Hands-on Lab: Getting Started with Cognos Analytics

Estimated time needed: 40 minutes

Purpose of the Lab:

This lab is designed to introduce learners to IBM Cognos Analytics, an AI-fueled business intelligence platform. The primary objective is to guide you through the process of setting up a trial account, navigating the user interface, uploading external data, and creating a dashboard. The lab aims to familiarize you with the key functionalities of Cognos Analytics, including data discovery, dashboard creation, and visualization. It is structured to offer practical experience in integrating and visualizing data, which is fundamental for data-driven decision-making and business intelligence.

Benefits of Learning the Lab:

By completing this lab, you will gain practical skills in using a leading business intelligence tool, enhancing their ability to analyze and visualize data effectively. The knowledge gained from this lab is particularly beneficial for individuals looking to improve their competencies in data analytics, dashboard creation, and data-driven storytelling. Mastery of these skills is crucial for professionals in data analysis, business intelligence, and related fields, as it enables them to derive insights from data and present them in a visually appealing and easy-to-understand format. This lab provides a stepping stone for those aspiring to become proficient in modern data analytics tools and techniques.

Software Used in this Lab

Like the videos in the course, for the hands-on labs, we will be using **IBM Cognos Analytics trial version** (currently limited to 90 days) as this is available at no charge.

Dataset Used in this Lab

The dataset used in this lab comes from the VM designed to showcase IBM Cognos Analytics. This dataset is published by IBM. You can download the dataset file directly from here: CustomerLoyaltyProgram.csv.

Objectives

After completing this lab, you will be able to:

- Sign up for a Cognos Analytics trial plan
- Navigate around the Cognos Analytics user interface
- Upload external data files to the Cognos Analytics platform
- Start a new dashboard with dashboard templates
- Create a simple dashboard

Exercise 1: Sign up for Cognos Analytics Trial Plan

In this exercise, you will learn how to sign up for an IBM Cognos Analytics trial plan.

1. Go to Try IBM Cognos Analytics.

   Note: If you use your **existing cloud account**, you will get only 30 days trial for Cognos Analytics.

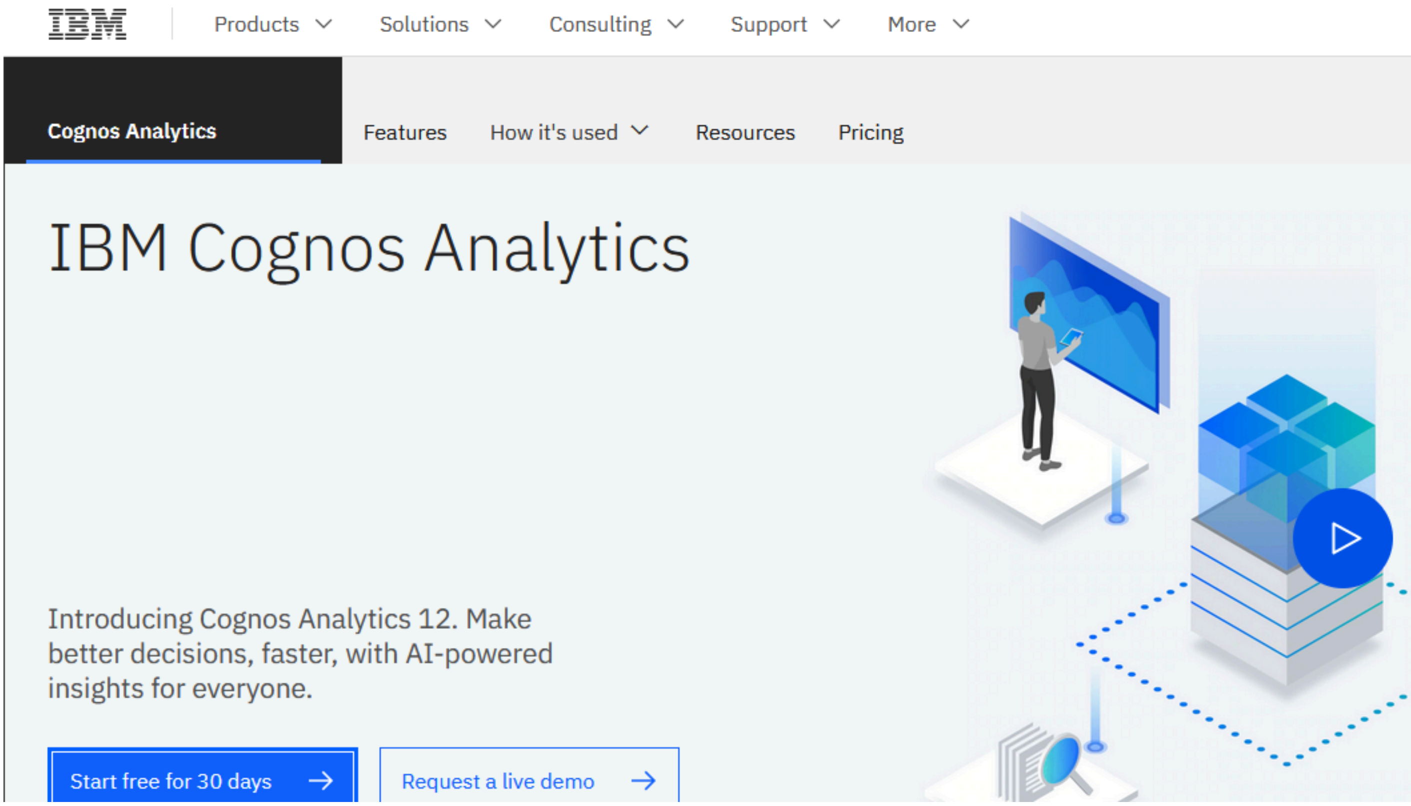
2. Fill out section **1. Account information** with your information and click **Next**. The email address you are going to use here will be called IBMid.

IBM

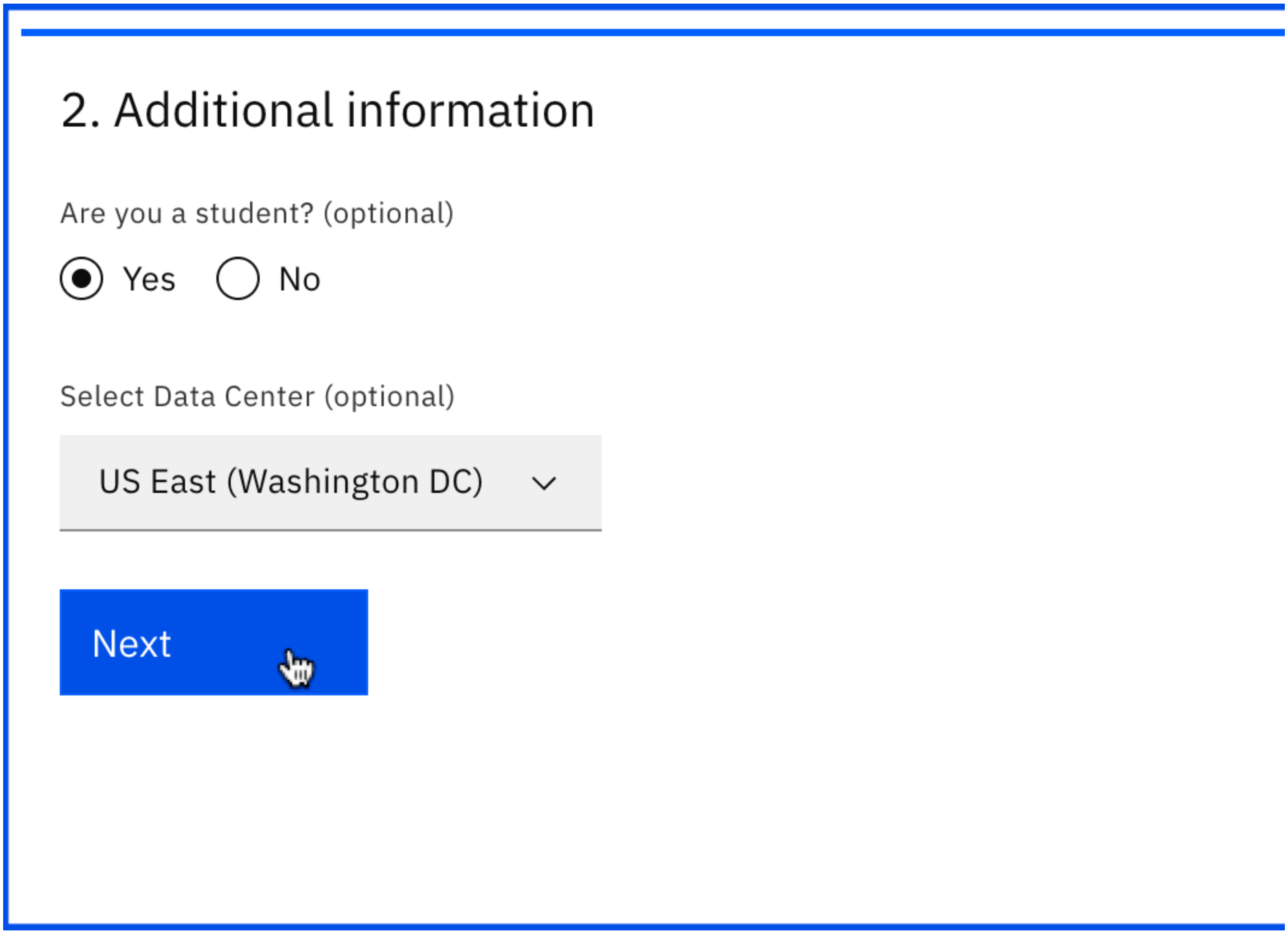
On-line training - Data Visualizations - Trial

Learn the skills necessary to become a data analyst using Cognos Analytics. By registering for the IBM Data and Analyst Certificate, you have the opportunity to use the full suite of its capabilities for 90 days while you complete your course. Cognos helps you to understand your data and easily create compelling visualizations and reports.

- If you already have an IBMid, click **Log in**. Enter your IBMid and password.
  Click here to start your free trial for Cognos Analytics and fill required information and press **Continue** at the bottom of the page.



3. Fill out section **2. Additional information** with your information. In the case of the Data Center, select one which is nearest to your location. Then click **Next**.



4. Now enter the 7 digit code you received on your email address and click **Create account**.

3. Verify email

We emailed a 7 digit code to
[redacted]@gmail.com

This code will expire in 30 minutes.

Verification token

5734728

Didn't receive the email? Check your spam filter for an email from ibmacct@iam.ibm.com.

Resend code

IBM may use my contact data to keep me informed of products, services and offerings:

- [x] by email

You can withdraw your marketing consent at any time by submitting an opt-out request. Also you may unsubscribe from receiving marketing emails by clicking the unsubscribe link in each email.

More information on our processing can be found in the IBM Privacy Statement. By submitting this form, I acknowledge that I have read and understand the IBM Privacy Statement.

I accept the product Terms and Conditions of this registration form.

5. Click **Proceed**.

About your IBMid Account Privacy

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you have previously been presented with a version of this notice, please refer to
“Changes since the previous version of this notice” below for information about t
updates.

Updates to the IBM Privacy Statement since this notice was originally published
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Changes since the previous version of this notice

What data does IBM collect?

Why IBM needs your data

How your data was obtained

How IBM uses your data

How IBM protects your data

How long we keep your data

Your rights

I acknowledge that I understand how IBM is using my Basic Personal Data and I an

6. You are now done with the sign up procedure. You will be redirected to myibm.ibm.com/dashboard/ automatically. Wait for a few moments until the Coursera online training - Data Visualizations trial offering becomes active.

myibm.ibm.com/dashboard/

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1 Offering

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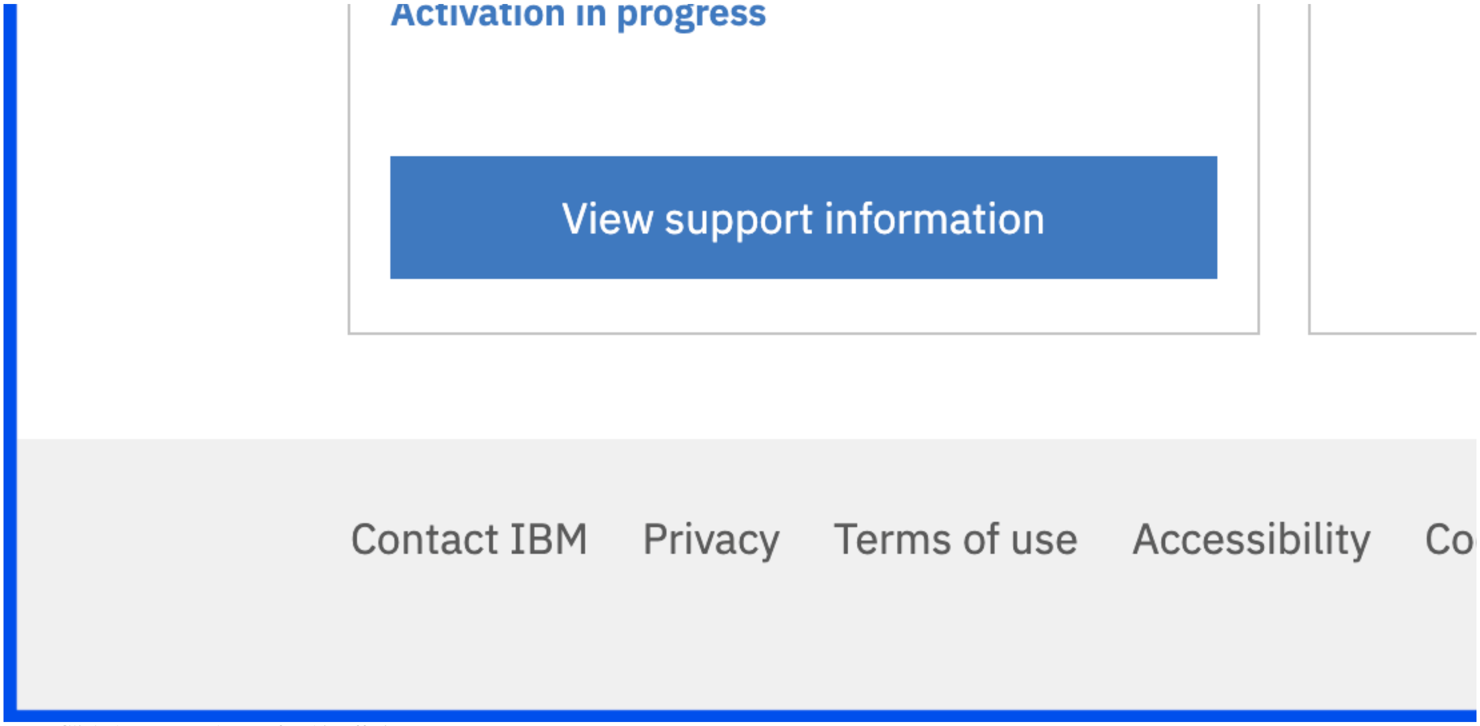
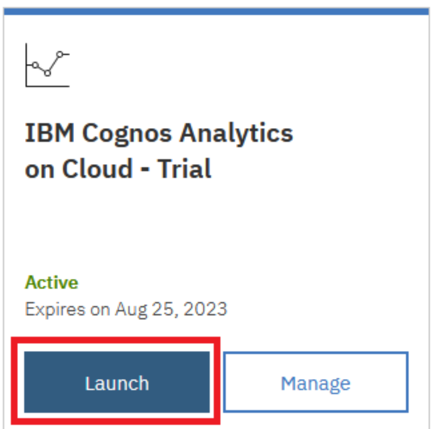


