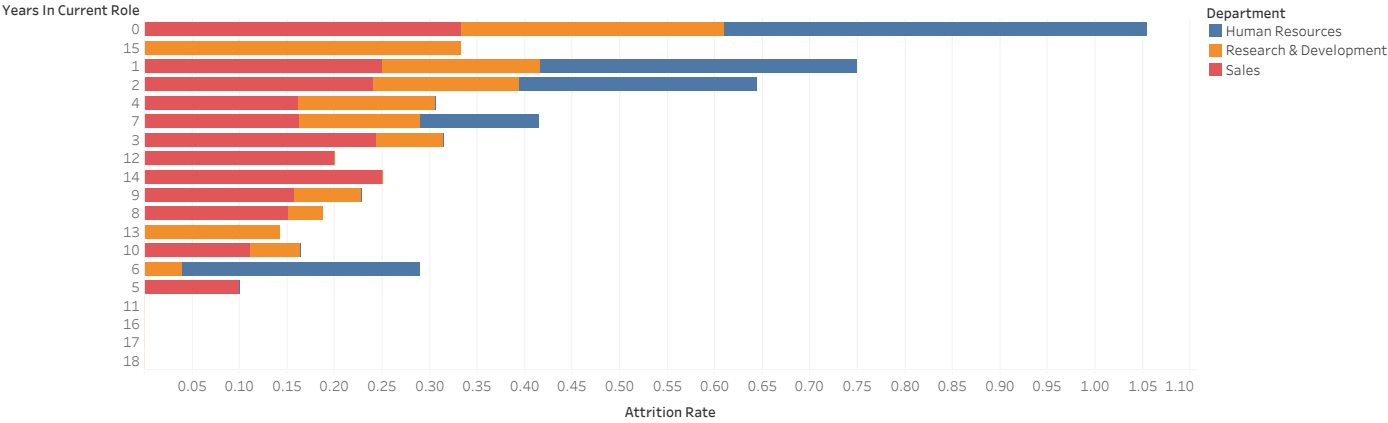
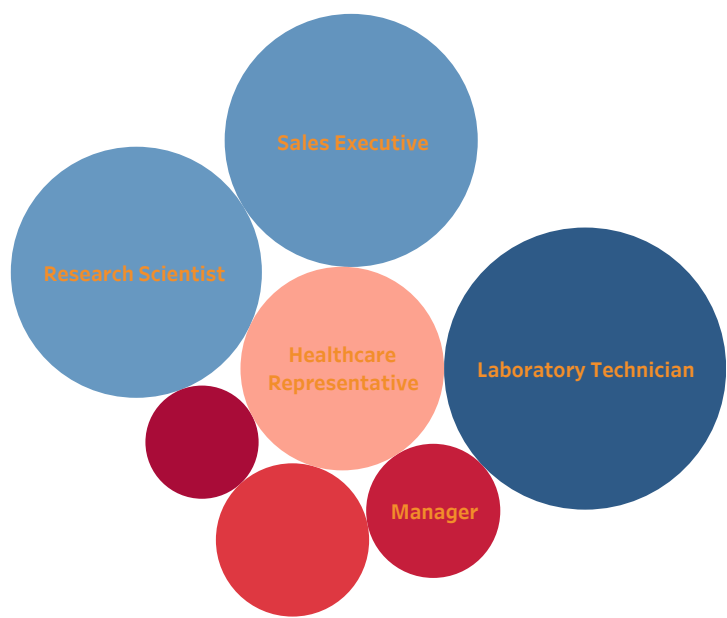
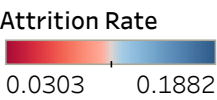


Years in Current Role



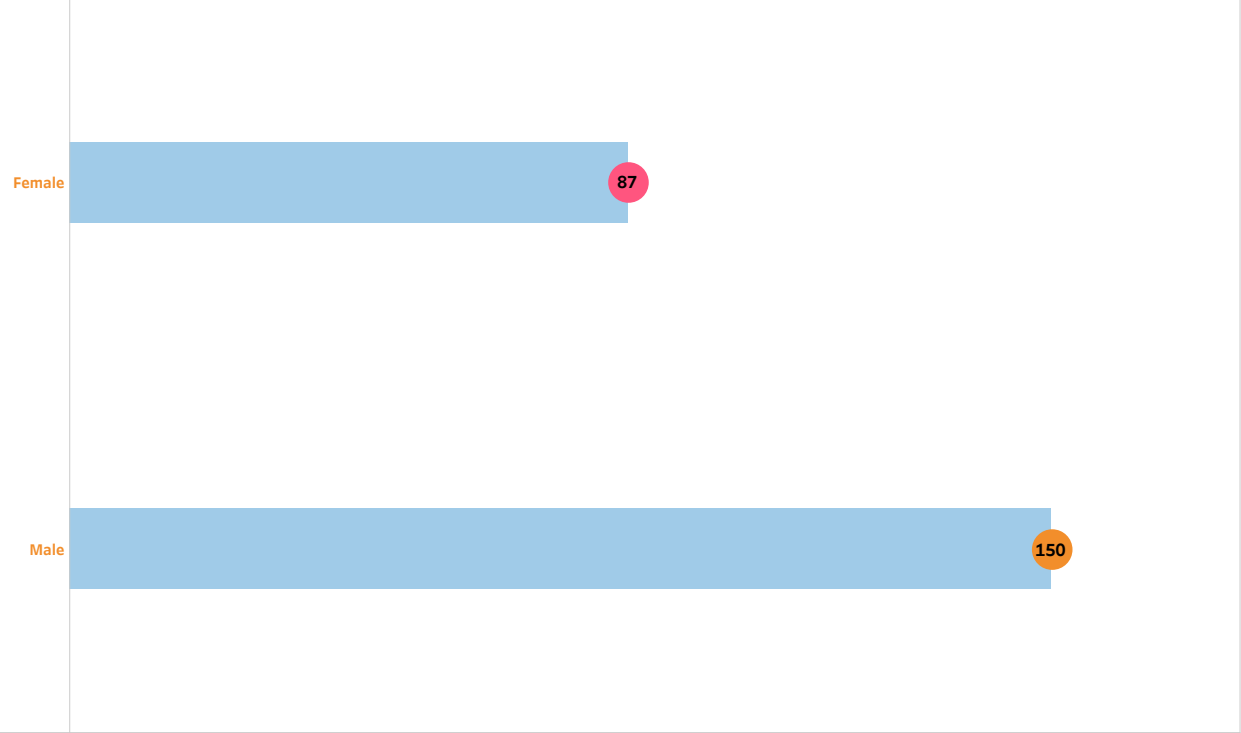
Attrition Rate for each Years In Current Role. Color shows details about Department.

Bubble Chart by Job Role



Job Role. Color shows Attrition Rate. Size shows Attrition Rate. The marks are labeled by Job Role. The data is filtered on Action (Age (bin)), Action (Department,Education Field), Action (Gender), Action (Job Role,Job Satisfaction) and Action (Years In Current Role). The Action (Age (bin)) filter keeps 15 members. The Action (Department,Education Field) filter keeps 14 members. The Action (Gender) filter keeps 1 member. The Action (Job Role,Job Satisfaction) filter keeps 36 members. The Action (Years In Current Role) filter keeps 19 members. The view is filtered on Attrition Rate, which ranges from 0.0250 to 0.3060.

