BizViz User Guide

Dashboard Designer

Release :   2.0

Date :   Feb. 25, 2016

Table of Contents

1. About this Guide

1.1. Document History

Product Version	Date (Release date)	Description
BizViz Dashboard Designer App 2.0	Feb 18th, 2016	Second Release of the document

1.2. Overview

This guide covers:
- Explanation and usage of all the menu options
- Connecting to data and creation of dashboards
- Explanation and usage of the dashboard components
- Publishing and sharing of dashboards

1.3. Target Audience

This guide is aimed at users who wish to create dashboards by connecting to wide range of data sources.

1.4. Prerequisites and Supported Devices

Prerequisites:
- Browser that supports HTML5
- Windows 7 Operating System

2. Getting Started
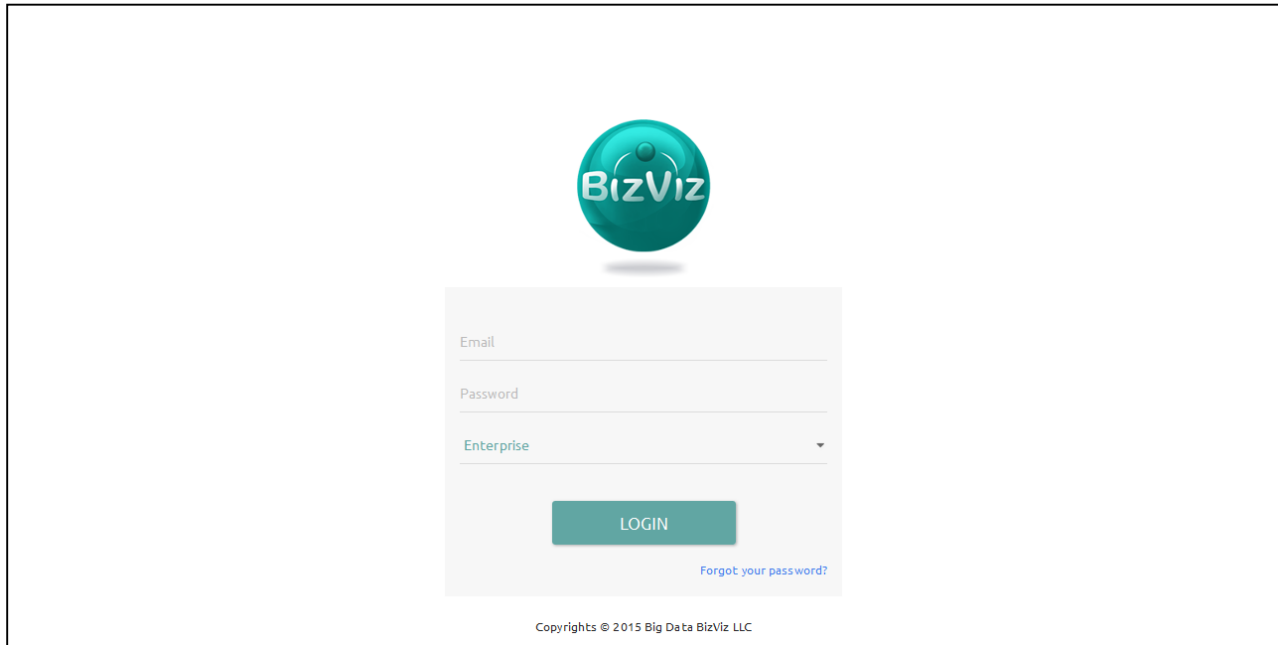
2.1. The BizViz Environment

This section covers how to access the BizViz Dashboard Designer, how to organize your work that, and workspace properties.
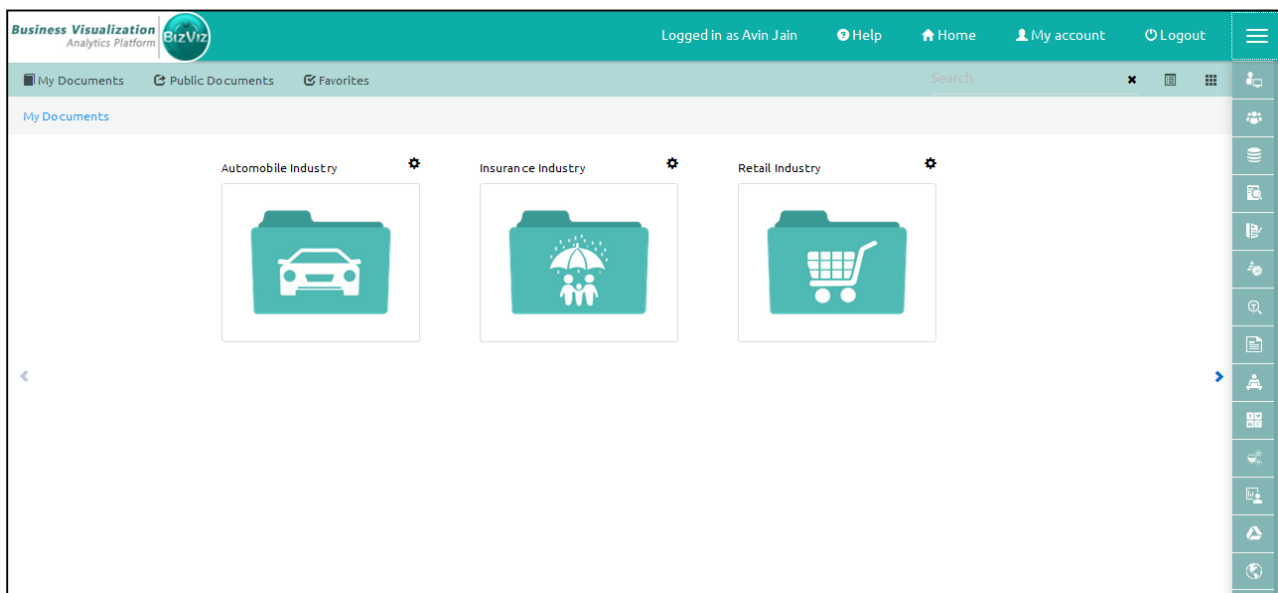
Opening and Closing Dashboard Designer
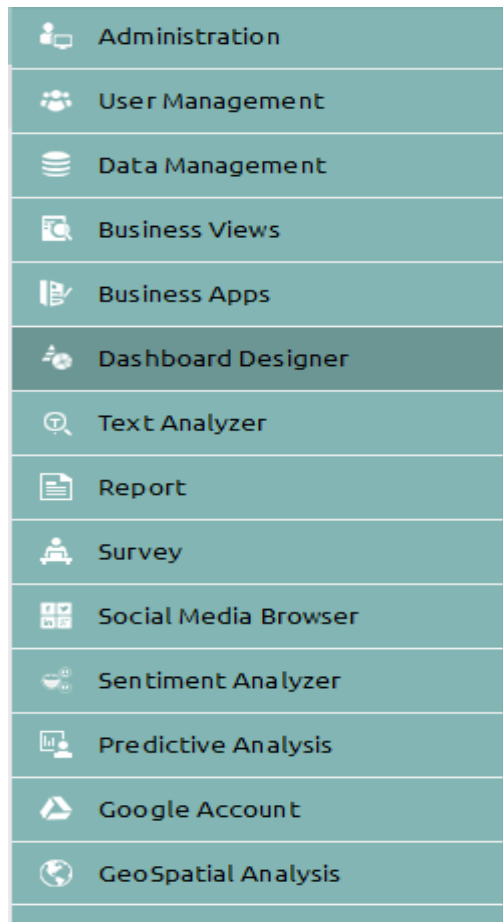
Opening Dashboard Designer

Login to the Portal to

i) Enter in the URL bar → **http://www.bdibizviz.com/app/**

ii) Enter your credentials.

iii) Click the '**Login'** button. You will be taken to the Portal Home Screen.


iv) Click the **'Menu'** icon to display a list of installed apps. Apps are BizViz portal plug-ins that provide specific functionality and can be used to extend the capabilities of BizViz portal. Some apps come as standard with the BizViz portal and others must be licensed separately before they are made available in the portal.

v) Select '**Dashboard Designer'** (as shown above).

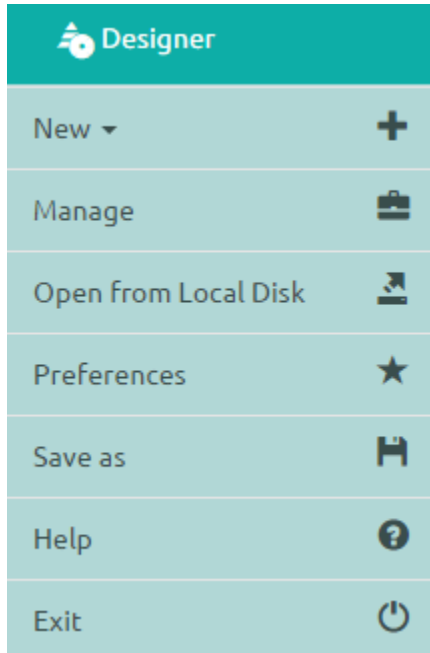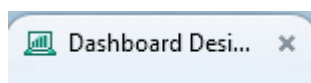Doing so will open a new webpage.

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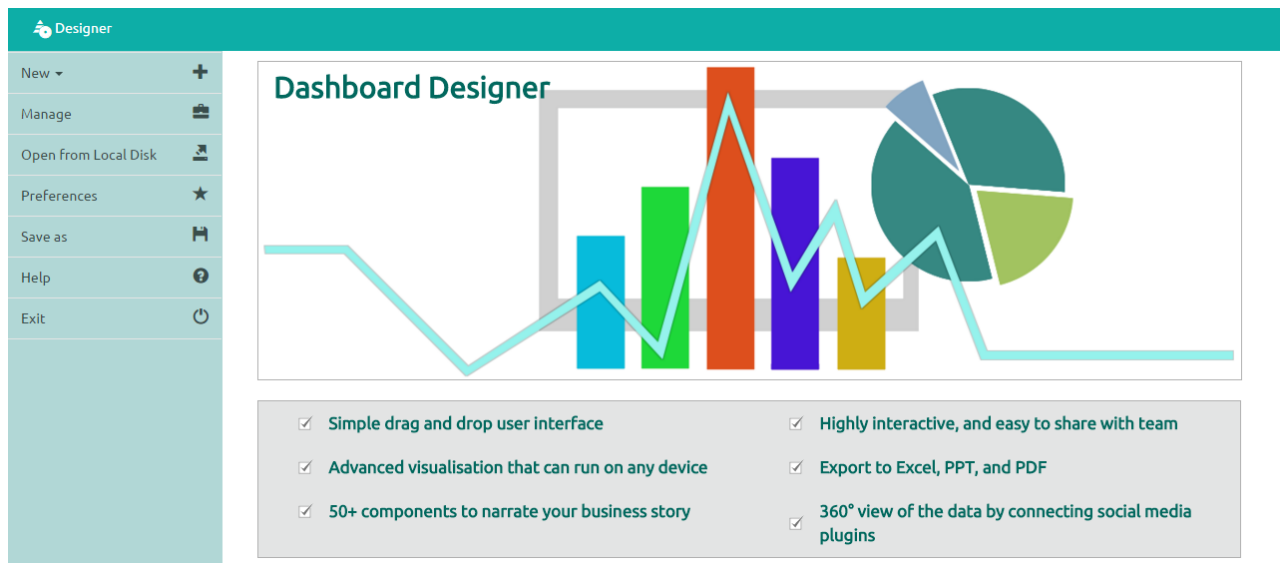
Closing Dashboard Designer

Once you have completed creating a dashboard, save your work and use one of the following options to close the Designer.
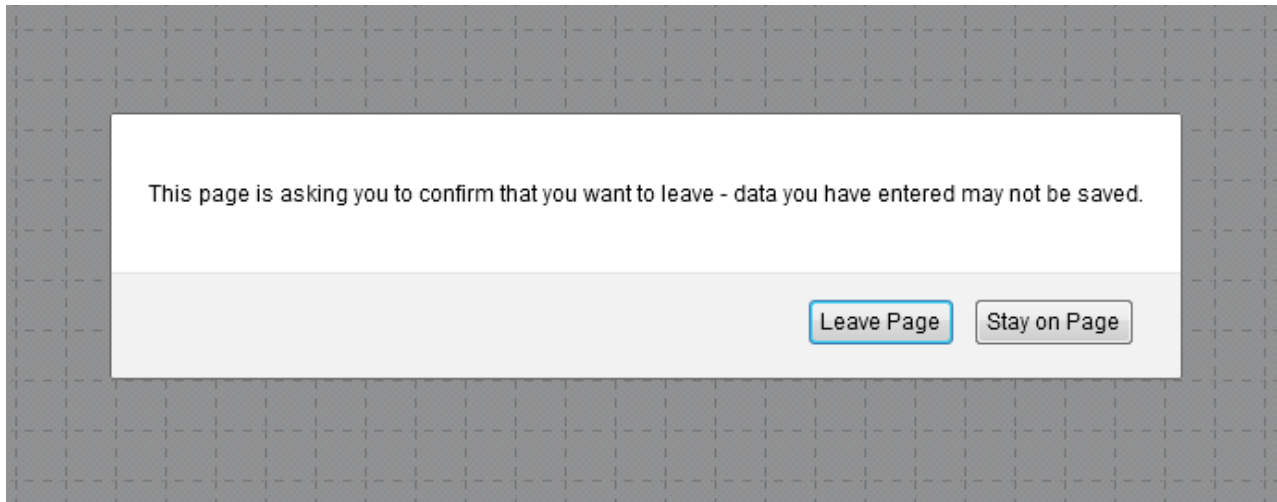
- From the Dashboard Designer home screen, click the **'Exit'** icon (as shown below

- Click the **'Close'** button (the 'X' on the right edge) of the Dashboard Designer tab

If you have not saved your work, you will be given the option to stay on the page or leave. If you have not yet saved your work, select 'Stay on Page' and then save your work before exiting the page.

