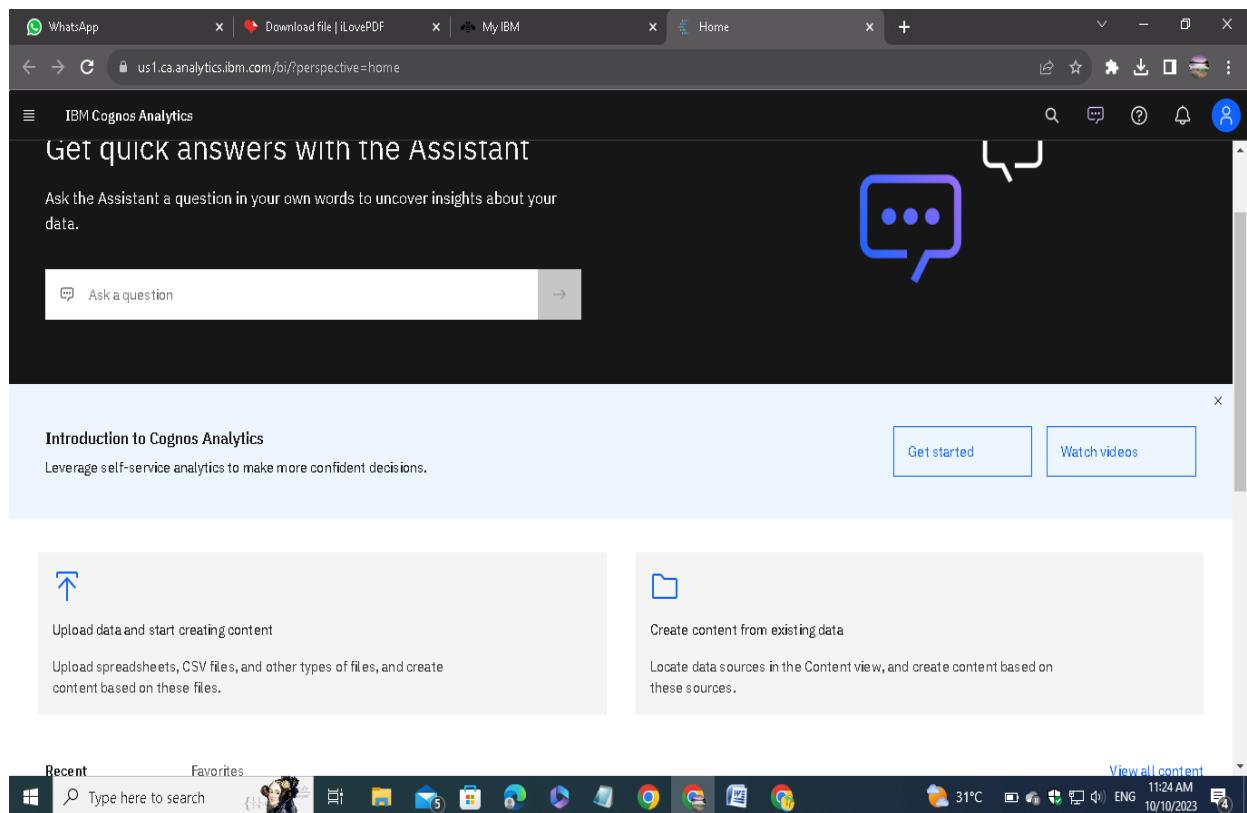


The Cognos HR Scored: Measuring Success in Talent Management

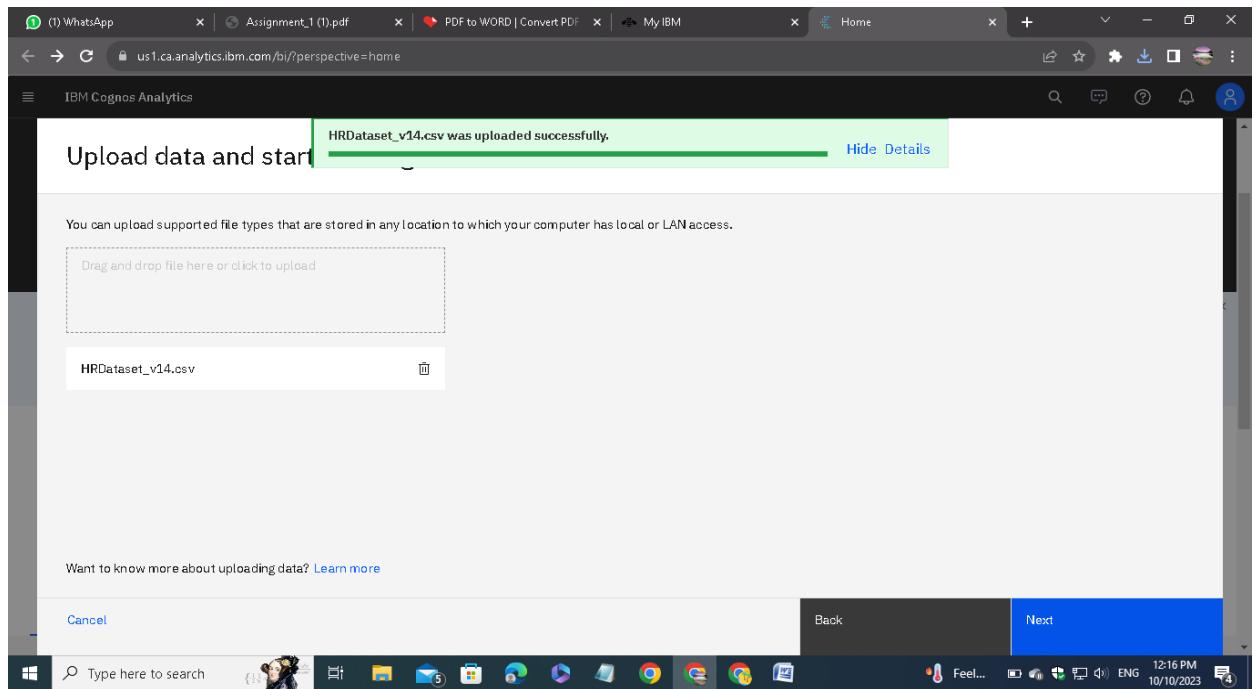
Name: Sathiya Rubha M

NM Id: au611220104134

Step 1: Upload the data



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:

A screenshot of the IBM Cognos Analytics with Watson interface. The title bar says "IBM Cognos Analytics with Watson". The main area shows a "Data module" grid with columns: Row Id, Employee_Name, EmpID, MarriedID, MaritalStatusID, and GenderID. The "MarriedID" column has a context menu open with 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 "Properties" option is highlighted. The taskbar at the bottom shows "Assignment_2.docx", "TeamsSetupx64_s_8...exe", and "TeamsSetupx64_s_8...exe".