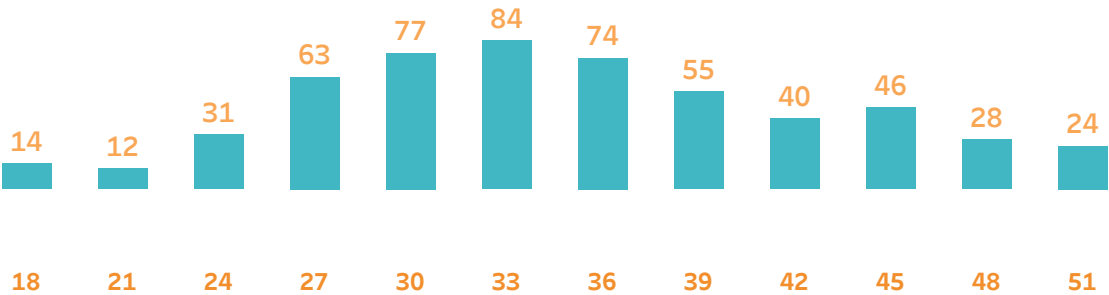
Attrition By Gender



Sum of Attrition Count and sum of Attrition Count for each Gender. For pane Sum of Attrition Count (2): Color shows details about Gender. The marks are labeled by Gender and sum of Attrition Count. The data is filtered on Action (Job Role), Action (Age (bin)), Action (Department,Education Field), Action (Job Role,Job Satisfaction) and Action (Years In Current Role). The Action (Job Role) filter keeps 9 members. The Action (Age (bin)) filter keeps 15 members. The Action (Department,Education Field) filter keeps 14 members. The Action (Job Role,Job Satisfaction) filter keeps 36 members. The Action (Years In Current Role) filter keeps 19 members.

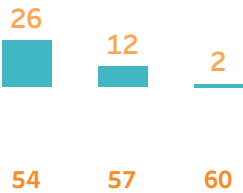
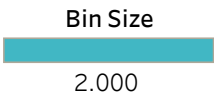
Number of Employee by Age Group

Bin Size
2.000



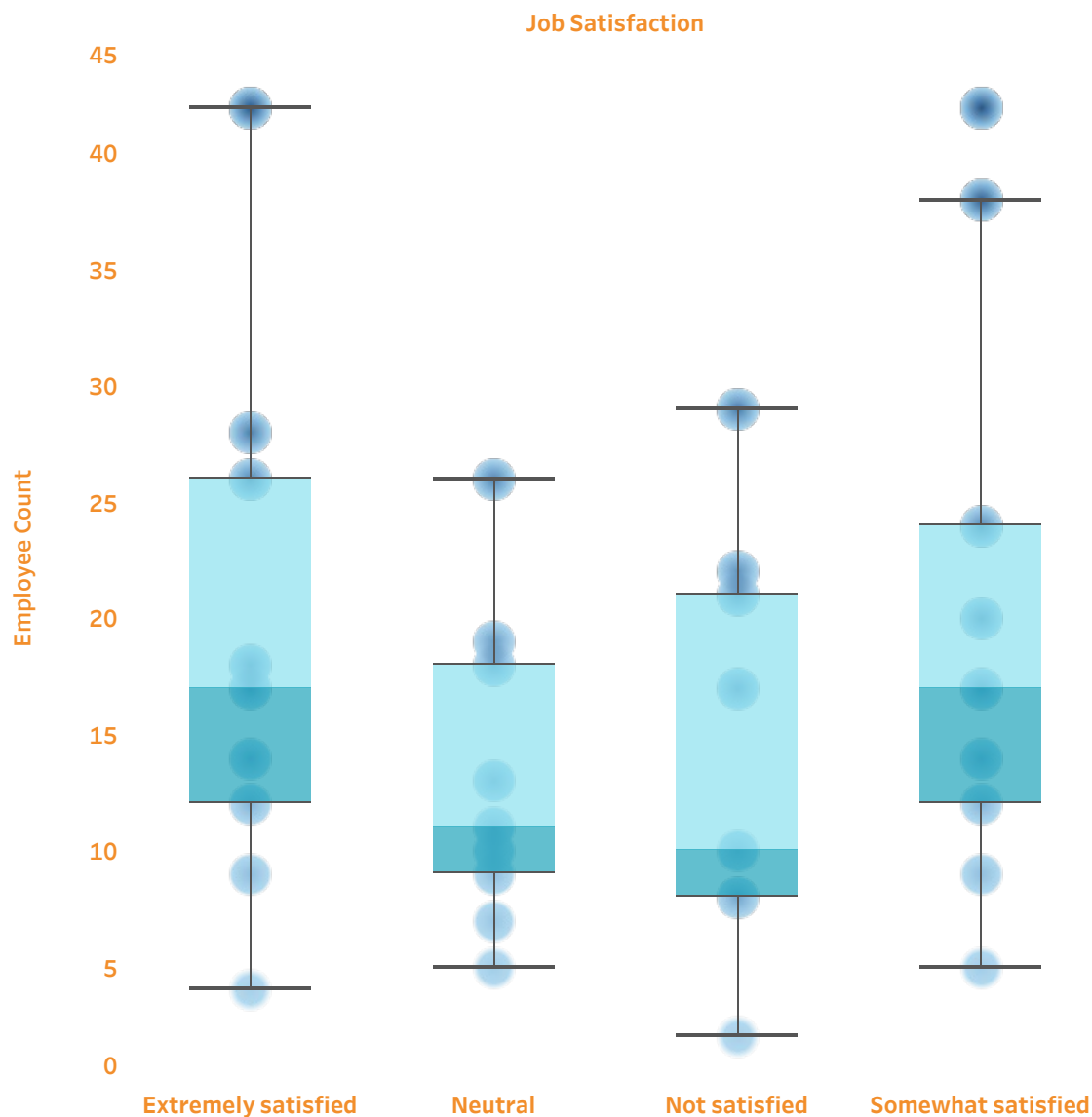
Sum of Employee Count for each Age (bin). Color shows Bin Size (Parameters). The marks are labeled by sum of Employee Count. The data is filtered on Education, Action (Job Role), Action (Department,Education Field), Action (Gender), Action (Job Role,Job Satisfaction) and Action (Years In Current Role). The Education filter ranges from 1 to 5. The Action (Job Role) filter keeps 9 members. The Action (Department,Education Field) filter keeps 14 members. The Action (Gender) filter keeps 1 member. The Action (Job Role,Job Satisfaction) filter keeps 36 members. The Action (Years In Current Role) filter keeps 19 members.

