

INTERNAL - SAP AND CUSTOMERS ONLY

# HOL101 – Create Compelling Stories in the SAP SuccessFactors People Analytics Solution.

In this hands-on lab, reporting administrators will learn how to tell compelling stories using a single solution with data from across the SAP SuccessFactors portfolio based on SAP SuccessFactors Employee Central data. Administrators will learn how to use live data from SAP SuccessFactors solutions, rich visualizations, and intelligent joins, all through a single, unified analytics solution.

This session is intended for intermediate-to-advanced reporting administrators with a working knowledge of the report center and role-based security permissions (RBP).



#### **CONTENTS**

LAB ACTIVITY #1 – USE TEMPLATES TO BUILD YOUR STORY.	3
LAB ACTIVITY #2 – BUILDING OUR QUERY FOR OUR EMPLOYMENT STATUS WIDGET	4
LAB ACTIVITY #3 – USING STORY DESIGNER	12
LAB ACTIVITY #4 – ADDING A NEW DATA SOURCE TO YOUR STORY REPORT.	18
LAB ACTIVITY #5 – ADDING A NEW WIDGETS TO YOUR STORY.	21



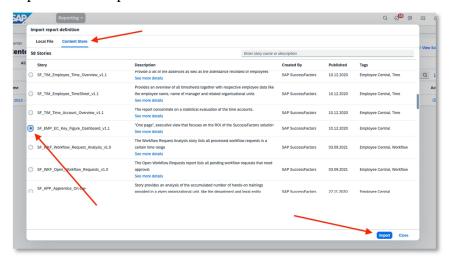


# LAB ACTIVITY #1 – Use Templates to build your Story.

The purpose of this exercise is to explore the ease of using story templates as a basis to begin your story report.

NOTE: Since the instances we are using will be shared among participants, this template has already been loaded. We'll use the exercises outlined below to "review the process" so you can perform these tasks in your own environments.

- 1) Add a pre-defined template to become the basis for your story report. For today's lab we'll be using a template that is available in "Content Store".
  - a) Log into your test environment with the supplied user (username and Password)
    - i) From the main dropdown (Reporting) or by typing into you action search bar, navigate to "Report Center".
  - b) Click on "Import" from Report Center and then click on "Content Store":



- c) For this HOL we'll be using the SF\_EMP\_EC\_KEY\_FIGURE\_DASHBOARD\_v1.1 Story template.
  - i) Remember this template has already been imported. We'll take a look at the story next.
- d) A Disclaimer will pop-up simply click on "Ok, I Understand":

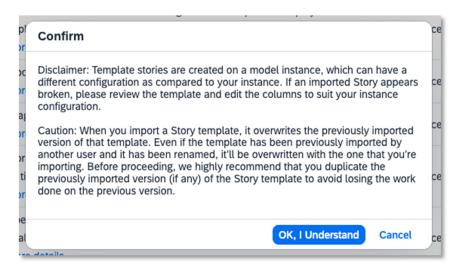




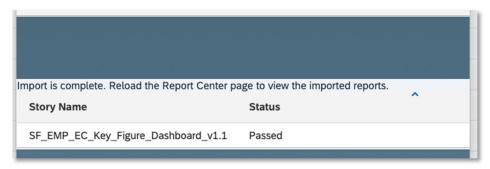
© 2023 SAP SE or an SAP affiliate company. All rights reserved

See Legal Notice on <a href="https://www.sap.com/legal-notice">www.sap.com/legal-notice</a> for use terms, disclaimers, disclosures, or restrictions related to SAP Materials





e) A separate window will display indicating that the import is in progress. Do not close the window until the import is complete, and the status indicates "Passed":



- f) Refresh the Report Center Screen
  - i) The story report using the template you just imported will be available. Click into that report to load your story.
- g) User "View" to modify the report using the built in controls, drill down to details, run filters, etc.
- h) Use Edit to make modifications to the widgets, add additional tiles, view, edit or add additional data sources, etc.

# LAB ACTIVITY #2 – Building our query for our Employment Status Widget

1) Building our First Query using Query Designer.



