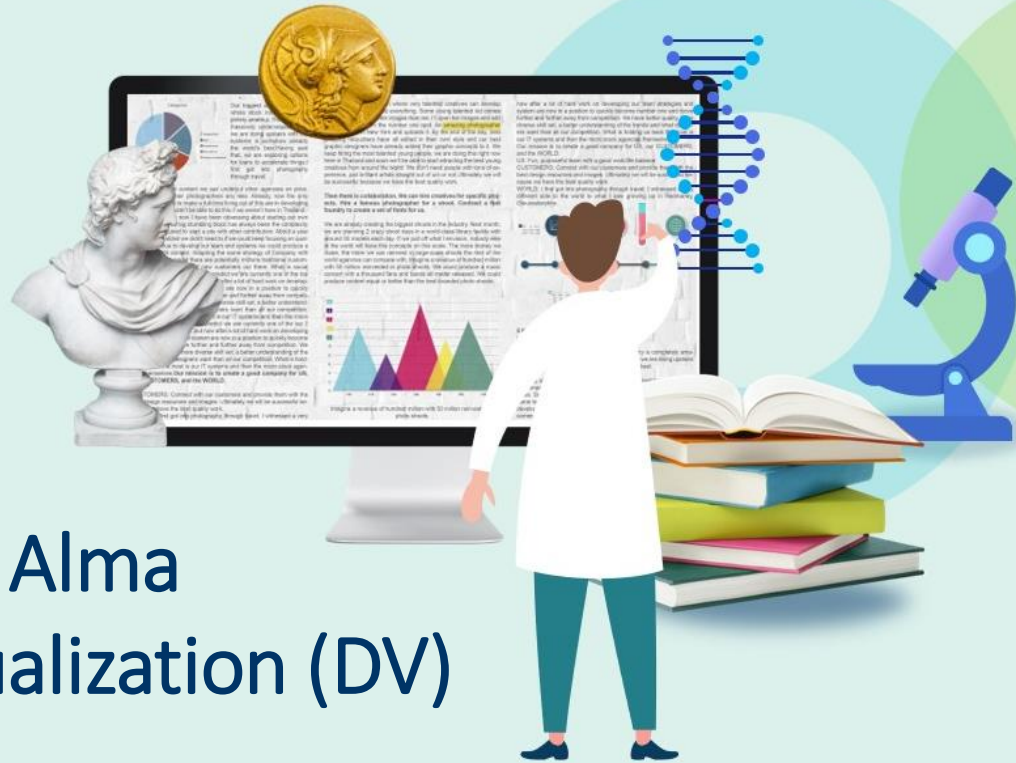


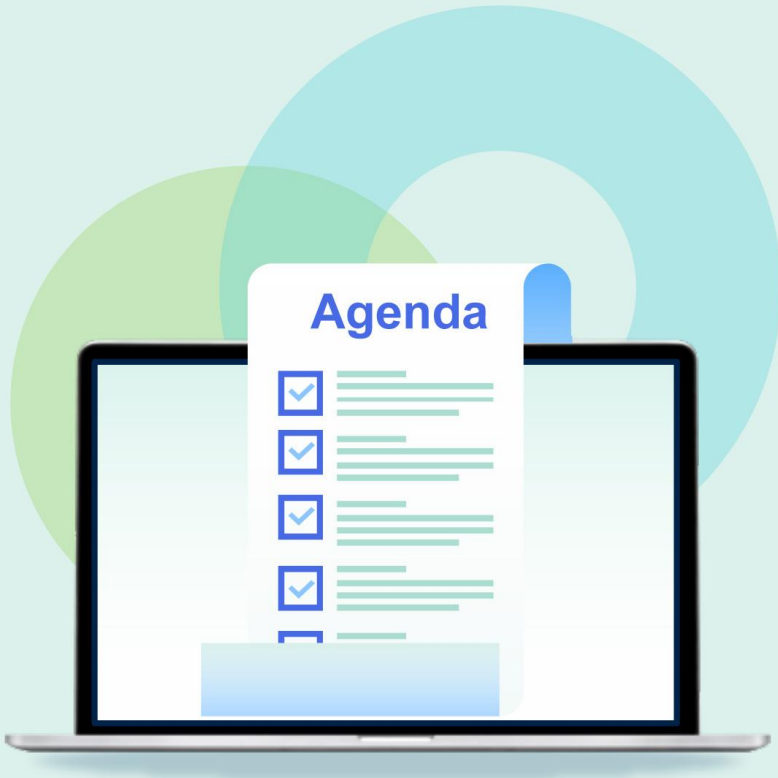
An Introduction to Alma Analytics Data Visualization (DV)

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Knowledge Days



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- Introduction
- Accessing DV and creating a workbook
- Displaying and filtering data
- Accessing a saved DV workbook
- Using multiple visualizations in the same workbook
- Some examples

Introduction

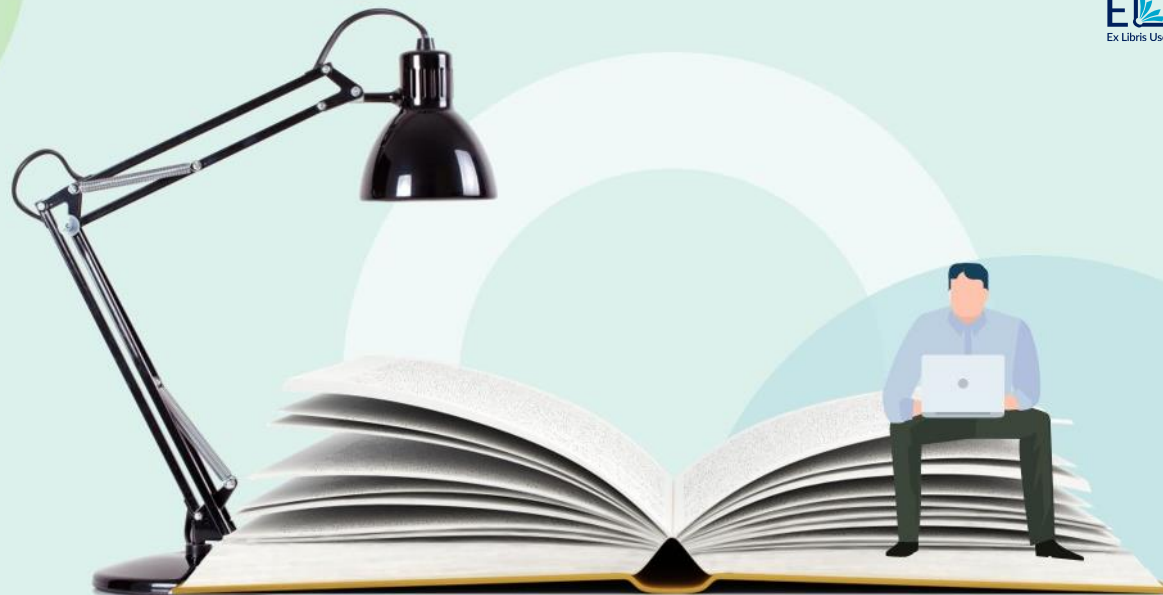
- In this presentation we will show a general introduction to OAS (Oracle Analytics Server) Data Visualization, specifically how it is used with Alma in the framework of Alma Analytics.
- The general introduction will be done by actually using the data visualization.
- See also blogs about specific Data Visualization functionality at <https://developers.exlibrisgroup.com/blog/?tag=data-visualizationdv>

Introduction

- First we will create a data visualization workbook and save it, and then access it.
- Next we will add an additional visualization in the same “canvas” of the same workbook, using two different methods. Along the way we will show how different visualizations may be accessed and changed.
- Finally, we will show a few examples of other data visualization workbooks.

Introduction

- This current presentation gives a high level overview.
- For more additional “Deep Dive” Data Visualization topics see also
- YouTube videos at [YouTube videos about OAS \(Oracle Analytics Server\) and DV \(Data Visualization\)](#)
- Developer Network blog posts at: [Blogs about DV \(Data Visualization\)](#)



Accessing DV and creating a workbook

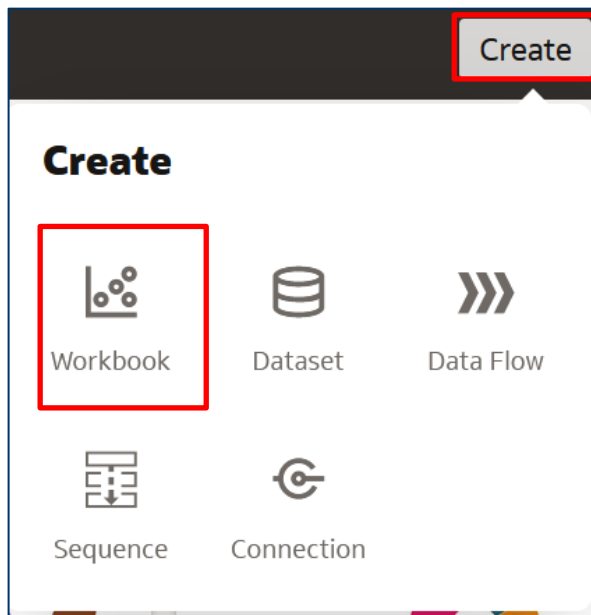
Accessing DV and creating a workbook

- Data Visualization is accessed from the Analytics menu of Alma:



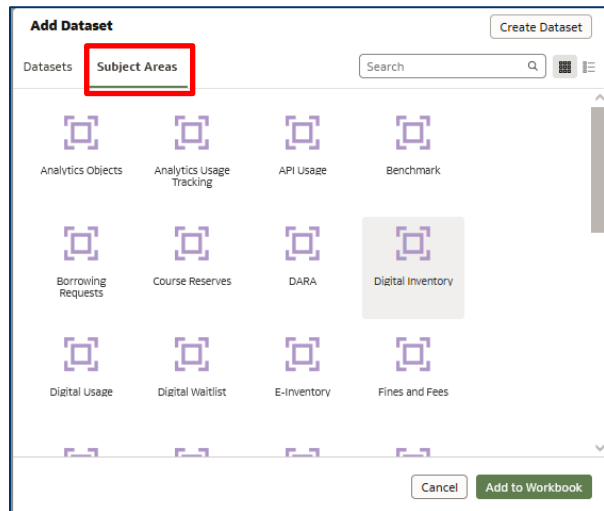
Accessing DV and creating a workbook

- The Oracle Business Intelligence home page will open in a new tab and from there you can create a new workbook:



Accessing DV and creating a workbook

- When creating a workbook an Alma Analytics subject area may be chosen:



Accessing DV and creating a workbook

- After adding a subject area, the following appears:

The screenshot displays the 'New Workbook' interface. At the top, there is a navigation bar with 'Data', 'Visualize', and 'Present' tabs. Below this is a search bar and a list of subject areas under 'Fulfillment'. The main area is a large canvas with a dashed border and the text 'Drop Visualizations or Data Here'. Three yellow boxes with black text are overlaid on the interface: 'Data Panel' points to the sidebar, 'Grammar Panel' points to the search bar, and 'Canvas' points to the main workspace.

← New Workbook Data Visualize Present

Click here or drag data to add a filter

Search

Fulfillment

- Loan
- Loan Details
- Loan Policy
- Loan Circulation Desk
- Renewal Circulation ...
- Return Circulation D...
- Loan Date
- Due Date

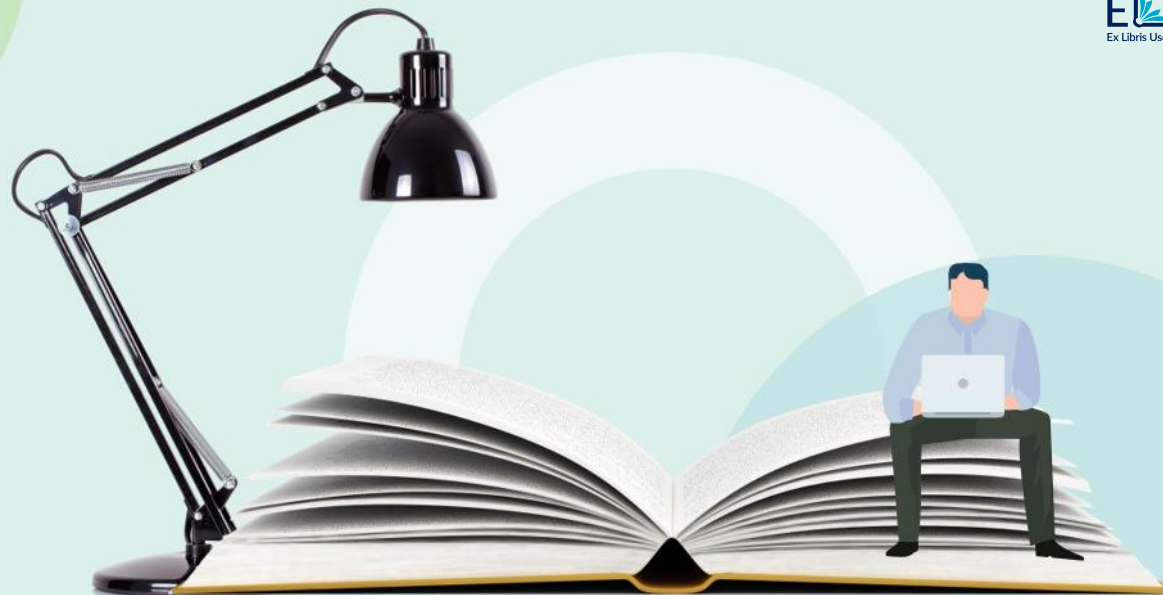
Data Panel

Grammar Panel

Canvas

Select Visualization to View Details

Drop Visualizations or Data Here



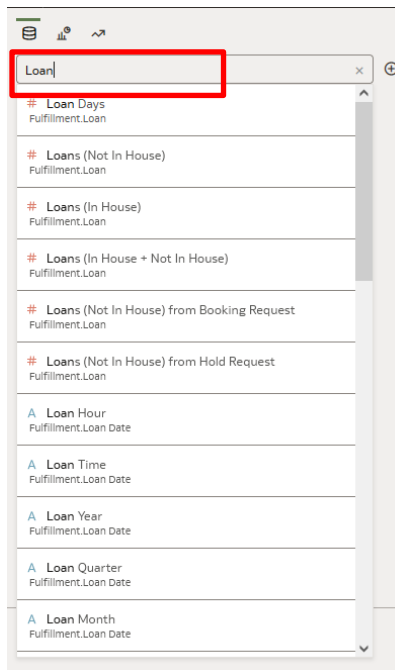
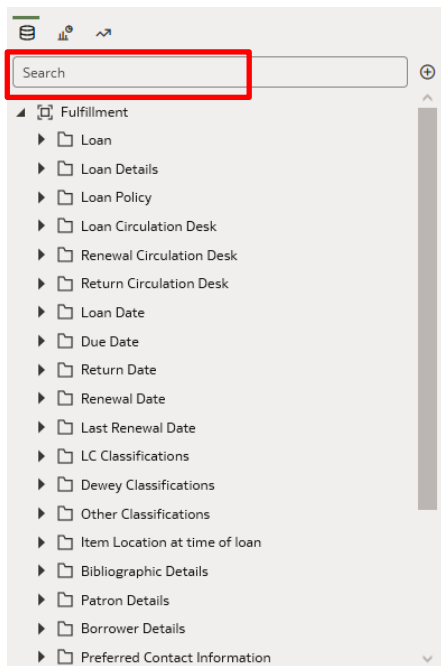
Displaying and filtering data

Displaying and filtering data

- To display and filter data:
- Drag fields from the subject area on the left to the canvas on the right to display them.
- Drag fields from the subject area on the left to the filter section on the top to filter them (this can also be done by other methods such as right clicking fields and choosing “Create filter”).

Displaying and filtering data

- From within the data elements section of the navigation pane it is possible to search for fields:



Displaying and filtering data

- On the next slide we are using the “Fulfillment” subject area and
- Drag to the canvas the "Number of loans (not in house)" and the "LC Classifications Group 1"
- Drag to the upper "Filters" section the "Loan Year" and "Number of loans (not in house)"
- Filter by "Loan Year" = 2022 and "Number of loans (not in house)" ≥ 100
- In the initial results we will right click the "LC Classifications Group 1" which is "Unknown" and choose "remove selected".

Displaying and filtering data

- Here are the filters on top

The screenshot shows a data visualization interface. At the top, there are two filter boxes: 'Loan Year' with the value '2022' and 'Loans (Not In House)' with the value '≥ 100'. Below the filters is a pivot table titled 'Loans (Not In House) by Group1'. The pivot table has a left sidebar with settings for Pivot, Columns, Rows (set to 'Group1'), Values (set to '# Loans (Not In ...)'), Color, Size, Shape, Tooltip, and Filters. The main area displays a table with two columns: 'Group1' and 'Loans (Not In House)'. The table contains 13 rows of data.

Group1	Loans (Not In House)
American literature	389.00
Christian Denominations	289.00
Christianity	169.00
Doctrinal Theology	132.00
English literature	197.00
Fiction and juvenile belles lettres	368.00
Law of the United States	797.00
Literature (General)	567.00
Music	277.00
Recreation. Leisure	105.00
The Bible	169.00
United States	150.00
Unknown	10,212.00