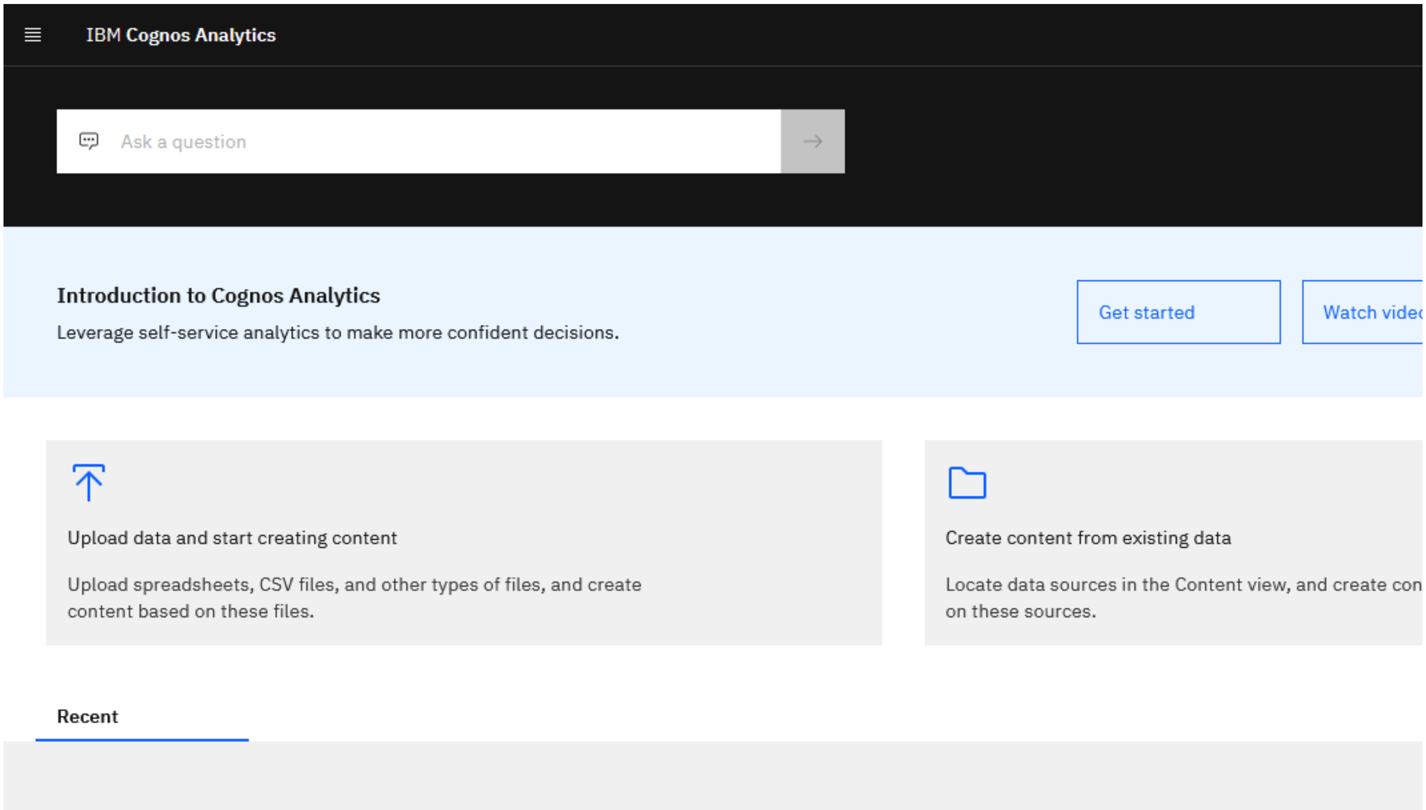
7. Click the **Launch** button for this offering.



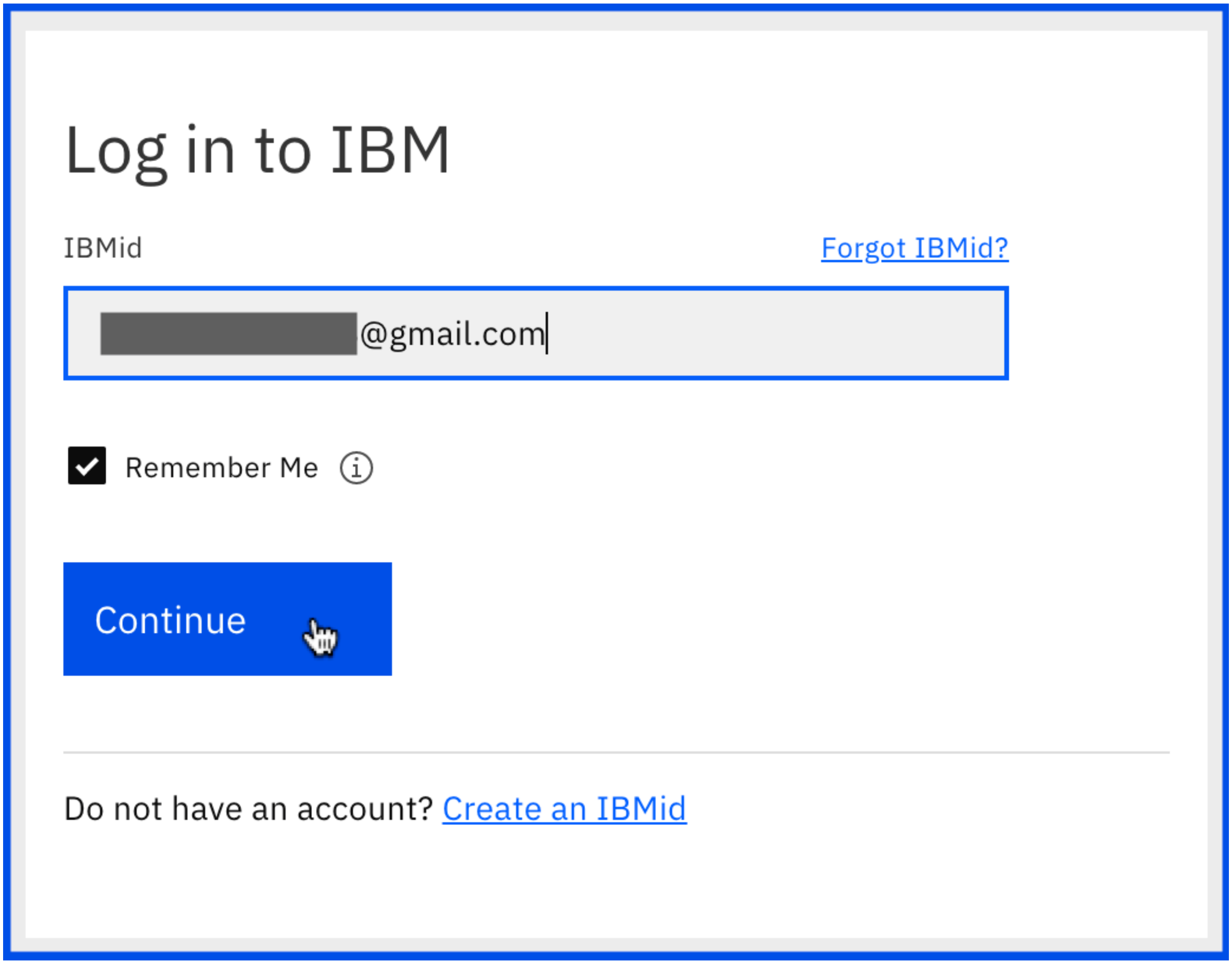
If it has been more than 72 hours since you initiated your Cognos Trial activation, but it's still showing *Activation in Progress*, please let us know on the forum so we can follow up with the Cognos team on your behalf.

NOTE: The trial will not be activated for learners in countries under US sanctions.

8. You have successfully launched the Cognos Analytics platform, it will look as below.



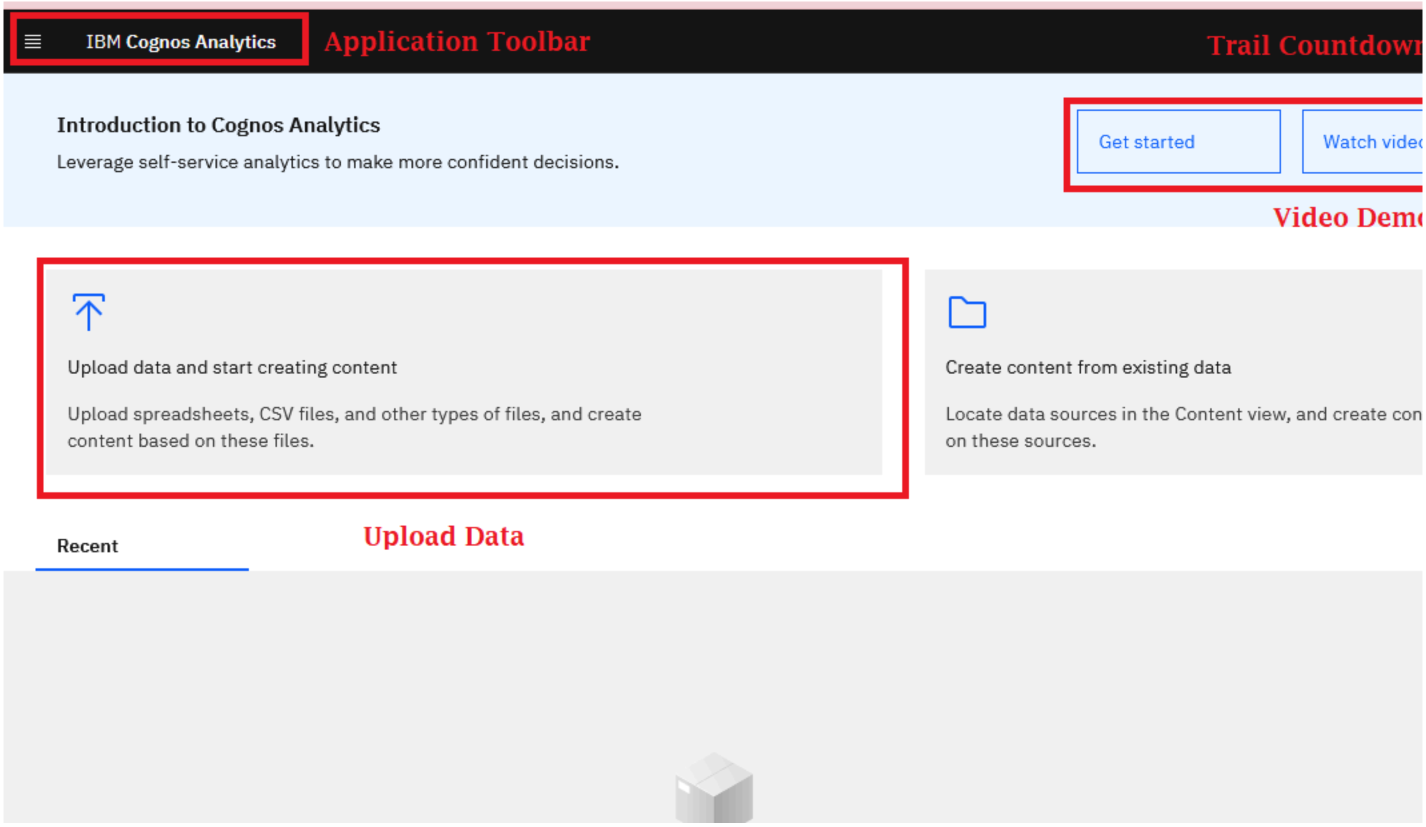
9. From now on, if you want to sign in to the Cognos Analytics platform with your IBMid, go to myibm.ibm.com. Enter your IBMid and password and then repeat steps 7 and 8.



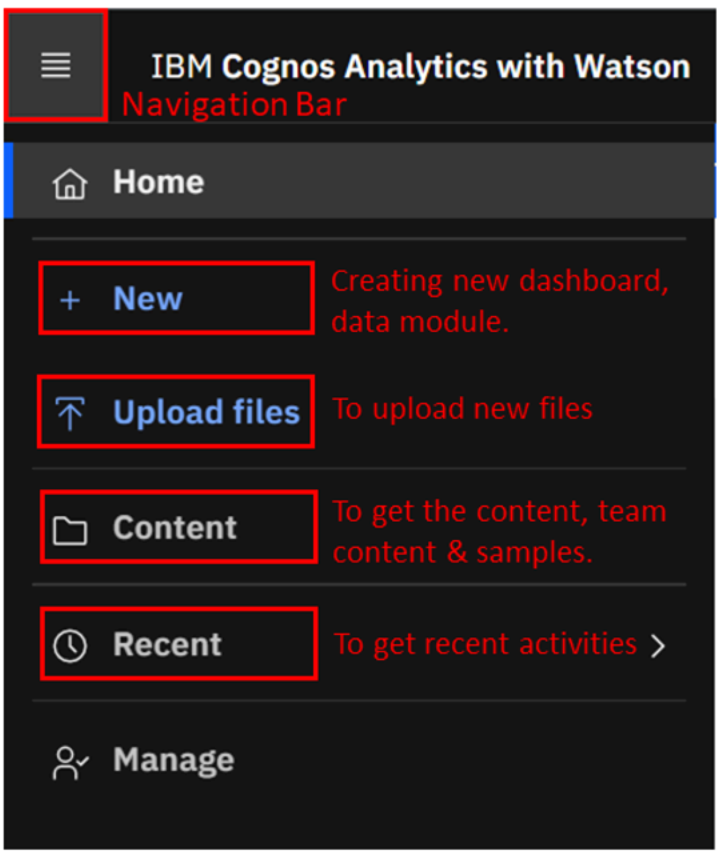
Exercise 2: Navigate around the Cognos Analytics UI

In this exercise, you will learn general navigation around the Cognos Analytics user interface (UI).

1. The goal of the Cognos Analytics UI is to provide you with a streamlined way to get started using Cognos Analytics and view content and activities pertinent to them. You will begin your general navigation here.