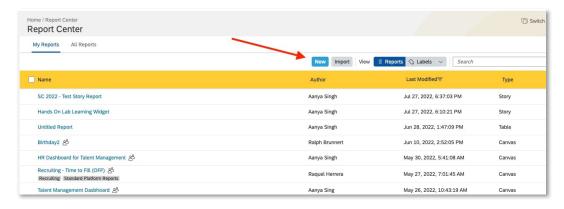
© 2023 SAP SE or an SAP affiliate company. All rights reserved.

See Legal Notice on <a href="https://www.sap.com/legal-notice">www.sap.com/legal-notice</a> for use terms, disclaimers, disclosures, or restrictions related to SAP Materials

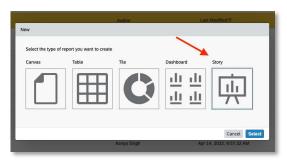


NOTE: A query model is a representation of large amounts of business data, using common business terminology. The **Query Builder** enables you to select the fields, which you want to include in your **Story** report. The queries you build using the **Query Builder** are equivalent to private models in SAP Analytics Cloud. The queries are unavailable outside the story. You can create multiple queries (also, referred to as models and data source) for a **Story** report.

- a) Create a new story report rom Report Center
  - i) On the Report Center main screen, you'll notice two tabs: "My Reports" which are those reports you have specifically created yourself or "All Reports" which are all the reports you have been granted access.
    - (1) Stay on the "My Reports" tab.



ii) Click on the "New" button to bring up the report types you can create then click on "Story" on the far right of the pop-up window.



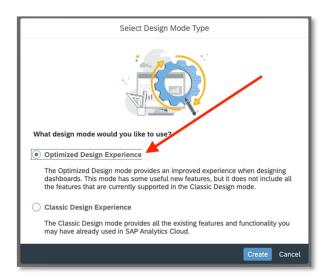
b) Next, click on "Select" at the bottom of the pop-up window.

NOTE: You may receive a message asking which design mode type you wish to use. For today's HOL we'll be using the "Optimized Design Experience". Click on "Create":

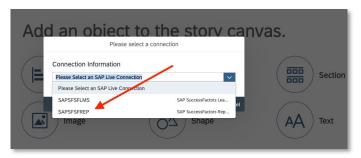








- i) Once the Story has loaded you will first select an SAP Live Connection using the dropdown within the subsequent pop-up window.
  - (1) For our first widget, select SAPSFSFREP (or SAP SuccessFactors Reporting).



NOTE: If you only have one data connection you will not be presented with this screen but will be taken directly to Query Designer.

- (2) Click "OK"
  - (a) This will load the available data we'll be using for our story.
- (3) Now we are ready to begin building our Query which will define the data source for our Story.
- c) Using Query Designer.
  - i) Let's begin by adding our employee's "Job Information" table so, within the schema search bar under "Available Data" scroll down until you locate "Employment".
  - ii) Expand this section and drag (or double click) the "Job Information" object onto the canvas. This will serve as our primary data source for our query.

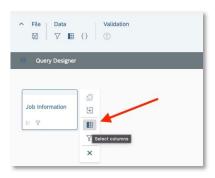








- iii) Now let's add a few columns from this table. These columns will provide the opportunity to slice up our data later in our Story as necessary.
  - (1) Click onto the Job Information table and you'll see a fly-out from which you will select the "column icon" to access the available columns within the table.

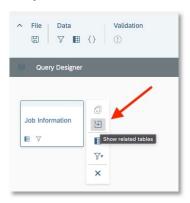


- (2) Select the following columns:
  - (a) Under Business Unit:
    - (i) Business Unit Name
  - (b) Under Company
    - (i) Legal Entity Name
  - (c) Under Department:
    - (i) Name
  - (d) Under Division
    - (i) Name
  - (e) Employee Class
  - (f) Employment Status
  - (g) Employment Type
  - (h) FTE
  - (i) Under Job Classification:

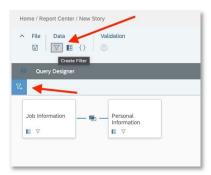




- (i) Job Title
- (i) Under Location:
  - (i) Name
- (k) User ID
- iv) Next, let's add a related table (or a table that is joined to our selected table) by clicking anywhere within the Job Information table and then the "show related tables" icon within the object flyout.



