IBM Cognos Powered Hr and People Analytics Dashboard

1.Introduction

1.1 Overview- A brief description about the project.

- Uploading the data

   Getting data for the project. There are lots of sample data assets on the IBM Cognos Analytics Community that you can use in IBM Cognos Analytics, including the one that's used in this project.

- Prepare the data

   Preparing data. After data collection,the researcher or users must prepare the data to be analyzed. Organizing the data correctly can save a lot of time and prevent mistakes.

- Exploration

   Where users explore a large data set in an unstructured way to uncover initial patterns,characteristics,and points of interest.

- Creating a dashboard / Present data

   You can explore your data and easily communicate the analysis and insights that you discover.

1.2 Purpose-

- The use of this project. What can be achieved using this.

   The HR Analytics dashboard provides a bird's eye view of an organization's Human Resource,based on factors like:

   1. Attrition Rate

   2. Employee Satisfaction Index

3. Hirings

4. Exits

Additionally,it offers:

1. The ability to chill down to both Divisional and
Departmental
	levels.

2. Insightful reports that shed a clear light on Employee Details
as
	well as Demographics.

2.LITERATURE SURVEY

2.1 Existing problem- Existing approaches to solve problem.

2.2 Proposed solution

-> Complexity

The presentation of the metrics should be as simple as possible so that it's clear what it's telling you. It should not leave any room for interpretation as to what's happening. For this it would be wise to divide all your dashboards into three categories:

Strategic Dashboards- they help users or business leaders monitor company progress towards goals.

Analytical Dashboards- they provide insights into data collected over time.

Operational dashboards-they are used at the departmental level, they monitor day-to-day operations,help managers catch problems as they
	occur.

3.THEORITICAL ANALYSIS

3.1 Block diagram- Diagrammatic overview of the project.
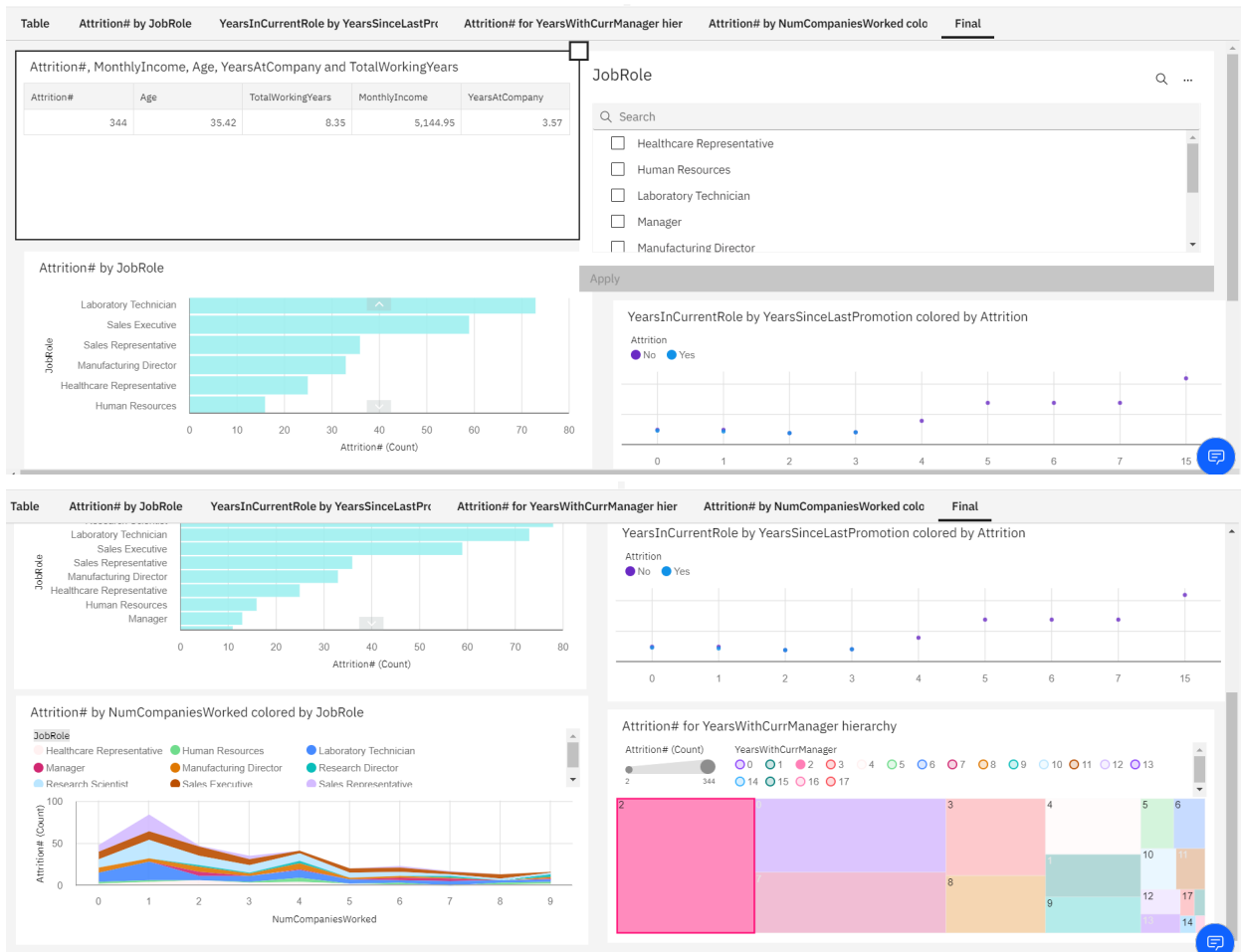
This is the dashboard created based on the given data of Powered Hr and People Analytics. Different visualizations are used in the process of creation of the dashboard. The following quantities are used for different visualizations:

1. Attrition, Monthly income, Age, Years at company and Total working years.
2. Attrition by Job Role.
3. Years in Current Role by Years since last promotion colored by

Attrition.

4. Attrition by Number of Companies worked colored by JobRole

5. Attrition for Years with Current Manager hierarchy.

3.2 Hardware/Software designing

BM Workplace Dashboard Framework delivers reusable service-oriented components, robust administration tools, and dashboard-specific features that speed the creation of standards-based, active dashboards. By leveraging Workplace Dashboard Framework, you can:

- Quickly deploy highly tailored dashboards that consolidate data and processes from multiple back-end systems.
- Facilitates problem resolution by enabling action right from the dashboard.
- Help dramatically reduce your development costs and speed the time-to-value for your dashboard initiatives.

Workplace Dashboard Framework offers the following key benefits:

- Helps reduce dashboard development and maintenance costs by simplifying and speeding the entire dashboard development cycle.
- Helps accelerate problem resolution by empowering dashboard users to drive action right from the dashboard, without having to pick up the phone or jump to one or more different systems.
- Helps improve employee productivity by delivering tailored access to relevant information and alerts.
- Leverages existing skills sets and infrastructures with standards-based tooling.
- Helps improve decision making and visibility into business

operations with consolidated, timely data.
- Increases dashboard flexibility and helps lower maintenance costs via business user configuration.

IBM currently offers two Workplace dashboards, IBM Workplace Dashboard for Sales and IBM Workplace Dashboard for Executives.

Workplace Dashboard Framework augments IBM WebSphere® Portlet Factory and supports IBM WebSphere Portal and IBM Workplace Services Express.

4.Experimental Investigations

Analysis or the investigation made while working on the solution.

Taking the guidance of some Youtube videos and from the guidance of mentors we had developed our project which was allotted.

