

ASSIGNMENT-2

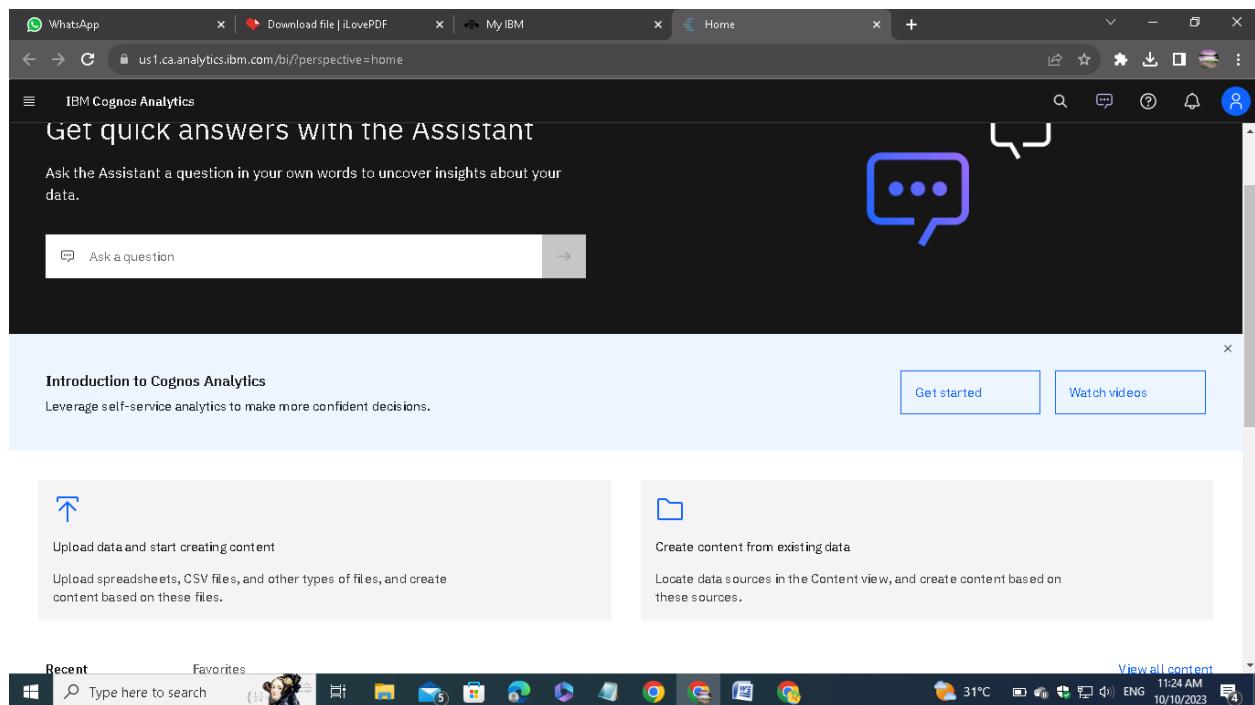
The Cognos HR Scorecard: Measuring Success in Talent Management

Name: Suryapraba V

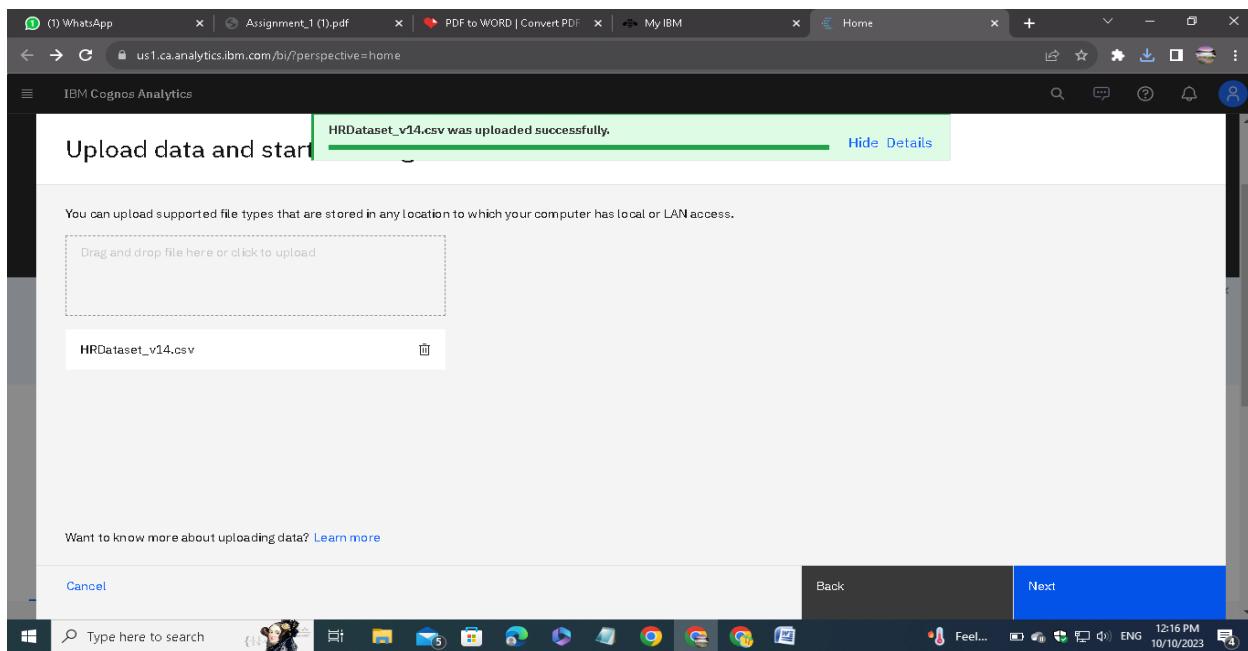
NM ID: au611220104159

Task 1: Creating Dashboard

Step 1: Uploading the dataset



Open IBM Cognos Analytics. Then choose upload data.

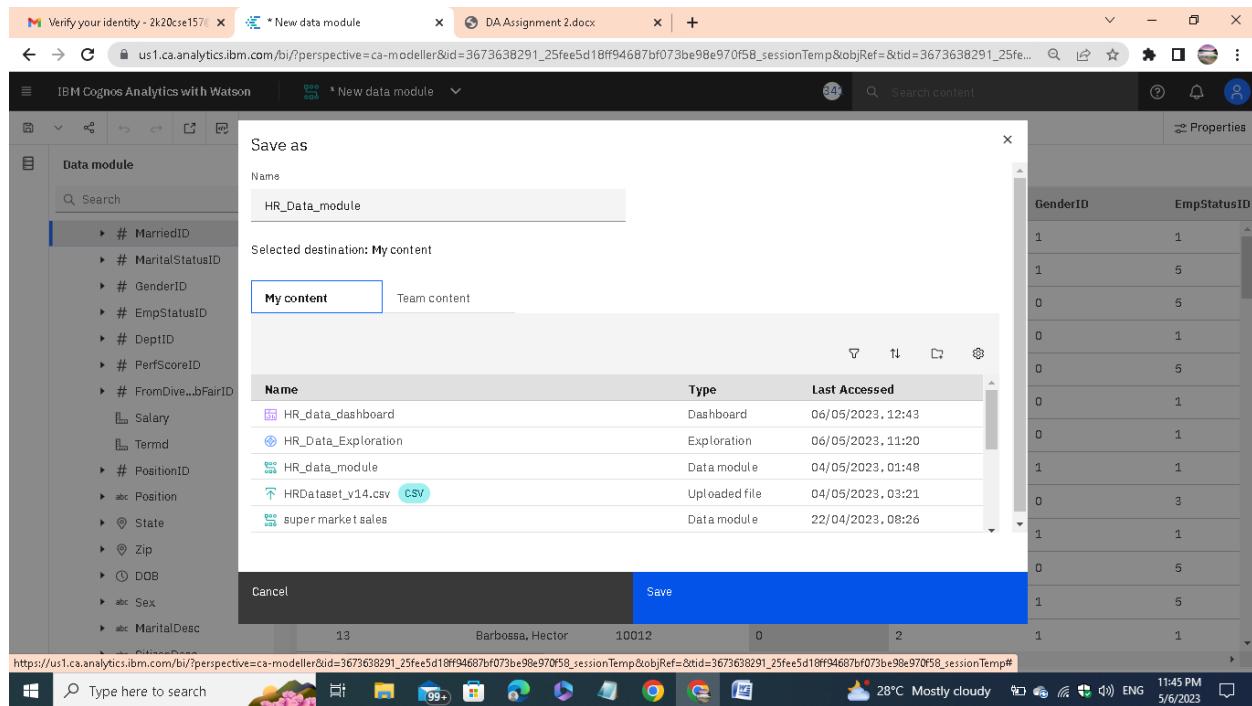


Upload the CSV data file which we downloaded from the given link on the assignment.