- v) Under the "Person" table, click on the "Plus" sign to add or commit the "Personal Information" table.
  - (1) Let's add some columns from this table as we did with the Job Information table:
    - (a) First Name
    - (b) Gender
    - (c) Last Name
    - (d) Person ID
- d) Now let's add a filter on status to our query.
  - i) Select the "Create Filter" icon under "Data":

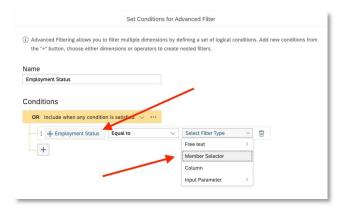


- ii) Next, select the "new-filter" icon on the left of the screen under Query Designer.
  - (1) Select "Advanced Filter". On the subsequent pop-up we'll a couple of conditions for our Filter.

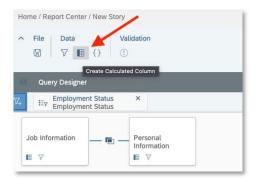


See Legal Notice on <a href="www.sap.com/legal-notice">www.sap.com/legal-notice</a> for use terms, disclosures, or restrictions related to SAP Materials





- (2) Add a name for your filter: "Employment Status".
- (3) Click on the "Plus" sign under "Conditions".
  - (a) Click on "Job Information"
    - (i) Scroll down and select "Employment Status".
  - (b) Select an Operator Type:
    - (i) Equal to
  - (c) Select the Filter Type:
    - (i) Member Selector and then select the following available members:
      - 1. Active
      - 2. Unpaid Leave
      - 3. Paid Leave
      - 4. Click "OK"
    - (ii) Click OK once again to save your filter.
- e) Renaming Selected Columns.
  - i) We will often need to rename columns. As an example, bringing over a foundation object, the column name might be "Name" and then "Name (2)" and you will want to change the column "name" so it makes more sense in your story.
  - ii) Under "Data" at the top of the page, click on the "Create Calculated Column" icon.







- (1) The pop-up screen displays the selected columns so far in your query as well as the ability to create calculated columns.
- (2) Scroll down to the foundational objects and rename them:
  - (a) Business Unit Name to Business Unit
  - (b) Legal Entity Name to Legal Entity
  - (c) Department > Name to Department
  - (d) Division > Name (2) to Division
  - (e) Location > Name (3) to Location
- f) Creating Calculated Columns.
  - i) Let's add a calculated column to create a formula using an "IF" statement.
    - (1) Select the Calculated Columns' tab.
    - (2) Select the fx+ icon to add a new calculation.



- (a) In the subsequent screen we will write two simple formulas.
- (3) Enter an ID within the ID field:
  - (a) FTPT (or Full Time/Part Time).
  - (b) Enter a description (example: FT / PT).
  - (c) Click into the Edit Formula area.
    - (i) Add an IF() function.
    - (ii) Begin typing inside the parenthesis:
      - 1. Employment#Job Information#FTE
        - a. Select that entry.
        - b. Add a condition ">="
        - c. Add 1.0 after your condition.
      - 2. After the first comma add 'FT'
      - 3. After the second comma add 'PT'
        - a. (So, if your FTE is greater than 1 then you are full time. Otherwise, you are part time).



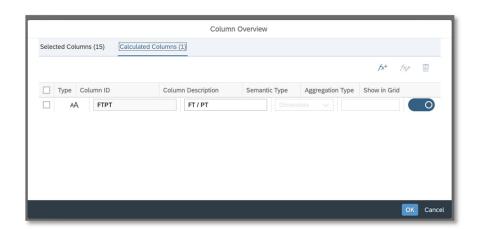
See Legal Notice on <a href="https://www.sap.com/legal-notice">www.sap.com/legal-notice</a> for use terms, disclaimers, disclosures, or restrictions related to SAP Materials





#### 4. Click "OK"

(4) Now, you have a calculated column which you can elect to show in the grid simply by toggling on or off.