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

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

Step 3: Exploring the data

The screenshot shows the IBM Cognos Analytics with Watson interface. A modal window titled "Add a data source to explore" is open. It has tabs for "My content" (which is selected) and "Team content". Below the tabs is a table with columns: Name, Type, and Last Accessed. The table contains the following data:

Name	Type	Last Accessed
HR_data_module	Data module	06/05/2023, 04:48
HRDataset_v14.csv	Uploaded file	06/05/2023, 12:35
Supermarket	Data module	22/04/2023, 08:27
Supermarket_sales_1.csv	Uploaded file	22/04/2023, 09:26
Supermarket_sales_data	Data module	22/04/2023, 08:09

At the bottom of the modal, there are "Cancel" and "Add" buttons. The "Add" button is highlighted in blue. The background of the main interface shows a "Quick launch" sidebar with options like "Upload data" and "Get started".

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

Then Select and add the data module that you want for the exploration.

The screenshot shows the IBM Cognos Analytics with Watson interface. At the top, there's a navigation bar with icons for search, notifications (1), and user profile. Below the navigation bar, a sidebar on the left has sections for 'Cards' and 'Data relationships'. The main content area is titled 'Select a starting point' and contains a sub-instruction: 'Every exploration includes a data relationships card.' It also says 'Start with any column. You can always change it later.' followed by a search bar with placeholder text 'Enter data column. Not sure? Try Total, cogs'. Below the search bar is a section titled 'Try starting with one of these...' containing several buttons: 'Total', 'cogs', 'gross income', 'Tax 5%', 'Quantity', 'Rating', 'Unit price', and 'gross margin percentage'. A 'Skip' button is located in the top right corner of the main content area.

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

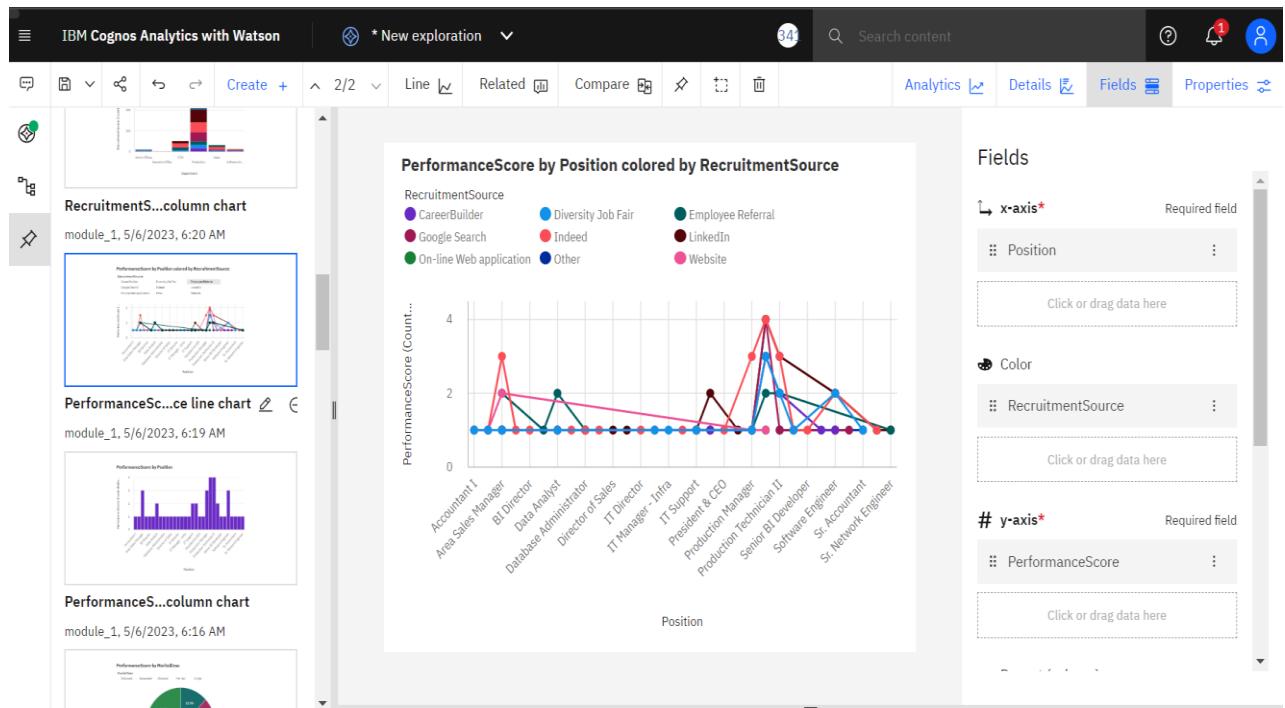
The screenshot shows the 'Choose visualization type' card in IBM Cognos Analytics with Watson. The top navigation bar is identical to the previous screenshot. The sidebar on the left still shows 'Cards' and 'Data relationships'. The main content area is titled 'Choose visualization type' and is divided into three sections: 'Comparison', 'Parts to whole', and 'Trend'. Under 'Comparison', there are eight visualization types: Bar, Bullet, Column, Heat map, Line and column, Marimekko, Radar, and Stacked bar. Under 'Parts to whole', there are four: Hierarchy bubble, Packed bubble, Pie, and Tree map. Under 'Trend', there are two: Word cloud and Stacked column. The bottom of the screen shows a taskbar with various application icons and system status indicators.

