

Employee Attrition Analysis

Introduction

In this project I did Analysis of Employee Attrition dataset using Tableau desktop (A tool for visualization).

Theory

Employee attrition refers to the loss of employees through a natural process, such as retirement, resignation, elimination of a position, personal health, or other similar reasons. With attrition, an employer will not fill the vacancy left by the former employee.

Attrition Formula



$$\text{Attrition Rate} = \frac{\text{No. of Employees that Left Workforce}}{\text{Average No. of Employees}}$$



Data

Dataset used in this project is taken from Super Data Science team.

Tableau - Employee Attrition(final)

FileDataWindowHelp

HR Analytics Data

Connection
☒ Live ☐ Extract

Filters
0 | Add

ConnectionsAdd

HR ...ata
Text file

HR Analytics Data.csv

Files

☐ Use Data Interpreter
Data Interpreter might be able to

HR...sv

New Union

Sort fields
Data source order

☐ Show aliases ☐ Show hidden fields 1,000 rows

#	Age	Attrition	Business Travel	Daily Rate	Department	Distance From Home	Education	Education Field	Employee Count	Employee ID
	35	No	Travel_Rarely	809	Research & Development...	16	3	Medical	1	
	29	No	Travel_Rarely	153	Research & Development...	15	2	Life Sciences	1	
	31	No	Travel_Rarely	670	Research & Development...	26	1	Life Sciences	1	
	34	No	Travel_Rarely	1,346	Research & Development...	19	2	Medical	1	
	28	Yes	Travel_Rarely	103	Research & Development...	24	3	Life Sciences	1	
	29	No	Travel_Rarely	1,389	Research & Development...	21	4	Life Sciences	1	
	32	No	Travel_Rarely	334	Research & Development...	5	2	Life Sciences	1	
	22	No	Non-Travel	1,123	Research & Development...	16	2	Medical	1	
	53	No	Travel_Rarely	1,219	Sales	2	4	Life Sciences	1	
	38	No	Travel_Rarely	371	Research & Development...	2	3	Life Sciences	1	
	24	No	Non-Travel	673	Research & Development...	11	2	Other	1	
	36	Yes	Travel_Rarely	1,218	Sales	9	4	Life Sciences	1	

Data Source

KPI

Attrition by Job Role

Attrition wrt Last Promotion

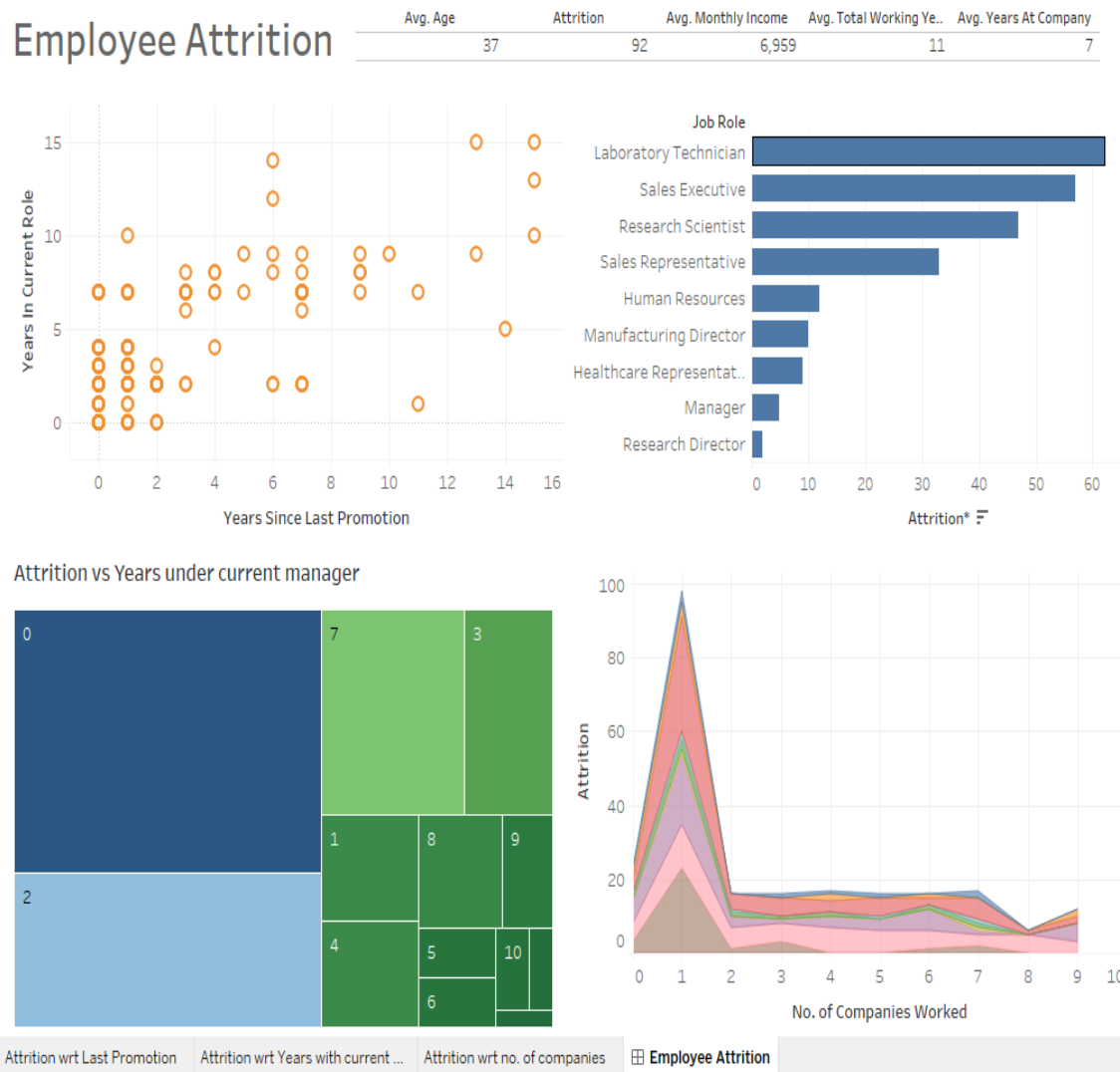
Attrition wrt Years with current ...