- (a) Click OK to return to the Query Designer Screen.
- ii) (Optional) To Preview the query, select "Preview Query" at the bottom of the page.
  - (1) You can leave the "Show variable technical names" blank.
  - (2) On the subsequent pop-up, select the "As of Date..." by selecting the appropriate date and then click on "Set".
  - (3) The following screen will display the data from your query.
  - (4) Click on "Hide Preview".
- iii) Click on "Finish"
- iv) The system will prompt you for a name Let's leave the default Data Source name "Job Information".
- v) Click "OK"



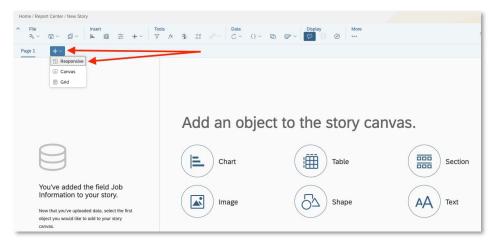
- vi) Once again you will be prompted to set the date for your query so click on "Set".
- vii) Now the query is saved for our first widget.



As a result of this exercise, you will have a completed Query/Data Model including filters and calculated columns.

# LAB ACTIVITY #3 - Using Story Designer

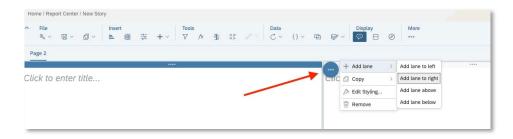
- 1. As we move forward building our Story it's important to consider the type of page we want to design for our Story report. The page types are "Canvas", which, as you can see is the default page of our Story report, Responsive, and Grid.
- 2. The Canvas page allows for adding charts, tables and other objects that can make the data visually appealing.
- 3. The "Responsive" page lets you create lanes to section the page content into groups and you can add tiles (or widgets) to the lanes. Also, the Tiles within a lane stay together when the Responsive page is resized.
- 4. And finally, the "Grid" page is a space where you can create and work with formulas, either directly on the page or with a table that has been generated from existing data.
- 5. For today's lab we'll be focusing largely on creating a "Responsive" page with two lanes for our respective widgets.
- 6. Creating a Responsive Page for our Story Report
  - a. Since our default page is a "Canvas" we'll need to click next to "page 1" towards the top left of the screen and click on the "plus" sign that is revealed to create our "Responsive" page.



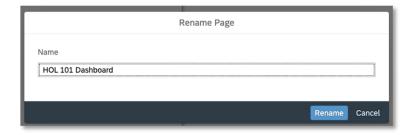




- i) From the dropdown, select "Responsive".
- b) Responsive pages will always default to two lanes however, you can easily add additional lanes based on how you want to organize your Story by clicking into the first lane and selecting the three horizontal dots. Clicking on "Add lane" will provide a fly-out so you can decide where you want to add you additional lane:



- c) Now we have two lanes which we can easily begin to add objects.
- d) First, we need to provide a name for each lane. Add the following names which will represent each widget we will create:
  - i) Headcount Information
  - ii) Position Analysis
- e) Let's change the page name by selecting the "dropdown" next to "page 2" and select "Rename".
  - i) Enter "HOL 101 Dashboard" into the Name field and click on "Rename":



f) Next, let's delete "page 1" by selecting delete from the dropdown next to "page 1":



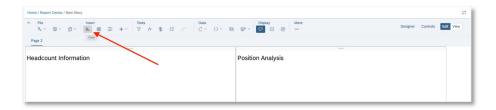




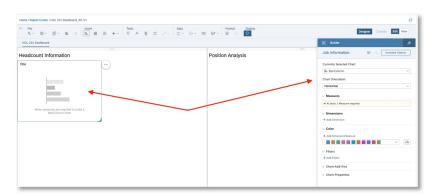
- g) Click on "Save"
  - i) Since we've not used the data source we created earlier you may see the following popup message:



- ii) Select "Keep Data Source".
- iii) A "Story Saved" message should appear at the bottom of the screen.
- iv) Add a Name: HOL 101 Dashboard\_RC V1
- h) Now, let's add a Chart to our first lane Headcount Information
  - i) Click into the "Headcount Information lane".
  - ii) Click on "Insert" to insert a chart object.



(1) The Designer pane will display on the right-hand side of the screen allowing you the ability to design your widget.





