# _IBM Cognos Powered Hr and People Analytics Dashboard_

**-By Indu Rudrapati**

*A report submitted in fulfillment of the requirements for the challenge PROJECT BUILD-A-THON*

**Department of Information Technology**
**Prasad V Potluri Siddhartha Institute of Technology**
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# 1.INTRODUCTION

## 1.1 Overview

✓ **IBM Cognos Analytics integrates reporting, modeling, analysis, dashboards, stories, and event management so you can understand your organization's data, and make effective business decisions.**

✓ **Analytics is the interpretation of data patterns that assist decision-making and performance improvement.**

✓ **HR analytics is defined as the process of measuring the impact of HR metrics, such as time to hire and retention rate on business performance.**

✓ **In this project, we visualize, analyze and gain most of the insights by creating a dashboard.**

## 1.2 Purpose

➤ **This project helps us to know fundamental concepts and can work on IBM Cognos Analytics.**

➤ **Helps to gain a broad understanding of plotting different graphs.**

➤ **We will be able to create meaningful dashboards.**

➤ **The project aims to analyze the impact on buisinessbased on the Hr analytics using IBM Cognos.**

# 2.LITERATURE SURVEY

## 2.1 Existing problem

- **To make analysis on given data we used four different methods provided by IBM Cognos.**
- **These four different methods help to upload the data,refining the data,providing clear analysis of data through different charts,tables etc and finally presenting the data in one frame with clear explanation.**

## 2.2 Proposed solution

- **To solve the given problem we used the four different methods.**
- **Those  are:**
  **1)Upload data**
  **2)Prepare data**
  **3)Exploration**
  **4)Present data.**

# 3.THEORITICAL ANALYSIS

## 3.1 Block diagram



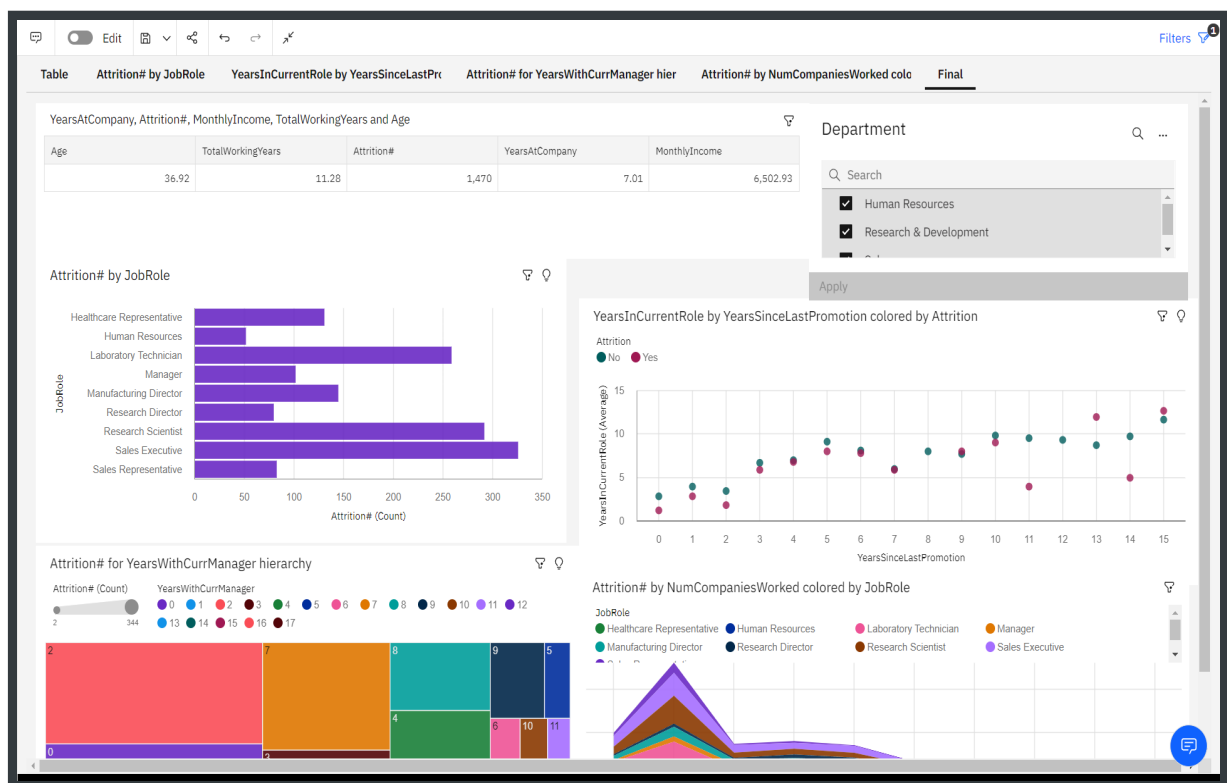*FIG 3.1 DIAGRAMMATIC OVERVIEW OF THE PROJECT*