Attrition wrt no. of companies

Employee Attrition

Analysis

Following are the visualization of Employee Attrition Analysis :

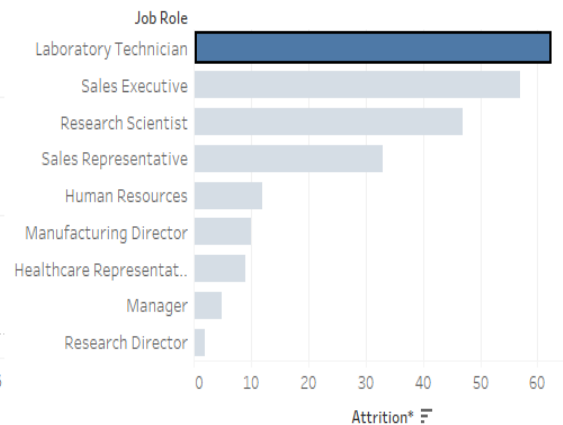
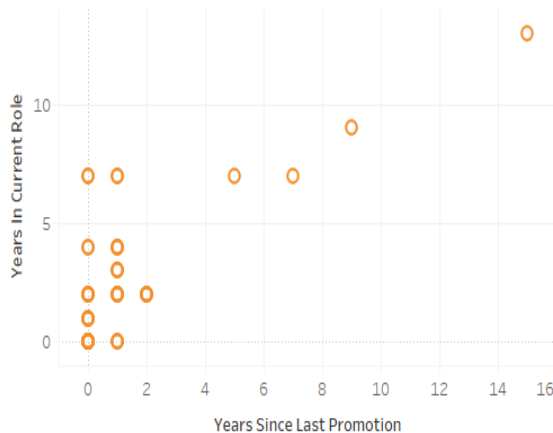


- Employee Attrition in the job of Laboratory Technician is maximum as shown in above Job Role vs Attrition chart.
- It is seen that employee attrition in freshers is more as compared to experienced employees.

