

User Guide

Business Story R-4.0

Contents

| | |
|---------------------------------------------------|----|
| 1. About this Guide | 5 |
| 1.1. Document History..... | 5 |
| 1.2. Overview..... | 5 |
| 1.3. Target Audience | 5 |
| 2. Introducing BDB Business Story..... | 5 |
| 2.1. Introduction | 5 |
| 2.2. Prerequisites and Supported Devices..... | 6 |
| 3. Getting Started with BDB Business Story | 6 |
| 3.1. Guided Tour..... | 9 |
| 3.2. Forgot Password Option | 11 |
| 3.3. Force Login..... | 12 |
| 4. Designing a New View | 14 |
| 4.1. Dimension Profiling | 16 |
| 4.2. Datastore Merge at View Level..... | 18 |
| 4.3. Measure Summary | 21 |
| 4.4. Series Properties..... | 23 |
| 4.5. Formula Field Editor | 25 |
| 4.5.1. Creating a Formula..... | 25 |
| 4.5.2. Creating a Range..... | 28 |
| 4.6. Order by and Limit..... | 30 |
| 4.6.1. Sort based on Non-existing Dimension | 32 |
| 4.6.2. Manual Sort | 32 |
| 4.7. Adding a Slicer | 34 |
| 5. Storyboard | 35 |
| 5.1. BDB Search..... | 36 |
| 5.2. Shared Views..... | 40 |
| 5.3. Change Theme..... | 41 |
| 5.4. Export..... | 42 |
| 5.5. Alert Center | 43 |
| 5.5.1. Applying Filter Condition to Alert | 47 |
| 5.6. Data Store Information | 47 |
| 5.7. Options Assigned to a View..... | 48 |

| | | |
|--------|---------------------------------------------|-----|
| 5.7.1. | Analyze | 48 |
| 5.7.2. | Edit | 52 |
| 5.7.3. | Remove..... | 53 |
| 5.8. | Data Interactions/Exploration..... | 54 |
| 5.8.1. | Automatic Data Drill..... | 54 |
| 6. | Actions..... | 56 |
| 6.1. | Interactions | 56 |
| 6.2. | Web Socket | 58 |
| 7. | Applying Filters..... | 59 |
| 7.1. | View Specific Filter..... | 59 |
| 7.1.1. | Measure based View Filter..... | 61 |
| 7.2. | Date based View Filter..... | 62 |
| 7.3. | Global Filter..... | 64 |
| 7.3.1. | Exclude from the Global Filter | 66 |
| 7.3.2. | Measure Filter..... | 69 |
| 7.3.3. | Custom View Filter..... | 71 |
| 7.3.4. | Like and Not Like Operation in Filter | 74 |
| 7.4. | Comments..... | 76 |
| 8. | Charts & Properties | 77 |
| 8.1. | Mixed Chart..... | 77 |
| 8.2. | Column Stack Chart | 81 |
| 8.3. | Line Chart..... | 85 |
| 8.4. | Bar Chart | 90 |
| 8.5. | Bubble Chart..... | 92 |
| 8.6. | Area Chart | 94 |
| 8.7. | Pie Chart..... | 96 |
| 8.8. | Scatter Plot Chart | 97 |
| 8.9. | TreeMap Chart | 99 |
| 8.10. | Semi Gauge Chart | 100 |
| 8.11. | KPI Tile..... | 102 |
| 8.12. | KPI Comparative Tile | 102 |
| 8.13. | KPI Sparkline..... | 106 |
| 8.14. | Map Chart | 107 |
| 8.15. | Data Grid | 109 |
| 8.16. | Metric Summary..... | 110 |

| | | |
|-------|----------------------------------------------------------|-----|
| 8.17. | R Server Visual..... | 111 |
| 8.18. | Pareto Chart | 112 |
| 9. | Options | 113 |
| 9.1. | Modifying a Document | 113 |
| 9.2. | Renaming a Story Document..... | 114 |
| 9.3. | Deleting a Business Story..... | 115 |
| 9.4. | Copying and Moving a Business Story | 115 |
| 9.5. | Adding/Removing a Story Document to/from Favorites | 117 |
| 9.6. | Properties..... | 119 |
| 9.7. | Move To | 123 |
| 10. | Signing Out..... | 124 |

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 |
|--------------------------|----------------------------------|-----------------------------------|
| BDB Business Story 2.0 | February 21 st , 2016 | The first release of the document |
| BDB Business Story 2.1 | May 25 th , 2016 | Updated document |
| BDB Business Story 2.5 | November 9 th , 2016 | Updated document |
| BDB Business Story 2.5.3 | March 16 th , 2017 | Updated document |
| BDB Business Story 3.0 | August 31 st , 2017 | Updated document |
| BDB Business Story 3.0 | October 26 th , 2017 | Modified document |
| BDB Business Story 3.2 | February 2 nd , 2018 | Updated document |
| BDB Business Story 3.5 | April 15 th , 2018 | Updated document |
| BDB Business Story 3.5.1 | July 5 th , 2018 | Updated document |
| BDB Business Story 3.6 | August 20 th , 2018 | Updated document |
| BDB Business Story 3.7 | October 10 th , 2018 | Updated document |
| BDB Business Story 3.8 | December 1 st , 2018 | Updated document |
| BDB Business Story 4.0 | December 31 st , 2018 | Updated document |

Note: Business Story 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 BDB Business Story
- Steps to create and modify a Business Story
- Options assigned to a Business Story

1.3. Target Audience

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

2. Introducing BDB Business Story

2.1. Introduction

The Business Story is an advanced data visualization feature of the BDB Platform. It helps users to create rich, interactive data visualization to present complex, related data. The entire process of creating a business story out of the selected data is easy, quick, and exciting. 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 business stories.

2.2. Prerequisites and Supported Devices

- A browser that supports HTML5
- Operating System: Windows 7
- Basic understanding of the BizViz Server
- Permission to access, create, and modify the Data Stores under the Data Center module of the BDB Platform.

3. Getting Started with BDB Business 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) Click the ‘Continue’ option.



- iv) 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.

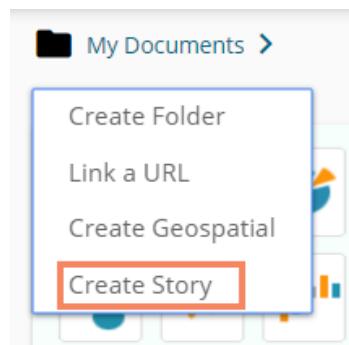
- v) Click on the '**Apps**' menu icon.
- vi) Select the '**Story**' plugin from the Apps menu.



Note: Number of plugins displayed in the Apps menu are reliant on the user permissions.

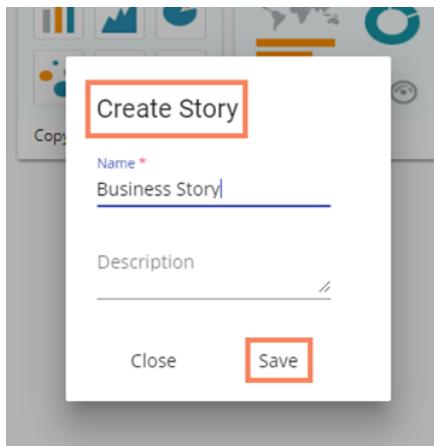
Or

1. Navigate to '**My Documents**' or '**Public Documents**' and use the right-click anywhere on the blank space.
2. A context menu opens.
3. Select the '**Create Story**' option from the context menu.

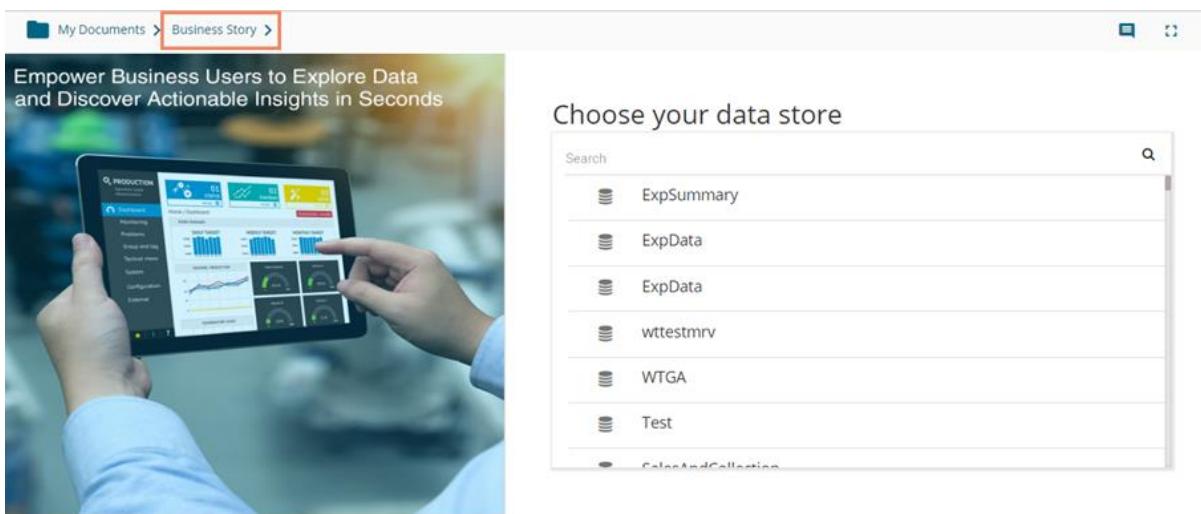


- vii) A new window pops-up.
- viii) Fill in the following information:

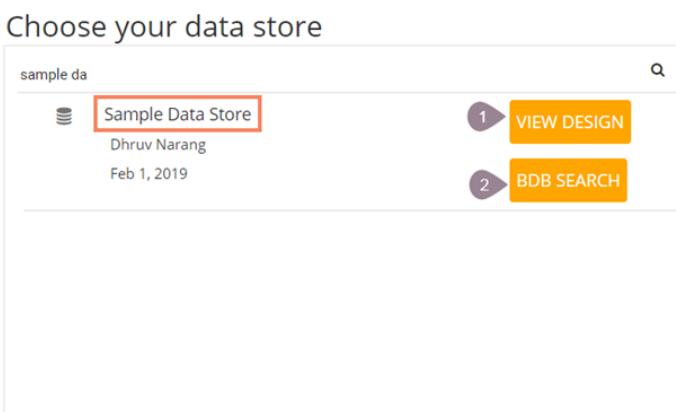
1. **Name:** Enter a name for the story document
2. **Description:** Describe the story document (optional)
3. Click the '**Save**' option.



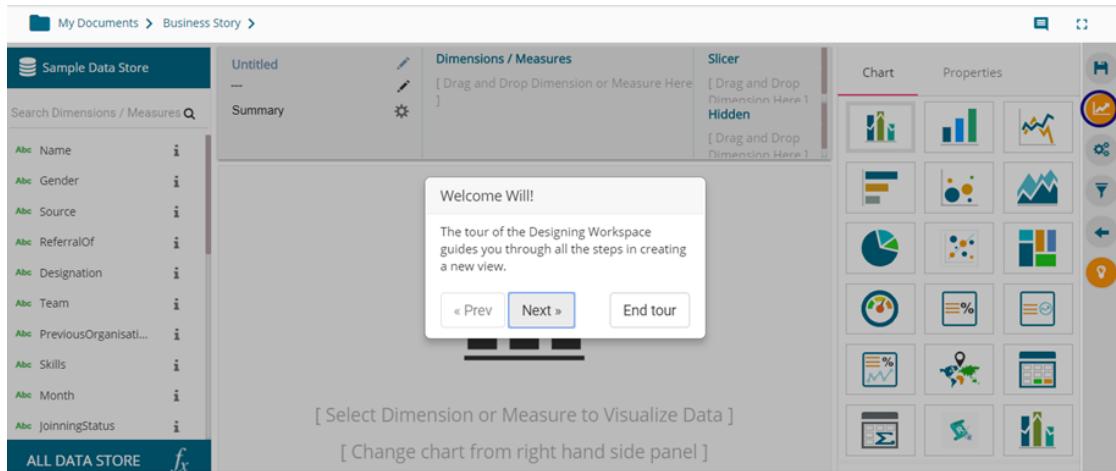
- ix) The story document gets created under the selected document space prompting the users to choose a Data Store.



- x) After selecting a data store, the users get two options to start working with their newly created story. They can choose either '**VIEW DESIGN**' or '**BDB SEARCH**' out of the provided options.

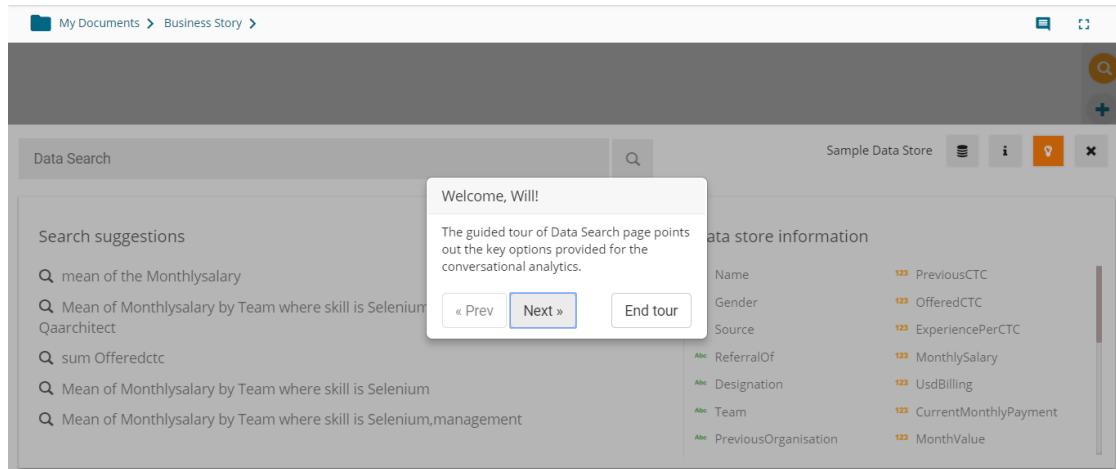


- VIEW DESIGN:** It redirects users to drag and drop the required dimensions and measures to create a new view for the newly created story.



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

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

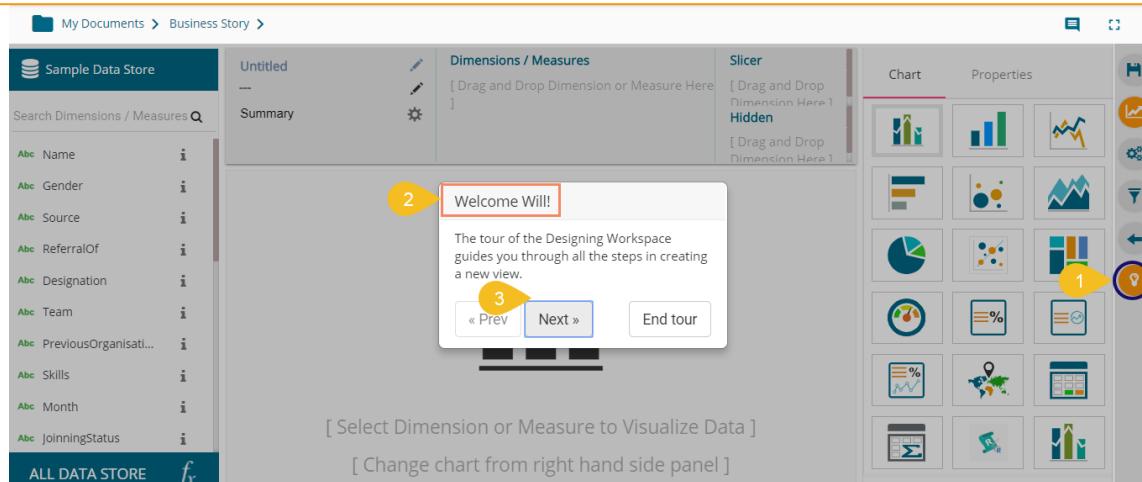


Please refer to the '**BDB Search**' section of this document for a detailed understanding of the Search page.

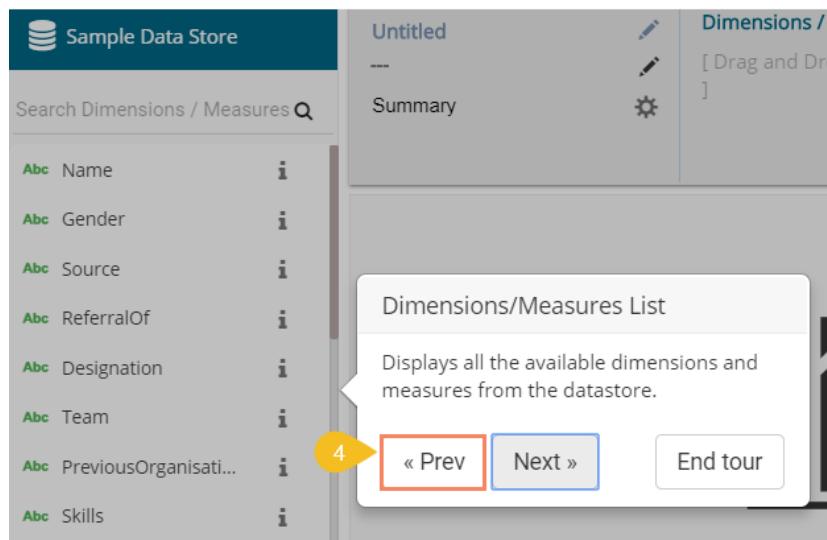
3.1. Guided Tour

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

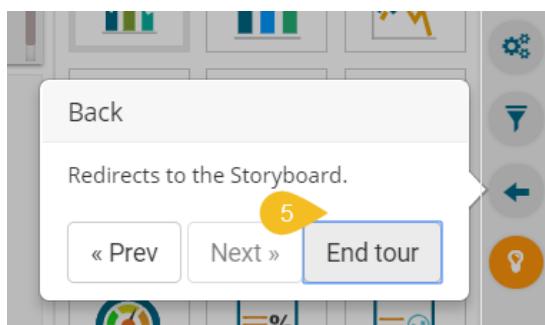
- The users need to click the '**Start Tour**' icon to begin the guided tour for an existing Business Story. (The Guided tour window opens by default for a newly created Business Story.)
- The users will get a dialog window prompting to lead them through all the major functionality provided the page.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



- Click the 'Prev' option to go back in the guided tour.



- Click the 'End Tour' option to end the guided tour.



Note:

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

3.2. Forgot Password Option

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

- i) Navigate to the Login page.
- ii) Click the '**Forgot your password?**' option.



Email *

Password *

Auth Type

Enterprise

[Forgot your password ?](#)

Continue

Copyright © 2015-2018 BDB (BizViz Technologies Pvt Ltd)

- iii) Users get redirected to a new window.
- iv) Provide the email id that is registered with BDB to send the reset password link.
- v) Click the '**Continue**' option.



Having trouble signing in?

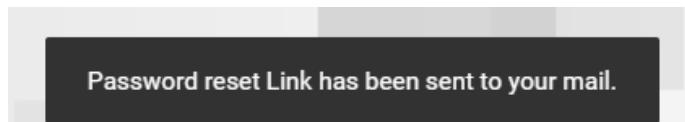
To reset your password, enter the email address you use to sign in to BizViz. This can be your email address associated with your account.

Email *

[Sign in](#)

Continue

- vi) Users may be redirected to select a space in case of multiple spaces under one server link; they need to choose a space and click the '**Continue**' option once again. Otherwise, a message will pop-up to notify that the password reset link has been sent to the registered email.



- vii) Click the link from your registered email.
- viii) Users get redirected to the '**Reset Password**' page to set a new password.
- ix) Set a new password.
- x) Confirm the newly set password.
- xi) Click the '**Continue**' option.



Reset Password

You've confirmed ownership of the BizViz Account, Reset your password now to regain access.

New Password *

Confirm New Password *

Continue

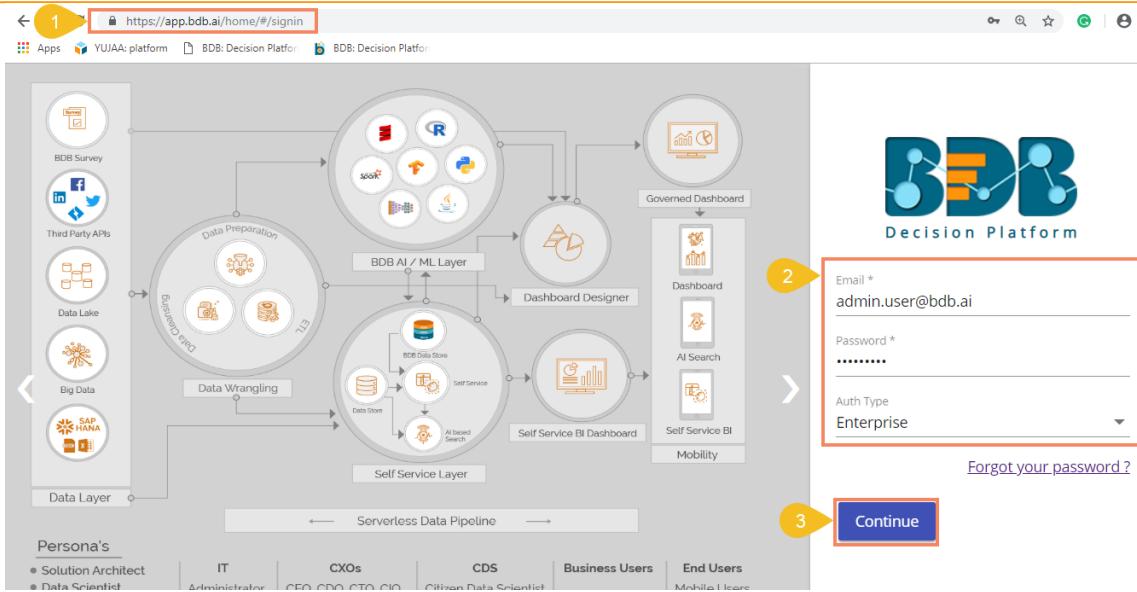
Copyright © 2015-2018 BDB (BizViz Technologies Pvt Ltd)

- xii) The password for the selected BDB account gets reset.

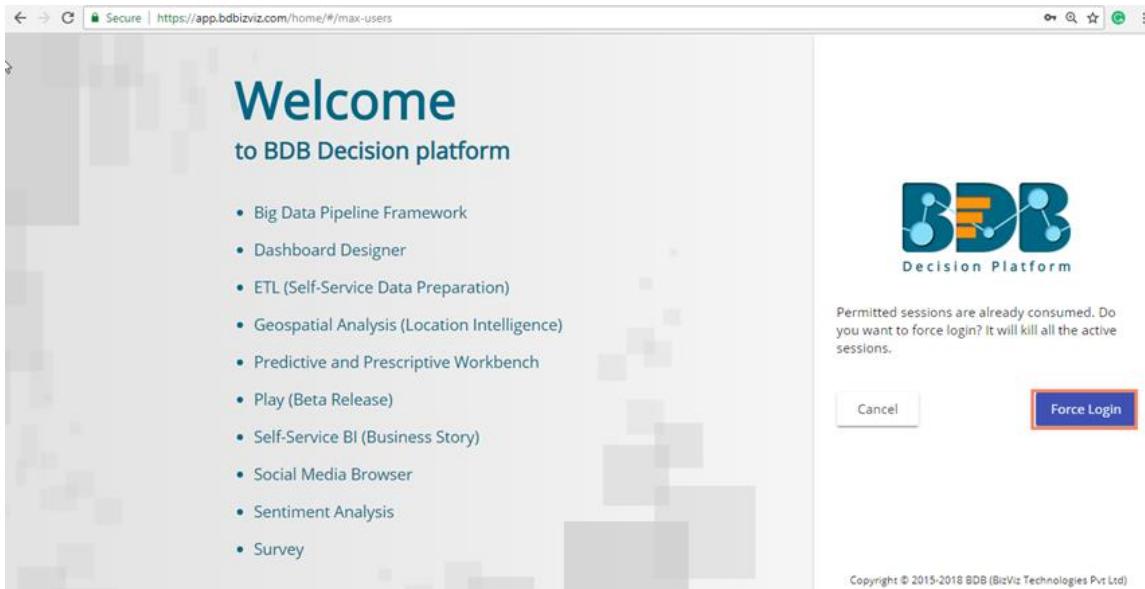
3.3. Force Login

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 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 '**Continue**' option.



- iv) The users will get the following message if the user already consumes the permitted active sessions (3 sessions at a time).
- v) Click the '**Force Login**' option.



- vi) A warning message appears to inform that the currently active sessions will be killed for the user if they want to do Force Login.
- vii) The users get redirected to the Log in page of the BDB Platform. (In this scenario, the user needs to enter the credentials once again to login to their BDB Platform account.)

4. Designing a New View

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

- By selecting the 'VIEW DESIGN' option after selecting a data store, users get redirected to the **Design** workspace to design a new view.
 - Name of the selected Data Store appears on the left side of the screen.
 - A list of available Dimensions and Measures in the selected Data Store get listed below the Data Store name.

The screenshot shows the 'View Design' interface. On the left, under 'Sample Data Store', there is a list of dimensions and measures: Name, Gender, Source, ReferralOf, Designation, Team, PreviousOrganisati..., Skills, Month, and JoinningStatus. The 'Month' dimension is highlighted with a red box. In the center, there is a placeholder for a chart with the text '[Select Dimension or Measure to Visualize Data]'. To the right, a legend indicates the chart type is 'Mixed'. Below the legend, there is a message '[Change chart from right hand side panel]'. At the bottom, there are buttons for 'ALL DATA STORE' and a search icon.

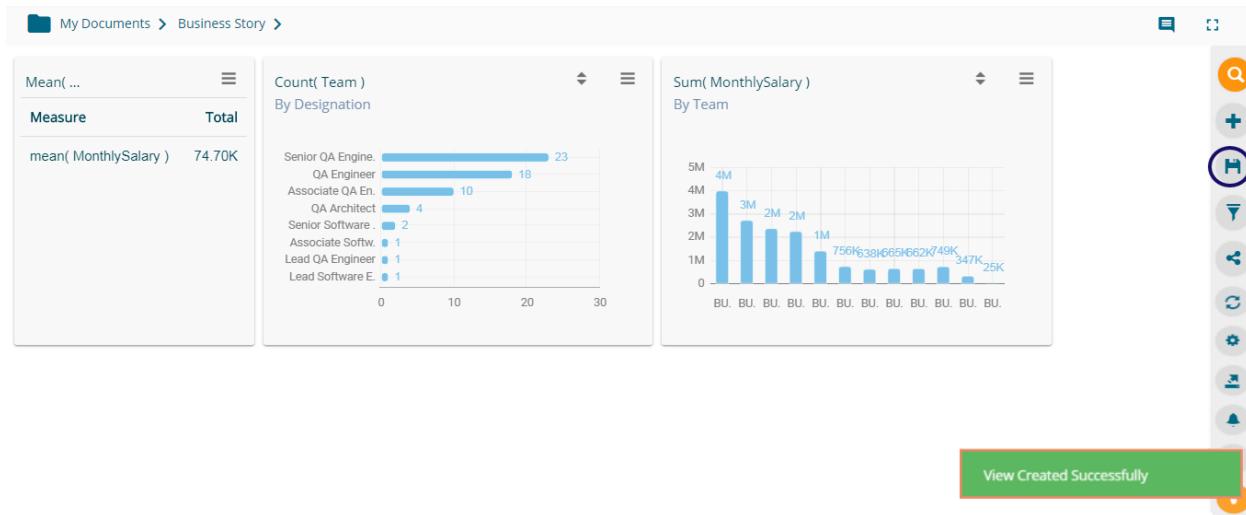
- Drag and drop the required dimensions/measures from the data store (As displayed in the below image).
- A View (graphical view) based on the selected dimensions/measures instantly appears on the canvas (The Mixed chart type gets selected by default).

iv) Click the 'Save' icon.



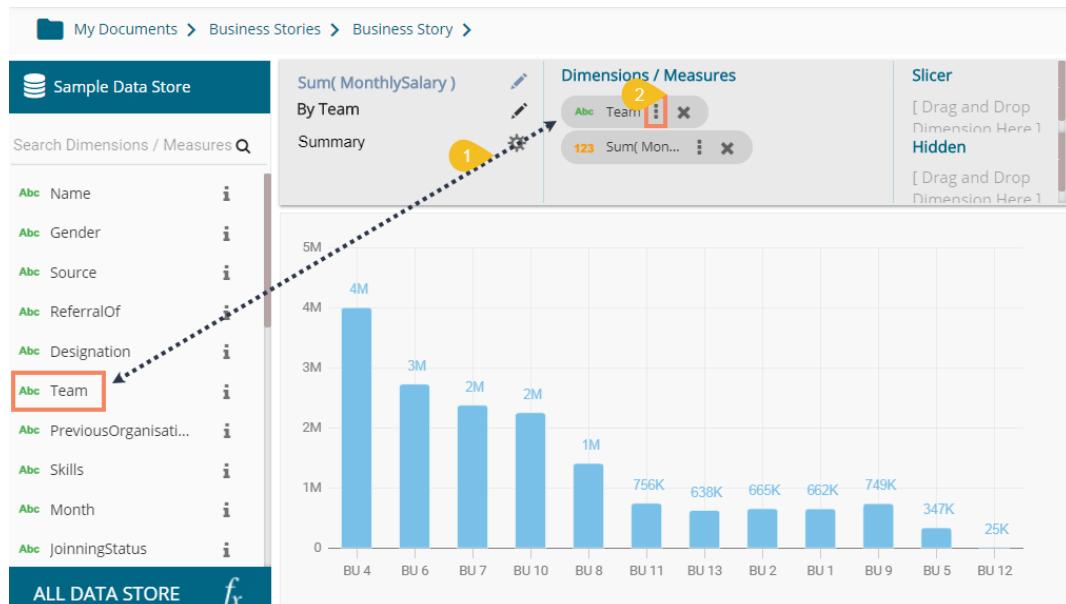
- The newly created view gets saved on the Storyboard.
- The users need to click the 'Save' option from the Storyboard.

- vii) A success message appears to convey that the recent story has been saved.

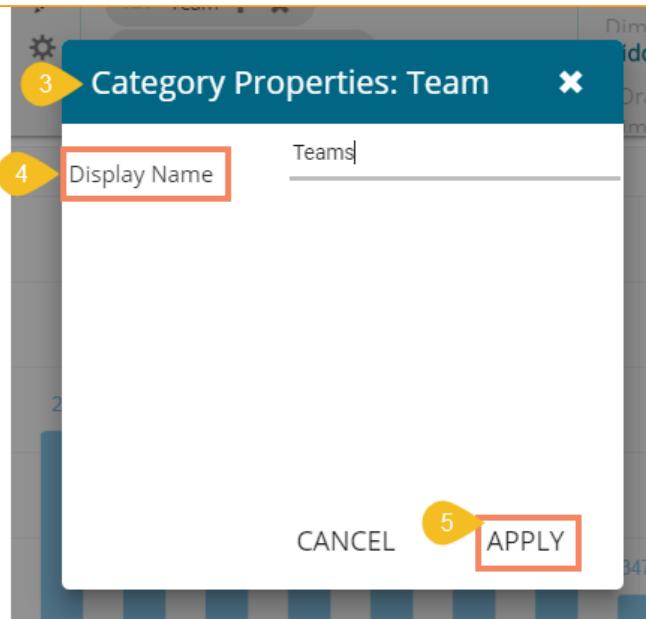


Note:

- Users can change a data store by using the '**All DATA STORE**' option provided on the Design page.
- Users can change the Display name of the selected Dimension by clicking on the Category Properties icon.
 - Select and drag a dimension to the specified space on the Design Workspace.
 - Click the '**Category Properties**' icon provided for the dragged Dimension.



- The Category Properties window opens.
- Change the Display name.
- Select '**APPLY**' option.



4.1. Dimension Profiling

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

- Select the '**Information**' icon from the list of displayed Dimensions on the '**Design New**' page.

| | Abc Name | i |
|------------------------|----------|----------------------|
| Abc Gender | i | |
| Abc Source | i | |
| Abc ReferralOf | i | |
| Abc Designation | i | |
| Abc Team | i | |
| Abc PreviousOrganis... | i | |
| Abc Skills | i | |
| Abc Month | i | |
| Abc JoinningStatus | i | |
| Abc CurrentStatus | i | |
| ALL DATA STORE | | f_x |

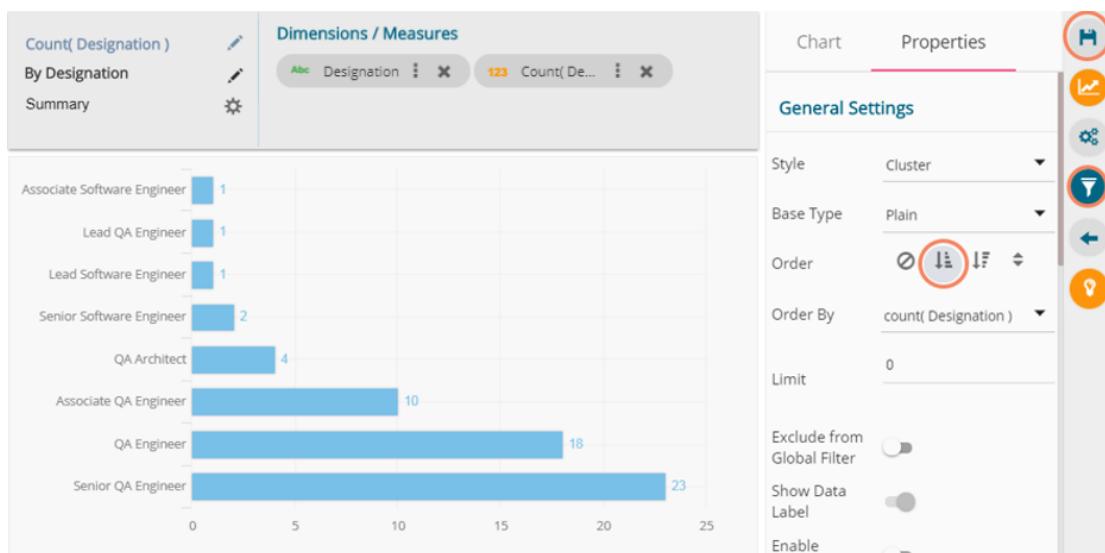
- A new window opens with the Data Profile information displaying the count of the selected dimension value.
- Click on the '**MOVE TO DESIGN**' icon.



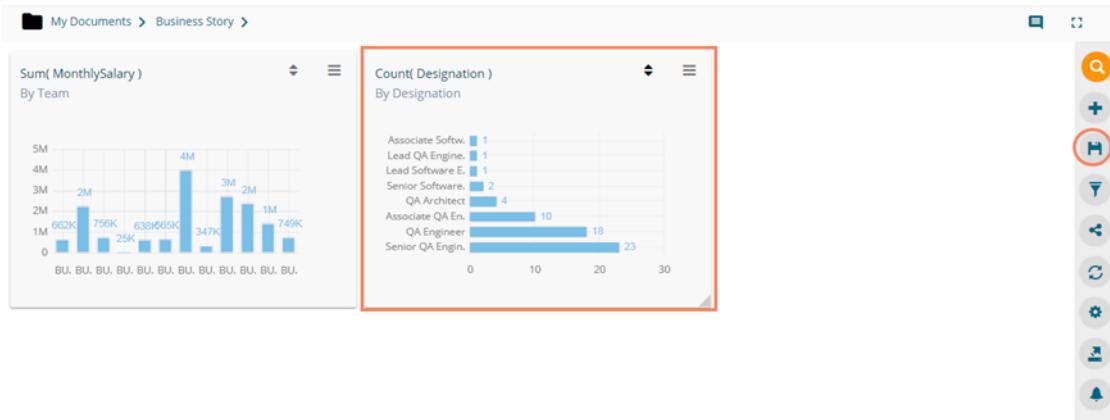
- iv) The data profile chart gets moved to the design new page.



- v) Users 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 a view filter and applying them in the ascending order).
- vi) Click the 'Save' option from the Design New page.



- vii) The selected view gets saved to the Storyboard a success message appears to convey the same.
- viii) Click the 'Save'  option provided on the Storyboard to save the recent updates in the story.



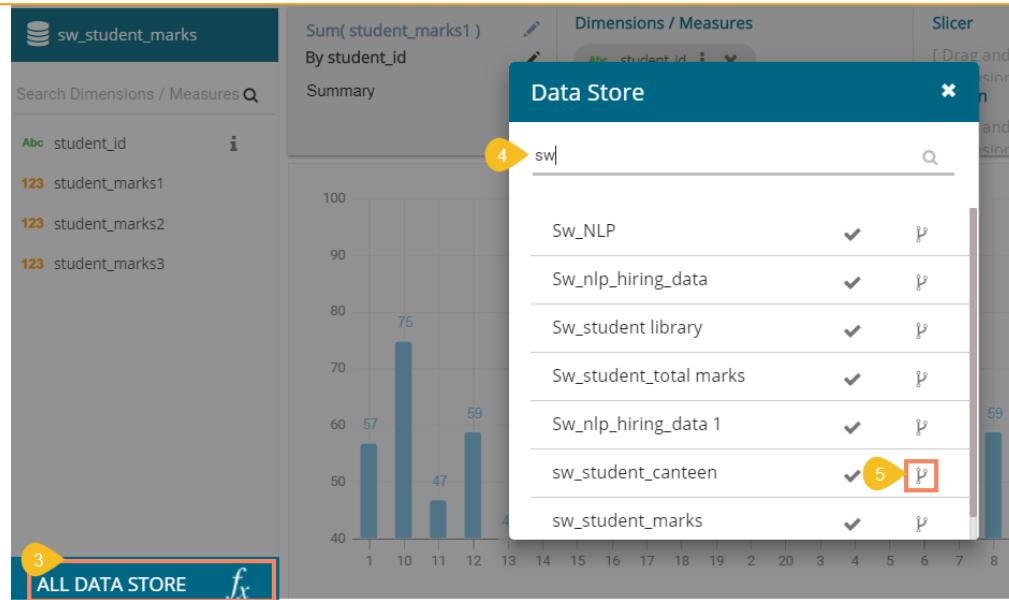
4.2. Datastore Merge at View Level

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

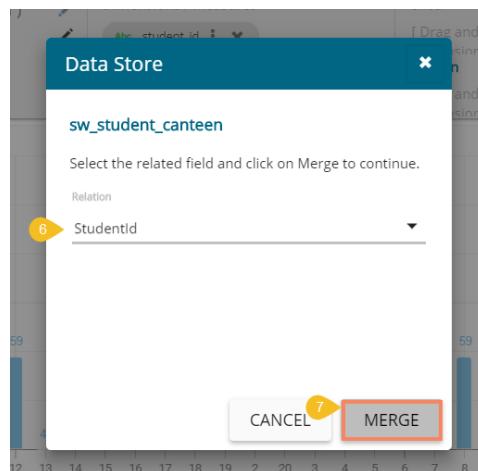
- i) Navigate to the Design New page
- ii) Drag and drop dimension(s) and measure(s) from the selected Data Store onto the canvas to create a new view.



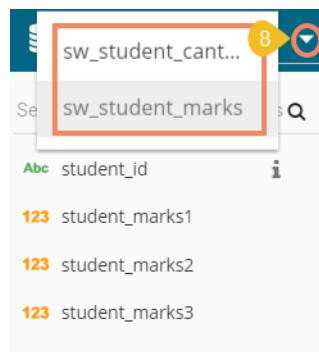
- iii) Click the 'ALL DATA STORE' option
- iv) Search for a datastore using the search bar
- v) Click the 'Merge' icon for the selected datastore



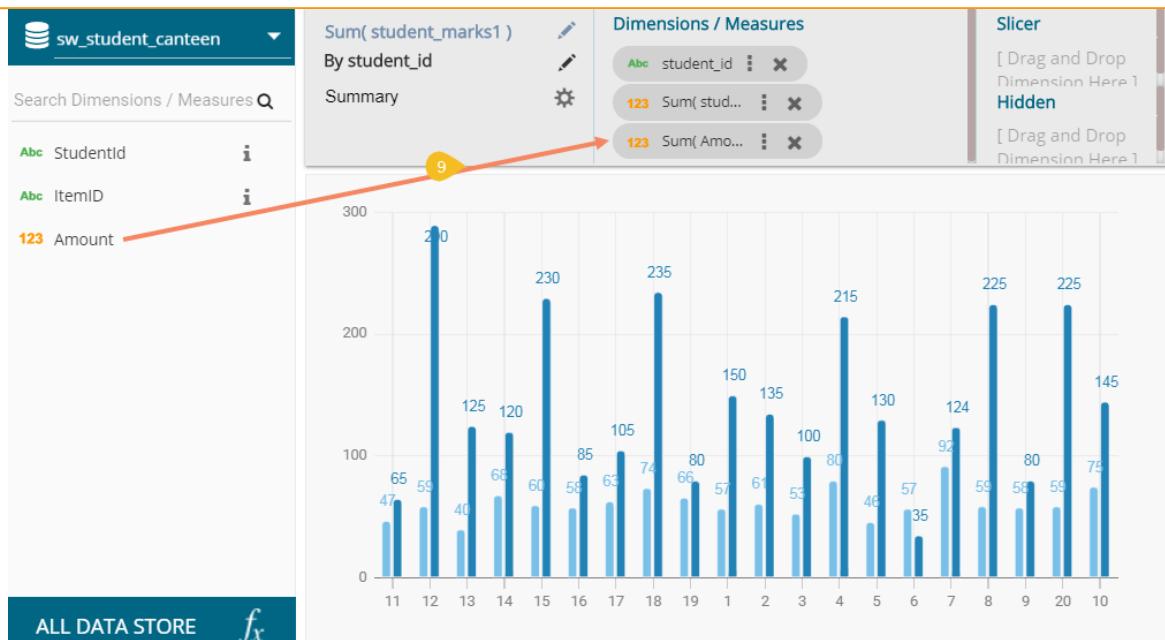
- vi) Users get redirected to select a related field from the drop-down menu
- vii) Click on the '**MERGE**' option



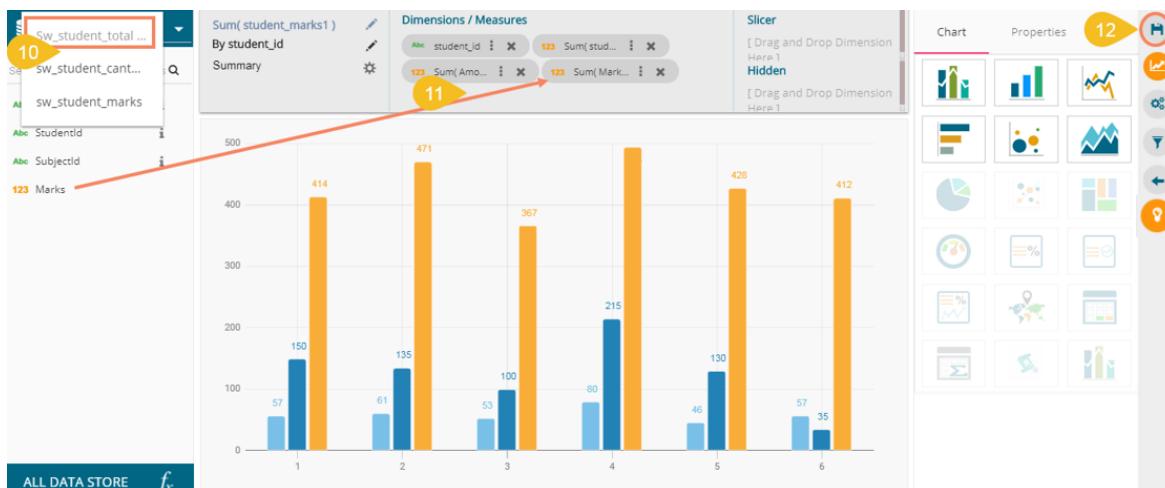
- viii) The selected datastore gets added to the datastore space, and a drop-down icon appears to choose any one datastore out of the given choices.