2.2. Home Page

When opening the BizViz Dashboard Designer, you will see icons in the left pane that will help users in connecting, creating, and sharing dashboards.
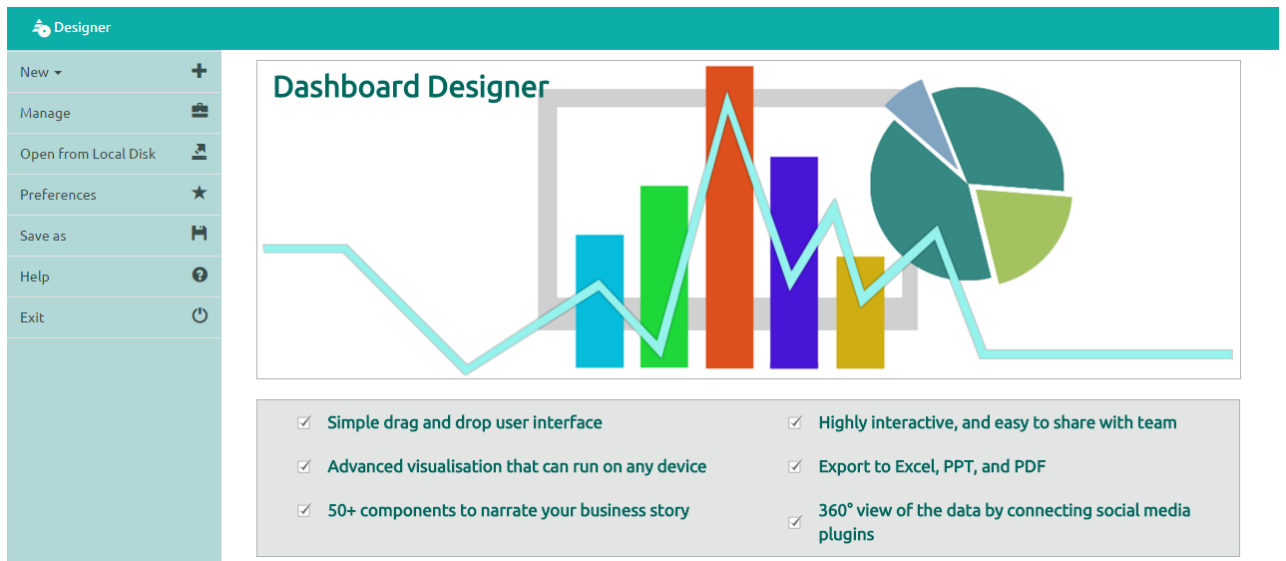
Description of icons on the Dashboard Designer Home Page:

Icon	Name	Description
➕	New Dashboard/Workspace	**Dashboard:** Place where new dashboard are created

		Manage	Use to Re-name, Open, Save-to-disk, Move, Publish, and Delete dashboards.
		Open from Local Disk	Opens locally saved dashboards
		Preferences	Configure dashboard settings (**ex**. Background color, size, etc.…)
		Save As	Options to save dashboards
		Help	<mark>More information on how to use is provided</mark>
		Exit	Exit Designer

2.2.1. BizViz Dashboard Designer Workspace

BizViz Dashboard Designer Workspace can be thought of as a folder that will contains Data Source connections, Components, Dashboard Objects, Component Attributes.

A wide range of filters, charts, and Data grids are available that can be used to create a dashboard.

Explaining the numbering flow from the above image:

1. **Tab:** Place where dashboard design takes place. Drag and Drag charts and components here to create dashboards.
2. **Save to Local Disk:** <mark>option used to save the created dashboards to your local disk</mark>
3. **Save:** option used to save the created dashboards
4. **Preview:** Option used to view the design layout of the dashboard.
5. **Maximize:** Option used to maximize the dashboard for better viewing.
6. **Data Source:** Option to connect to wide range of data sources.
7. **Components:** Include compelling range of charts, filters and data grids.

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8. **Dashboard Objects:** Option used to lock, hide and layout ordering of the components on the dashboard.
9. **Component Attribute:** Option used to define scripts

### 2.2.2. Creating a Dashboard
This session explains users on how to create dashboards.

1. Click on **'New +'** button to create a workspace as shown below.
   - **Workspace**: A place holder for previously created dashboards.
   - **Dashboard**: A place where design and development of dashboards takes place.

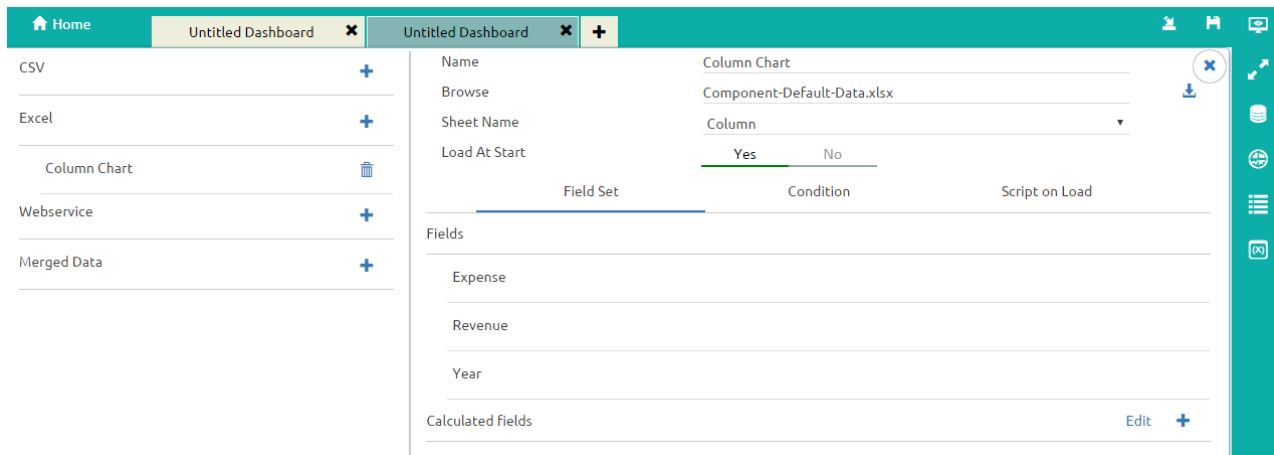2. Click on **'Dashboard'** button create a dashboard

New>Dashboard
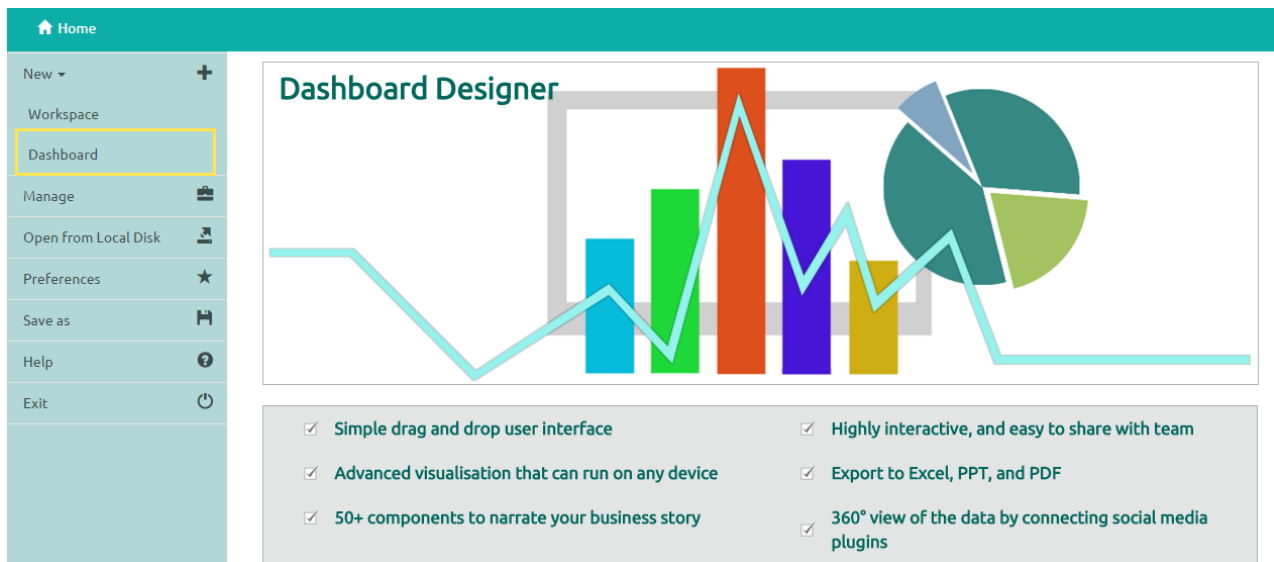
3. After Clicking on the **'Dashboard'** button, a web page will open in a new window.

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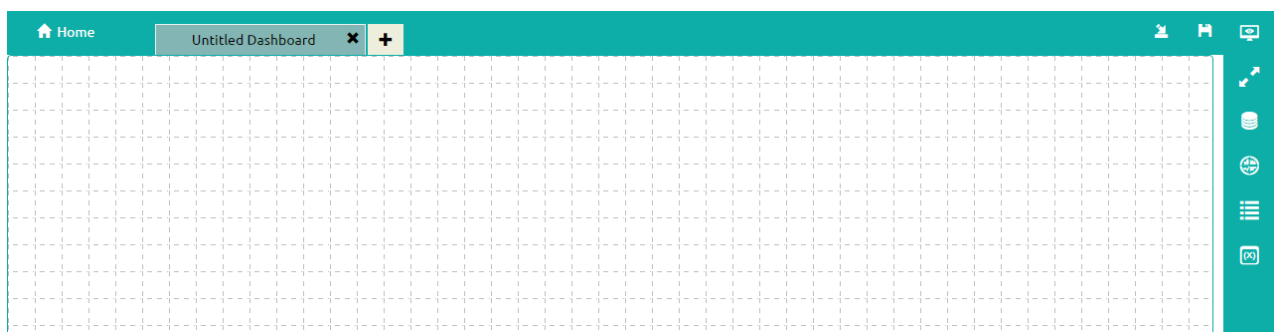
4. Click on **'Data Source'** icon provided to the right side of canvas, and view the database connectivity options. (**Ex:** CSV, Excel and Web-Service)

5. Click on icon to create a new connection.

Fill in the necessary details

- **Name:** Name the connection
- **Browse:** Navigate to the Excel file that you wish to use as a data-source.
- **Sheet Name:** Select the sheet you wish to use from the Excel file you have selected.
- **Load at Start:** Enabling this option refreshes the data-source before opening the charts

1. Click on **'Charts'** icon provided at right side to the canvas.
    - Drag and Drop Pie-Chart and Column chart into the canvas

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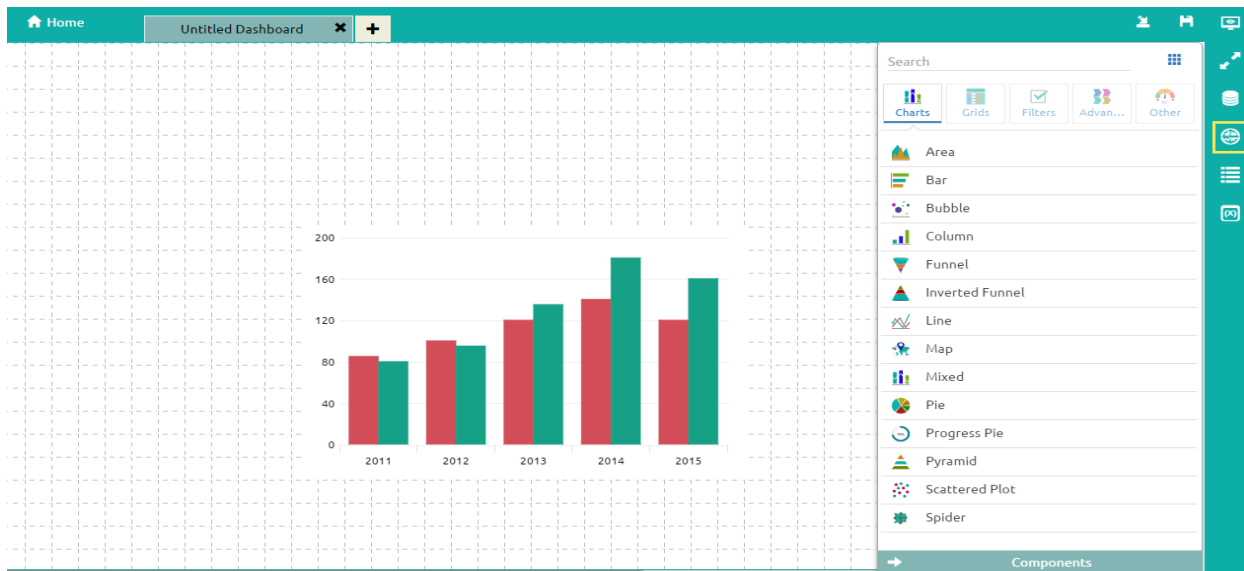
2. Connect Column chart to the created data connection (i.e. **Column**)
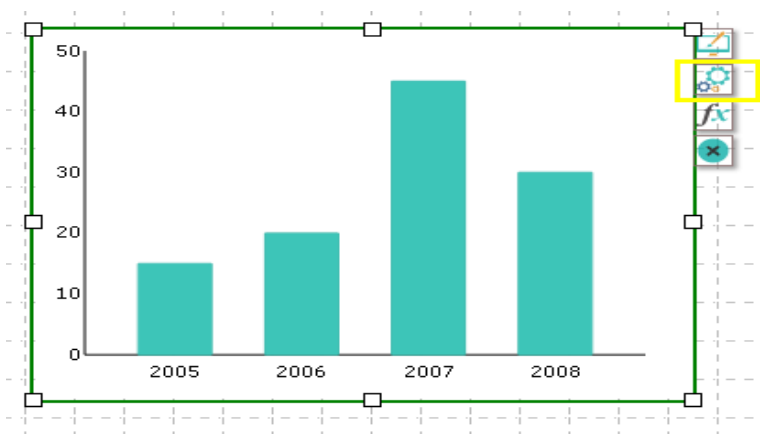
- Click on settings icon ⚙ which appears next to the charts.
- Select the connection from the **'Available Connections'** dropdown.(Ex: **Sample**)
- Drag and Drop respected fields to series and Category.
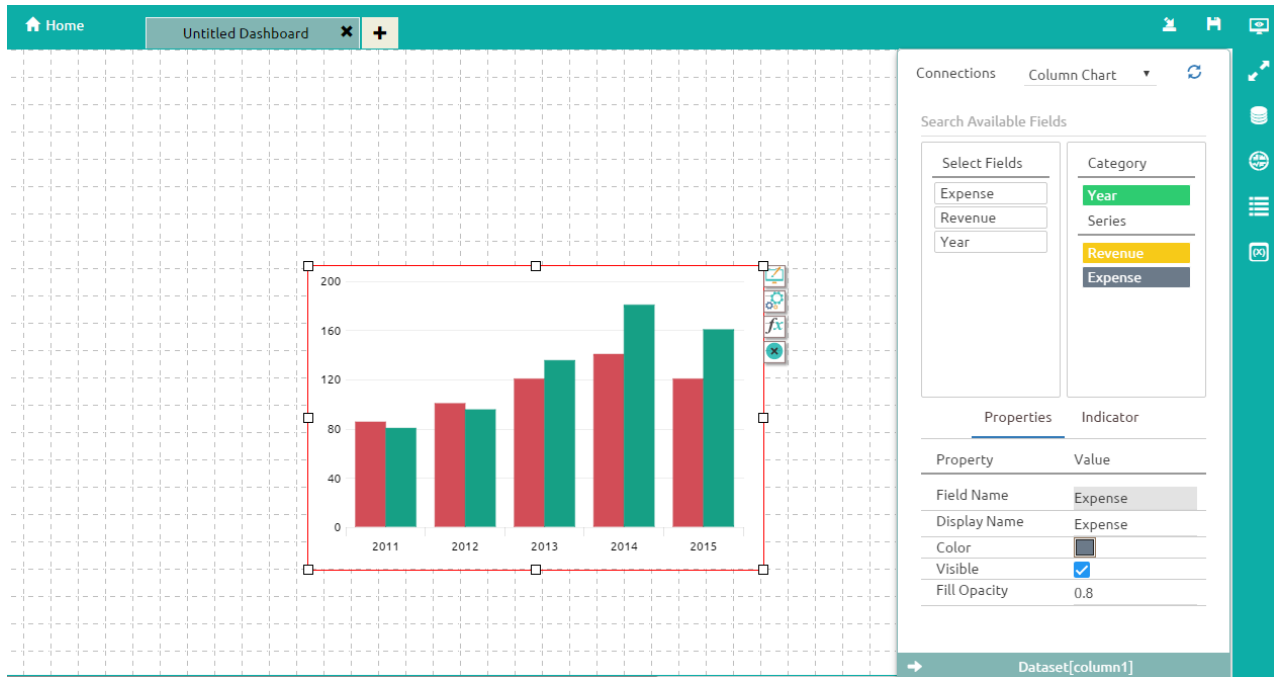
3. Connection to Data

This section explains how to connect to the available data sources, managing and explaining condition and Script on Load options. This tutorial explains a step-by-step process in creating connection with the available data sources.

