# Factors Affecting Employee Turnover Rate

**Tableau Intermediate to Advance**
**Data Science 4 - Dataloper**

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# 01

# Introduction

# Introduction

A large company named XYZ, employs, at any given point of time, around 4000 employees. However, every year, around 15% of its employees leave the company and need to be replaced with the talent pool available in the job market. The management believes that this level of attrition (employees leaving, either on their own or because they got fired) is bad for the company, because of the following reasons -

- The former employees' projects get delayed, which makes it difficult to meet timelines, resulting in a reputation loss among consumers and partners
- A sizeable department has to be maintained, for the purposes of recruiting new talent
- More often than not, the new employees have to be trained for the job and/or given time to acclimatise themselves to the company

Hence, the management has contracted an Dataloper to understand what factors they should focus on, in order to curb attrition. In other words, they want to know what changes they should make to their workplace, in order to get most of their employees to stay. Also, they want to know which of these variables is most important and needs to be addressed right away.

# 02

## Goals of Analysis

# Factors of Turnover Rate

There are several factors that may affect the increasing on employee turnover rate, which are:

A. Non conducive Working Environment
B. Overworked
C. Lack of development
D. Salary

From those factors we will decide which affects the most towards employee turnover.

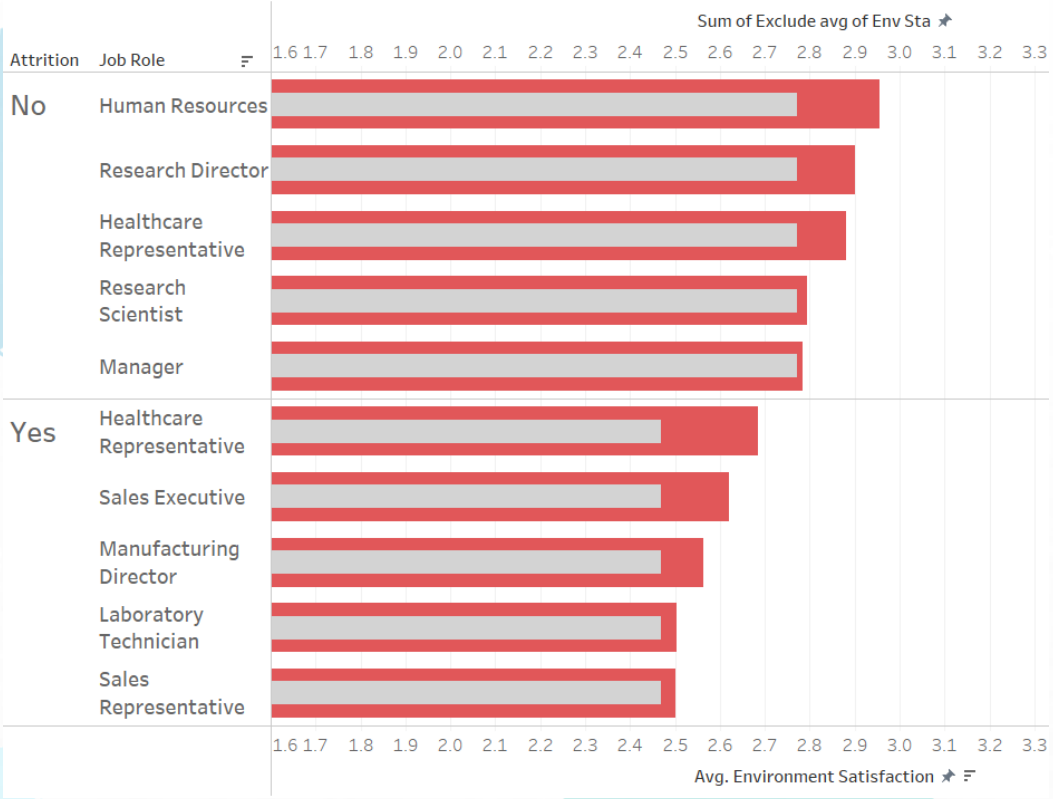
# Goals of Analysis

Define the impactful factors of turnover rate

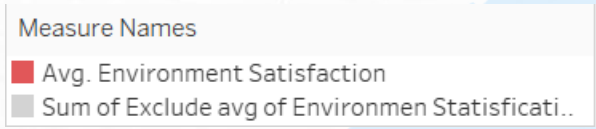
# 03

# Non conducive Working Environment

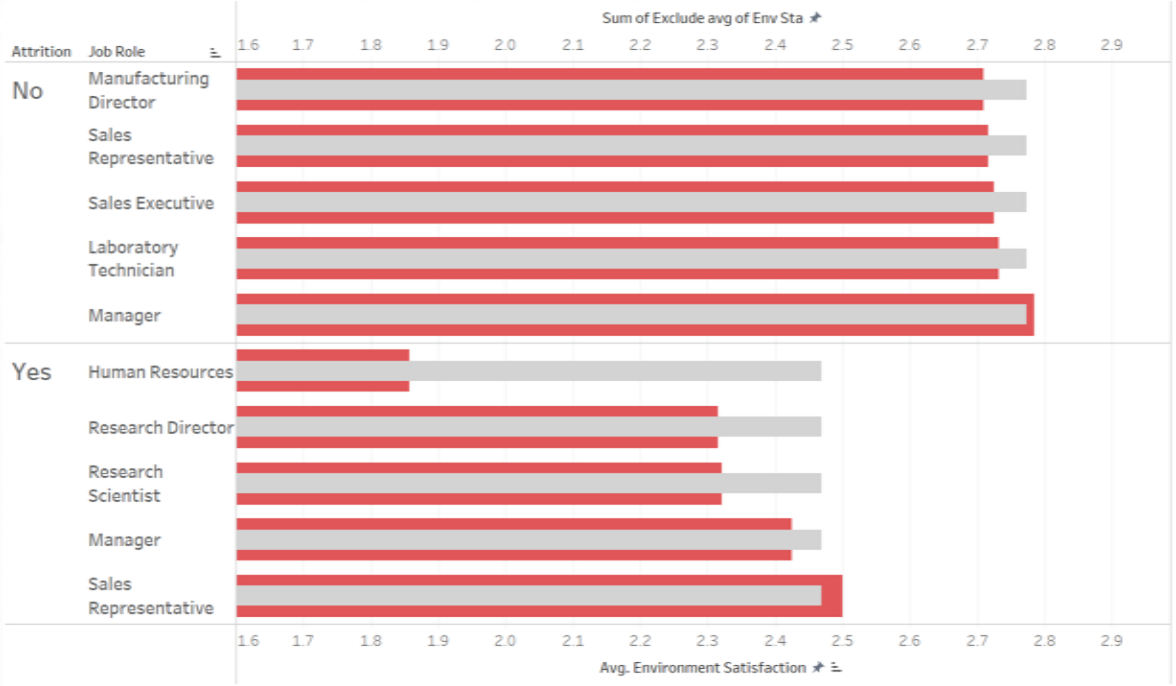
# Top 5 Job roles with non-conducive working environment