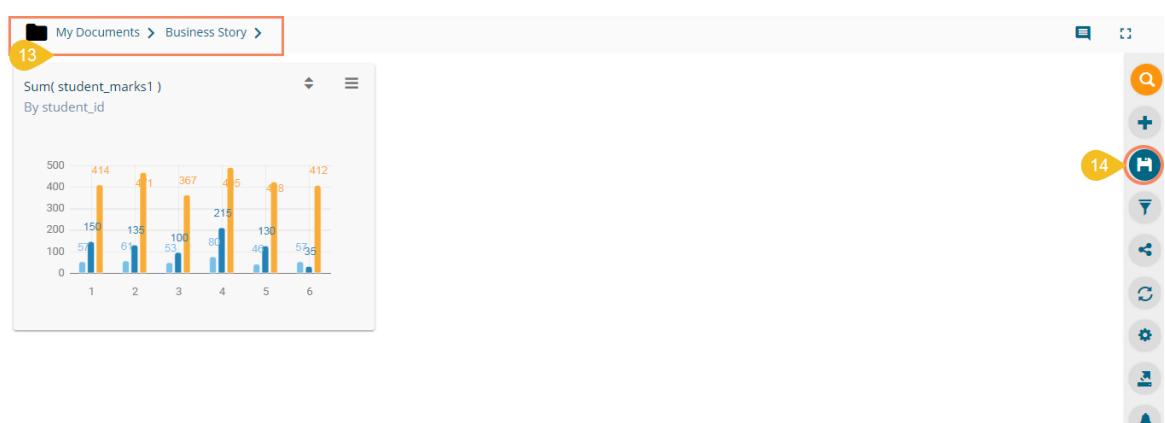
- ix) Drag and drop a measure from the newly added Data Store to create a comparative view.



- x) Users can add multiple datastores by using the same set of steps.
- xi) Drag the required measures to add the corresponding fields in the view.
- xii) Click the '**Save**' icon.

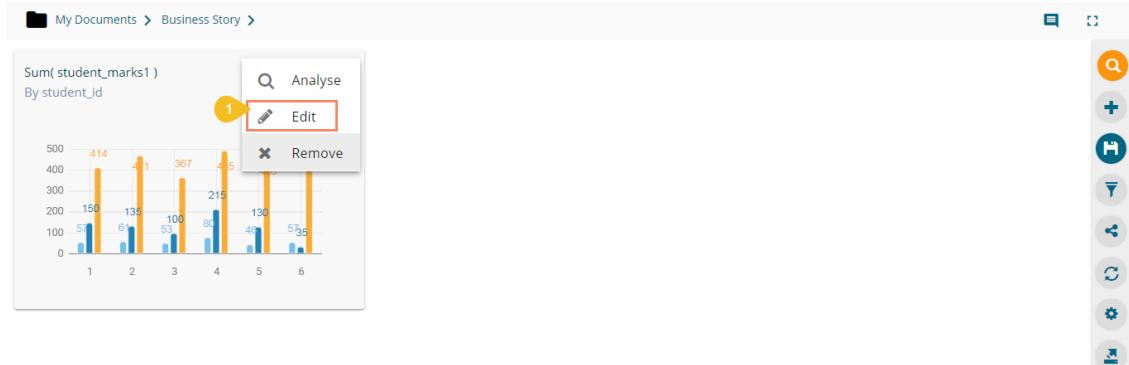


- xiii) The view gets saved on the storyboard.
- xiv) Click the '**Save**' icon from the storyboard to save the entire story.

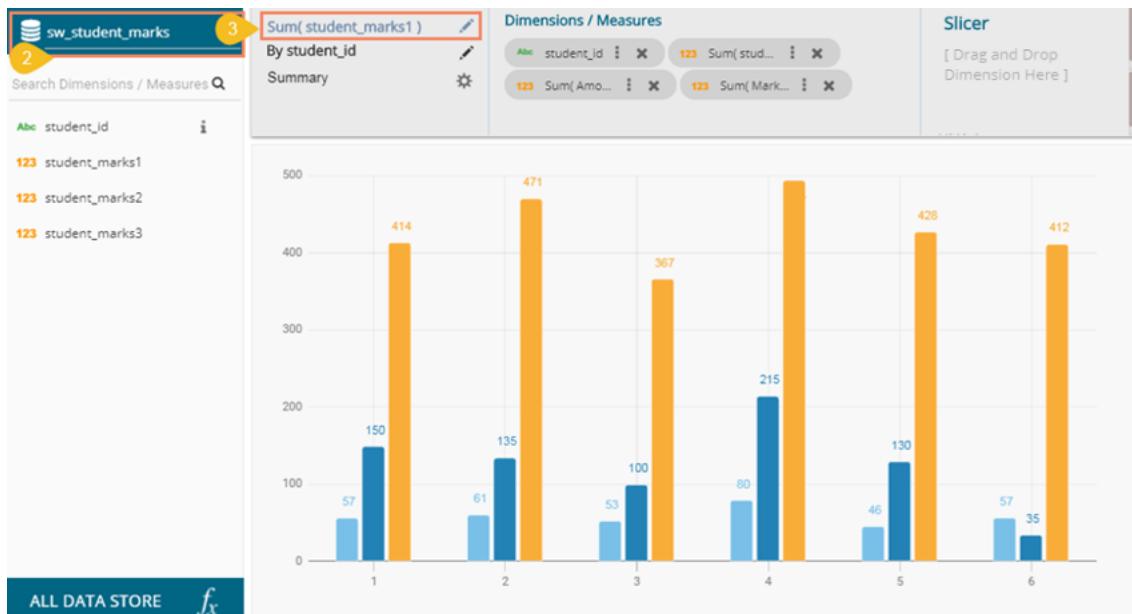


Note:

- c. All the merged data stores can be accessed for the saved view by using the 'Edit' option from the storyboard.
- 1) Users can modify the view by selecting the 'Edit' option from the storyboard.



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



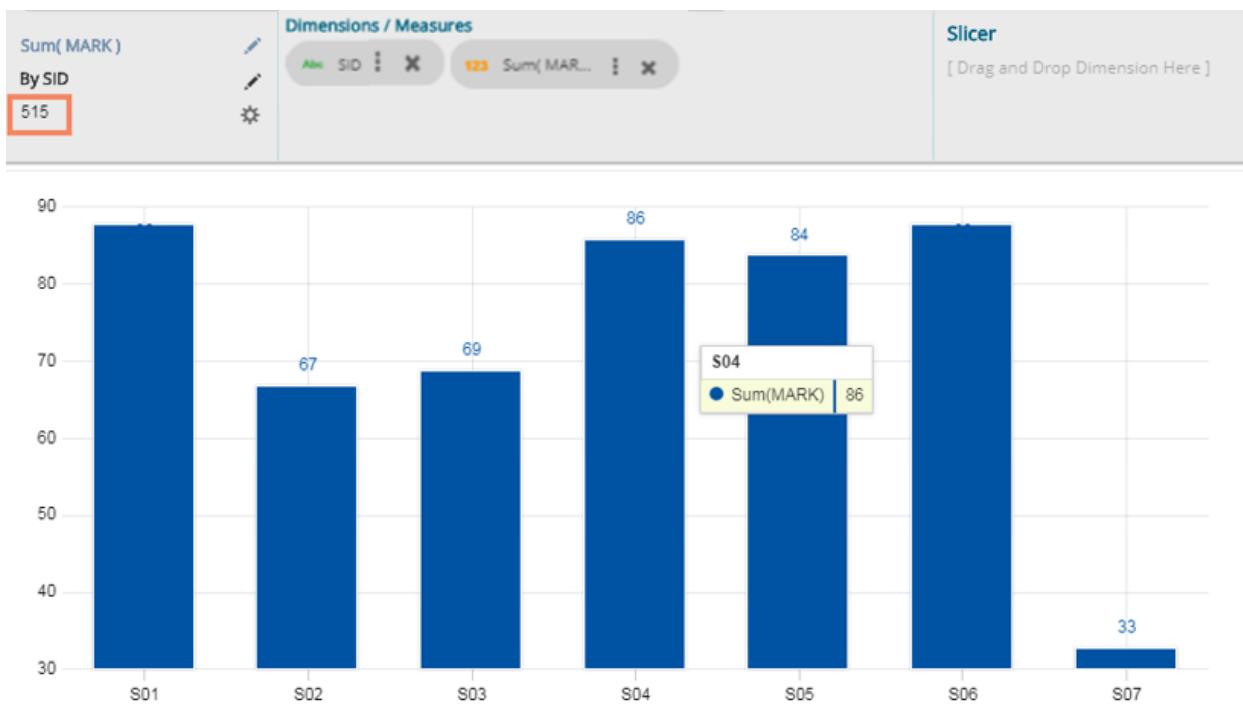
- d. The Merged Data Stores do not get saved in the 'All Data Store' menu, so to add the subsequent new view based on merged data stores into the same business story the users need to merge the data stores yet again.

4.3. Measure Summary

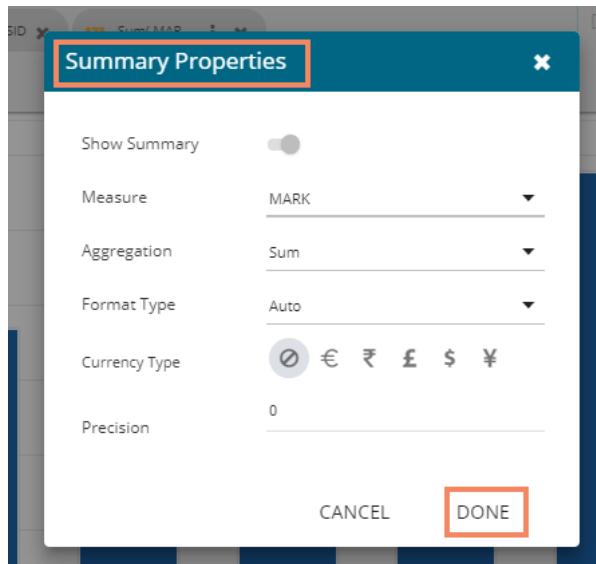
Users can access summary properties by clicking on the 'Summary' option on the 'Design New' page.

- i) Navigate to the 'DESIGN' tab to create a new view.

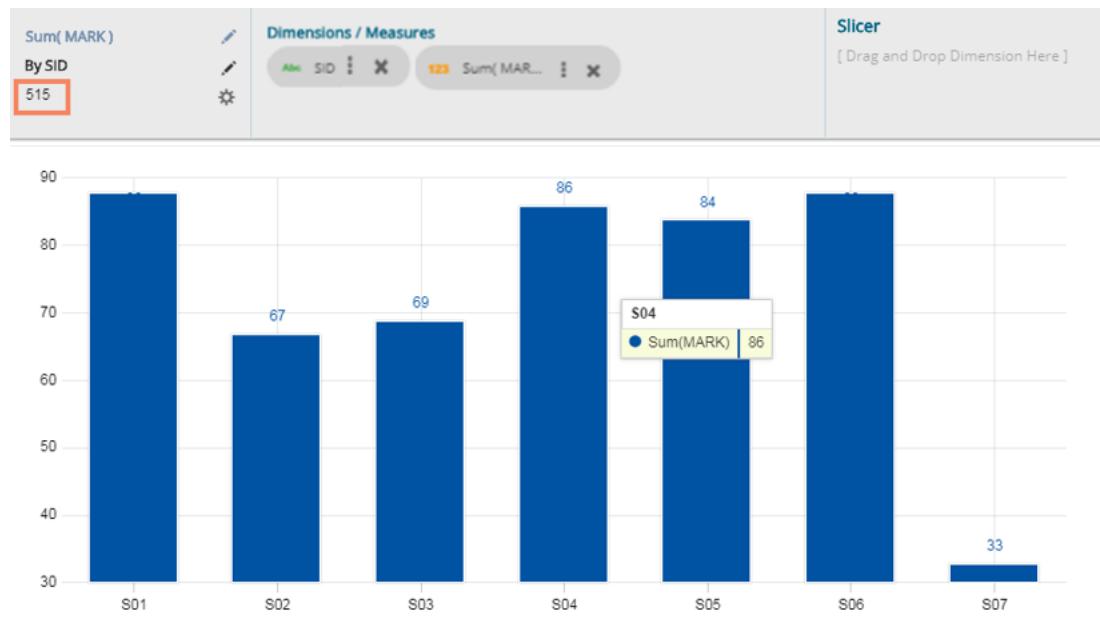
- ii) Drag and drop the required dimensions and measures.
- iii) Click the 'Settings'  option to configure Summary.



- 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 up to what the precision value can be displayed
- vi) Click the 'DONE' option.



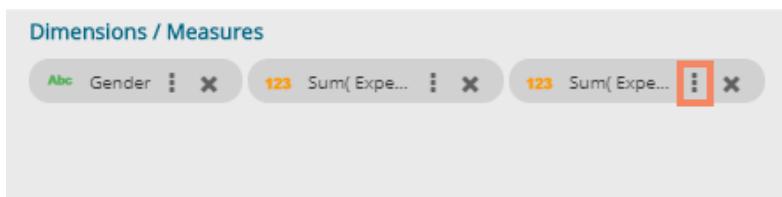
- vii) The measure summary value gets displayed on the view page by enabling the '**Show Summary**' option.



4.4. Series Properties

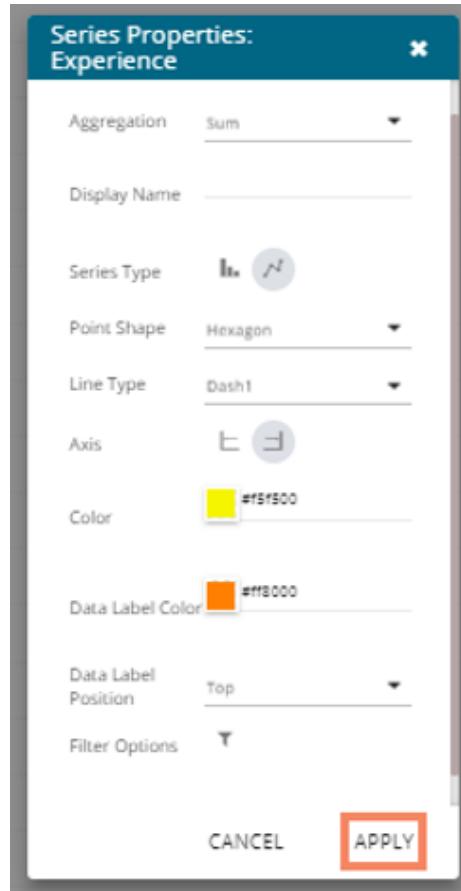
The users can configure and modify various measure related properties through the Series Properties window.

- Navigate to the Design New page for a view that has at least one selected measure value.
- Click the '**Series Properties**' option provided next to the dragged measure.

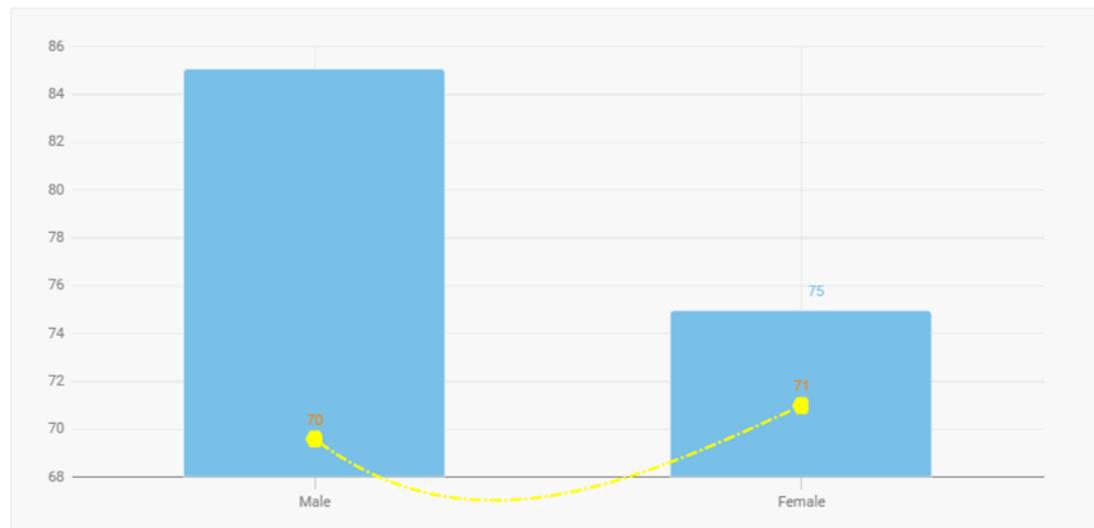


- Users can set the following properties from a pop-up window for a mixed chart with two measures dragged on the workspace:
 - Aggregation: Select an aggregation option from the drop-down menu (the given choices are: Sum, Min, Max, Variance, Mean, Standard Deviation, Cumulative Sum)
 - Display Name: Enter the title for the measure to be displayed in the data label
 - Series Type: Choose a series type format for the selected measure
 - Point Shape: Select a point shape from the drop-down menu (the given choices are: Cross, Cube, Hexagon, Point, Quad, Star, Triangle)
 - Line Type: Select a line type from the drop-down menu (the given choices are: Straight, Dot, Dash, Dash1)
 - Axis: Select an axis out of the given choices (users need to enable the '**Secondary Value Axis**' to get the '**Axis**' option in the Series Properties window)
 - Color: Select the color of the chart presentation from the given menu
 - 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.

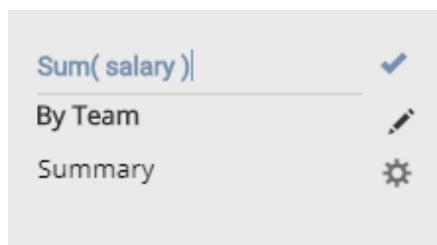


- v) The selected measure properties get applied to the view.



Note:

- b. The '**Series Properties**' may differ as per the selected chart components.
 - c. Users need to enable 'Secondary Value Axis' from the Properties tab to get the 'Axis' field in the Series Properties.
 - d. Users need to refresh the selected data store to avail the data in the Business Story Views.
 - e. View specific chart properties can be accessed from the 'Properties' tab.
 - f. 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.



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

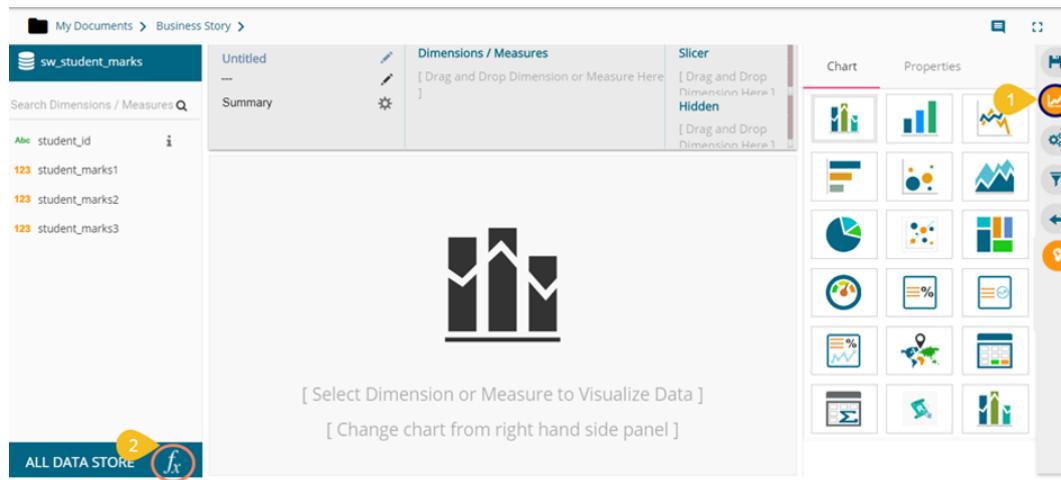
| Icon | Name | Description |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------------------------------------------------------------|
|  | 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 |

4.5. Formula Field Editor

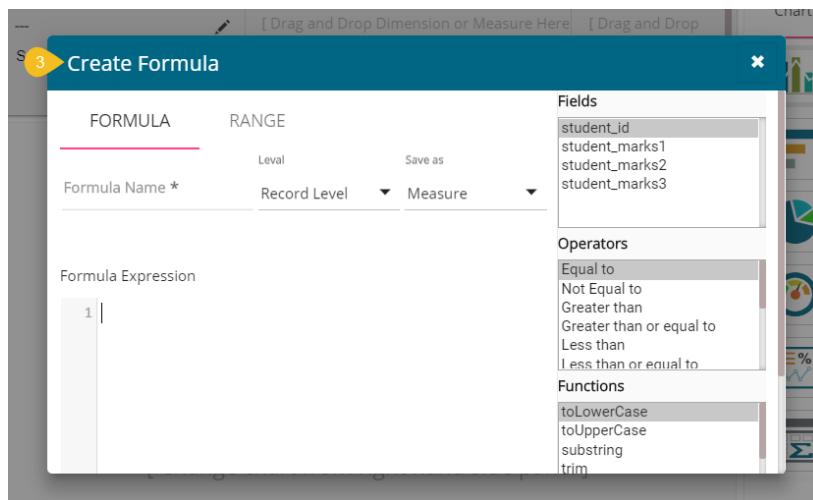
A formula field editor has been provided on the Design New page to create and add a calculated field in the selected datastore. The Formula Field Editor window offers two options '**Formula**' and '**Range**' for users. Users can access the icon for Formula Field from the '**DESIGN**' tab next to the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

4.5.1. 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**' .

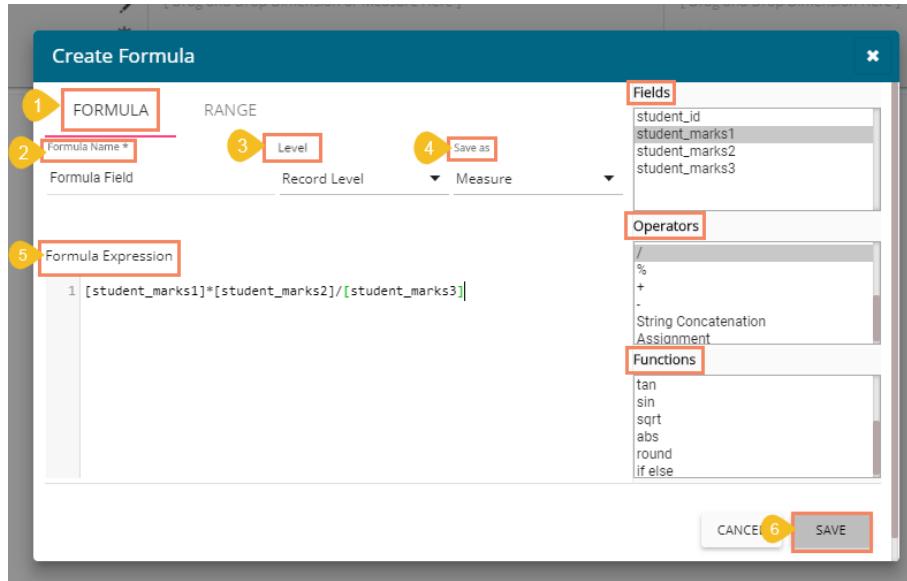


- iii) Users get redirected to the '**Create Formula**' window.



- iv) Users need to provide the following information to create a formula field:
- Navigate to the 'FORMULA' tab (opens by default)
 - Formula Name: Give a title to the formula field
 - Type: Select an option from the drop-down menu to decide on the type of the Formula Field
 - Dimension
 - Measure
 - Fields: All fields from the selected data store list in this window. Users can select the required fields by tapping on them.
 - Operators: All the available operations list in this window. Users can select the required operations to add to complete the formula.
 - 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 `student_marks1`, `student_marks2`, and `student_marks3` fields from the data store. The `*` (multiplication) and `/` (division) operations are used to create the current Formula

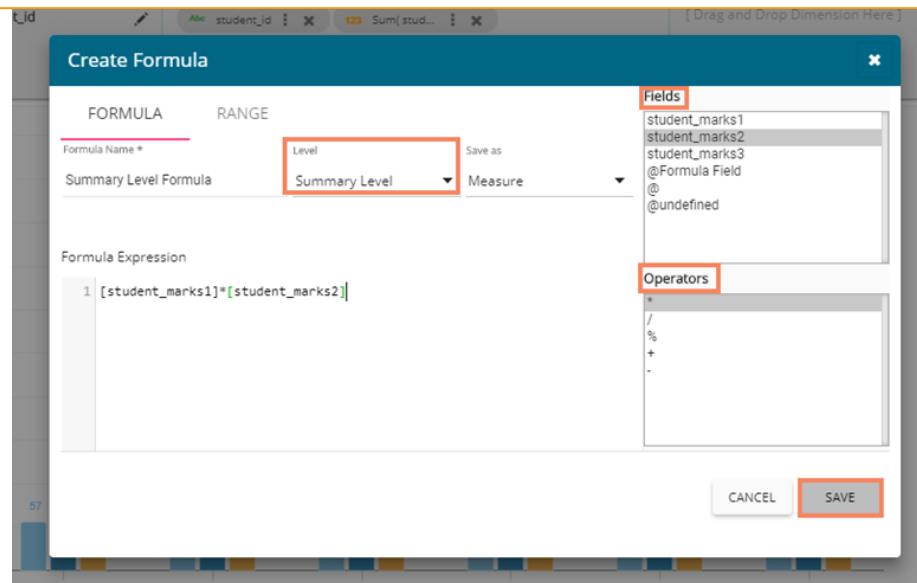
Expression.



- vi) The selected data store gets newly created formula field.

Note: Users 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 dimension and measure

The screenshot shows the 'sw_student_marks' data store interface. At the top, there's a search bar labeled 'Search Dimensions / Measures' with a magnifying glass icon. Below it is a list of items:

- Abc** student_id
- 123** student_marks1
- 123** student_marks2
- 123** student_marks3
- (X)** Formula Field
- (X)**
- (X)**
- (X)** Summary Level Form...

The last item, 'Summary Level Form...', is highlighted with a red box.

4.5.2. Creating a Range

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

- Users can navigate to the **Design** tab.
- Click the '**Formula Field Editor**' icon.

The screenshot shows the BDB AI Data Visualization interface. On the left, there's a sidebar titled 'Student_Total_marks' with fields for SubjectName, StudentId, SubjectId, and Marks. The main area has tabs for 'Untitled', 'Summary', and 'Dimensions / Measures'. A 'Slicer' section allows dragging dimensions or measures. To the right is a 'Chart' panel with various chart types like Bar Chart, Line Chart, and Map. A 'Properties' panel is also visible.

- 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

The screenshot shows the 'Create Formula' dialog box. It has tabs for 'FORMULA' (selected) and 'RANGE' (highlighted). There are dropdowns for 'Grade' and 'Marks'. The 'RANGE' tab contains fields for 'Name*', 'From', and 'To'. A table lists ranges: Row 1 (Name: A, From: 91, To: 100), Row 2 (Name: B, From: 75, To: 90). Buttons include 'ADD ROW' (highlighted), 'CANCEL', and 'SAVE' (highlighted).

| Name | From | To |
|------|------|-----|
| A | 91 | 100 |
| B | 75 | 90 |

- vii) The selected data store gets a new calculated field.

Student_Total_marks

Search Dimensions / Measures

Abc SubjectName

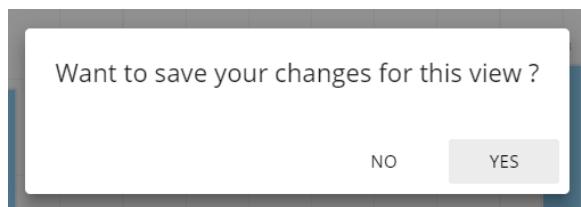
Abc StudentId

Abc SubjectId

Marks

10 Grade

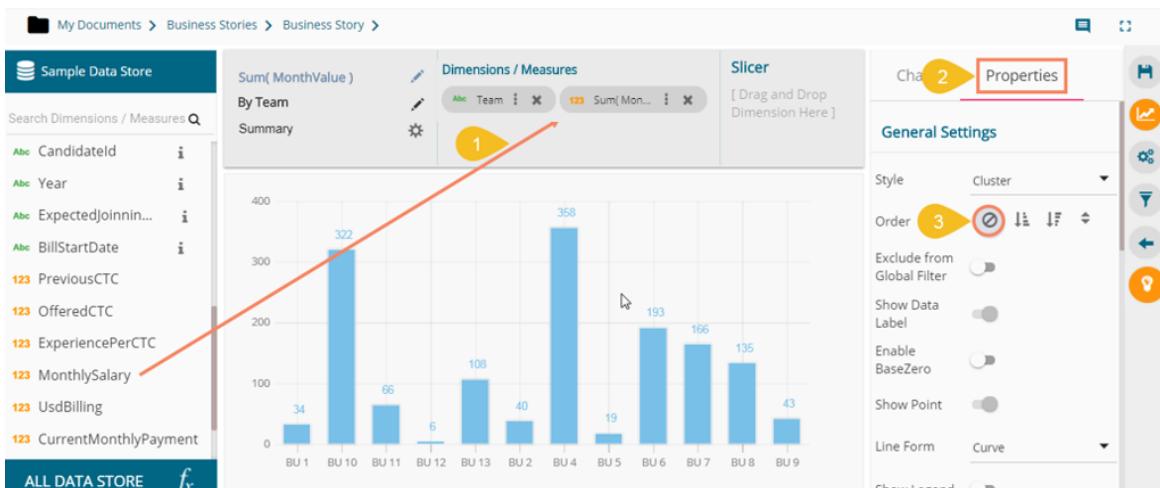
Note: If users move to storyboard without saving the designed view a pop-up window appears to confirm whether the changes for the View need to be saved to the story or not. Click 'YES' using the message window to save the view changes.



4.6. Order by and Limit

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

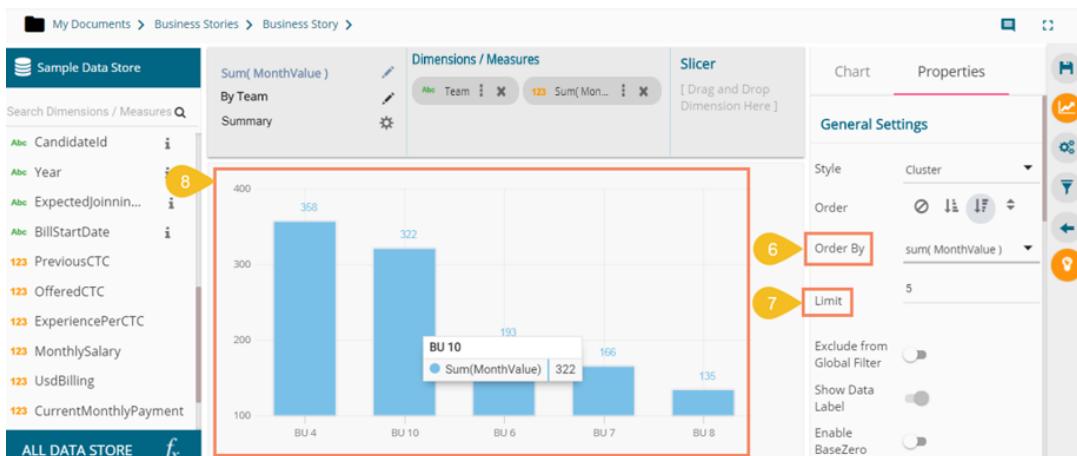
- i) Drag and Drop the desired dimensions and measures to create an instant view (By default the Mixed chart displays the dragged data)
- ii) Open the '**Properties**' tab.
- iii) By default, the chart displays '**none**' as the selected option for the '**Order**' field.



- iv) Select an order option by choosing an ascending or descending icon.
- v) The '**Order By**' and '**Limit**' options get displayed

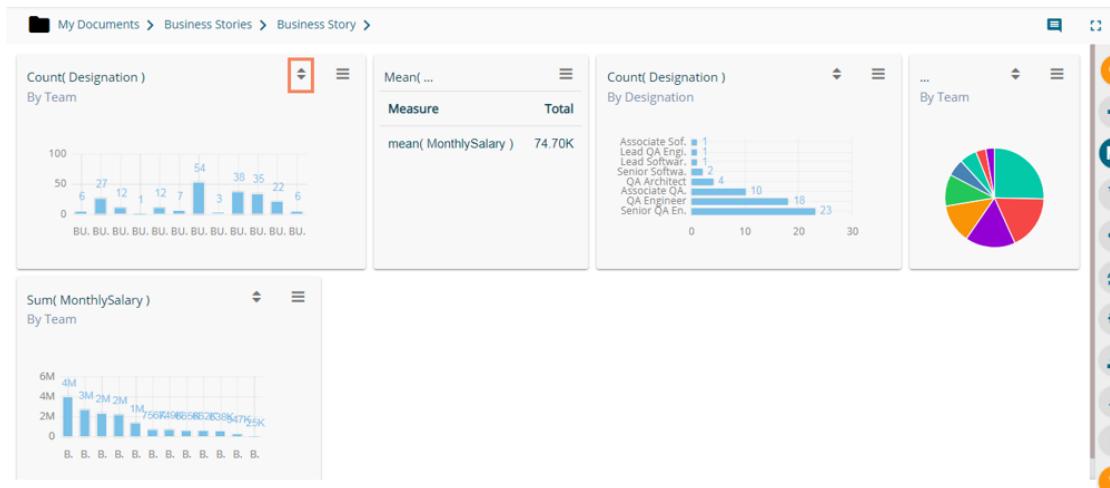


- vi) Select a dimension or measure value from the drop-down to display the data value in the selected order.
- vii) Insert a number to add a limit to the displayed values by using the 'Limit' option.
- viii) The chart displays data as per the set limit in the selected order.



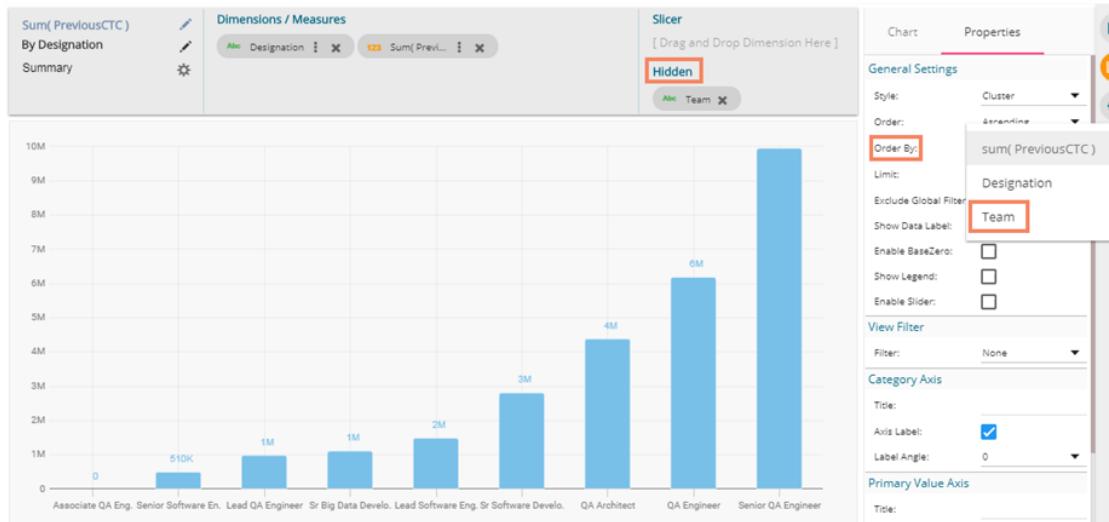
Note:

- This feature does not work for KPI tile, Semi Gauge, Map, TreeMap Chart, and Metric Summary.
- The view specific 'Sort By' option can be accessed from the storyboard.



4.6.1. Sort based on Non-existing Dimension

The Design workspace has got a category called '**Hidden**.' The dragged dimension as the '**Hidden**' category gets added to the '**Order By**' drop-down menu from where the users can apply it on the current view to represent data in the selected order.



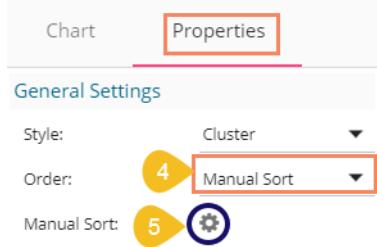
4.6.2. Manual Sort

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

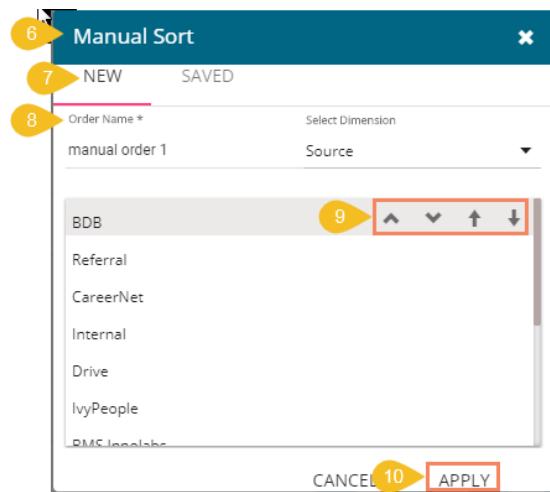
- Navigate to the Design page.
- Choose any combination of one Dimension and Measure.
- A chart gets displayed in some order (by default 'None' order option gets selected).



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



- vi) A new window opens.
- vii) Select the 'New' tab.
- viii) Enter the order name.
- ix) 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.
- x) Click the 'APPLY' option after arranging the fields in the desired order.

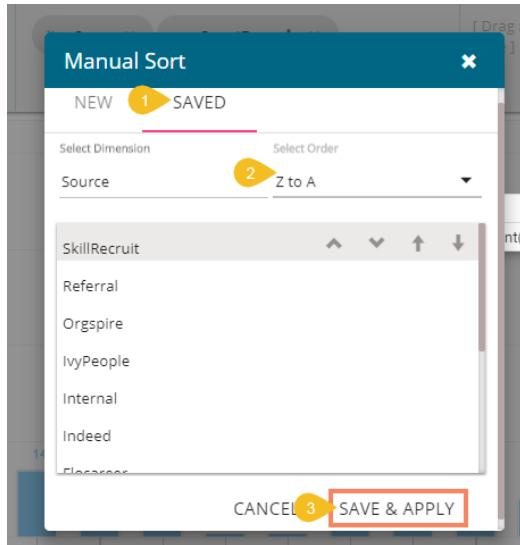


- xi) The View fields get displayed in the selected order.



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 selected saved order applies to the view.

4.7. Adding a Slicer

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

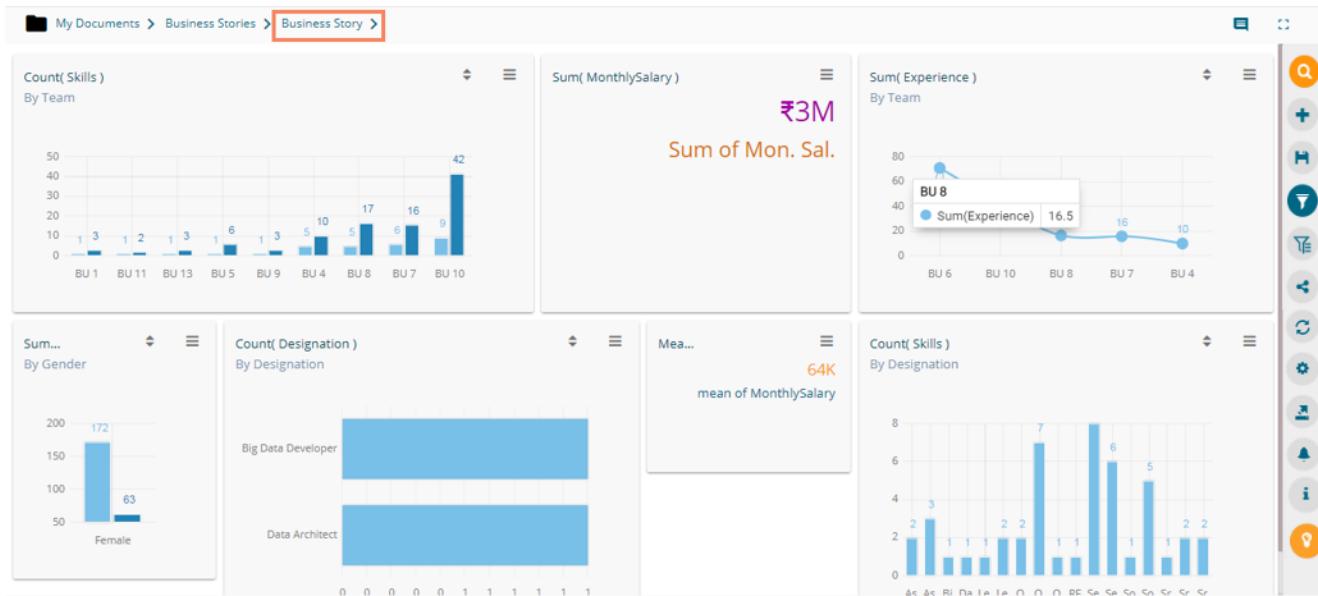
- i) Drag and drop one dimension and one measure to the '**Dimensions/ Measures**' column using the DESIGN tab.
 - ii) Drag and drop another dimension as '**Slicer**'.
 - iii) The slices get displayed in the created view based on the second-dimension value via a column chart (by default)
- E.g., The following image shows designation wise salary for teams BU 4, BU 6, BU 7, and BU 10 through Mixed Chart.



Note: 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.

5. Storyboard

Users can add multiple Views on a single screen signified as a Storyboard. Users can add any number of Views based on various data stores on a single storyboard. Users can create a new View, apply Filter to a View, and save an altered View using the storyboard.



