

## Exercise: Expenses by Category

A team needs to see annual expenses in a bar chart – grouped into custom account categories like an income statement. The filter is the entire management unit, and the timeframe is the last three years. The team would like separate bar charts for sponsored and total funds.

After referring to the Data Dictionary, the report builder chooses the KK\_Summary star and the data elements below.

- Facts: FY Expenses
- Dimensions: Account (in Custom Groups), Fund (also grouped), and Fiscal Year
- Filters: Fiscal Year and Level 5 Department (Transportation Center in this example)

### Insert dimension elements and filters

1. From the Insert Data menu, expand AdHoc View > Ledger KK Summary.
2. Place the Fund element on the canvas. Note: this will be used to create fund groups.
  - a. Expand the Fund dimension.
  - b. Select Fund and click Insert. Result: the column appears on the canvas.
  - c. Close the Fund dimension.
3. Place the Fiscal Year on the canvas, and create a filter for the last three years.
  - a. Expand the Fiscal Period dimension.
  - b. Double-click Fiscal Year. Result: the column appears on the canvas.
  - c. On the canvas, select the Fiscal Year column heading.
  - d. Click the Filter icon on the toolbar. Result: the filter dialog appears.
  - e. In the Filter dialog, type 201 in the Keyword field and click Search.
  - f. Select 2012, 2013, and 2014 and click Insert > OK.
  - g. Close the dimension.
4. Create a filter for the management unit (using the Department Master Tree).

In addition to Query Studio, you can find your “management unit” name and Department ID on the Cognos BI Department Tree or in the NUFinancials Tree Viewer.

- a. Expand the NU Department Master Tree > Department Level 5.
  - b. Right-click Level 5 Description and click Filter for report.
  - c. Select “Transportation Center” > OK > OK.
  - d. Close the tree dimension.
5. Place the Account element on the canvas. Note: this will be used to create account groups.
    - a. Expand the Account dimension.
    - b. Double-click Account and Description.
    - c. Close the dimension.

### Insert the fact element






6. Place Total Expenses onto the canvas.
  - a. Expand the KK Summary Fact dimension.
  - b. Double-click Total Expenses.
  - c. Close the dimension.

Now you are ready to create the custom groups. For learning purposes, we will create two: Personnel and Non-Personnel. Detailed account custom groups are likely on the job.

## Define custom groups of account codes and funds

To create custom groups, first add a column to the report and give it a name (Step 7 below), then add the custom groups until you finish (Step 8).


The GL077 Income Statement Report breaks expenses into University account categories and can be exported to Excel for charts and graphs. You can create different account categories with custom groups in Cognos BI.

7. Add a column to the report for the custom groups and give it a name.
  - a. Select the Account and Description column heading.
  - b. Click Edit Data menu and select *Define Custom Groups...*
  - c. Name the first custom group "Personnel" and click the Down arrow  to save it to a working list.
  - d. Enter the value 60000 and click the Left arrow  to add it to the custom group.
  - e. Name the *New item name* "Expense Category."
  - f. Click OK. Result: a new column is added to the report called "Expense Category."
8. Add the remaining custom groups.
  - a. Select the Expense Category column heading.
  - b. Click *Define Custom Groups...* Result: the dialog appears with the custom group you just created and a list of account codes in the available values box.
  - c. Select the "Personnel" custom group, select all salary and benefits account codes, and click the Left arrow  to add them to the list.
  - d. Name the next custom group "Non-Personnel" and click Down .
  - e. From available values, select all Other Expenses account codes, and click Left .
9. As a best practice, include an "Other" category to capture outlying expenses.
  - a. Click *All remaining values (including future values)*:
  - b. Click *New range name* and enter "Other."
  - c. Click OK.
10. Repeat steps 7-8 for two custom groups of funds. Name the new item "Fund Groups" and create two groups: Sponsored Funds and Total Funds.