The screenshot shows the IBM Cognos Analytics with Watson interface. On the left, there's a sidebar titled 'Selected sources / HRDATA_MODULE' containing a tree view of dataset fields. In the center, a 'Build your visualization' area has two sections: 'Color' and 'Length', each with a 'Drag data here' placeholder. Below these is a preview of a bar chart. On the right, a 'Fields' sidebar lists various fields such as Employee_Name, EmpID, MaritalStatusID, and Position. The top navigation bar includes tabs for 'Analytics', 'Details', 'Fields', and 'Properties'.

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

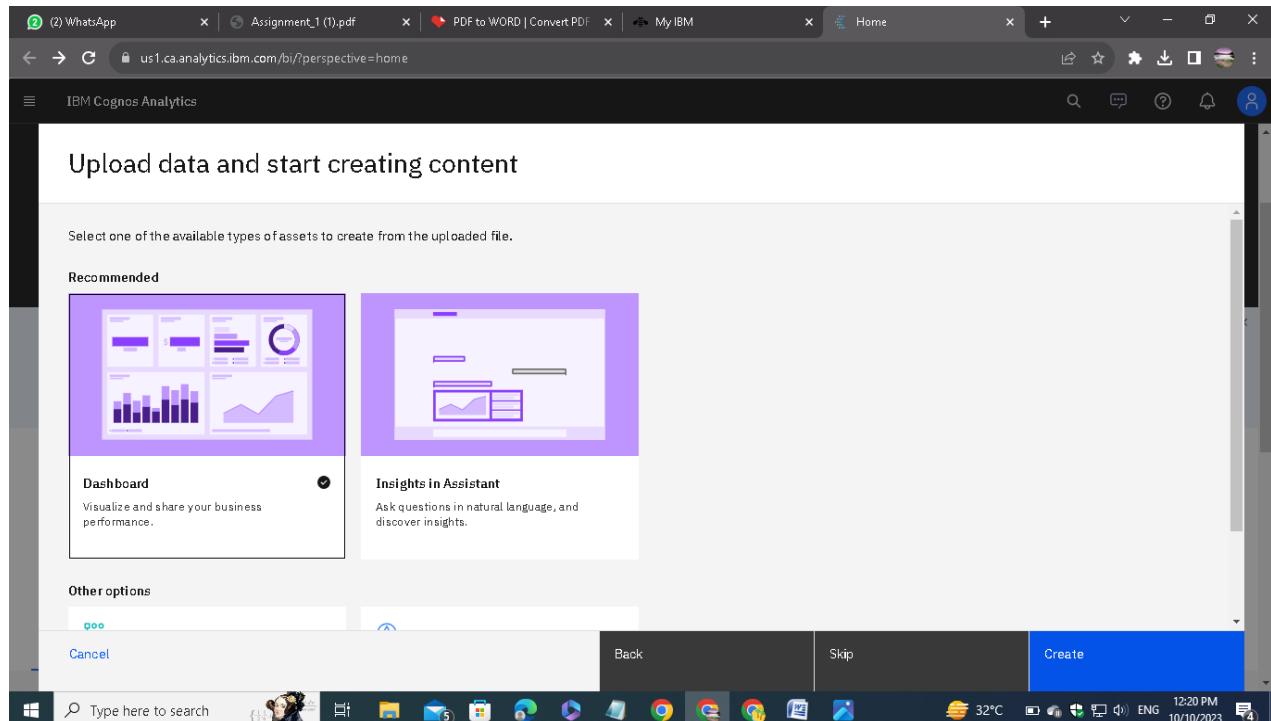
This screenshot shows the IBM Cognos Analytics with Watson interface. On the left, a list of existing visualizations is displayed, including a column chart, a line chart, and several bar charts. The main area shows a detailed view of a bar chart titled 'PerformanceScore by Position'. The y-axis is labeled 'PerformanceScore (Count distinct)' and ranges from 0 to 4. The x-axis is labeled 'Position' and lists various roles. The bars show the count of distinct performance scores for each position. The right side features a 'Fields' sidebar with sections for 'Bars', 'Length', 'y-start', and 'Target', each with a 'Click or drag data here' placeholder.

In the fields, we have to mention the attributes for the x-axis, y-axis and colors.



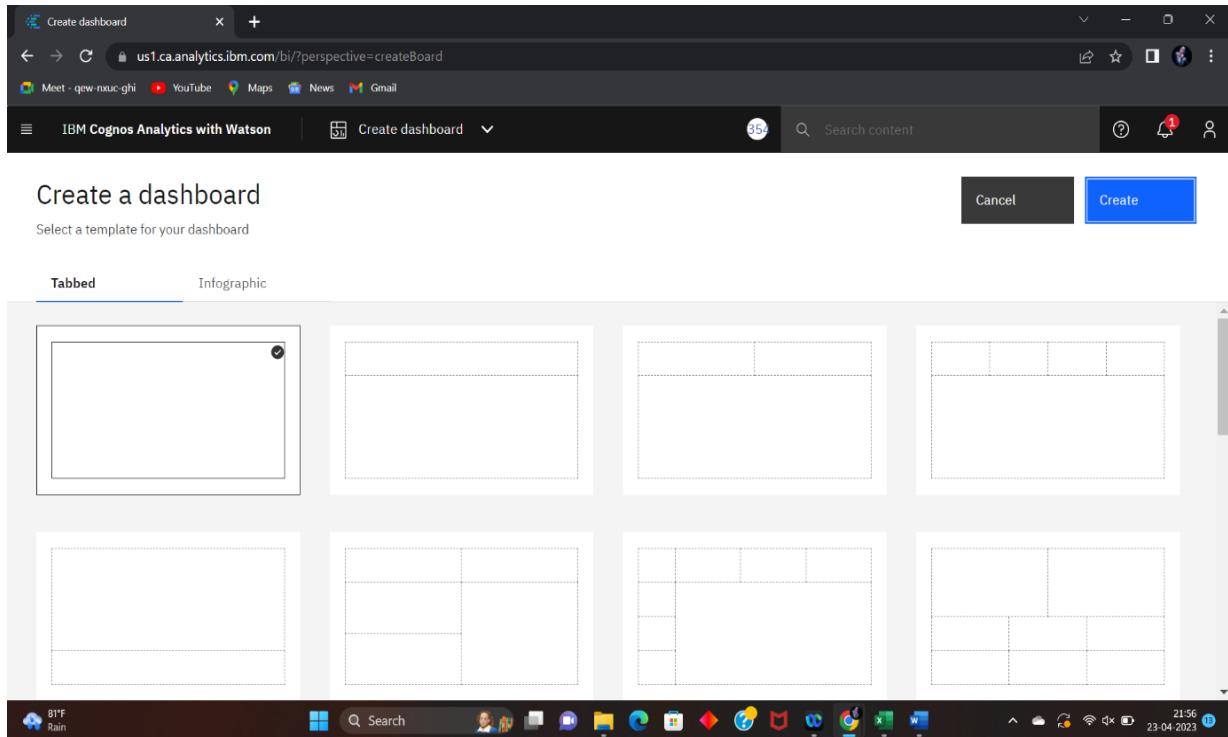
After exploring save it in a required name.