## 3.2 Hardware/Software designing

- **IBM Cognos is the software required to build this project.**

- **We used this software to complete our project.**

- **Dataset is used to create dashboard.**

# 4. EXPERIMENTAL INVESTIGATIONS

- **IBM Cloud Account**
- **Log in to Cognos Analytics**
- **Working with the Dataset**
  - **Understand the Dataset**
  - **Loading the Dataset**
- **Data visualization charts**
  - **Table analysing Age, TotalWorkingYears, Attrition#, YearsAtCompany and MonthlyIncome**
  - **Attrition# by JobRole**
  - **YearsInCurrentRole by YearsSinceLastPromotion colored by Attrition**
  - **Attrition# for YearsWithCurrManager hierarchy**
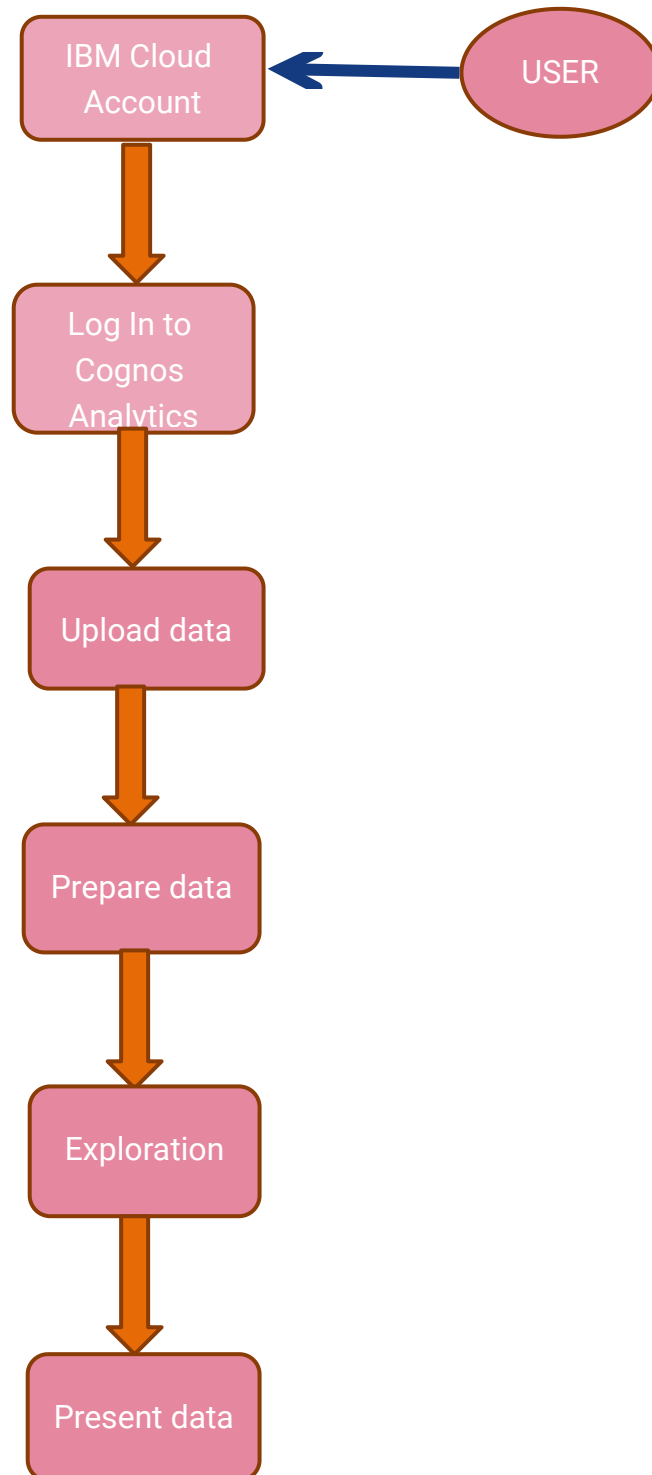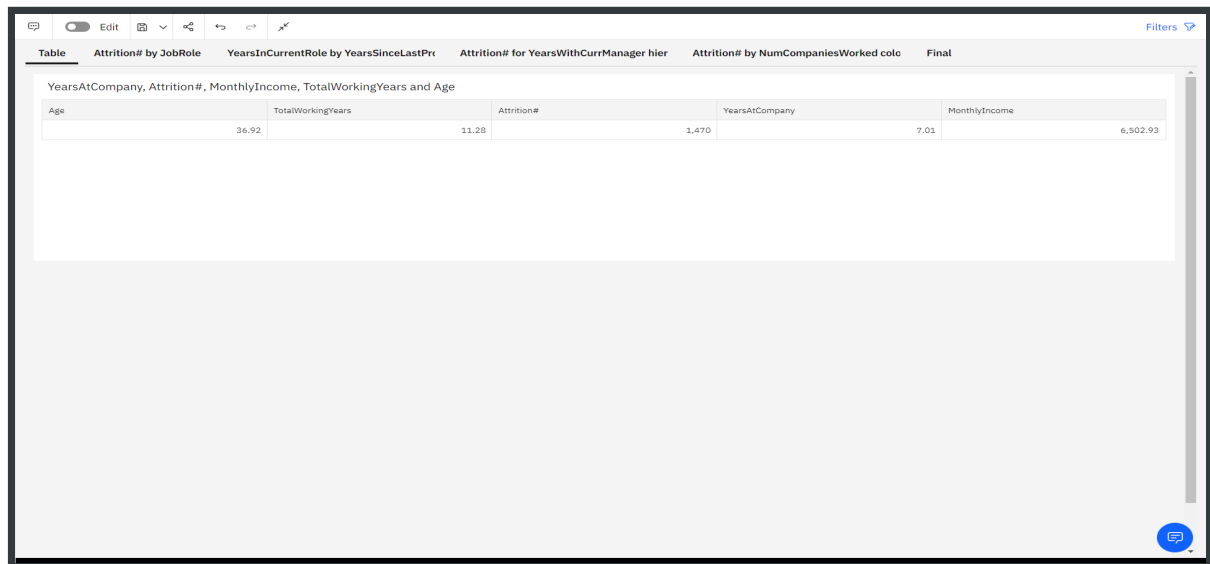  - **Attrition# by NumCompaniesWorked colored by JobRole**
- **Dashboard Creation**

# 5. FLOW CHART



*FIG 5.1 CONTROL FLOW OF THE SOLUTION*

# 6.RESULT

Dashboard creation for Hr and People Analytics is created using IBM Cognos.



