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# CAREER DEVELOPMENT ANALYSIS

### Introduction

Career development is the process of managing and advancing one's professional growth and job level within an organization. It involves skill-building, setting career goals, and aligning personal aspirations with opportunities for advancement. This process enhances employee satisfaction and retention while supporting organizational success.

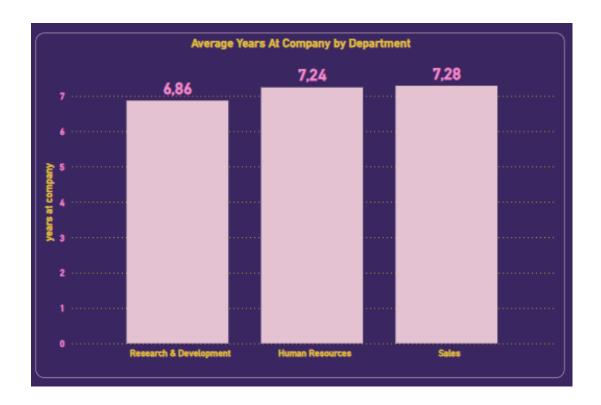


### Preliminary calculations with Power BI

In this section, I present my preliminary calculations of several metrics to provide a comprehensive understanding of the organization's current state:

- The company employs a total of 1,470 individuals.
  - There have been 237 attritions within the organization.
- Employees stay with the company for an average of 7.01 years.
  - The average tenure in current roles is 4.23 years.
- Employees typically receive promotions every 2.19 years.
  - 28.3% of employees are working overtime, indicating the proportion of the workforce putting in extra hours.
- The average educational level of employees is 2.91.

# Average years at company by department

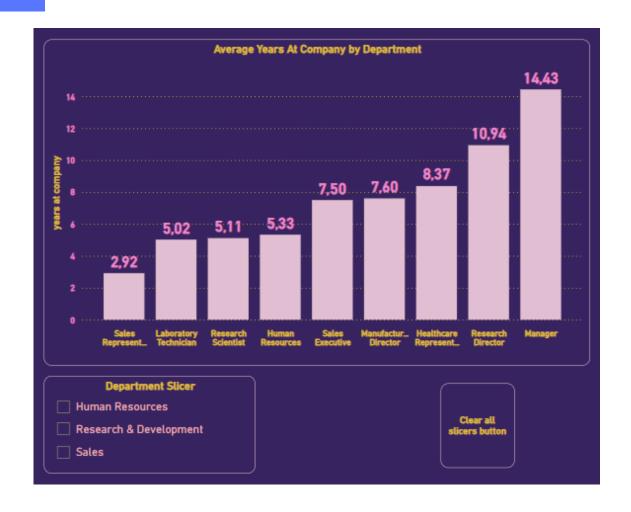


The column chart visualizes the average tenure of employees at the company, broken down by department: Research  $\delta$  Development, Human Resources, and Sales. We can see:

#### I.Close Averages Across Departments:

• The average years employees have stayed with the company are quite close across the three departments. Sales leads slightly with an average tenure of 7.28 years, followed closely by Human Resources at 7.24 years, and Research & Development at 6.86 years.





Knowing that I created a department hierarchy which includes firstly the departments then job roles, I drill to the next level of the hierarchy of the last chart to visualize average years by job roles.

we can see the following observations:

- 1. Sales Representative:
  - Average years at the company: 2.92 years
- 2. Laboratory Technician:
  - Average years at the company: 5.02 years
- 3. Research Scientist:
  - Average years at the company: 5.11 years
- 4. Human Resources:
  - Average years at the company: 5.33 years
- 5. Sales Executive:
  - Average years at the company: 7.50 years
- 6. Manufacturing Director:
- Average years at the company: 7.60 years
- 7. Healthcare Representative:
- Average years at the company: 8.37 years

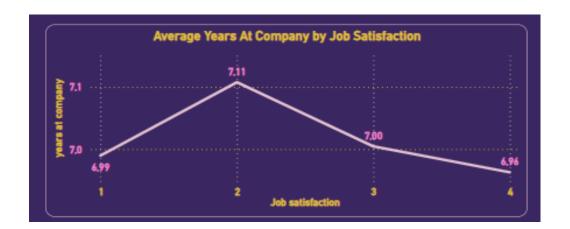


- 6. Manufacturing Director:
- Average years at the company: 7.60 years
- 7. Healthcare Representative:
- Average years at the company: 8.37 years
- 8. Research Director:
- Average years at the company: 10.94 years
- 9. Manager:
- Average years at the company: 14.43 years

The slicer section at the bottom left allows users to filter the data by specific departments: Human Resources, Research & Development, and Sales. This enables a focused analysis of average years by job roles within selected departments. The "Clear all slicers" button is provided to unselect the selected elements in the slicer.