Number of Employee by Age Group



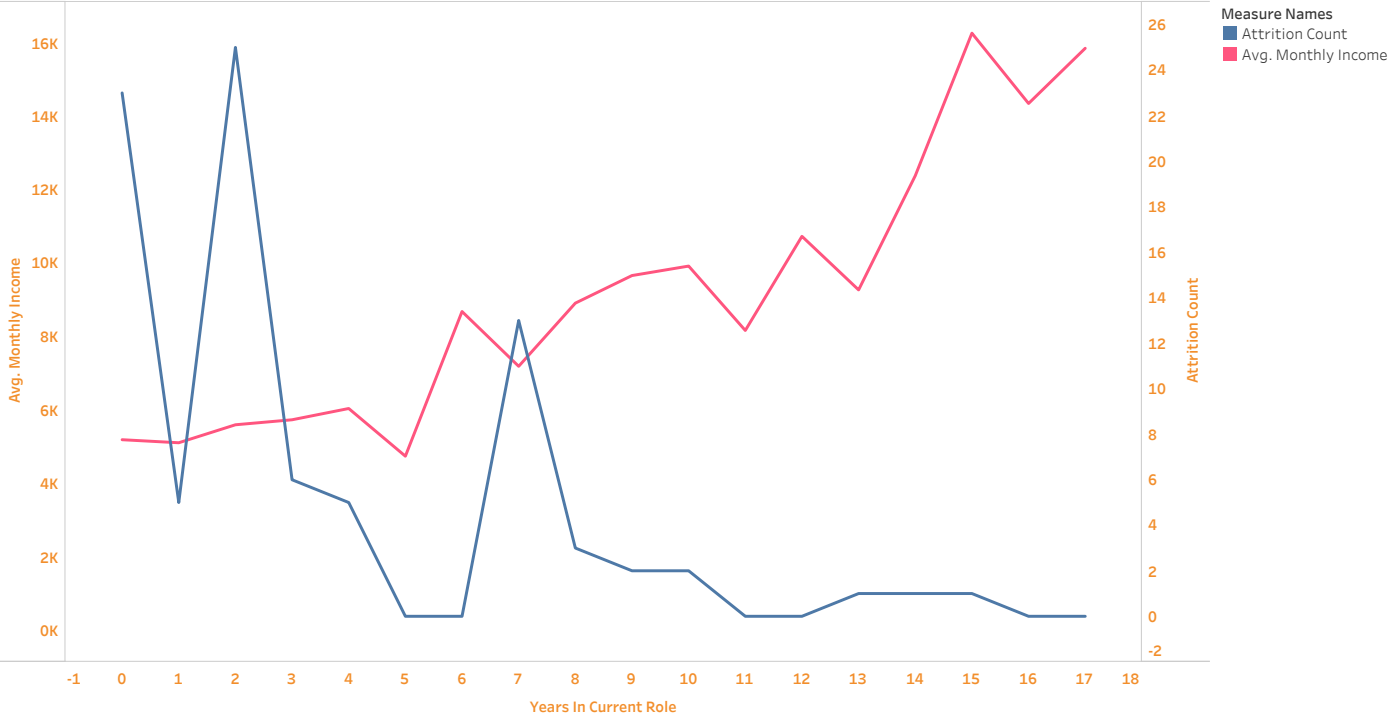
Sum of Employee Count for each Age (bin). Color shows Bin Size (Parameters). The marks are labeled by sum of Employee Count. The data is filtered on Education, Action (Job Role), Action (Department,Education Field), Action (Gender), Action (Job Role,Job Satisfaction) and Action (Years In Current Role). The Education filter ranges from 1 to 5. The Action (Job Role) filter keeps 9 members. The Action (Department,Education Field) filter keeps 14 members. The Action (Gender) filter keeps 1 member. The Action (Job Role,Job Satisfaction) filter keeps 36 members. The Action (Years In Current Role) filter keeps 19 members.

Employee count vs Job Satisfaction



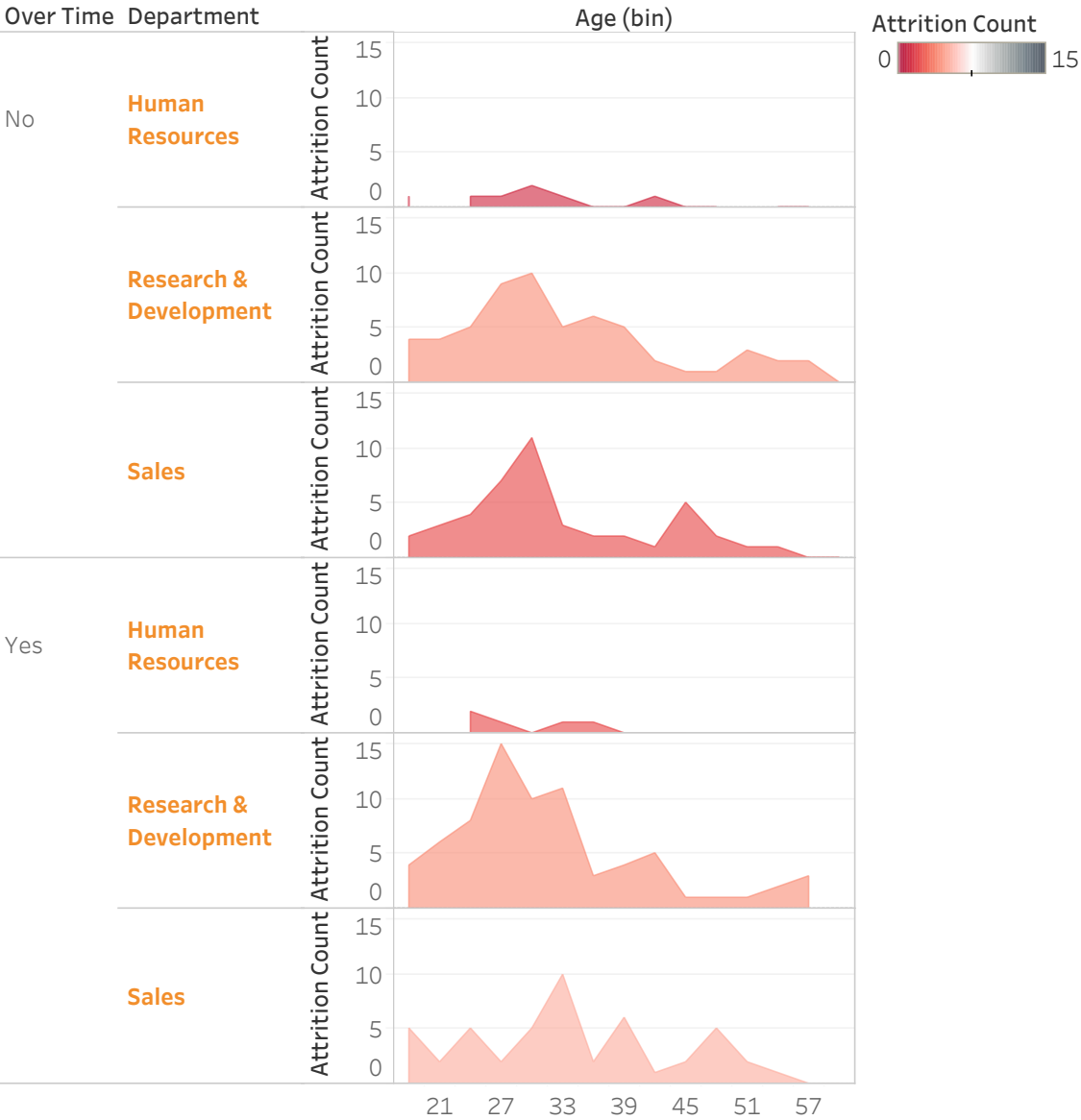
Sum of Employee Count for each Job Satisfaction. Color shows sum of Employee Count. The marks are labeled by sum of Employee Count. Details are shown for Job Role. The data is filtered on Education, Action (Job Role), Action (Age (bin)), Action (Department,Education Field), Action (Gender) and Action (Years In Current Role). The Education filter ranges from 1 to 5. The Action (Job Role) filter keeps 9 members. The Action (Age (bin)) filter keeps 15 members. The Action (Department,Education Field) filter keeps 14 members. The Action (Gender) filter keeps 1 member. The Action (Years In Current Role) filter keeps 19 members.

