

Integrating two business units : a case study on human resource analytics

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Outline

- Introduction
- Objectives
- At a glance
- Analysis
- The new employees
- The promoted employees
- The terminated employees
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- Recommendation

Assumptions:

1. All outliers and errors in the dataset have no significance on the analysis thus will be ignored.
2. All employees and ex-employees are represented only in their latest job position, thus no record of their previous position prior to promotion.
3. All age and timeline shall be recorded as of 2016.

Introduction


- The stakeholders in an organization is considering combining two business units in order streamline and improve efficiency.
- With datasets from these two business units, an analytical case study is being conducted to study the feasibility of combining these two units and to gather insights on the two units.
- While a thorough data analytical study was conducted on the dataset, only significant results and insights from the analysis will be included in this presentation.
- The analysis begins with a general study of the overall data of both Units, before going in detail on key information such as the newly hired employees and terminated employees.

Objectives

To decide on a verdict on whether to proceed with combining the two units or not.



Raise key questions and insights on the HR aspects of the two unit.

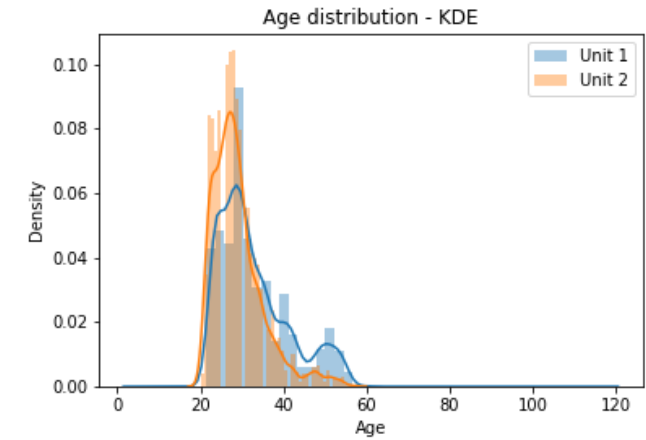
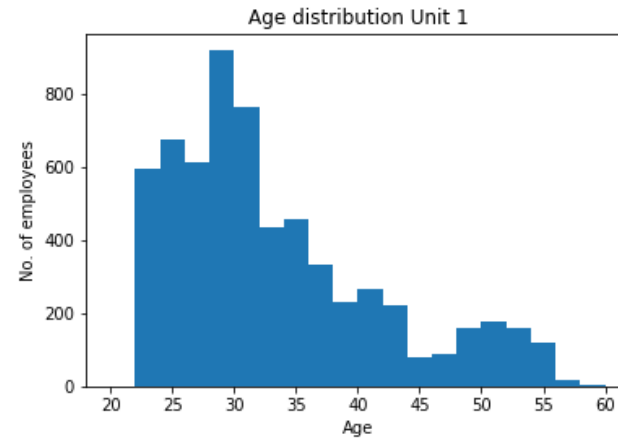
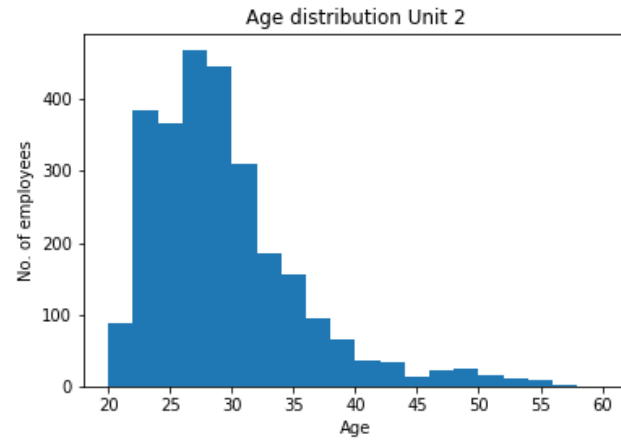


Provide recommendation on the steps needed for any issues to be resolved.

At a glance

	Unit 1	Unit 2
No. of employees	6328	2593
No. of new hires (%)	586 (9.26%)	770 (29.7%)
No. of termination (%)	409 (6.46%)	614 (23.68%)
No. of involuntary exit (%)	86 (1.35%)	386 (14.9%%)
No. of first year termination (%)	37 (0.58%)	293 (11.3%)
Median age	30 years	28 years
Average tenure	10.3 years	5.6 years

- Unit 2 appears to have dramatically higher employee turnover rate and lower average tenure
- Unit 1 is clearly established earlier with a more stable environment

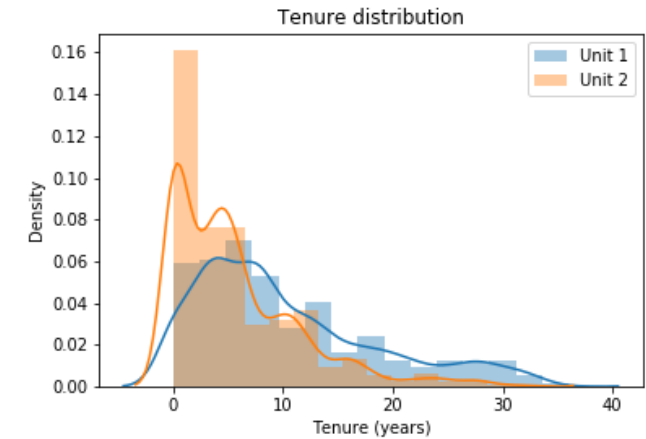
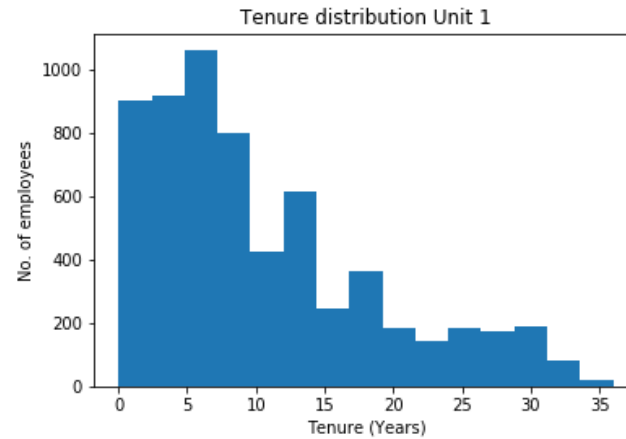
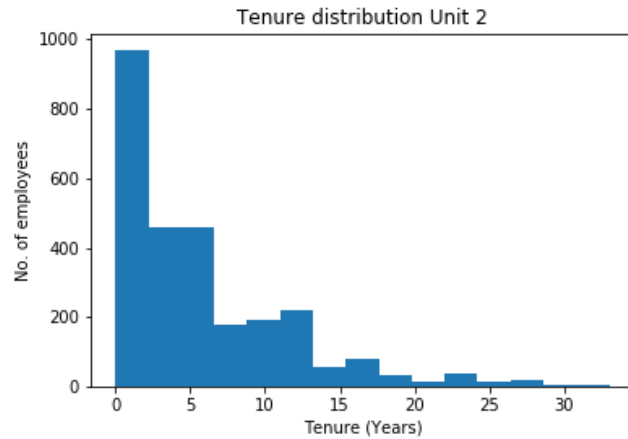


Age distribution

- Unit 1 and Unit 2 have roughly similar age distribution, with Unit 1 has a higher number of employees within the 50-year-old range while Unit 2 has higher composition of employees less than 30 years old.