*FIG 6.1 Table analysing Age,Attrition#,YearsAtCompany,TotalWorkingYears and MonthlyIncome*
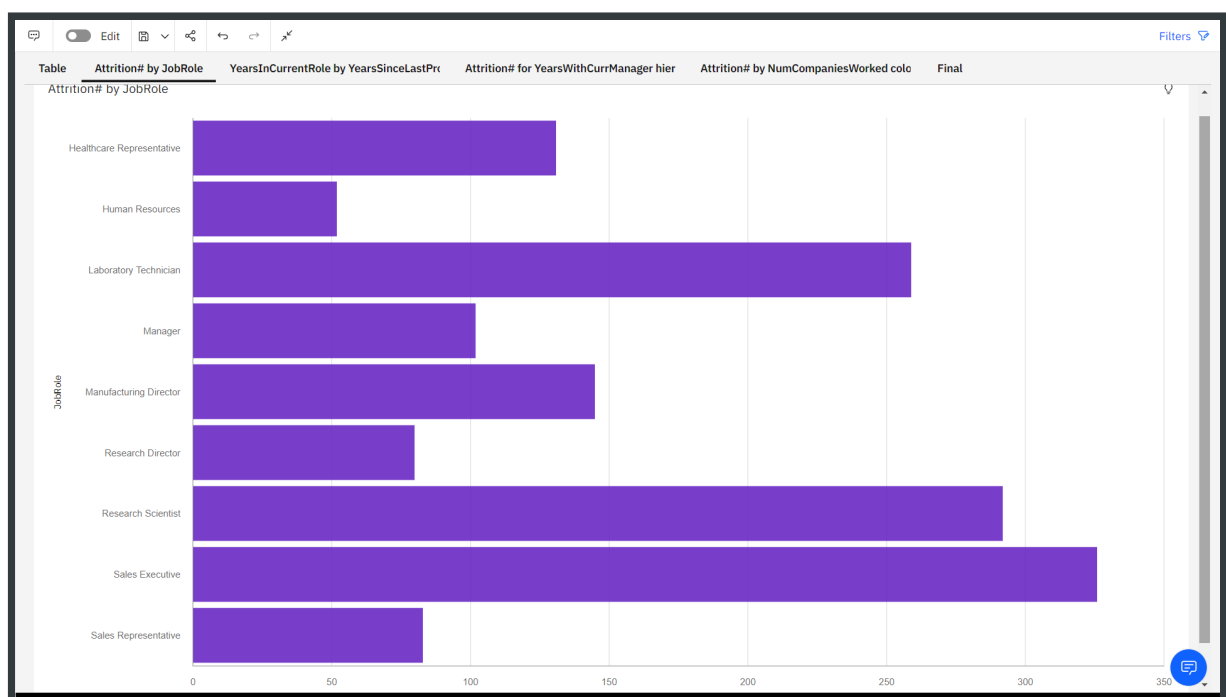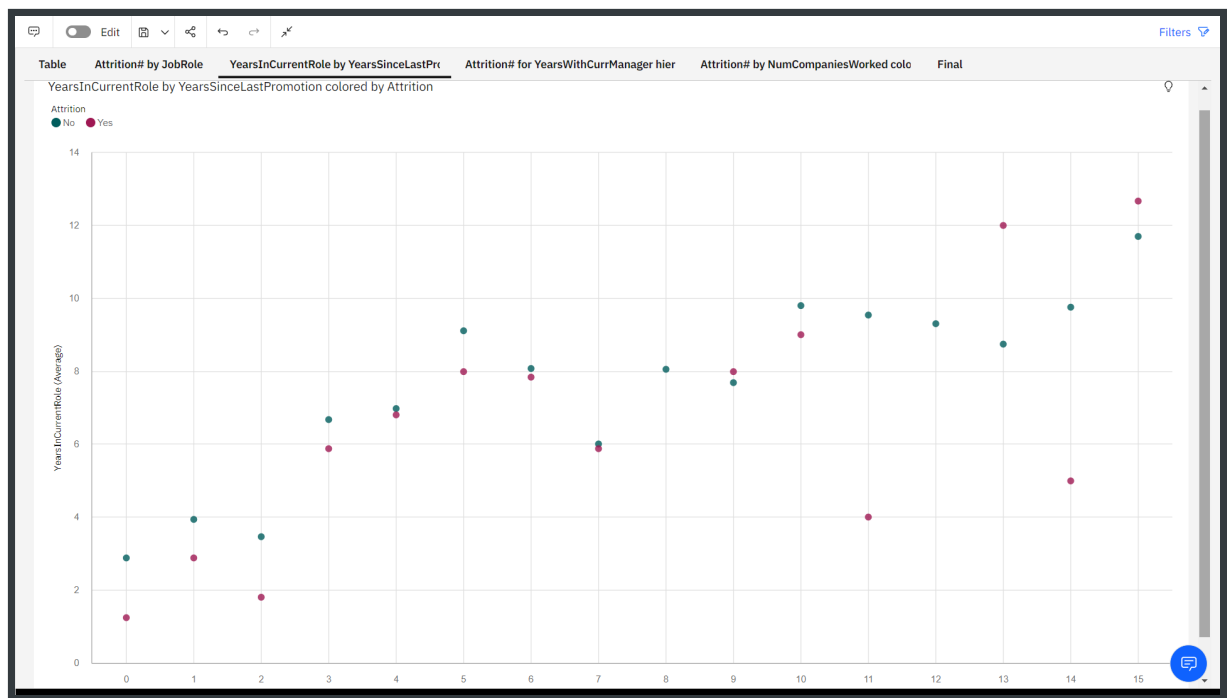


