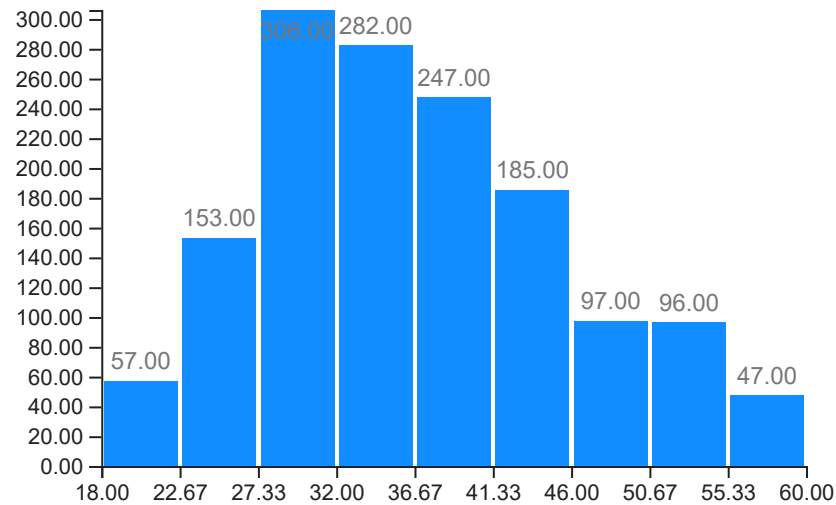


Age

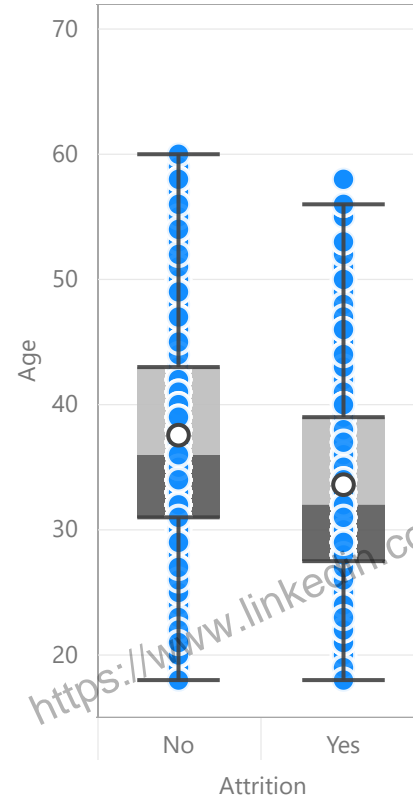
Summary measures

36.92	18	60
Average of Age	Min of Age	Max of Age
36	9.13	
Median of Age	SD of Age	

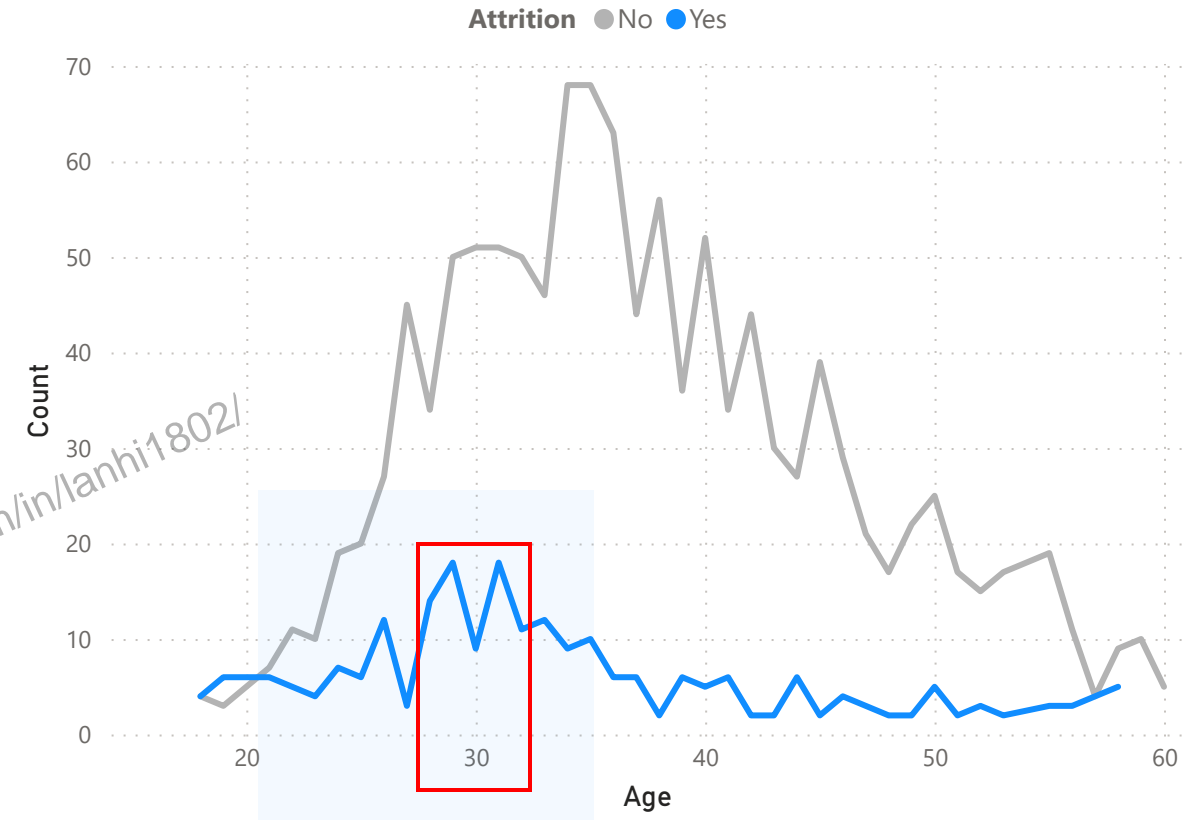
Age Distribution



Age by Attrition



Age Count of Employee



Observation:

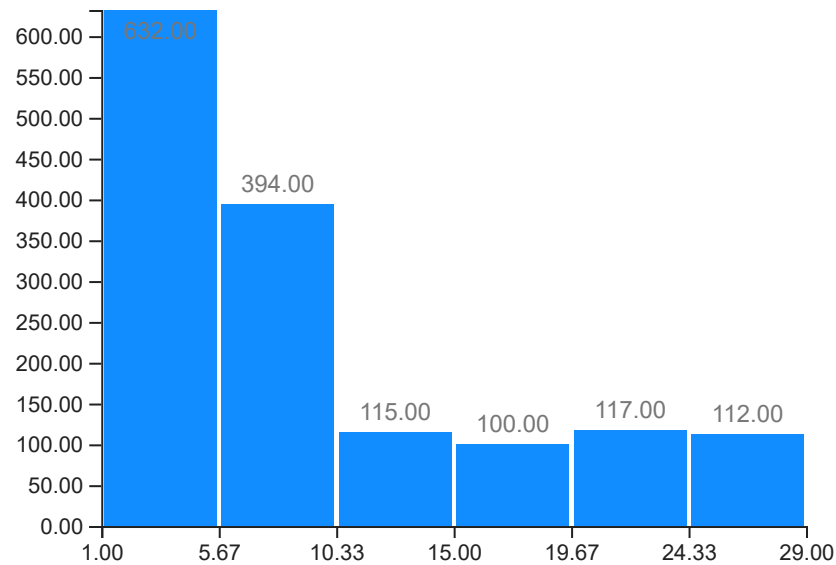
The age group with the highest attrition is 28-32. This percentage decreases as people get older because they are concerned about job stability. In addition, the youthful age group from 18 to 25 is also more likely to leave the organization because they have many options and enjoy exploring them. Ages 58 and above can leave work due to early retirement or illness problems.

Distance From Home

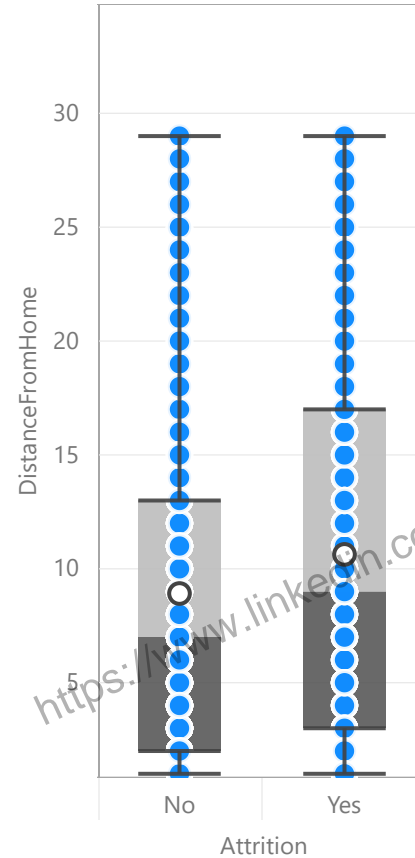
Summary measures

9.19	1	29
Avg of Distance	Min of Distance	Max of Distance
7	8.10	
Median of Dist...	SD of Distance	

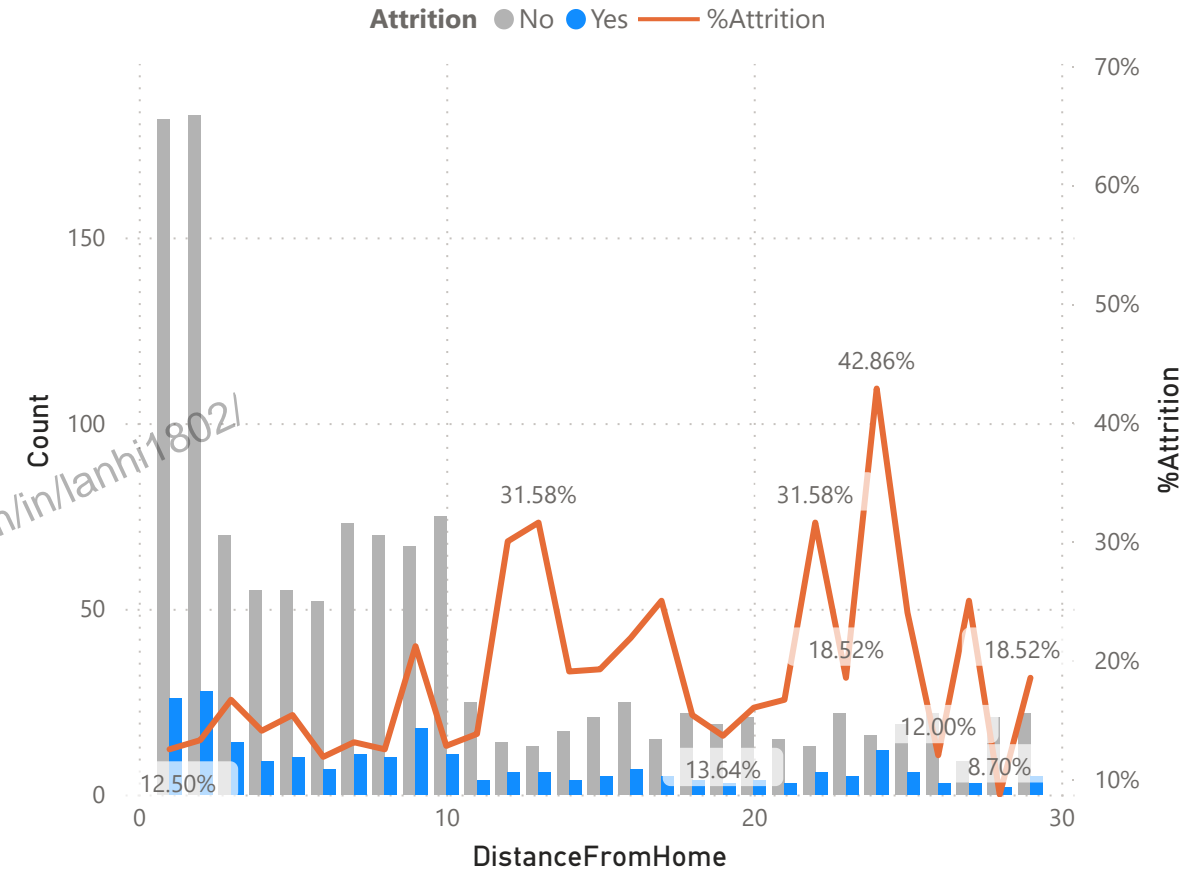
Distance Distribution



Distance by Attrition



Distance Count of Employee



Observation:

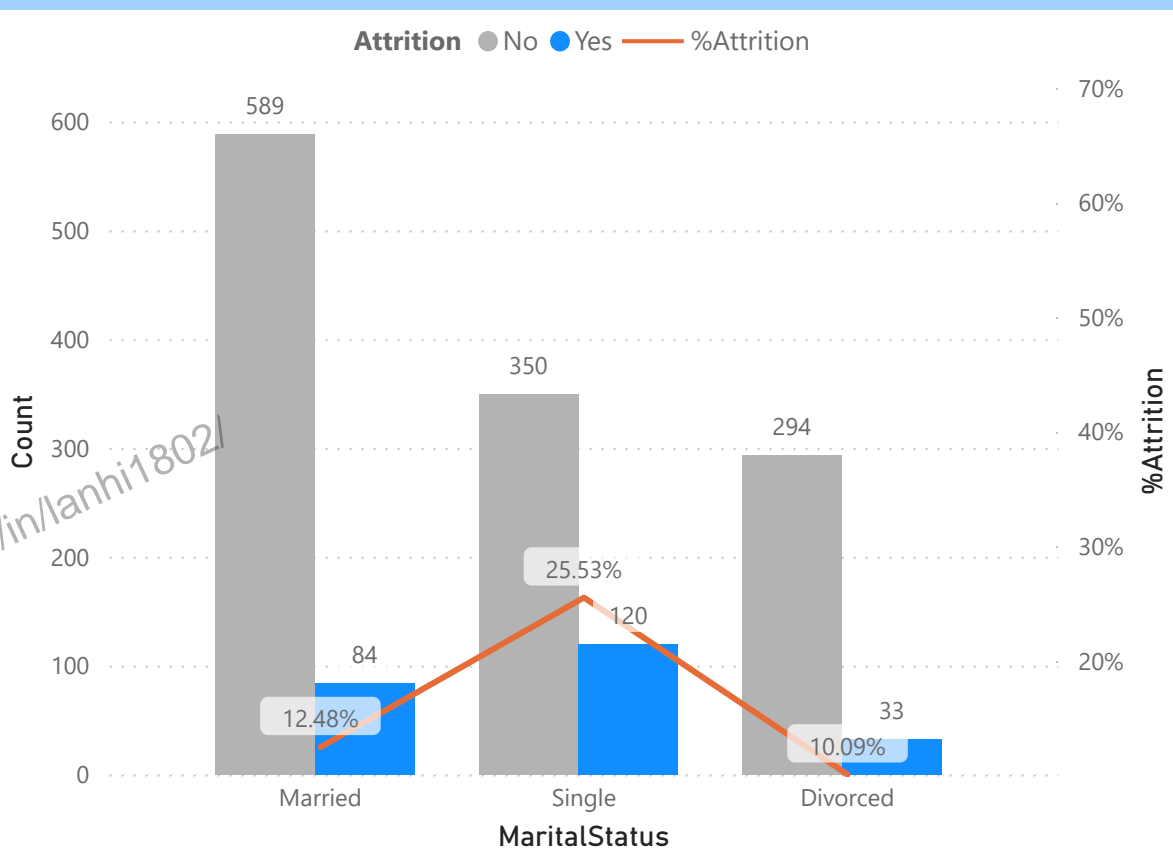
Employees who live more than 12 kilometers from their workplace are more likely to quit than those who reside nearby.