3.1.1. Supported Data Source Connections

This session explains users on how to create a basic data connection, creation of scripts and conditions. Currently BizViz Dashboard Designer supports three types of connections.
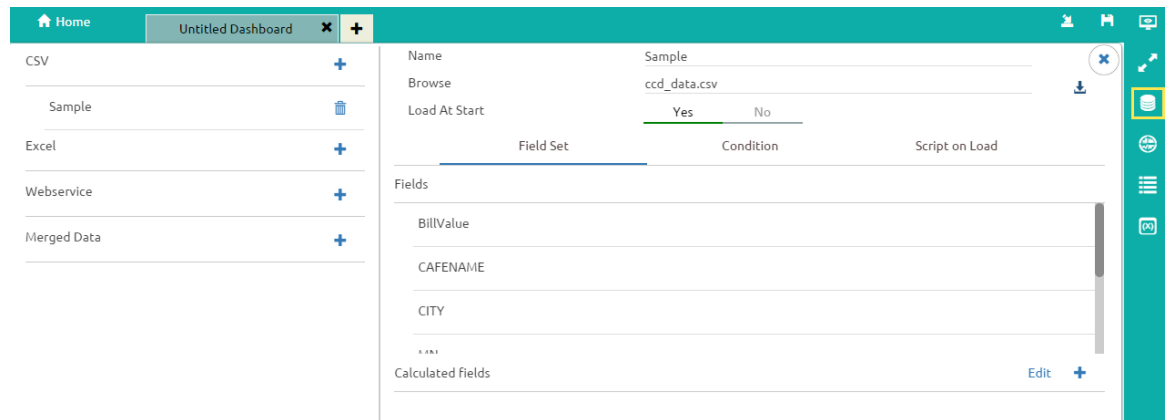
- CSV
- Excel
- Web service

3.1.2. How to Connect to a Data Source

Click on **'Data source'** icon [icon] provided to the right side of canvas, and view the database connectivity options.(Ex: CSV, Excel and Web-Service)

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a) **Connectiong to a CSV**
   This example discusses how to create connection for .csv format files.

   Click on ➕ icon to create a new connection.

- **Name:** Name the connection
- **Browse:** Navigate to the folder where .csv is present.
- **Load at Start:** Enabling this option makes the data Up-to-date before loading into charts

Field Set: Once the data connection is established all the fields available in the data will be displayed under this tab.

Condition: Use to filter values based on the given condition.

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Ex: From the above given image we selected 'CITY=BANGALORE' as the condition. By enabling the checkbox ☑ present under Action column only data related to 'CITY=BANGALORE' will be displayed on the dashboard.

Single On Load: A script will trigger to produce some action on a component. (**Ref:** how-to-guide document of **'Dynamic Visibility'**)
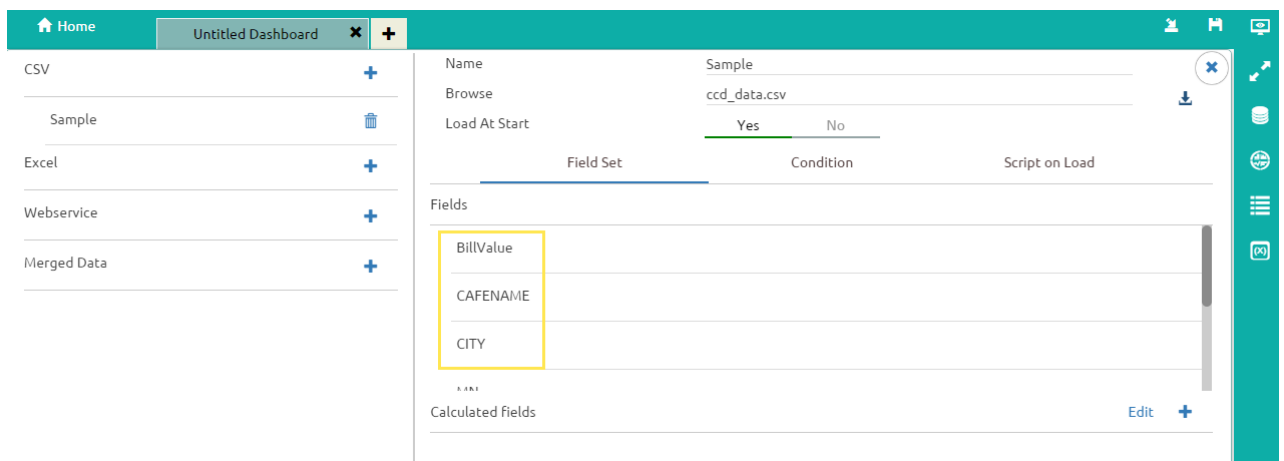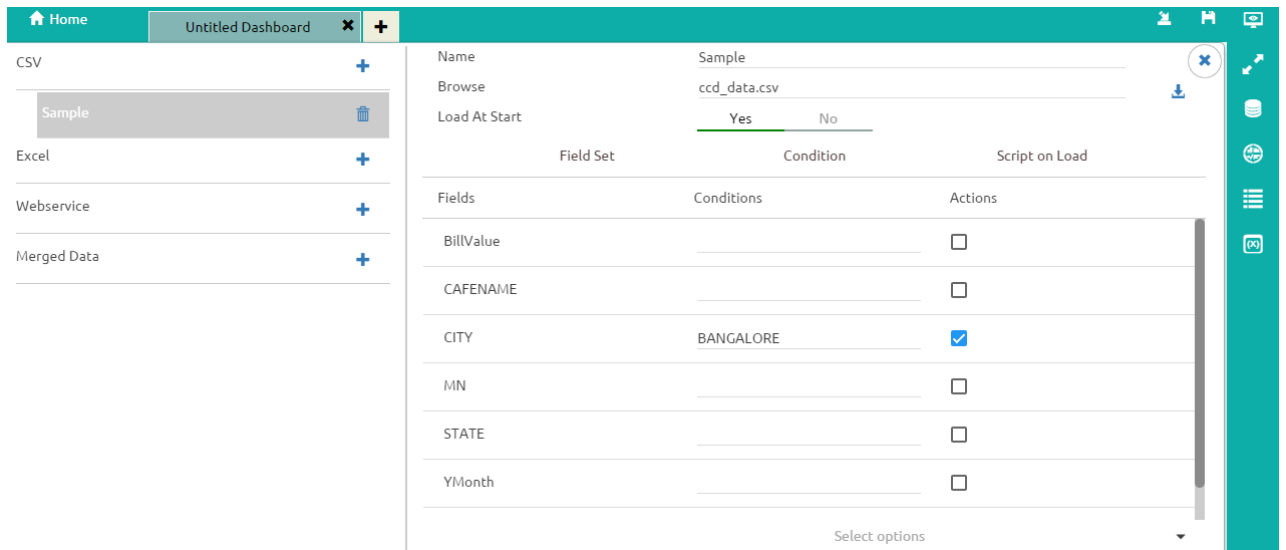
b) **Connecting to a Excel**
    This example discusses how to create connection for Excel file formats.

    Click on ✚ icon to create a new connection.

- **Name:** Name the connection

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- **Browse:** Navigate to the folder where .Excel file is present.
- **Load at Start:** Enabling this option makes the data Up-to-date before loading into charts

Field Set: Once the data connection is established all the fields available in the data will be displayed under this tab.

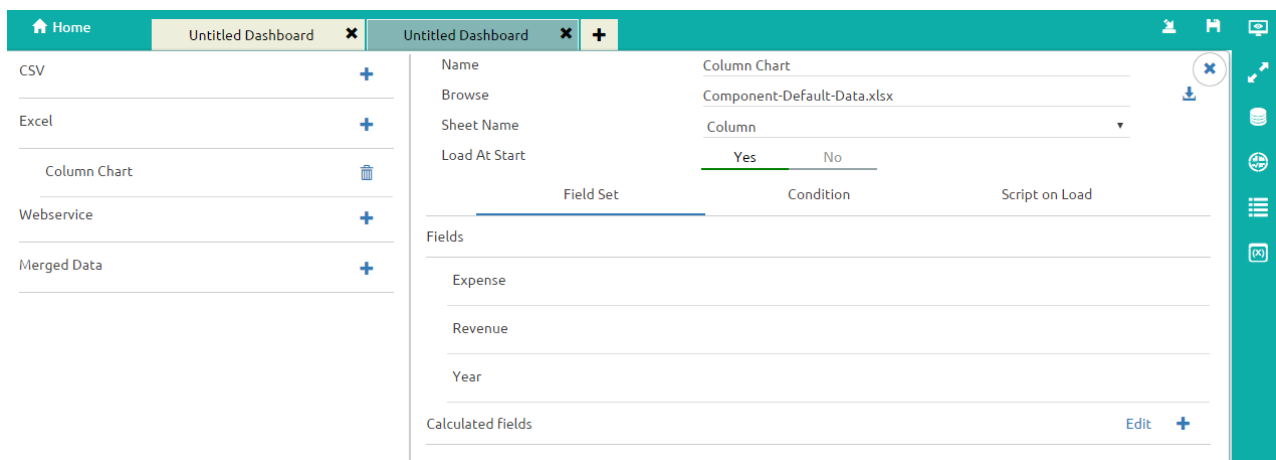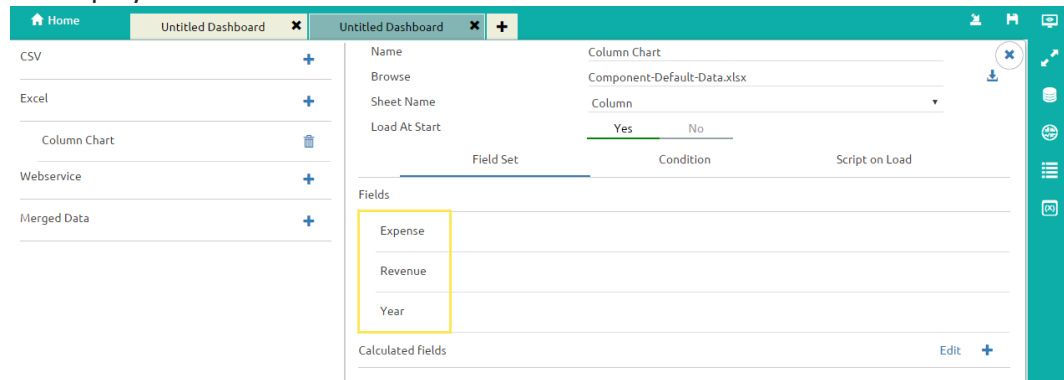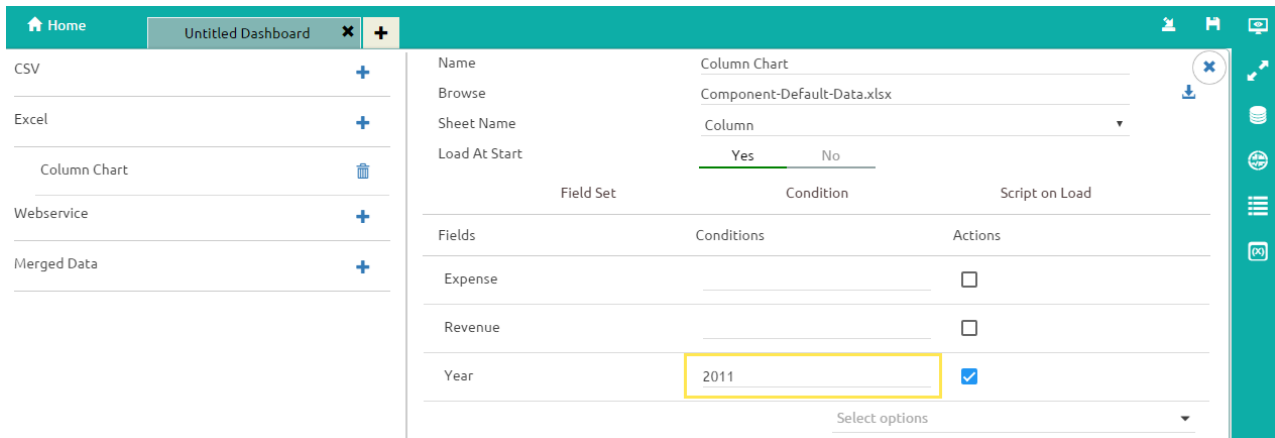**Condition:** Use to filter values based on the given condition.