The links have been attached here: https://youtu.be/7gIJYDnChAs

And the link which had been referred to upload the files to Github is: https://youtu.be/m5QHWrwii4E
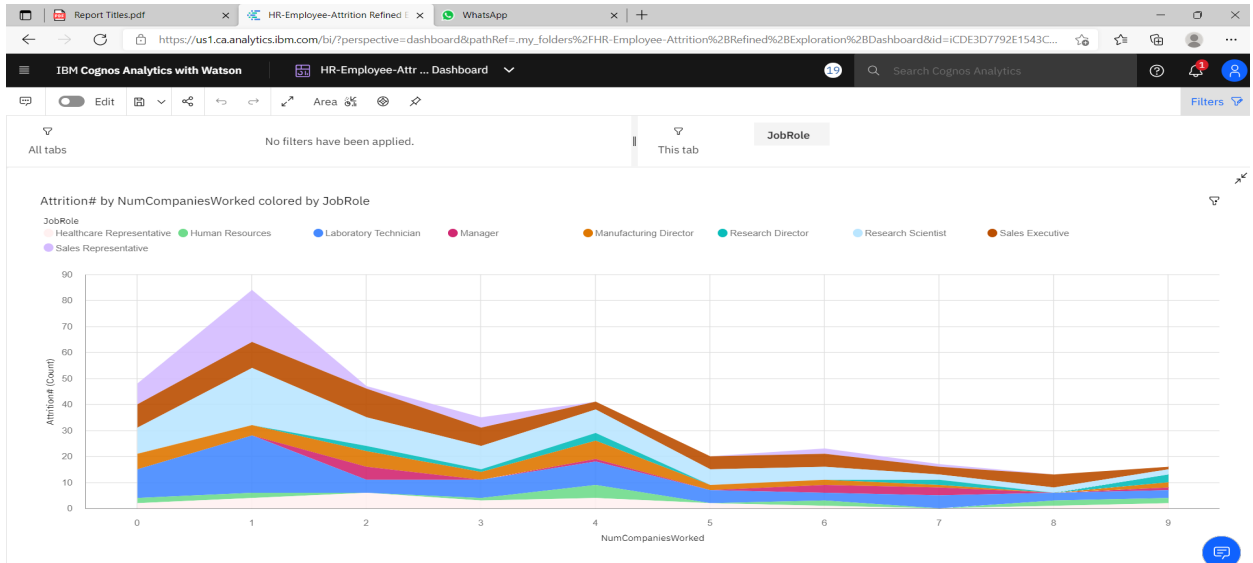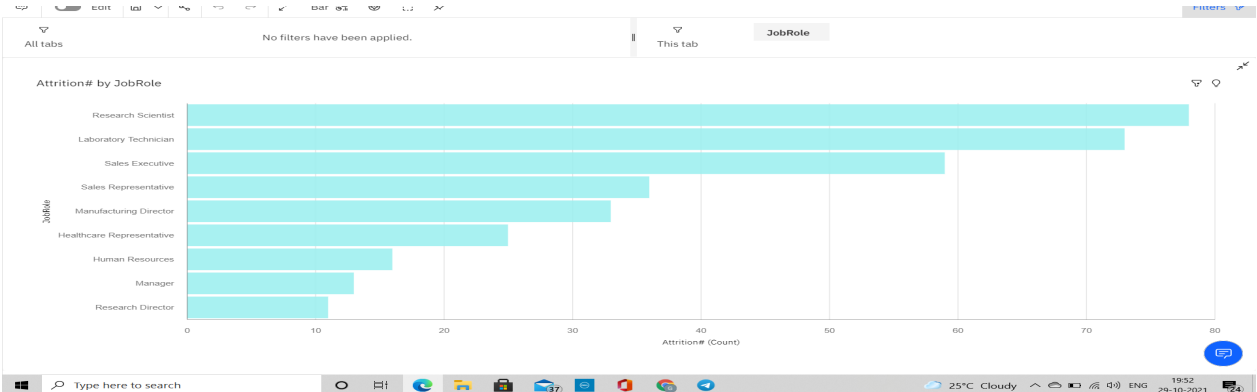
5.Flowchart