*FIG 6.2 Attrition# by JobRole*

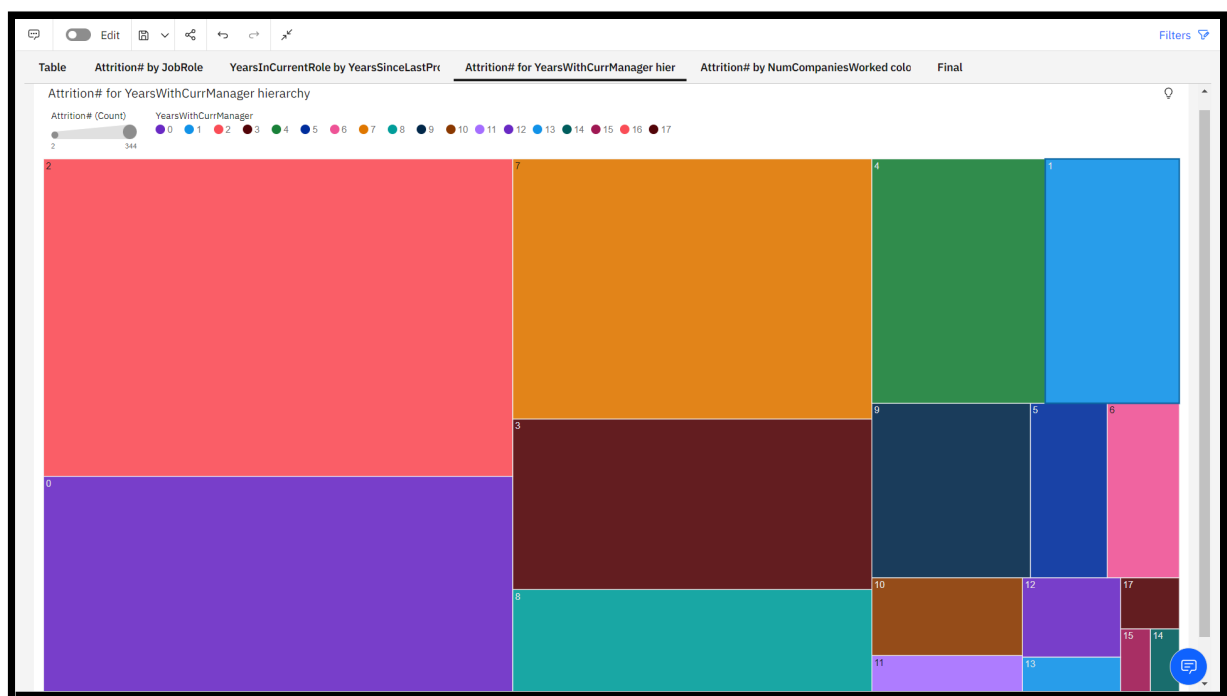**FIG 6.3 YearsInCurrentRole by YearsSinceLastPromotion colored by Attrition**