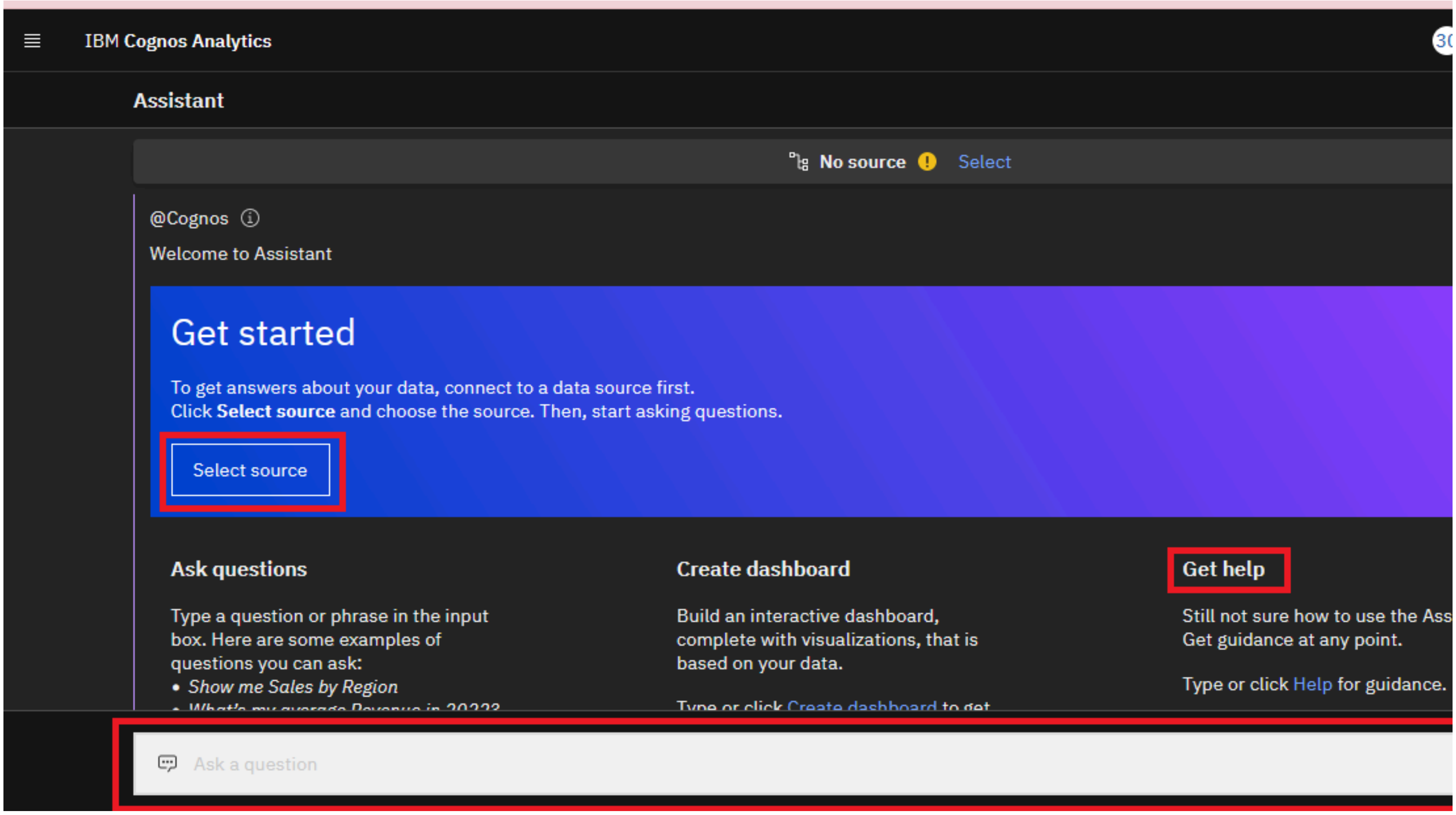


2. Click the **Navigation Bar**, you can use **New** to create new items, you can use **Upload data** to upload your external data files, the **Content** section is where you can create new content or open different samples to work with, and the **Recent** section shows any recently used files you've worked on.



3. Once you begin working with content, the menu will update with your recently used items. In your Cognos Analytics instance, you may see recent content on the canvas.

4. You can always use the **Assistant** icon in the top right of the page to find insights from your data once data is uploaded.



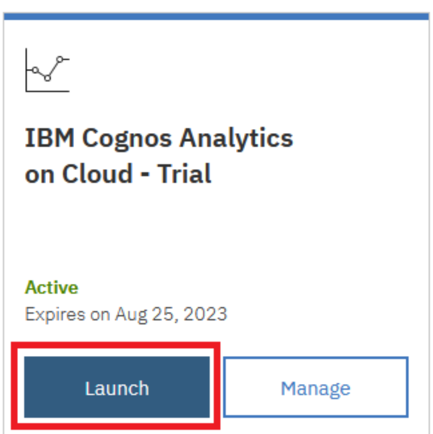
Exercise 3: Create a Simple Dashboard with Cognos Analytics

In this exercise, you will learn how to upload external data files to Cognos Analytics, and then learn how to start a new dashboard with templates. Lastly, you will learn how to create a simple dashboard.

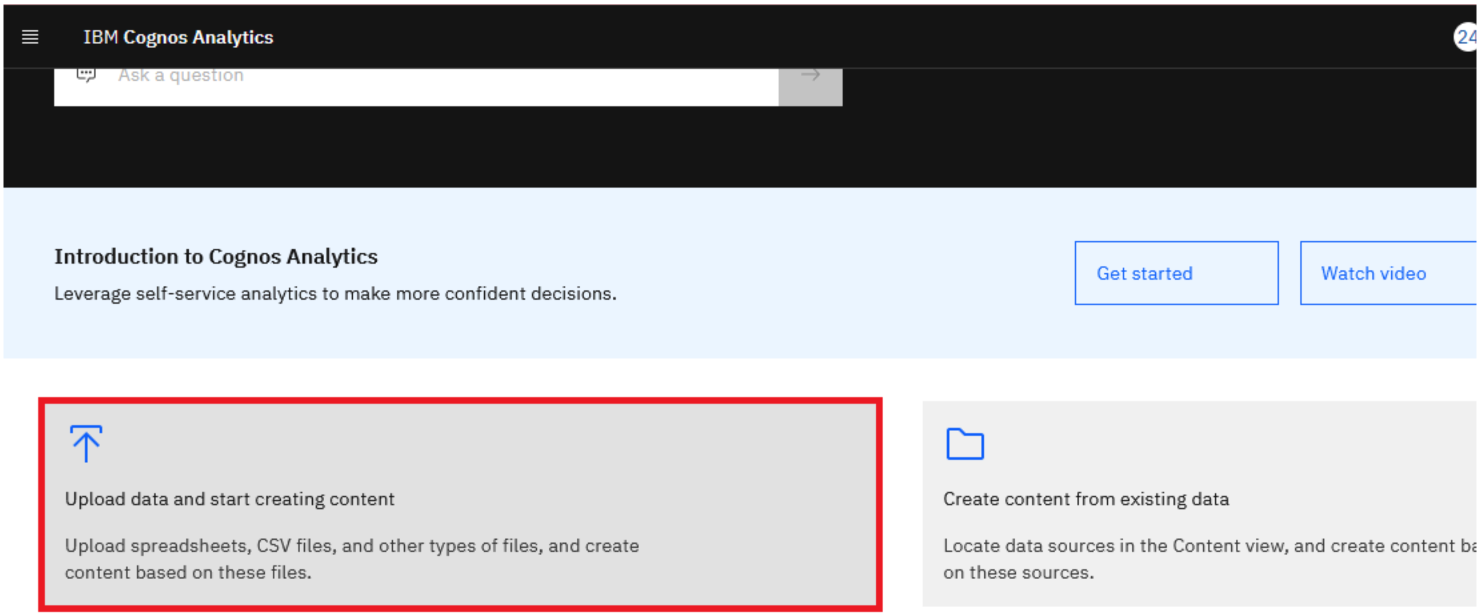
Task A: Upload External Data Files

In this task, you will learn how to upload external data files to Cognos Analytics.

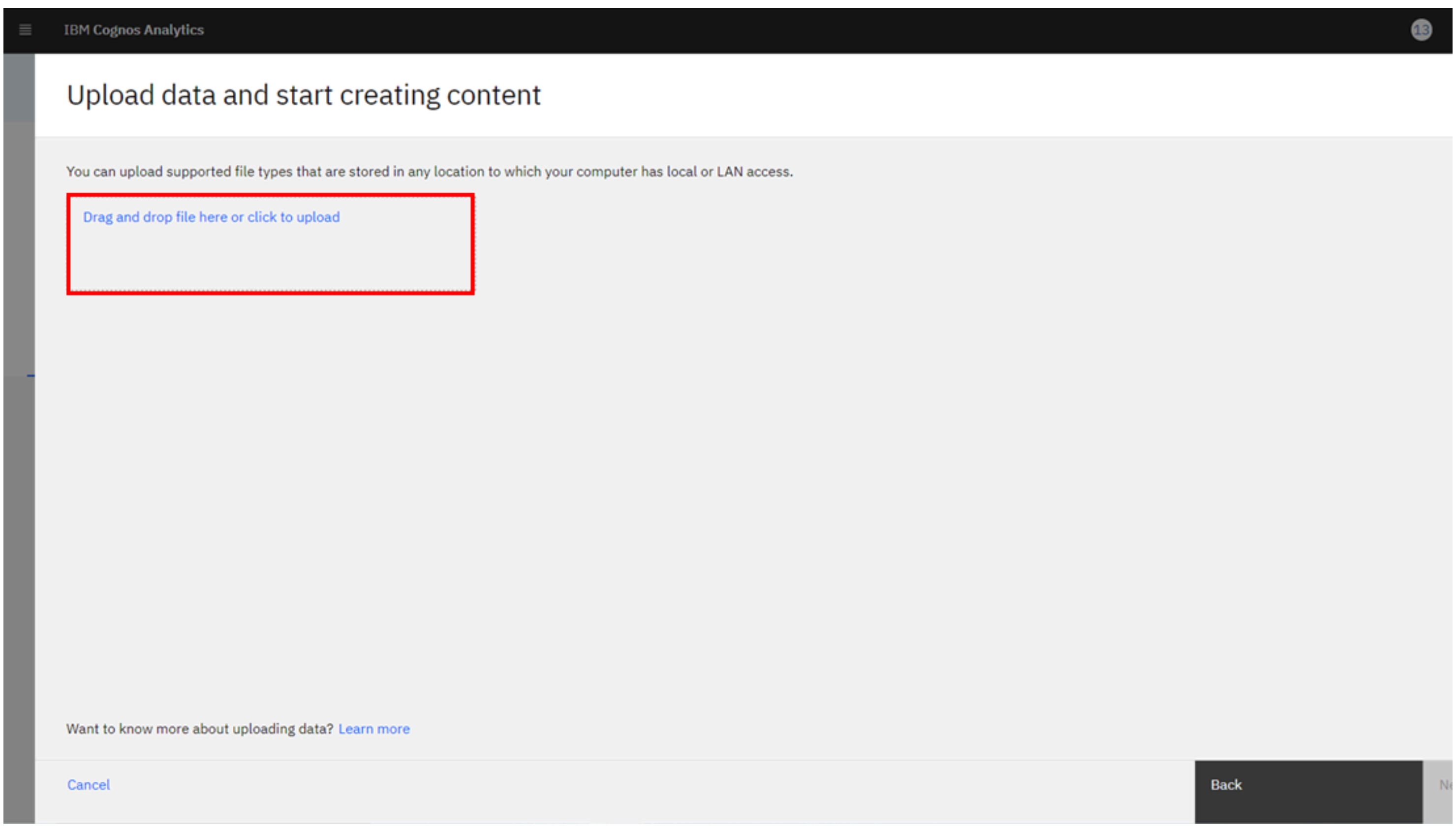
1. Download the file CustomerLoyaltyProgram.csv.
2. If you are not currently signed in, sign in to the Cognos Analytics platform with your IBMid, by navigating to myibm.ibm.com/dashboard/.
3. Enter your IBMid and password, then scroll down and click **Launch**.



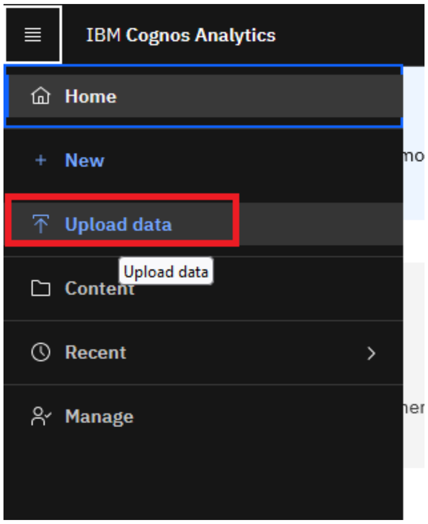
4. To upload a file, click the **Upload data and start creating content** link.



5. Click on **Drag and drop file here or click to upload**, aupdated new file browser window will open. Navigate to where the file is saved, select the file, and click **Open**.

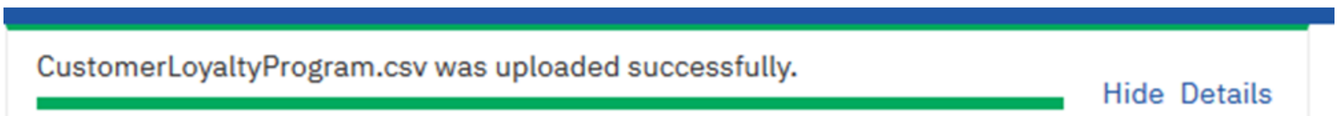


6. Alternatively, from the menu, click **Upload data**.

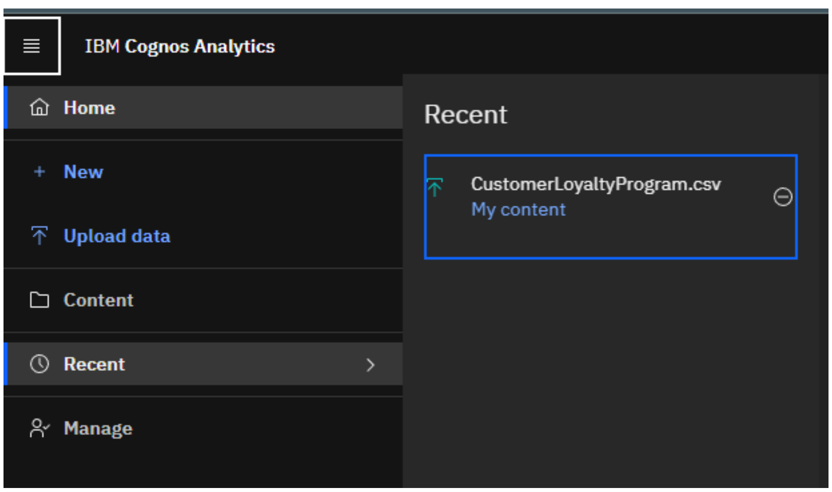


7. As the file uploads, notice that a series of status bars will be visible as the upload process reads and analyzes the data being brought in.

8. Once it completes, the status bar will update to show the successful completion before closing.



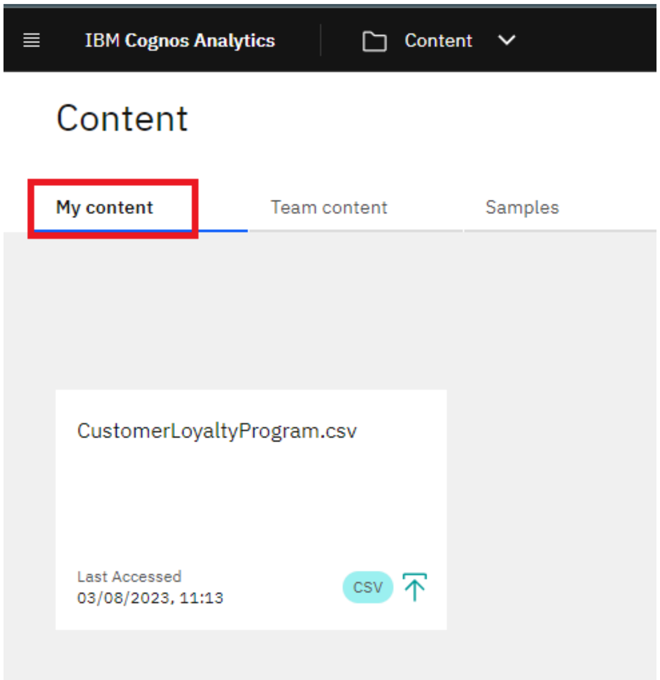
9. In the **Recent** section, you will see the new uploaded data file.



