

# Option A - Building a dashboard with IBM Cognos Analytics

**Estimated time needed:** 45 minutes

In this assignment, you will create some visualizations and add them to dashboards using IBM Cognos Analytics.

## Software Used in this Assignment

In this assignment, you will use the free trial version of IBM Cognos Analytics Tool.

## Prerequisites

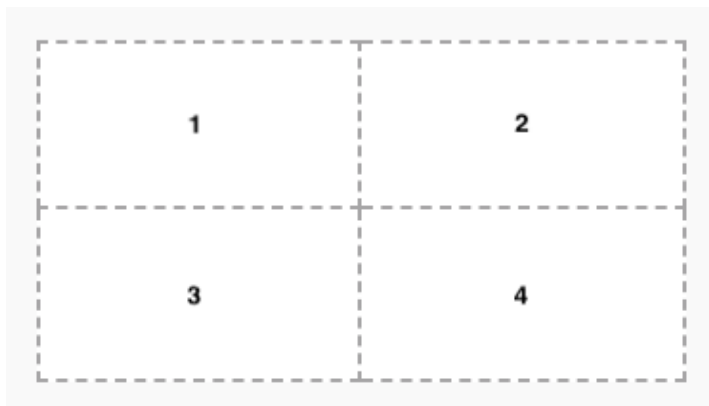
You need access to Cognos Analytics. This [Cognos lab](#) will guide to get your access to Cognos Analytics, and also get you started with how to use it to analyze the data.

## Dataset Used in this Assignment

The dataset you are going to use in this assignment comes from the following source: [link](#)

## Guidelines for the Submission

1. Get the files: "survey\_data\_updated.csv" from the downloaded folder and upload it as data assets to your project Cognos Analytics.
2. Create 3 dashboards (**3 separate tabs under a single dashboard**) as follows:
  - o One dashboard using the 2 x 2 rectangle areas tabbed template - rename this dashboard tab to **Current Technology Usage**.
  - o One dashboard using the 2 x 2 rectangle areas tabbed template - rename this dashboard tab to **Future Technology Trend**.
  - o One dashboard using the 2 x 2 rectangle areas tabbed template - rename this dashboard tab to **Demographics**.



3. On the **Current Technology Usage** dashboard tab, use the data asset **survey\_data\_updated.csv** and capture the following metrics as visualizations:
  - o In the first rectangle (**Panel 1**):
    - Capture **Top 10 LanguageHaveWorkedWith**.
    - Visualize as a **Bar chart**.
    - Utilize **Bars, Length, Color** fields of Bar chart.
    - Include **Show value labels** feature.
    - Include a proper **Chart title**.
  - o In the second rectangle (**Panel 2**):
    - Capture **Top 10 DatabaseHaveWorkedWith**.
    - Visualize as a **Column chart**.
    - Utilize **Bars, Length, Color** fields of Column chart.
    - Include **Show value labels** feature.
    - Include a proper **Chart title**.
  - o In the third rectangle (**Panel 3**):
    - Capture **Top 10 PlatformHaveWorkedWith**.
    - Visualize as a **Word cloud chart**.
    - Utilize **Words, Size, Color** fields of Word cloud chart.
    - Include a proper **Chart title**.
  - o In the fourth rectangle (**Panel 4**):
    - Capture **Top 10 WebFrameHaveWorkedWith**.
    - Visualize as a **Hierarchy bubble chart**.
    - Utilize **Bubbles, Size, Color** fields of Hierarchy bubble chart.
    - Include a proper **Chart title**.

4. On the **Future Technology Trend** dashboard tab, use the data asset **survey\_data\_updated.csv** and capture the following metrics as visualizations:

