

Factors Affecting Employee Turnover Rate

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

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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

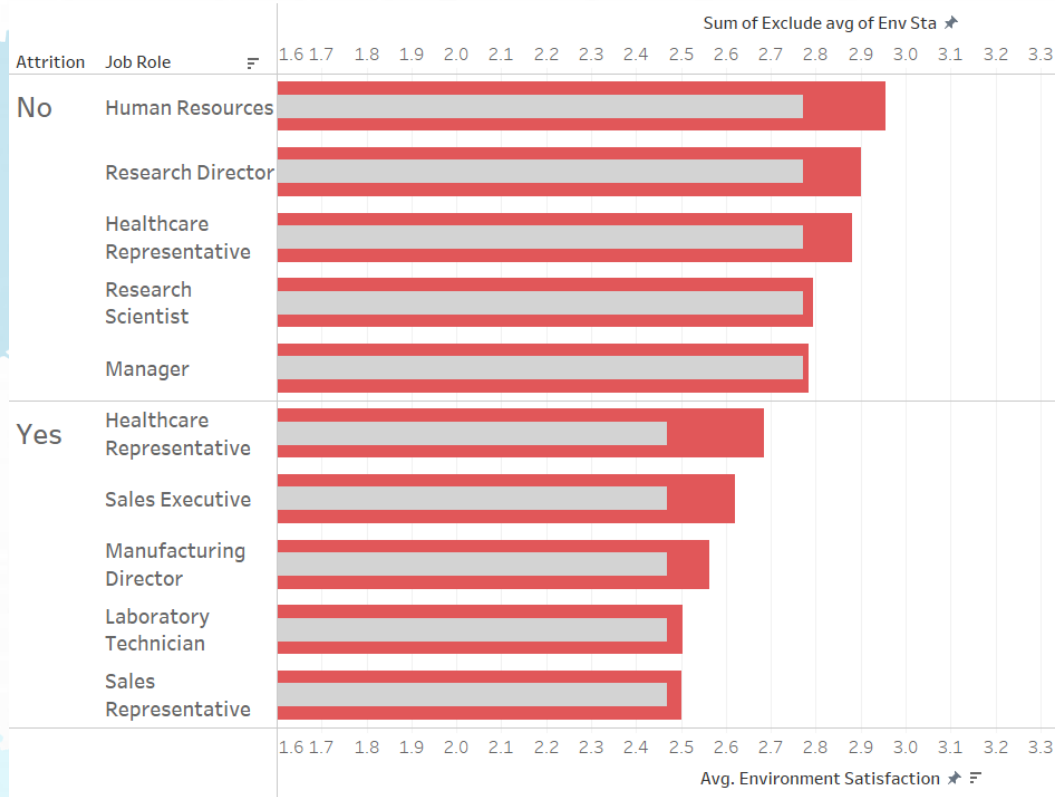
Define the impactful factors of
turnover rate

The background features a light blue watercolor wash in the upper half and a light green wash in the lower half. Scattered throughout are small, dark blue dots of varying sizes. A thin, dark blue line curves from the top right towards the bottom right, ending in a series of three loops.