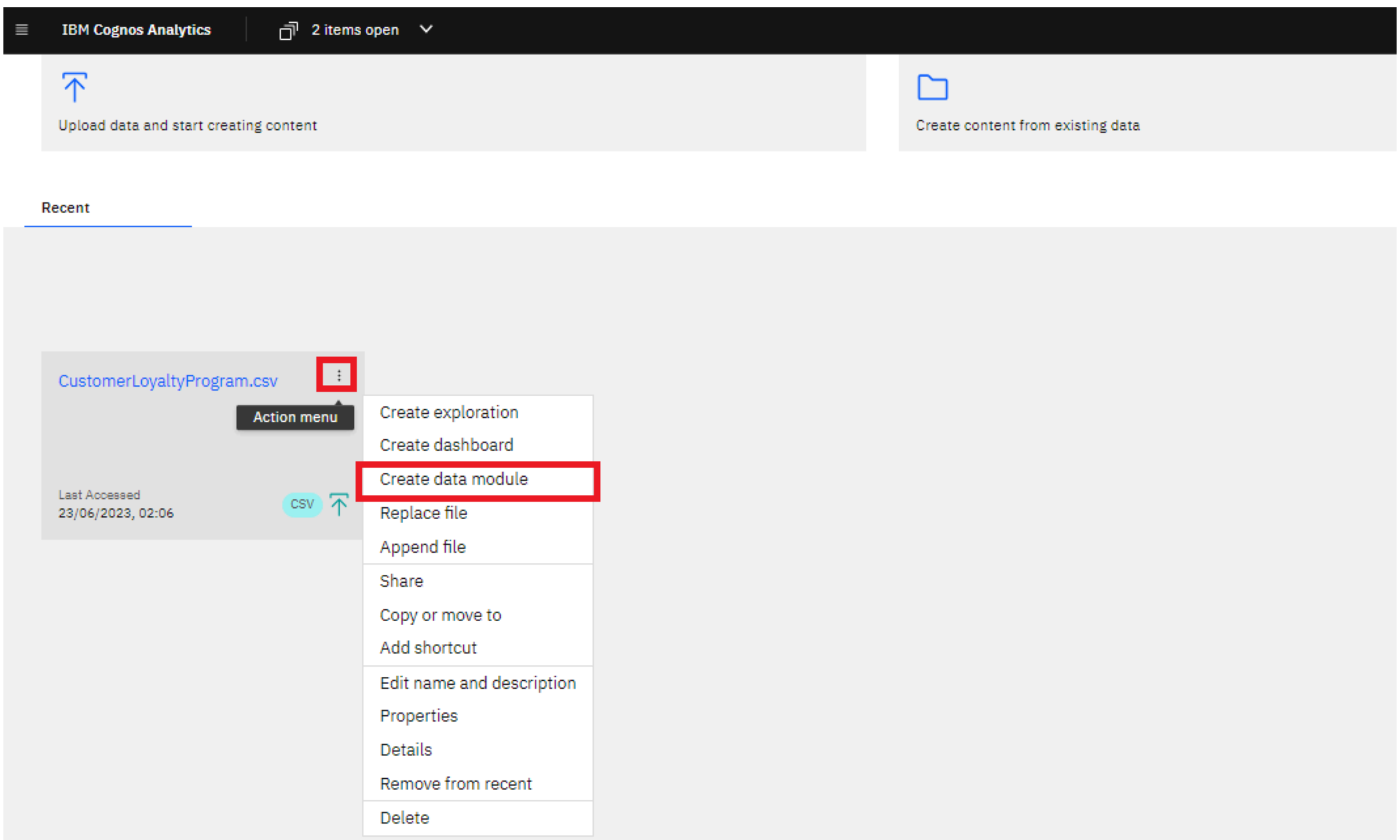
Task B: Convert the uploaded CSV file into Data Module and view the table on IBM Cognos.

In this task, you will learn how to view the dataset on IBM Cognos.

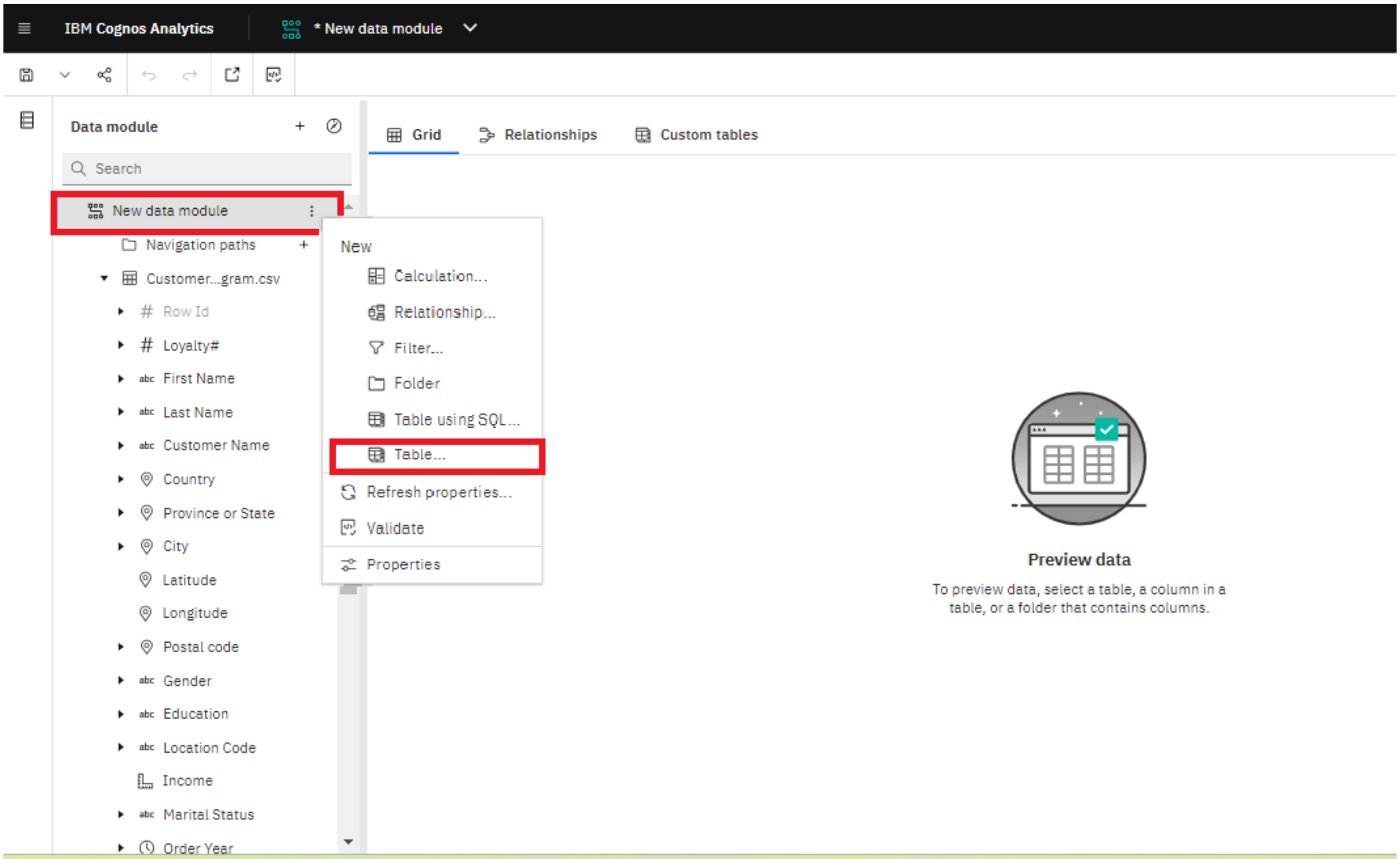
1. In the menu, click **Content**, then select the **My content** tab.



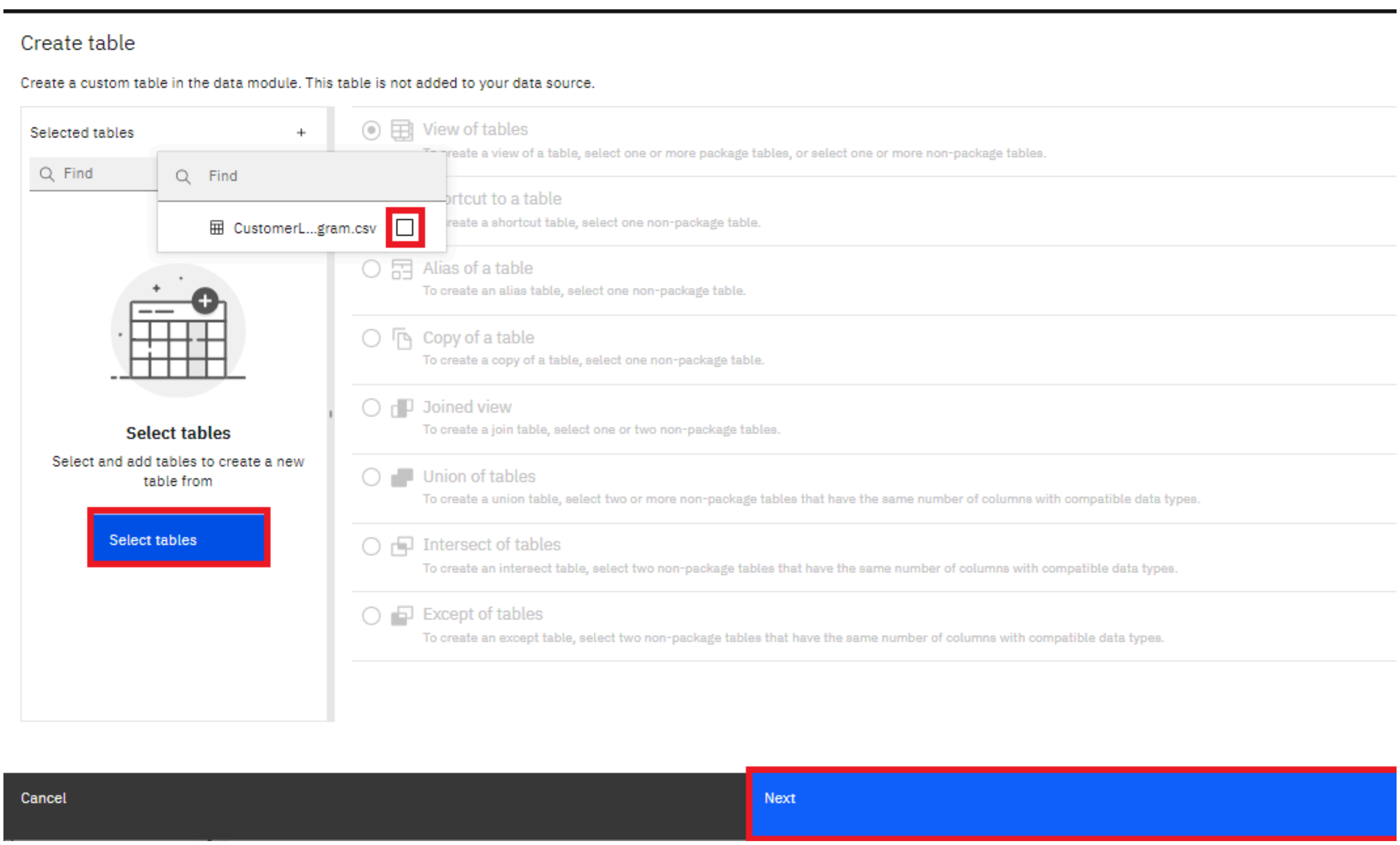
2. Click the **Action Menu** (represented by three dots) to the right of the *CustomerLoyaltyProgram.csv* file, and then click **Create data module**.



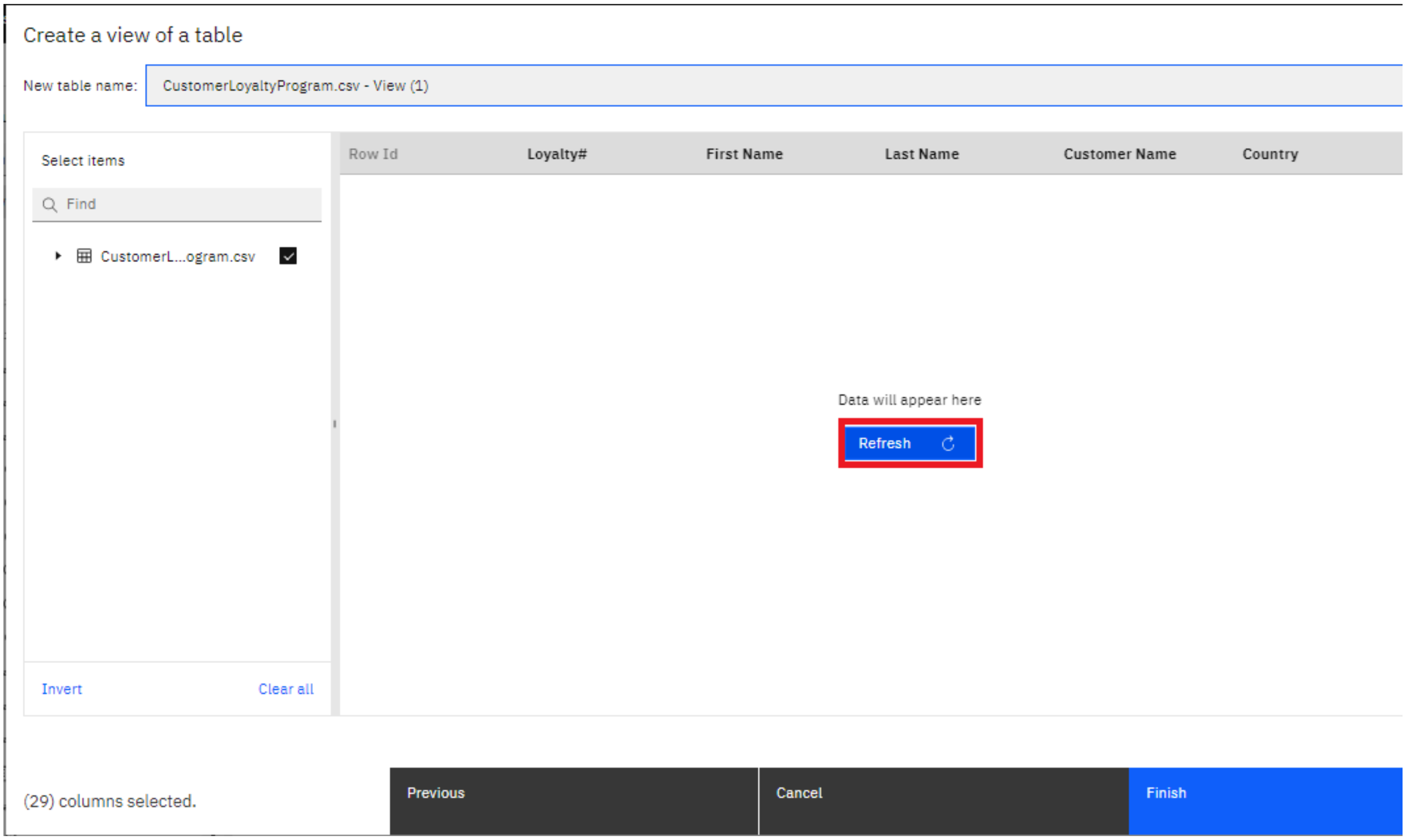
3. Click the **Action Menu** (represented by three dots) to the right of **New data Module**, and click the **Table** option to launch the **Create table** window.



