# IBM COGNOS POWERED HR AND PEOPLE ANALYTICS DASHBOARD

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

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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 business based 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 exploration.

#### 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.THEORETICAL ANALYSIS

#### 3.1 Block diagram

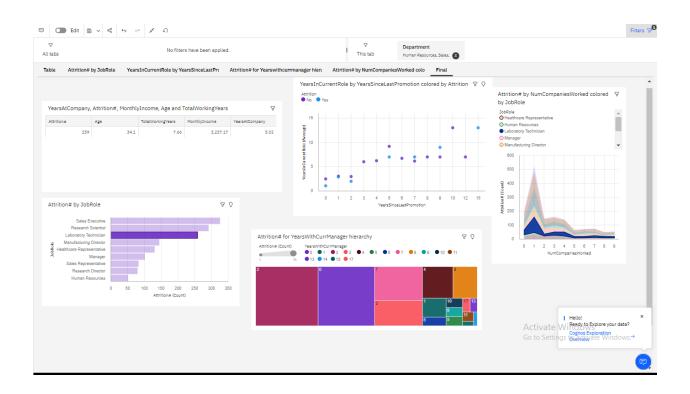


FIG 3.1 DIAGRAMMATIC OVERVIEW OF THE PROJECT

#### 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 INESTIGATIONS

- IBM cloud account
- Log in to cognos analytics
- Working with the dataset
  - Understand the dataset
  - Loading the dataset
- Data visualization charts
  - Table analyzing age, TotalworkingYears,
     Attrition#, Years at company and monthly income
  - Attrition# by job role
  - YearsincurrentRole by Yearssincelastprpmotion
     Colored by Attrition
  - Attrition# for Yearswithcurrmanager hierarchy
  - Attrition# by Numcompaniesworked colored by Jobrole
- Dashboard creation

#### 5. FLOW CHART

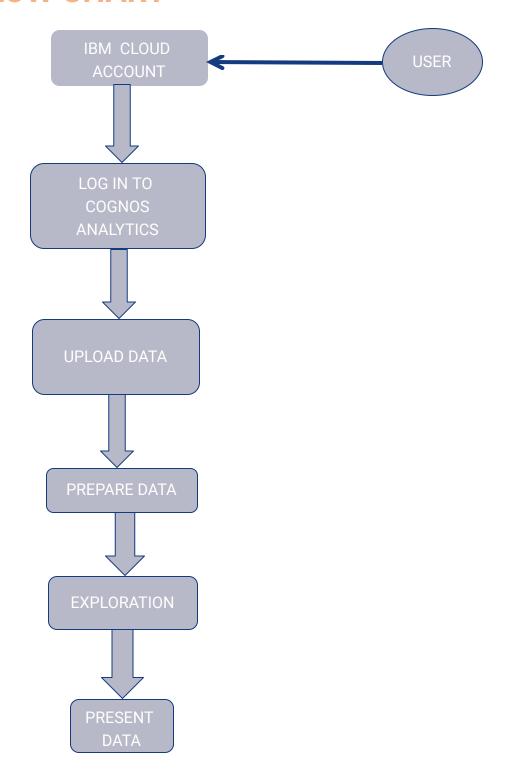


FIG 5.1 CONTROL FLOW OF THE SOLUTION

#### **6.RESULT**

Dashboard creation for Hr and people analytics is Created by using IBM Cognos.

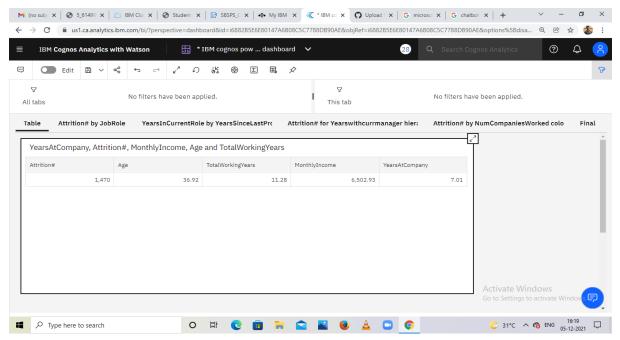


FIG 6.1 Table analyzing Age, Attrition#, Years At Company, Total working Years and Monthlyincome