Displaying and filtering data

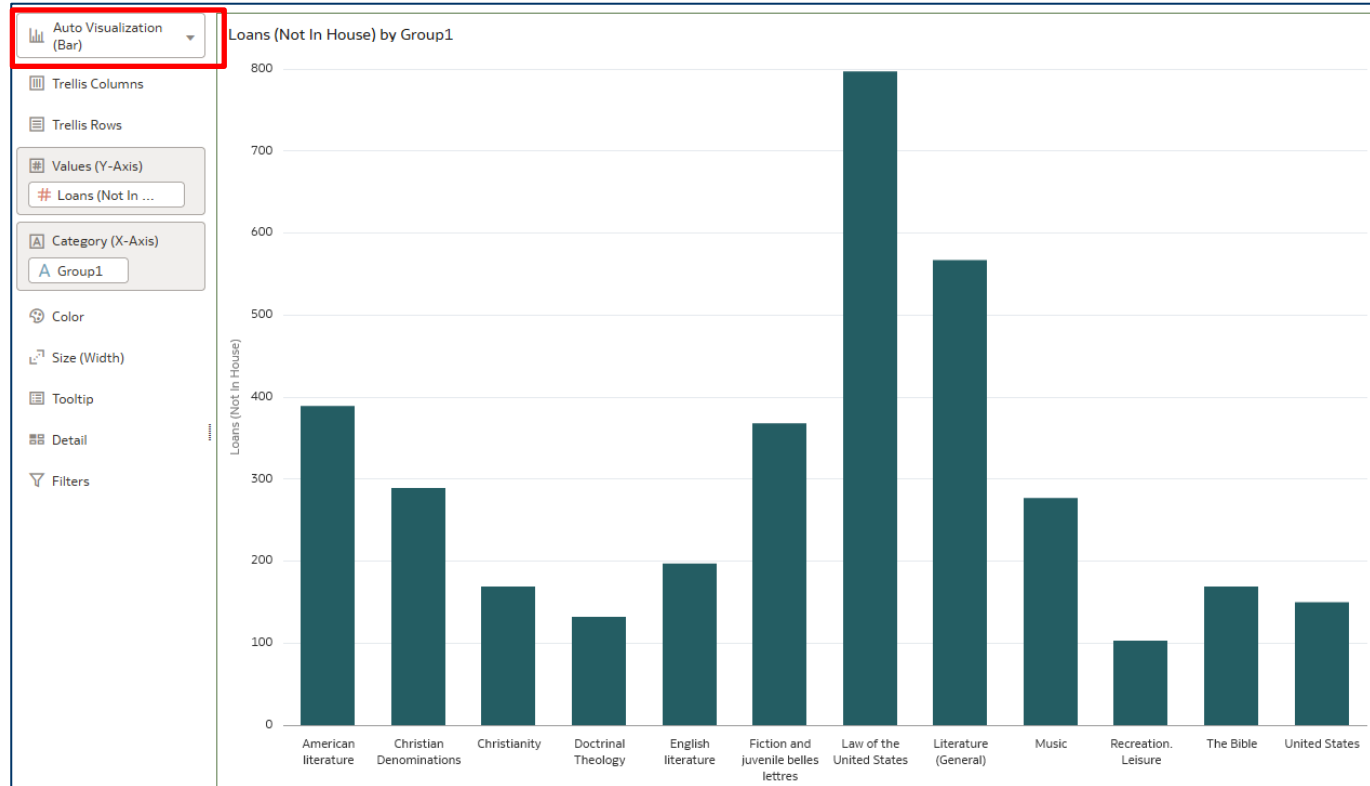
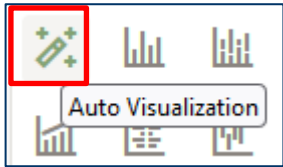
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Group1	Loans (Not In House)
American literature	389.00
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Law of the United States	797.00
Literature (General)	567.00
Music	277.00
Recreation. Leisure	103.00
The Bible	169.00
United States	0.00
Unknown	0.00

- Keep Selected
- Remove Selected
- Sort By
- Drill to Attribute/Hierarchy...
- Use as Filter

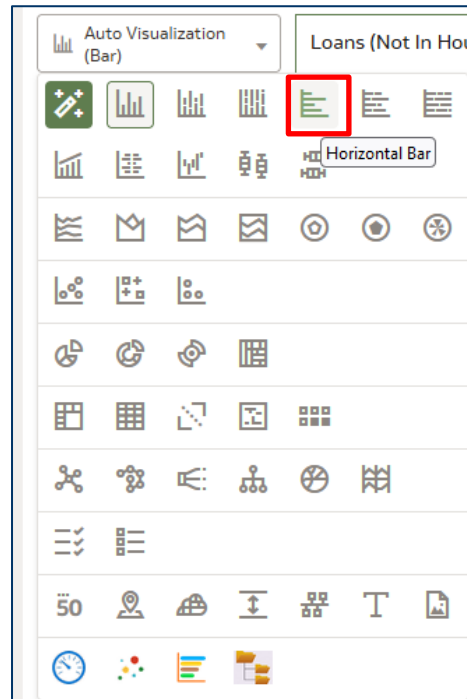
Displaying and filtering data

- If we choose “Auto Visualization” then (in this case) the DV will choose for us a bar graph



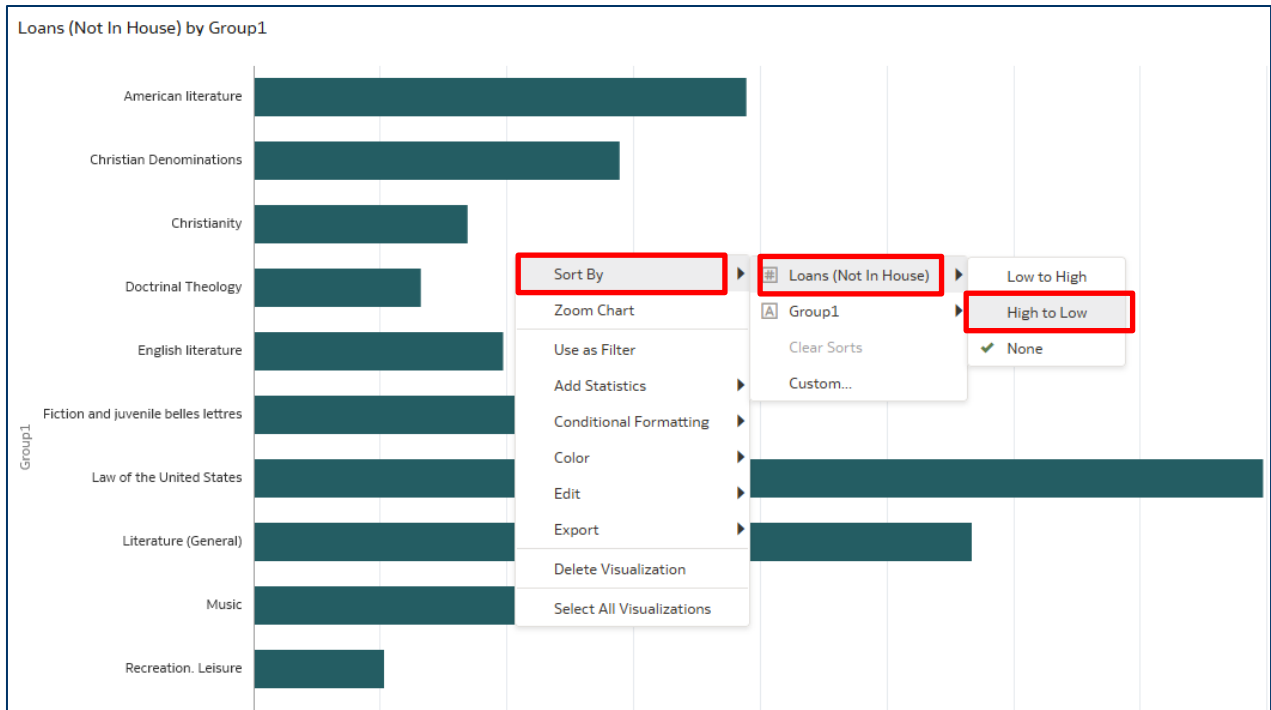
Displaying and filtering data

- We can click the visualization (where now it states "Auto Visualization (Bar)") and choose a different visualization. Here we choose Horizontal Bar.



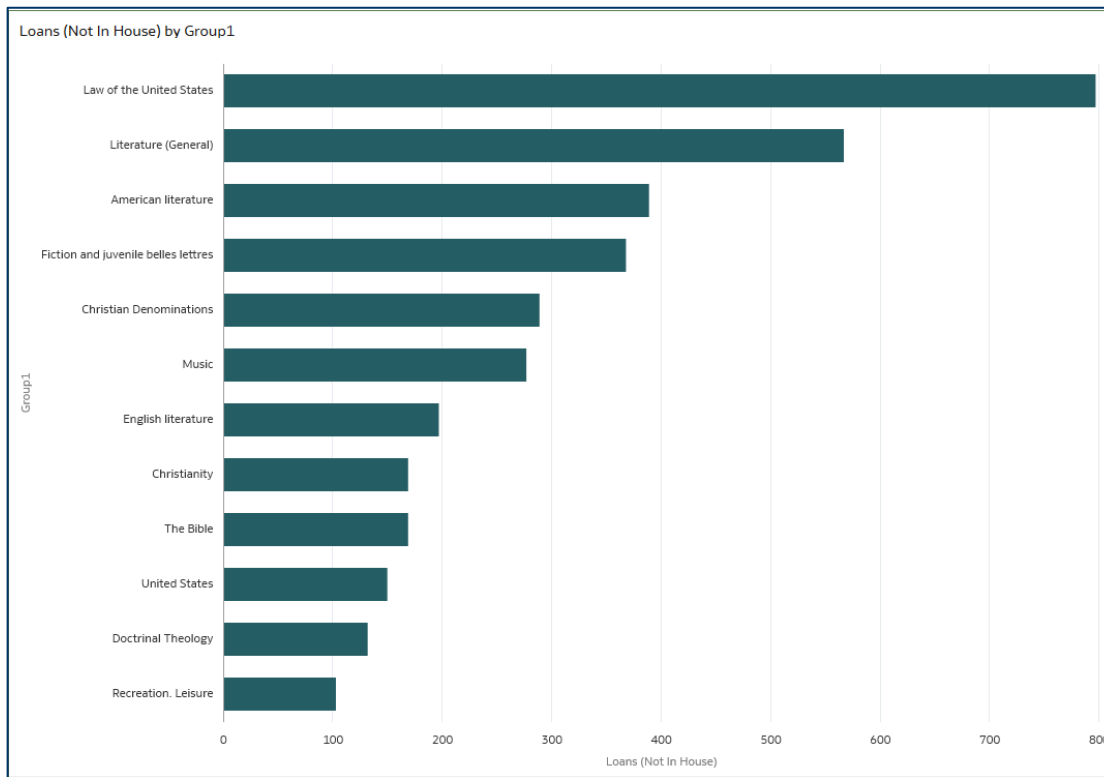
Displaying and filtering data

- The values can be sorted as desired by right clicking and choosing "sort". We will sort the LC Classification Group 1 by loans high to low.