Analysis

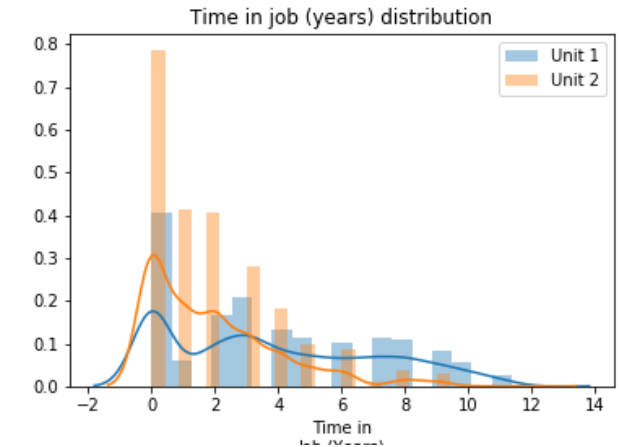
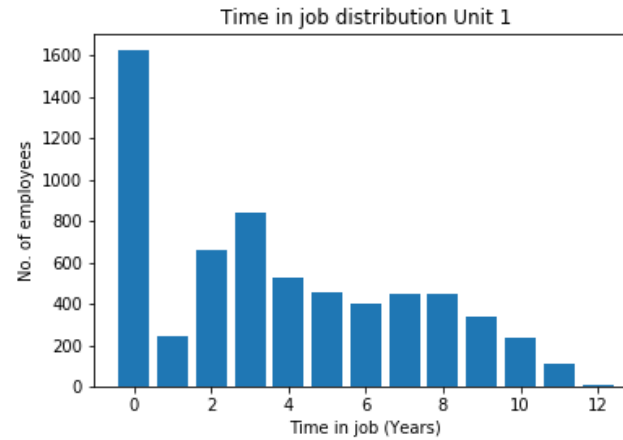
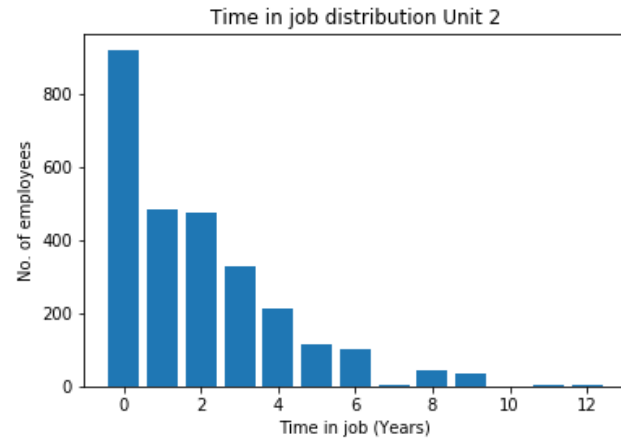
Analysis



Tenure distribution

- Employees in Unit 1 overall have longer tenure than those in Unit 2
- Significant number of Unit 2 employees and ex-employees have barely completed a year with the company
- As noted earlier, Unit 2 appears to be a rather new department compared to Unit 1

Analysis



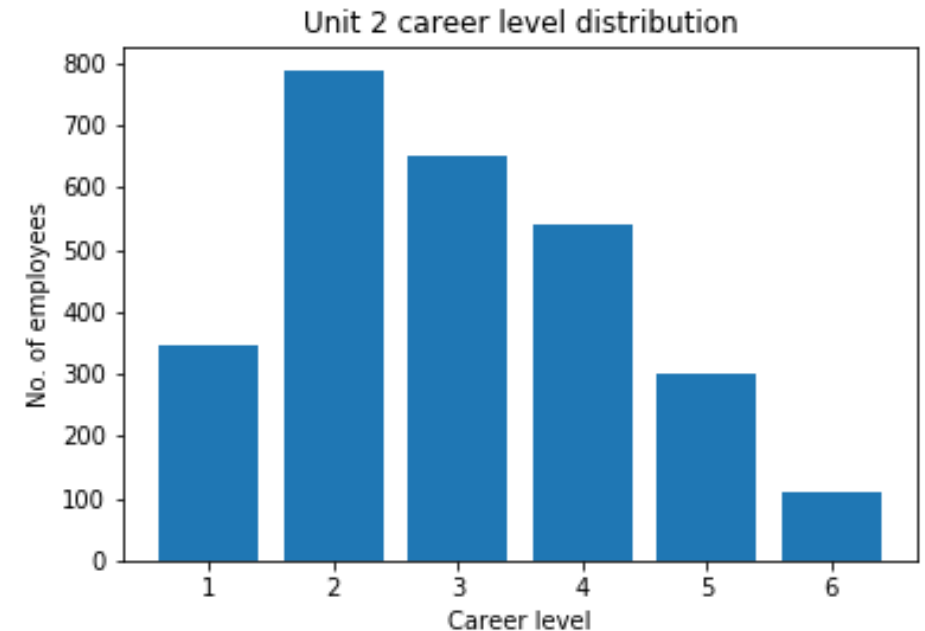
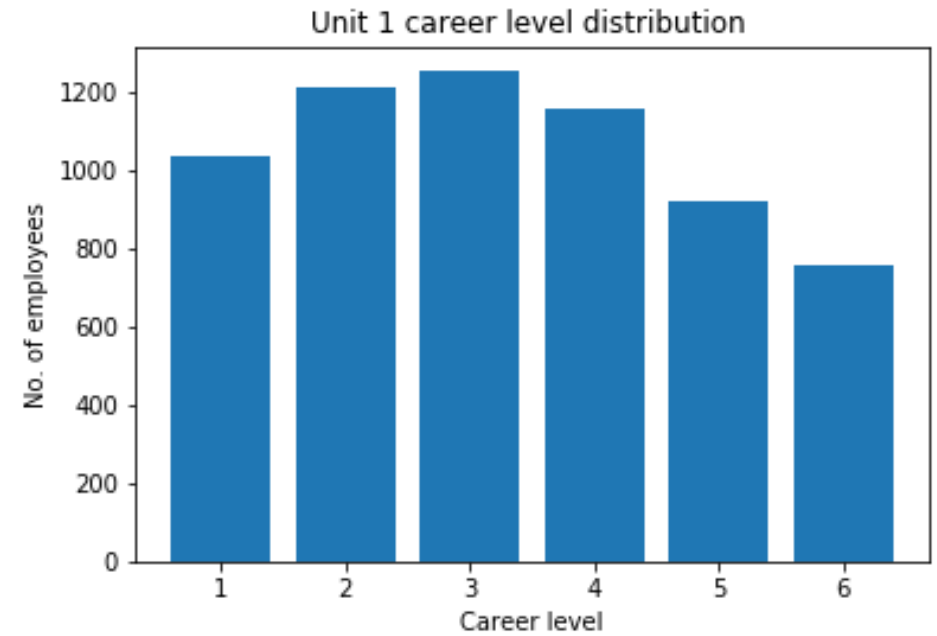
Time in job

