



Hands-on Lab: Analyzing Data With Cognos Analytics

Estimated time needed: 20 minutes

Purpose of the Lab:

This advanced Cognos Analytics lab is designed to provide hands-on experience in utilizing more sophisticated features of the Cognos Analytics dashboard. It aims to teach you how to initiate new dashboards, create complex calculations, manage data visualization more effectively, and apply advanced analytical techniques like top/bottom settings, navigation paths, and data filtering within a dashboard. The exercises are tailored to impart practical knowledge in handling and visualizing data in multifaceted ways, enabling a more detailed and nuanced exploration of datasets.

Benefits of Learning the Lab:

Learning this lab offers significant advantages, especially for individuals looking to deepen their understanding of business intelligence tools and data visualization. The skills acquired are valuable for:

Enhanced Data Analysis Capabilities: Understanding how to manipulate and filter data, create meaningful calculations, and navigate through complex datasets allows for more insightful data analysis.

Improved Decision Making: With the ability to create detailed and interactive dashboards, you can present data in ways that support better business decisions.

Advanced Visualization Skills: Knowing how to leverage Cognos Analytics' advanced features, such as keeping/excluding data points and setting top/bottom visualizations, enhances your ability to present data in a more compelling and informative manner.

Increased Efficiency: The ability to create navigation paths within dashboards saves time and improves the user experience, making data exploration more intuitive and less time-consuming.

Professional Development: These advanced skills are highly sought after in many roles involving data analysis, business intelligence, and information management, thus adding significant value to one's professional profile.

Overall, this lab provides an excellent opportunity to master advanced features of Cognos Analytics, making it a worthwhile investment for anyone aiming to excel in data-driven environments.

Objective for Exercise:

- To create a dashboard with Billing data using IBM Cognos Analytics and analyze the regionwise spend.

Note: Click on the [data link](#). Right-click and choose **Save AS....** Save the file in your local system as *Billing-data.csv*.

Task 1 - Connect to IBM Cognos Analytics.

1. Go to [IBM Cognos Analytics](#), login with your IBM Cloud credentials and launch Data visualization.

Products

A screenshot of the IBM Cloud interface under the "Products" section. It shows two offerings: "Coursera on-line training - Data Visualizations" and "IBM Cloud". Each offering has a thumbnail icon, a title, a status indicator (Active), an expiration date, and two buttons: "Launch" and "Manage". The "Launch" button for the Coursera offering is highlighted with a red border.

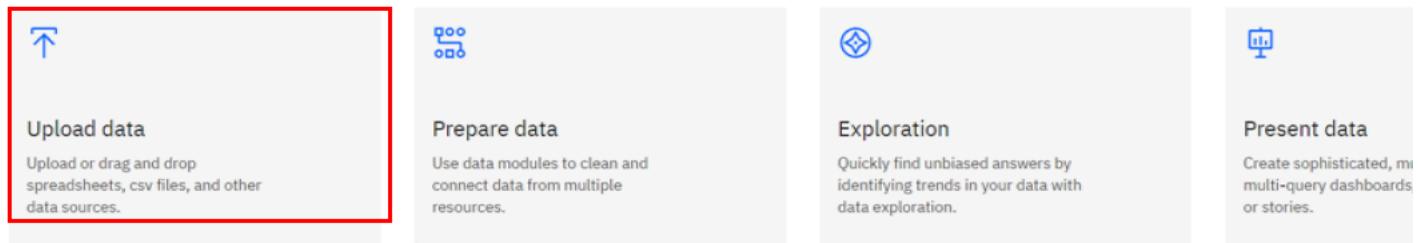
2. Choose the **Upload data** option and select the *Billing_data.csv* stored in your system.

IBM Cognos Analytics with Watson

14 Search content

Maintenance Due to changes that happened on the last system upgrade on, March 31th 2022, there was changes to the IP address for allowlist for cloud based datasources. Please open a ticket with us.