Step 2: Preparing the dataset

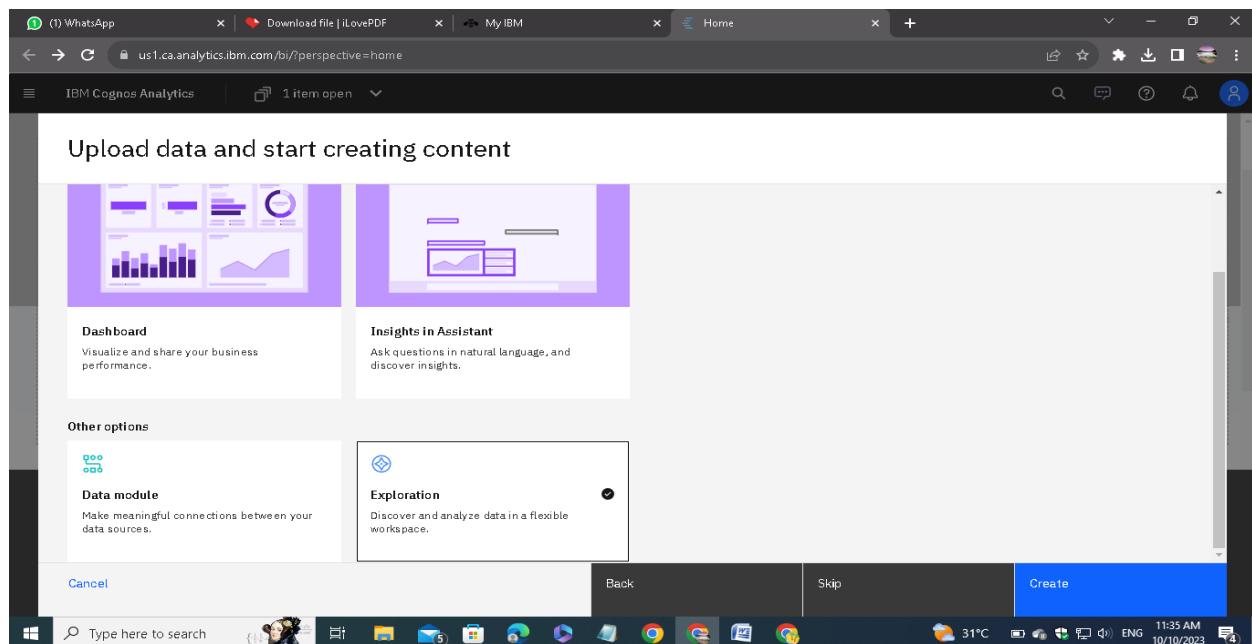
A screenshot of the IBM Cognos Analytics interface showing the "Data module" screen. On the left, there is a sidebar with various data source icons. The main area shows a grid of employee data with columns: Row Id, Employee_Name, EmpID, StatusID, GenderID, and EmpStatusID. A context menu is open over the last three columns, listing options like "Filter...", "Create calculation...", "Create data group...", "Create navigation path...", "Hide from users", "Remove", "Format data...", "Clean...", "Sort descending", "Sort ascending", and "Properties". The status bar at the bottom indicates the date as 5/6/2023 and the time as 11:45 PM.

Remove the unnecessary columns and check for the missing values. In my case, there are no missing cases.



After removing, save the new data module in a required name.

Step 3: Exploring the dataset

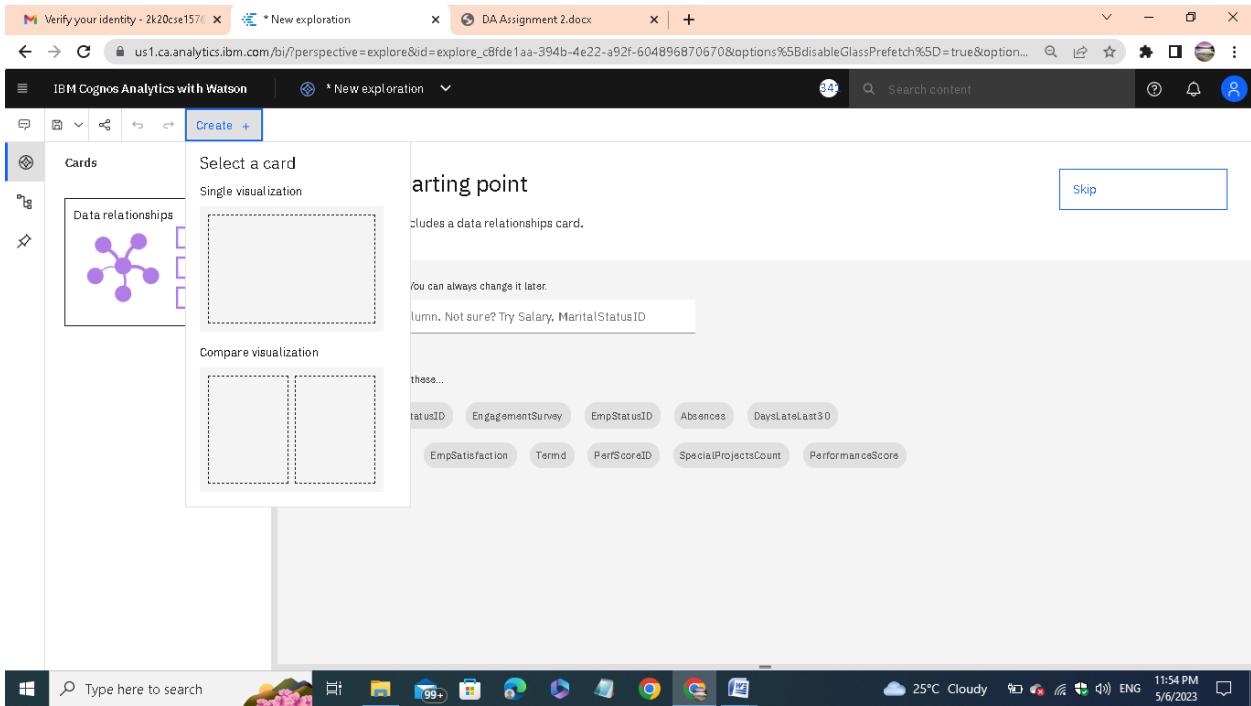


Go to Exploration given in the menu and open the saved data module.

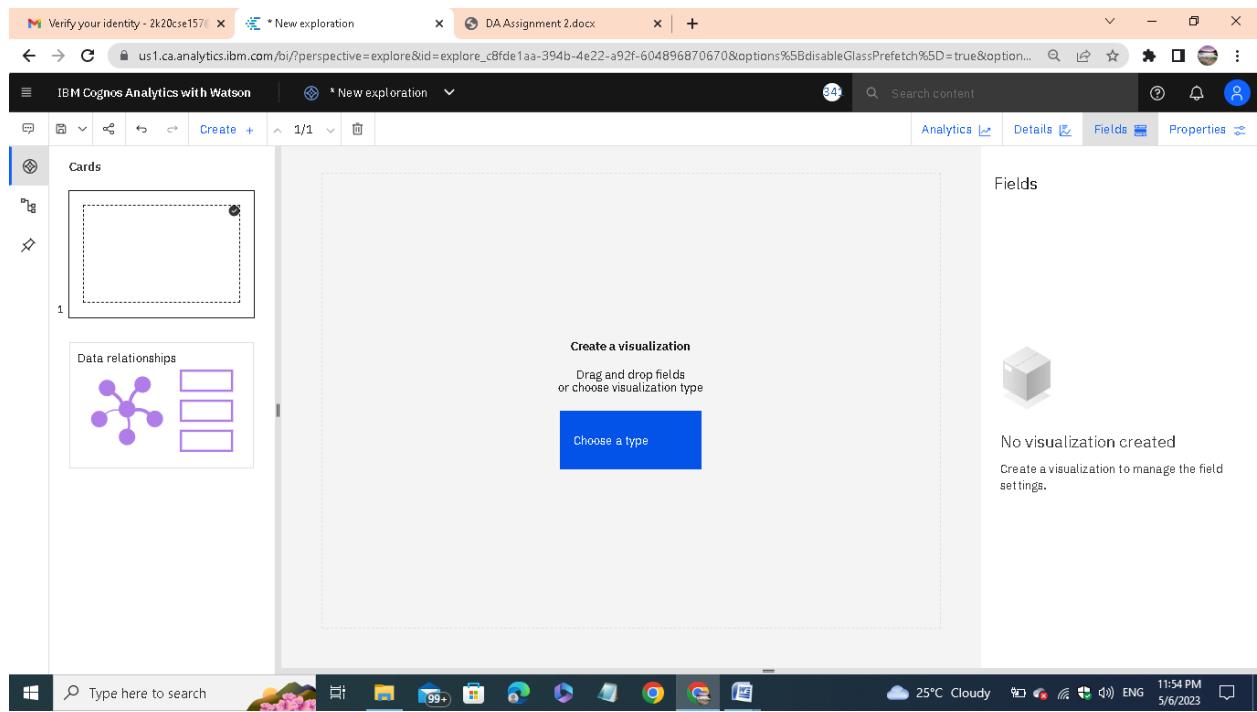
The screenshot shows the IBM Cognos Analytics with Watson interface. A modal dialog box titled "Add a data source to explore" is open, listing several data sources under "My content". The sources include "HR_data_module" (Data module, last accessed 04/05/2023, 01:48), "HRDataset_v14.csv" (Uploaded file, last accessed 04/05/2023, 03:21), "super market sales" (Data module, last accessed 22/04/2023, 08:26), "Super Market Sales Data" (Data module, last accessed 22/04/2023, 08:09), "Super_sales" (Data module, last accessed 22/04/2023, 09:29), "supermarket_sales - Sheet1.csv" (Uploaded file, last accessed 22/04/2023, 07:57), and "vgsales.csv" (Uploaded file, last accessed 17/04/2023, 23:30). The dialog has "Cancel" and "Add" buttons at the bottom. The background shows the main dashboard with various cards and a search bar.