- Unit 2 have significantly higher composition of employees in their current role for 3 years or less.
- Unit 1 have a roughly even distribution of employees in the current role for 4 years and above.
- Employees in Unit 1 seems to be more stable in their position and are willing to stay for years in their position, in contrast to Unit 2.

Analysis

Career level

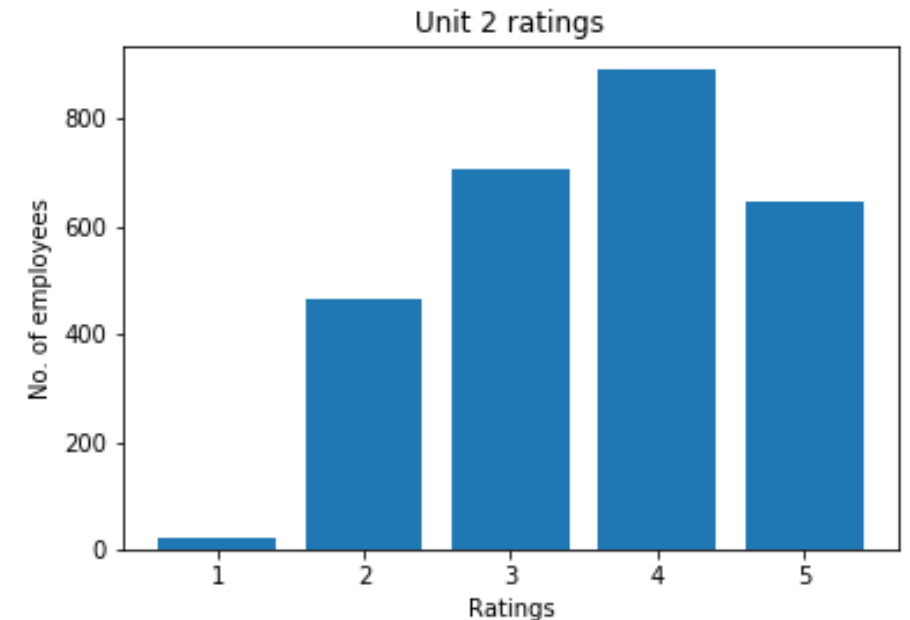
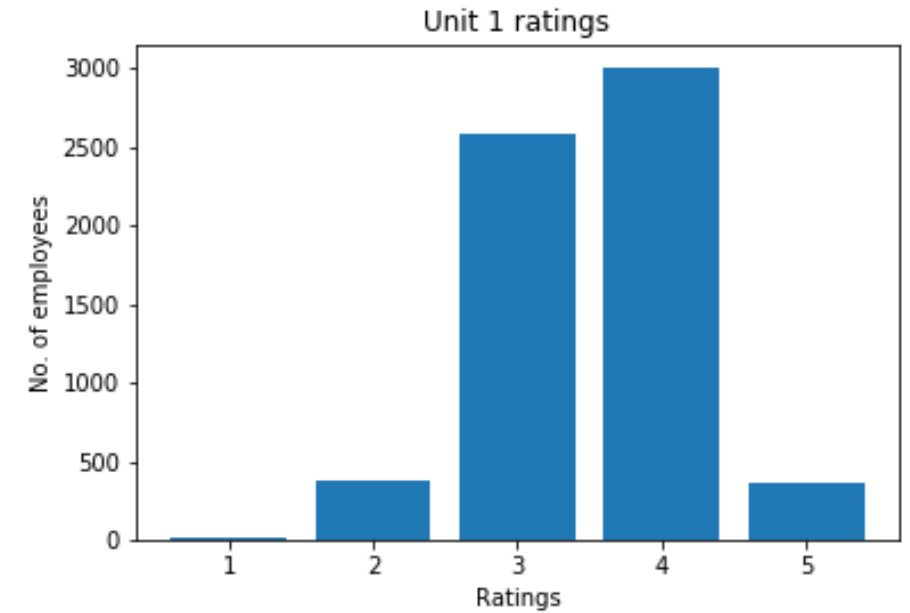
- Unit 1 employees has a rather high composition of mid level to high level management team, while Unit 2 has a smaller composition of senior management with a slight majority in the mid or junior level.
- It appears Unit 1 is under a more conservative management that is common in established legacy firm, while Unit 2 has a leaner more efficient upper management that resembles the start-up companies.



Analysis

Ratings

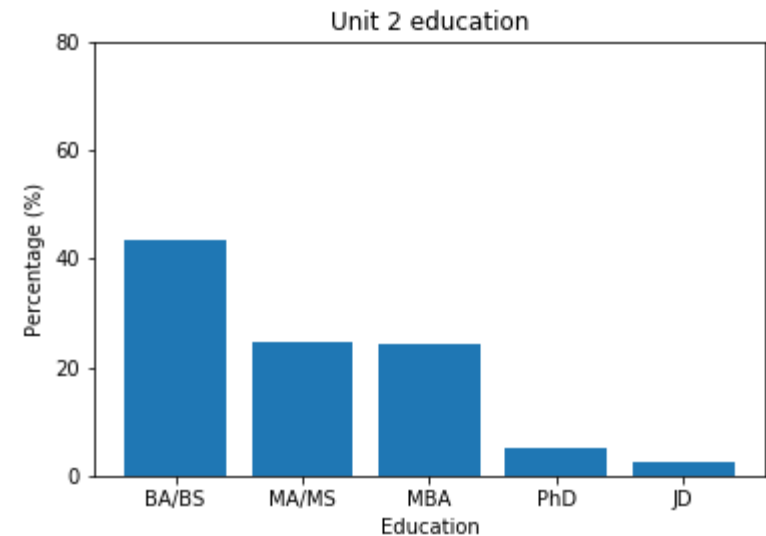
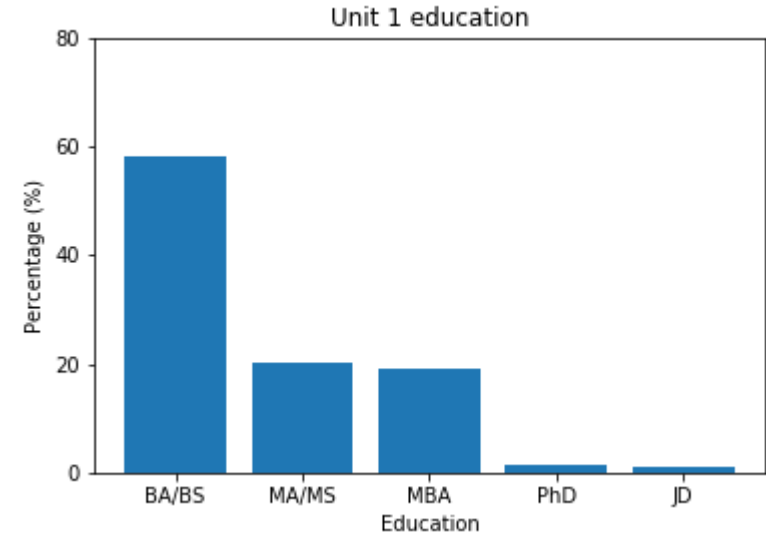
- Employees of Unit 1 mostly perform on target or just above target, with smaller numbers performing below target and high above target.
- While the slight majority of Unit 2 performs on target and slightly above target, a significantly high number also performs high above target and below target.
- The rather extreme outcome of the ratings in Unit 2 will need further data for study. Why are so many employees under performing while many are also over performing?