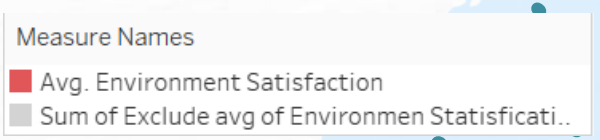

**based on Avg of Environment group by Attrition**



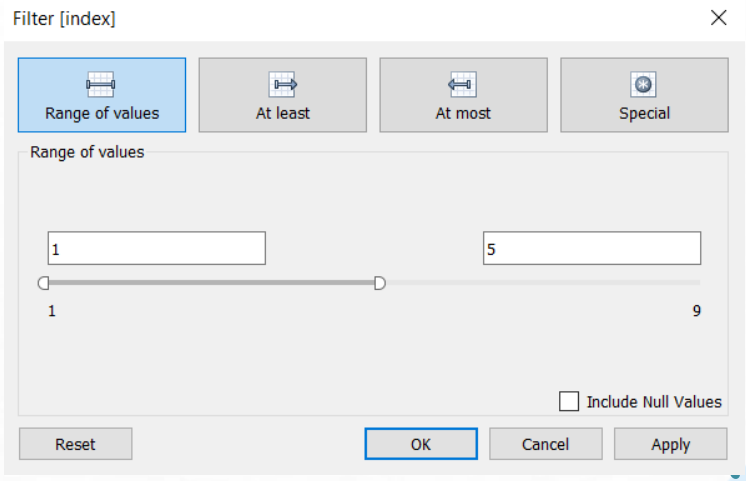
# Bottom 5 Job roles with non-conducive working environment




**based on Avg of Environment group by Attrition**



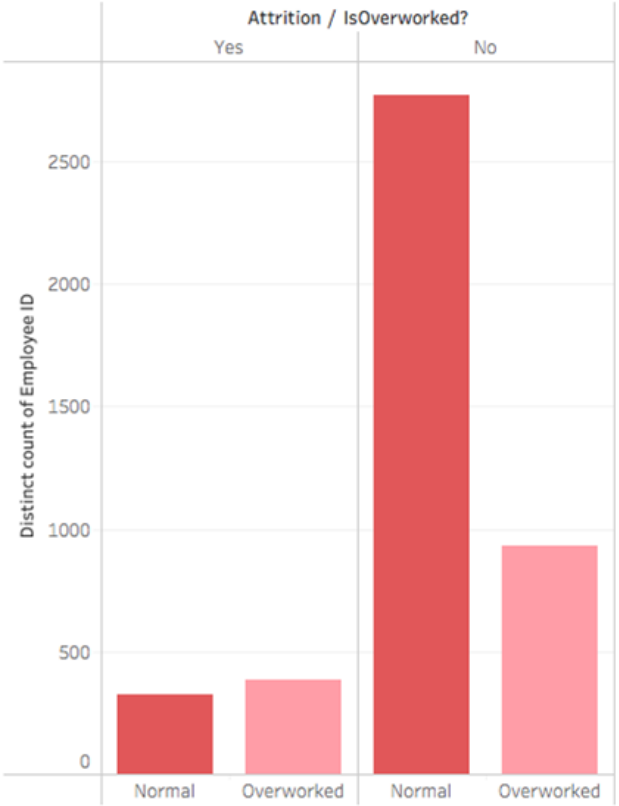
# LOD (Exclude) & Filter



# 04

## Overworked

# Attrition Based on Working Hours (Fixed)



# Attrition Based on Working Hours (Fixed)

# Attrition Based on Working Hours (Fixed)

IsOverworked?

```
{FIXED [Employee ID]:
    IF AVG([WorkingHour]) <= 8 THEN 'Normal'
    ELSE 'Overworked'
    END
}
```

The calculation is valid. 5 Dependencies Apply OK

# Attrition Based on Working Hours (Table Calculation)

| | IsOverworked? | | |
|---|---|---|---|
| Attrition | Normal | Overworked | Grand Total |
| No | 74.86% | 25.14% | 100.00% |
| Yes | 45.71% | 54.29% | 100.00% |