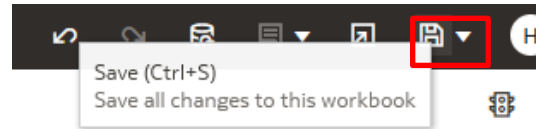
Displaying and filtering data

- The data is now sorted:



Displaying and filtering data

- Save the workbook via the "Save" button on the top right:

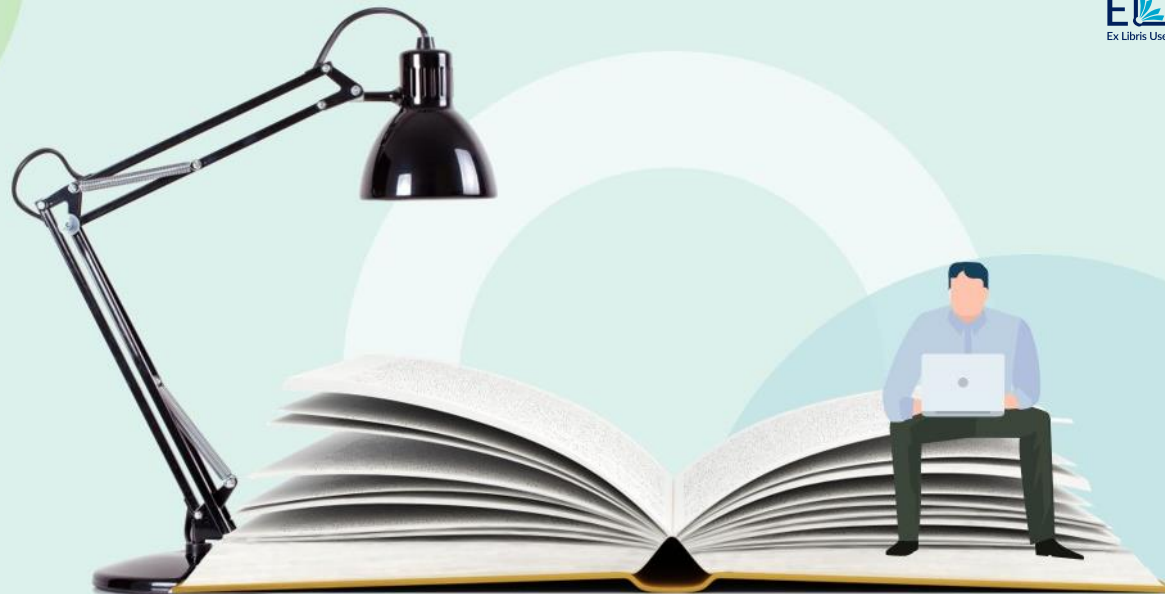


Save Workbook

Name	Loans 2022 by LC Group 1
Description	

All > My Folders

Search Sort by Type



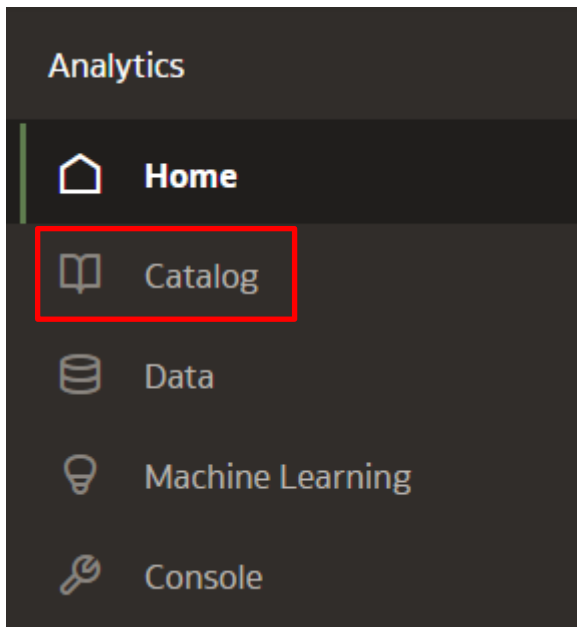
Accessing a saved DV workbook

Accessing a saved DV workbook

- The workbook can then later be accessed from the Data Visualization home page (which is accessed as we saw from within Alma choosing "Data Visualization" from the Alma menu).
- There are multiple ways to access and open the saved workbook. One way is:
 - Click the three lines on top left
 - Choose "Catalog"
 - Navigate to where the workbook was saved
 - Right click the workbook and choose "open"

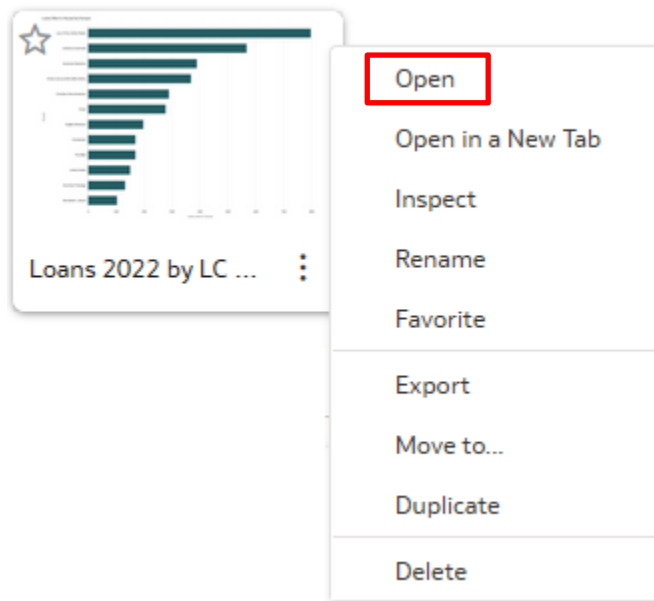
Accessing a saved DV workbook

- Click the three lines on top left and choose "Catalog"