Image showing the control flow of the solution(Creating a dashboard)
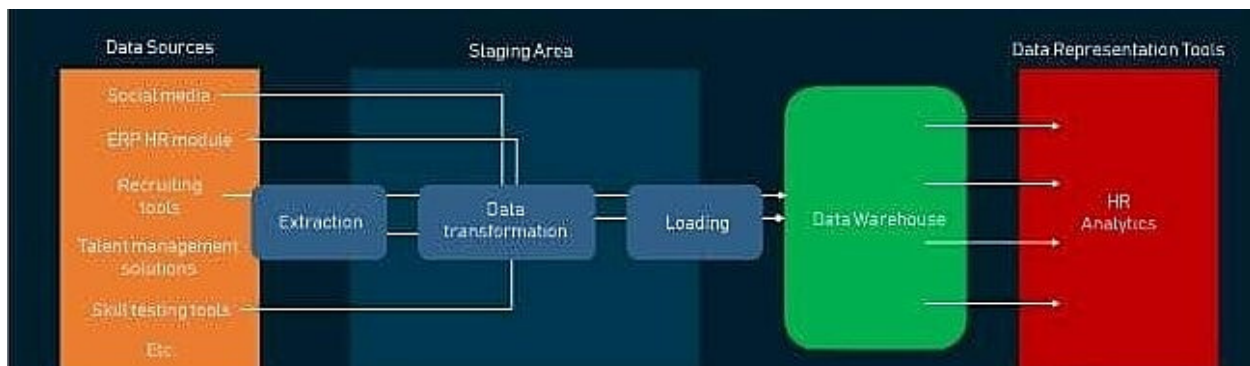
6.Result

Attrition#, MonthlyIncome, Age, YearsAtCompany and TotalWorkingYears

Attrition#	Age	TotalWorkingYears	MonthlyIncome	YearsAtCompany
344	35.42	8.35	5,144.95	3.57