Marital Status

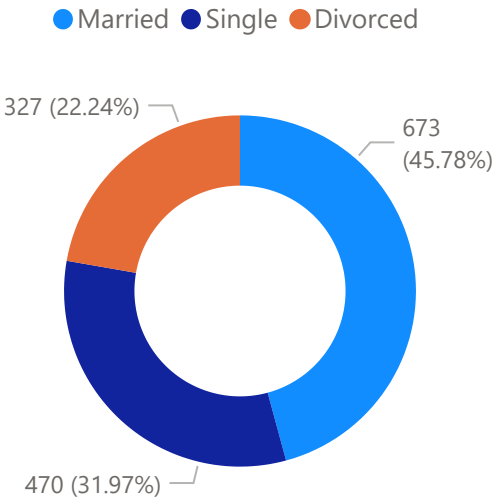
Frequency by Marital Status & Attrition

MaritalStatus	Divorced		Married		Single		Total	
Attrition	Count	%Count	Count	%Count	Count	%Count	Count	%Count
No	294	89.91%	589	87.52%	350	74.47%	1233	83.88%
Yes	33	10.09%	84	12.48%	120	25.53%	237	16.12%
Total	327	100.00%	673	100.00%	470	100.00%	1470	100.00%

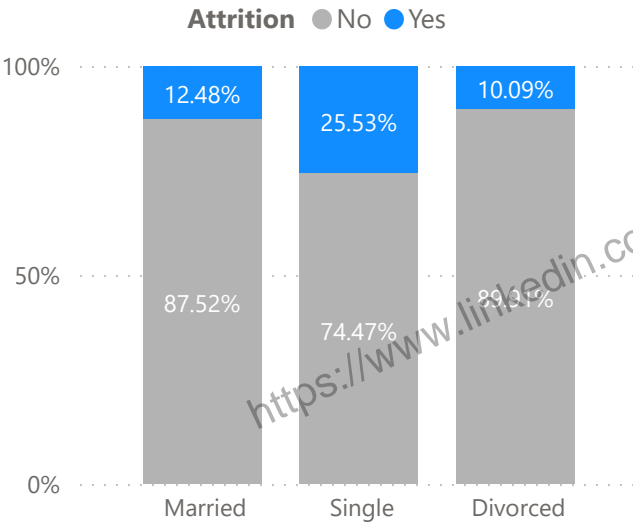
Marital Status Count of Employee



Count of Marital Status by Employee



Employee by Material Status/ Attrition



Observation:

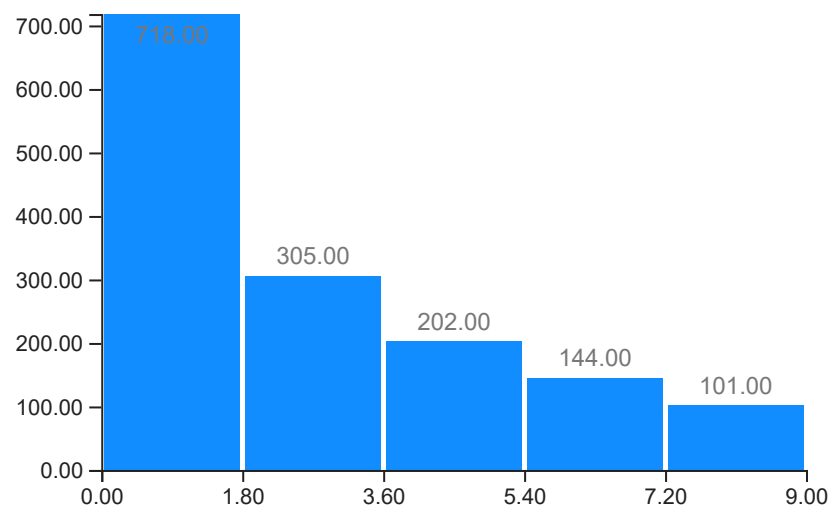
The attrition rate for single employees is the highest, at 25.53%. The next group of employees are those who are married or divorced, with rates of 12.48% and 10.09%, respectively. Employees with families tend to make more thoughtful decisions before leaving.

Number of Companies

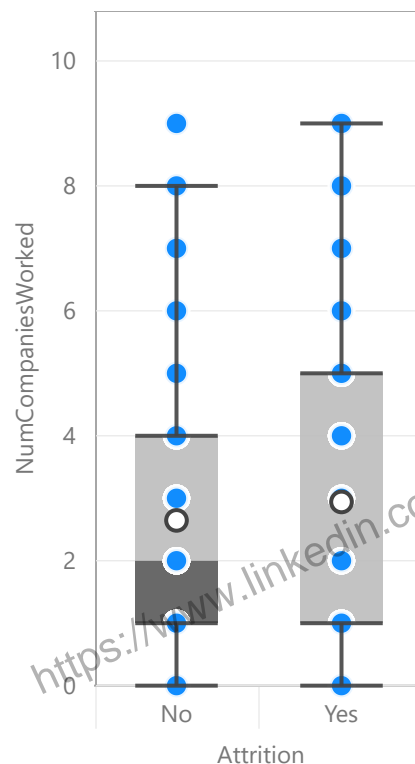
Summary measures

3959	2.69	0
Num	Avg	Min
9	2	2.50
Max	Median	SD

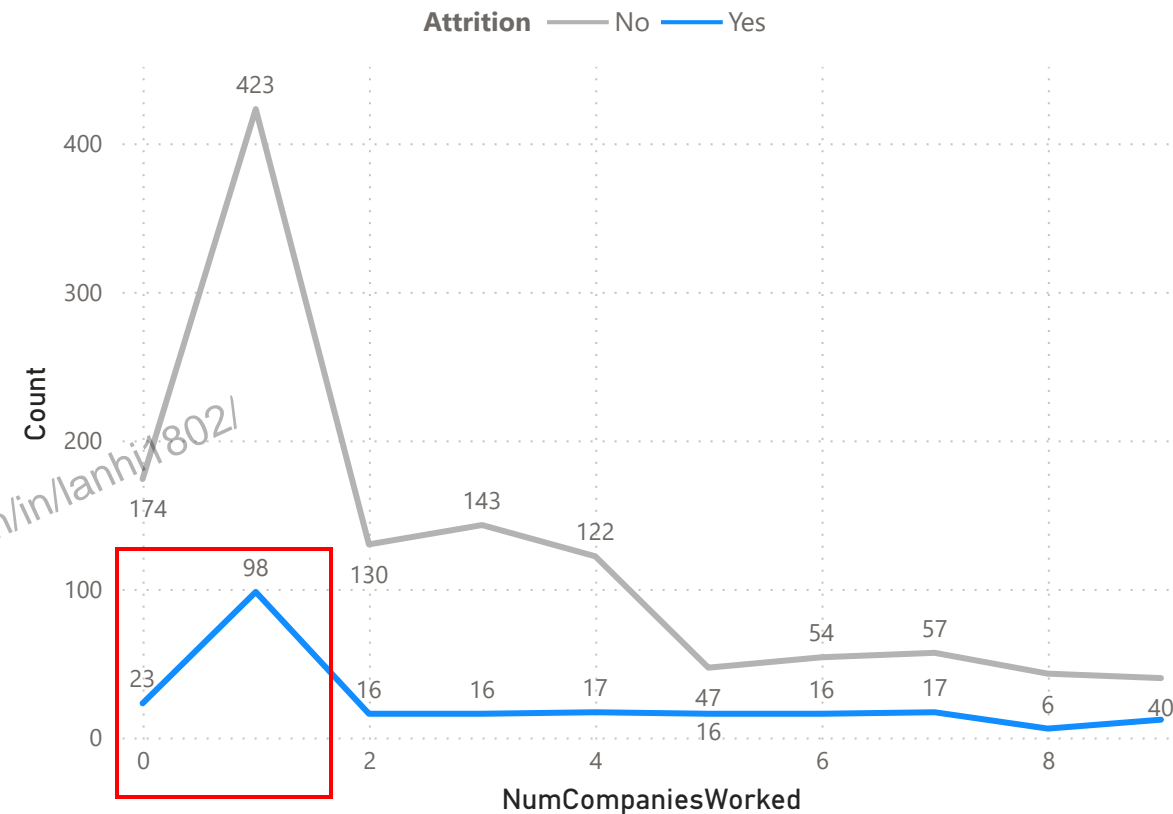
NumCompaniesWorked Distribution



NumCompaniesWorked by Attrition



Count NumCompaniesWorked



Observation:

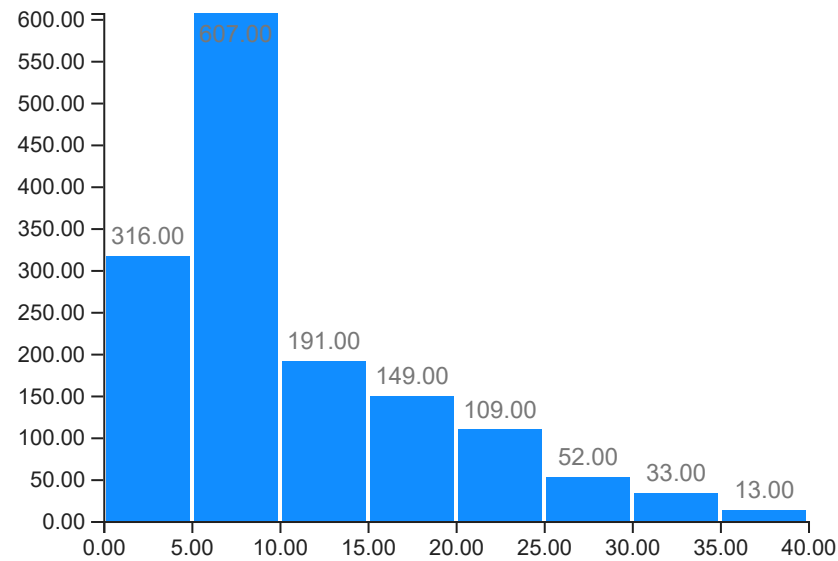
Employees who started their careers with the company or only moved to one previous company in their careers are more likely to leave the organization than employees who have more experience and have worked in a variety of companies.

