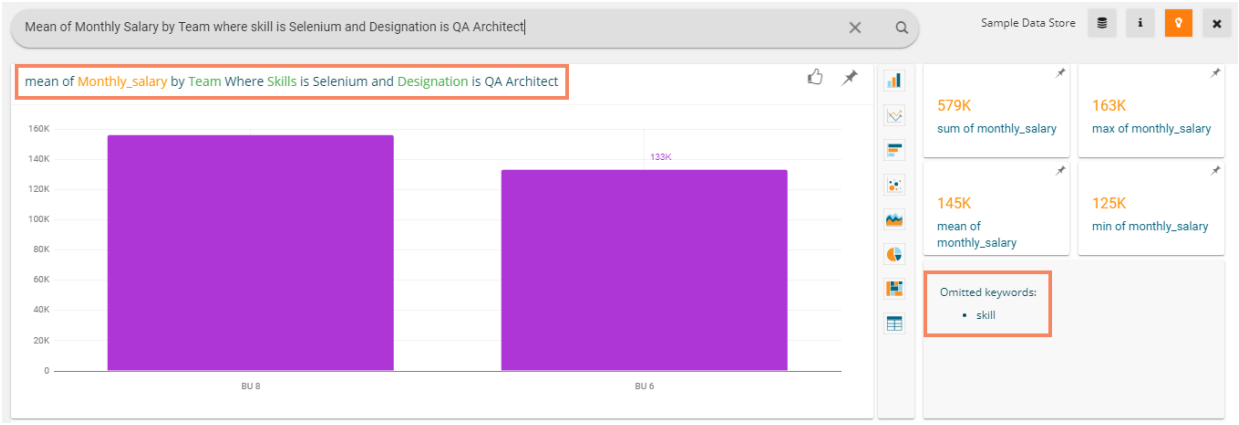
xii) The user can drill deeper into the selected Data Store by using the BDB Search bar with proper data queries. Refer to the following images to see how instantly the searched data gets displayed with more profound queries:
Query 1: 'Mean of Monthly Salary by Team'- Displays team-wise monthly salary



Query 2: 'Mean of Monthly Salary by Team where Skill is Selenium' - Displays team-wise monthly salary for those employees having Selenium skills

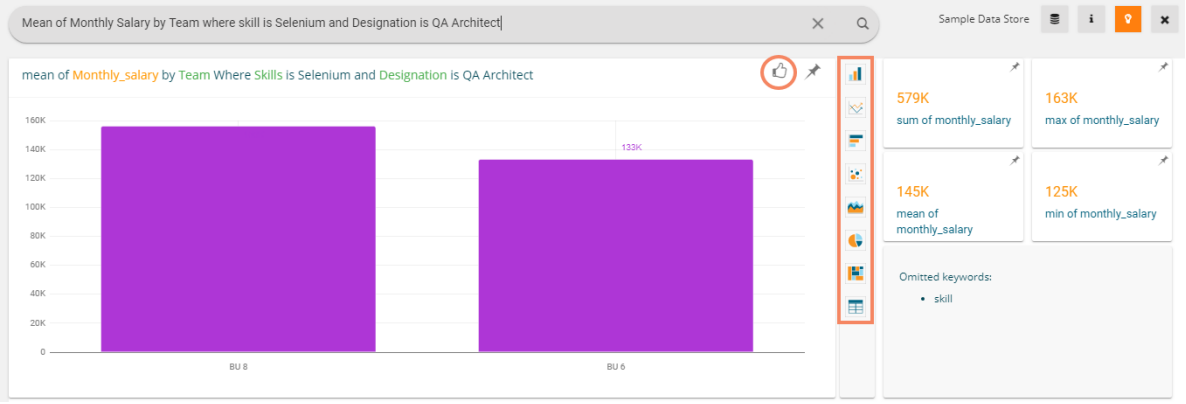


Query 3: 'Mean of Monthly Salary by Team where skill is Selenium and Designation is QA Architect' – Displays team-wise records of QA Architects' monthly salary who know Selenium

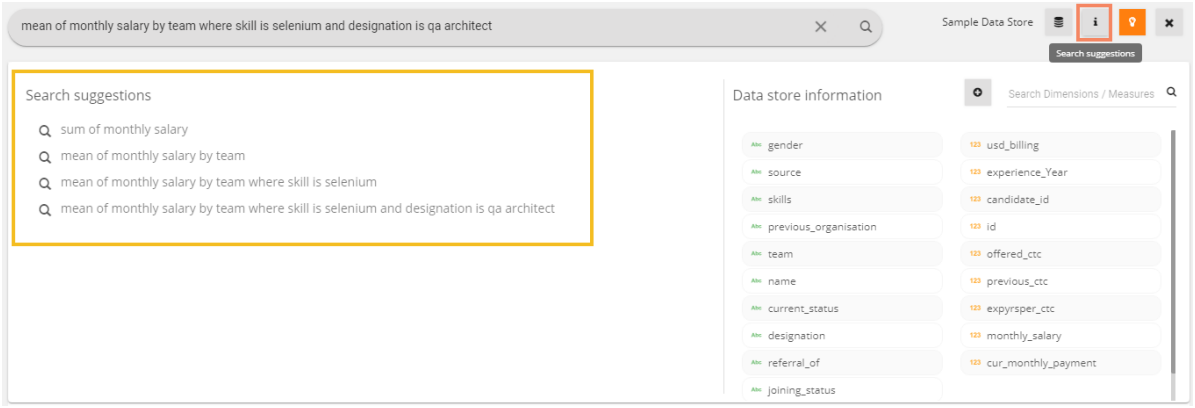


Note:

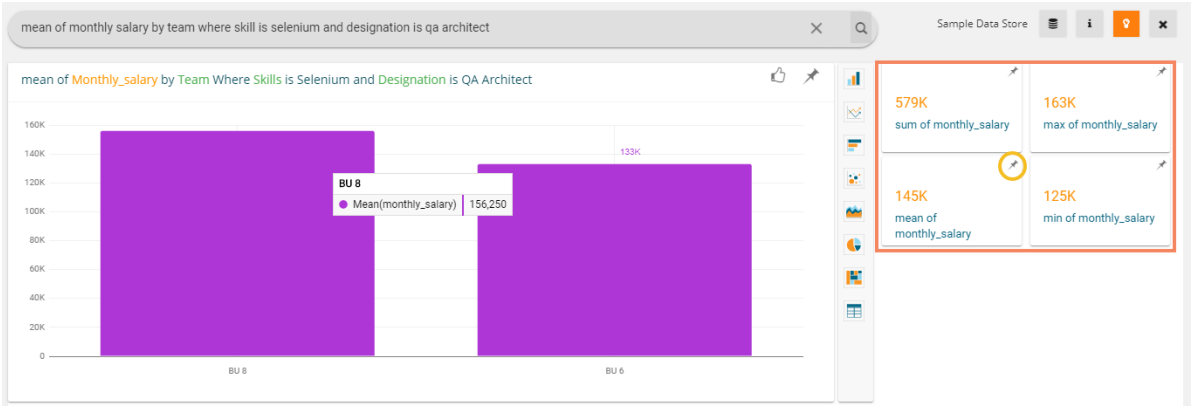
a. The instantly created view gets displayed in a default charting component based on the inserted search query, users can switch to any other visualization option using the charting panel provided on the search page.
b. Click the '**Like**' icon to save the searched query into the database.



c. Click the '**Search suggestions**' icon to display all the saved search suggestions from the database along with a list of dimensions and Measures from the selected Data Store.

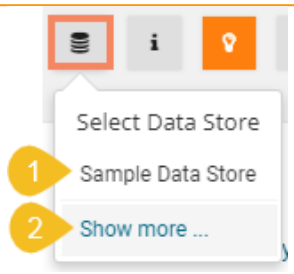


d. Other views close to the searched query also get displayed (on the right). The user can add any of the suggested Views to the current storyboard by using the '**Add to Story**' icon provided for the view.

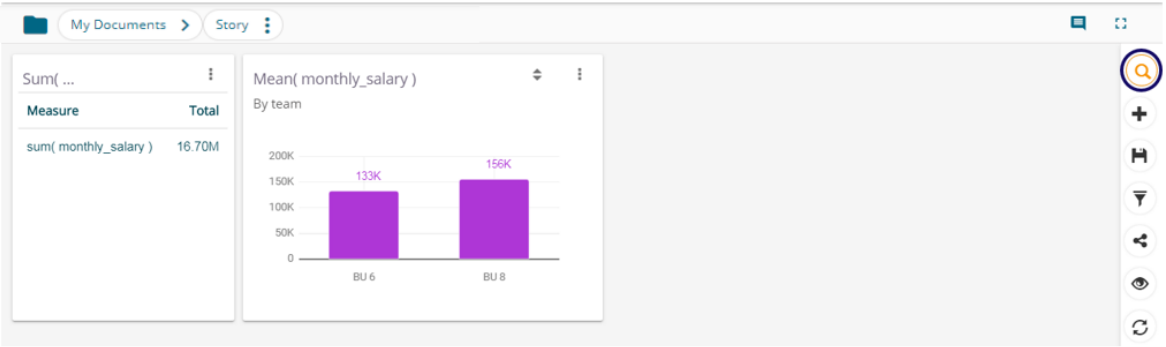


e. Users can alter the data store by using the Data Store icon provided on the Data Search page. The users get two choices to choose from:

1) Displays the selected Data Store- to continue with the selected Data Store (in the given case, it is 'Sample Data Store')
2) Show more- to select another Data Store from the list of available Data Stores.



f. BDB Search icon is accessible from the vertical panel provided on the Storyboard page.



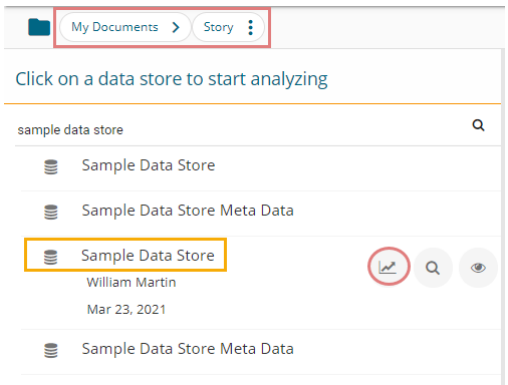
g. BDB Search supports search terms like 'yesterday,' 'the day before yesterday,' and 'two days ago.'
h. Measure filter values with k/M/lakh/million unit for the "=is/is equal to" and "is between" operations are supported as search terms.

Icons	Name	Function
	Search	Searches the inserted query from the selected Data Store
	Select Data Store	Prompts users to select Sample Data Store or choose from the list of Data Stores
	Search Suggestions	Displays all the saved search suggestions
	Start BDB Search Tour	Begins the Guided Tour for the BDB Search page
	Close NLP Dialog	Closes the Data Search window

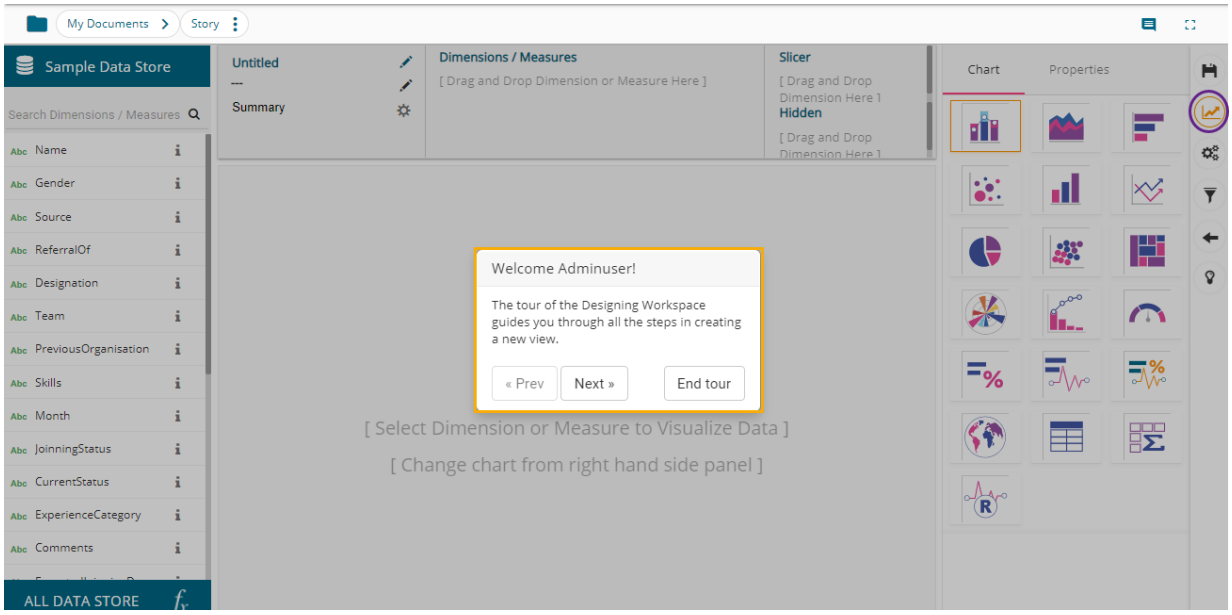
6. Designing a New View

This section explains the steps to create a new view using the drag-drop interface provided on the Design page.

i) Select the '**View Design**' icon after selecting a data store.



ii) The Design workspace opens displaying the guided tour dialog window.



iii) After completing the guided tour or ending the tour, the user gets access of the Design workspace.

iv) The **Design** workspace opens to design a new view.

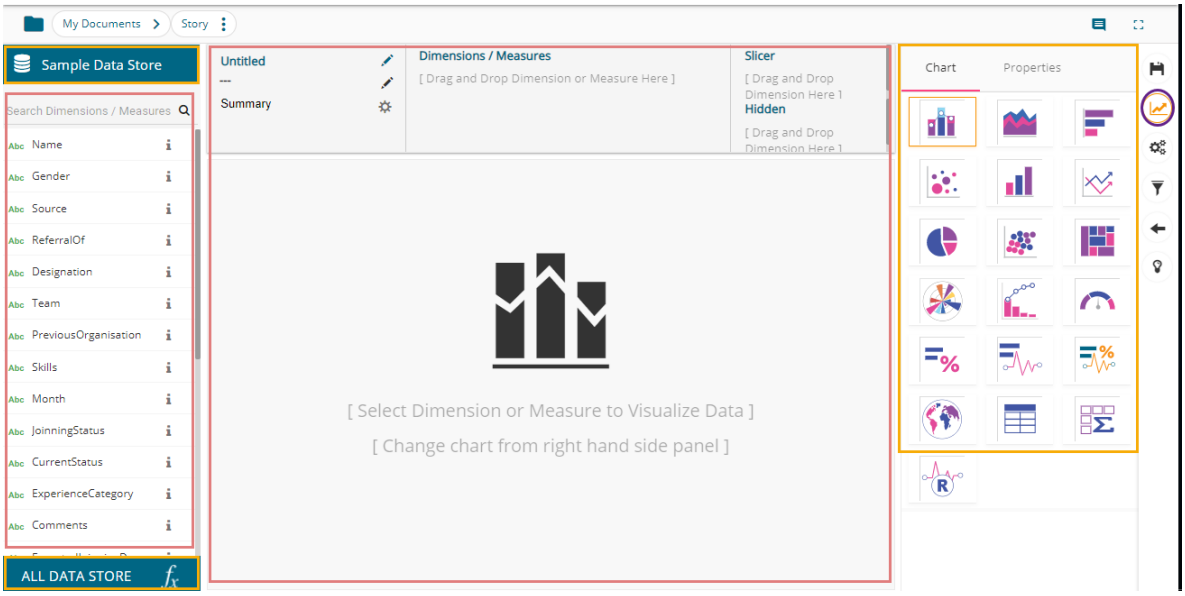
i. The name of the selected Data Store appears on the left side of the screen.

ii. A list of available Dimensions and Measures in the selected Data Store get listed below the Data Store name.

iii. Select another Data Store by clicking the '**ALL DATA STORE**' option.

iv. All the available Charts and chart specific Properties get displayed on the right side.

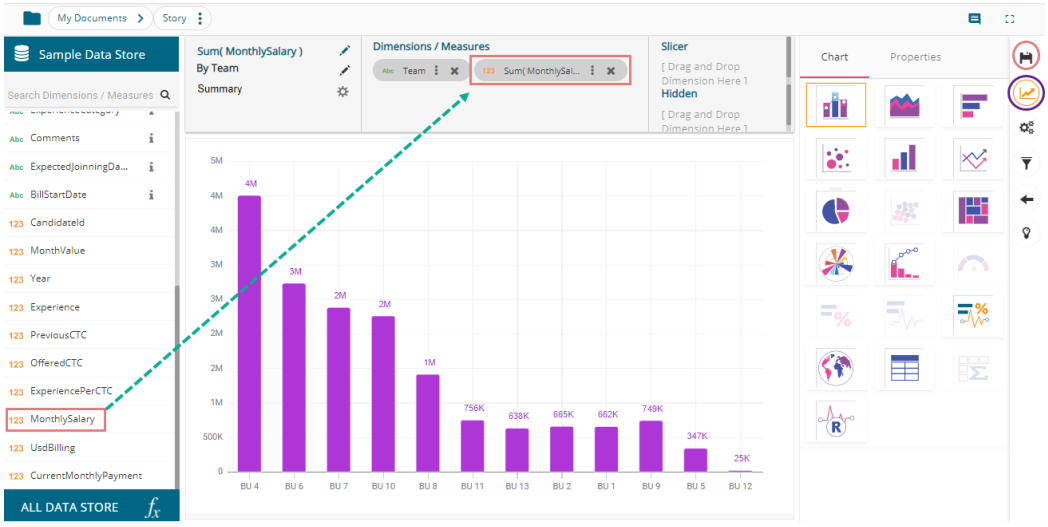
v. The user also gets a panel to drag the dimensions and measures and the instant visualization appears below.



v) Drag and drop the required dimensions/measures from the data store (As displayed in the below image).

vi) A View (graphical view) based on the selected dimensions/measures instantly appears on the canvas (The Mixed chart type gets selected by default).

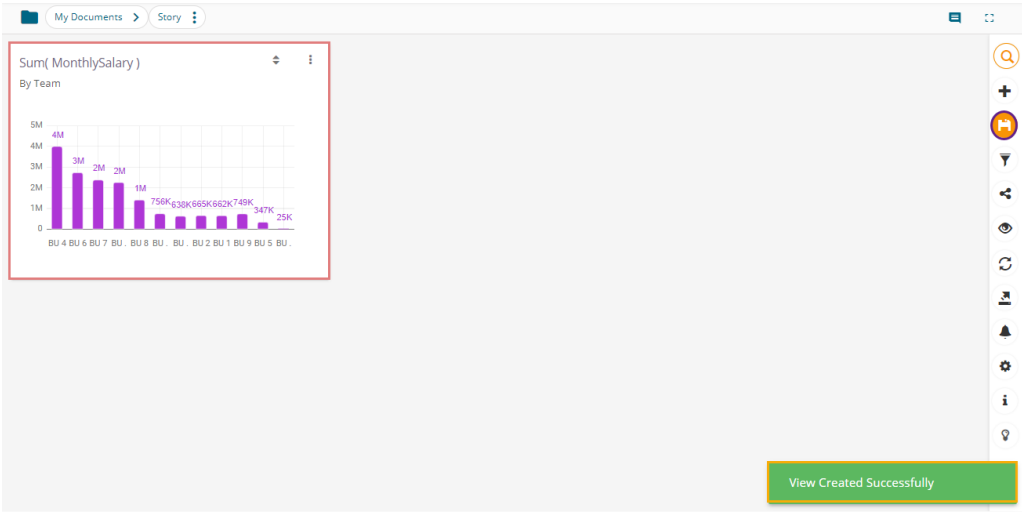
vii) Click the '**Save**' icon.



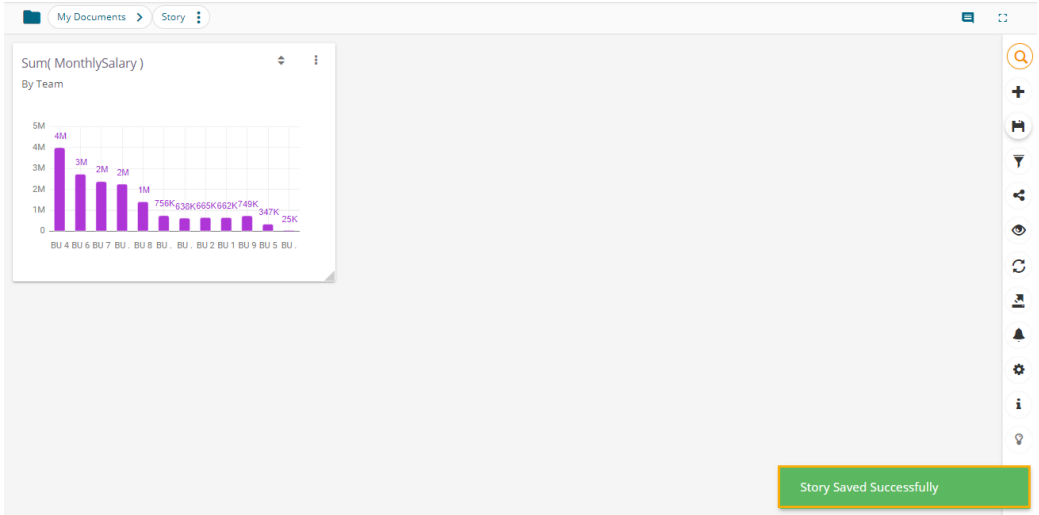
viii) A new view gets created successfully.

ix) The newly created view gets saved on the Storyboard.

x) The users need to click the '**Save**' option from the Storyboard.

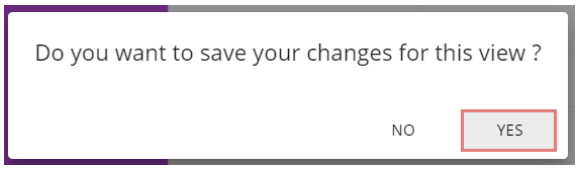


xi) A message appears to convey that the recent story has been saved.



Note:

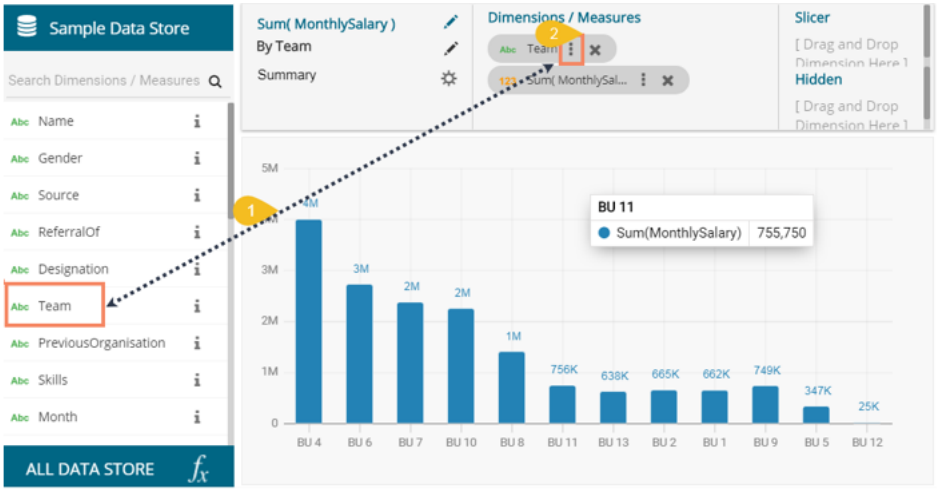
a. If users move to Storyboard without saving the newly designed view, a pop-up window appears to confirm whether the changes for the View need to be saved to the story or not. Click '**YES**' using the message window to save the view changes.



b. The user can change the Display name of the selected Dimension by clicking on the Category Properties icon.

i) Select and drag a dimension to the specified space on the Design Workspace.

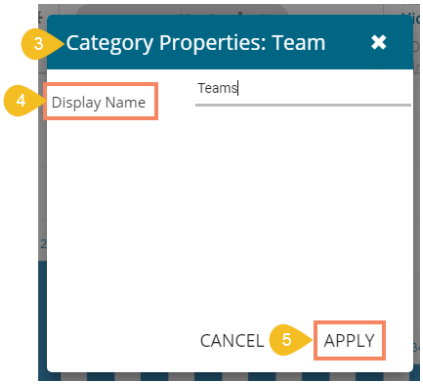
ii) Click the '**Category Properties**' icon provided for the dragged Dimension.



iii) The Category Properties window opens.

iv) Change the Display name.

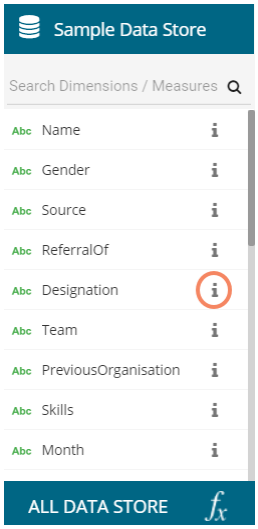
v) Select the '**APPLY**' option.



6.1. Dimension Profiling

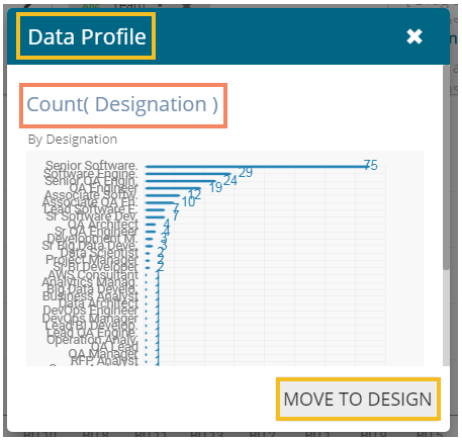
Dimension Profiling has been introduced to provide users with some more insights into a dimension.

i) Select the '**Relation**' ℹ icon from the list of displayed Dimensions on the '**Design**' page.

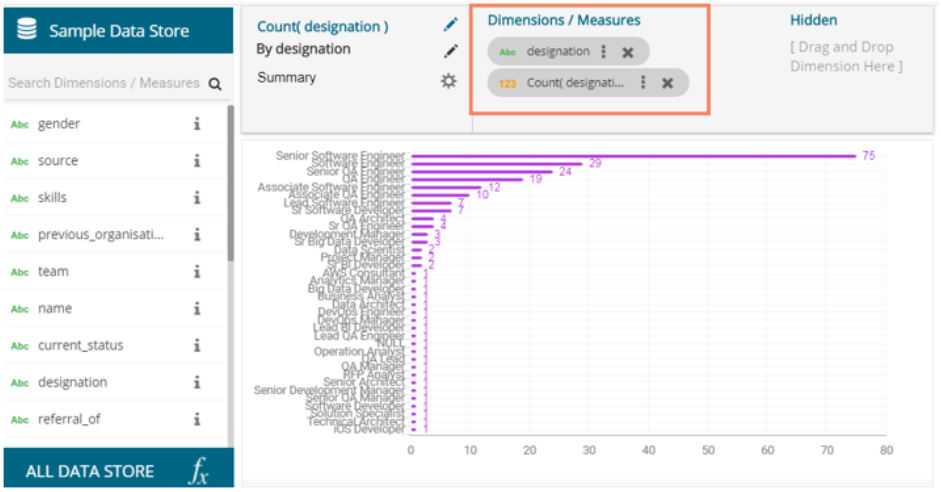


ii) A new window opens with the Data Profile information displaying the count of the selected dimension value.

iii) Click the '**MOVE TO DESIGN**' option.

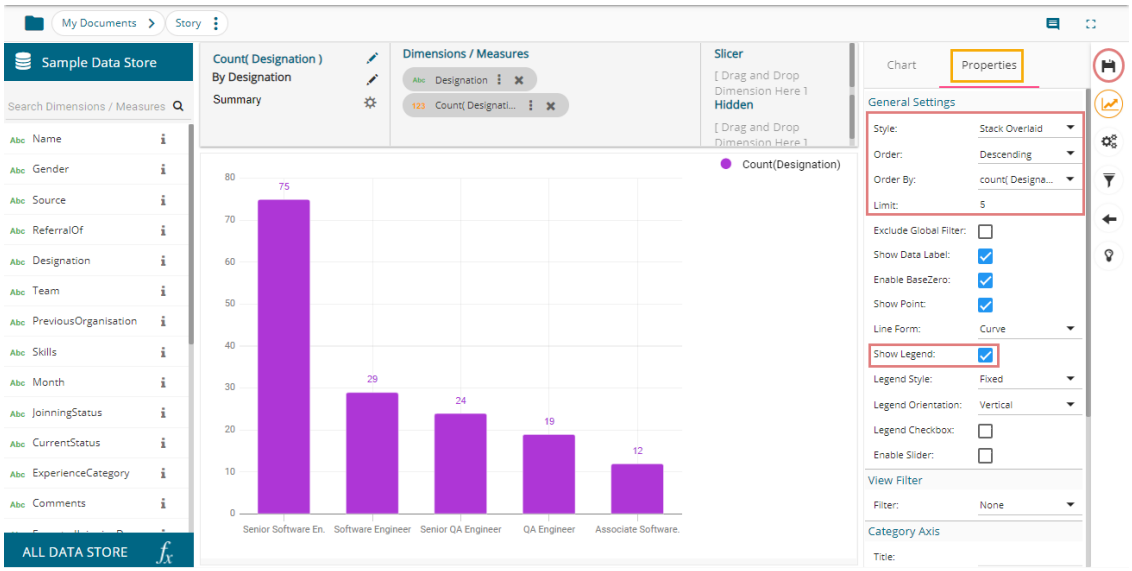


iv) The data profile chart gets moved to the design workspace.

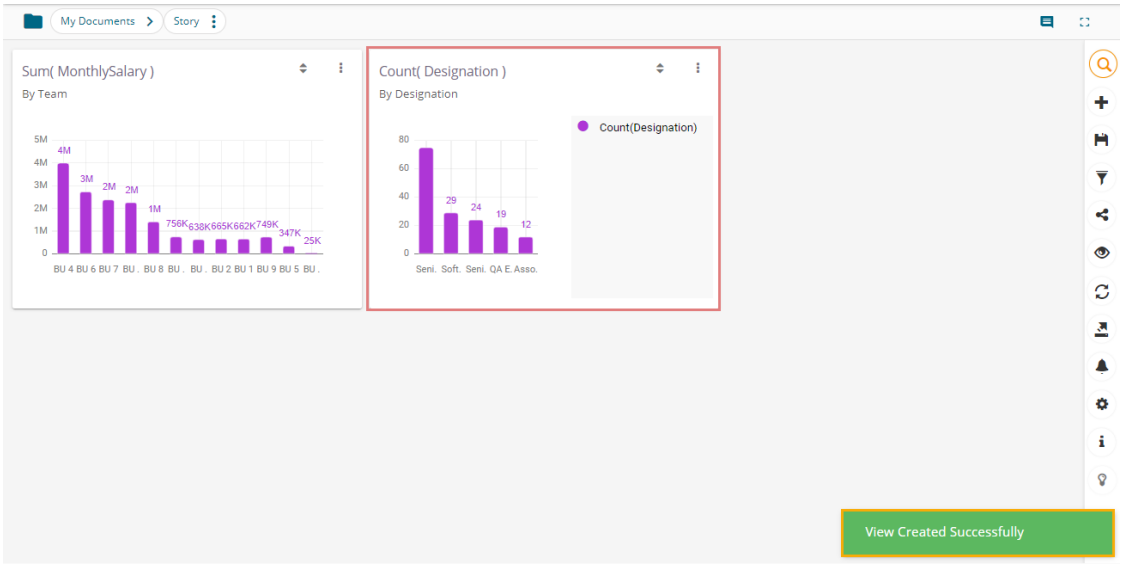


v) The user can apply the various modification options to the view from the Design page (E.g., The below given image displays the modified view after applying the descending order and limiting the display to 5 records. It also displays legend).

vi) Click the '**Save**' option from the Design Workspace.



vii) The selected view gets saved to the Storyboard; a success message appears to convey the same.



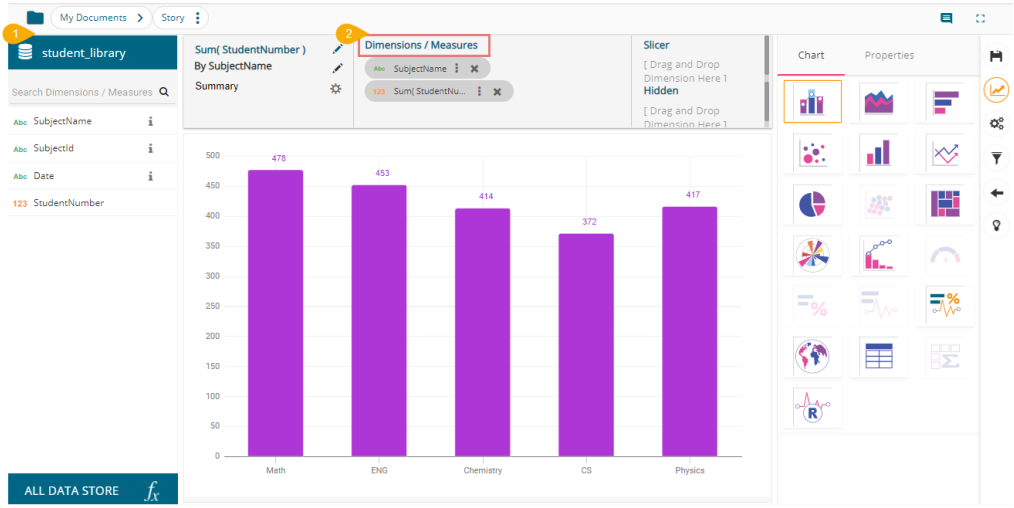
Note: Click the '**Save**' option provided on the Storyboard to save the recent updates in the story.

6.2. Data Store Merge at View Level

Users can merge multiple data stores at view level to compare different measure values across the merged datastores.

i) Navigate to the Design New page.

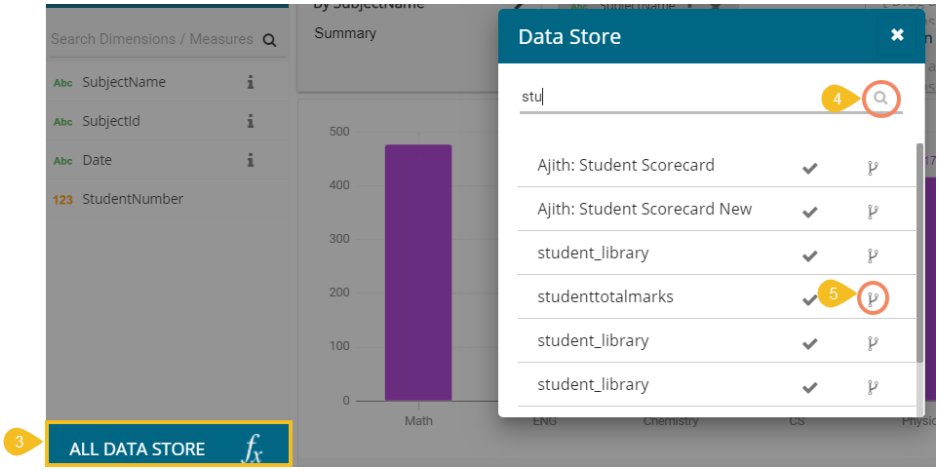
ii) Drag and drop dimension(s) and measure(s) from the selected Data Store onto the canvas to create a view.



iii) Click the '**ALL DATA STORE**' option.

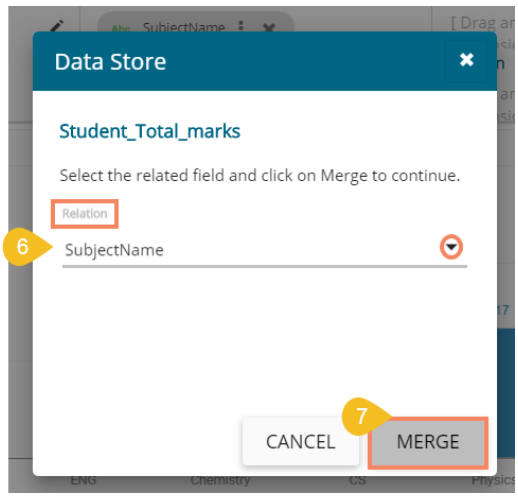
iv) Search for a Data Store using the search bar.

v) Click the '**Merge**' icon for the selected Data Store.

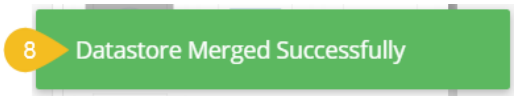


vi) The user gets redirected to select a related field from the drop-down menu.

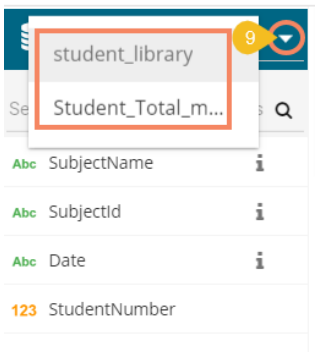
vii) Click on the '**MERGE**' option.



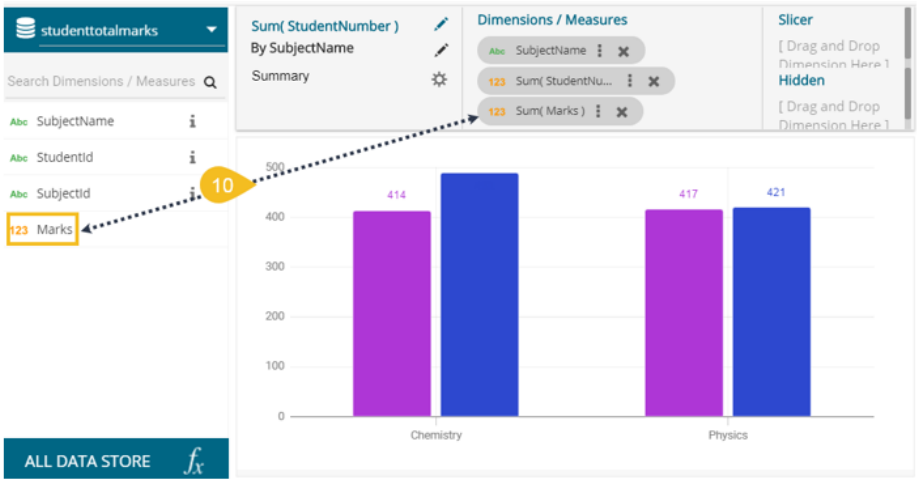
viii) A success message appears to confirm the merge of the selected Data Stores.



ix) The selected Data Store gets added to the Data Store space, and a drop-down icon appears to choose any one Data Store out of the given choices.



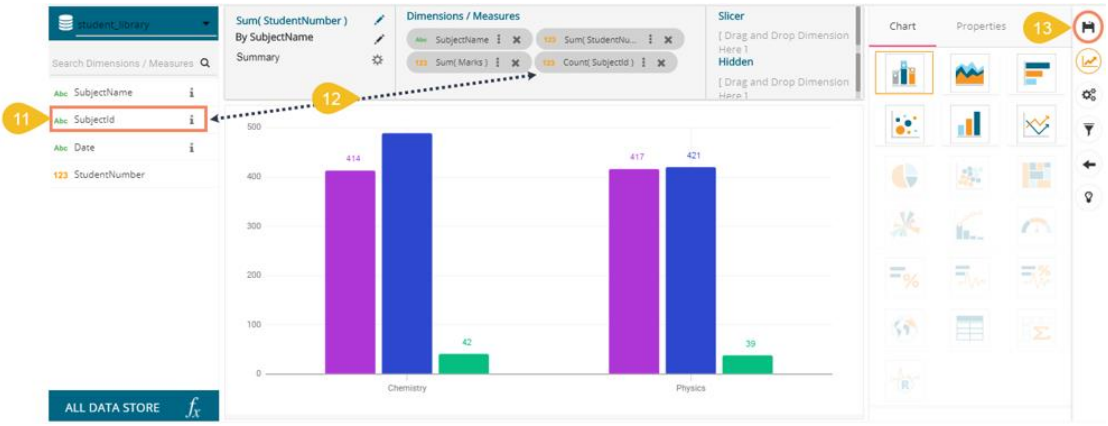
x) Drag and drop a measure from the newly added Data Store to create a comparative view.



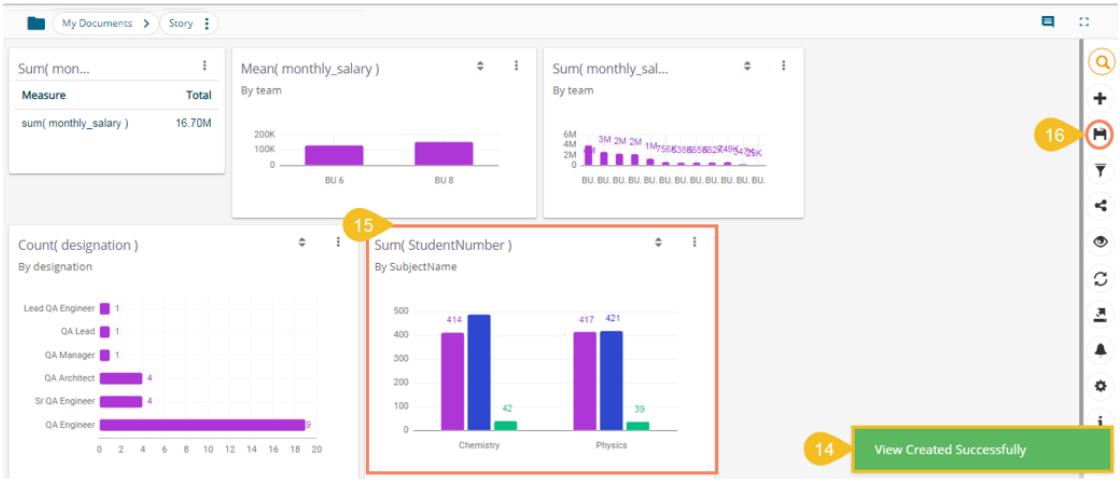
xi) The user can add multiple Data Stores by using the same set of steps.

xii) Drag the required measures to add the corresponding fields in the view.

xiii) Click the '**Save**' icon.

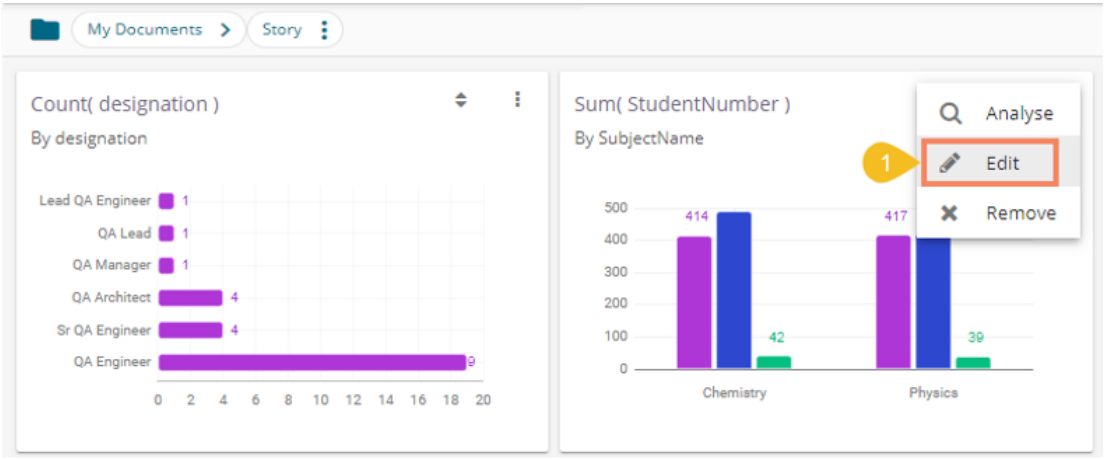


xiv) A success message appears.
xv) The view gets added to the storyboard.
xvi) Click the '**Save**' icon from the storyboard to save the entire story.

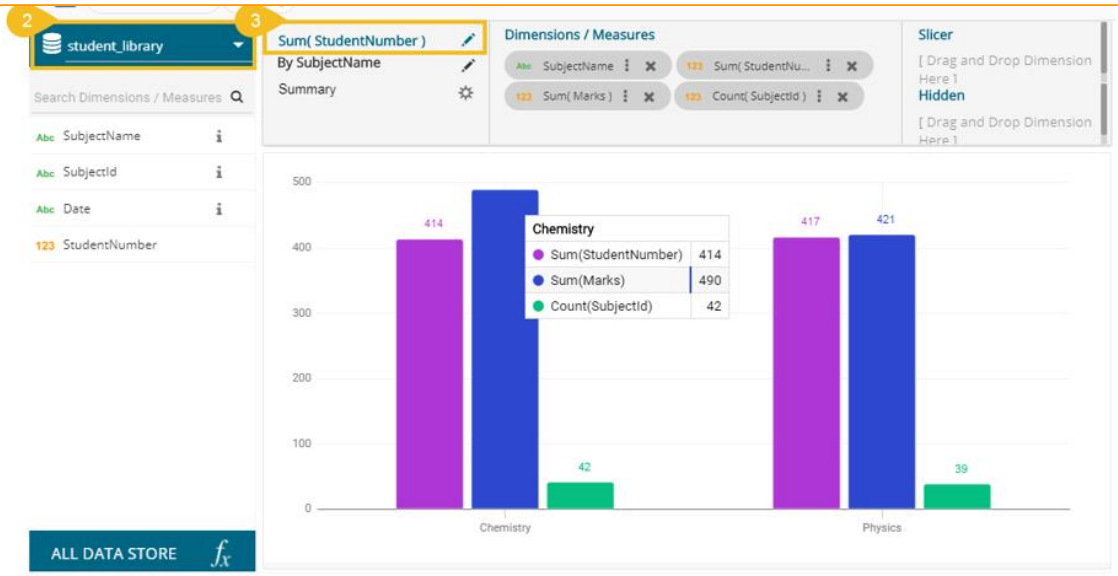


Note:

a. All the merged data stores can be accessed for the saved view by using the '**Edit**' option from the storyboard.
1) The user can modify the view by selecting the '**Edit**' option from the storyboard.



2) All the merged data store can be accessed for that view even in the '**Edit**' mode.
3) The user can change the title of a Saved View title by opening the Design New page of the view via the '**Edit**' option.

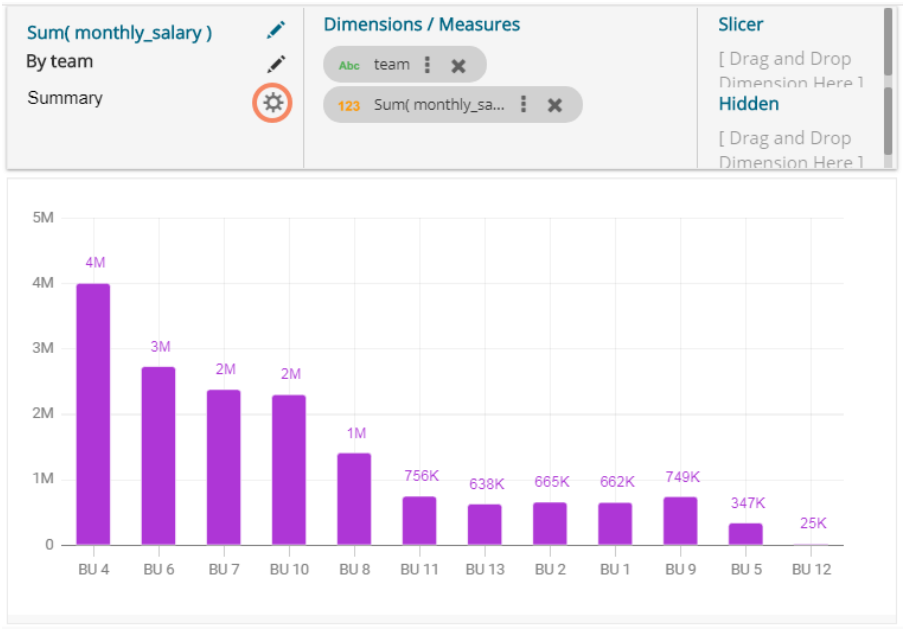


b. The Merged Data Stores do not get saved in the '**ALL DATA STORE**' menu, so to add the subsequent new view based on merged data stores into the same business story, the users need to merge the data stores yet again.

6.3. Measure Summary

Users can access summary properties by clicking on the '**Summary**' option on the '**Design New**' page.

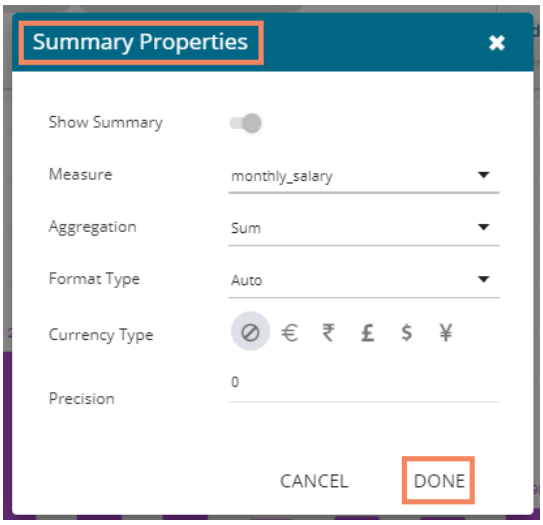
i) Navigate to the Design tab to create a new view.
ii) Drag and drop the required dimensions and measures.
iii) Click the '**Configure Summary**' ⚙ icon.



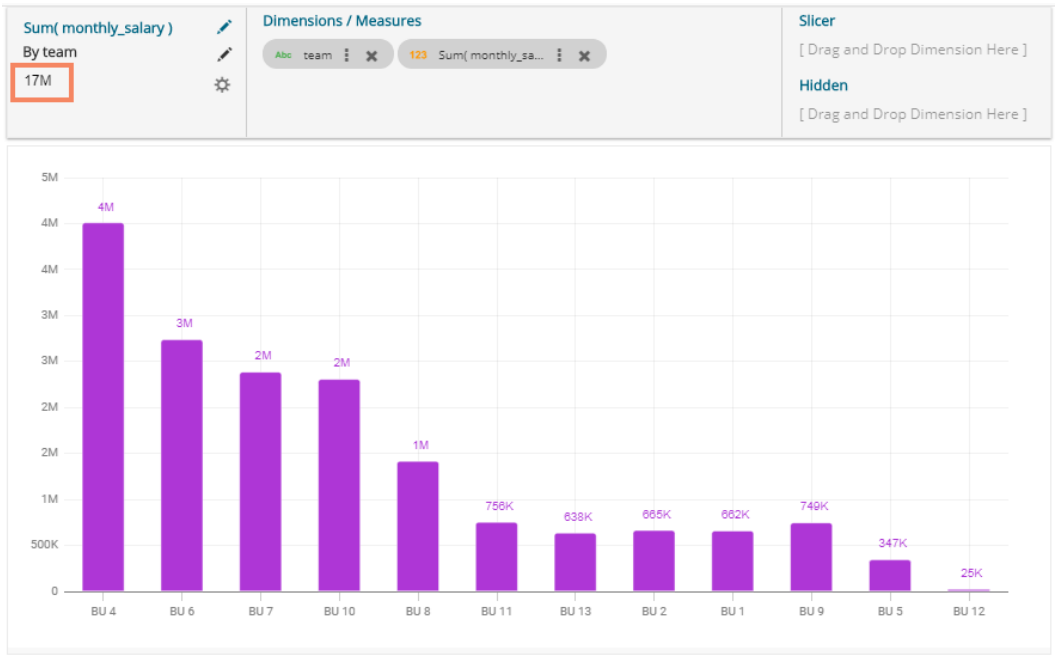
iv) A window opens.
v) Set the following details:
   a) Show Summary: Enable or disable the summary option
   b) Measure: Select a measure from the drop-down menu

c) Aggregation: Select an aggregation type from the drop-down menu
d) Format Type: Select a format type from the drop-down menu
e) Currency Type: Select a currency symbol from the available choices
f) Precision: Select a number to up to what the precision value can be displayed

vi) Click the '**DONE**' option.



vii) The measure summary value gets displayed on the view page by enabling the '**Show Summary**' option.