^ Quick launch



3. If the data is loaded successfully it shows a successfully loaded.

IBM Cognos Analytics with Watson

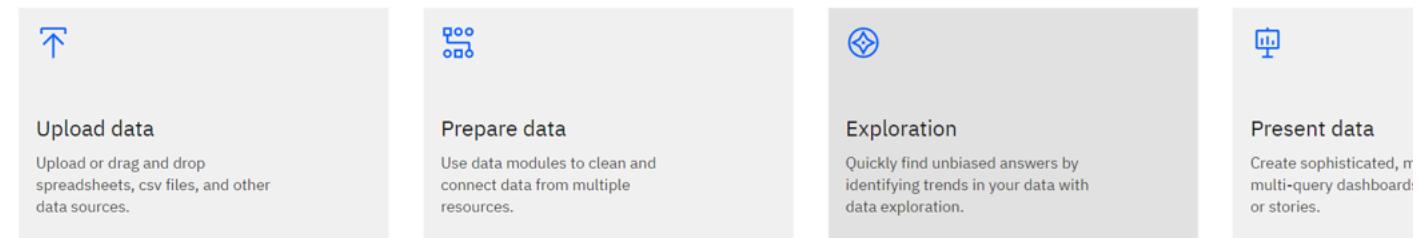
You can get started right away by taking a look at our Started tab.

Billing_data.csv was uploaded successfully. Hide Details

Watch video Take a product tour

The screenshot shows a success message 'Billing_data.csv was uploaded successfully.' displayed prominently in a green bar above the navigation buttons. A red box highlights this message. The rest of the interface is dark-themed with a 3D cube visualization.

^ Quick launch



4. Go to **Recent** and right Click on **Billing_data.csv** and click on create dashboard.

Upload data

Upload or drag and drop spreadsheets, csv files, and other data sources.

Prepare data

Use data modules to clean and connect data from multiple resources.

Exploration

Quickly find unbiased answers by identifying trends in your data with data exploration.

Present data

Create sophisticated, multi-query dashboard or stories.

Get started Recent

1 item selected

Billing_data.csv

Last Accessed 08/04/2022, 04:17 CSV

Create exploration

Create dashboard

Create data module

Replace file

Append file

Share

Copy or move to

Add shortcut

Edit name and description

Properties

Details

Remove from recent

More + Create Remove from recent

5. Choose to a dashboard and Click on **Create**.

IBM Cognos Analytics with Watson

Create dashboard

Create a dashboard

Select a template for your dashboard

Tabbed Infographic

Cancel

Task 2 - Visualization

You will now see the table listed on the left panel with all the attributes.

1. Drag and drop the **Billed Amount** on the template.

The screenshot shows the IBM Cognos Analytics with Watson interface. On the left, the 'Selected sources' panel displays a tree structure for 'Billing_data.csv' with nodes for 'customerid', 'category', 'country', 'industry', 'month', and 'billedamount'. A blue box highlights the 'billedamount' node. On the right, a tab labeled 'Tab 1' is open, showing a single text element 'billedamount' enclosed in a blue box.

2. The total billed amount will now appear on the Dashboard. The size and position can be adjusted as per requirement and the text display can be edited and formatted by double-clicking on it.

The screenshot shows a dashboard titled 'Summary'. The left sidebar shows the same 'Selected sources' tree as before. The main area contains a large text element '1.32B' with the word 'billedamount' repeated above and below it. The text is enclosed in a rectangular frame with handles for resizing. The top of the frame has the label 'billedamount'. The bottom of the frame has the label 'billedamount'. The entire text element is highlighted with a blue box.

3. Drag and drop **Billed Amount** and **Industry** onto the dashboard as shown in the following image. With this, we can visualize the build amount per industry.

IBM Cognos Analytics with Watson

* New dashboard

14

Search content

Filters

Selected sources /

Billing_data.csv

All tabs

Drag and drop data here to filter all tabs.