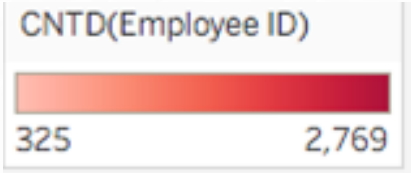
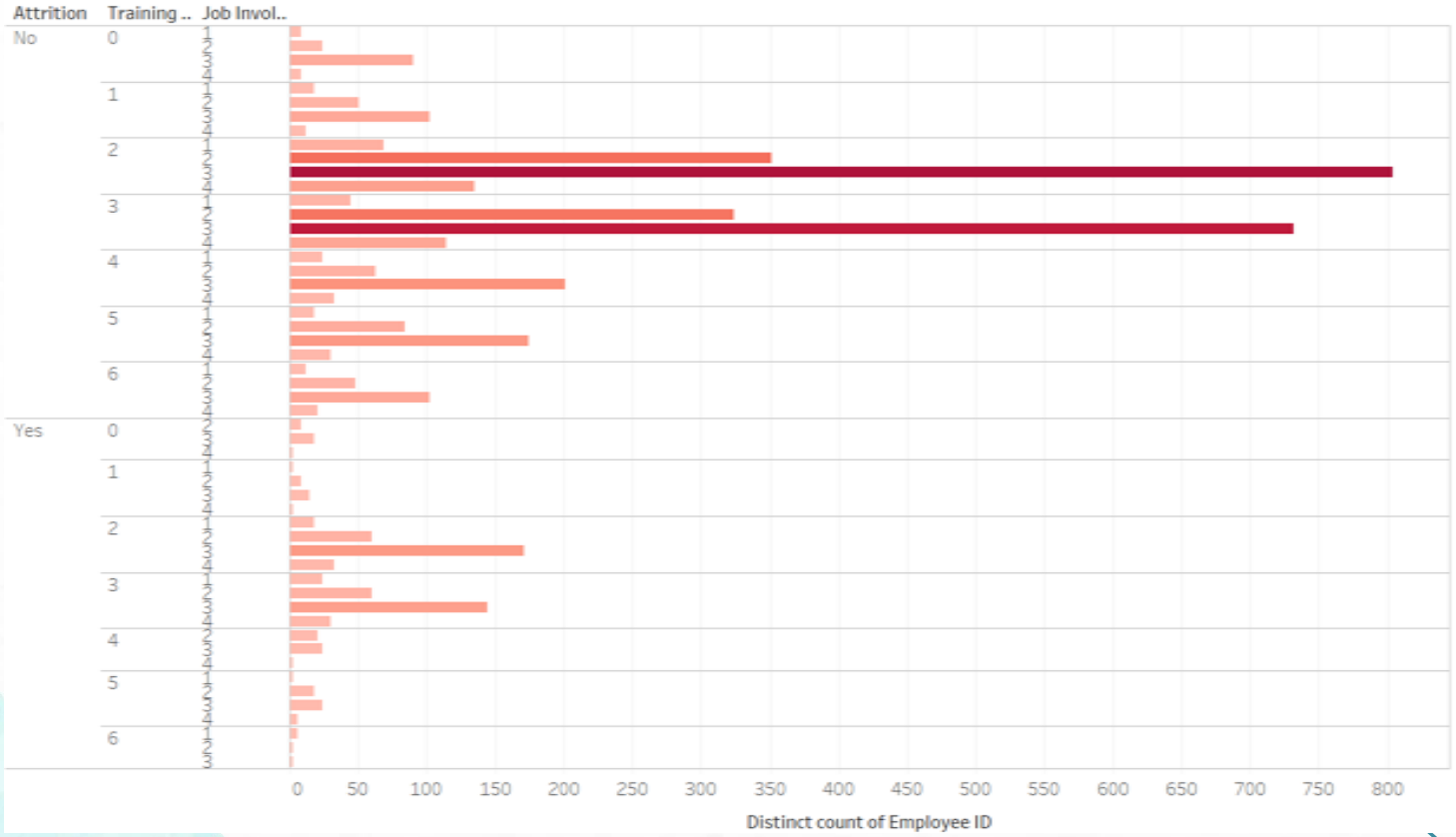



Table Calculation : Percent of Total
Compute Using : Table (Accross)