Analysis

Education

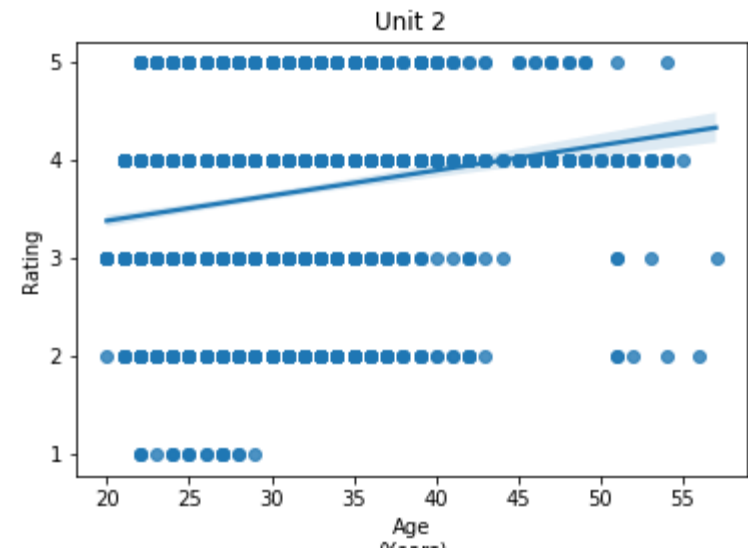
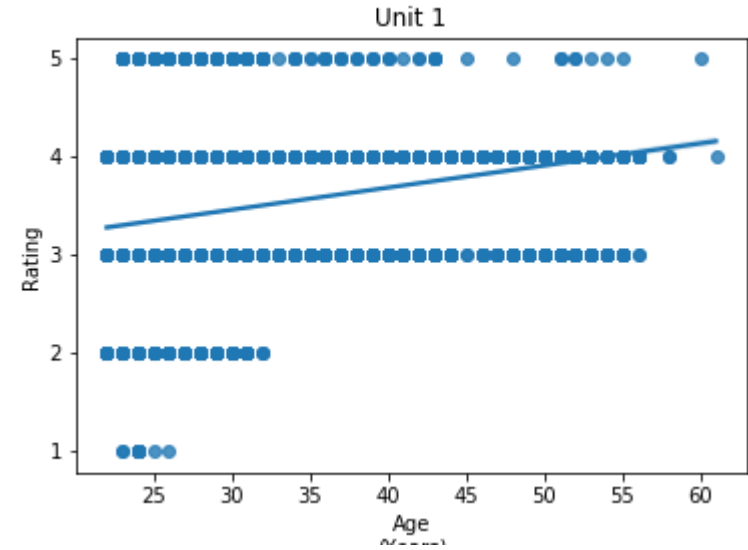
- Unit 2 has a significantly higher percentage of PhD and Master's holder compared to Unit 1.
- It appears to indicate that Unit 2 may be involved in a technological development or research-based role.



Analysis

Correlation (Ratings and Age)

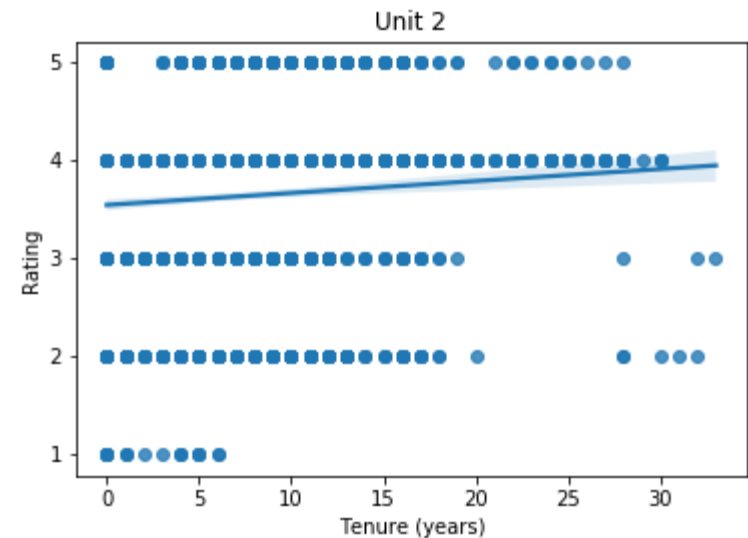
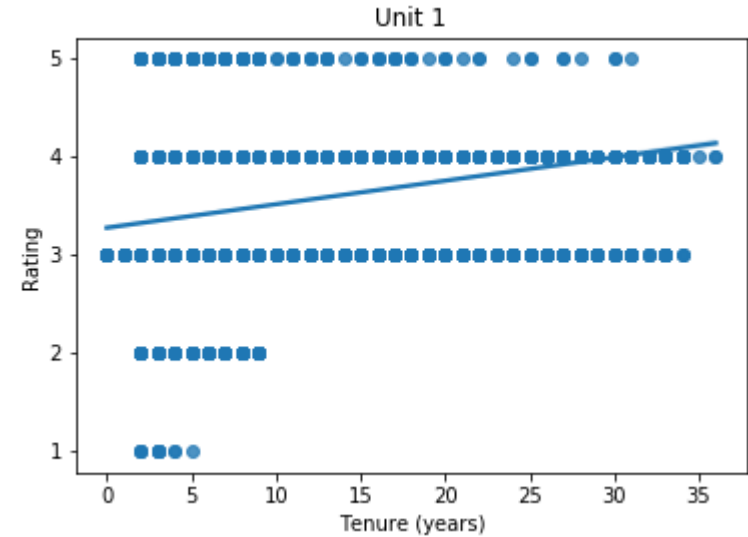
- Employees in Unit 1 and Unit 2 share the same correlation result of increasing age with improvement in job performance.