Step 4: Dashboarding

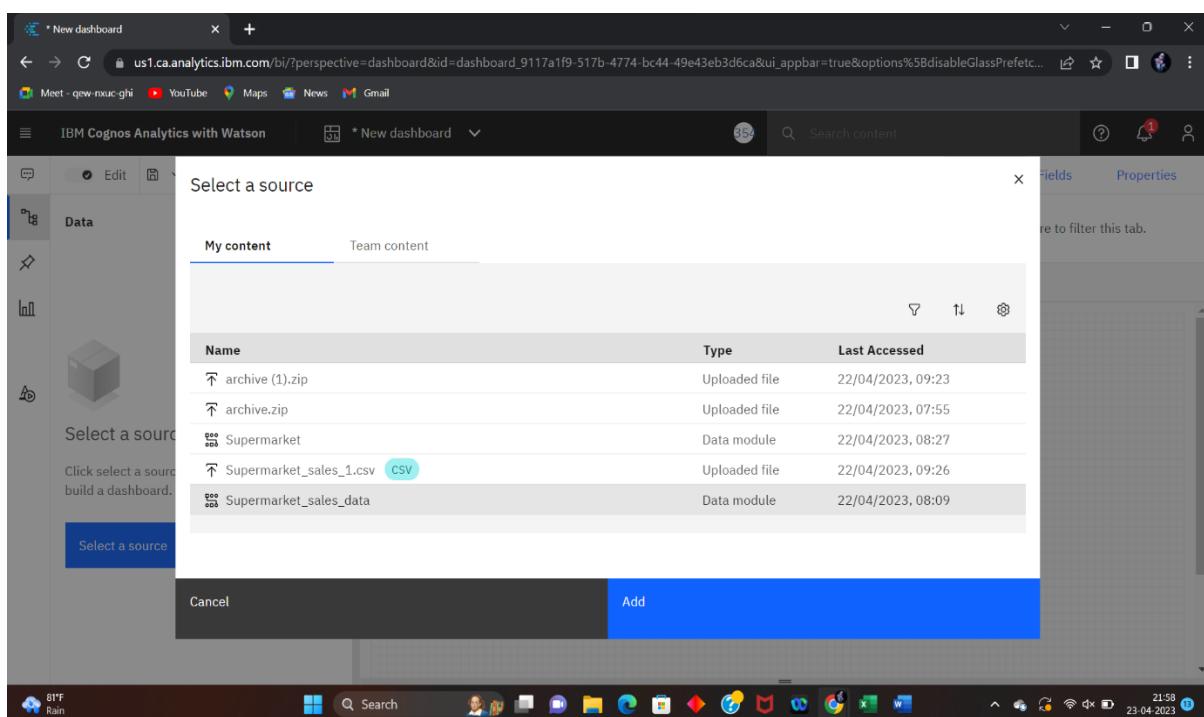


Go to the present data option to visualize the explored data in different format

Select the type of presentation, in my case I am using dashboard.



Select the type of dashboard.



After selecting the type of dashboard click on “select a source” button to add the source file to the dashboard.

The screenshot shows the IBM Cognos Analytics with Watson interface. On the left, the 'Selected sources' panel displays a tree view of data from the 'HR_data_module'. A specific dataset, 'HRDataset_v14.csv', is selected and highlighted with a blue border. The tree structure includes categories like Navigation paths, Employee_Name, EmpID, FromDiversityJobFairID, Salary, Termid, Position, State, Zip, DOB, Sex, and MaritalDesc. To the right of the source panel is a workspace area titled 'Tab 1'. The workspace has two tabs: 'All tabs' and 'This tab'. The 'All tabs' tab contains a placeholder message: 'Drag and drop data here to filter all tabs.' The 'This tab' tab also has a placeholder message: 'Drag and drop data here to filter this tab.' At the top of the interface, there are various navigation and search tools, along with a status bar indicating '341' items.

Adjust the dashboard settings for our convenience.

The screenshot shows the IBM Cognos Analytics with Watson interface with the 'Properties' tab selected. The main workspace displays a photograph of a modern office interior. On the left, there is a sidebar with sections for 'Widgets', 'Standard' (containing icons for text, image, video, and link), and 'Shapes' (containing a grid of geometric shapes). The 'Properties' panel on the right is expanded and contains several settings: 'Canvas' (Layout positioning set to 'Relative'), 'Page zoom (Absolute layout only)' (Default zoom value set to 100%), 'Page size' (Preset set to 'Screen 16:9'), 'Fit page' (checkbox checked), 'Width' (set to 1280 px), 'Height' (set to 720 px), and 'Grid' (checkbox checked).

Choose the type of dashboard.

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.