03

**Non conductive
Working
Environment**

Top 5 Job roles with non-conductive working environment



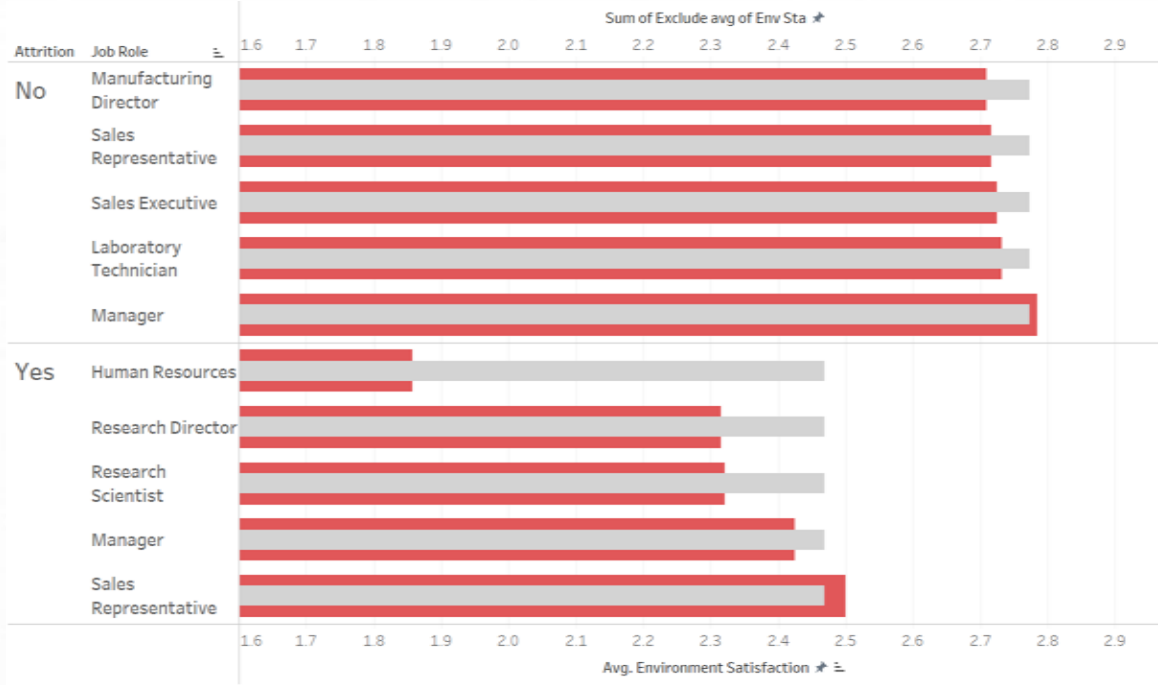
based on Avg of Environment group by Attrition

Measure Names

■ Avg. Environment Satisfaction

■ Sum of Exclude avg of Environmen Statificati...

Bottom 5 Job roles with non-conducive working environment



based on Avg of Environment group by Attrition

Measure Names

- Avg. Environment Satisfaction
- Sum of Exclude avg of Environment Satisfaction

LOD (Exclude) & Filter

Exclude avg of Env Sta

general_data

×

```
{EXCLUDE[Job Role] : avg([Environment Satisfaction])}
```

The calculation is valid.

3 Dependencies ▾

Apply

OK

Filter [index] ×

Range of values

At least

At most

Special

Range of values

1

5

1

9

☐ Include Null Values

Reset

OK

Cancel

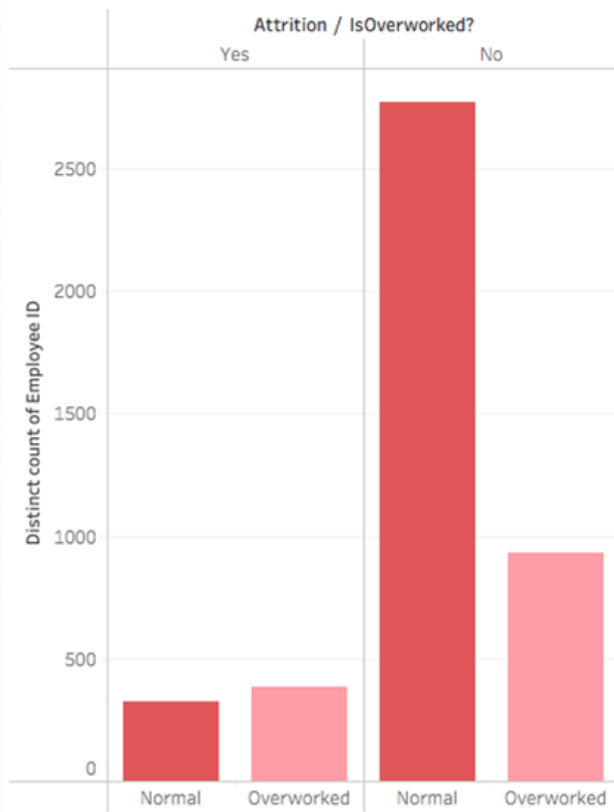
Apply



04

Overworked

Attrition Based on Working Hours (Fixed)



Attrition Based on Working Hours (Fixed)

×

`DATEDIFF('hour', [In Datetime], [Out Datetime])`

The calculation is valid.