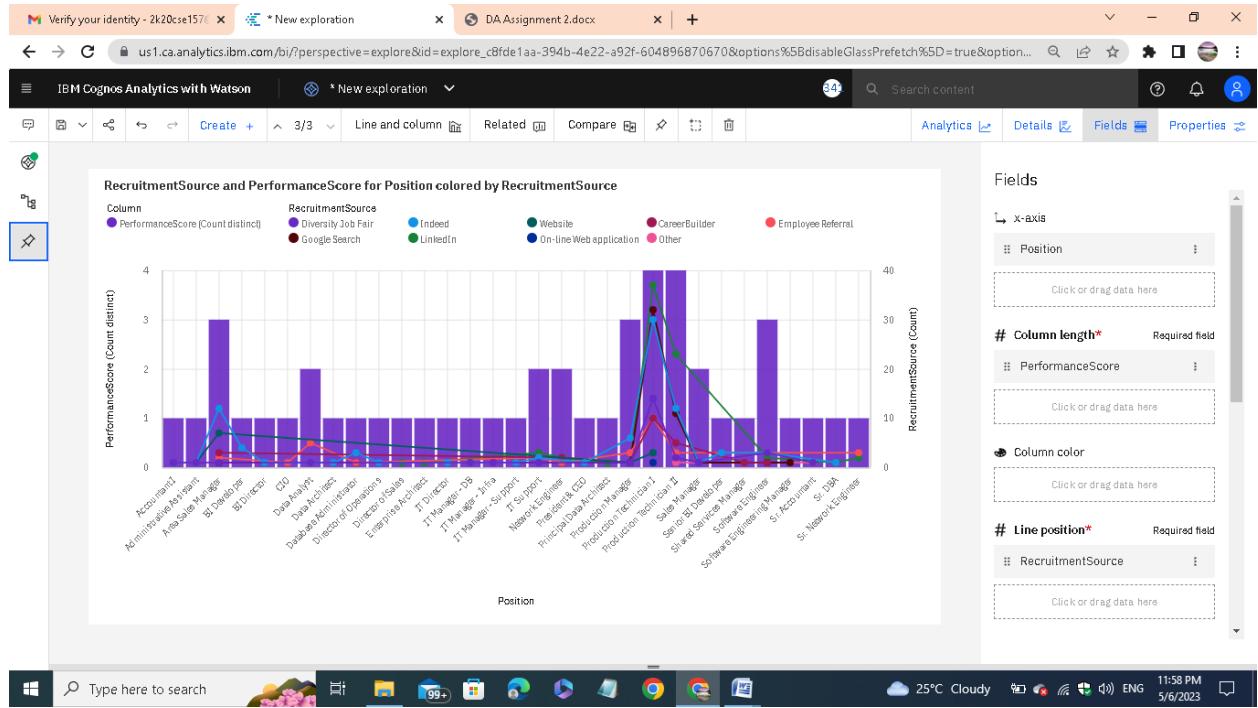
Then add the data module to the Explorations.

The screenshot shows the "New exploration" wizard. The first step, "Select a starting point", is displayed. It includes a "Skip" button and a note that every exploration includes a data relationships card. Below this, there's a search bar with placeholder text "Enter data column. Not sure? Try Salary, MaritalStatusID" and a list of suggested columns: "Salary", "MaritalStatusID", "EngagementSurvey", "EmpStatusID", "Absences", "DaysLateLast30", "EmploymentStatus", "EmpSatisfaction", "TermID", "PerfScoreID", "SpecialProjectsCount", and "PerformanceScore". The background shows the main dashboard with various cards and a search bar.

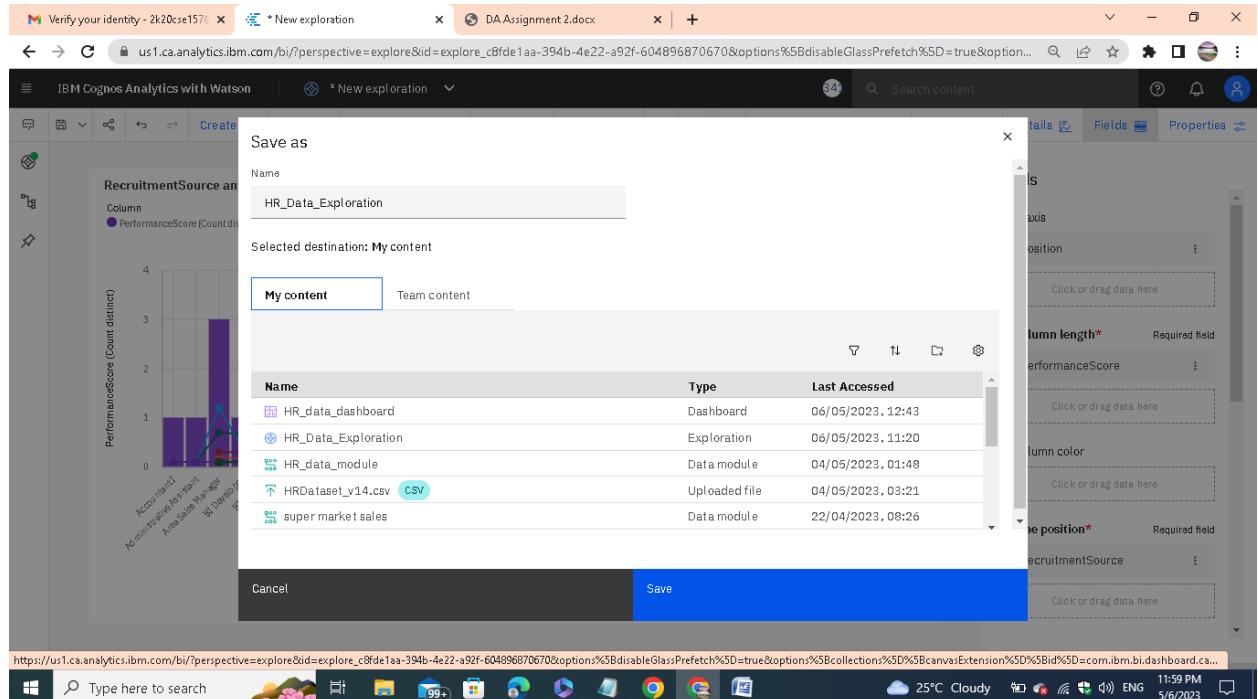


Click on create and select a card. In my case, I have chosen the single visualization.



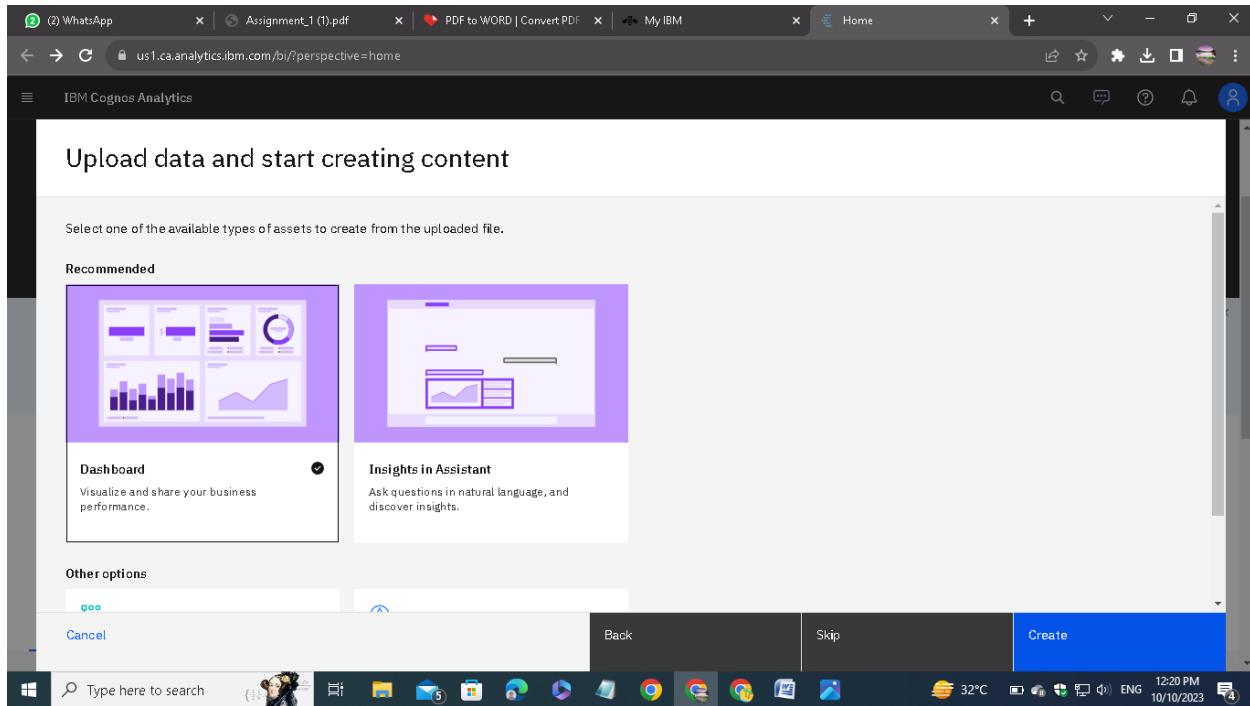


Then choose the type of the visualization. Each type of visualization is used for different needs.

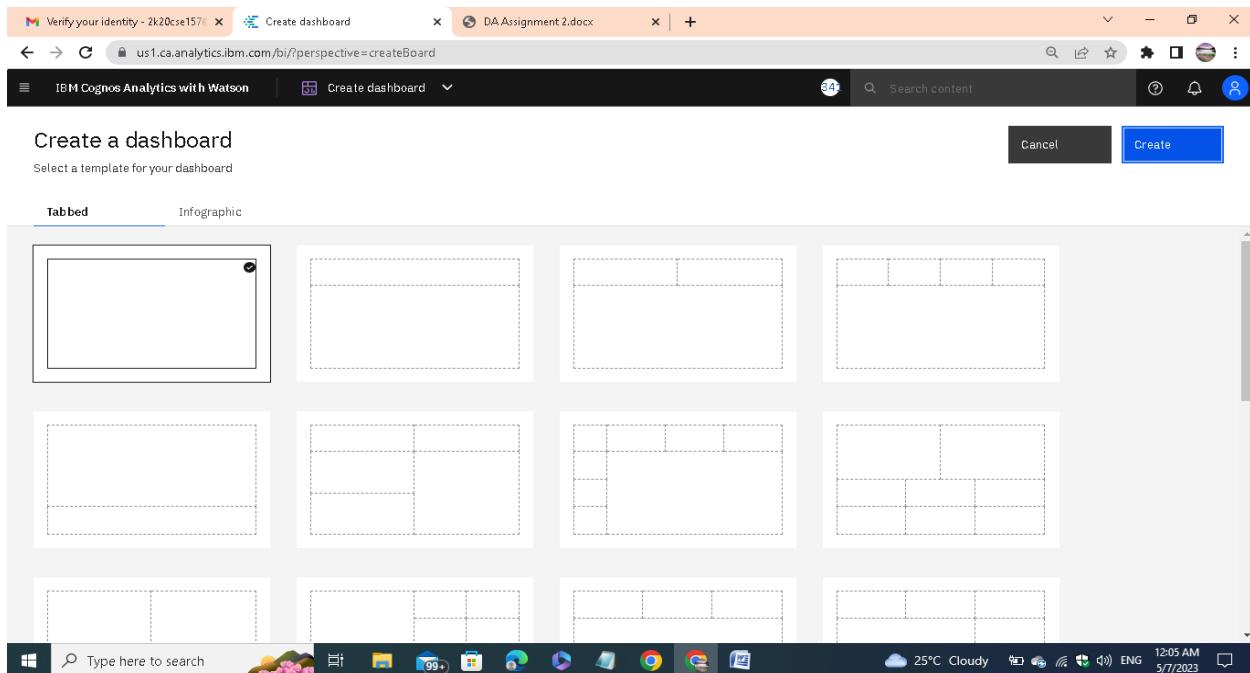


After exploring save it in a required name.