Analysis

Correlation (Ratings and Tenure)

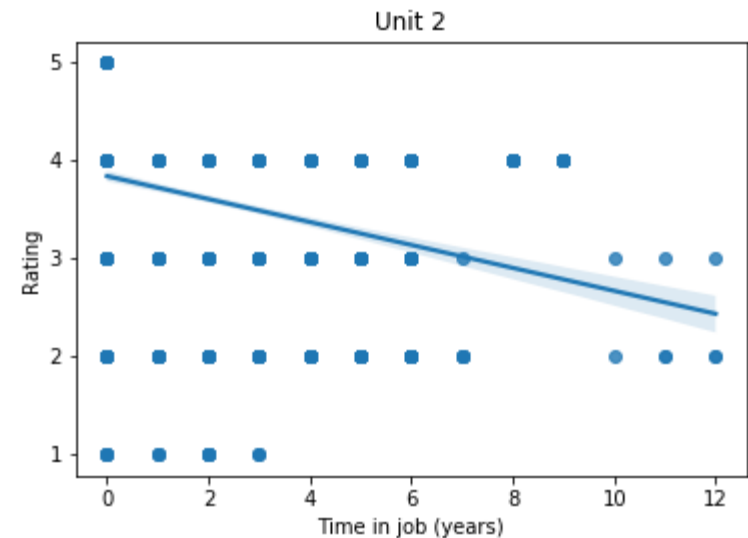
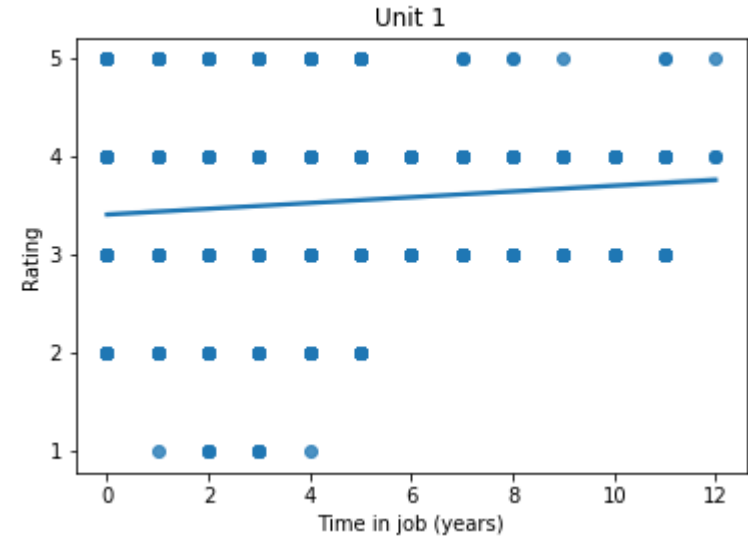
- Similar with Age, employees of both Unit 1 and Unit 2 also share the same correlation result of longer Tenure with improvement in job performance.



Analysis

Correlation (Ratings and Time in job)

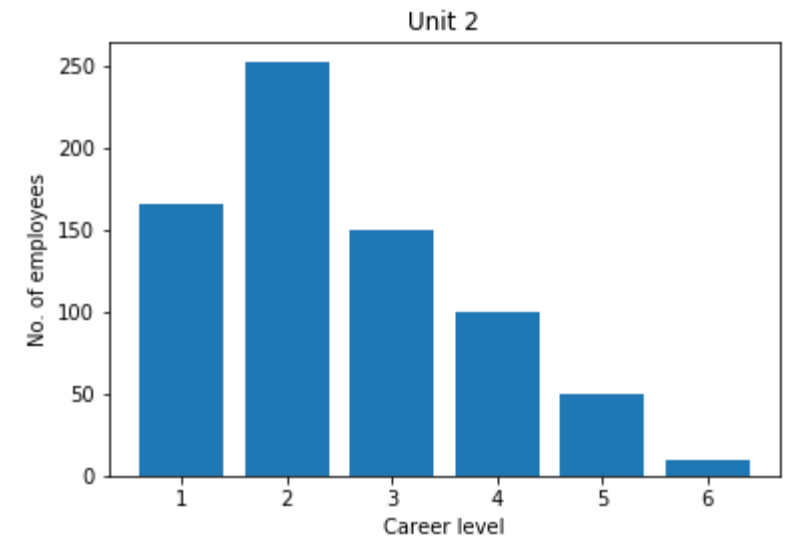
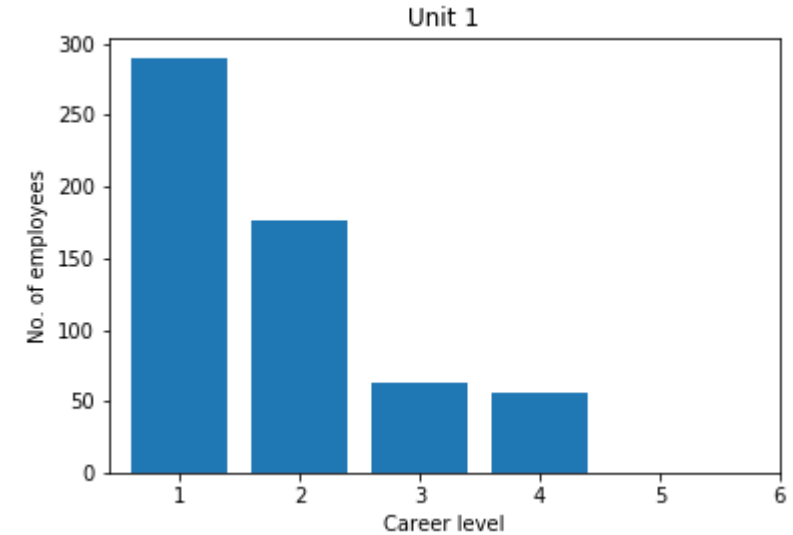
- In contrast with Unit 1, job performance of employees in Unit 2 decreases with the longer time they stayed in any role.
- High performance employees in Unit 2 are most often less than 1 year in their current role.
- More information will be needed to understand this issue.
- Are the employees in Unit 2 easily demoralized or is there a negative workplace environment?
- What are the personality traits of Unit 2 employees that leads them to be motivated or demotivated?