6 Dependencies ▼

Apply

OK

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)

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

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

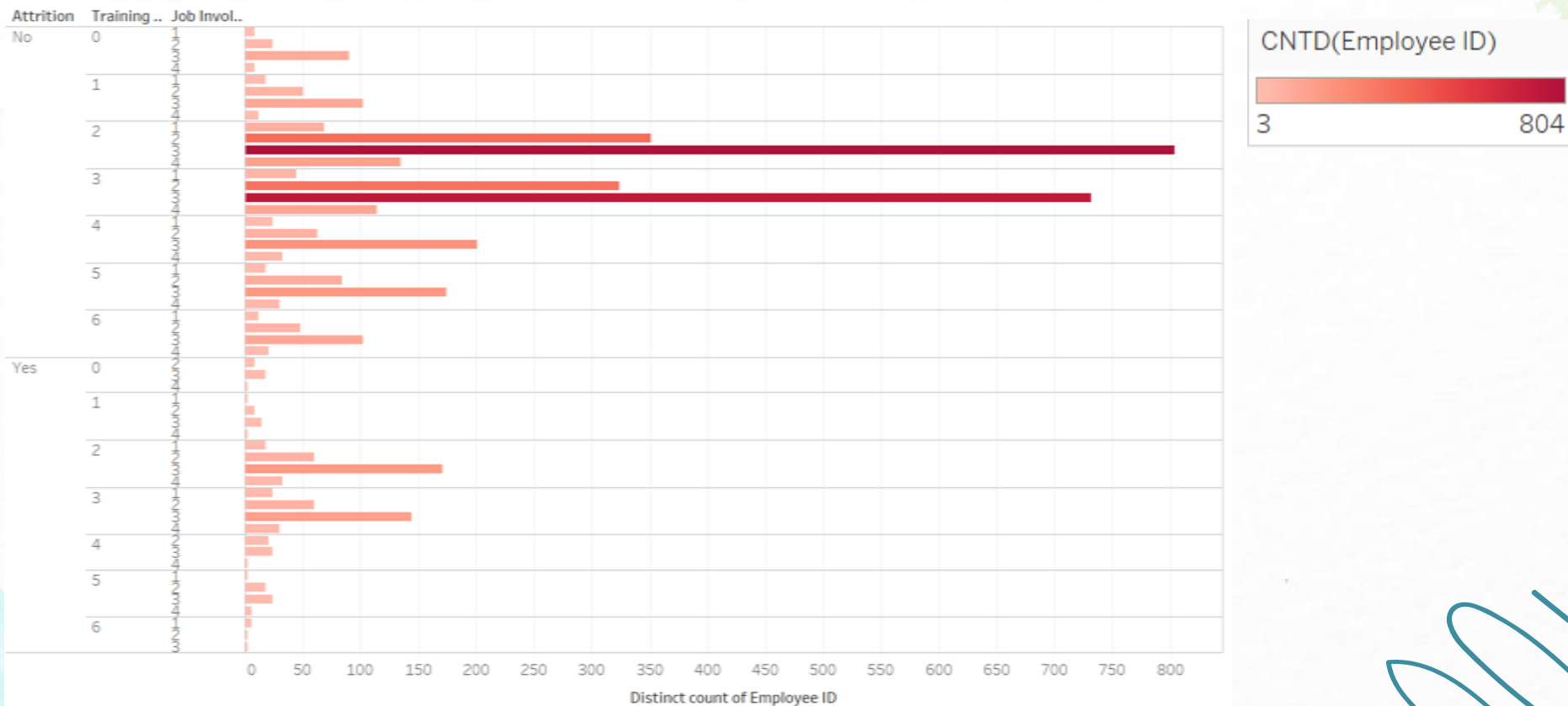


The background features a large, irregular watercolor shape in shades of light blue and green. The blue is more prominent in the upper half, while the green is more prominent in the lower half. Scattered around this central shape are numerous small, dark blue dots of varying sizes. A thin, dark blue line curves across the right side of the image, starting from the top right and ending near the bottom right. In the bottom right corner, there is a small, stylized drawing of a hand with fingers spread, pointing towards the central text.