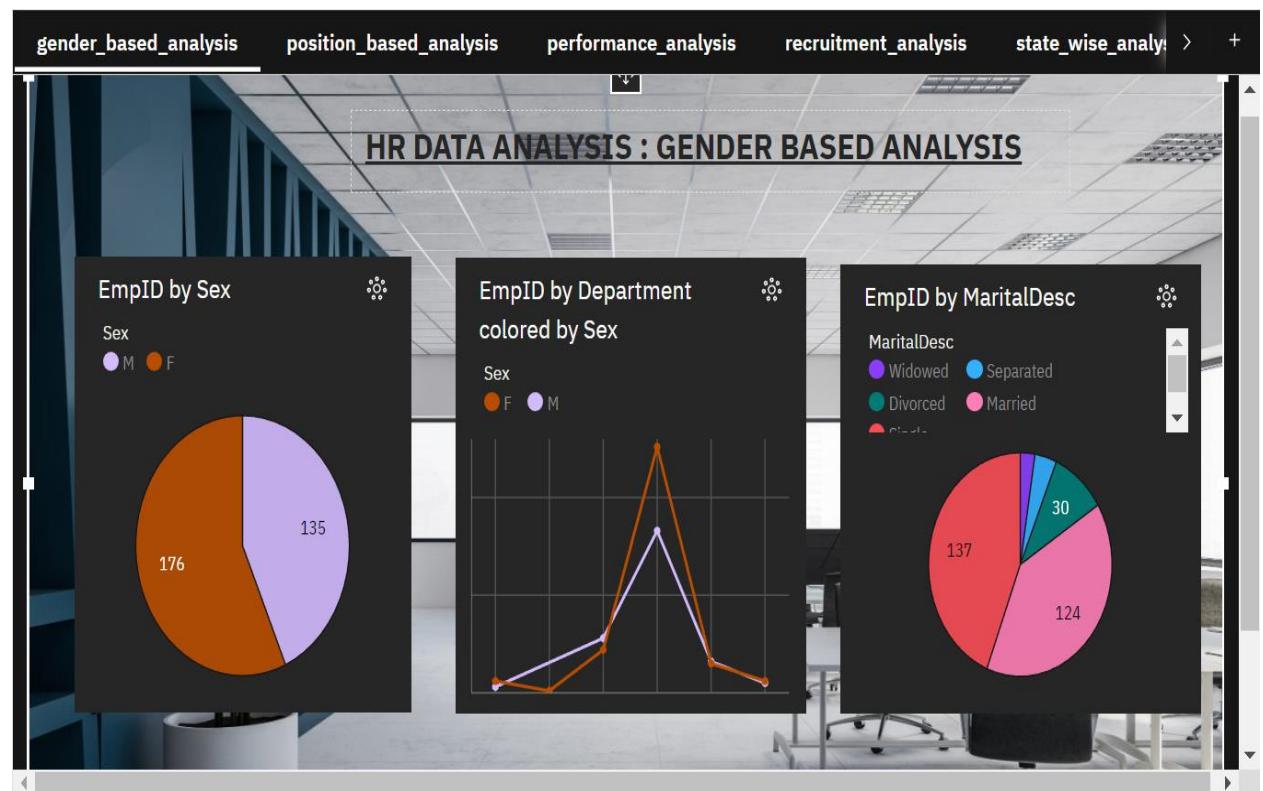
Change the tab name for our reference.

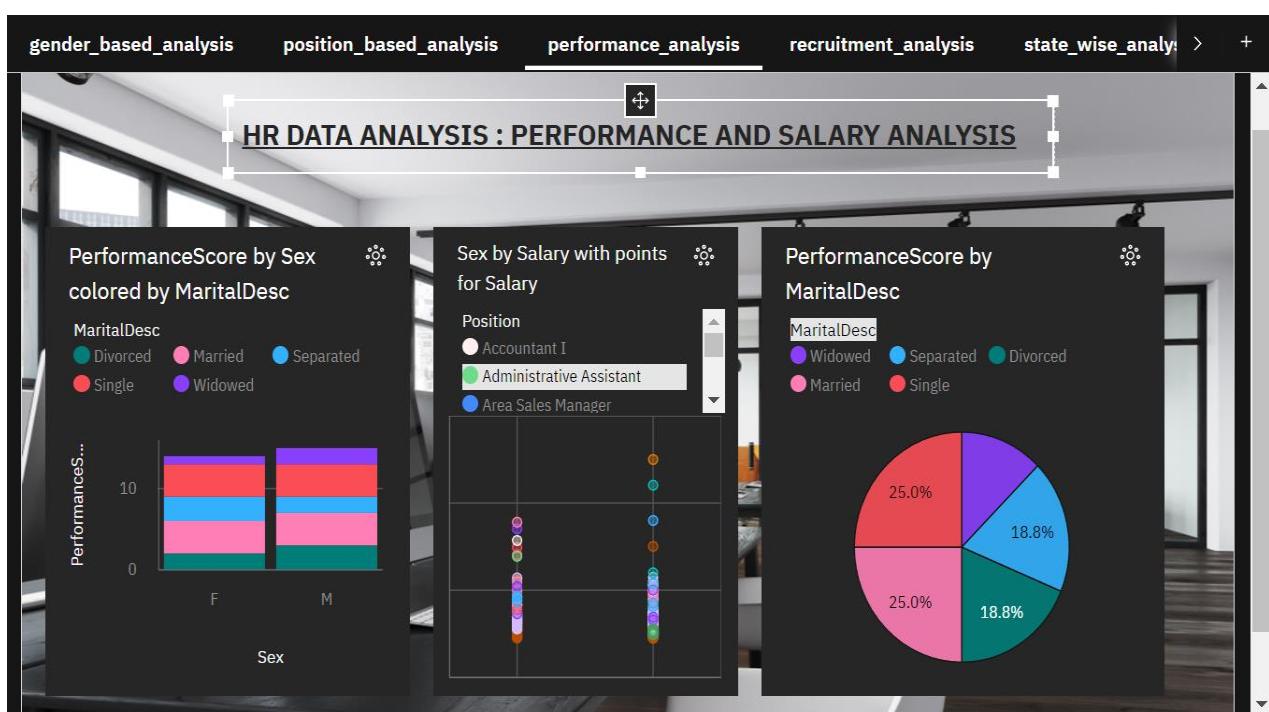
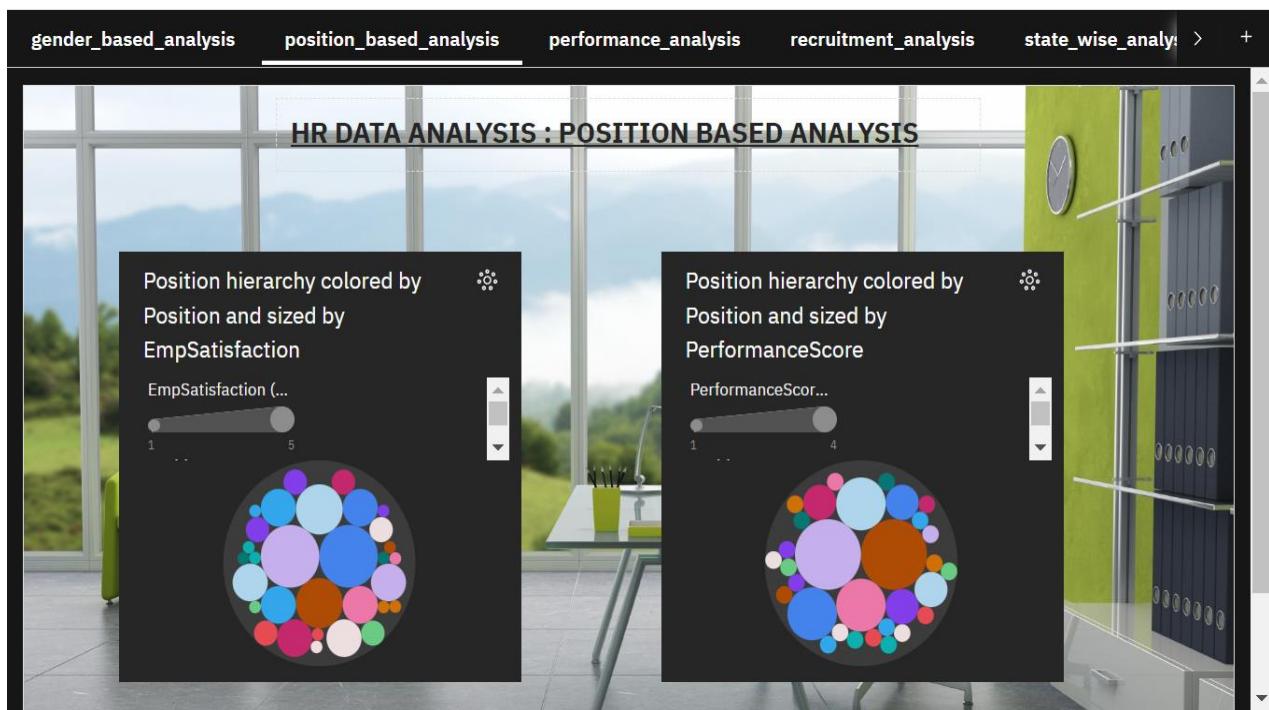
After that save the presentation. These steps are followed for all other tabs. Finally, we get the visualization of our analytics.