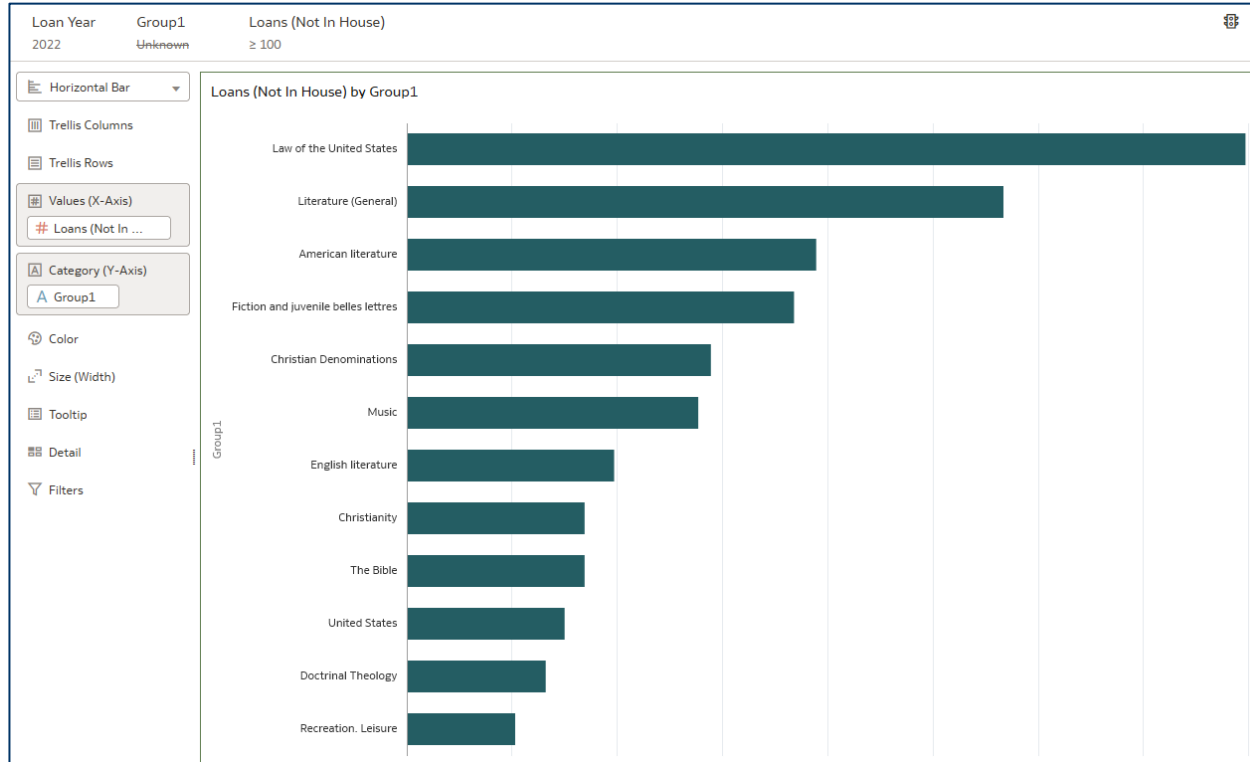
Accessing a saved DV workbook

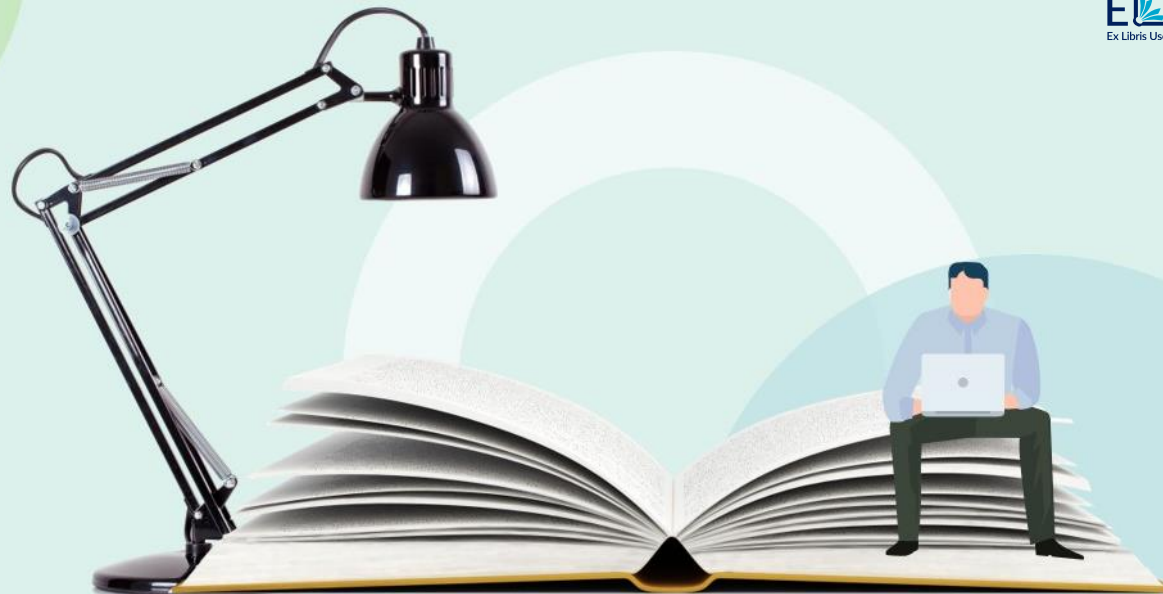
- Navigate to where the workbook was saved
- Right click the workbook and choose "open"



Accessing a saved DV workbook

- The workbook opens

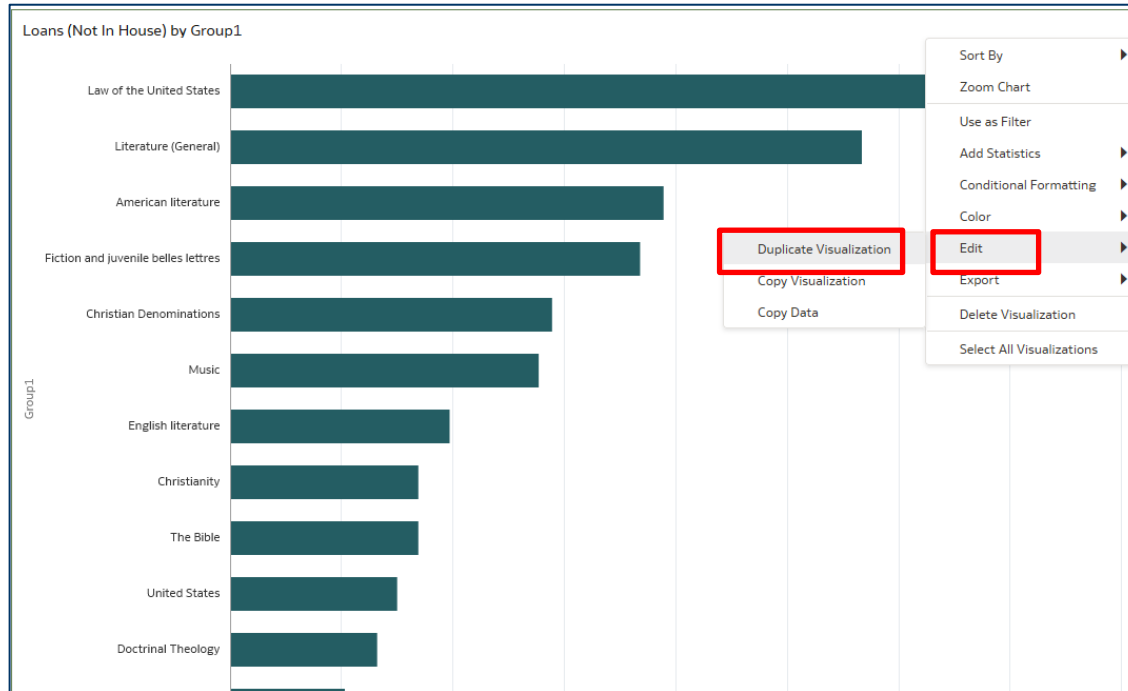




Using multiple visualizations in the same workbook

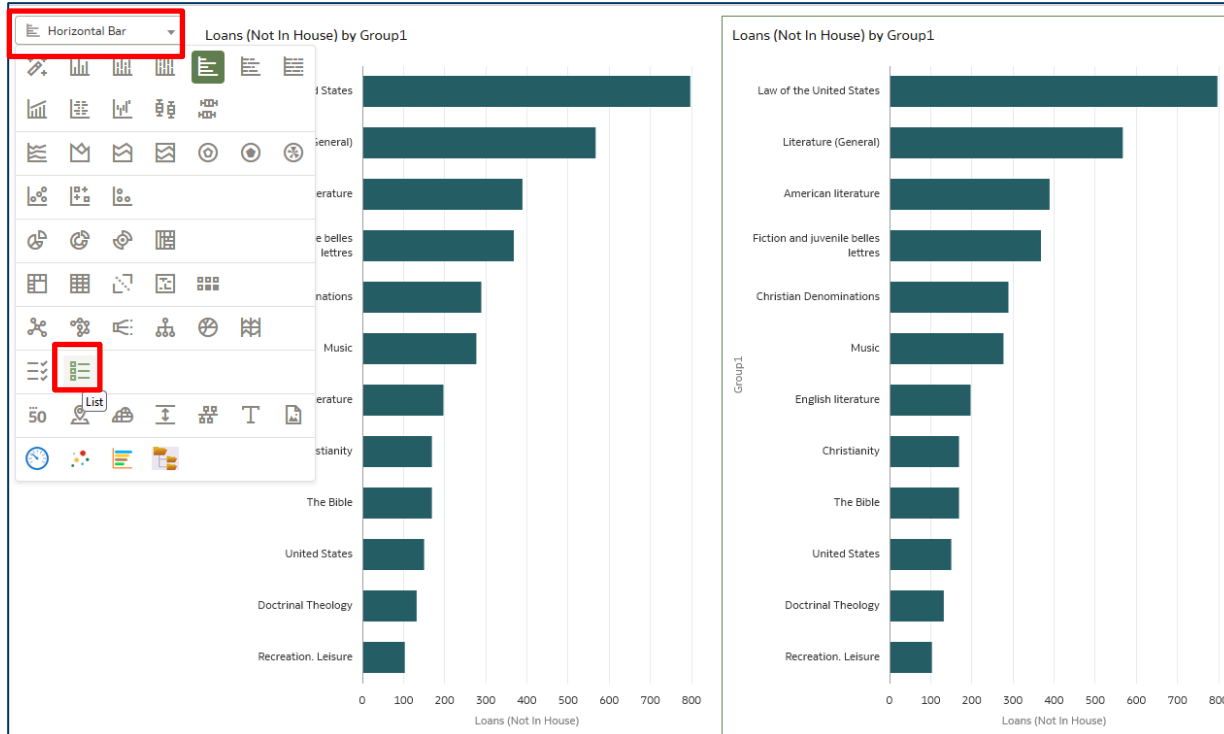
Using multiple visualizations in the same workbook

- It is possible to have two different visualizations based on the same data on the same canvas. To do so first duplicate the visualization. “Menu (on top right of visualization) > Edit > Duplicate Visualization”.