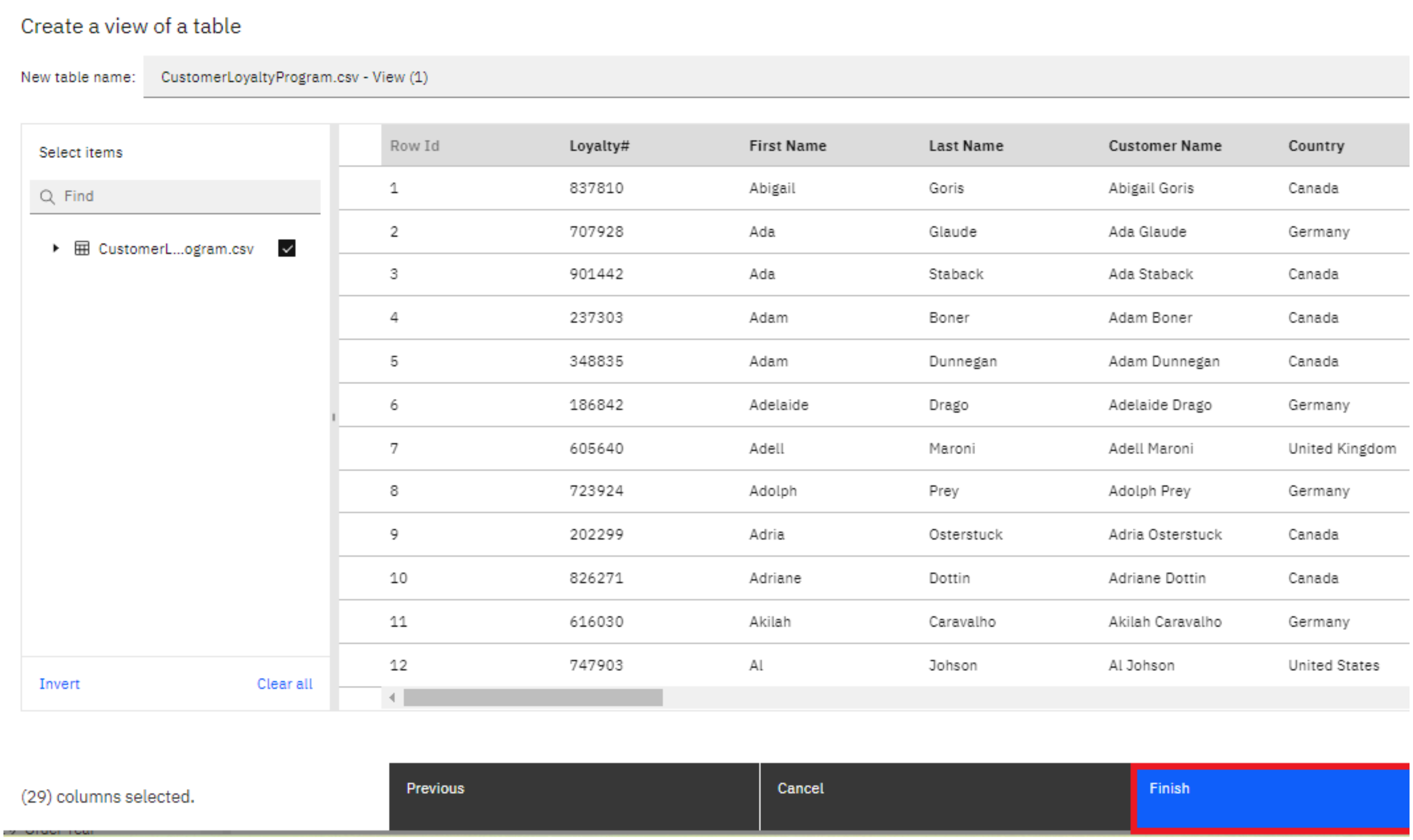
4. Click **Select tables**, select the checkbox for the uploaded dataset **CustomerLoyaltyProgram.csv**, and then click the **Next** button to proceed with the creation of the table.



5. In the **Create a view of a table** window, click the **Refresh** button to view the data.

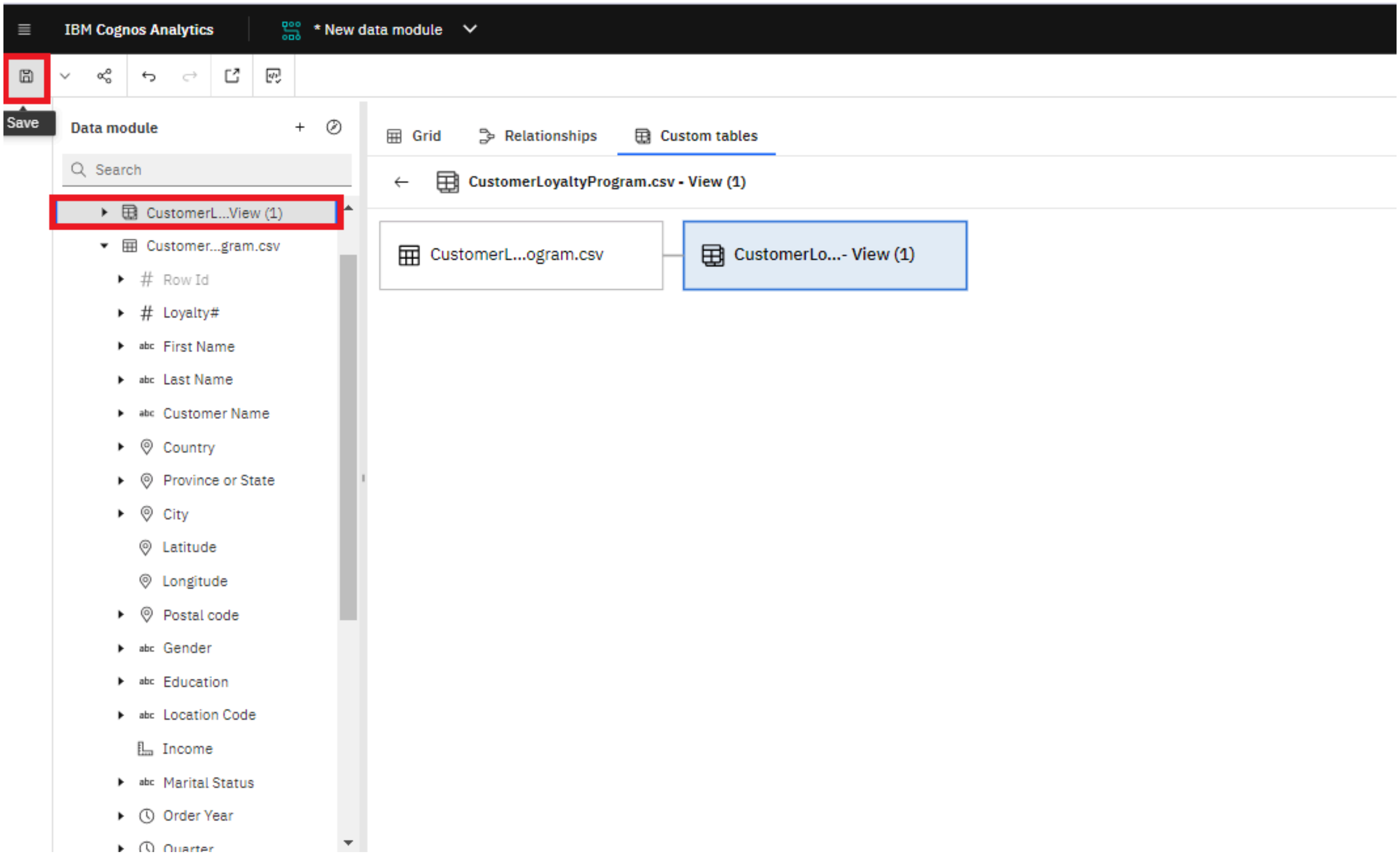


6. Now, you will be able to view the data in the table. Click **Finish**.

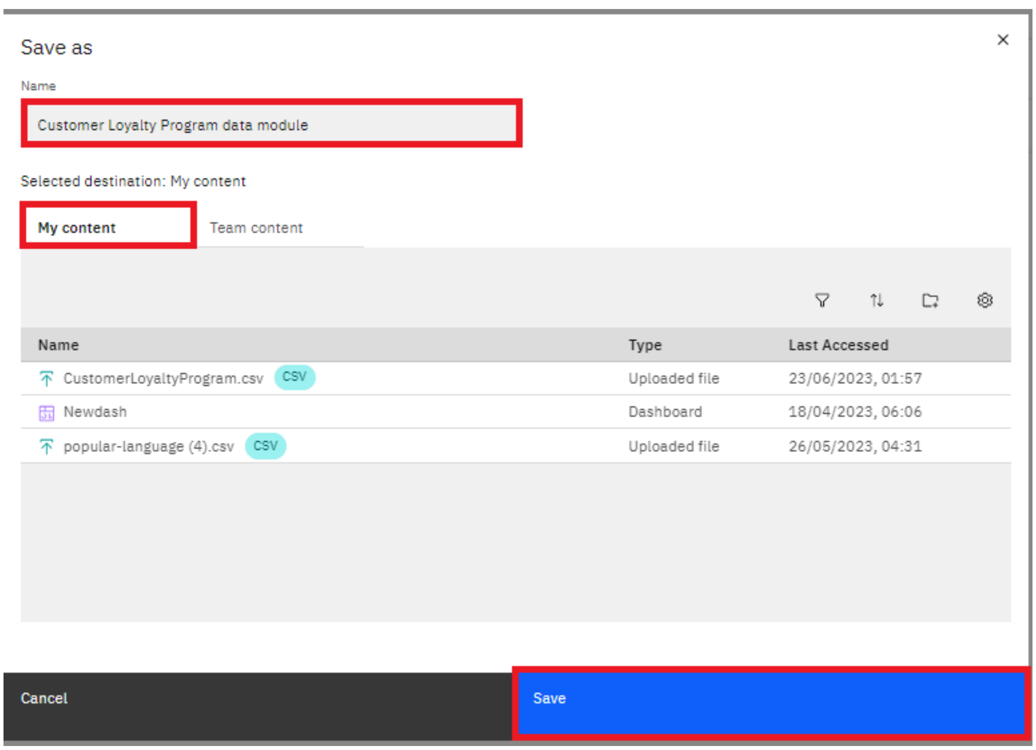


Row Id	Loyalty#	First Name	Last Name	Customer Name	Country
1	837810	Abigail	Goris	Abigail Goris	Canada
2	707928	Ada	Glaude	Ada Glaude	Germany
3	901442	Ada	Staback	Ada Staback	Canada
4	237303	Adam	Boner	Adam Boner	Canada
5	348835	Adam	Dunnegan	Adam Dunnegan	Canada
6	186842	Adelaide	Drago	Adelaide Drago	Germany
7	605640	Adell	Maroni	Adell Maroni	United Kingdom
8	723924	Adolph	Prey	Adolph Prey	Germany
9	202299	Adria	Osterstuck	Adria Osterstuck	Canada
10	826271	Adriane	Dottin	Adriane Dottin	Canada
11	616030	Akilah	Caravalho	Akilah Caravalho	Germany
12	747903	Al	Johson	Al Johson	United States

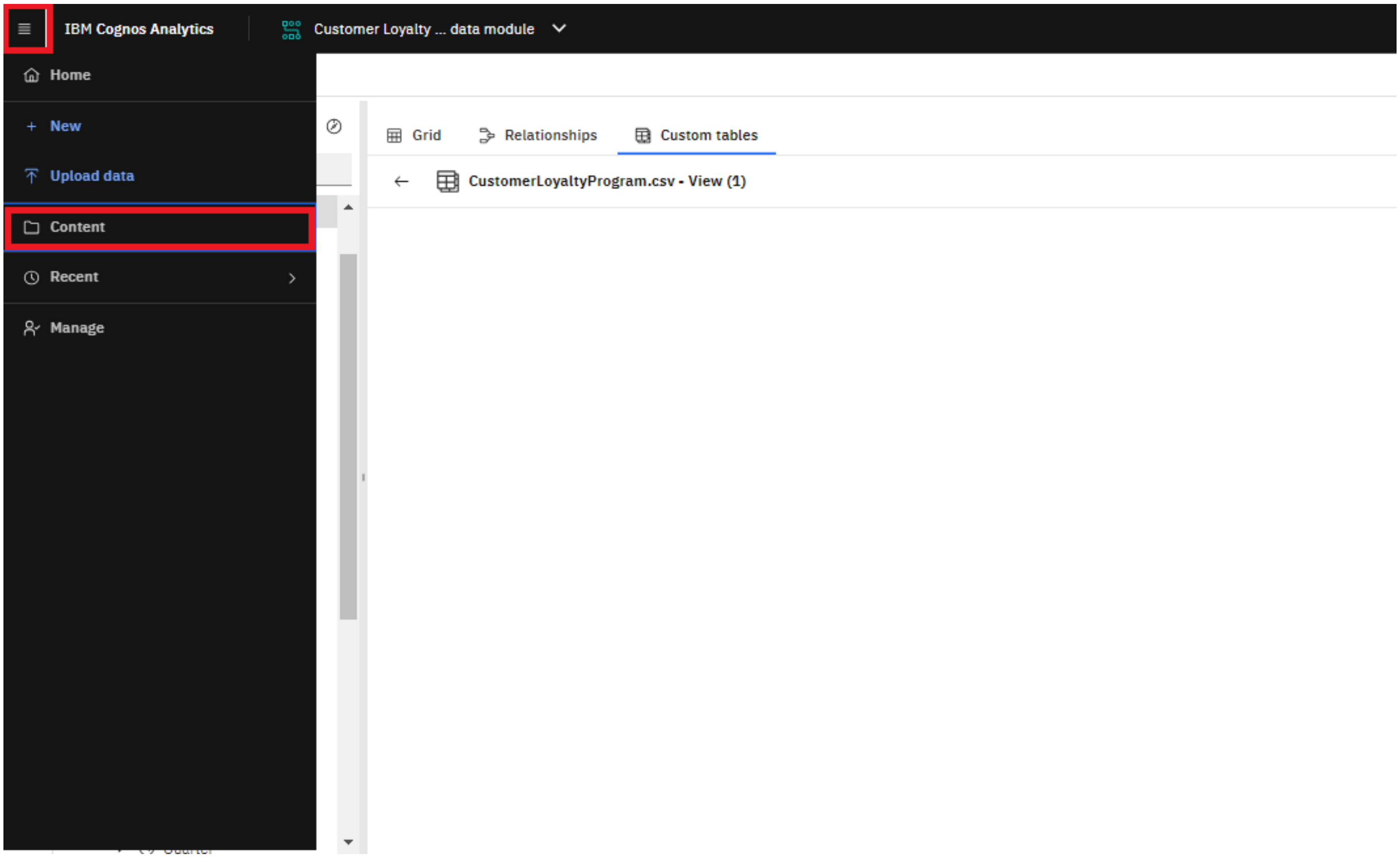
7. The new table view will be added in the source panel. Save this data module by clicking **Save**.