Attrition# by JobRole

Attrition# by NumCompaniesWorked colored by JobRole

YearsInCurrentRole by YearsSinceLastPromotion colored by Attrition

Attrition
● No   ● Yes

Attrition# for YearsWithCurrManager hierarchy

Attrition# (Count)   YearsWithCurrManager
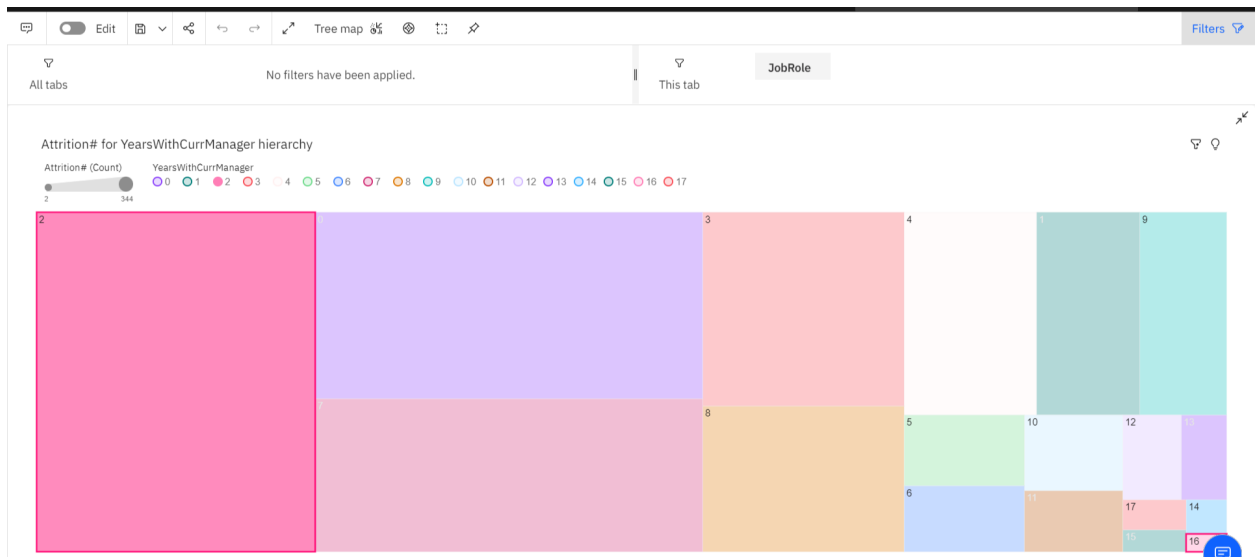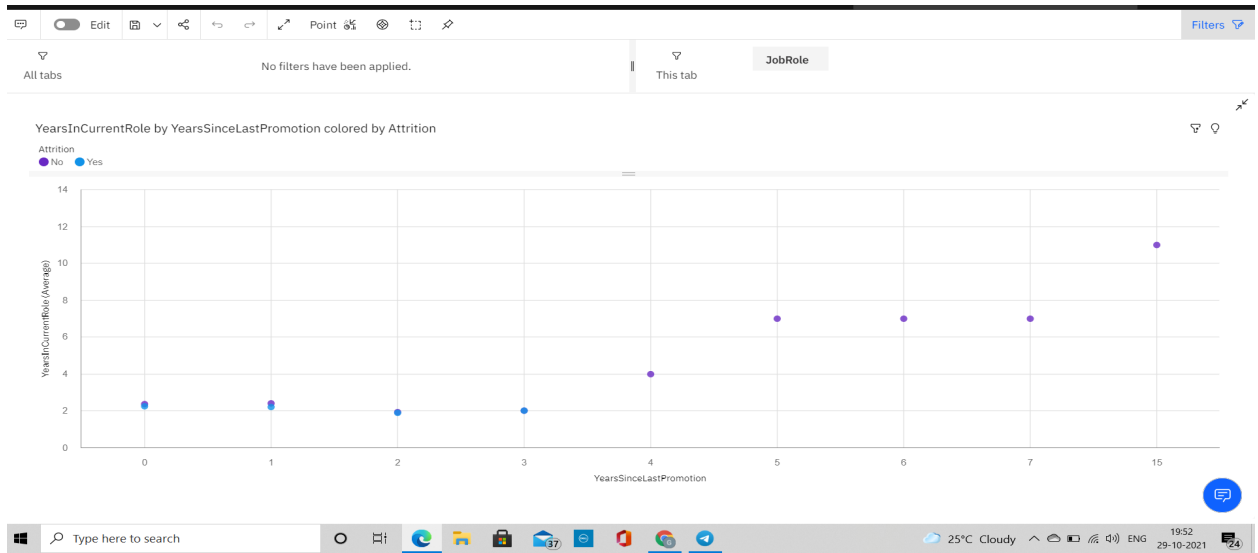2   344   ●0 ●1 ●2 ●3 ●4 ●5 ●6 ●7 ●8 ●9 ●10 ●11 ●12 ●13 ●14 ●15 ●16 ●17

| Table | Attrition# by JobRole | YearsInCurrentRole by YearsSinceLastPro | Attrition# for YearsWithCurrManager hier | Attrition# by NumCompaniesWorked colo | Final |

Attrition#, MonthlyIncome, Age, YearsAtCompany and TotalWorkingYears

Attrition#	Age	TotalWorkingYears	MonthlyIncome	YearsAtCompany
344	35.42	8.35	5,144.95	3.57