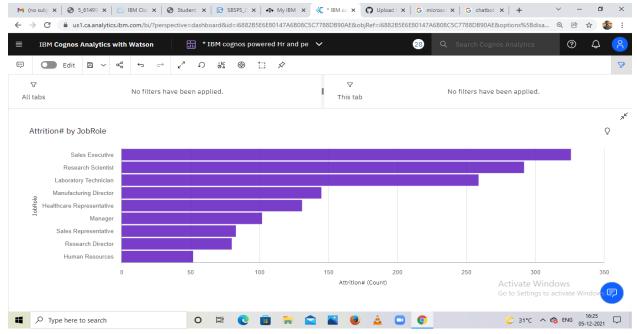


FIG 6.2 Attrition# by Job role

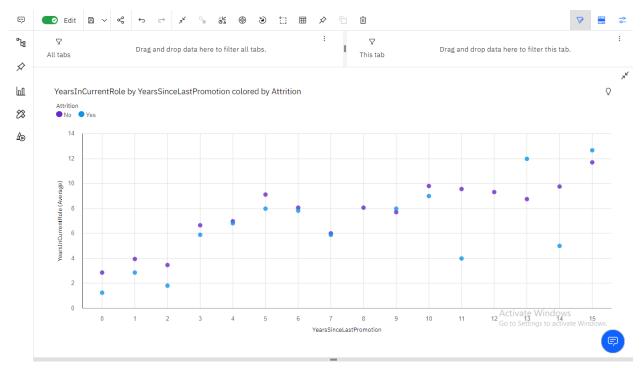


FIG 6.3 YearsincurrentRole by YearsSinceLastpromotion colored by Attrition

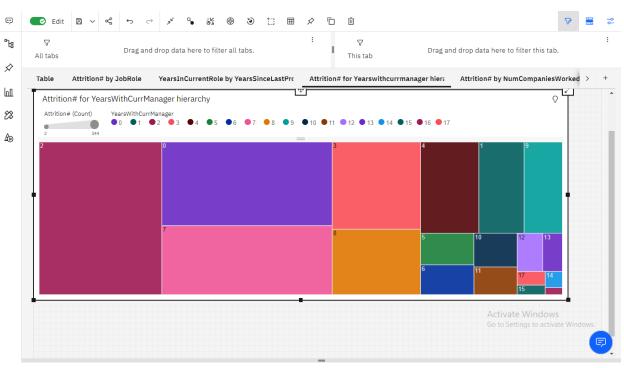


FIG 6.4 Attrition# for YearsWithCurrentmanager hierarchy

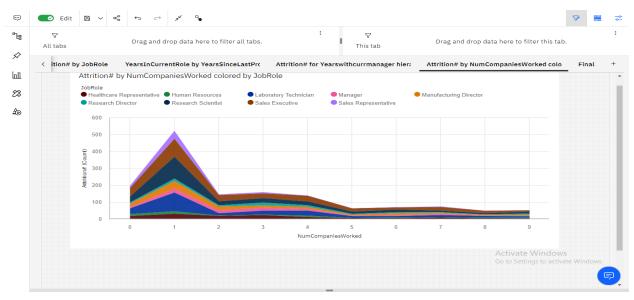


FIG 6.5 Attrition# by NumCompaniesWorked colored by Jobrole

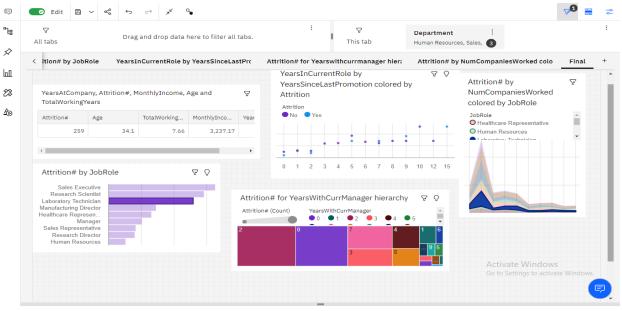


FIG 6.6 FINAL DASHBOARD

#### Final dashboard link for Hr analytics

https://us1.ca.analytics.ibm.com/bi/?perspective=dashboard&pathRef=.my\_folders%2 FIBM%2Bcognos%2Bpowered%2BHr%2Band%2Bpeople%2Banalytics%2Bdashboard&a ction=view&mode=dashboard&subView=model0000017d84cadedb\_00000000

## 7.ADVANTAGES AND DISADVANTAGES

#### <u>Advantages</u>

- 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 use a variety of charts----crosstabs,bar or 3D bar,pie or droughnut,line, guage,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(HMTL),and comma Separated value (CSV).
- Multilingual capabilities automatically deliver reports in the user's 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 decisions
- 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.

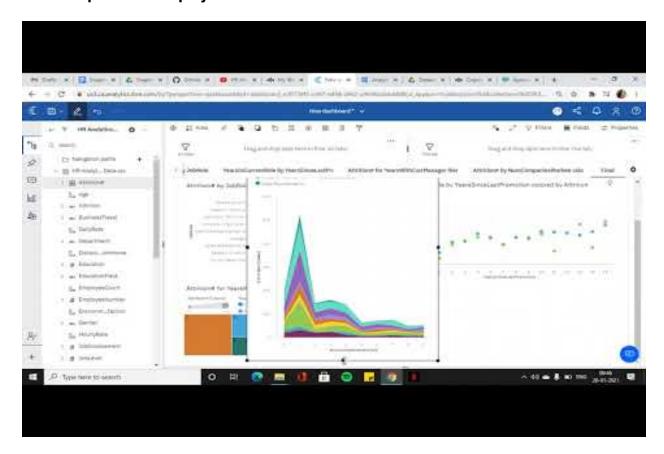
#### **10.FUTURE SCOPE**

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 Desmeitjer,
Rodrigo Frealdo Dumont, Armin Kamal, John
Leahy, Scott Masson, Ksenija Rusak, Shinsuke
Yamamoto, Martin keen.

**▶**Videos provided for project reference.



https://youtu.be/zxyS2DnAyJ0

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