Total Working Years

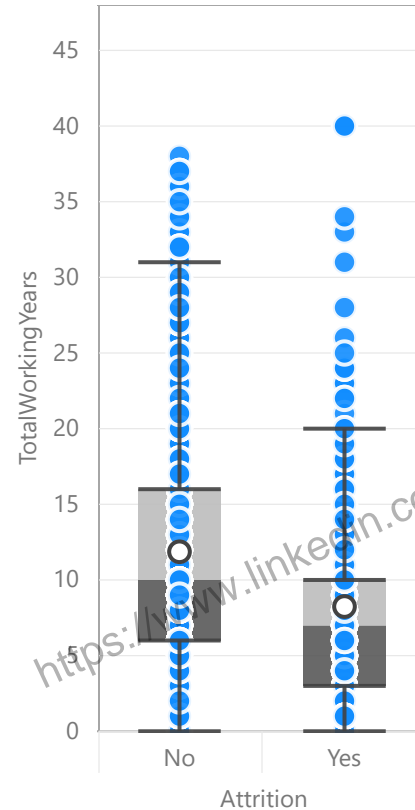
Summary measures

11.28	0	40
Avg	Min	Max
10	7.78	
Median	SD	

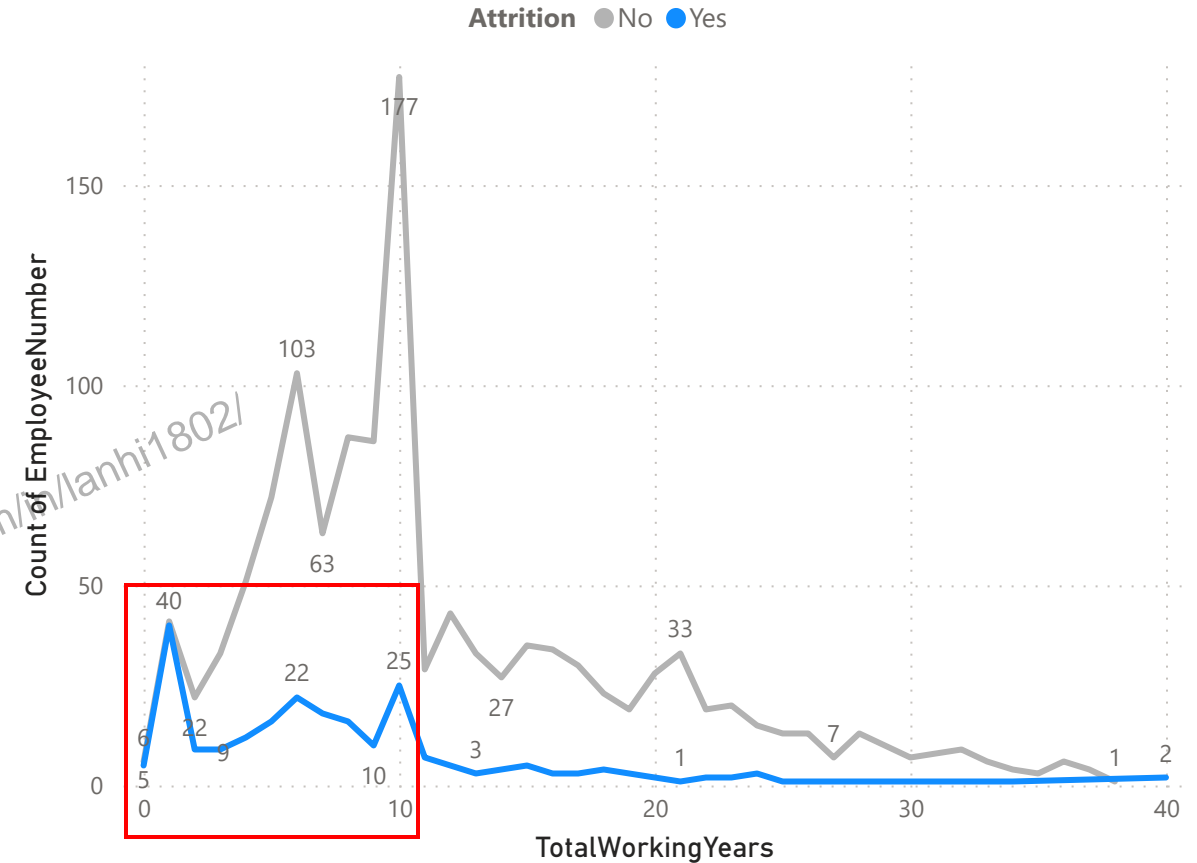
TotalWorkingYears Distribution



TotalWorkingYears by Attrition



Total Working Years of Employee



Observation:

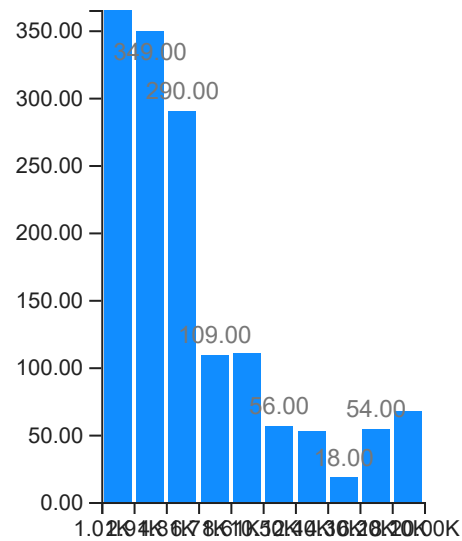
Employees with less than 10 years of work experience are far more likely to be fired! Attrition risks decrease with more work experience.

Monthly Income

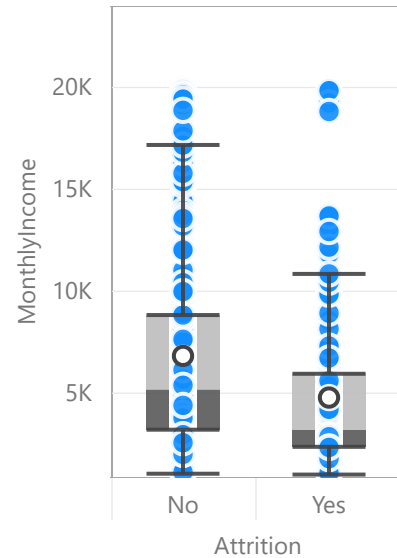
Summary measures

6502.93	1009	19999
Average	Min	Max
4919	4706.36	
Median	Standard deviation	

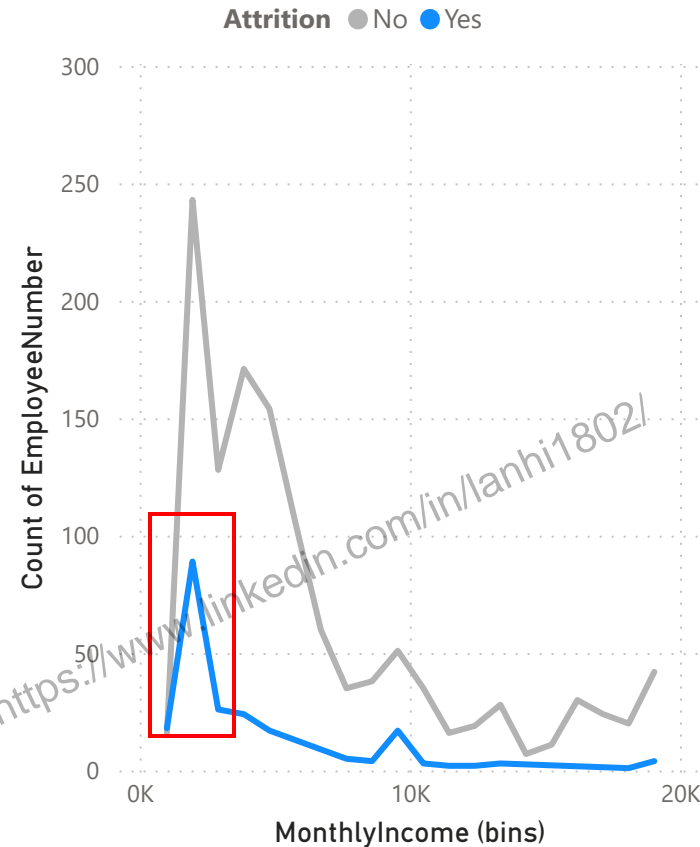
MonthlyIncome Distribution



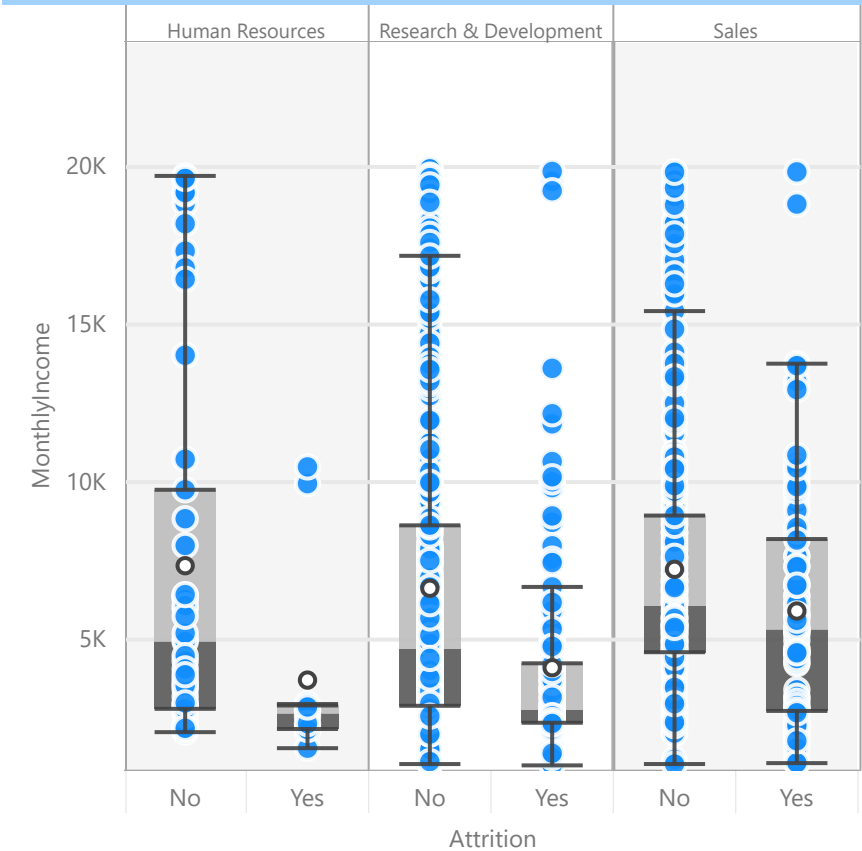
MonthlyIncome by Attrition



MonthlyIncome by Employee



MonthlyIncome vs Department



Observation:

- The low-income group's attrition rate is higher than the high-income group's. Monthly incomes under \$2900 have the greatest attrition rate. When monthly income is high, employees are less likely to leave the organization.
- Too many outlier values exist for Monthly Income by Department. Employees in Human Resources who leave earn considerably less than those who stay.

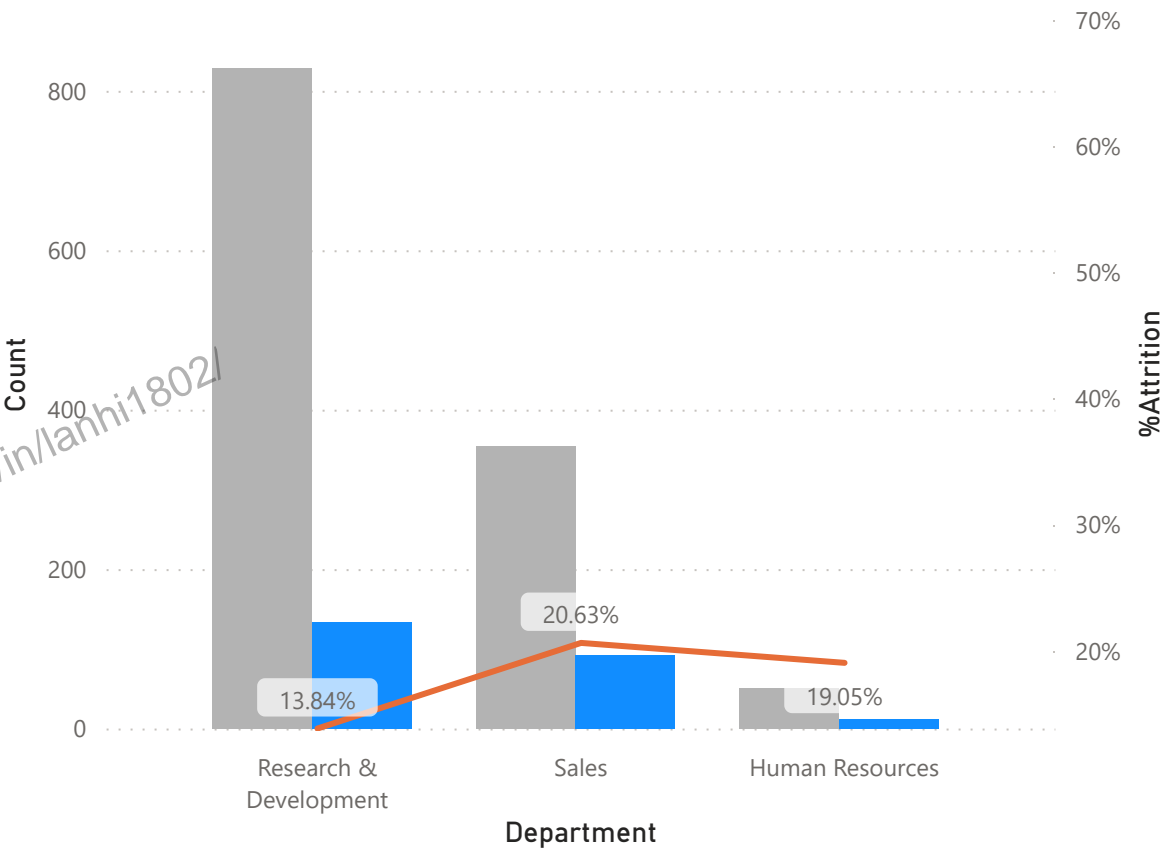
Department

Frequency by Department & Attrition

Department Attrition	Human Resources		Research & Development		Sales		Total	
	Count	%Count	Count	%Count	Count	%Count	Count	%Count
No	51	80.95%	828	86.16%	354	79.37%	1233	83.88%
Yes	12	19.05%	133	13.84%	92	20.63%	237	16.12%
Total	63	100.00%	961	100.00%	446	100.00%	1470	100.00%

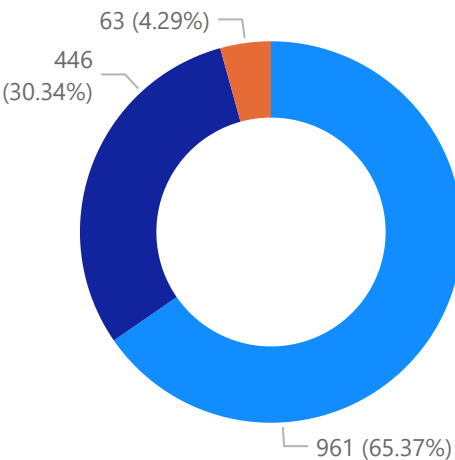
Department of Employee

Attrition ● No ● Yes — %Attrition



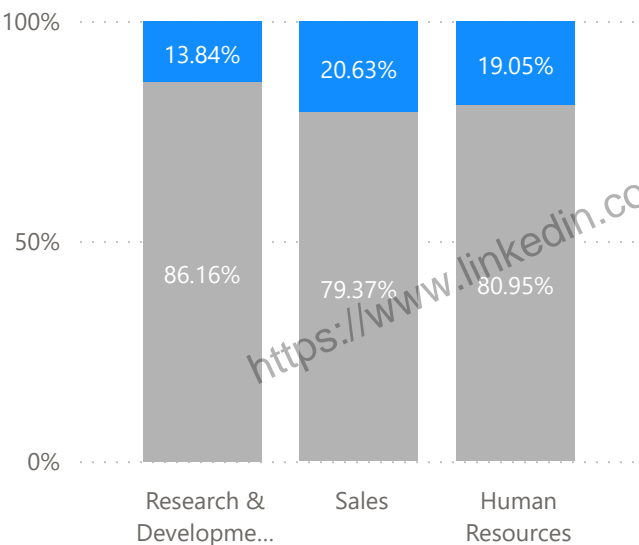
Count of Department by Employee

● Research & Developm... ● Sales ● Human Resour...