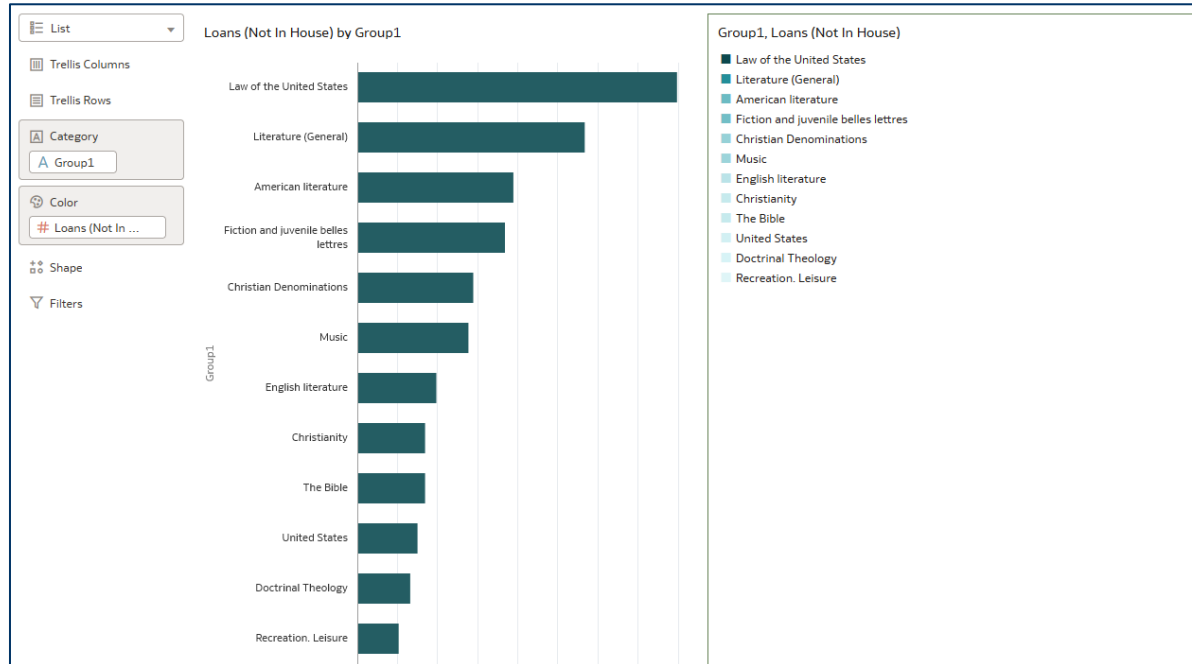
Using multiple visualizations in the same workbook

- Now we have two identical visualizations and will change one of them to a list



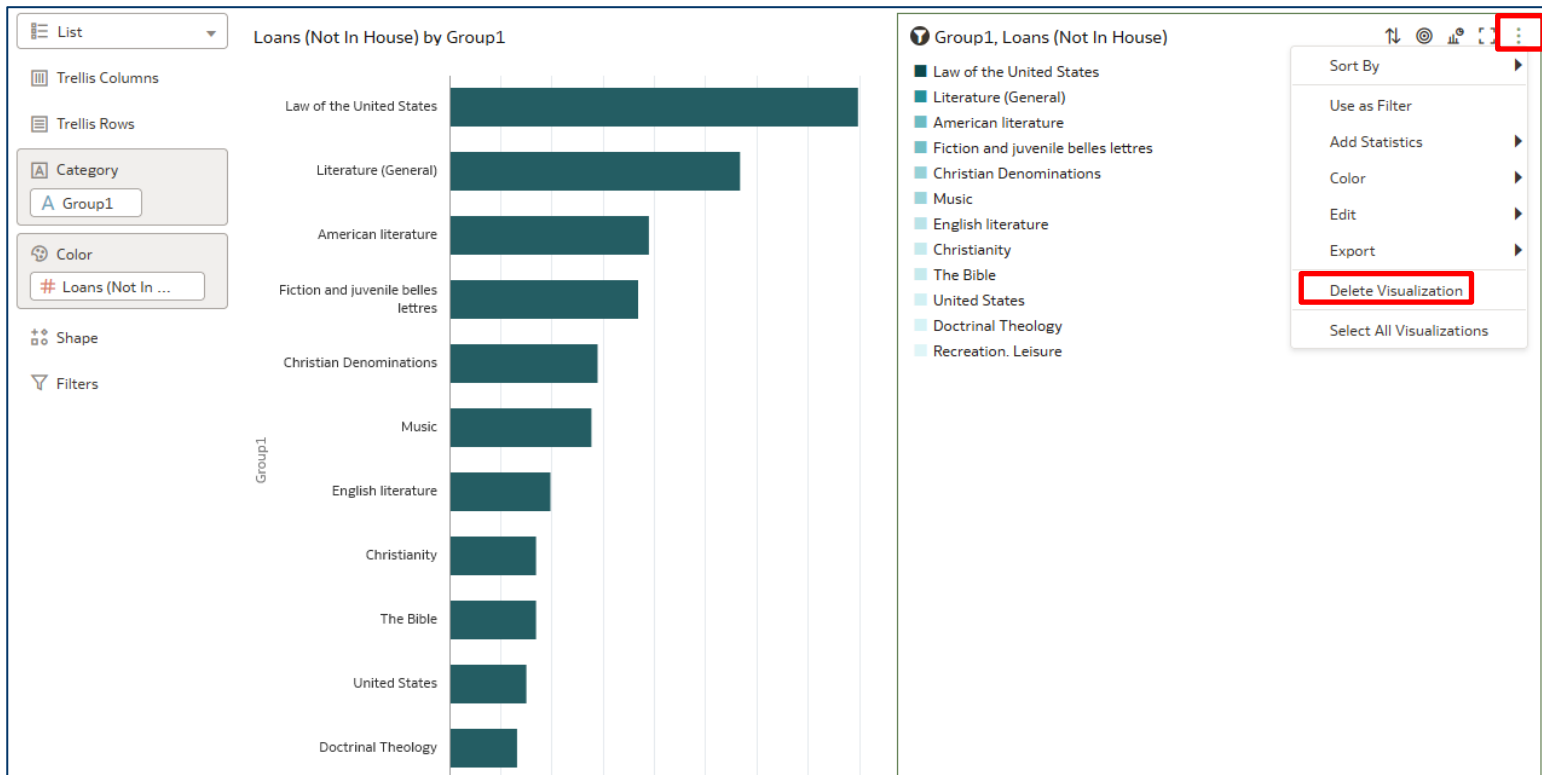
Using multiple visualizations in the same workbook

- Now we have two different visualizations with the same data on the same canvas. One is "Horizontal Bar" and one is a "List":



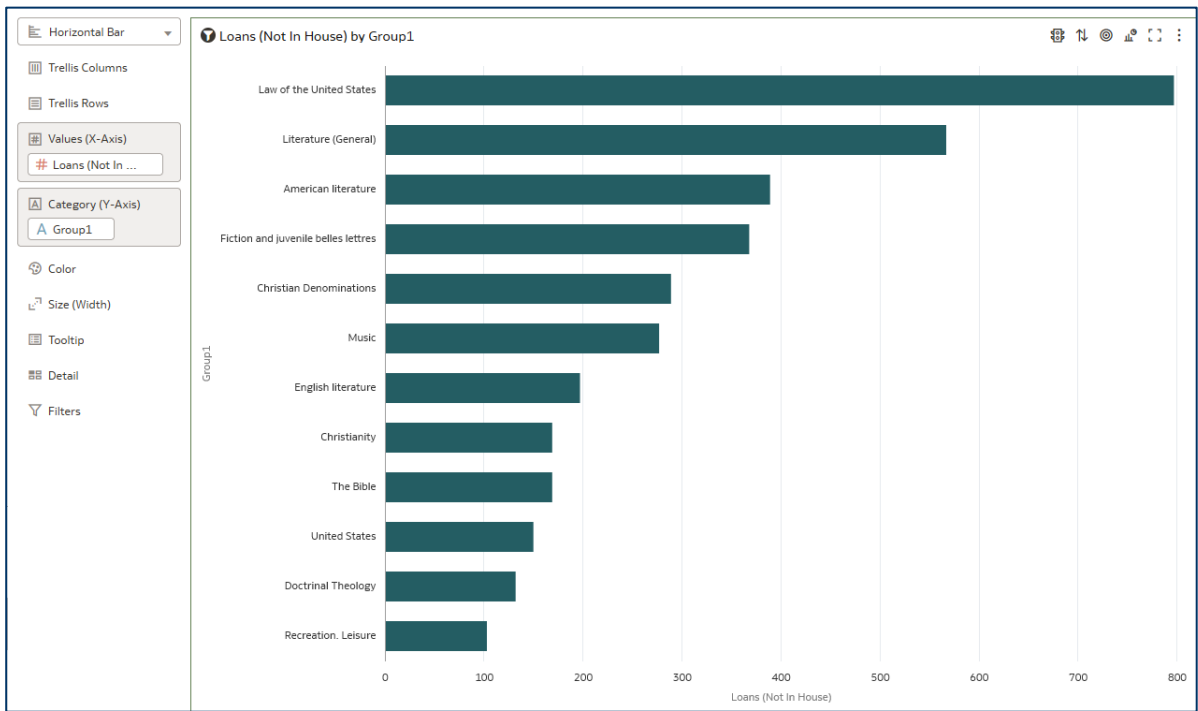
Using multiple visualizations in the same workbook

- Now we will delete the "List" visualization:



Using multiple visualizations in the same workbook

- Now again we have one visualization on the canvas:



Using multiple visualizations in the same workbook

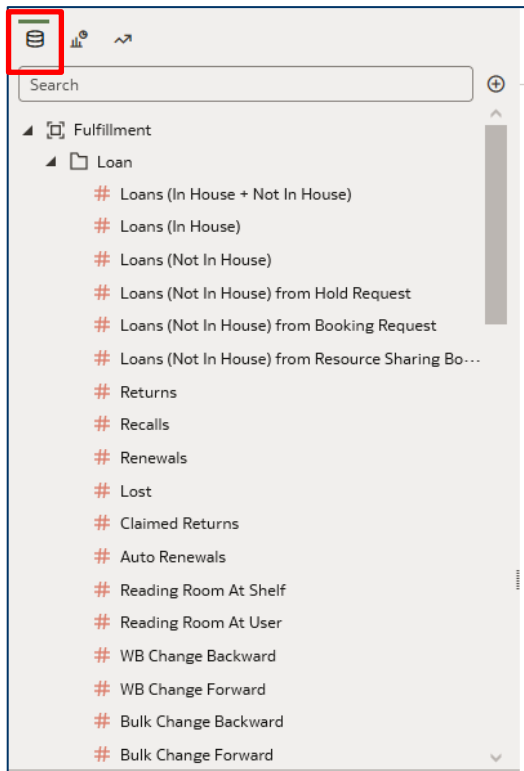
- We can also have two visualizations on the same canvas with different data. Here we have clicked the "Visualizations" icon in the left pane and dragged in a new blank "Bar" visualization.