Analysis

2016 new employees

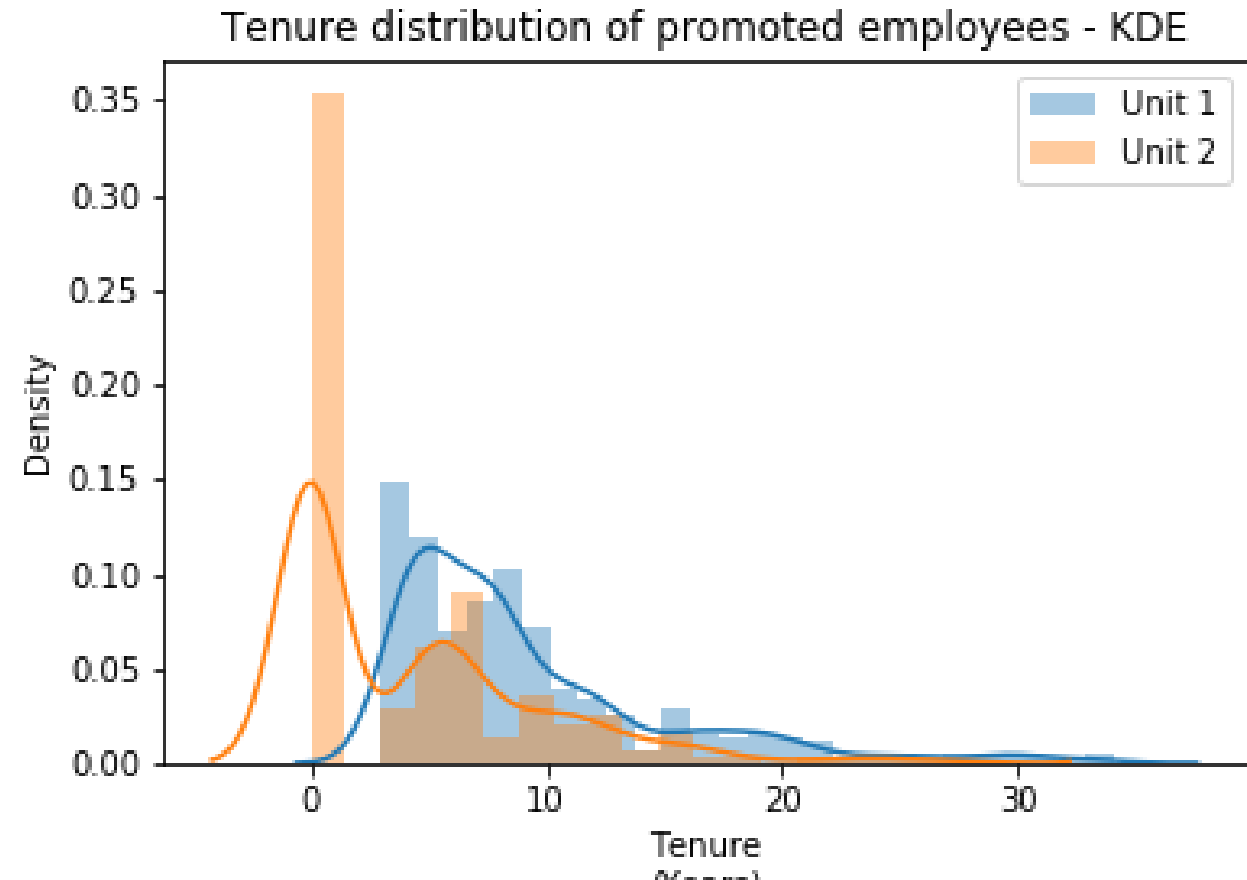
- While Unit 1 hired a high number of junior level and lower number of mid level employees, there are no new hires for the upper level employees.
- Unit 2 by contrast hires significant number of new upper level employees, in addition to new junior and mid level employees.
- Either Unit 2 is expanding rapidly or there is a high number of upper level employees exiting the company.



Analysis

2016 promoted employees

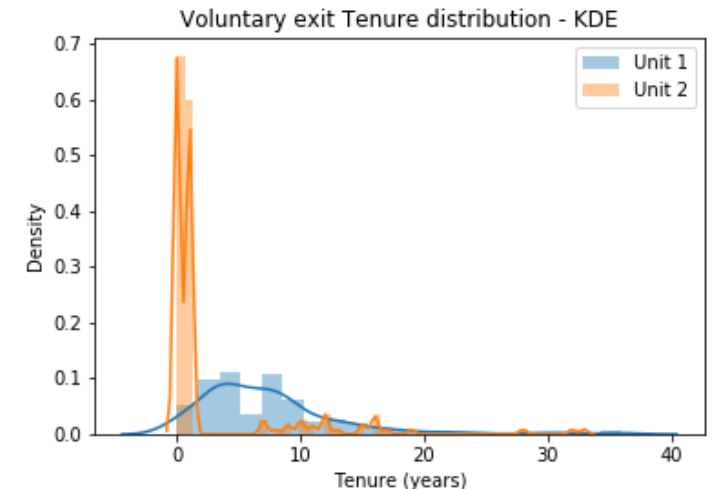
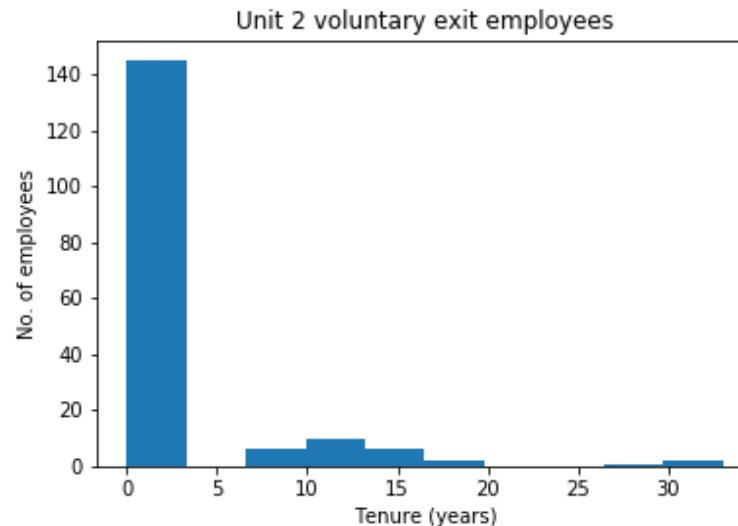
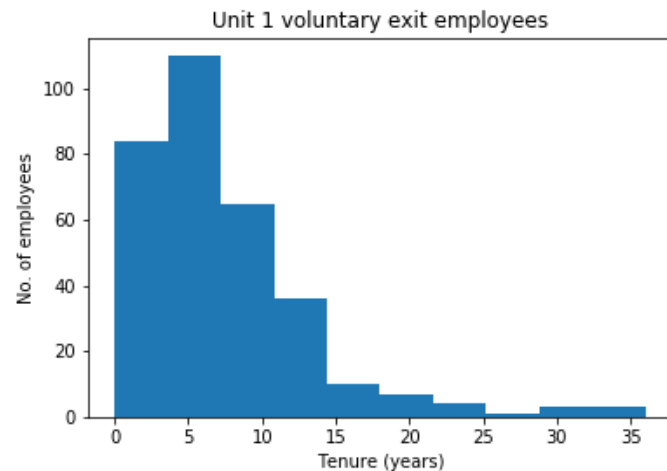
- A significantly high number of employees in Unit 2 were promoted after 1 year tenure.
- Promoted employees in Unit 1 are in tenure for at least 2 years.
- Unit 2 seems to have a higher opportunity for gaining promotion, whether it is due to senior employees exiting or the department is expanding.