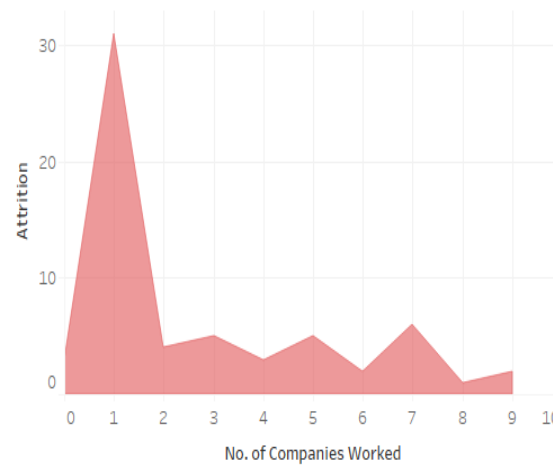
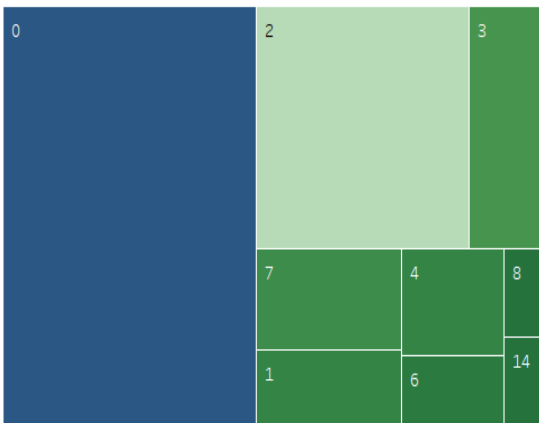
Employee Attrition vs Job Role

1. Laboratory Technician:

Employee Attrition



Attrition vs Years under current manager

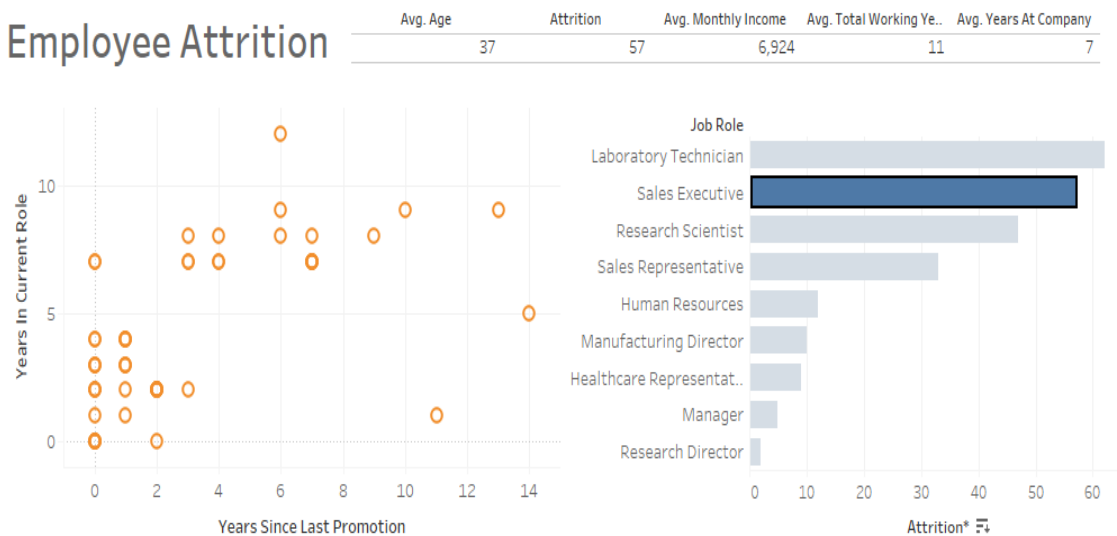


- It is seen that employee attrition in job of laboratory technician is maximum who worked in less no. of companies.
- Employee attrition in job of laboratory technician is maximum in freshers.

Employee Attrition vs Job Role

2. Sales Executive:

Employee Attrition

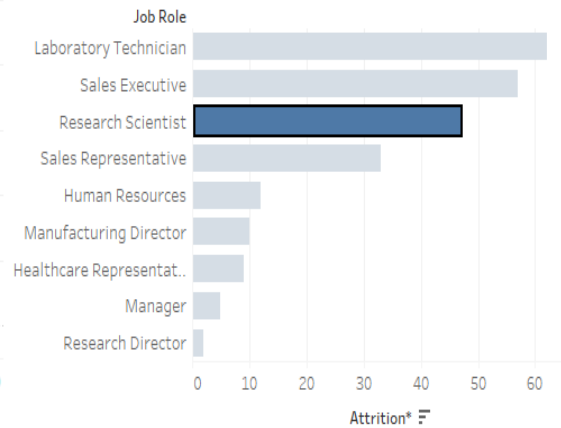
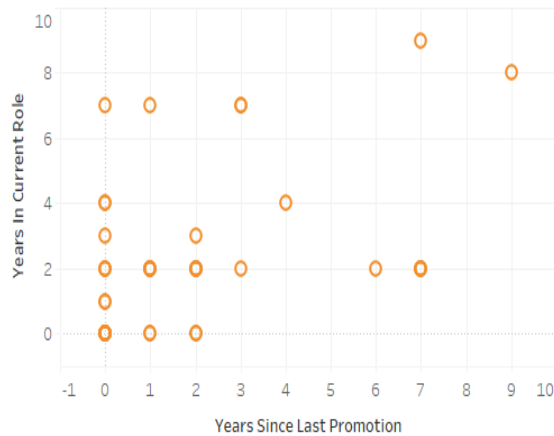


- It is seen that employee attrition in job of Sales Executive is more who worked in less no. of companies.
- Employee attrition in job of Sales Executive is maximum in freshers.