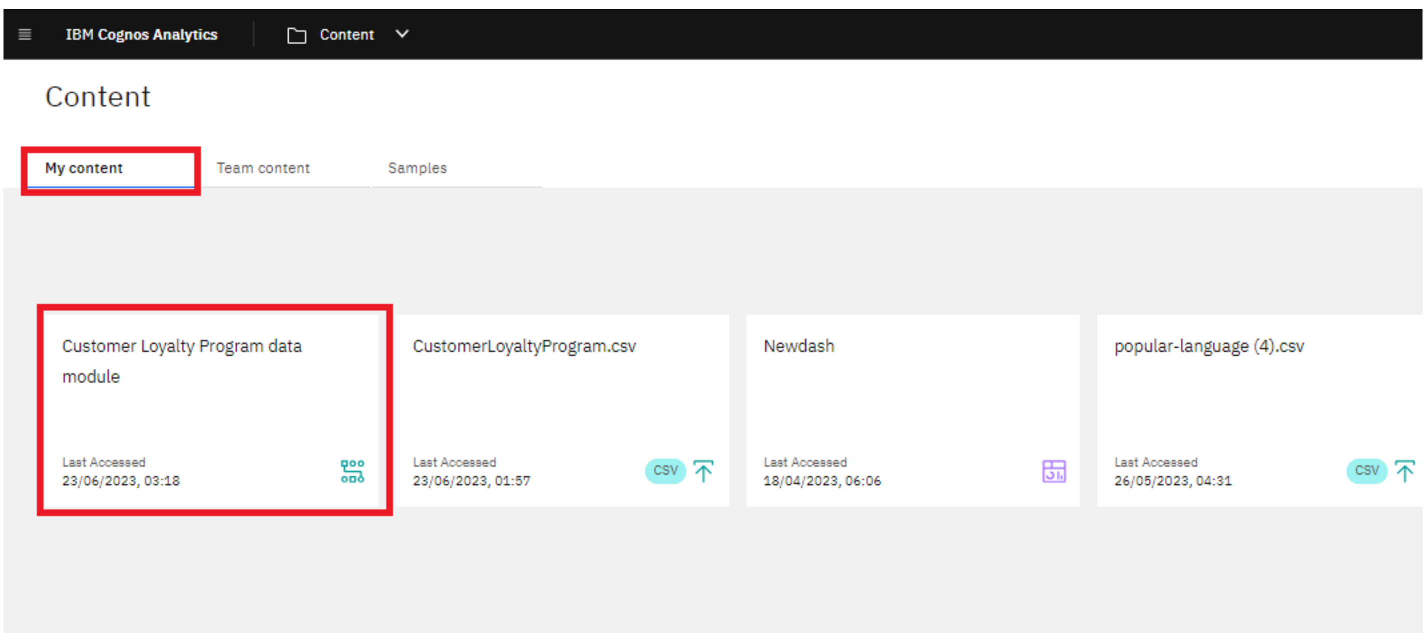
8. In the **Save as** window, enter the name **Customer Loyalty Program data module**, select the **My content** tab as the destination, and click **Save** to proceed.



9. Next, in the IBM Cognos Analytics main menu, select **Content**.



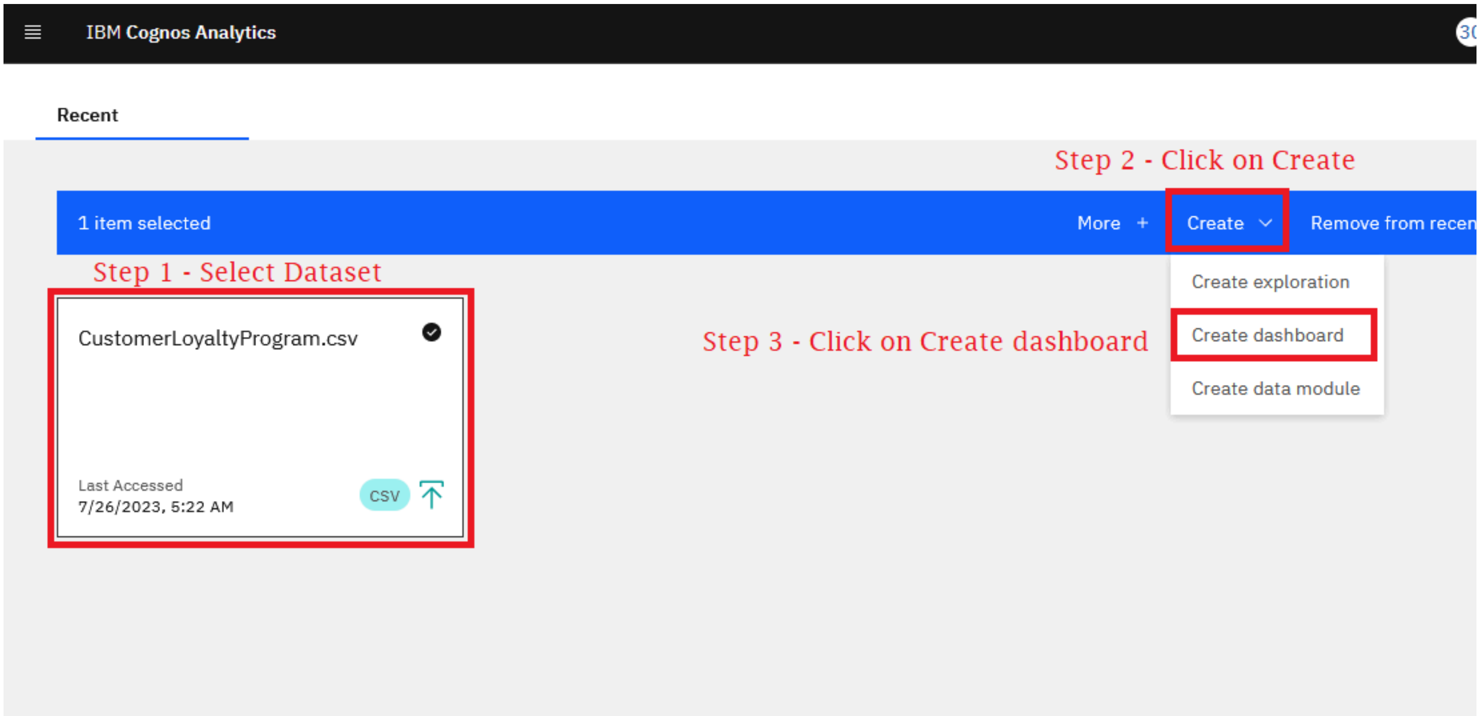
10. You will now see the new **Customer Loyalty Program data module** under the **My Content** tab.



Task C: Start a New Dashboard with Templates

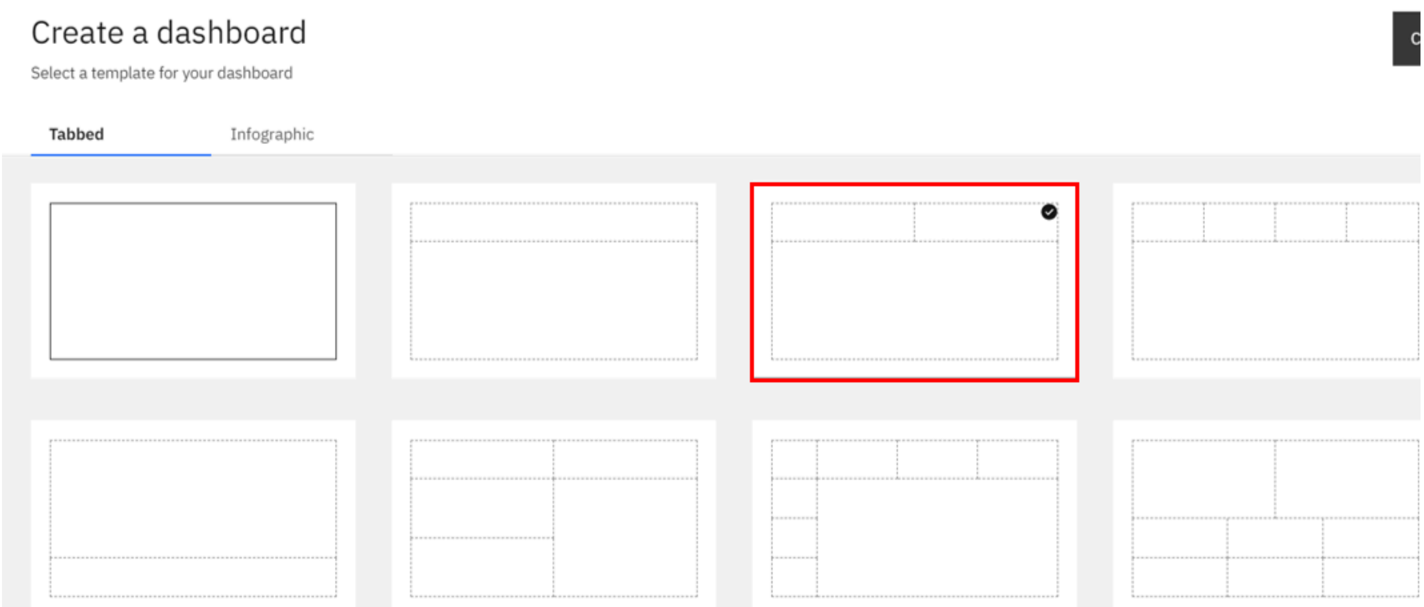
In this task, you will learn how to start a new dashboard with templates.

1. In the IBM Cognos Analytics main menu, click **Recent**, select the uploaded data file **CustomerLoyaltyProgram.csv**.
2. In the blue menu bar, click **Create** and then click **Create dashboard**.

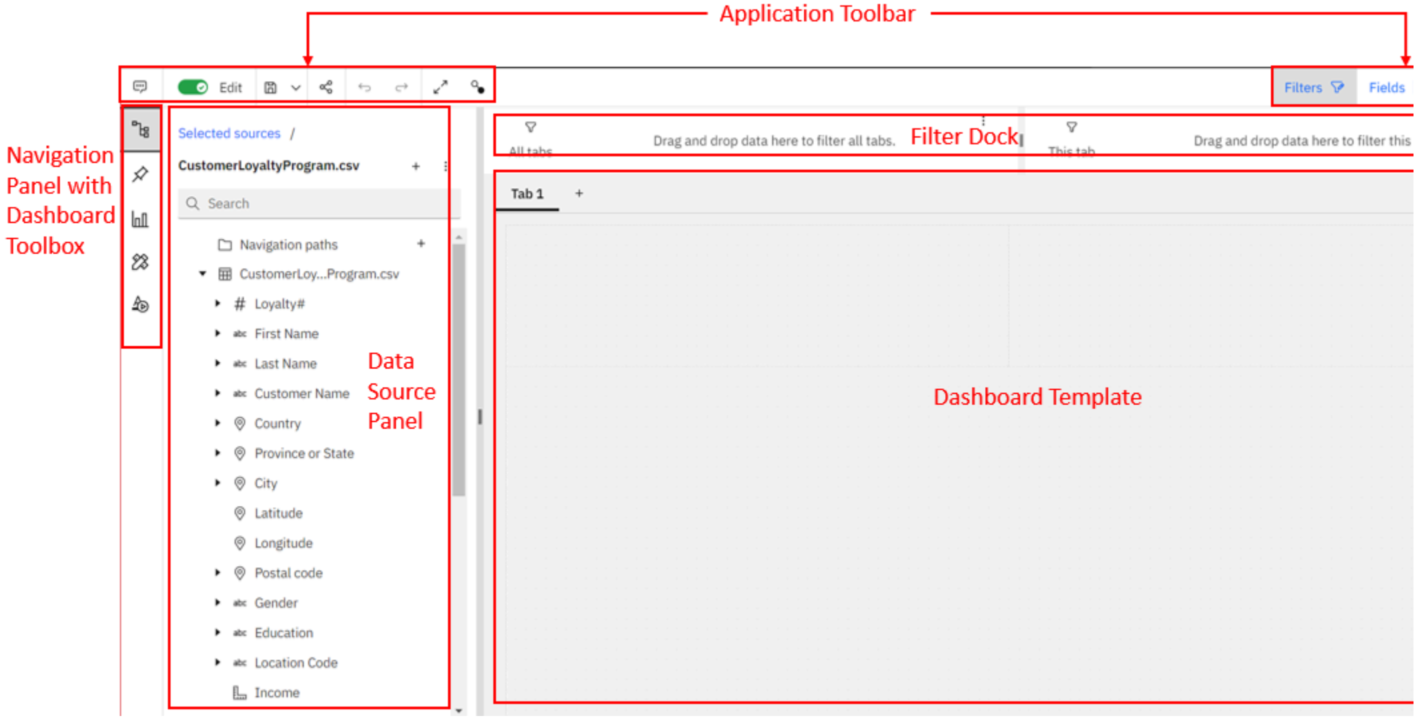


The *Create a dashboard* window will display, allowing you to select the type of dashboard and the template style.

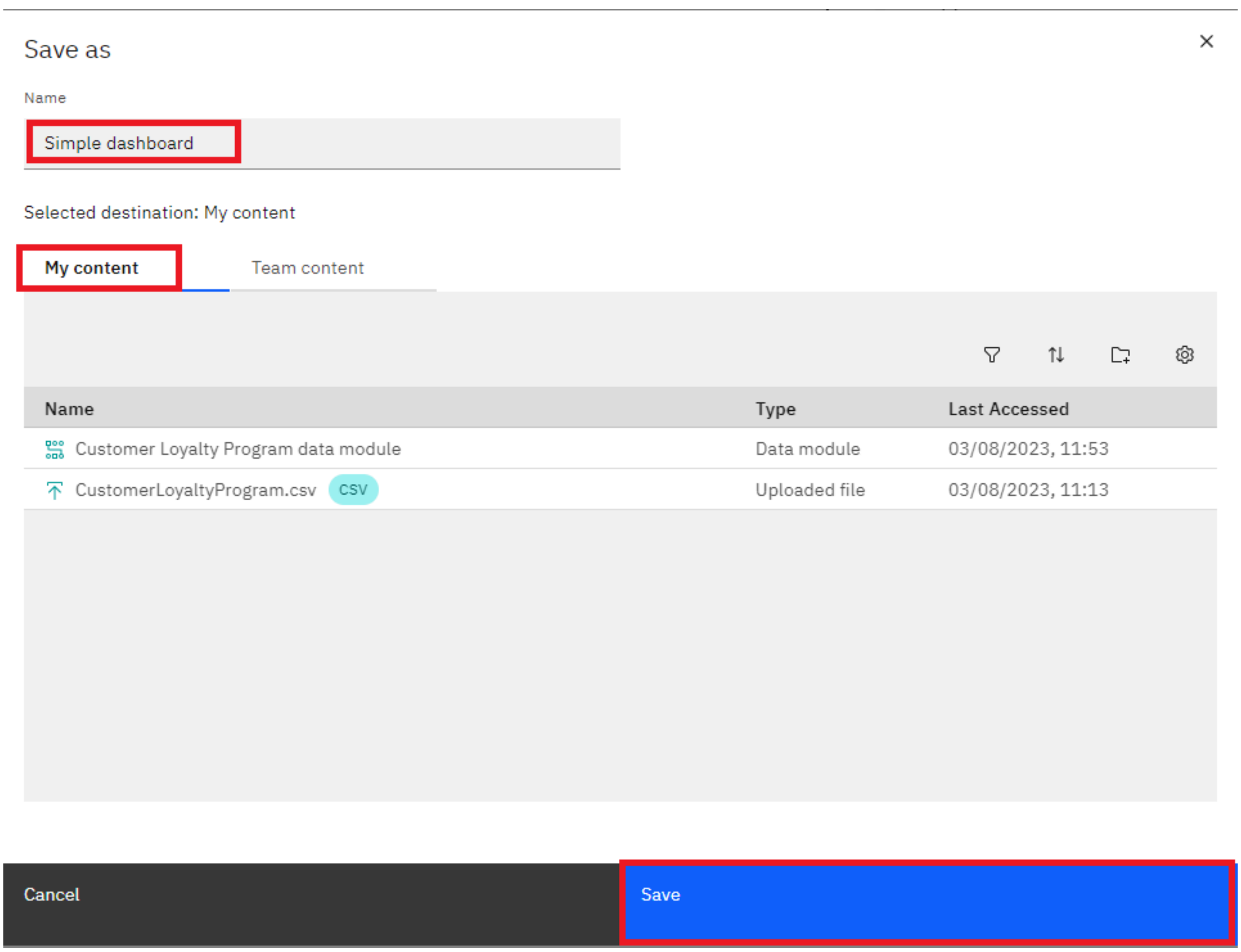
3. Select the **Tabbed** dashboard style. This will allow you to have multiple pages for your dashboards.
4. Select the *three-panel template*, which should be the third one displayed, and then click **Create**.



