INTRODUCTION

The human resources department always plays a vital role in the growth of an organization and it is enhanced more by the application of HR analytics. it doesn't only collect data about how employees are working, but it will provide insights into each of the human resources processes gathering data and then using this data to make informed decisions. A detail HR dashboard will help the in

- Monitoring the human capital
- Helping the HR to perform better
- Improving the hiring process

We also have one such dataset where will develop a report to determine how many employees are due for promotions and how many of them have to be laid off and many more things

DATASET DESCRIPTION AND SOURCE

The dataset l basically contains two csv files
- HR employee data contains 2 columns and 1470 rows
- HR data (data is available in a single column which needs to be cleaned first)

The dataset links
- HR data - https://drive.google.com/file/d/13X-8wqi9y1emt-cpJ3WvZrWY3z77JZ8E/view?usp=sharing
- HR employee- https://drive.google.com/file/d/1QCNFlc-geRADByDZIy5X4XVuLWCG5wbT/view?usp=sharing

DATA PREPARATION AND CLEANING

1. First and the fore most change the regional setting and the autodetect relationship options

Go to File ->options and settings -> options->current file ->Data load -> Deselect the autodetect new relation after data is loaded option (if you want to create relationship on your own)

Go to File ->options and settings -> options->current file ->Regional settings ->English (USA)

2. For HR emp data dim table
   - promote the headers by using the use first row as header options.
   - Changed data types of "options."
   - Renamed the columns to "employee name "
3. For, HR dataset
   - After loading, the data is present in a single column, hence it was cleaned by using the "split the column by delimiter option ".
   - promote the headers by using the use first row as header options.
   - Changed data types of "age", "distance from home", Daily route", education etc.

- Created two custom columns to create "years of service" and "job level "columns.

4. Created a conditional column named 'promotion status "where if the year since last promotion is greater than or equal to 10 then the employee is due for promotion or else not due. Changed columns datatype to text.

5. Created another conditional column named "retrenchment status" where if the year at company is greater than or equal to 20 then the employee is to be lay off or else, he is on service.

6. Created another conditional column named "Distance status" where if the distance from home is greater than or equal to 20 then "Far"
distance from home is greater than or equal to 10 then "Medium"
or else "Close"

7. Merged the two queries based on "employee id" and selected a new column named "employee name"

8. Created another conditional column named "Job satisfaction status" where if the
Job satisfaction is greater than or equal to 4," High"
job satisfaction is greater than or equal to 3," Moderate"
or else "Low".

9. Created another conditional column named "Performance rating" where if the **performance** rating is less than or equal to 3 then "Low", or else "High

10. In the report view, go to summary page and add a bookmark and do the same for Retrenchment and promotion data page . Then go to summary page ->insert->buttons->select blank (place then blank button on top of the summary title. Select this button and go to format button ->turn on action->type->bookmark ->bookmark->select the bookmark created for that page . Do the same for the other one as well . Now if you click on the title it will take you to the corresponding bookmark added

DAX MEASURES

MEASURE NAME	DAX FUNCTION	M-CODE	EXPLANATION
Total employees	COUNTROWS	Total employees = COUNTROWS ('HR dataset')	
On service	CALCULATE	On service = CALCULATE ([Total employees],'HR dataset'[Retrenchment status] ="On service")	
Retrenchment Promotion due promotion not due	IF () ISBLANK () CALCULATE ()	Retrenchment = IF (ISBLANK (CALCULATE ([Total employees],'HR dataset'[Retrenchment status] ="retrenched")),0, CALCULATE ([Total employees],'HR dataset'[Retrenchment status] ="retrenched")) Promotion due = IF (ISBLANK (CALCULATE ([Total employees],'HR dataset'[promotion status] ="Promotion due")),0, CALCULATE ([Total employees],'HR dataset'[promotion status] ="Promotion due")) promotion not due = IF (ISBLANK (CALCULATE ([Total employees],'HR dataset'[promotion status] ="Promotion not due")),0, CALCULATE ([Total employees],'HR dataset'[promotion status] ="Promotion not due"))	
No. of male employees No. of female employees Low rated High rated	CALCULATE ()	No. of male employees = CALCULATE ([Total employees],'HR dataset'[Gender]="Male") No. of female employees = CALCULATE ([Total employees],'HR dataset'[Gender]="Female") low rated = CALCULATE ([Total employees],'HR dataset'[performance rating] ="low") High rated = CALCULATE ([Total employees],'HR dataset'[performance rating] ="High")	
% On service % Retrenched employee % Of promotion not due % Of promotion	Divide ()	% On service = divide ([On service], [Total employees]) % Retrenched employee = DIVIDE([Retrenchment], [Total employees]) % Of promotion not due = DIVIDE ([promotion not due], [Total employees]) % Of promotion due = DIVIDE ([Promotion due], [Total employees])	

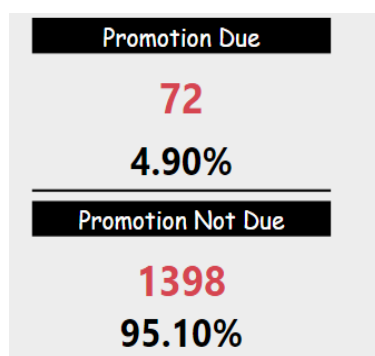| due

% Of male employees
% Of low rated
% Of high rated
% Of female employees | | % Of male employees = DIVIDE ([No. of male employees], [Total employees])
% Of low rated = DIVIDE ([low rated], [Total employees])