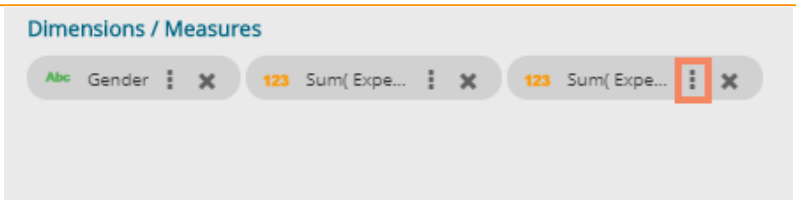


6.4. Series Properties

The users can configure and modify various measure related properties through the Series Properties window.

i) Navigate to the Design page for a view that has at least one selected measure value.

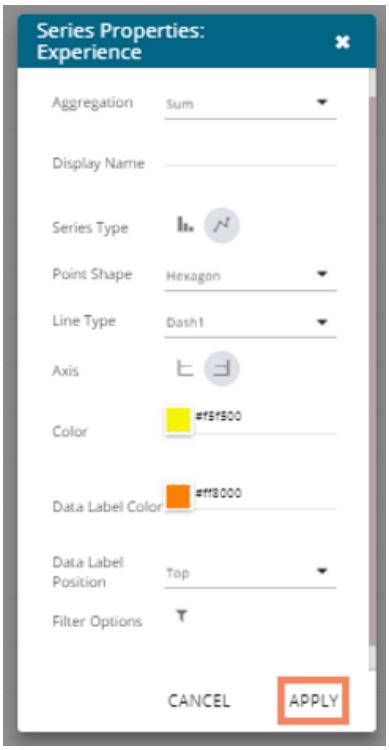
ii) Click the '**Series Properties**' option ⋮ provided next to the dragged measure.



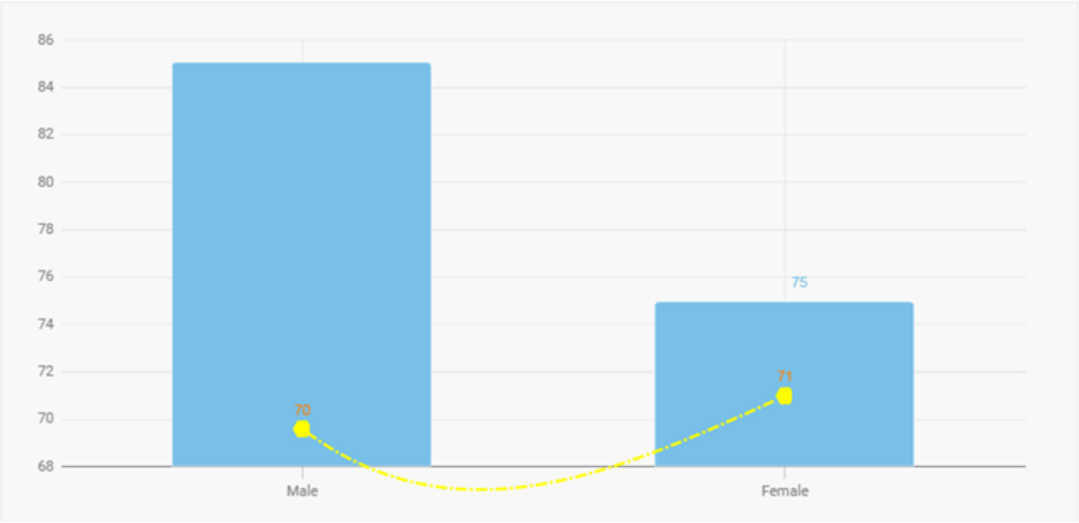
iii) Users can set the following properties from a pop-up window for a mixed chart with two measures dragged on the workspace:

a. Aggregation: Select an aggregation option from the drop-down menu (the given choices are: Sum, Min, Max, Variance, Mean, Standard Deviation, Cumulative Sum)
b. Display Name: Enter the title for the measure to be displayed in the data label
c. Series Type: Choose a series type format for the selected measure
d. Point Shape: Select a point shape from the drop-down menu (the given choices are: Cross, Cube, Hexagon, Point, Quad, Star, Triangle)
e. Line Type: Select a line type from the drop-down menu (the given choices are: Straight, Dot, Dash, Dash1)
f. Axis: Select an axis out of the given choices (the users need to enable the '**Secondary Value Axis**' to get the '**Axis**' option in the Series Properties window)
g. Color: Select the color of the chart presentation from the given menu
h. Data Label Color: Choose a color for data label from the given menu
i. Data Label Position: Select a position to display the data label (the given choices are: Top, Middle, Bottom)
j. Filter Options: Click the '**Filter**' icon to access the dimensions and measures to apply filter condition on the displayed data.

iv) Click the '**APPLY**' option.
Note: The below given image displays Series Properties for the Mixed chart type secondary axis.



v) The selected measure properties get applied to the view.



Note:

a. The '**Series Properties**' may differ as per the selected chart components.
b. Users need to enable '**Secondary Value Axis**' from the Properties tab to get the 'Axis' field in the Series Properties.
c. The user needs to refresh the selected data store to avail of the data in the Business Story Views.
d. View specific chart properties can be accessed from the 'Properties' tab.
e. Users can change or modify the view title by clicking on the edit options provided next to the view name.
   Click '**Edit**' icon > Modify/change the title for the selected measure or dimension > click the '**Checkmark**' icon to save the change.

f. The icons provided on the Design workspace are described below:

Icon	Name	Description
	Save View	Saves and adds the newly designed view to the Storyboard
	Design	Redirects the users to the Design workspace
	Actions	Redirects the users to the Actions tab
	View Filter	Opens the view specific filter panel
	Back	Redirects the users on the storyboard page
	Start Tour	Begins the guided tour of the selected page
	Comments	Allows users to describe the story

or	Full Screen/Reduce Size	Displays the full-screen view OR Reduces the display of the screen

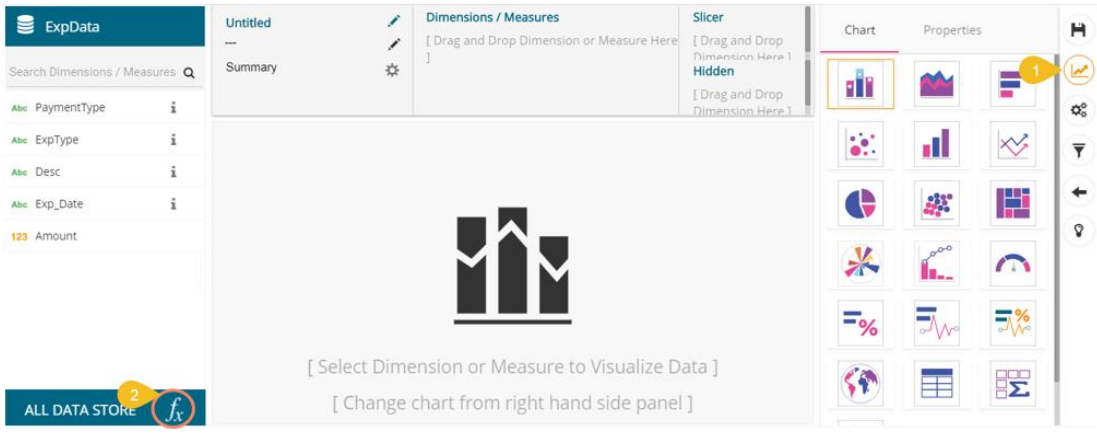
6.5. Formula Field Editor

A formula field editor has been provided on the Design New page to create and add a calculated field in the selected Data Store. The Formula Field Editor window offers two options '**Formula**' and '**Range**' for users. The users can access the icon for Formula Field from the **Design** page next to the '**ALL DATA STORE**' option.

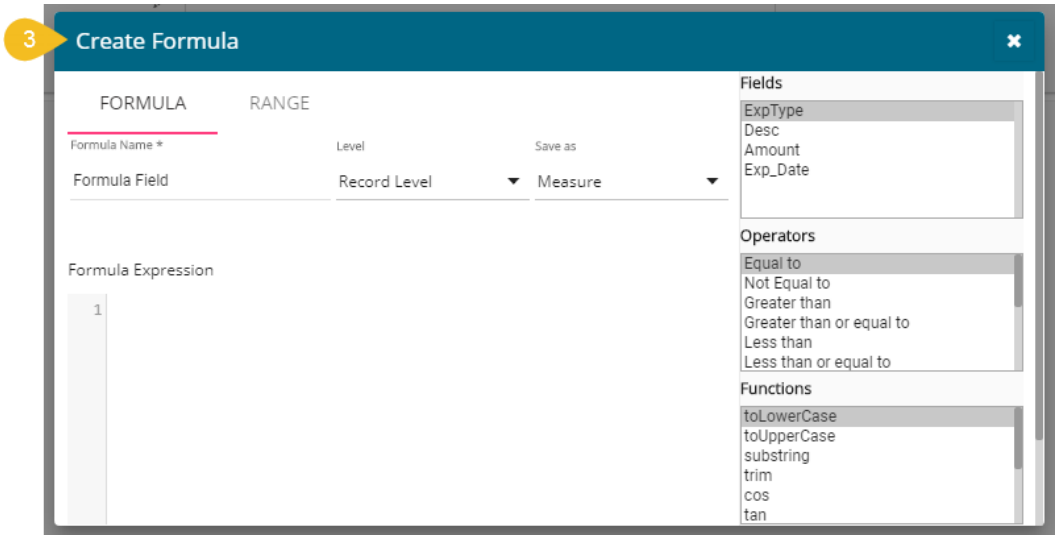
6.5.1. Creating a Formula

i) Navigate to the '**Design**' tab after selecting a data store to design a new view.

ii) Click the '**Formula Field Editor**' f_x icon.



iii) The user gets redirected to the '**Create Formula**' window.

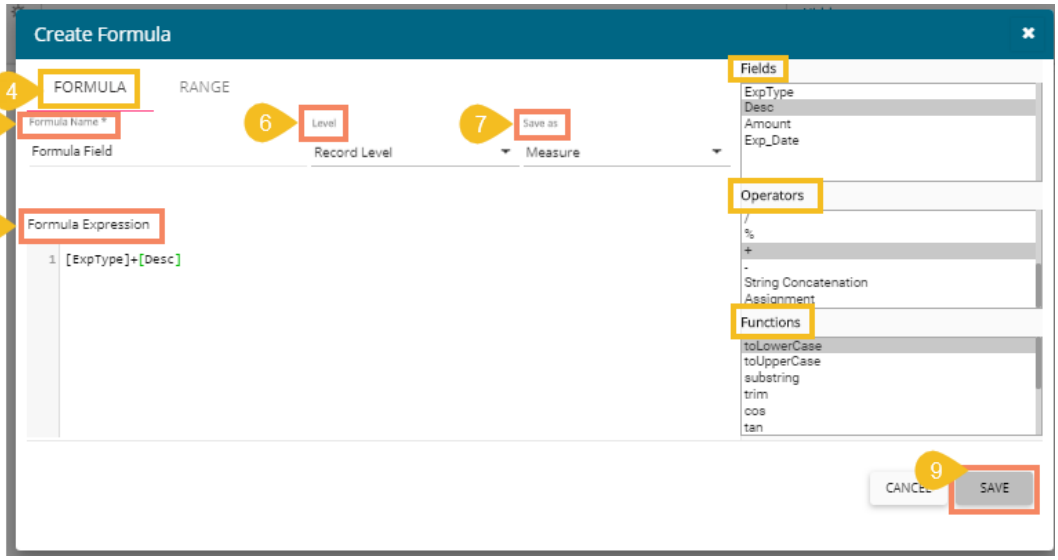


iv) The user needs to provide the following information to create a formula field:

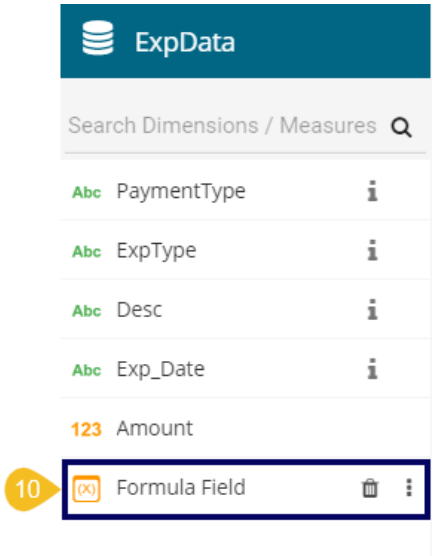
a. Navigate to the '**FORMULA**' tab (opens by default)
b. Formula Name: Give a title to the formula field
c. Type: Select an option from the drop-down menu to decide the type of the Formula Field
   i. Dimension
   ii. Measure

d. Fields: All fields from the selected Data Store list in this window. Users can select the required fields by tapping on them.
e. Operators: All the available operations list in this window. Users can select the required operations to add to complete the formula.
f. Functions: All the available functions list in this window. Users can select the required functions to apply it to the chosen field.

v) Click the '**SAVE**' option to save the formula.
E.g., The following image displays a new formula field '**Formula Field**' created using the 'ExpType' and 'Desc', fields from the data store. The +(addition) operation is used to create the current Formula Expression.



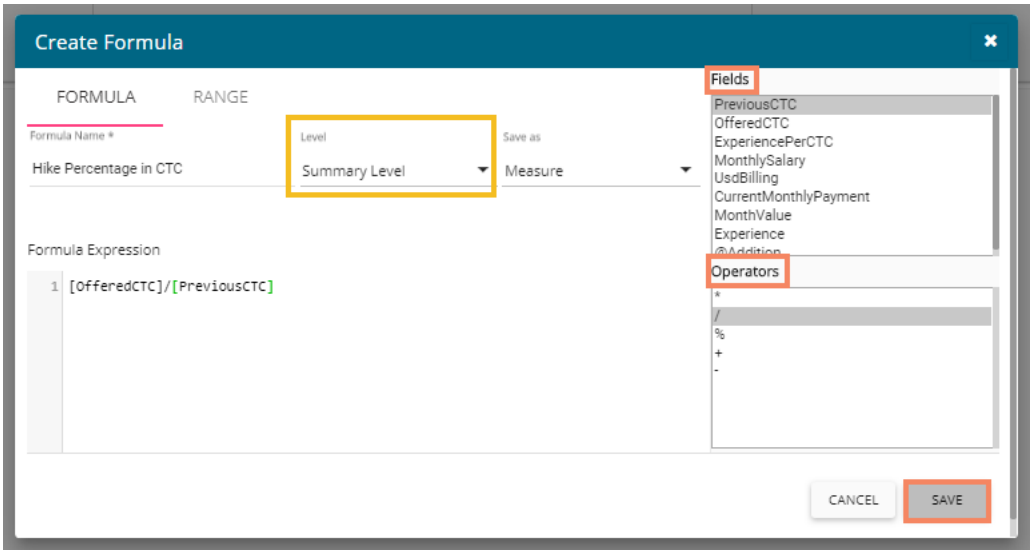
vi) The newly created formula field gets added to the selected Data Store.



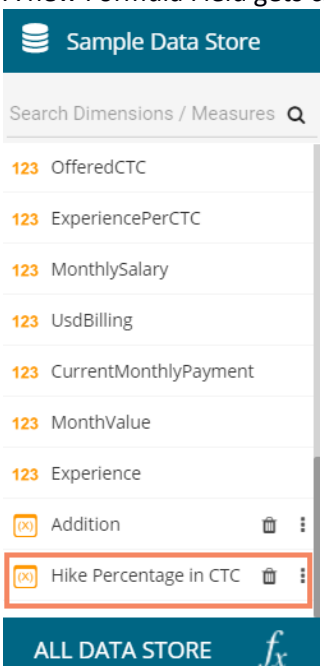
Note: The user can also create a formula field choosing '**Summary Level'** as a level option from the Formula field editor window.

1) Navigate to the '**Formula**' tab.
2) Choose '**Summary Level**' from the Level drop-down menu.
3) Select a '**Save as'** option.

4) Enter a Formula Expression using the Fields and Operators.
5) Click the '**SAVE**' option.



6) A new Formula Field gets created and added to the list of dimensions and measures.



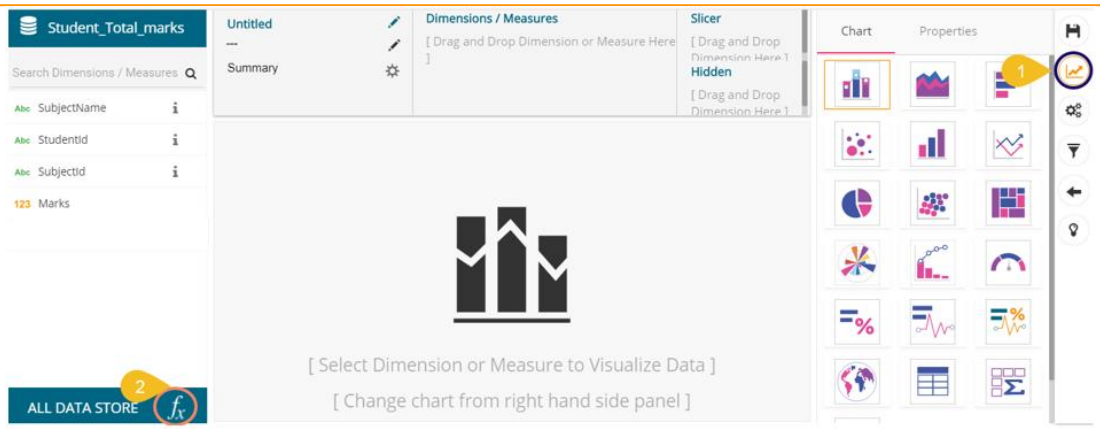
Note:

a. Click the '**Delete**' icon to remove the selected Formula Field.
b. Click the icon to open the '**Create Formula**' window.

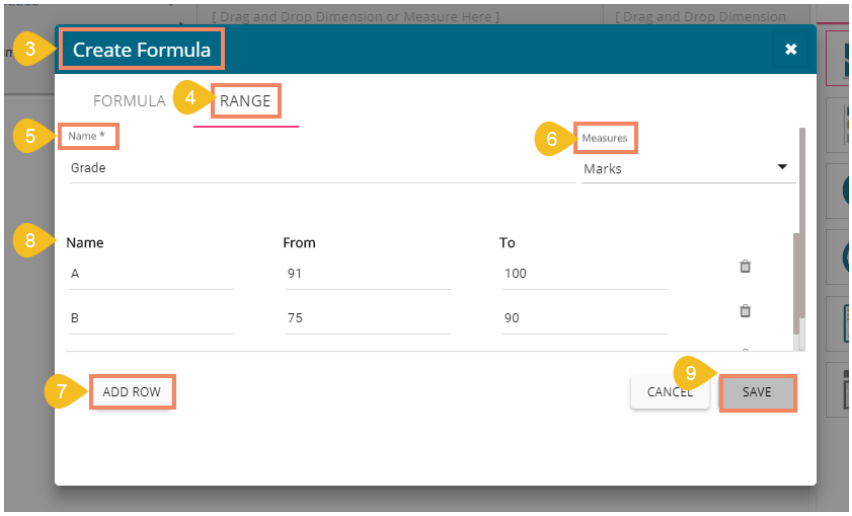
6.5.2. Creating a Range

The user can create a new calculated field in the selected data store using the '**Range**' tab.

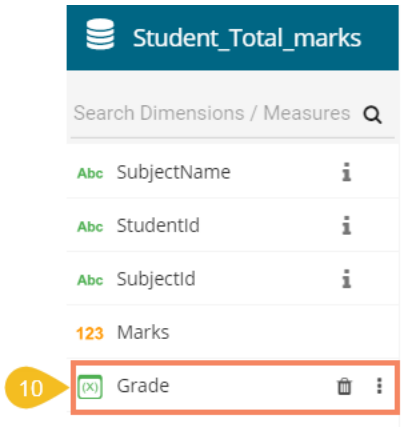
i) Navigate to the **Design** Workspace.
ii) Click the '**Formula Field Editor**' icon.



iii) The '**Create Formula**' window opens.
iv) Select the '**RANGE**' tab.
v) Configure the following information:
   a. Name: Provide a title for the formula field.
   b. Measure: Select a Measure field using the drop-down menu.
   c. Name: Provide a name for the defined range.
   d. From: Set a minimum value to define a specific range.
   e. To: Set a maximum value to define a specific range.
vi) Click the '**SAVE**' option.



vii) The selected Data Store gets a new calculated field.

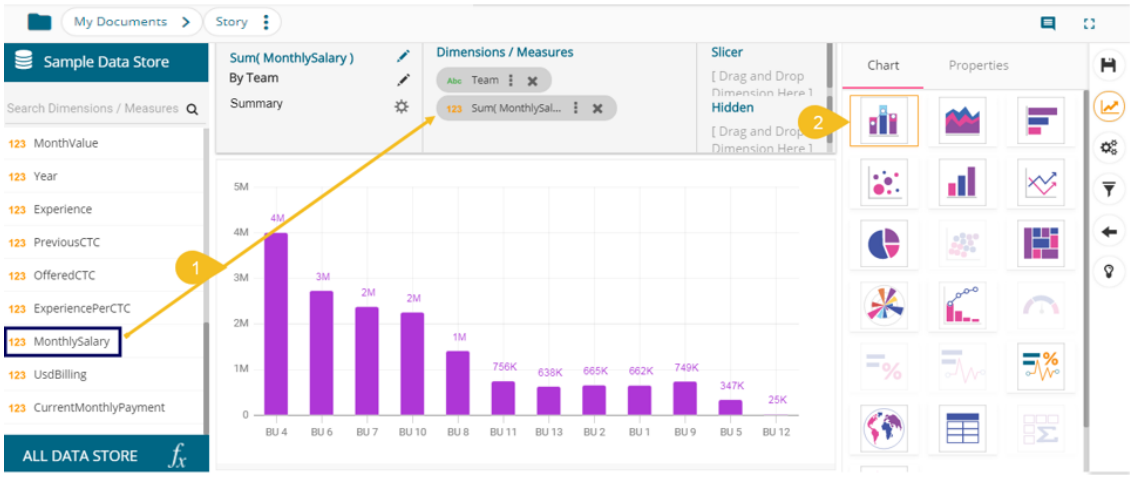


6.6. Order by and Limit

The user can sort data values displayed in a chart by using this option from the chart Properties.

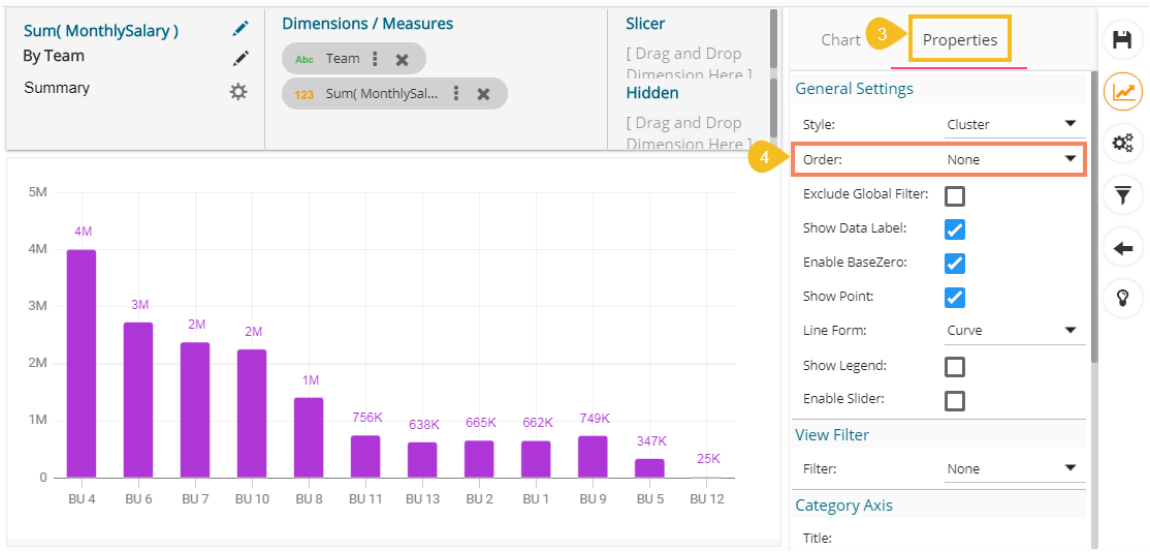
i) Drag and Drop the desired dimensions and measures to create an instant view.

ii) The Mixed chart gets selected by default to present the dragged data values.



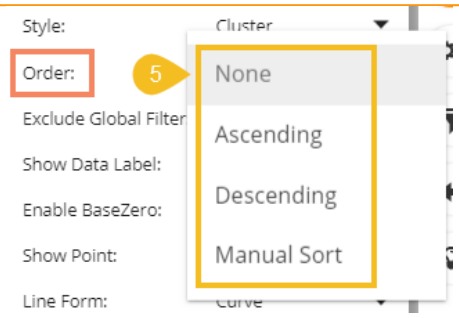
iii) Open the '**Properties**' tab.

iv) By default, the '**None**' option gets selected for the '**Order**' field.

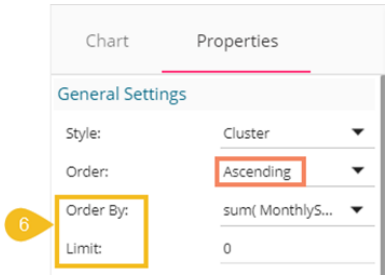


v) The user gets the following options to display the selected data in a particular order.

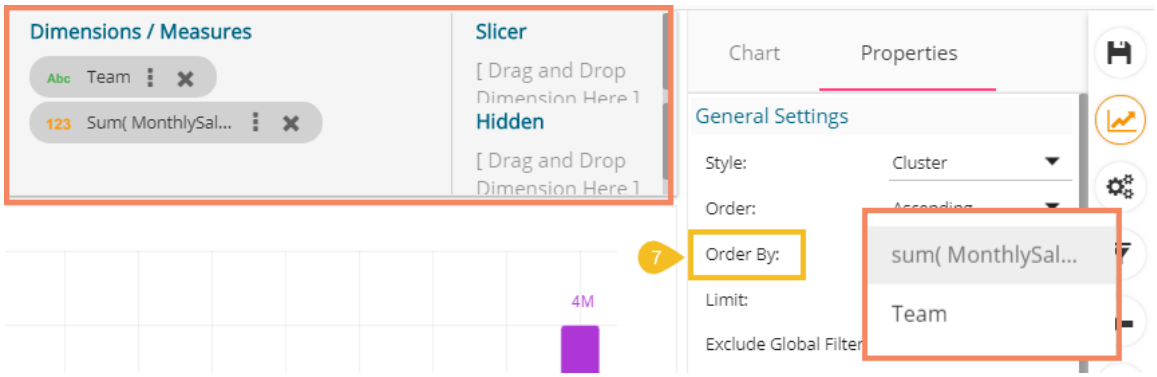
a. None
b. Ascending
c. Descending
d. Manual Sort



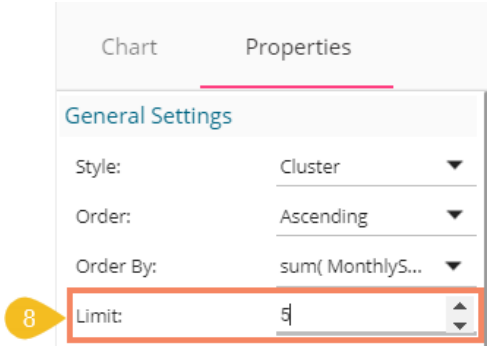
vi) The '**Order By**' and '**Limit**' options get displayed if the selected Order option is either **Ascending** or **Descending**.



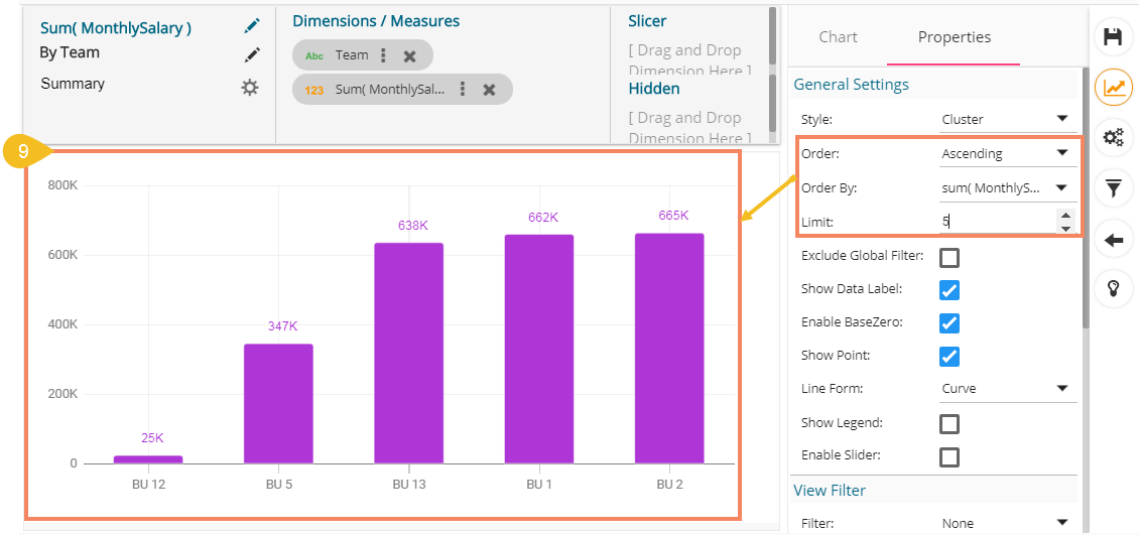
vii) **Order By**: Select an option from the drop-down list to set the order of the view (the dragged dimension and measure display in the 'Order By' drop-down list)



viii) **Limit**: Insert a number to limit the displayed dimension and measured values.

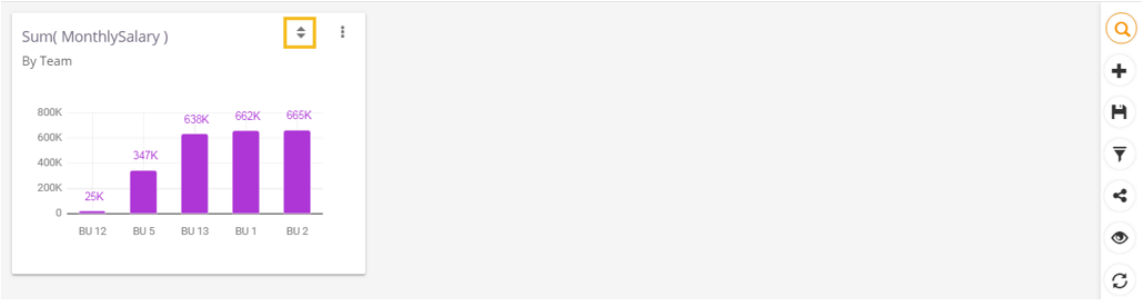


ix) The following image displays a monthly salary for the 5 teams in the ascending order.



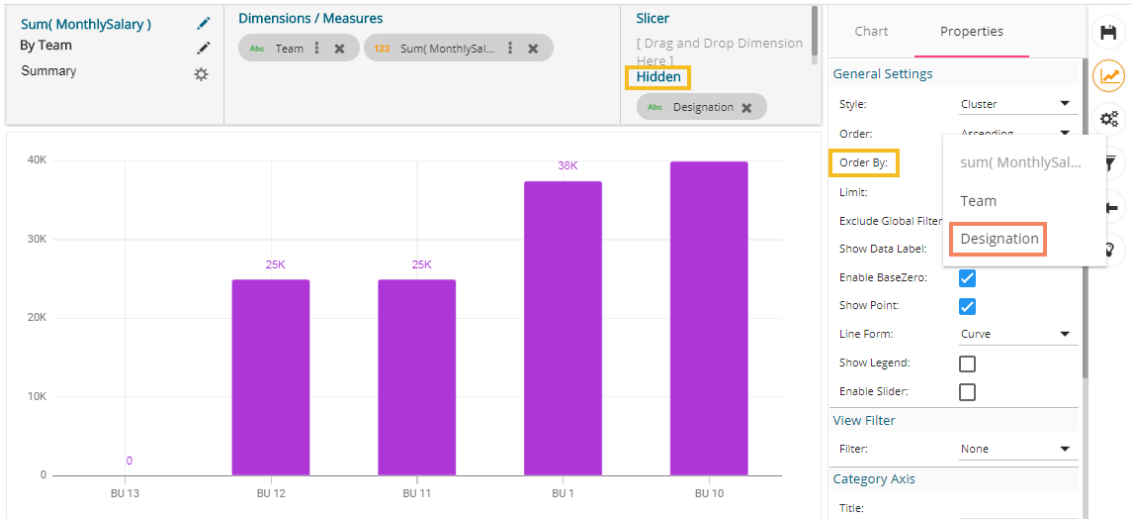
Note:

a. This feature does not work for KPI tile, Semi Gauge, Map, TreeMap Chart, and Metric Summary.
b. The view specific '**Sort By**' option is provided on the storyboard.



6.6.1. Sort based on Non-existing Dimension

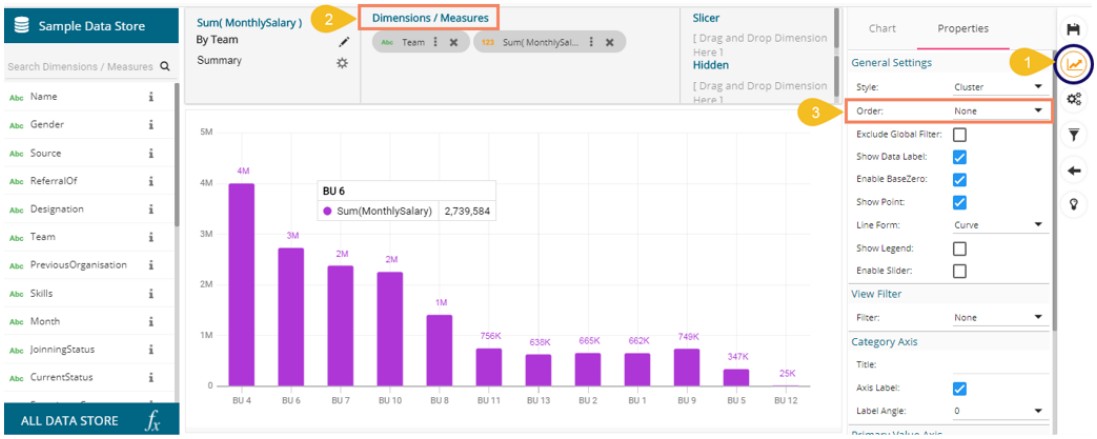
The Design workspace contains the '**Hidden**' category. The dragged dimension to the '**Hidden**' category gets added to the '**Order By**' drop-down menu from where the user can use it to order the display of the current view.



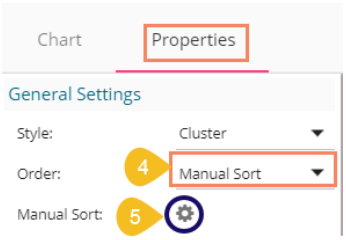
6.6.2. Manual Sort

Users can manually sort a view by choosing the customized order they require. They can save the customized order and reuse it whenever required.

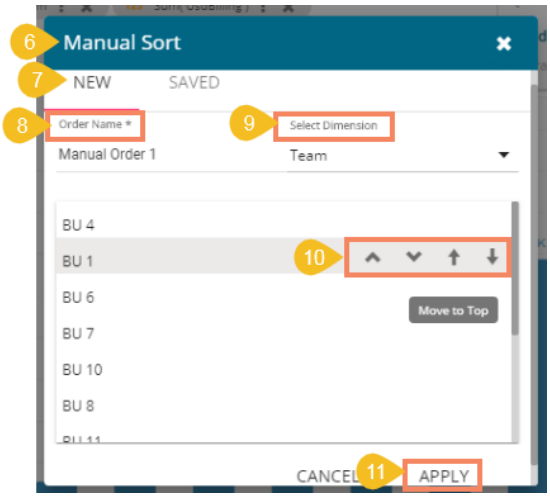
i) Navigate to the Design workspace.
ii) Choose any combination of one Dimension and Measure.
iii) A chart gets displayed in some order (by default, the '**None**' order option gets selected).



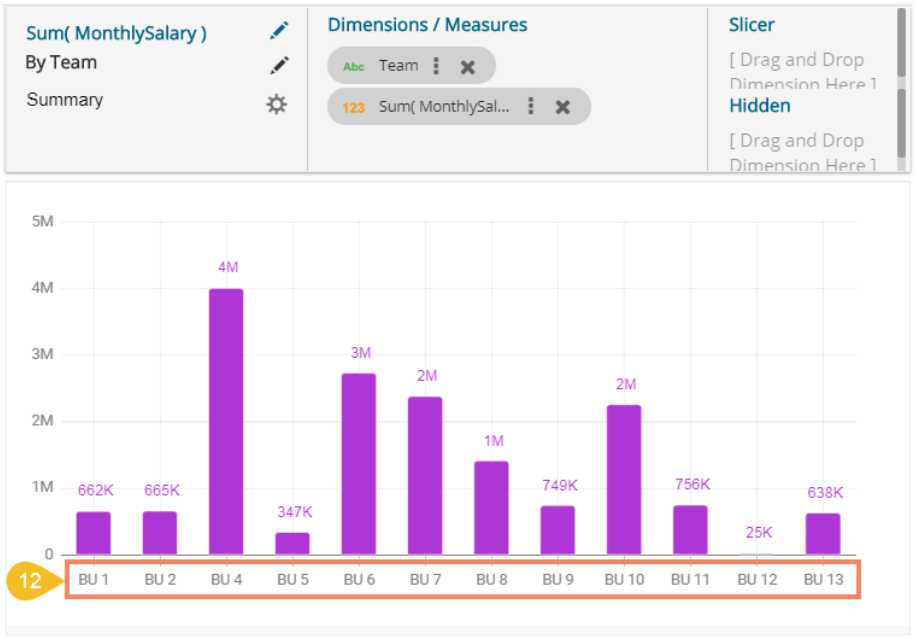
iv) Select the '**Manual Sort**' option using the Order drop-down icon.
v) Click the new icon that appears for '**Manual Sort**'.



vi) The Manual sort window opens.
vii) Select the '**New**' tab.
viii) Enter a title for the Order Name.
ix) The dragged Dimension appears in the '**Select Dimension**' drop-down list.
x) Arrange the fields by dragging them or using the arrows (move up, move down, move to the top, move to bottom) to arrange them in order.
xi) Click the '**APPLY**' option after arranging the fields in the desired order.

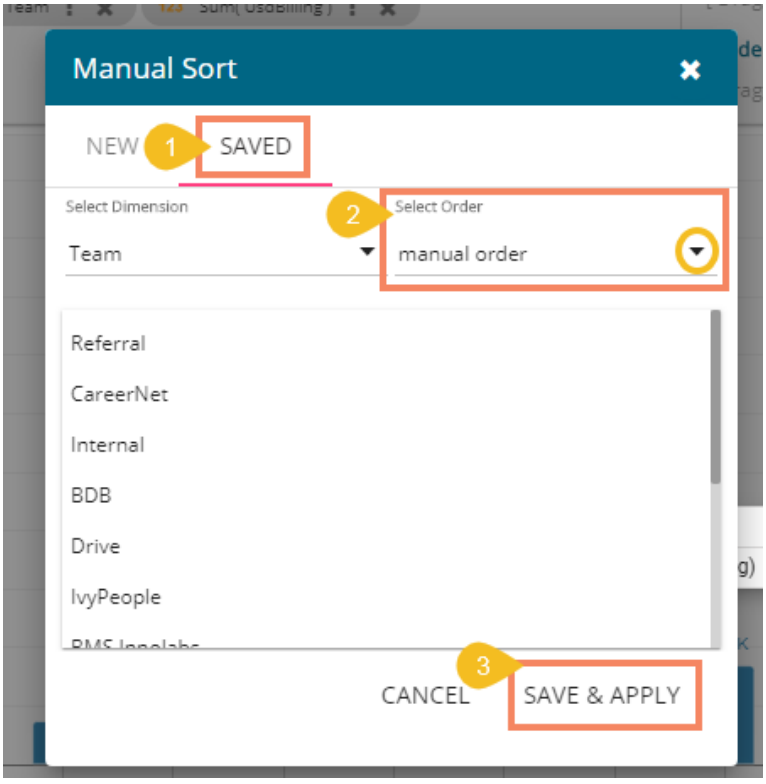


xii) The View fields get displayed in the selected Manual Sort order.

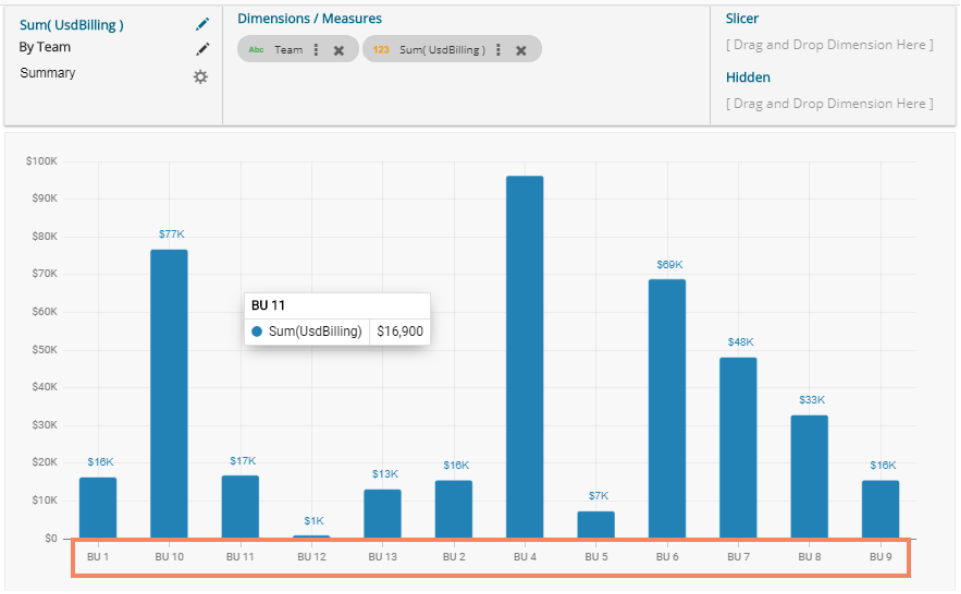


Note: The '**Saved**' tab lists all the saved order by the user. Follow the below given steps to use a saved order.

i) Open the '**Saved**' tab from the Manual Sort window.
ii) Select a saved order using the Select Order drop-down.
iii) Click the '**SAVE & APPLY**' option.



iv) The saved manual sort applies to the current view.



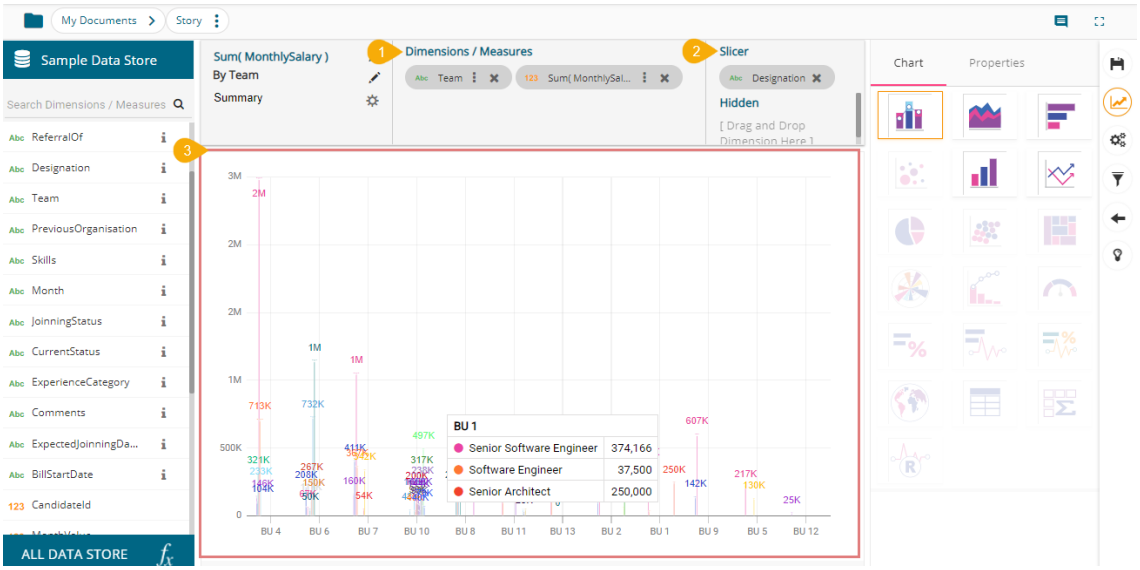
6.7. Adding a Slicer

Users can add a further dimension to the created view using the '**Slicer**' option.

i) Drag and drop one dimension and one measure to the '**Dimensions/ Measures**' column using the DESIGN tab.

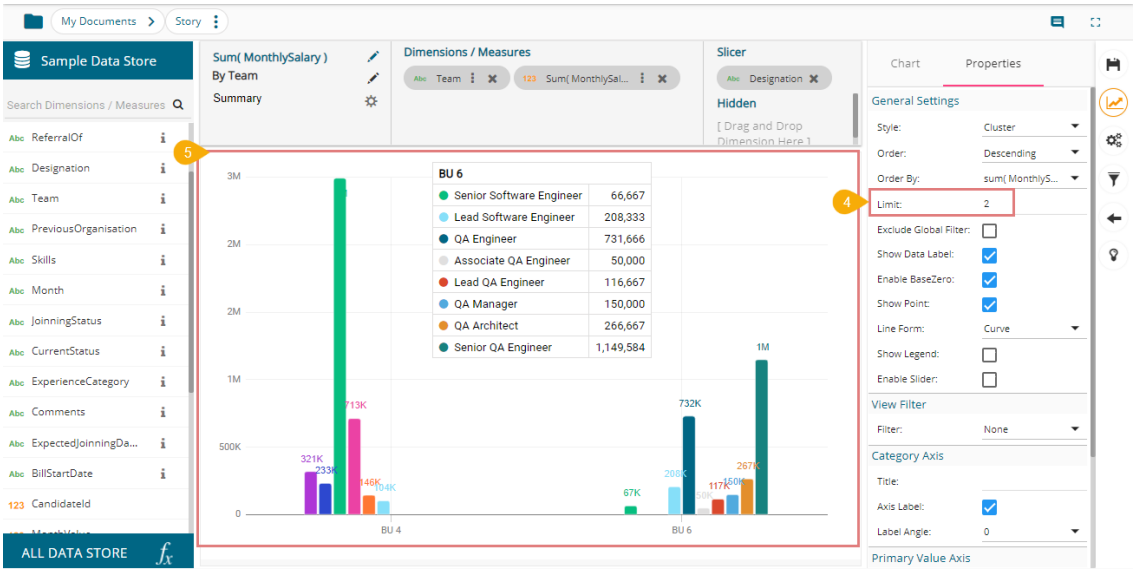
ii) Drag and drop another dimension to the **Slicer** section (E.g., Designation is used as slicer over here).

iii) The slices get displayed in the created view based on the second-dimension value via a Mixed chart (by default)



iv) Order the displayed data sorting it by specific limit.

v) The displayed view gets modified accordingly.
E.g., The following image shows the designation-wise salary for teams BU 4 and BU 6 through Mixed Chart.



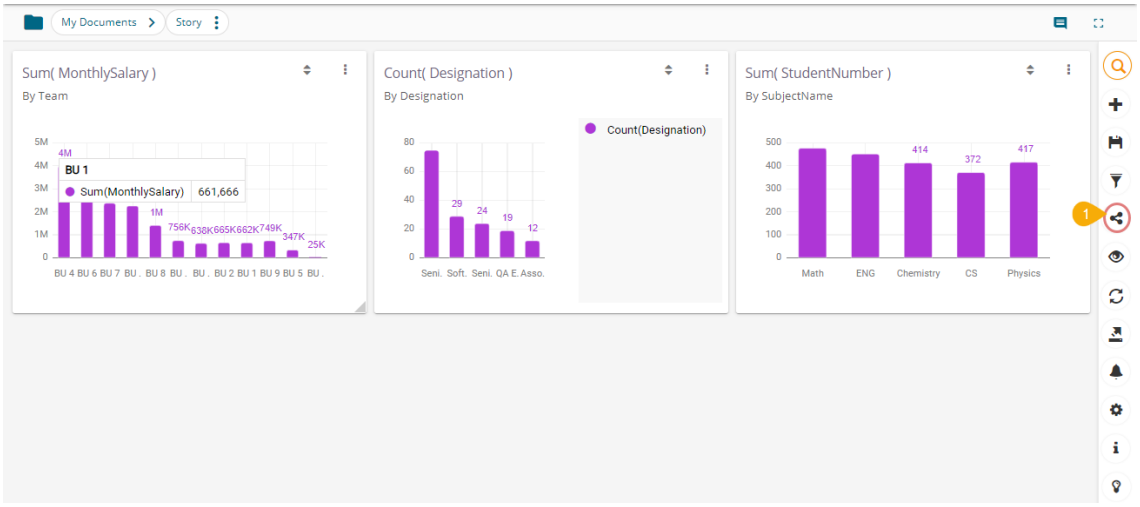
Note:

a. The Slicer supports the selection of only one dimension and one measure in the '**Dimensions/Measures**' space. Another dimension should be added to the '**Slicer'** space**.**
b. The 'Manual Sort' order option does not get supported by Slicer.

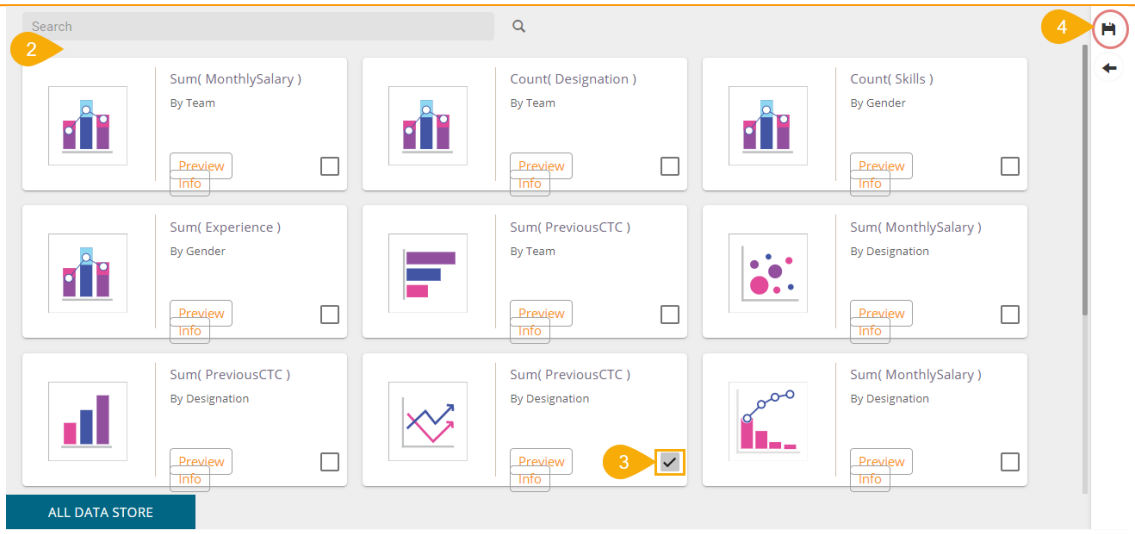
6.8. Shared Views

The users can use already existing views based on a data store using the '**Shared Views**' icon.