Employees Attrition by Income



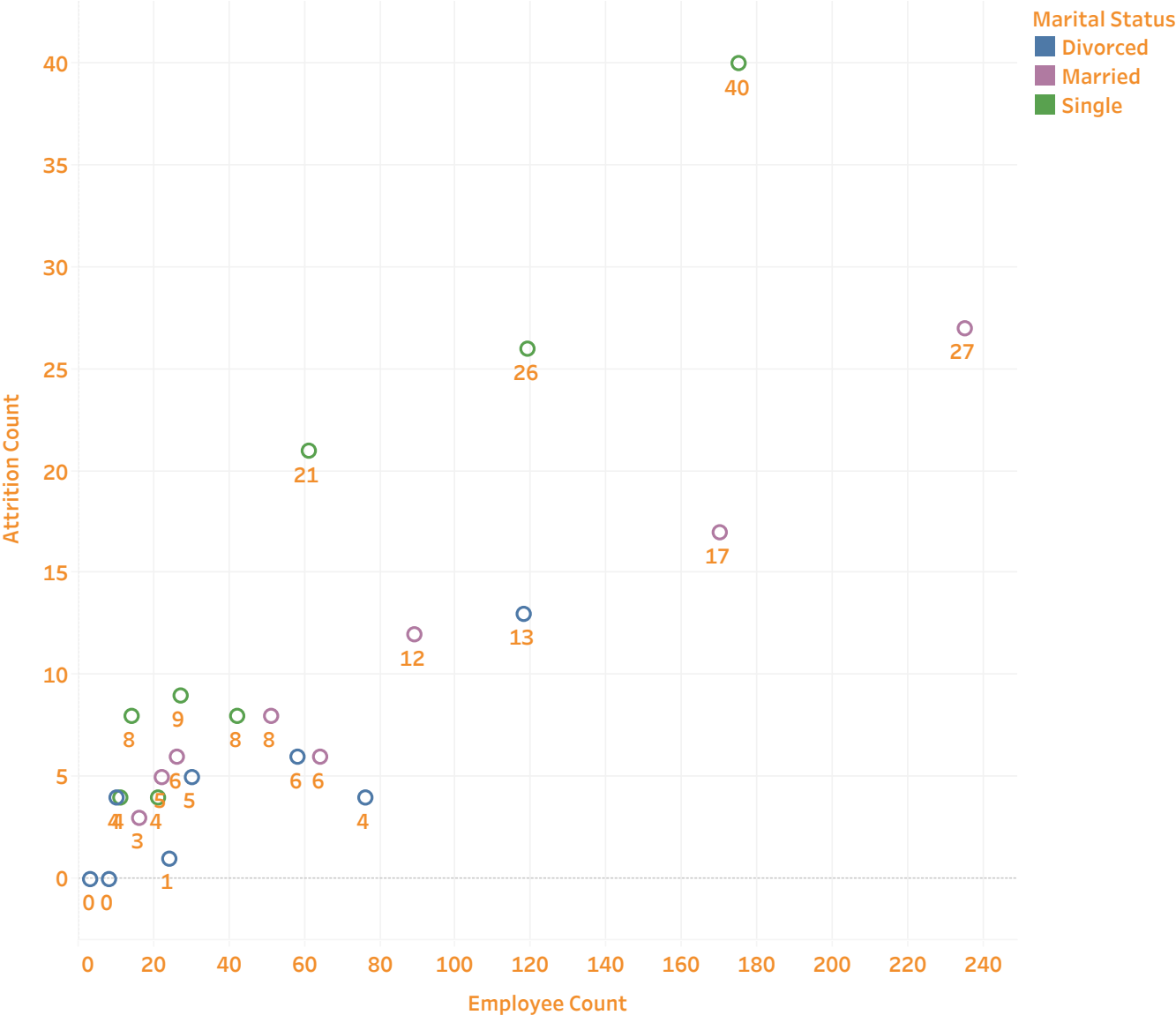
The trends of Avg. Monthly Income and Attrition Count for Years In Current Role. Color shows details about Avg. Monthly Income and Attrition Count. The data is filtered on Action (Job Role), Action (Age (bin)), Action (Department,Education Field), Action (Gender) and Action (Job Role,Job Satisfaction). The Action (Job Role) filter keeps 9 members. The Action (Age (bin)) filter keeps 15 members. The Action (Department,Education Field) filter keeps 14 members. The Action (Gender) filter keeps 1 member. The Action (Job Role,Job Satisfaction) filter keeps 36 members. The view is filtered on sum of Attrition Count, which ranges from 0 to 51 and keeps Null values.

Attrition Graph of Employees based on Overtime




Attrition Count for each Age (bin) broken down by Over Time and Department.
Color shows Attrition Count. Details are shown for Attrition Count.

Work Life Balance/Marital Status/Gender



Sum of Employee Count vs. sum of Attrition Count. Color shows details about Marital Status. Details are shown for Work Life Balance and Gender.

Educational Field

Department	Education Field						Job Level
	Human Resources	Life Sciences	Marketing	Medical	Other	Technical Degree	
Human Resources	21	19		2		1	1  326
Research & Devel..		326		317	51	82	
Sales		147	167	74	8	30	

Sum of Job Level broken down by Education Field vs. Department. Color shows sum of Job Level. The marks are labeled by sum of Job Level. The data is filtered on Action (Job Role), Action (Age (bin)), Action (Gender), Action (Job Role,Job Satisfaction) and Action (Years In Current Role). The Action (Job Role) filter keeps 9 members. The Action (Age (bin)) filter keeps 15 members. The Action (Gender) filter keeps 1 member. The Action (Job Role,Job Satisfaction) filter keeps 36 members. The Action (Years In Current Role) filter keeps 19 members. The view is filtered on Education Field, which keeps 6 of 6 members.

KPI - HR DATA ANALYTICS

Employee Count	Attrition Count	Attrition Rate
588	87.0	14.

Employee Count, Attrition Count, Attrition Rate, Active Employees and Avg. Age. The data is filtered on Action (Job Role), Action (Age (bin)), Action (Department,Education Field), Action (Gender), Action (Job Role,Job Satisfaction) and Action (Years In Current Role). The Action (Job Role) filter keeps 9 members. The Action (Age (bin)) filter keeps 15 members. The Action (Department,Education Field) filter keeps 14 members. The Action (Gender) filter keeps 1 member. The Action (Job Role,Job Satisfaction) filter keeps 36 members. The Action (Years In Current Role) filter keeps 19 members.

KPI - HR DATA ANALYTICS

Attrition Rate	Active Employees	Avg. Age
18.80%	501.0	37.3

Employee Count, Attrition Count, Attrition Rate, Active Employees and Avg. Age. The data is filtered on Action (Job Role), Action (Age (bin)), Action (Department,Education Field), Action (Gender), Action (Job Role,Job Satisfaction) and Action (Years In Current Role). The Action (Job Role) filter keeps 9 members. The Action (Age (bin)) filter keeps 15 members. The Action (Department,Education Field) filter keeps 14 members. The Action (Gender) filter keeps 1 member. The Action (Job Role,Job Satisfaction) filter keeps 36 members. The Action (Years In Current Role) filter keeps 19 members.