The screenshot shows a data visualization tool interface. On the left, a sidebar contains a search bar and a grid of visualization types. The 'Bar' category is selected, and a red box highlights the 'Bar' icon. A red arrow points from this icon to a large, empty rectangular area in the center of the interface, which is also outlined in red. This area contains a small bar chart icon and the text 'Drag Data Here'. To the right of this area, a partially visible bar chart titled 'Loans (Not In House) by Group1' is shown. The chart has a vertical axis labeled 'Group1' and a horizontal axis. The data points are as follows:

Group1	Loans (Not In House)
Law of the United States	~95
Literature (General)	~85
American literature	~75
Fiction and juvenile belles lettres	~70
Christian Denominations	~65
Music	~60
English literature	~55
Christianity	~50
The Bible	~45
United States	~40

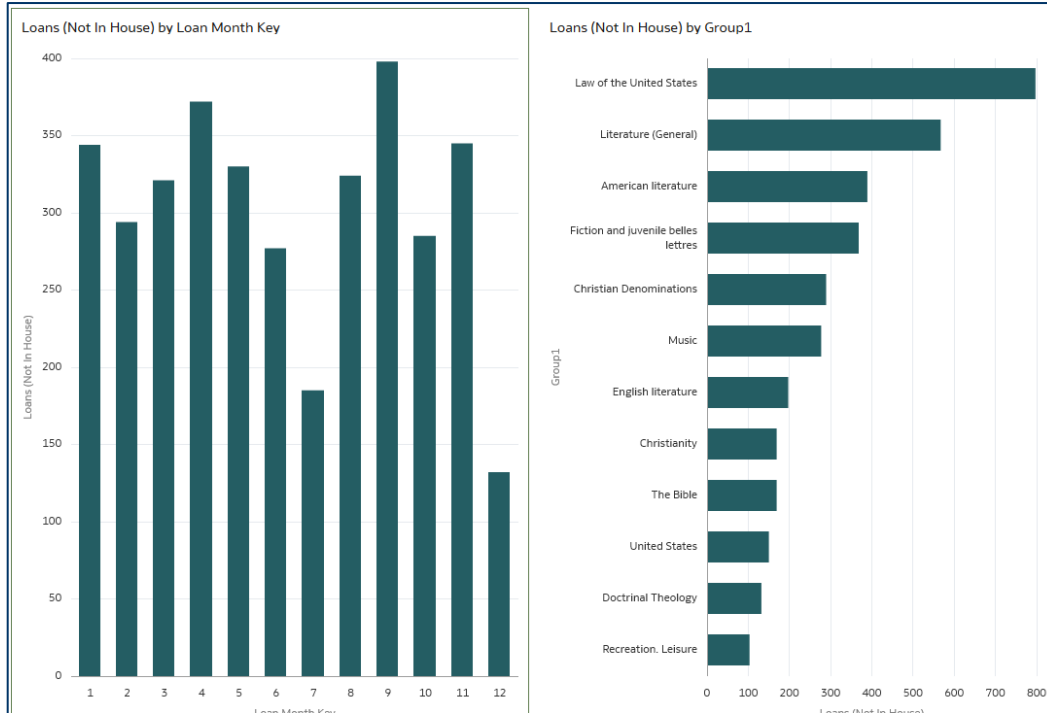
Using multiple visualizations in the same workbook

- With the new blank "Bar" visualization selected we can make a new visualization, for example with number of loans by month. First we select the "Data Elements" icon in the data panel.



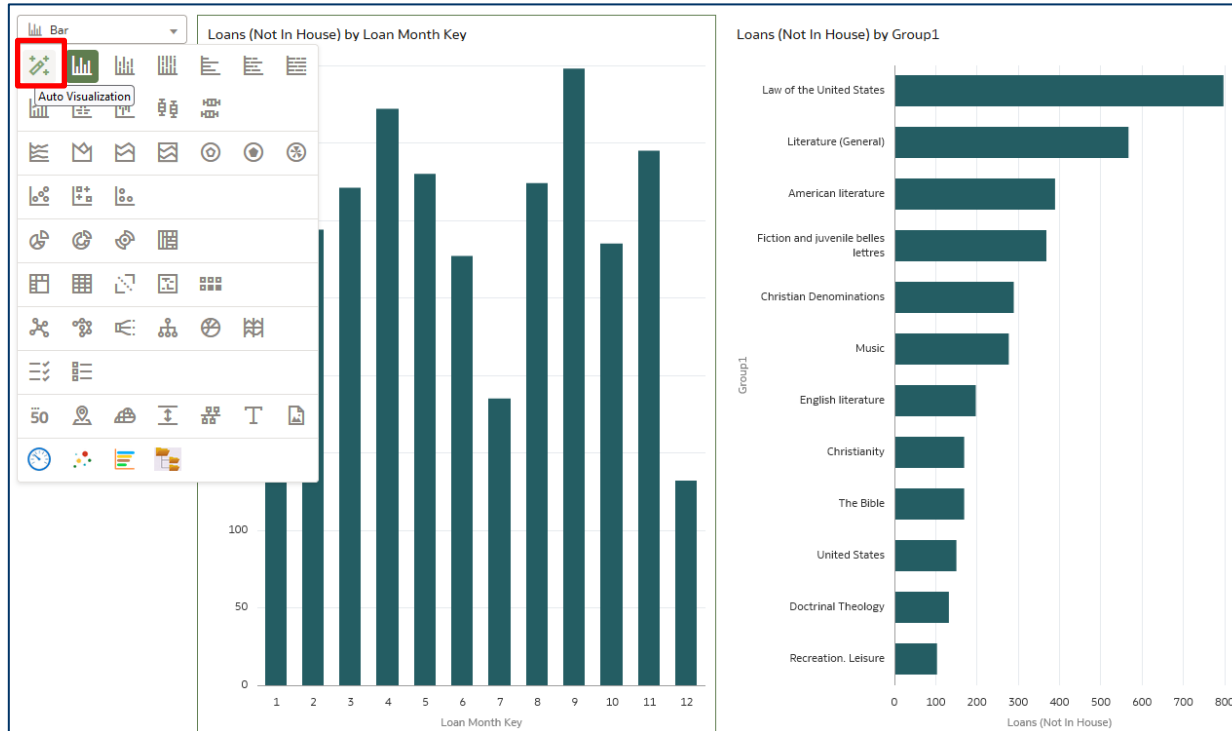
Using multiple visualizations in the same workbook

- And now we drag in to the "Bar" visualization the number of loans and loan month key. Now we have two visualizations with different data in the same canvas. Note that in this case the filters on the top apply to both visualizations in the same canvas.



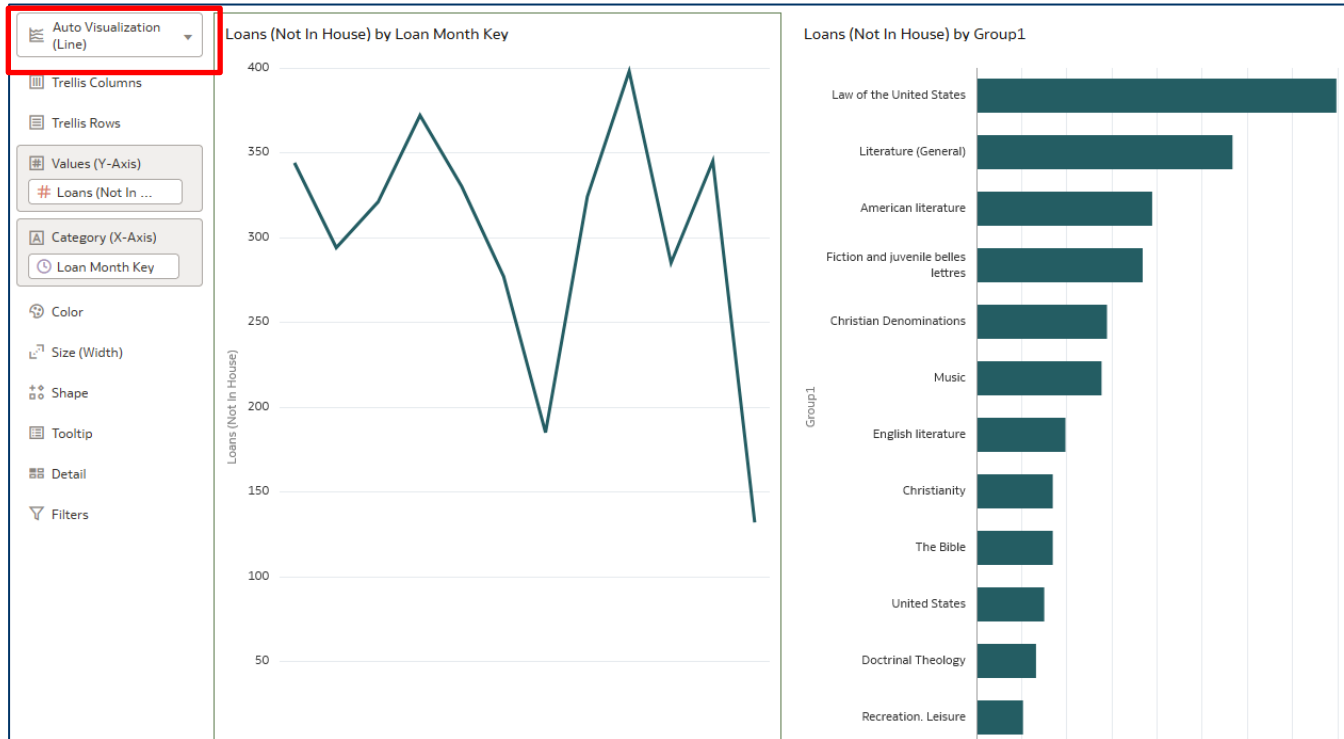
Using multiple visualizations in the same workbook