## Delete unneeded columns

11. Delete the Fund and Account Description columns, as they are now unnecessary.

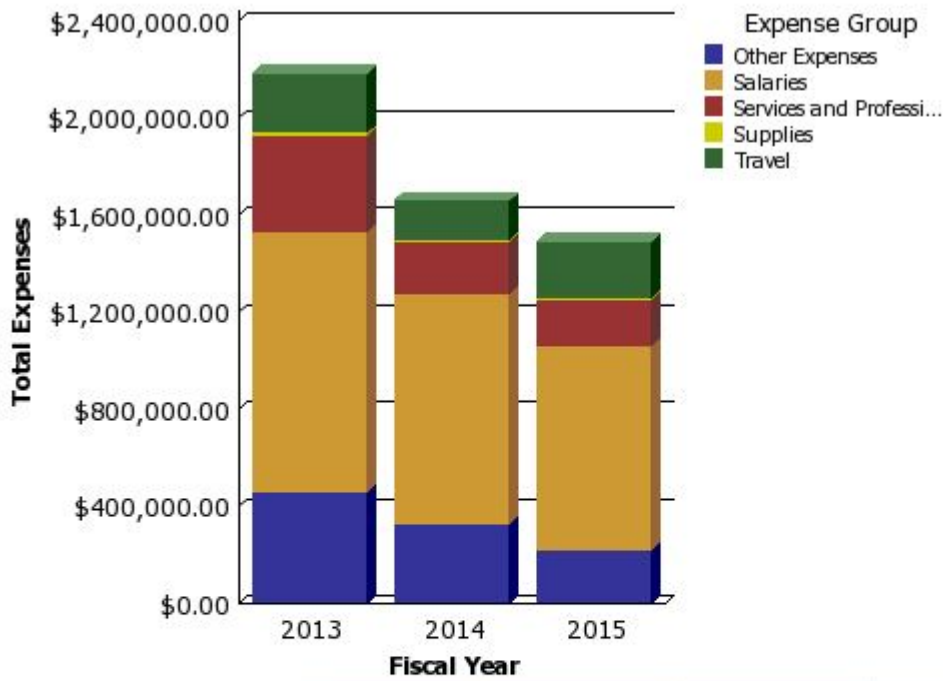
## Save and apply finishing touches

12. Save the file to My Folders and name it "ExpensesbyAccountCategory."
13. Section the report by fund groups: click Fund Groups > Create Sections.
14. Create the pivot layout: select the Expense Category column heading > Pivot.
15. Verify that Fiscal year is on the horizontal axis. If not, click the *Swap Rows and Columns* icon .
16. Add a chart to the report: click Change Layout > Chart... > Stacked > OK.
17. Give the report a title: click Title and type "Annual Expenses by Account Category" > OK.

## Run the report

18. Click Save and Run. Result: Prompts appear.
  - a. Enter 2012, 2013, and 2014 in the Fiscal Year prompt.
  - b. Enter 2012, 2013, 2014, and the dash (-) in the Budget Year prompt.
  - c. Click OK. Result: The report runs with all data.

## Report Sample



Total Expenses	2013	2014	2015	Summary
Other Expenses	\$465,559.26	\$328,772.13	\$221,354.65	<b>\$1,015,686.04</b>
Salaries	\$1,066,300.46	\$948,157.20	\$841,125.02	<b>\$2,855,582.68</b>
Services and Professional Fees	\$396,120.76	\$213,436.66	\$194,443.38	<b>\$804,000.80</b>
Supplies	\$13,860.99	\$8,000.33	\$5,725.78	<b>\$27,587.10</b>
Travel	\$241,143.94	\$163,003.92	\$232,708.54	<b>\$636,856.40</b>
<b>Summary</b>	<b>\$2,182,985.41</b>	<b>\$1,661,370.24</b>	<b>\$1,495,357.37</b>	<b>\$5,339,713.02</b>