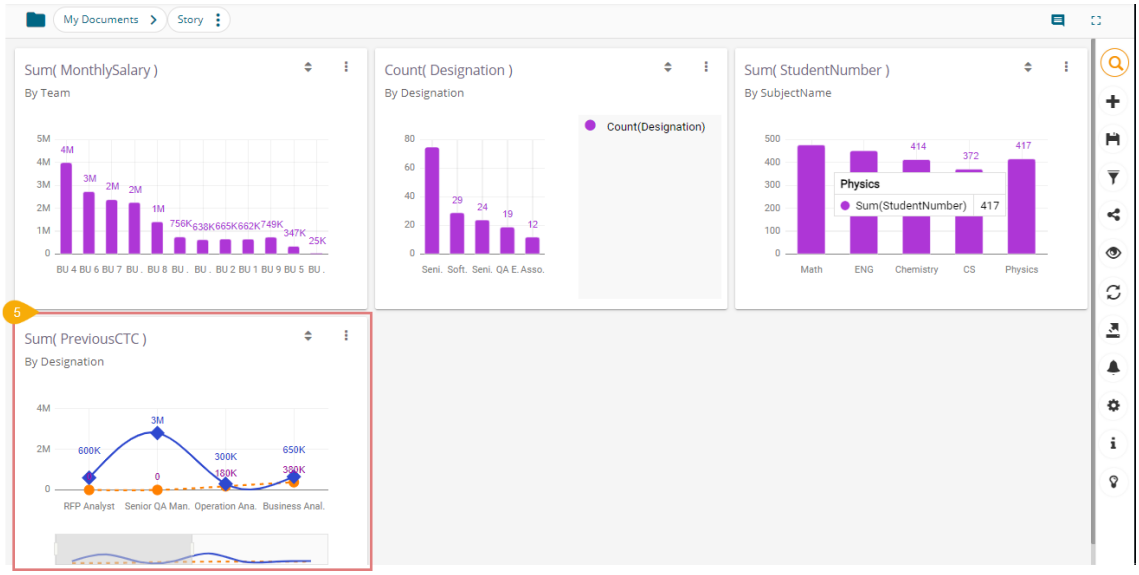
i) Click the '**Shared Views**' icon on the storyboard.



ii) All the available shared views appear.
iii) Select a shared view by a checkmark in the box.
iv) Click the '**Save**' icon.



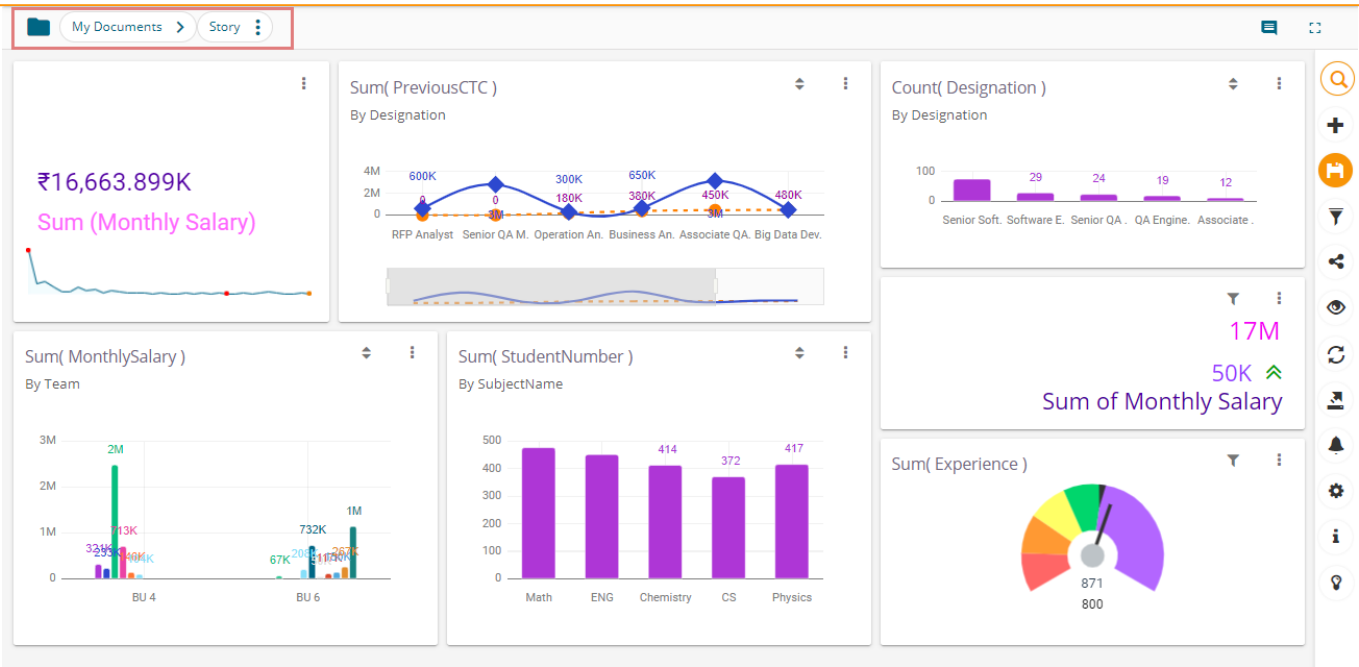
v) The selected shared view gets added to the storyboard.



7. Storyboard

The user can add multiple Views on a single screen signified as a Storyboard. The user can add any number of Views based on various data stores on a single storyboard. The users can create a new View, apply Global Filter, and save an altered View using the storyboard. The views saved on a Storyboard unveils valuable data insights across the selected Data Stores or inside a vast volume of a data. The user can instantly modify themes, avail data drill, and export a business story to the desired format all from this single screen. The user can further instantly add a new View using the Search option provided on the vertical panel of the Storyboard.

The following image provides an overview of how a Storyboard may look with Views added to it across multiple datasources.



Describing the Storyboard icons:

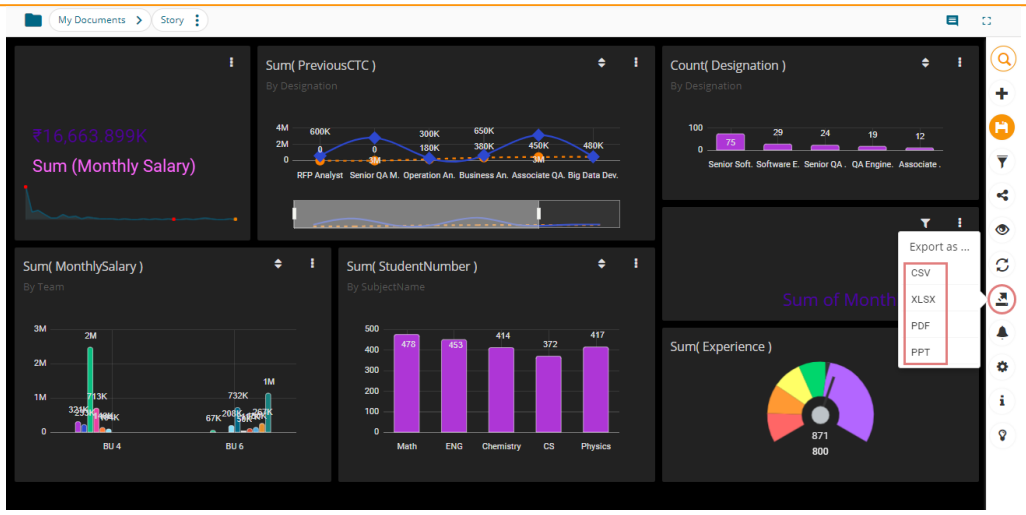
Icon	Name	Description
	Data Search Bar	Searches the queried data from the selected Data Store
	Create New View	Redirects users to the Design workspace to design a new view
	Save Story	Saves story with all the added views
	Global Filter	Filters data from the multiple views saved on the storyboard
	Applied Filter	Displays the list of applied filters on the selected story
	Shared Views	Redirects the user to select and add the available shared view(s) to the storyboard
	Data Insights	Redirects the user to the Data Insights page
	Refresh Views	Refreshes the story with all the existing views
	Export	Exports the story as CSV, XLSX, PDF, PPT format
	Alert Center	Redirects to schedule an alert for the story
	Change Theme	Displays various themes to be applied to the story
	Data Store Information	Opens necessary information for the selected Data Store
	Start Tour	Begins the guided tour of the selected page
	Comments	Redirects to add a description about the story
/	Full Screen/Reduce Size	Displays the Storyboard in the full-screen or reduces the storyboard screen

7.1. Export

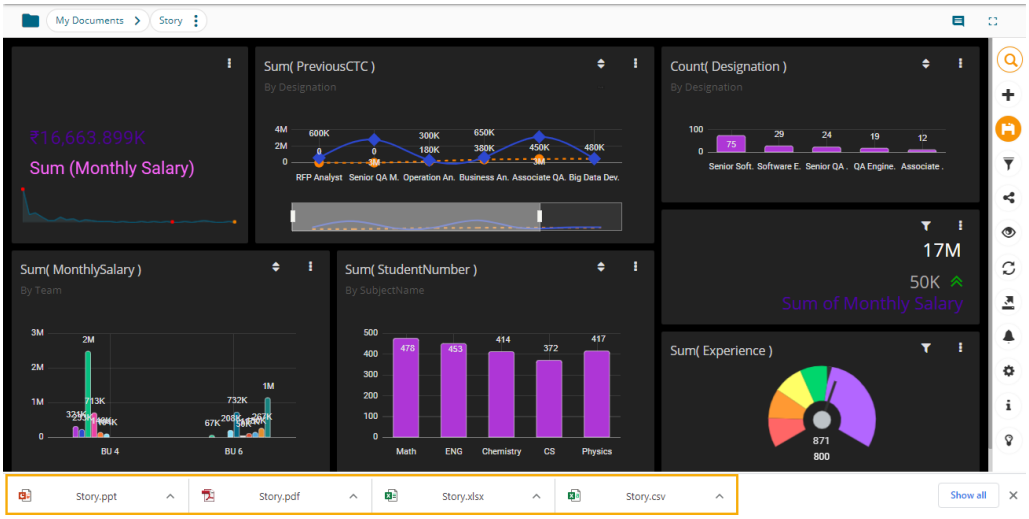
The user can export business stories in various formats via the '**Export**' option.

i) Click the '**Export**' option from the storyboard.

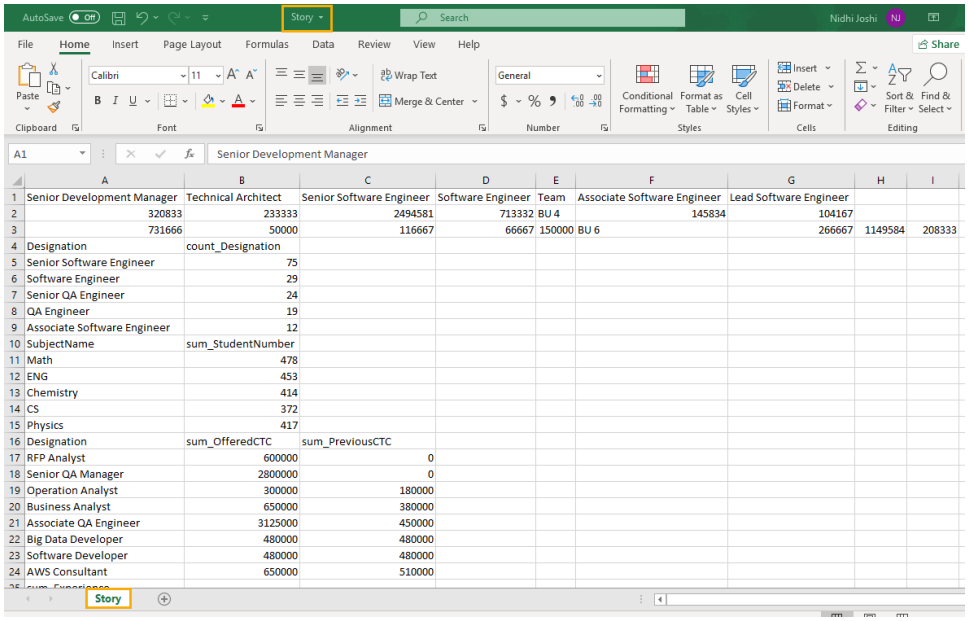
ii) Select an export option from the context menu.



iii) The story gets downloaded in the selected export option.

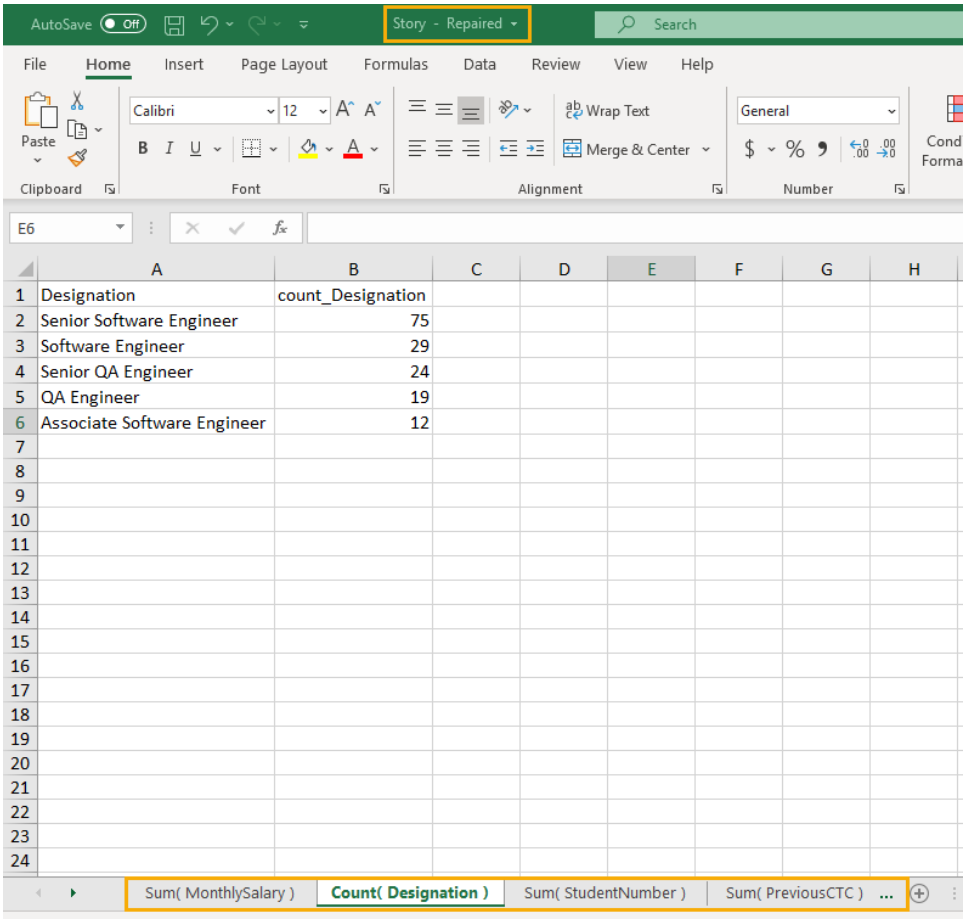


a. The story data gets saved in the CSV Excel format by clicking the '**CSV**' option. The collective data of different views get displayed on one sheet.

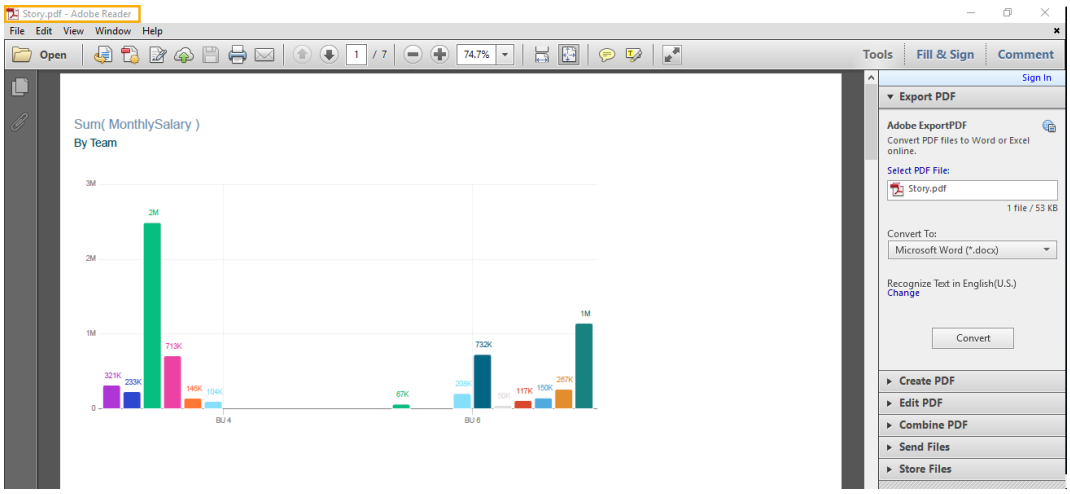


	A	B	C	D	E	F	G	H	I
1	Senior Development Manager	Technical Architect	Senior Software Engineer	Software Engineer	Team	Associate Software Engineer	Lead Software Engineer		
2	320833	233333	2494581	713332	BU 4	145834	104167		
3	731666	50000	116667	66667	150000	BU 6	266667	1149584	208333
4	Designation	count_Designation							
5	Senior Software Engineer	75							
6	Software Engineer	29							
7	Senior QA Engineer	24							
8	QA Engineer	19							
9	Associate Software Engineer	12							
10	SubjectName	sum_StudentNumber							
11	Math	478							
12	ENG	453							
13	Chemistry	414							
14	CS	372							
15	Physics	417							
16	Designation	sum_OfferedCTC	sum_PreviousCTC						
17	RFP Analyst	600000	0						
18	Senior QA Manager	2800000	0						
19	Operation Analyst	300000	180000						
20	Business Analyst	650000	380000						
21	Associate QA Engineer	3125000	450000						
22	Big Data Developer	480000	480000						
23	Software Developer	480000	480000						
24	AWS Consultant	650000	510000						

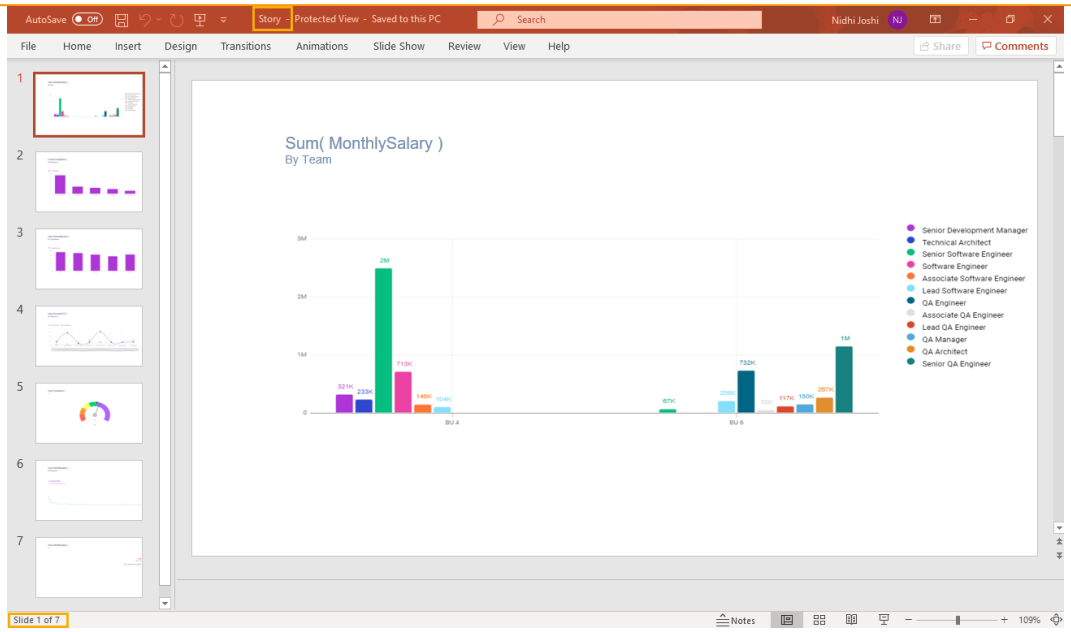
b. The view specific data gets saved in sperate sheets in the XLSX Excel format by clicking the '**XLSX**' option.



c. By clicking the '**PDF**' option, the story views get saved in the PDF format.



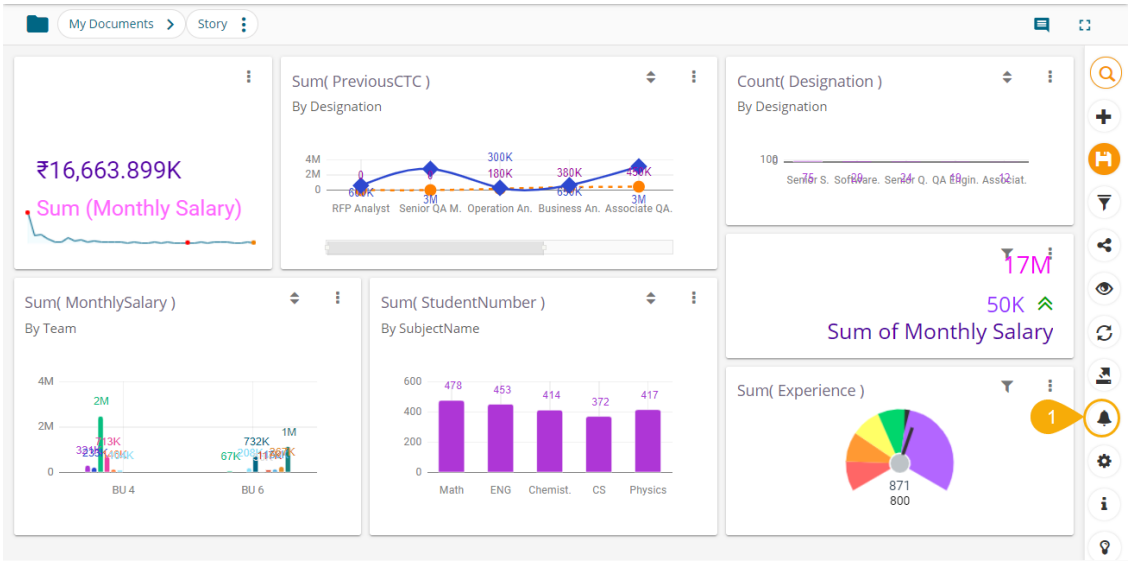
d. By clicking the '**PPT**' option, the story views get saved in the PPT format.



7.2. Alert Center

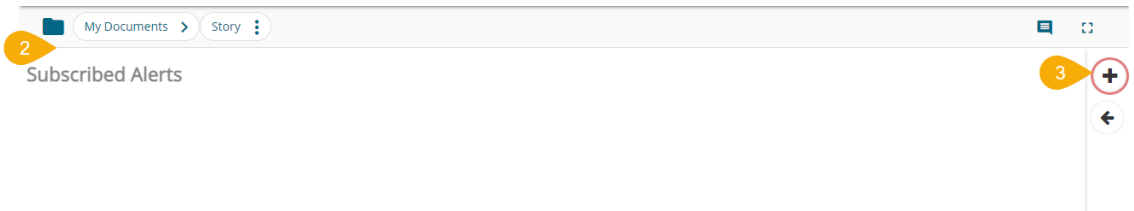
The alert center triggers alerts based on the lower threshold and upper threshold values for the defined dimension or measure.

i) Click the '**Alert Center**' icon on the Storyboard.



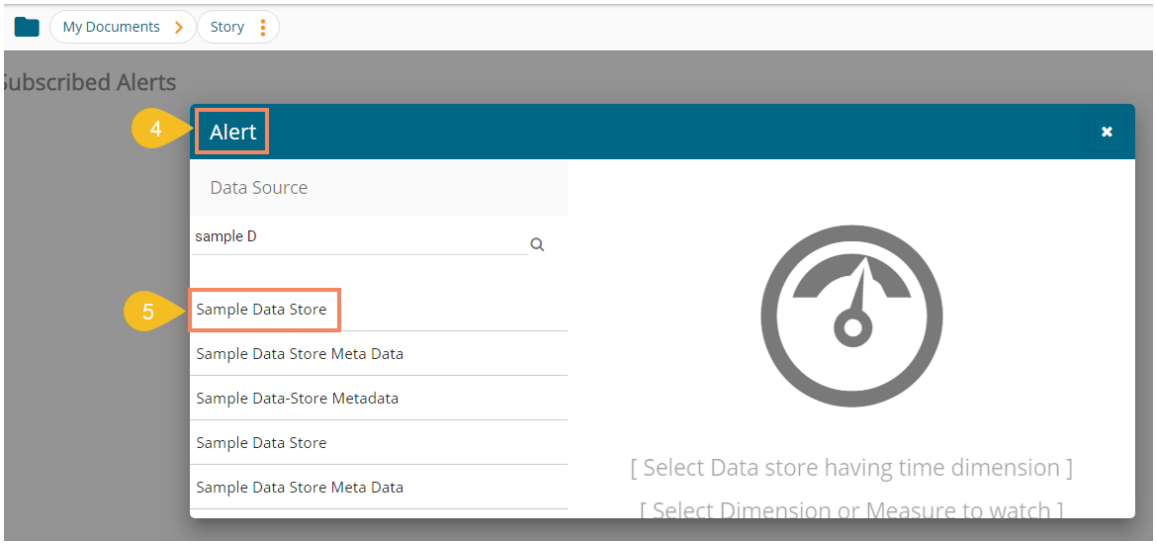
ii) A new page opens prompting to subscribe alerts (the same screen also displays the previously Subscribed Alerts).

iii) Click the '**Create New Alert**' icon.



iv) The '**Alert**' window opens, displaying a list of the available Data Stores (Data Sources for the story).

v) The user needs to select a Data Store containing a time dimension from the list (the user can use the '**Search**' bar to search a Data Store from the displayed list).

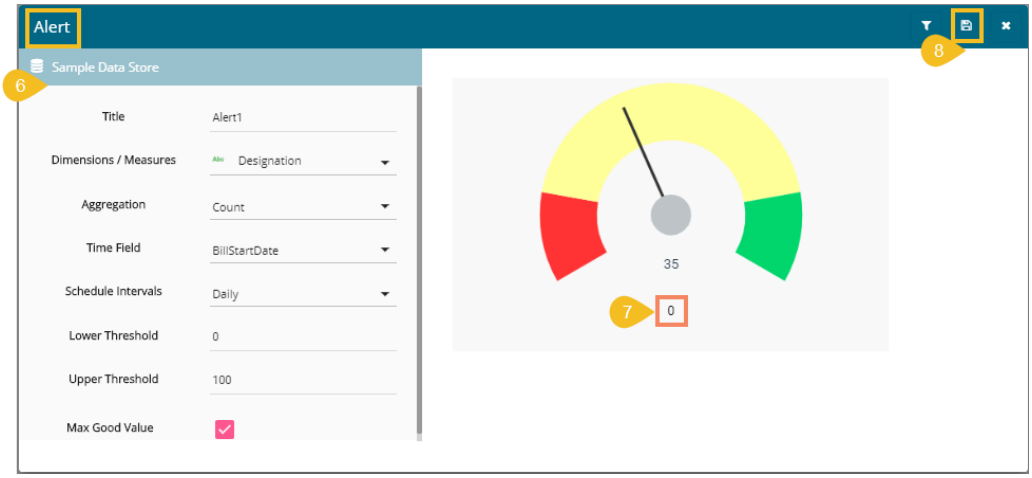


vi) The following fields display to fill the required information when selecting a data store (data source):

a. Title: Give a title to the created alert
b. Dimension/Measures: Select a dimension or measure from the drop-down list
c. Aggregation: Select an aggregation type from the drop-down list
d. Time Field: Select a time field from the drop-down menu
e. Schedule Intervals: Select a time range to schedule the refresh intervals using the drop-down menu
f. Lower Threshold: Set value as the lower threshold (the default value for this field is 0)
g. Upper Threshold: Set value as the upper threshold (the default value for this field is 100)
h. Max Good Value: Enable/disable the '**Max Good Value**' by a checkmark in the box

vii) A Semi-Gauge chart displays the selected information on the right side of the screen with the value (E.g., in this case, the Semi-Gauge image displays a count of 35 Designations)

viii) Click the '**Save**' icon.



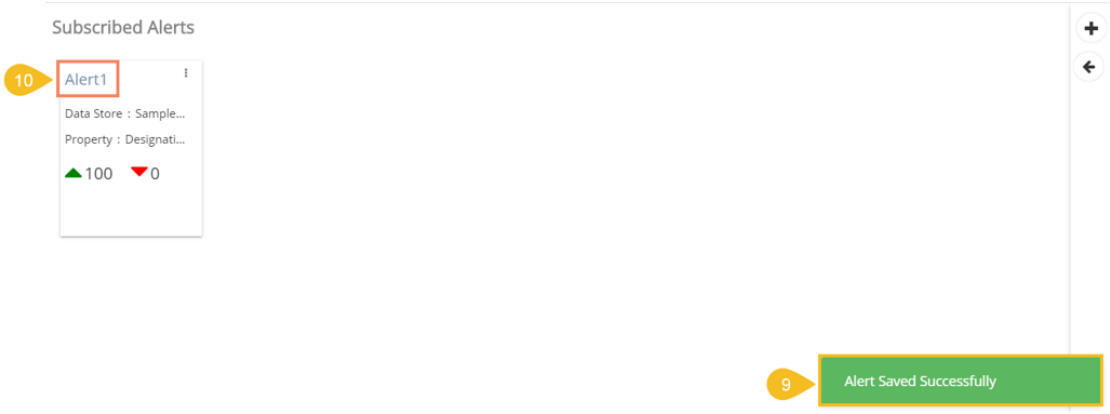
Note:

a. The user can enable the '**Aggregation**' field only after selecting a Dimension/Measure field from the drop-down menu.

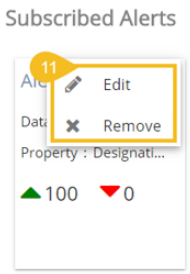
b. The order of colors changes in Semi-Gauge from '*green-yellow-red'* to '*red-yellow-green'* by enabling the '**Max Good Value**' option.

ix) A success message appears to assure about the alert creation.

x) The newly created alert gets added to the Subscribed Alert page.



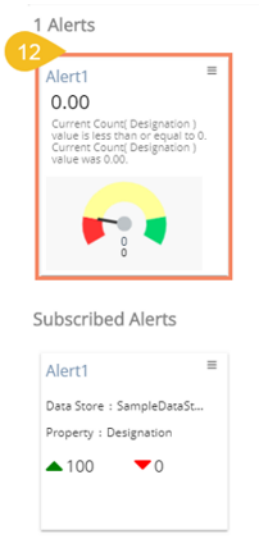
xi) Click the '**Options**' icon ⋮ to get '**Edit**' and '**Remove**' options, as shown below:



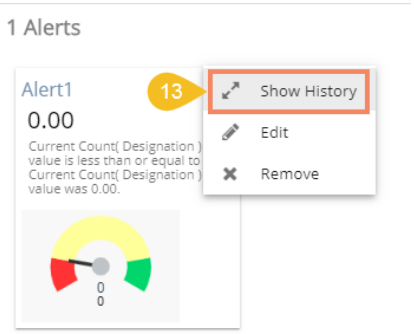
Note:

a. Click the '**Edit**' option to modify the inserted Alert information.
b. Click the '**Remove**' option to remove the subscribed alert.

xii) The triggered alerts display under the '**Alert Center**' with a brief explanation of the change in the set alert thresholds.



xiii) The user can click the '**Show History**' option for the triggered alert (The 'Show History' option displays only for the triggered alerts).



Note:

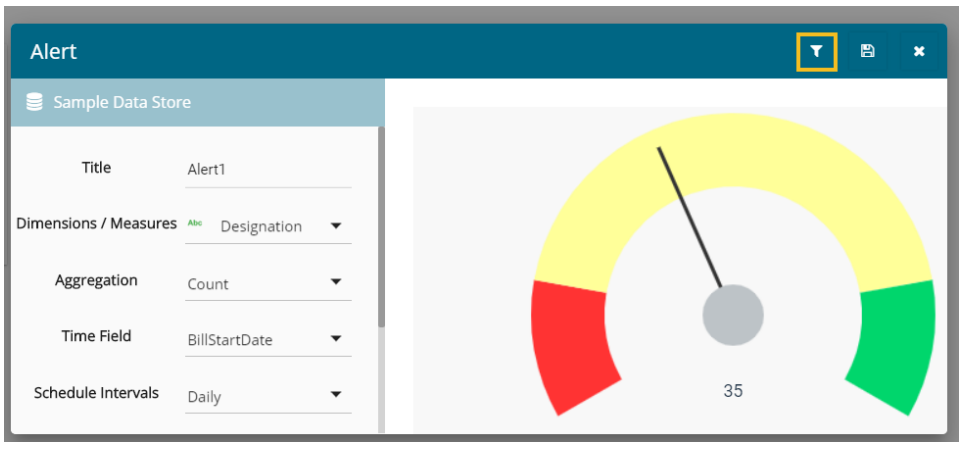
a. Choosing the '**Edit**' option redirects users to modify the inserted values for Alert.
b. A Click on the '**Remove**' option redirects users to remove the subscribed Alert together with the triggered alert.

xiv) A page opens, displaying the information of previously triggered alerts.

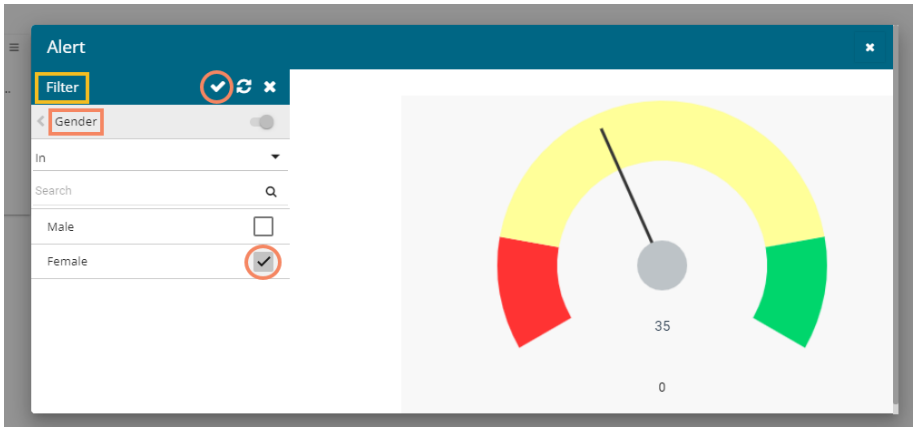
7.2.1. Applying Filter Condition to Alert

The user can apply a filter condition data before configuring the information.

i. Click the '**Filter**' icon.



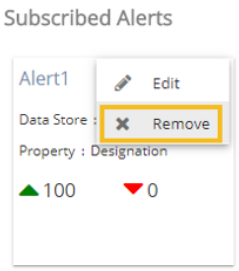
ii. Choose a filter condition from the displayed filter panel.
iii. Click the '**Apply**' icon.



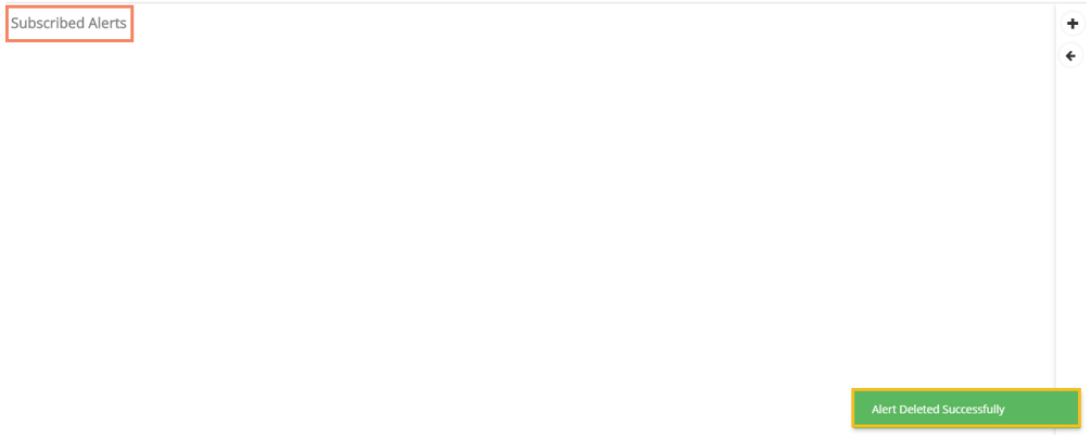
iv. The Alert configuration screen reopens.
v. Click the '**Save**' icon to save the modified Alert.

7.2.2. Deleting a Subscribed Alert

1. Click the '**Remove**' option from the Alert option menu.



2. A message appears to notify the user and the subscribed alert gets deleted.

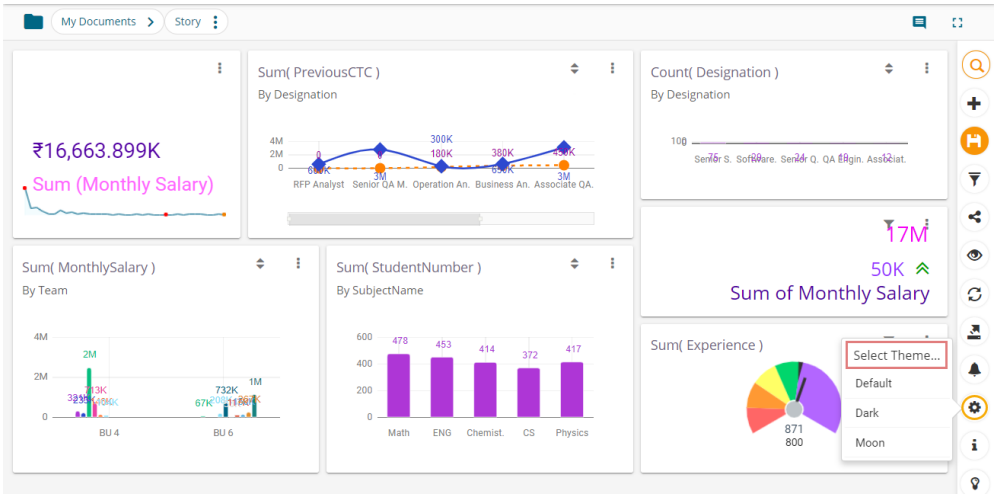


7.3. Change Theme

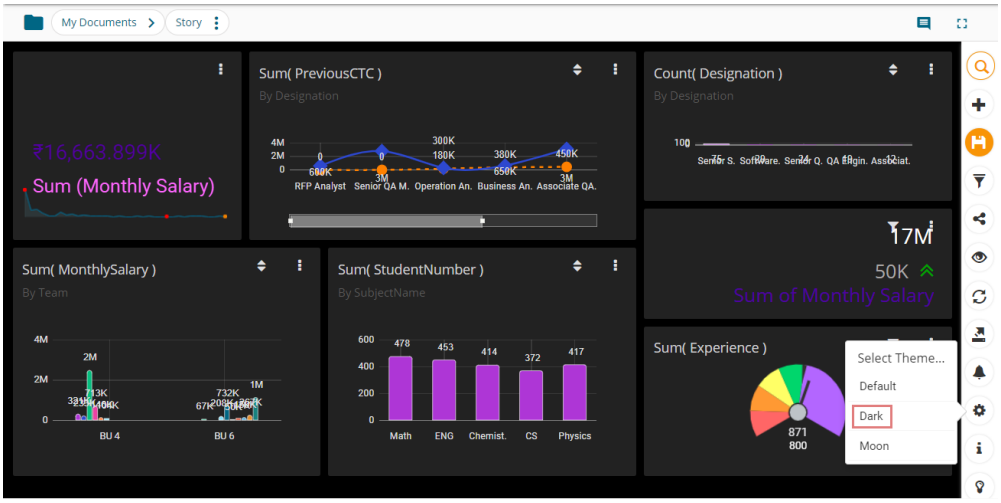
The user can change the look and feel of the entire story through this option.

i) Click the '**Change Theme**' icon from the storyboard.

ii) A menu opens with the available themes for the story (The below image displays a Story in the Default theme).



iii) Select a theme from the context menu to change the display of the views on the Storyboard. E.g., The following image displays the views in the '**Dark**' theme:



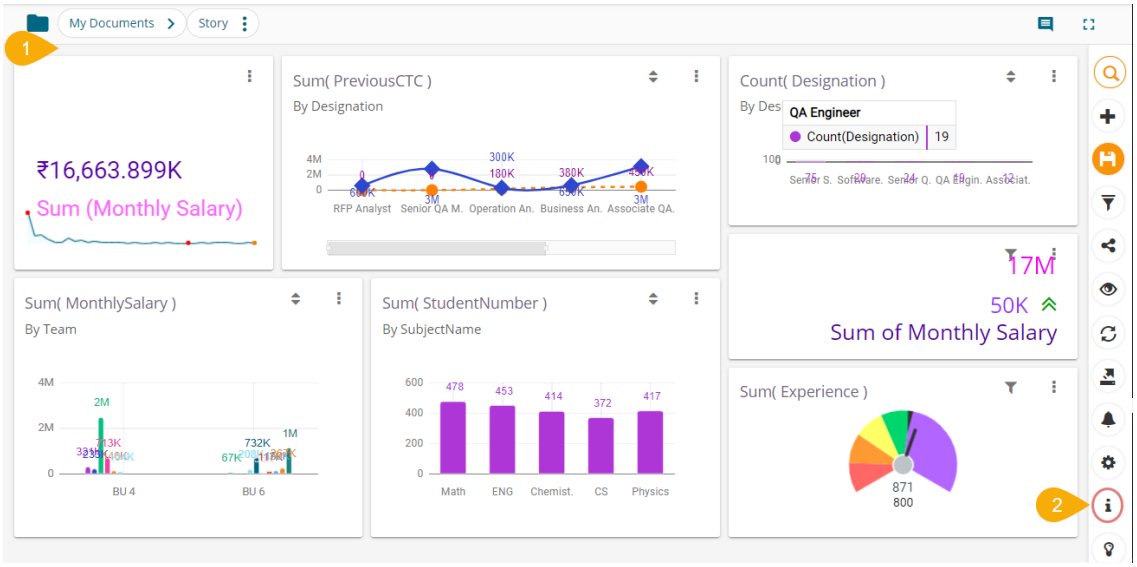
The following image displays the story in the '**Moon**' theme:

7.4. Data Store Information

The data store information icon helps the user to manage data stores in a business story. This icon is accessible from the storyboard page. By clicking the Data Store Information icon, a new page opens, and the users get some more options to be used on a data store.

i) Navigate to the Storyboard of a story.

ii) Click the '**Data Store Information**' icon.



iii) The selected Data Store(s) for the current story appears with some action icons. The user can perform the following actions by using the various icons provided for a Data Store:

a. Primary Store : It marks the selected Data Store as a primary Data Store

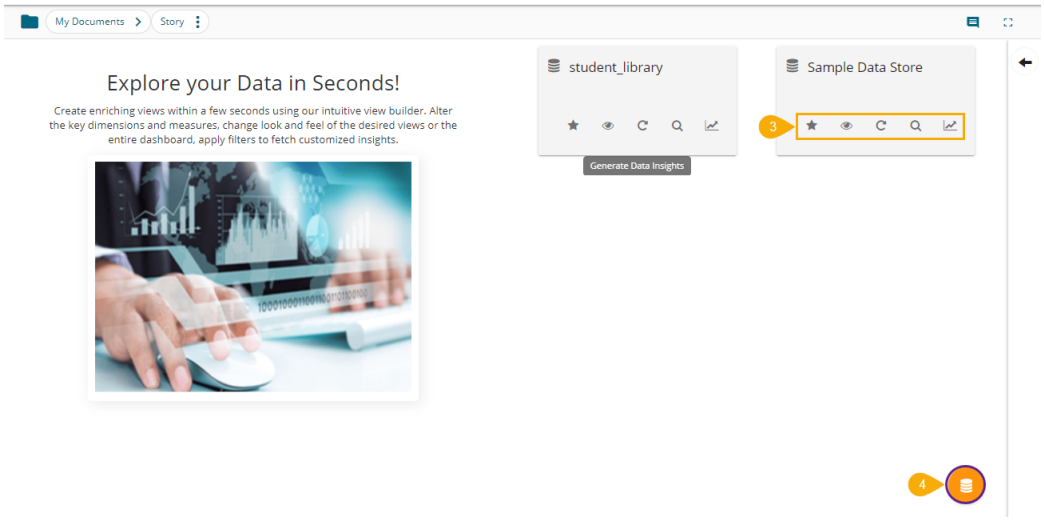
b. BDB Data Insights : It redirects the users to the BDB Data Insights page.

c. Generate Data Insights : It starts the insights generation process.

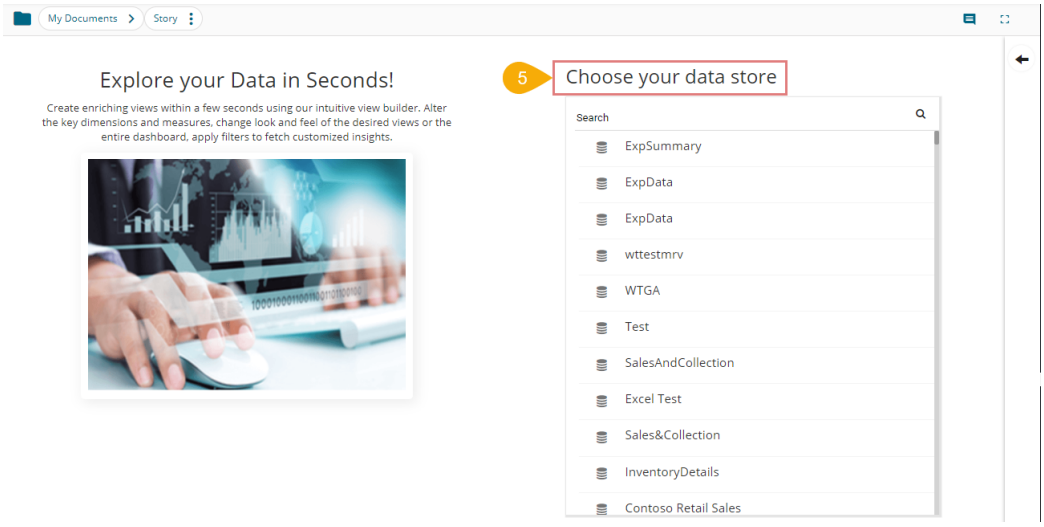
d. BDB Search : It redirects the users to the BDB Search page for the selected data store.

e. View Design : It redirects the users to the Design page for the selected data store.

iv) Click the '**Switch to Data Sources**' icon.



v) A list of the available Data Stores opens for the users to select another data store.



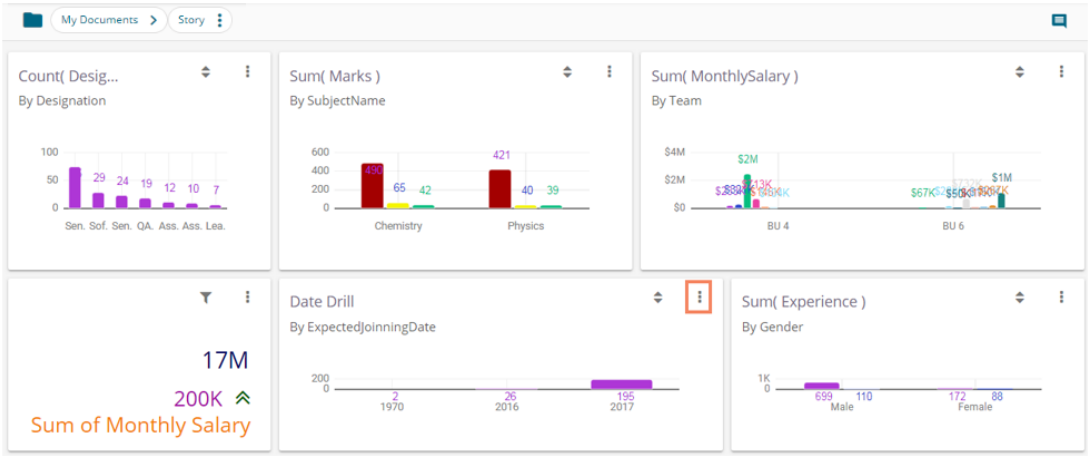
7.5. Options Assigned to a View

The following options supported by a view can be accessed from the Storyboard.

7.5.1. Analyze

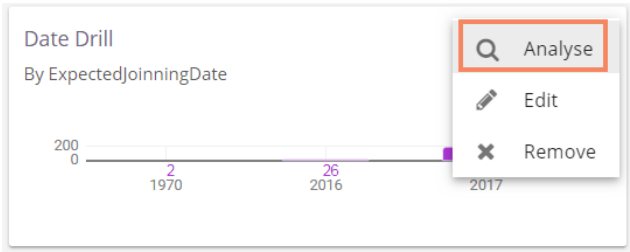
i) Select a view from the Storyboard.

ii) Click the '**Options**' icon.

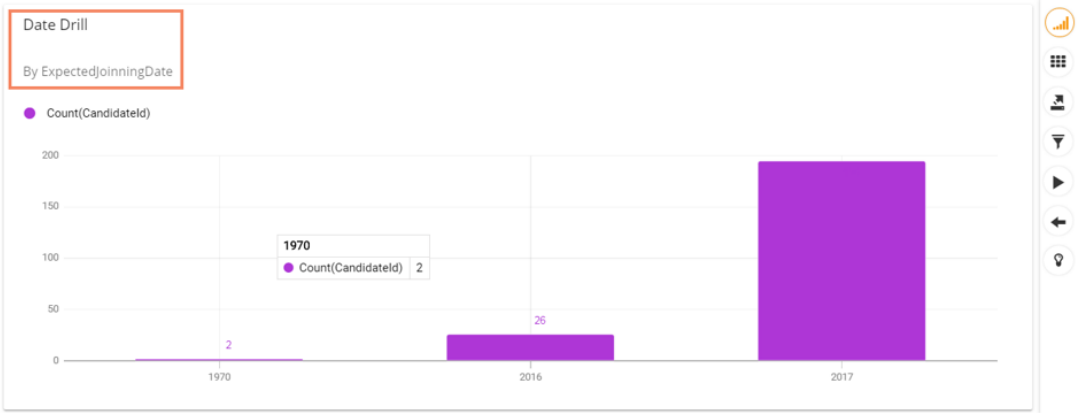


iii) A context menu appears with various options.

iv) Select the '**Analyse**' option from the context menu.



v) The selected View opens in the full-screen.



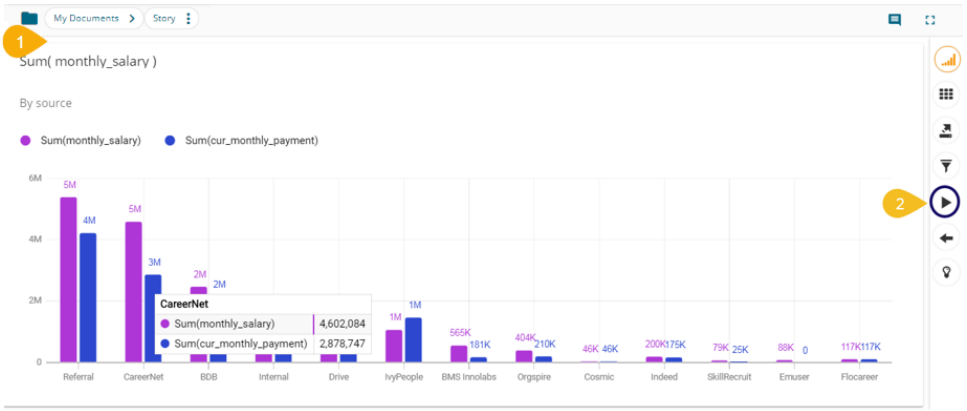
vi) The user can select any of the following options to analyze a saved view:

Option	Name	Description
	Chart	Displays data in the chart view
	Grid	Displays data in the grid view
	Export	Exports the Story as CSV/XLSX/PDF format
	View Filter	Displays filter panel to apply or edit view specific filter conditions
	Timeline Play	Displays changes in the selected data over a period.
	Back	Redirects back to the storyboard
	Start Tour	Begins guided tour for the Analyse page

7.5.1.1. Timeline Play

This feature allows the users to see the data changes over time. For this to achieve, at least one Time dimension should be there in the data store.