Describing the Storyboard icons:

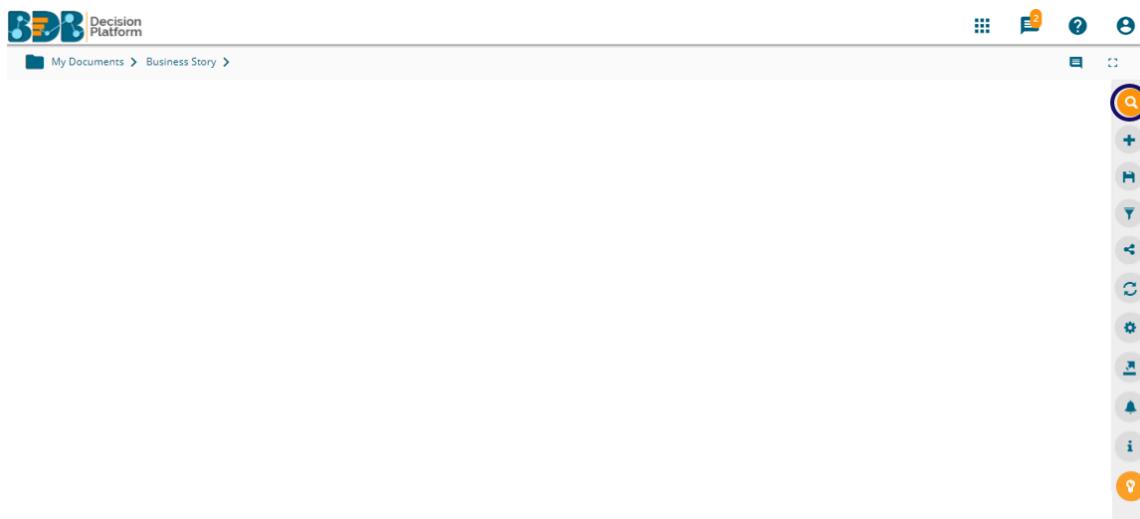
| Icon | Name | Description |
|------|------------------------|----------------------------------------------------------------------------------|
| | Data Search Bar | Searches the queried data from the selected data store |
| | Create New View | Redirects users to the Design workspace to design a new 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 users to select and add the available shared view(s) to the storyboard |
| | Refresh Views | Refreshes the story with all the existing views |
| | Change Theme | Displays various themes to be applied to the story |
| | Export | Exports the story as CSV, XLSX, PDF, PPT format |
| | Alert Center | Redirects to schedule an alert for the story |
| | Data Store Information | Opens basic 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 |
| or | Full Screen/Reduce Size | Displays the Storyboard in the full-screen or reduces the storyboard screen |

5.1. BDB Search

The AI-based **Search** 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 instantly build an insightful data story.

- i) Navigate to the Storyboard.
- ii) Click the '**BDB Search**' icon.



- iii) The Data Search page opens (with Guided Tour dialog window).

The screenshot shows the Data Search interface. At the top, there's a navigation bar with 'My Documents > Business Story'. Below it is a search bar with a magnifying glass icon. To the right of the search bar is a 'Sample Data Store' button and other icons. A guided tour dialog box is overlaid on the page, containing the text: 'Welcome, Will! The guided tour of Data Search page points out the key options provided for the conversational analytics.' It includes 'Next' and 'End tour' buttons. On the left, there's a 'Search suggestions' section with several query suggestions. On the right, there's a 'Data store information' section listing various data fields like Name, Gender, Source, etc., each associated with a code snippet (e.g., '123 PreviousCTC').

- iv) The users can take a tour by using the '**Next**' option or close the tour by clicking on the '**End tour**' option.
- v) The users get autosuggestions when they start typing a query in the Data Search bar.

The screenshot shows the BDB AI interface with a search bar containing 'mean'. Below the search bar is a list of search results:

- Mean Of MonthlySalary By Team Where Skill Is Selenium,management
- Mean Of MonthlySalary By Team Where Skills Is Selenium, Management
- Mean
- sum Offeredctc
- Mean of Monthlysalary by Team where skill is Selenium
- Mean of Monthlysalary by Team where skill is Selenium,management

To the right of the search results is a sidebar titled 'Data store information' listing various data fields:

| Field | Description |
|-----------------------|-------------|
| Name | |
| Gender | |
| Source | |
| ReferralOf | |
| Designation | |
| Team | |
| PreviousOrganisation | |
| Skills | |
| Month | |
| JoinningStatus | |
| PreviousCTC | |
| OfferedCTC | |
| ExperiencePerCTC | |
| MonthlySalary | |
| UsdBilling | |
| CurrentMonthlyPayment | |
| MonthValue | |
| Experience | |

- vi) After typing a specific query click the '**Search**'  icon.
- vii) The search result instantly reflects beneath the search bar.
- viii) Click the '**Add to story**'  icon.

The screenshot shows the BDB AI interface with a search bar containing 'mean of monthlysalary'. A specific view is selected, highlighted with a red border:

Mean Of MonthlySalary

Measure

mean(MonthlySalary)

Total: 74.70K

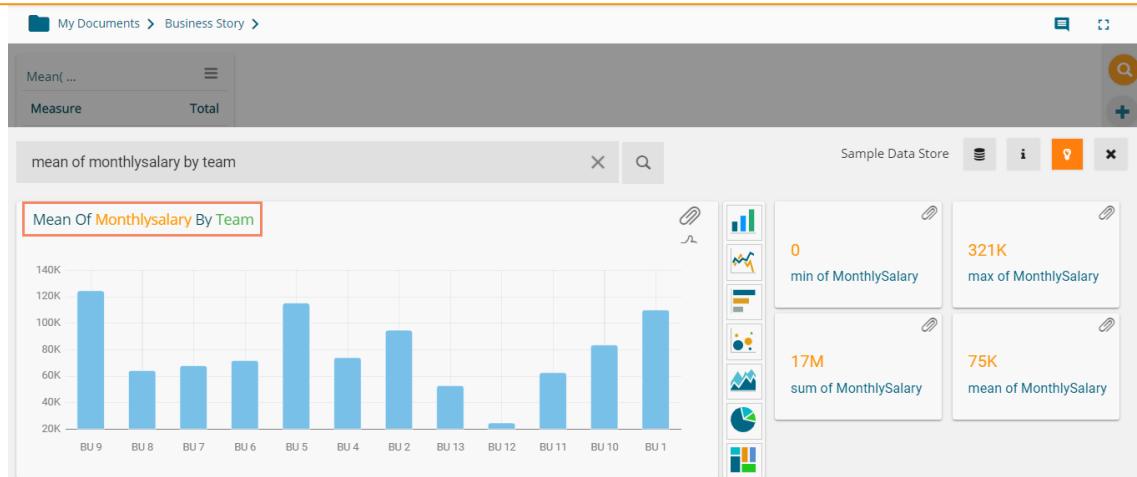
Below the selected view are four metrics:

- 0 min of MonthlySalary
- 321K max of MonthlySalary
- 17M sum of MonthlySalary
- 75K mean of MonthlySalary

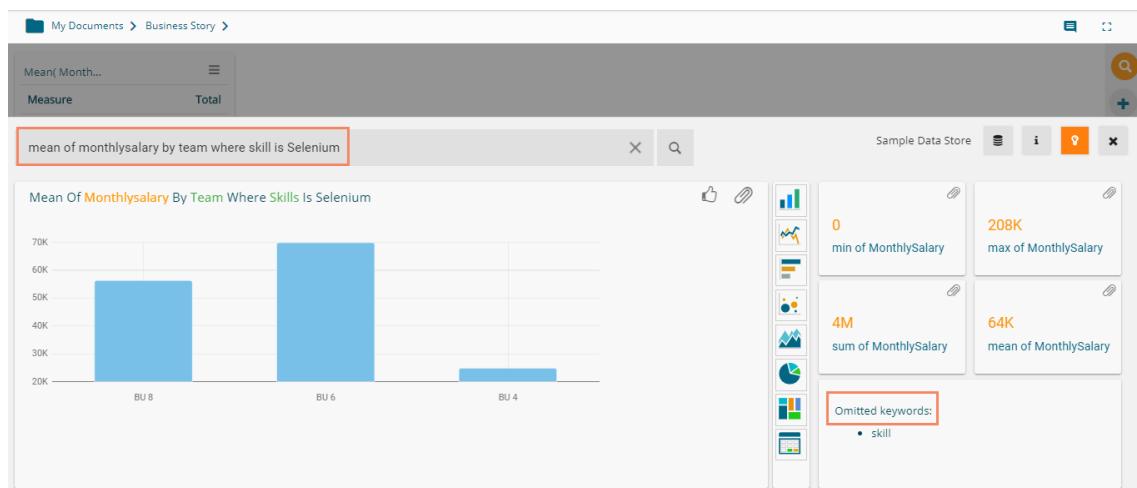
- ix) The selected view gets added to the storyboard.

The screenshot shows the BDB AI interface with the selected view 'Mean(...)' added to the storyboard. The view is highlighted with a red border.

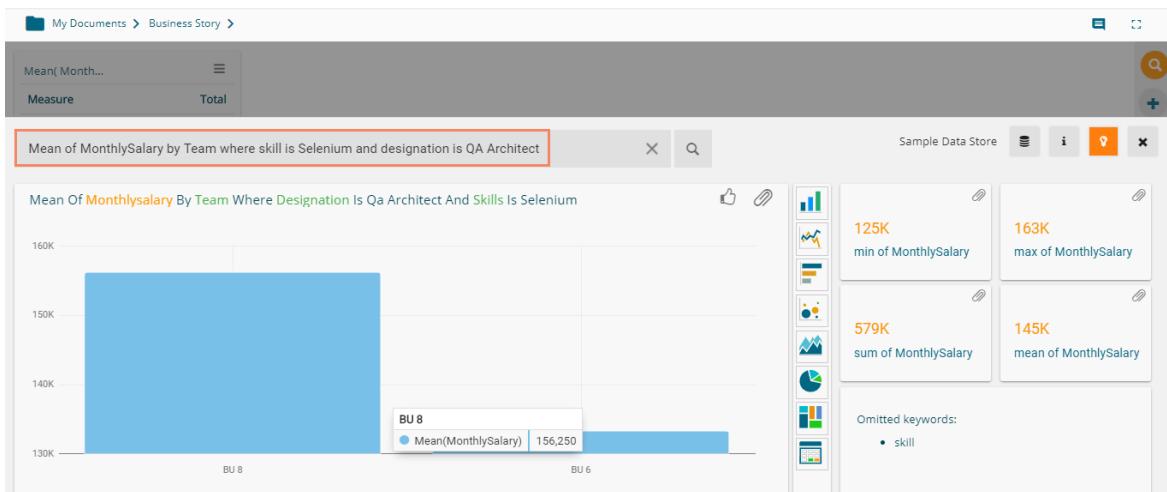
- x) Users can drill deeper into the selected data store by using the BDB Search bar with proper data queries. Refer to the following images to see how instantly the searched data gets displayed with deeper queries:
- Query 1: 'Mean of Monthly Salary by Team'- Displays team wise monthly salary



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



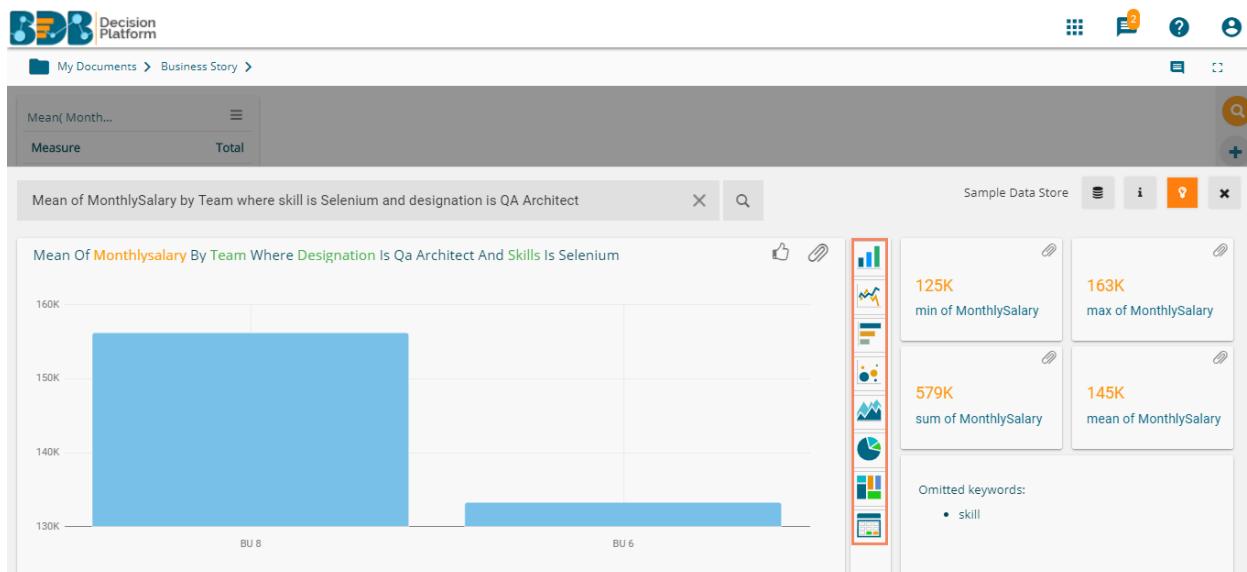
Query 3: 'Mean of Monthly Salary by Team where skill is Selenium and Designation is QA Architect' – Displays team wise records of QA Architects' monthly salary who know Selenium



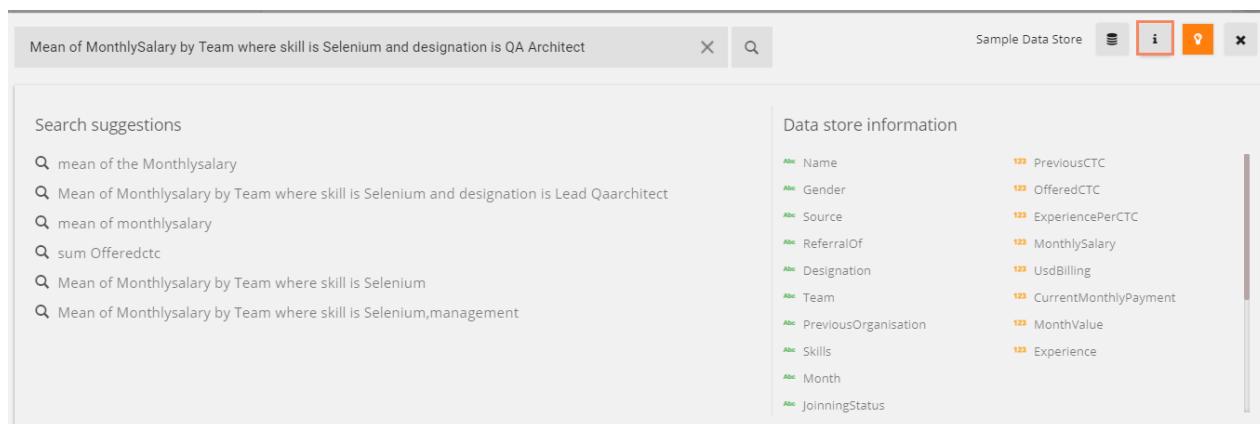
| Icons | Name | Function |
|-------|-----------------------|----------------------------------------------------------------------------------|
| | Search | Searches the inserted query from the selected data store |
| | Select Data Store | Prompts users to select Sample Data Store or choose from the 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 Dialogue | Closes the Data Search window |

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.

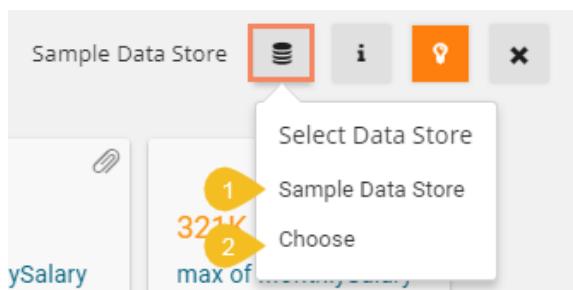


- b. Click the 'Like' icon to save the searched query into the database.
- c. Click the 'Information' icon to display all the saved search suggestions from the database along with a list of dimensions and Measures from the selected Data Store.



- d. Other views close to the searched query also get displayed (on the right). Users 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) to continue with the selected Data Store (in the given case, it is 'Sample Data Store' and 2) Choose from the list of available Data Stores.

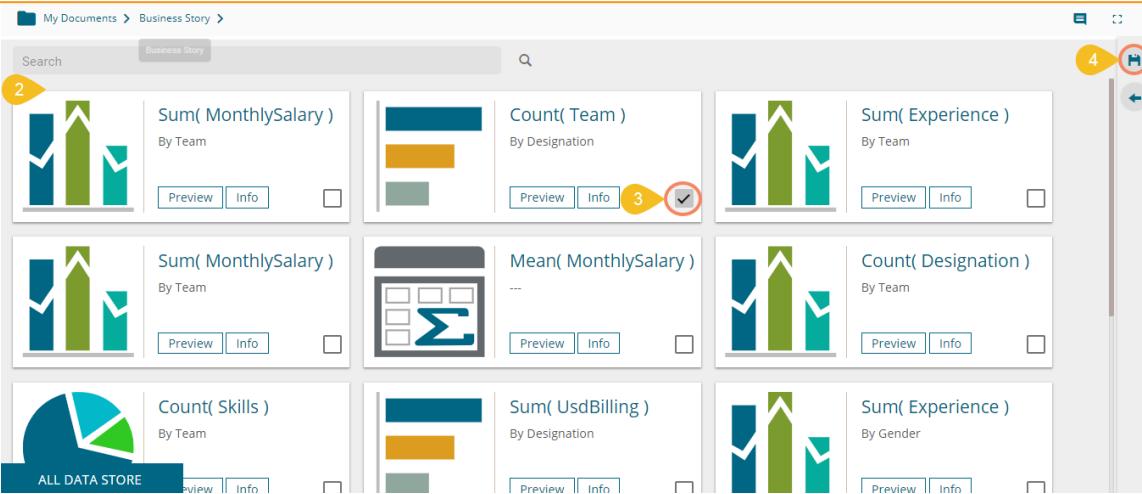


5.2. Shared Views

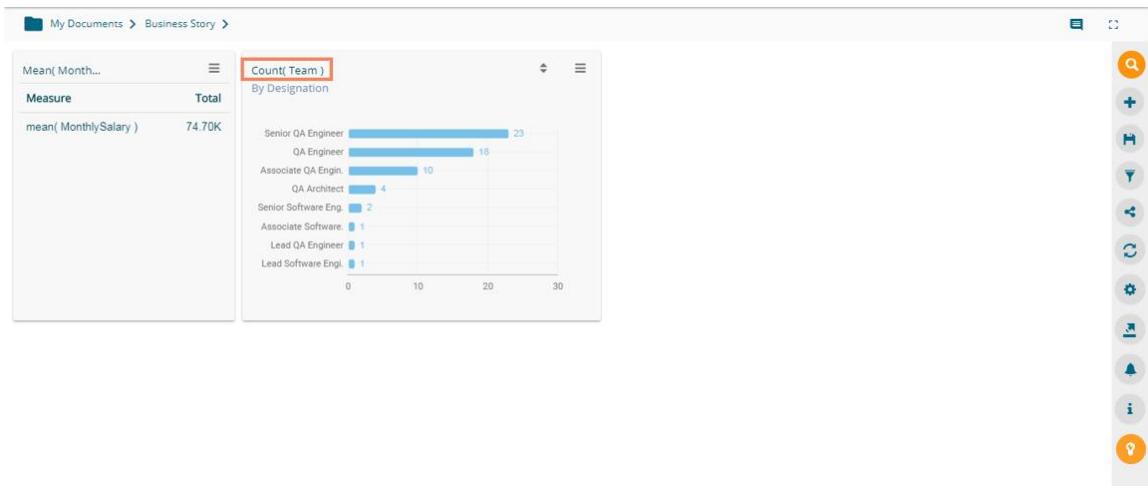
Users can use already existing views based on a data store using the '**Shared Views**' icon.

- Click the '**Shared Views**' icon on the storyboard.

- All the available shared views appear.
- Select a shared view by a checkmark in the box.
- Click the '**Save**' icon.



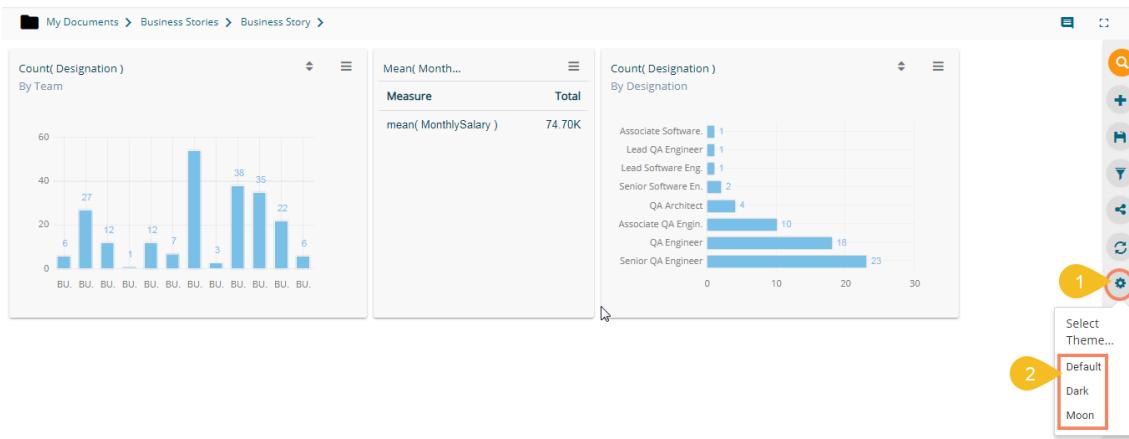
- v) The selected shared view gets added to the storyboard.



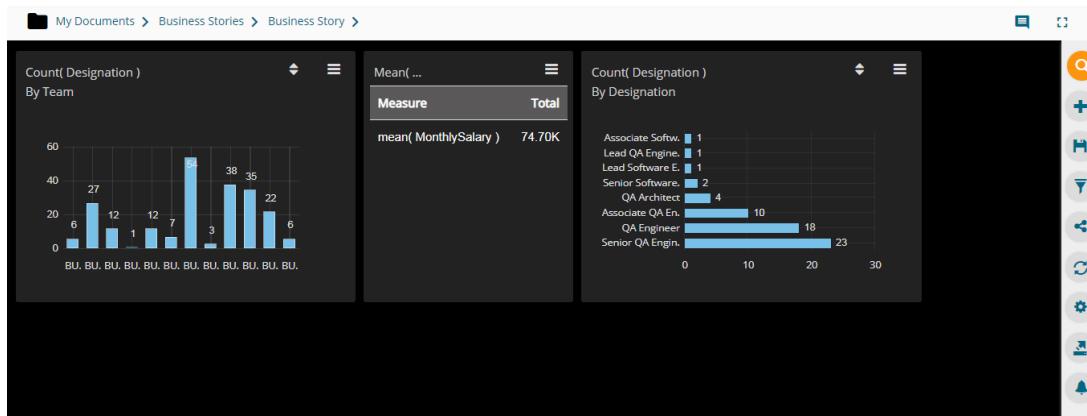
5.3. Change Theme

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

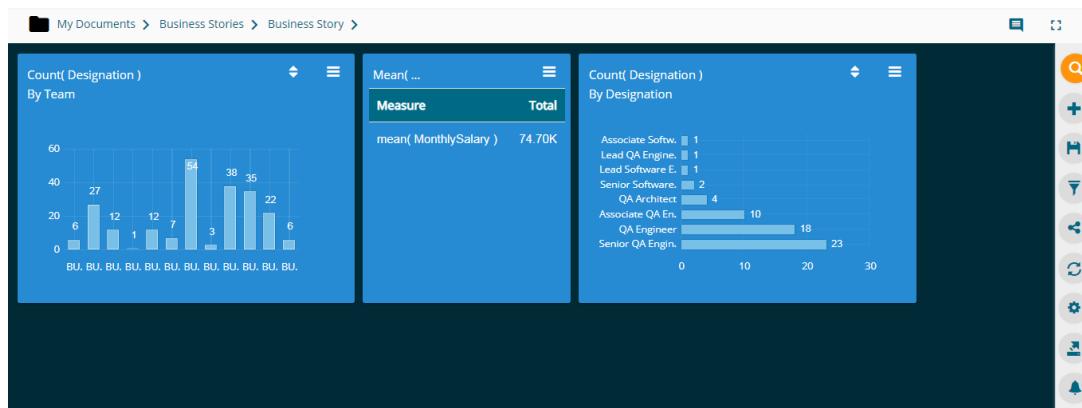
- i) Click the '**Change Theme**' icon from the storyboard.
- ii) A menu opens with the available themes for the story (The below image displays a Story in the Default theme).



- 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.



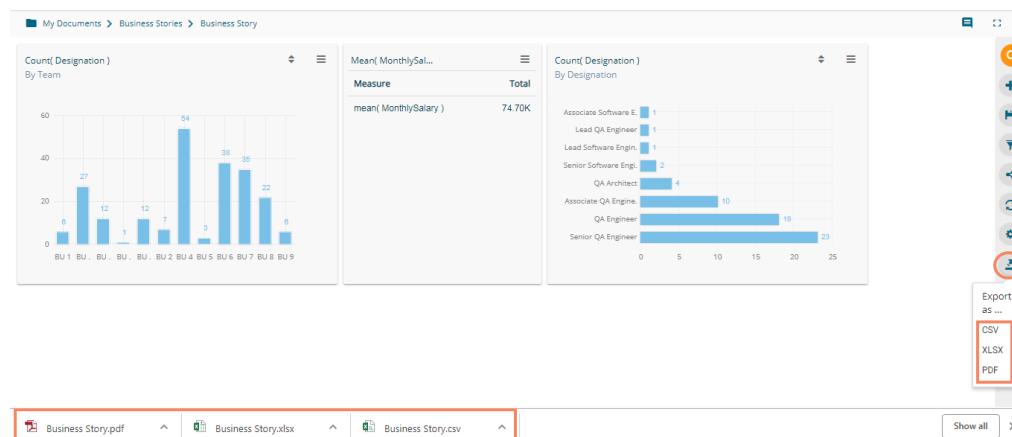
The following image displays the story in the ‘Moon’ theme:



5.4. Export

Users can export business story in the various format via the ‘Export’ option.

- Click the ‘Export’ option from the storyboard.
- Select an export option from the context menu.



- The story gets downloaded in the selected export option.

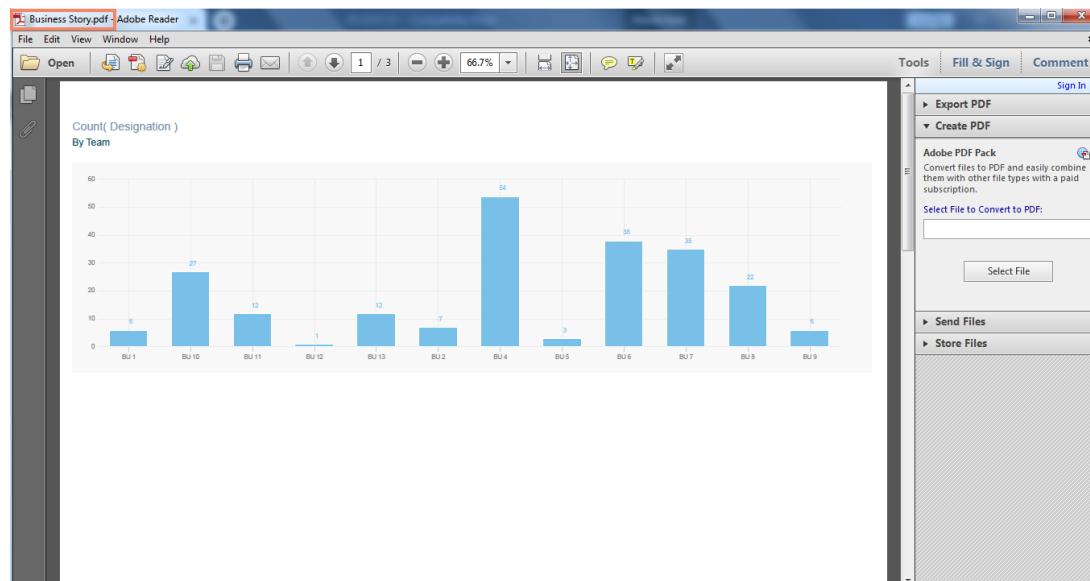
- a. The story data gets saved in the CSV and XLSX Excel formats by clicking the ‘CSV’ and ‘XLSX’ options respectively.

A screenshot of Microsoft Excel titled "Business Story - Excel". The table contains the following data:

| | Avg Monthly Salary | |
|----|-----------------------------|-------------------|
| 10 | 38 BU 6 | |
| 11 | 35 BU 7 | |
| 12 | 22 BU 8 | |
| 13 | 6 BU 9 | |
| 14 | avg_MonthlySalary | |
| 15 | 74726.00448 | |
| 16 | Designation | count_Designation |
| 17 | Associate Software Engineer | 1 |
| 18 | Lead QA Engineer | 1 |
| 19 | Lead Software Engineer | 1 |
| 20 | Senior Software Engineer | 2 |
| 21 | QA Architect | 4 |
| 22 | Associate QA Engineer | 10 |
| 23 | QA Engineer | 18 |
| 24 | Senior QA Engineer | 23 |
| 25 | | |

The formula `=AVERAGE(B2:B14)` is entered in cell A14, resulting in the value 74726.00448. The tab bar at the bottom shows "Business Story" highlighted.

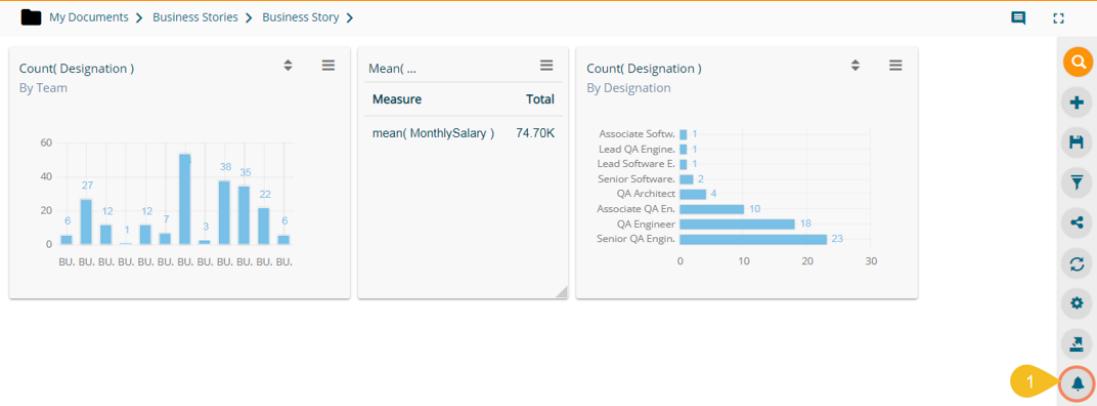
- b. By clicking the ‘PDF’ option the story views are saved in the PDF format.



5.5. Alert Center

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

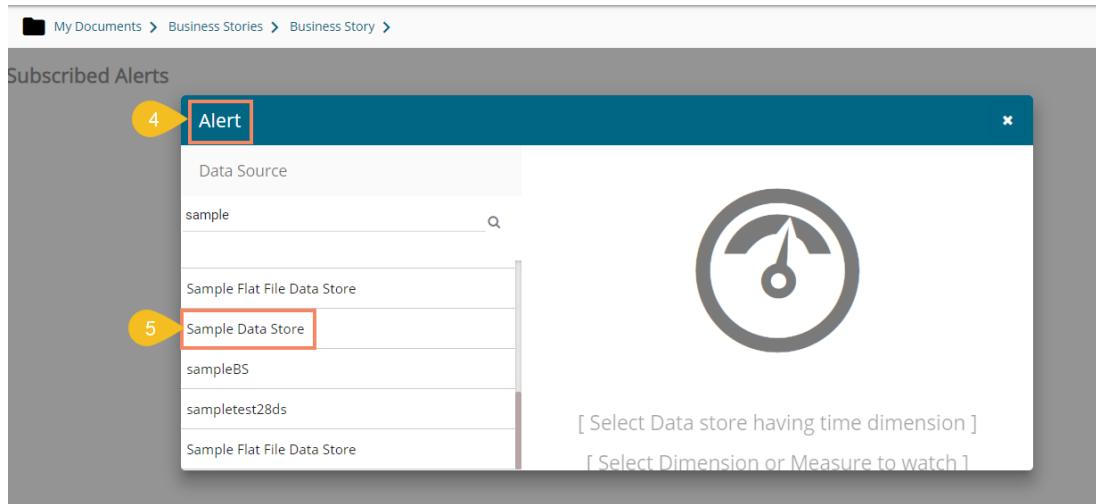
- i) Click the ‘Alert Center’ icon on the Storyboard.



- ii) A new page opens prompting to subscribe alerts.
 - iii) Click the '**Create New Alert**'  icon.



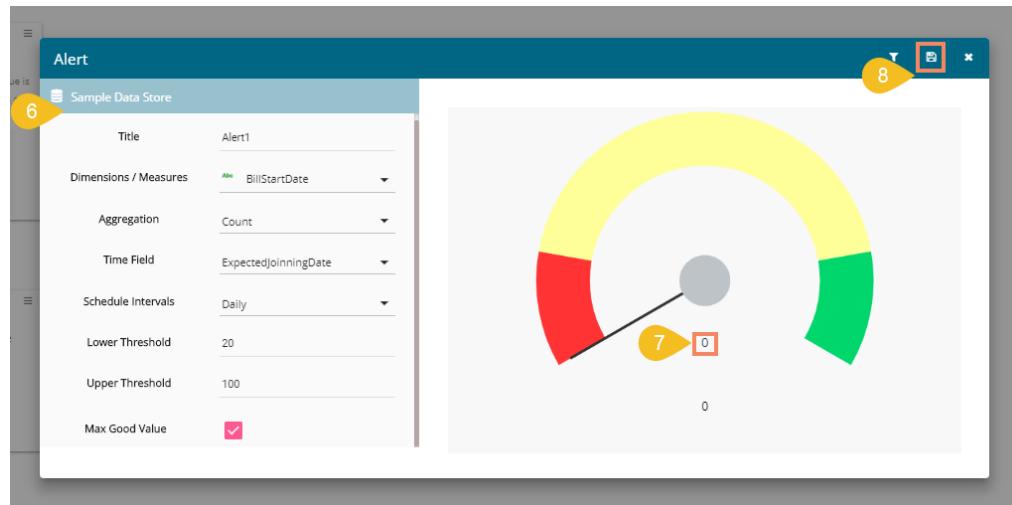
- iv) A new window will pop-up to display a list of the available data stores.
 - v) Users need to select a datastore containing time dimension from the list.



- 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 a value as a lower threshold (the default value for this field is 0)
 - g. Upper Threshold: Set a value as an 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.

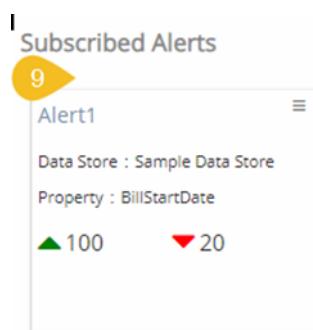
- vii) A Semi-Gauge chart displays the selected information on the right side of the screen with the value (E.g., in this case, the Semi-Gauge image displays a count of 12 teams)
- viii) Click the 'Save' icon.



Note:

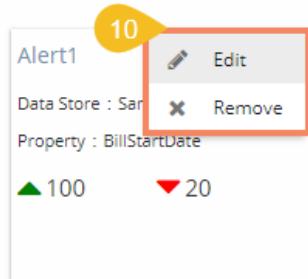
- a. Users can enable the '**Aggregation**' field only after selecting a Dimension/Measure field from the drop-down menu.
- b. The order of colors in Semi-Gauge changes from '*green-yellow-red*' to '*red-yellow-green*' by enabling the '**Max Good Value**' option.

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



- x) Click the 'Options' icon to get 'Edit' and 'Remove' options as shown below:

Subscribed Alerts



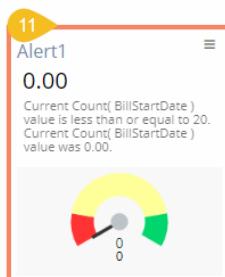
Note:

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

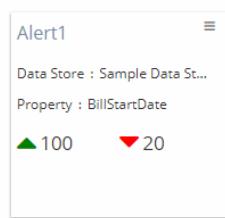
- xi) The triggered alerts display under the '**Alert Center**' with a brief explanation of the change in the set alert thresholds.

My Documents > Business Stories > Business Story

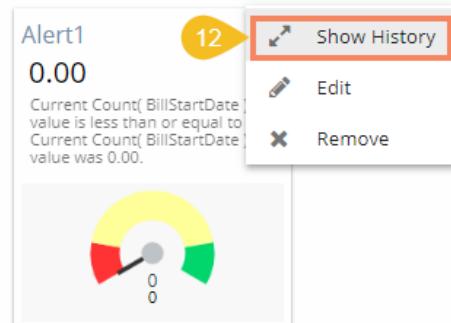
1 Alerts



Subscribed Alerts

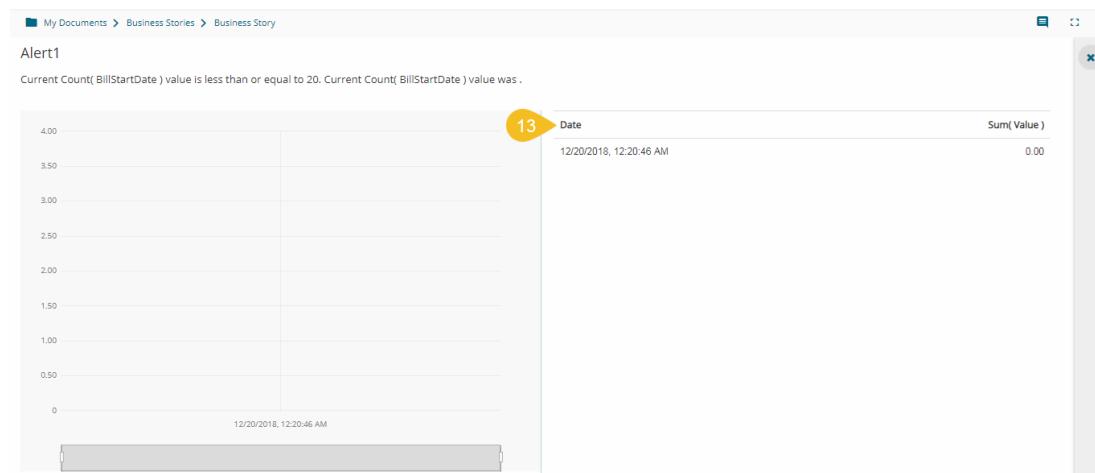


- xii) Users can click the '**Show History**' option for the triggered alert.



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.
- xiii) A page opens displaying the information of previously triggered alerts.



5.5.1. 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

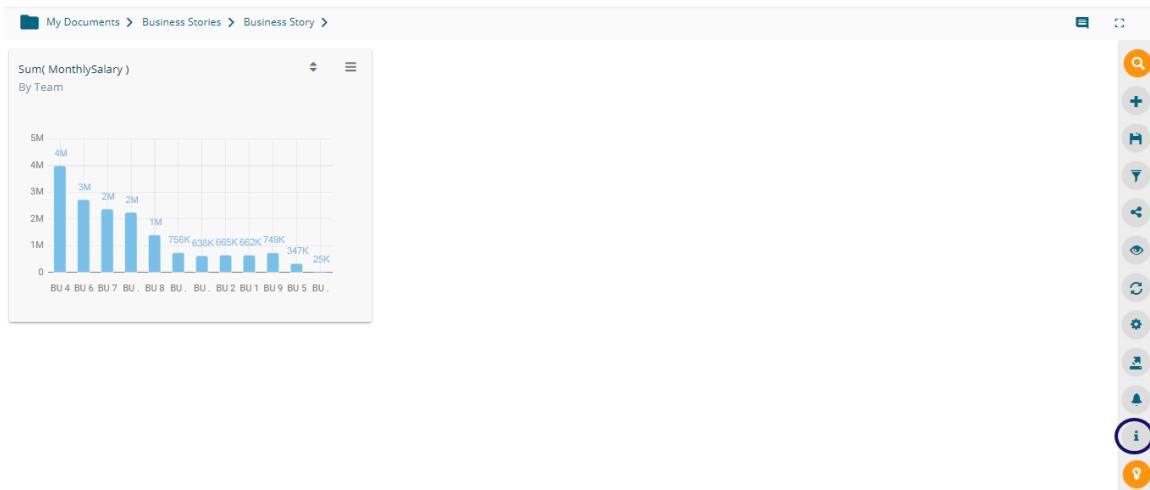


- iv. The Alert configuration screen reopens.
- v. Click the '**Save**' icon to save the modified Alert.

5.6. 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.
- ii) Click the '**Data Store Information**' icon.



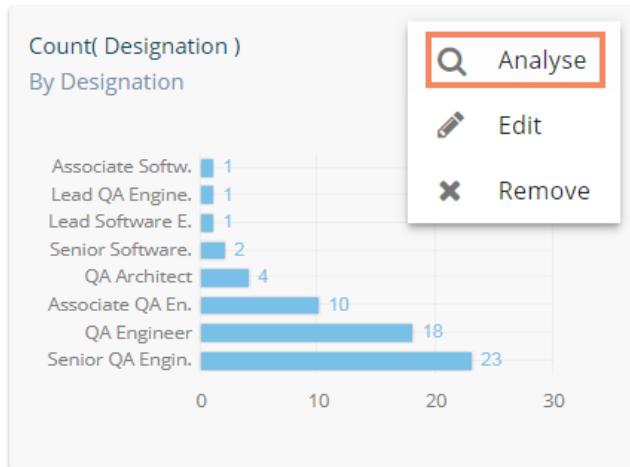
- iii) The Data Store Information page opens.
- iv) The users can perform the following actions by using the various icons provided for a data store:
 - a. Primary Data Store : It marks the selected Data Store as a primary data store
 - b. BDB Search : It redirects the users to the BDB Search page for the selected data store
 - c. View Design : It redirects the users to the Design page for the selected data store
 - d. Switch to Data Stores : It opens the Data Store List with all the available data stores for the users to select another data store.