% Of high rated = DIVIDE ([High rated], [Total employees])

% Of female employees = DIVIDE ([No. of female employees], [Total employees]) | |

INFERENCES AND CONCLUSIONS OF OUR OBJECTIVES

1. **% Of male and female employees in the company**

   Male employee
   882
   60%

   Female employee
   588
   40%
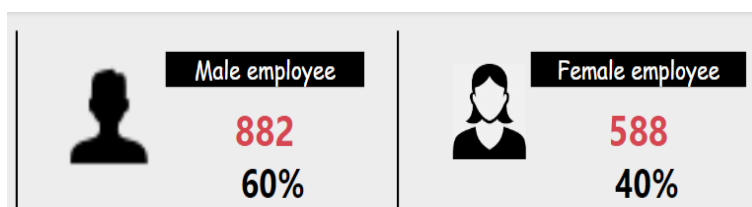
2. **% Of employees due and not due for promotion**

   Promotion Due
   72
   4.90%

   Promotion Not Due
   1398
   95.10%

3. **On service and retrenchment stats.**

   On service
   1353
   92.04%

   Retrenchment
   117
   7.96%
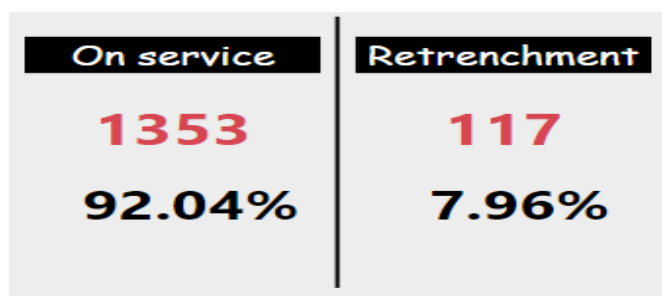
4. Total employees by years of experiences, distance, education and job level

Total Employees by Years of experience

5 years	196
1 years	171
3 years	128
2 years	127
10 years	120
4 years	110
7 years	90

Total Employees by job level

3 level	572
4 level	398
2 level	282
1 level	170
5 level	48

Total Employees by education field

Life Sciences	606
Medical	464
Marketing	159
Technical ...	132
Other	82
Human Re...	27

Total employees by Distance status

229 (15.58%)
301 (2...)
940 (63...)

Distance status
- close
- medium
- far

5. Retrenchment and promotions of employees by department, performance rating

Retrenchment and Promotion due by Department

● Retrenchment ● Promotion due

Department	Retrenchment	Promotion due
Research & Development	74	47
Sales	36	23
Human Resources		

Performance rating – High

226
15.37%

Performance rating – Low

1244
84.63%
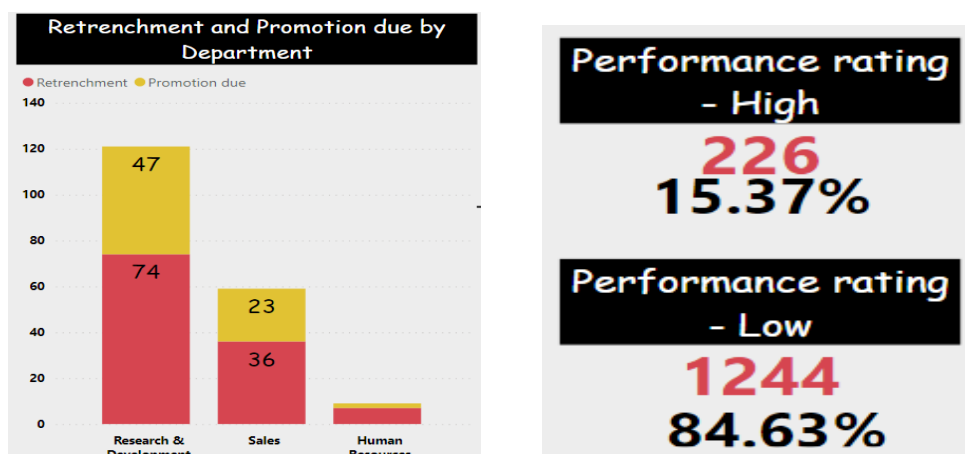
6. Employee satisfaction status

Total employees by Job satisfaction status

Total employees	LOW	HIGH	MODERATE
500	569	459	442
0			
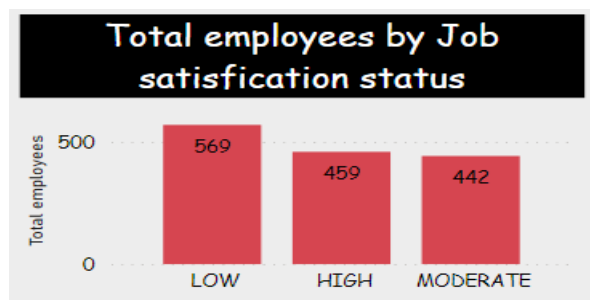
FUTURE WORKS

There are a lot of insights which can be added to these reports in future along with addition of some more dataset, some of them are as listed Below

- Find out the promotion and retrenchment stats for females
- Age wise performance of individual employees
- Calculate overtime expanses, salary hike and catch to the companies
- Employee salary and promotion history etc