HR ANALYTICS DASHBOARD

- Education Field
- ☒ Human Resources
 - ☒ Life Sciences
 - ☒ Marketing
 - ☒ Medical
 - ☒ Other
 - ☒ Technical Degree

Employee Count
588

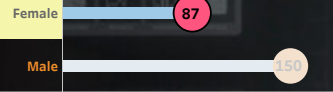
Attrition Count
87.0

Attrition Rate
14.80%

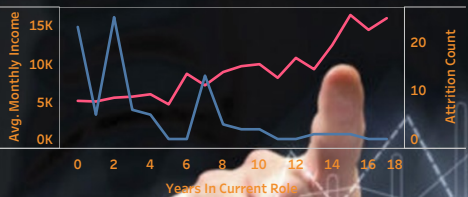
Active Employees
501.0

Avg. Age
37.3

Attrition By Gender



Employees Attrition by Income

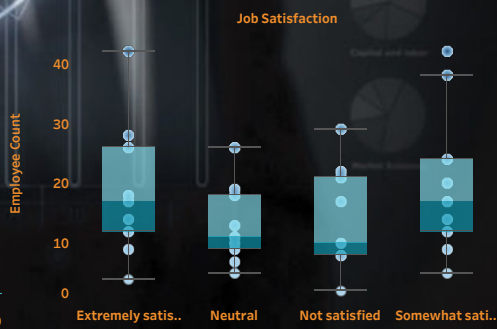


Bubble Chart by Job Role



Department	Education Field				
	Human Resources	Life Sciences	Marketing	Medical	Technical Degree
Human Resources	21	19		2	1
Research & Devel..	326			317	51
Sales		147	167	74	8

Employee count vs Job Satisfaction



HR Employee Attrition Story

Introduction	Number of employees by ag..	Attrition by Job Role	Employee count vs Job Satisfacti..	Attrition based on Overtime	Years in Current Role	Education al Field
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Each day, there are many people who begin their journey with a new job or leave the job for their personal circumstances. Our main focus and scope of the dataset is on workforce reduction in the company, which is a fictional dataset created by IBM data scientists to showcase or unveil the factors that lead to employee attrition.

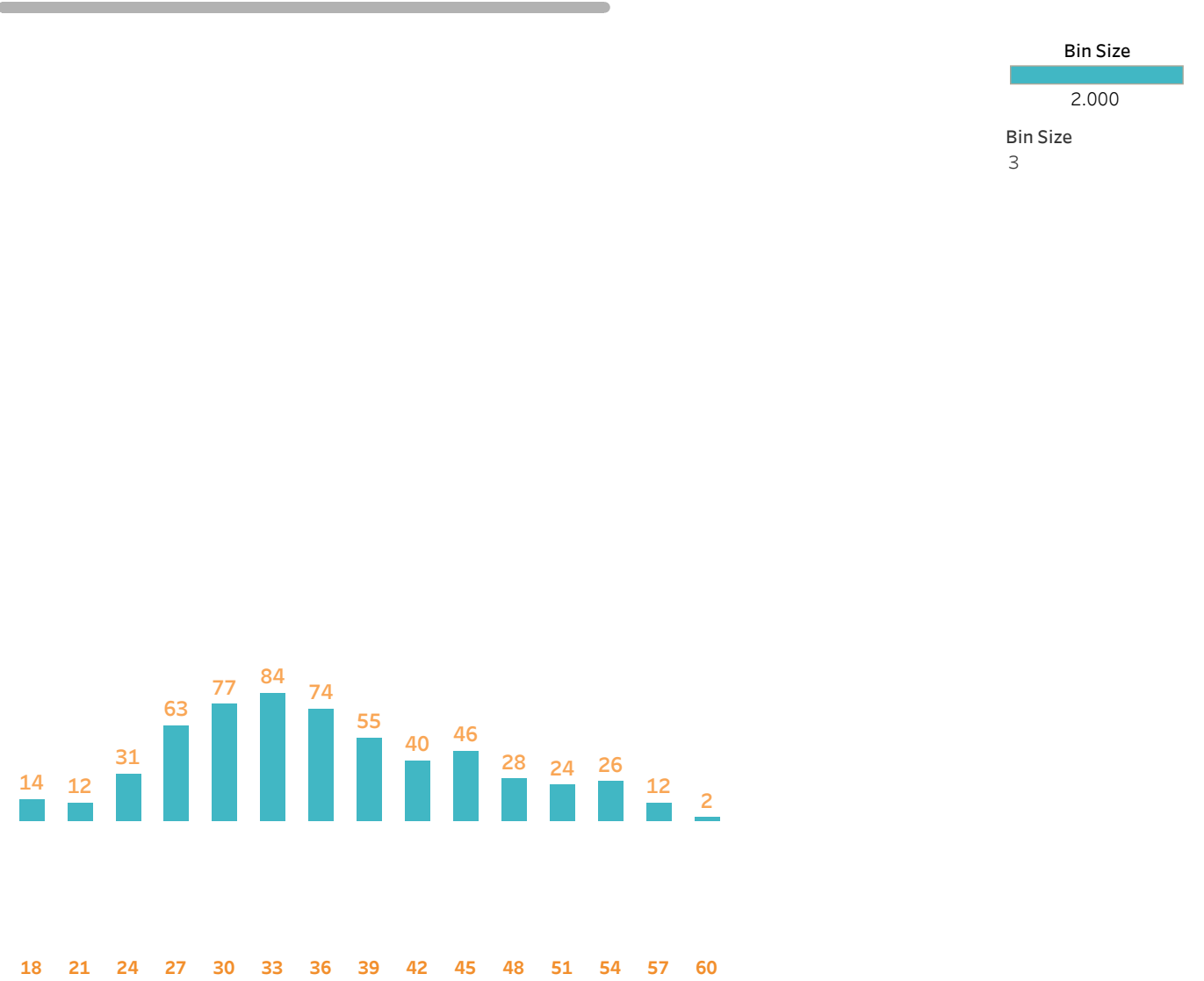
Employee Attrition is determining the turnover rate (i.e., percentage of employees leaving the organization voluntarily, involuntarily, role deletion or internal). Quitting may happen due to various factors such as more working hours, no recognition, low payment, work distance from home, work environment, management, better prospects etc.

Our idea/motto of our project is to visualize the data and provide meaningful insights, find out whether she/he is going to quit or not, if they are leaving, what are the reasons behind it. Based on findings, we can provide suggestions on how to reduce the employee attrition such that long term strategies in the company won't get affected, apart from that, recruiting new employees, hiring, training them is way costlier than not terminating someone.

Our dataset has 35 attributes and 1470 employees with no missing information. Also, through high-level analysis, the dataset is unbalanced, as 84% of employees do not quit and 16% quit...

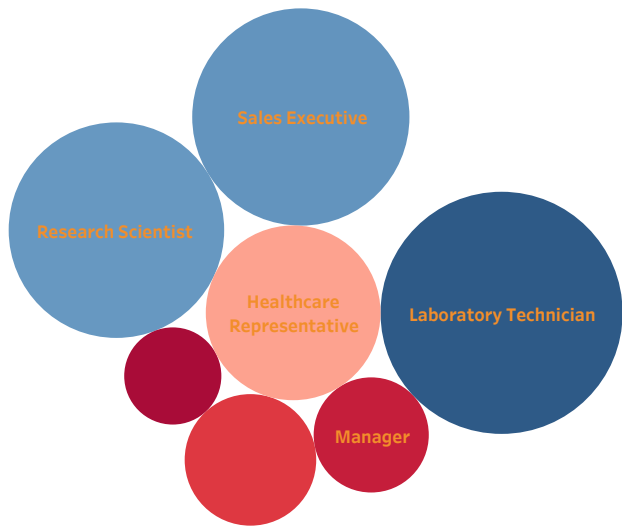
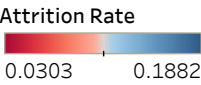
HR Employee Attrition Story