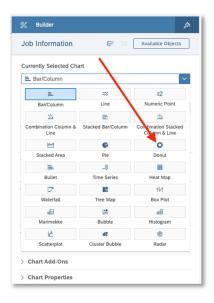


© 2023 SAP SE or an SAP affiliate company. All rights reserved.

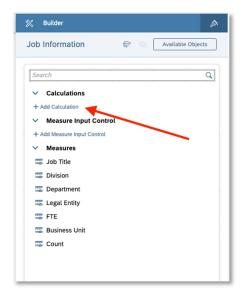
See Legal Notice on <a href="www.sap.com/legal-notice">www.sap.com/legal-notice</a> for use terms, disclosures, or restrictions related to SAP Materials



- iii) Title: you do not have to give your widget a title because the title will be added dynamically based upon the measure and dimensions chose however, you can easily come back and modify the title as you see fit.
- iv) Under "Chart Structure" select "More" to choose a Chart Type:
  - (1) Select Donut:



- v) Add a Measure
  - (1) Here we will add a calculation.
  - (2) Click on "Create Calculation" to open the Calculation Editor.



(3) For Type: select "Aggregation"

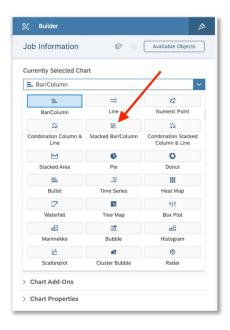


© 2023 SAP SE or an SAP affiliate company. All rights reserved.

See Legal Notice on <a href="www.sap.com/legal-notice">www.sap.com/legal-notice</a> for use terms, disclaimers, disclosures, or restrictions related to SAP Materials



- (4) Enter "Headcount" for the Name.
- (5) Under Properties select for Operation: "COUNT DIMENSIONS"
- (6) For Aggregation Dimensions select "User ID"
- (7) Click "OK"
- vi) Under Color
  - (1) Add a Dimension: Gender.
  - (2) Select a color palette.
- i) Add an additional Chart to the "Headcount Information" lane.
  - i) Title: leave for now.
  - ii) Chart Type:
    - (1) Choose Comparison.
      - (a) Then select "Stacked Bar/Column".



- iii) Chart Orientation:
  - (1) Horizontal
- iv) Measures:
  - (1) Use the same calculation for Headcount as above by placing a checkmark next to "Headcount".
- v) Dimensions:

See Legal Notice on <a href="www.sap.com/legal-notice">www.sap.com/legal-notice</a> for use terms, disclosures, or restrictions related to SAP Materials

for general audiences.

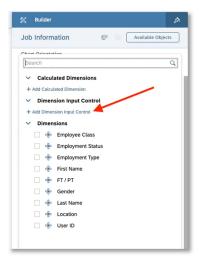
(1) Add a New Dimension Input Control.





16

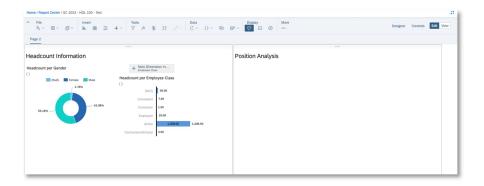
- (a) NOTE: This input control will allow you to visualize your data based upon the input selection without the need to create separate reports.
- (b) Under "Dimension" click on "Add Dimension"
- (c) Click on "Create Dimension Input Control"



- (d) Place a checkmark next to the following Available Dimensions:
  - (i) Employee Class
  - (ii) Employment Status
  - (iii)Employment Type
  - (iv)FT / PT
  - (v) Gender
  - (vi)Location
- (e) Click on "OK"
- j) Rearrange Your Widgets.
  - i) Drag the first widget, "Headcount Information" down below the widget you just created.
  - ii) Resize your Input control box.
  - iii) Drag the side of your lane to increase the width.







- k) Save Report.
  - i) Click on the "Save" icon under File.
  - ii) Click "Save".

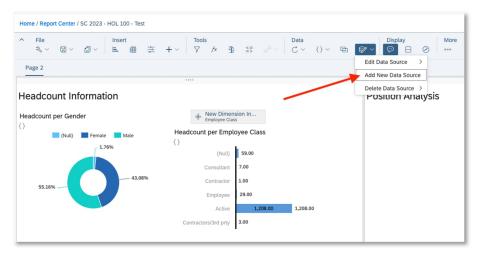


As a result of this exercise, you will have built a working widget for your story report and a Responsive Page to view your report.