Analysis

2016 Voluntary exit employees

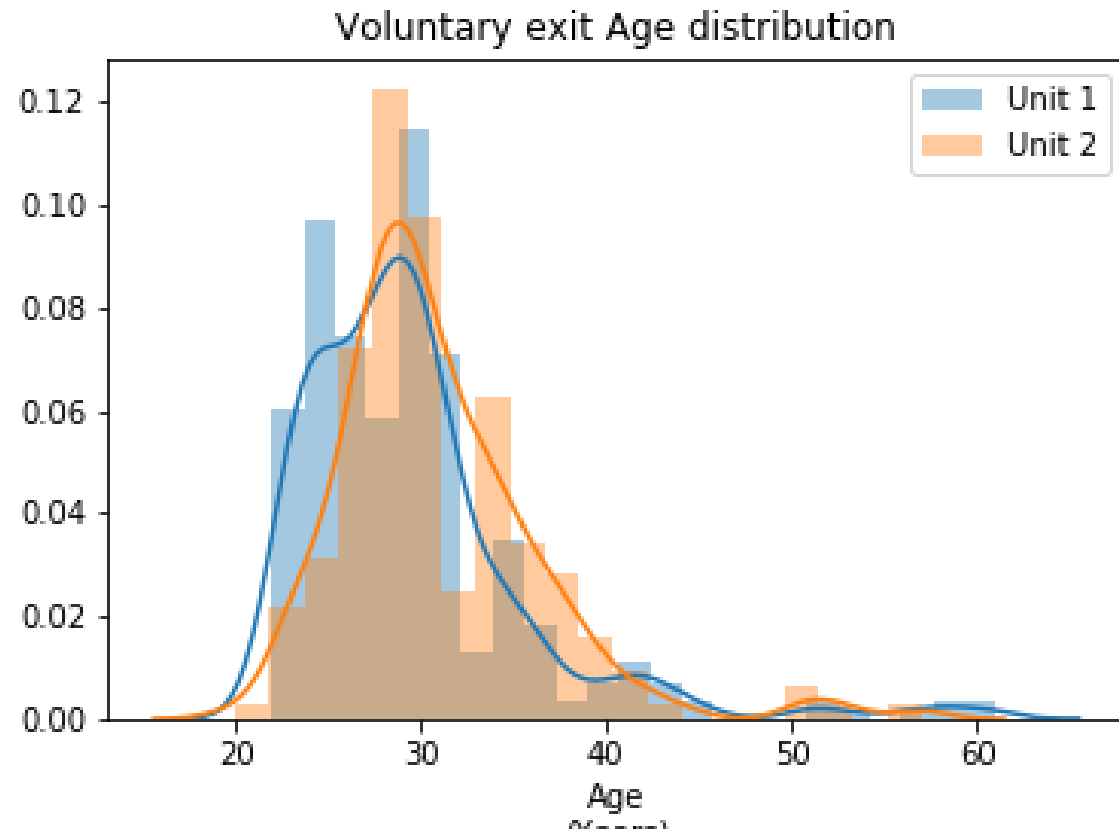
- Dramatically high composition of employees in Unit 2 who left do so after only 1 or 2 years with the company.
- Unit 1 employees who left usually have been with the company for 5 years or more, in stark contrast to Unit 2.
- It appears Unit 2 have a serious employee turnover issue.



Analysis

2016 Voluntary exit employees

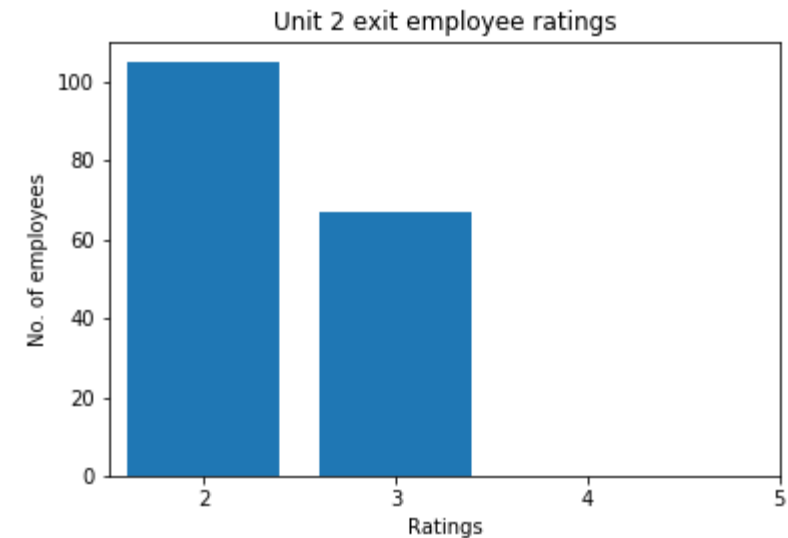
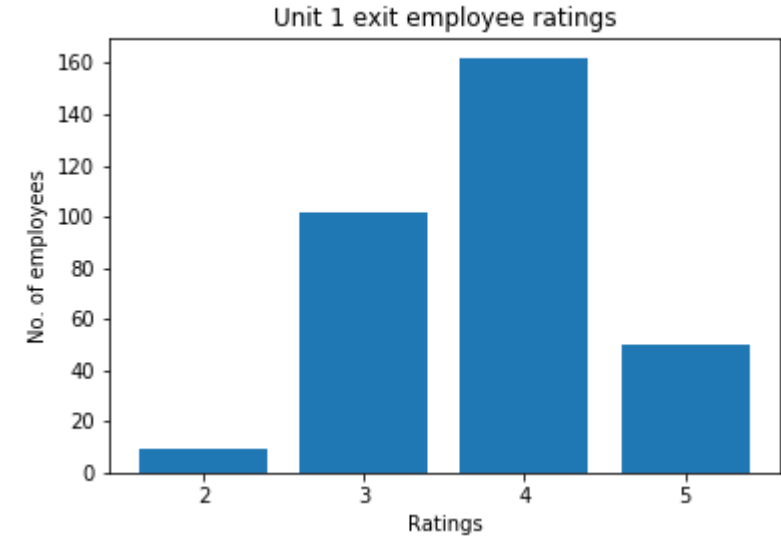
- Age distribution of the voluntarily exited employees shows a similar profile for both Unit 1 and Unit 2.
- This is important in revealing that the overwhelming majority of employees who exited are not due to retirement.



