

Employee Churn Analysis

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Introduction

Objective: Analyze a company's churn rate to determine which group of employees are at risk of leaving the company

Methodology

Data:

- Employee dataset obtained from Kaggle**

Tools:

- Tableau for interactive data visualization**
- Excel for data cleaning and analysis**

Results

Employees who have been employed within their first couple of years are more likely to leave

Sum of Employee Count		Years At Company											
Attrition	Job Role	0	1	2	3	4	5	6	7	8	9	10	11
No	Healthcare Representative	2.0	8.0	5.0	9.0	9.0	14.0	10.0	11.0	11.0	6.0	9.0	3.0
No	Human Resources	-	1.0	6.0	5.0	3.0	8.0	3.0	2.0	2.0	3.0	5.0	2.0
No	Laboratory Technician	4.0	29.0	20.0	22.0	15.0	32.0	8.0	11.0	11.0	11.0	15.0	4.0
No	Manager	2.0	7.0	5.0	3.0	-	10.0	2.0	6.0	1.0	4.0	5.0	2.0
No	Manufacturing Director	2.0	8.0	6.0	12.0	10.0	18.0	9.0	10.0	9.0	14.0	12.0	5.0
No	Research Director	1.0	5.0	4.0	5.0	7.0	6.0	1.0	3.0	5.0	4.0	6.0	2.0
No	Research Scientist	8.0	32.0	25.0	28.0	27.0	40.0	19.0	11.0	11.0	8.0	17.0	3.0
No	Sales Executive	6.0	12.0	15.0	17.0	16.0	45.0	15.0	22.0	19.0	21.0	33.0	8.0
No	Sales Representative	3.0	10.0	14.0	7.0	4.0	2.0	-	3.0	2.0	3.0	-	1.0
No Total		28.0	112.0	100.0	108.0	91.0	175.0	67.0	79.0	71.0	74.0	102.0	30.0
Yes	Healthcare Representative	-	3.0	-	-	-	-	-	-	1.0	1.0	2.0	-
Yes	Human Resources	-	4.0	2.0	2.0	1.0	1.0	-	1.0	-	-	-	-
Yes	Laboratory Technician	7.0	21.0	7.0	4.0	7.0	5.0	1.0	5.0	-	2.0	2.0	-
Yes	Manager	-	-	-	-	-	1.0	-	1.0	-	-	1.0	-
Yes	Manufacturing Director	-	2.0	-	1.0	1.0	1.0	-	-	-	-	4.0	-
Yes	Research Director	-	-	-	-	-	-	-	-	-	-	-	-
Yes	Research Scientist	2.0	12.0	6.0	3.0	3.0	6.0	3.0	2.0	3.0	1.0	5.0	-
Yes	Sales Executive	3.0	4.0	8.0	3.0	5.0	5.0	5.0	2.0	5.0	3.0	4.0	2.0
Yes	Sales Representative	4.0	13.0	4.0	7.0	2.0	2.0	-	-	-	1.0	-	-
Yes Total		16.0	59.0	27.0	20.0	19.0	21.0	9.0	11.0	9.0	8.0	18.0	2.0
Grand Total		44.0	171.0	127.0	128.0	110.0	196.0	76.0	90.0	80.0	82.0	120.0	32.0