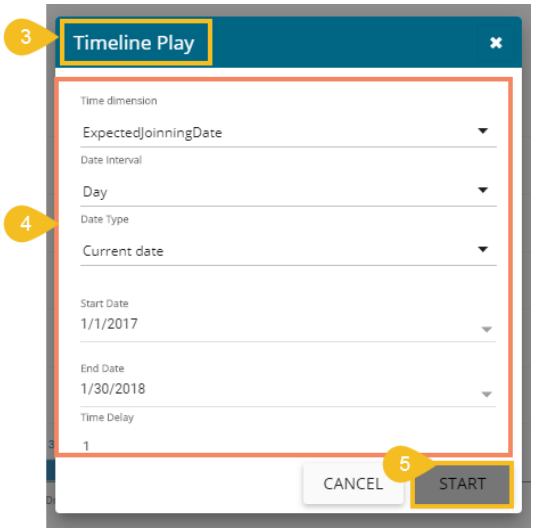
i) Navigate to the Analyse view page.
ii) Click the '**Play**' icon.



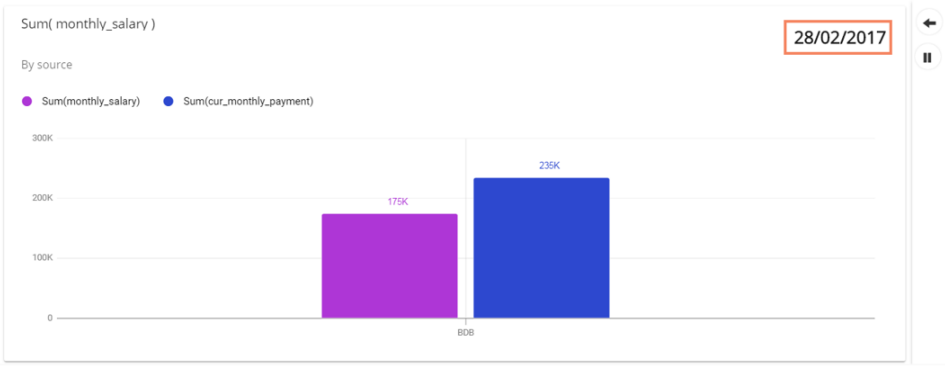
iii) The Timeline Play window opens.
iv) Fill in the required information in the Timeline Play window:
   a. Time Dimension
   b. Date Interval

c. Date Type
d. Start Date
e. End Date
f. Time Delay

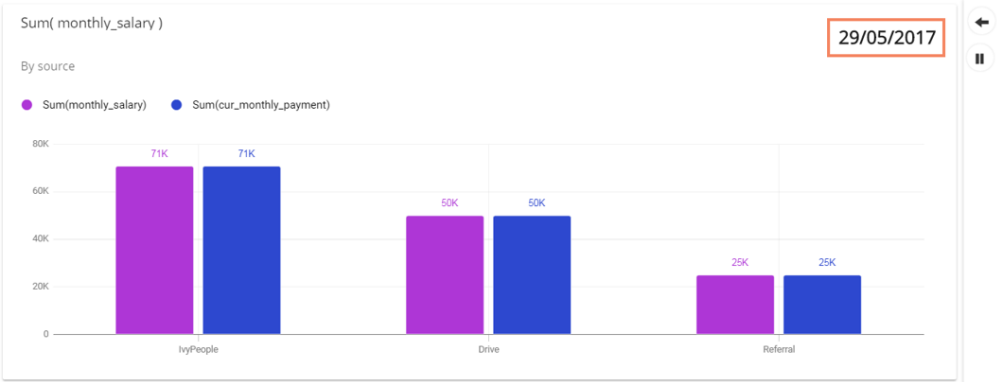
v) Click the '**START**' option.



vi) The timeline play gets displayed for the selected period.
a. E.g., the below image displays data for the date 28th February 2017.



b. E.g., the following image displays data for the date 29th May 2017.

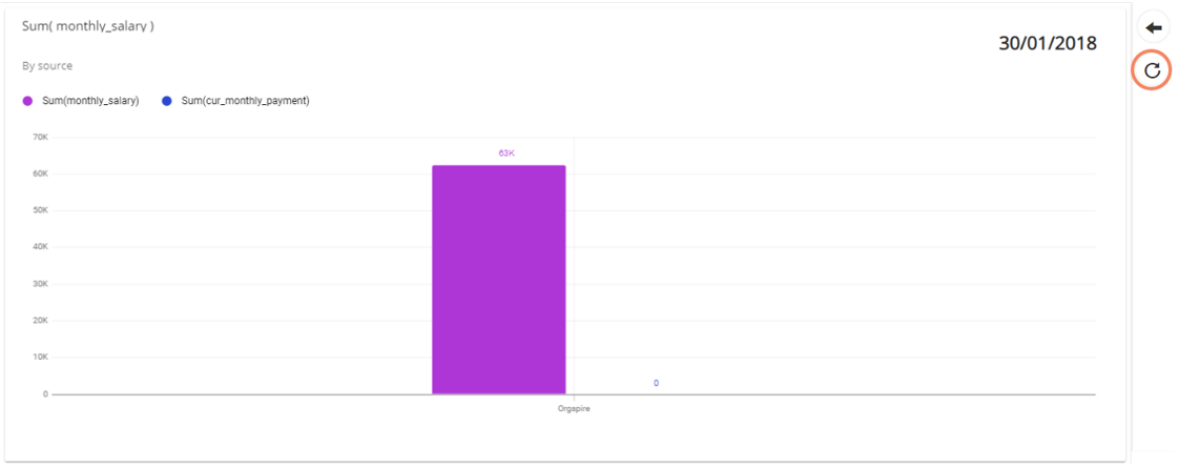


Note:

a. The timeline play can be paused by clicking the '**Stop Timeline Play**' icon.

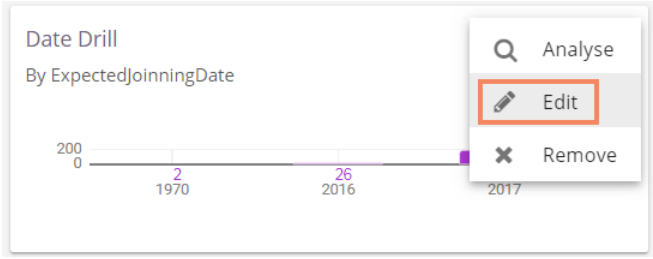
b. The user can resume the stopped timeline play by clicking the '**Resume Timeline Play**' icon.

c. Once the timeline play gets over, a '**Replay**' icon appears using which the users can replay the timeline play.

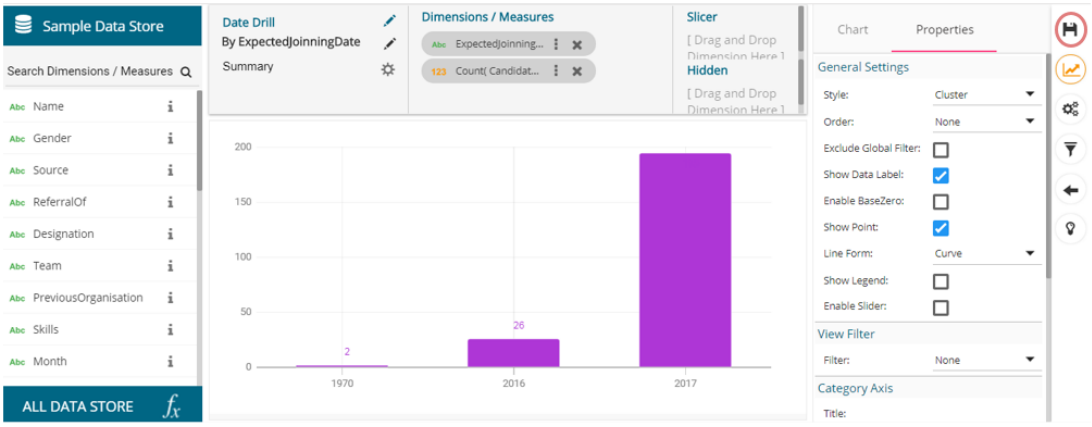


7.5.2. Edit

i) Select a view from the Storyboard.
ii) Click the '**Options**' icon
iii) Select the '**Edit**' option from the context menu.



iv) The Design page opens for the selected view.
v) Edit the required details (If required).
vi) Click the '**Save**' icon.



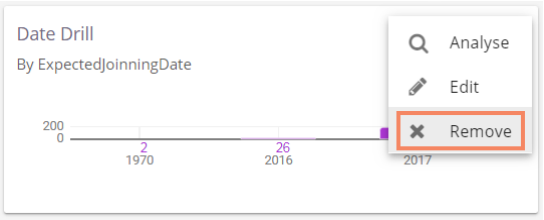
vii) The modified View gets saved successfully to the Storyboard.

7.5.3. Remove

i) Select a view from the Storyboard.

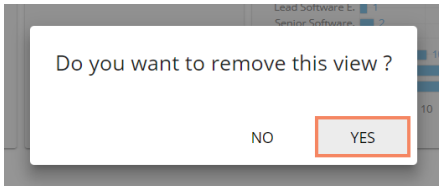
ii) Click the '**Options**' icon.

iii) Select the '**Remove**' option from the context menu.



iv) A new window pops-up to confirm the removal of the view.

v) Click the '**YES**' option.



vi) The selected View gets removed from the storyboard.

7.6. Data Interactions/Exploration

Views shared on the storyboard can display some interactions based on the applied functionalities. This section aims to describe '**Automatic Data Drill**' and '**Actions**.'

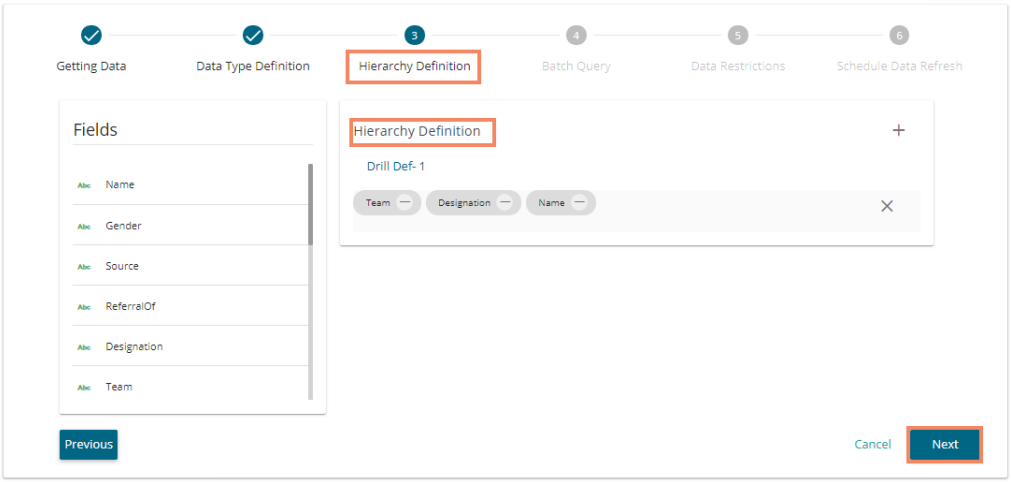
7.6.1. Automatic Data Drill

The Auto Data Drill allows users to drill down in the data values of a saved view on the storyboard for the selected story. The user must define a hierarchical pattern among the data dimensions via the '**Hierarchy Definition**' option of a Data Store.

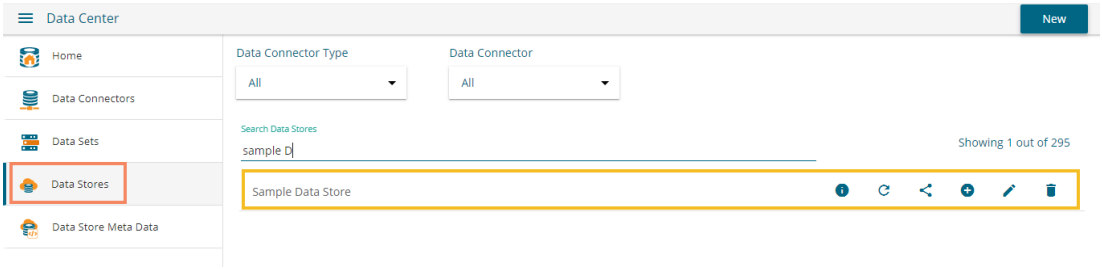
i) Navigate to the '**Hierarchy Definition**' tab (while creating a data store).

ii) Drag and drop the dimensions one by one to the '**Drill Def**' box. Choose the dimensions among which you wish to define a hierarchical drill path.

iii) Click the '**Next**' option.



iv) Create a Data Store successfully by completing the Data Store configuration steps.



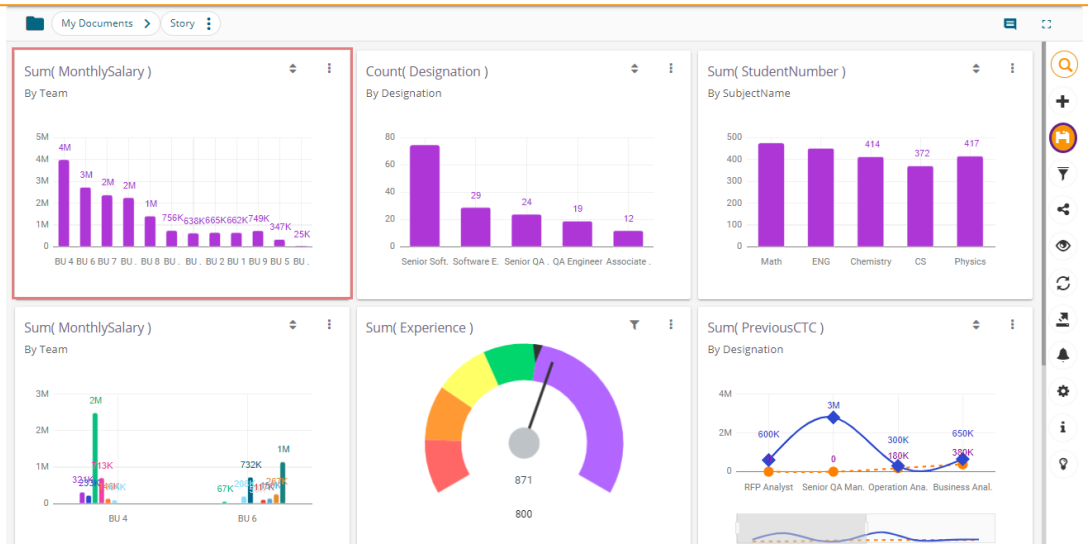
v) Select the Data Store with the defined drill path to create a new view.

vi) Select the dimension for which the drill path has been defined and drag to create a view.

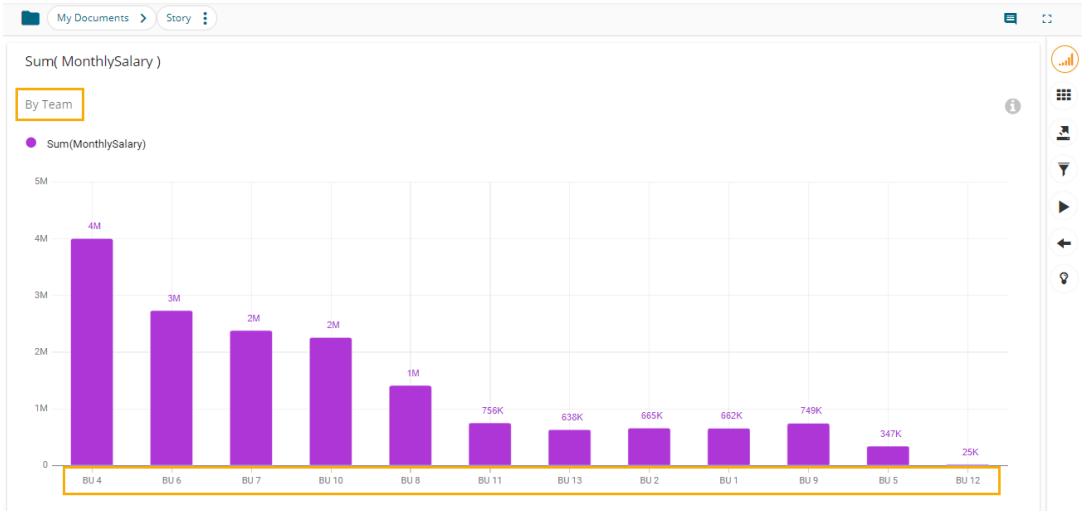
vii) Click the '**Save**' icon to save the view on the Storyboard.

viii) Access the saved view on the storyboard

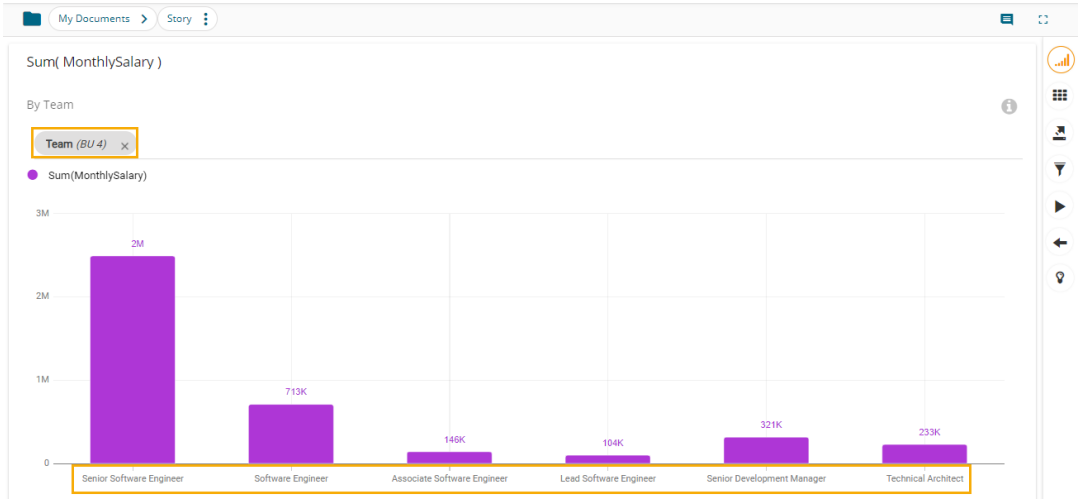
ix) Open the Analyse window by double clicks on it.



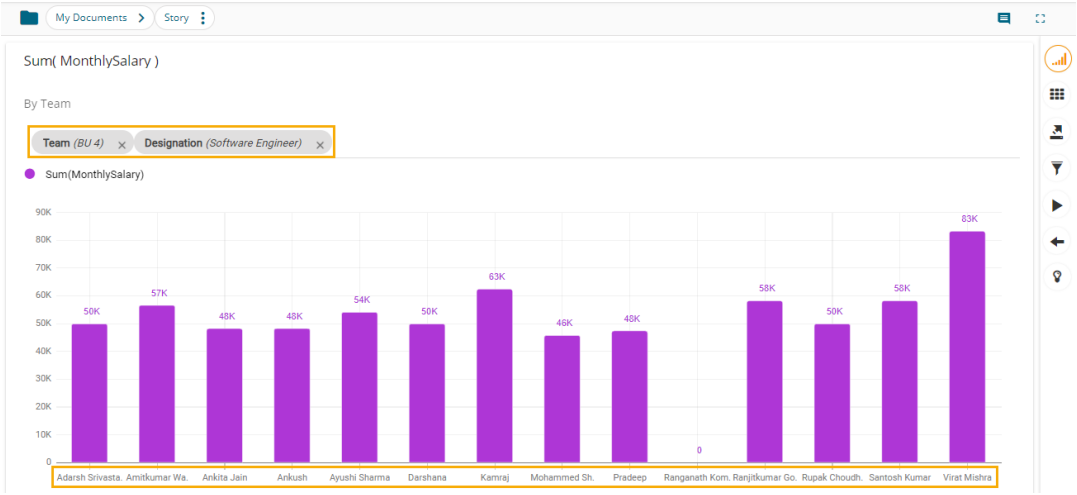
x) The **Analyse** window opens, displaying *Team* as the highest-level granularity of data drill.



xi) Click on a team to display the designation wise break up for the selected team (E.g., The following image displays designations for the *Team BU-4*).



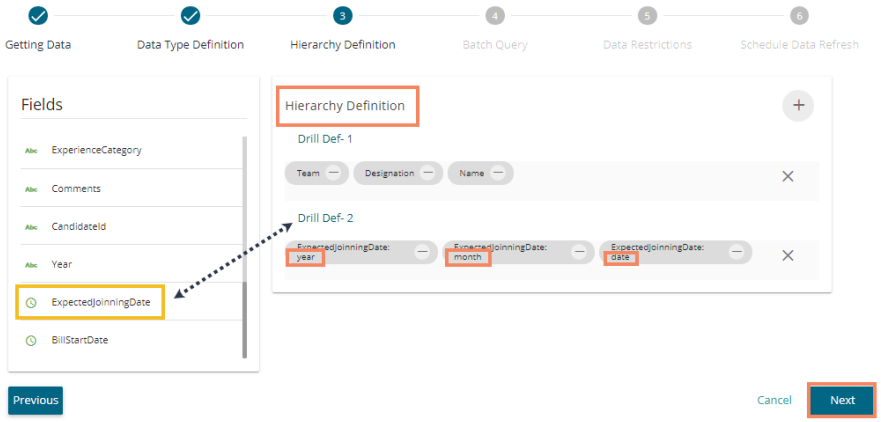
xii) Click on a designation to see the names of the employee (E.g., the following image displays names of all the *Software Engineers* inside the *Team BU-4*).



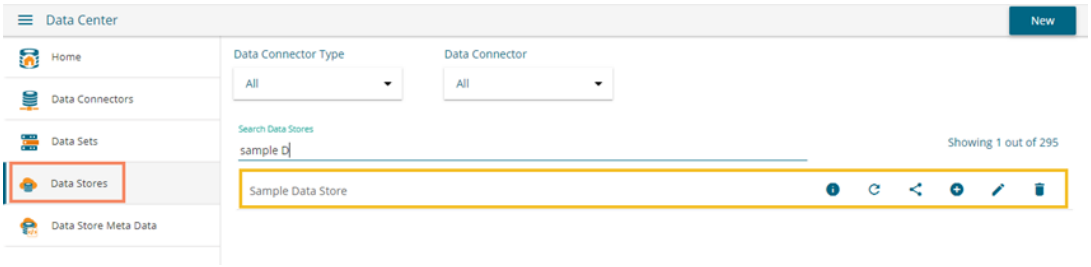
7.6.2. Automatic Date Drill

The Auto Data Drill allows users to drill down in the time values of a saved view on the storyboard for the selected story. The user must define a hierarchical pattern among the date dimensions via the '**Hierarchy Definition**' option of a Data Store.

i) Navigate to the '**Hierarchy Definition**' tab (while creating a data store).
ii) Drag and drop a time dimension into the '**Drill Def**' box to configure the drill path.
iii) The dragged time dimension splits into three granularities (E.g., Year>Month>Date)
iv) Click the '**Next**' option.



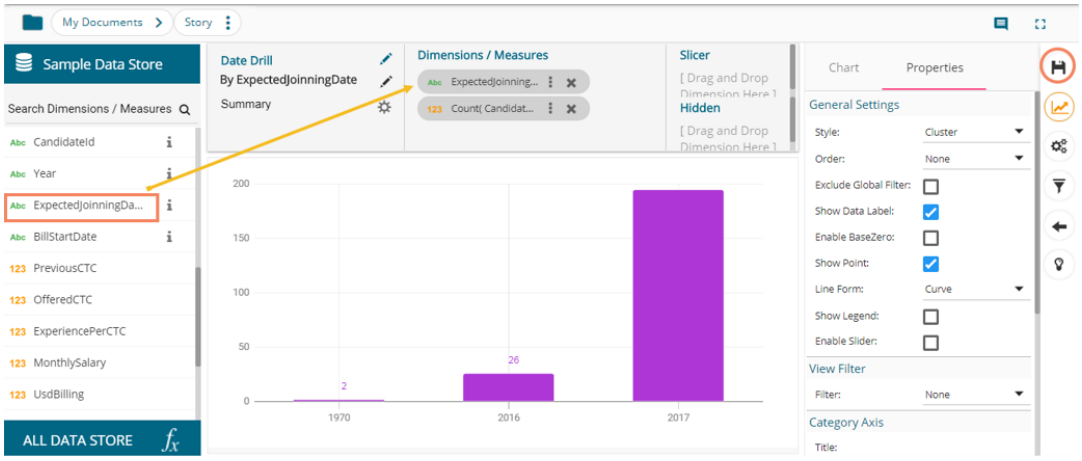
v) Create a Data Store successfully by reaching the final screen of the Data Store creation.



vi) Select the Data Store with the defined drill path to create a new view.

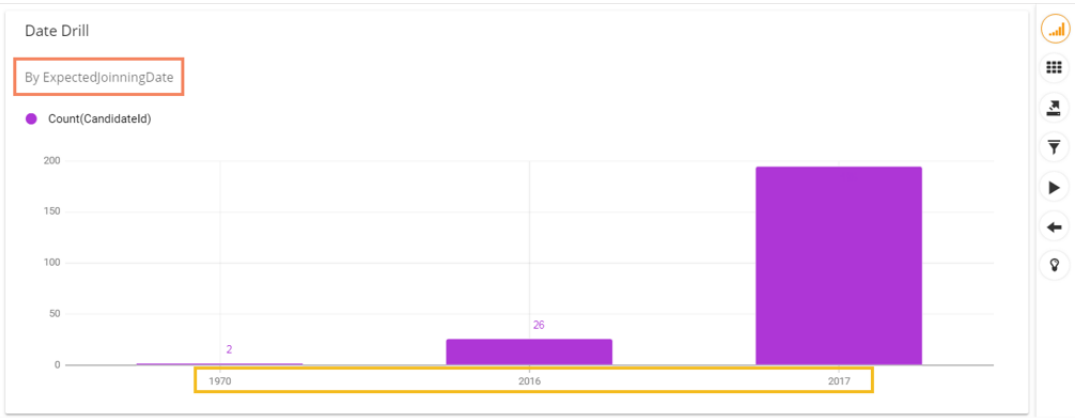
vii) Select the time dimension for which the drill path has been defined and drag to create a view.

viii) Click the '**Save**' icon to save the view on the Storyboard.

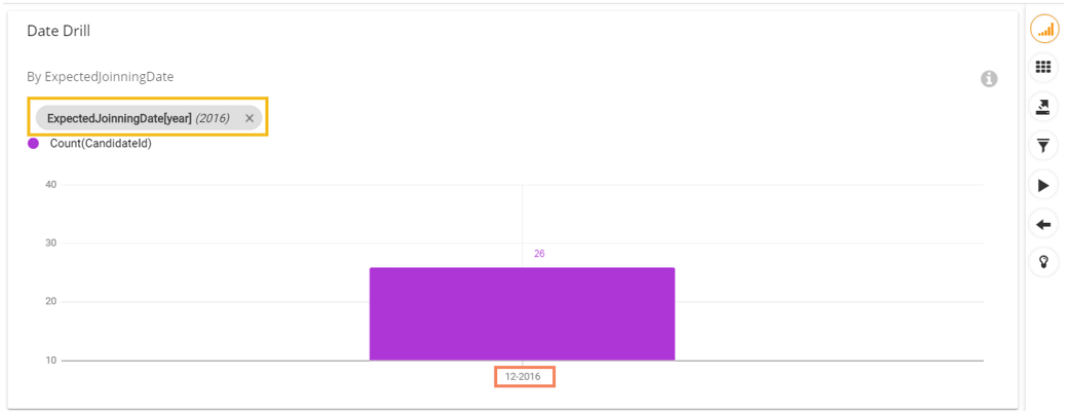


ix) Access the saved view on the storyboard by double clicks on it.

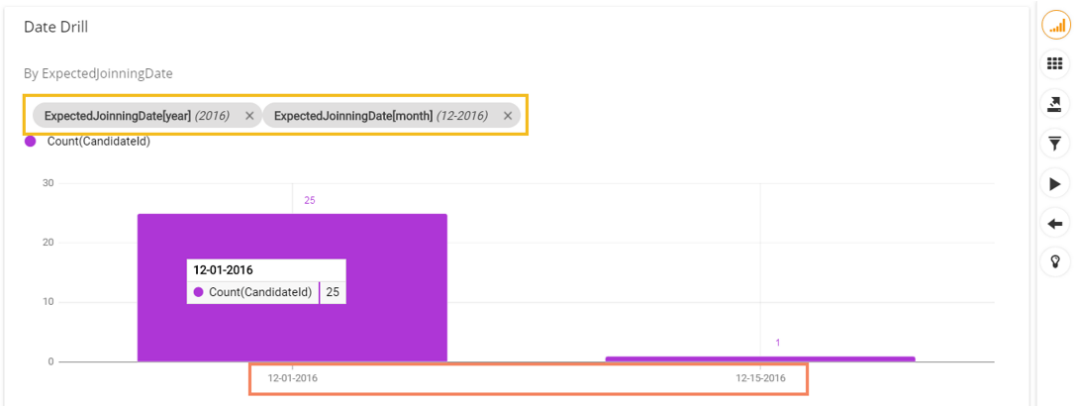
x) The **Analyse** window opens displaying *Year* as the highest-level granularity of date drill.



xi) By clicking the Yearly granularity of the time value, the user gets the monthly value displayed in the selected view. (E.g., the December 2016's data gets displayed in the below image)



xii) Click on the monthly granularity to display the exact dates of joining (E.g., the 1st and 15th December are displayed in the below given image).



8. Actions

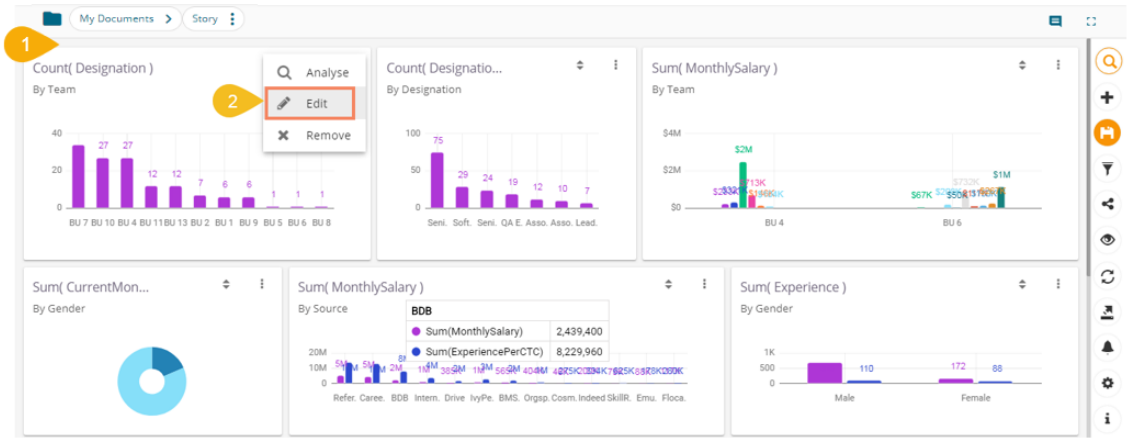
The Action tab includes various actions to be applied to a designed view.

8.1. Interactions

The '**Interactions**' option is the next level of applying the Global Filter. The suggested new feature enables users to select multiple views of the storyboard to filter based on a specific view. By default, on a single click, all the views permitted for interactions get filtered.

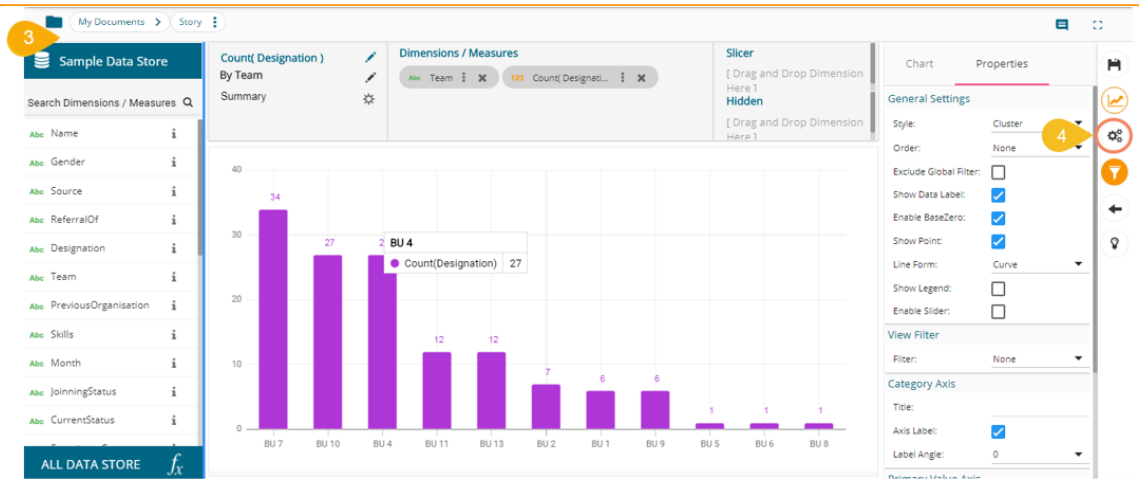
i) Navigate to the Storyboard.

ii) Select the '**Edit**' option for a specific view.



iii) The '**Design**' workspace opens by default for the selected view.

iv) Click the '**Actions**' icon.

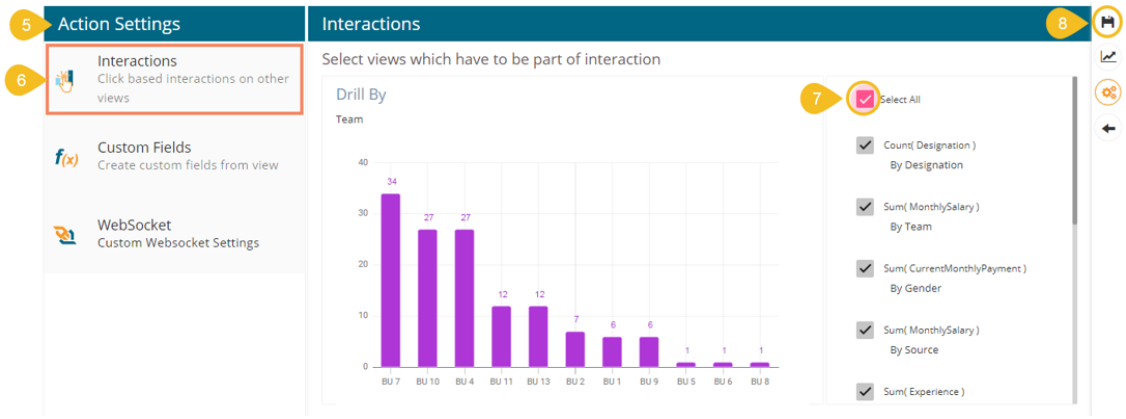


v) The Actions tab opens.

vi) Click the '**Interactions**' option from the displayed settings list.

vii) Enable interactions among the selected view (displayed as a chart) and the other views by a checkmark in the given box.

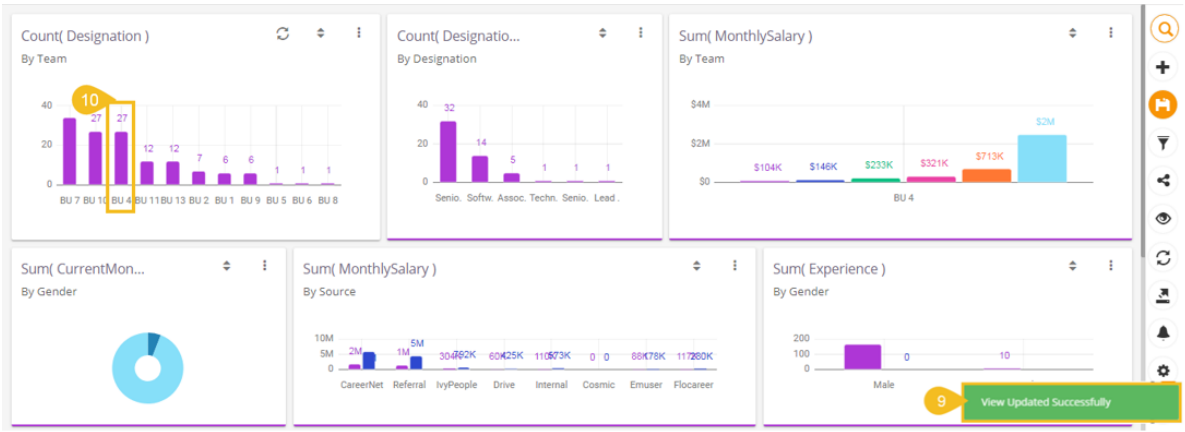
viii) Click the '**Save**' icon.



ix) A message appears stating that the storyboard views are updated.

x) Select a dimension value from the view which was selected to develop a dependency; the other views get filtered accordingly.

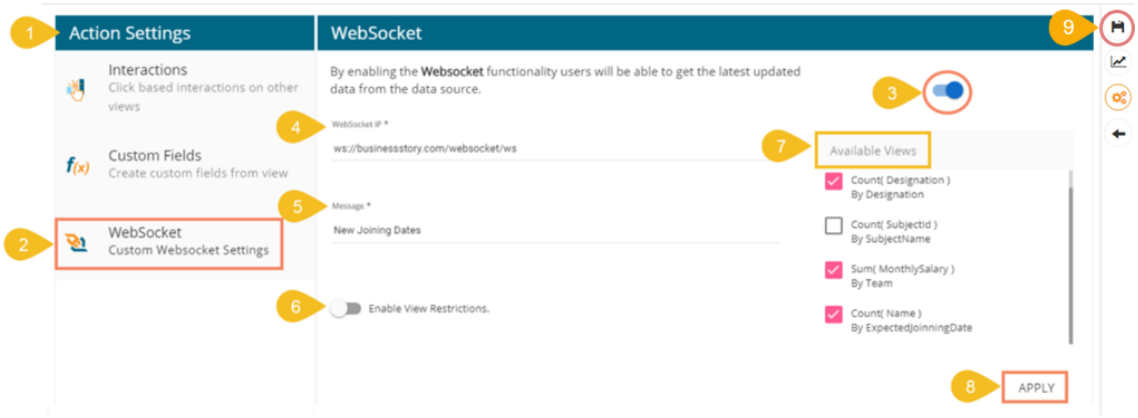
E.g., By selecting BU 4 from the parent view, all the integrated views display data for the BU 4 Team.



8.2. Web Socket

The Web Socket option under '**ACTIONS**' is provided to refresh the story when an external event occurs. Users can achieve this by configuring a WebSocket. The WebSocket Configuration contains a WebSocket IP and a message. On opening a WebSocket enabled story, a WebSocket channel is established to receive messages. The story gets refreshed when Web Socket receives the same message configured from this channel.

i) Navigate to the Action Settings page.
ii) Choose the '**WebSocket**' option.
iii) Enable the WebSocket functionality.
iv) Provide a WebSocket IP
v) Insert a Message based on which the selected view(s) get updated (Enable View restrictions, if required)
vi) Select the required views from the Available Views list.
vii) Click the '**APPLY**' option.
viii) Save the configured view.



ix) The story gets refreshed data based on the WebSocket setting when the event triggers.

Note:

a. The '**Action**' tab also contains the '**Custom Fields**' option to be applied to the KPI Comparative tile. Please refer description given for KPI Comparative Tile to understand the '**Custom Fields**' functionality.
b. By enabling the '**Enable View Restriction**,' the views listed under '**Available Views**' get disabled.

9. Applying Filters

BDB Story offers a series of filters to customize your interactive visual report. The filters can be applied to a view or the entire Story by using a dimension, measure, or date dimension from the available data source.

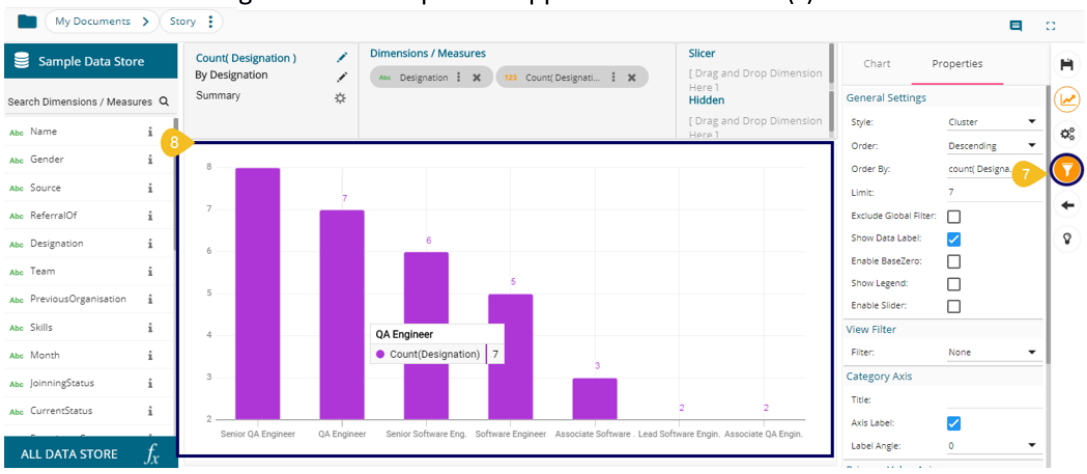
9.1. View Specific Filter

The View Filter icon provided on the '**Design**' workspace allows the user to filter a specific view based on the selected filter condition. A view can be filtered based on the Dimension, Measure, or Date Dimension data values.

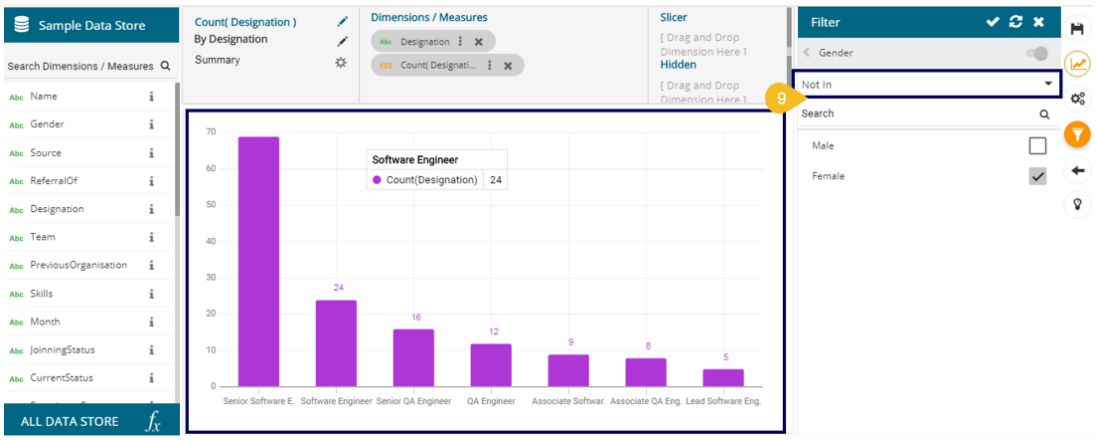
9.1.1. Dimension based View Filter

i) Click the '**Filter**' icon from the design mode of a view.
ii) A filter panel opens with the list of available filter values.
iii) Select a dimension/measure/time dimension to display a list containing all the sub-dimensions.
iv) Select the '**In**' option as the filter condition from the drop-down menu.
v) Select sub-dimension(s) by putting checkmarks in the box (the user can select multiple values).
vi) Click the '**Apply**' icon.

vii) The View Filter icon gets highlighted.
viii) The concerned view gets filtered as per the applied filter condition(s).

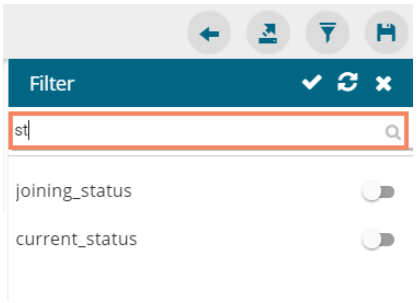


ix) If the selected filter condition is '**Not In**,' then the view gets filtered by the not selected filter values.

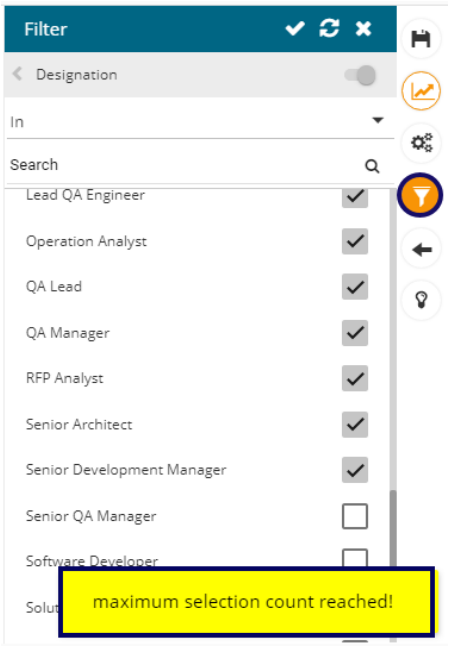


Note:

a. A '**Search**' bar has been provided in the View Filter panel to search a specific Dimension/ Measure/ Time value from the available list.



b. The user needs to click the '**Apply Filter**' button while enabling or eliminating the View specific filter values to reflect the same in the displayed chart.
c. The user can insert, modify, or remove a view specific filter via the '**Analyse**' option.
d. The View Filter becomes ineffective when the selected view is inserted into a story, and the Global Filter is applied to it.
e. The maximum selection for the Filter condition is restricted to 30. The users get a notification when they select the permitted number of the filter condition.



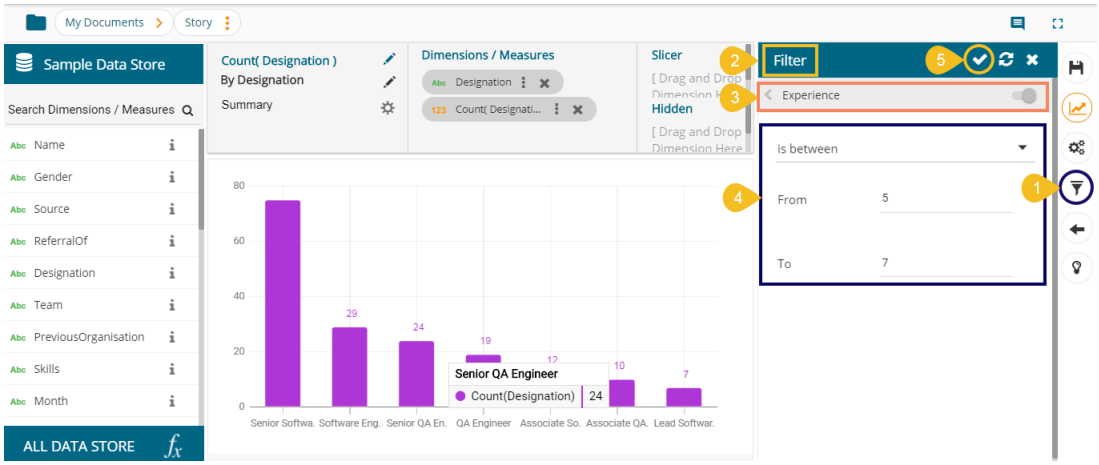
f. The View Filter also contains '**Like**' and '**Not Like**' operations. Please refer the section 9.2.4. to learn details about these operations.

9.1.2. Measure based View Filter

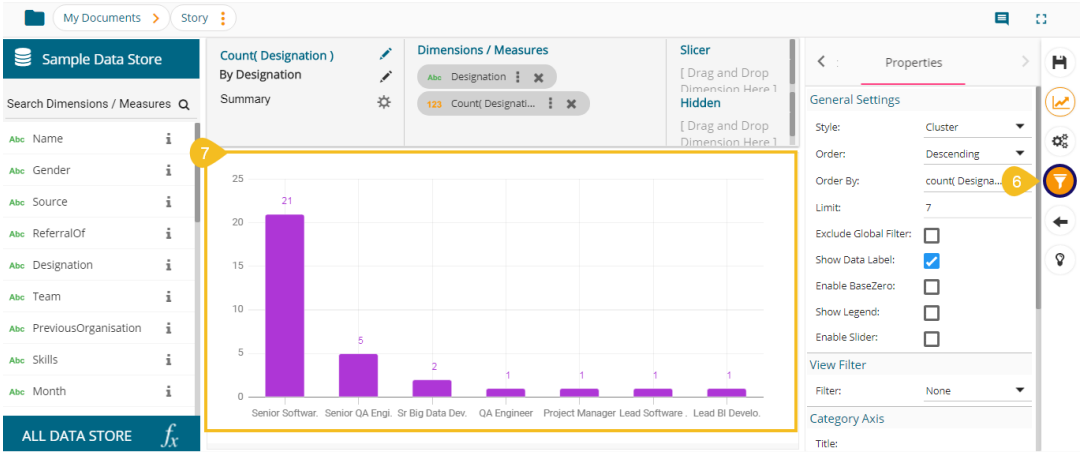
The user can add a view filter based on the **Measures** values.

i) Open the Filter panel on the Design New page.

ii) All the selected Dimensions and Measures get listed.
iii) Select a measure as a filter value.
iv) Select a condition from the drop-down menu and provide the required information to configure it.
v) Click the '**Apply**' icon.



vi) The View Filter icon gets highlighted.
vii) The view gets modified according to the selected View filter condition.



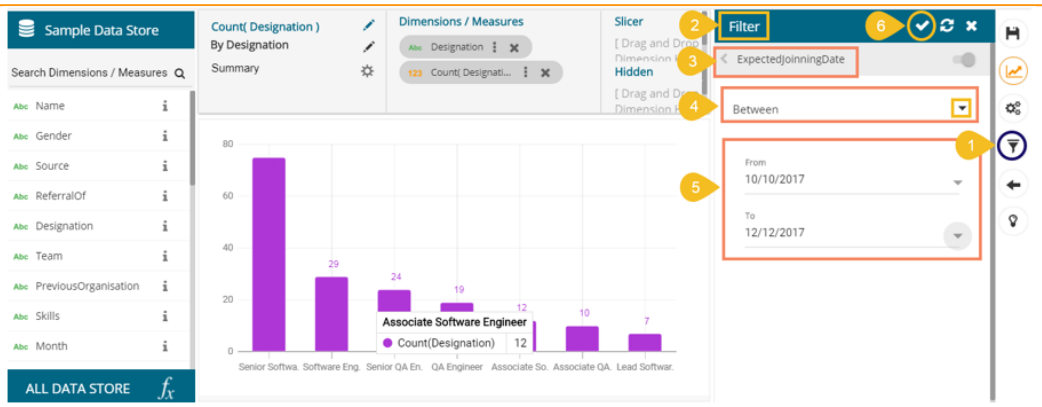
Note: The same set of steps can be followed to apply Global filter based on the Measure values.

9.1.3. Date based View Filter

The users can apply Date based View Filter selecting the Date Values from the Data Store. The user can provide two kinds of conditions on the Date values.

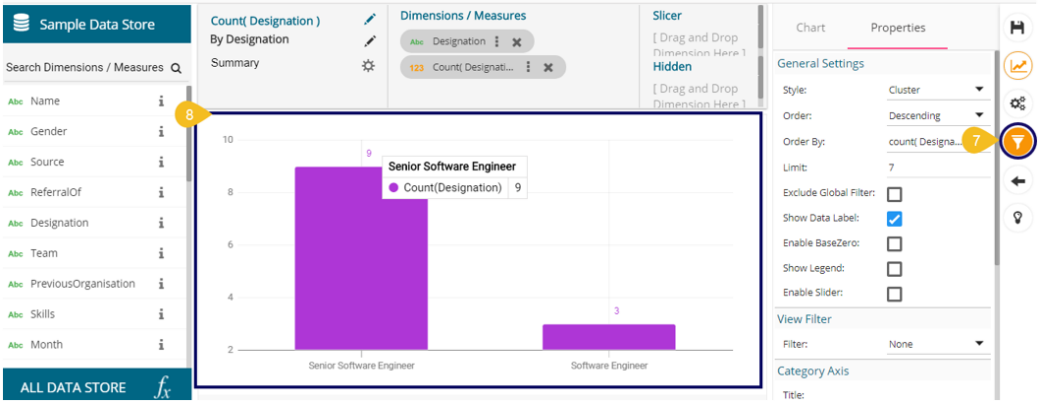
i. Between

i) Click the filter icon from the Design page.
ii) The Filter panel opens, displaying the available filter values.
iii) Select a condition containing Date values to filter the view.
iv) Choose the '**Between**' option from the drop-down menu.
v) Provide '**From**' and '**To**' dates.
vi) Click the '**Apply**' icon.



vii) The View Filter icon gets highlighted.

viii) The selected view gets filtered as per the applied filter conditions.



ii. Relative

i) Navigate to the Filter panel from the Design page.

ii) Select a Date value as the filter condition.