**FIG 6.4 Attrition# for YearsWithCurrManager hierarchy**
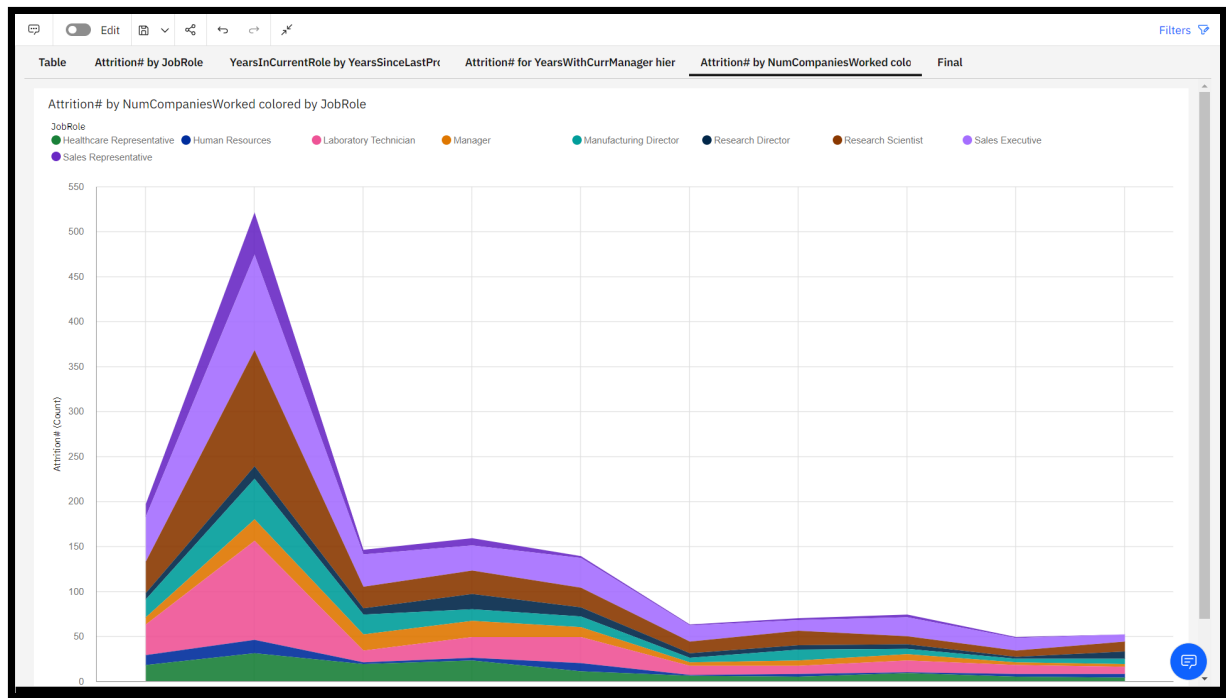
**FIG 6.5 Attrition# by NumCompaniesWorked colored by JobRole**
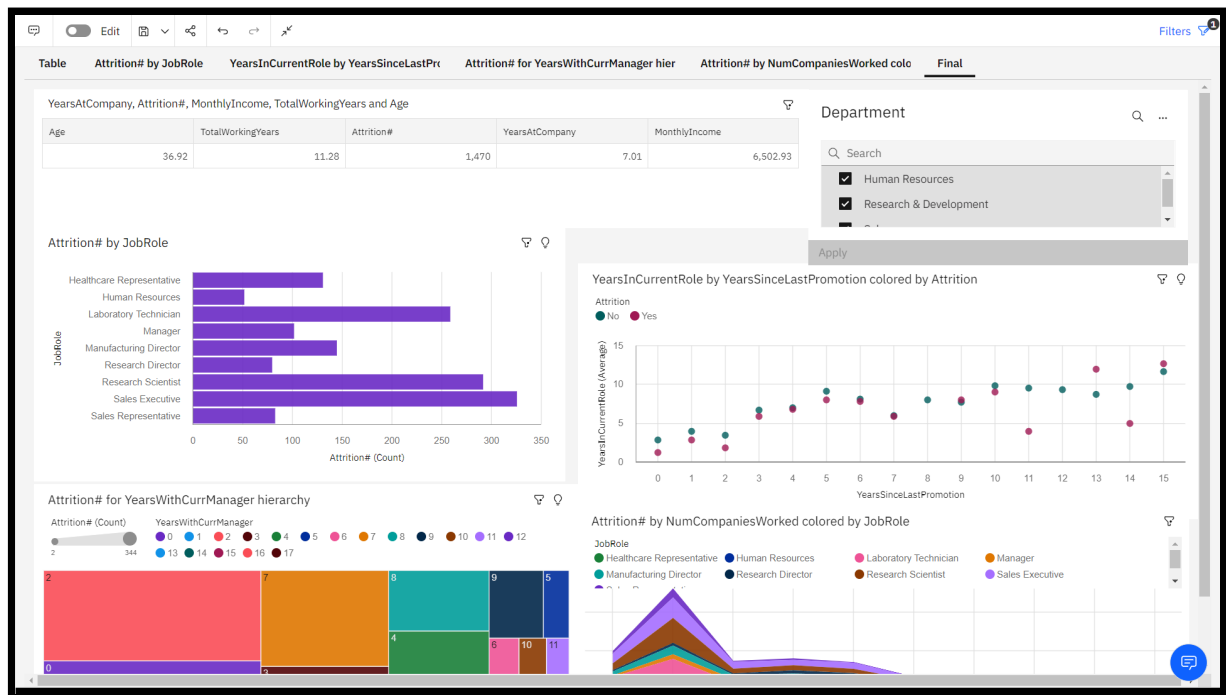