JobRole

🔍 Search

☐ Healthcare Representative
☐ Human Resources
☐ Laboratory Technician
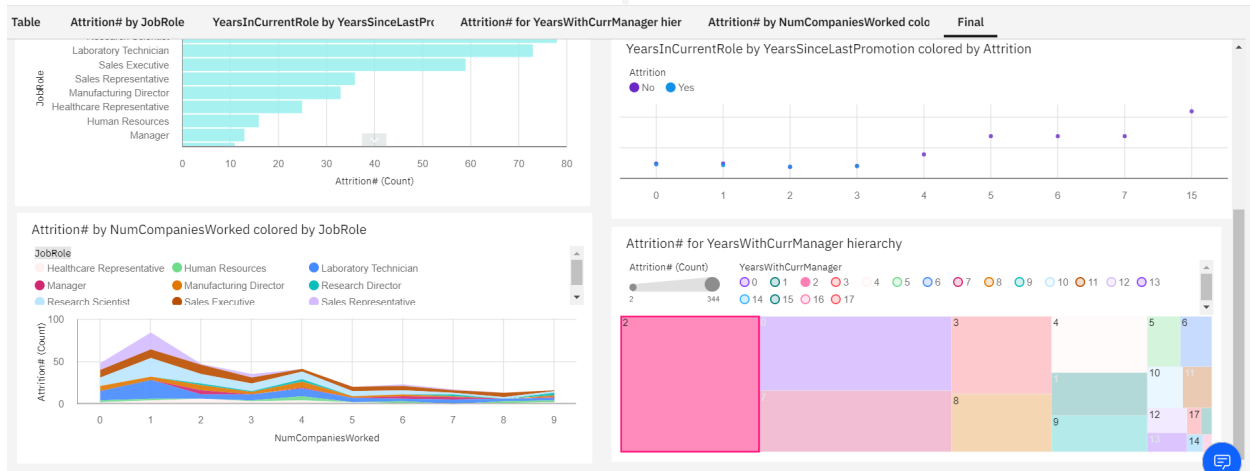☐ Manager
☐ Manufacturing Director

Apply

Attrition# by JobRole

YearsInCurrentRole by YearsSinceLastPromotion colored by Attrition

Attrition
● No   ● Yes

7.Advantages and Disadvantages

Advantages:

1. .Better decision making.
2. Key performance indicators.
3. Better Forecasting.
4. Easy Communication.
5. Recognize skills and vulnerabilities of the workforce.
6. Understand and mitigate risk.
7. Improved results.

Disadvantages:

1. Difficulty in integrating data.
2. Access to the right performance.

8.Applications

HR dashboards are useful for analyzing performance and identifying areas for improvement in an organization. They're not only important to HR managers, but for C-level executives as well. Decision makers ensure that company strategy is aligned from executive to managerial to individual goals. Executives and HR leaders must work together to identify the data they need in order to take action. Then you can collect and
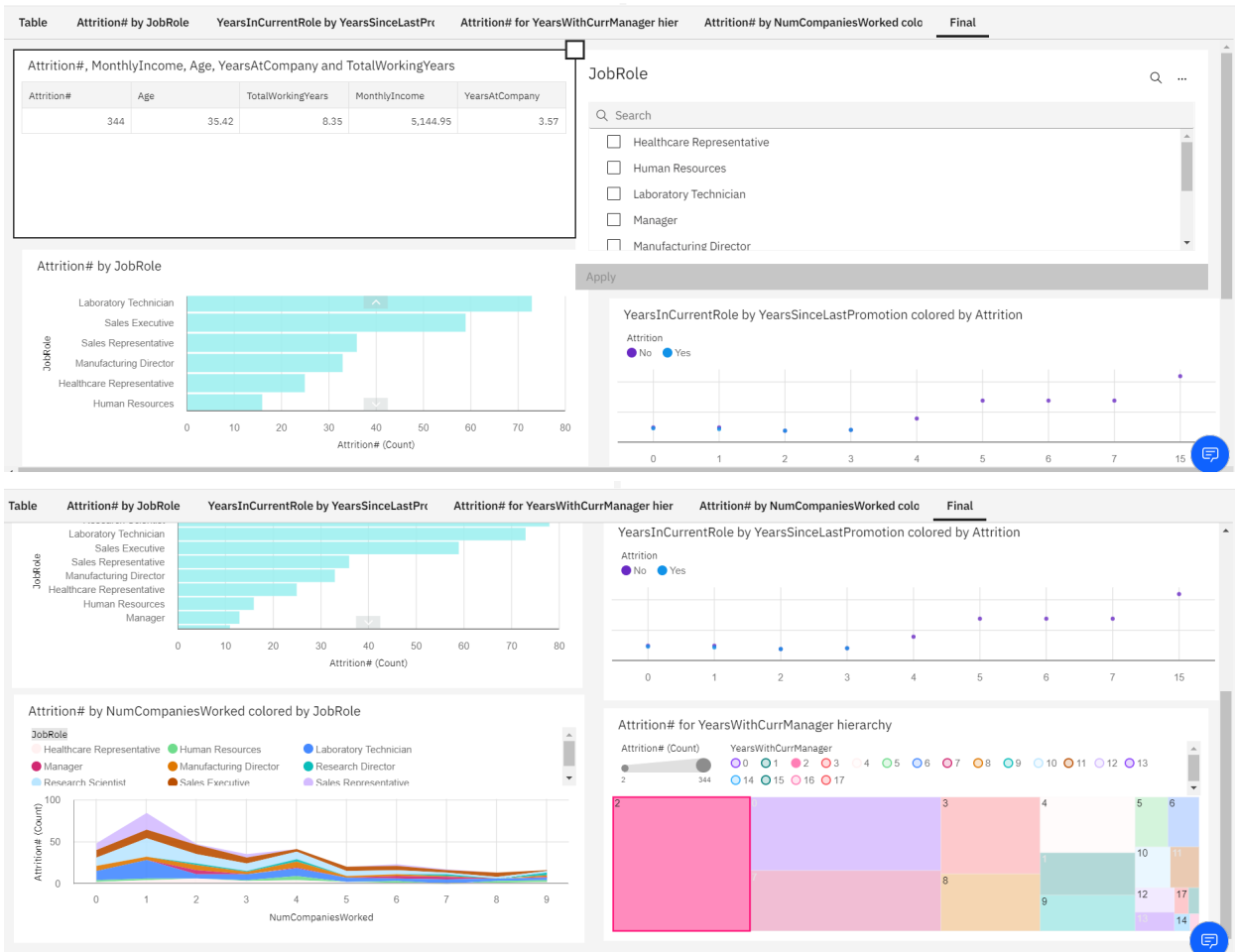
monitor that data to keep workforce performance aligned with organizational objectives.