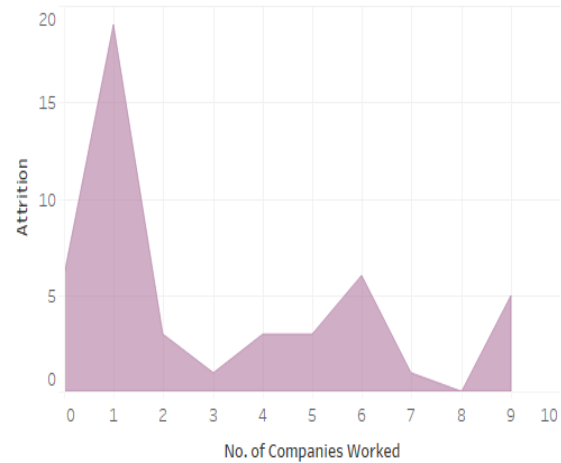
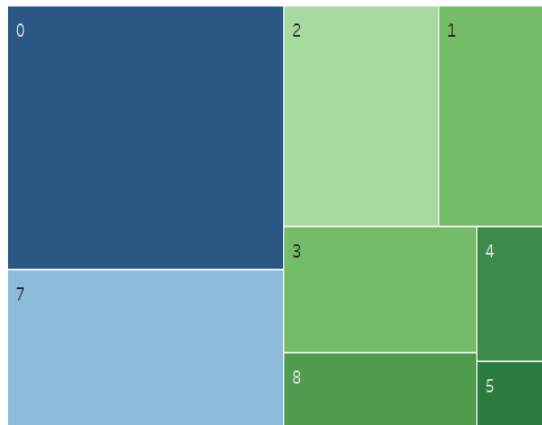
Employee Attrition vs Job Role

3. Research Scientist:

Employee Attrition



Attrition vs Years under current manager



KPI Attrition by Job Role Attrition wrt Last Promotion Attrition wrt Years with current ... Attrition wrt no. of companies

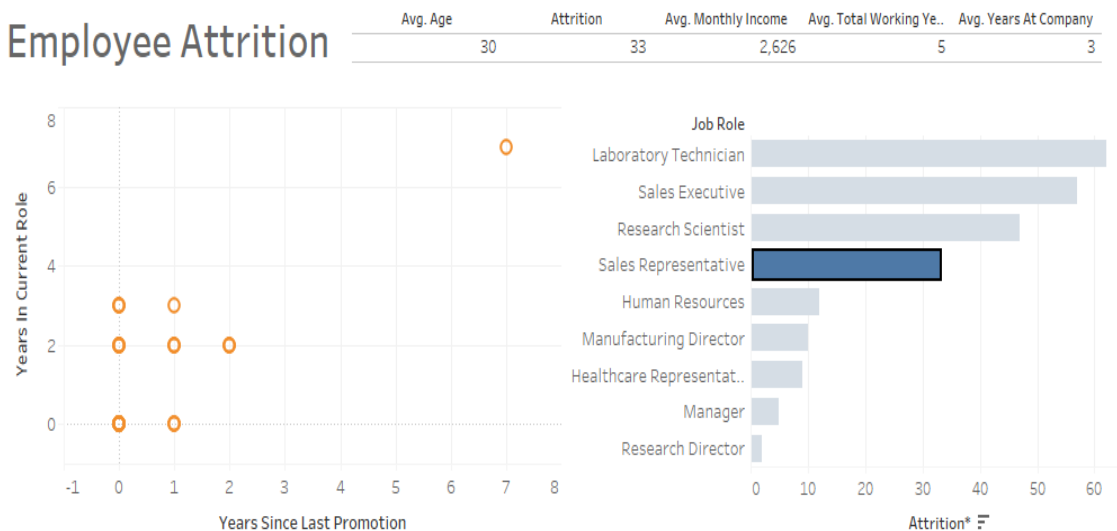
Employee Attrition

- It is seen that employee attrition in job of Research Scientist is maximum who worked in less no. of companies.
- Employee attrition in job of Research Scientist is maximum in freshers.