Employee by Department/ Attrition

● No ● Yes



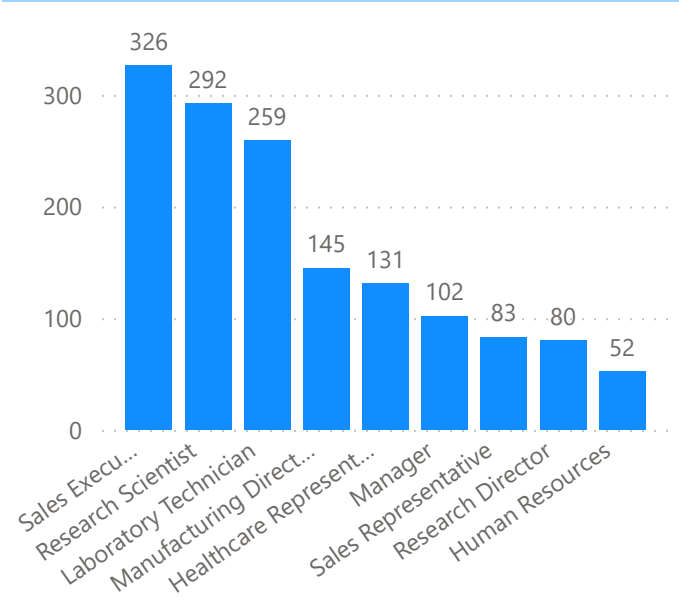
Observation:

The attrition rate of employees in the Sales department is the highest with 20.63%, followed by the HR department with 19.05%. With 13.84%, Research and Development has the lowest attrition rate.

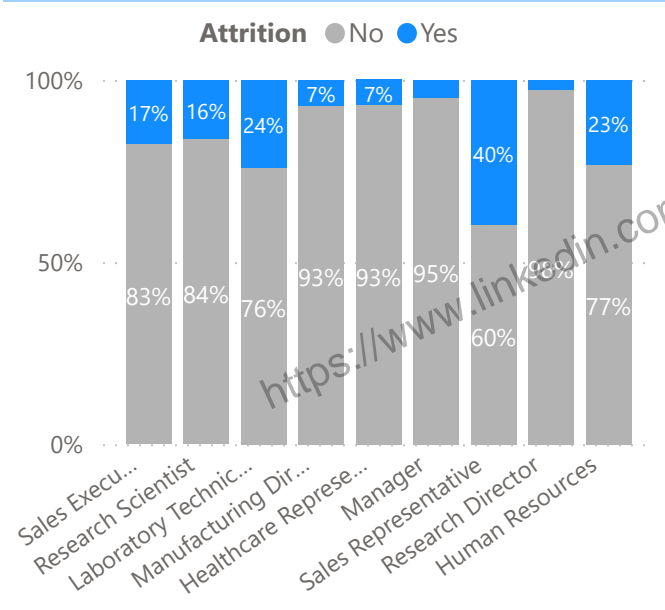
Job role

Frequency by Job Role& Attrition																				
JobRole	Healthcare Representative		Human Resources		Laboratory Technician		Manager		Manufacturing Director		Research Director		Research Scientist		Sales Executive		Sales Representative		Total	
Attrition	Count	%Count	Count	%Count	Count	%Count	Count	%Count	Count	%Count	Count	%Count	Count	%Count	Count	%Count	Count	%Count	Count	%Count
No	122	93.13%	40	76.92%	197	76.06%	97	95.10%	135	93.10%	78	97.50%	245	83.90%	269	82.52%	50	60.24%	1233	83.88%
Yes	9	6.87%	12	23.08%	62	23.94%	5	4.90%	10	6.90%	2	2.50%	47	16.10%	57	17.48%	33	39.76%	237	16.12%
Total	131	100.00%	52	100.00%	259	100.00%	102	100.00%	145	100.00%	80	100.00%	292	100.00%	326	100.00%	83	100.00%	1470	100.00%

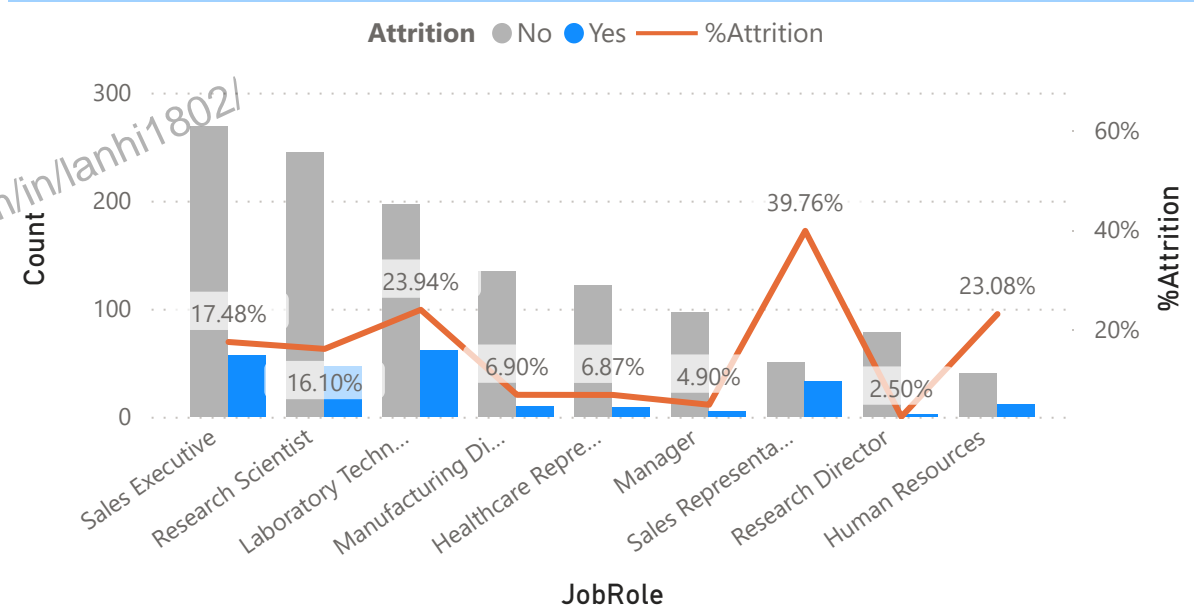
Count of Job Role by Employee



Employee by Job Role/ Attrition

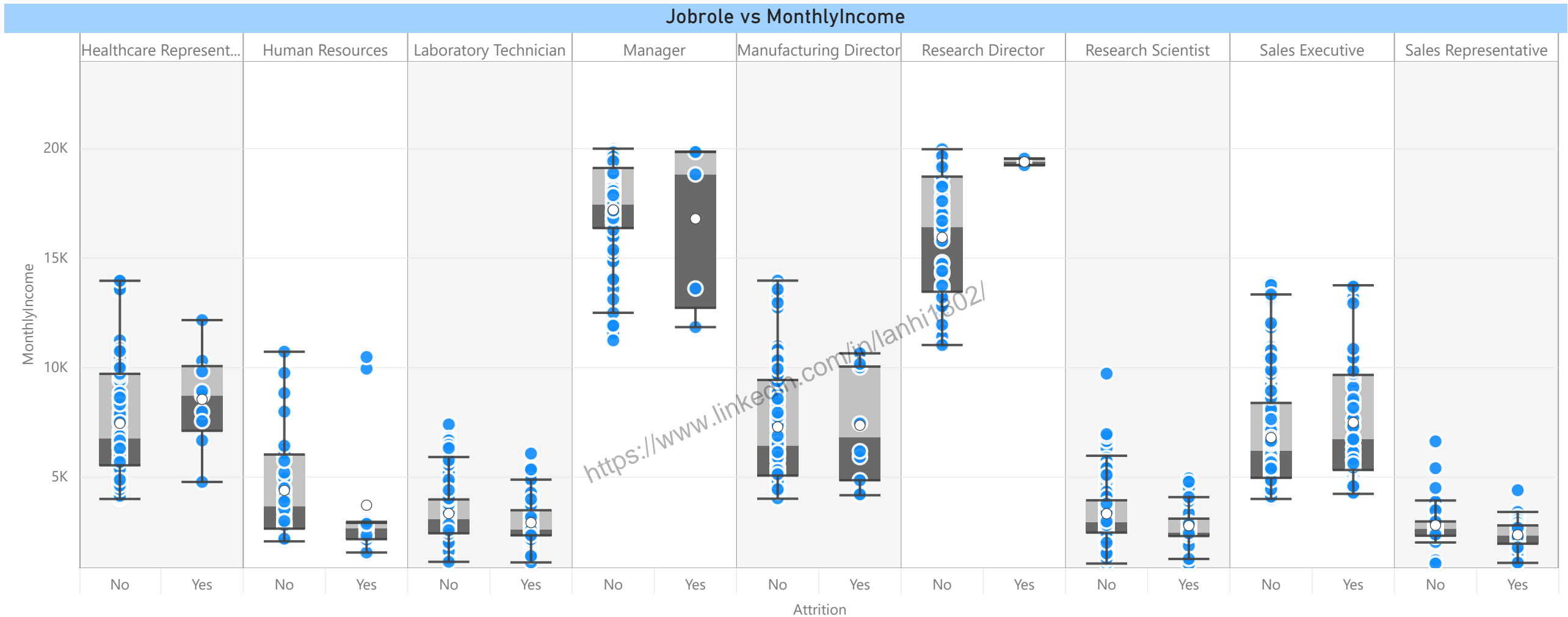


Job Role of Employee



Observation:
The employee job role of Sales Representative has the highest attrition rate, at 39.76%. The attrition rate for Laboratory Technician, Human Resources is over 20%. Managers and Directors will have the lowest rate of attrition.

Job role



Observation:

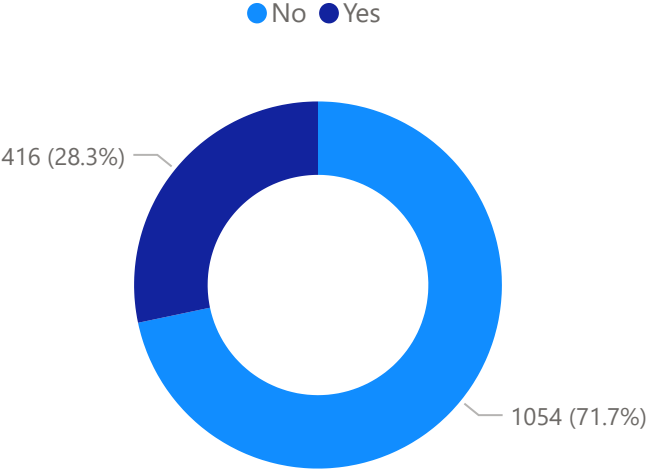
The fact that Human Resources, Laboratory Technician, Research Scientist, and Sales Representative positions all pay significantly less per month than other positions could be the key factor in their leaving.