- Now instead of the "Bar" visualization on the left we will choose "Auto Visualization"



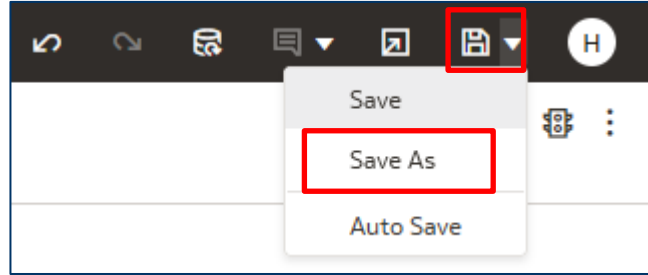
Using multiple visualizations in the same workbook

- This time the "Auto Visualization" chose a line graph



Using multiple visualizations in the same workbook

- And now we can save the workbook again, this time with a new name



Save Workbook

Name

Description



Some examples

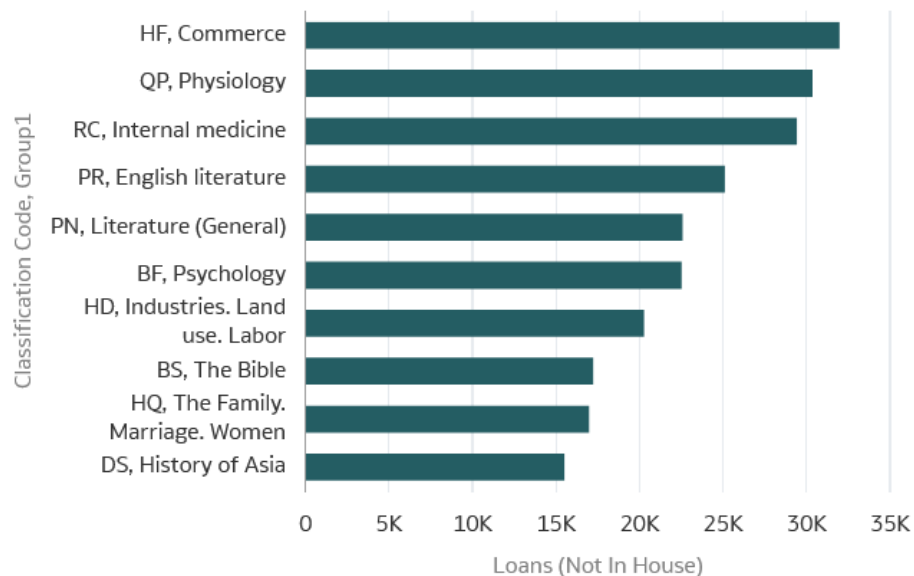
Some examples

Top Ten LC Classifications by number of loans

Loans (Not In House), Classification Code, Group1

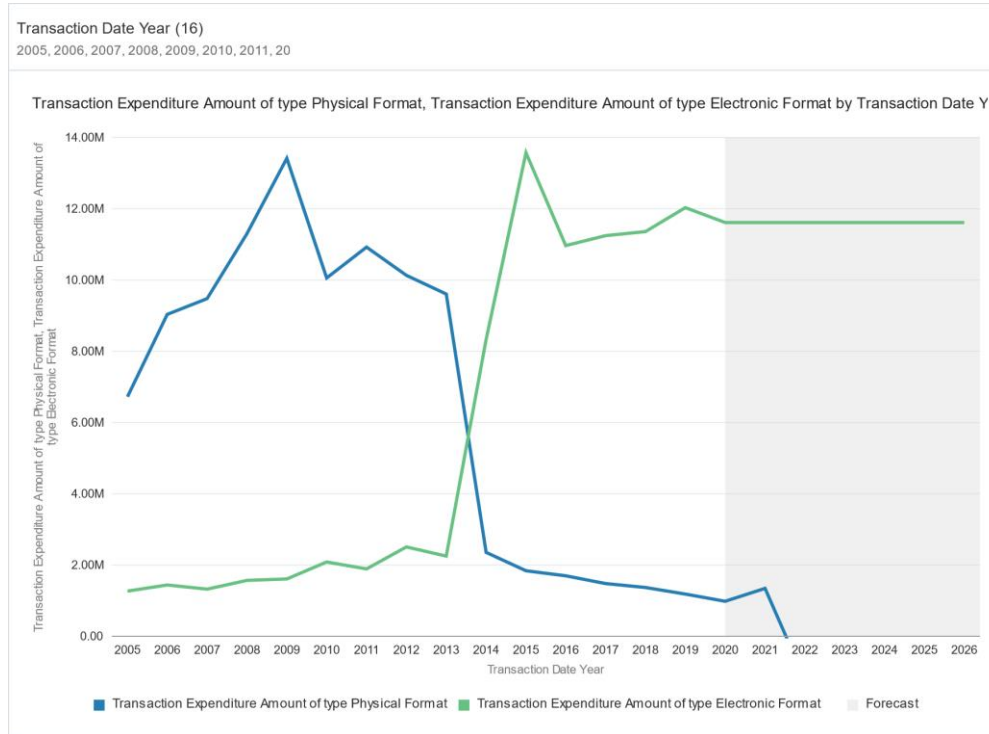
Loans (Not In House) ▼	Classification Code	Group1
31,980.00	HF	Commerce
30,365.00	QP	Physiology
29,425.00	RC	Internal medicine
25,115.00	PR	English literature
22,584.00	PN	Literature (General)
22,519.00	BF	Psychology
20,275.00	HD	Industries. Land use. Labor
17,230.00	BS	The Bible
16,984.00	HQ	The Family. Marriage. Women
15,509.00	DS	History of Asia

Loans (Not In House) by Classification Code, Group1



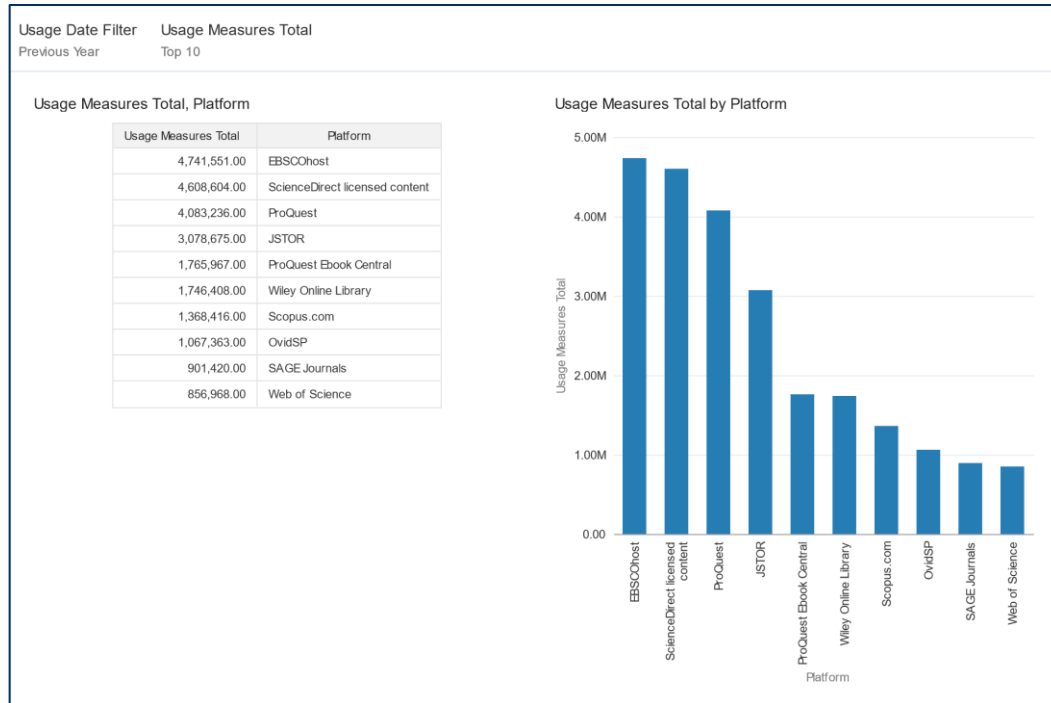
Some examples

Physical and electronic expenditures with forecast



Some examples

Top 10 platforms for COUNTER R5 usage in previous year





Thank you!

xxx@exlibrisgroup.com