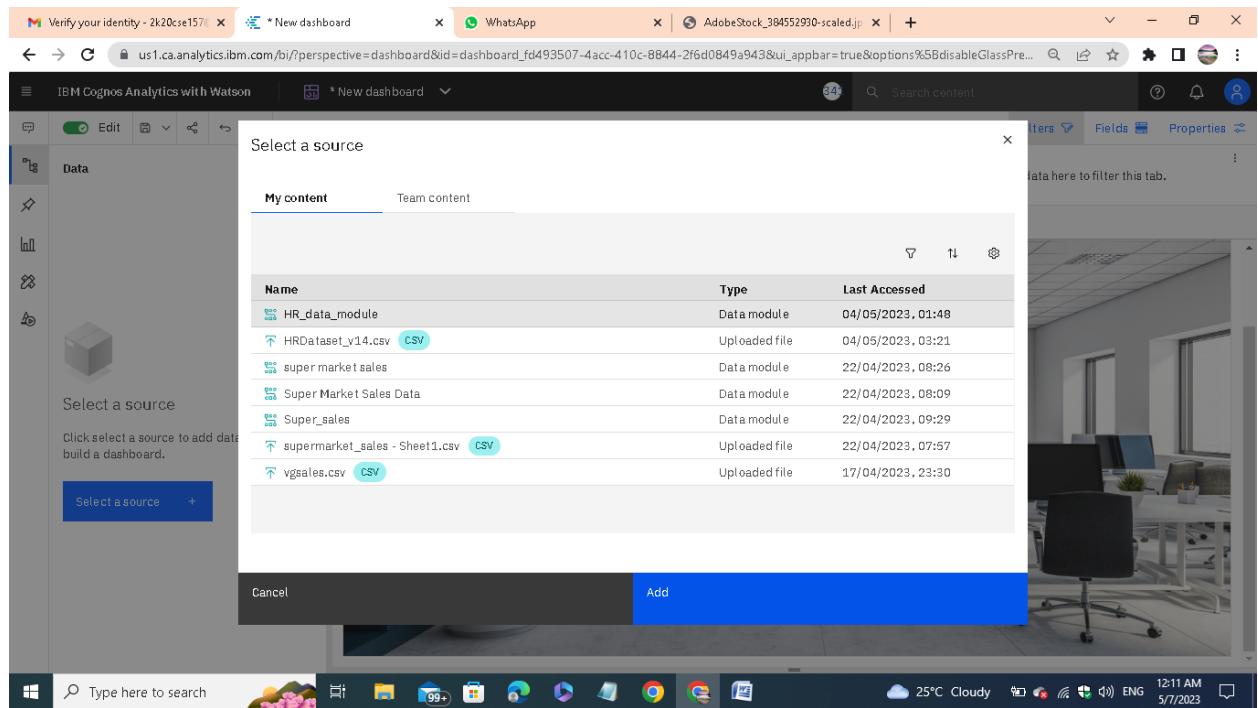
Step 4: Presenting the data



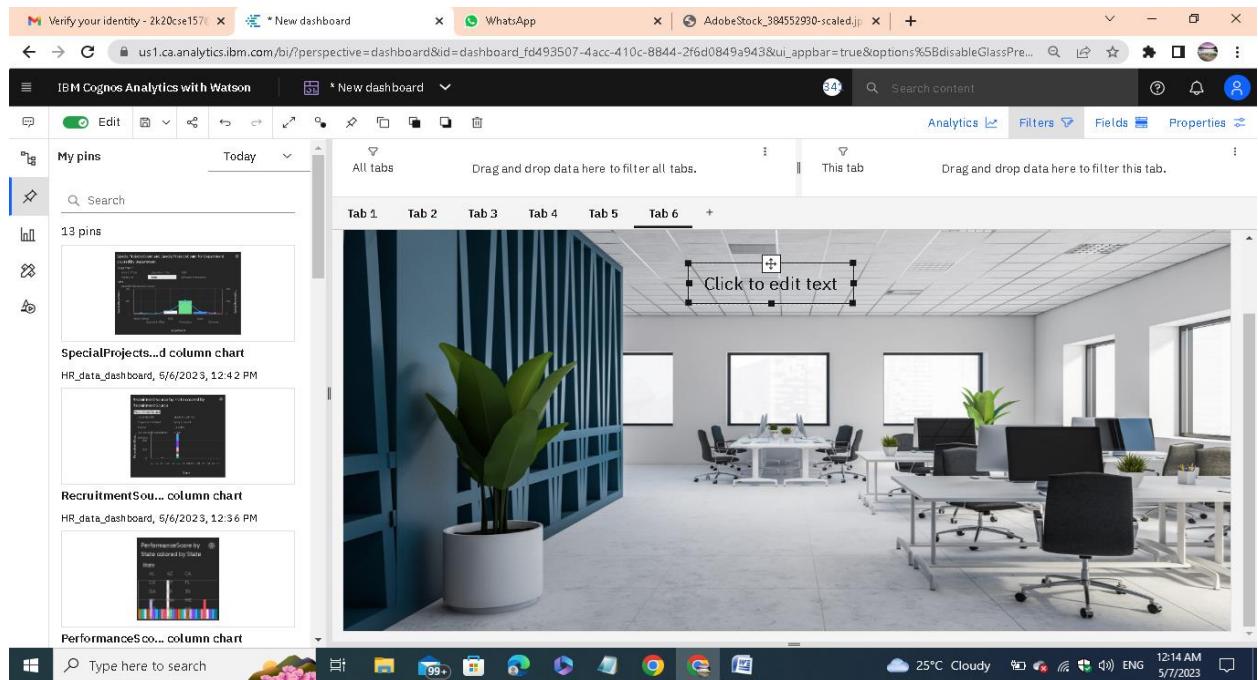
Choose the dashboard.



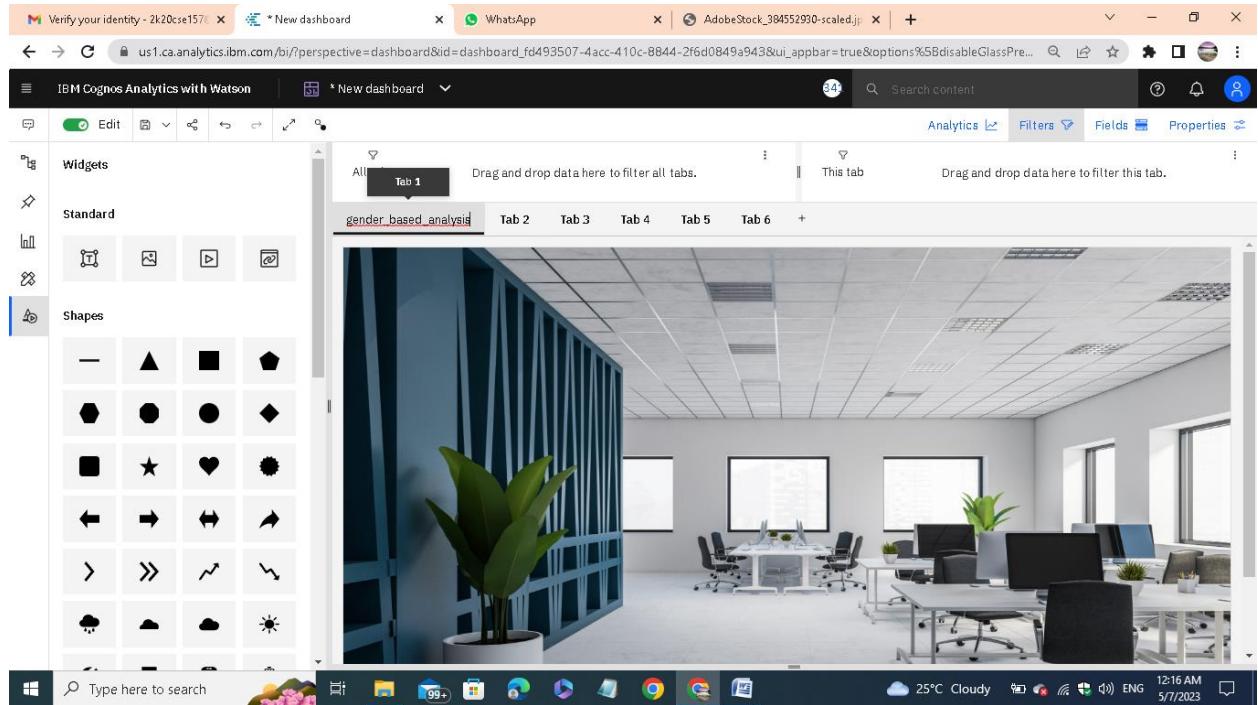
Then select a type of dashboard and create it.