Analysis

Voluntary exit employee ratings

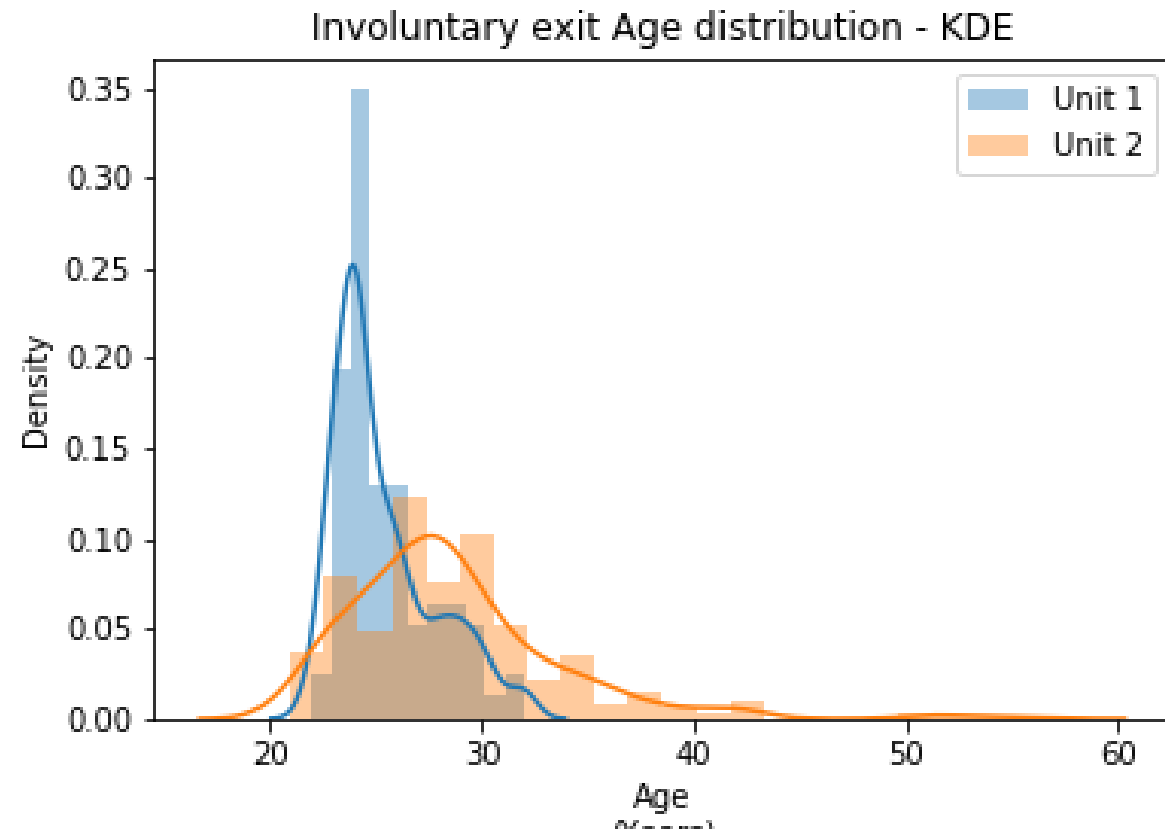
- Most Unit 1 employees who exited voluntarily are also performing well in their job. Thus it appears that Unit 1 employees left in search of better opportunities and in good standing.
- In contrast, Unit 2 employees who exited were performing below average or just on target. It does appear that Unit 2 seems to have an unhealthy culture or environment to have employees leaving with low ratings.



Analysis

Involuntary exit employees

- This refers to employees who were fired. As mentioned earlier, Unit 2 has a very rate and number of employees being terminated involuntarily.
- While the fired employees of Unit 1 were mostly in their early 20s, fired employees of Unit 2 skewed more towards the mid and late 20s with even those in their 30s and 40s being fired.

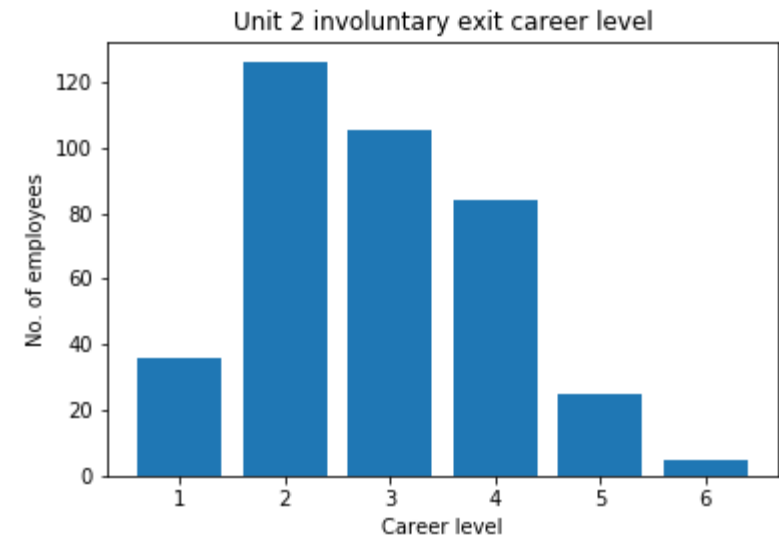


Analysis

Involuntary exit employees

Career level distribution

- While the fired employees of Unit 1 were mostly of the junior level, the fired employees of Unit 2 mostly consisted of even mid level employees. In fact, even upper level employees in Unit 2 were also fired.





Summary

Unit 1	Unit 2
<ul style="list-style-type: none">• Appears to be a more conservative and stable department.• Employees tend to remain for long and only leave with the offer of better opportunities.	<ul style="list-style-type: none">• Evidence of toxic and volatile work environment with high employee turnover rate.• Employees tend to be highly motivated in the first few years of a position, before being demoralized as time passes.• Shockingly high number of firings, even affecting upper level employees.• Appears to have high number of PhD holders.



Verdict

- It is advised to *proceed* with the integration of the two business units.
 - The chaotic environment in Unit 2 which leads to high employee turnover will end up being a drain on resources on the company overall.
 - Employees in Unit 2 will benefit from the mature and stable management in Unit 1.
 - Concerns of Unit 2 employees being placed under a more conservative management can be addressed.
-



Recommendation

- The upper managements of Unit 2 must be placed under the authority of Unit 1 managements, so as to end the toxic culture that is pervasive in Unit 2.
 - Given that employees in Unit 2 may have different roles than Unit 2, studies should be made to understand the needs of Unit 2 employees to allow them to perform in their task. This is with the understanding that Unit 1 management may be too conservative for Unit 2 employees.
 - Great care to be undertaken to ensure the talents in Unit 2 have their voices heard to discourage more unnecessary exit.
-