Report on Employee Attrition Analysis at Green Destinations

Objective

The HR Director at Green Destinations has observed an increase in employee attrition and seeks to understand the trends and patterns behind this phenomenon. The main objectives are:

1. To calculate the attrition rate.
2. To analyze the influence of factors like age, years at the company, and monthly income on attrition.
3. To develop a predictive model to identify employees likely to leave the company.

Data Overview

The dataset contains various attributes of employees, including age, years at the company, monthly income, and whether the employee has left the company (attrition).

Attrition Rate Calculation

The attrition rate is calculated as the percentage of employees who have left the company.

- **Total Employees**: 1250
- **Employees Left**: 202
- **Attrition Rate**: $\frac{202}{1250} \times 100 = 16.12\%$

The factors like Age,years at company and income also play an important role in determining if people will leave or not and this is shown below:
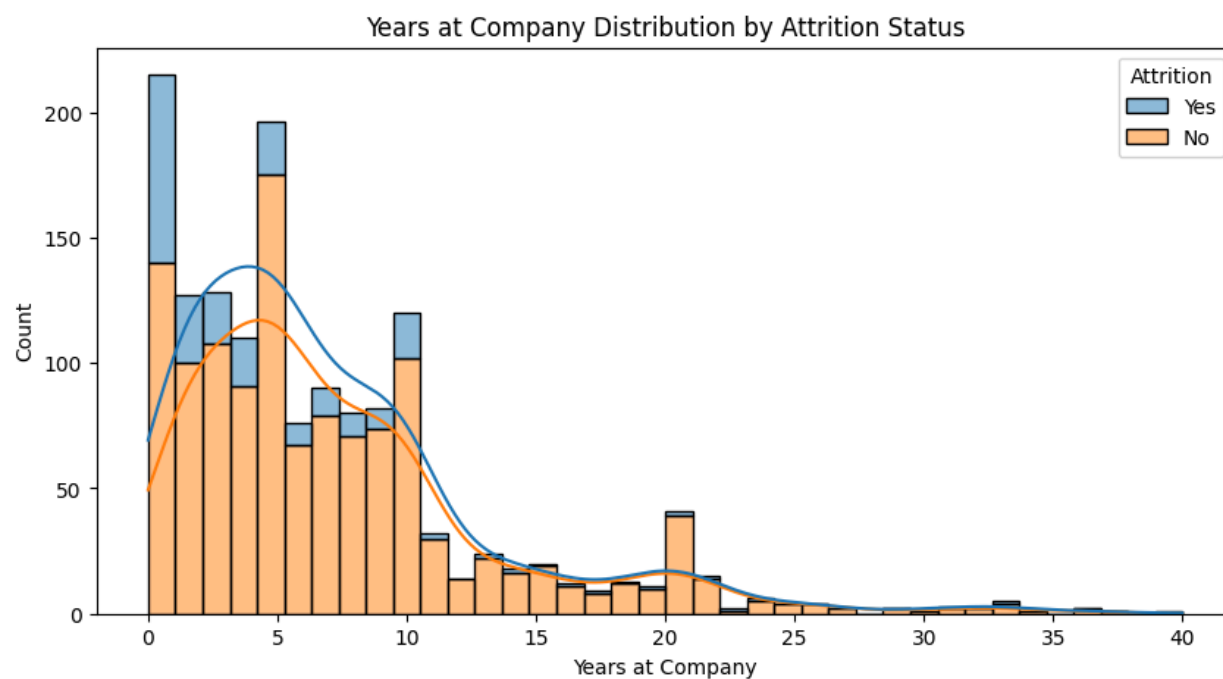
Age Statistics by Attrition Status:

Attrition	count	mean	std	min	25%	50%	75%	max
No	1233.0	37.561233	8.88836	18.0	31.0	36.0	43.0	60.0
Yes	237.0	33.607595	9.68935	18.0	28.0	32.0	39.0	58.0

Age Distribution by Attrition Status
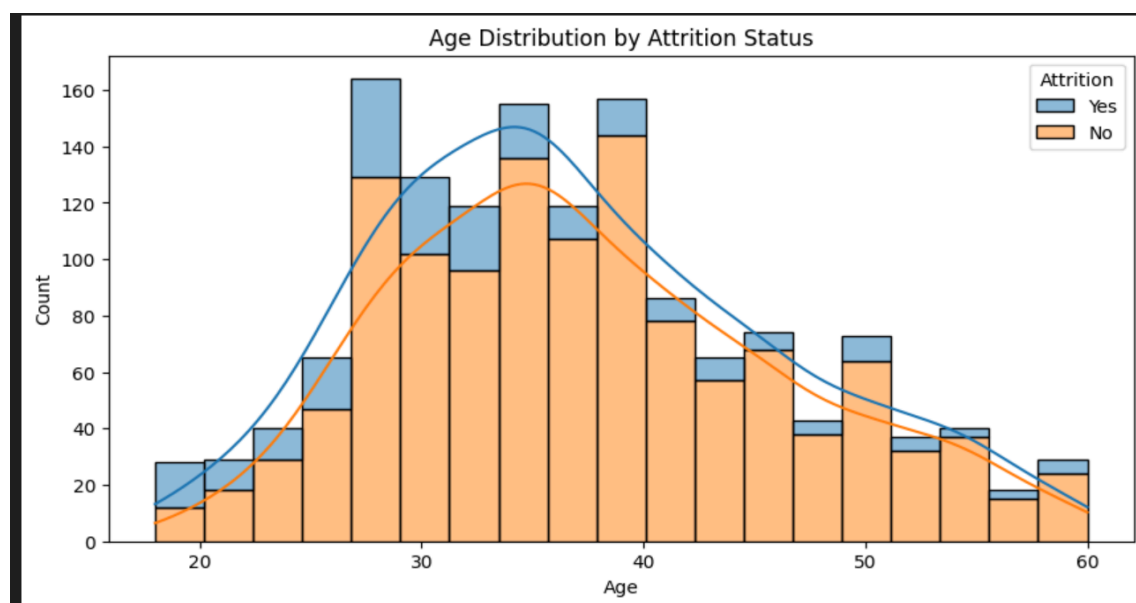
Years at Company Statistics by Attrition Status:

Attrition	count	mean	std	min	25%	50%	75%	max
No	1233.0	7.369019	6.096298	0.0	3.0	6.0	10.0	37.0
Yes	237.0	5.130802	5.949984	0.0	1.0	3.0	7.0	40.0

Years at Company Distribution by Attrition Status

Monthly Income Statistics by Attrition Status:

Attrition	count	mean	std	min	25%	50%	75%	max
No	1233.0	6832.739659	4818.208001	1051.0	3211.0	5204.0	8834.0	19999.0
Yes	237.0	4787.092827	3640.210367	1009.0	2373.0	3202.0	5916.0	19859.0

Monthly Income Distribution by Attrition Status