This tab

Drag and drop data here

Navigation paths

- Billing_data.csv
 - customerid
 - category
 - country
 - industry**
 - month

billedamount

Tab 1

billedamount

1.32B

billedamount

billedamount

industry

IBM Cognos Analytics with Watson

* New dashboard

Column

Selected sources /

Billing_data.csv

Tab 1

billedamount

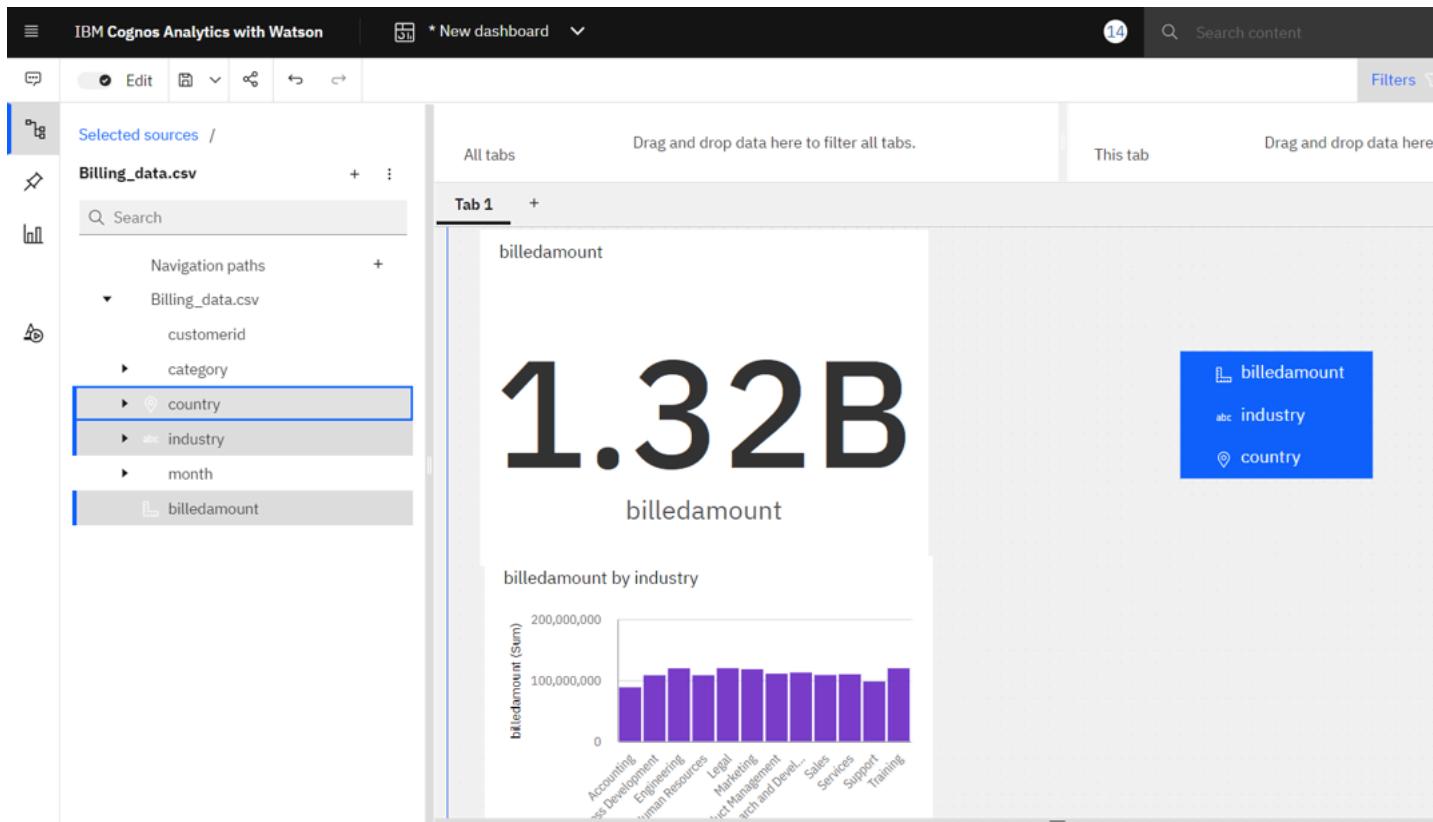
1.32B

billedamount

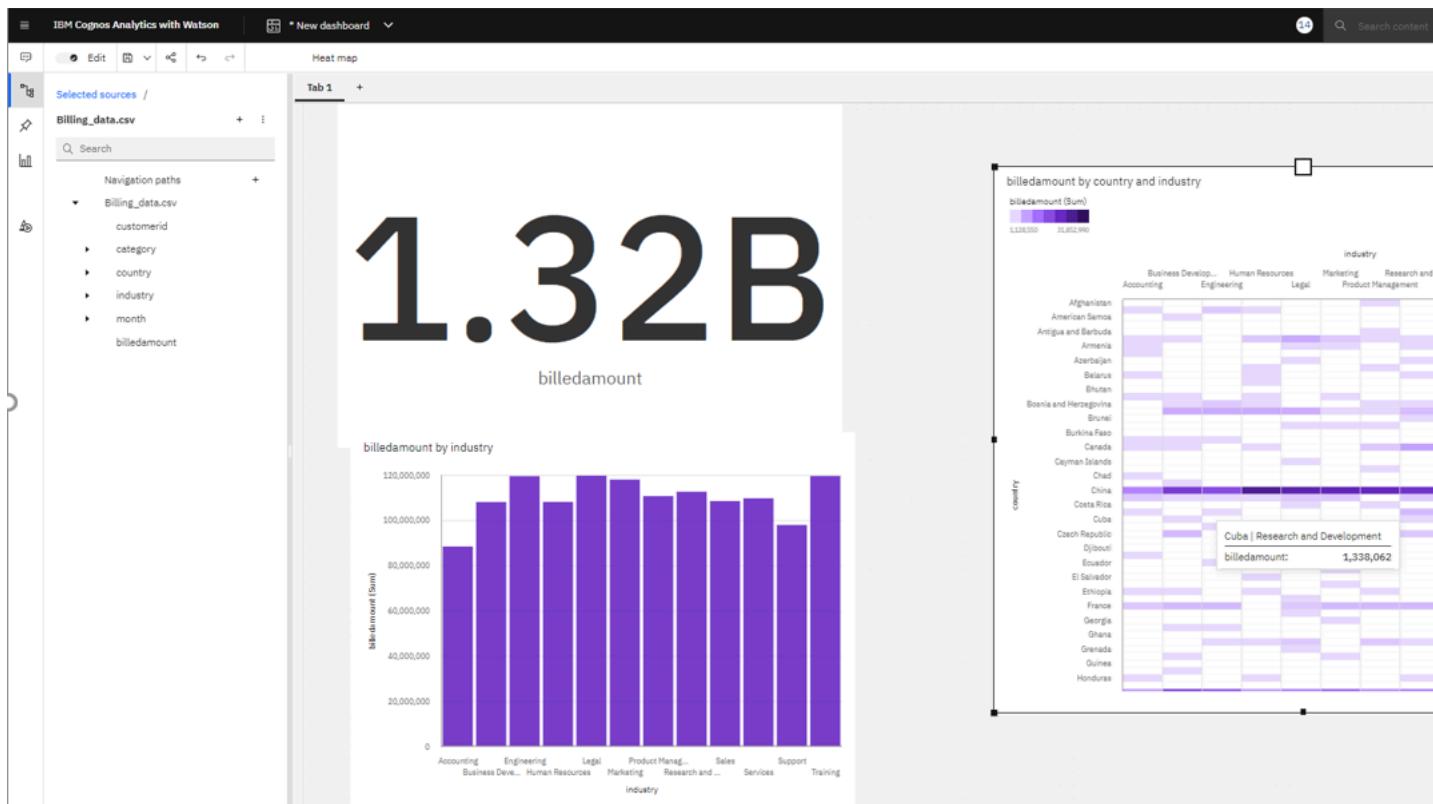
billedamount by industry

Industry	Billed Amount (USD)
Accounting	85,000,000
Business Dev...	105,000,000
Engineering	120,000,000
Human Resources	100,000,000
Legal	120,000,000
Marketing	110,000,000
Product Manage...	105,000,000
Research and...	110,000,000
Sales	105,000,000
Services	110,000,000
Support	95,000,000

- Drag and drop **Billed Amount, Country and Industry** onto the dashboard as shown in the following image. This will generate a heat map of spending by country and by industry.



5. The finished dashboard will appear as in the following image.



6. Optionally, try to change the properties and settings to see how the dashboard changes. You can also observe the billed amount changing as you click on a region on the heat map or the bar graph.

Credits

Author(s)

[Niveditha Pandith](#)

© IBM Corporation 2023. All rights reserved.