Over Time

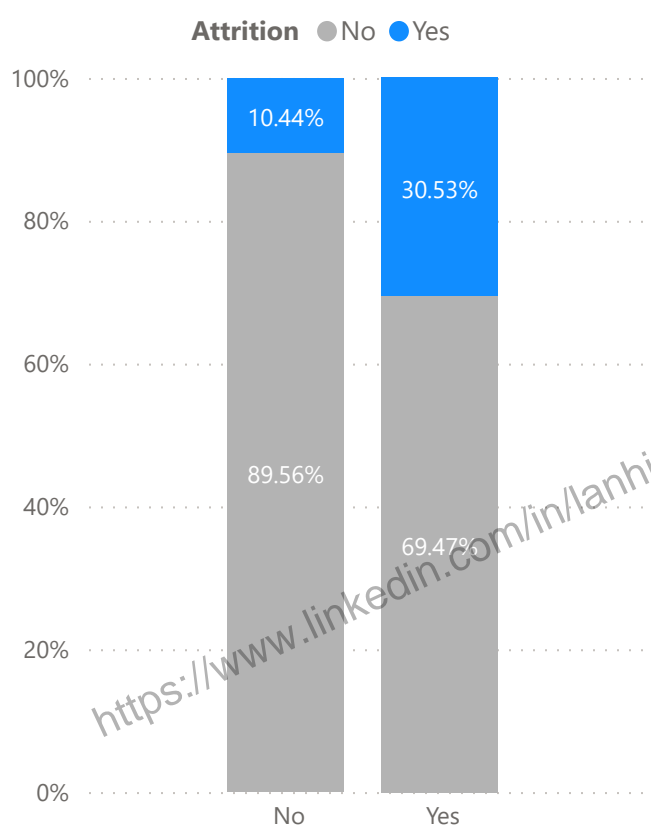
Frequency by OverTime & Attrition

OverTime	No		Yes		Total	
Attrition	Count	%Count	Count	%Count	Count	%Count
No	944	89.56%	289	69.47%	1233	83.88%
Yes	110	10.44%	127	30.53%	237	16.12%
Total	1054	100.00%	416	100.00%	1470	100.00%

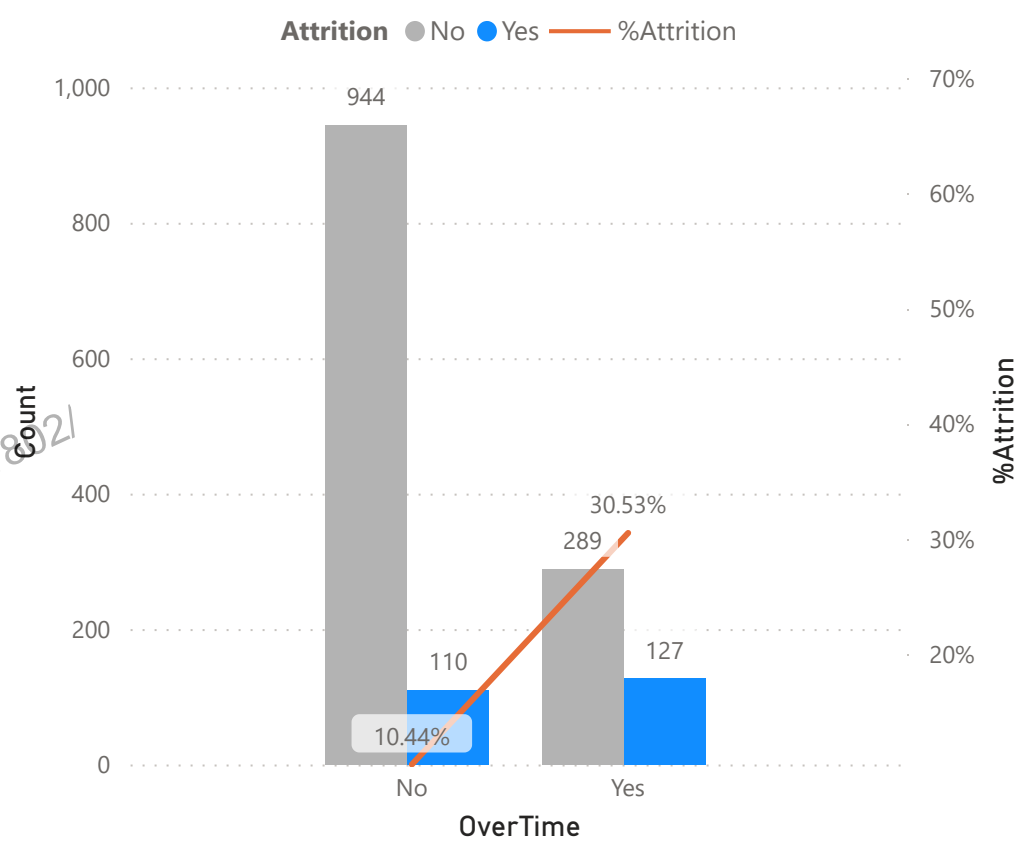
Count of OverTime by Employee



Employee by OverTime/ Attrition



Overtime vs Attrition



Observation:

Overtime employees are more likely to abandon the company! Compared to workers who don't work overtime, it has a 30.53% attrition rate.

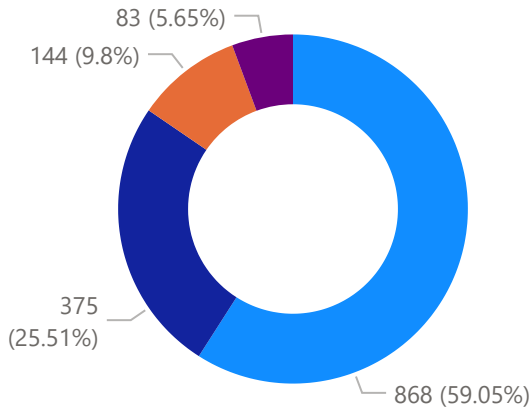
Job Involvement

Frequency by Job Involvement & Attrition

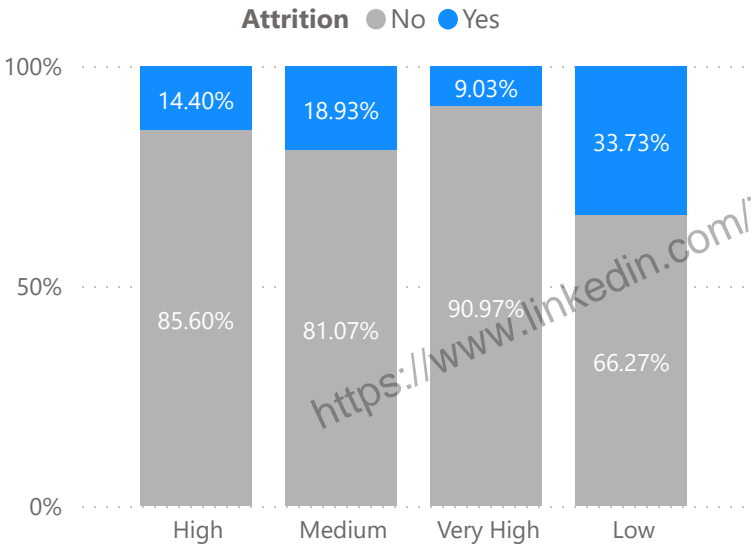
JobInvolvement Attrition	High		Low		Medium		Very High		Total	
	Count	%Count	Count	%Count	Count	%Count	Count	%Count	Count	%Count
No	743	85.60%	55	66.27%	304	81.07%	131	90.97%	1233	83.88%
Yes	125	14.40%	28	33.73%	71	18.93%	13	9.03%	237	16.12%
Total	868	100.00%	83	100.00%	375	100.00%	144	100.00%	1470	100.00%

Count of Job Involvement by Employee

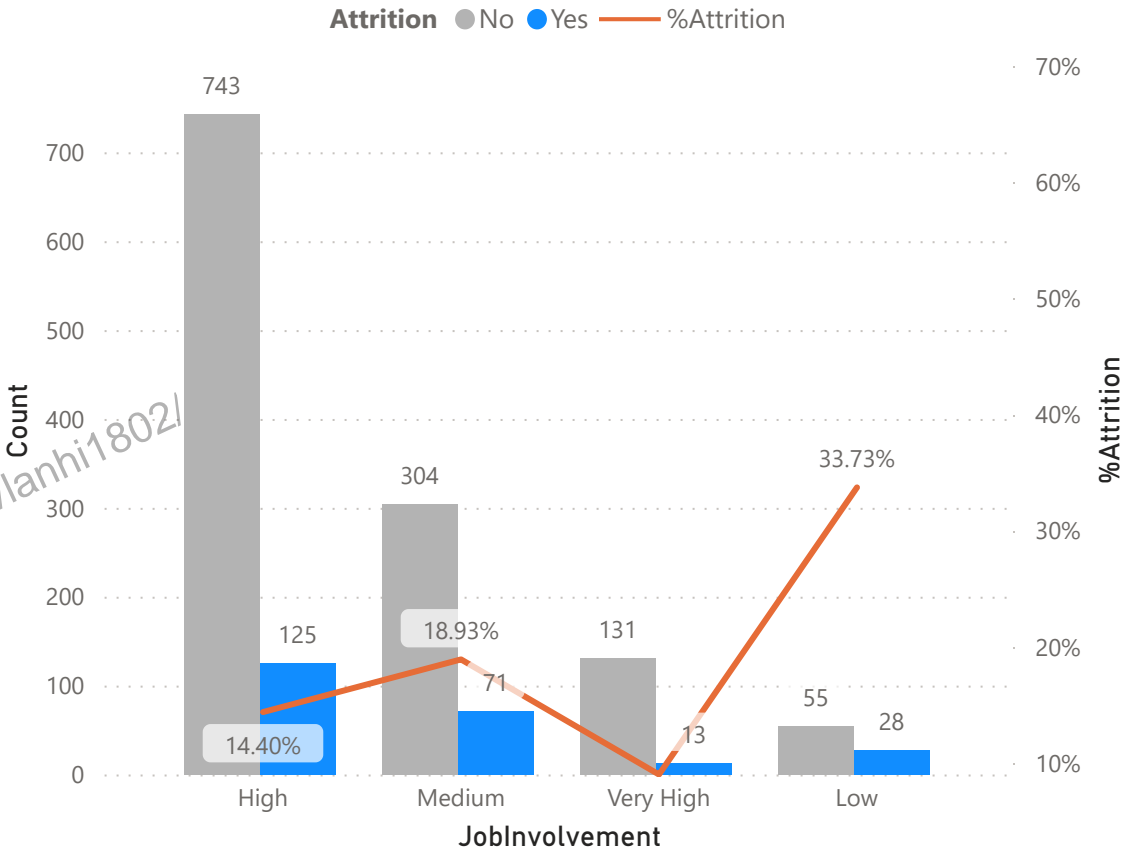
High Medium Very High Low



Employee by Job Involvement/ Attrition



Job Involvement Count of Employee



Observation:

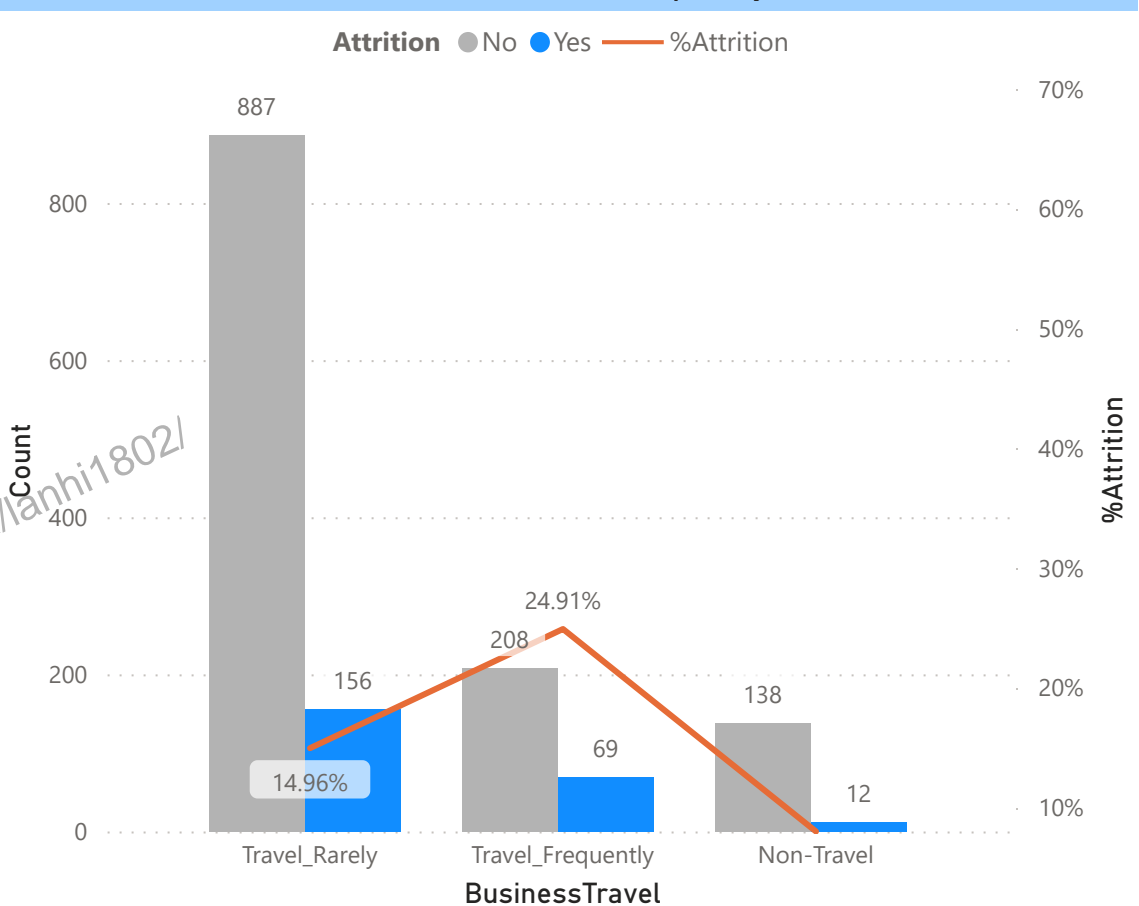
The higher the Job Involvement, the lower the attrition rate.