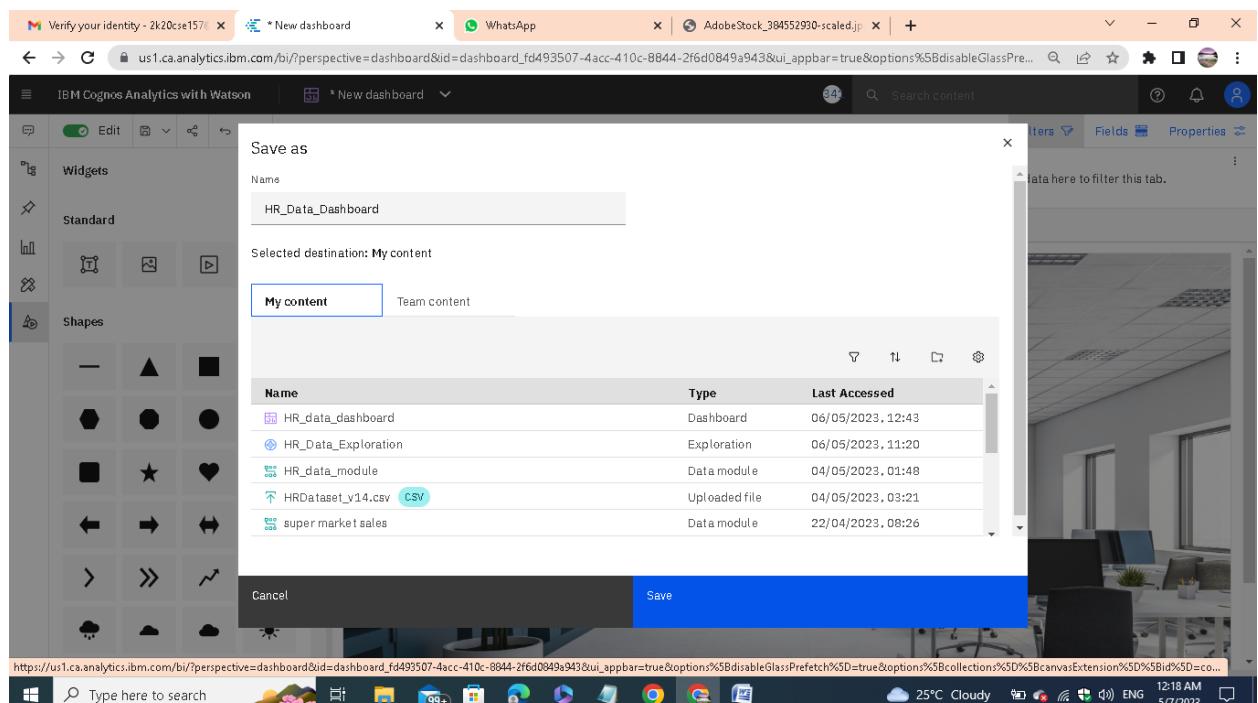
Add the source file to the dashboard. Adjust the dashboard settings for our convenience.



We can able to directly drag the data from the source or we can also able to plot our exploration directly from the pinned things.

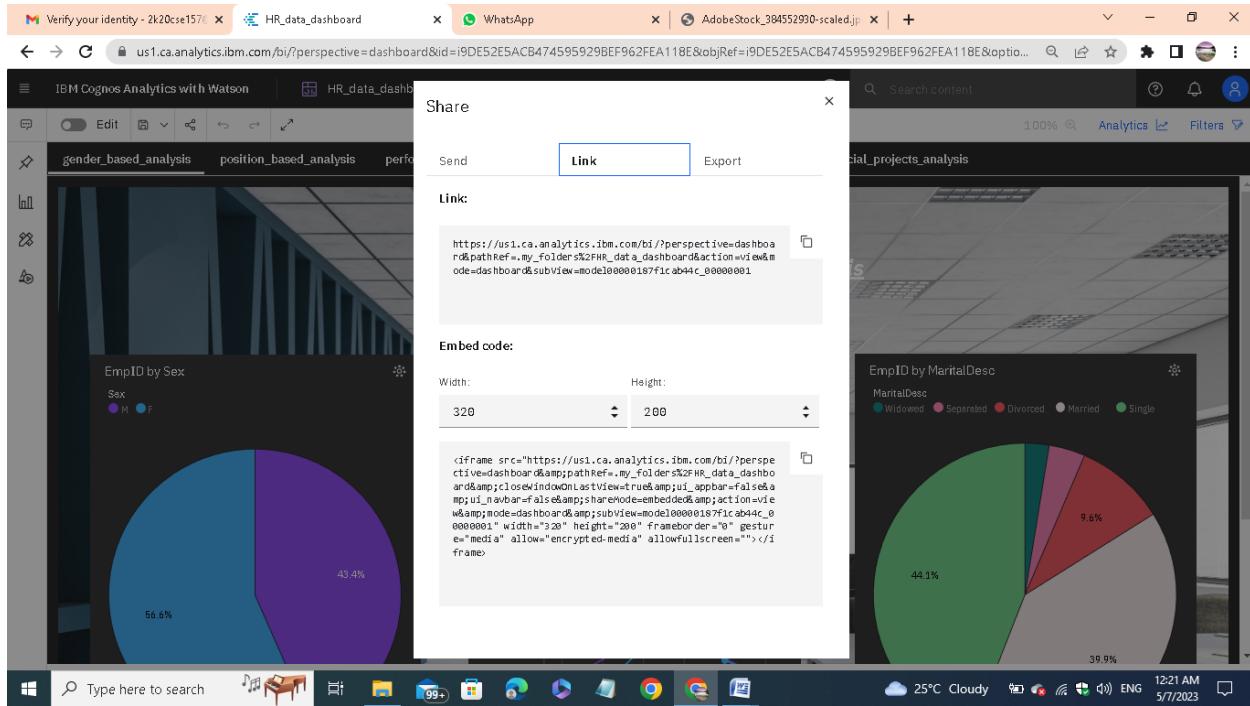


Change the tab name for our reference.



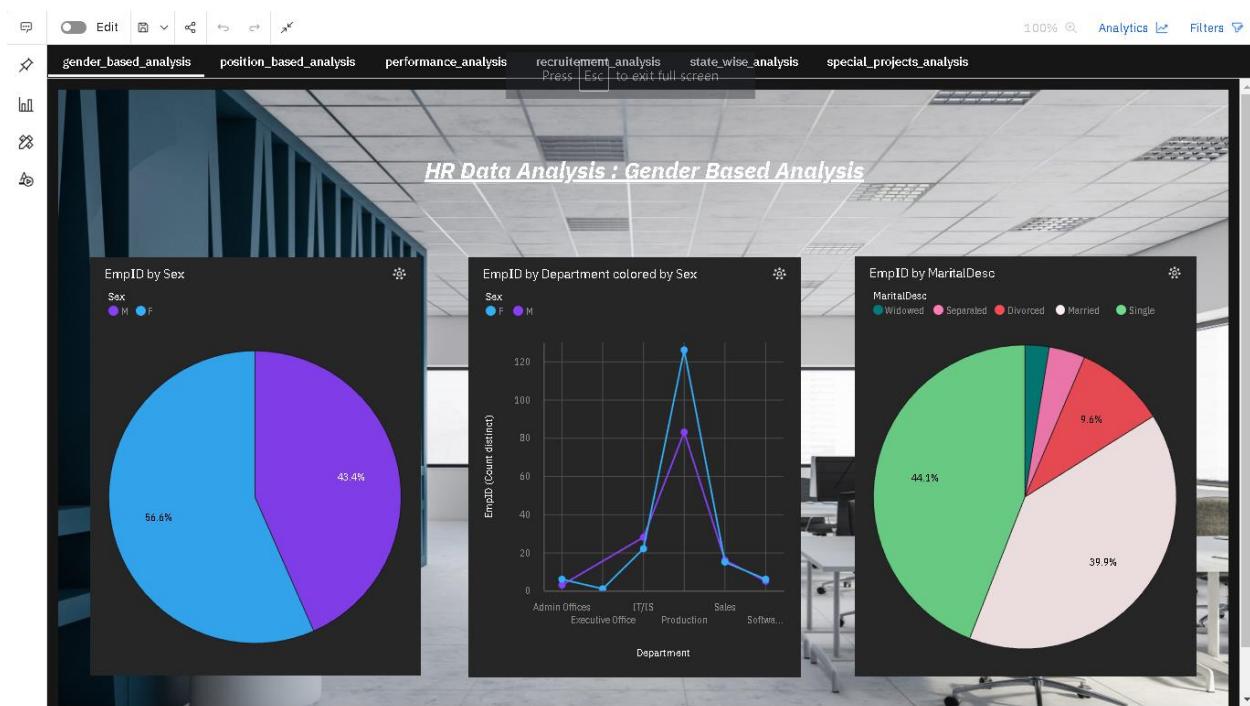
After that save the presentation. These steps are followed for all other tabs.