Introduction	Number of employees by ag..	Attrition by Job Role	Employee count vs Job Satisfacti..	Attrition based on Overtime	Years in Current Role	Education al Field
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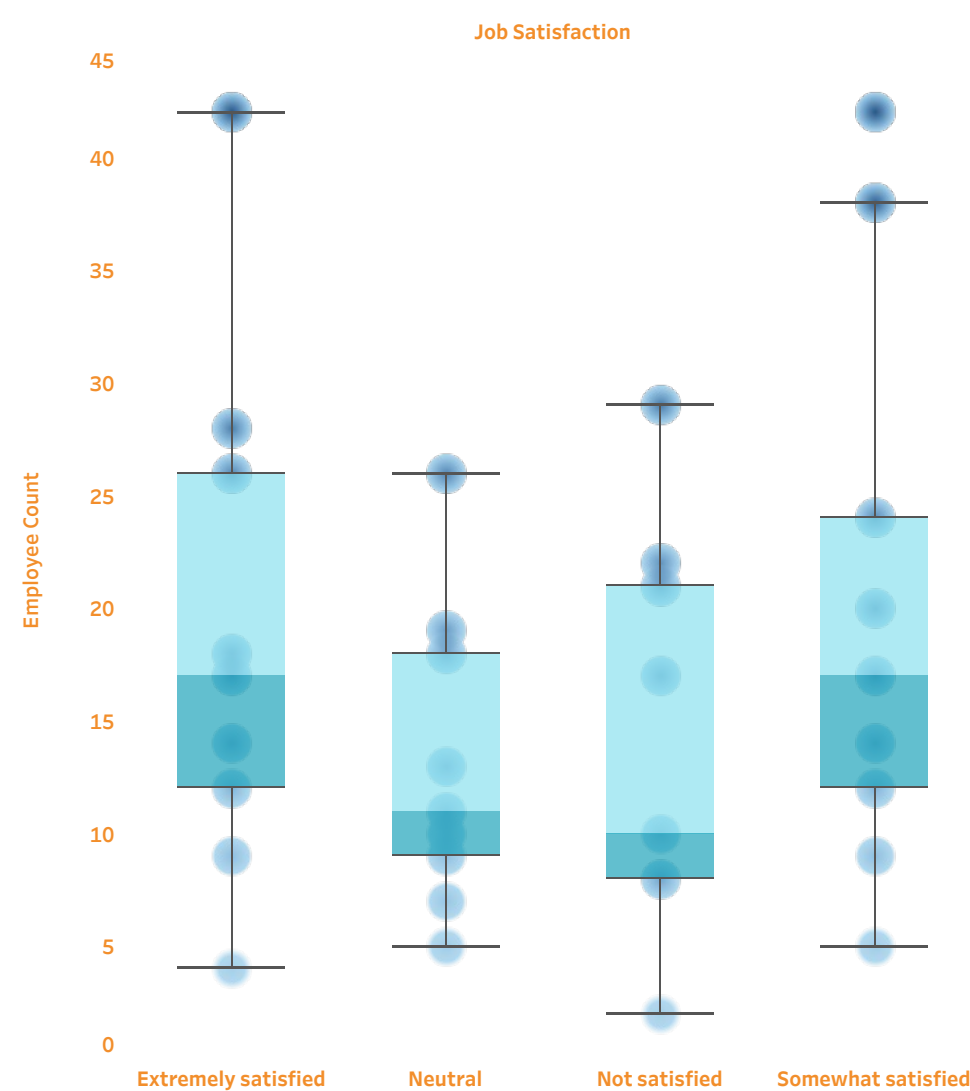
HR Employee Attrition Story

Introduction	Number of employees by ag..	Attrition by Job Role	Employee count vs Job Satisfacti..	Attrition based on Overtime	Years in Current Role	Education al Field
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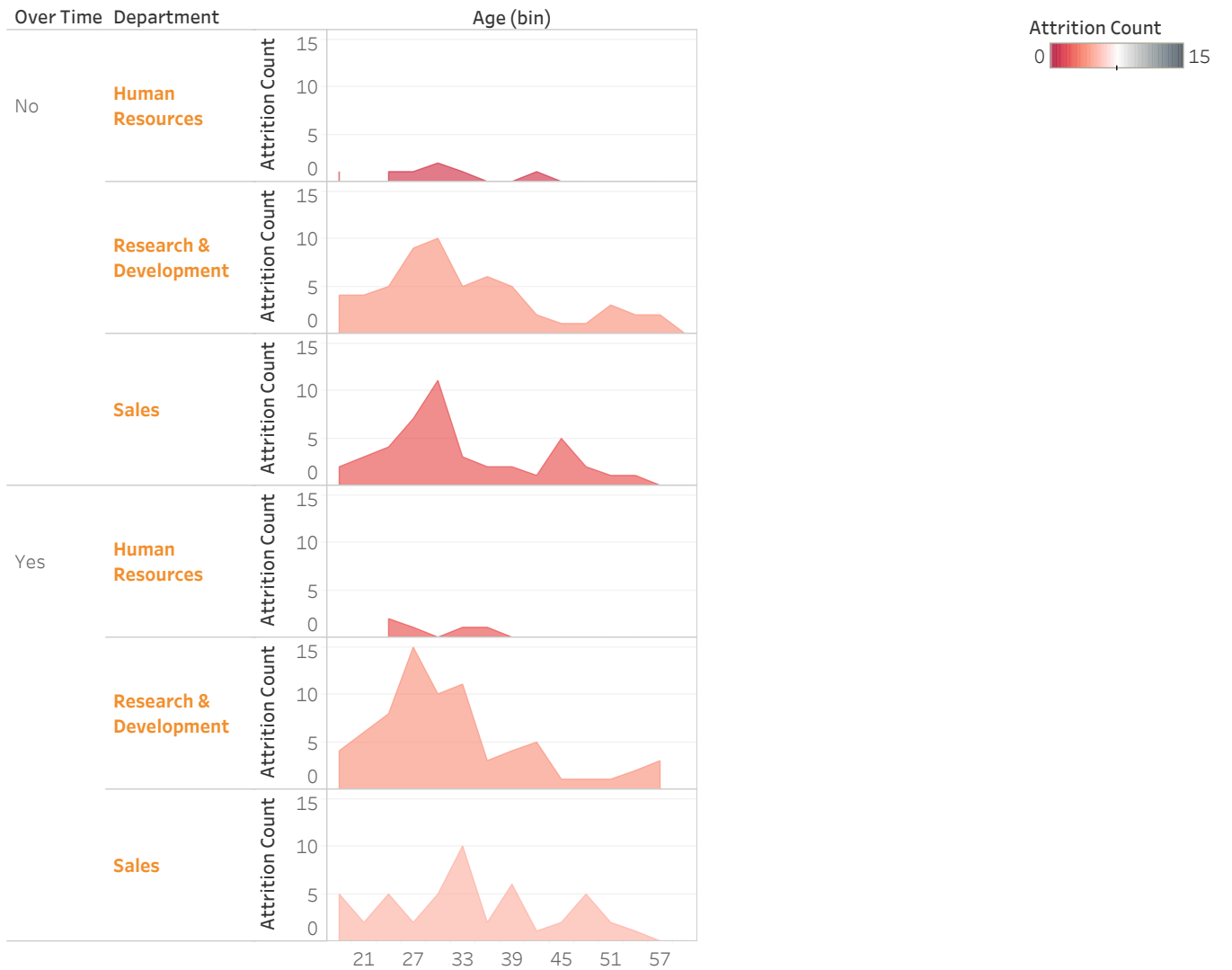
HR Employee Attrition Story