Business Travel

Frequency by Business Travel & Attrition

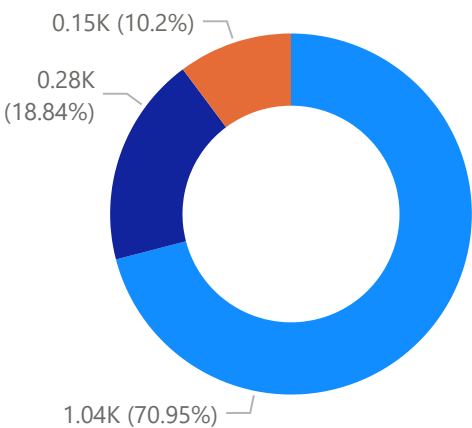
BusinessTravel Attrition	Non-Travel		Travel_Frequently		Travel_Rarely		Total Count	%Count
	Count	%Count	Count	%Count	Count	%Count		
No	138	92.00%	208	75.09%	887	85.04%	1233	83.88%
Yes	12	8.00%	69	24.91%	156	14.96%	237	16.12%
Total	150	100.00%	277	100.00%	1043	100.00%	1470	100.00%

Business Travel Frequency



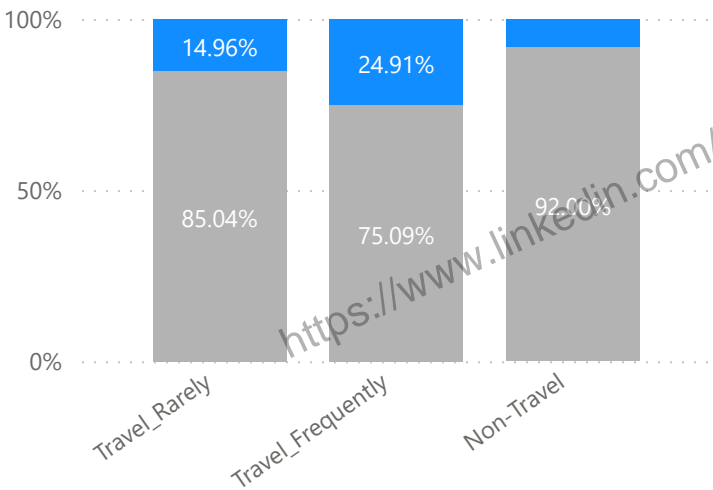
Count of Business Travel by Employee

Travel_Rarely (Blue), Travel_Frequently (Dark Blue), Non-Travel (Orange)



Employee by Business Travel/ Attrition

Attrition: No (Grey), Yes (Blue)



Observation:

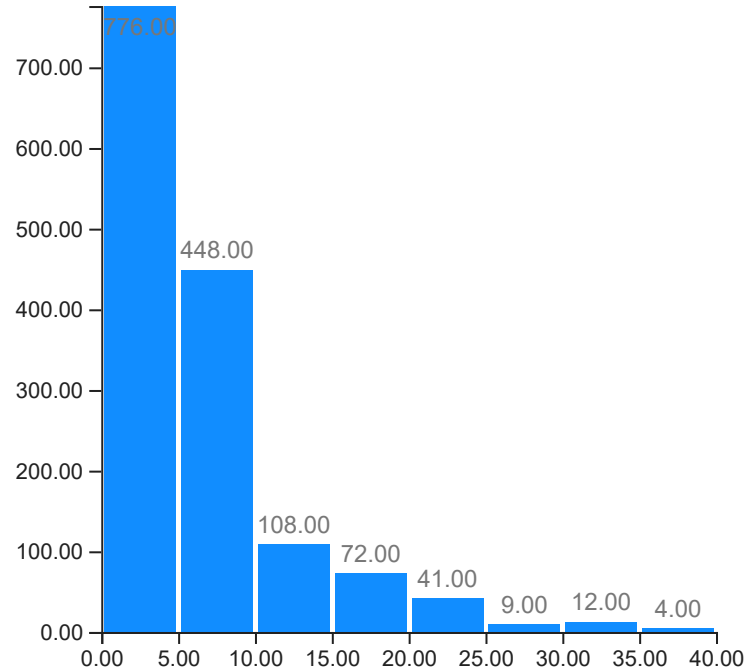
The attrition rate of employees who travel frequently is the highest, at 24.91%. The more employees travel frequently for work, the more likely they are to resign.

Years at Company

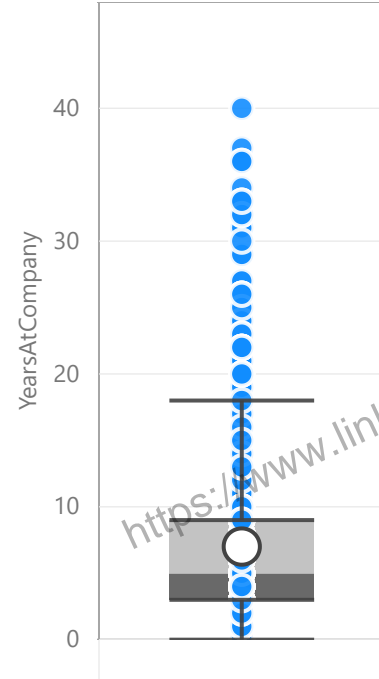
Summary measures

7.01	0	40	5	6.12
Average	Min	Max	Median	SD

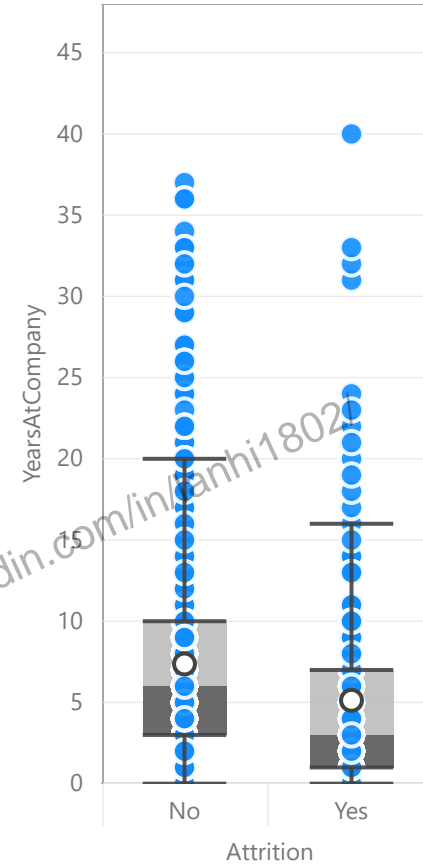
YearsAtCompany Distribution



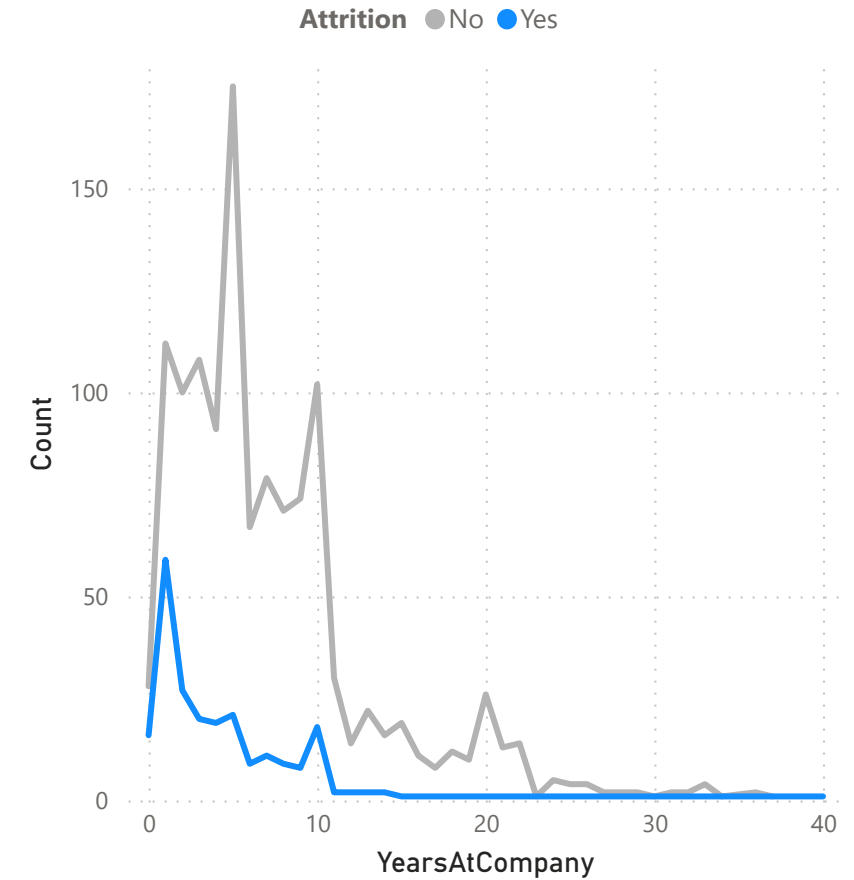
YearsAtCom by Employee



YearsAtCompany by Attrition



YearatCompany Count by Employee



Observation:

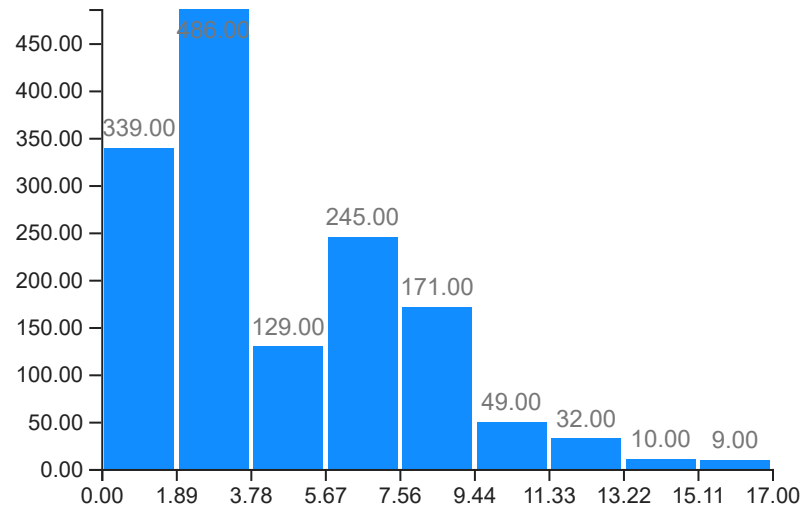
Most remain employees in the company for 3–9 years, with the median being 5 years. For employees who have left, they have worked at the company for 1–7 years, with the median being 3 years.

Years with Current Manager

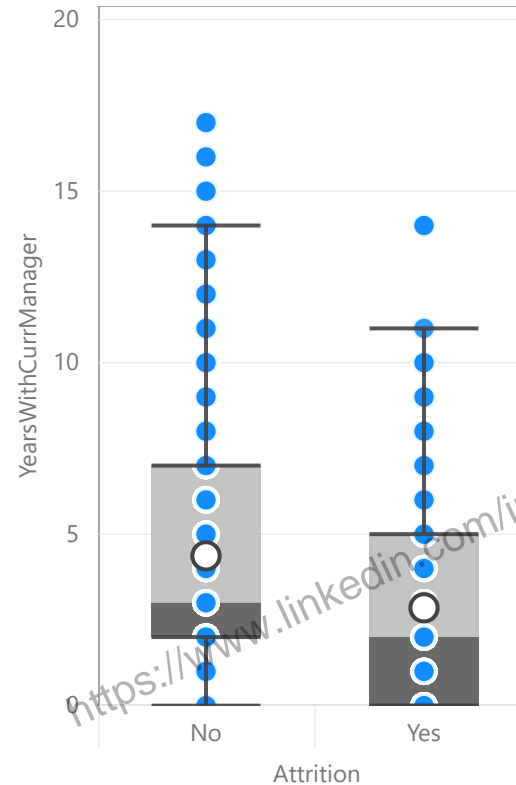
Summary measures

4.12	0	17
Average	Min	Max
3	3.57	
Median	SD	

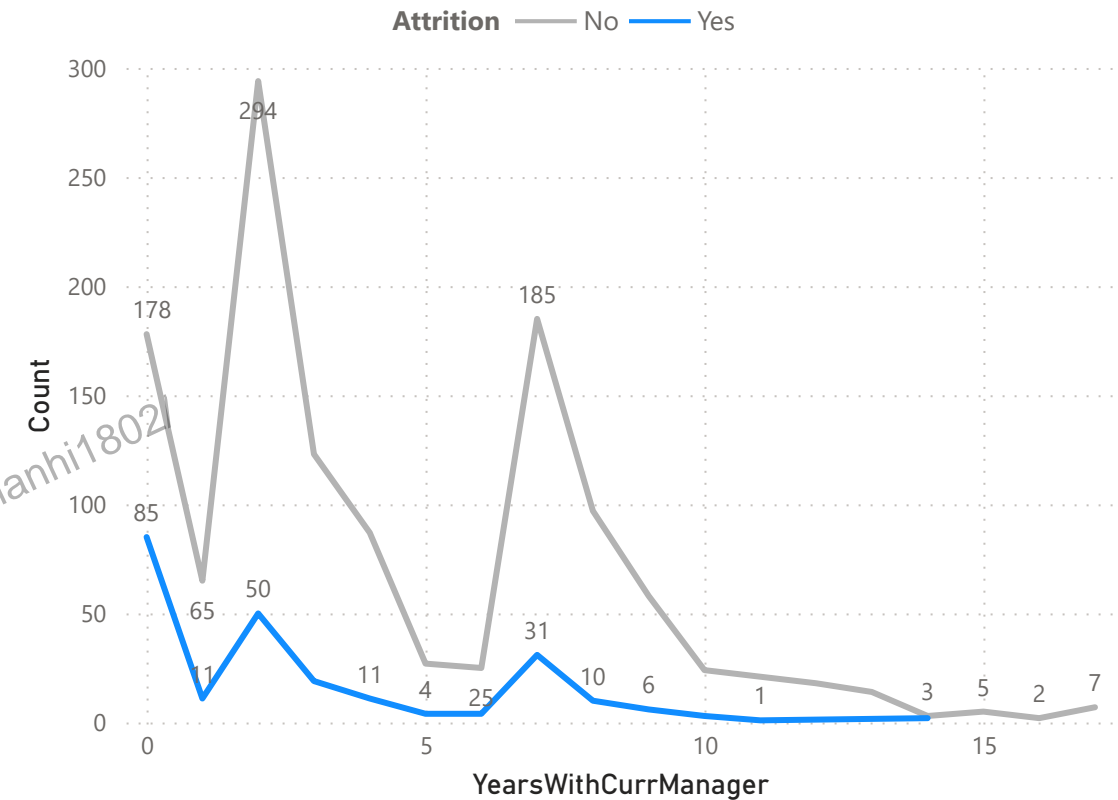
YearsWithCurrManager Distribution



YearsWithCurrManager by Attrition



YearsWithCurrManager Count by Employee



Observation:

Employees typically quit their positions during the following stages:

- A period of less than a year when there is not much time with the manager; maybe they leave because the current manager is unsuitable and they wish to find another manager.
- After 2 years of working with the management, they tend to want to leave to develop their careers.
- On average, after working long enough with the manager (7 years), they will leave because they find their work stagnant and they cannot get a promotion.