5.7. Options Assigned to a View

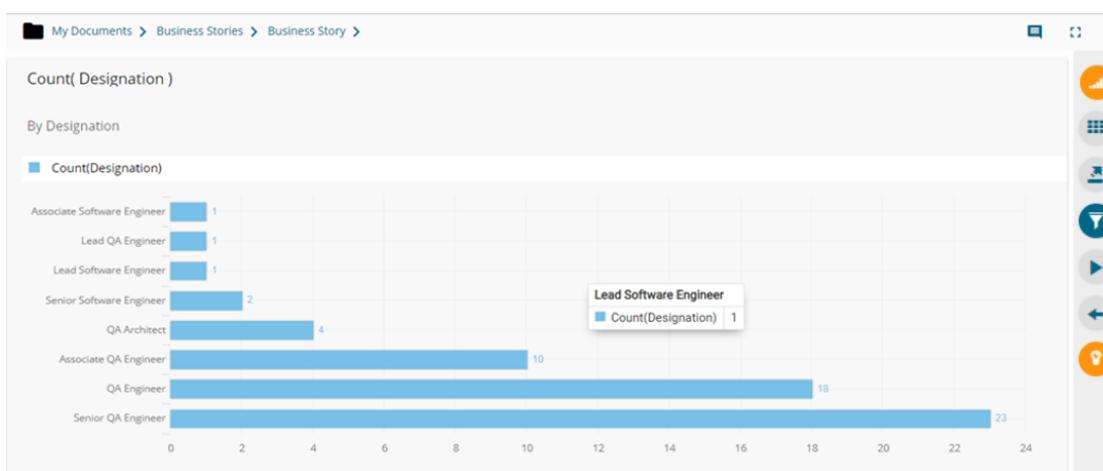
The following options supported by a view can be accessed from the Storyboard.

5.7.1. Analyze

- i) Select a view from the Storyboard.
- ii) Click the '**Options**' icon
- iii) A context menu appears with various options.
- iv) Select '**Analyse**' from the context menu.



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



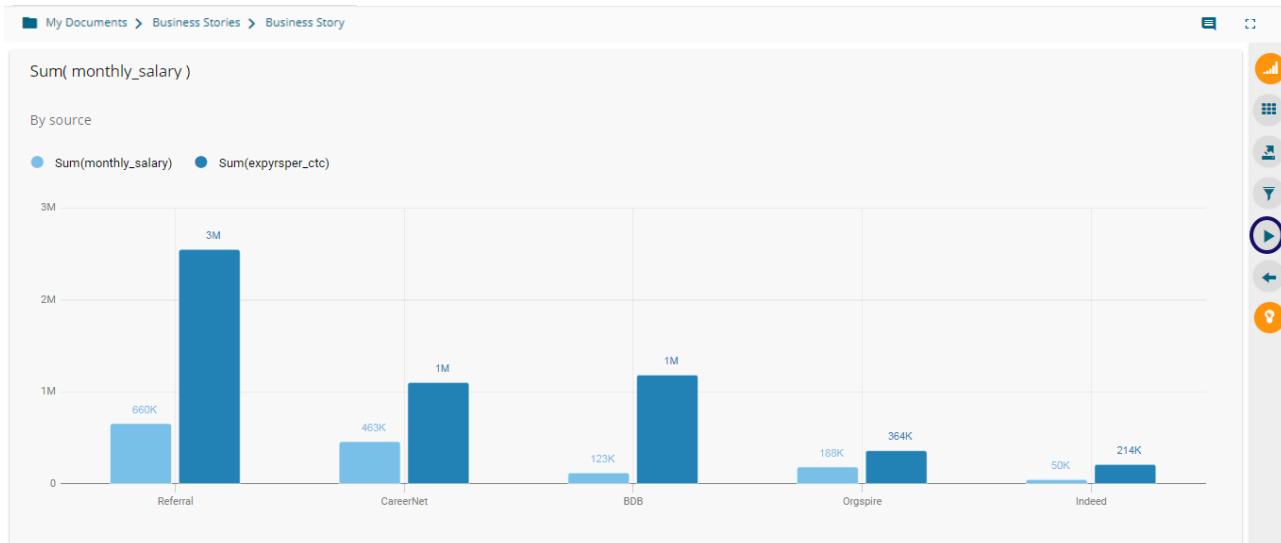
- vi) Users can select any of the following options to analyze a saved view:

| 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 |

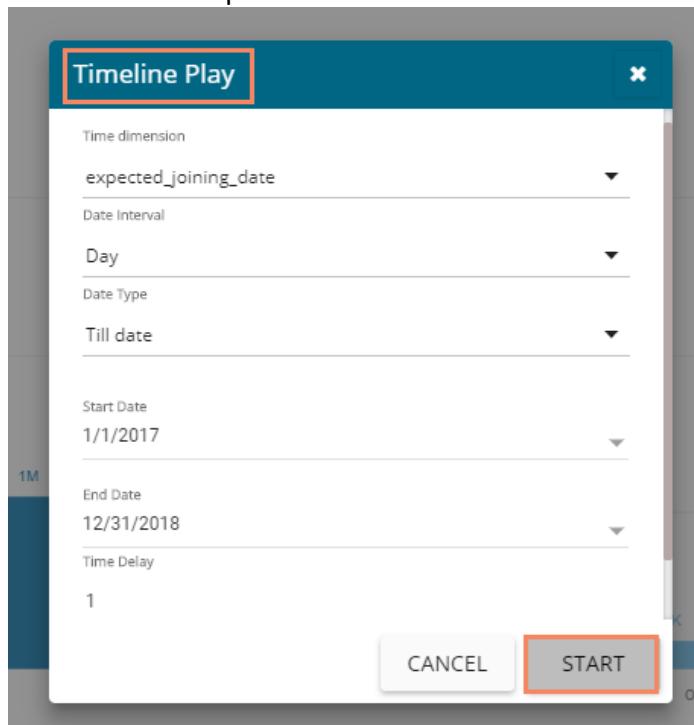
5.7.1.1. Timeline Play

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.

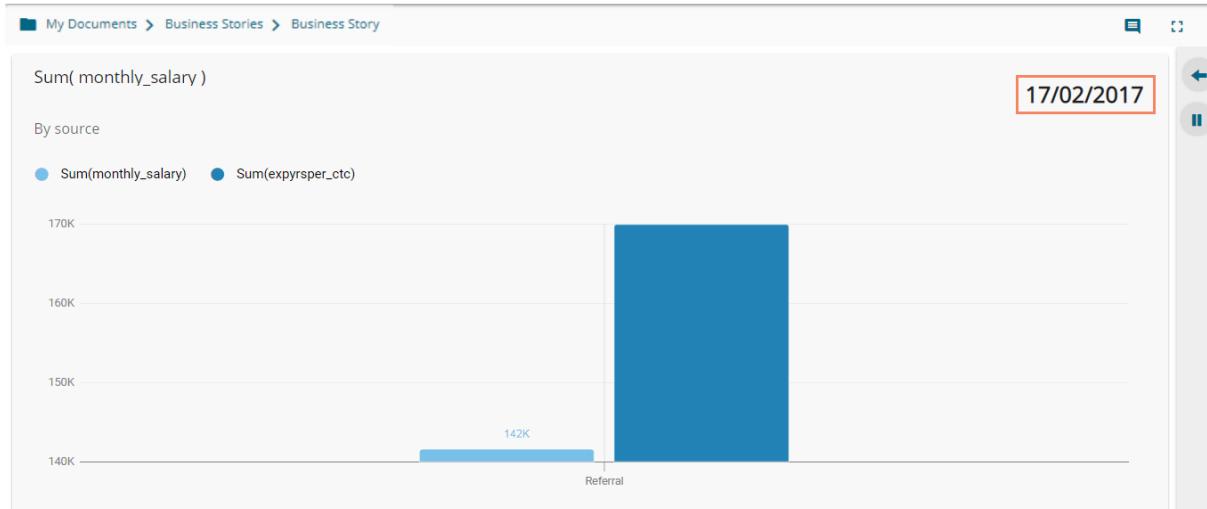
- v) Navigate to the Analyse view page.
- vi) Click the 'Play' icon.



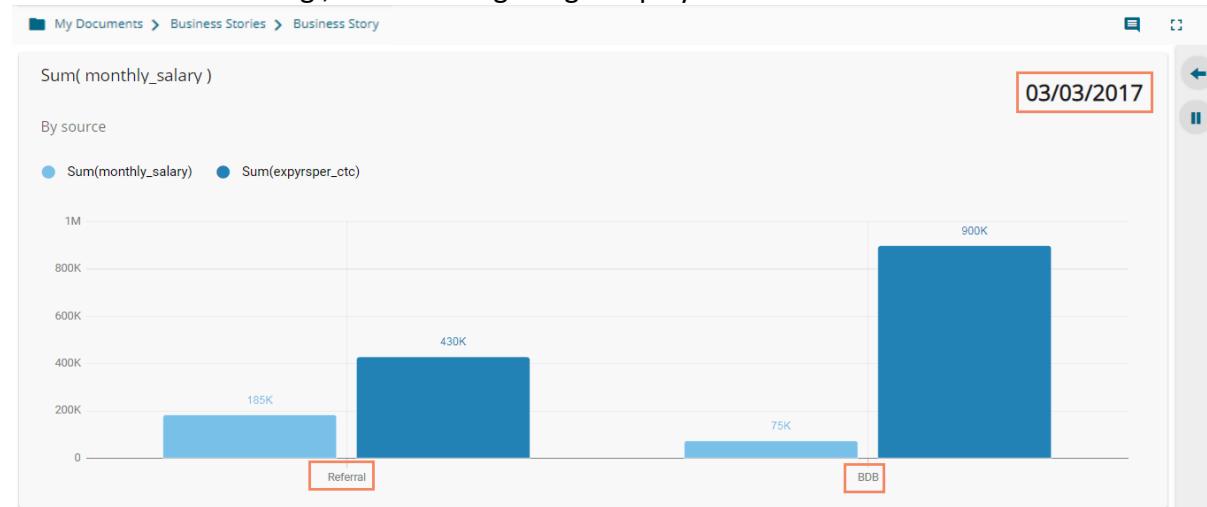
- vii) Fill in the required information in the Timeline Play window:
 - a. Time Dimension
 - b. Date Interval
 - c. Date Type
 - d. Start Date
 - e. End Date
 - f. Time Delay
- viii) Click the 'Start' option.



- ix) The timeline play gets displayed for the selected period.
 a. E.g., the below image displays data for the date 17th February 2017.

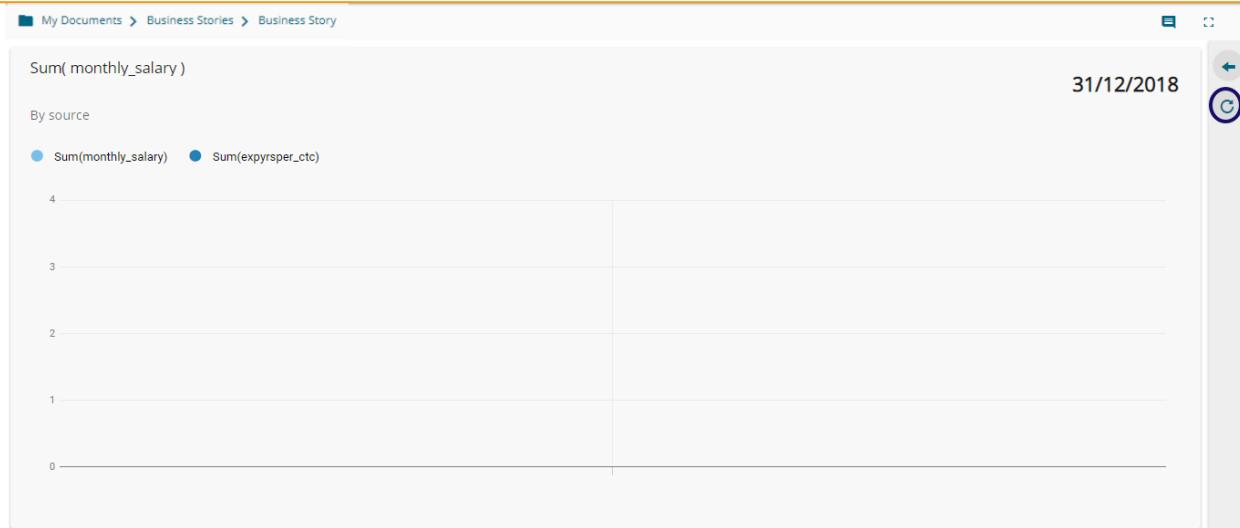


- b. E.g., the following image displays data for the date 3rd March 2017.



Note:

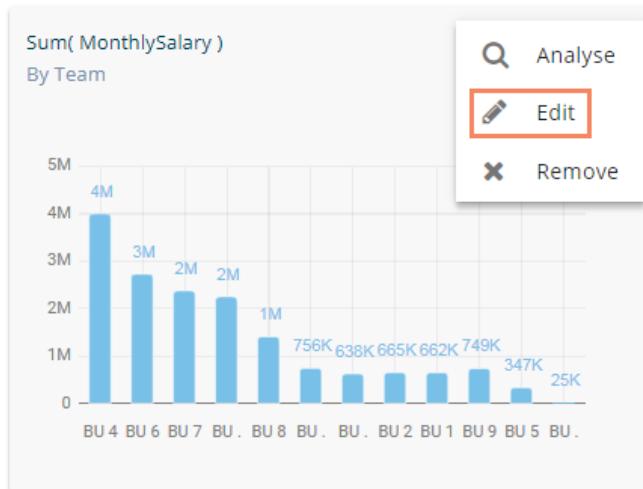
- a. Once the timeline play gets over, a 'Replay' icon appears using which the users can replay the timeline play.



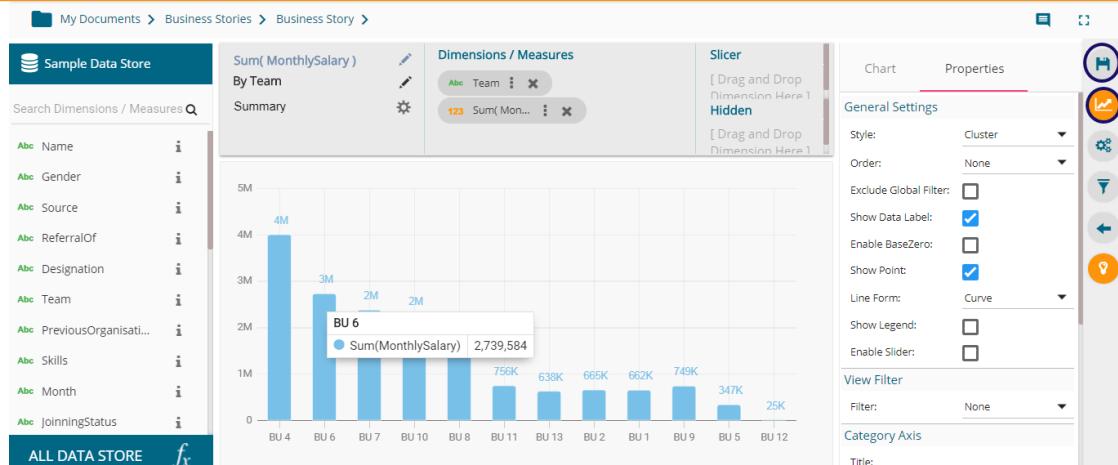
- b. The timeline play can be paused by clicking the 'Stop Timeline Play' icon.
- c. The users resume the stopped timeline play by clicking the 'Resume Timeline Play' icon.

5.7.2. Edit

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



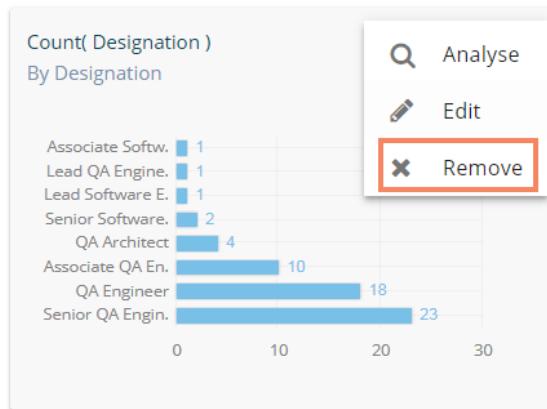
- iv) The Design page opens.
- v) Edit the required details. (If required)
- vi) Click the 'Save' option.



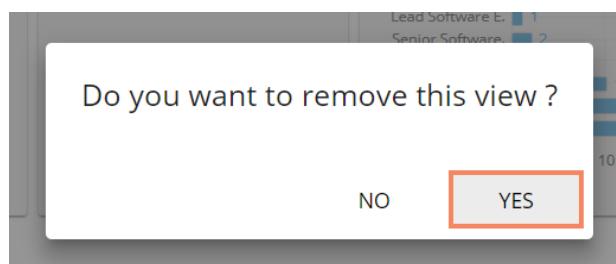
- vii) The modified View gets saved successfully to the Storyboard.

5.7.3. Remove

- i) Select a view from the Storyboard.
- ii) Click the 'Options' icon
- iii) Select 'Remove' 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.

5.8. Data Interactions/Exploration

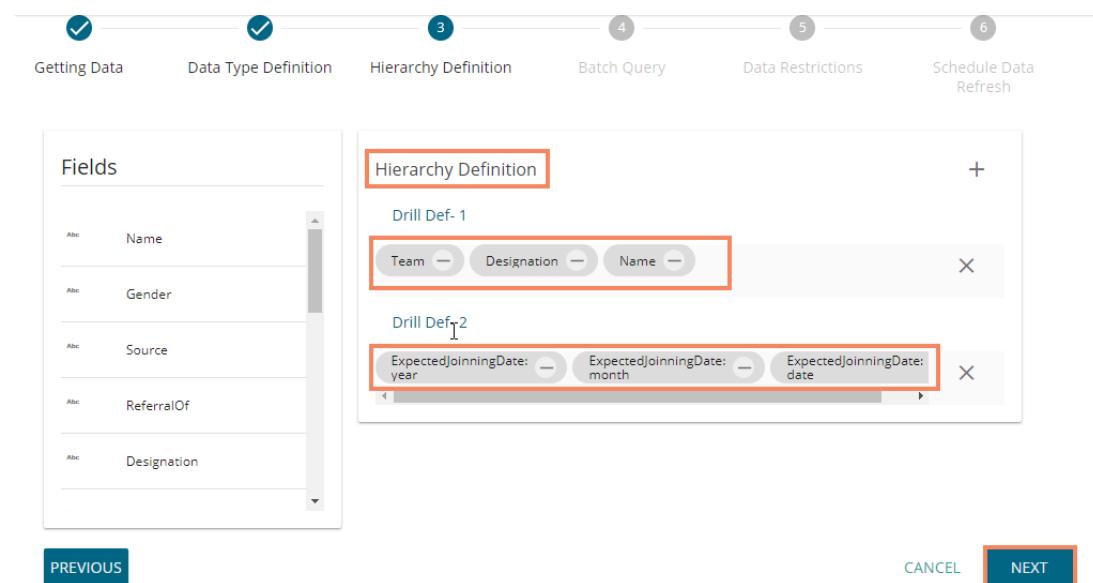
Views shared on the storyboard can display some interactions based on the applied functionalities. This section aims to describe ‘Automatic Data Drill’ and ‘Actions.’

5.8.1. Automatic Data Drill

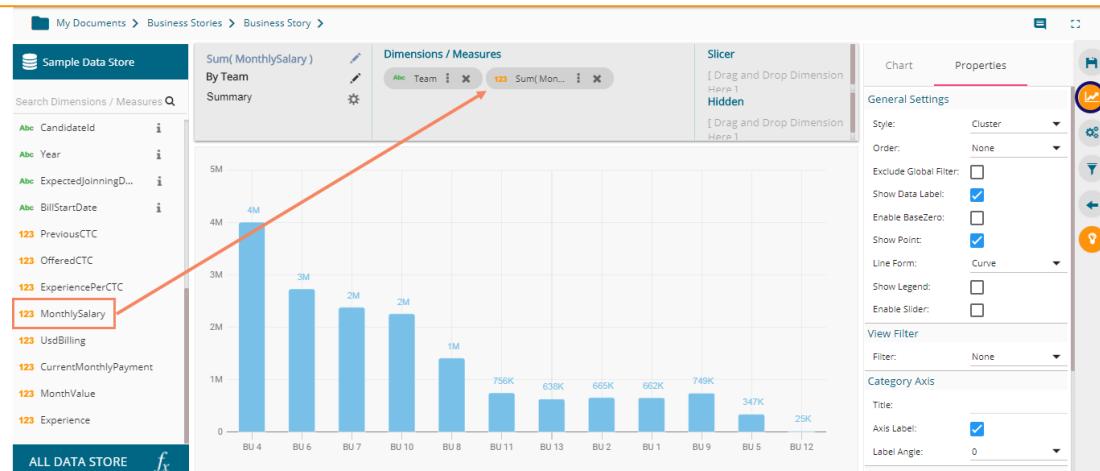
The Auto Data Drill allows users to drill down in the time values of a saved view on the storyboard of a Business Story.

Users must define a hierarchical pattern for the time values in a data store via the ‘Hierarchy Definition’ option of a Data Store.

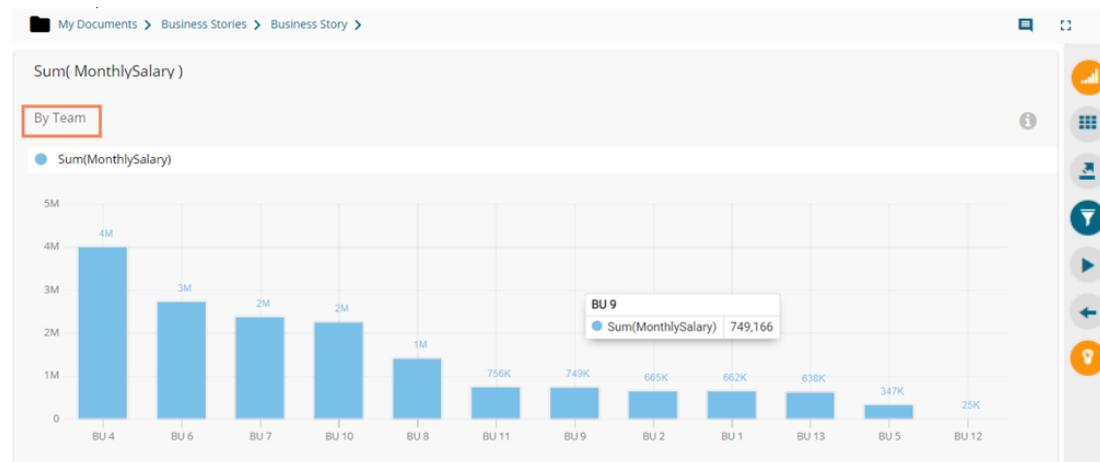
- i) Navigate to the ‘Hierarchy Definition’ tab (while creating a data store).
- ii) Drag and drop a time dimension into the ‘Drill Def’ box to configure the drill path.
- iii) The dragged time dimension splits into three granularities (E.g., Year>Month>Date)
- iv) Click the ‘NEXT’ option.
- v) Create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



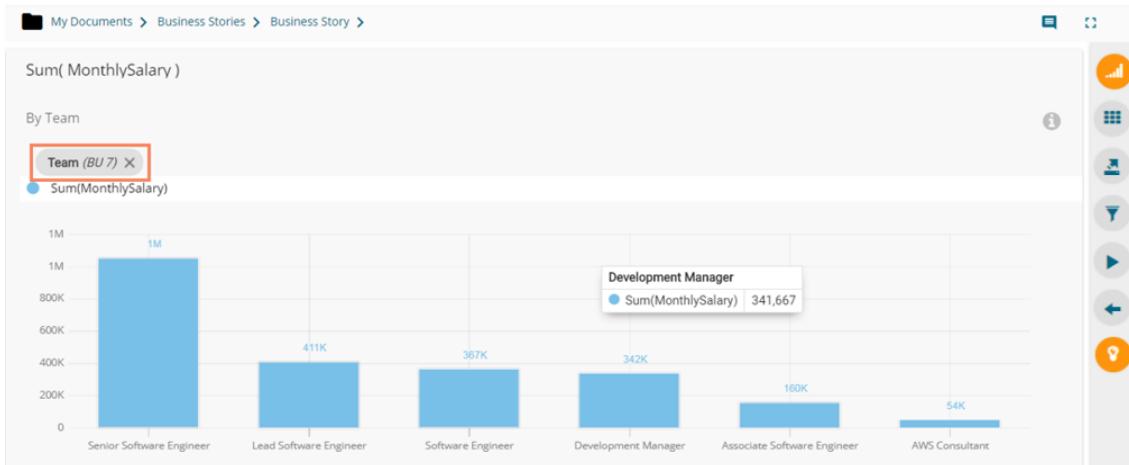
- vi) Select the data store with the defined drill path to create a new view.
- vii) Select the dimension for which the drill path has been defined and drag to create a view.
- viii) Click the ‘Save’ icon  to save the view on the Storyboard.



- ix) Access the saved view on the storyboard by double clicks on it.
- x) The **Analyse** window opens displaying *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-7*).



- xii) Click on a designation to see the names of the employee (E.g., the following image displays names of all the *Senior Software Engineers* inside the *Team BU-7*).



Note:

- Users can also define a hierarchy for the date dimensions using the '**Hierarchy Definition**' tab of a datastore and avail the drill-down functionality for a saved view that contains the same date field.
- Users can also open a saved view via the '**Analyse**' option.

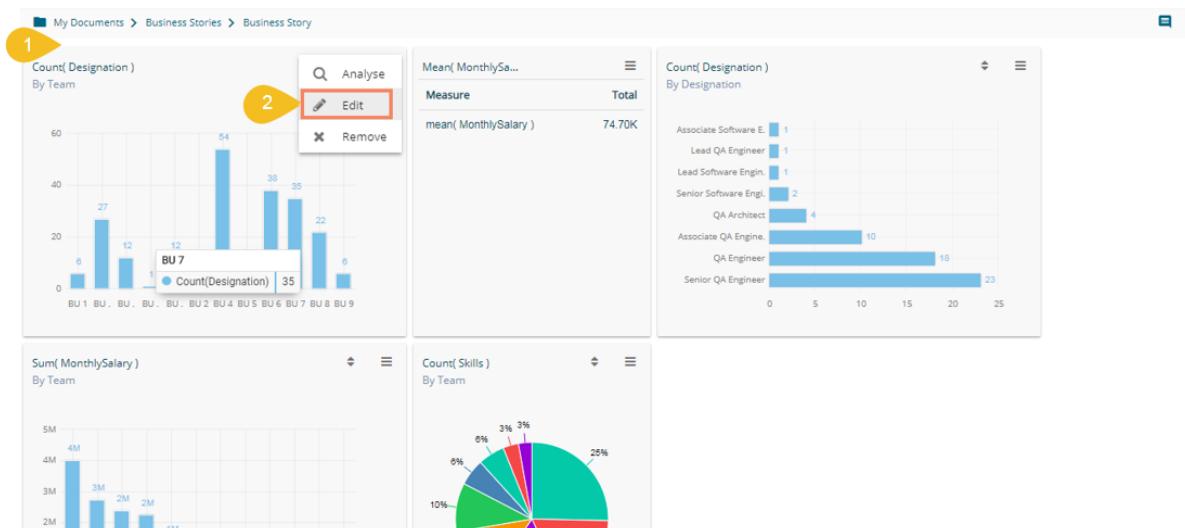
6. Actions

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

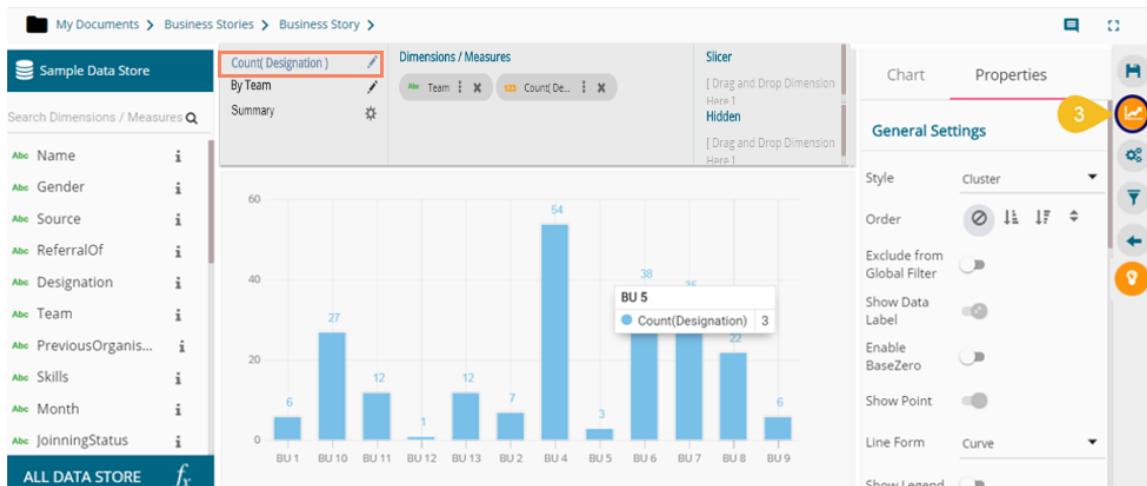
6.1. Interactions

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.

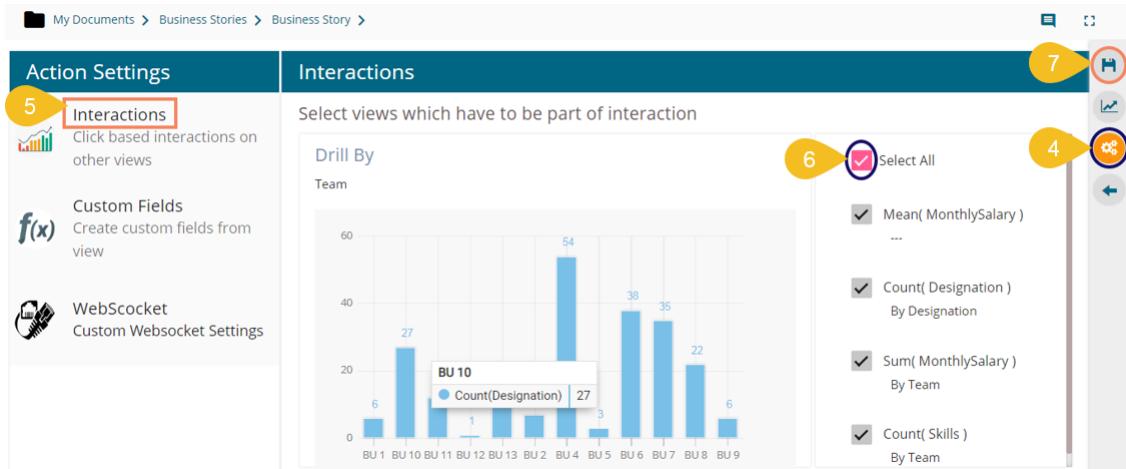
- Navigate to the Storyboard.
- Select '**Edit**' view from the '**Options**'  menu.



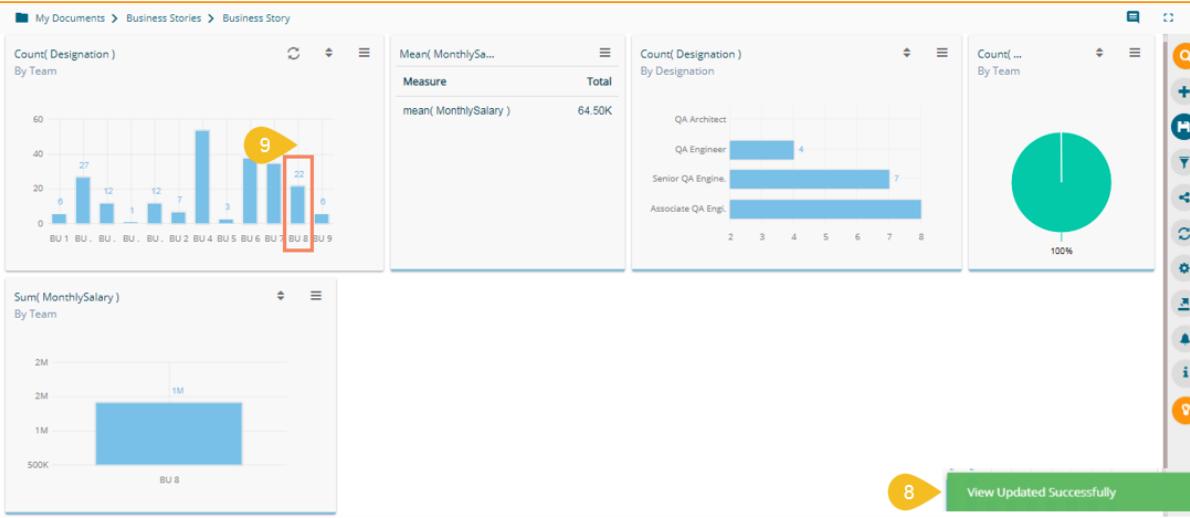
- iii) The ‘Design’ tab opens by default for the selected view.



- iv) Click the ‘Actions’ tab.
 v) Click the ‘Interactions’ option from the displayed settings list.
 vi) Enable interactions among the selected view (displayed as a chart) and the other views by a checkmark in the given box.
 vii) Click the ‘Save’ icon.



- viii) The Storyboard with a pop-up message stating that the storyboard views are updated.
 ix) Select any one-dimension value from the view which was selected to develop a dependency; the other views get filtered accordingly.
 E.g., By selecting BU 8 from the parent view, all the integrated views display the data for BU 8 team.



6.2. Web Socket

The WebSocket 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 business story, a WebSocket channel is established to receive messages. The story gets refreshed when Web Socket receives the same message configured from this channel.

- Create a story or open an existing story.
- Edit any view from the story or create a new view.
- Choose the '**WebSocket**' option from the '**ACTIONS**' tab.
- Configure the following details:
 - Enable the WebSocket functionality
 - Provide a WebSocket IP
 - Insert a Message based on which the selected view(s) get updated (Enable View Restrictions, if required)
 - Click the '**APPLY**' option
 - Save the configured view.

The screenshot shows the 'Action Settings' tab with the 'WebSocket' section open. The configuration steps are numbered as follows:

- 1** Click on the 'WebSocket' button.
- 2** Turn on the 'Enable' switch.
- 3** Enter the 'WebSocket IP' as 'ws://businessstory.com/websocket/ws'.
- 4** Enter the 'Message' as 'New Employee Joins'.
- 5** Select the views to refresh: 'Count(Designation) By Team', 'Mean(MonthlySalary)', 'Count(Designation) By Designation', and 'Count(Skills)'. A checkbox for 'Enable View Restrictions' is also present.
- 6** Click the 'APPLY' button.

- The event triggers and the story gets refreshed data.

Note:

- The '**ACTIONS**' tab also contains '**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.
- By enabling the '**Enable View Restriction**' the views listed under '**Available Views**' get disabled.

7. Applying Filters

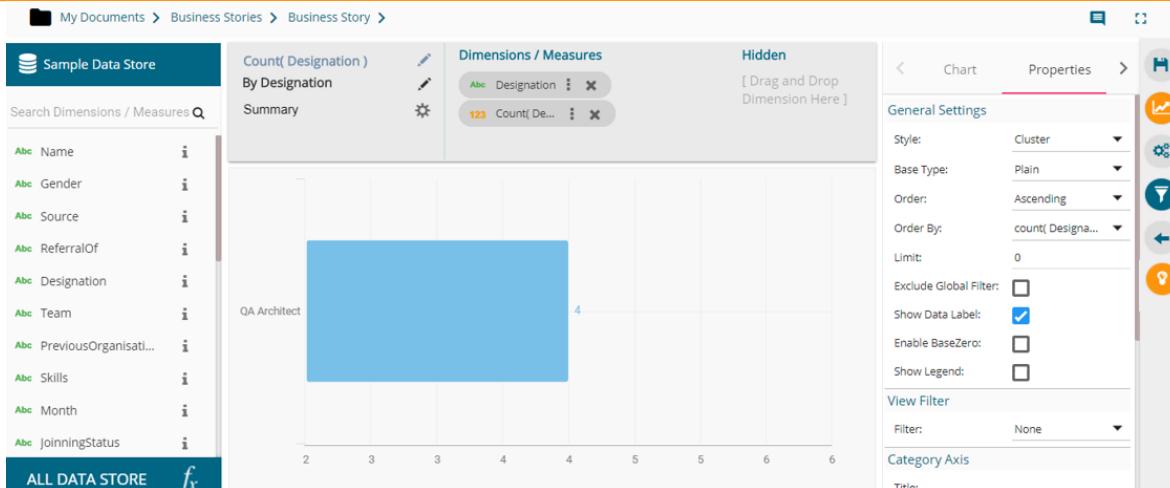
BDB Story offers a series of filters to customize your interactive visual report. The filters can be applied at the view level as well as to the entire business story.

7.1. View Specific Filter

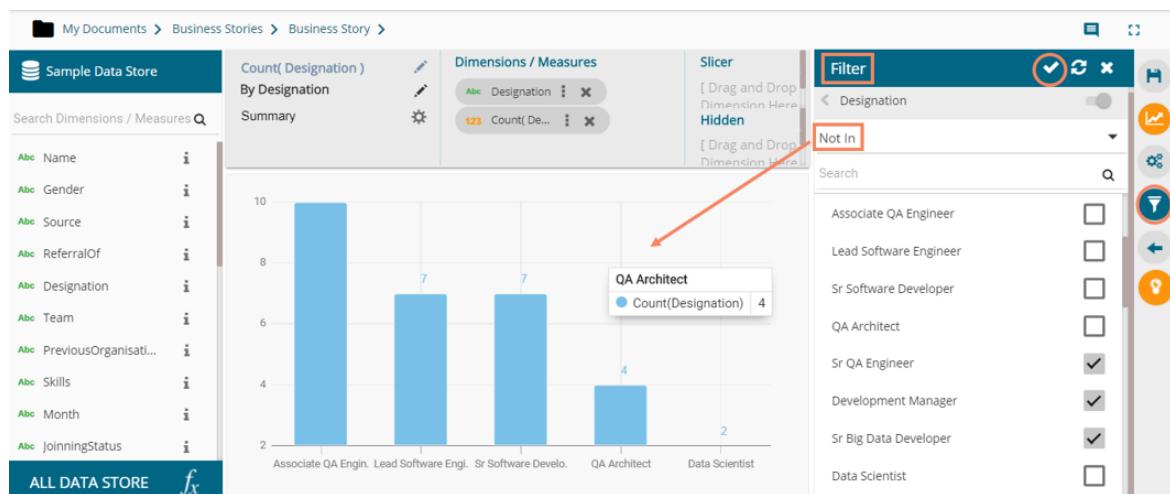
- Click the '**Filter**'  icon from the design mode of a view.
- A filter panel opens with the list of available filter values.
- Select a Dimension to display a list containing all the sub-dimensions.
- Select '**In**' as the filter condition from the drop-down menu.
- Select sub-dimension(s) by putting check marks the box.
- Click the '**Apply**'  icon.



- The view gets filtered as per the applied filter condition(s).

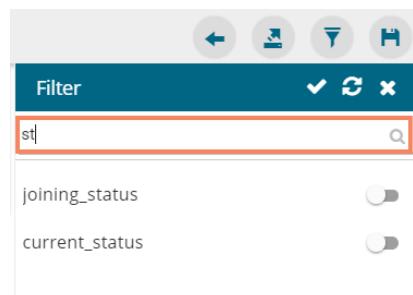


- viii) If the selected filter condition is ‘**Not In**’, then the view displays all the not selected dimensions.



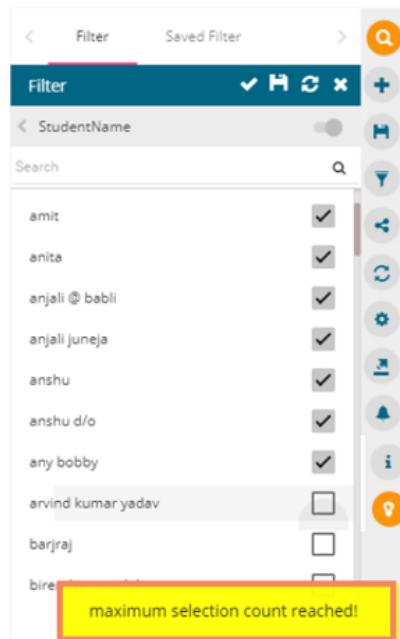
Note:

- a. A ‘**Search**’ bar has been provided for the View Filter panel to search a Dimensions, Measures, and Time value from the available list.



- b. Users need to click the ‘**Apply**’ button while enabling or eliminating the View specific filter values to reflect the same in the displayed chart.
- c. Users can insert, modify, or remove a view specific filter via the ‘**Analyse**’ option.

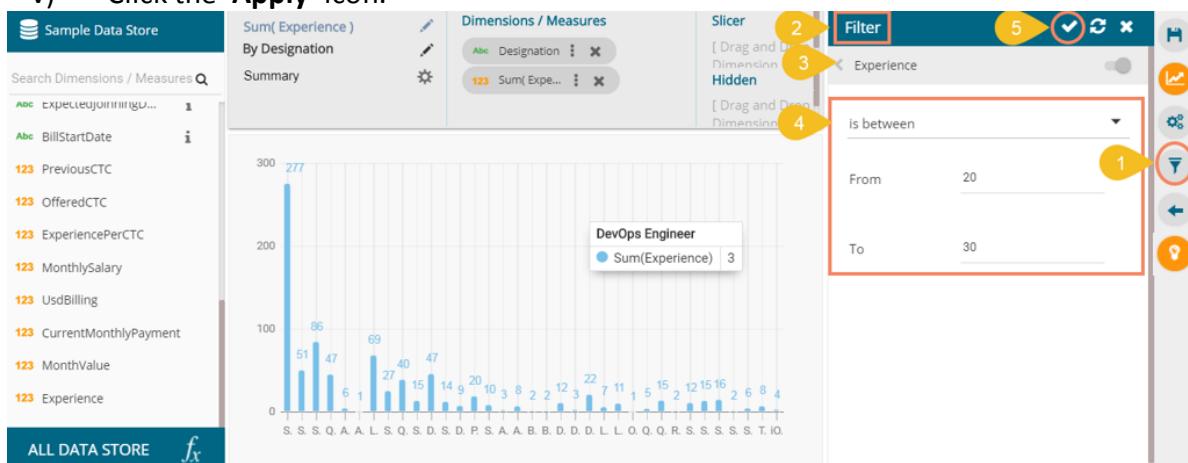
- d. The View Filter becomes ineffective when the selected view is inserted into a story, and the Global Filter is applied to it.
- e. The maximum selection for the Filter condition is restricted to 30. The users get a notification when they select the permitted number of the filter condition.