Introduction	Number of employees by ag..	Attrition by Job Role	Employee count vs Job Satisfacti..	Attrition based on Overtime	Years in Current Role	Educational Field
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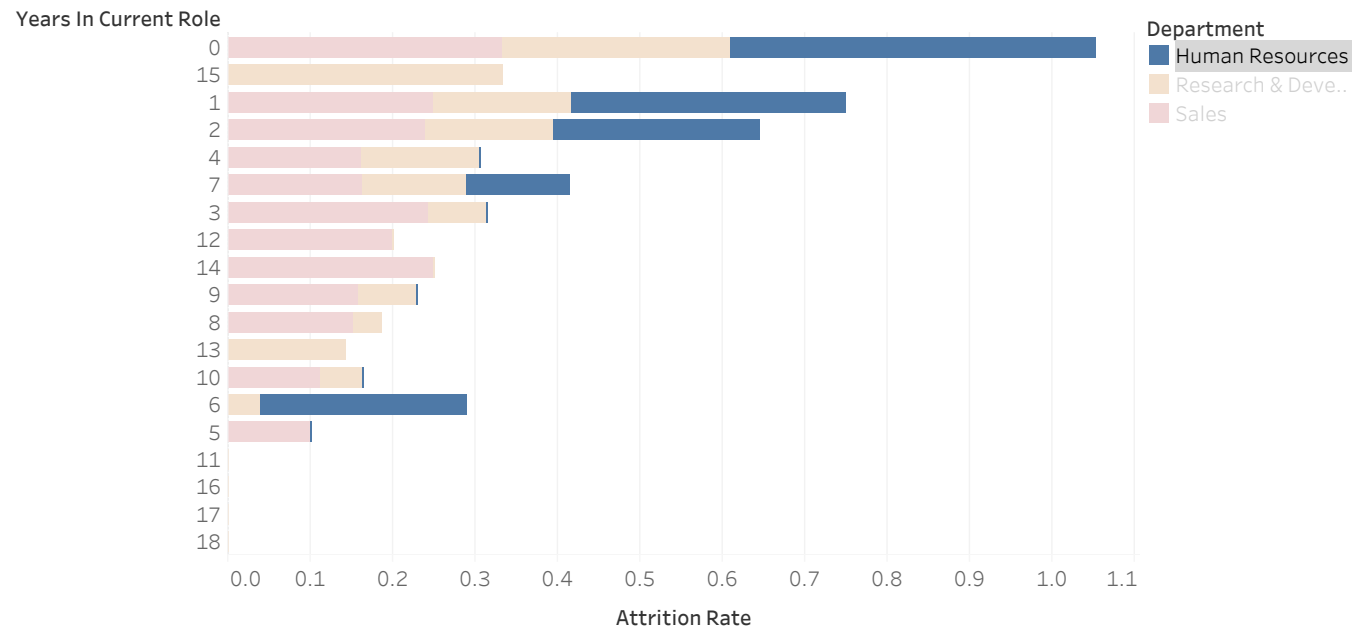
HR Employee Attrition Story

Number of employees b..	Attrition by Job Role	Employee count vs Job Satisfacti..	Attrition based on Overtime	Years in Current Role	Educational Field	Work Life Balance/Marit..
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HR Employee Attrition Story

Attrition by Job Role	Employee count vs Job Satisfacti..	Attrition based on Overtime	Years in Current Role	Educational Field	Work Life Balance/Marital ..	Employee Attrition vs Mo..
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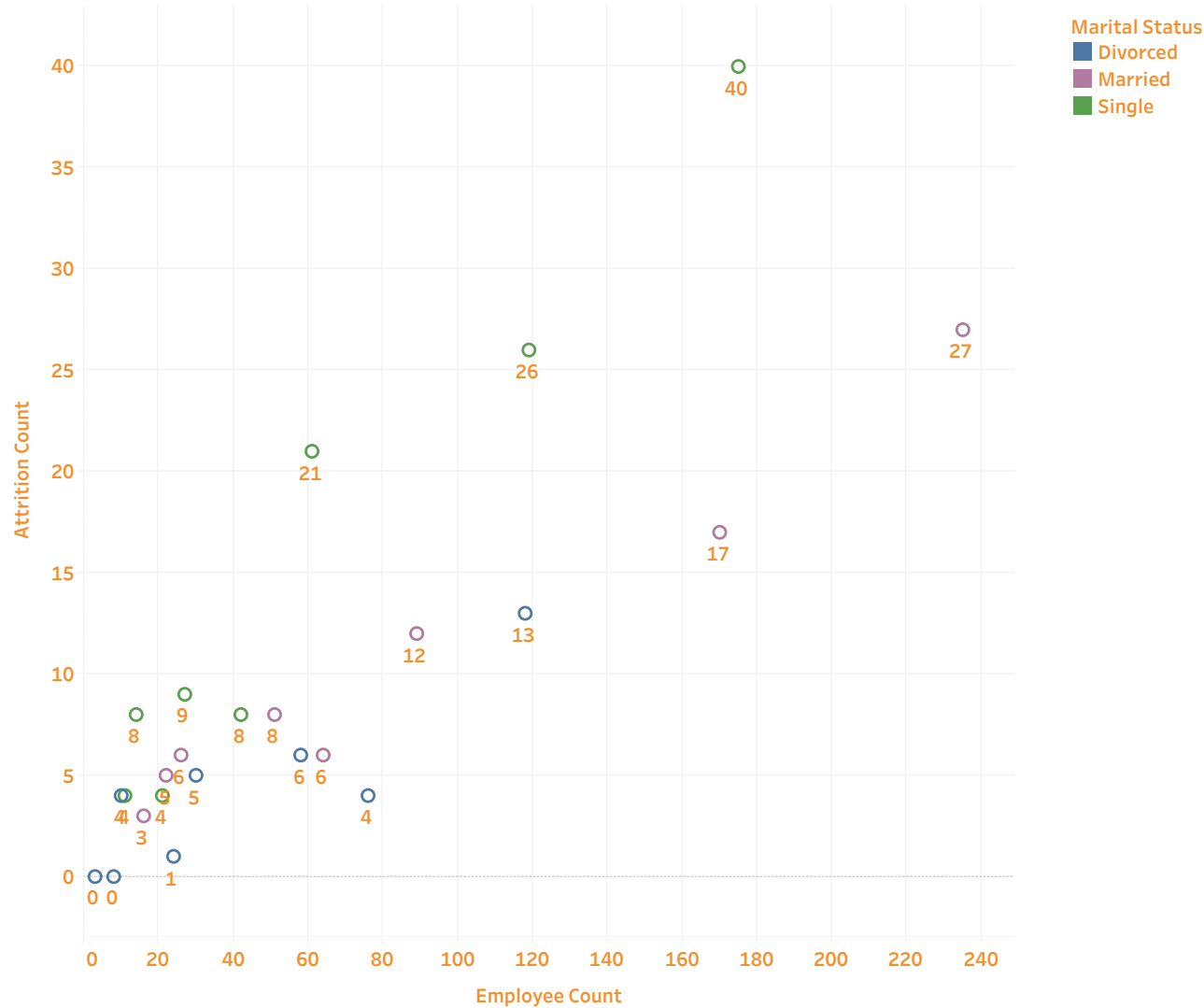
HR Employee Attrition Story