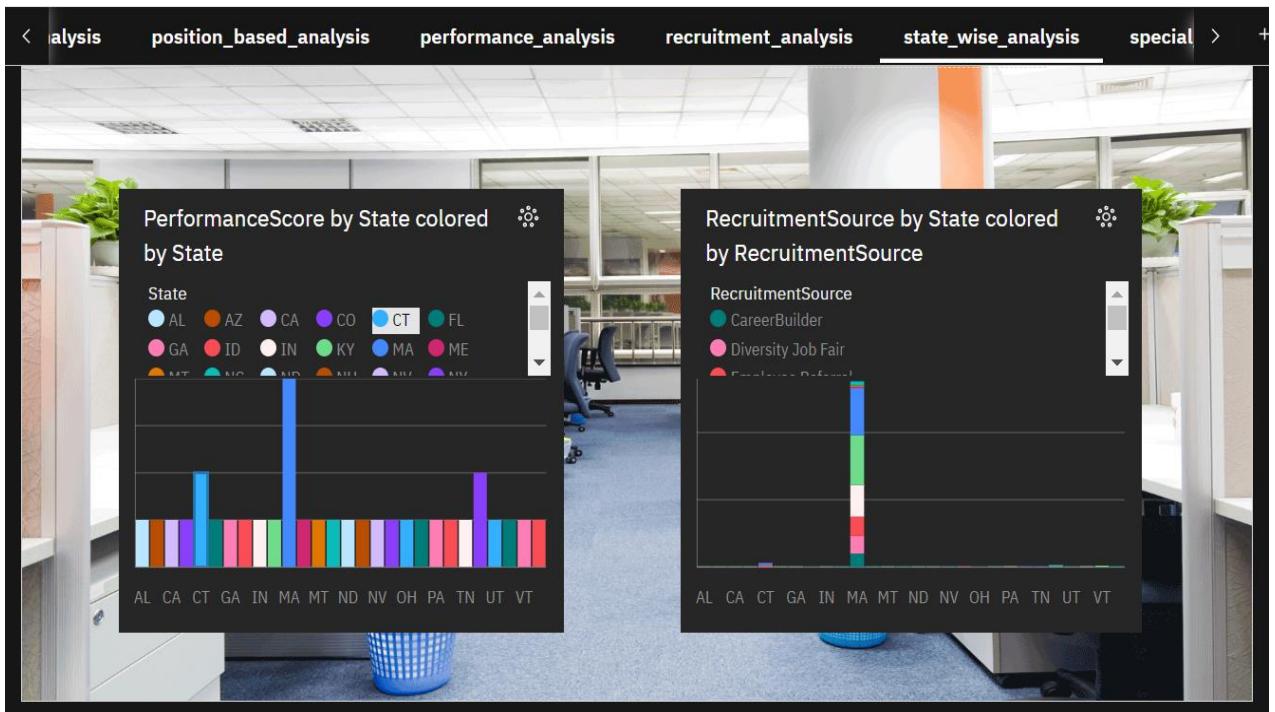
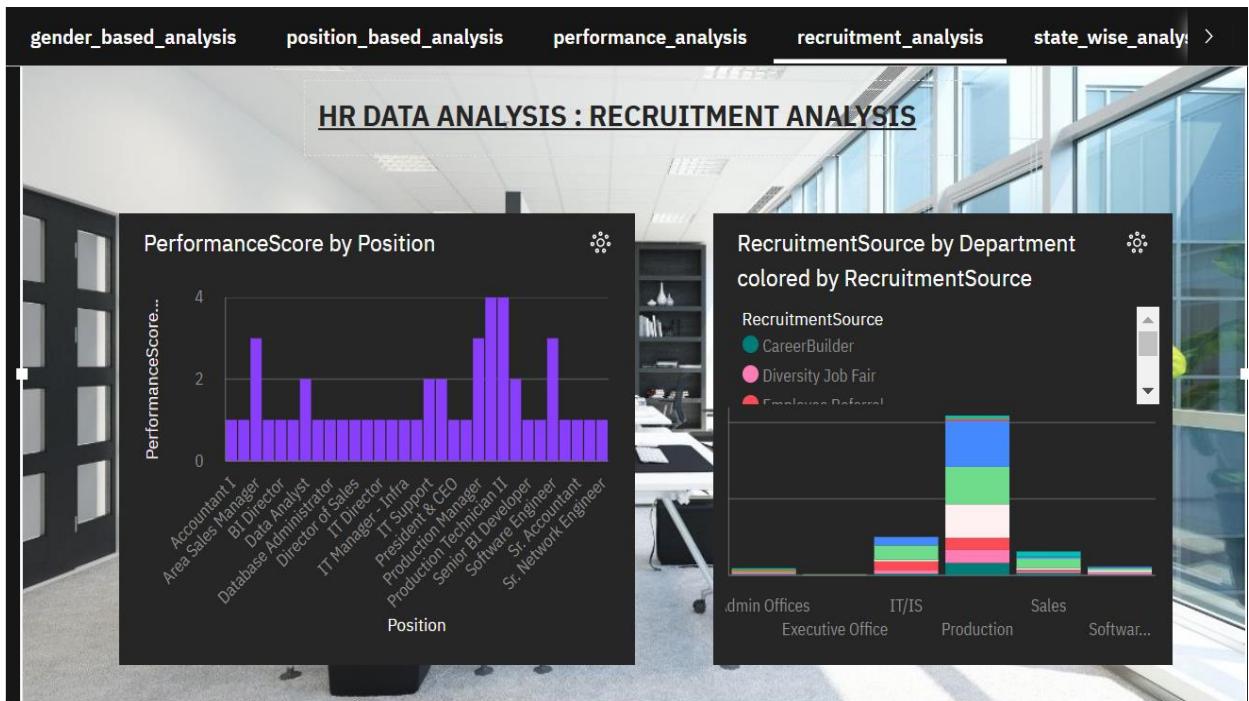
Using share option, we can able to share our presentation as direct link or embed code