5. Now, you have created a new dashboard using a dashboard template.



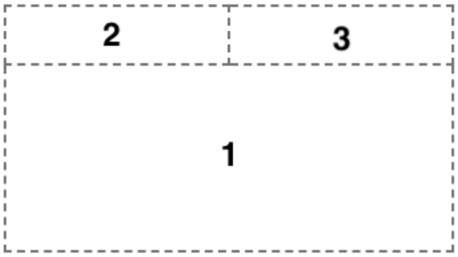
6. To save the newly created dashboard, click the **Save** icon in the toolbar or press **CTRL+S**.
7. Select **My content** as the destination. In the **Name** field, enter *Simple dashboard*, and click **Save**.



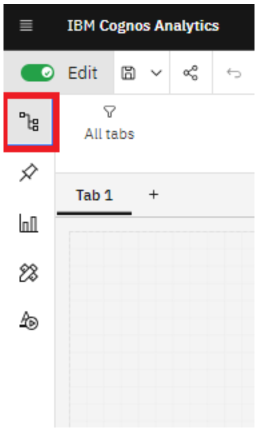
Task D: Create a Simple Dashboard

In this task, you will learn how to create a simple dashboard with Cognos Analytics.

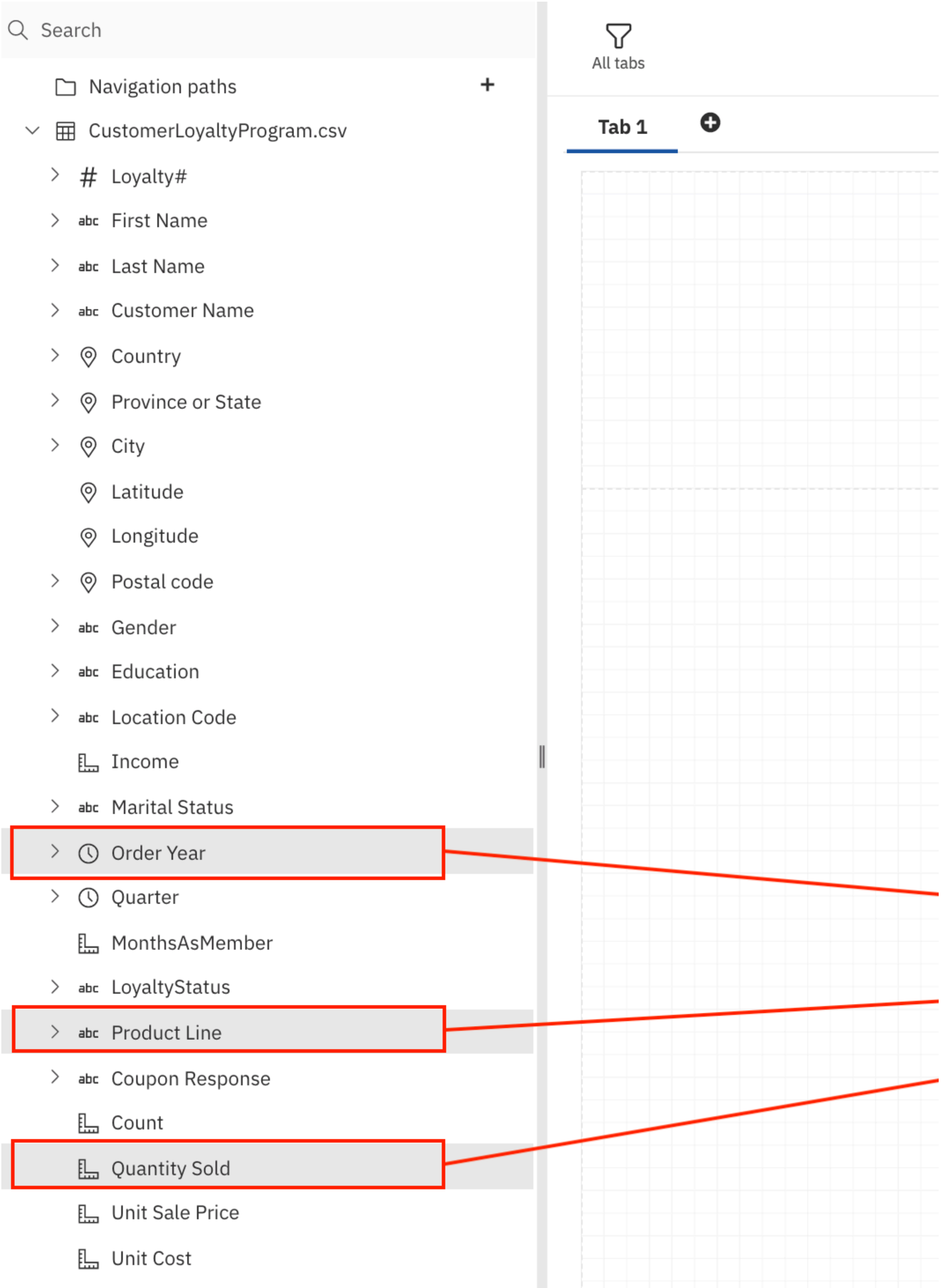
1. As you build the dashboard, the location placement for Widgets in the dashboard template will be referenced using the following panel numbers.



2. From the **Navigation** panel, select **Sources** to open the data source panel if it is not already open. The data source panel displays the uploaded file **CustomerLoyaltyProgram.csv** as the *selected source*.

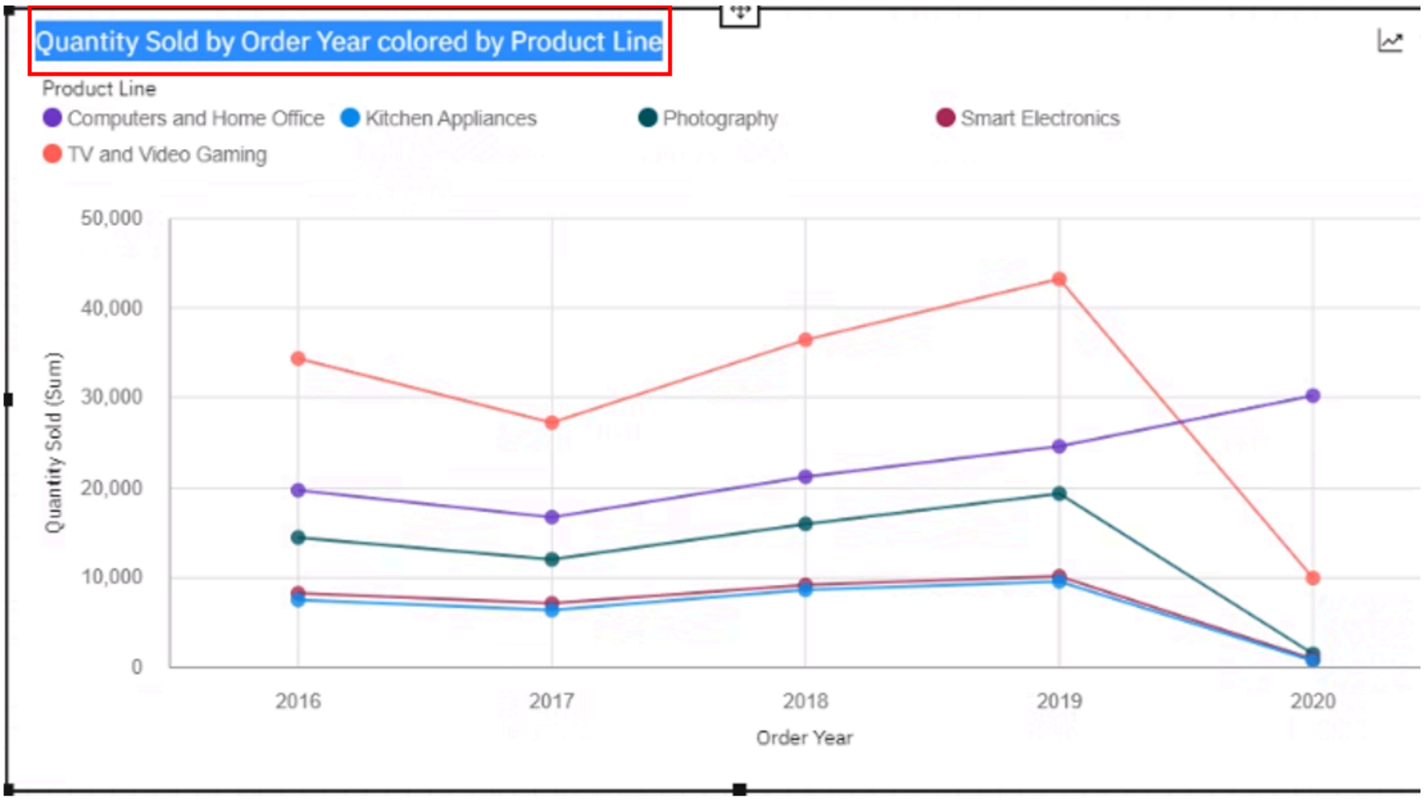


3. From the data source panel, press the **CTRL** key and select **Order Year**, **Quantity Sold**, and **Product Line**, and drag them to the center of **Panel 1**, releasing them once you see the drop zone square turn blue.

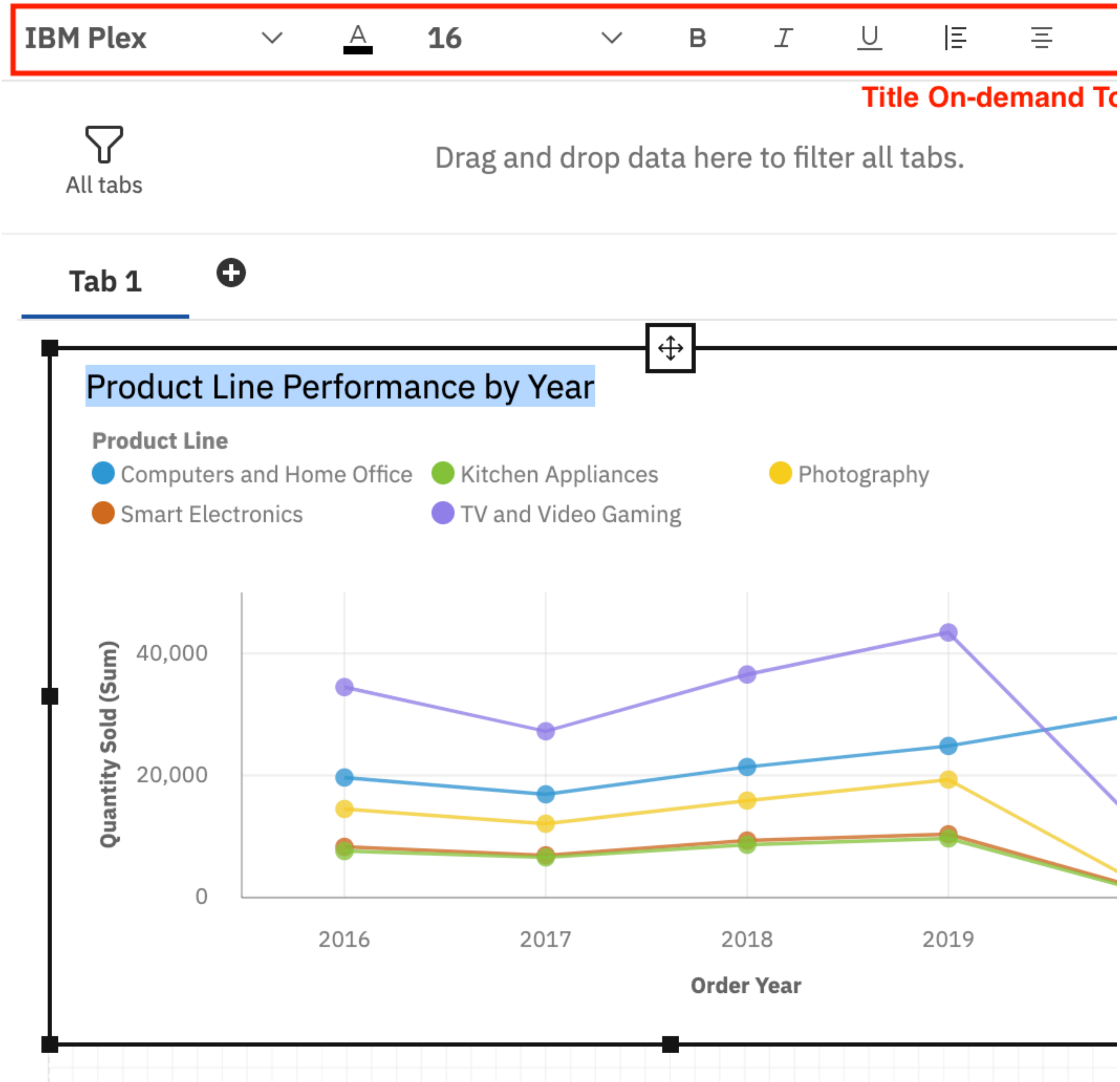

Search
Navigation paths
CustomerLoyaltyProgram.csv
Loyalty#
First Name
Last Name
Customer Name
Country
Province or State
City
Latitude
Longitude
Postal code
Gender
Education
Location Code
Income
Marital Status
Order Year
Quarter
MonthsAsMember
LoyaltyStatus
Product Line
Coupon Response
Count
Quantity Sold
Unit Sale Price
Unit Cost
All tabs
Tab 1

4. Click the line chart in **Panel 1** to bring it into focus and open the on-demand toolbar, which will be added to the main toolbar.

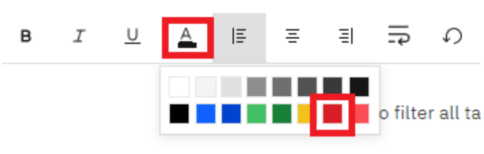
5. In the line chart visualization, select the title text and change it to *Product Line Performance by Year*.



