Employee Attrition Analysis

Project by Khushi Jangid

Dashboard link: Link

Introduction

XYZ Company, established a few years ago, is facing a persistent 15% employee attrition rate, affecting its growth and performance. Understanding the reasons behind employee departures is crucial for implementing effective retention strategies. To address this issue. By leveraging data-driven insights, the aim is to uncover the underlying causes of attrition and formulate actionable strategies to enhance employee retention.

Objectives

Identify Key Factors Influencing Attrition :

Analyze employee data to pinpoint the major factors contributing to high attrition rate.

Profile Attrition Trends :

Highlight patterns and trends in employee departures, including departmental and demographic variations.

Predict Future Attrition :

Utilize predictive analytics to forecast potential future attrition and identify at-risk employees.

Recommend Retention Strategies :

Provide actionable insights and recommendations to reduce attrition and improve overall employee satisfaction and engagement.
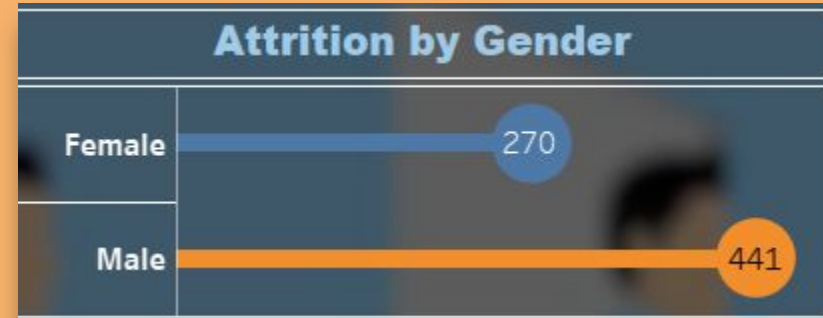
Assumptions

1. **Data Quality:** Data is accurate and complete.
2. **Uniform Reasons:** Similar reasons for attrition across departments unless data indicates otherwise.
3. **Consistent Metrics:** Metrics are industry-standard and consistent.
4. **Historical Trends:** Past trends indicate future patterns.
5. **Model Validity:** Predictive models assume stable external and internal conditions.
6. **Stable External Factors:** Economic and regional factors remain stable.
7. **Accurate Feedback:** Employee surveys accurately reflect reasons for leaving.
8. **Actionable Recommendations:** Suggestions are feasible for implementation.

❑ Key Insights

Employee Count	Attrition count	Avg. Age	Active Employee	Attrition Rate
4,410	711	37	3,699	16.12%

➢ The company has a significant attrition rate of *16.12%*, which indicates that a considerable number of employees are leaving. This rate needs to be reduced to stabilize the workforce.

➢ A larger number of male employees are leaving compared to female employees. This may indicate gender-specific issues such as work-life balance, workplace culture, or other gender-related concerns.

Attrition by Gender

Female	270
Male	441

Attrition by Department

8.02%

28.27%

63.71%

Department
- Human Resources
- Research & Development
- Sales

Attrition by Education

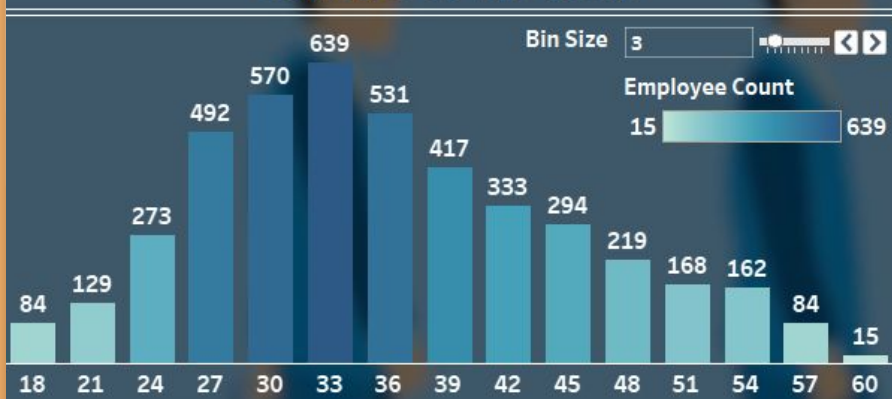|	
Life Sciences	303
Medical	225
Marketing	75
Technical Degree	45
Human Resources	33
Other	30