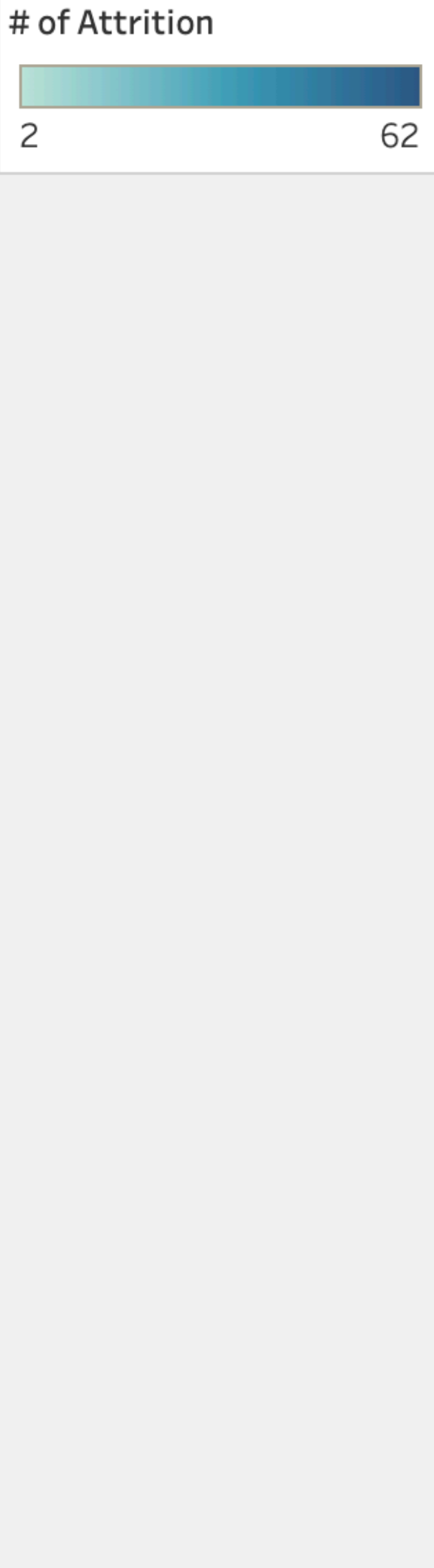
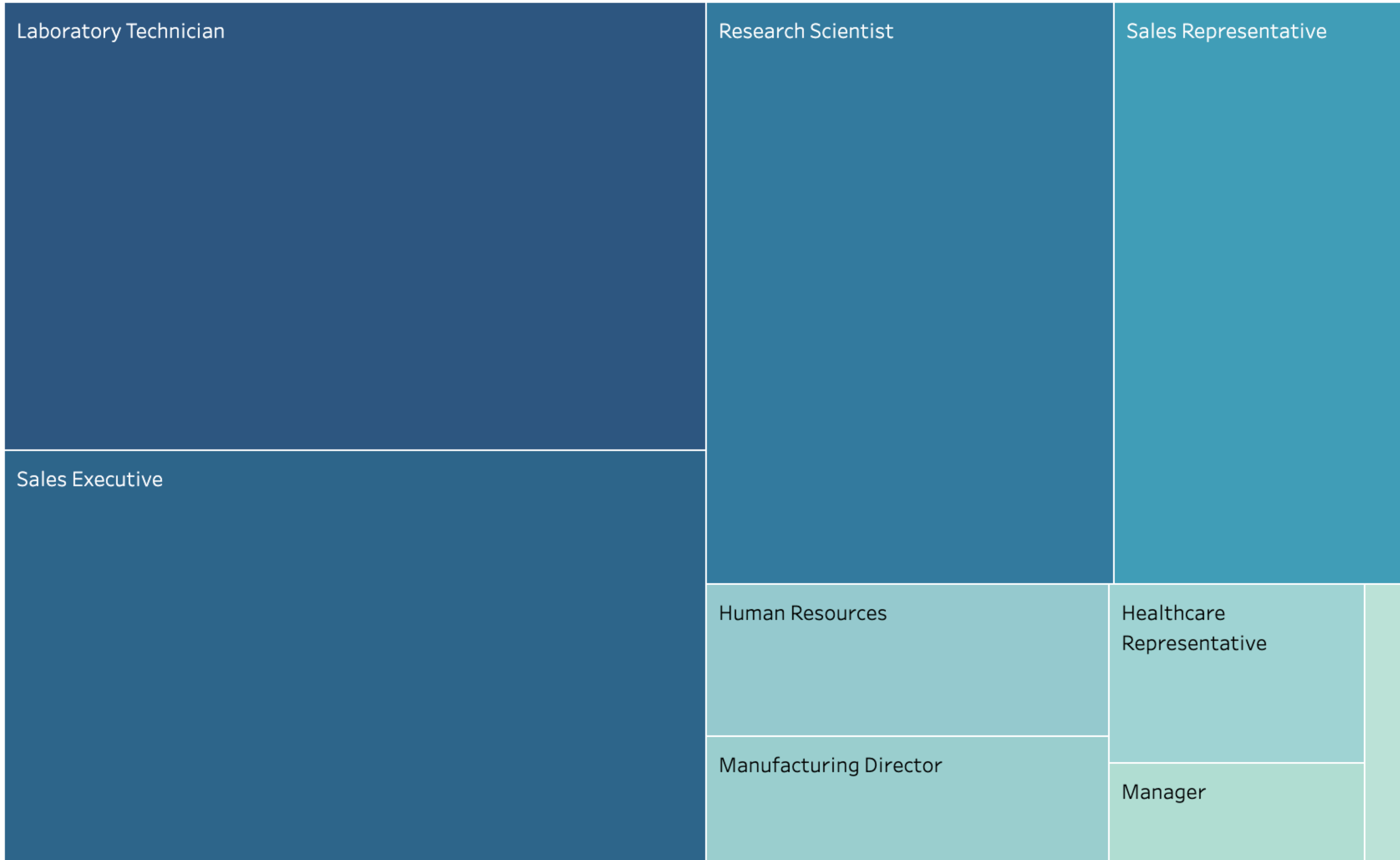
% of Employees leaving the company	36%	35%	21%	16%	17%	11%	12%	12%	11%	10%	15%	6%
% change YoY		269%	-54%	-26%	-5%	11%	-57%	22%	-18%	-11%	125%	-89%