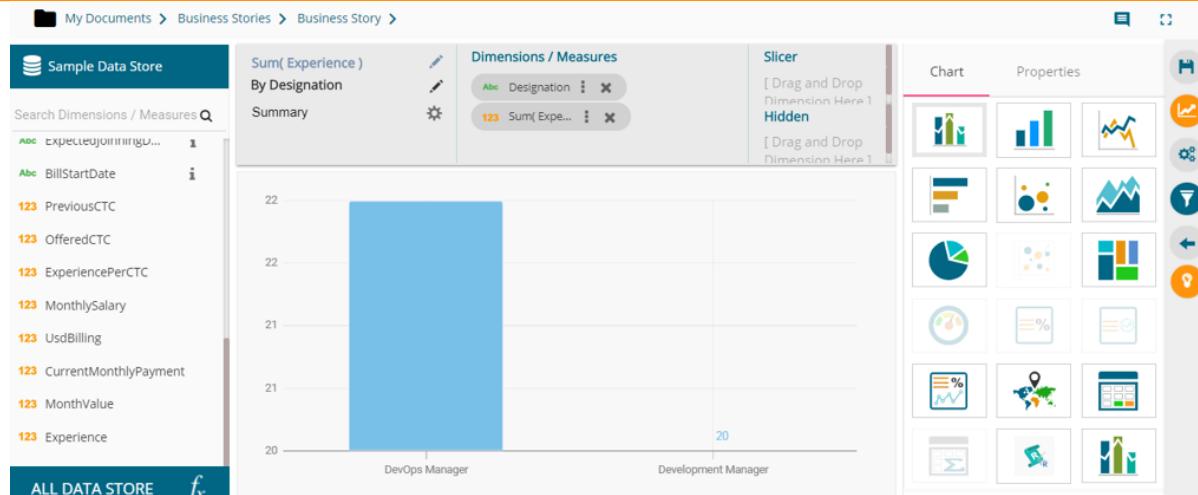
7.1.1. Measure based View Filter

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



- vi) The view gets modified according to the selected filter value.



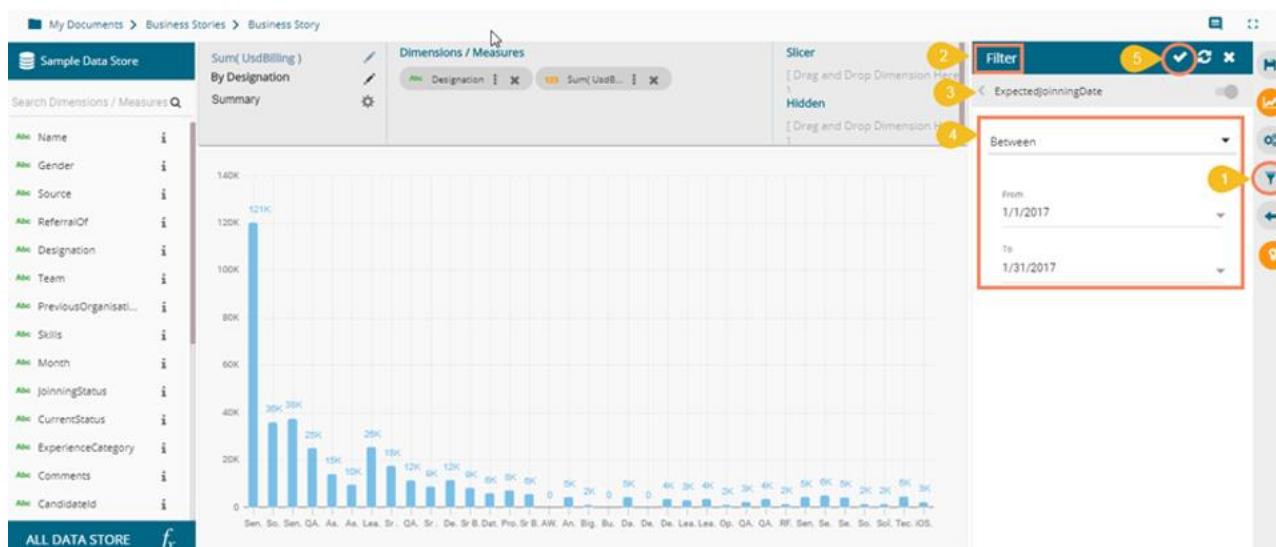
Note: the same set of steps can be followed to apply Global filter based on the Measure values.

7.2. Date based View Filter

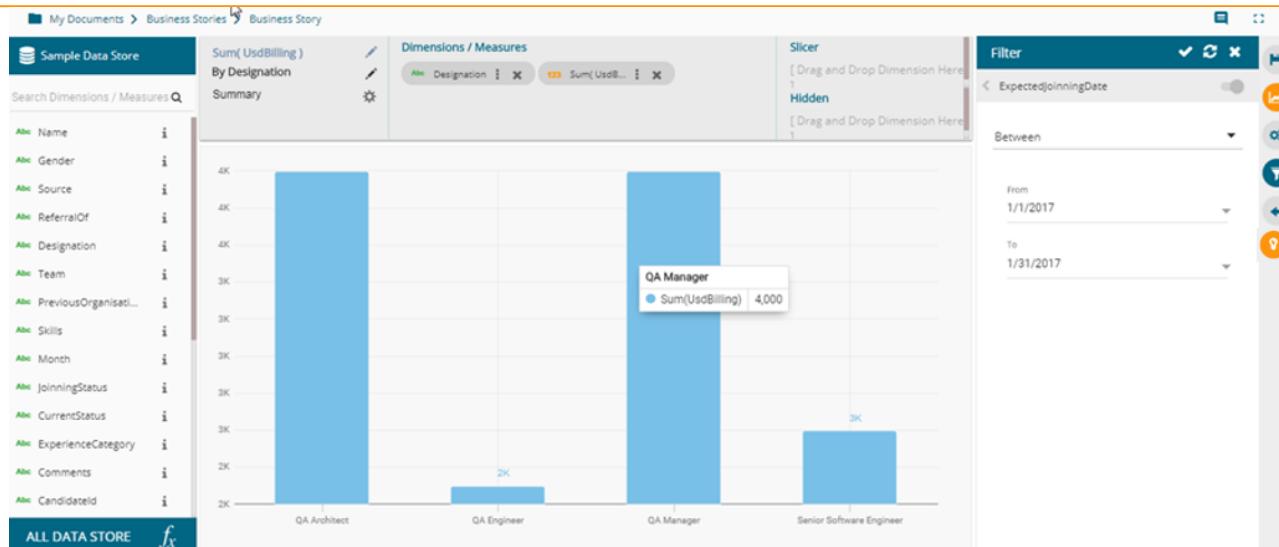
The users can apply Date based View Filter selecting the Date Values from the Data Store. Users can provide two kinds of conditions on the Date values.

i. Between

- Click the filter icon from the Design page.
- Select the Date value field as a filter condition.
- Choose the '**Between**' option from the drop-down menu.
- Provide '**From**' and '**To**' dates.
- Click the '**Apply**' icon.



- The selected view gets filtered.

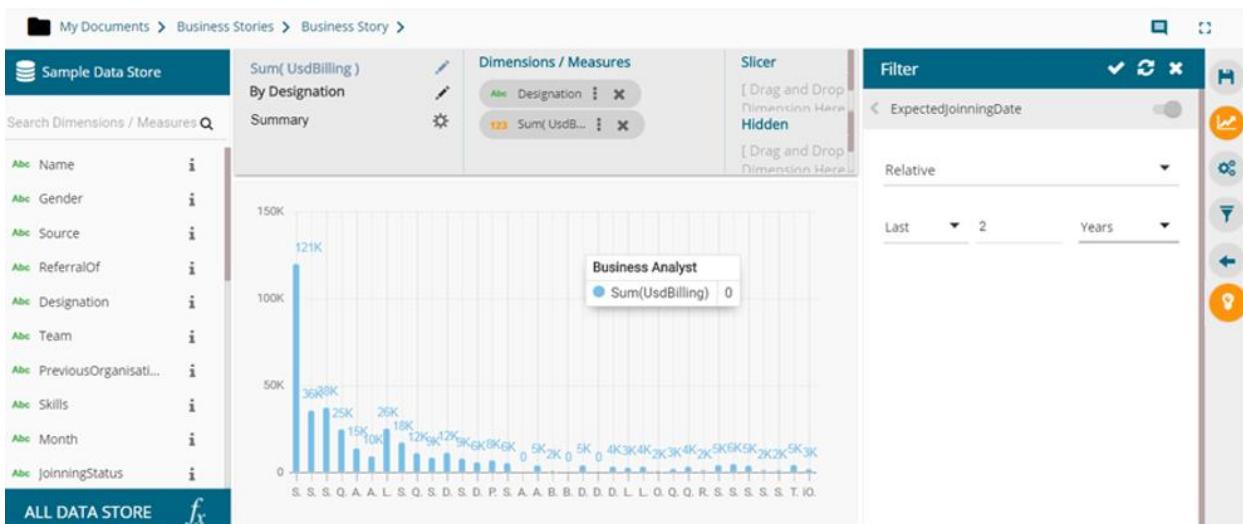


ii. Relative

- Navigate to the Filter panel from the Design page.
- Select a Date value as the filter condition.
- Choose the '**Relative**' option from the drop-down.
 - Insert a period by selecting the required values. E.g., the below given image displays '**Last 2 years**' as the selected time condition.
- Click the '**Apply**' icon.

Note:

- Users get '**Last**' and '**This**' under the drop-down menu to select the previous or present time zone.
- There are 4 categories of time pointers provided in another drop-down menu which allows the users to select a value out of Years/ Months/Weeks/Days.



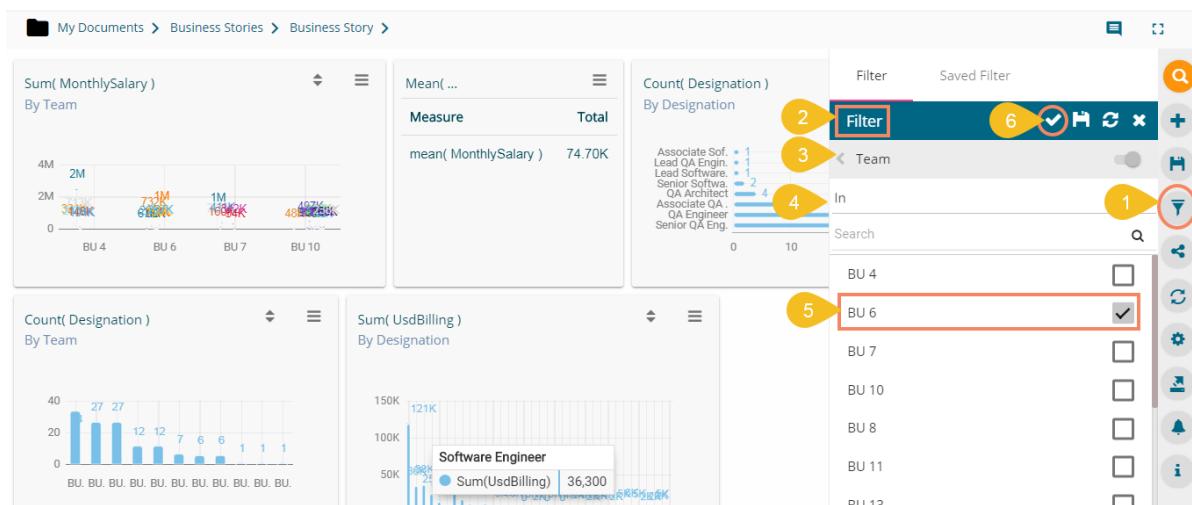
- The selected view gets filtered based on the applied conditions.



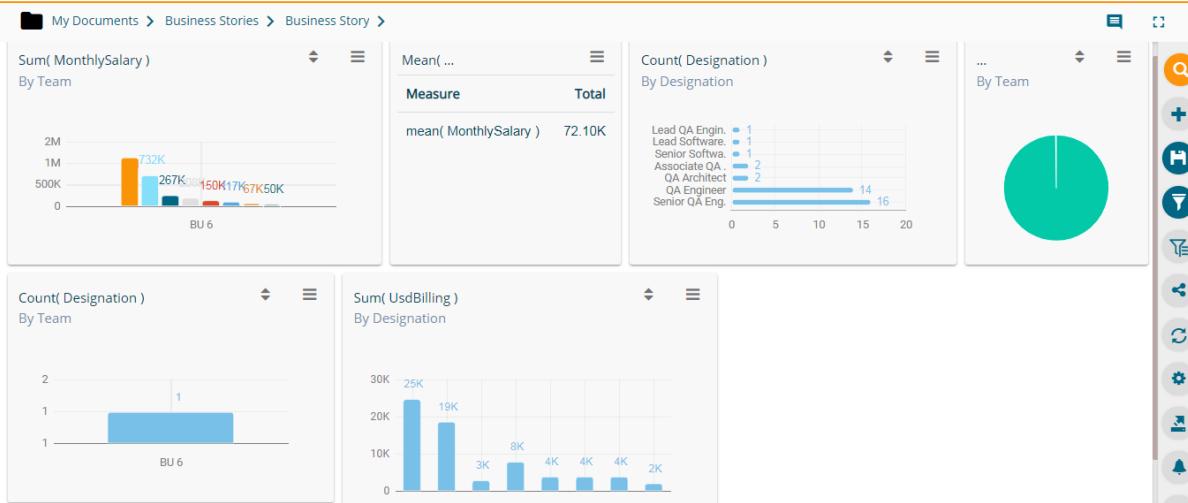
Note: The same set of steps can be used to apply Global filter based on the date values.

7.3. Global Filter

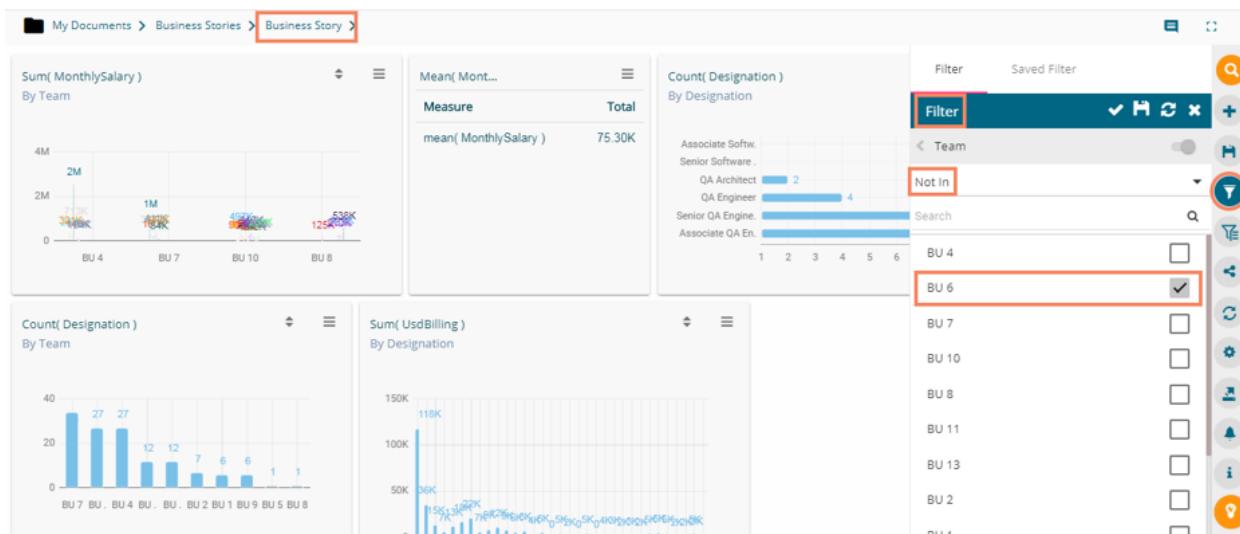
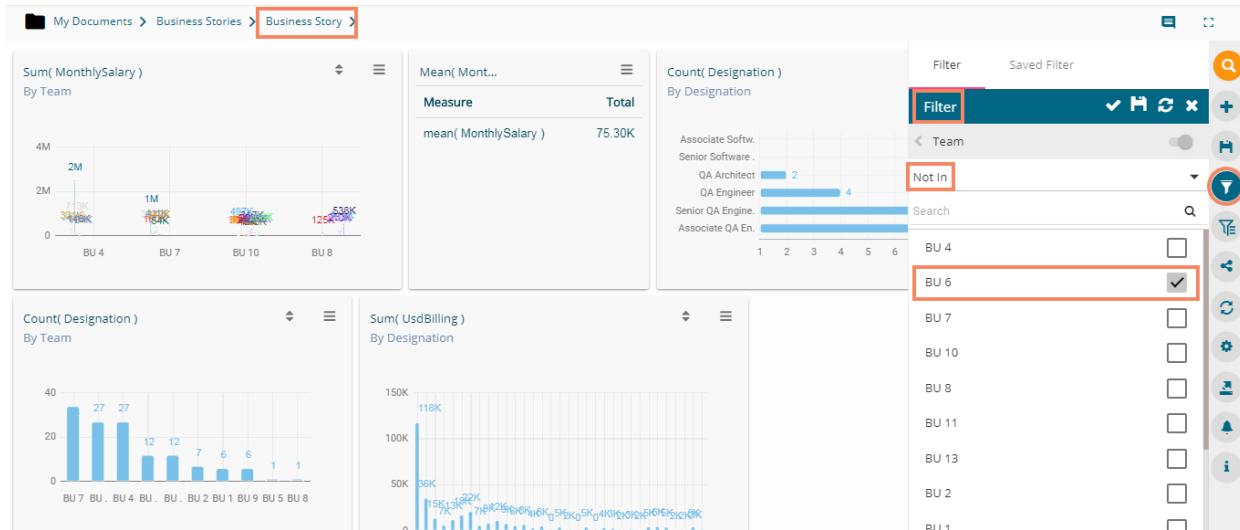
- Click the 'Global Filter' icon on the Storyboard.
- A filter panel opens with the list of filter values.
- Click on a Dimension to display a list containing all the sub-dimensions.
- Select 'In' or 'Not In' option from the drop-down menu to apply the filtering condition. (E.g., the below given image displays 'In' as the selected option so that the story gets filtered as per the selected sub-dimension(s).
- Select sub-dimension(s) using checkmark(s).
- Click the 'Apply' icon.



- The concerned views on the Storyboard get customized as per the applied Global Filter condition.

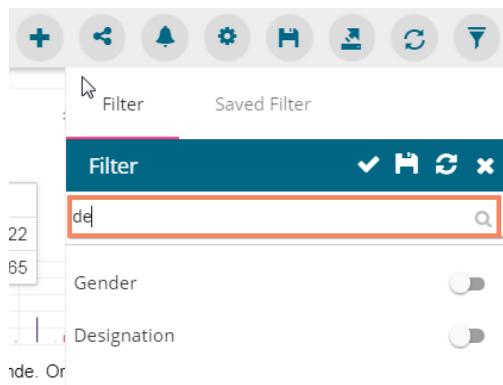


viii) By selecting the ‘Not In’ option the story (views) gets filtered by not selected filter conditions (E.g., the below given image displays the story displaying without BU 6 dimension.)



Note:

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

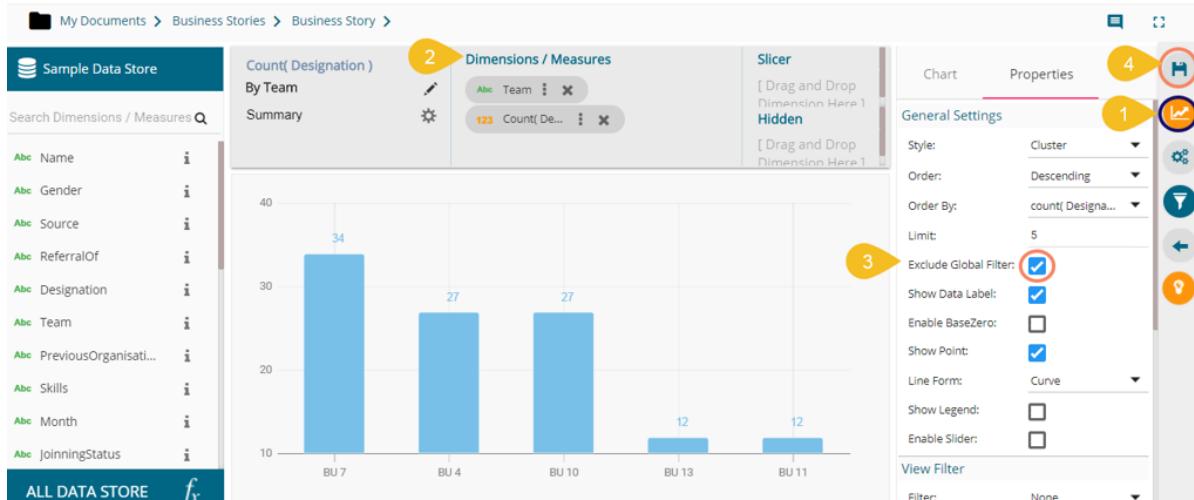


- b. The global filter can be applied only to those views on the storyboard where the filter values are used as dimensions.
- c. Global filter when applied to various views on a storyboard, subdues the view specific filter values.
- d. Users can insert views created via different data stores on one Story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

7.3.1. Exclude from the Global Filter

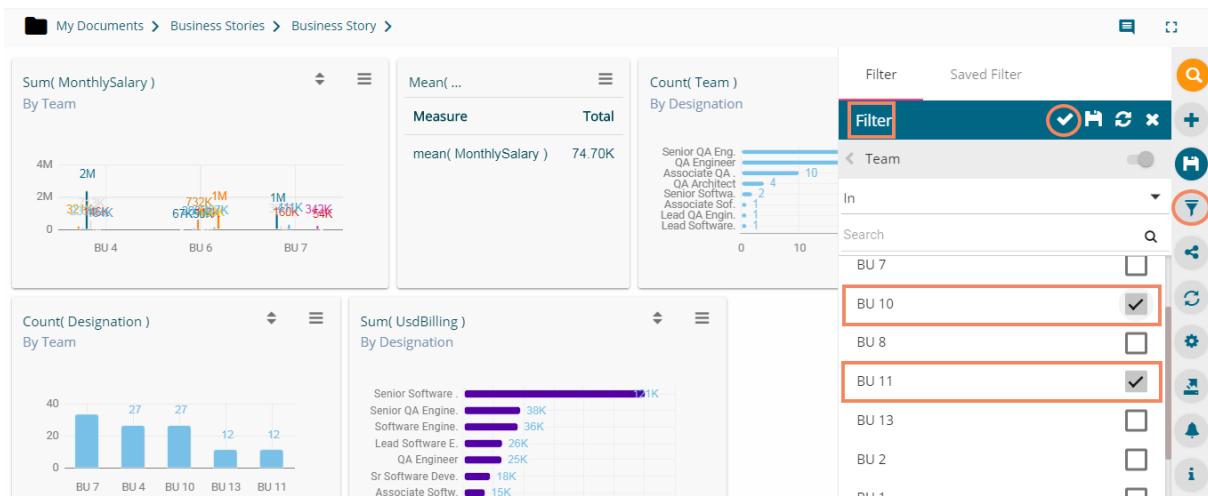
The Global filter values are applied to all the available views on a storyboard. Users can exclude specific view from the Global Filter effect by selecting the '**Exclude from the Global Filter**' option.

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

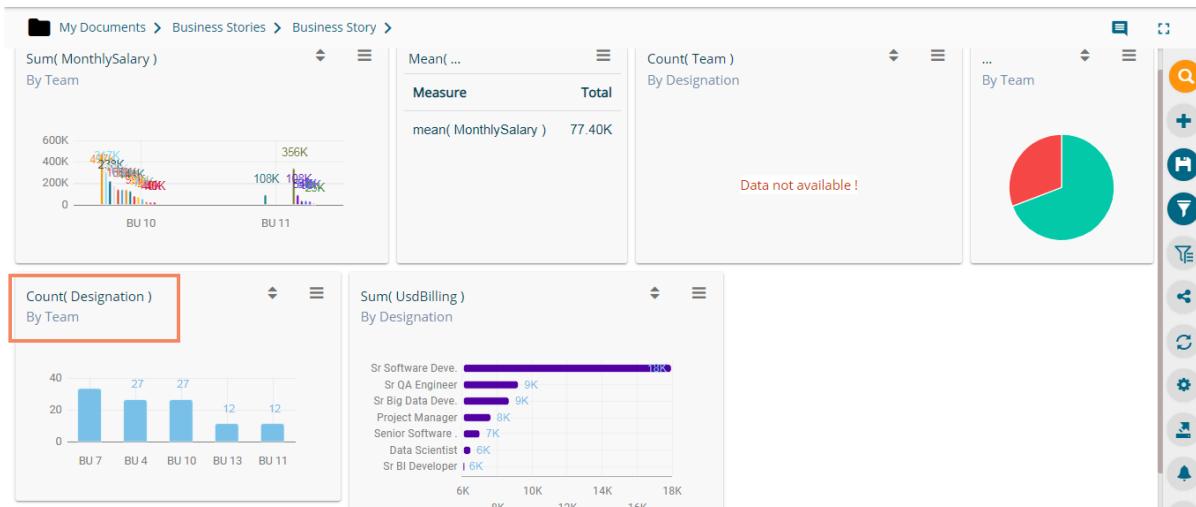


- Users get redirected to the Storyboard.
- Click the '**Filter**' option and select a global filter condition (E.g., the below given image displays BU 10 and BU 11 Teams selected with the 'In' filter condition).

vi) Click the 'Apply' icon.

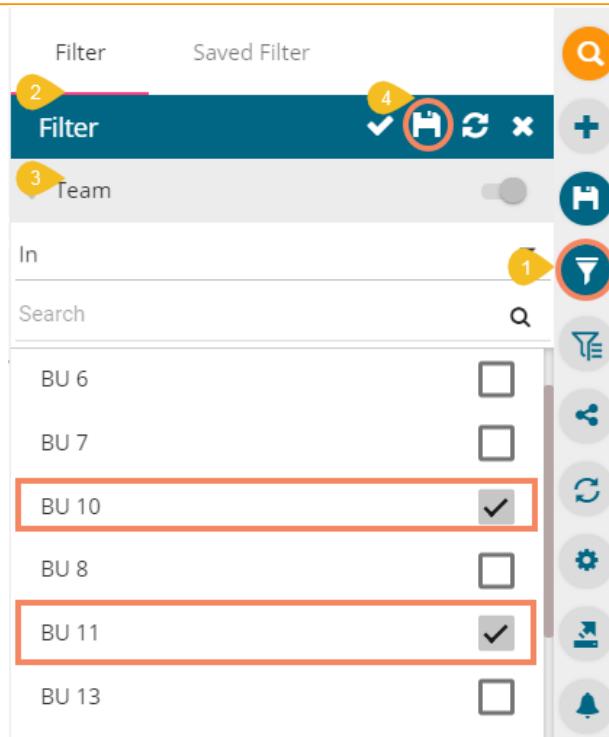


vii) All the views get modified according to the Global filter, but the selected view gets excluded from the Global filter.

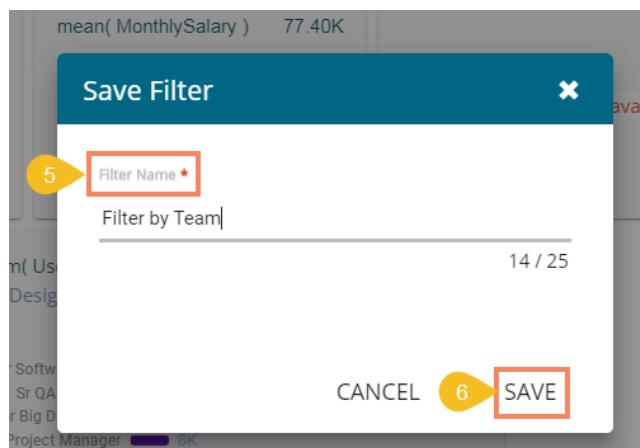


7.3.1.1. Saving a Global Filter

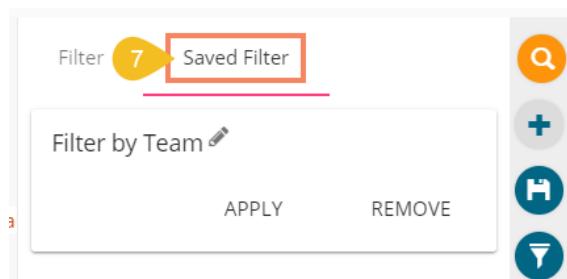
- Click the 'Global Filter' icon.
- The global filter panel opens.
- Select the filter conditions by check marks. E.g. In this Case, team BU 10 and BU 11 are selected as filter conditions.
- Click the 'Save' icon.



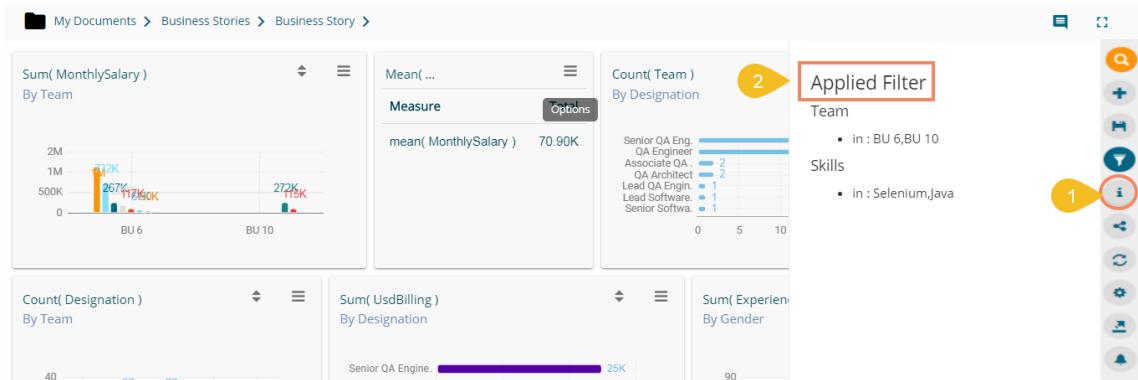
- v) A new 'Save Filter' window opens.
- Provide a Filter Name in the 'Save Filter' pop-up window.
 - Click the 'SAVE' option.



- vi) The filter gets stored under the 'Saved Filter' tab. (The same gets notified by a pop-up message.)



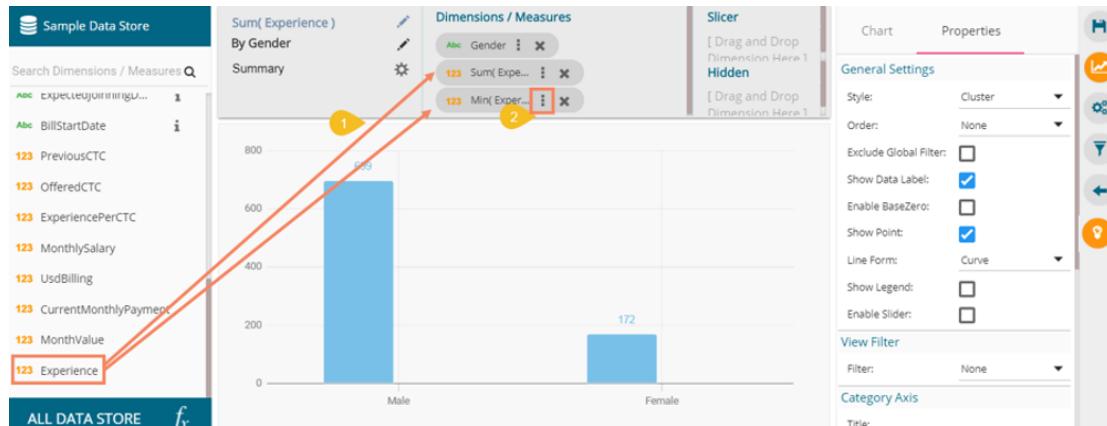
Note: The users can see all the applied Global Filters conditions by clicking the 'Applied Filter' icon from the storyboard.



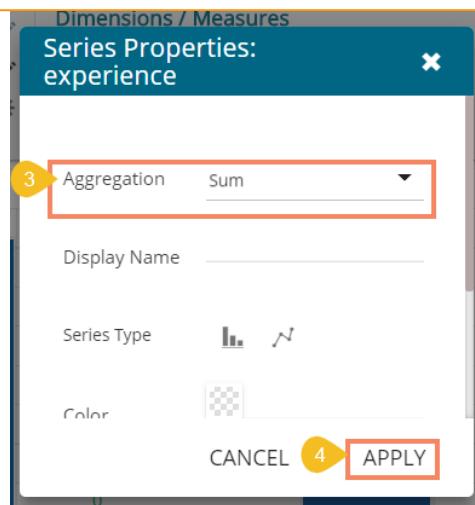
7.3.2. Measure Filter

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

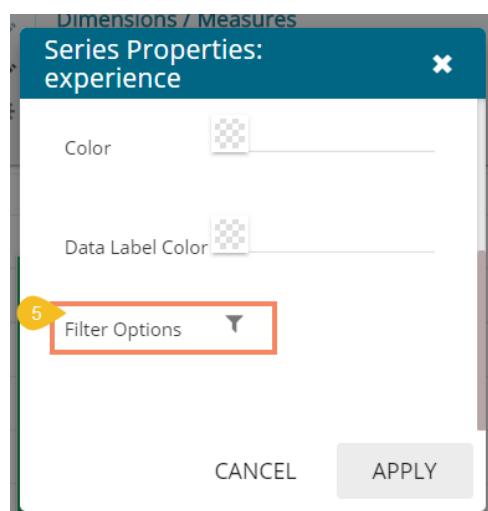
- Select one dimension and one Measure value from the list of the available Dimensions and measures. Drop the Measure value twice on the canvas.
- Click the 'Series Properties' icon to open the measure specific Series Properties.



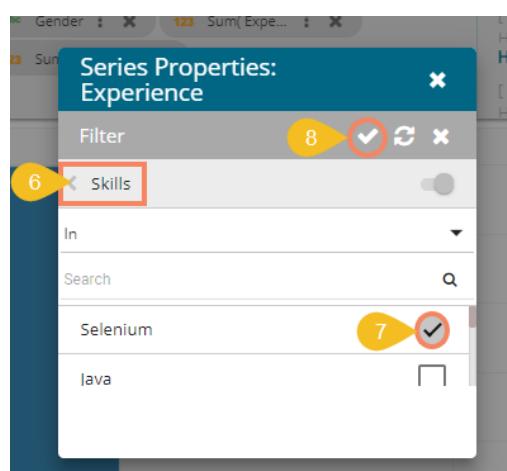
- Make sure that the 'Aggregation' type is the same for both the selected measures.
- Click the 'APPLY' option to modify the aggregation values, if they were not the same for the dragged measures.



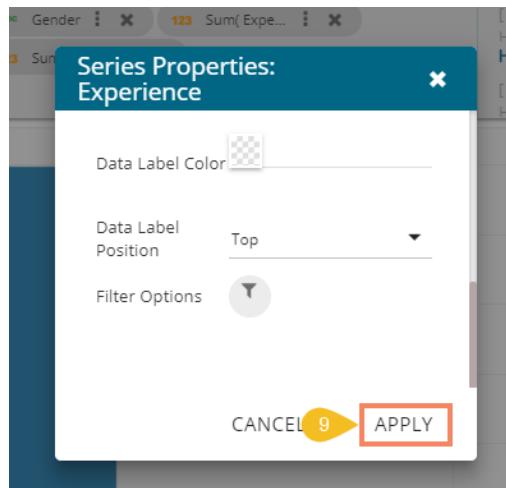
- v) Scroll down the Series Properties to get the '**Filter Options**'
 vi) Click the '**Filter**' icon to get all the available filter values.



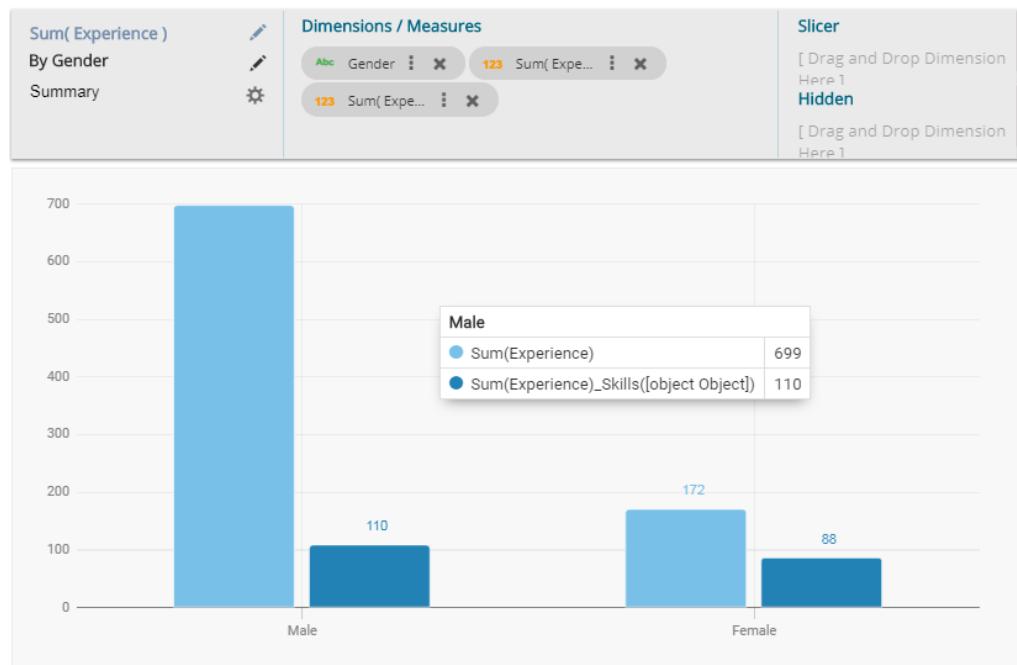
- vii) Select filter conditions using checkmarks in the given boxes. (E.g. In this case, '**Skills**' is a broad filter condition under which '**Selenium**' is a specific filter choice.)
 viii) Apply it using the '**Apply Filter**'  icon.



- ix) The screen displaying the Filter icon re-opens, click the ‘APPLY’ option.



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

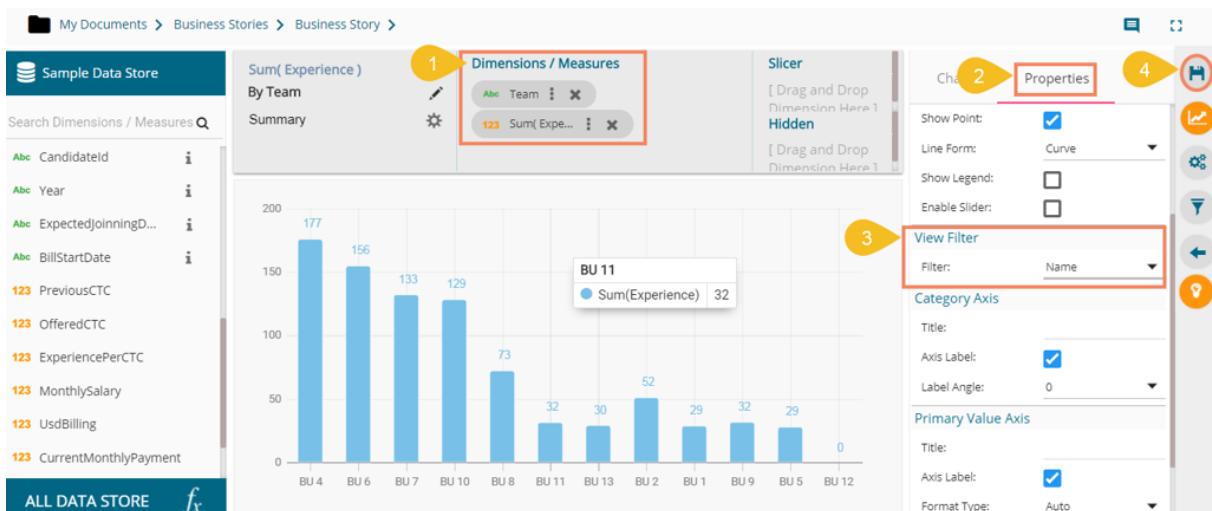


7.3.3. Custom View Filter

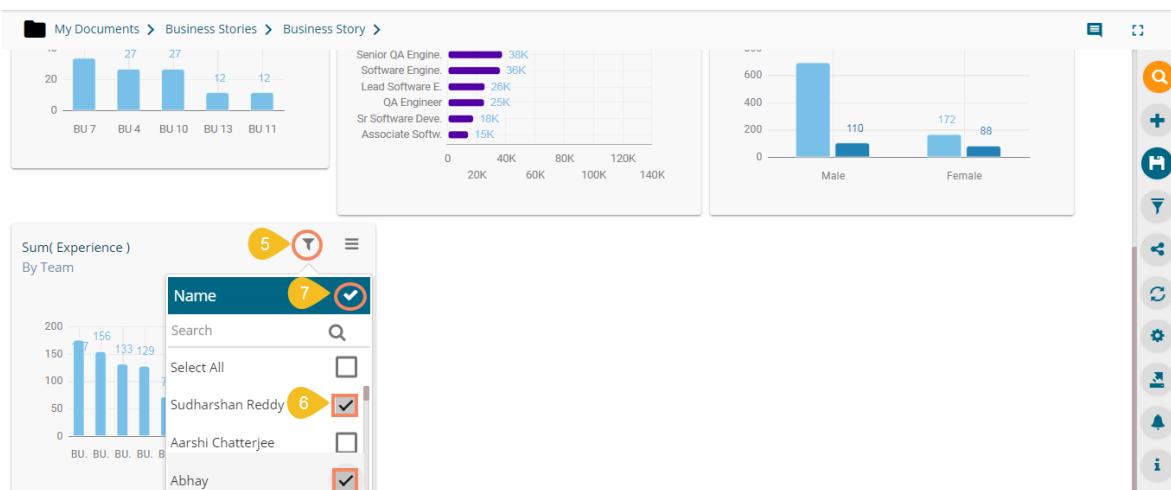
Users can access this filter option from the chart properties that appear in a chart on the storyboard when the view is saved.

- Create a view by drag and drop of the desired dimension and measure (By default, the Mixed chart gets selected to represent the selected data)
- Open the ‘Properties’ tab.
- Select the ‘View Filter’ option using the Properties panel. (In this case, filter condition is ‘Name’)

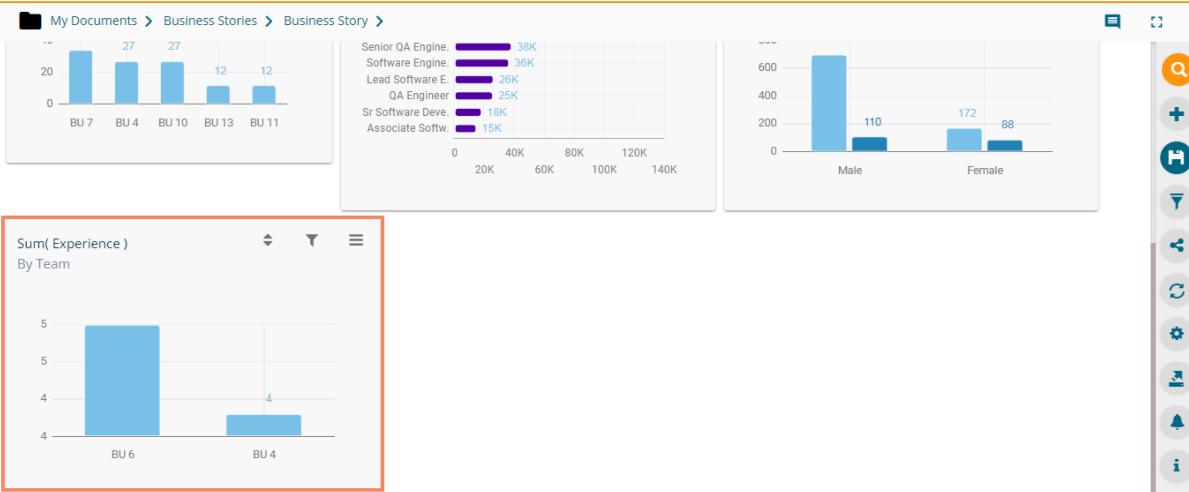
- iv) Click the 'Save' option to save the view on the storyboard.