EX: From the above given image we have selected 'Year=2011' as the condition. By enabling the checkbox present under Action column only data related to '2011' will be displayed on the dashboard.
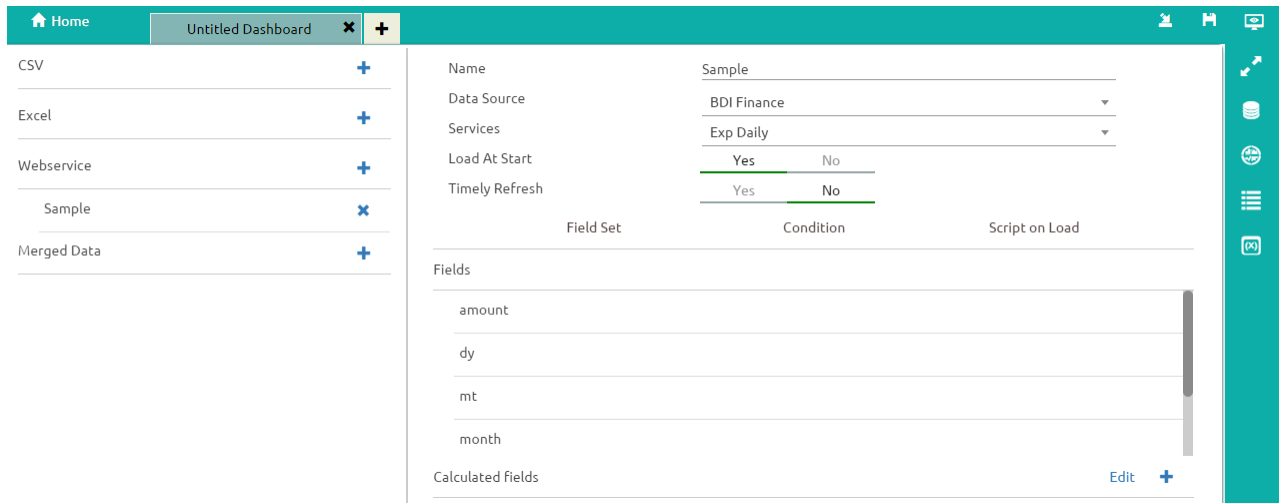
Single On Load: A script will trigger to produce some action on a component. (**ref:** how-to-guide document of **'Dynamic Visibility'**)

c) **Connecting to a Web Service**

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This example explains how to connect to BizViz Web service. In BizViz portal Data management plug-in is available which manages all the connections to data sources.

Click on icon to create a new connection.

Fill in the necessary details

- **Name:** Name the connection
- **Data Sources:** Select the Data Source from the list(i.e. all the data-sources created in Data-Management will be listed here)
- **Services:** Select the query name from the list(i.e. all the queries created on a particular database will be listed here)
- **Load at Start:** Enabling this option makes the data Up-to-date before loading into charts
- **Timely Refresh:** Data will be updated during periodic intervals
- **Field Set**: Fields available in the uploaded file will be displayed.
- **Condition**: Fields used as filters in the query will be displayed here i.e.(applicable when connection is made using web service).
- **Script on Load**: Scripts can be written to trigger a function.

Field Set: Once the data connection is established all the fields available in the data will be displayed under this tab.

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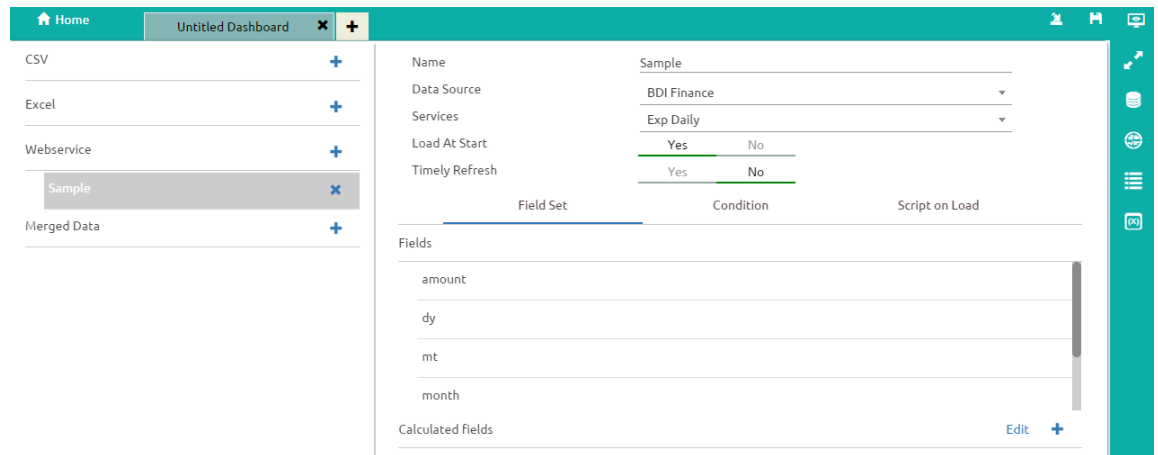
Condition: Use to filter values based on the given condition.
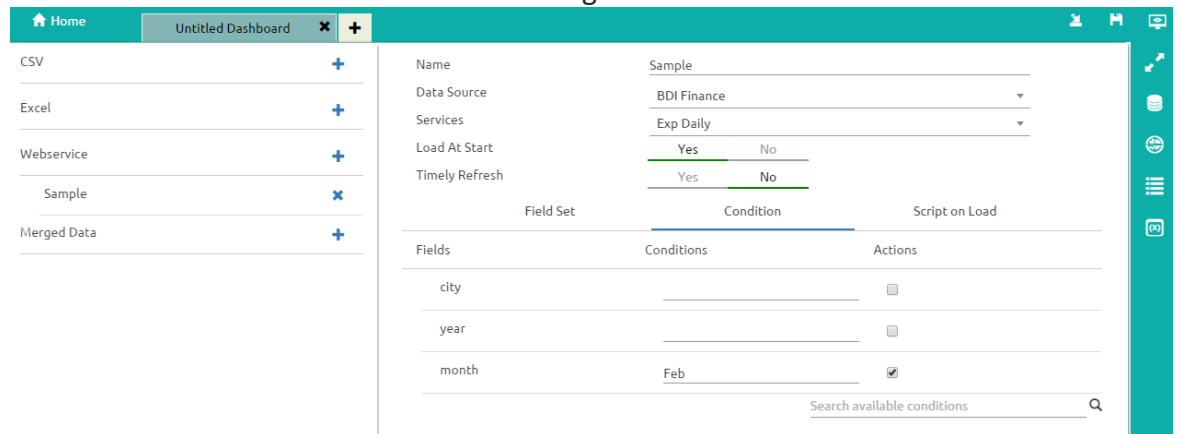
Ex: From the above given image we selected Month = 'Feb' in the condition. By enabling the checkbox ☑ present under Action column only data related to 'Feb' month will be displayed on the dashboard.

Single On Load: A script will trigger to produce some action on a component. (**ref:** how-to-guide document of **'Dynamic Visibility'**)

4. Dashboard Objects

Every component in the dashboard is considered as an object. Object browsers have properties which are used to lock, hide, delete, duplicate and arrange components on the dashboard.

4.1. Object Browser Window Properties

Every component which was dragged into the canvas will have its properties displayed in the Object browser window.
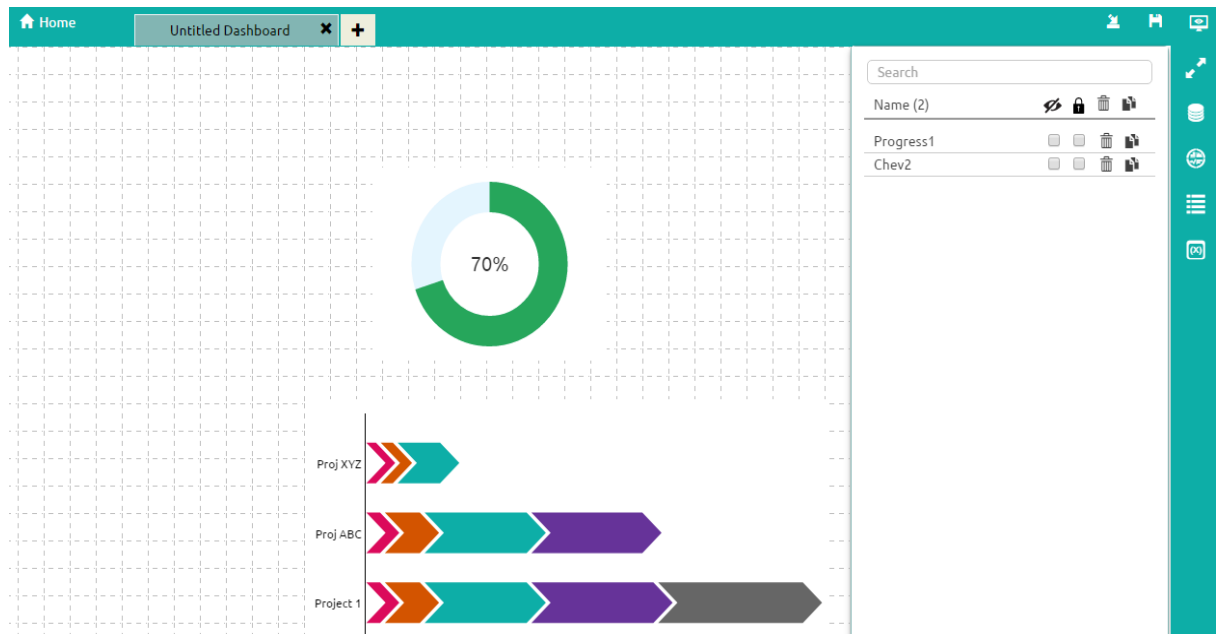
From the fig we can observer that we have two components on the Dashboard (i.e. Chevron and Progress chart) so object properties related to those components will be displayed. Enable ☑ the checkbox to perform the action.

4.1.1. Properties Includes

i) **Hide All** ⊘ : By clicking on this icon all the components which are present in the dashboard will be hidden. Users can hide the components individually by enabling the checkbox ☑ provided next to the name of the component.

ii) **Lock All** 🔒 : By clicking on this icon all the components which are present in the dashboard will be locked i.e. means components cannot be moved from one place to another. Users can lock the components individually by enabling the checkbox ☑ provided next to the name of the component.

iii) **Delete All** 🗑 : By Clicking on this icon all the components which are present in the dashboard can be deleted.

iv) **Duplicate** 🗐 : By clicking on this option duplicate component will be produced on the canvas.

v) **Search:** When the component number increase in the dashboard it will be difficult to the users to find out desired component. So we have provided the search bar where user can search for the components.

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5. Component Attributes

Component Attributes consist of attributes and values of the charts and components that have been dragged into the canvas. It is used for

a) Place where default values will be passed
b) Performing Dynamic Filtering

Passing Default Values: In this tutorial we will explain how to pass default values in the charts.

Ex: Assume that we have sales data of auto manufacturers. In this we would like to view only data of **'FEB'** month. In this scenario we need to perform the below steps

i) Select a column chart from the chart components and drag it into canvas.(**Ref: Creating Dashboards tutorial**)
ii) Connect an Excel data source of auto sales data.(**Ref: Creating a data source connection using Excel tutorial**)
iii) Click on 'Column chart's data source connection and select Condition tab and give input as 'Feb' in the text box.(as shown below)
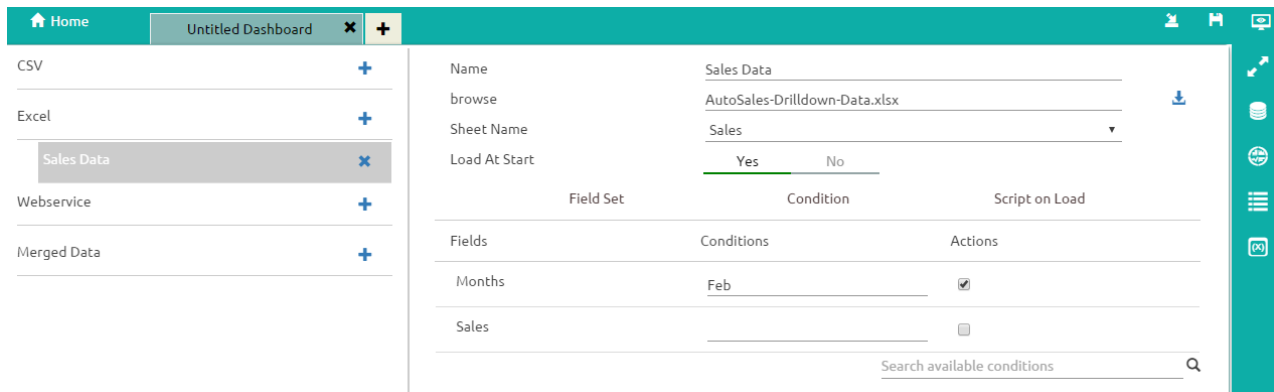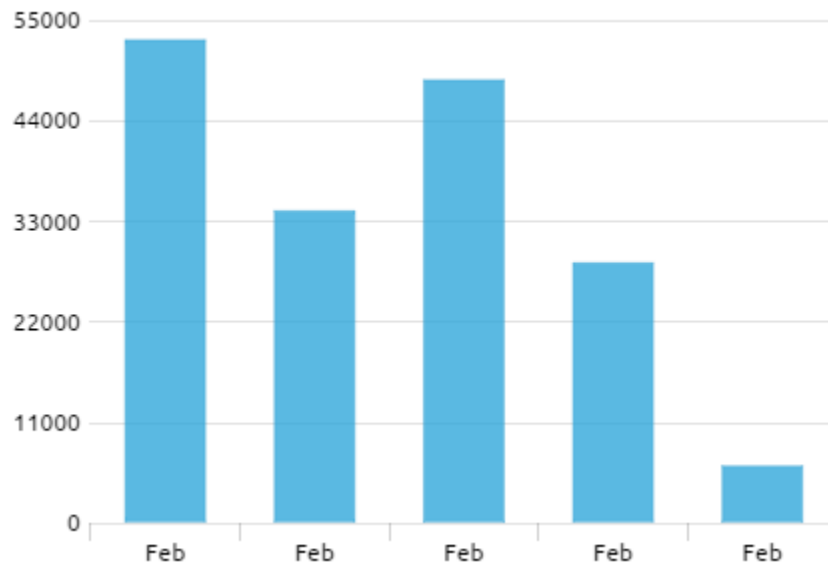

iv) Click on 'Preview' button to view the results

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Fig: As we have given 'Feb' in condition only February's month data was displayed.

Performing Dynamic Filtering in Dashboard: In this tutorial we will explain how to perform dynamic filtering using filters and charts. Every component has some attributes and values which can be seen in **'Component Attributes'** window. By passing values of one component into another component dynamic filtering is achieved.