Employee count vs Job ..	Attrition based on Overtime	Years in Current Role	Educational Field	Work Life Balance/Marital ..	Employee Attrition vs Mon..	Dashboard
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Education Field							Job Level	
Department	Human Resources	Life Sciences	Marketing	Medical	Other	Technical Degree	1	326
Human Resources	21	19		2		1		
Research & Devel..		326		317	51	82		
Sales		147	167	74	8	30		

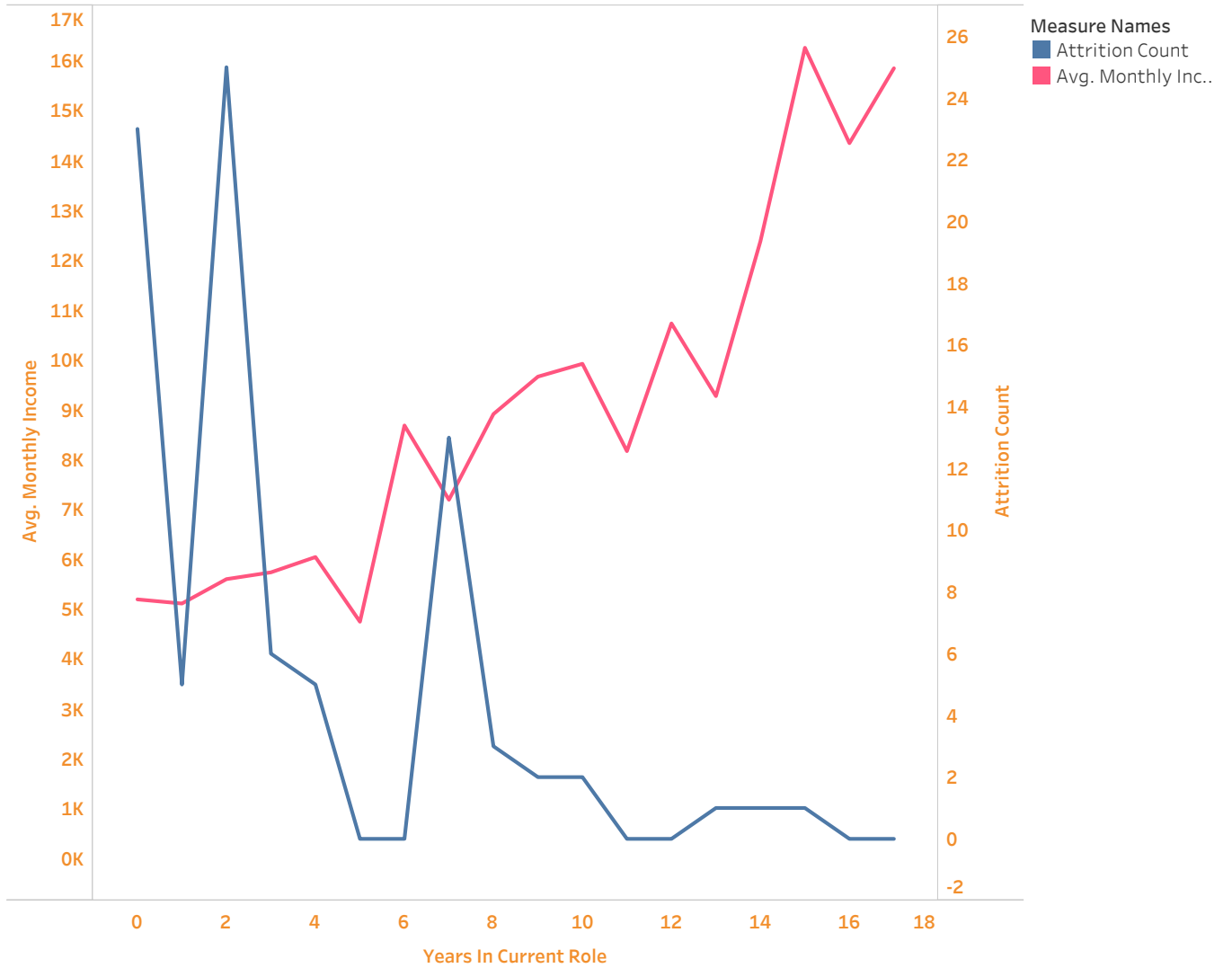
HR Employee Attrition Story

Attrition based on Ov..	Years in Current Role	Educational Field	Work Life Balance/Marital ..	Employee Attrition vs Mon..	Dashboard	Findings
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HR Employee Attrition Story

Years in Current Role	Educational Field	Work Life Balance/Marital ..	Employee Attrition vs Mon..	Dashboard	Findings	Managerial Implications
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HR Employee Attrition Story

Educational Field	Work Life Balance/Marital ..	Employee Attrition vs Mon..	Dashboard	Findings	Managerial Implications	Conclusion
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HR Employee Attrition Story

Educationa l Field	Work Life Balance/Marital ..	Employee Attrition vs Mon..	Dashboard	Findings	Managerial Implications	Conclusion
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Through our analysis/visualizations, we categorize the attrition as follows:

- 1. Age group:** Employees who worked for 5 to 8 years would like to switch for better income and higher position and most of them are around 27.
- 2. Gender:** Female with lower salaries or satisfaction tend to leave quickly.
- 3. Work-life balance/marital status:** Attrition count for single, male seems to be high when compared with married and divorced.
- 4. Monthly income :** It is less likely to leave if the income is more. Apart from that, hikes also play prominent role.
- 5. Education :** Employees who did Bachelors has high chance to leave due to their further career progress in terms of studies or better job opportunities.
- 6. Department :** Research & Development shows high attrition count for age group between 27 and 29. Though, average income is high for sales, they tend to leave more.
- 7. Overtime :** most of the employees who worked overtime are seen to be left the organization. But it's 54% of employees are overtime which is almost balanced with who don't work overtime. This might not be the reason to leave the company.
- 8. Work Environment:** There is high chance of leaving for employees who have no recognitions, appreciations, more work pressure, manager behavior etc.

HR Employee Attrition Story

Educationa l Field	Work Life Balance/Marital ..	Employee Attrition vs Mon..	Dashboard	Findings	Managerial Implications	Conclusion
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On evidence generated in findings and visualizations, we understood that they are few measures to take up for reducing employee attrition.

1. We recommend organizations to increase their budget on salaries with respect to the role, also, quarterly bonus, perks, hikes must be implemented which is a good way to reciprocate with employees.
2. Conducting quarterly appraisals and recognizing the best performer every month inculcates positivity and encouragement to work in employee.
3. If the employee leaves voluntarily, it's insisted to have a one on one session and knowing the reason is important because hiring a new employees impacts company profits and turnover rate.
4. Changing the hiring and onboarding process can impact the organization in a positive direction.
5. Instead of terminating a long term working employee for not having the skills, it's always better to create a room for advanced technology sessions, exams, assessments for purpose of individual career and project goals/requirements. Also..

HR Employee Attrition Story

Educationa l Field	Work Life Balance/Marital ..	Employee Attrition vs Mon..	Dashboard	Findings	Managerial Implications	Conclusion
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Overall, firstly, hikes, perks and recognitions play vital role for an employee to either continue or quit the job.

Secondly, late 30s tend to either pursue higher education or switch the companies in order to earn well and settle rich.

Thirdly, toxic environment also leads to employee attrition. These are three main factors that impact company turnover rate and profits. It's not the overtime, moreover, employee thinks if she/he is underused. However, to reduce it, based on our research and analysis of dataset, we have mentioned few implementations in previous section.