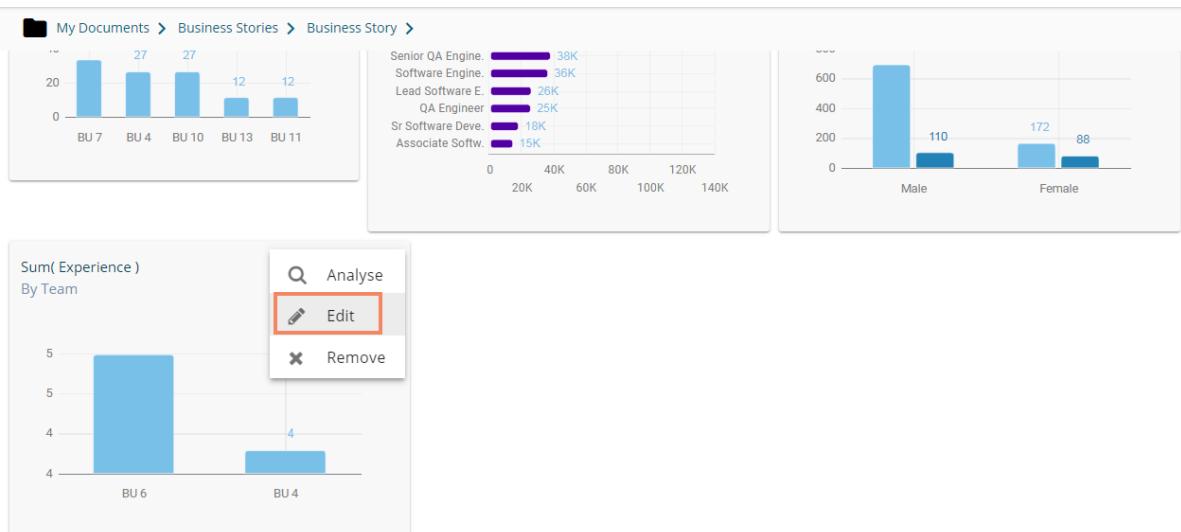
- v) Access the view from the storyboard and click the 'Filter' icon.
vi) Select a filter value.
vii) Click the 'Apply' icon.



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



ix) Click the 'Edit' option for the same view.



x) The custom filter condition does not remain effective when the view opens in the Design mode.

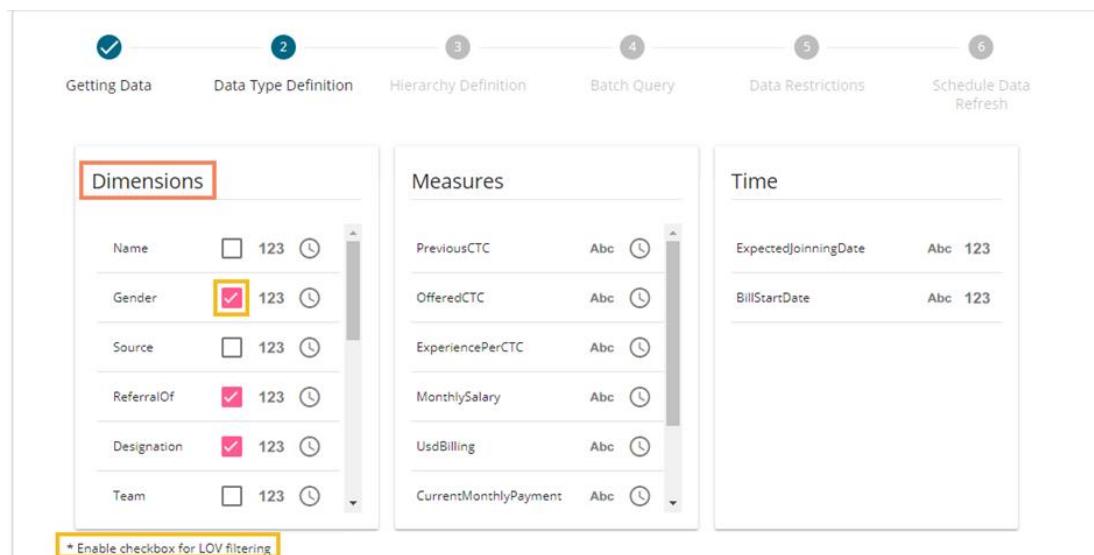


Note: The ‘View Filter’ choice is not available for the Scatter Plot chart, Semi Gauge chart, KPI Tile, KPI Comparative Tile, Matrix Summary.

7.3.4. Like and Not Like Operation in Filter

The users can enable filter and look up 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.

- 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, ReferralOf and Designation are enabled for the filter lookup function, but Name, Source, and Team are disabled from the filter lookup.



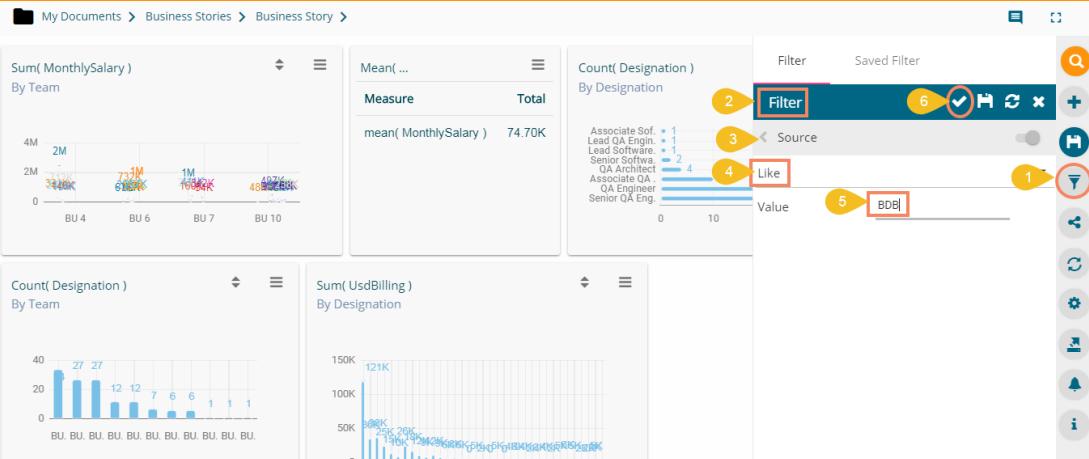
| Dimensions | | |
|-------------|-------------------------------------|-----|
| Name | <input type="checkbox"/> | 123 |
| Gender | <input checked="" type="checkbox"/> | 123 |
| Source | <input type="checkbox"/> | 123 |
| ReferralOf | <input checked="" type="checkbox"/> | 123 |
| Designation | <input checked="" type="checkbox"/> | 123 |
| Team | <input type="checkbox"/> | 123 |

| Measures | | |
|-----------------------|-----|--------------------------|
| PreviousCTC | Abc | <input type="checkbox"/> |
| OfferedCTC | Abc | <input type="checkbox"/> |
| ExperiencePerCTC | Abc | <input type="checkbox"/> |
| MonthlySalary | Abc | <input type="checkbox"/> |
| UsdBilling | Abc | <input type="checkbox"/> |
| CurrentMonthlyPayment | Abc | <input type="checkbox"/> |

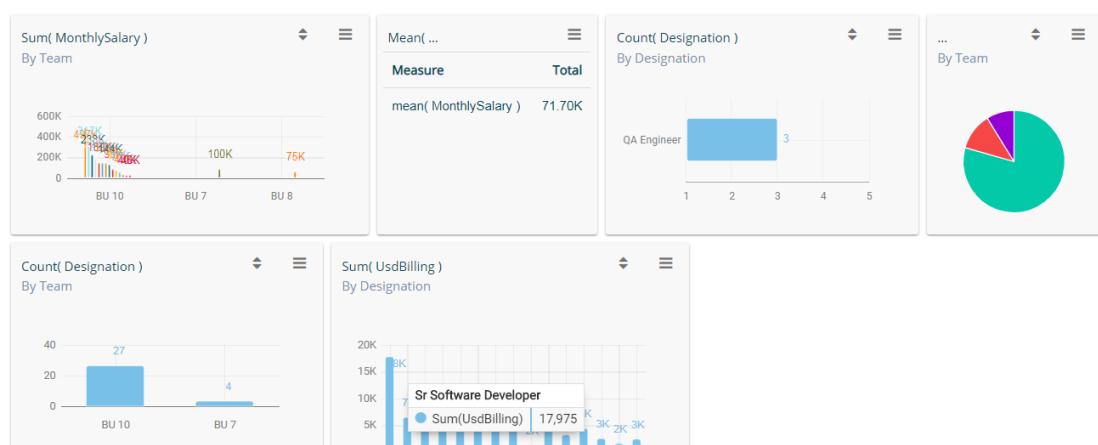
| Time | | |
|----------------------|-----|-----|
| ExpectedJoinningDate | Abc | 123 |
| BillStartDate | Abc | 123 |

* Enable checkbox for LOV filtering

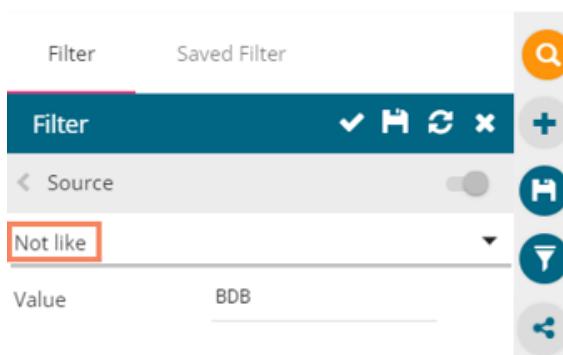
- Create a story based on the same data store and save it with a relevant view.
- Access the filter panel and select any of the disabled Dimension value. (E.g., the Source dimension is selected from the Filter panel. in this condition, the users do not get ‘In’ or ‘Not In’ filter conditions in the drop-down.)
- Users do not get a list of the sub-dimensions.
- Choose ‘Like’ operation from the drop-down menu
- Provide Value manually for the selected Dimension (E.g., BDB is the value provided for the Source dimension)
- Click the ‘Apply’ icon.



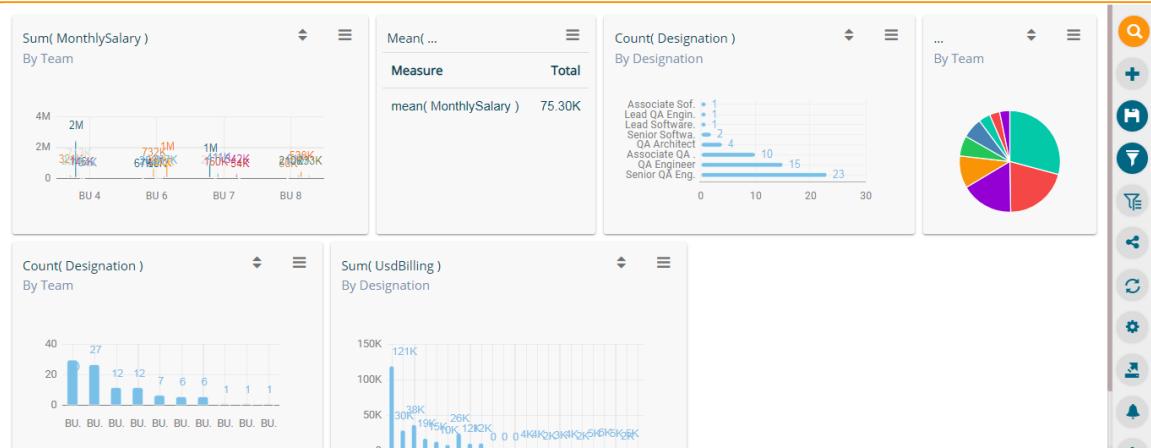
viii) The story (views) gets filtered as per the applied filter value.



ix) Select ‘Not Like’ as the filter operation.



x) The Story (views) gets filtered as per the not entered values of the dimension.

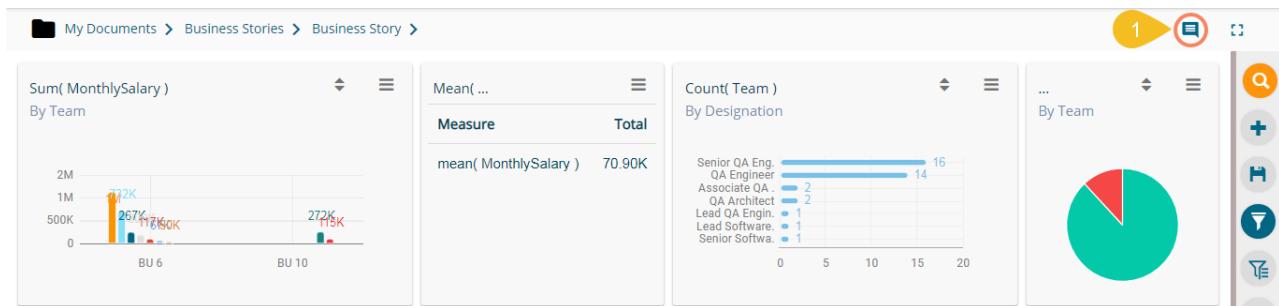


Note: The ‘Like’ and ‘Not Like’ operations can also be performed using the Local filter panel.

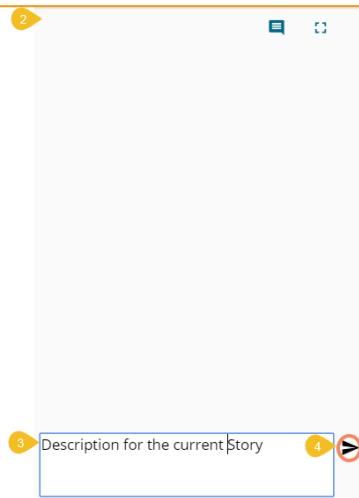
7.4. Comments

Users can access the ‘Comments’ option on the menu row while designing a story.

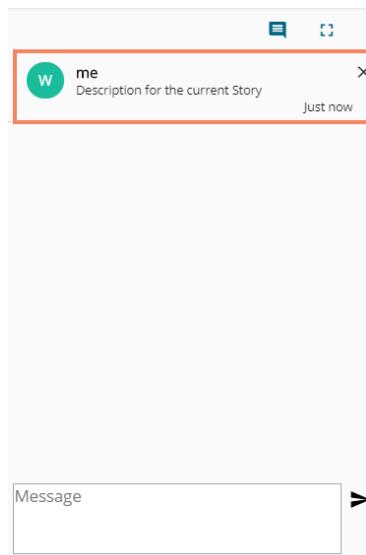
- Click the ‘Comments’ icon from the Header panel.



- A new window opens below with space to insert a message at the end of the window.
- Type a comment in the given ‘Message’ space.
- Click the ‘Send’ icon.



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



Note:

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

8. Charts & Properties

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

8.1. Mixed Chart

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

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.

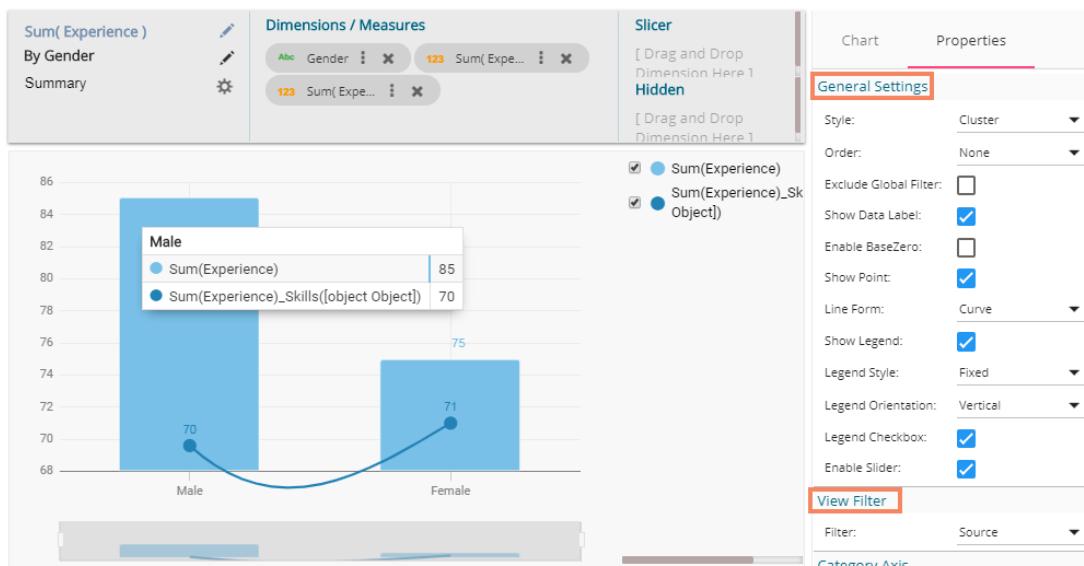
Properties:

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
- c. **Manual Sort:** Users need to sort the dimensions by using the indicator signs manually 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
- d. **Exclude Global Filter:** The view will be 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 providing a checkmark in the box
- g. **Show Point:** Enable the Show Point option by using a checkmark in the given box
- h. **Line Form:** Select a line format from the drop-down menu (the provided choices for this field are: Curve and Segment)
- i. **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 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
- j. **Enable Slider:** Provide a check mark 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

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

iv) Primary Value Axis

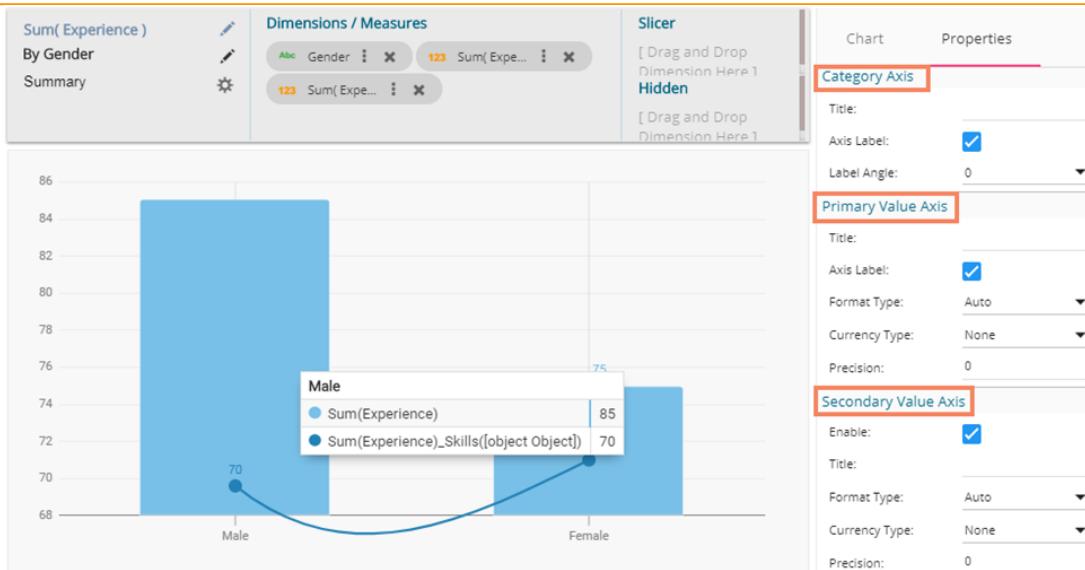
- Title:** Provide a title for the Primary Value Axis
- Axis Label:** Enable the Primary Value Axis label by putting a checkmark in the box.
- Format Type:** Select a desired format type from the drop-down menu (the provided options for this field are: None, Auto, Percent, Thousand, Lacs, Crore, Million)
- 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)
- Precision:** Set the after-decimal value (It displays up to 5 precision)

v) Secondary Value Axis

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

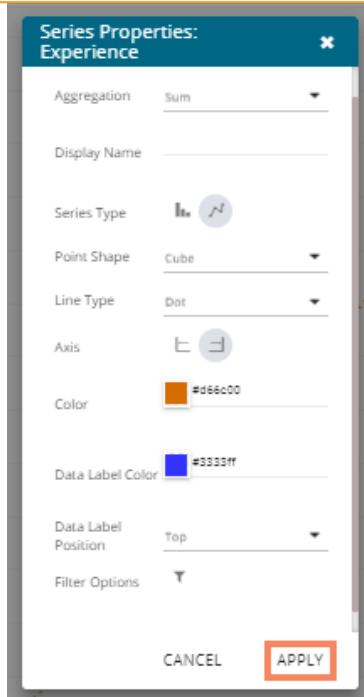
- Enable:** Put a checkmark in the box to enable the Secondary Value Axis
- Title:** Provide a title for the Secondary Value Axis
- Format Type:** Select a desired format type from the drop-down menu
- Currency Type:** Select a desired currency symbol from the list
- Precision:** Set the after-decimal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

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

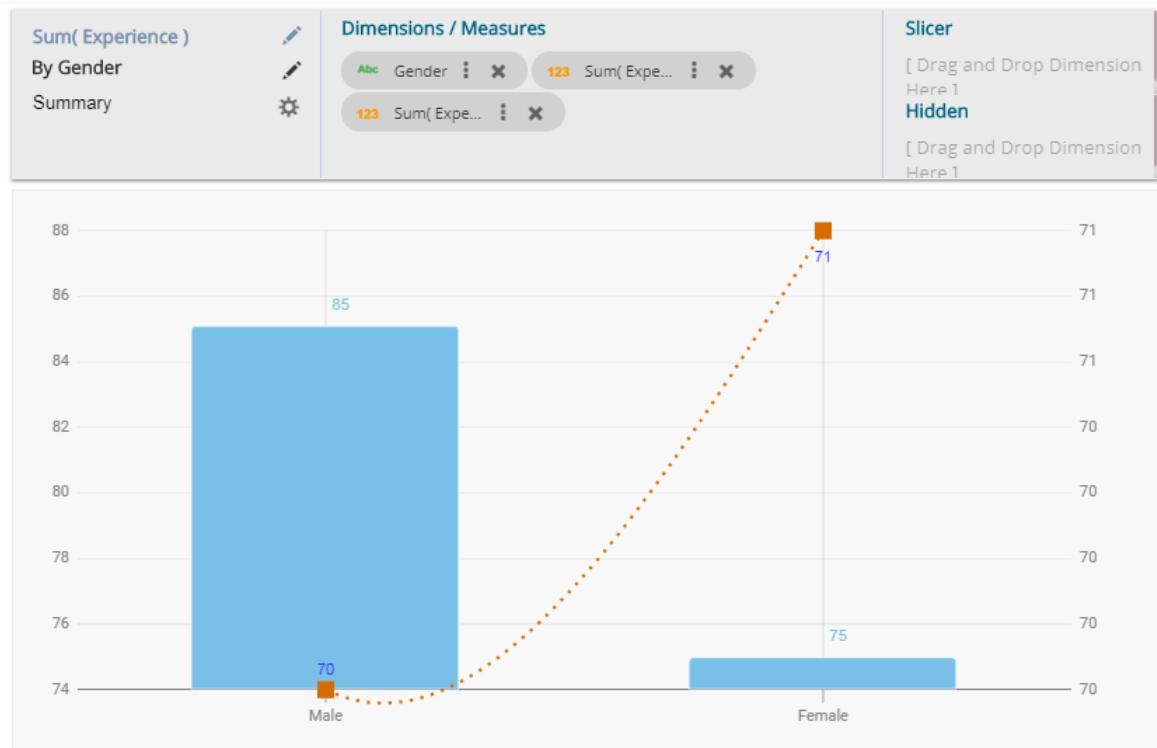


Users must configure the **Series Properties** of the dragged measure after enabling the Secondary Value Axis to display the same in the chart.

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



8.2. 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), 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 check mark 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 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

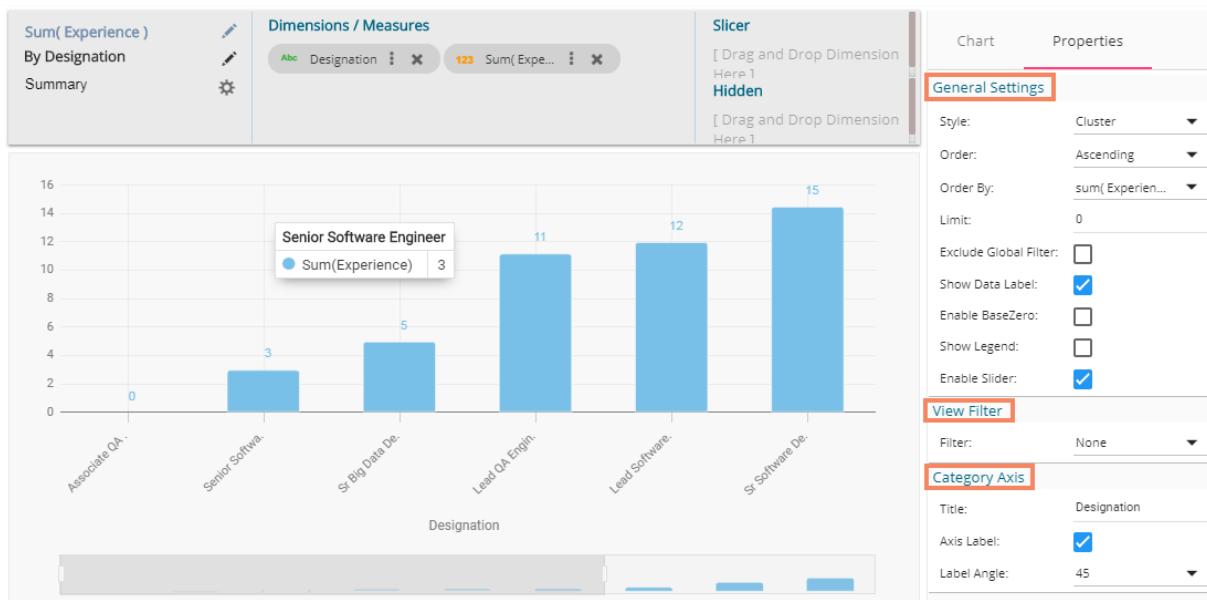
g. Enable Slider: Provide a check mark in the box to enable the Slider.

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

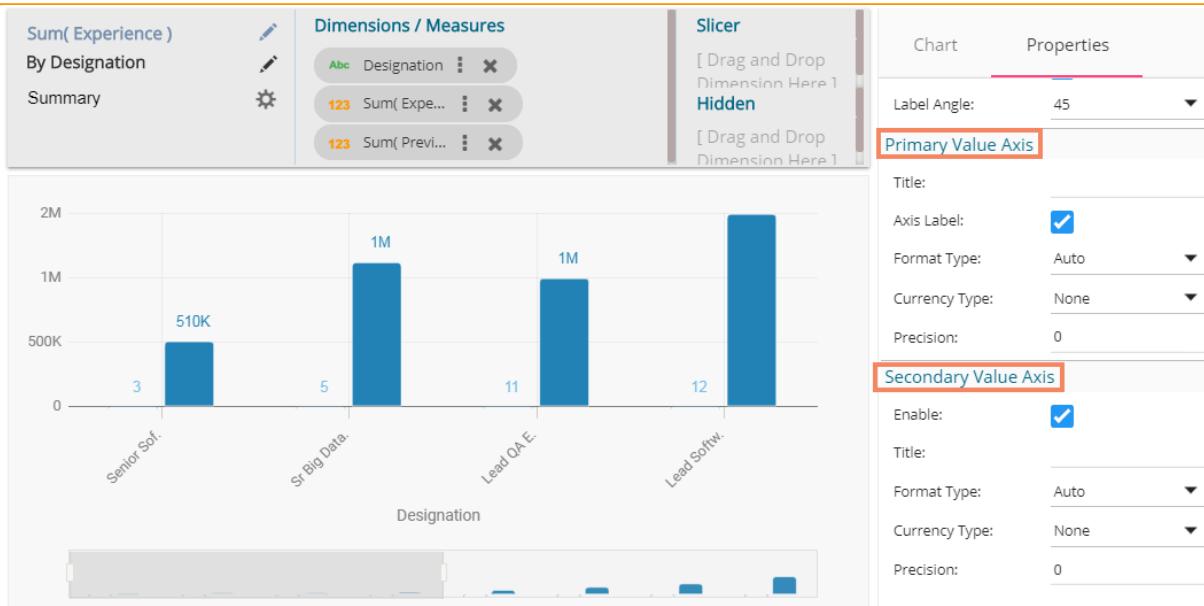
- a. **Title:** Provide a title for the Primary Value Axis
- b. **Axis Label:** Enable the Primary Value Axis label by turning on the radio button
- c. **Format Type:** Select a desired format type from the drop-down menu (the provided options for this field are: None, Auto, Percent, Thousand, Lacs, 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 will be displayed when two measures are dragged on the canvas.

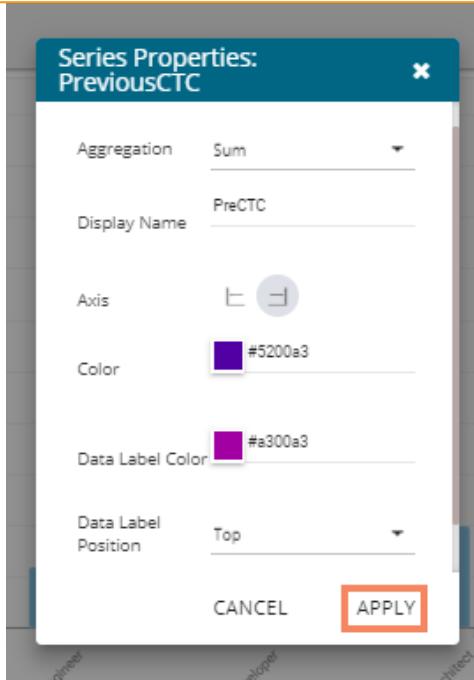
- a. **Enable:** Put a checkmark in the box to enable the Secondary Value Axis
- b. **Title:** Provide a title for the Secondary Value Axis
- c. **Format Type:** Select a desired format type from the drop-down menu
- d. **Currency Type:** Select a desired currency symbol from the list

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

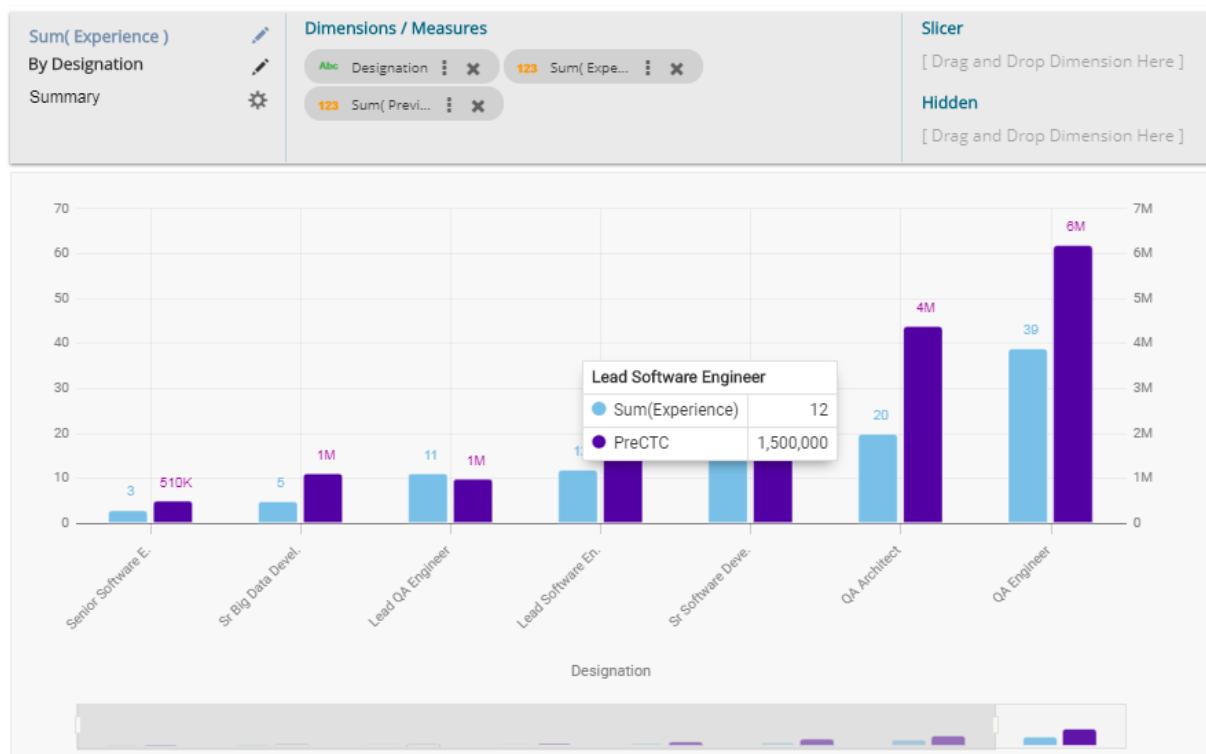


Users must configure the **Series Properties** of the dragged measure after enabling the Secondary Value Axis to display the same in the chart

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



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



8.3. Line Chart

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:

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 (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, 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)

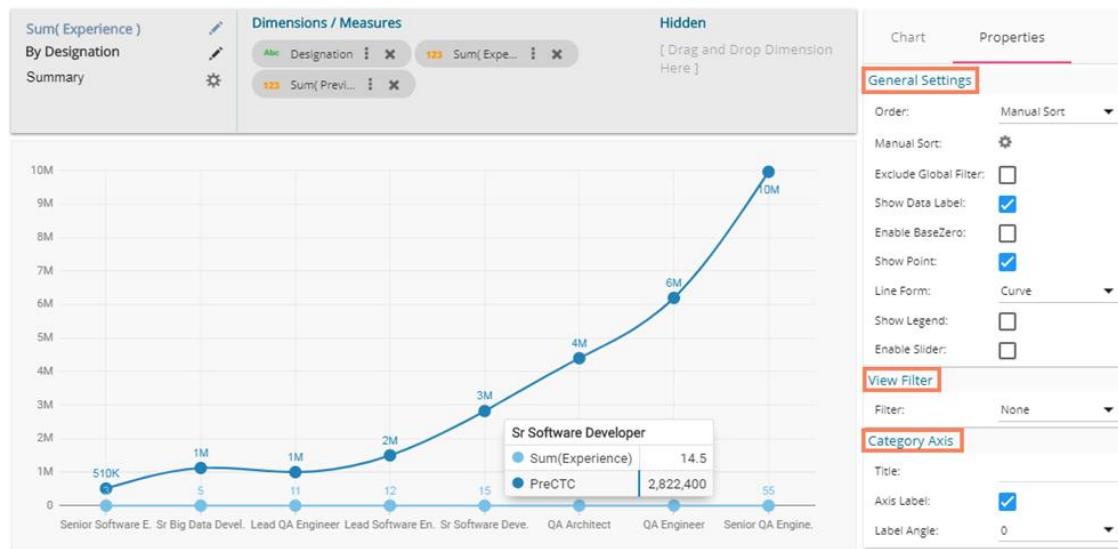
- h. **Show Legend:** Displays legend by turning on the radio button. After enabling 'Show Legend,' users need to select the following information:

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

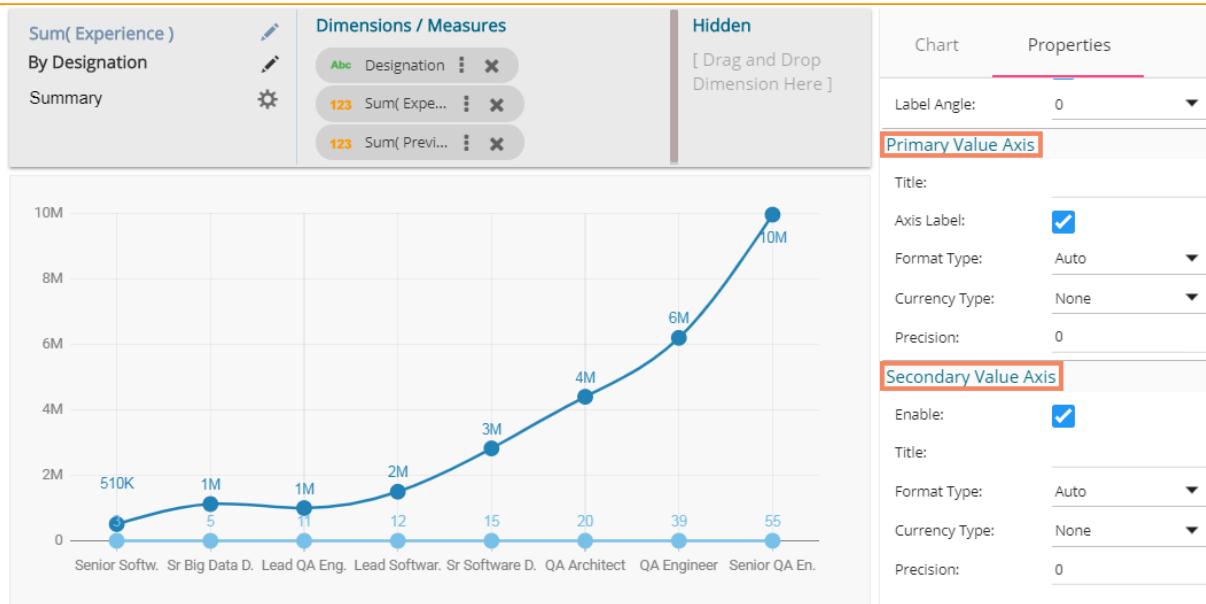


- iv) **Primary Value Axis**
 - a. **Title:** Provide a title for the Primary Value Axis
 - b. **Axis Label:** Enable the Primary Value Axis label by using a checkmark in the box
 - c. **Format Type:** Select a desired format type from the drop-down menu (the provided options for this field are: None, 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**

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

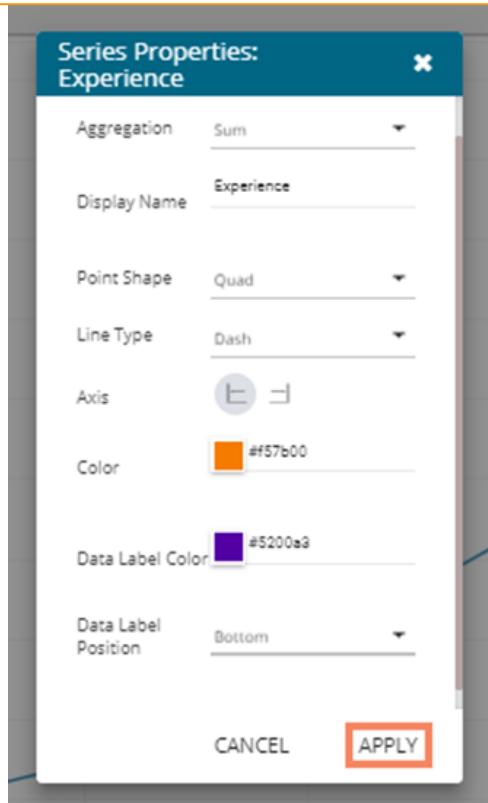
 - a. **Enable:** Put a checkmark in the box to enable the Secondary Value Axis
 - b. **Title:** Provide a title for the Secondary Value Axis
 - c. **Format Type:** Select a desired format type from the drop-down menu
 - d. **Currency Type:** Select a desired currency symbol from the list
 - e. **Precision:**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

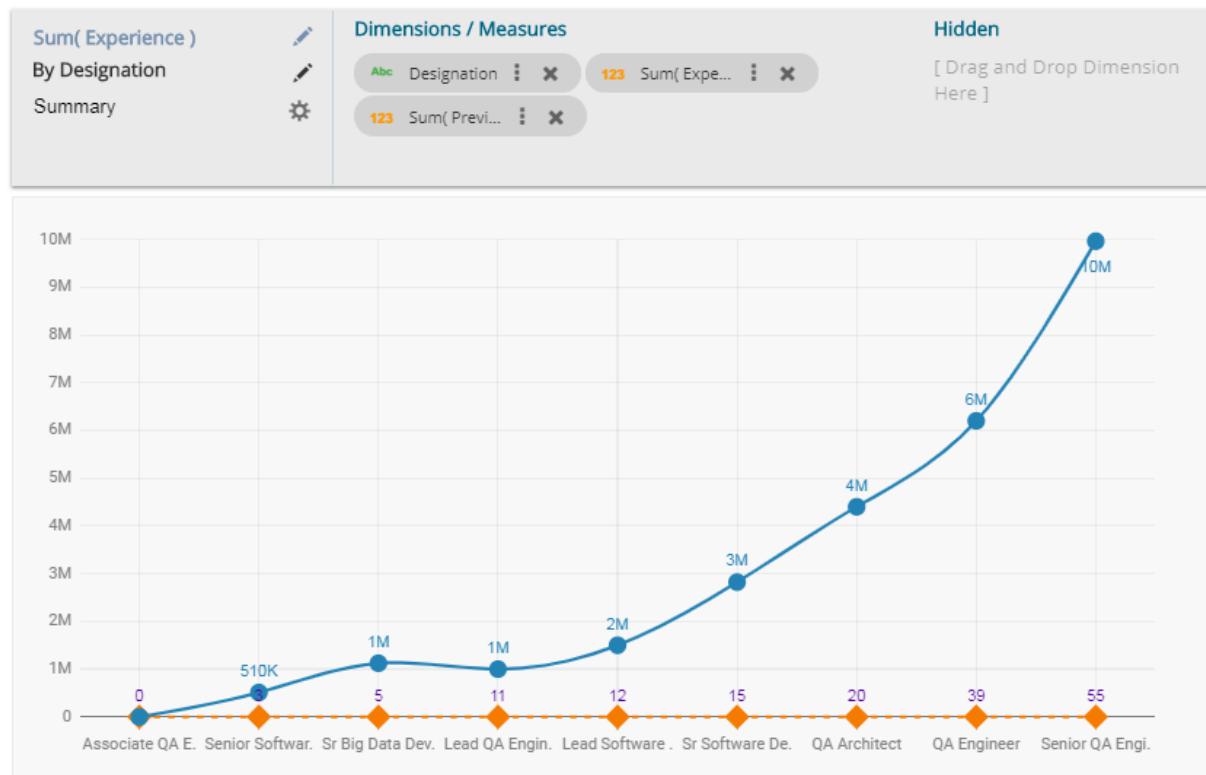


Users must configure the **Series Properties** of the dragged measure after enabling the Secondary Value Axis to display the same in the chart

- 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 will show 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 'Properties' tab.
- f. The selected changes can be seen in the secondary value axis of the view.