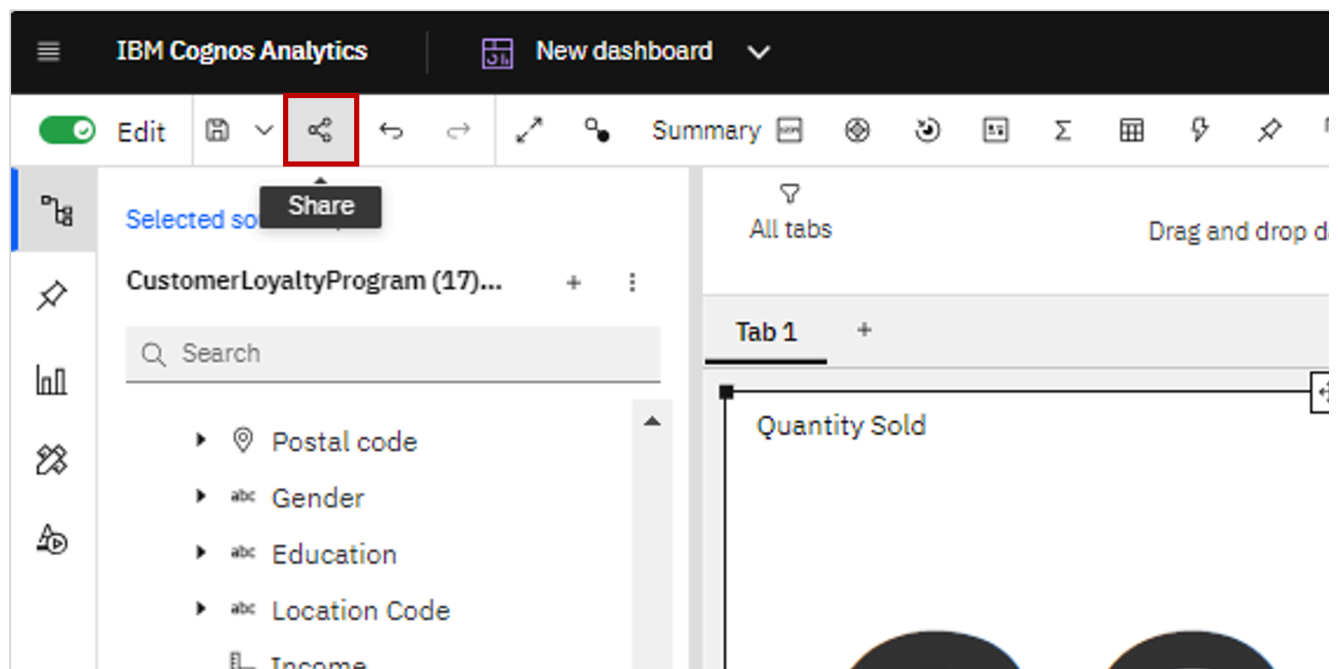
- In the first rectangle (**Panel 1**):
  - Capture **Top 10 LanguageWantToWorkWith**.
  - Visualize as a **Bar chart**.
  - Utilize **Bars, Length, Color** fields of Bar chart.
  - Include **Show value labels** feature.
  - Include a proper **Chart title**.
- In the second rectangle (**Panel 2**):
  - Capture **Top 10 DatabaseWantToWorkWith**.
  - Visualize as a **Column chart**.
  - Utilize **Bars, Length, Color** fields of Column chart.
  - Include **Show value labels** feature.
  - Include a proper **Chart title**.
- In the third rectangle (**Panel 3**):
  - capture **Top 10 PlatformWantToWorkWith**.
  - Visualize as a **Tree map chart**.
  - Utilize **Area hierarchy, Size, Heat** fields of Tree map chart.
  - Include **Contrast label color** feature.
  - Include a proper **Chart title**.
- In the fourth rectangle (**Panel 4**):
  - Capture **Top 10 WebframeWantToWorkWith**.
  - Visualize as a **Hierarchy bubble chart**.
  - Utilize **Bubbles, Size, Color** fields of Hierarchy bubble chart.
  - Include a proper **Chart title**.

5. On the **Demographics** dashboard tab, use the data asset **survey\_data\_updated.csv** and capture the following metrics as visualizations:

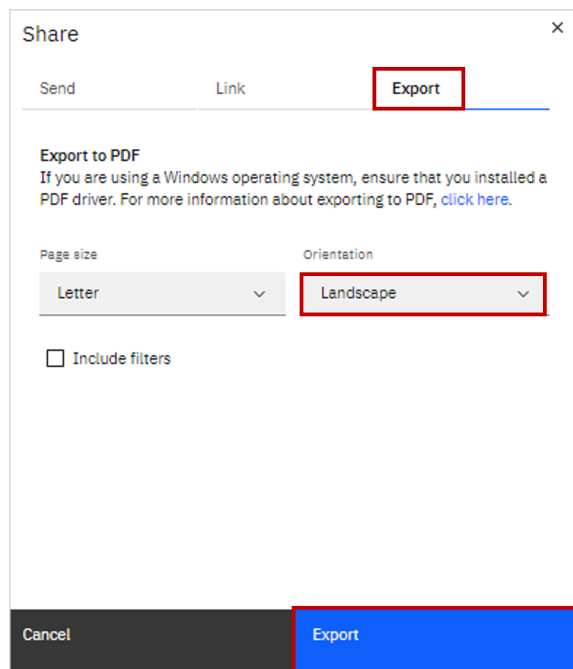
- In the first rectangle (**Panel 1**):
  - Capture **Respondent distribution by Age**.
  - Visualize as a **Pie chart**.
  - Utilize **Segments, Size** fields of Pie chart.
  - Include **Display %** feature.
  - Include a proper **Chart title**.
- In the second rectangle (**Panel 2**):
  - Capture **Respondent Count by Country**.
  - Visualize as a **Map chart**.
  - Utilize **Regions-Locations, Regions-Location color** fields of Map chart.
  - Include a proper **Chart title**.
- In the third rectangle (**Panel 3**):
  - Capture **Respondent distribution by Formal Education Level**.
  - Visualize as a **Line chart**.
  - Utilize **x-axis, y-axis** fields of Line chart.
  - Include **Show value labels** feature.
  - Include **Show markers** feature.
  - Include a proper **Chart title**.
- In the fourth rectangle (**Panel 4**):
  - Capture **Respondent Count by Age, classified by Education Level**.
  - Visualize as a **Stacked bar chart**.
  - Utilize **Bars, Length, Color** fields of Stacked bar chart.
  - Include **Show value labels** feature.
  - Include a proper **Chart title**.

6. To generate the GitHub link for the dashboard, please follow the instructions provided below:

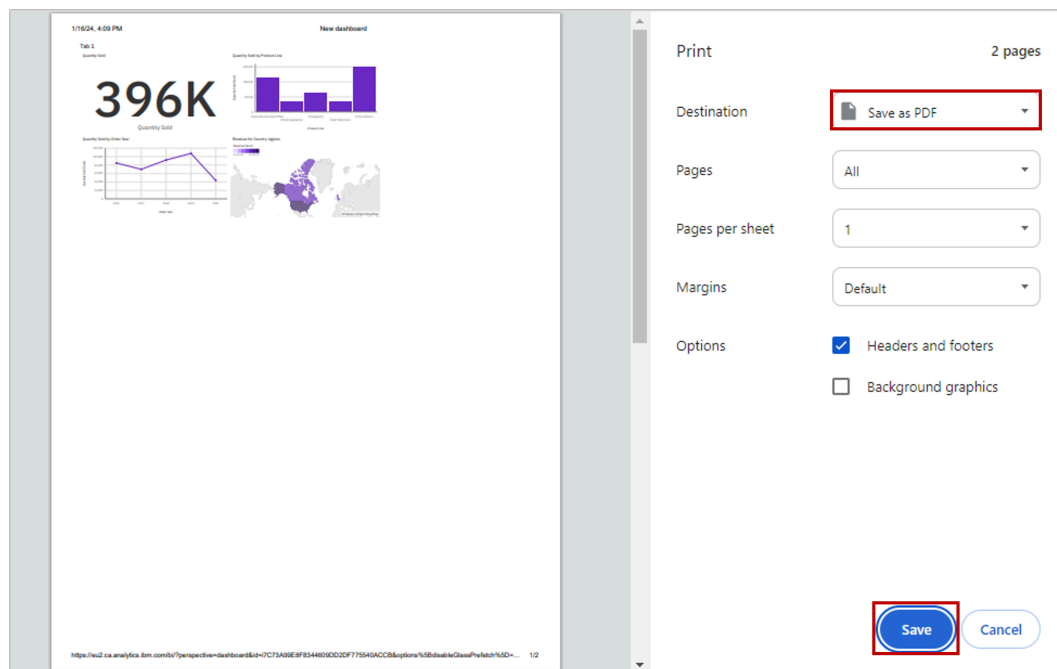
- On the application toolbar of your **dashboard page**, click **Share** icon.



- Navigate to the **Export** tab, choose **Landscape** orientation, and click the **Export** button.



- To save your dashboard as PDF, select Destination as **Save as PDF**, and click **Save**.



- Later, take screenshots of your dashboard.

## Grading Information

For your assignment to be graded in a subsequent step in this module, you will be required to submit the permanent link to a read-only view of the dashboard you got in Task 6.

The main grading criteria will be:

- Have you downloaded the image of your dashboard that needs to be attached to the presentation?
- Have the correct tabs been created?
- Have you created the required number of visualizations for each tab of the dashboard?
- Have you captured the correct metrics, chart types, chart features and titles for each visualization?
- Are the results correct?

You will not be judged on:

- Your English language, including spelling or grammatical mistakes.

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