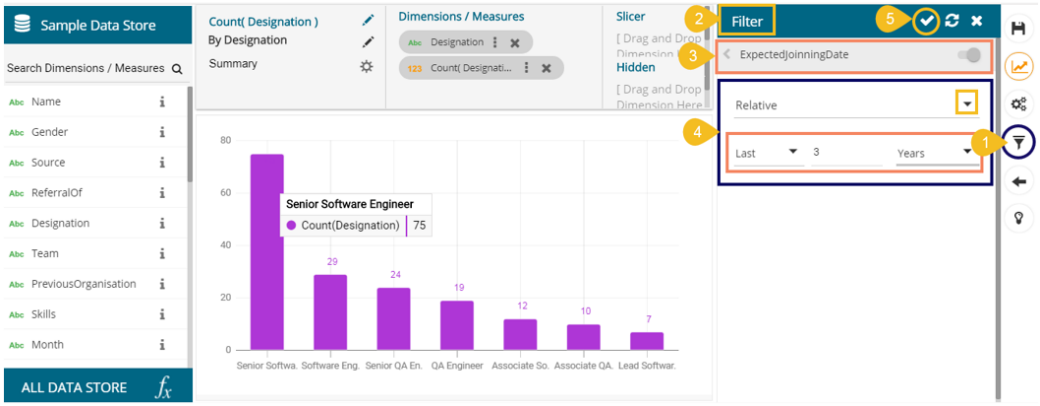
iii) Choose the '**Relative**' option from the drop-down.

iv) Insert a period by selecting the required values.

a. The user gets '**Last**' and '**This**' under the drop-down menu to select the **past** or **present time zone**.

b. There are **4 categories of time pointers** provided in another drop-down menu, which allows the user to select a value out of Years/ Months/Weeks/Days.
E.g., the below given image displays the '**Last 2 years**' as the selected time condition.

v) Click the '**Apply**' icon.



vi) The View Filter icon gets highlighted.
vii) The selected view gets filtered based on the applied conditions.

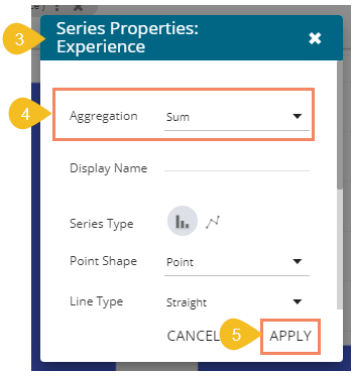
Note: The same set of steps can be used to apply Global filter based on the date values.

9.1.4. Measure Filter Via Series Properties

The user can apply a measure filter via the series properties. Users can compare different values for the same attribute based on the applied filter conditions using this feature.

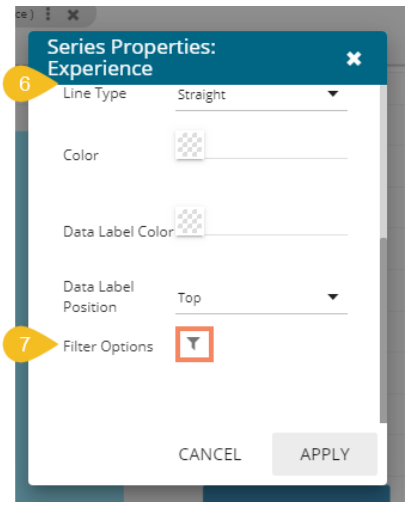
i) Select and drag one dimension, and one measure value from the list of Dimensions and Measures. Drop the Measure value twice on the canvas.
ii) Click the '**Series Properties**' icon from the second measure component.

iii) The '**Series Properties**' window opens.
iv) Make sure that the '**Aggregation**' type is the same for both the selected measures.
v) Modify the aggregation values and click the '**APPLY**' option; the aggregation values were not the same for the dragged measures.



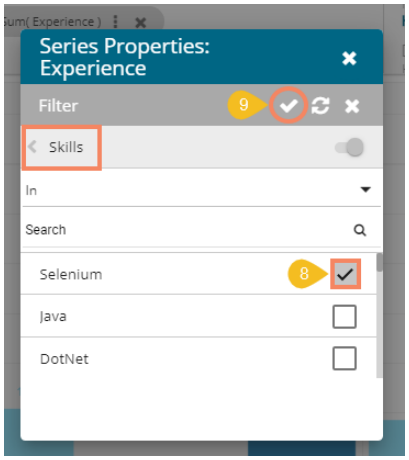
vi) Open the Series Properties window once again and scroll down to get the '**Filter Options**' icon.

vii) Click the '**Filter**' icon.

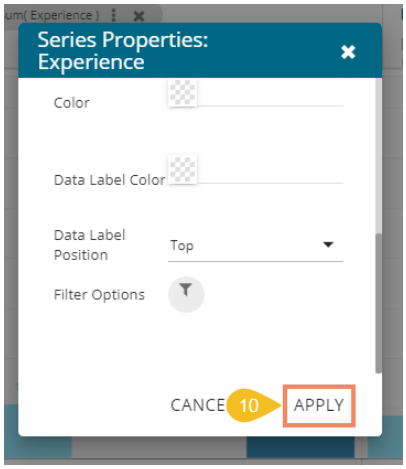


viii) Select filter conditions using checkmarks in the given boxes. (E.g. In this case, '**Skills**' is a broad filter condition under which '**Selenium**' is a specific filter choice.)

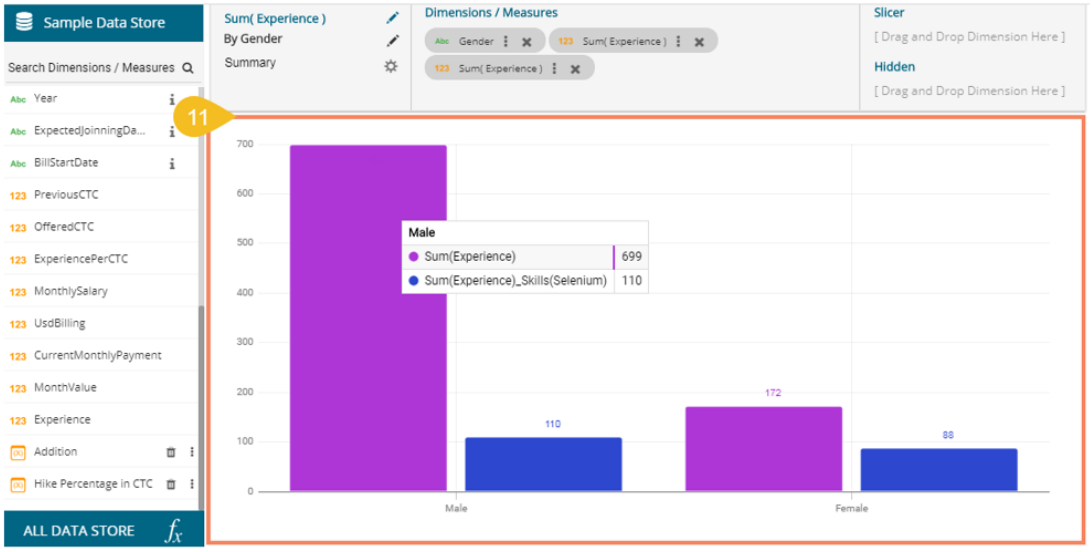
ix) Apply it using the '**Apply Filter**' icon.



x) The screen displaying the Filter icon re-opens, click the '**APPLY**' option.

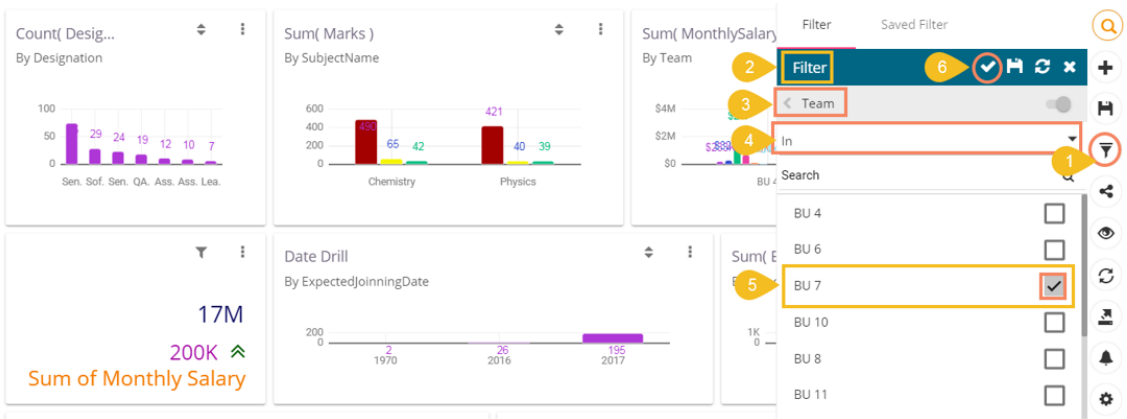


xi) The view gets filtered according to the set Measure Filter condition.

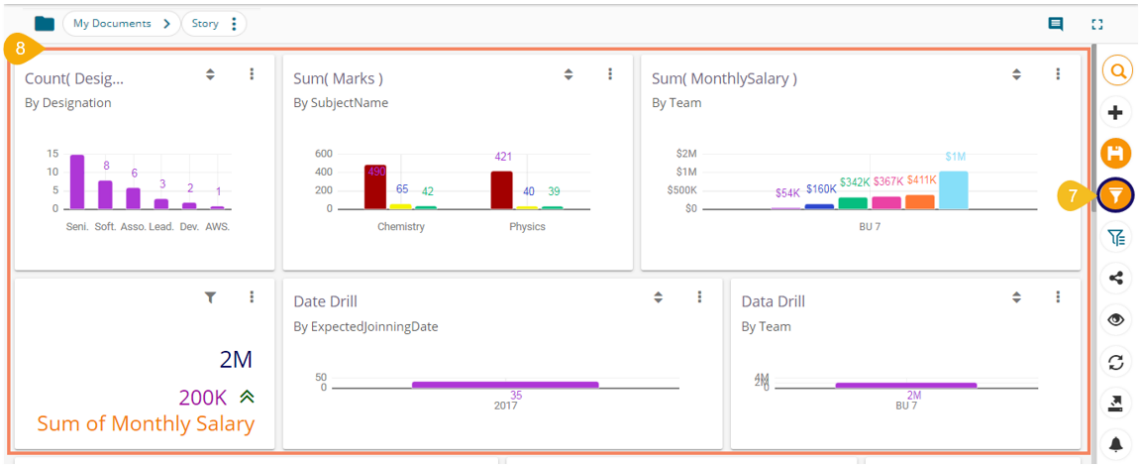


9.2. Global Filter

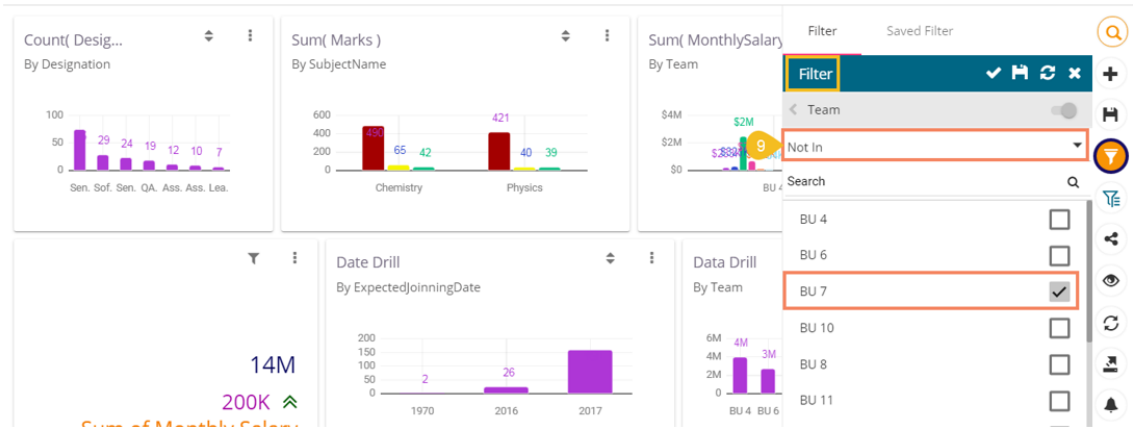
i) Click the '**Global Filter**' icon provided on the Storyboard.
ii) A filter panel opens, displaying a list of values that can be used as a filter condition.
iii) Click on a Dimension to display a list containing all the sub-dimensions (Clicking a measure or time dimension would display the related fields).
iv) Select the '**In**' or '**Not In**' option from the drop-down menu to apply the filtering condition. (E.g., the below given image displays '**In**' as the selected option so that the story gets filtered as per the chosen sub-dimension(s).
v) Select sub-dimension(s) using checkmark(s).
vi) Click the '**Apply**' icon.



vii) The Global Filter icon gets highlighted.
viii) The concerned views on the Storyboard get customized as per the applied Global Filter condition. E.g., All the displayed views have been filtered in the below given storyboard image.

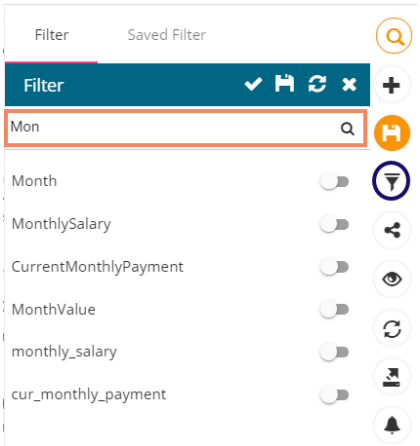


ix) By selecting the '**Not In**' option, the story (views) gets filtered by not selected filter conditions (E.g., the below given image displays the data without BU 7 team dimension.)



Note:

a. A '**Search**' bar has been provided for the Global Filter panel to search the available Dimensions, Measures, and Time values.

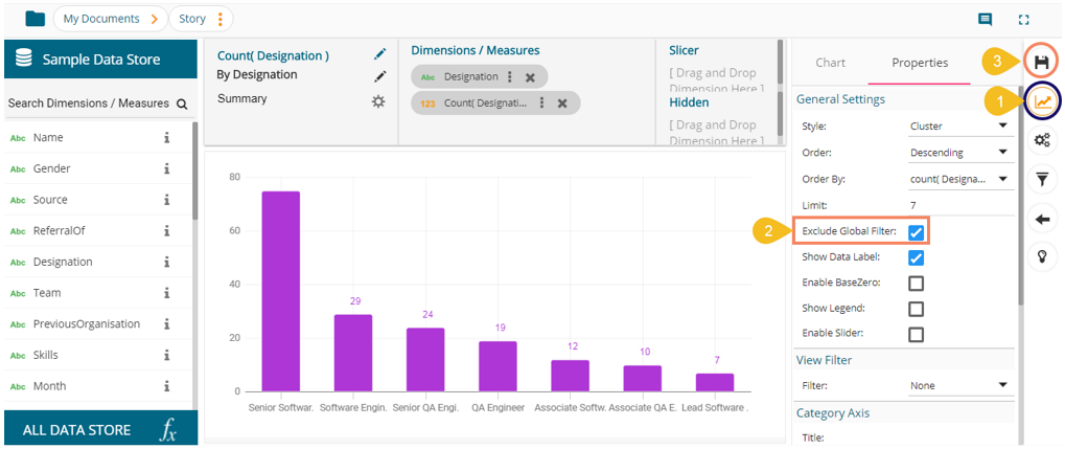


b. The global filter can be applied only to those views on the storyboard, where the filter values are used as dimensions.
c. Global filter, when applied to various views on a storyboard, subdues the view specific filter values.
d. The user can insert views created via different data stores on one Storyboard. By default, the Global filter panel displays all the available filter values across the data stores.

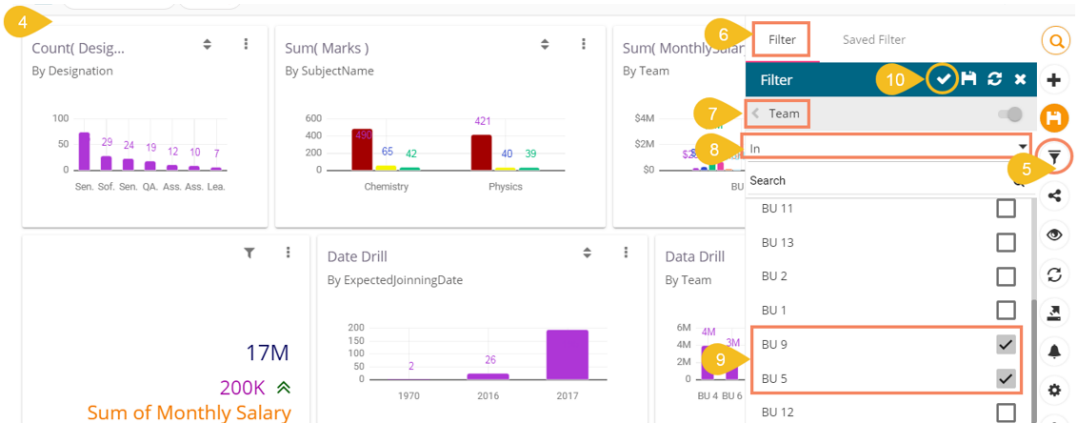
9.2.1. Exclude from the Global Filter

The Global filter values are applied to all the available views on a storyboard (if they are created using the same data store). The users can exclude a specific view from the Global Filter effect by selecting the '**Exclude from the Global Filter**' option.

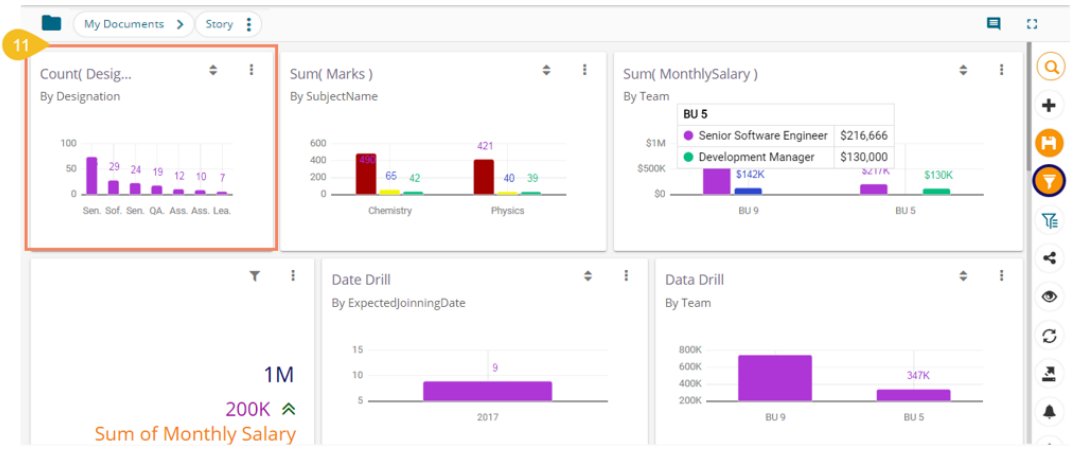
i) Navigate to the '**Design**' mode of a view that you wish to exclude from the Global Filter effect.
ii) Enable the '**Exclude Global Filter**' option from the '**Properties**' tab.
iii) Click the '**Save**' icon.



iv) The user gets redirected to the Storyboard.
v) Click the '**Global Filter**' icon.
vi) The '**Filter**' tab opens by default to create a new Global Filter condition.
vii) Select a data value from the available list.
viii) Select the '**In**' condition using the drop-down list.
ix) Select the global filter conditions using the displayed list of the data values (E.g., the below given image displays BU 9 and BU 5 Teams are selected with the '**In**' filter condition).
x) Click the '**Apply**' icon.

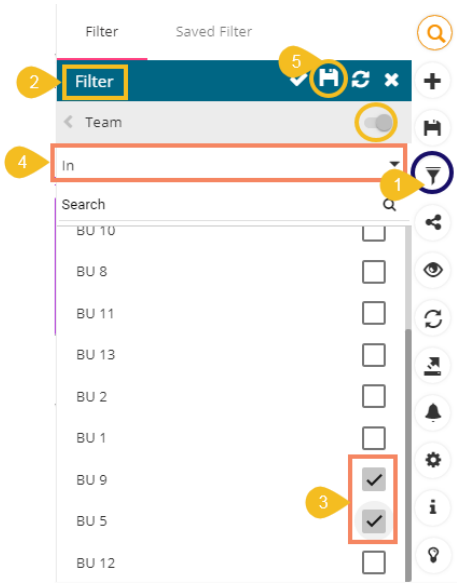


xi) All the views get modified according to the Global filter, but the selected view gets excluded from the Global filter.

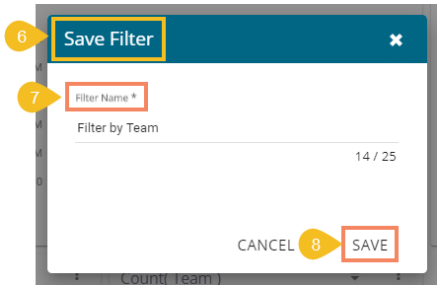


9.2.2. Saving a Global Filter

i) Click the '**Global Filter**' icon.
ii) The global filter panel opens.
iii) Select the specific data values from the displayed list by using the checkmarks. E.g., In this Case, team BU 9 and BU 5 are selected.
iv) Select the '**In**' filter condition from the drop-down.
v) Click the '**Save**' icon.

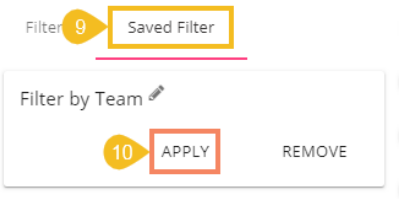


vi) The '**Save Filter'** window opens.
vii) Provide a Filter Name.
viii) Click the '**SAVE**' option.

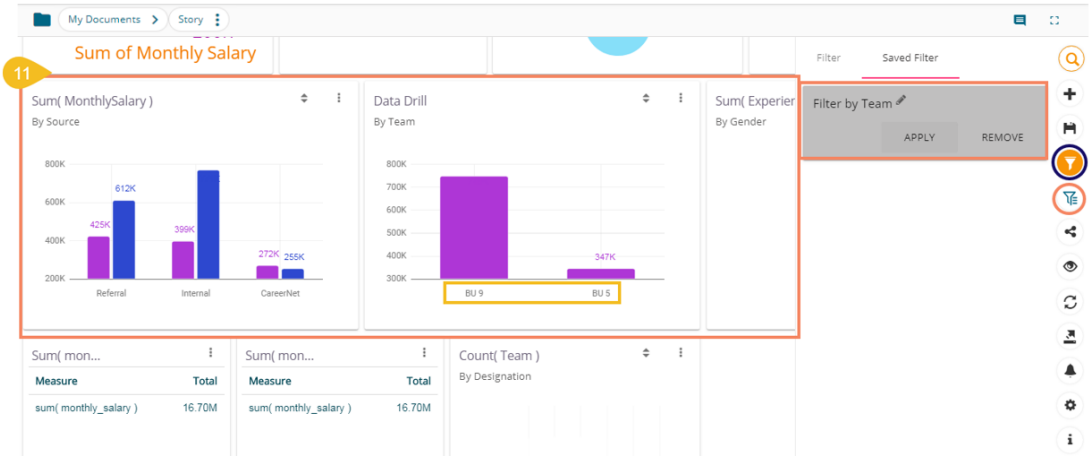


ix) The filter gets stored under the '**Saved Filter**' tab. (The same gets notified by a message.)

x) Click the '**APPLY**' option to apply the selected Saved Filter.

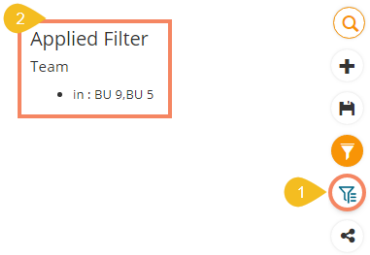


xi) The saved global filter condition gets applied to the concerned views.



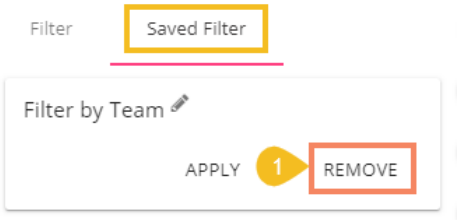
Note:

a. After applying a Saved Filter condition, the '**Applied Filter**' icon appears on the Storyboard menu list. The user can see all the applied Global Filter conditions by clicking the '**Applied Filter**' icon from the storyboard.



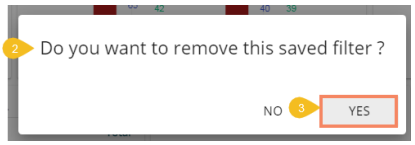
b. Removing the Saved Filter

1. Click the '**REMOVE**' option from the Saved Filters window.

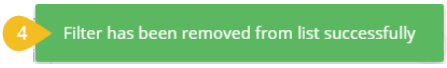


2. A confirmation window opens to remove the saved filter.

3. Click the '**YES**' option.



4. A message appears to confirm that the concerned saved filter condition is removed from the list.

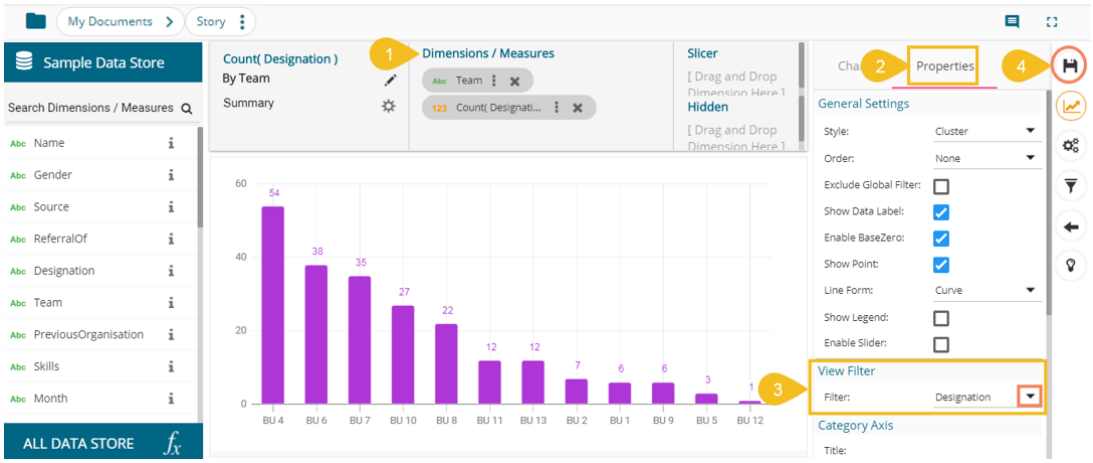


5. The saved filter gets removed.

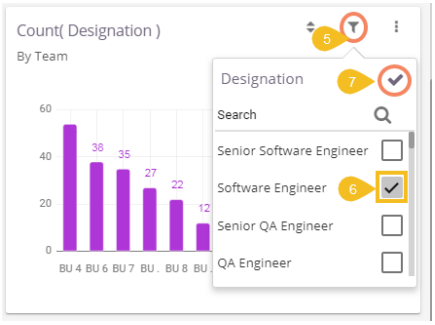
9.2.3. Custom View Filter

The user can access this view specific filter option from the chart properties provided on the storyboard when the view is saved.

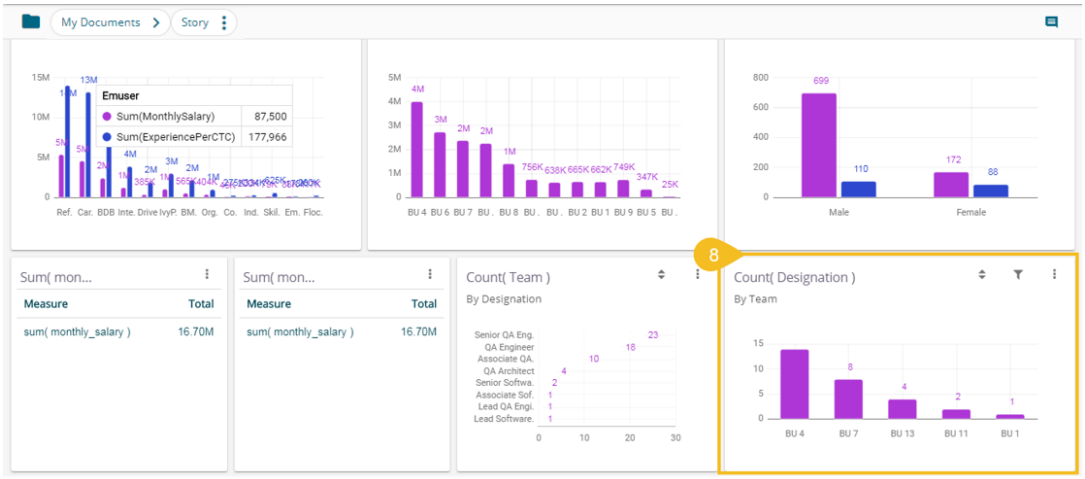
i) Create a view by drag and drop of the desired dimension and measure using the Design page(By default, the Mixed chart gets selected to display the selected data)
ii) Open the '**Properties**' tab.
iii) Select the '**View Filter**' option using the Properties panel. (In this case, the filter condition is '**Designation**')
iv) Click the '**Save**' option to save the view on the storyboard.



v) Access the view from the storyboard and click the '**Filter**' icon.
vi) Select a filter value.
vii) Click the '**Apply**' icon.

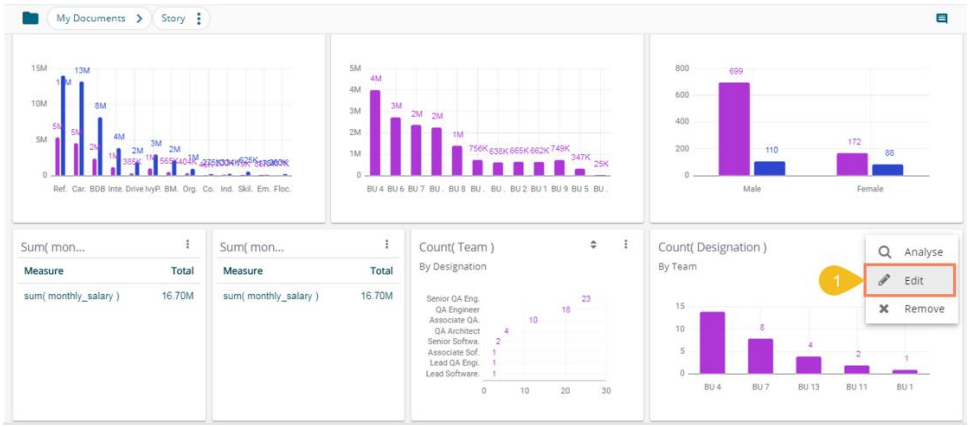


viii) The view gets customized as per the selected filter condition on the Storyboard.

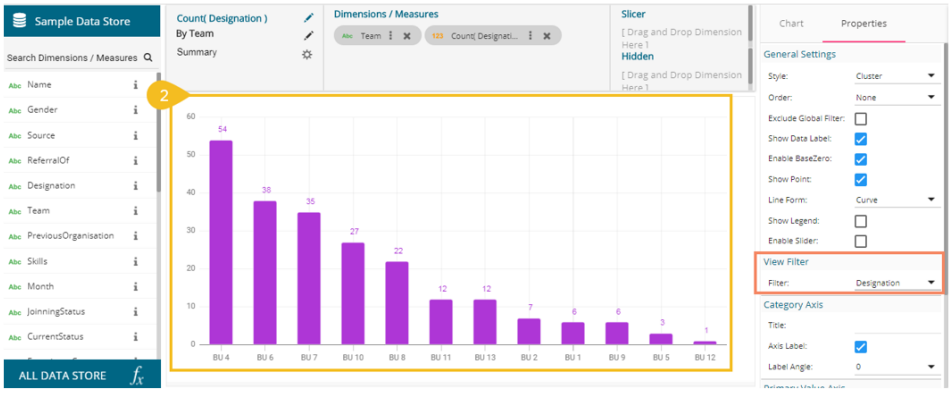


9.2.3.1. Editing the Customized View

i) Click the '**Edit**' option for the same view from the Storyboard.



ii) The view opens in the Design Workspace, the View Filter (Custom Filter) condition does not remain effective on the view when it opens in the design mode.

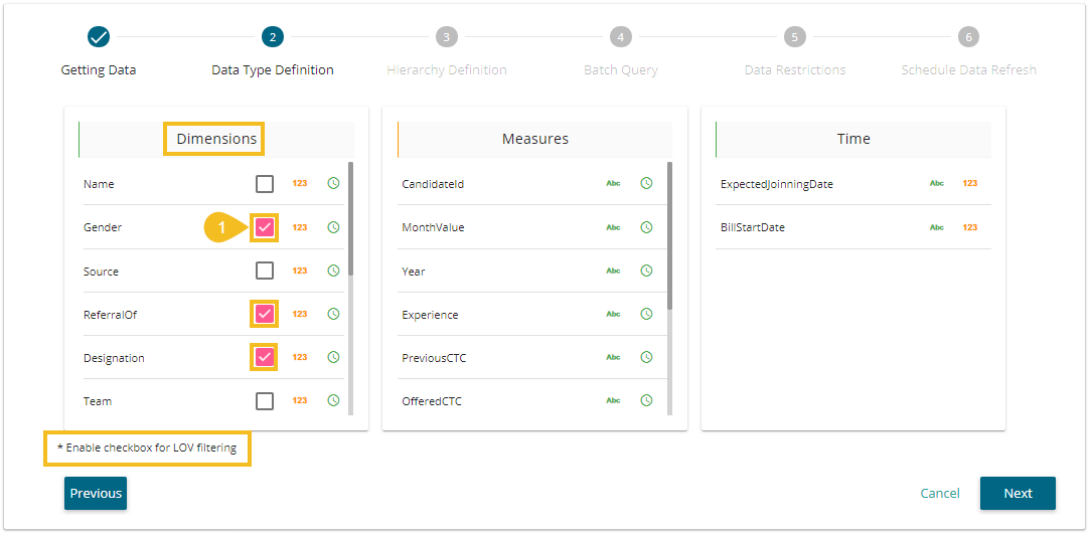


Note: The '**View Filter**' choice cannot be used for the Scatter Plot chart, KPI Tile, KPI Comparative Tile, Matrix Summary visualization charting options.

9.2.4. Like and Not Like Operation in Filter

The user can enable the filter and lookup for specific dimensions via the Data Type Definition step for a Data Store. All the selected (enabled) dimensions list with the sub-values, while for the disabled ones, no sub-values appear. This operation applies to both Local and Global filters.

i) Navigate to the Data Type Definition page for a Data Store (the following image displays the Data Type Definition page for the Sample Data Store where Dimensions like Gender, Referral of and Designation are enabled for the filter lookup function, but Name, Source, and Team are disabled from the filter lookup.



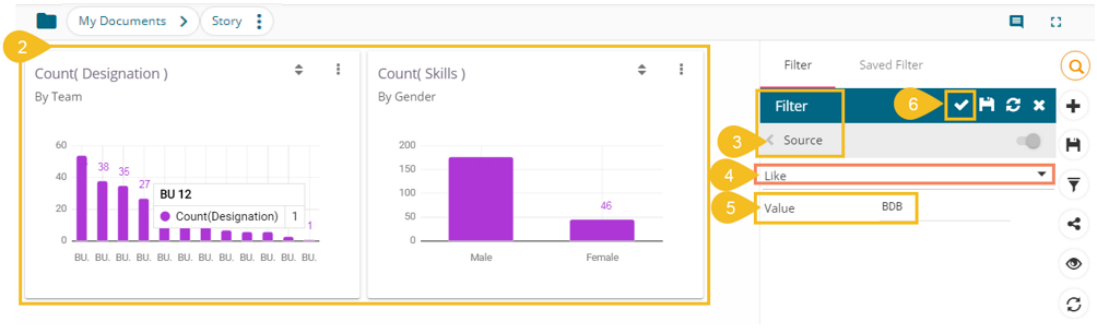
ii) Create a story based on the same Data Store and save it with relevant views.

iii) Access the global filter panel and select any of the disabled Dimension values (E.g., the Source dimension is selected from the Filter panel).

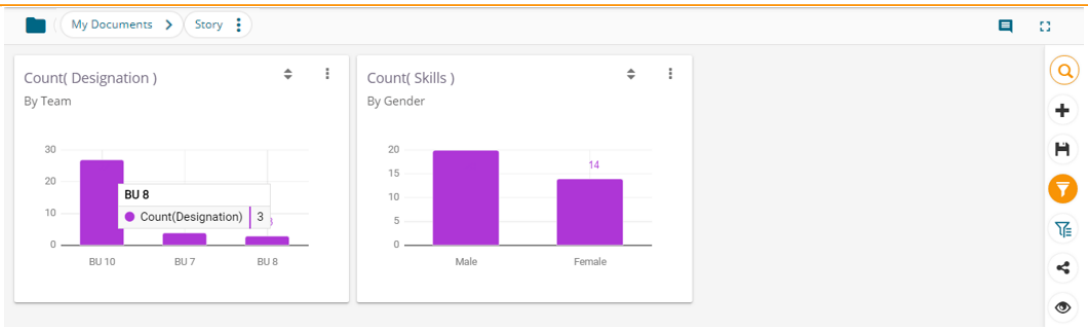
iv) Choose the '**Like'** operation from the drop-down menu.

v) Provide a Value manually to filter data. The list of sub-dimensions does not appear (E.g., BDB is the value provided for the Source dimension).

vi) Click the '**Apply**' icon.

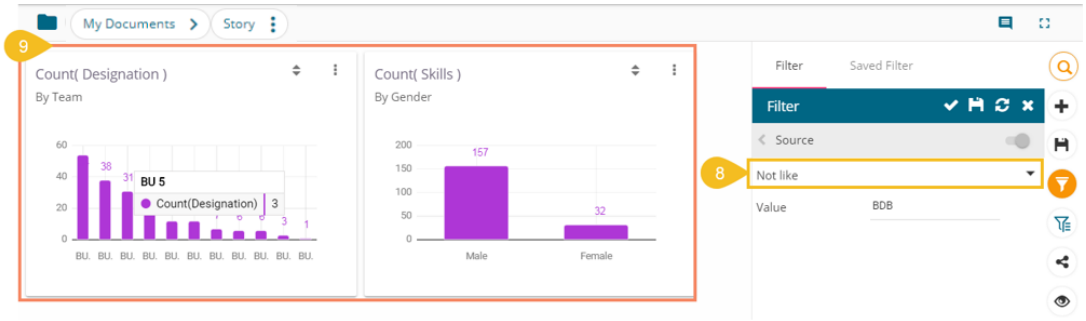


vii) The concerned views get filtered as per the applied filter value.

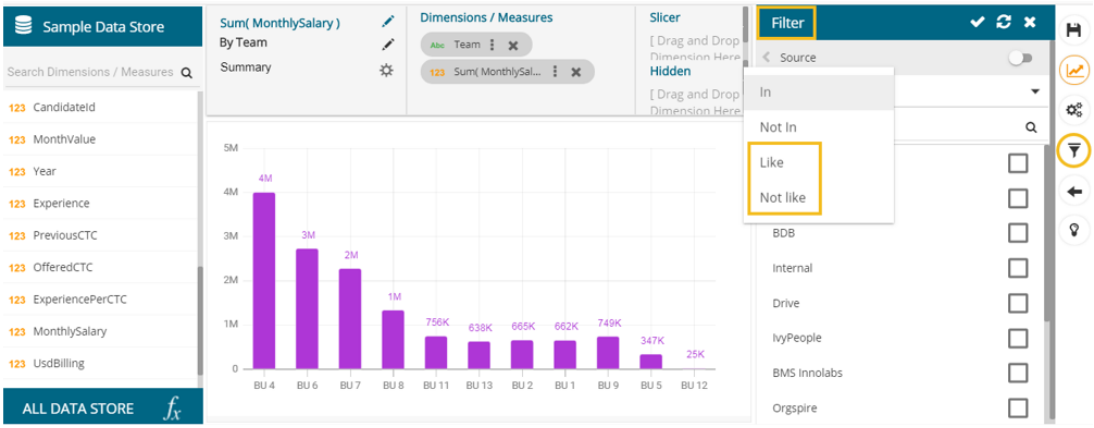


viii) Select the '**Not Like**' as the filter operation.

ix) The concerned views get filtered, excluding the entered values (E.g., BDB as source option displaying data for the not entered values.



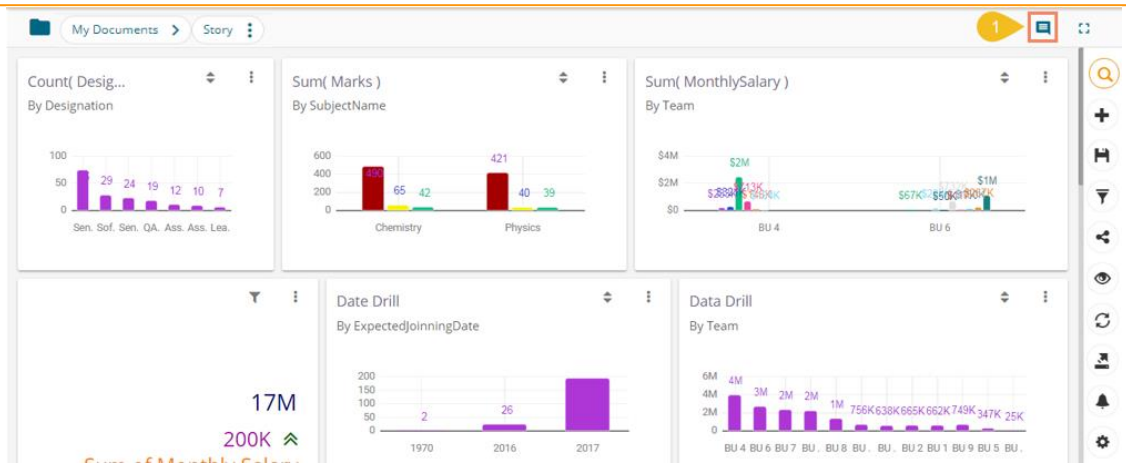
Note: The '**Like**' and '**Not Like**' operations are available in the View Filter panel as well.



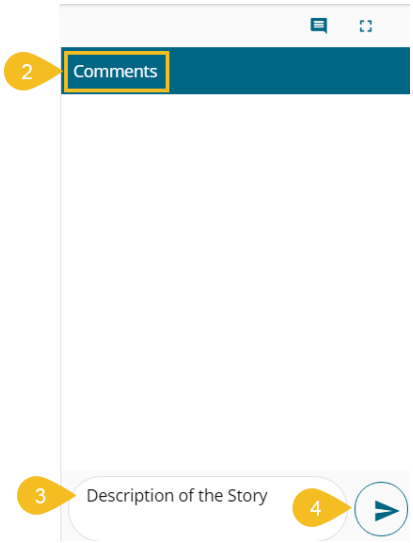
9.3. Comments

The user can access the '**Comments**' option on the menu row while designing a story.

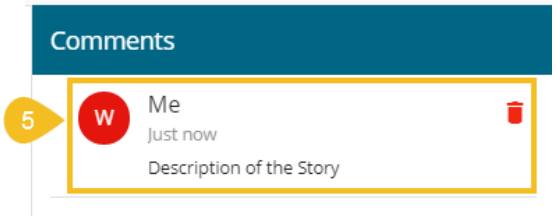
i) Click the '**Comments**' icon from the Header panel.



ii) A new window opens below with space to insert a message at the end of the window.
iii) Type a comment in the given '**Message**' space.
iv) Click the '**Send**' icon.



v) The entered comment appears in the '**Comments**' window.



Note:

a. The '**Comments**' feature is enabled for all the users who can access the story document.
b. The inserted comments can display user initials and record of time.

10. Charts & Properties

This section explains all the available chart types and chart-related properties provided on the Story Design page. The animation is added in the charts to show data change and visual effects.

10.1. Mixed Chart

The Mixed Chart is a combination of a line chart and a column chart. It can plot 3-series of data on the graph. It is primarily used to emphasize a different series of information.

The best situation to use Mixed Chart: To compare multiple categories
Example: To analyze a company's budget v/s revenue.
Variations of this chart-The following are the variations for this chart:

1. **Use stacked Column charts:** Multiple categories can be clubbed together on top of each other, which makes addressing multiple questions easier.
2. **Use columns side by side:** Comparison between multiple categories becomes easier instead of toggle between charts and data.
3. **Add color for quick insight:** Where displaying columns with colors allows users to pay immediate attention to the essential tasks.

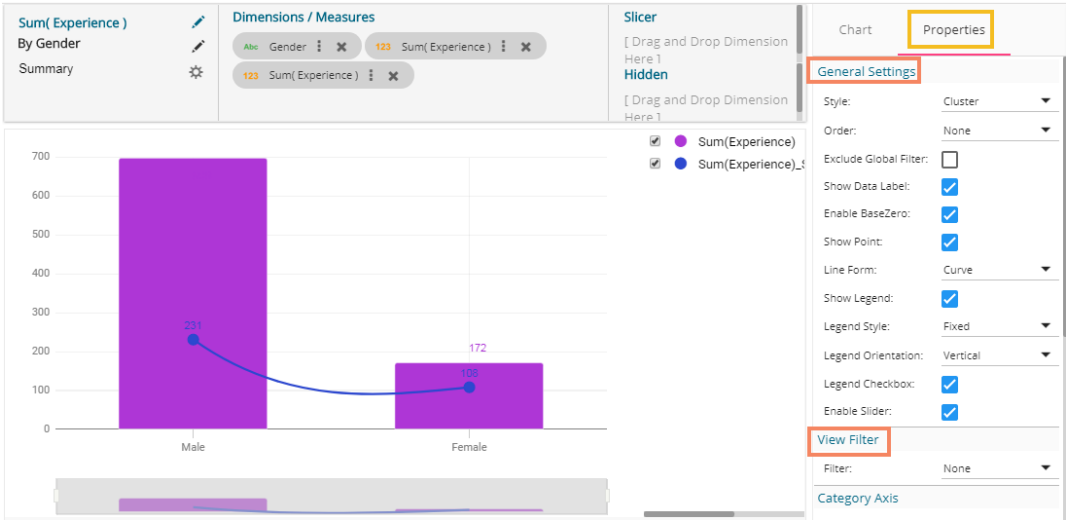
Properties:

i) General Settings

- **a. Style**: Select a style to display the data (the provided choices for this field are: Cluster, Stack, Stack Percentage, Stack Overlaid)
- **b. Order**: Select a sequence for displaying information
  - i. None
  - ii. Ascending
  - iii. Descending
  - iv. Manual Sort: The user needs to sort the dimensions by using the indicator signs manually
    By selecting an order(ascending or descending), the user needs to configure the following fields:
    1. Order By- Select a value option from the drop-down menu to order the sequence of the data
    2. Limit- Set a number to display the requested data by this limit
- **c. Exclude Global Filter**: The view gets excluded from the Global Filter condition by putting a checkmark in the box
- **d. Show Data Label**: Data label gets displayed by using a checkmark in the given box
- **e. Enable Base Zero**: Base value gets presented from Zero by providing a checkmark in the box
- **f. Show Point**: Enable the Show Point option by using a checkmark in the given box
- **g. Line Form**: Select a line format from the drop-down menu (the provided choices for this field are: Curve and Segment)
- **h. Show Legend**: Provide a checkmark in the box to display Legend. After enabling '**Show Legend**,' users need to select the following information:
  - i. **Legend Style**: Select one of the following options by using the drop-down menu
    1. Fixed
    2. Floating
  - ii. **Legend Orientation**: This option appears when '**Show Legend**' is enabled, and the selected '**Legend Style**' is '**Fixed**'. Users need to select an option out of the given choices using the drop-down menu.
    1. Vertical
    2. Horizontal
  - iii. **Legend Checkbox**: Enable this option by a checkmark to add the checkbox beside the Legend
- **i. Enable Slider**: Provide a checkmark in the box to enable the slider

ii) View Filter

a. **Filter**: Select a filter condition using the drop-down menu (E.g., '**Source**' is the selected filter condition in the following image).



iii) Category Axis

a. **Title**: Provide a title for the axis
b. **Axis Label**: Enable the Category Axis label by putting a checkmark in the box.
c. **Label Angle**: Select a display angle for the axis label.

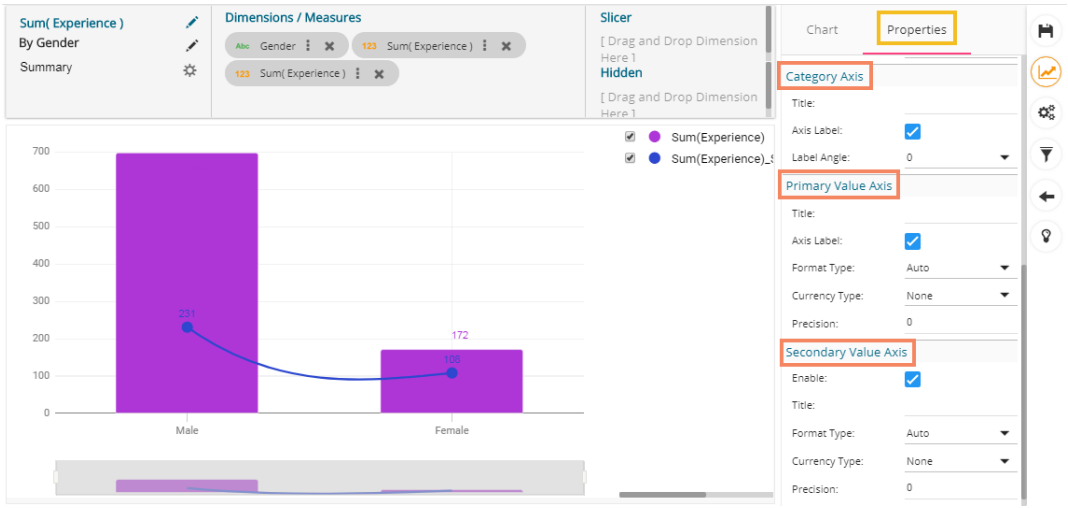
iv) Primary Value Axis

a. **Title**: Provide a title for the Primary Value Axis
b. **Axis Label**: Enable the Primary Value Axis label by putting a checkmark in the box.
c. **Format Type**: Select a desired format type from the drop-down menu (the provided options for this field are: None, Auto, Percent, Thousand, Lacs, Crore, Million)
d. **Currency Type**: Select a currency symbol to be displayed in the view (the provided options for this field are: None, Euro, Rupees, Pound, USD, Yen, Cent)
e. **Precision**: Set the after-decimal value (It displays up to 5 precision)

v) Secondary Value Axis

Properties for the Secondary Value Axis gets displayed when two measures are dragged on the canvas.