### Average years at company by job satisfaction



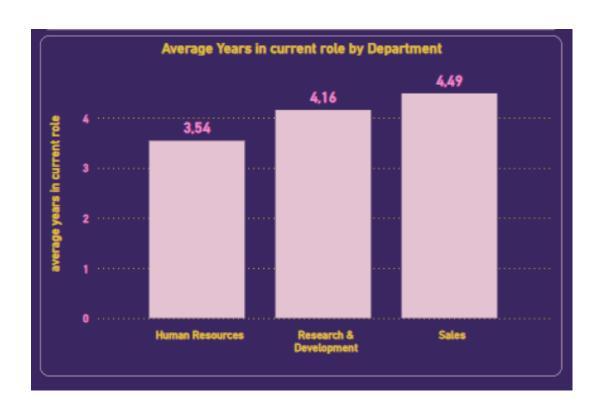
The Line chart displays the Average Years At Company by Job Satisfaction. Here is the observations:

- Job Satisfaction Level 1: Average tenure of 6.99 years.
- Job Satisfaction Level 2: Highest average tenure of 7.11 years.
- Job Satisfaction Level 3: Average tenure of 7.00 years.
- Job Satisfaction Level 4: Lowest average tenure of 6.96 years.

While moderate job satisfaction (level 2) correlates with the longest tenure, the differences in average tenure across various job satisfaction levels are minimal. This suggests that job satisfaction levels do not dramatically impact the length of time employees stay with the company.



## Average years in current role by department



#### Observations:

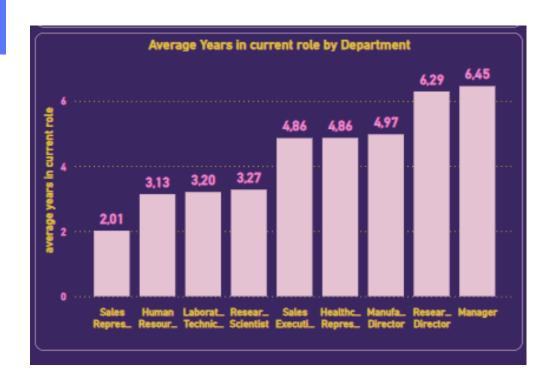
- 1. Human Resources (HR):
  - Average tenure in current role: 3.54 years
  - Shortest average tenure among the departments
- 2. Research  $\delta$  Development (R $\delta$ D):
  - Average tenure in current role: 4.16 years
  - Moderate tenure indicating stability

#### 3. Sales:

- Average tenure in current role: 4.49 years
- Longest average tenure, indicating high experience levels

This observations reveals that HR has the shortest average tenure in current roles, which may indicate a need for better career development and retention strategies. In contrast, Sales and  $R \Delta D$  show a little more longer tenures, suggesting greater stability and in these departments. Addressing these differences can help enhance career growth and employee satisfaction across the organization.





Observations after drilling down in the hierarchy:

- Sales Representative: 2.01 years

- Human Resources: 3.13 years

- Laboratory Technician: 3.20 years

- Research Scientist: 3.27 years

- Sales Executive: 4.86 years

- Healthcare Representative: 4.86 years

- Manufacturing Director: 4.97 years

- Research Director: 6.29 years

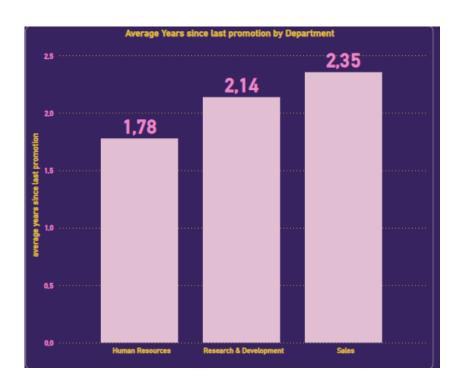
- Manager: 6.45 years

The observations reveals significant variation in average tenure across different roles within the departments:

- Sales Representatives experience high turnover or frequent role changes.
- Human Resources, Laboratory Technicians, and Research Scientists have shorter tenures, indicating career stages or technical roles with quicker transitions.
- Sales Executives, Healthcare Representatives, and Manufacturing Directors show increased stability and tenure in mid-level roles.
- Research Directors and Managers have the longest tenures, reflecting highly stable and experienced leadership positions.