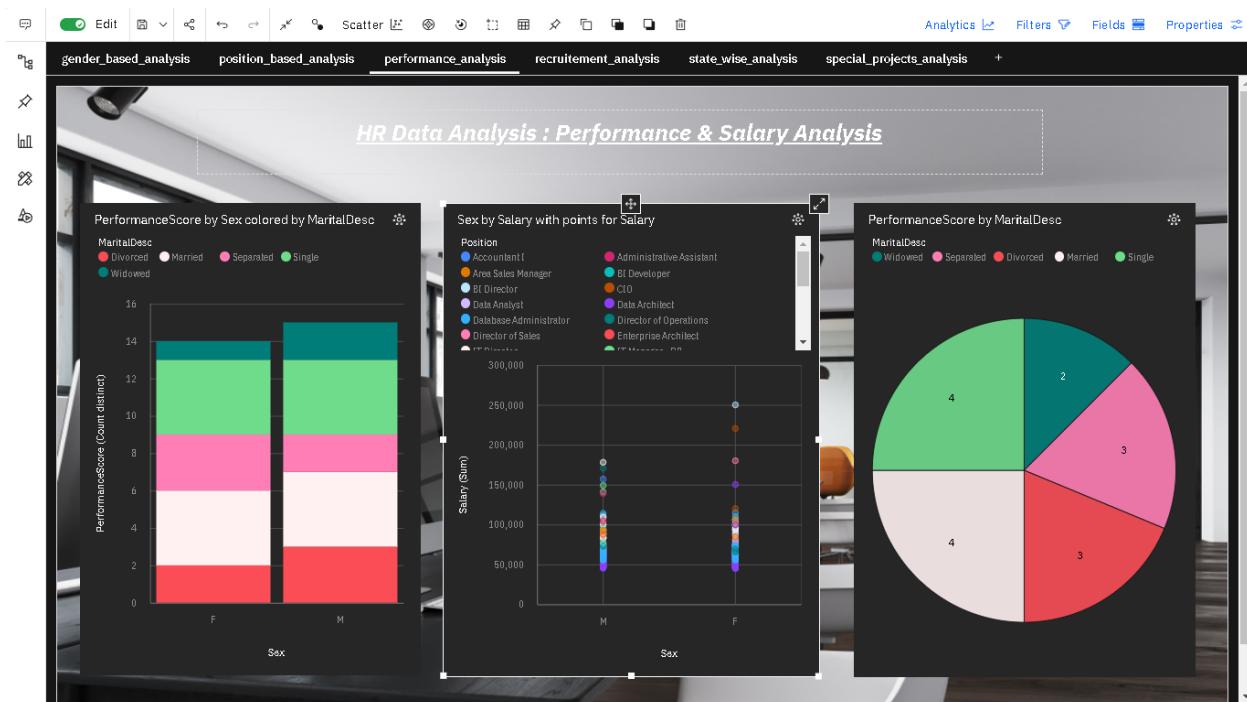
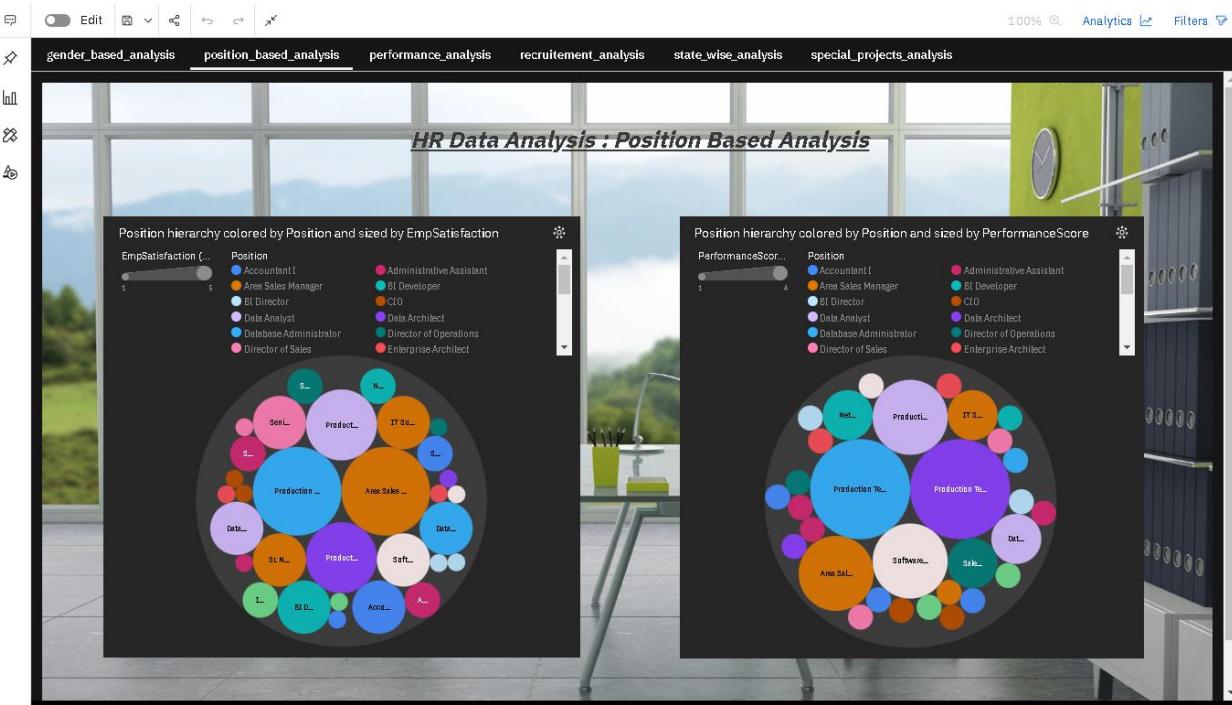
Finally we get the visualization of our analytics.

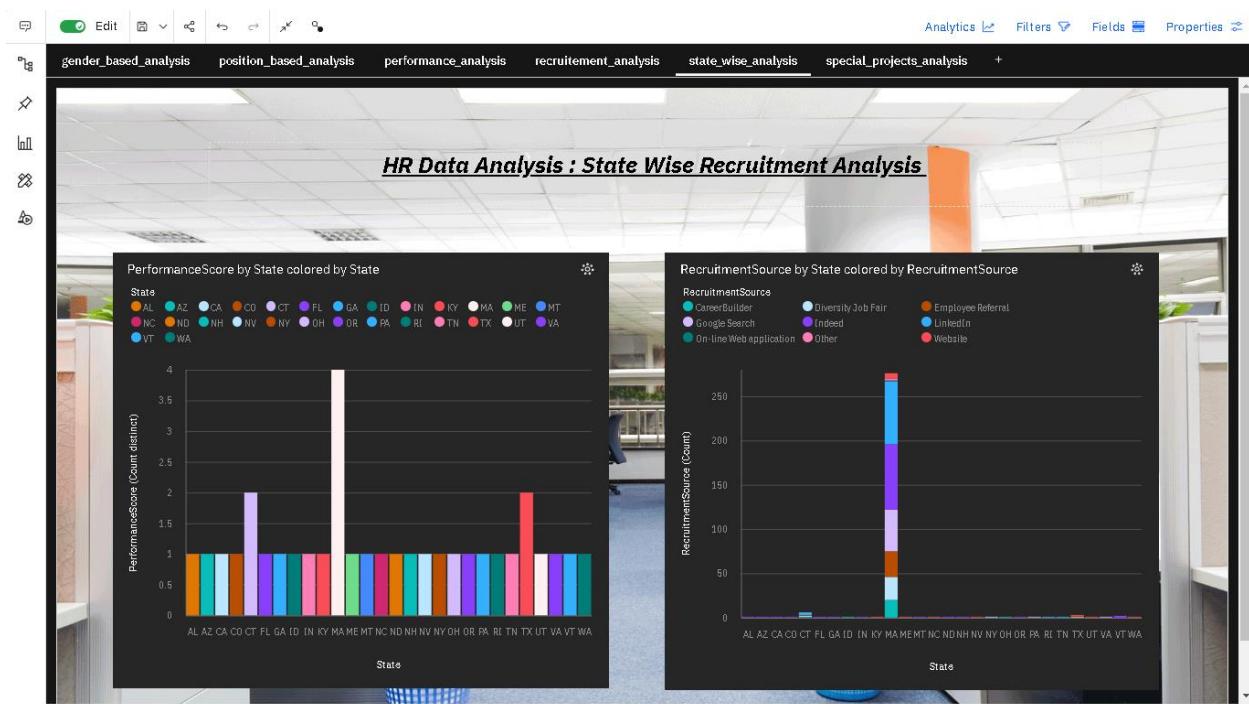
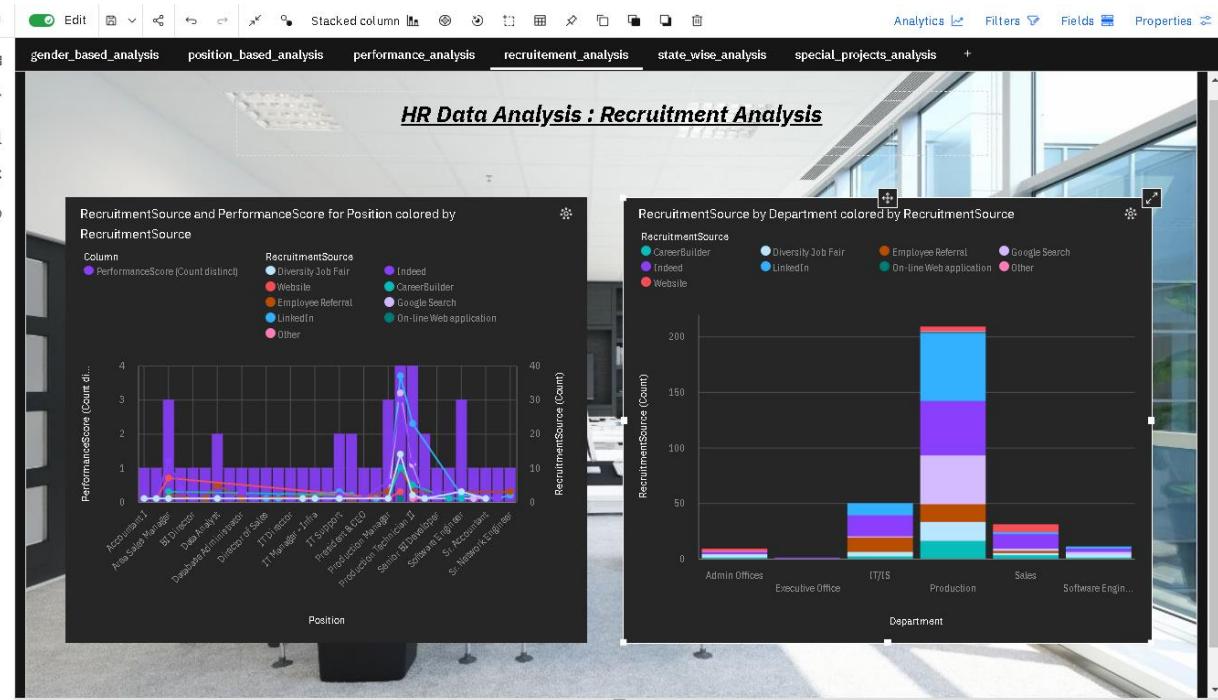