# 05

## Lack of Development

# Attrition based on Training Time Last Year and Job Involvement



# Crosstab Attrition based on Training Time Last Year and Job Involvement

| | | Job Involvement | | | |
|---|---|---|---|---|---|
| Attrition | Training .. | 1 | 2 | 3 | 4 |
| No | 0 | 4.62% | 2.54% | 4.08% | 2.54% |
| | 1 | 9.23% | 5.40% | 4.63% | 3.39% |
| | 2 | 35.38% | 37.14% | 36.46% | 38.14% |
| | 3 | 23.08% | 34.29% | 33.20% | 32.20% |
| | 4 | 12.31% | 6.67% | 9.12% | 9.32% |
| | 5 | 9.23% | 8.89% | 7.89% | 8.47% |
| | 6 | 6.15% | 5.08% | 4.63% | 5.93% |
| | Total | 100.00% | 100.00% | 100.00% | 100.00% |
| Yes | 0 | | 5.00% | 4.51% | 3.85% |
| | 1 | 5.56% | 5.00% | 3.76% | 3.85% |
| | 2 | 33.33% | 33.33% | 42.86% | 42.31% |
| | 3 | 44.44% | 33.33% | 36.09% | 38.46% |
| | 4 | | 11.67% | 6.02% | 3.85% |
| | 5 | 5.56% | 10.00% | 6.02% | 7.69% |
| | 6 | 11.11% | 1.67% | 0.75% | |
| | Total | 100.00% | 100.00% | 100.00% | 100.00% |
| Grand Total | | 100.00% | 100.00% | 100.00% | 100.00% |

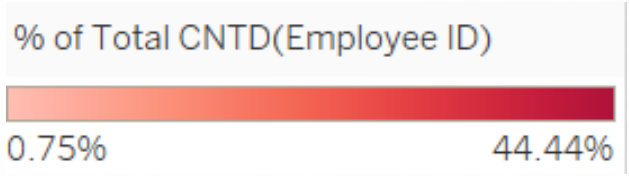
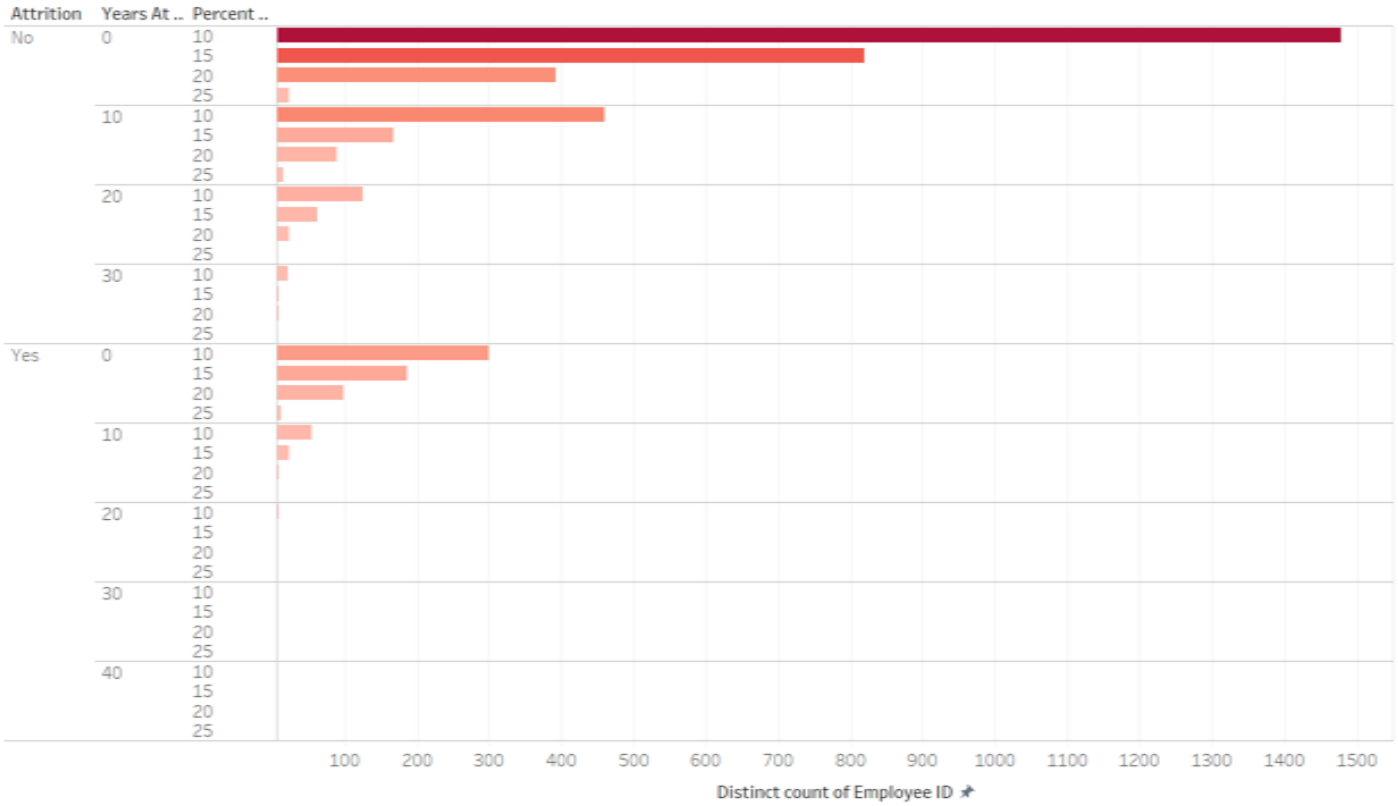
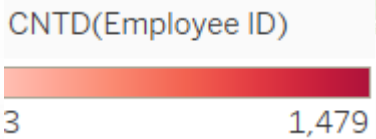