➢ The Research & Development department has the highest attrition rate i.e. *63.71%*, which may suggest internal issues such as job dissatisfaction, lack of career advancement opportunities, or workplace environment challenges. The Sales and Human Resources departments also have notable attrition rates.
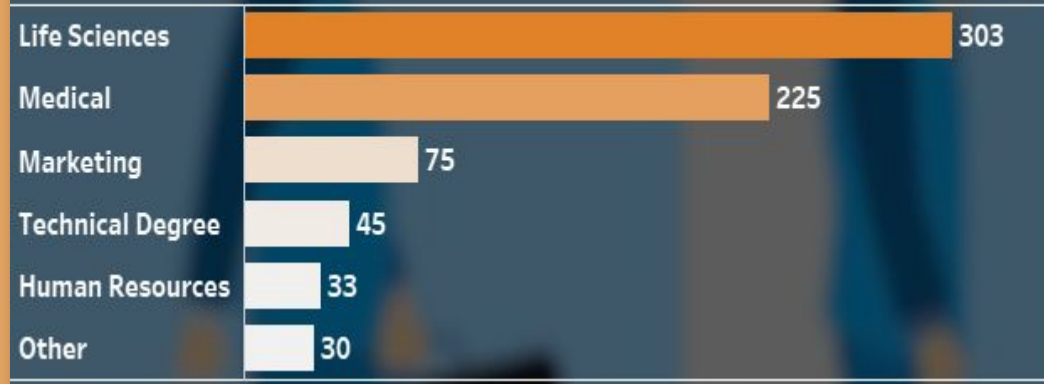
➢ Employees with educational backgrounds in Life Sciences and Medical fields have higher attrition rates. This might be due to a lack of alignment between their job roles and their expectations or qualifications.
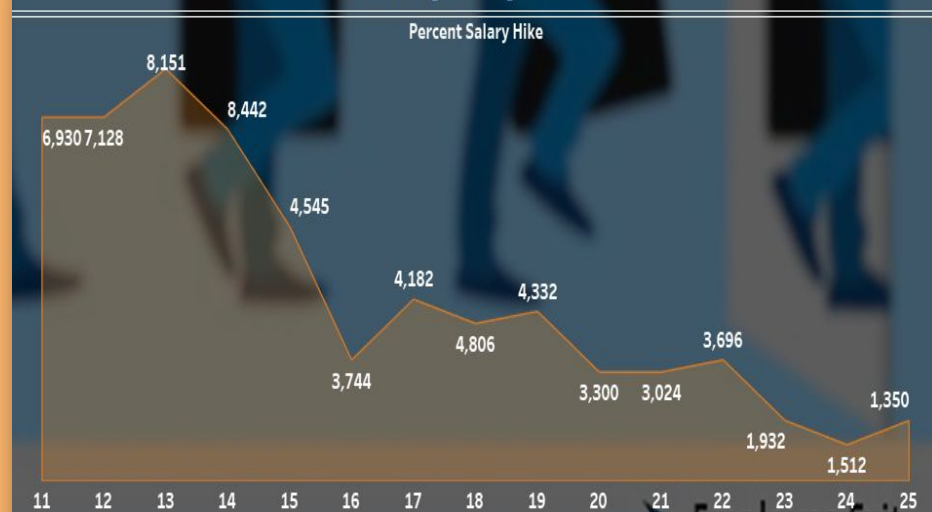
Employee by Age group

Bin Size: 3

Employee Count
15 — 639

Age	Count
18	84
21	129
24	273
27	492
30	570
33	639
36	531
39	417
42	333
45	294
48	219
51	168
54	162
57	84
60	15

➢ The majority of employees are in their late 20s to late 30s. This demographic might be seeking career growth, work-life balance, and job satisfaction, which are critical factors to address to retain this age group.

➢ There is a clear correlation between salary hikes and attrition rates. Employees who receive lower salary hikes are more likely to leave. Ensuring competitive salary increments could help in retaining employees.