8.4. Bar Chart

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

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.

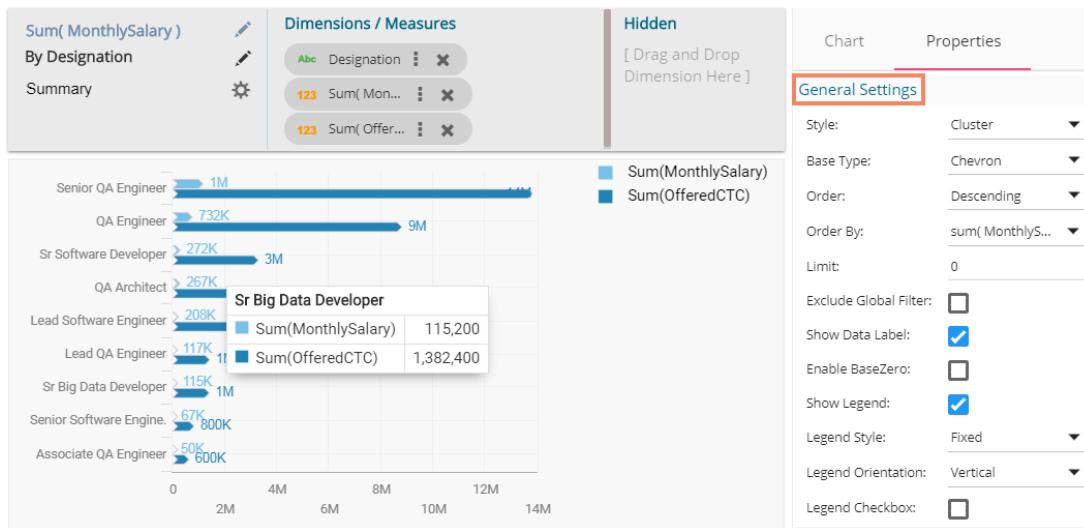
Use bar side by side: Where comparison between multiple categories becomes easier instead of toggle between charts.

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 (Users need to sort the dimensions by using the indicator signs manually)
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
- d. **Exclude Global Filter:** The view will be 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 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 turning on the radio button

iv) Primary Value Axis

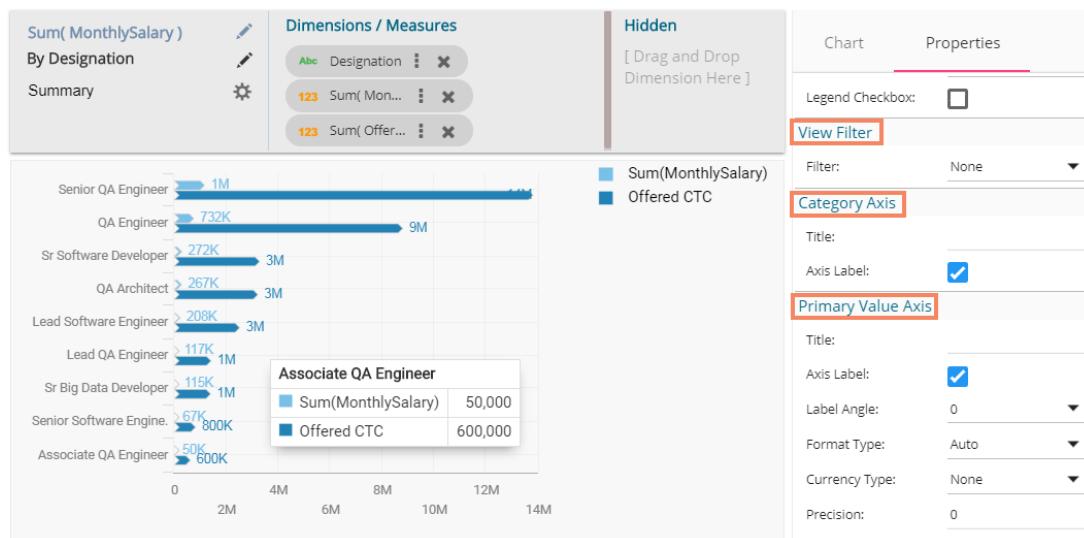
- a. **Title:** Provide a title for the Primary Value Axis

- b. **Axis Label:** Enable the Primary Value Axis label by turning on the radio button

- c. **Format Type:** Select 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)



8.5. Bubble Chart

A Bubble chart visualizes data set in three or four dimensions. The first two aspects are used as coordinates like 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.

Best situation to use a Bubble Chart:

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

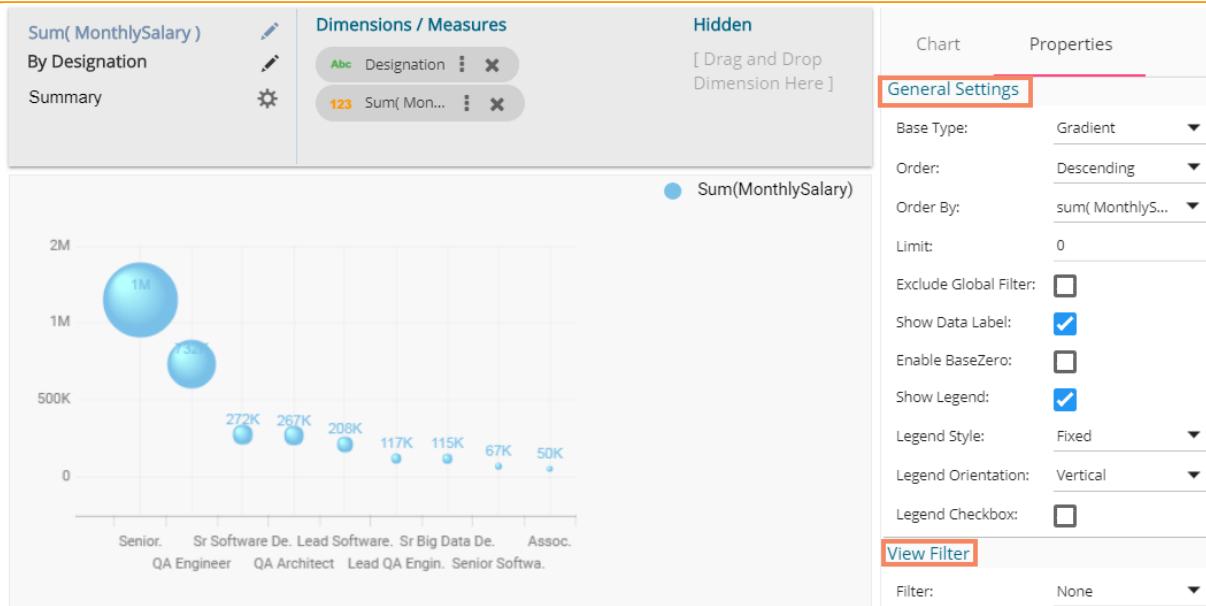
Properties:

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, 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 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

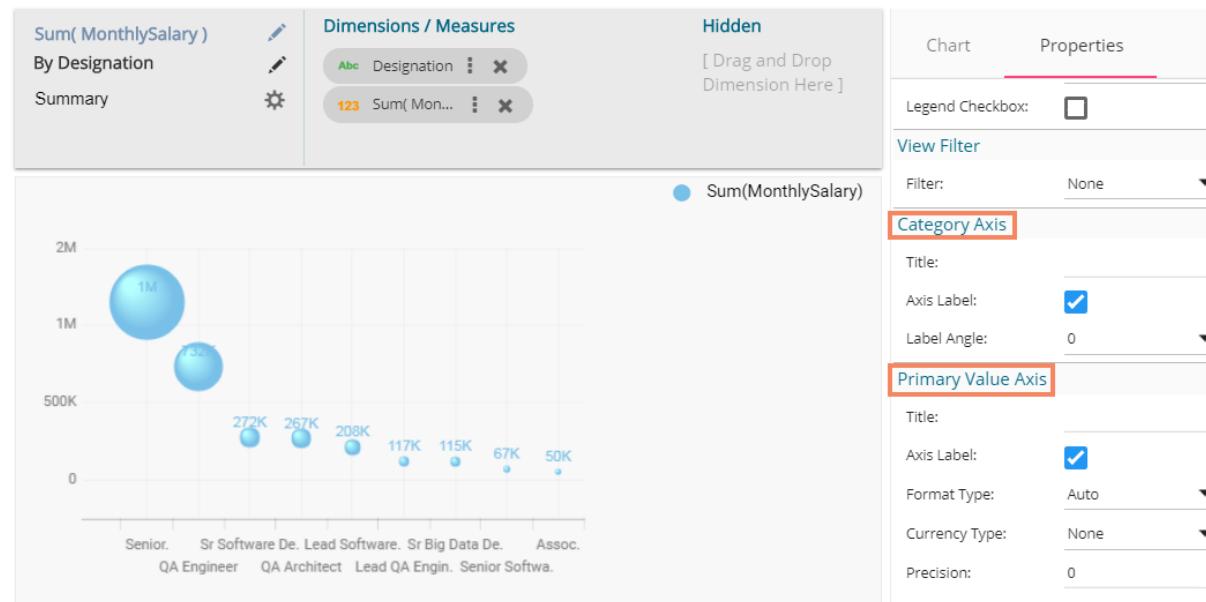


iii) Category Axis

- 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)



8.6. 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.

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

Examples:

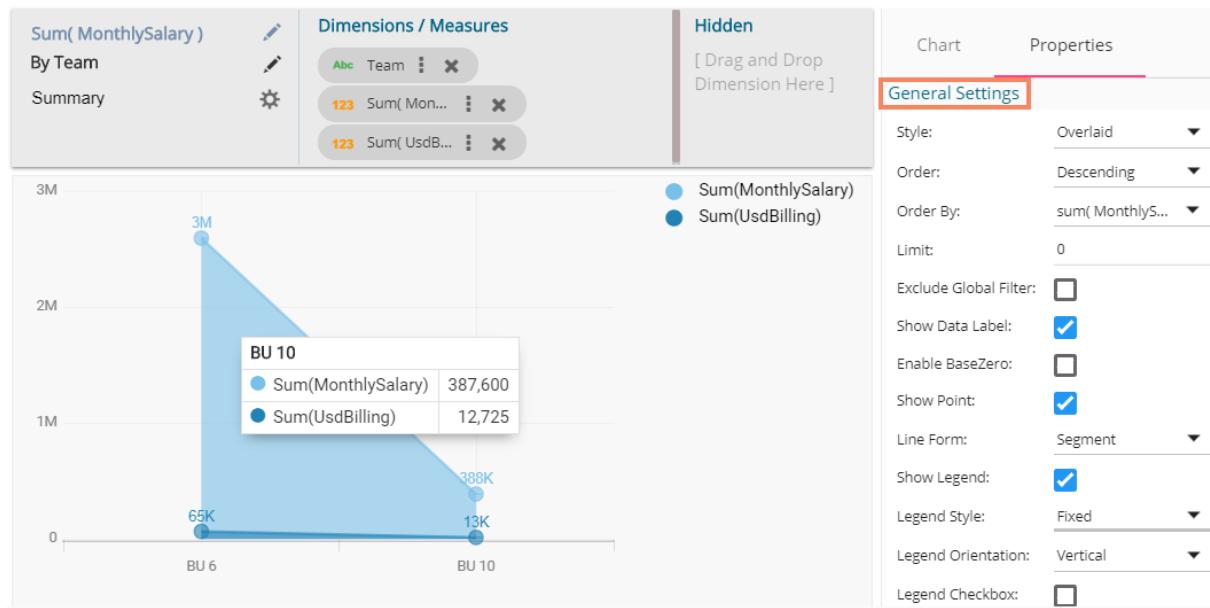
- To view the sales of a manufacturer over a period.
- To display quarter wise revenue growth of an organization

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

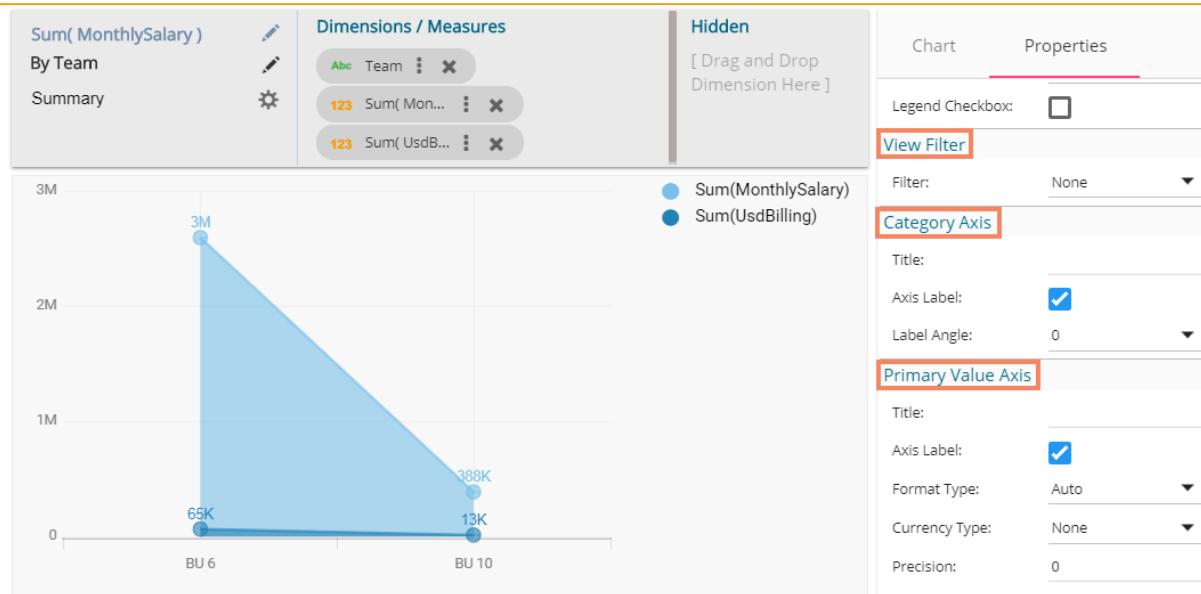
- Filter:** Select a filter condition using the drop-down menu

iii) Category Axis

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

iv) Primary Value Axis

- Title:** Provide a title for the Primary Value Axis
- Axis Label:** Enable the Primary Value Axis label by using a checkmark in the box
- 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)
- 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)
- Precision:** Set the after-decimal value (It displays up to 5 precision)



8.7. 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.

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 users can switch from pie-chart to a doughnut chart.

Properties:

i) General Settings

- Style: Select a style to display data
 - Pie
 - Doughnut
 - Semi Doughnut
 - Order: Select a sequence for displaying data
 - None
 - Ascending
 - Descending
 - Manual Sort
- By selecting an order(ascending or descending, users will be required to configure the following fields:
- 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

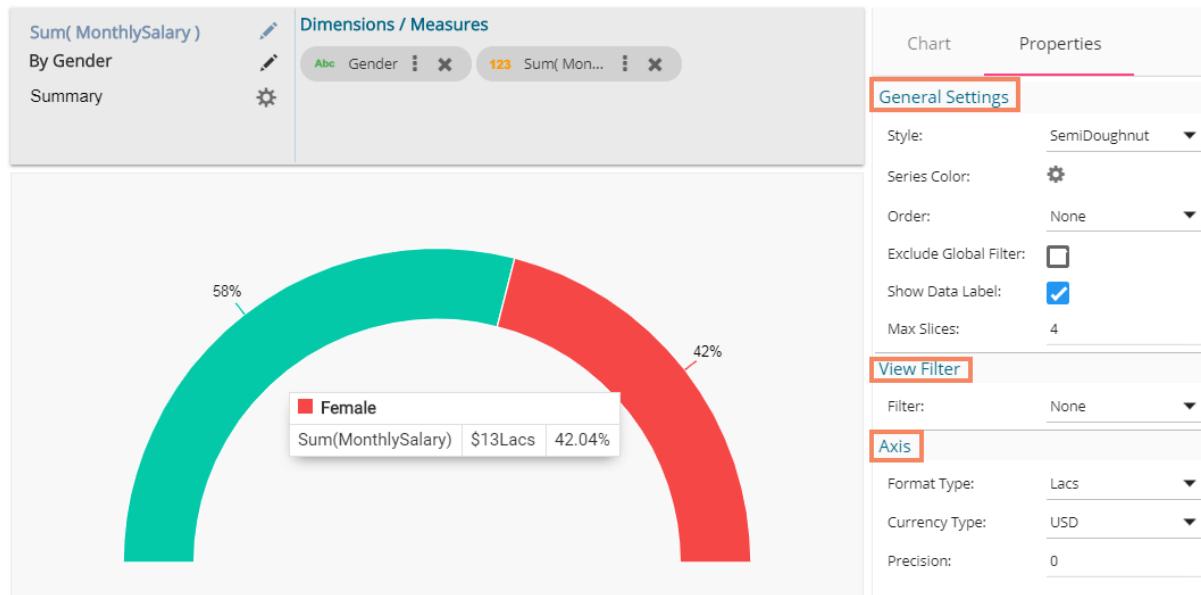
- c. Exclude from Global Filter: The view will be excluded from the Global Filter condition by putting a checkmark in the box
- d. Show Data Label: Data label will be displayed by turning on the radio button
- e. Max Slices: Set a number to limit the maximum displayed slices in the chart

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 Software Engineer in six million rupees as selected currency type is 'rupees' and format type is 'million.'



8.8. 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)

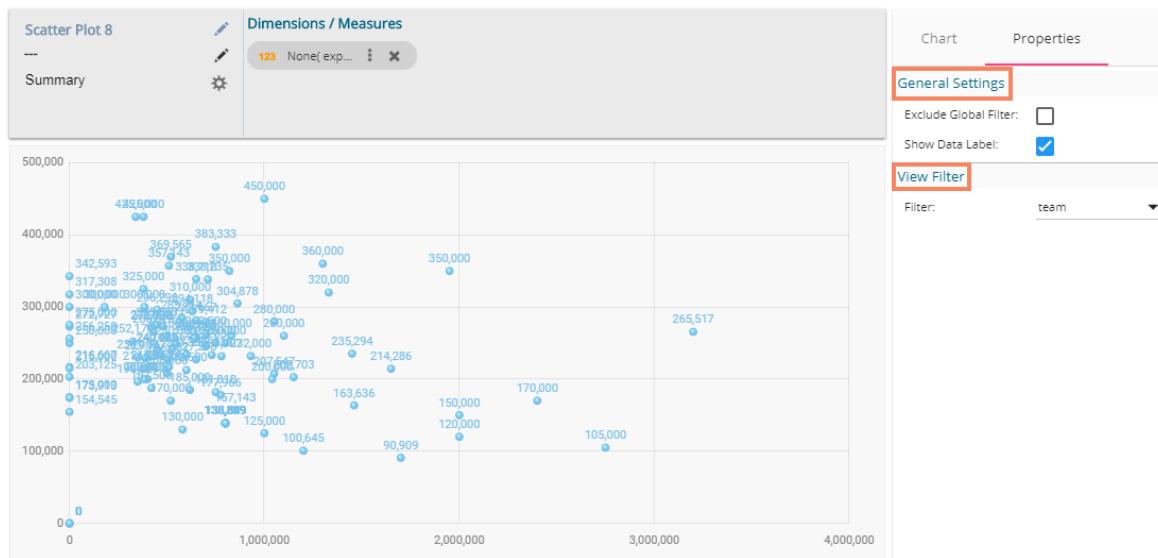
Properties:

i) General Settings

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

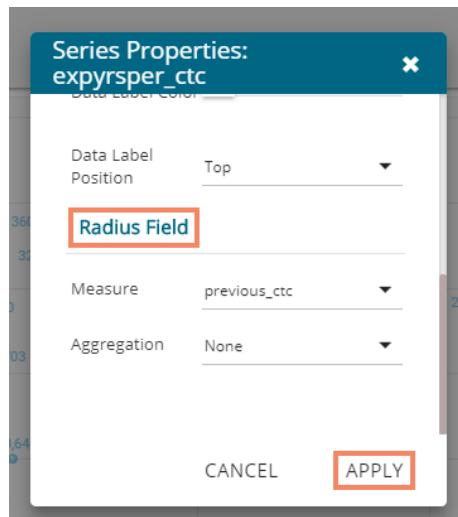
ii) View Filter

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



Note:

- a. The users need to configure the 'Radius 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 'previous_ctc,' and the selected Aggregation option is 'None.'



- b. The Scatter Plot chart displays only Measure values with the Aggregation option selected as 'None.'

8.9. 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 users 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:

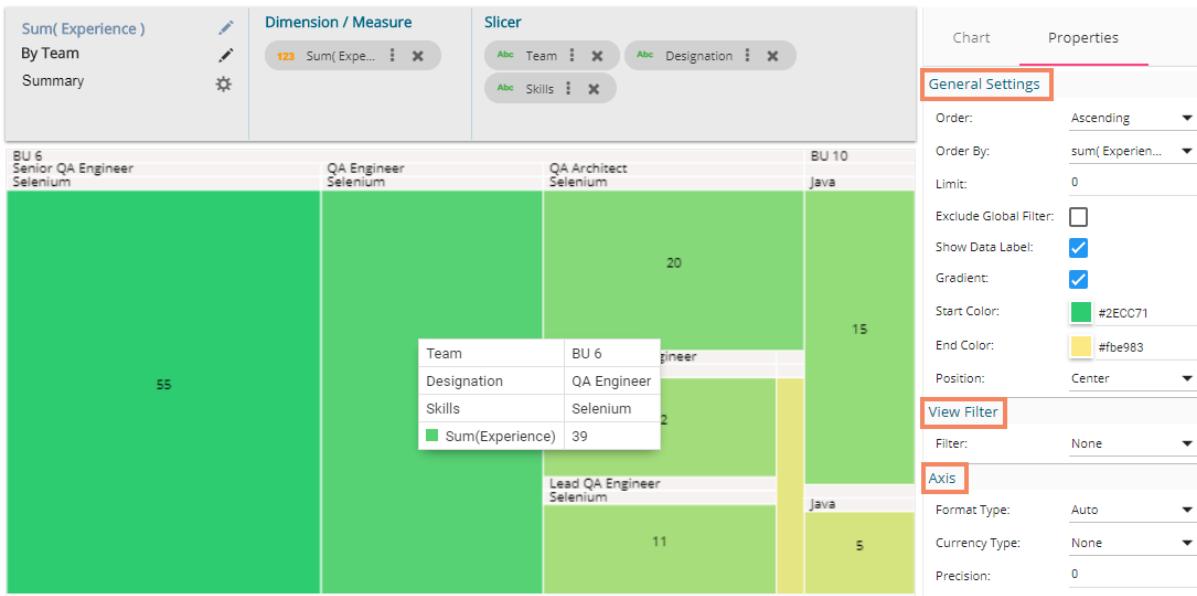
1. Order By- Select a value option from the drop-down menu to order the sequence of the data
 2. Limit- Set a number to display the requested data by this limit
- b. Exclude Global Filter: The view will be excluded from the Global Filter condition by turning on the radio button
 - c. Show Data Label: Data label will be displayed by turning on the radio button
 - d. Gradient: Enable or disable color gradient effect on the chart by using the check mark in the box.
 - i. By enabling the 'Gradient' option users get redirected to select 'Start Color' and 'End Color' from the respective menus.
 - ii. By disabling the 'Gradient' option users get 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 Experience sliced based on Team, Designation, and Skills.



8.10. 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

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

ii) View Filter

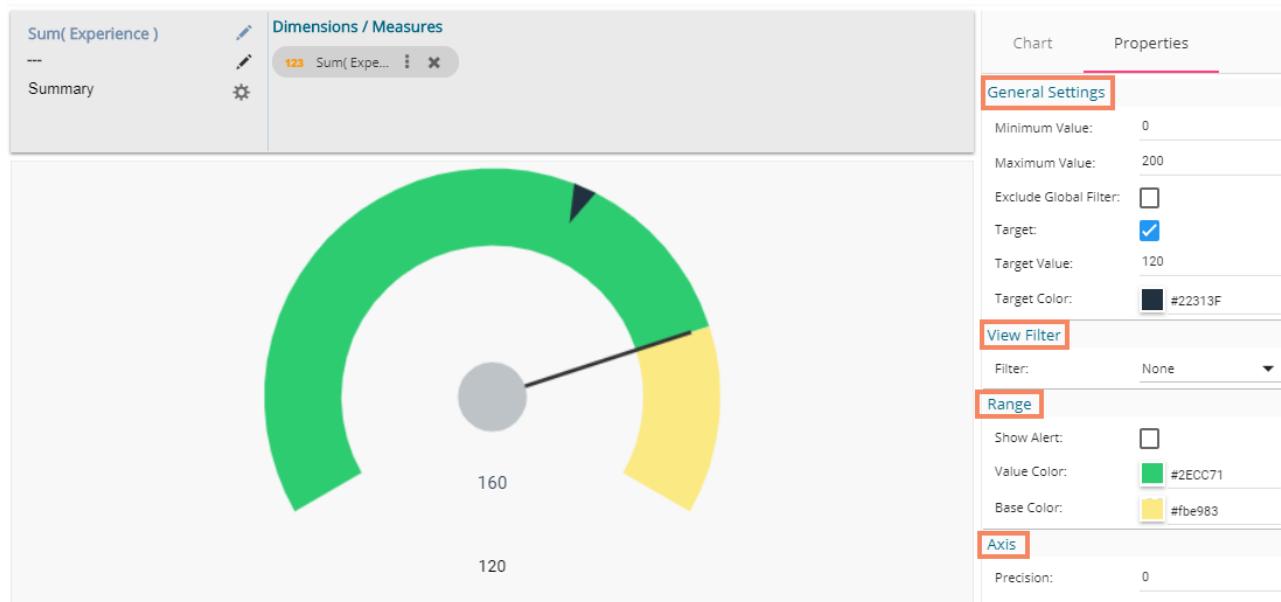
a. **Filter:** Select a filter condition using the drop-down menu

iii) Range

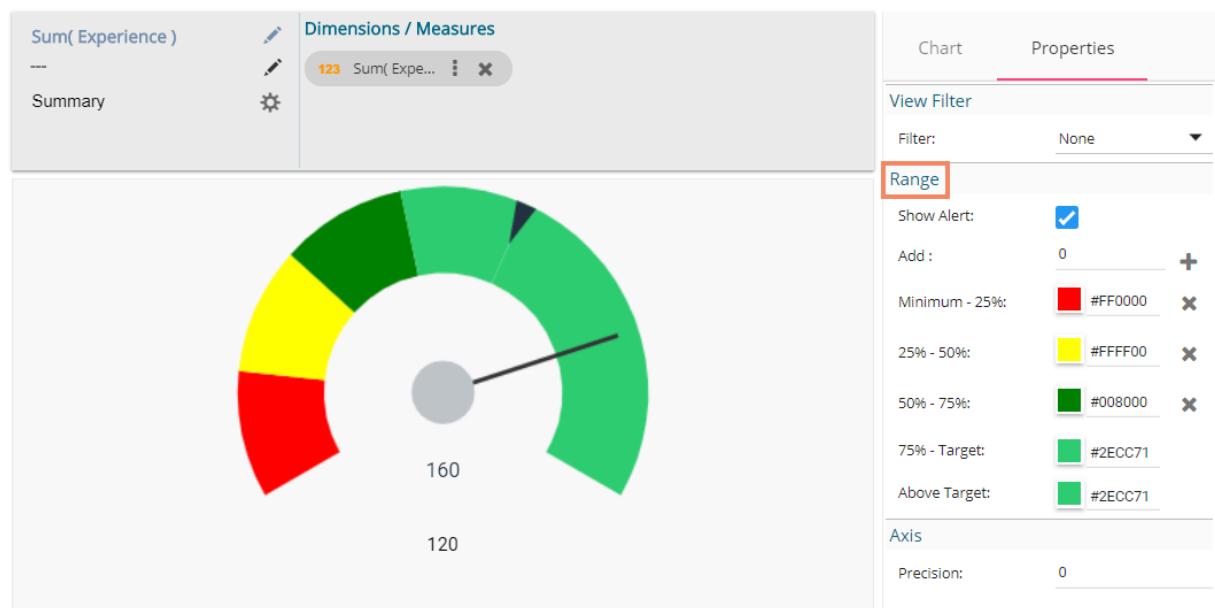
- a. **Show Alert:** Enable various ranges (in %) by turning on the radio button
- b. **Value Color:** Set a value color
- c. **Base Color:** Set a base color

iv) Axis

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



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



Note:

- a. 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.

8.11. 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 check mark 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 Lacs and Precision value is shown up to three numbers.

| Dimensions / Measures | | Properties | |
|-----------------------|-------------------------------------|------------|------------------------------------------------------------|
| Sum(MonthlySalary) | <input type="button" value="Edit"/> | Chart | General Settings |
| --- | <input type="button" value="Edit"/> | | Label: Sum of Monthly Sal. |
| | <input type="button" value="Edit"/> | | Label Color: #0000a3 |
| | <input type="button" value="Edit"/> | | Label Font Size: 16 |
| | <input type="button" value="Edit"/> | | Value Color: #ff9933 |
| | <input type="button" value="Edit"/> | | Value Font Size: 20 |
| | <input type="button" value="Edit"/> | | Exclude Global Filter: <input checked="" type="checkbox"/> |
| | <input type="button" value="Edit"/> | | View Filter |
| | <input type="button" value="Edit"/> | | Filter: Team |
| | <input type="button" value="Edit"/> | | Primary Value Axis |
| | <input type="button" value="Edit"/> | | Format Type: Lacs |
| | <input type="button" value="Edit"/> | | Currency Type: Rupees |
| | <input type="button" value="Edit"/> | | Precision: 3 |

8.12. KPI 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
- iii) Click the 'Actions' icon

The screenshot shows the BDB AI workspace interface. On the left, there's a sidebar titled 'Sample Data Store' with a search bar and a list of dimensions and measures. One measure, 'Sum(Experience)', is highlighted with a red box and has a yellow arrow pointing to it. In the center, a chart area displays a value of '871'. On the right, a 'Chart' library is open, showing various chart types like bar, line, pie, and map. A specific tile icon is highlighted with a red box and a yellow arrow. The top right corner of the workspace shows a tooltip for the 'KPI Tile: Comparative Tile' with fields for 'Dimensions' and 'Measures'.

- 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.

The screenshot shows the 'Action Settings' page. On the left, there are three options: 'Interactions', 'Custom Fields' (which is highlighted with a red box and a yellow arrow), and 'WebSocket'. On the right, a 'Custom Fields' dialog box is open. It has a 'Title' field containing 'Salary' (highlighted with a red box and a yellow arrow), a 'Value' field containing '2700000' (highlighted with a red box and a yellow arrow), and a 'SAVE' button at the bottom right (highlighted with a red box and a yellow arrow). A 'NEW' button is also visible in the top right of the dialog.

- ix) A new Custom Field gets created and added to the Custom Fields page.

The screenshot shows the 'Custom Fields' page. On the left, there are the same three options: 'Interactions', 'Custom Fields', and 'WebSocket'. On the right, a list of custom fields is shown. The first item in the list is 'Salary' (highlighted with a red box and a yellow arrow). There are edit and delete icons next to each entry.

- x) Users can create multiple custom fields by following the above steps. (E.g. Monthly Salary is another custom field.)

Action Settings

Custom Fields

NEW

- Interactions
- Custom Fields
- WebSocket

| Field | Actions |
|----------------|---------------------------------------------------------------------------|
| Salary | <input type="button" value="Edit"/> <input type="button" value="Delete"/> |
| Monthly Salary | <input type="button" value="Edit"/> <input type="button" value="Delete"/> |

- xi) Navigate to the 'Properties' tab using the Design icon
- xii) Configure the following properties:
- General Settings**
 - Label:** Insert text to be displayed as Label
 - Label Color:** Select the Label color using the menu
 - Label Font Size:** Select the font size for the displayed label using the drop-down menu
 - Exclude Global Filter:** Use a check mark in the box to exclude the Global filter conditions
 - Show Trend:** Use a check mark in the box to display the trends
 - View Filter**
 - Filter:** Choose a view filter condition from the drop-down menu
 - Primary Value Properties**
 - Font Size:** Select a font size from the drop-down menu
 - 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)
 - 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)
 - Precision:** Set the after-decimal value (It displays up to 5 precision)

Dimensions / Measures

Sum(Experience)

123 Sum(Expe...

Chart Properties

General Settings

Label:

Label Color:

Label Font Size: 15

Exclude Global Filter:

Show Trend:

View Filter

Filter:

Primary Value Properties

Font Size: 22

Format Type: Auto

Currency Type: None

Precision: 0

d. Secondary Value Properties

- Secondary Value:** Select a custom filed from the drop-down menu
- Font Size:** Select a font size from the drop-down menu
- 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)
- 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)
- Precision:** Set the after-decimal value (It displays up to 5 precision)
- Rules:** Click the icon provide to insert rules

14 Secondary Value Properties

| | |
|------------------|--------|
| Secondary Value: | Salary |
| Font Size: | 20 |
| Format Type: | Auto |
| Currency Type: | None |
| Precision: | 0 |
| Rules: | |

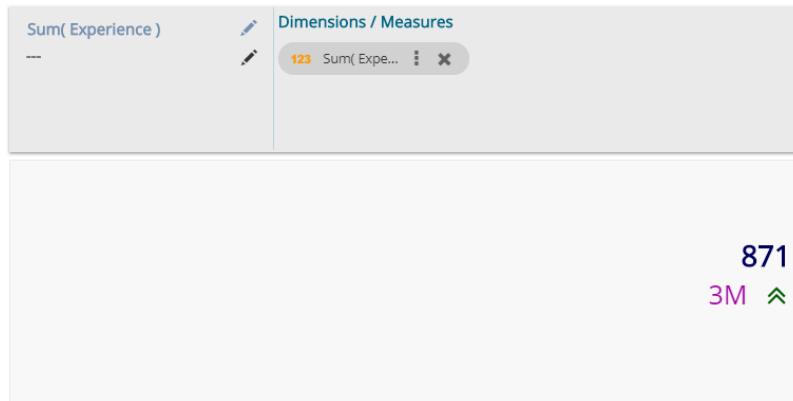
- A new screen opens allowing the users to set rules for displaying the comparative values
- Configure the required '**Rules**' fields as shown in the following image:
 - Primary Operator:** Select an option from the drop-down menu
 - Operation:** Select an operation from the drop-down menu to be applied as a condition on the selected Primary Operator
 - Secondary Operator:** Select an option from the drop-down menu
 - Primary Value Color:** Select a color for the primary value field
 - Secondary Value Color:** Select a color for the Secondary Value field
 - Trend Direction:** Select a trend direction using the drop-down menu
 - Trend Color:** Select a trend color from the menu
 - REMOVE:** Selecting this option removes the added rules
 - ADD:** Selecting this option adds a new row to be configured as a rule
 - Click the '**APPLY**' option to apply the configured Rule

15 Rules

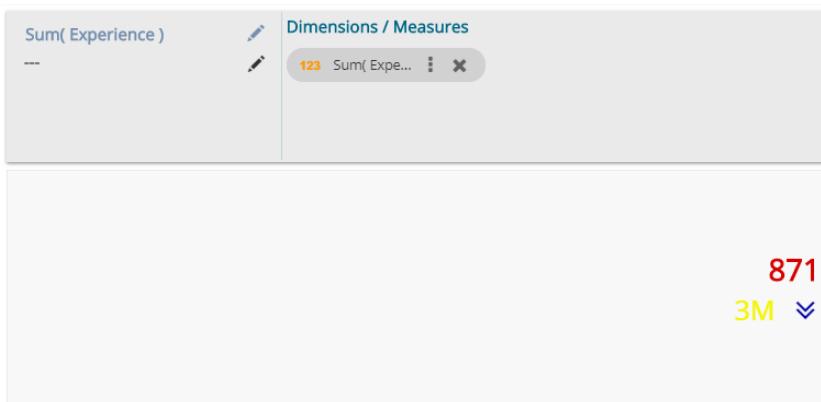
| Primary Operator | Operation | Secondary Operator | Primary Value Color | Secondary Value Color | Trend Direction | Trend color |
|------------------|-----------------------|--------------------|---------------------|-----------------------|-----------------|-------------|
| Primary Value | less than or equal to | Secondary Value | | | Up | |

ADD CANCEL **APPLY**

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



- xiv) Users 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.

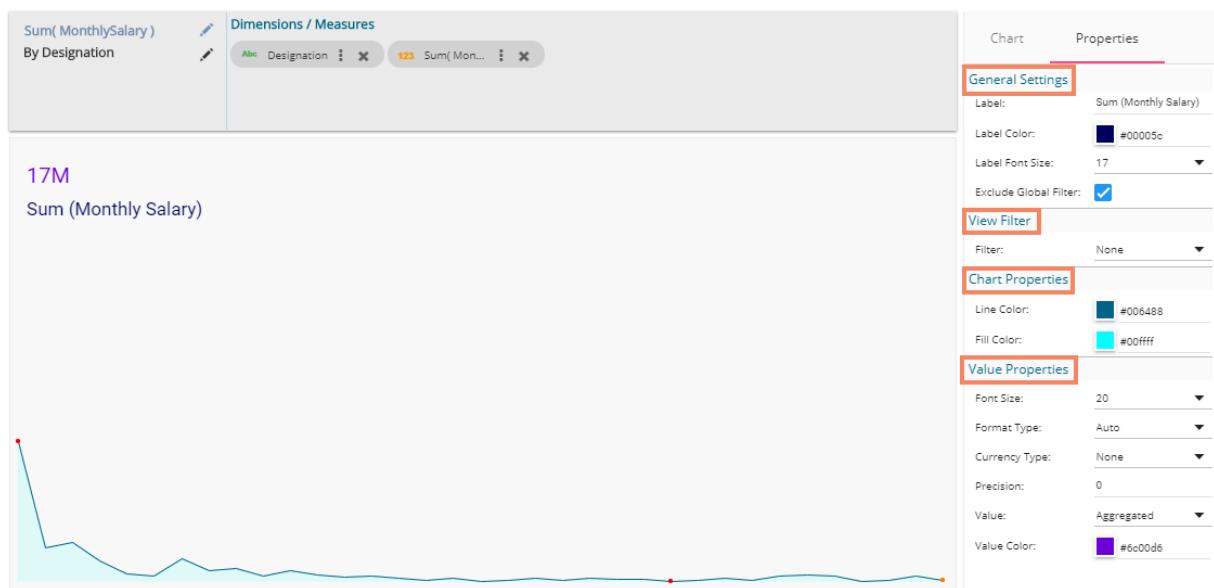
8.13. KPI Sparkline

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.

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 opt 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 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



8.14. 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 represents data in the region. The designated area gets colored based on the data. Users have the provisions to change 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 check mark in the box to exclude the global filter condition

ii) View Filter

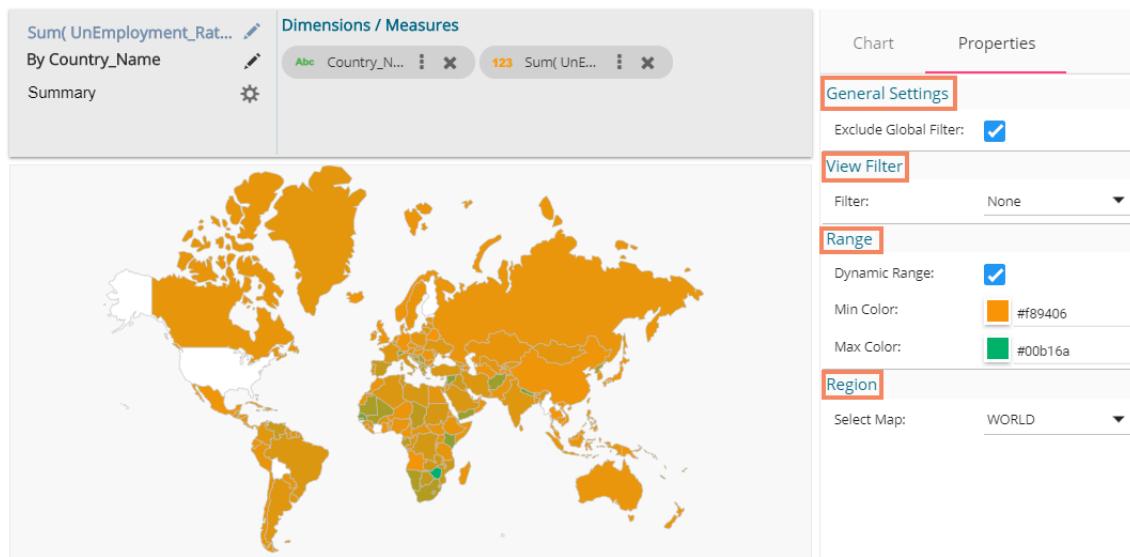
- a. Filter: Select a filter condition to be applied to the view on the storyboard

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

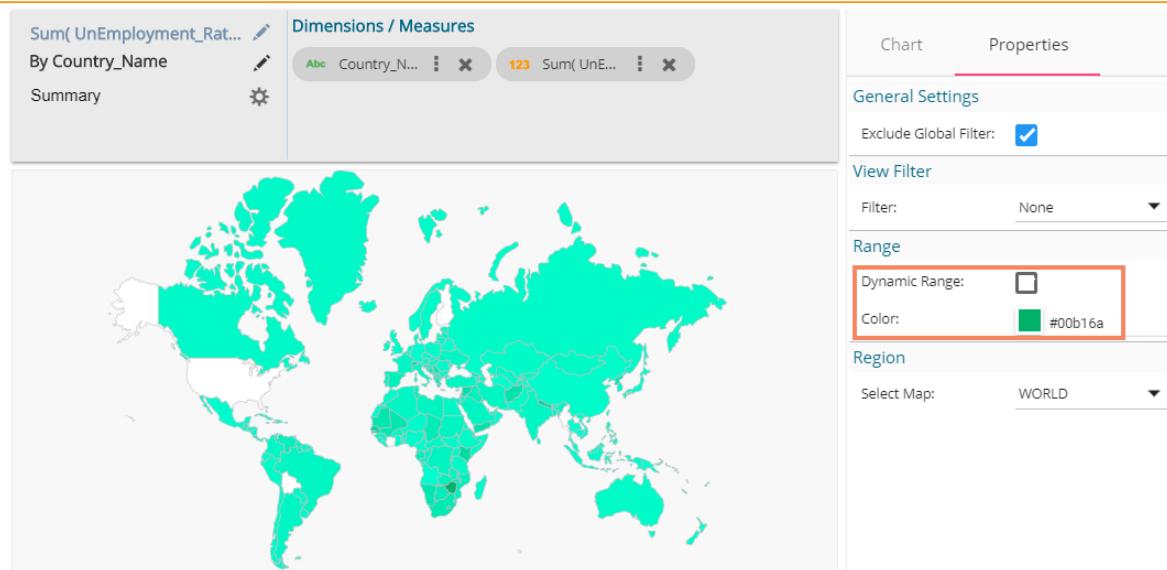
iv) Region

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



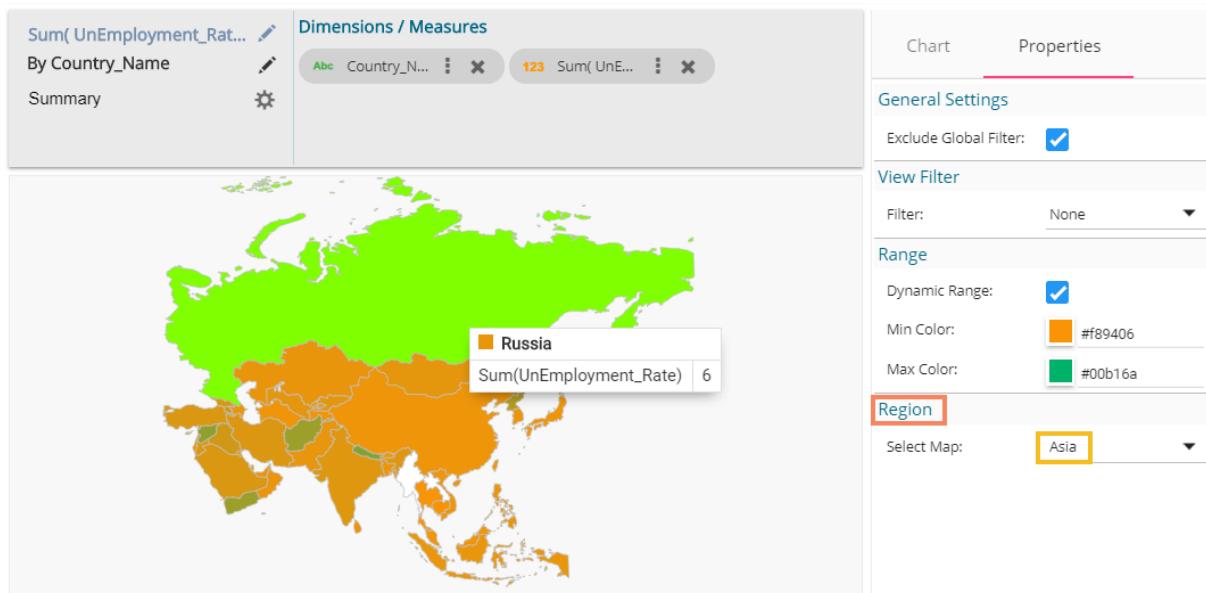
Note:

- 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.