Scenario: Performing filtering using Pie-Chart to Column chart

a) **Creating Data Source Connections for Charts**

i) Go to the Dashboard Designer Home Screen, and click on 'Data Source' icon.

ii) Click on the icon to create a new connection. In this tutorial we are selecting an Excel data connection.
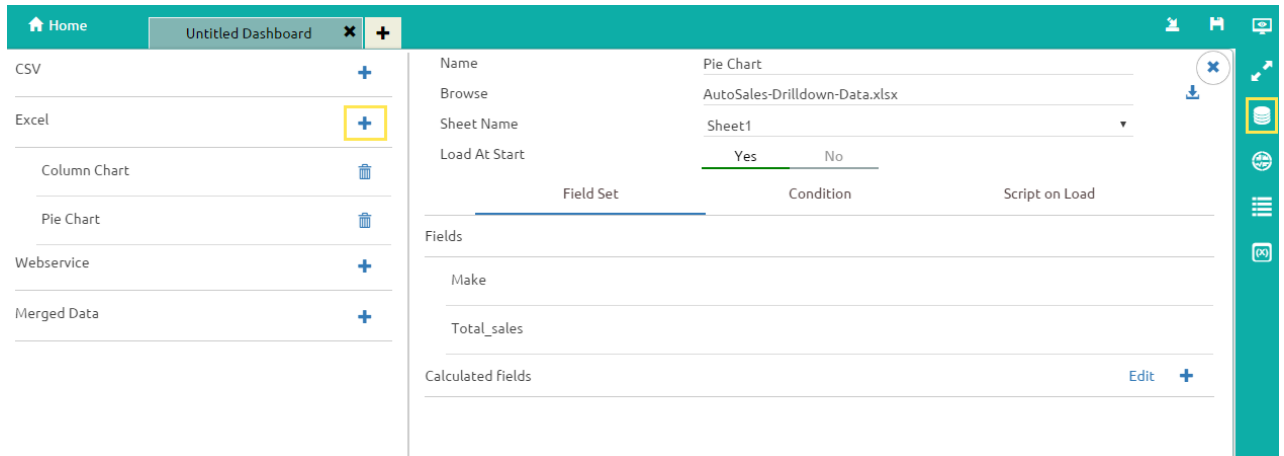
Note: As we are performing drill from Pie-chart to Column chart we have created two data sources (i.e. Pie and Column)

Fill in the necessary details

- **Name:** Name the connection
- **Browse:** Navigate to the Excel file that you wish to use as a data-source.
- **Sheet Name:** Select the sheet you wish to use from the Excel file you have selected.
- **Load at Start:** Enabling this option refreshes the data-source before opening the charts

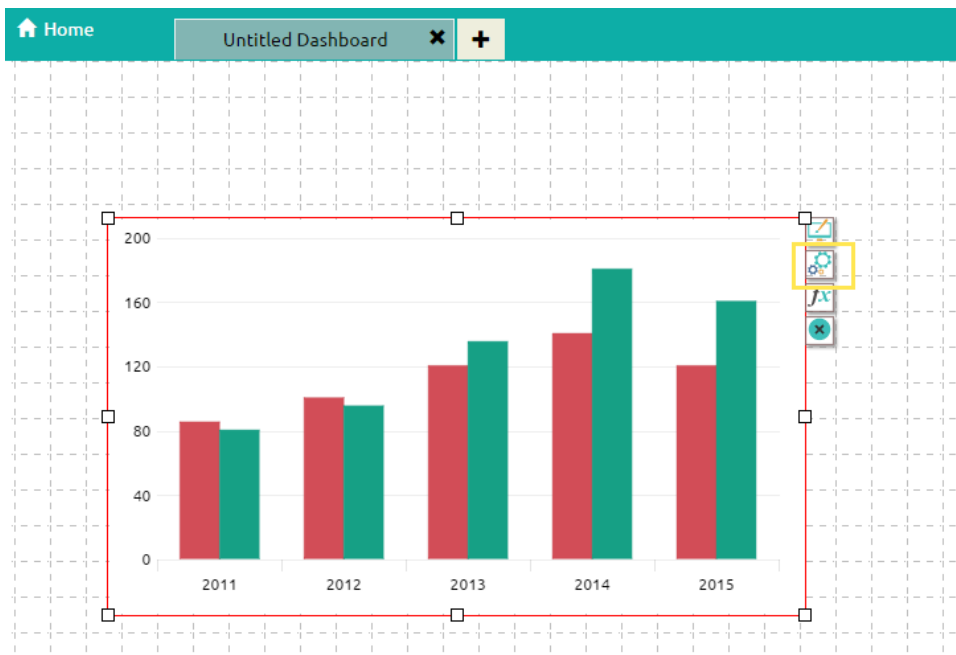iii) Click on **'Charts'** icon provided at right side to the canvas.

A list of the available components will be displayed.

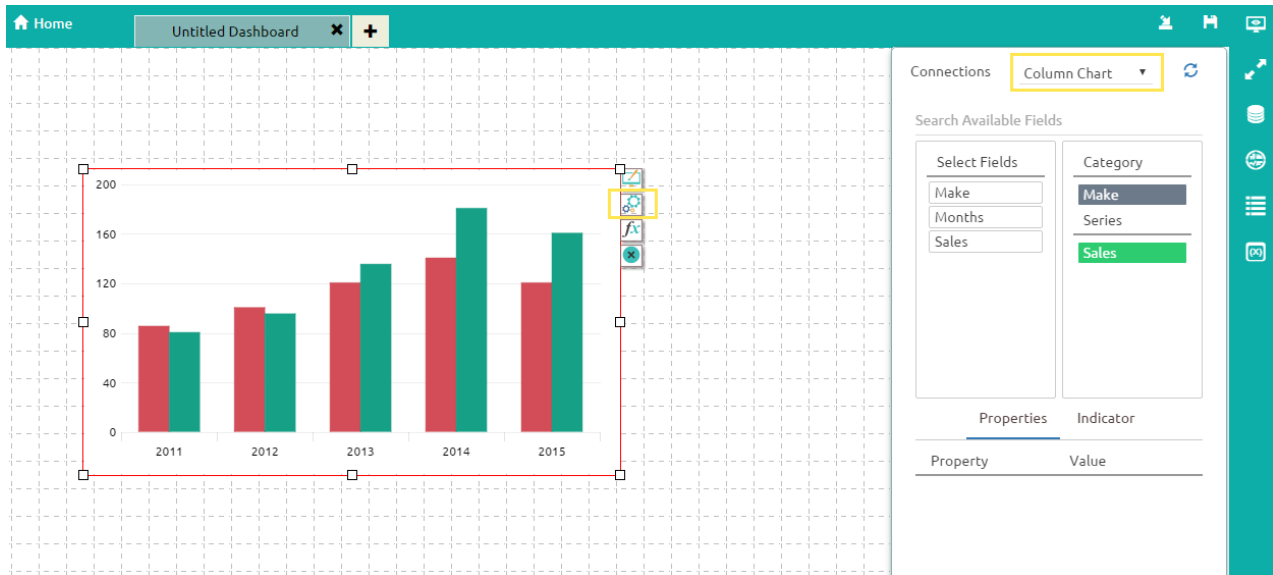Drag and drop the Pie-Chart and Column components onto the canvas
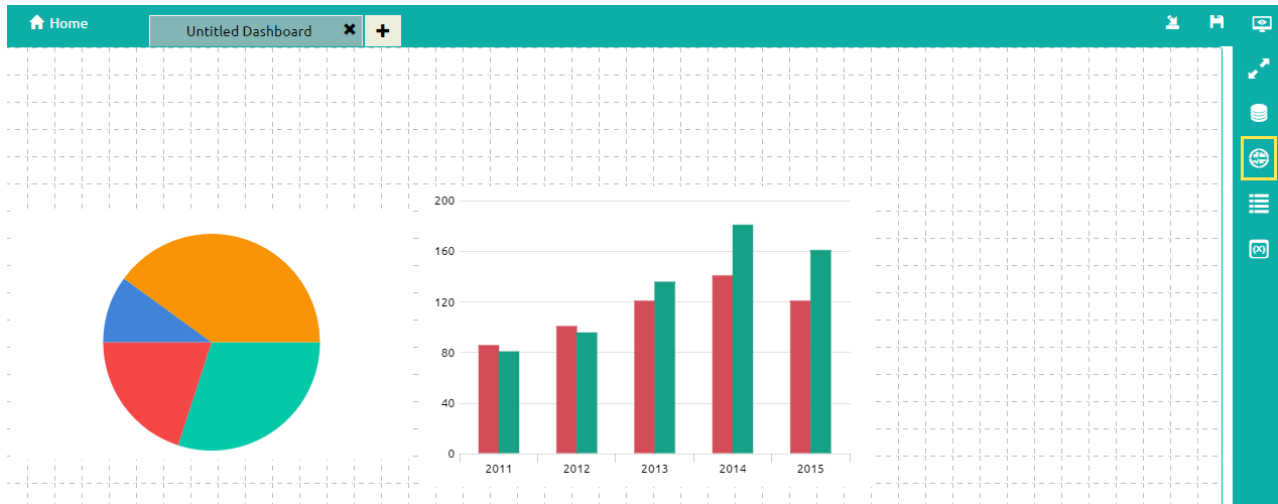
iv) Connecting the Column chart component to an existing data connection:

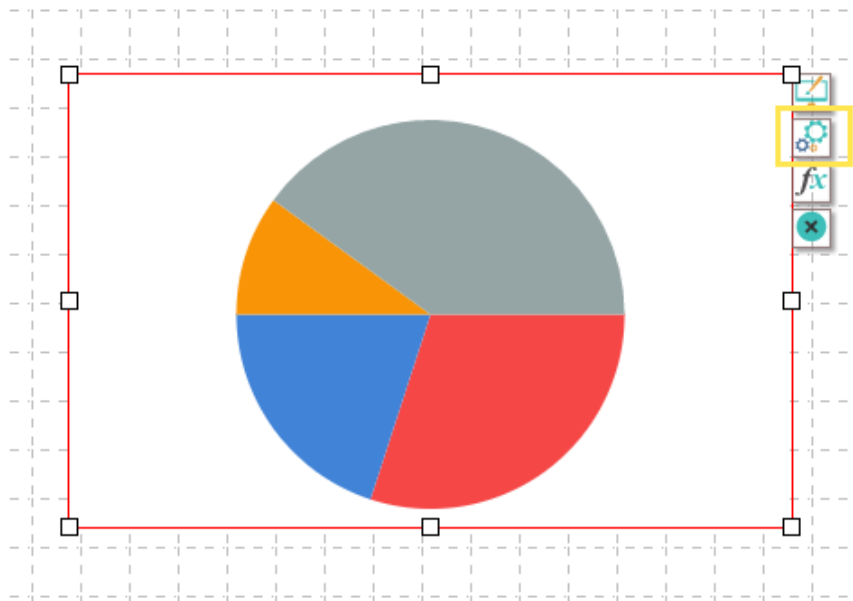- Click on the settings [icon] icon that appears next to the chart, as shown below.

- Select the connection from the **'Available Connections'** dropdown.(Ex: Column)
- Drag and drop the fields to their respected series and categories.

Copyright © 2015. Big Data BizViz LLC. All Rights Reserved
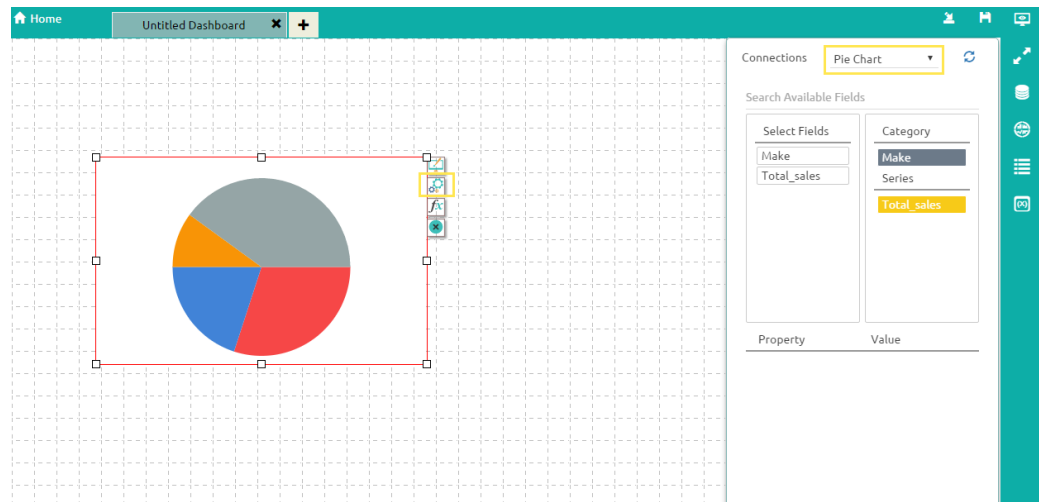
v) Connecting the Pie chart to an existing data connection

- Click on the settings icon that appears next to the chart, as shown below.
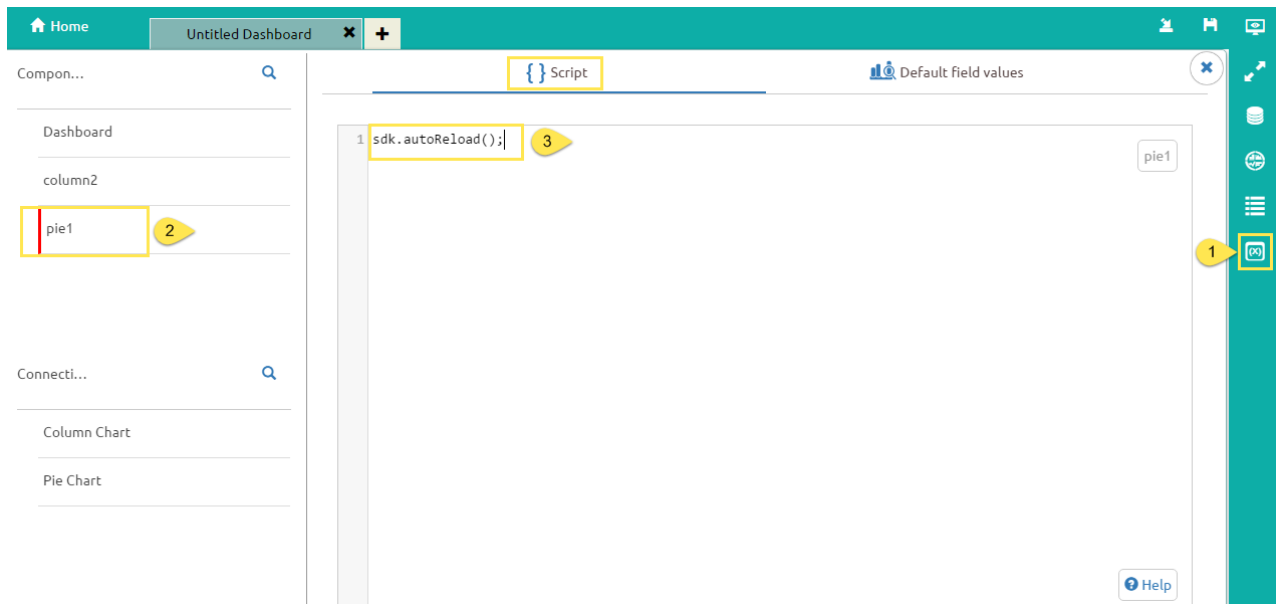

- Select a connection from the **'Available Connections'** dropdown (Ex: **Pie**)
- Drag and drop the fields to their respected series and categories.