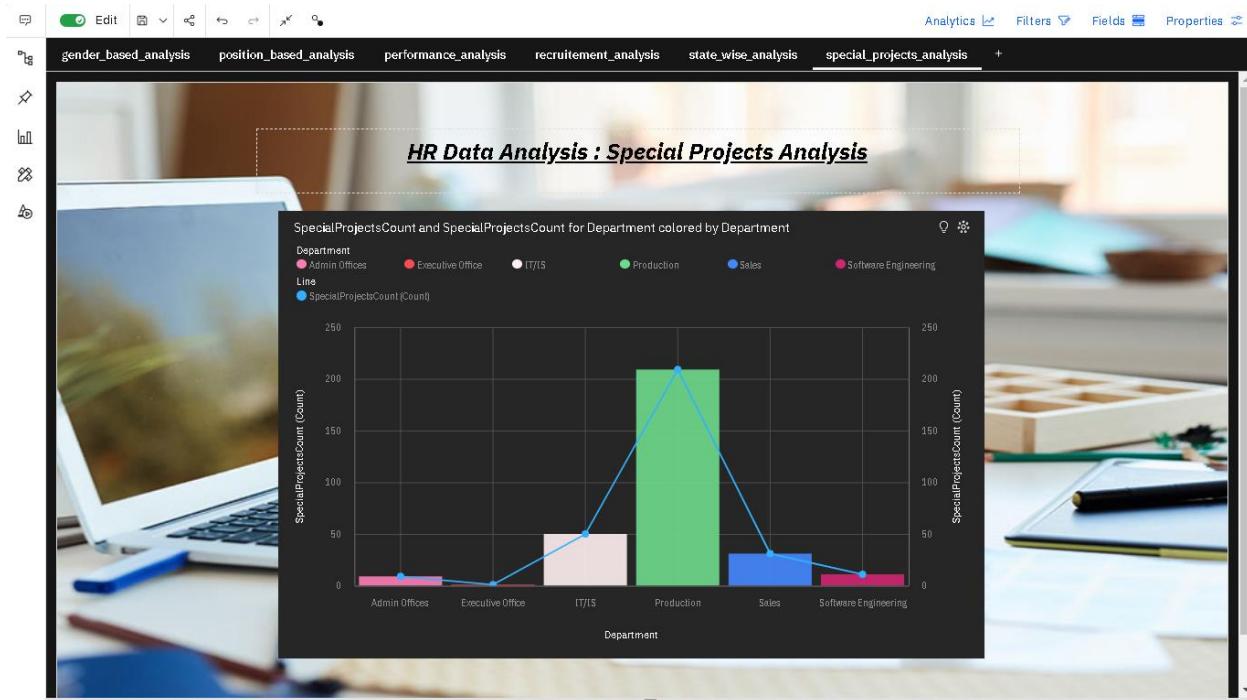
Using share option, we can able to share our presentation as direct link or the Embed code.

Here I am attaching the screenshots of all the tabs I have created:









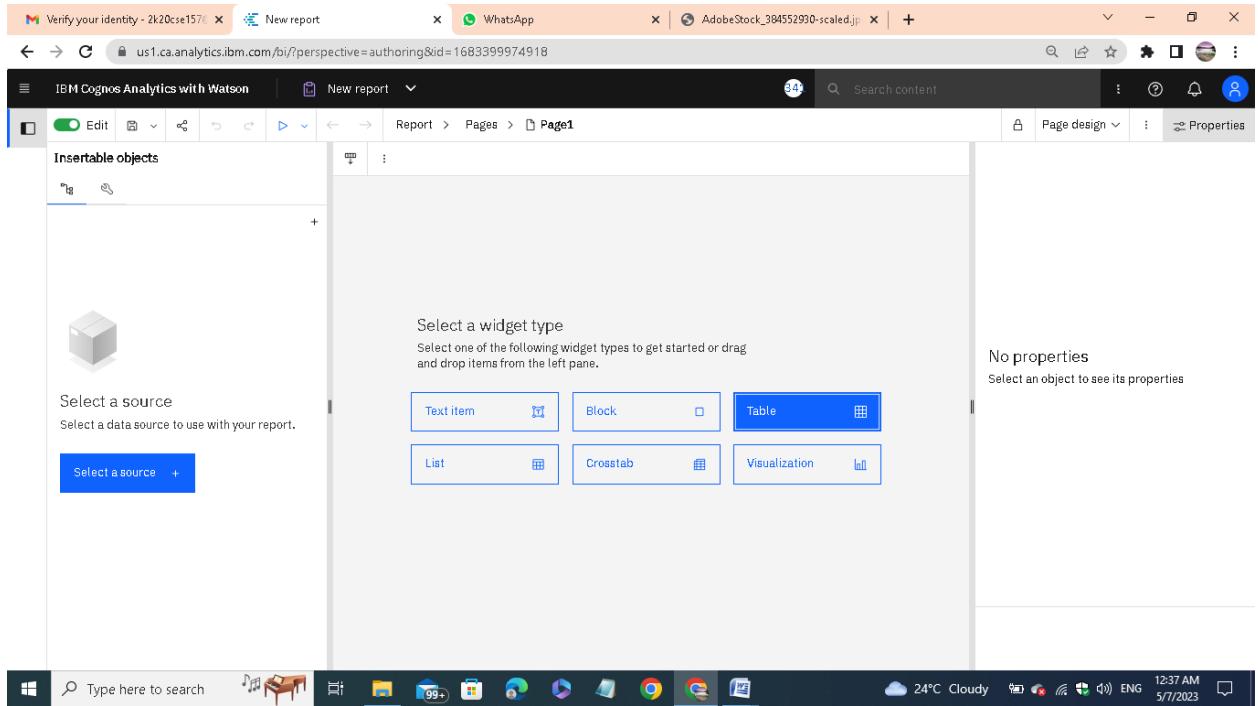
Task 2: Creating Report

New +

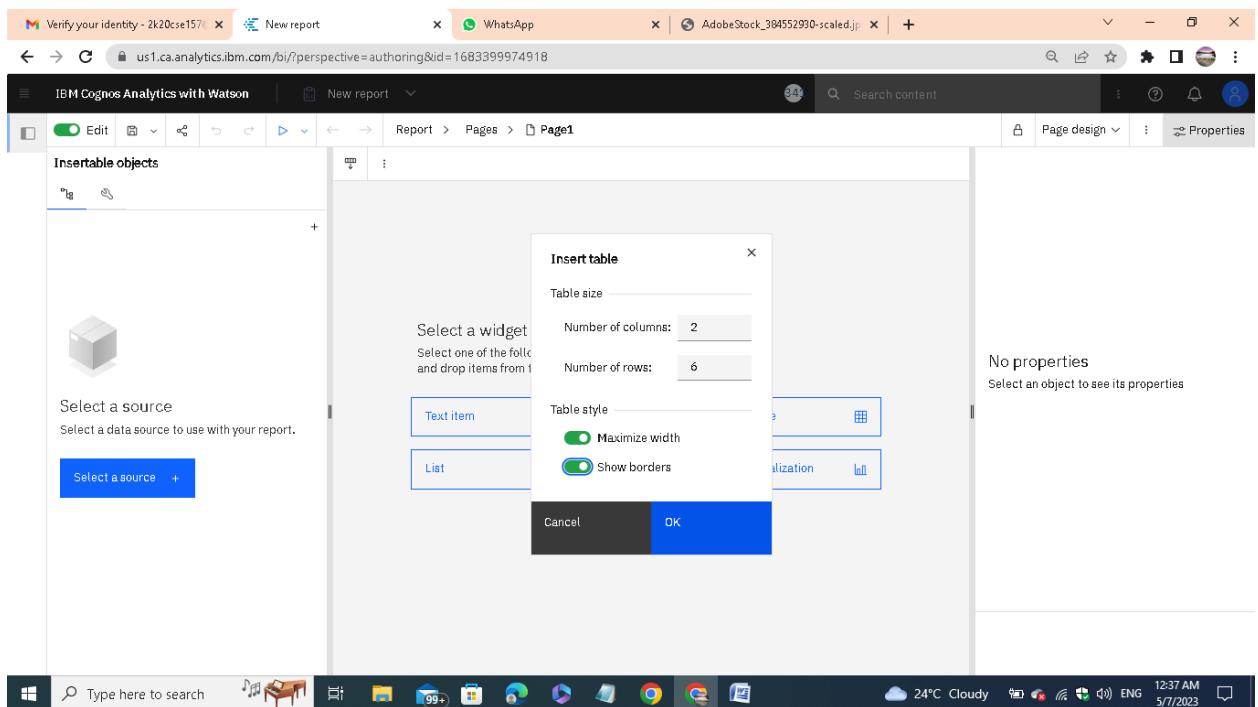
- Data module
- Exploration
- Dashboard
- Report**
- Story

Content Item	Last Modified	Action Buttons
HR_data_dashboard	07/05/2023, 02:56	[dropdown]
HR_Data_Exploration	06/05/2023, 11:20	[dropdown]
HR_data_module	04/05/2023, 01:48	[dropdown]
HR_Data_Report	06/05/2023, 14:45	[dropdown]
HR_Data_Story	-----	[dropdown]
HRDataset_v14.csv	-----	[CSV] [Upload]
super market sales	-----	[dropdown]
super market sales dashboard	-----	[dropdown]

For creating report, choose the Report option.



Select a widget type that used for creating report.



In my case, I am choosing table type of the report.

The screenshot shows a web browser window with multiple tabs open. The active tab is titled 'HR_Data_Report'. The page content displays a table with five rows, each containing a report specification and its corresponding insights and description. The specifications include 'Based on Gender', 'Position Based Analysis', 'Performance & Salary Analysis', 'Recruitment Analysis', and 'State Wise Analysis'. The insights and descriptions provide details about employee gender distribution, job satisfaction, salary packages, recruitment sources, and state-wise employee counts.