Employee Attrition vs Job Role

4. Sales Representative:

Employee Attrition

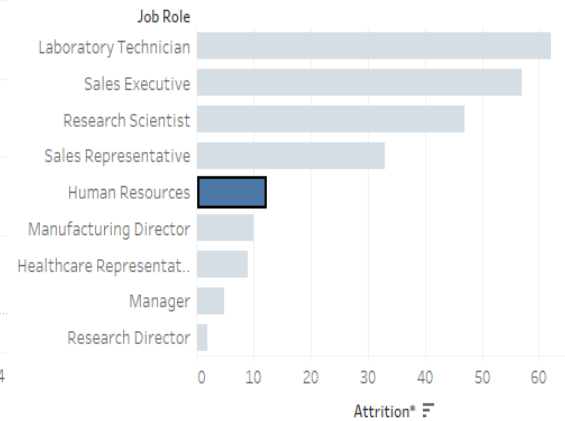
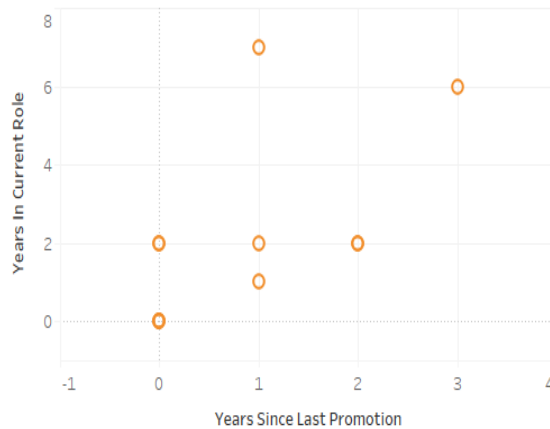


- It is seen that employee attrition in job of Sales Representative is maximum who worked in less no. of companies.
- Employee attrition in job of Sales Representative is maximum in freshers.

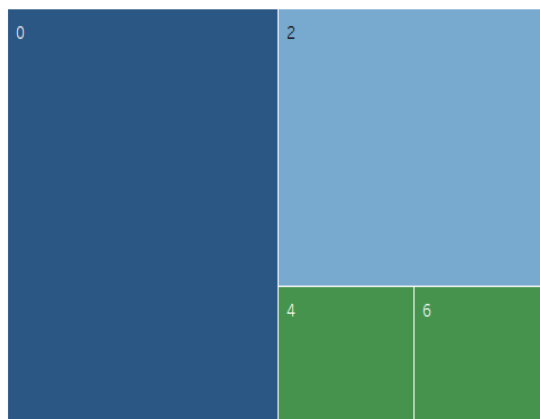
Employee Attrition vs Job Role

5. Human Resources:

Employee Attrition



Attrition vs Years under current manager



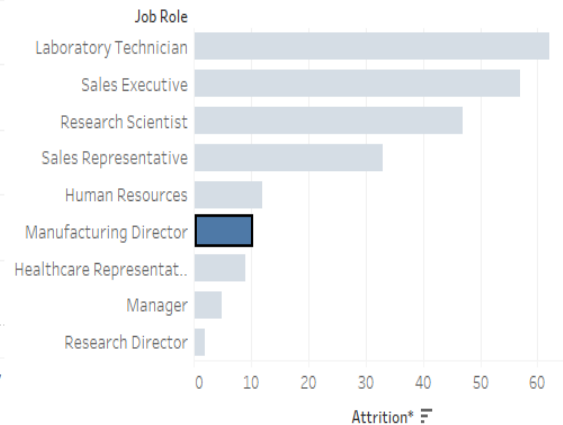
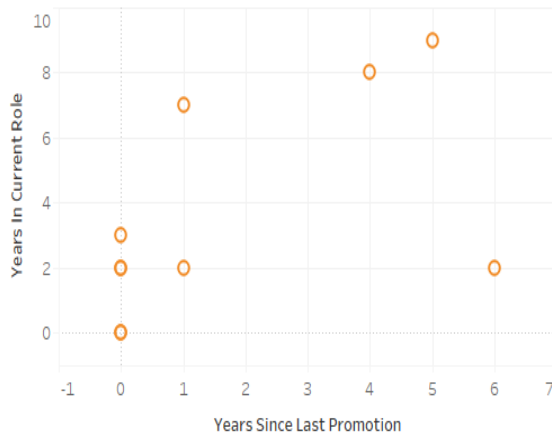
KPI Attrition by Job Role Attrition wrt Last Promotion Attrition wrt Years with current ... Attrition wrt no. of companies Employee Attrition

- It is seen that employee attrition in job of Human Resources is more who worked in less no. of companies.
- Employee attrition in job of Human Resources is maximum in freshers.