b) **Enabling Drilldown Option**

Click on **'Component Attributes'** icon [icon] provided to the right side of canvas. And select '**Pie1**' component as shown in the below fig
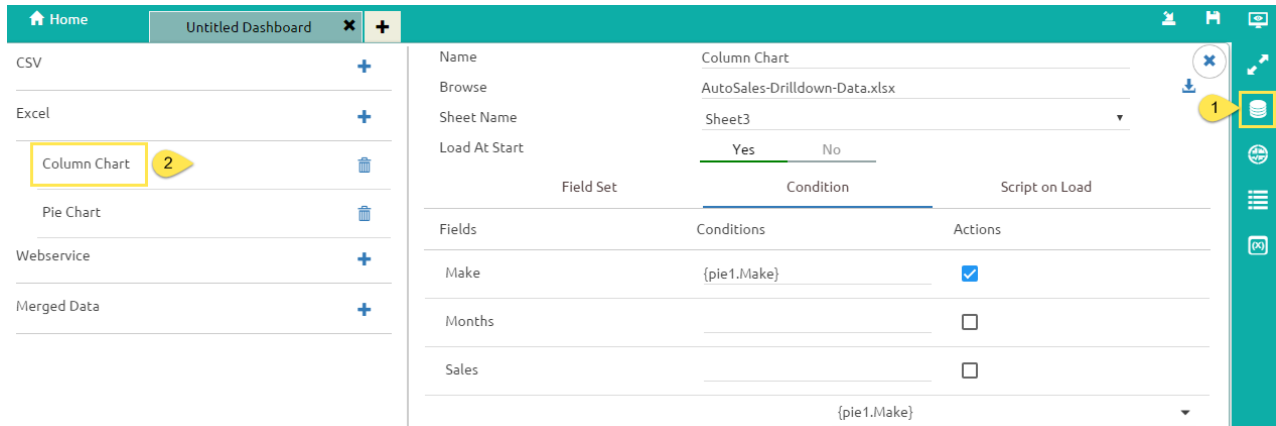

Apply the below mentioned actions

- Type the function name as shown in the above fig
- Follow the below mentioned steps to write the function name
  - After typing SDK. Use **'Ctrl+SPACE'** keys to select a particular function from the pop-up list

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- Select ![icon] icon and click on the '**Column Chart**' component as shown below
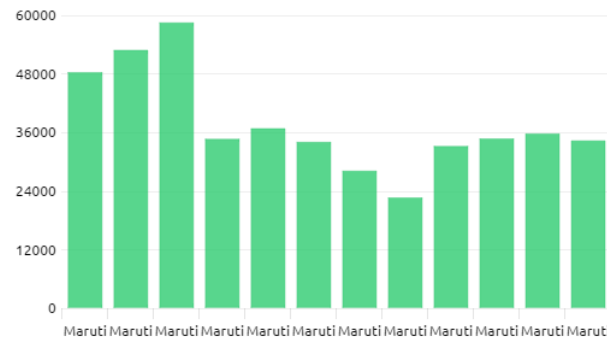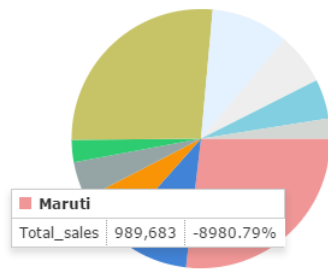

- Select **'Condition'** button and in the Search Available Conditions type the field name using which filtering is going to be performed i.e. (here using **'Make'** field we are performing the drill)
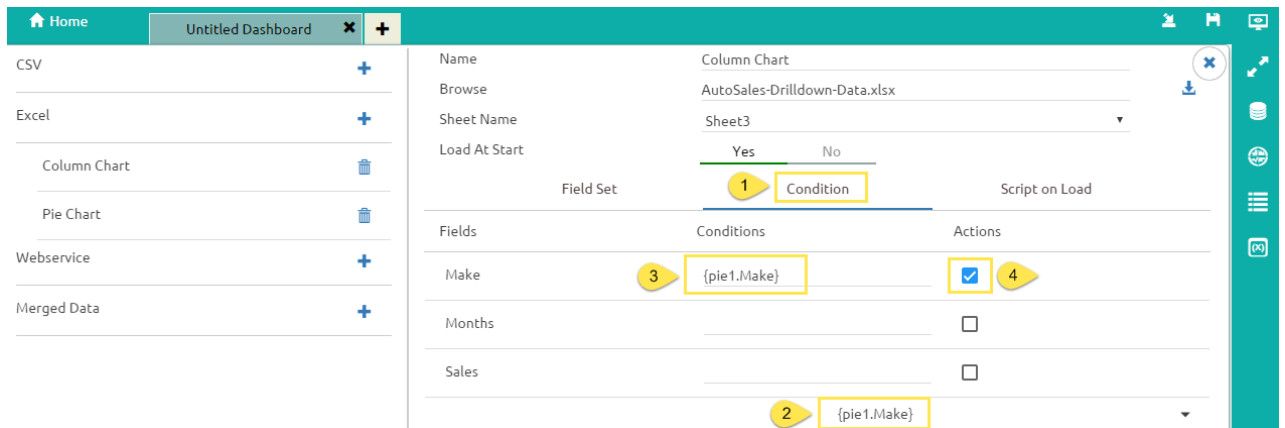
- Copy the condition and paste it under **'Condition'** and enable the **'Action'** checkbox. (as shown in the above image)

- Click on 'Preview' ![preview icon] button to perform drilldown

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From the above fig we can observe that on clicking '**Maruti**' option in the Pie-chart all the sales information of that make is filtered in the column chart.

6. Features and Sharing Options

BizViz has introduced scripting mechanism in creating dashboards which helps the users to customize dashboards to next level. Creating complex dashboard using scripting was made easy. Users need to have basic scripting knowledge to create dashboards with ease.

6.1. Scripting Window

In this tutorial, we will provide a basic understanding of writing scripts and their functionality.

Scenario: We wish to have a check box which when enabled, will show a column chart, and when disabled, will show an area chart. This concept is called '**Dynamic Visibility**'.

    i)   Select **'Dashboard'** to create a new dashboard
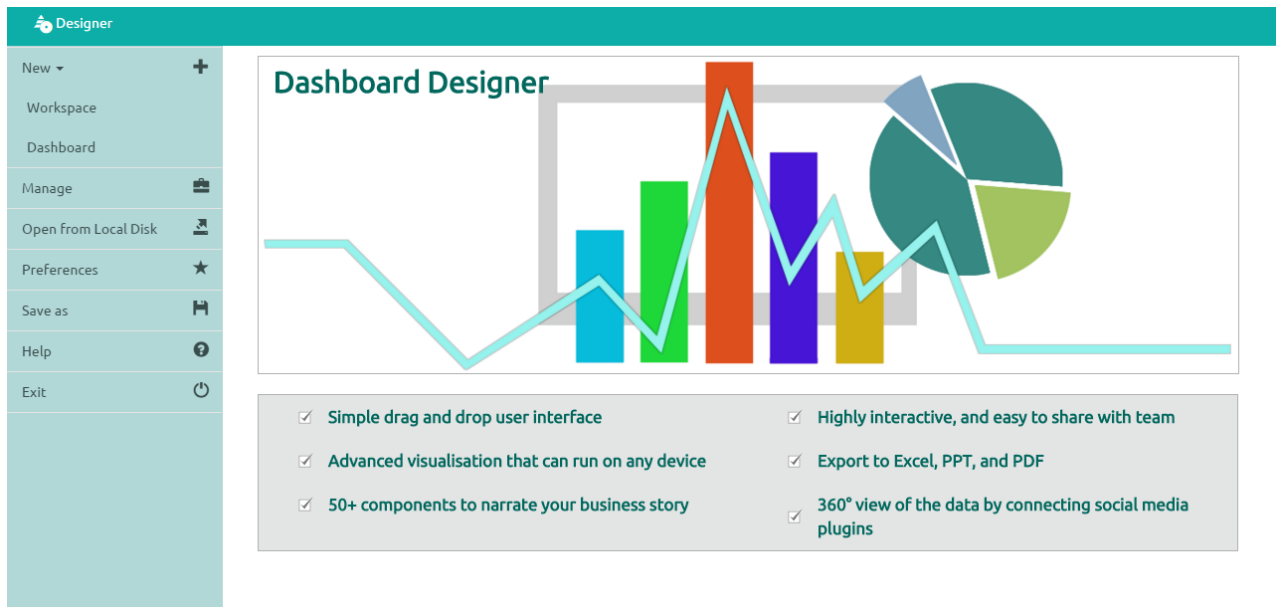
ii)   After selecting **'Dashboard'**, a web page will open.

iii)   Click on the Charts icon [icon] and drag and drop the 'Check Box', 'Column Chart', and 'Area Chart' components into the canvas.
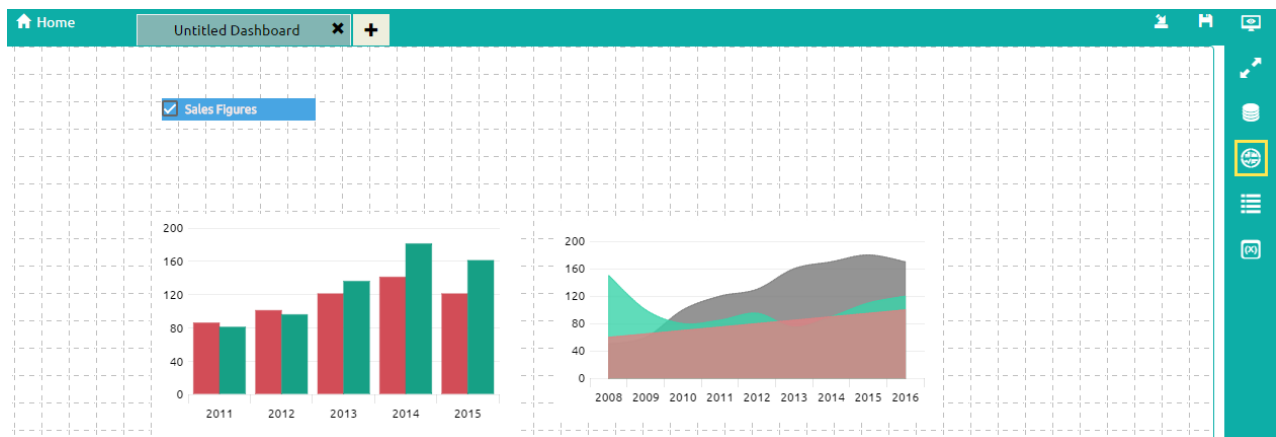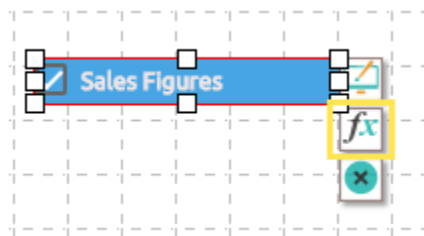

iv)   Click on the '**Appearance**' icon next to the label component (shown below in the yellow box) and set **Checked Value to '0'** and **Unchecked Value to '1'** (as shown below).

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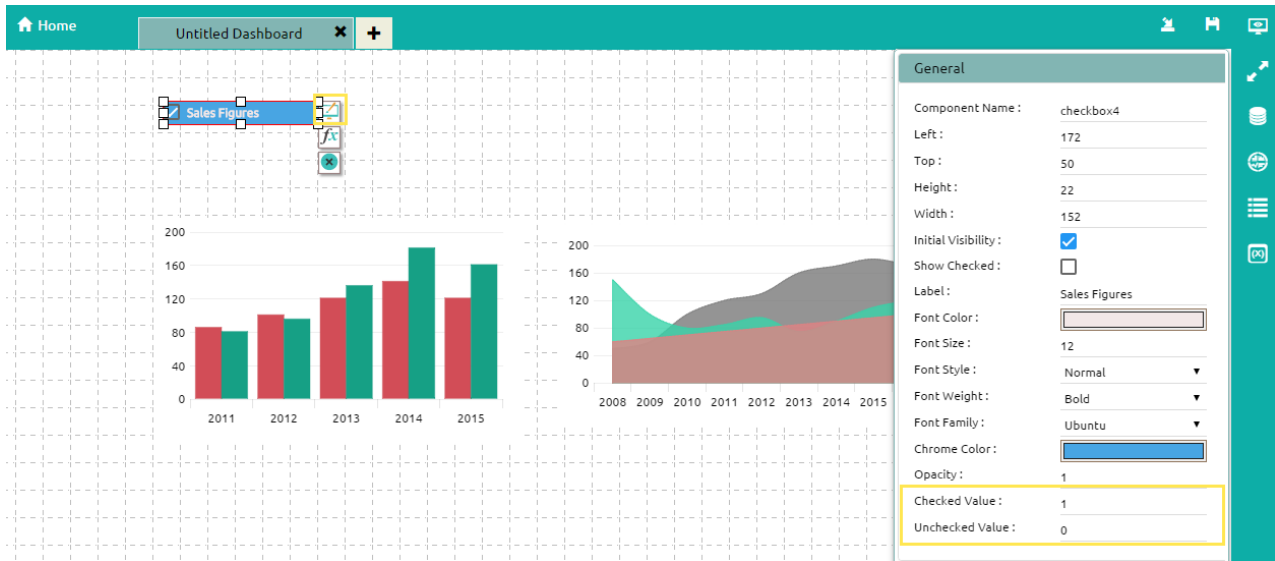
v) Create data connections for the Column chart and Area chart.

(Ref Creating Data Source Connection for Charts)

vi) Click on the **'Script-on-change'** icon which is provided next to the label component (as shown below).

vii) After clicking on the '   ' icon, a **'Change Script'** window will be displayed where the user needs to write a script by using the functions provided in the dropdown menu.