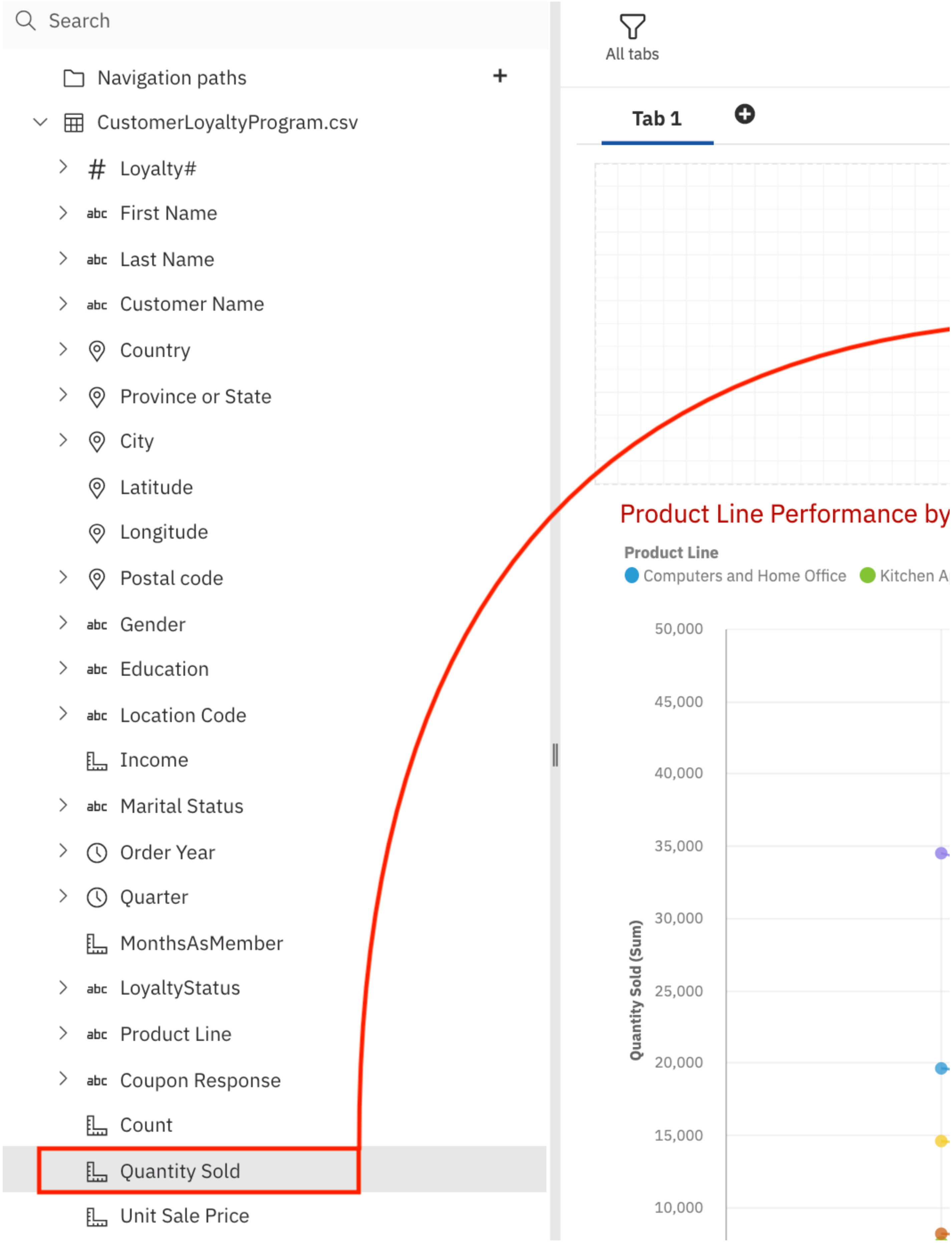
6. Highlight the title text and use the on-demand toolbar to change the properties of the title.



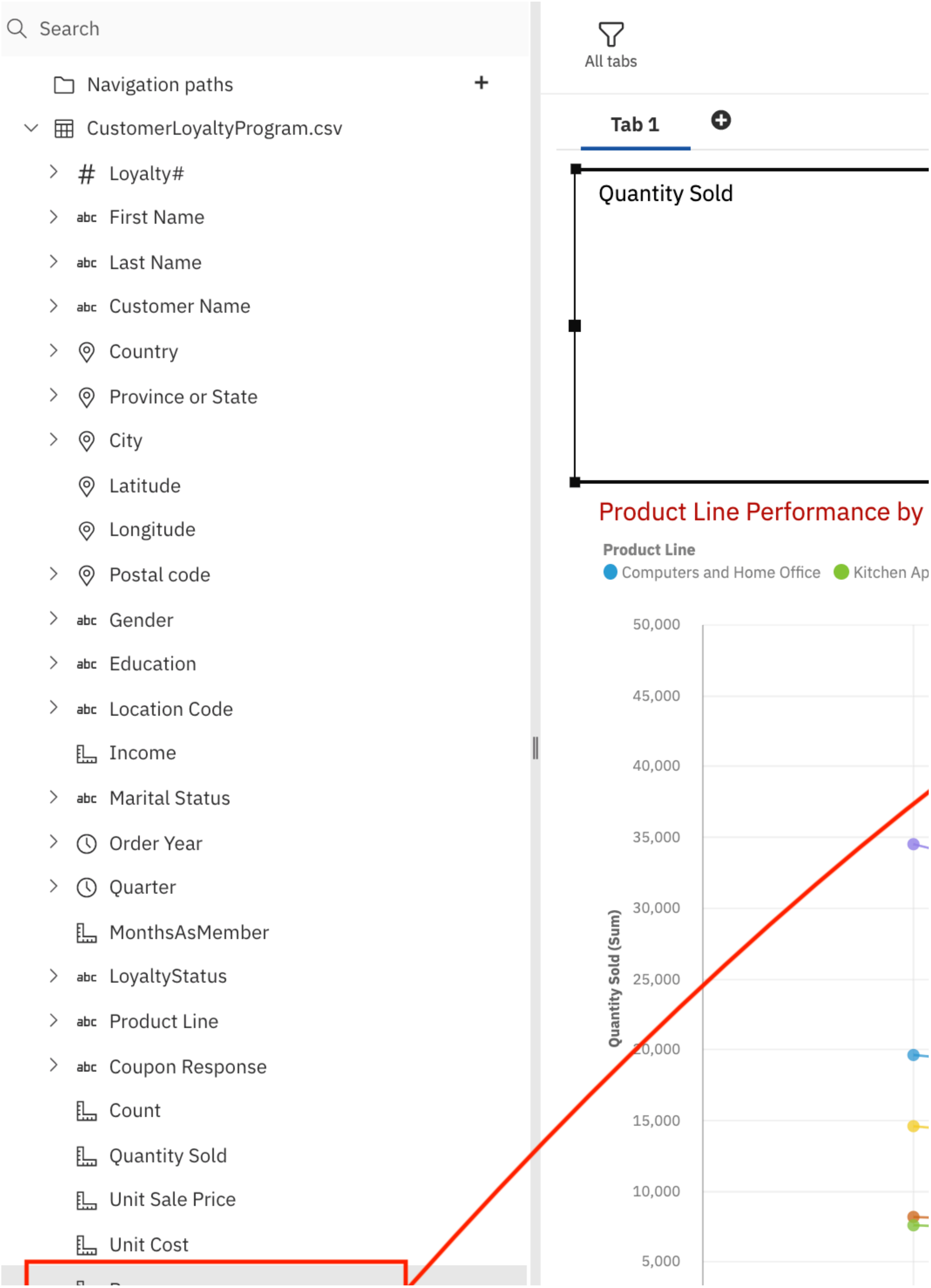
7. Click the **Color picker** icon, and change the color to **Red**, then click the font size drop-down menu and choose **18**.

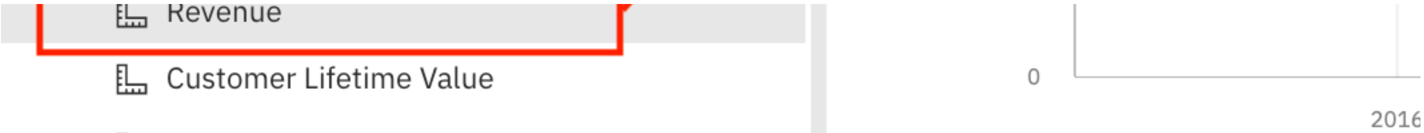


8. From the data source panel, select **Quantity Sold** and drag it to the center of **Panel 2**, releasing it once you see the drop zone square turn blue.

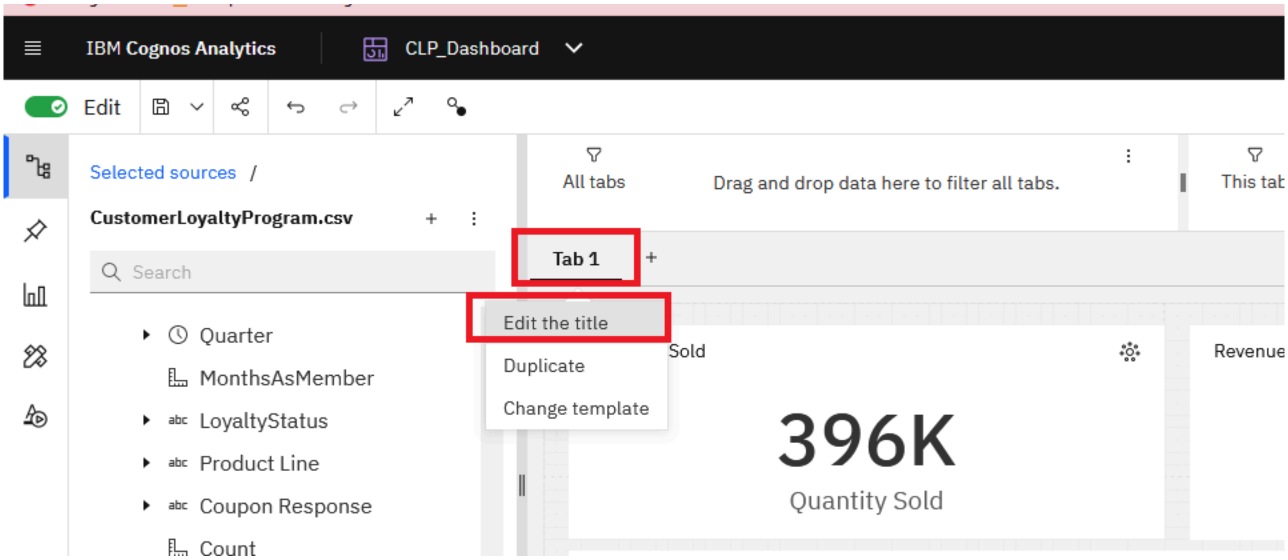


9. From the data source panel, select **Revenue** and drag it to the center of **Panel 3**, releasing it once you see the drop zone square turn blue.

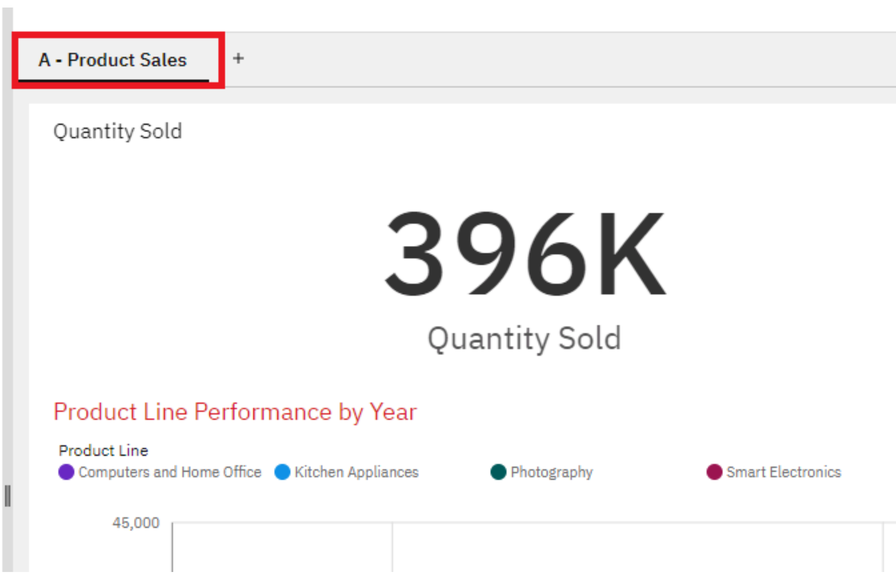

Search
Navigation paths
CustomerLoyaltyProgram.csv
Loyalty#
First Name
Last Name
Customer Name
Country
Province or State
City
Latitude
Longitude
Postal code
Gender
Education
Location Code
Income
Marital Status
Order Year
Quarter
MonthsAsMember
LoyaltyStatus
Product Line
Coupon Response
Count
Quantity Sold
Unit Sale Price
Unit Cost
All tabs
Tab 1
Quantity Sold
Product Line Performance by
Product Line
Computers and Home Office
Kitchen Ap
Quantity Sold (Sum)
50,000
45,000
40,000
35,000
30,000
25,000
20,000
15,000
10,000
5,000



10. Click the tab name **Tab 1** and in the mini-menu select **Edit the title**.

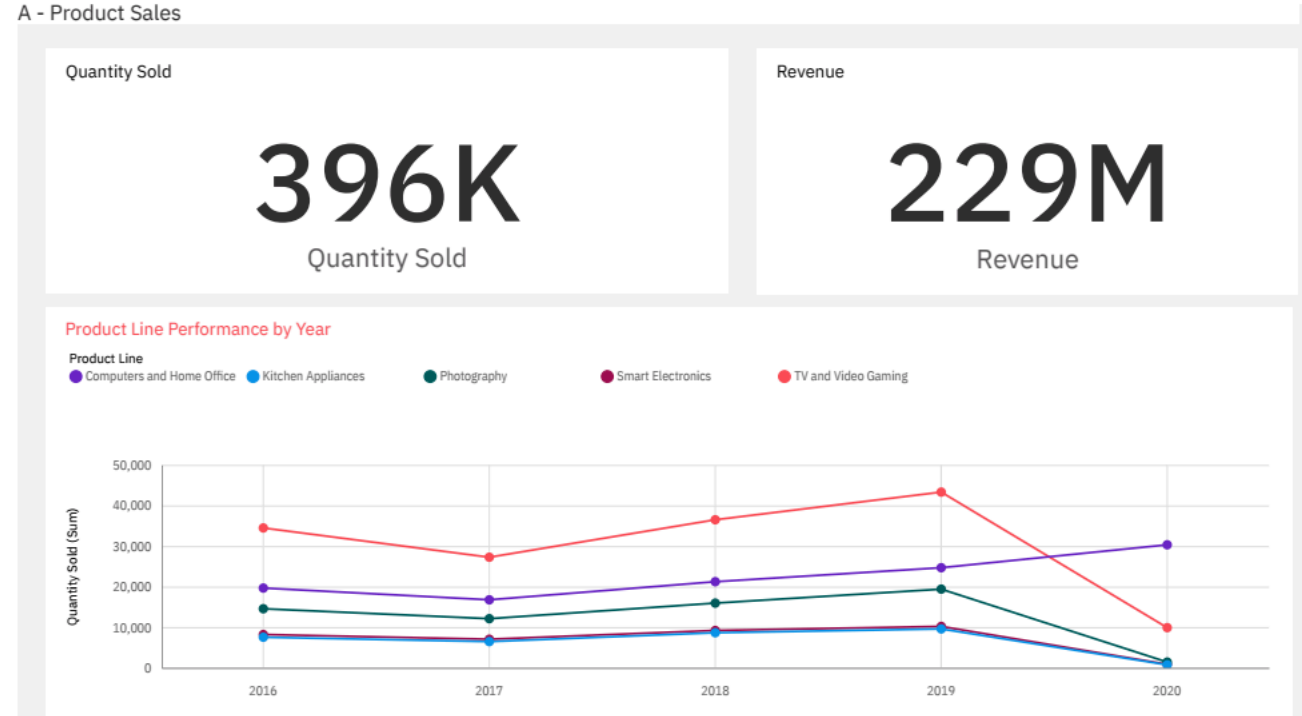


11. Rename the tab to **A - Product Sales**.



12. To save the current state of your dashboard, click the **Save** icon in the toolbar or press **CTRL+S**.

Your completed dashboard **A- Product Sales** should look similar to the image below:



Congratulations! You have completed this lab, and you are ready for the next topic.

Author(s)

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Other Contributor(s)

- [Steve Ryan]
- [Dr. Pooja]