- Select a map using the '**Region**' drop-down menu.
- The map of the selected region gets highlighted based on the chosen dimensions and measures.



8.15. 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

- 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, users will be required 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 check mark in the box to display the fonts of the heading in Bold
- d. Italics: Use a check mark in the box to apply the Italics style to display the heading
- e. Underline: Use a check mark 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 check mark 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

The screenshot shows a data visualization interface with a table and its properties panel.

Table Data:

| Experiencecategory | Sum(MonthlySalary) | Sum(OfferedCTC) | Sum(PreviousCTC) | Sum(UsdBilling) |
|--------------------|--------------------|-----------------|------------------|-----------------|
| 2-4 | 6.40M | 76.40M | 47.90M | 152.30K |
| 4-6 | 3.00M | 36.10M | 24.00M | 72.20K |
| 0-2 | 2.10M | 25.30M | 9.40M | 63.30K |
| 10-15 | 2.10M | 24.90M | 17.50M | 46.70K |
| 6-8 | 1.70M | 20.80M | 15.60M | 38.80K |
| 15+ | 705.00K | 8.50M | 5.70M | 16.60K |
| 8-10 | 673.30K | 8.10M | 8.10M | 19.40K |
| null | 0.00 | 0.00 | 0.00 | 0.00 |

Properties Panel:

- General Settings:**
 - Order: Descending
 - Order By: sum(MonthlyS...)
 - Limit: 0
 - Font Size: Small
 - Bold:
 - Italics:
 - Underline:
 - Font Color: #00005c
 - Background Color: #ccffe6
 - Exclude Global Filter:
- View Filter:** (highlighted with a red box)
- Filter:** Designation

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

8.16. Metric Summary

The Metric Summary displays the measure wise summary. 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

The screenshot shows a data visualization interface. On the left, there is a table titled "Dimensions / Measures" with columns for "Measure" and "Total". The table contains the following data:

| Measure | Total |
|------------------------------|---------|
| sum(PreviousCTC) | 128.20M |
| sum(OfferedCTC) | 200.00M |
| sum(ExperiencePerCTC) | 49.30M |
| sum(MonthlySalary) | 16.70M |
| sum(UsdBilling) | 409.20K |
| sum(CurrentMonthlyPayment) | 12.30M |

On the right, there is a "Properties" panel with tabs for "Chart" and "Properties". The "General Settings" tab is selected, showing fields for "Measure Description" (Measure), "Summary Description" (Total), and "Exclude Global Filter" (checked). A "View Filter" button is also present. Below the tabs, there is a "Filter:" dropdown set to "None".

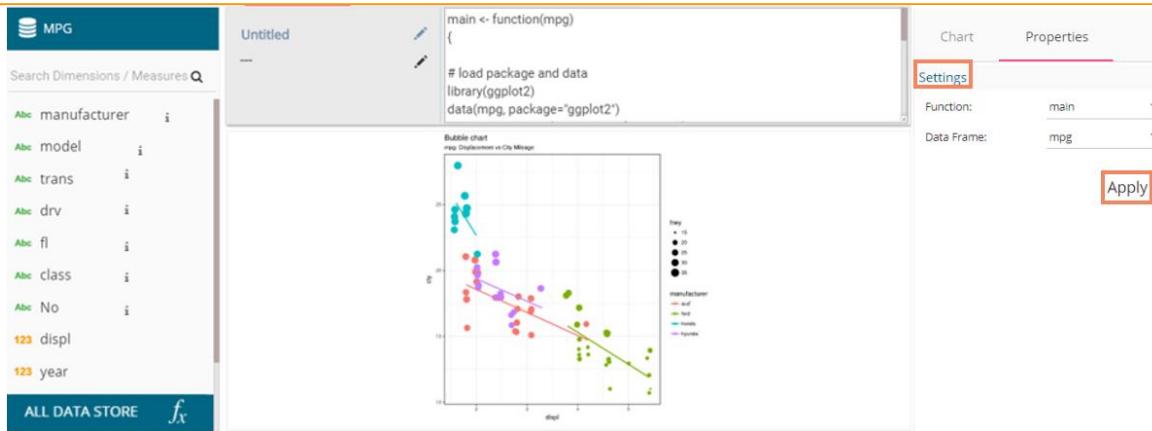
8.17. R Server Visual

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

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

The screenshot shows the R Server Visual component. On the left, there is a sidebar with a list of dimensions and measures, including "manufacturer", "model", "trans", "drv", "fl", "class", "No", "displ", "year", and "cyl". At the bottom of the sidebar is a "ALL DATA STORE" button. The main area has a title "Untitled" and a tab labeled "R Script" which is highlighted with a red box. Below the tabs is a large text input area containing a grid icon. At the bottom of this area are two instructions: "[Select Dimension or Measure to Visualize Data]" and "[Change chart from right hand side panel]". To the right of the main area is a "Properties" panel with tabs for "Chart" and "Properties". The "Chart" tab is selected. Below the tabs is a grid of 16 chart icons, with the fourth icon in the fourth row (a bar chart with a dollar sign) highlighted with a red box.

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



8.18. 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 will make the most impact

Variation of this Chart: Pareto Pyramid, Paired Pareto chart

Properties:

i) General Settings

- a. **Exclude Global Filter:** The view will be excluded from the Global Filter condition by putting 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

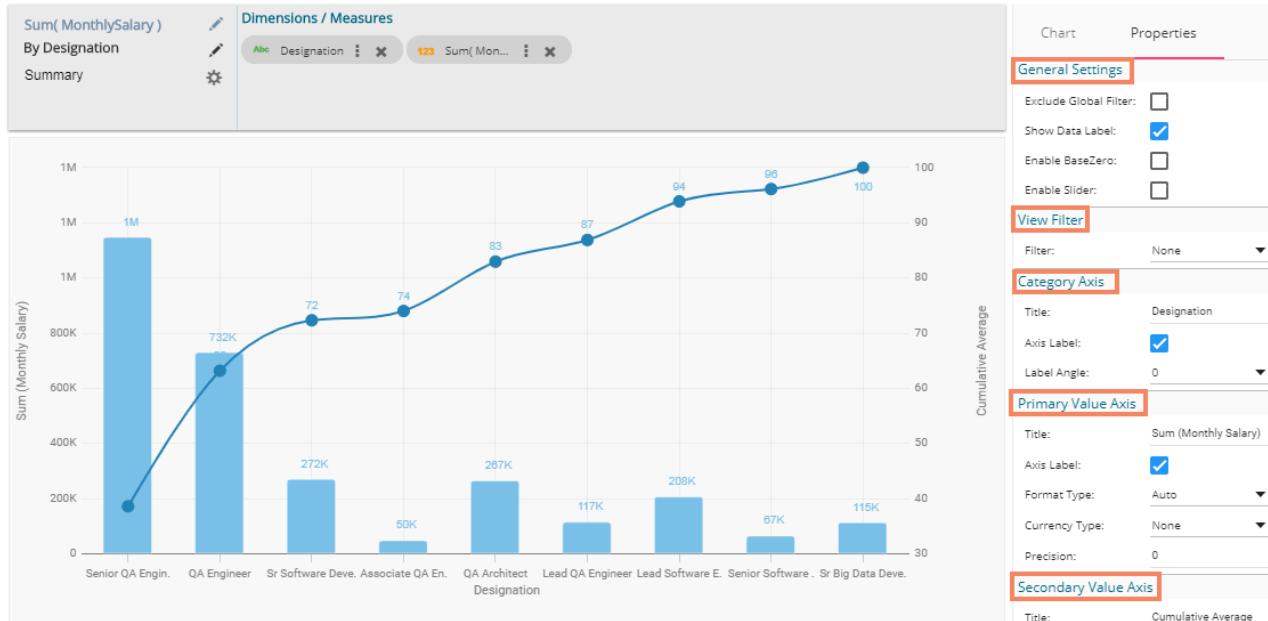
- a. **Title:** Provide a title for the axis
- b. **Axis Label:** Enable the category axis label by using a checkmark in the box
- c. **Label Angle:** Select a display angle for the axis label

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

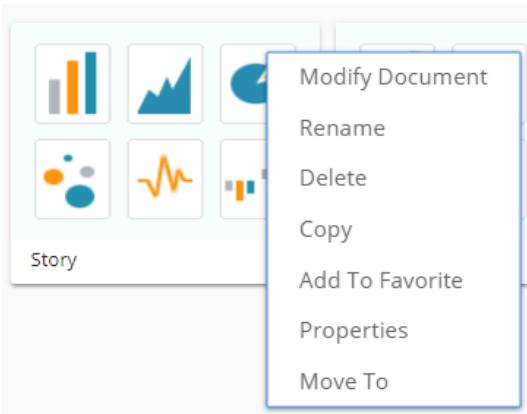
- a. **Title:** Provide a title for the Secondary Value Axis (by default it displays the cumulative average of the selected measure)



9. Options

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

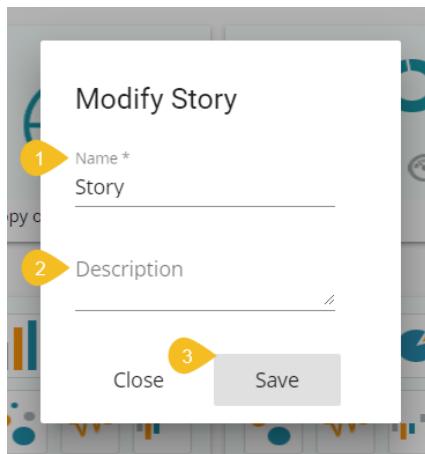
- Navigate to '**My Documents**' or '**Public Documents**'.
- Select a story document
- Use the right-click on it to display the following context menu:



9.1. Modifying a Document

- Select '**Modify Document**' from the Story Options menu
- A new window to modify the story details appears
- Modify the following information:

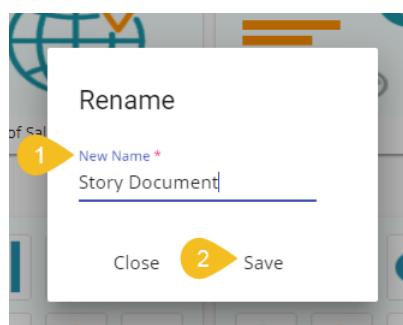
- Title: Enter a title for the Business Story
- Description: Describe the story (Optional)
- Click the 'Save' option



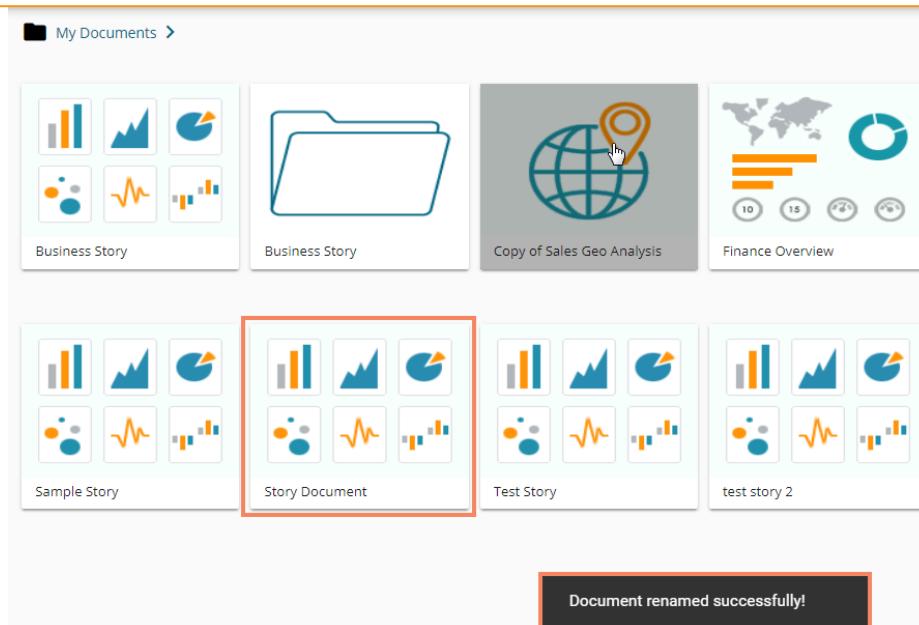
- The chosen information for the story document gets modified

9.2. Renaming a Story Document

- Select 'Rename' from the Story Options menu
- Configure the following information to rename the story
 - Enter 'New Name' in the story document
 - Click the 'Save' option

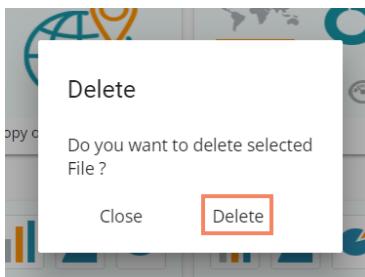


- A success message appears
- The story document gets renamed successfully



9.3. Deleting a Business Story

- Select the 'Delete' option from the Story Options menu
- A new window will pop-up to assure the deletion
- Click 'Delete'



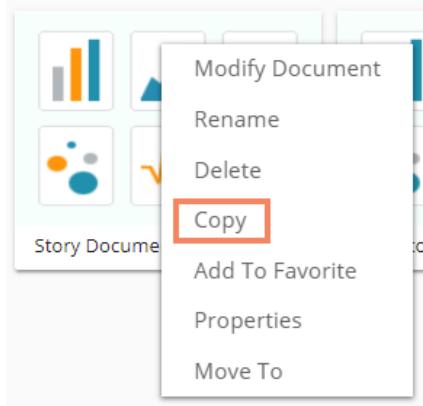
- The selected story document gets removed.

Note: The 'Delete' option is not provided to the story documents shared as the Public Documents.

9.4. Copying and Moving a Business Story

Users can copy a business story document and paste it into the selected place from the BizViz Platform.

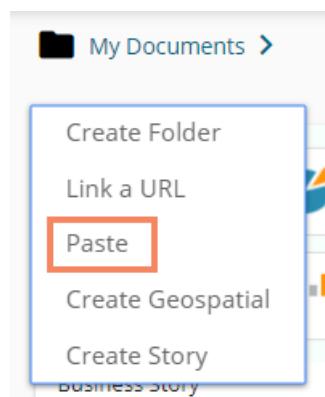
- Select 'Copy' option from the Story Options menu



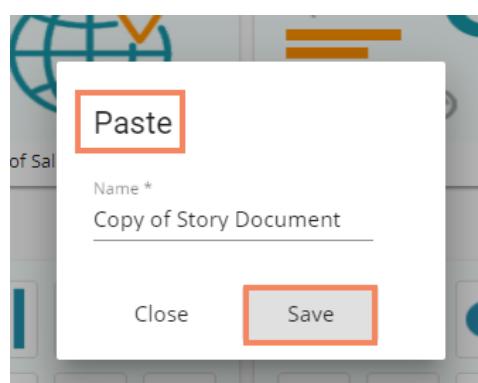
- ii) Select another folder and use a right click to get story option menu with the '**Paste**' option
Or

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) A new window pops-up
vi) The **Name** mentioned in the pop-up window shows prefix '**Copy of-**' before the original name of the story document (E.g., *Story Document* gets a new name *Copy of Story Document*).
vii) Click '**Save**'.



- viii) A message pops-up to assure that the copied story document has been pasted successfully with a different name.

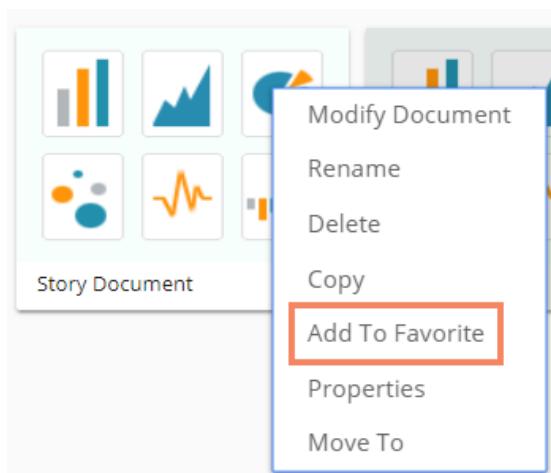
E.g., The following image shows that *Story Document* is named *Copy of Story Document* and has been pasted to the ‘**My Documents**’ space.



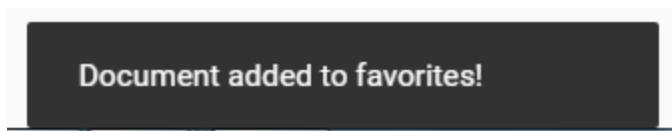
9.5. Adding/Removing a Story Document to/from Favorites

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

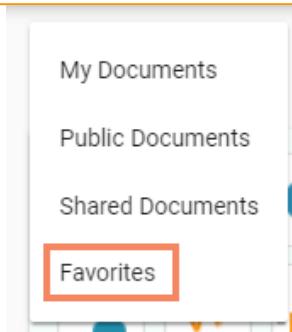
- i) Select the ‘**Add to Favorite**’ option from the Story Options menu.



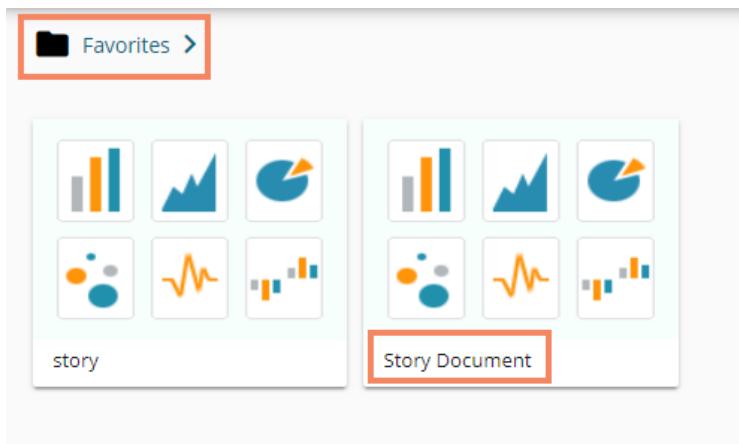
- ii) A new message pops-up, “Document added to Favorites!”



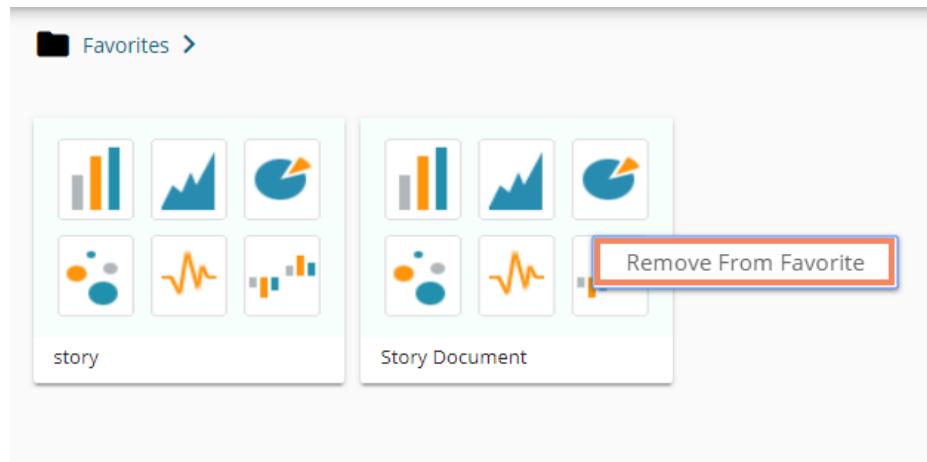
- iii) Open ‘**Favorites**’ using the ‘**My Document**’ drop-down menu.



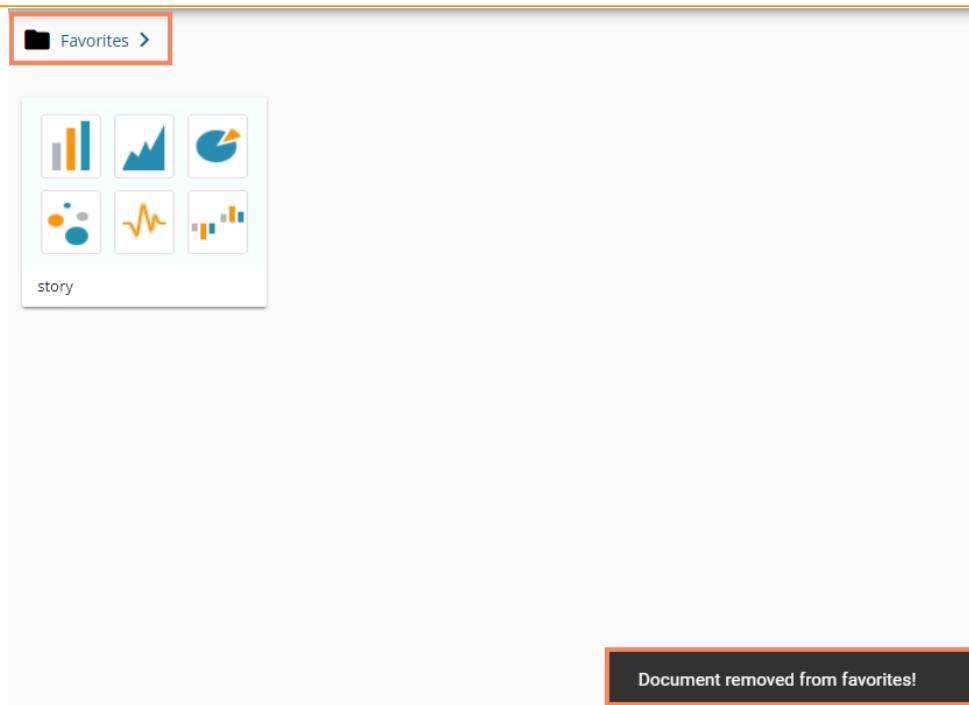
- iv) The selected story document gets added to the '**Favorites**' space.



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

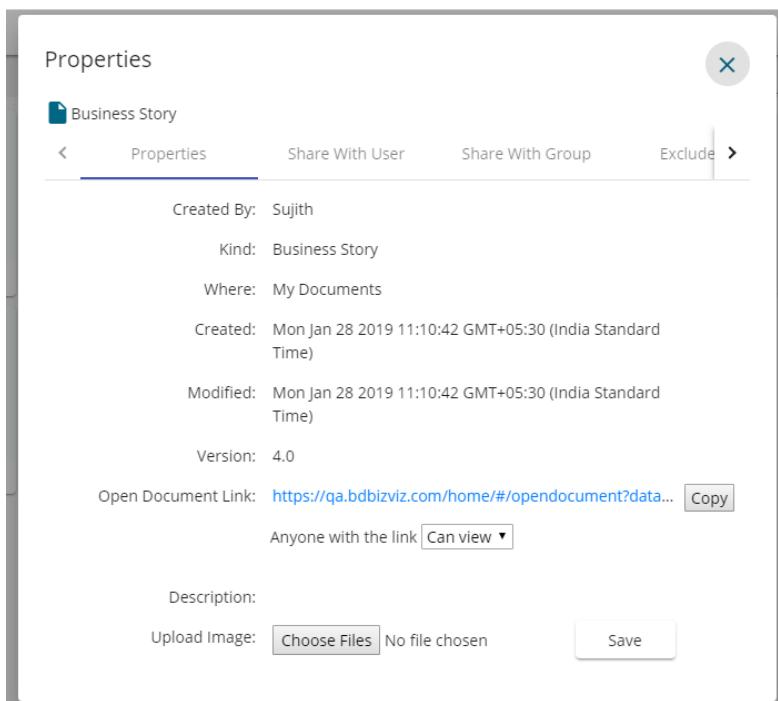


- vi) A new message pops-up, "**Document removed from Favorites!**"
 vii) The selected story document gets removed from '**Favorites**'.



9.6. Properties

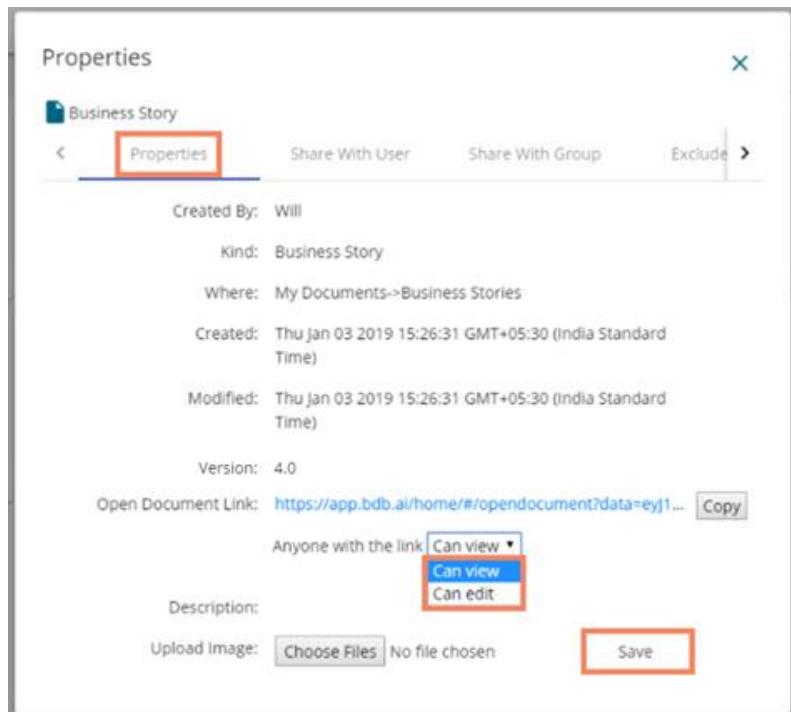
- i) Select the '**Properties**' option from the Story Options menu.
- ii) A new screen pops-up with four options:
 - a. **Properties:** Displays the basic properties of the selected Business Story.



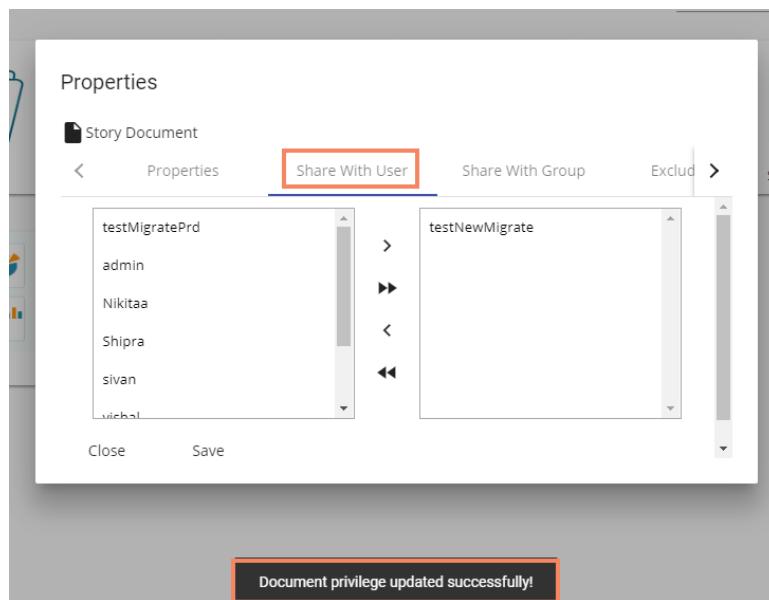
Note: The users can select via the Properties screen whether the other users to whom the story doc has been shared receive a view only rights or they can edit the shared copy.

- i) Select an option using the drop-down menu.

- ii) Click the '**Save**' option after the required settings are selected from the drop-down.

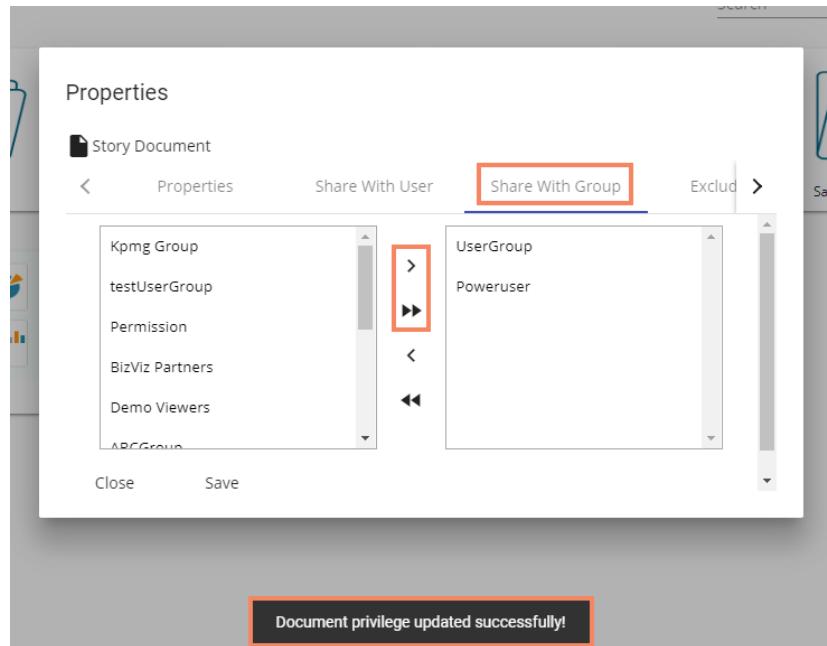


- b. Share With User:** The story document gets shared with the selected user or users.
1. Select '**Share With**' on the Properties pop-up screen.
 2. Select a user or multiple users from the User List that appears on the left side
 3. Move the selected user or users to the right-side box using the arrows.
 4. Click the '**Save**' option
 5. A success message appears stating, "Document privilege updated successfully!"



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

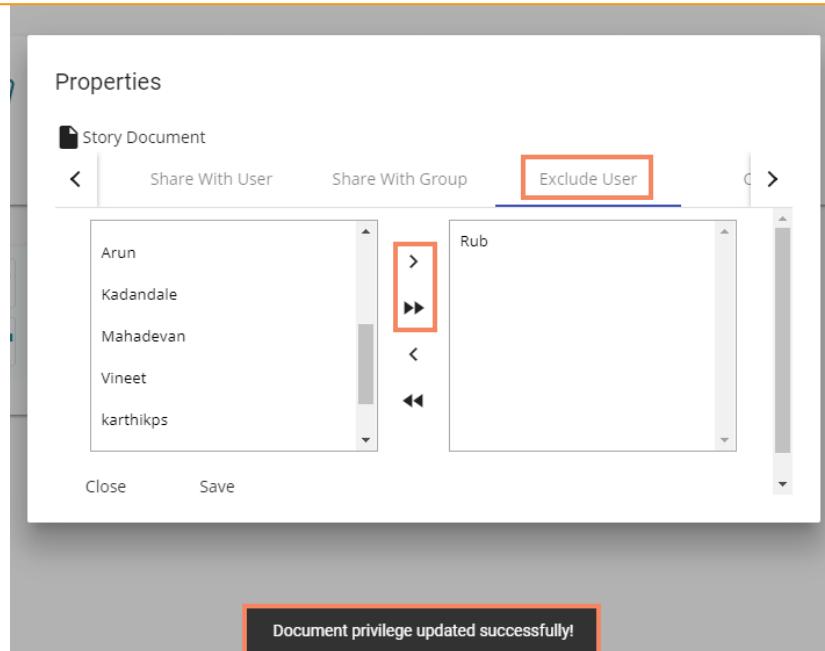
- c. **Share With Group:** The story document gets shared with the selected user group or user groups.
1. Select ‘Share With Group’ on the Properties pop-up screen.
 2. Select a user group or multiple user groups from the list that appears on the left side
 3. Move the selected user group or user groups to the right-side box using the arrows
 4. Click the ‘Save’ option
 5. A success message appears stating, “Document privilege updated successfully!”



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

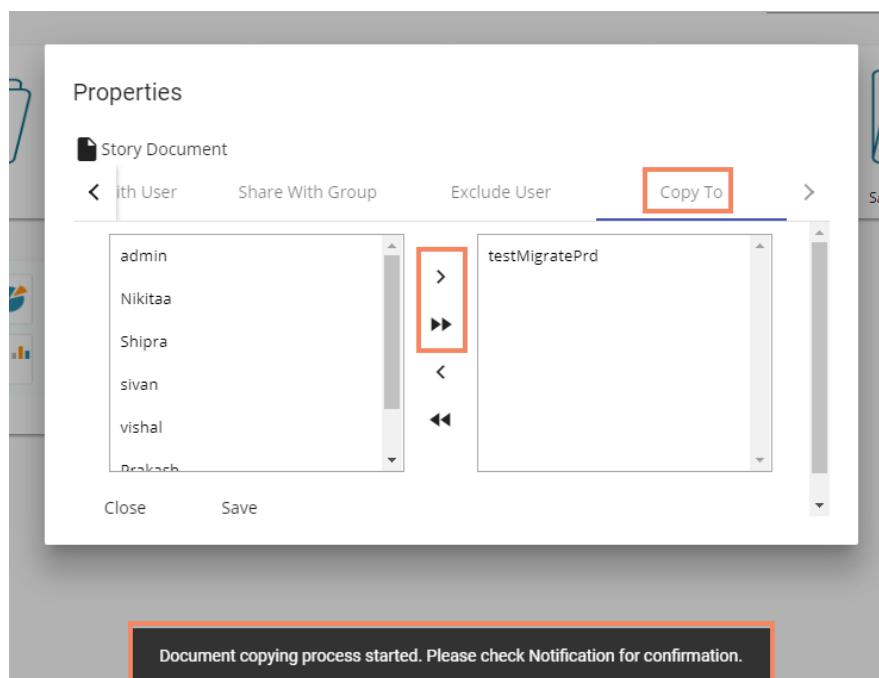
Note: If a story document is shared using this option, then the selected users or user groups receive a view only copy. The shared story document gets added to the ‘Shared Documents’ space.

- d. **Exclude User:** The selected user gets excluded from the privilege to access the story document.
1. Select the ‘Exclude User’ option on the Properties pop-up screen.
 2. Select and move user or users from the user list given on the left side to the selected user list provided on the right-side using the arrows.
 3. Click the ‘Save’ option.
 4. A success message appears stating, “Document privilege updated successfully!”

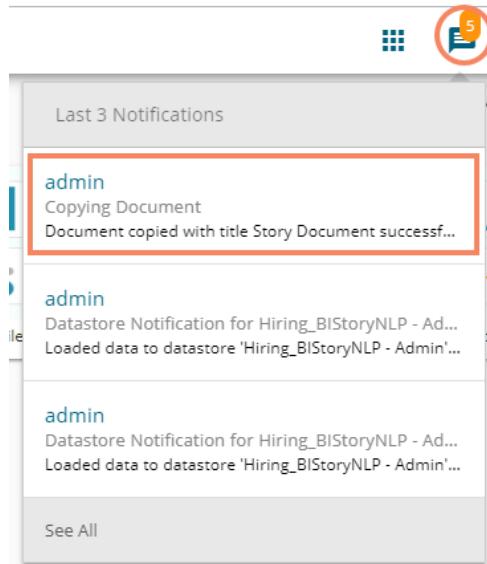


5. The selected user or users are unable to access the story document.

- e. **Copy To:** A copy of the story document gets created and shared with the selected users.
 1. Select 'Copy To' from the Properties pop-up screen.
 2. Select and move a user or multiple users from the user list given on the left to the selected user list provided on the right-side
 3. Click the 'Save' option
 4. A message comes stating, "**Document copying process started. Please check Notification for confirmation.**"



5. Users can open the 'Notification' window to see the updates on the current task of copying the story document.

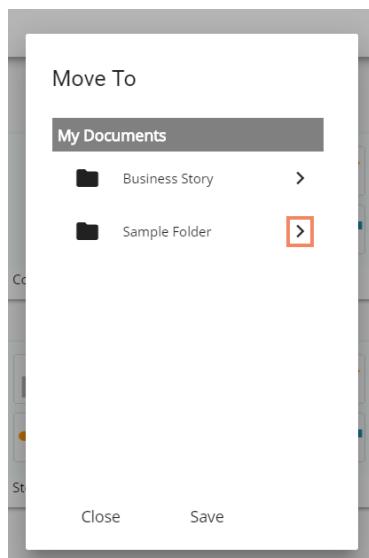


6. A copy of the story document gets shared with the selected user or users.

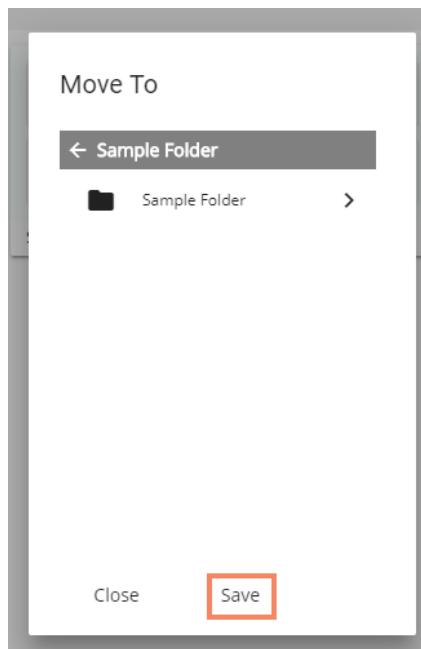
Note: If a story document is shared using this option, then the selected users have the right to modify the received story. The copied story document can be accessed from the '**Shared Documents**' space.

9.7. Move To

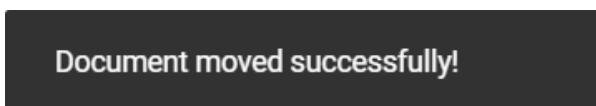
- i) Select the '**Move To**' option from the Story Options menu.
- ii) A new screen opens with the available folder options.
- iii) Select a folder or subfolder.
- iv) Click on the '**Move**' > option to open a list of available sub-folders.



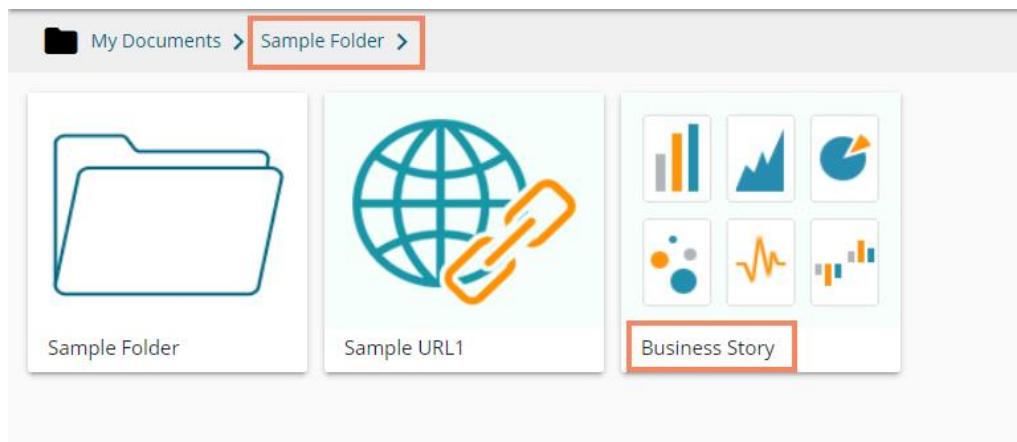
- v) Users get redirected to the next screen.
- vi) Click the '**Save**' option.



- vii) A success message appears at the bottom of the screen.



- viii) The story is moved to the selected folder or subfolder.



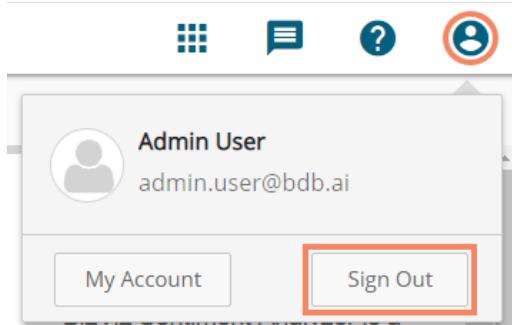
Note: 'Move To' option is not provided to the story documents shared as the Public Documents.

10. Signing Out

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

Follow the below given steps to log out from the BDB Platform:

- i) Click the 'User' icon  on the Platform homepage.
- ii) A menu appears with the logged in user details (User's name and email id).
- iii) Click 'Sign Out.'



- iv) Users successfully sing out from the BDB Platform.

Note: Clicking on 'Sign Out' will redirect the user back to the login page of the BDB platform.