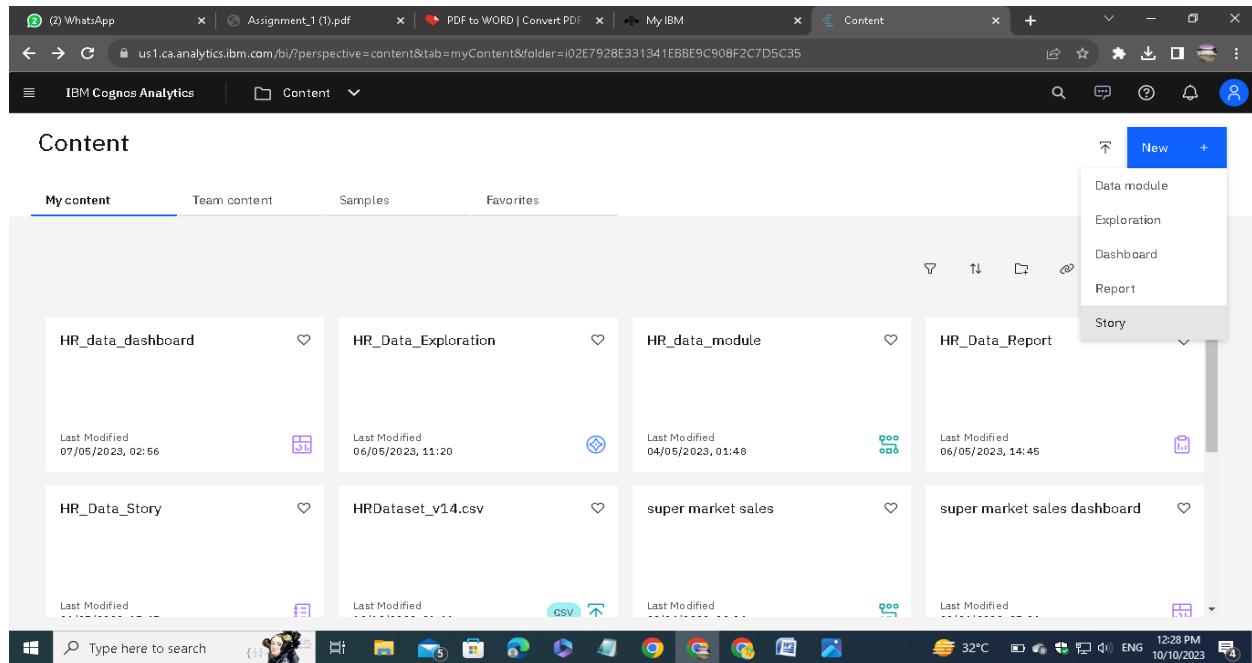
Report Specification	Insights and Description
Based on Gender	41.9 % male and 58.1 % are female employees. Except the executive office and IT/IS department, female employees are high in other departments. Most of the employees are single and married.
Position Based Analysis	Production Technician, Area Sales Manager and production manager are more satisfied persons respectively. Production Technician I and II and software engineers are the highly performing employees.
Performance & Salary Analysis	Highest salary package getting employees are females and highest average salary getting employees are males. Male employees are highly rated than female employees Based on the Marital status, married and single employees are more performed. Widowed employees are less performed.
Recruitment Analysis	Employees performing well are recruited from the linkedin, employee-referral and indeed. Production department has higher employees strength. Linked in and indeed plays major role in the recruitment process.
State Wise Analysis	State MA, CT and CD has the high recruited peoples. State MA is providing more number of employees to the company. Most of the people from MA are recruited by linked in and indeed.

After creating report, we can run using multiple options. Here I am running as PDF format report.

The screenshot shows a 'Save as' dialog box overlaid on the main application window. The dialog box has a 'Name' field containing 'HR_Data_Report'. Below it, a 'Selected destination' dropdown is set to 'My content'. A list of available items is shown, including 'HR_data_dashboard', 'HR_Data_Exploration', 'HR_data_module', 'HRDataset_y14.csv', and 'super market sales'. The right side of the dialog box contains a 'Properties' panel with various settings like 'Page design', 'Text', and 'State Wise Analysis'. At the bottom of the dialog box are 'Cancel' and 'Save' buttons.

Save the report using required name.

Task 3: Creating Story



To create a story, choose the Story option.

The screenshot shows the 'Story' view in IBM Cognos Analytics. The main title of the story is 'Gender Based Analysis'. On the left side, there is a sidebar titled 'My pins' which lists several pinned items, including 'Image' (a screenshot of a dashboard), 'SpecialProjects.d column chart', and 'RecruitmentSou... column chart'. The main content area features two pie charts. The first pie chart, titled 'EmpID by Sex', shows the distribution of employees by gender: 56.6% for males (M) and 43.4% for females (F). The second pie chart, titled 'EmpID by MaritalDesc', shows the distribution of employees by marital status: 44.1% for Single, 39.9% for Married, 9.6% for Separated, and 5.4% for Widowed. A callout box contains the following bullet points: 'More number of the employees are females.' and 'Married and single employees are more in overall.'

These tools are similar to the other presentation creating tools.

Gender Wise Performance Analysis

PerformanceScore by Position and Sex colored by Sex

Position	Sex	Score
Accountant	F	85
Area Sales Manager	M	88
CIO	F	75
Database Administrator	F	80
Enterprise Architect	M	78
IT Manager - Support	M	72
Network Engineer	M	70
Production Manager	M	75
Production Technician	M	70
Senior BI Developer	M	78
Software Engineering Manager	M	75
Sr. Network Engineer	F	72

• 41.9 % male and 58.1 % are female employees.

- Except the executive office and IT/IS department, female employees are high in other departments.
- Male employees are highly rated than female employees.

EmpID(Count distinct)

Department	Count
Admin Office	10
Executive Office	15
IT/IS	120
Production	80
Sales	15
Software Engineering	10

HR Data Analysis

Using IBM Cognos Analytics

Here is the completed Story:

The screenshot shows the Story Editor interface with a dark blue background. A large white dashed rectangular area is centered, containing the title text. The top navigation bar includes 'Edit', 'Analytics', 'Filters', 'Fields', and 'Properties' tabs. The bottom navigation bar shows 'Prev scene', 'Next scene', 'Scene 1 of 5', a progress bar from '0:00.0' to '0:06.0', and a gear icon.

HR Data Analysis

Using IBM Cognos Analytics

The screenshot shows the Story Editor interface with a dark blue background. On the left, there is a pie chart titled 'EmpID by Sex' with two segments: M (56.6%) and F (43.4%). On the right, there is another pie chart titled 'EmpID by MaritalDesc' with four segments: Single (44.1%), Married (39.9%), Separated (9.6%), and Divorced (5.4%). Between the charts is a callout box containing the following text:

- More number of the employees are females.
- Married and single employees are more in overall.

The top navigation bar includes 'Edit', 'Analytics', 'Filters', 'Fields', and 'Properties' tabs. The bottom navigation bar shows 'Prev scene', 'Next scene', 'Scene 2 of 5', a progress bar from '0:00.0' to '0:06.0', and a gear icon.

Position Based Analysis

Position hierarchy colored by Position and sized by EmpSatisfaction

EmpSatisfaction (..)

- Position
 - Accountant I
 - Administrative Assistant
 - Area Sales Manager
 - BI Developer
 - BI Director
 - IT...

Position hierarchy colored by Position and sized by PerformanceScore

PerformanceScore (..)

- Position
 - Accountant I
 - Administrative Assistant
 - Area Sales Manager
 - BI Developer
 - BI Director
 - IT...

• Production Technician, Area Sales Manager and production manager are more satisfied persons respectively.

• Production Technician I and II and software engineers are the highly performing employees.

Analytics Filters Fields Properties

Recruitment Based Analysis

RecruitmentSource and PerformanceScore for Position colored by RecruitmentSource

Column
● PerformanceScore (Count distinct)

RecruitmentSource

- Diversity Job Fair
- Indeed
- Website
- CareerBuilder
- Employee Referral
- Google Search

PerformanceScore (Count distinct)

RecruitmentSource (Count)

Position

• Employees performing well are recruited from the linked-in, employee-referral and indeed.

• Production department has higher employees strength.

• Linked-in and indeed plays major role in the recruitment process.

• State AL and KY also has good performance. Recruitment may raised on those areas.

PerformanceScore by State colored by State

State

- AL
- AZ
- CA
- CO
- CT
- FL
- GA
- ID
- IN
- KY
- MA
- ME
- MT
- NC
- NH
- NV
- NY
- OH
- OR
- PA
- RI
- TN
- TX
- UT
- VA
- VT
- WA

PerformanceScore (Count distinct)

State

Gender Wise Performance Analysis

PerformanceScore by Position and Sex colored by Sex

Position - Sex	PerformanceScore (Count distinct)
Associate F	0.5
Administrative Assistant F	0.5
Area Sales Manager M	1.5
BD Developer M	1.5
CIO F	1.5
Data Analyst M	2.0
Database Admin M	1.5
Director of Operations M	1.5
Enterprise Architect M	1.5
IT Manager - DB M	1.5
IT Manager - Support M	1.5
IT Support M	2.0
Network Engineer M	1.5
Principal Data Architect M	1.5
Production Manager M	3.0
Production Technician M	3.0
Production Technician F	1.5
Sales Manager M	1.5
Senior BD Developer M	1.5
Software Engineer M	2.0
Software Engineering Manager M	1.5
SL Network Engineer F	1.5

- 41.9 % male and 58.1 % are female employees.
- Except the executive office and IT/IS department, female employees are high in other departments.
- Male employees are highly rated than female employees
- Based on the Marital status, married and single employees are more performed.
- Recruitment of male employee count should be increased.

EmpID by Department colored by Sex

Department	EmpID (Count distinct)
Admin Office	5
Executive Office	5
IT/IS	30
Production	125
Sales	20
Software...	10

Verify your identity - 2k20cse157 | * New story | WhatsApp | background images hd - Google | us1.ca.analytics.ibm.com/bi/?perspective=story&id=dashboard_948fed9e-38ca-4478-a5d2-79810221809f&ui_appbar=true&options%5BenableGlassPrefetch%5D=true&options%5Bcollections%5D%5BcanvasExtension%5D%5Bid%5D=com.ibm.cognos.analytics

IBM Cognos Analytics with Watson | Edit | Save as

Save as

Name: HR_Data_Story

Selected destination: My content

My content Team content

Name	Type	Last Accessed
HR_data_dashboard	Dashboard	06/05/2023, 14:55
HR_Data_Exploration	Exploration	06/05/2023, 11:20
HR_data_module	Data module	04/05/2023, 01:48
HR_Data_Report	Report	06/05/2023, 14:45
HRDataset_y14.csv	CSV	04/05/2023, 03:21

Cancel Save

https://us1.ca.analytics.ibm.com/bi/?perspective=story&id=dashboard_948fed9e-38ca-4478-a5d2-79810221809f&ui_appbar=true&options%5BenableGlassPrefetch%5D=true&options%5Bcollections%5D%5BcanvasExtension%5D%5Bid%5D=com.ibm.cognos.analytics

Save the story as per the required name.

Finally make sure everything has been saved.