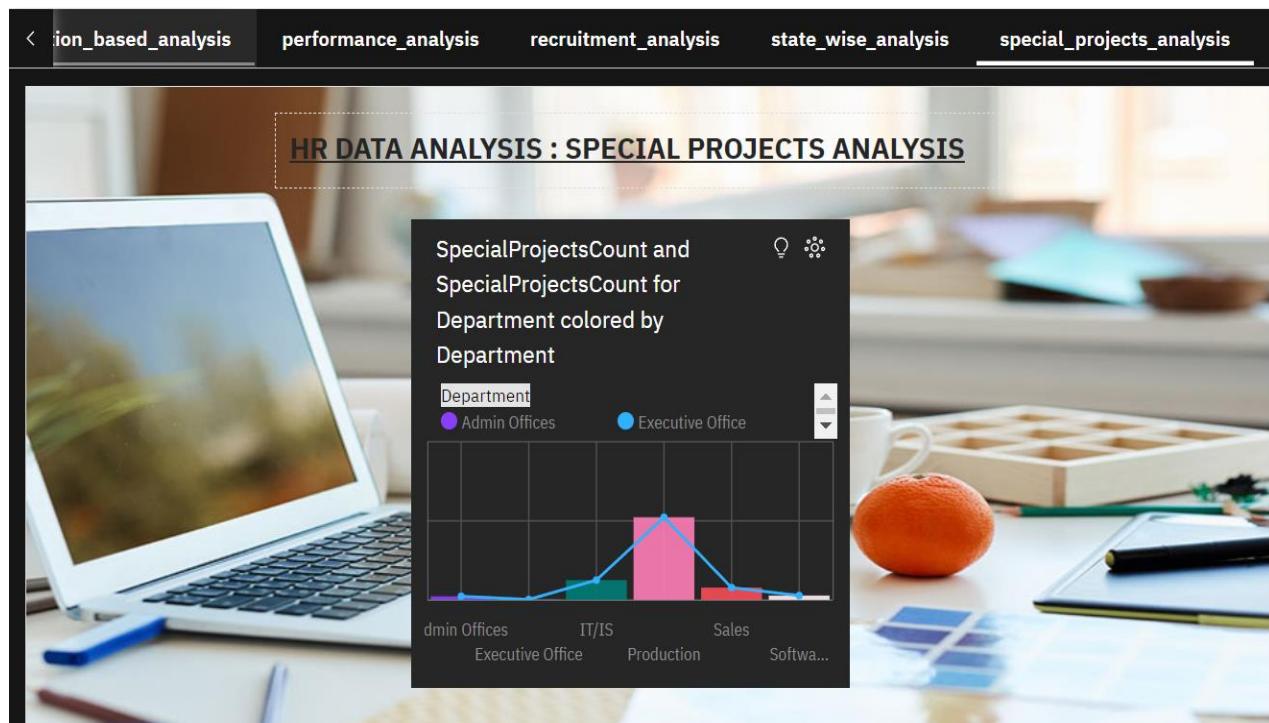
—

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









Here is the link for the presentation:

https://us3.ca.analytics.ibm.com/bi/?perspective=dashboard&pathRef=.my_folders%2FHRDATA_DASHBOARD&action=view&mode=dashboard&subView=model00000187eff70841_00000003

Step 5: Creating Reporting:

The screenshot shows the IBM Cognos Analytics Content interface. A context menu is open on the right, with 'Report' selected. The main area displays several content items:

- HR_data_dashboard
- HR_Data_Exploration
- HR_data_module
- HR_Data_Report
- HR_Data_Story
- HRDataset_v14.csv
- super market sales
- super market sales dashboard

Each item has a small preview icon and a 'Last Modified' timestamp.