**FIG 6.6 FINAL DASHBOARD**

## Final dashboard link for Hr analytics:

```
https://us3.ca.analytics.ibm.com/bi/?perspective=dashboard&pathRef=.my_folders%2FWA
_Fn-UseC_-HR-Employee-Attrition-
Dashboard01&action=view&mode=dashboard&subView=model0000017cbbe2c127_00000000
```

# 7. ADVANTAGES AND DISADVANTAGES

## Advantages:

- **Lower costs—reduces maintenance due to complete report coverage and a zero-footprint environment.**

- **Faster results—shortens reporting time due to seamless integration and adaptive authoring.**

- **Improved decision making—reports and dashboards present data in easily-understood formats.**

- **Adaptive authoring automatically adjusts report layout when objects are added, moved, or removed.**

- **Ability to work with data using familiar business terms.**

- **Ability to use a variety of charts—crosstabs, bar or 3D bar, pie or doughnut, line, gauge, funnel, scatter, dot density, waterfall, and so forth.**

- **Ability to create complex, multi-page layouts using different data sources.**

- **High performance data access across all sources.**

- **Complete connectivity regardless of environment.**

- **Open architecture that leverages XML, SOAP, and WSDL.**

- **Multiple export formats—Excel, Portable Document Format (PDF), Extensible Markup Language (XML), Hypertext Markup Language (HTML), and Comma Separated Value (CSV).**

- **Multilingual capabilities automatically deliver reports in the users' working language.**

# Disadvantages:

- **Minimal forecast content.**
- **Won't work smoothly with large data sets having many framework.**
- **Cross-browser kinship is often tough.**
- **The user interface is slow to move from screen to screen**
- **I wish there were a search function to find our data elements in the data warehouse**
- **It would be helpful to have more clear error messages that you could better use to determine what needs to be changed.**