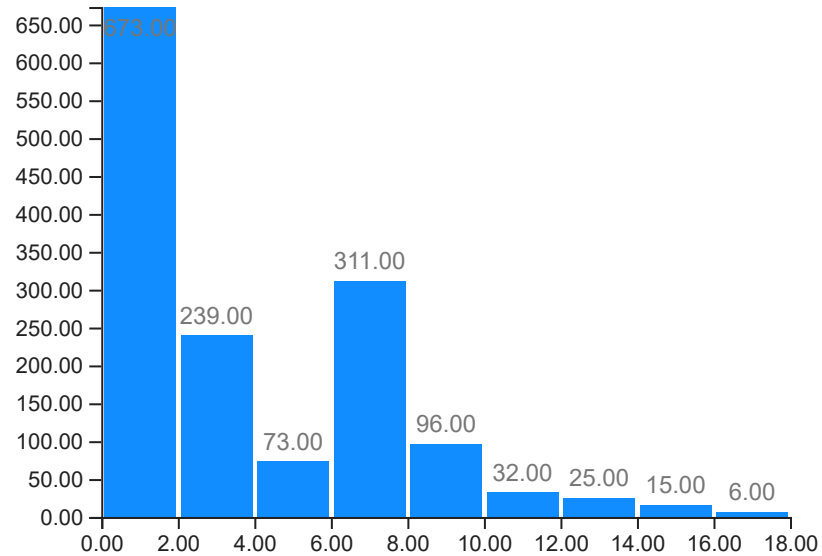
However, after working with management for more than 7 years, people are less likely to leave the organization.

Years in Current Role

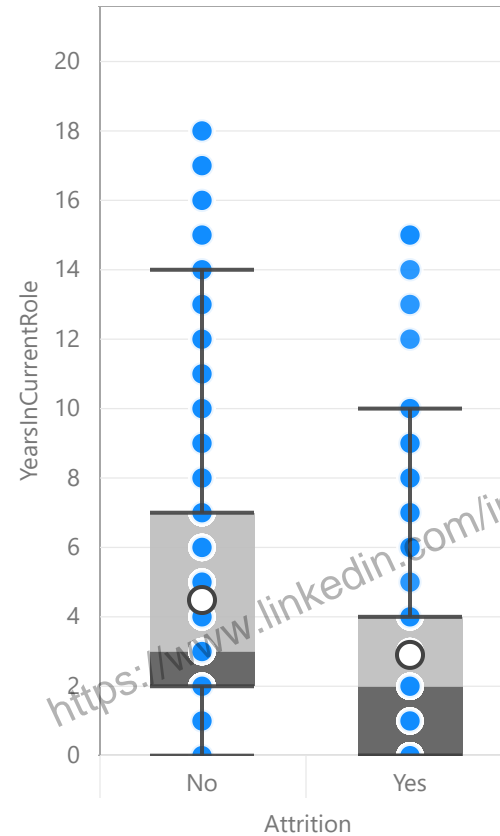
Summary measures

4.23	0	18
Average of Yea...	Min	Max
3	3.62	
Median	SD	

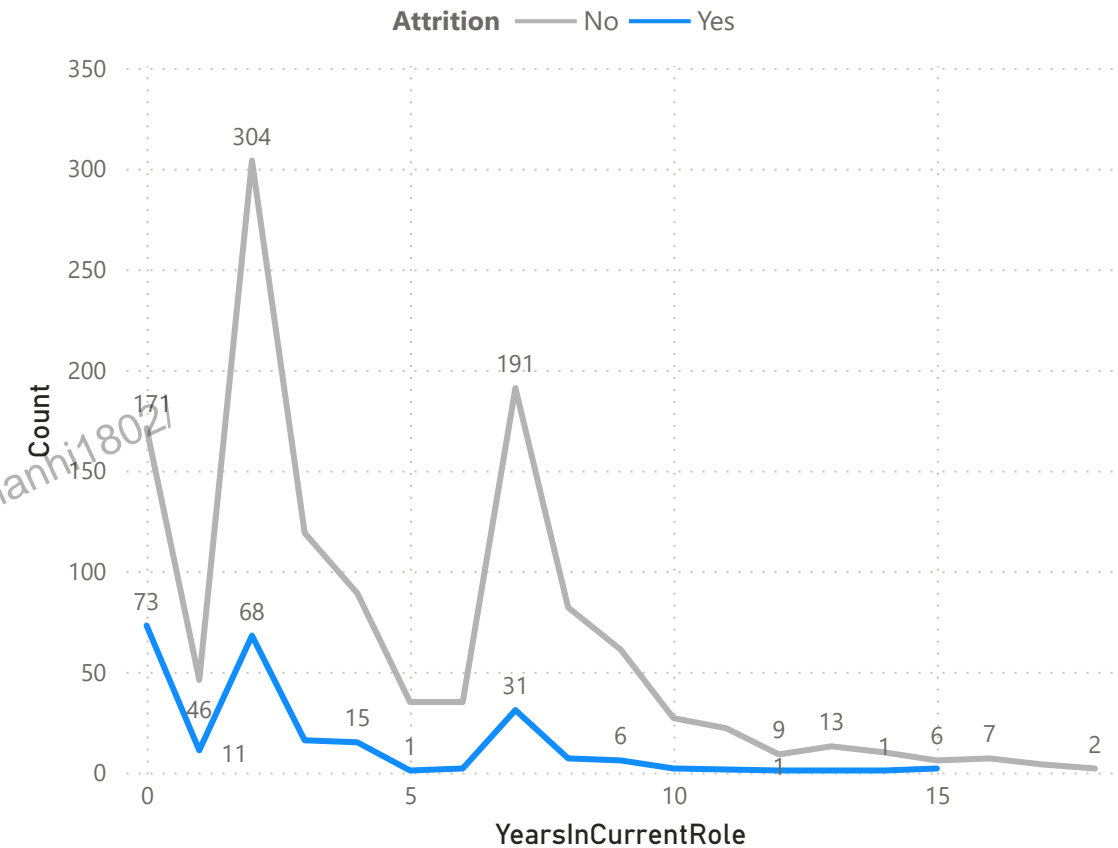
YearsInCurrentRole Distribution



YearsInCurrentRole by Attrition



YearsInCurrentRole Count by Employee



Observation:

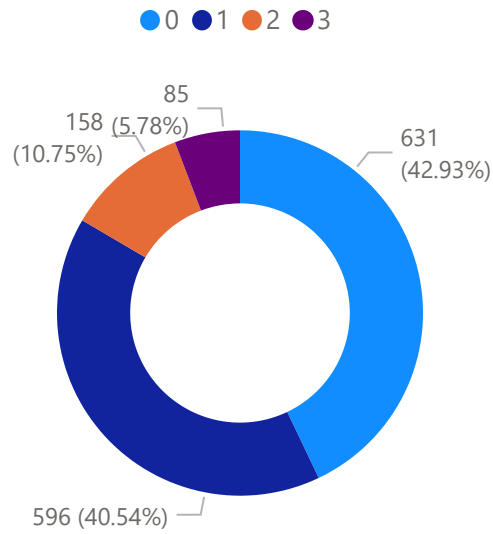
Employees who begin their careers are more likely to leave the company. Employees who have been in the same position for more than 3 years will stay in order to enhance their careers. If they stay in the same job until the 7th year, many people will leave because there are no opportunities for promotion at the current firm or if the company decides to shake things up. Employees who have been with the organization for 8 years or longer prefer to settle down and stay.

Stock Option Level

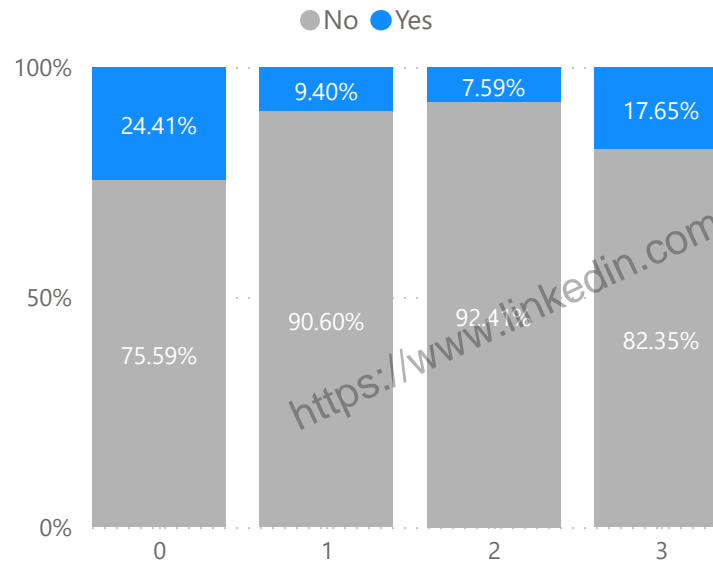
Frequency by StockOptionLevel & Attrition

StockOptionLevel	0		1		2		3		Total	
Attrition	Count	%Count	Count	%Count	Count	%Count	Count	%Count	Count	%Count
No	477	75.59%	540	90.60%	146	92.41%	70	82.35%	1233	83.88%
Yes	154	24.41%	56	9.40%	12	7.59%	15	17.65%	237	16.12%
Total	631	100.00%	596	100.00%	158	100.00%	85	100.00%	1470	100.00%

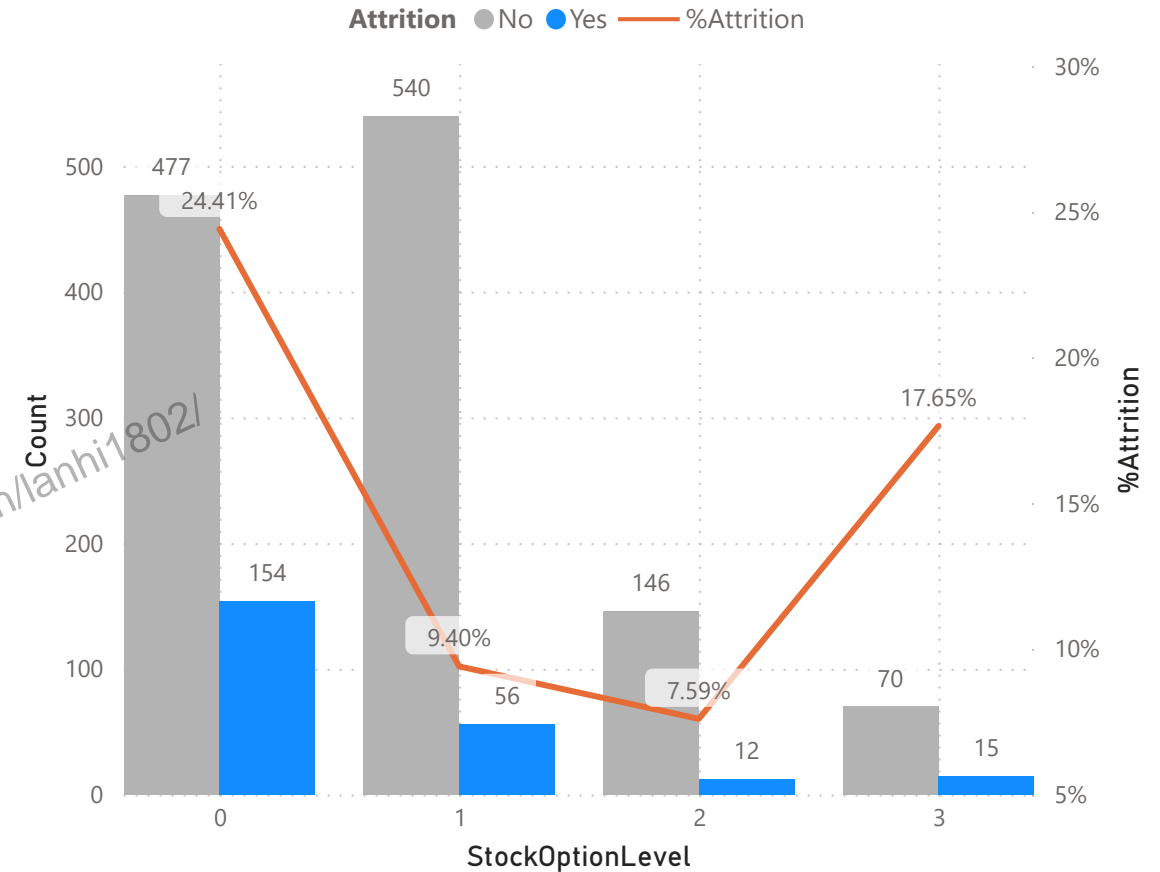
Count of StockOptionLevel by Employee



Employee by StockOptionLevel/ Attrition



StockOptionLevel Count by Employee



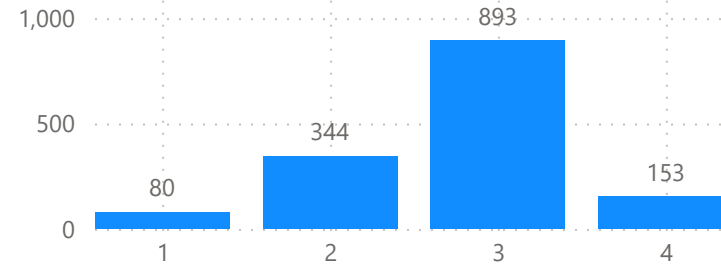
Observation:

Employees with limited stock options are the most likely to leave the organization. When employees have good stock options, they will desire to stay with the company longer to take advantage of the stock benefits.