The screenshot shows a report specification table with the following rows:

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 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. Linkedin and indeed plays major role in 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 linkedin and indeed.

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

Step 6: Creating story

The screenshot shows the Content page with the following interface elements:

- Header:** Shows multiple browser tabs including WhatsApp, Assignment_1 (1).pdf, PDF to WORD | Convert.PDF, and MyIBM.
- Top Bar:** Includes a search bar, a content navigation bar, and user profile icons.
- Content Area:** A grid of items under the heading "Content". The items are:
 - HR_data_dashboard
 - HR_Data_Exploration
 - HR_data_module
 - HR_Data_Report
 - HR_Data_Story
 - HRDataset_v14.csv
 - super market sales
 - super market sales dashboard
- New Item Dialog:** A floating menu on the right side with the following options: Data module, Exploration, Dashboard, Report, and Story. The "Story" option is highlighted.
- Bottom Bar:** Shows system status including temperature (32°C), battery level (ENG 12:28 PM 10/10/2023), and a notification icon.

To create a story, choose the Present data.

Then choose story option.

The screenshot shows the IBM Cognos Analytics with Watson interface. On the left, there is a sidebar with various chart thumbnails and titles such as "PerformanceScore column chart", "RecruitmentSource column chart", and "RecruitmentSource column chart". The main area displays a presentation slide with a dark purple background and white text that reads "HR Data Analysis Using IBM Cognos Analysis". Below the slide, a timeline bar indicates "Scene 1 of 1" and "0:00.0".

These tools are similar to the other presentation creating tools.

This screenshot shows the same IBM Cognos Analytics interface as the previous one, but the presentation slide has been updated. The text now reads "HR Data Analysis Using IBM Cognos Analysis" in a larger, bold font. The timeline bar at the bottom still shows "Scene 1 of 1" and "0:00.0".

Here is the completed Story:

IBM Cognos Analytics with Watson * HR_Data_Analysis_Story 340 Search content

Edit Analytics Filters

HR Data Analysis Using IBM Cognos Analysis

Prev scene ⏪ ⏩ Next scene Scene 1 of 1 0:00.0 0:05.0

← → C us1.ca.analytics.ibm.com/bi/?perspective=story&id=iAF04BC9122294846A1598B725F4C6111&options%5BdisableGlassPrefetch%5D=true&options%5Bcollections... Search content

IBM Cognos Analytics with Watson * HR_Data_Analysis_Story 340 Analytics Filters

Gender Based Analysis

EmpID by Sex

Sex	Count
M	176
F	135

EmpID by MaritalDesc

MaritalDesc	Count
Widowed	0
Separated	30
Divorced	0
Single	137
Married	124

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

Prev scene ⏪ ⏩ Next scene Scene 2 of 2 0:00.0 0:05.0

position Based Analysis

Position hierarchy colored by Position and sized by EmpSatisfaction

A bubble chart titled "Position hierarchy colored by Position and sized by EmpSatisfaction". The x-axis is labeled "EmpSatisfaction (1 to 5)" with a slider at 5. The y-axis is labeled "Position". The legend includes: Accountant I (blue), Administrative Assistant (pink), Area Sales Manager (orange), and BI Developer (teal). The chart shows various employee roles as bubbles, with their size corresponding to satisfaction levels. Large bubbles include Production Technician, Area Sales Manager, and Production Manager.

• **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.**

Position hierarchy colored by Position and sized by PerformanceScore

A bubble chart titled "Position hierarchy colored by Position and sized by PerformanceScore". The x-axis is labeled "PerformanceScore (1 to 4)" with a slider at 4. The y-axis is labeled "Position". The legend includes: Accountant I (blue), Administrative Assistant (pink), Area Sales Manager (orange), and BI Developer (teal). The chart shows various employee roles as bubbles, with their size corresponding to performance scores. Large bubbles include Production Technician, Area Sales Manager, and Production Manager.

[us1.ca.analytics.ibm.com/bi/?perspective=story&id=iAF04BC9122294846A1598B725F4C6111&options%5BenableGlassPrefetch%5D=true&options%5Bcollections...](#)

IBM Cognos Analytics with Watson HR_Data_Analysis_Story 340 Search content

Analytics Filters

Recruitment Based Analysis

PerformanceScore by Position

Position	PerformanceScore Count
Accountant I	3
Area Sales Manager	1
BI Director	2
Data Analyst	1
Director of Admin	1
Director of Sales	1
IT Director	1
IT Manager - Infra	2
IT Support	1
President & CEO	1
Production Manager	3
Production Technician II	4
Software Developer	2
Sr. Engineer	1
Sr. Accountant	3
Sr. Network Engineer	1

Employees performing well are recruitment from the linked-in , employee-referred and indeed.

- Production department has higher employees strength.
- Linked-in and indeed plays major role in the recruitment process.
- State AI and KY also has good performance. Recruitment may raised on those areas.

PerformanceScore by State colored by State

State	PerformanceScore Count
AL	1
CA	1
CT	1
GA	1
IN	1
KY	1
MA	4
ME	1
MT	1
NC	1
ND	1
NH	1
NV	1
NY	1
OH	1
OR	1
PA	1
RI	1
TN	1
TX	1
VA	1
VT	1
WA	1

Gender Wise Performance Analysis

PerformanceScore by Sex colored by MaritalDesc

Sex	Divorced	Married	Separated	Single	Widowed
F	2	3	2	4	2
M	3	2	1	2	3

EmpID by Department colored by Sex

Department	Female (F)	Male (M)
Admin Offices	10	10
Executive Office	10	10
IT/IS	20	20
Production	120	80
Sales	20	20
Software...	10	10

Analysis and Recommendations:

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

Save as

Name: HR_Data_Analysis_Story

Selected destination: My content

My content Team content

Name	Type	Last Accessed
HR_Analysis_Report	Report	07/05/2023, 00:12
HR_CHART	Exploration	06/05/2023, 11:20
HR_dashboards	Dashboard	06/05/2023, 10:23

Cancel Save

Save the story as per the required name. Finally make sure everything has been save.