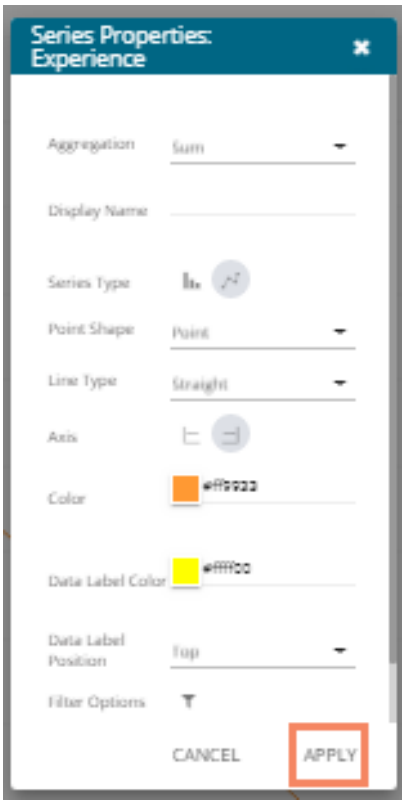
a. **Enable**: Put a checkmark in the box to enable the Secondary Value Axis
b. **Title**: Provide a title for the Secondary Value Axis
c. **Format Type**: Select a desired format type from the drop-down menu
d. **Currency Type**: Select a desired currency symbol from the list
e. **Precision**: Set the after-decimal value (It displays up to 5 precision)



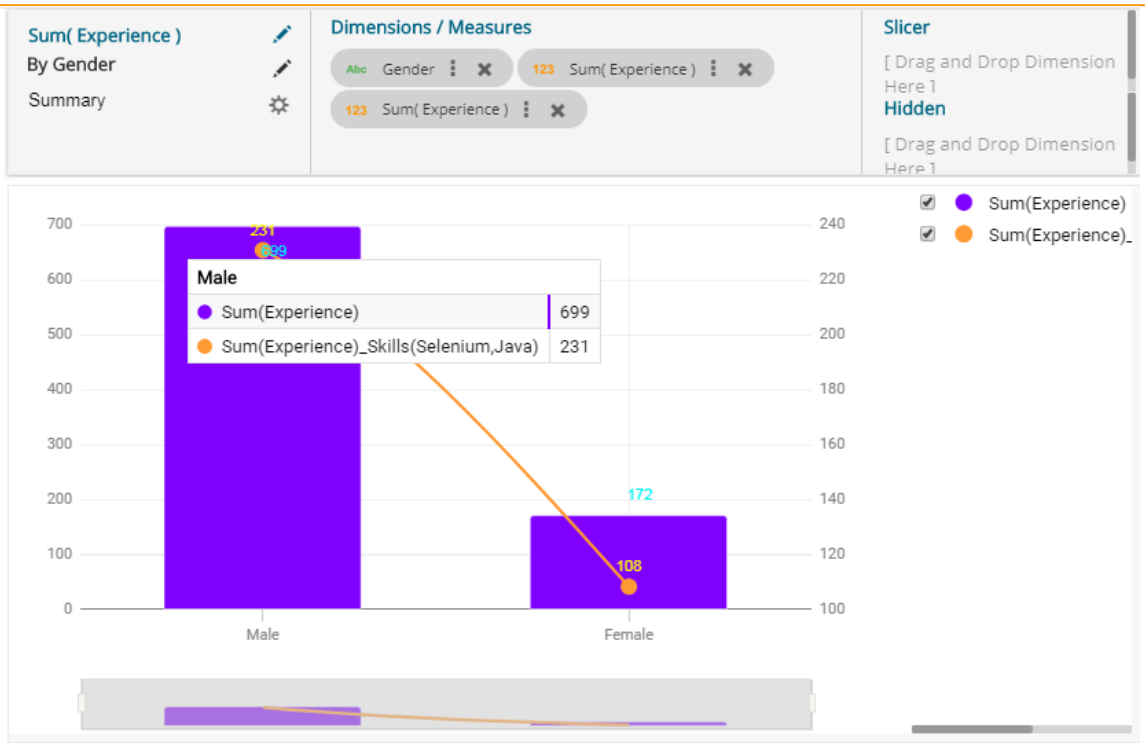
Note: When the selected Format Type is 'Percentage', you don't get the 'Currency Type' field.

The users must configure the **Series Properties** of the dragged measure after enabling the Secondary Value Axis to display the same in the chart.

a. Access Secondary Value Axis using the '**Properties**' tab and enable it.
b. Click '**Series Properties**' ⋮ provided next to the measure name
c. A new window opens
d. Configure the required details:
   i. **Aggregation**-select an aggregation using the drop-down menu (By default, it displays the second aggregation type that is '**Sum**')
   ii. **Display Name**- provide a name to be displayed in the legend.
   iii. **Series Type**- select a series type to display the secondary value.
   iv. **Point Shape:** Select a point shape using the drop-down menu.
   v. **Line Type:** Select a line type using the drop-down menu.
   vi. **Axis**-select an axis to display the values of the second measure.
   vii. **Color**- Select a color for the series.
   viii. **Data Label Color**-select a color for the Data Label.
   ix. **Data Label Position**: Select an option using the drop-down icon.
   x. **Filter Options**: Access the list of dimensions and measures to apply the filter condition(s).
   xi. Click the '**APPLY**' option.



e. Navigate to the '**Properties**' tab
f. The selected changes can be seen in the secondary value axis of the view.



10.2. Area Chart

An area chart or area graph displays graphically quantitative data. It is based on the line chart. The primary use of area charts is to show trends over a period.

The best situation to use Area Chart: To showcase data that depicts a time-series relationship

Examples:

- To view the sales of a manufacturer over a period.
- To display quarter wise revenue growth of an organization

Variations of this chart: Group and Stacked Area graphs

Properties:

i) General Settings

a. Style: Select a style to display the data (the provided choices for this field are: Overlaid, Stacked, 100%)

b. Order: Select a sequence for displaying information

i. None
ii. Ascending
iii. Descending
iv. Manual Sort (Users can manually sort the dimensions by using the indicator signs)
By selecting an order(ascending or descending, users will be required to configure the following fields:
1. Order By- Select a value option from the drop-down menu to order the sequence of the data
2. Limit- Set a number to display the requested data by this limit

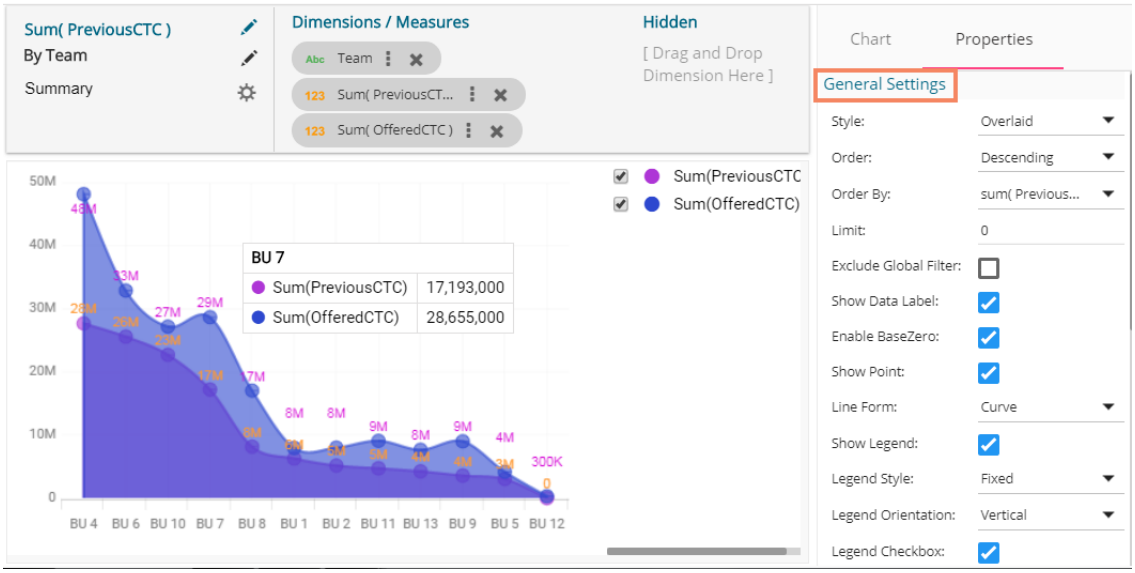
c. Exclude Global Filter: The view will be excluded from the Global Filter condition by putting a checkmark in the box

d. Show Data Label: Data label gets displayed by using a checkmark in the given box

e. **Enable Base Zero**: Base value gets presented from Zero by using a checkmark in the given box
f. **Show Point**: Enable the Show Point option by using a checkmark in the given box
g. **Line Form**: Select a line format from the drop-down menu (the provided choices for this field are: Curve and Segment)
h. **Show Legend**: Displays legend by turning on the radio button. After enabling 'Show Legend,' users need to select the following information:
    i. **Legend Style**: Select one of the following options by using the drop-down menu
        1. Fixed
        2. Floating
    ii. **Legend Orientation**: This option will be provided when 'Show Legend' is enabled, and the selected 'Legend Style' is 'Fixed.' Users need to select an option out of the given choices using the drop-down menu.
        1. Vertical
        2. Horizontal
    iii. **Legend Checkbox**: Enable this option by a checkmark to add the checkbox beside the Legend.

ii) View Filter

a. **Filter**: Select a filter condition using the drop-down menu.

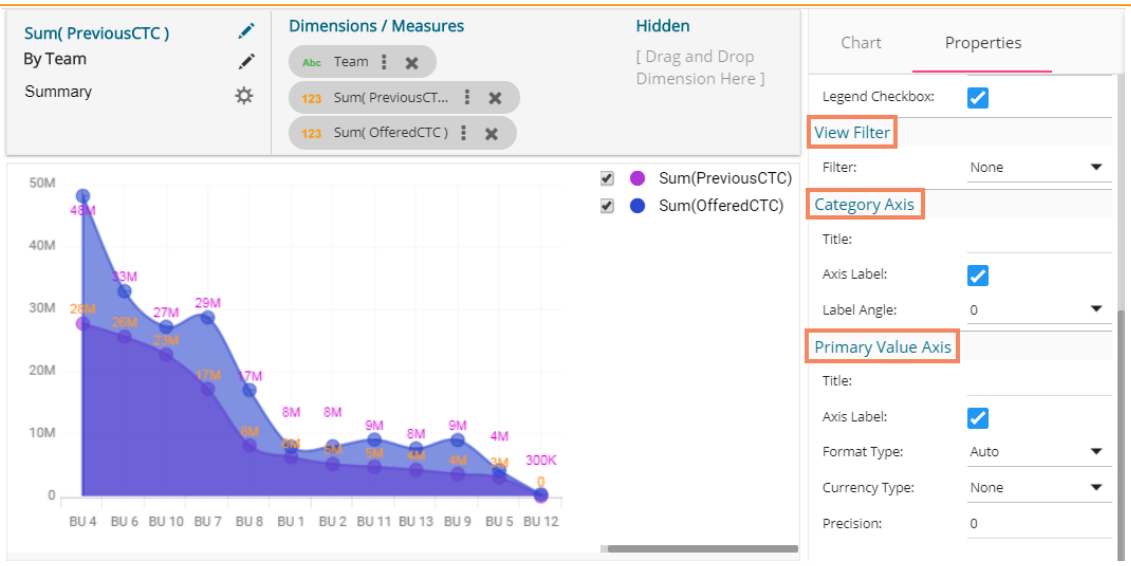


iii) Category Axis

a. **Title**: Provide a title for the axis
b. **Axis Label**: Enable the category axis label by using a checkmark in the box
c. **Label Angle**: Select a display angle for the axis label

iv) Primary Value Axis

a. **Title**: Provide a title for the Primary Value Axis
b. **Axis Label**: Enable the Primary Value Axis label by using a checkmark in the box
c. **Format Type**: Select a desired format type from the drop-down menu (the provided options for this field are: None, Auto, Percent, Thousand, Lacs, Crore, Million)
d. **Currency Type**: Select a currency symbol to be displayed in the view (the provided options for this field are: None, Euro, Rupees, Pound, USD, Yen, Cent)
e. **Precision**: Set the after-decimal value (It displays up to 5 precision)



10.3. Bar Chart

Bar Charts are useful for comparing classes, categories, or groups of data. They are one of the most commonly used types of charts because they are simple to create and very easy to interpret.

The best situation to use a bar chart: When the data set is small, it would be more accessible to the end-user to

interpret data. Observations can be performed over a period.

Examples:

a. Quarterly sales of an organization

b. Percentage of change in sales or revenue can be indicated

Variations of this chart:

Add color for quick insight: Displaying the bars with colors helps users to pay immediate attention to the essential tasks.

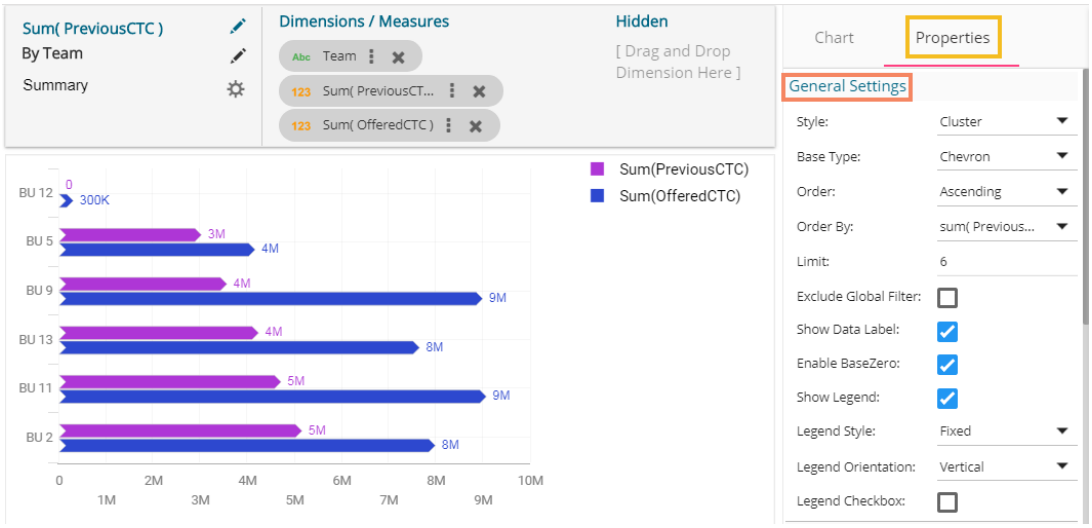
Use bar side by side: Where comparison between multiple categories becomes easier instead of toggle between charts.

Properties:

i) General Settings

- **a. Style**: Select a style to display the data (the provided choices for this field are: Cluster, Stack, Stack Percentage, Stack Overlaid)
- **b. Base Type**: Select a base type option from the drop-down (the provided choices for this field are: Plain, Rectangle, Chevron)
- **c. Order**: Select a sequence for displaying information using the drop-down
  - i. None
  - ii. Ascending
  - iii. Descending
  - iv. Manual Sort (The users need to sort the dimensions by using the indicator signs manually)
    By selecting an order(ascending or descending, the user needs to configure the following fields:
    1. Order By- Select a value option from the drop-down menu to order the sequence of the data
    2. Limit- Set a number to display the requested data by this limit
- **d. Exclude Global Filter**: The view gets excluded from the Global Filter condition by putting a checkmark in the box.
- **e. Show Data Label**: Data label gets displayed by using a checkmark in the given box.
- **f. Enable Base Zero**: Base value gets presented from Zero by using a checkmark in the given box

g. **Show Legend**: Displays legend by turning on the radio button. After enabling 'Show Legend,' users need to select the following information:
   i. **Legend Style**: Select one of the following options by using the drop-down menu
      1. Fixed
      2. Floating
   ii. **Legend Orientation**: This option appears when 'Show Legend' is enabled, and the selected '**Legend Style'** is '**Fixed**'. Users need to select an option out of the given choices using the drop-down menu.
      1. Vertical
      2. Horizontal
   iii. **Legend Checkbox**: Enable this option by a checkmark to add the checkbox beside the Legend.



ii) View Filter

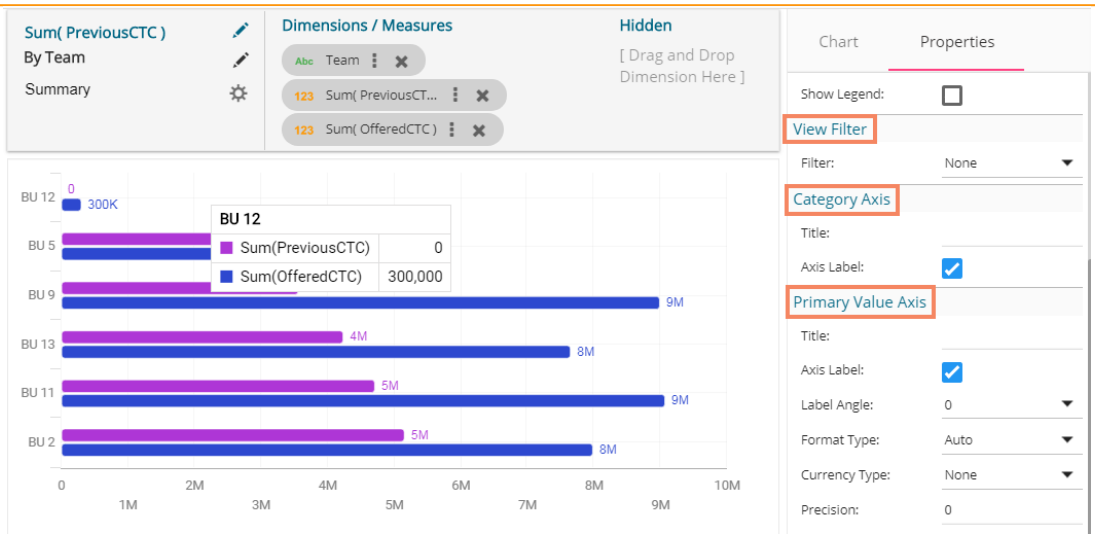
a. **Filter**: Select a filter condition using the drop-down menu.

iii) Category Axis

a. **Title**: Provide a title for the axis.
b. **Axis Label**: Enable the category axis label by turning on the radio button.

iv) Primary Value Axis

a. **Title**: Provide a title for the Primary Value Axis.
b. **Axis Label**: Enable the Primary Value Axis label by turning on the radio button.
c. **Format Type**: Select the desired format type from the drop-down menu (the provided options for this field are: None, Auto, Percent, Thousand, Lacs, Crore, Million).
d. **Currency Type**: Select a currency symbol to be displayed in the view (the provided options for this field are: None, Euro, Rupees, Pound, USD, Yen, Cent).
e. **Precision**: Set the after-decimal value (It displays up to 5 precision).



10.4. Bubble Chart

A Bubble chart visualizes data set in three of four dimensions. The first two aspects are used as coordinates like the x-axis and y-axis. The remaining two are used to represent the color and size of the bubbles. Mostly used to plot financial data.

The best situation to use a Bubble Chart:

Three Data Series: If your data has three series, each containing values, then you can use a bubble chart for better representation. The values determine the sizes of the bubble.

Properties:

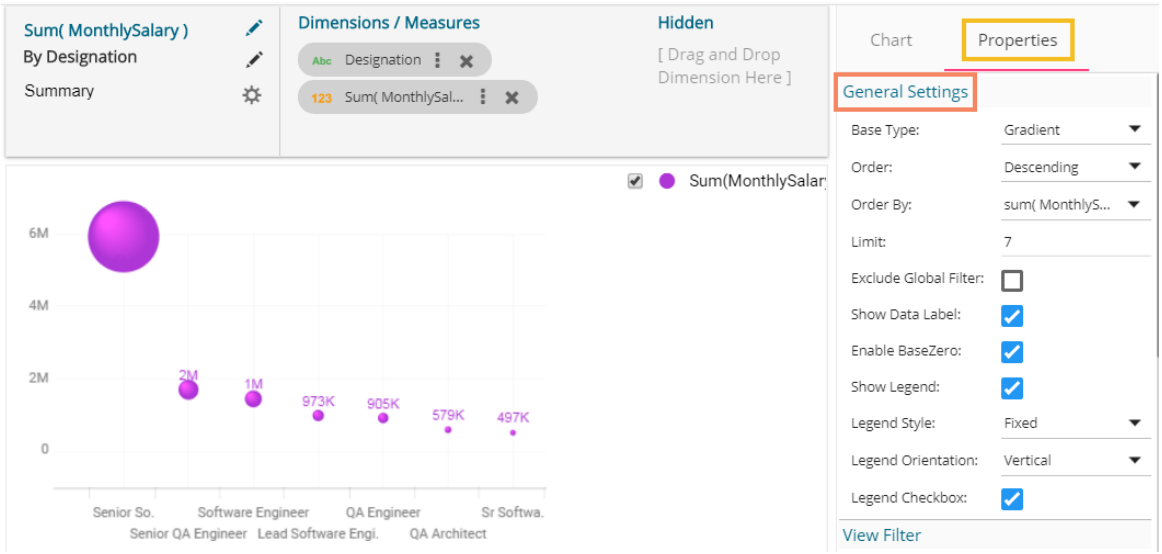
i) General Settings

- **a. Base Type**: Select a base type to display the data (the provided choices for this field are: Plain, Gradient, Ring)
- **b. Order**: Select a sequence for displaying information
  - i. None
  - ii. Ascending
  - iii. Descending
  - iv. Manual Sort (Users can manually sort the dimensions by using the indicator signs)
    By selecting an order(ascending or descending, the user needs to configure the following fields:
    1. Order By- Select a value option from the drop-down menu to order the sequence of the data
    2. Limit- Set a number to display the requested data by this limit
- **c. Exclude Global Filter**: The view gets excluded from the Global Filter condition by putting a checkmark in the box
- **d. Show Data Label**: Data label gets displayed by using a checkmark in the given box
- **e. Enable Base Zero**: Base value gets presented from Zero by using a checkmark in the given box
- **f. Show Legend**: Displays legend by turning on the radio button. After enabling 'Show Legend,' users need to select the following information:
  - i. **Legend Style**: Select one of the following options by using the drop-down menu
    1. Fixed
    2. Floating
  - ii. **Legend Orientation**: This option appears when 'Show Legend' is enabled, and the selected 'Legend Style' is 'Fixed.' Users need to select an option out of the given choices using the drop-down menu.
    1. Vertical
    2. Horizontal

iii. **Legend Checkbox**: Enable this option by a checkmark to add the checkbox beside the Legend

ii) View Filter

a. Filter: Select a filter condition using the drop-down menu



iii) Category Axis

a. Title: Provide a title for the axis

b. Axis Label: Enable the category axis label by using a checkmark in the box

c. Label Angle: Select a display angle for the axis label

iv) Primary Value Axis

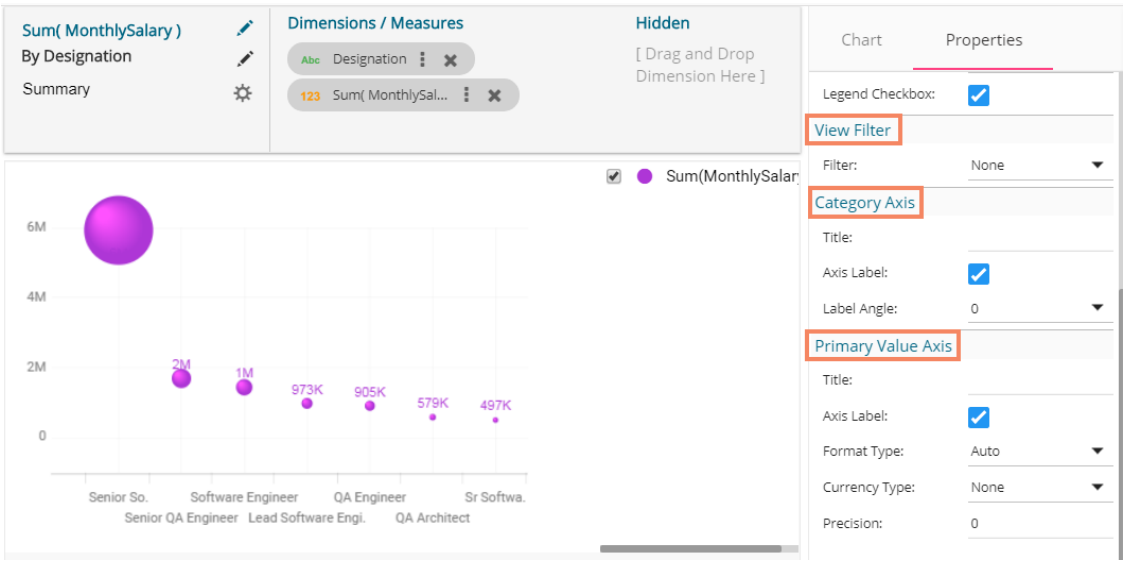
a. Title: Provide a title for the Primary Value Axis

b. Axis Label: Enable the Primary Value Axis label by using a checkmark in the box

c. Format Type: Select a desired format type from the drop-down menu (the provided options for this field are: None, Auto, Percent, Thousand, Lacs, Crore, Million)

d. Currency Type: Select a currency symbol to be displayed in the view (the provided options for this field are: None, Euro, Rupees, Pound, USD, Yen, Cent)

e. Precision: Set the after-decimal value (It displays up to 5 precision)



10.5. Column Stack Chart

Column charts are used when users want to compare the values of individual data points with another. They help in bringing out the highs and lows of the data set.

Best Situation to use Column charts: Column charts are suitable for displaying data sets with negative values

Example: To find the best and worst performers in an organization

Variations of this chart

Use stacked Column charts: Where multiple categories can be clubbed together on top of each other, which makes addressing numerous questions easier.

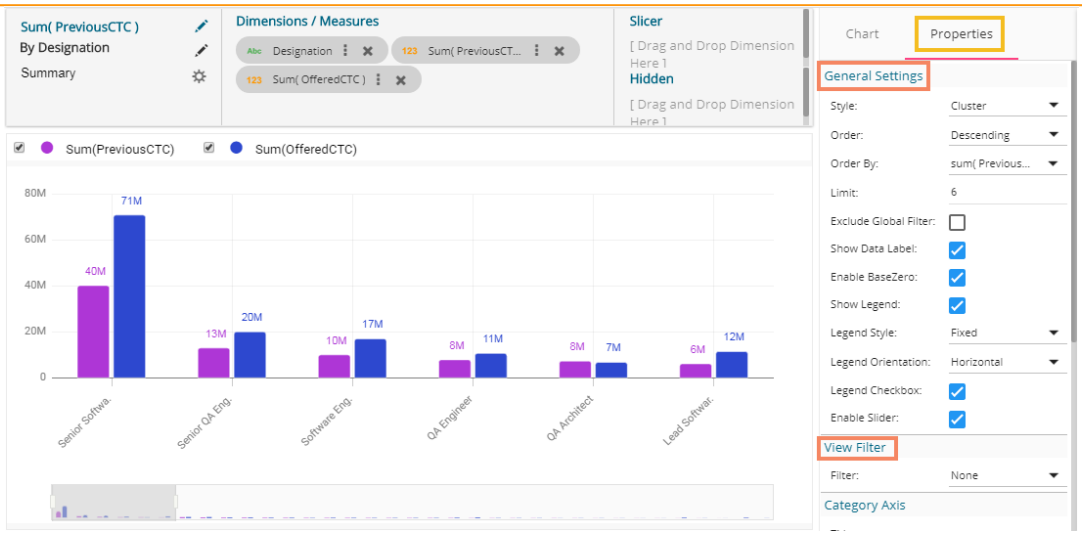
Use column side by side: Where comparison between multiple categories becomes easier instead of toggling between charts.

Add color for quick insight: Displaying the columns with colors helps users to pay immediate attention to the essential tasks.

Properties:

i) **General Settings**
   a. **Style**: Select a style to display the data (the provided choices for this field are: Cluster, Stack, Stack Percentage, Stack Overlaid)
   b. **Order**: Select a sequence for displaying information
      i. None
      ii. Ascending
      iii. Descending
      iv. Manual Sort (Users need to sort the dimensions by using the indicator signs manually)
      By selecting an order(ascending or descending), the user needs to configure the following fields:
         1. **Order By**- Select a value option from the drop-down menu to order the sequence of the data
         2. **Limit**- Set a number to display the requested data by this limit
   c. **Exclude Global Filter**: The view gets excluded from the Global Filter condition by putting a checkmark in the box.
   d. **Show Data Label**: Data label gets displayed by using a checkmark in the given box.
   e. **Enable Base Zero**: Base value gets presented from Zero by putting a checkmark in the given box
   f. **Show Legend**: Displays legend by turning on the radio button. After enabling 'Show Legend,' users need to select the following information:
      i. **Legend Style**: Select one of the following options by using the drop-down menu
         1. Fixed
         2. Floating
      ii. **Legend Orientation**: This option appears when 'Show Legend' is enabled, and the selected 'Legend Style' is Fixed. Users need to select an option out of the given choices using the drop-down menu.
         1. Vertical
         2. Horizontal
      iii. **Legend Checkbox**: Enable this option by a checkmark to add the checkbox beside the Legend
   g. **Enable Slider**: Provide a checkmark in the box to enable the Slider.

ii) **View Filter**
   a. **Filter**: Select a filter condition using the drop-down menu (E.g., 'None' option is the selected as a filter condition in the following image)



iii) Category Axis

a. **Title**: Provide a title for the axis. (E.g., 'Designation' is the title for the category axis displayed in the following view)
b. **Axis Label**: Enable the category axis label by putting a checkmark in the box
c. **Label Angle**: Select a display angle for the axis label. (the provided choices for this field are: 0, 45, 90 angles)

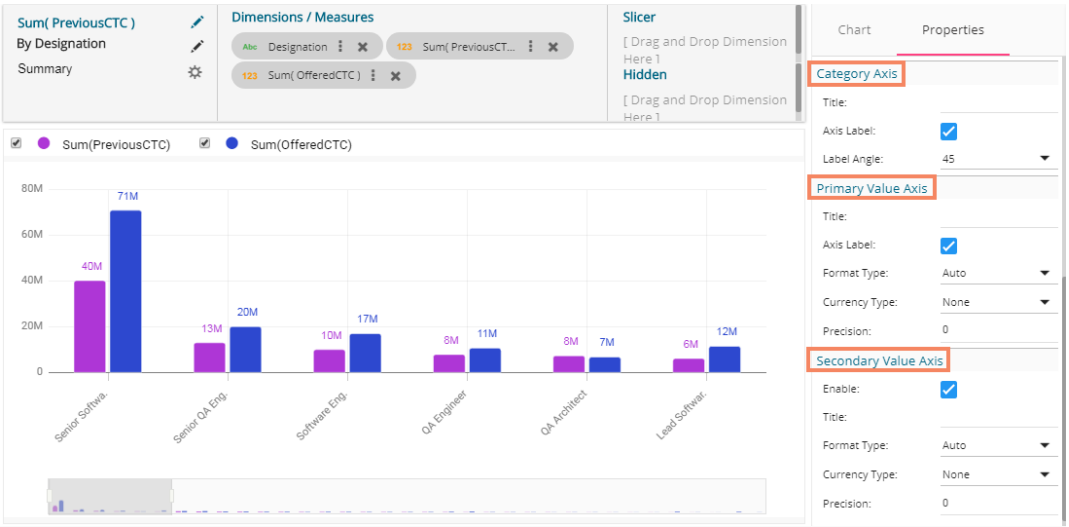
iv) Primary Value Axis

a. **Title**: Provide a title for the Primary Value Axis
b. **Axis Label**: Enable the Primary Value Axis label by turning on the radio button
c. **Format Type**: Select a desired format type from the drop-down menu (the provided options for this field are: None, Auto, Percent, Thousand, Lacs, Crore, Million)
d. **Currency Type**: Select a currency symbol to be displayed in the view (the provided options for this field are: None, Euro, Rupees, Pound, USD, Yen, Cent)
e. **Precision**: Set the after-decimal value (It displays up to 5 precision)

v) Secondary Value Axis

Properties for the Secondary Value Axis gets displayed when two measures are dragged on the canvas.

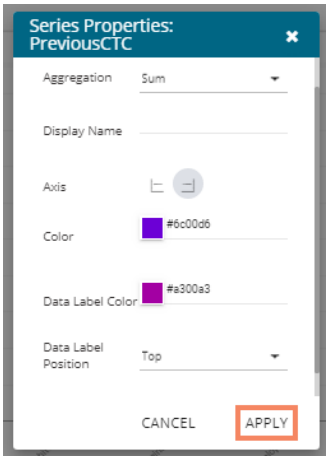
a. **Enable**: Put a checkmark in the box to enable the Secondary Value Axis
b. **Title**: Provide a title for the Secondary Value Axis
c. **Format Type**: Select a desired format type from the drop-down menu
d. **Currency Type**: Select a desired currency symbol from the list



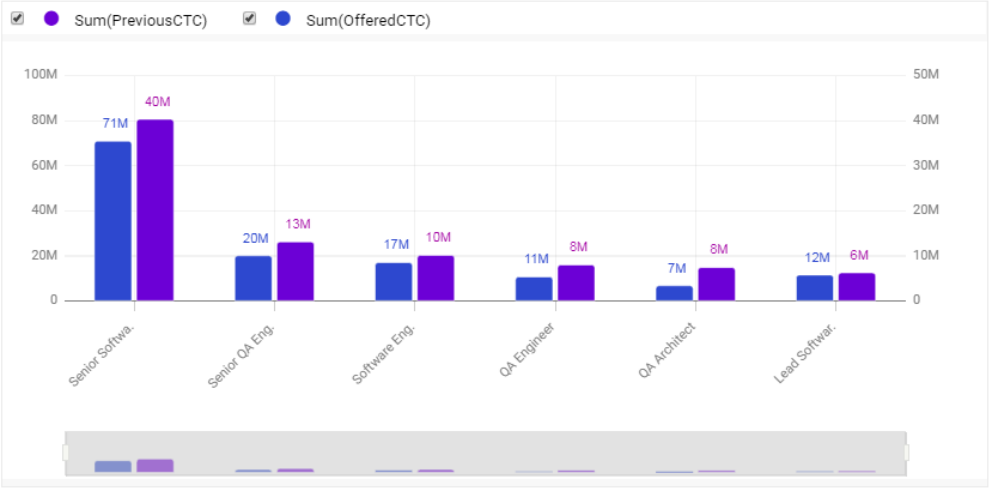
Note: When the selected Format Type is 'Percentage,' you don't get the 'Currency Type' field.

The users must configure the **Series Properties** of the dragged measure after enabling the Secondary Value Axis to display the same in the chart

a. Access Secondary Value Axis using the '**Properties**' tab and enable it.
b. Click '**Series Properties**' ⋮ provided next to the measure name
c. A new window opens
d. Configure the required details:
   i. **Aggregation**-select an aggregation using the drop-down menu (By default, it displays the second aggregation type that is 'Sum')
   ii. **Display Name**- provide a name to be displayed in the legend
   iii. **Series Type**- select a series type to display the secondary value
   iv. **Point Shape:** Select a point shape using the drop-down menu
   v. **Line Type:** Select a line type using the drop-down menu
   vi. **Axis**-select an axis to display the values of the second measure
   vii. **Color**- Select a color for the series
   viii. **Data Label Color**-select a color for the Data Label
   ix. **Data Label Position**: Select an option using the drop-down icon
   x. **Filter Options**: Access the list of dimensions and measures to apply filter condition(s)
   xi. Click the '**APPLY**' option



e. Navigate to the view
f. The secondary value axis reflects the selected changes.



10.6. Line Chart

The line chart connects individual numeric data points to create a sequence of values. They are primarily used to display trends over a period.

Best Situation to use Line Charts:

View trends in data over a period

Examples:

To indicate increasing revenue or varying stock price

Variations of this chart

Mixed Chart- Combine a line graph with column charts to provide visual cues for further investigation

Example: A column chart representing the numeric score of students combined with the line chart corresponding proficiency score

Properties:

ii) General Settings

a. **Style**: Select a style to display the data (the provided choices for this field are: Cluster, Stack, Stack Percentage, Stack Overlaid)
b. **Order**: Select a sequence for displaying information
   i. None (default option)
   ii. Ascending
   iii. Descending
   iv. Manual Sort (Users need to sort the dimensions by using the indicator signs manually)
   (If the user selects 'Manual Sort' as the ordering option, they get an icon clicking which the Manual Sort window appears)

   By selecting an order(ascending or descending, the user needs to configure the following fields:
   1. Order By- Select a value option from the drop-down menu to order the sequence of the data
   2. Limit- Set a number to display the requested data by this limit

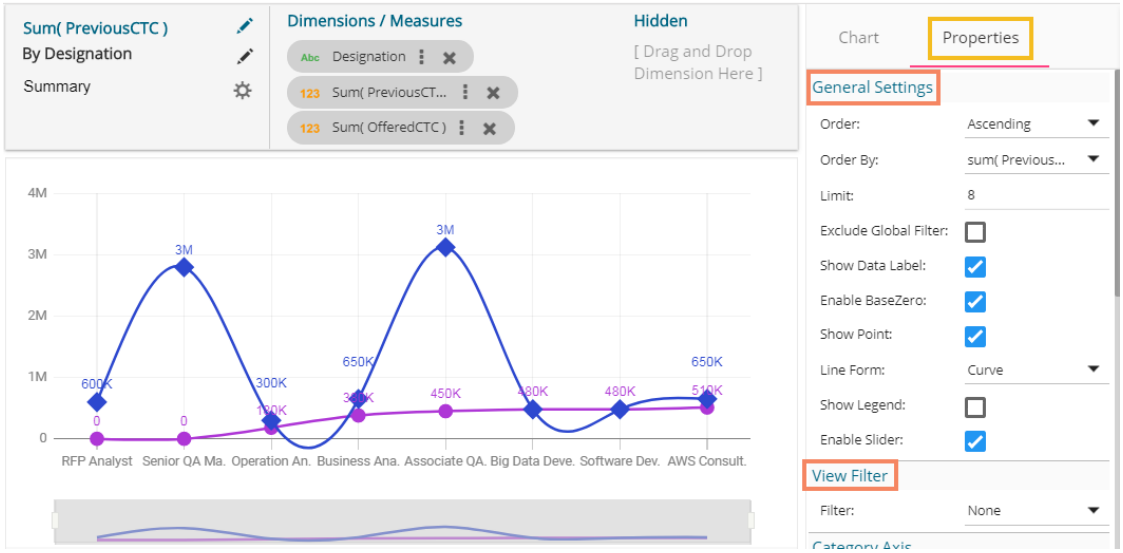
c. **Exclude Global Filter**: The view gets excluded from the Global Filter condition by putting a checkmark in the box
d. **Show Data Label**: Data label gets displayed by using a checkmark in the given box
e. **Enable Base Zero**: Base value gets presented from Zero by using a checkmark in the given box
f. **Show Point**: Enable the Show Point option by using a checkmark in the given box
g. **Line Form**: Select a line format from the drop-down menu (the provided choices for this field are: Curve and Segment)
h. **Show Legend**: Displays legend by turning on the radio button. After enabling 'Show Legend,' users need to select the following information:
   i. **Legend Style**: Select one of the following options by using the drop-down menu
      1. Fixed
      2. Floating
   ii. **Legend Orientation**: This option appears when 'Show Legend' is enabled, and the selected 'Legend Style' is 'Fixed.' Users need to select an option out of the given choices using the drop-down menu.
      1. Vertical
      2. Horizontal

iii. **Legend Checkbox**: Enable this option by a checkmark to add the checkbox beside the Legend

i. Enable Slider: Slider gets displayed by putting a checkmark in the box

iii) View Filter

a. Filter: Select a filter condition using the drop-down menu



iv) Category Axis

a. Title: Provide a title for the axis

b. Axis Label: Enable the category axis label by using a checkmark in the box

c. Label Angle: Select a display angle for the axis label

v) Primary Value Axis

a. Title: Provide a title for the Primary Value Axis

b. Axis Label: Enable the Primary Value Axis label by using a checkmark in the box

c. Format Type: Select a desired format type from the drop-down menu (the provided options for this field are: None, Auto, Percent, Thousand, Lacs, Crore, Million)

d. Currency Type: Select a currency symbol to be displayed in the view (the provided options for this field are: None, Euro, Rupees, Pound, USD, Yen, Cent)

e. Precision: Set the after-decimal value (It displays up to 5 precision)

vi) Secondary Value Axis

Properties for the Secondary Value Axis gets displayed when two measures are dragged on the canvas.

a. Enable: Put a checkmark in the box to enable the Secondary Value Axis

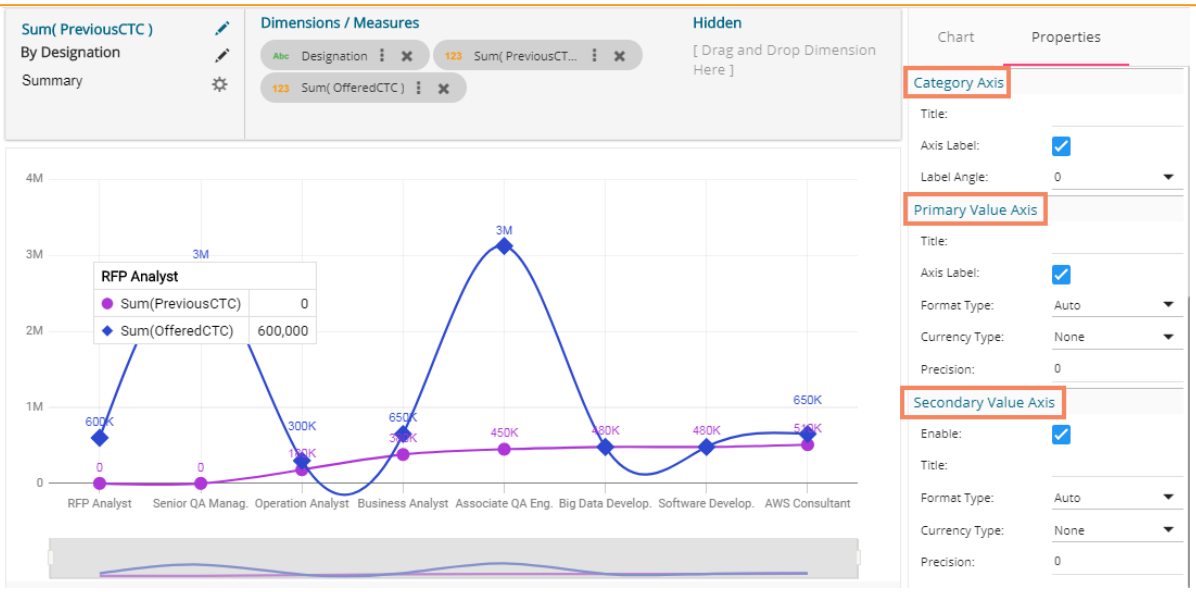
b. Title: Provide a title for the Secondary Value Axis

c. Format Type: Select a desired format type from the drop-down menu

d. Currency Type: Select a desired currency symbol from the list

e. Precision: Set the after-decimal value (It displays up to 5 precision)

Note: When the selected Format Type is '**Percentage**,' you don't get the '**Currency Type**' field.



The users must configure the **Series Properties** of the dragged measure after enabling the Secondary Value Axis to display the same in the chart.

a. Access Secondary Value Axis using the '**Properties**' tab and enable it.

b. Click the '**Series Properties**' icon ⋮ provided next to the measure name.

c. A new window opens.

d. Configure the required details:

i. **Aggregation**-select an aggregation using the drop-down menu (By default, it shows the second aggregation type that is 'Sum').

ii. **Display Name**- provide a name to be displayed in the legend.

iii. **Series Type**- select a series type to display the secondary value.

iv. **Point Shape:** Select a point shape using the drop-down menu.

v. **Line Type:** Select a line type using the drop-down menu.

vi. **Axis**-select an axis to display the values of the second measure.

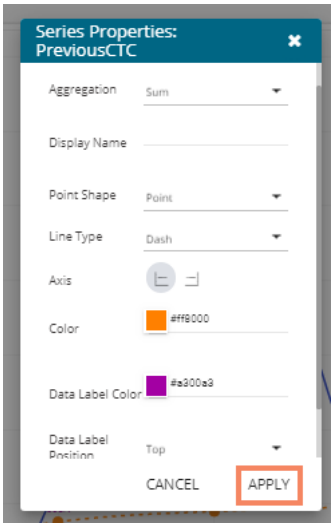
vii. **Color**- Select a color for the series.

viii. **Data Label Color**-select a color for the Data Label.

ix. **Data Label Position**: Select an option using the drop-down icon.

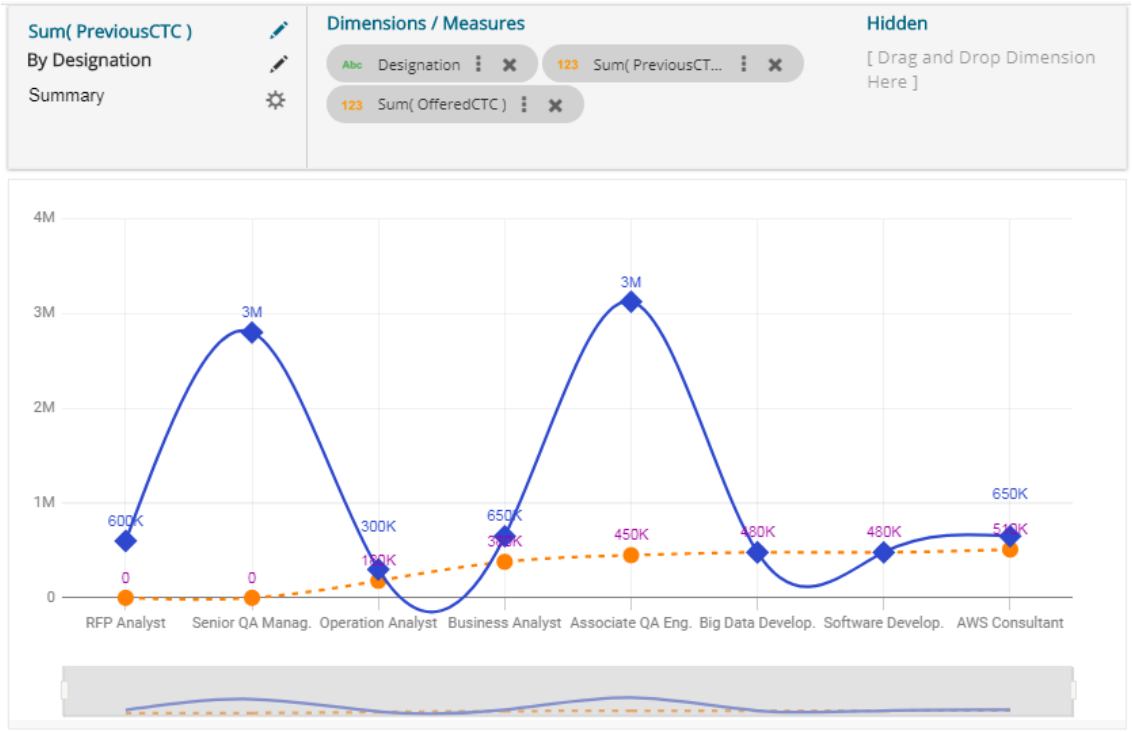
x. **Filter Options**: Access the list of dimensions and measures to apply the filter condition(s).

xi. Click the '**APPLY**' option.



e. Navigate to the '**Properties**' tab.

f. The selected changes can be seen in the displayed view.



10.7. Pie Chart

The most widely used chart to show proportions, percentages, and categorizes information is the Pie Chart. It is mainly used for comparison where the users can find out quickly which category is most popular, and which is least.

The best situation to use Pie Chart:

Mainly used for comparison of categories available on the pie to find out top performers and least performers. Better for viewing if the category is limited to 6 or fewer.

Variations of this chart:

Pie-Doughnut*:* Doughnut charts are like Pie-chart if wished the user can switch from a pie-chart to a doughnut chart.

Properties:

i) General Settings

a. Style: Select a style to display data
   i. Pie
   ii. Doughnut
   iii. Semi Doughnut

b. Order: Select a sequence for displaying data
   i. None
   ii. Ascending
   iii. Descending
   iv. Manual Sort

   By selecting an order(ascending or descending, users will be required to configure the following fields:

   1. Order By- Select a value option from the drop-down menu to order the sequence of the data

2. Limit- Set a number to display the requested data by this limit

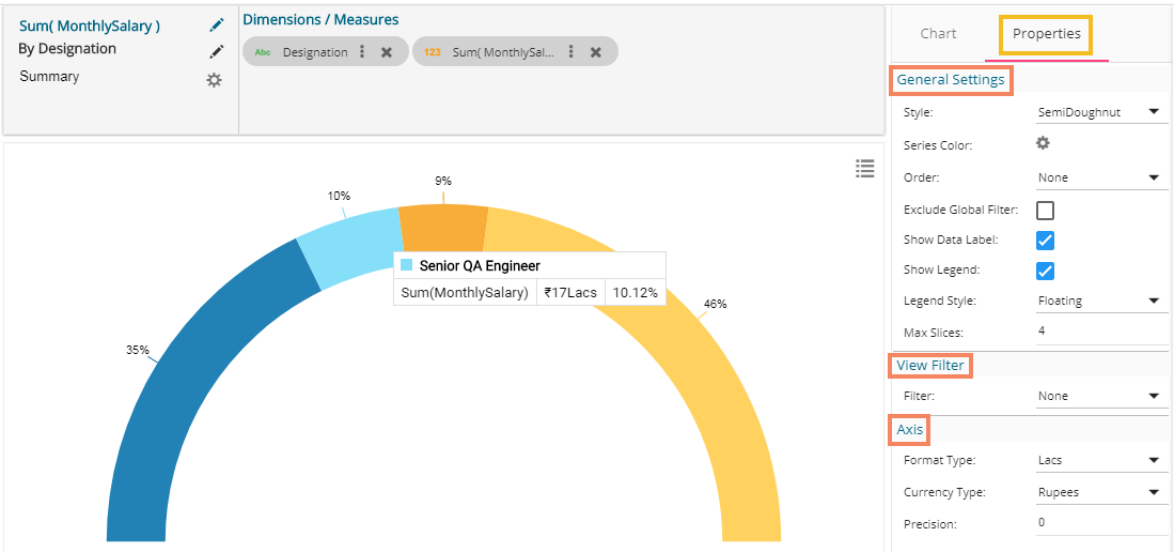
c. Exclude from Global Filter: The view will be excluded from the Global Filter condition by putting a checkmark in the box
d. Show Data Label: Data label will be displayed by turning on the radio button
e. Max Slices: Set a number to limit the maximum displayed slices in the chart

ii) View Filter

a. Filter: Select a filter condition using the drop-down menu

iii) Axis

a. Format Type: Select a desired format type from the drop-down menu (the provided options for this field are: None, Auto, Percent, Thousand, Lacs, Crore, Million)
b. Currency Type: Select a currency symbol to be displayed in the view (the provided options for this field are: None, Euro, Rupees, Pound, USD, Yen, Cent)
c. Precision: Set the after-decimal value (It will show up to 5 precision)
E.g., the below given image displays 'Sum of Monthly Salary' for Senior QA Engineer in 17Lacs as the selected currency type is 'Rupees' and the format type is 'Lacs'.



10.8. Scatter Plot Chart

A scatter plot is a two-dimensional data visualization that uses dots to represent the values obtained for two different variables - one plotted along the x-axis and the other plotted along the y-axis.

Best Situation to use Scatter Plot Chart:

Scatter plots display a correlation between two variables (x and y-axis) to compare large numbers of data points without regard to time.