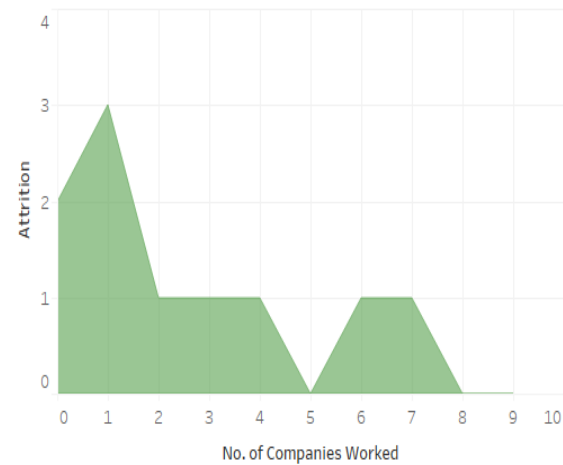
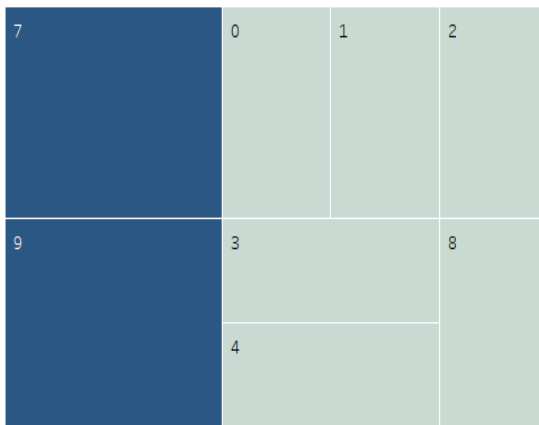
Employee Attrition vs Job Role

6. Manufacturing Director:

Employee Attrition



Attrition vs Years under current manager



KPI Attrition by Job Role Attrition wrt Last Promotion Attrition wrt Years with current ... Attrition wrt no. of companies