# 8.APPLICATIONS

1)Create business reports
2)Analyze data
3)Monitor events and metrics
4)Business decision
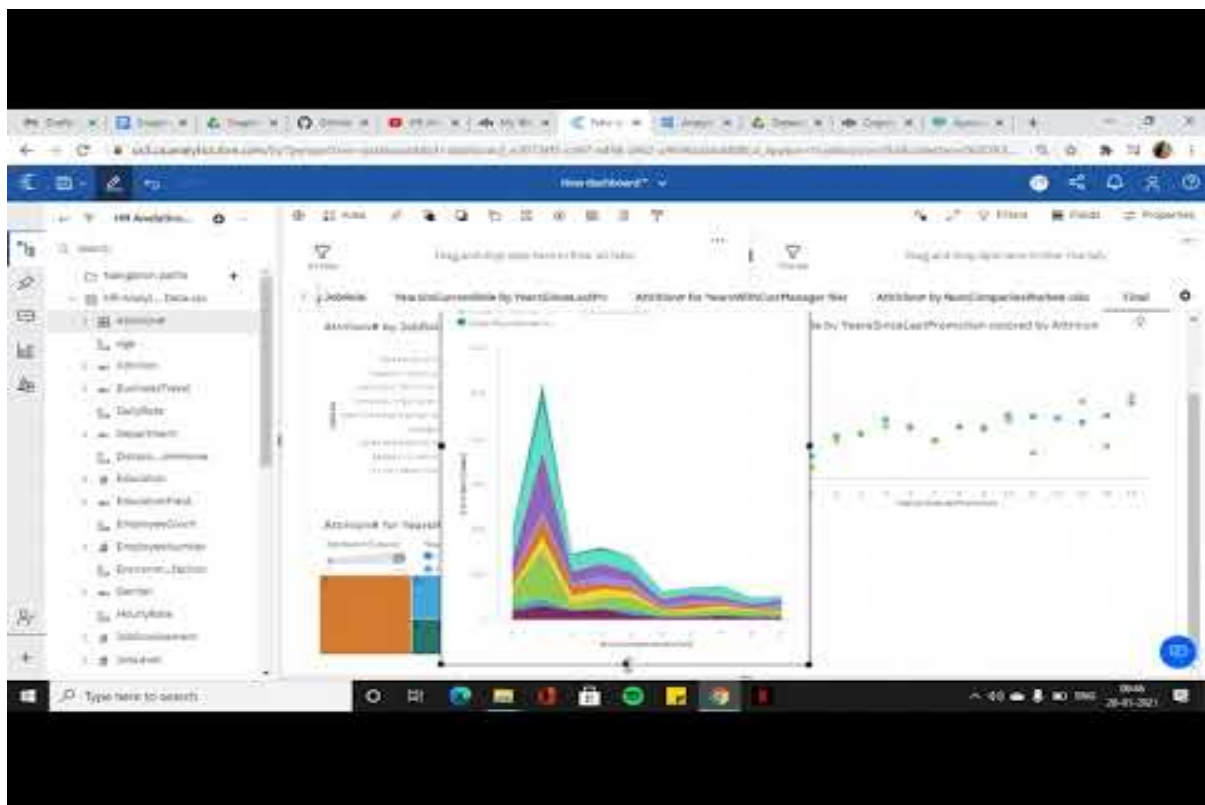5)Web based solution

# 9.CONCLUSION

We created Hr and People Analytics dashboard using IBM Cognos software and with tools in the software.We observed all the required data is presented on dashboard.

# 10.FUTURE SCOPE

It is very useful to present and future business work and IT base.

# 11.BIBILOGRAPHY

➤IBM Cognos Business Intelligence V10.1 Handbook An IBM Red books publication Authors: Dean Browne, Brecht Desmeijter, Rodrigo Frealdo Dumont, Armin Kamal, John Leahy, Scott Masson,Ksenija Rusak, Shinsuke Yamamoto, Martin Keen

➤Videos provided for project reference.



https://www.youtube.com/watch?v=zxyS2DnAyJ0