Variations of this Chart: Bubble Plot chart (3D), Density Plot (2D)

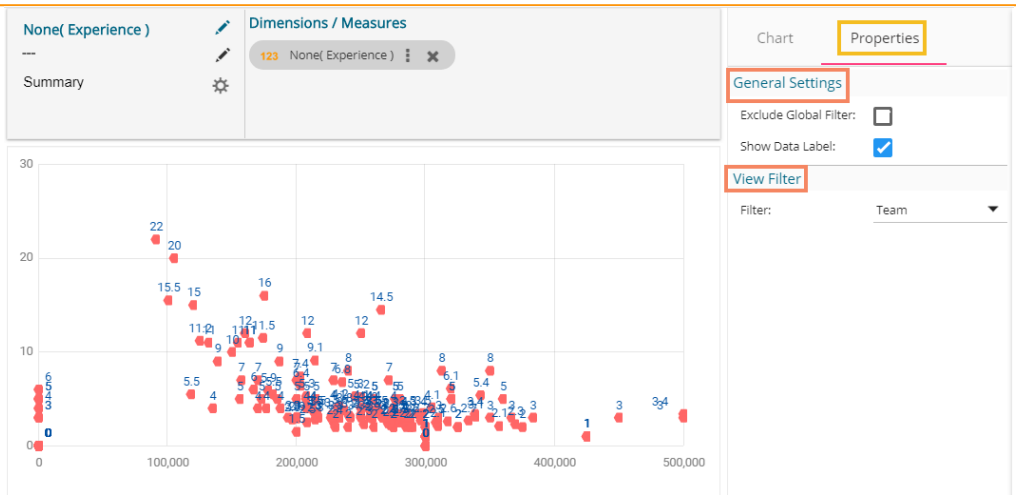
Properties:

i) General Settings

a. Exclude Global Filter: Use a checkmark in the given box to exclude the Global filter
b. Show Data Label: Use a checkmark in the provided box to display the data label

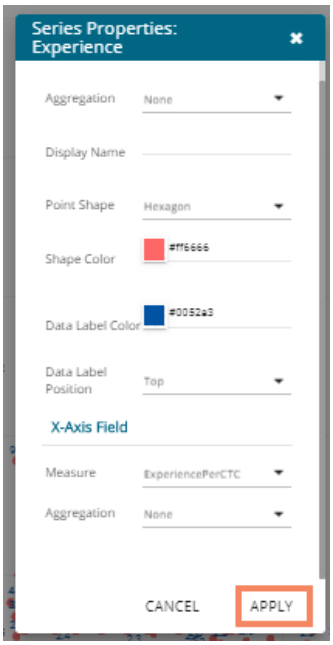
ii) View Filter

a. Filter: Select a filter condition using the drop-down menu



Note:

a. The user needs to configure the '**X-Axis Field**' information such as '**Measure**' and '**Aggregation**' to get the above-given display of the scattered points in the chart. E.g., In this case, the selected Measure value is '**ExperiencePerCTC**,' and the selected Aggregation option is 'None.'



b. The Scatter Plot chart displays only Measure values with the '**None**' Aggregation option selected from the drop-down.

10.9. TreeMap Chart

The TreeMap charts are mainly used to demonstrate vast amounts of classified data. It can be the best choice when users want to view all their hierarchical data at one time. Each rectangle represents a branch in a tree, and it also shows how much data it comprises. The size and position of the boxes are based on the quantitative variable used for the chart. Patterns across the data can be identified using the size and color of the boxes.

Best situation to use TreeMap:

To view all the hierarchical data at one time.

Variations of this chart:

Each rectangle can be colored differently so the user can understand by a glance at how the hierarchical data is structured.

Properties:

i) General Settings

a. Order: Select a sequence for displaying data
   i. None
   ii. Ascending
   iii. Descending
   iv. Manual Sort

   By selecting an order(ascending or descending), users will be required to configure the following fields:
   1. Order By- Select a value option from the drop-down menu to order the sequence of the data
   2. Limit- Set a number to display the requested data by this limit

b. Exclude Global Filter: The view gets excluded from the Global Filter condition by turning on the radio button

c. Show Data Label: Data label gets displayed by turning on the radio button

d. Gradient: Enable or disable the color gradient effect on the chart by using the checkmark in the box.
   i. By enabling the 'Gradient' option, the user gets redirected to select 'Start Color' and 'End Color' from the respective menus.
   ii. By disabling the 'Gradient' option, the user gets redirected to select 'Color' for the Treemap sections.

ii) View Filter

a. Filter: Select a filter condition using the drop-down menu (E.g., 'None' is the selected filter condition in the following image)

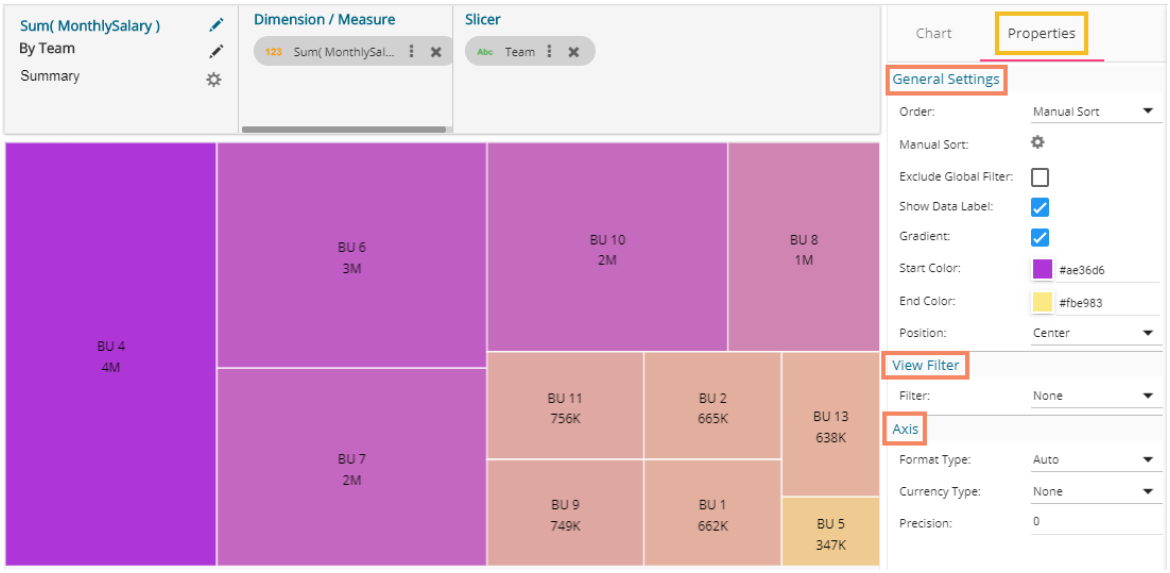
iii) Axis

a. **Format Type**: Select a desired format type from the drop-down menu (the provided options for this field are: None, Auto, Percent, Thousand, Lacs, Crore, Million)

b. **Currency Type**: Select a currency symbol to be displayed in the view (the provided options for this field are: None, Euro, Rupees, Pound, USD, Yen, Cent)

c. **Precision**: Set the after-decimal value (It displays up to 5 precision)

E.g., The below given image displays the Sum of Monthly Salary sliced based on Team.



10.10. Circumplex Chart

The Circumplex chart, also known as the Polar Area chart or Nightingale Rose chart, is a combination of the Bar chart and Pie chart. Each category may have more than one sub-category, where a section of the disc shows that each subcategory and each section have the same angle. The value of the corresponding sub-category is shown through the area. By changing the radius in a Circumplex chart, users can adjust the area of each segment (based on data).

Best Situations to Use a Circumplex chart:

To display manifold data in the form of a two-dimensional chart of three or more measurable variables represented on axes starting from the same point.

Properties:

i) General Settings

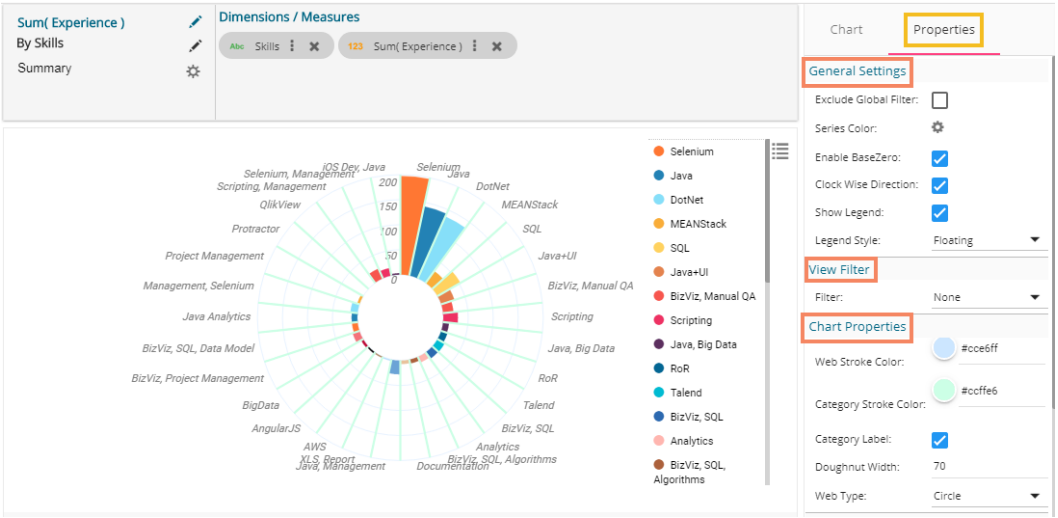
- **a. Exclude Global Filter**: The view gets excluded from the Global Filter condition by putting a checkmark in the box
- **b. Series Color**: Select color for the series using the available color menu
- **c. Enable Base Zero**: Base gets presented from Zero by using a checkmark in the provided box
- **d. Clockwise Direction**: the data values get displayed in a clockwise manner by enabling a checkmark in the given box
- **e. Show Legend**: Displays legend by turning on the radio button. After enabling 'Show Legend,' users need to select the following information:
  - i. **Legend Style**: Select one of the following options by using the drop-down menu
    1. Fixed
    2. Floating
  - ii. **Legend Orientation**: This option appears when 'Show Legend' is enabled, and the selected 'Legend Style' is 'Fixed.' Users need to select an option out of the given choices using the drop-down menu.
    1. Vertical
    2. Horizontal

ii) View Filter

- **a. Filter**: Select a filter condition using the drop-down menu

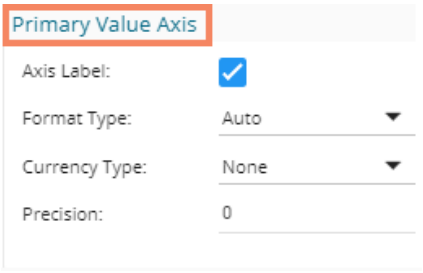
iii) Chart Properties

- **a. Web Stroke Color**: Select a color from the given menu
- **b. Category Stroke Color**: Select a color using the given menu
- **c. Category Label**: Enable the given box to display the category labels
- **d. Doughnut Width**: Set (increase/decrease) width of the doughnut.
- **e. Web Type**: Select an option from the drop-down menu
  a. Polygon
  b. Circle



iv) Primary Value Axis

a. **Axis Label**: Enable the Primary Value Axis label by using a checkmark in the box
b. **Format Type**: Select a desired format type from the drop-down menu (the provided options for this field are: None, Auto, Percent, Thousand, Lacs, Crore, Million)
c. **Currency Type**: Select a currency symbol to be displayed in the view (the provided options for this field are: None, Euro, Rupees, Pound, USD, Yen, Cent)
d. **Precision**: Set the after-decimal value (It displays up to 5 precision)



10.11. Pareto Chart

A Pareto chart is a type of chart that contains both bars and a line graph, where individual values are represented in descending order by bars, and the line represents the cumulative average.

Best Situation to Use a Pareto Chart:
To identify the most frequent defects, complaints, or any other factor that the users can count and categorize to focus on where improvement efforts make the most impact

Variation of this Chart: Pareto Pyramid, Paired Pareto chart

Properties:

i) General Settings

a. **Exclude Global Filter**: The view gets excluded from the Global Filter condition by putting a a checkmark in the box
b. **Show Data Label**: Data label gets displayed by using a checkmark in the given box
c. **Enable Base Zero**: Base gets presented from Zero by using a checkmark in the provided box
d. **Enable Slicer**: the slicer gets displayed by enabling a checkmark in the given box

ii) View Filter

a. **Filter**: Select a filter condition using the drop-down menu

iii) Category Axis

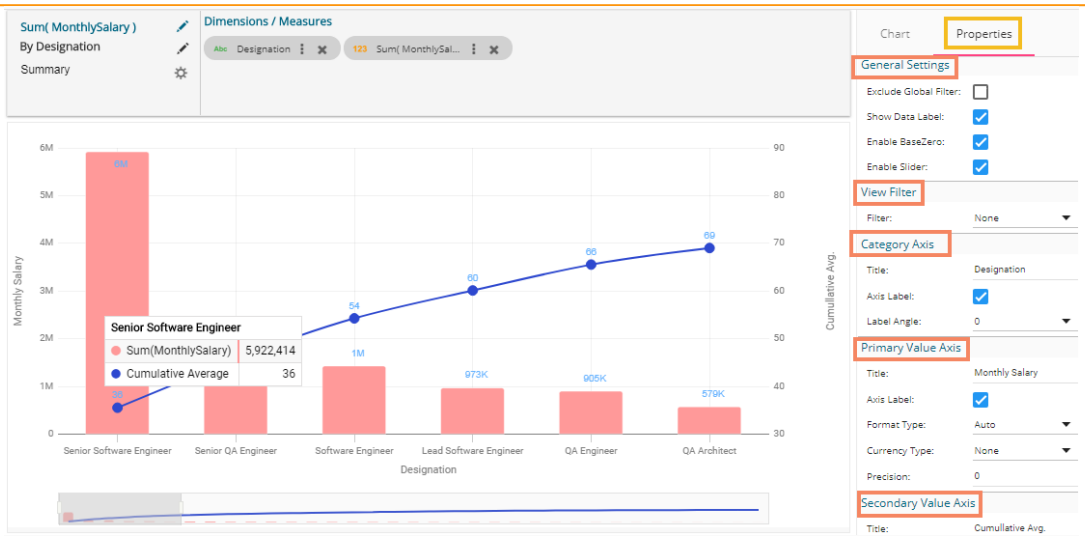
a. **Title**: Provide a title for the axis
b. **Axis Label**: Enable the category axis label by using a checkmark in the box
c. **Label Angle**: Select a display angle for the axis label

iv) Primary Value Axis

a. **Title**: Provide a title for the Primary Value Axis
b. **Axis Label**: Enable the Primary Value Axis label by using a checkmark in the box
c. **Format Type**: Select a desired format type from the drop-down menu (the provided options for this field are: None, Auto, Percent, Thousand, Lacs, Crore, Million)
d. **Currency Type**: Select a currency symbol to be displayed in the view (the provided options for this field are: None, Euro, Rupees, Pound, USD, Yen, Cent)
e. **Precision**: Set the after-decimal value (It displays up to 5 precision)

v) Secondary Value Axis

a. **Title:** Provide a title for the Secondary Value Axis (by default it displays the cumulative average of the selected measure



Note: The look and feel of the chart can be modified from the series properties.

10.12. Semi Gauge Chart

Semi-Gauge charts contain a semi-circle with the needle pointing at the target value. They indicate a specific dataset by utilizing a semi-circle that changes color to indicate whether the monitored data is within the defined limits. Users need to set boundaries (minimum and maximum values) for the gauge scale and various colors to indicate the predetermined ranges. The '**Show Alert**' option has been provided to indicate the situation when the target values cross the set limits.

Gauges are used in dashboards, real-time monitors, and reports. They can display Key Performance Indicators (KPIs), progress indicators, and quantity indicators.

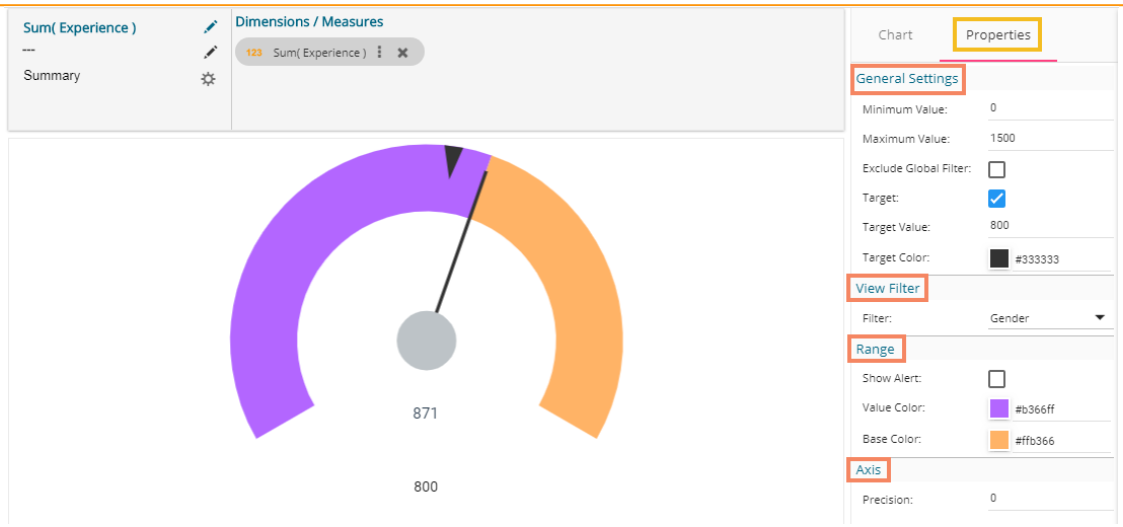
Best Situation to use Semi-Gauge:
To monitor any performance that contains predefined ranges
Examples:
The overall performance of a student/class in an examination.
Properties:

i) **General Settings**
   a. **Minimum Value**: Set a minimum value to be shown on the chart (It should be less than the maximum set value)
   b. **Maximum Value**: Set a maximum value to be displayed on the chart (It should be more than the minimum set value)
   c. **Exclude Global Filter**: The view will be excluded from the Global Filter condition by putting a checkmark in the box
   d. **Target**: Enable target by turning on the radio button
   e. **Target Value**: User-defined value to set a target
   f. **Target Color**: Set a target color

ii) **View Filter**
   a. **Filter**: Select a filter condition using the drop-down menu

iii) **Range**
   a. **Show Alert**: Enable various ranges (in %) by turning on the radio button
   b. **Value Color**: Set a value color
   c. **Base Color**: Set a base color

iv) **Axis**
   a. **Precision**: Set the after decimal value (It can show up to 5 precision)



The following image displays various ranges when the '**Show Alert**' option is enabled.

Note:

a. The target value should be included in the range of minimum and maximum set values.
b. Semi-Gauge supports only one measure value. It converts the selected Dimension value into Measure as it considers only Measure values.

10.13. KPI Tile

The KPI Tile displays the sum of quantity for ongoing evaluation.

Properties:

i) General Settings

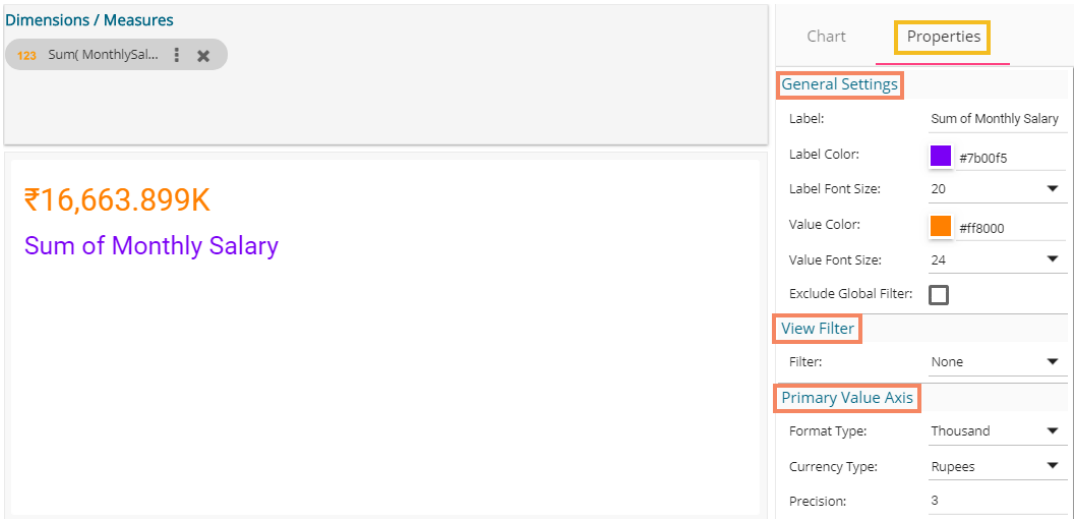
a. **Label**: Insert Label for the displayed value
b. **Label Color**: Select a label color from the menu
c. **Label Font Size**: Set the font size for the label
d. **Value Color**: Select a value color from the menu
e. **Value Font Size**: Set the font size of the displayed value
f. **Exclude Global Filter**: The view will be excluded from the Global Filter condition by using a checkmark in the box

ii) View Filter

a. Filter: Select a view filter condition from the drop-down menu

iii) Primary Value Axis

a. **Format Type**: Select a desired format type from the drop-down menu (the provided options for this field are: None, Auto, Percent, Thousand, Lacs, Crore, Million)
b. **Currency Type**: Select a currency symbol to be displayed in the view (the provided options for this field are: None, Euro, Rupees, Pound, USD, Yen, Cent)
c. **Precision**: Set the after-decimal value (It will show up to 5 precision)
E.g., the below given image displays the Sum of Monthly Salary in INR, where the selected Format is Thousand, and the Precision value is shown up to three numbers.

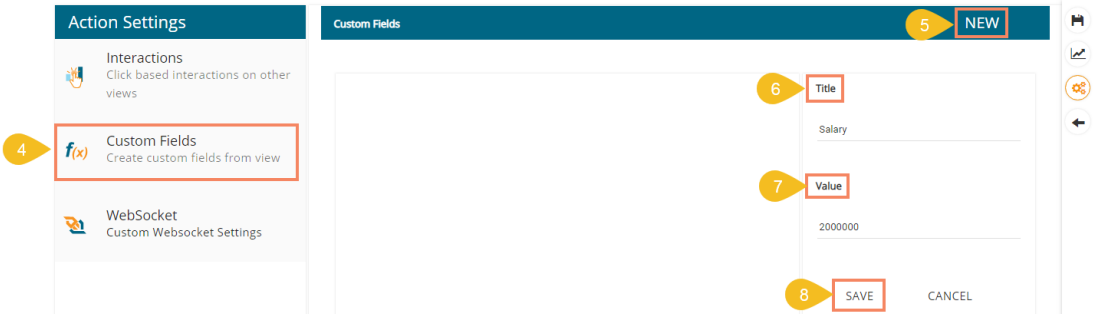


10.14. KPI Tile: Comparative Tile

KPI comparative Tile compares one measure value against the other selected measure values.

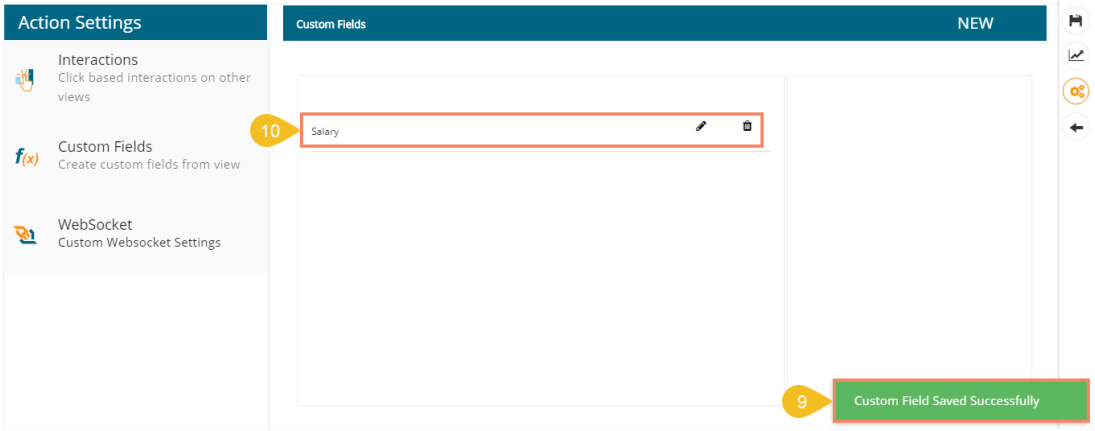
i) Select the '**KPI Comparative Tile**' component from the list of charts.
ii) Drag a Measure value to the workspace from the selected Data Store.
iii) Click the '**Actions**' icon.

iv) Select the '**Custom Fields'** option from the Action Settings page.
v) Click the '**NEW'** option.
vi) Provide a Title.
vii) Set Value by using the value indicators or manually.
viii) Click the '**SAVE**' option.

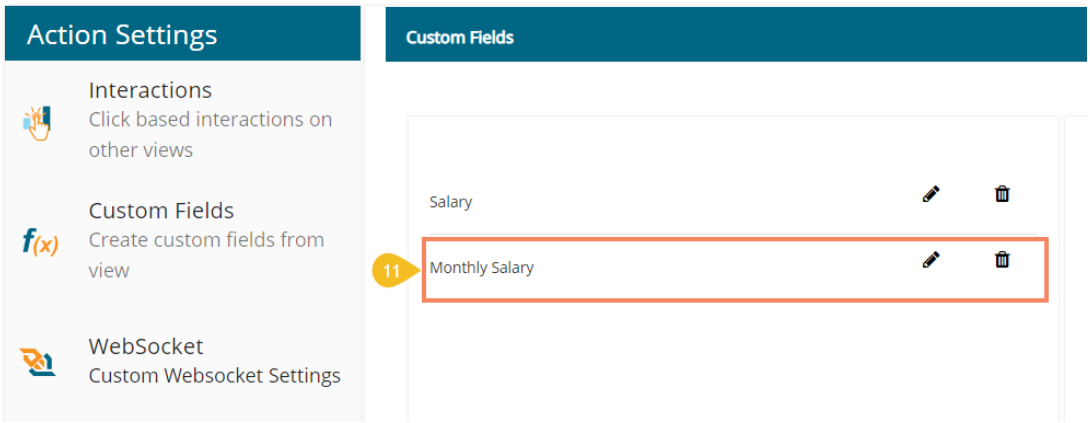


ix) A success message appears.

x) The newly created Custom Field gets saved and added to the **Custom Fields** page.



xi) The user can create multiple custom fields by following the above steps. (E.g., Monthly Salary is another custom field.)



xii) Navigate to the '**Properties**' tab using the Design icon.

xiii) Configure the following properties:

a. General Settings

i. **Label**: Insert text to be displayed as Label

ii. **Label Color**: Select the Label color using the menu

iii. **Label Font Size**: Select the font size for the displayed label using the drop-down menu

iv. **Exclude Global Filter**: Use a checkmark in the box to exclude the Global filter conditions

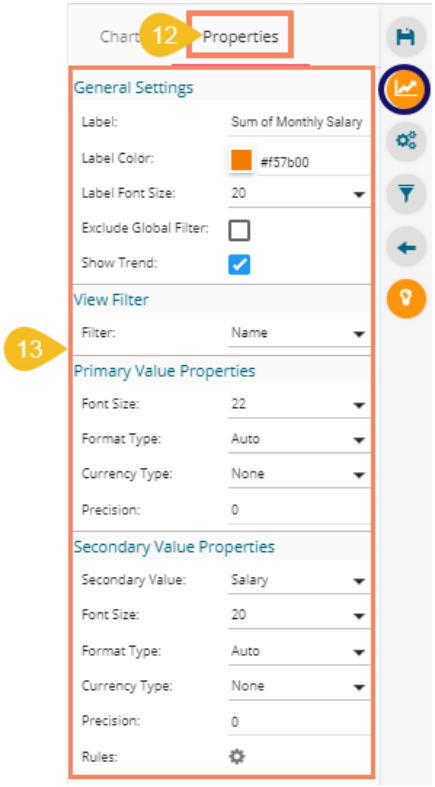
v. **Show Trend**: Use a checkmark in the box to display the trends

b. View Filter

i. **Filter:** Choose a view filter condition from the drop-down menu

c. **Primary Value Properties**
   i. **Font Size:** Select a font size from the drop-down menu
   ii. **Format Type**: Select a desired format type from the drop-down menu (the provided options for this field are: None, Auto, Percent, Thousand, Lacs, Crore, Million)
   iii. **Currency Type**: Select a currency symbol to be displayed in the view (the provided options for this field are: None, Euro, Rupees, Pound, USD, Yen, Cent)
   iv. **Precision**: Set the after-decimal value (It displays up to 5 precision)

d. **Secondary Value Properties**
   i. **Secondary Value:** Select a custom field from the drop-down menu
   ii. **Font Size:** Select a font size from the drop-down menu
   iii. **Format Type**: Select a desired format type from the drop-down menu (the provided options for this field are: None, Auto, Percent, Thousand, Lacs, Crore, Million)
   iv. **Currency Type**: Select a currency symbol to be displayed in the view (the provided options for this field are: None, Euro, Rupees, Pound, USD, Yen, Cent)
   v. **Precision**: Set the after-decimal value (It displays up to 5 precision)
   vi. **Rules**: Click the provided icon to insert rules

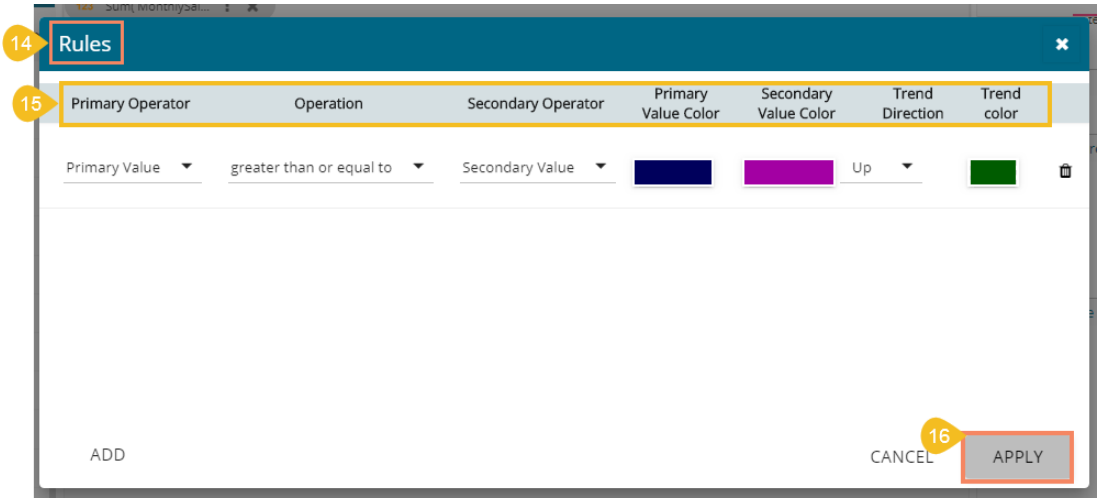


xiv) Once the user clicks on the '**Rules**' icon, a new screen opens, redirecting the users to set rules for displaying the comparative values.

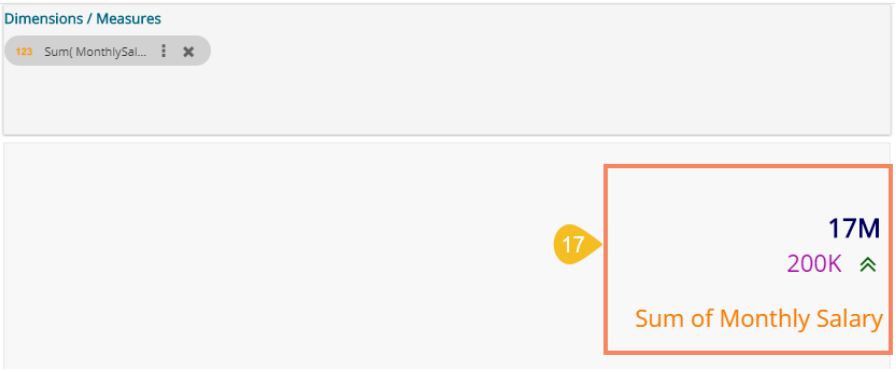
xv) Configure the required '**Rules**' fields, as shown in the following image:
   a. Primary Operator: Select an option from the drop-down menu.
   b. Operation: Select an operation from the drop-down menu to be applied as a condition on the selected Primary Operator.
   c. Secondary Operator: Select an option from the drop-down menu.
   d. Primary Value Color: Select a color for the primary value field.
   e. Secondary Value Color: Select a color for the Secondary Value field.
   f. Trend Direction: Select a trend direction using the drop-down menu.
   g. Trend Color: Select a trend color from the menu.
   h. Remove : Selecting this option removes the added rules.

i. ADD: Selecting this option adds a new row to be configured as a rule.

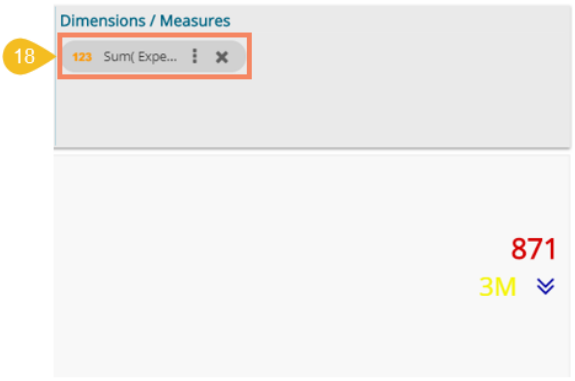
xvi) Click the '**APPLY**' option to apply the configured Rule.



xvii) The Primary and Secondary values get displayed in the selected colors with Trend directed to upward if the rule condition is met.



xviii) The user can set multiple '**Rules**' by configuring the required fields as described above; the KPI Tile Visualization reflects the crucial changes as per the selected rule. (E.g., the following image displays another rule where the Secondary Value is selected as Greater than or equal to the Primary Value, and the trend direction is downward.



Note: The KPI Comparative Tile contains General Settings, View Filter, and Primary Value Axis like KPI Tile, but it has additional properties such as Show Trend, Secondary Value Axis, and Rule to insert comparative approach.

10.15. KPI Tile: Sparkline

The KPI Sparkline combines KPI tile and Sparkline visualization in a single view. It facilitates the users to see KPIs and trends in the same view. The visualization type supports one Dimension and one measure. It does not support the 3rd dragged value and converts the second Dimension in a Measure if dragged on the canvas.

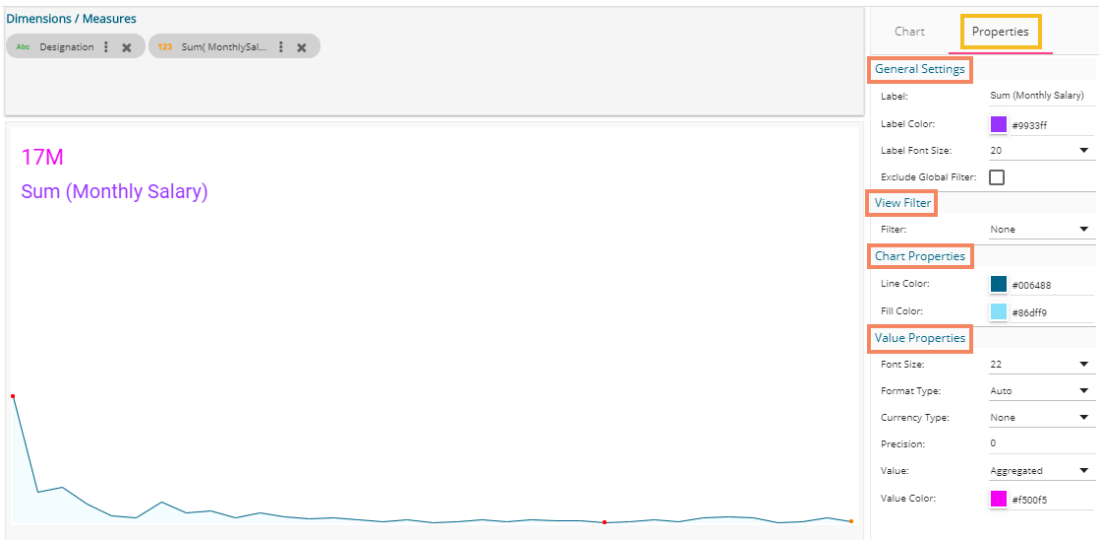
Chart Properties:

i) **General Settings**
   a. Label: Provide a label name by using this field
   b. Label Color: Select a label color from the menu
   c. Label Font Size: Set the label font size
   d. Exclude Global Filter: Enabling this option by a checkmark excludes the selected view from the Global Filter condition

ii) **View Filter**
   a. Filter: Select a filter condition to be applied to the view on the storyboard

iii) **Chart Properties**
   a. Line Color: Select a line color for the Sparkline chart
   b. Fill Color: Select a fill color for the Sparkline chart

iv) **Value Properties**
   a. Font Size: Set the font size of the displayed value using the drop-down menu
   b. Format Type: Select a desired format type from the drop-down menu (the provided options for this field are: None, Auto, Percent, Thousand, Lacs, Crore, Million)
   c. Currency Type: Select a currency symbol to be displayed in the view (the provided options for this field are: None, Euro, Rupees, Pound, USD, Yen, Cent)
   d. Precision: Set the after decimal value to be displayed
   e. Value: Select an option from the drop-down menu
      i. Aggregated
      ii. Last
   f. Value Color: Select a value color from the menu



10.16. Map Chart

A Map chart allows the users to position their data in a geographical context using different data layers. Users can create a view based on the selected dimensions/measures that represent data in the region.

The designated area gets colored based on the data. Users have the provisions for changing the visualization.

Best Situation to Use Map:

To represent any information in the geographical context.

Chart Properties:

i) General Settings

a. Exclude Global Filter: Use a checkmark in the box to exclude the global filter condition

ii) View Filter

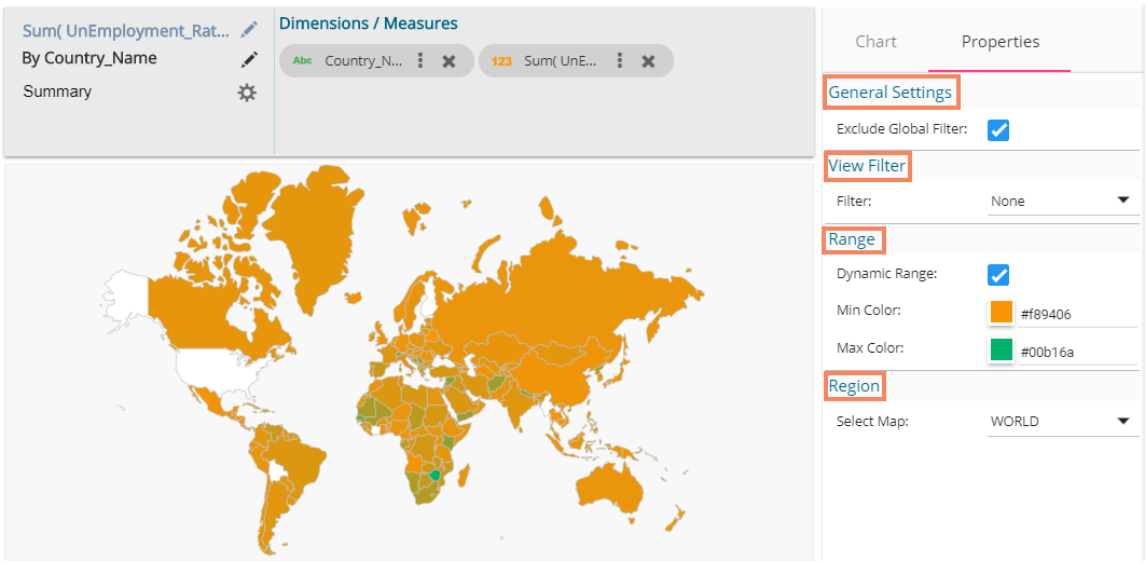
a. Filter: Select a filter condition to be applied to the view on the storyboard

iii) Range

a. Dynamic Range: Enable or disable the dynamic range.
b. Min Color: Select a color for the minimum value from the drop-down menu
c. Max Color: Select a color for the maximum value from the drop-down menu

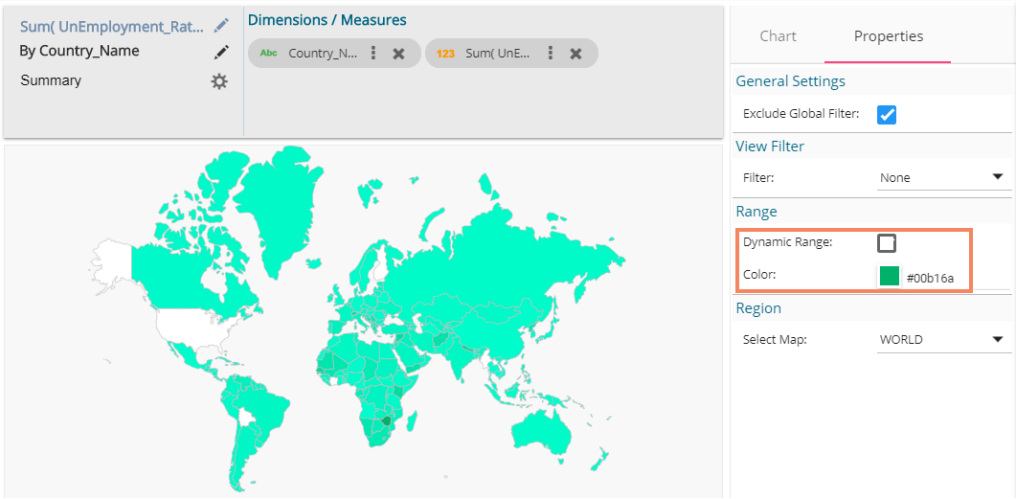
iv) Region

a. Select Map**:** Select a region using the drop-down menu

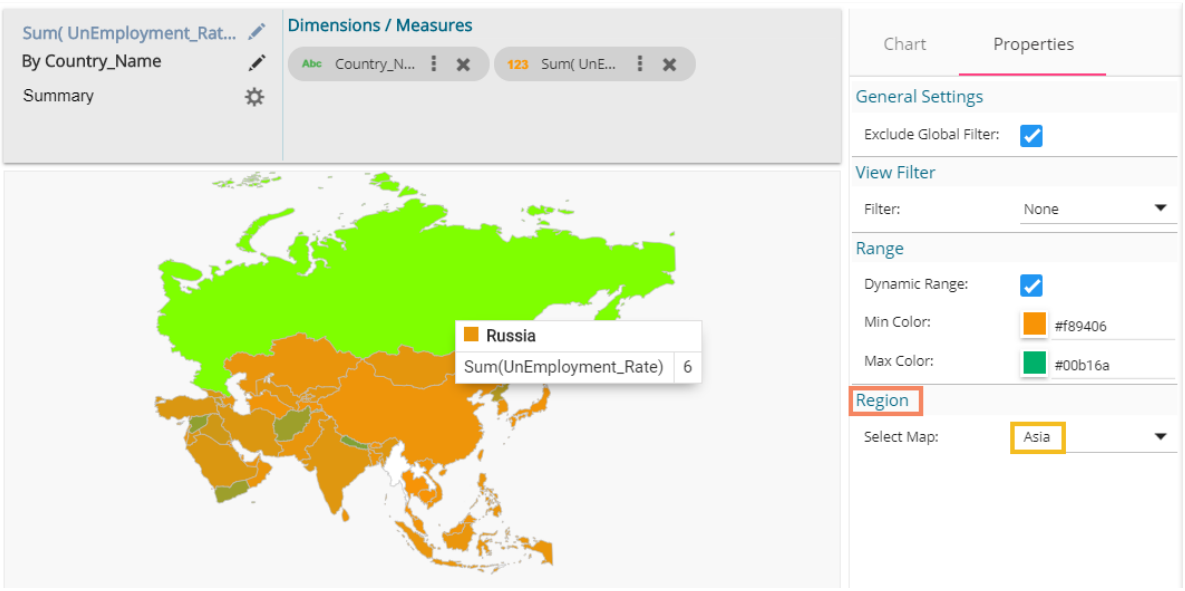


Note:

a. By disabling the dynamic range, the map projects the selected **Max Color.** The user can change the color by clicking the '**Color**' properties option.
   i. Disable the dynamic range.
   ii. The entire map reflects the selected Max color (by default).



b. Based on the selected '**Region**,' the displayed visualization gets changed.
   i. Select a map using the '**Region**' drop-down menu.
   ii. The map of the selected region gets highlighted based on the chosen dimensions and measures.



10.17. Data Grid

Users can see data in tabular format by selecting the Data Grid component from the chart list. Multiple values can be displayed via Grid visualization.

Properties:

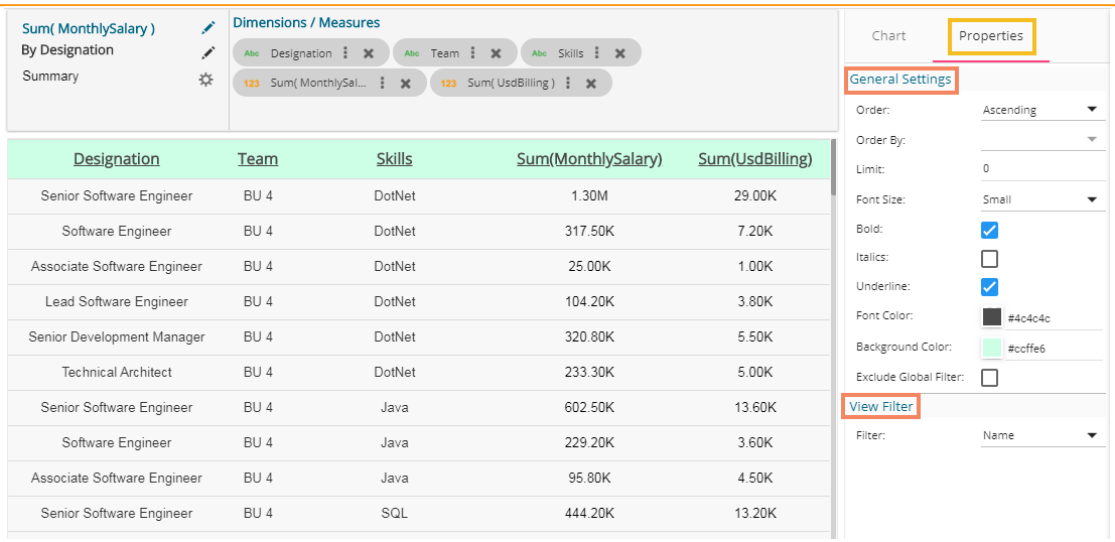
i) General Settings

a. Order: Users can order the displayed data by selecting an option from the given choices:
   i. Ascending,
   ii. Descending
   iii. None
   iv. Manual Sort (Users can manually sort the dimensions by using the indicator signs)
   By selecting an order, the user needs to configure the following fields:
      i. **Order By**- Select a value option from the drop-down menu to order the sequence of the data
      ii. **Limit**- Set a number to display the requested information by this limit

b. Font Size: Select a font size out the given choices (Small, Medium, Large)
c. Bold: Use a checkmark in the box to display the fonts of the heading in Bold
d. Italics: Use a checkmark in the box to apply the Italics style to display the heading
e. Underline: Use a checkmark in the box to underline the headings of the displayed data columns
f. Font Color: Select a font color using the menu
g. Background Color: Select a background color using the menu
h. Exclude from Global Filter: Use a checkmark in the given box to exclude the view from the Global filter condition

ii) View Filter

a. Filter: Select a filter condition from the drop-down menu



Note: The users get redirected to the pop-up color menu by clicking on Font Color or Background Color option.

10.18. Metric Summary

The Metric Summary displays the measure wise summary. The users can select any number of Dimensions and Measures to show the metric summary.

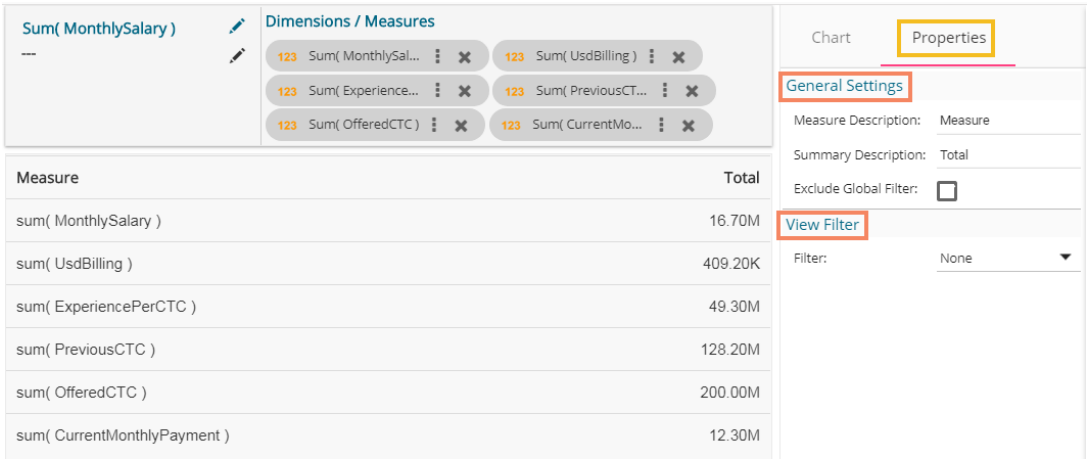
Properties:

i) General Settings

a. Measure Description: Provide heading for the selected dimensions or measures column
b. Summary Description: Provide heading for the displayed summary column
c. Exclude from Global Filter: Enabling this option excludes the view from the Global

ii) View Filter

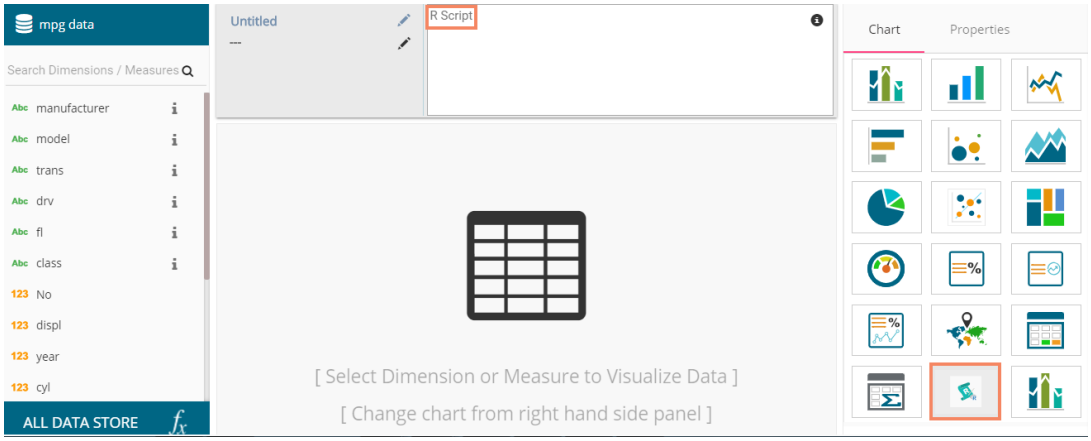
a. Filter: Select a filter condition from the drop-down menu



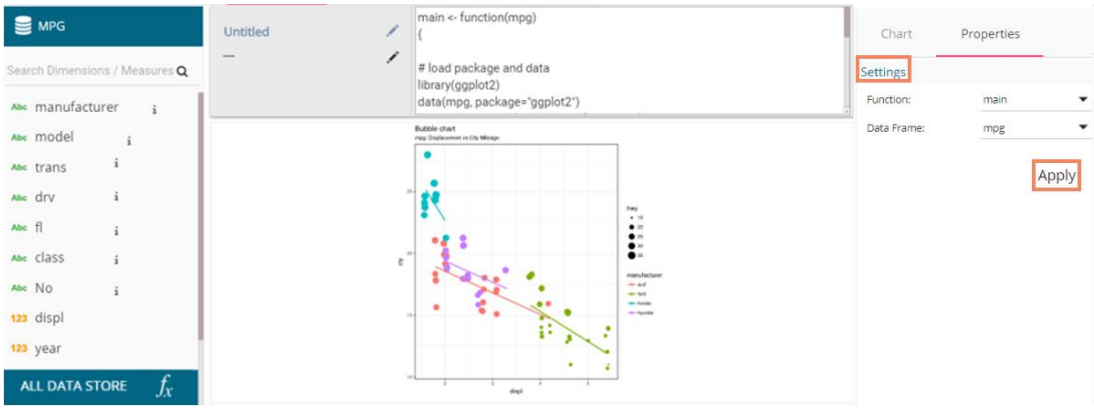
10.19. R Server Visual

The user can see visualization based on their inserted R scripts using this charting component.

i) Navigate to the Design New page.
ii) Select R Server Visual component to visualize the data.
iii) Write a valid R Script in the given space.