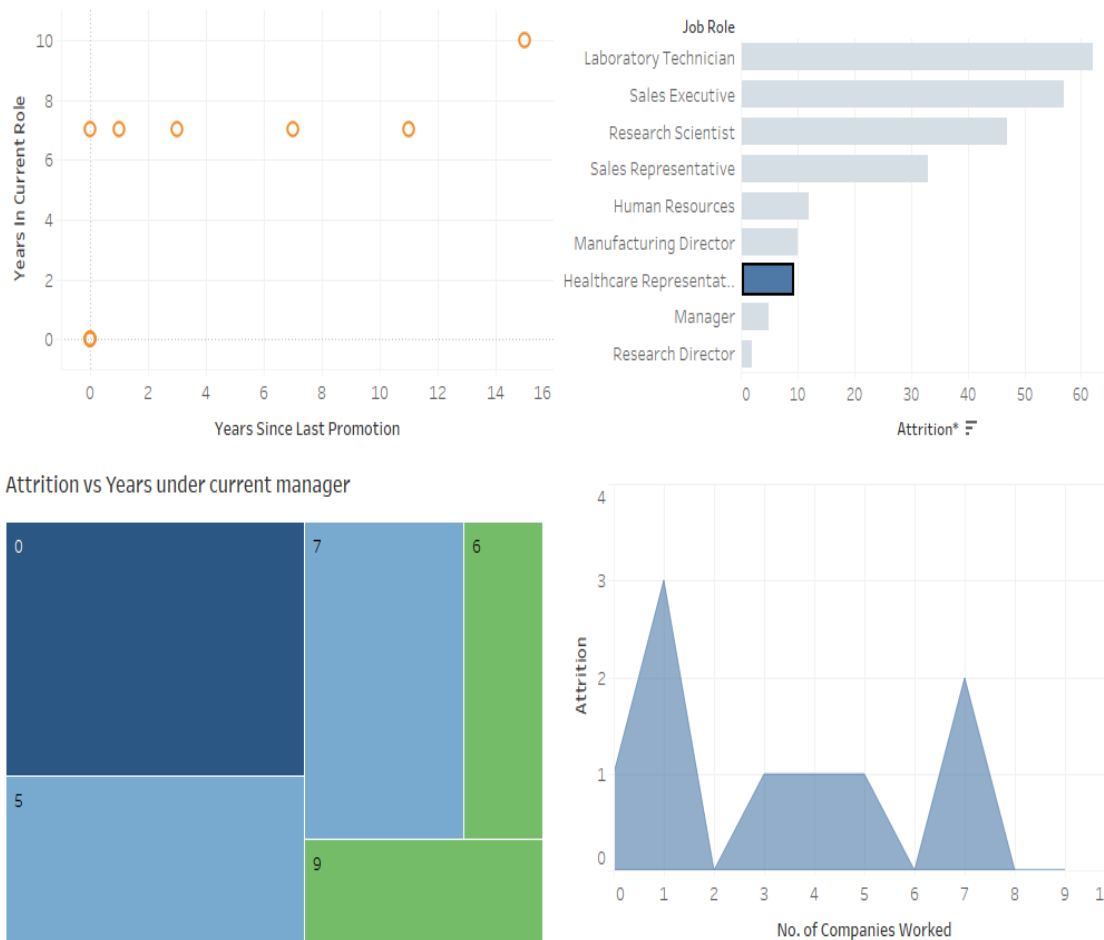
Employee Attrition

- It is seen that employee attrition in job of Manufacturing Director is more who worked in less no. of companies.
- Employee attrition in job of Manufacturing Director is maximum in freshers.

Employee Attrition vs Job Role

7. Healthcare Representative:

Employee Attrition

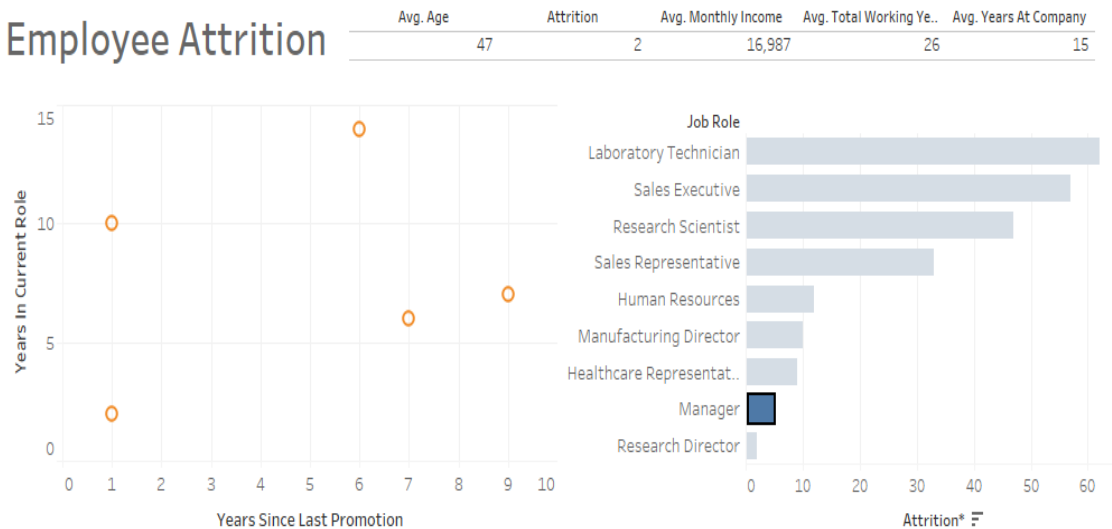


- It is seen that employee attrition in job of Healthcare Representative is more who worked in less no. of companies.
- Employee attrition in job of Healthcare Representative is maximum in freshers.

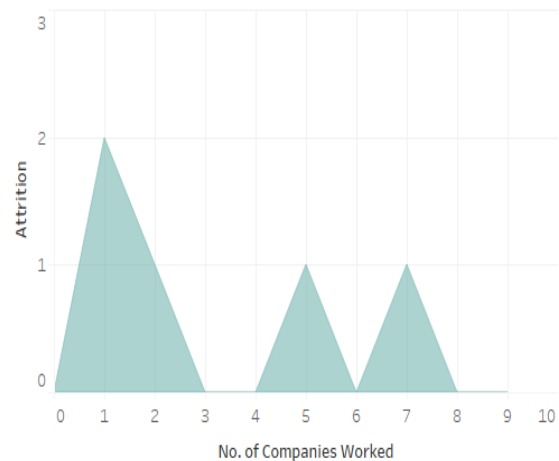
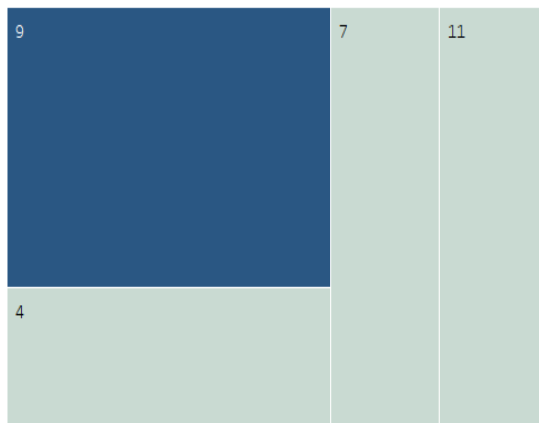
Employee Attrition vs Job Role