A good HR dashboard will provide a concise and intuitive display of clear key performance indicators. Below are a few tips to consider when customizing or creating an HR dashboard:

- Narrow down what you measure. Just because you can monitor dozens of KPIs doesn't mean you should. You're not building Frankenstein's monster. You're painting a nuanced picture of the workforce that guides the decision making process. Monitor the metrics that benchmark performance. Stick to the eight to 12 most important visualizations and drill down as necessary.
- Only measure meaningful data. The most valuable data is actionable. The goal is to monitor metrics which can be linked to a future course of action. Let's say HR needs to meet aggressive hiring deadlines due to the company's rapid growth. If your all of your top performing employees were found through LinkedIn ads, then should you spend time and money sourcing new candidates at job fairs? Only monitor data from which you can glean insights for decisions.
- Dive deeper. Businesses must strike a delicate balance between measuring everything and measuring nothing. To do this, first pinpoint the challenges of each department. Next, determine which are related to HR. Then determine what metrics would provide insight into these challenges.

9.Conclusion

The dashboard based on given data is created.

10.Future Scope

HR dashboards are useful for analyzing performance and identifying areas for improvement in an organization. They're not only important to HR managers, but for C-level executives as well. Decision makers ensure that company strategy is aligned from executive to managerial to individual goals. Executives and HR leaders must work together to identify the data they need in order to take action. Then you can collect and monitor that data to keep workforce performance aligned with organizational objectives.

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key performance indicators.

11.Bibilography

References of previous works or websites visited/books referred for analysis

about the project,solution previous findings.

- IBM Cloud Account
- YouTube

Appendix

Source code- The code for the solution built.

Dashboard link:

https://us1.ca.analytics.ibm.com/bi/?perspective=dashboard&pathRef=.my_folders%2F
HR-Employee-
Attrition%2BRefined%2BExploration%2BDashboard&action=view&mode=dashboard&s
ubView=model0000017cb12e68f3_00000000