Attrition by Salary Hike Rate

Percent Salary Hike

Percent	Value
11	6,930
12	7,128
13	8,151
14	8,442
15	4,545
16	3,744
17	4,182
18	4,806
19	4,332
20	3,300
21	3,024
22	3,696
23	1,932
24	1,512
25	1,350

Job Satisfaction Rating

Job Role	Job Satisfaction				Grand Total
	1	2	3	4	
Healthcare Represe..	84	66	114	126	390
Human Resources	24	18	47	66	155
Laboratory Technici..	158	147	246	224	775
Manager	59	54	99	93	305
Manufacturing Direc..	72	87	133	139	431
Research Director	32	51	75	81	239
Research Scientist	176	189	252	256	873
Sales Executive	186	198	285	305	974
Sales Representative	69	30	72	77	248
Grand Total	860	840	1,323	1,367	4,390

➢ Roles such as Laboratory Technician, Research Scientist and Sales Executive have higher counts of low satisfaction ratings (1 and 2). This low satisfaction is a strong indicator of potential attrition and needs to be addressed through targeted interventions.

Employee Attrition Dahboard

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Education Field
(All)

Attrition count
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Insights Drawn from Dashboard
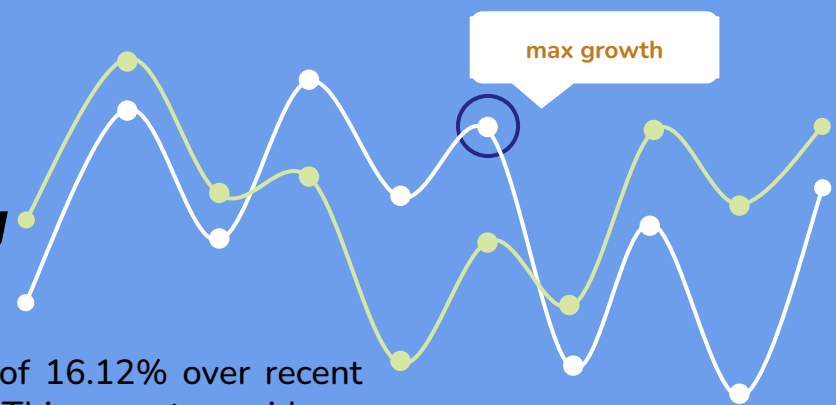
- XYZ Company has experienced a significant attrition rate of 16.12% over recent years, impacting overall productivity and company morale. This report provides a comprehensive analysis of attrition patterns and proposes strategic recommendations to mitigate this issue. This analysis focuses on department-wise attrition, age demographics, gender-specific trends, education background, job satisfaction ratings, and salary hike rates.

-The analysis reveals several critical factors contributing to the high attrition rate at XYZ Company. The Research & Development department, employees in their late 20s to late 30s, and those with Life Sciences and Medical backgrounds are particularly affected. Job satisfaction, gender-specific issues, and salary hikes also play significant roles in attrition.

-To reduce the attrition rate, XYZ Company should focus on improving HR policies, offering career development programs, addressing gender-specific concerns, aligning roles with educational backgrounds, enhancing job satisfaction, and revising salary hike policies. By implementing these recommendations, the company can create a more stable and satisfying work environment, ultimately retaining more employees.

Recommendations

Improve HR Policies and Work Environment
- Address specific issues in the Research & Development department, as it has the highest attrition rate.
-Conduct employee feedback sessions to understand pain points and improve policies accordingly.

Career Development Programs
-Implement career development and progression programs, especially targeting employees in their late 20s to late 30s.
-Provide clear career paths and professional development opportunities to retain this demographic.

Gender-Specific Retention Strategies
-Develop strategies to address gender-specific issues, particularly focusing on retaining male employees.
-Consider flexible work arrangements, mentoring programs, and support for work-life balance.

Align Roles with Educational Backgrounds
-Reevaluate roles and career growth opportunities for employees with Life Sciences and Medical backgrounds.
-Ensure their roles are aligned with their qualifications and career aspirations.

Enhance Job Satisfaction
-Conduct surveys and focus groups to understand factors leading to low job satisfaction among Laboratory Technicians and Sales Executives.
-Implement targeted interventions such as better work conditions, recognition programs, and opportunities for growth.

Revise Salary Hike Policies
-nsure competitive and fair salary increments to reduce attrition.
Regularly review and adjust salary policies to keep up with industry standards and employee expectations.

Thank-you for attending the presentation

EMPLOYEE ATTRITION