Note:

As employees stay longer at the company, the chances of them leaving the company decreases. This indicates that employees who were hired within the first couple of years of employment have the greatest chance of leaving

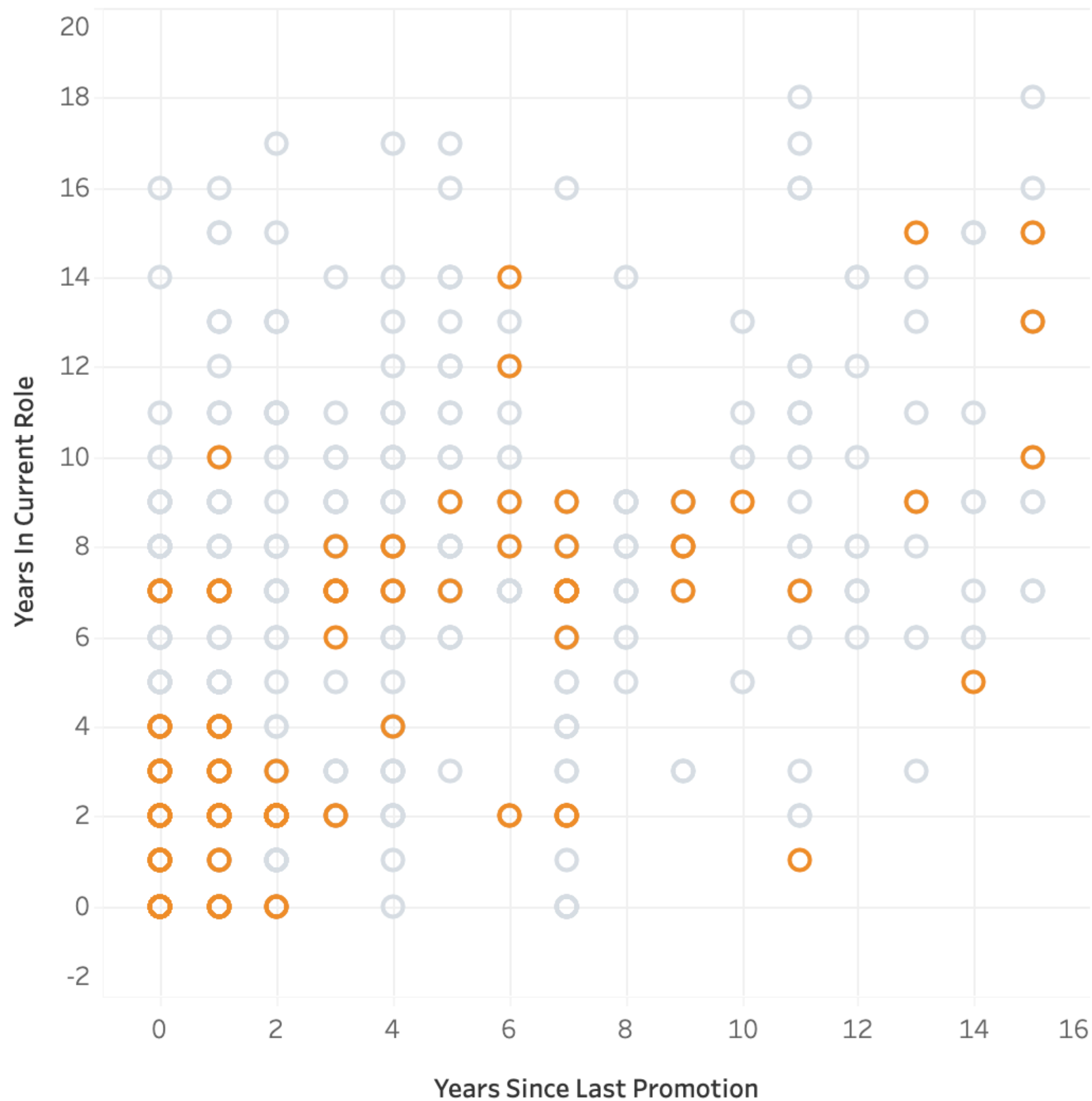
Results

Attrition view by Role



Results

Attrition View by Promotion



Results

Recommendations:

- The data is telling us that employees within the first couple of years are “high” risk employees of churning**
- Have Manager’s conduct monthly meetings to make sure the employee is happy and satisfied**

Business Impact

- **Re-look at HR data a year from now to see if churn rate has decreased from prior year**
- **A decline would indicate a company is taking the necessary action to curb churn rate**
- **A rise would indicate a problem still exists and needs to be addressed immediately**

End