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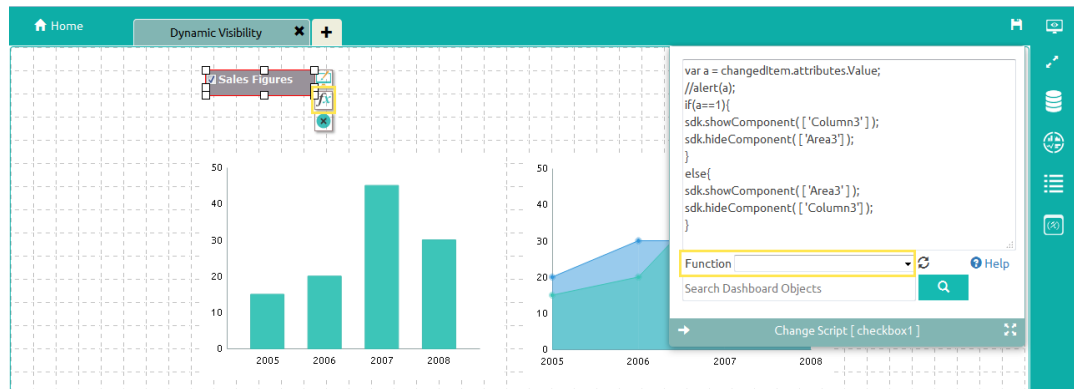
Note: Below steps explains how to write the above mentioned script

- First, pass the 'Combo Box' value to the script 'if' function.
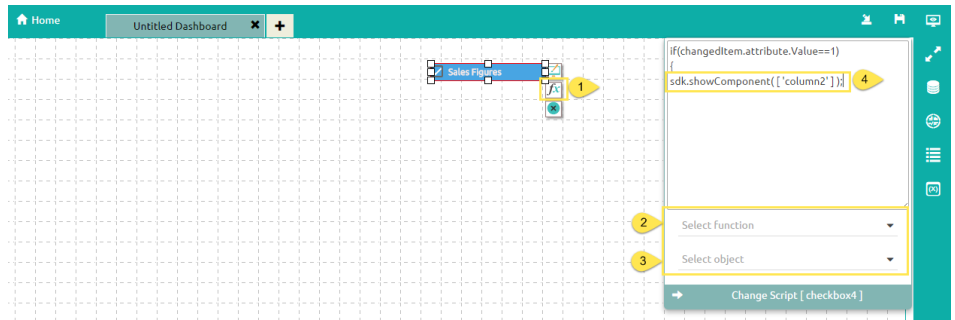
    To accomplish this, click on the 'Component Attributes' icon on the right edge of the screen, and copy the 'Display Tag' value as shown below.
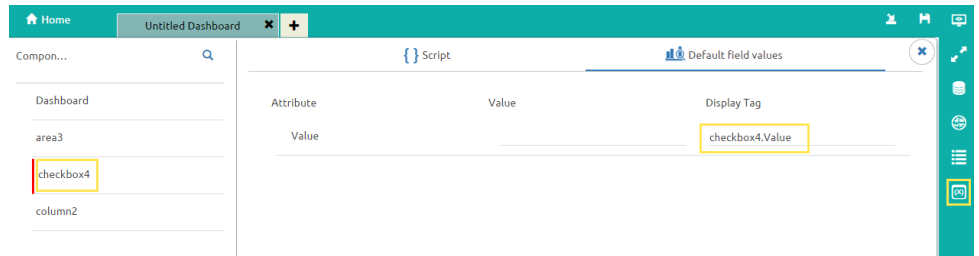
- We will now pass the 'Display Tag' value to the 'if' function of the 'Check Box' Change Script window (as shown below).
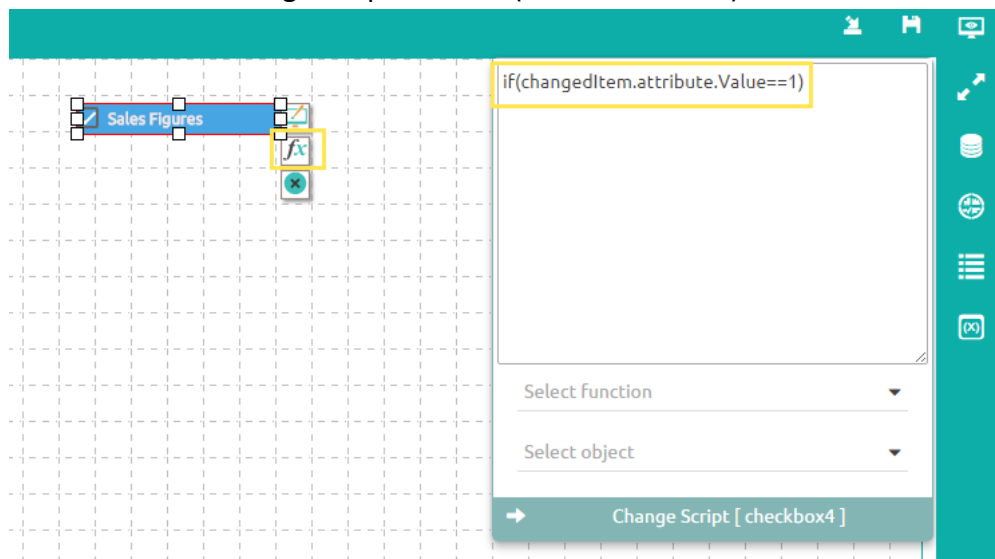

- We will now select the 'Show and Hide' function from the 'Function' dropdown menu
- If the 'Value == 1' (in other words, if the check box is enabled) the Column chart should be displayed. For this to occur, we need to place the 'Show Component' function under the 'if' function, as shown below.

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- We now need to pass the 'Column chart' value to the 'show Component' function which we have placed under the 'if' statement, as shown in above.

  To accomplish this, the user has to search for the Column chart in the Search Object dropdown provided and select it (as shown below).
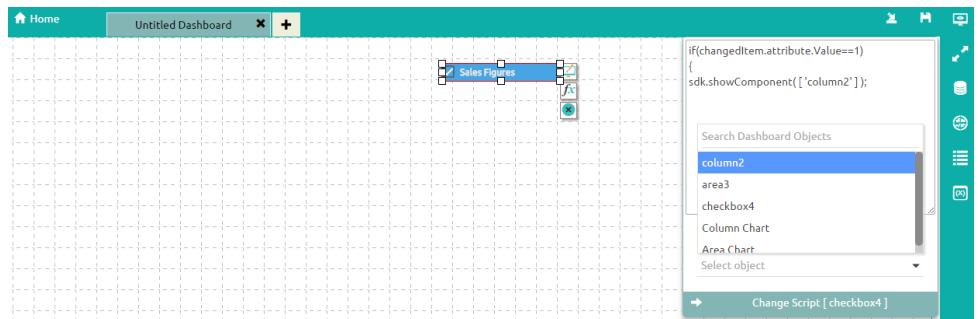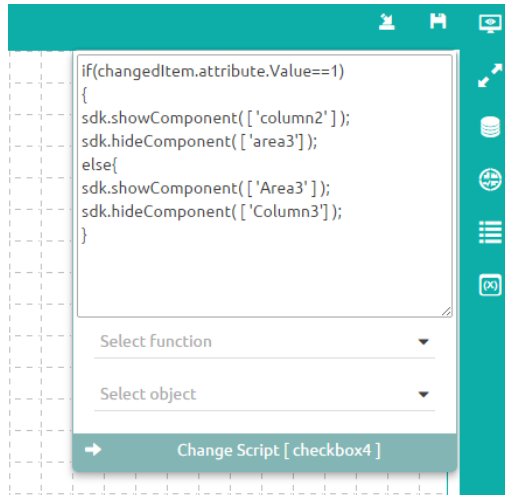

- Now when the Column chart is passed to the 'Show Component' function, we need to make sure that area chart is hidden. To do this, we will pass the area chart value to the 'Hide Component' function, as shown below (similar to what we did for the Column chart).

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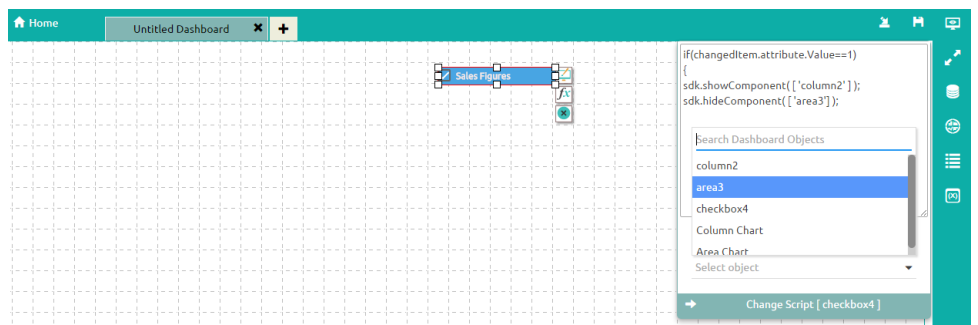
- If the 'Value == 0' (in other words, if the check box is disabled), we need do the reverse of the function we used earlier; So that when the user unchecks the Check Box, the 'Area chart' will be displayed and 'Column chart' will be hidden.

  To accomplish this, we need to write the following script:
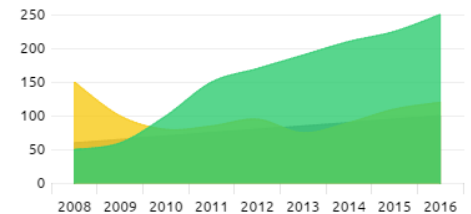

- After entering the above script successfully, click on the 'Preview' icon to view the results.
- In the below screen capture, since the 'Check Box' is checked, the 'Column Chart' is displayed.

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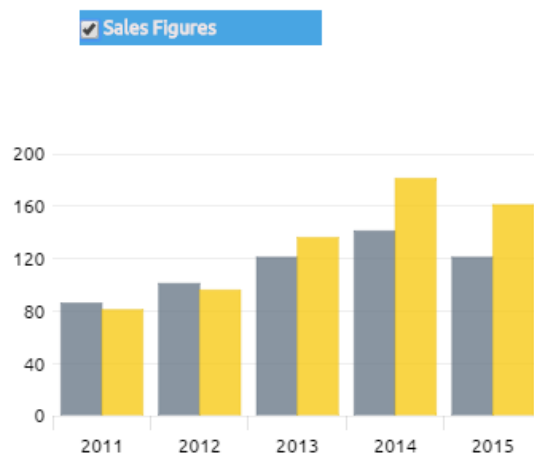
- Unchecking the 'Check Box' will cause the 'Area Chart' to be displayed.

7. Manage and Sharing Options

Manage and share your work with others. In this tutorial we will explain how to edit, save and share/publish the dashboards which we have created.

A. Manage Dashboards

Generally created dashboards are saved under a workspace. Based upon requirement users will be editing the dashboards by adding some modifications to them and saving dashboards to the disk. In this tutorial we will explain you how to edit, open, and save dashboards.

B. Share Dashboards

Created dashboards will be shared among the users for a purpose. We have provided options to move and publish dashboards. Below given tutorial helps you how to access those options in the designer.

Click on the **'Manage'** button as shown in the below figure. All the 'Workspace' which is created by the user will be displayed. Clicking on particular workspace will display all the dashboards which are created under it.

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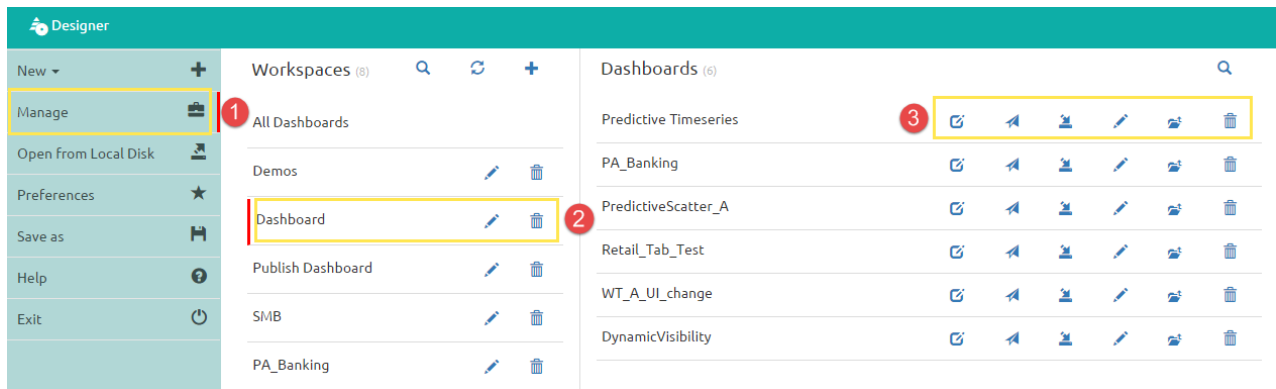
From the above figure we can observe that icons are providing next to the dashboard name.

Explaining the options:

| Icon	Name	Description
	Open	Used to Open the dashboards which are already created.
	Publish	Used to publish the created dashboard on to the portal.
	Save to local disk	Used to save the dashboard to your local system.
	Edit	Used to rename the previously created dashboard.
	Move	Used to move the dashboard from one workspace to other.
	Delete	Used to delete the dashboard.

7.1. Editing Dashboard

Previously created dashboards can be renamed using edit option. In this tutorial will explain users on how to edit (rename) existing dashboard.

1) From the dashboard designer home screen click on **'Manage'** button all the 'Workspaces' created will be displayed. Clicking on particular dashboard will display all the dashboards it contains.
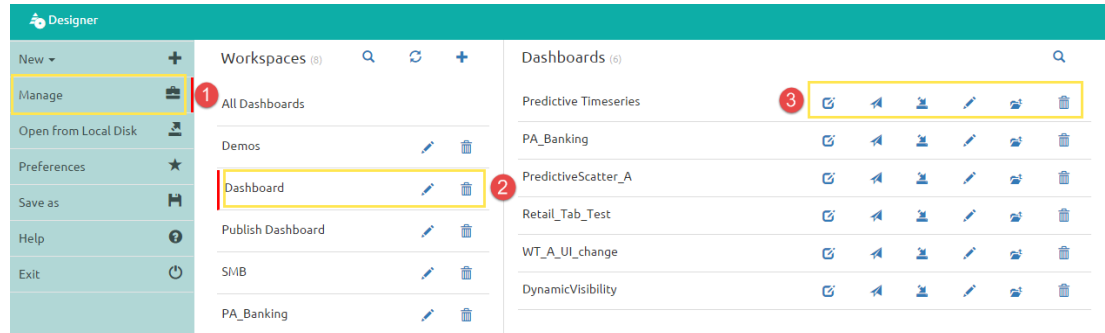
2) On clicking the edit icon   pop-up window will appear where user will be allowed to rename the dashboard name.
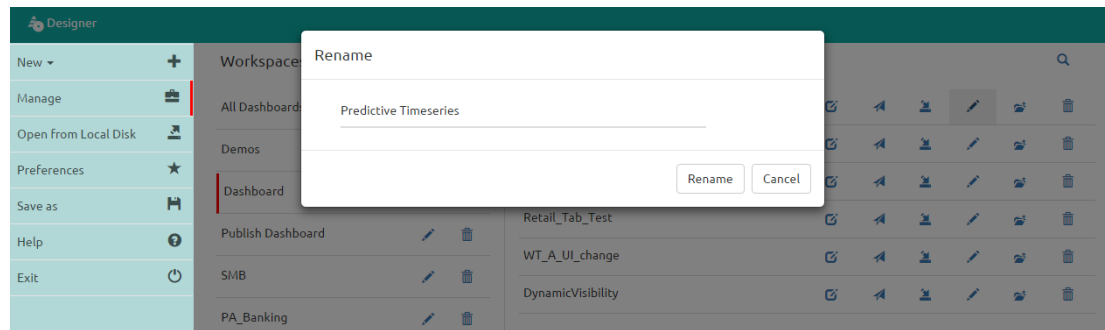

3) After entering the desired name click on the **'Rename'** button to change the existing name of the dashboard.