Table Calculation : Percent of Total
Compute Using : Training Time Last Year

# Attrition based on Years at Company and Percent Salary Hike



# Crosstab Attrition based on Years at Company and Percent Salary Hike

| | | Percent Salary Hike (bin) | | | |
|---|---|---|---|---|---|
| Attrition | Years At .. | 10 | 15 | 20 | 25 |
| No | 0 | 70.94% | 77.34% | 76.16% | 61.54% |
| | 10 | 22.01% | 15.86% | 17.44% | 38.46% |
| | 20 | 6.04% | 5.95% | 4.65% | |
| | 30 | 1.01% | 0.85% | 1.74% | |
| | Total | 100.00% | 100.00% | 100.00% | 100.00% |
| Yes | 0 | 81.30% | 84.93% | 91.67% | 80.00% |
| | 10 | 14.63% | 10.96% | 8.33% | |
| | 20 | 2.44% | 2.74% | | |
| | 30 | 0.81% | 1.37% | | 20.00% |
| | 40 | 0.81% | | | |
| | Total | 100.00% | 100.00% | 100.00% | 100.00% |
| Grand Total | | 100.00% | 100.00% | 100.00% | 100.00% |

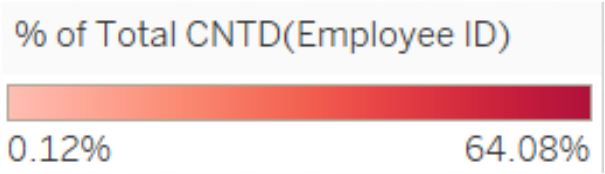
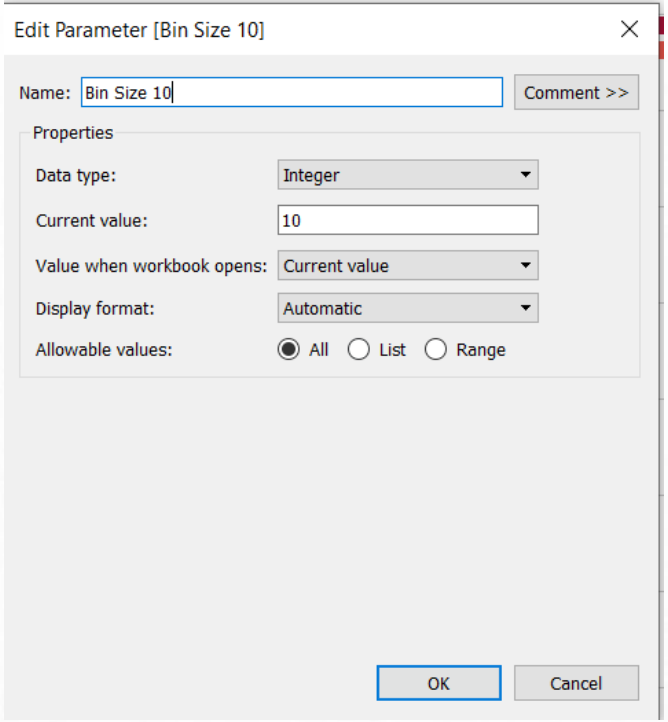
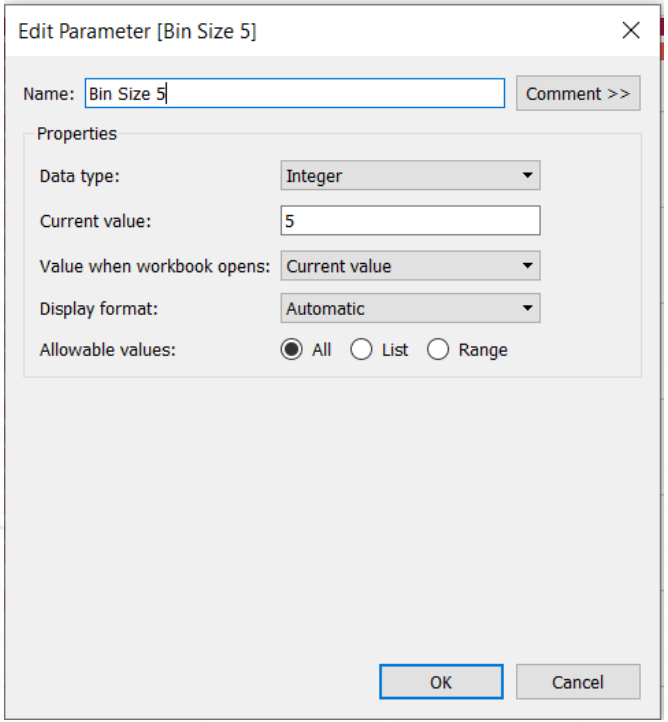



Table Calculation : Percent of Total
Compute Using : Years at Company

# Parameters


Edit Parameter [Bin Size 10]
Name: Bin Size 10
Comment >>
Properties
Data type: Integer
Current value: 10
Value when workbook opens: Current value
Display format: Automatic
Allowable values: All List Range
OK
Cancel


Edit Parameter [Bin Size 5]
Name: Bin Size 5
Comment >>
Properties
Data type: Integer
Current value: 5
Value when workbook opens: Current value
Display format: Automatic
Allowable values: All List Range
OK
Cancel

# Attrition based on Salary

| Attrition | Gender | Max. Include departement | Min. Include departement | Avg. Monthly Income |
|---|---|---|---|---|
| No | Female | 76,551 | 56,471 | 65,165 |
| | Male | 67,259 | 49,435 | 66,016 |
| Yes | Female | 74,214 | 51,300 | 61,441 |
| | Male | 67,658 | 52,158 | 61,831 |

# LOD (Include)

Include departement
general_data
{INCLUDE [Department] : AVG([Monthly Income])}
The calculation is valid.
3 Dependencies
Apply
OK

# 06

# Conclusion

# Conclusion

Based on the analysis we can conclude that:

- Based on overworking and lack of development, there was no significant contribution to the employee turnover rate.
- Based on salary, there was a slightly contribution to the employee turnover rate.
- The biggest factor affecting the increasing of employee turnover rate is the non-conducive working environment

# THANKS

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