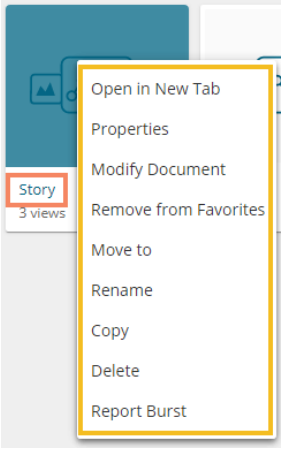
iv) Open the '**Properties**' tab
v) Configure the below given Settings fields:
   a. Function: Select an option from the drop-down menu
   b. Data Frame: Select an option from the drop-down menu
vi) Click the '**Apply**' option
vii) The canvas displays visualization based on the inserted R script.



11. Operations

A story created under '**My Documents**' or '**Public Documents**' is credited with various operations. This section describes all the operations assigned to a Story document.

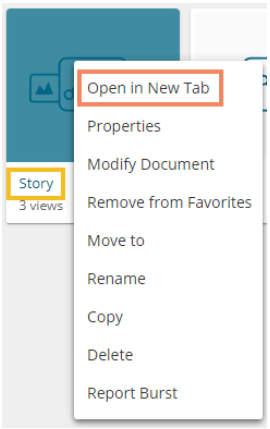
i) Navigate to '**My Documents**' or '**Public Documents**' documents space.
ii) Select a story document.
iii) Use the right-click on it to display the following context menu:



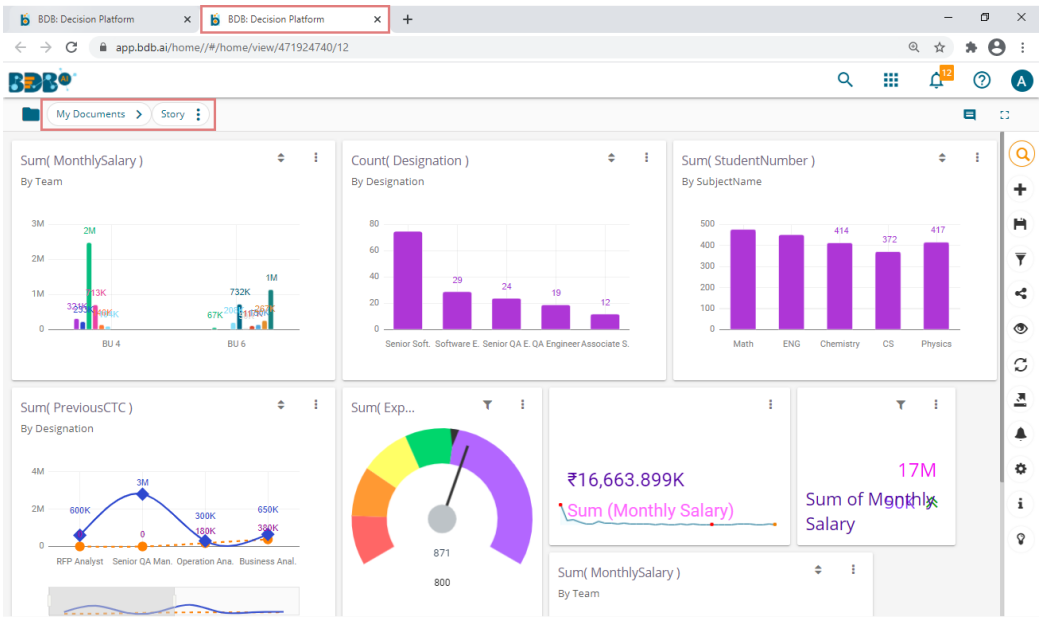
11.1. Open in New Tab

The user can open the selected story in a new tab by using this option.

i) Click the '**Open in New Tab**' option from the options menu.

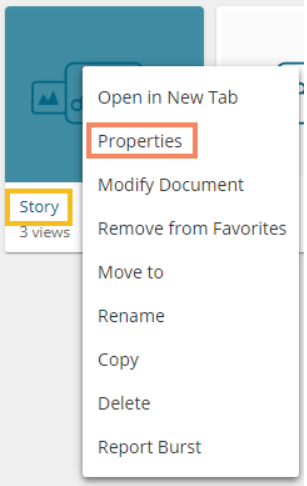


ii) The concerned story opens in a new tab.



11.2. Properties

i) Select the '**Properties**' option from the Options menu.



ii) A new screen pops-up with four options:

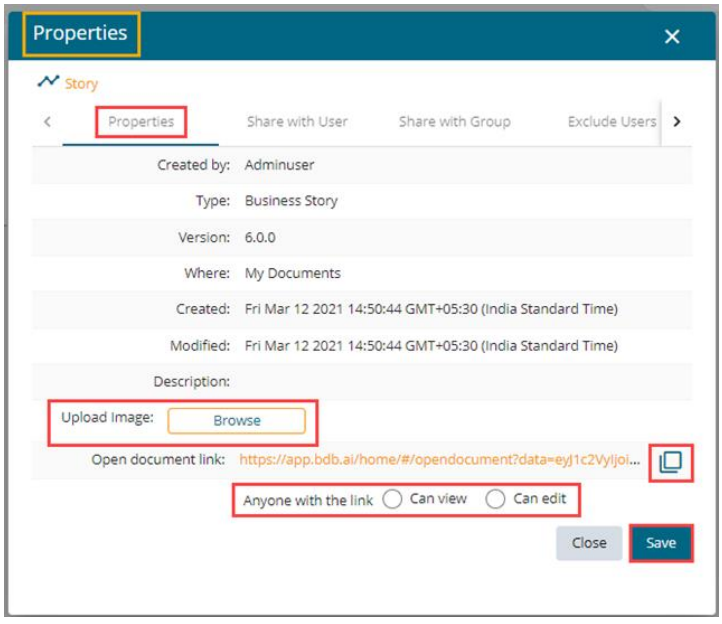
a. Properties: Displays the basic properties of the selected Business Story.

The user can upload an image by using the '**Browse**' option.

i) Click the '**Copy link**' icon to copy the open document link.

ii) Select an option out of '**Can view**' and '**Can edit**' options by using the radio button.

iii) Click the '**Save**' option to save the properties settings.

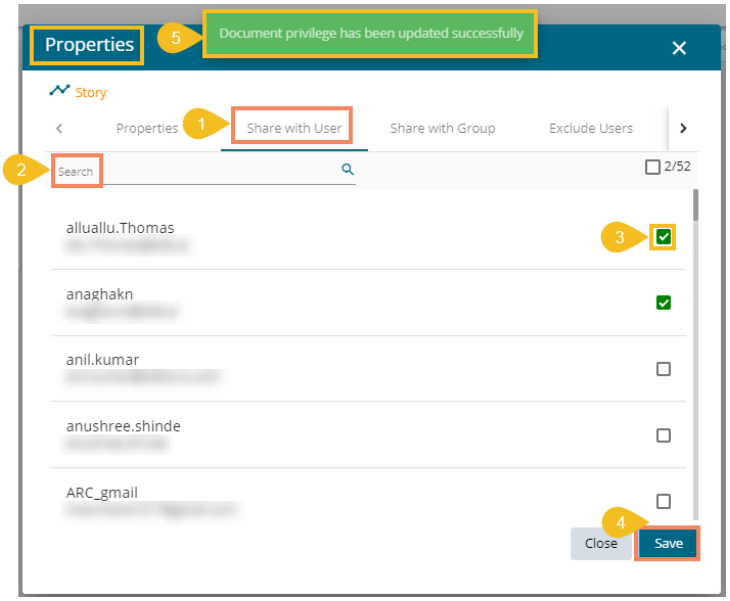


Note: The users can select via the Properties screen whether the other users to whom the story document has been shared with view-only rights or they can edit the shared copy.

b. Share with User: The story document gets shared with the selected user or users.

1. Select the '**Share with User**' tab.
2. Search for a specific user(s) using the search bar.
3. Select a user or multiple users by using the tick marks in the given box(es).

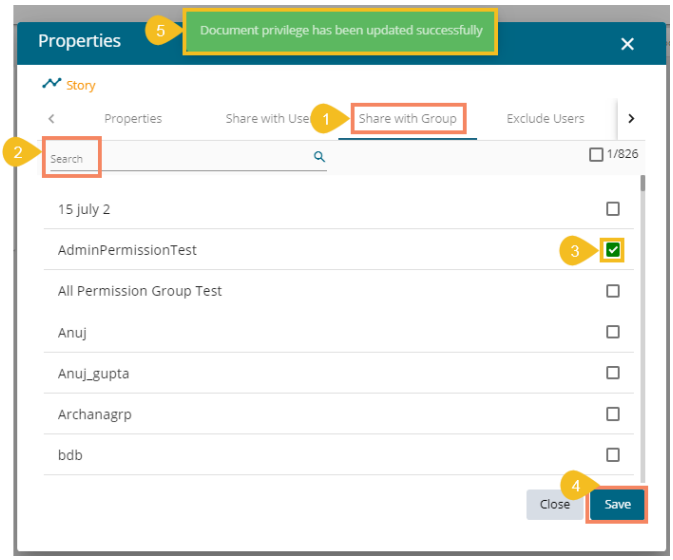
4. Click the '**Save**' option.
5. A success message appears, "Document privilege has been updated successfully".



6. The story document gets shared with the selected user or users.

c. Share with Group: The story document gets shared with the selected user group or user groups.

1. Select the '**Share with Group**' tab.
2. Search for the specific (user) Group(s) via the Search bar.
3. Select a user group or multiple user groups using the tick marks in the given box(es).
4. Click the '**Save**' option.
5. A success message appears, "Document privilege has been updated successfully."

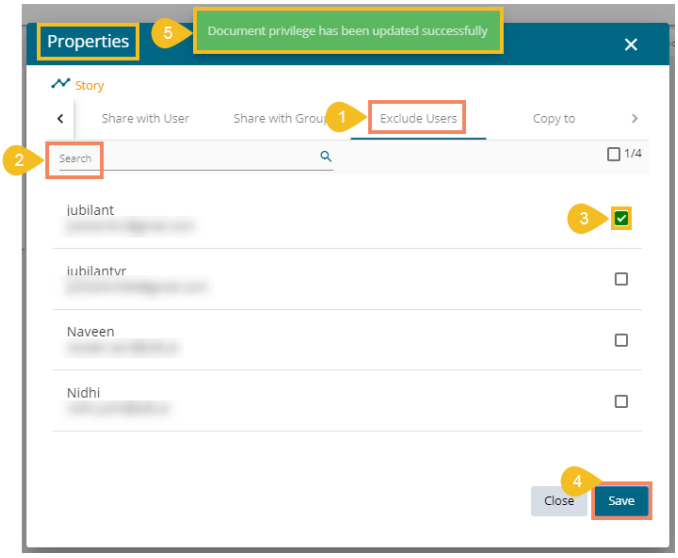


6. The story document gets shared with the selected user group or user groups.

Note: If a story document is shared using this option, then the selected users or user groups receive a view-only copy. The shared story document gets added to the '**Shared Documents**' space.

d. Exclude Users: The selected user gets excluded from the privilege to access the story document.

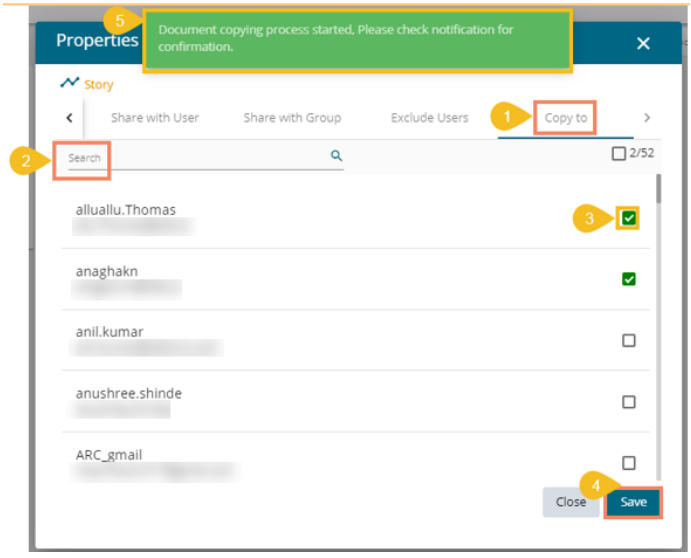
1. Select the '**Exclude Users**' tab.
2. Search for the specific user via the Search bar.
3. Select a user or users by using checkmark(s) in the given box.
4. Click the '**Save**' option.
5. A success message appears, "Document privilege has been updated successfully."



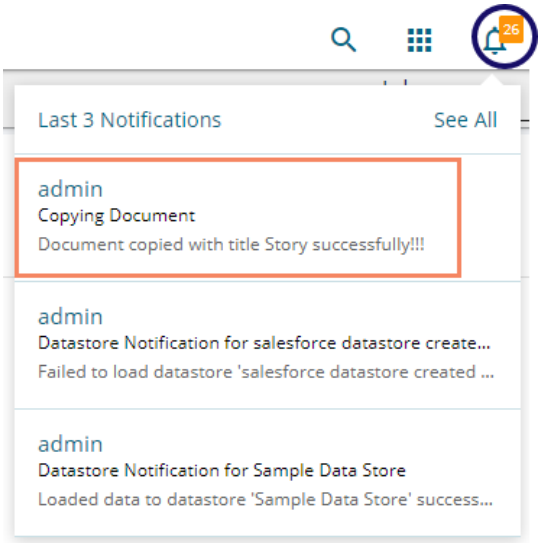
6. The selected user or users get excluded from the rights to access the concerned story document.

e. Copy to: A copy of the story document gets created and shared with the selected users.

1. Select the '**Copy to**' tab.
2. Search the specific user(s) via the Search bar.
3. Select the user(s) by using the tick marks in the given box.
4. Click the '**Save**' option.
5. A message appears stating, "**Document copying process started. Please check the notification for confirmation.**"



6. The user can open the '**Notification**' window to see the updates on the current task of copying the story document. E.g., the following image displays that the Business Story 4.5 document got successfully copied to the selected users.



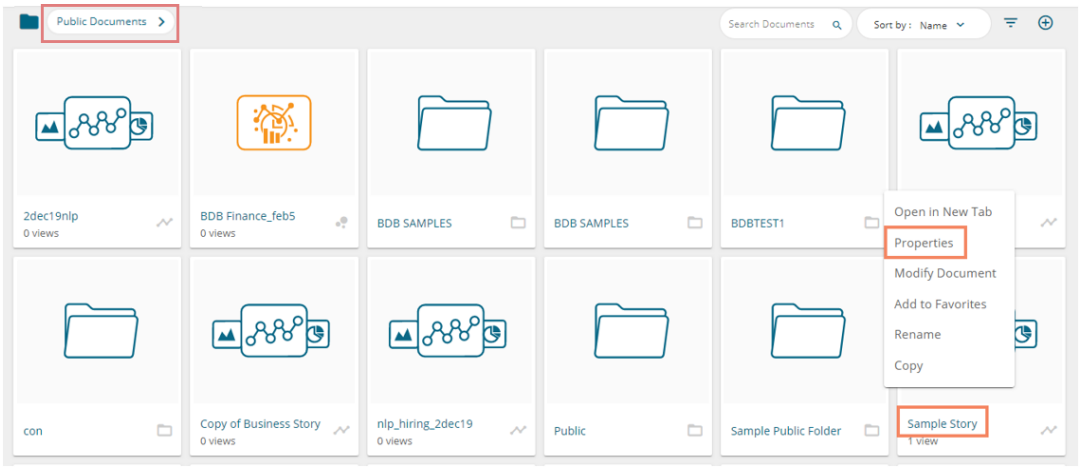
7. A copy of the story document gets shared with the selected user or users.

Note: If a story document is shared using this option, then the selected users have the right to modify the received story. The copied story document can be accessed from the '**Shared Documents**' space.

11.2.1. Report Burst

The Report Burst operation allows the user to share the open document link of a Business Story to another user(s). The feature appears under the **Properties** option provided for a story created or shared under the '**Public Documents**' space.

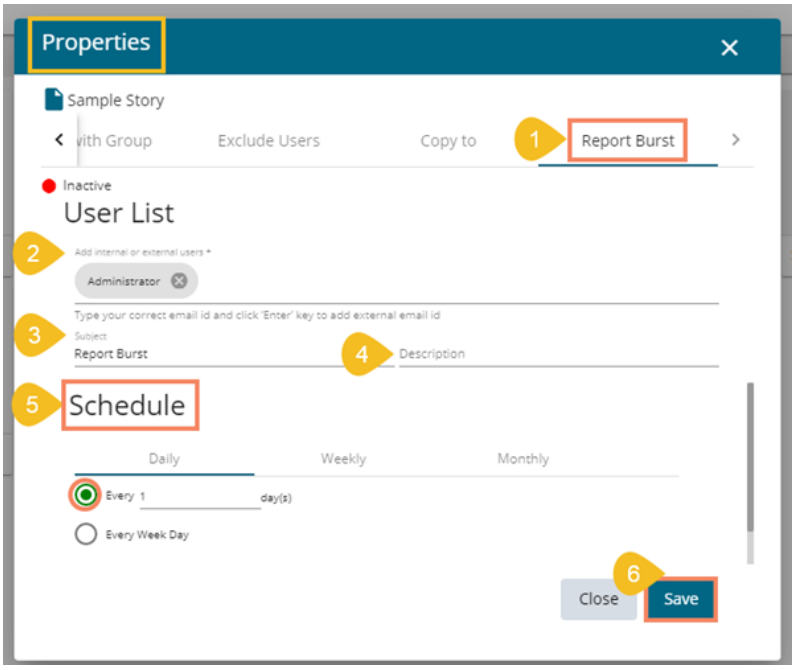
i) Navigate to the '**Public Documents**' documents space.
ii) Select a Story document and open the context menu with the available operations.
iii) Click the '**Properties**' option.



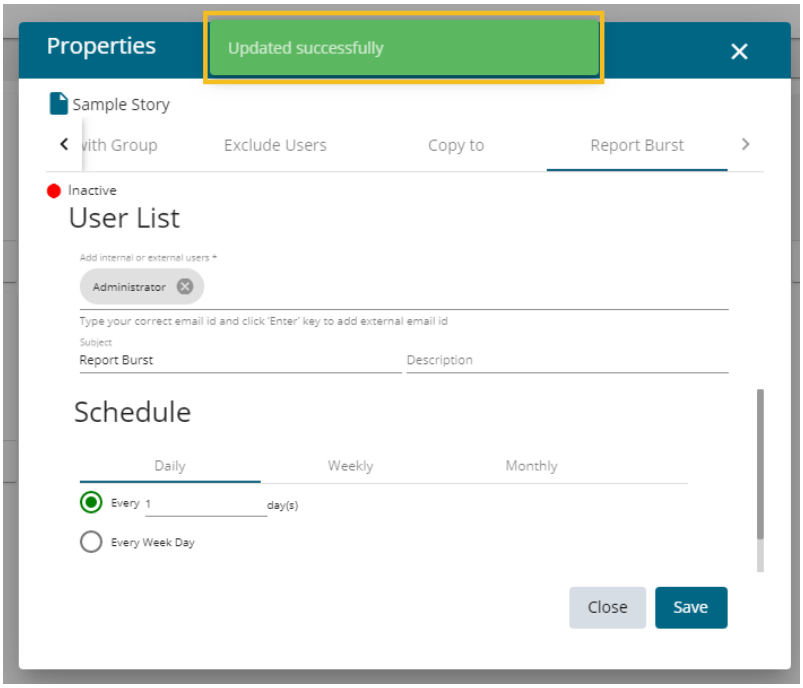
iv) A new window opens with multiple tabs.
v) Select the '**Report Burst**' tab.
vi) Add an external or internal user(s).
vii) Provide Subject.
viii) Provide Description.

ix) Schedule the selected story document by configuring the time range.

x) Click the '**Save**' option.

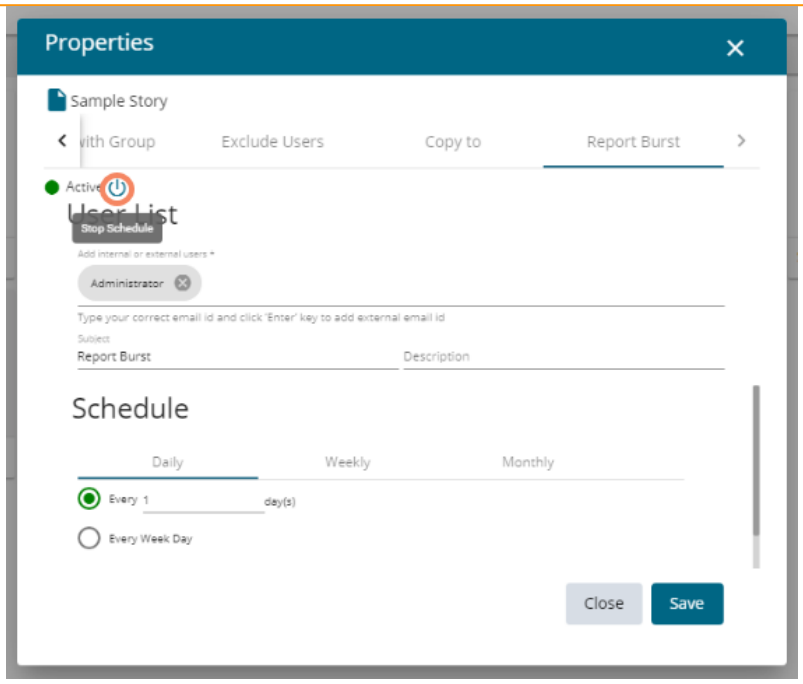


xi) A success message appears.

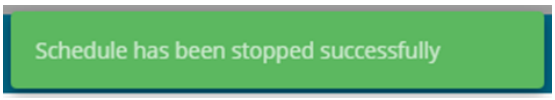


xii) The Scheduler status becomes active.

xiii) Click the '**Stop Schedule**' button to stop the scheduler.



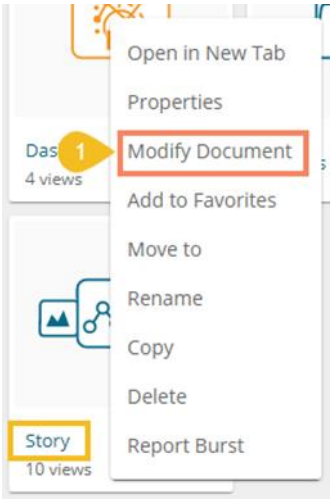
xiv) A notification message appears to inform the same.



xv) The open doc link of the selected story gets shared to the selected user at the scheduled time through the mail.

11.3. Modifying a Document

i) Select the '**Modify Document**' option from the Story Operations menu.



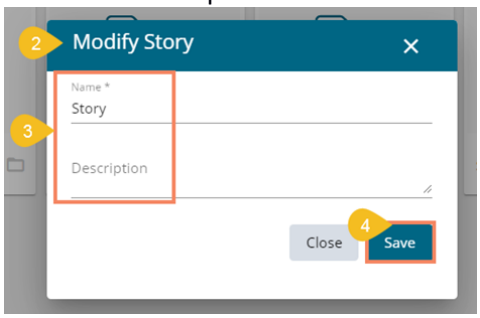
ii) The '**Modify Story**' window opens.

iii) Modify the following information:

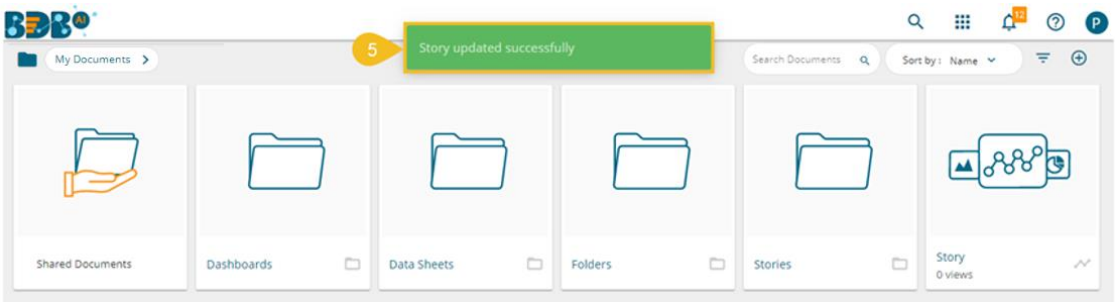
a. Title: Enter a title for the Business Story.

b. Description: Describe the story (Optional).

iv) Click the '**Save**' option.



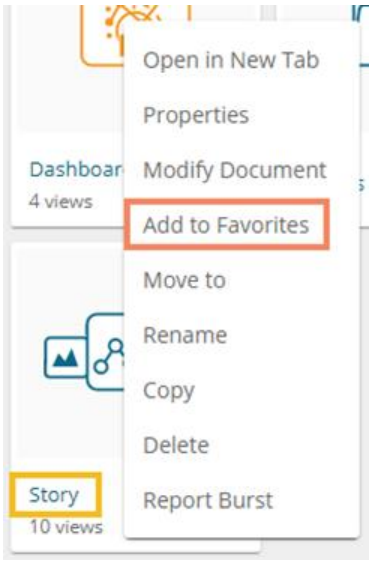
v) A confirmation message appears and the chosen information for the story gets modified.



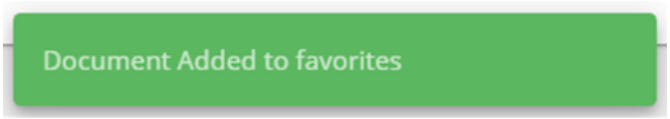
11.4. Adding/Removing a Story Document to/from Favorites

The user can add a business story document to or remove it from the Favorites.

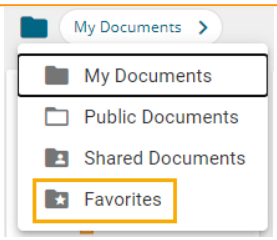
i) Select the '**Add to Favorites**' option from the Operations menu.



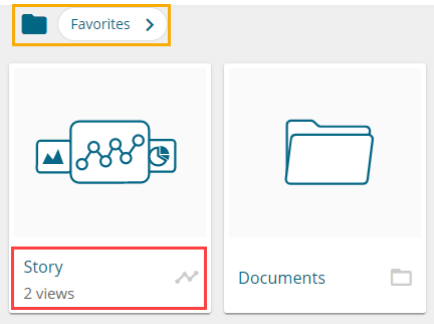
ii) A new message pops-up, "Document added to Favorites."



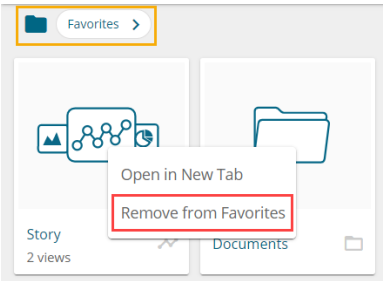
iii) Open the '**Favorites**' document using the '**My Documents**' drop-down menu.



iv) The selected Data Sheet document gets added to the '**Favorites**' space.

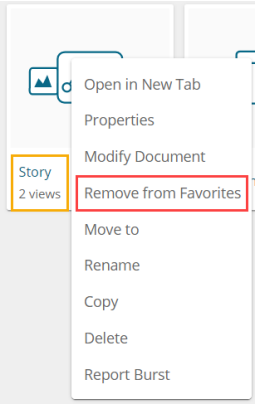


v) Click the '**Remove from Favorites**' option that appears by using a right-click on the story document under the Favorites.



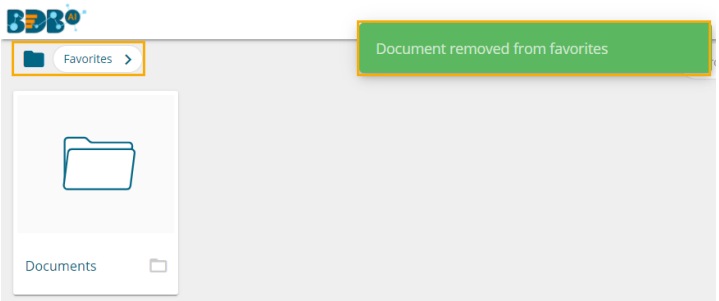
OR

Navigate to the original Story document and use right-click on it to get the '**Remove from Favorites**' option.



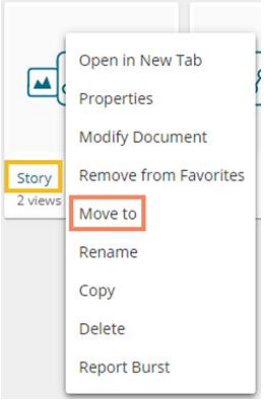
vi) A confirmation message appears.

vii) The selected story document gets removed from '**Favorites**.'

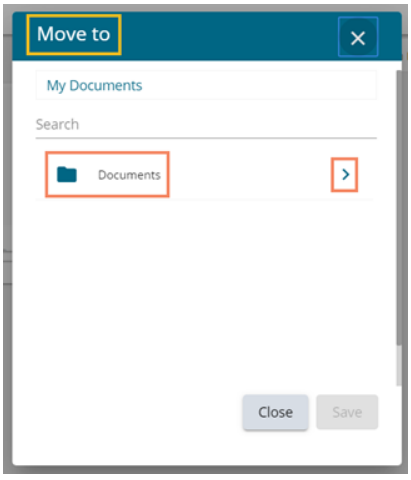


11.5. Move to

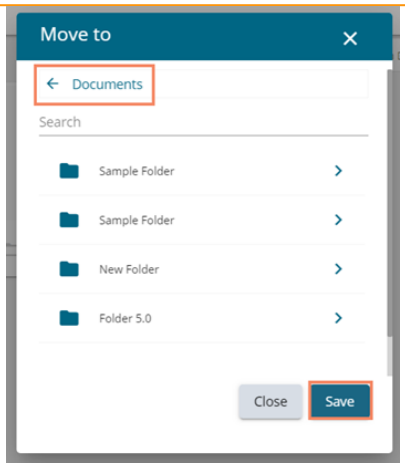
i) Select the '**Move to**' option from the Story Options menu.



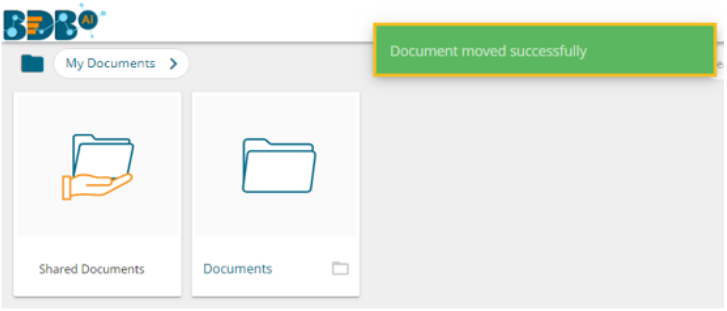
ii) A new screen opens with the available folder options.
iii) Select a folder or subfolder.
iv) Click on the '**Move**' > option to open a list of available sub-folders.



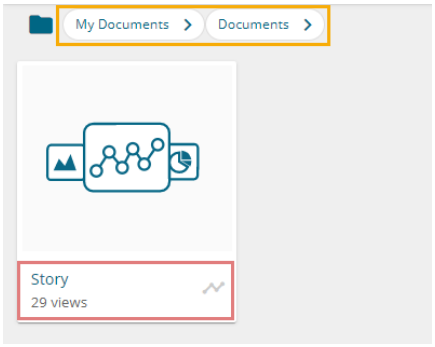
v) A new window opens with the selected Folder mentioned on the top.
vi) Click the '**Save**' option.



vii) A success message appears.

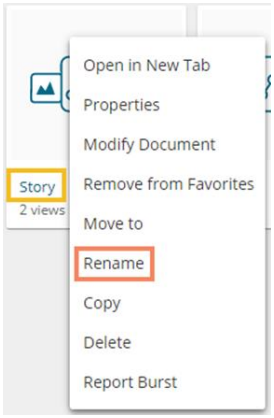


viii) The concerned story gets moved to the selected folder or subfolder.

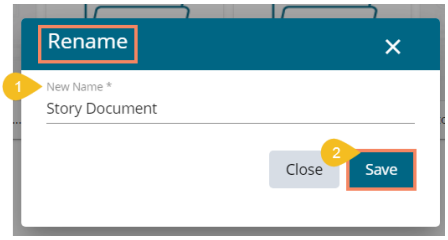


11.6. Renaming a Story Document

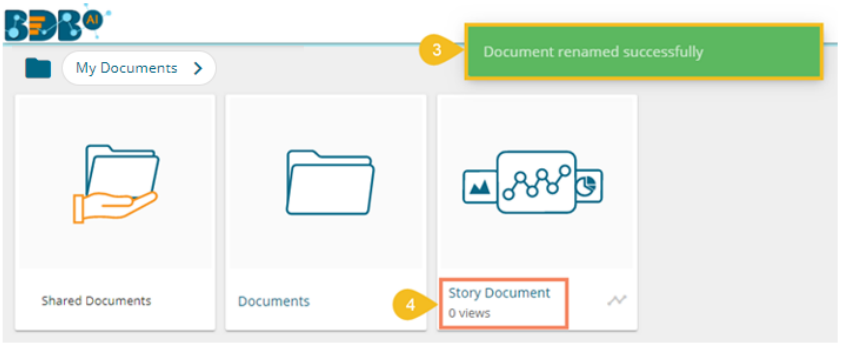
i) Select the '**Rename**' option from the Operations menu.



ii) Configure the following information to rename the story.
   a. Provide a **New Name** for the story document or modify the name.
   b. Click the '**Save**' option.



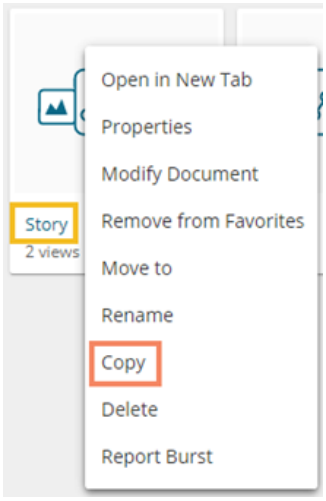
iii) A confirmation message appears.
iv) The story document gets renamed successfully.



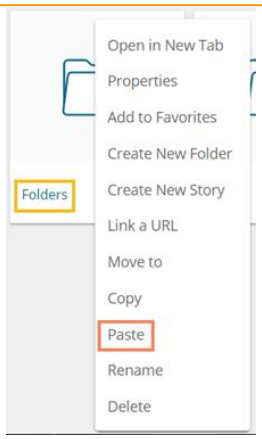
11.7. Copying and Moving a Business Story

The user can copy a business story document and paste it into the selected place on the BDB Platform.

i) Select the '**Copy**' option from the Operations menu.



ii) Select another folder and use right-click to get the '**Paste**' option.

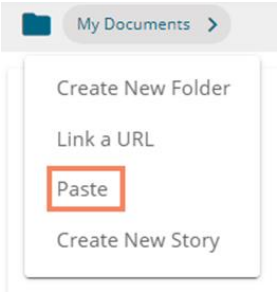


Or

Navigate to '**My Documents**' or '**Public Documents**' and right-click anywhere.

iii) A context menu appears with the '**Paste**' option.

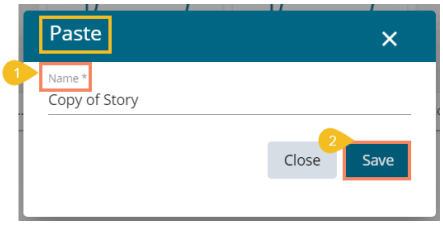
iv) Select the '**Paste**' option.



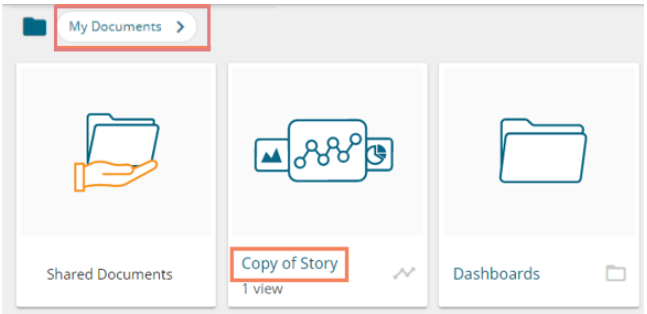
v) The '**Paste**' window appears

a. The **'Name'** field displays the prefix '**Copy of-**' before the original name of the story document (E.g., *Story g*ets a new name *Copy of Story*).

b. Click the '**Save**' option.

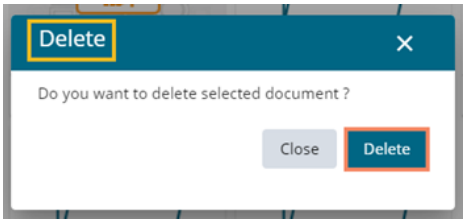


vi) The copied story document gets pasted successfully with a different name in the given space.
E.g., The following image shows that *Story* is named *Copy of Story* and has been pasted to the '**My Documents'** space.

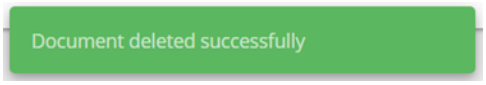


11.8. Deleting a Business Story

i) Select the '**Delete**' option from the Operations menu.
ii) A new window opens, assuring the deletion.
iii) Click the '**Delete**' option.



iv) A success message appears.

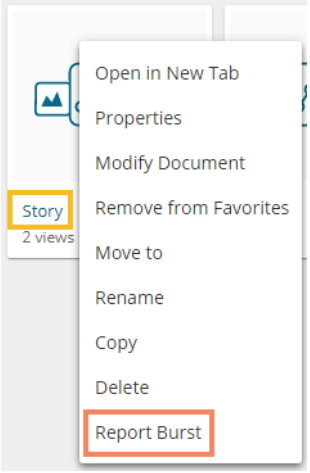


v) The selected story document gets removed.

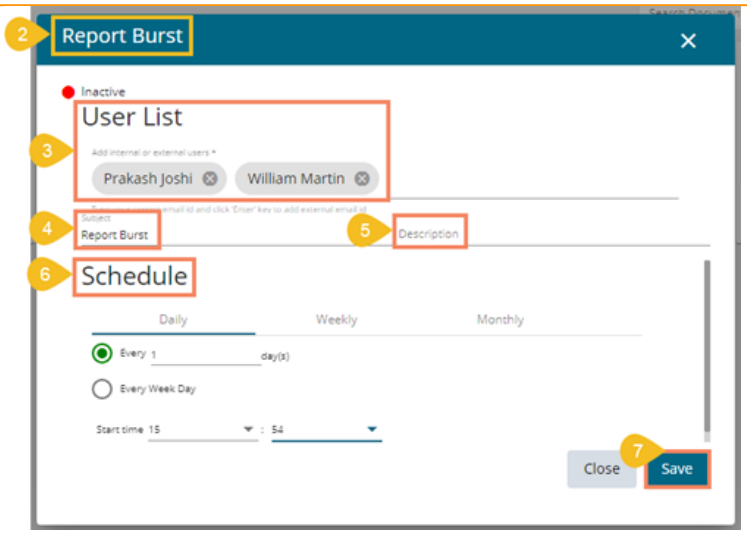
11.9. Report Burst

The Report Burst operation allows the user to share the open document link of a Business Story to another user(s).

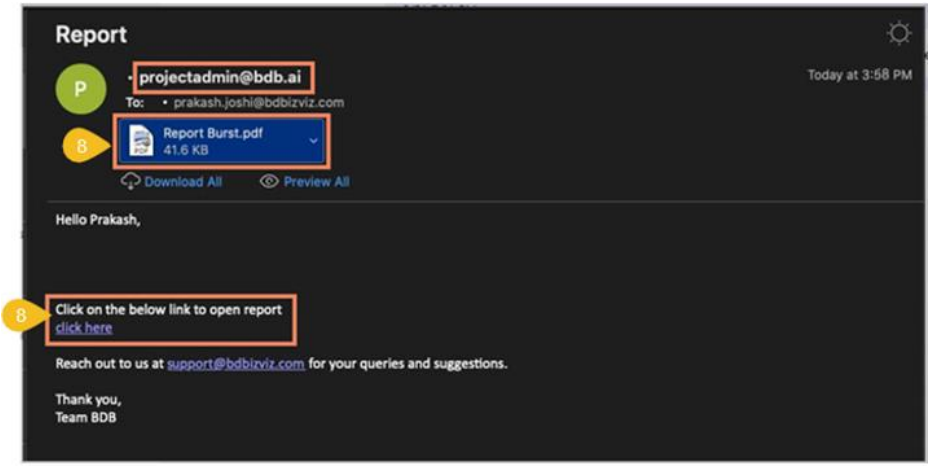
i) Select the '**Report Burst**' option from the Story options menu.



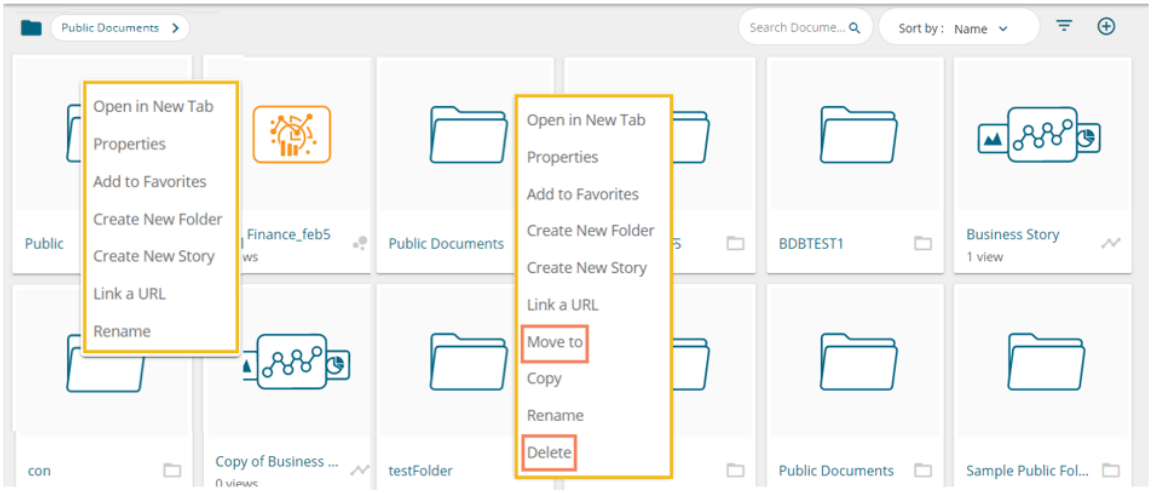
ii) The Report Burst window opens.
iii) Add the users or user groups.
iv) Provide a subject.
v) Provide description (optional).
vi) Schedule the report.
vii) Click the '**Save**' option.



viii) The open document link and PDF report get shared with the selected user(s)/ user group(s).



Note: The documents which are created in the '**Public Documents**' space get the '**Delete**' and '**Move To**' operations, the shared documents in this space do not get these two operations.



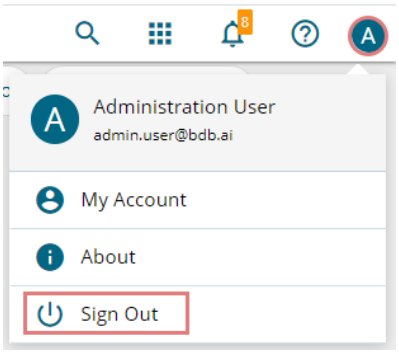
12. Signing Out

The user can Sign out from the Story at any given stage, but it is advisable to sign out after saving your story.

The following steps describe how to log out from the BDB Platform.

i) Click the '**User Profile**' icon on the Platform homepage.

ii) Click the '**Sign Out**' option.

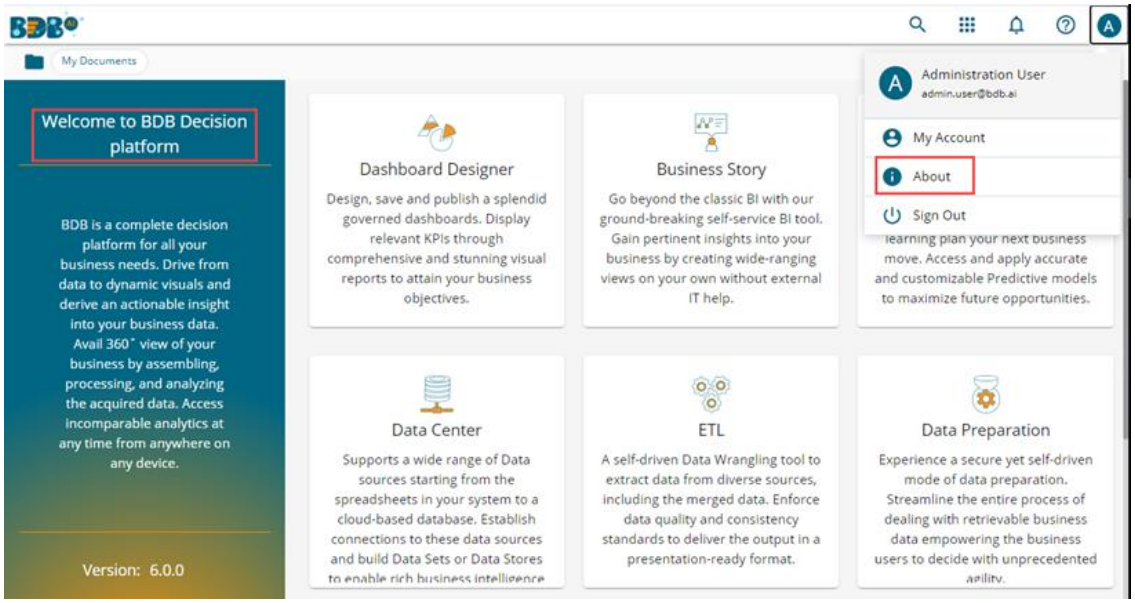


iii) The user successfully signs off from the **BDB Platform.**

Note:

a. By clicking the '**Sign Out**' option, the user gets back to the Sign-in page of the BDB platform.

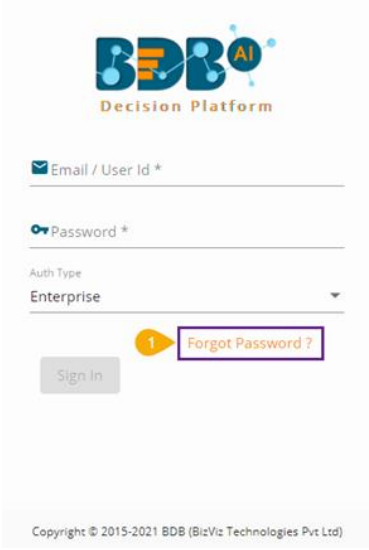
b. Click the '**About**' option to open the default homepage for the BDB Platform.



12.1. Forgot Password Option

The users are provided with a choice to change the password on the Login page of the platform.

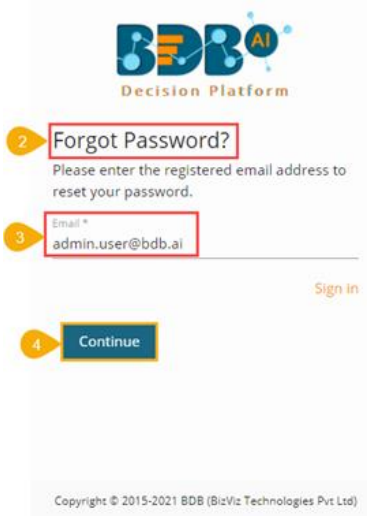
i) Click the '**Forgot Password?**' option from the Sign In page.



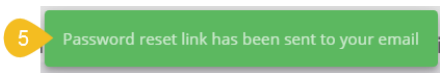
ii) The '**Forgot Password?**' page opens.

iii) Provide the email id that is registered with BDB to send the reset password link.

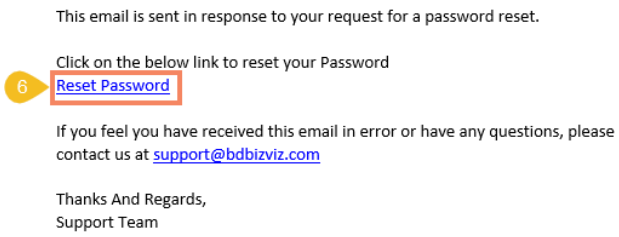
iv) Click the '**Continue**' option.



v) The user may be redirected to select a space in case of multiple spaces under one server link (The user needs to select a space and click the '**Continue**' option once again). If a user does not have multiple spaces then, a message appears to notify the user that the password reset link (The users receive the reset link via their registered email.)



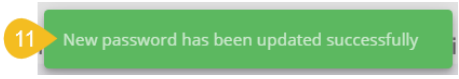
vi) Click the link from your registered email.



vii) The user gets redirected to the '**Reset Password**' page to set a new password.

viii) Set a new password.
ix) Confirm the newly set password.
x) Click the '**Continue**' option.

xi) The password for the selected BDB account gets reset and a message appears to inform the user.

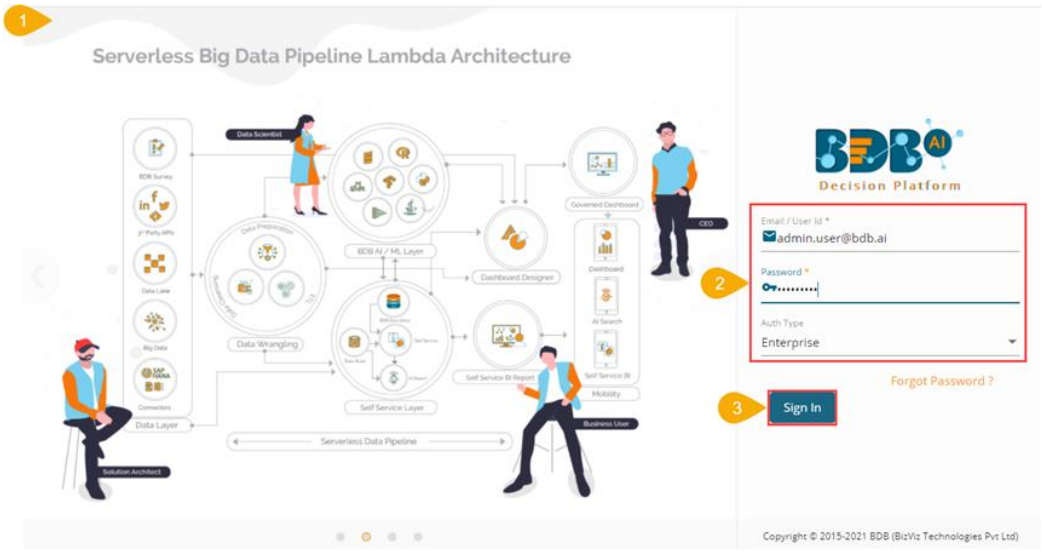


Note: The user gets redirected back to the Sign In page after successfully resetting the password.

12.2. Force Login

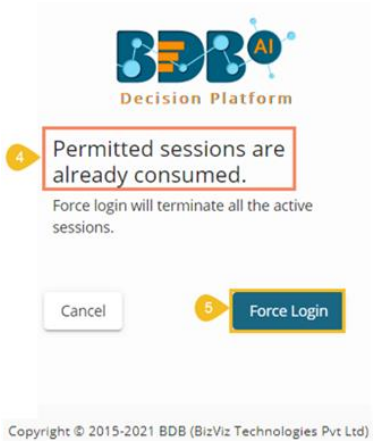
The '**Force Login**' functionality has been introduced to control the number of active sessions up to three. The users can access only 3 sessions at a time when they try to access the 4th session, a warning message displays to inform that the user has consumed the permitted sessions and, a click on the '**Force Login**' would kill all those active sessions.

i) Navigate to the BDB Platform Login page.
ii) Enter the valid credentials to log in.
iii) Click the '**Sign In**' option.



iv) The user gets the following message if the permitted active sessions (3 sessions at a time) are consumed.

v) Click the '**Force Login**' option.



vi) A warning message appears the currently active sessions get killed, and the user gets redirected to the BDB Platform Sign In page.

vii) The user needs to provide valid credentials once again and click the '**Continue**' option to access the platform.