8. Manager:

Employee Attrition



Attrition vs Years under current manager



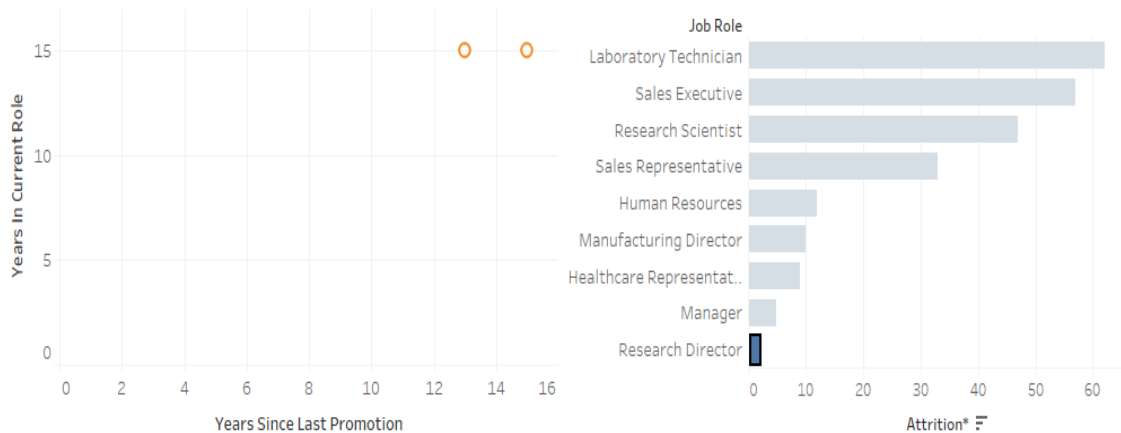
KPI Attrition by Job Role Attrition wrt Last Promotion Attrition wrt Years with current ... Attrition wrt no. of companies **Employee Attrition**

- It is seen that employee attrition in job of Manager is more who worked in less no. of companies.
- Employee attrition in job of Manager is very low in comparison to other job roles.

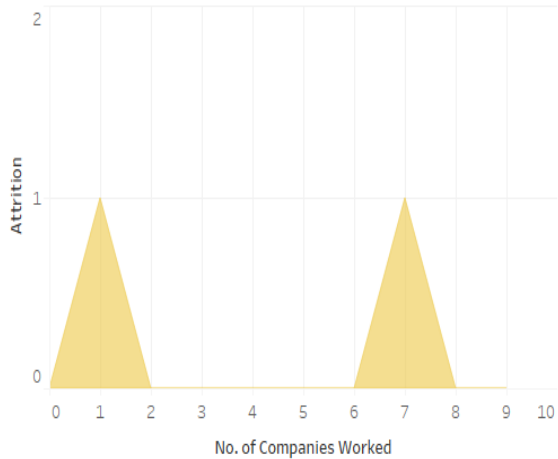
Employee Attrition vs Job Role

9. Research Director:

Employee Attrition



Attrition vs Years under current manager



KPI Attrition by Job Role Attrition wrt Last Promotion Attrition wrt Years with current ... Attrition wrt no. of companies

Employee Attrition

Navigation icons: back, forward, search, etc.

- It is seen that employee attrition in job of Research Director is equal in those who worked in less as well as more no. of companies.
- Employee attrition in job of Research Director is minimum.

Conclusion

After all the analysis, following attrition trend is seen in different job roles mentioned above:

- Attrition is seen more in employees who worked in lesser no. of companies.
- Attrition is seen more in freshers in compare to experienced employee.
- Employee attrition is maximum in laboratory technician followed by sales executive, research scientist, sales representative, human resources, manufacturing director, healthcare representative, manager and least in research director.