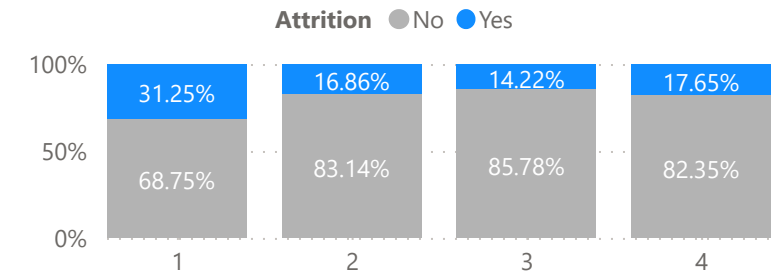
Frequency by WorkLifeBalance & Attrition

Attrition	No		Yes		Total	
	Count	%Count	Count	%Count	Count	%Count
1	55	4.46%	25	10.55%	80	5.44%
2	286	23.20%	58	24.47%	344	23.40%
3	766	62.12%	127	53.59%	893	60.75%
4	126	10.22%	27	11.39%	153	10.41%
Total	1233	100.00%	237	100.00%	1470	100.00%

Count of WorkLifeBalance by Employee



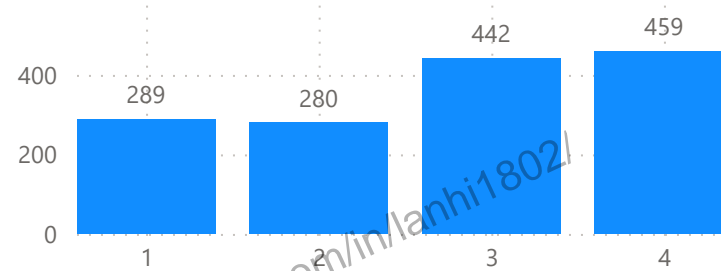
Employee by WorkLifeBalance/ Attrition



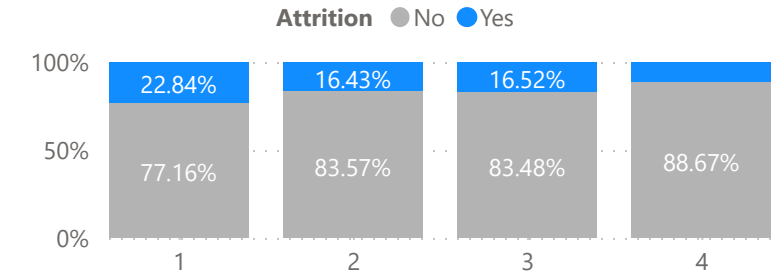
Frequency by JobSatisfaction & Attrition

Attrition	No		Yes		Total	
	Count	%Count	Count	%Count	Count	%Count
1	223	18.09%	66	27.85%	289	19.66%
2	234	18.98%	46	19.41%	280	19.05%
3	369	29.93%	73	30.80%	442	30.07%
4	407	33.01%	52	21.94%	459	31.22%
Total	1233	100.00%	237	100.00%	1470	100.00%

Count of JobSatisfaction by Employee



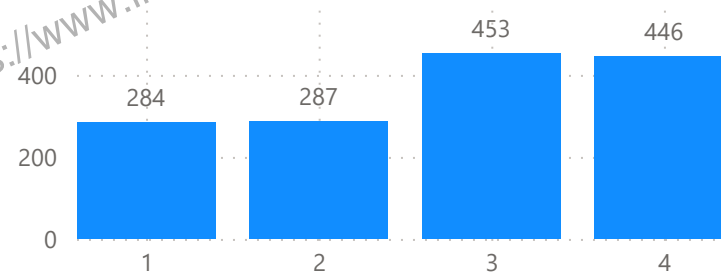
Employee by JobSatisfaction/ Attrition



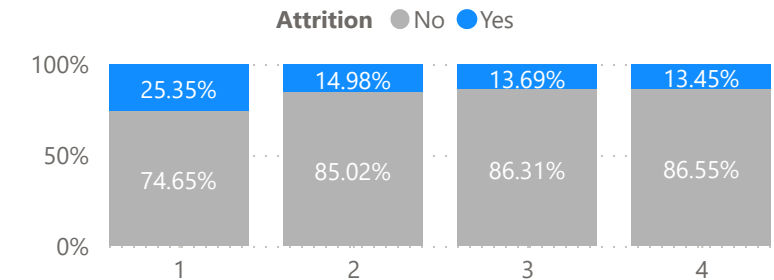
Frequency by EnvironmentSatisfaction & Attrition

Attrition	No		Yes		Total	
	Count	%Count	Count	%Count	Count	%Count
1	212	17.19%	72	30.38%	284	19.32%
2	244	19.79%	43	18.14%	287	19.52%
3	391	31.71%	62	26.16%	453	30.82%
4	386	31.31%	60	25.32%	446	30.34%
Total	1233	100.00%	237	100.00%	1470	100.00%

Count of EnvironmentSatisfaction by Employee



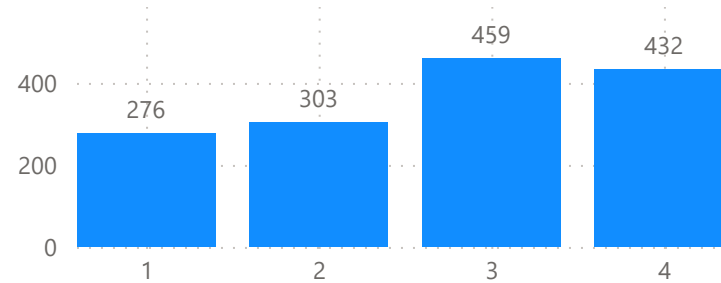
Employee by EnvironmentSatisfaction/ Attrition



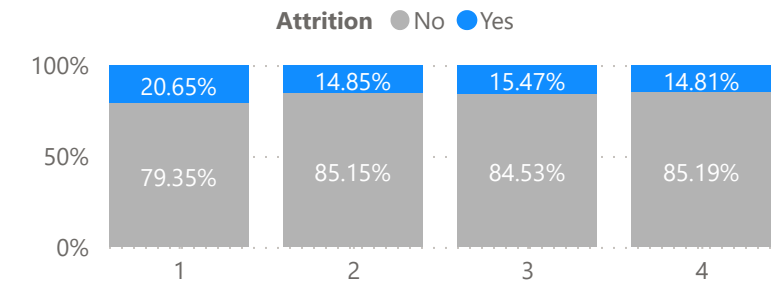
Frequency by RelationshipSatisfaction & Attrition

Attrition	No		Yes		Total	
	Count	%Count	Count	%Count	Count	%Count
1	219	17.76%	57	24.05%	276	18.78%
2	258	20.92%	45	18.99%	303	20.61%
3	388	31.47%	71	29.96%	459	31.22%
4	368	29.85%	64	27.00%	432	29.39%
Total	1233	100.00%	237	100.00%	1470	100.00%

Count of RelationshipSatisfaction by Employee

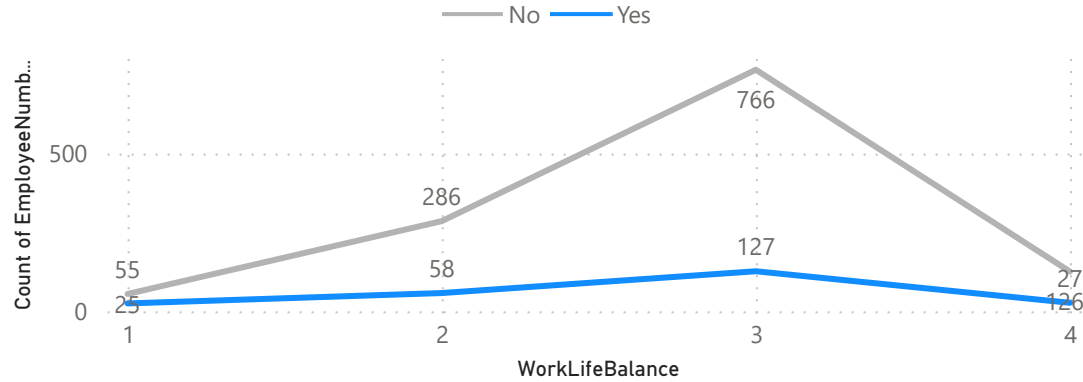


Employee by RelationshipSatisfaction/ Attrition

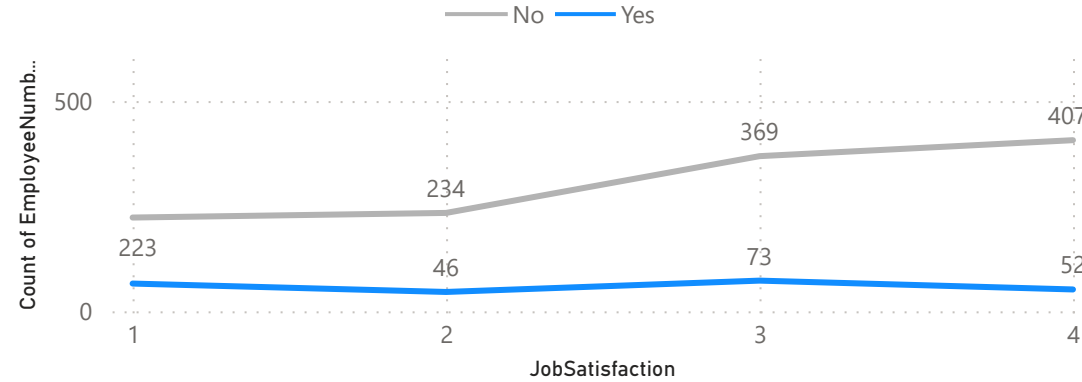


Employee Engagement

WorkLifeBalance Count by Employee



JobSatisfaction Count by Employee



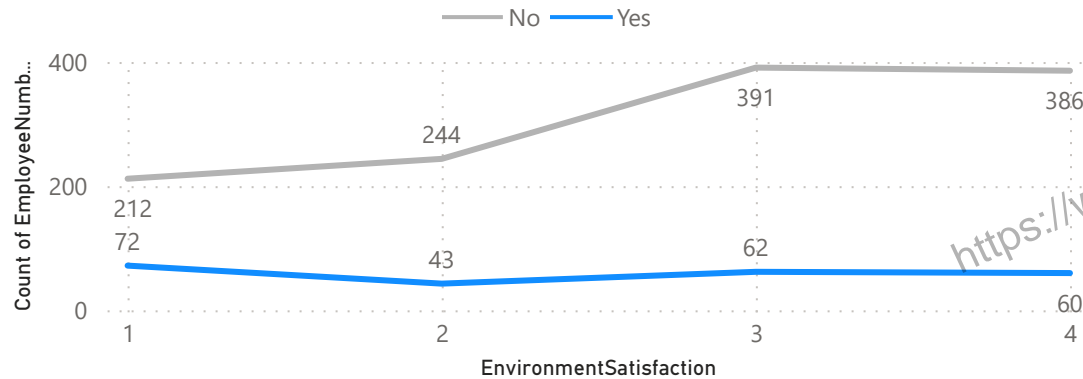
WorkLifeBalance

- 1 'Bad'
- 2 'Good'
- 3 'Better'
- 4 'Best'

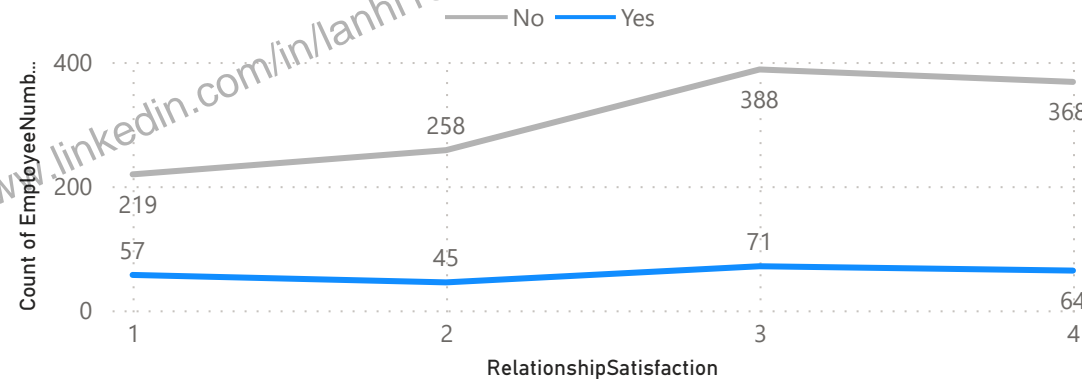
The others

- 1 'Low'
- 2 'Medium'
- 3 'High'
- 4 'Very High'

EnvironmentSatisfaction Count by Employee



RelationshipSatisfaction Count by Employee



Observation:

- **WorkLifeBalance:** People who rank WorkLifeBalance as "Bad" tend to balance themselves to adapt. When they become accustomed to their jobs and rate their work-life balance as "Good" or "Better", they leave the organization. However, when WorkLifeBalance is at "Best", they are really satisfied with their work.
- **The Others:** Other satisfaction ratings tend to be similar. When they are dissatisfied with their job, environment, and relationships, they leave the organization. When the situation improves and the factors are "Medium", they will be more loyal to the company. When people are truly satisfied, though, they prefer to seek out new opportunities.