# LAB ACTIVITY #4 – Adding a new Data Source to your story report.

In this activity we'll be creating an additional Data Source in order to add additional widgets to our Story report.

- 1) Building our second Data Source.
  - i) Adding an additional data source is like the initial process in that we will select an appropriate data model and begin to create our query.
- 2) While in Edit mode, under Data, use the dropdown next to the Data Source icon and select "Add New Data Source".







- i) Select a Connection: SAPSFSFREP (if multiple connections are available)
- ii) Click OK
- 3) Once the metadata loads, search the available data for the "Position" table and drag that table onto the Query designer:
  - a) Add the following Columns:
    - i) Code
    - ii) End Date
    - iii) FTE
    - iv) Job Title
    - v) Mass Position
    - vi) New Position Title
    - vii) Position Criticality
    - viii) Record Status
    - ix) Regular/Temporary
    - x) Start Date
    - xi) To Be Hired
  - b) Add the Related Table: "Incumbents" by clicking on the "Plus" icon on that table.
  - c) Add the following Columns:
    - i) Assignment Type
    - ii) Business Unit
      - (1) Business Unit Name
    - iii) Company
      - (1) Legal Entity Name
    - iv) Cost Center
      - (1) Name
    - v) Department
      - (1) Name
    - vi) Division
      - (1) Name
    - vii) Effective End Date
    - viii) Effective Start Date
    - ix) Employment Status



See Legal Notice on <a href="www.sap.com/legal-notice">www.sap.com/legal-notice</a> for use terms, disclaimers, disclosures, or restrictions related to SAP Materials

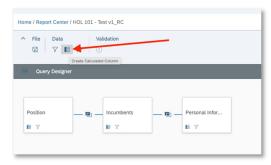
for general audiences



19



- x) FTE
- xi) Location
  - (1) Name
- xii) User ID
- d) Clicking on the "Incumbents" table, relevant icon to add related table: Scroll down to the "Person" table and, within that table, add "Personal Information" by clicking on the "Plus" icon on the Personal Information table.
- e) Add the following Columns:
  - i) First Name
  - ii) Gender
  - iii) Last Name
- f) Now let's rename some of the columns we added.
  - i) Under "Data" at the top of the page, click on the "Create Calculated Column" icon.



- (1) Change Code to "Position Number"
- (2) Change FTE to "Position FTE"
- (3) Change New Position Title to "Position Title" Change "Measure" to "Dimension"
- (4) Change Position Criticality "Measure" to "Dimension"
- (5) Change Regular/Temporary "Measure" to "Dimension"
- (6) Change FTE (2) to FTE
- (7) Change Business Unit Name to "Business Unit" and change "Measure" to "Dimension"
- (8) Change Legal Entity Name to "Legal Entity" and change "Measure" to "Dimension"
- (9) Change Cost Center Name to "Cost Center" and change "Measure" to "Dimension"
- (10) Change Department Name to "Department" and change "Measure" to "Dimension"
- (11) Change Division Name to "Division" and change "Measure" to "Dimension"
- (12) Change location Name to "Location"



See Legal Notice on <a href="https://www.sap.com/legal-notice">www.sap.com/legal-notice</a> for use terms, disclaimers, disclosures, or restrictions related to SAP Materials



- (13) Click "OK"
- 4) Click on "Finish"
  - i) Data Source Name: "Position" and click "OK"
  - ii) Set the "As of Date" for all tables (use today's date)
  - iii) Click on "Set"
- 5) This will take you back to the Report Designer.



As a result of this exercise, you will have built a second data source that can then be used as part of your Story report.

# LAB ACTIVITY #5 – Adding a New widgets to your Story.

In this activity we'll be creating additional widgets to add to our Story report.

- 1) Now that our new data source is created, we can begin adding a new widget to our story.
  - a) Click inside the "Position Analysis" lane and under "Insert", let's add a chart.
  - b) Select the Chart type:
    - i) Under Comparison:
      - (1) Bar/Column
    - ii) Chart Orientation
      - (1) Horizontal
  - c) Add a Measure:

NOTE: Ensure that your widget is using the correct data model by checking the top of the Designer pane (should indicate "Position").