7.2. Opening Dashboard

Existing dashboards can be opened using '**Open**' option. In this tutorial we will explain users how to open existing dashboards which are available in local disk.

1) From the dashboard designer home screen click on **'Manage'** button all the 'Workspaces' created will be displayed. Clicking on particular dashboard will display all the dashboards it contains.

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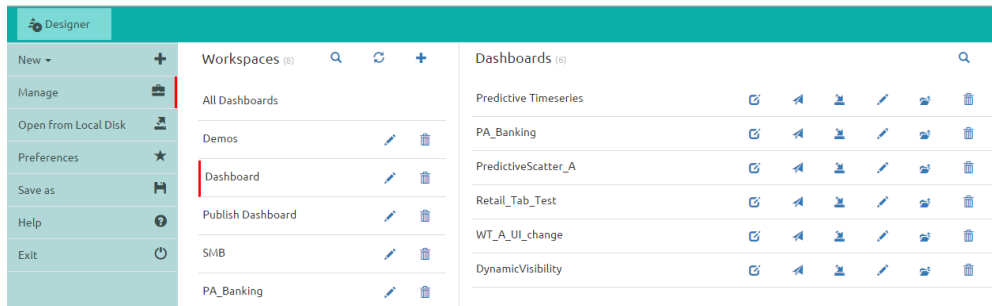
2) On clicking the Open icon [icon] dashboard will be opened. (as shown below)
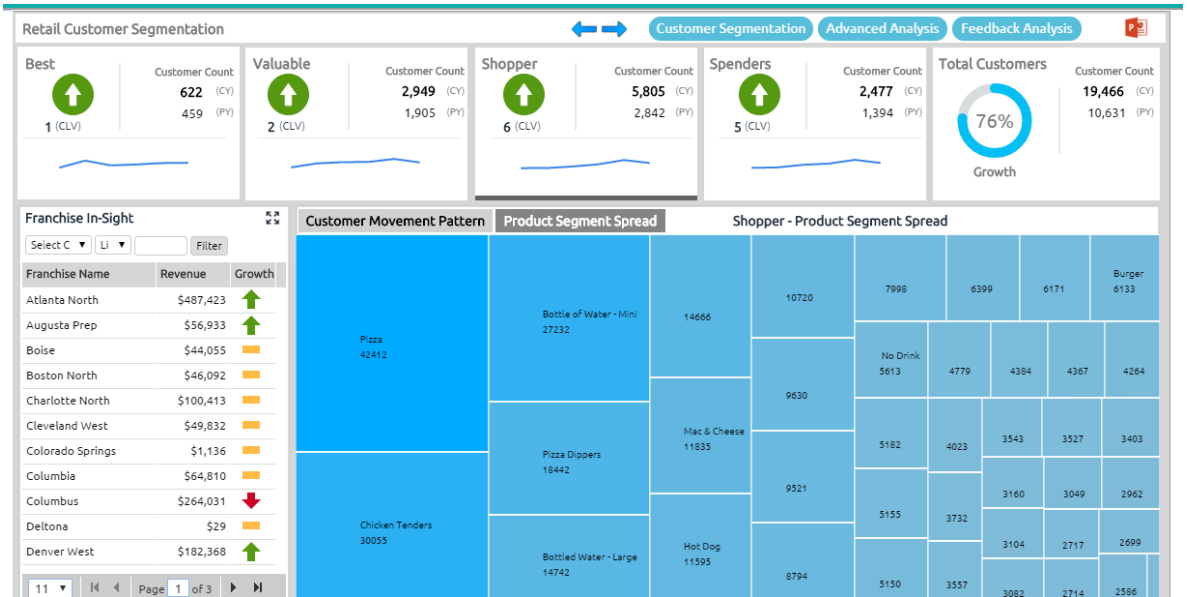
7.3. Save to Local Disk

Dashboard which are created by the users will be saved to local disk by using **'Save to Local Disk'** option.

1) From the dashboard designer home screen click on **'Manage'** button all the 'Workspaces' created will be displayed. Clicking on particular dashboard will display all the dashboards it contains.
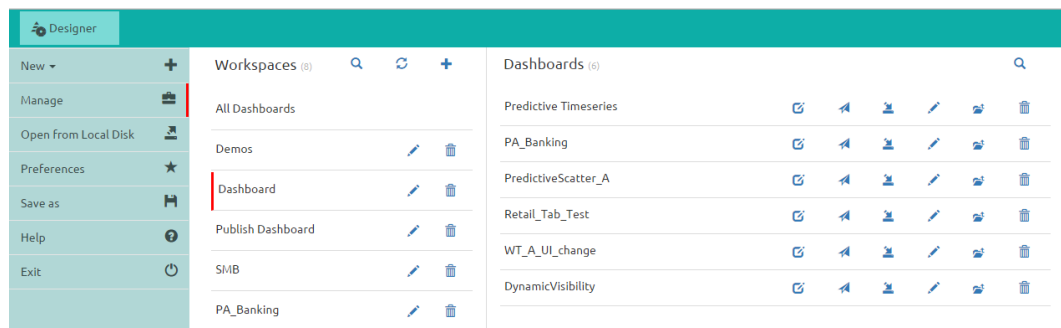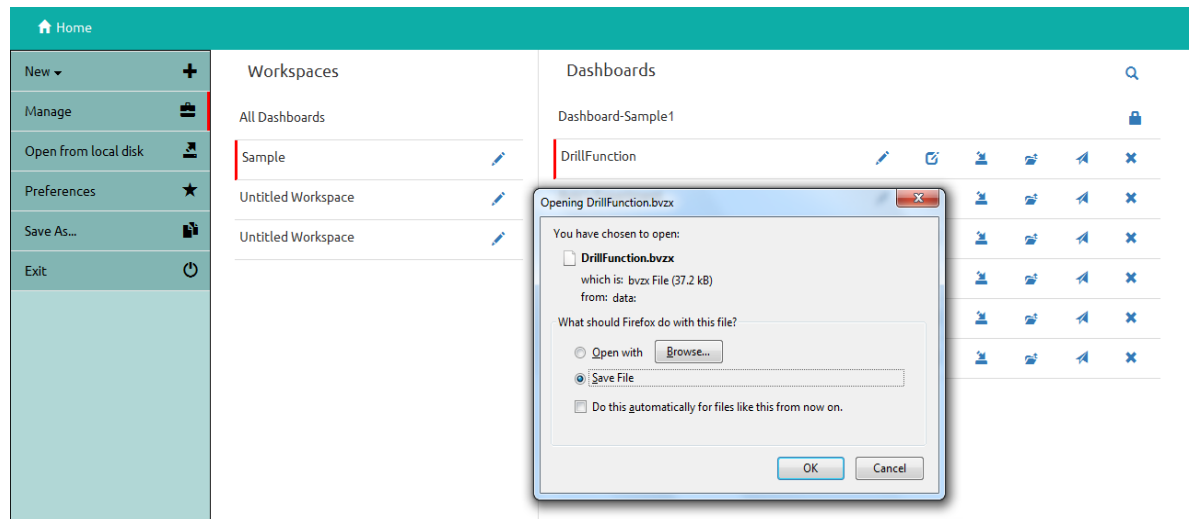

2) On clicking the Save to local disk icon [icon] a pop-up window will appear (as shown below) click on 'Save' option to save the dashboard to your local system..

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7.4. Moving Dashboard

Created dashboards can be moved from one workspace to other using this option. In this tutorial will explain users on how to move dashboards.

1) From the dashboard designer home screen click on **'Manage'** button all the 'Workspaces' created will be displayed. Clicking on particular dashboard will display all the dashboards it contains.
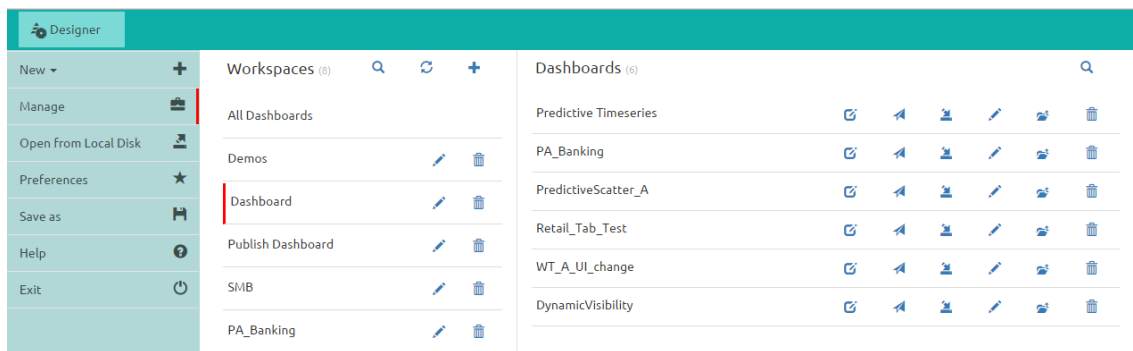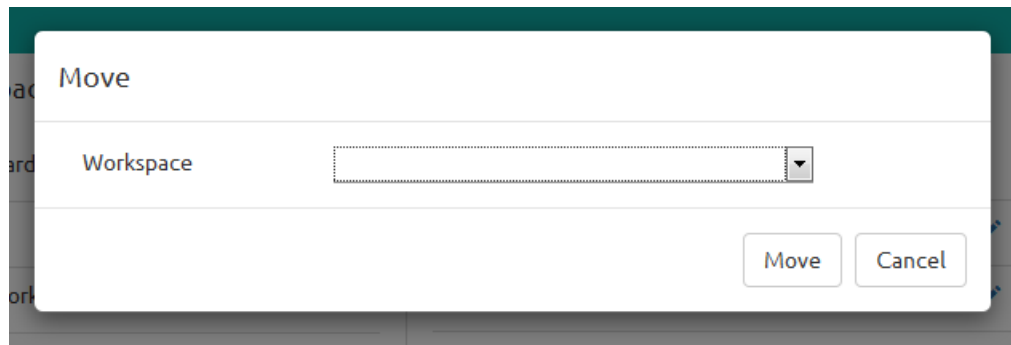

3) On clicking 'Move' icon a pop-up window will appear (as shown below) From the dropdown select the Workspace to which you would like to move the dashboard and click on **'Move'** option.
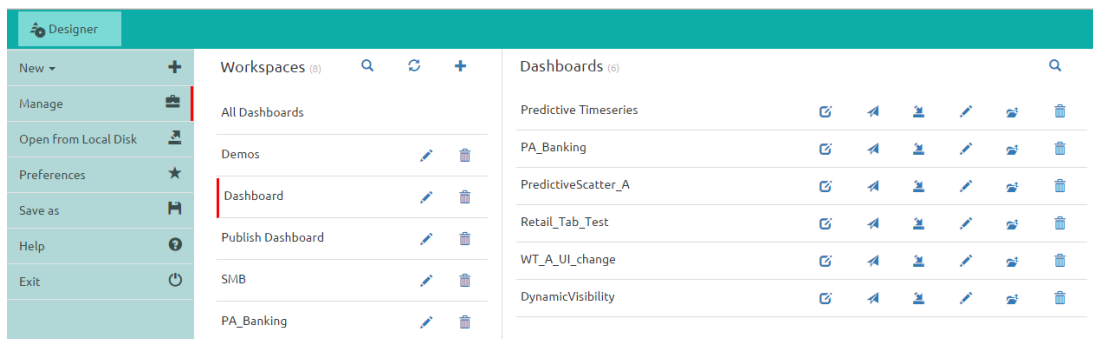
7.5. Publishing Dashboard

Dashboards need to be published in order for end-users to access them.

In this tutorial we will explain how to publish dashboards.

   i)   On the Dashboard Designer home screen, click on the **'Manage'** button. All existing 'Workspaces' will be displayed. Click on any workspace to view the dashboards it contains.
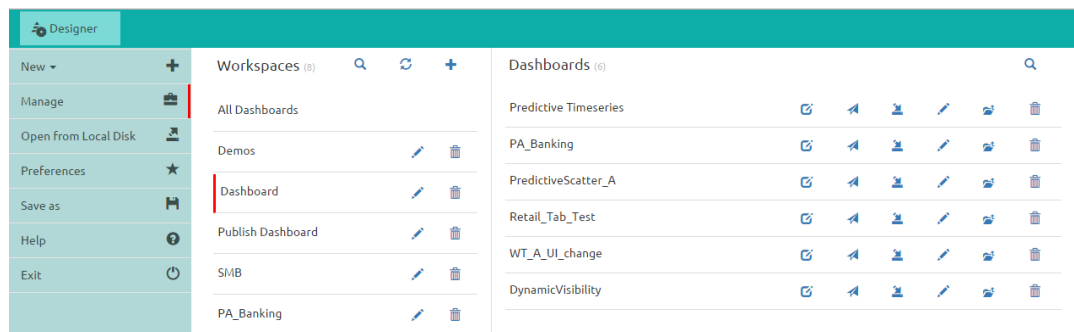

   ii) On clicking the **'Publish'** icon   , a pop-up window will appear (as shown below). From the Location dropdown menu, select the location to which you would like to publish the dashboard, and click on **'Publish'**.
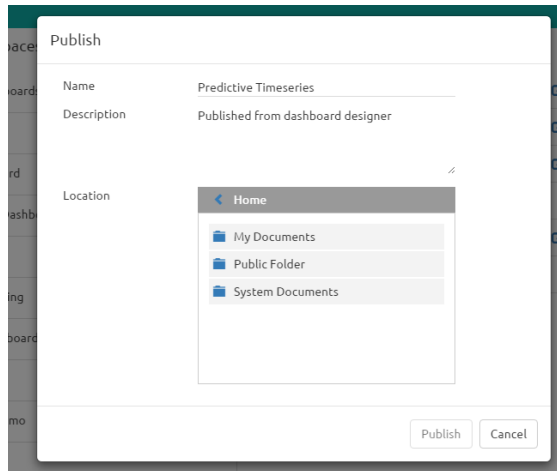
7.6. Delete Dashboard

When a user wants to delete a dashboard by using this option he can delete the desired dashboards. In this tutorial we will explain how to delete a dashboard.

i)   From the dashboard designer home screen click on **'Manage'** button all the 'Workspaces' created will be displayed. Clicking on particular dashboard will display all the dashboards it contains.

ii)   On clicking **'Delete'** icon a pop-up window will appear (as shown below).Click on the **'Remove'** button to **delete** the dashboard.

Workspaces

All Dashboards

Demos

Dashboard

Publish Dashboard

Trash

Are you sure to remove the dashboard "Predictive Timeseries"?

Remove   Cancel

Retail_Tab_Test