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

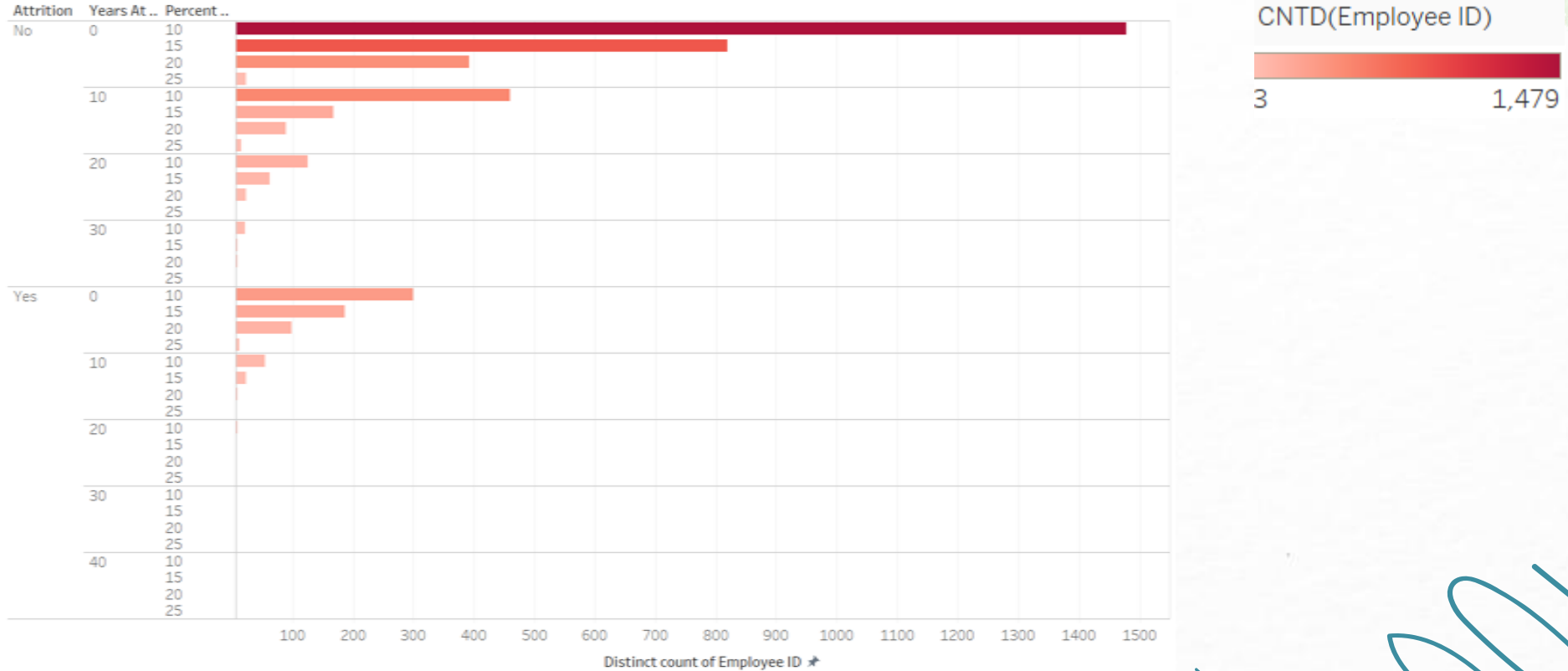
Attrition	Training ..	Job Involvement			
		1	2	3	4
No	0	4.62%	2.54%	4.08%	2.54%
	1	9.23%	5.40%	4.63%	3.39%
	2	35.38%	37.14%	36.46%	38.14%
	3	23.08%	34.29%	33.20%	32.20%
	4	12.31%	6.67%	9.12%	9.32%
	5	9.23%	8.89%	7.89%	8.47%
	6	6.15%	5.08%	4.63%	5.93%
Total		100.00%	100.00%	100.00%	100.00%
Yes	0		5.00%	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%

% of Total CNTD(Employee ID)



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

Attrition	Years At ..	Percent Salary Hike (bin)			
		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%

% of Total CNTD(Employee ID)



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

Parameters

Edit Parameter [Bin Size 10] ✕

Name: Comment >>

Properties

Data type:

Current value:

Value when workbook opens:

Display format:

Allowable values: ☒ All ☐ List ☐ Range

Edit Parameter [Bin Size 5] ✕

Name: Comment >>

Properties

Data type:

Current value:

Value when workbook opens:

Display format:

Allowable values: ☒ All ☐ List ☐ Range

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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