- i) Click on "Add Measure" and select "Create a calculation".
- ii) For "Type of Measure" use the drop-down and select "Aggregation"
- iii) Enter a Name for the calculation: "Number of Positions".
- iv) Under Properties for Operation use: "Count Dimensions"
- v) For Aggregation Dimensions use the drop-down to locate and select: "Position Number".
- vi) Click "OK"
- d) Add a Dimension:

© 2023 SAP SE or an SAP affiliate company. All rights reserved

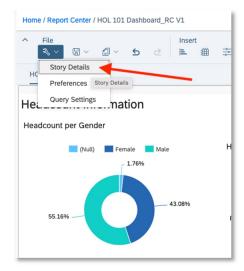
See Legal Notice on <a href="https://www.sap.com/legal-notice">www.sap.com/legal-notice</a> for use terms, disclaimers, disclosures, or restrictions related to SAP Materials

i) Click on "Create Dimension Input Control"





- ii) Select:
  - (1) Business Unit
  - (2) Cost Center
  - (3) Department
  - (4) Division
  - (5) Legal Entity
  - (6) Location
- iii) Click "OK"
- e) Choose your color palette
- f) And now "Save" your finished dashboard by clicking on the floppy disc icon on the upper left of the screen under "File".
- g) Enable "Drill Down" capabilities.
  - i) Under "File" at the top left of the screen, use the drop down to select "Story Details":



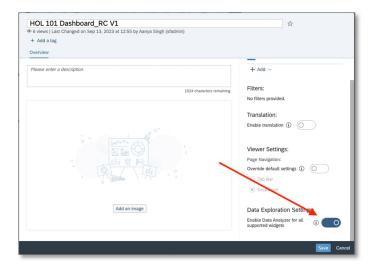
ii) On the far bottom right of the subsequent pop-up, click on the toggle next to "Enable Data Analyzer for all supported widgets":



© 2023 SAP SE or an SAP affiliate company. All rights reserved.

See Legal Notice on <a href="www.sap.com/legal-notice">www.sap.com/legal-notice</a> for use terms, disclaimers, disclosures, or restrictions related to SAP Materials



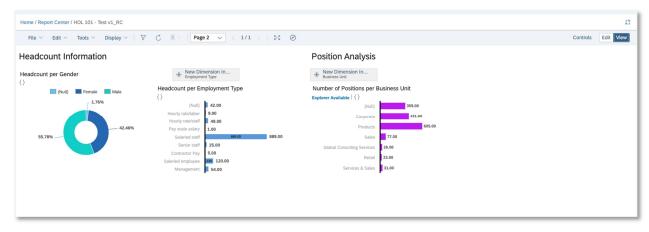


- iii) Click on "Save"
- h) Save Report.



As a result of this exercise, you will have built an additional working widget for your story report and included it in your designated lane.

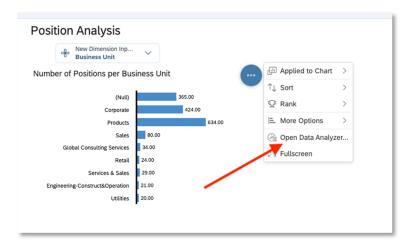
2) Click on "View" at the far right of your screen to view your Story Report.

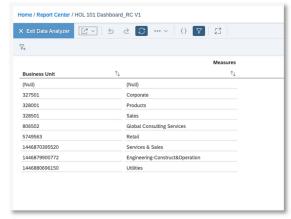


a) Click on a chart and then the three horizontal dots to view options or to open Data Analyzer:

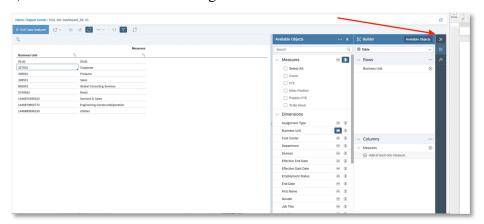








b) Use the Arrows at the far right to access the "builder" feature:





The result of these exercises is a Story report that reflects multiple data sources and can now be shared and permissioned within Report Center.







This concludes the steps for this Hands-on Adoption Lab.