# Average years since last promotion by department



#### Observations:

- Human Resources: 1.78 years

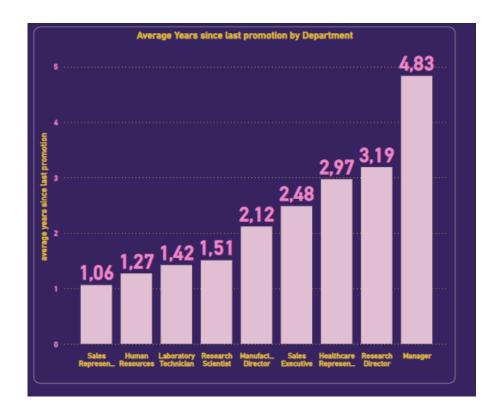
- Research & Development: 2.14 years

- Sales: 2.35 years

This observations shows variation in promotion frequency:

- Human Resources: Shortest time since last promotion at 1.78 years, indicating more frequent promotions.
- Research & Development: Moderate time since last promotion at 2.14 years, reflecting a balanced promotion frequency.
- Sales: Longest time since last promotion at 2.35 years, suggesting a very little less frequent promotions than the Research & Development department.





By drilling down on the hierarchy, the chart reveals significant disparities between different roles:

- 1. Sales Representatives have the shortest average duration since the last promotion at 1.06 years. This suggests frequent promotions or high turnover.
- 2. Human Resources and Laboratory Technicians have relatively short durations since the last promotion, at 1.27 years and 1.42 years, respectively. These roles also appear to have regular opportunities for advancement.
- 3. Research Scientists have an average of 1.51 years since their last promotion, indicating a moderate frequency of promotions.
- 4. Manufacturing Directors and Sales Executives show longer periods of 2.12 years and 2.48 years, respectively, indicating slower promotion track or more stability in these positions.
- 5. Healthcare Representatives have an average of 2.97 years since their last promotion, which is slightly higher, suggesting less frequent advancement.

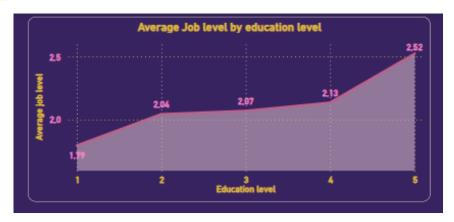


- 6. Research Directors have an even longer duration at 3.19 years, indicating relatively less frequent promotions.
- 7. Managers stand out with the highest average of 4.83 years since the last promotion. This suggests that promotions at this level are rare, likely due to the high level of responsibility and the limited number of positions available at higher levels.

Overall, the data suggests that higher-level positions, such as Managers and Research Directors, experience less frequent promotions compared to lower-level roles like Sales Representatives and Human Resources staff.



### Average Job Level by Education Level



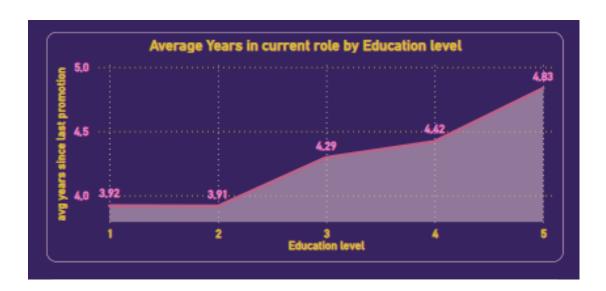
This chart displays the average job level attained by individuals across five different education levels, presumably ranging from lower (level 1) to higher (level 5) educational qualifications.

- Level 1 (1.79): Individuals with the lowest education level are on average at job level 1.79. This suggests entry-level positions, likely requiring minimal qualifications.
- Level 2 (2.04): There is a noticeable increase, with an average job level of 2.04. This indicates that higher education slightly correlates with attaining higher job levels.
- Level 3 (2.07): very small increase to an average job level of 2.07, suggesting a very modest improvement in job level with this education level.
- Level 4 (2.13): The upward trend continues, with individuals reaching an average job level of 2.13.
- Level 5 (2.52): A noticeable increase to an average job level of 2.52 for the highest education level. This indicates a stronger correlation between advanced educational qualifications and attaining higher job levels.

This observations indicates a positive relationship between education level and job level, with higher education generally leading to higher job positions, even if it is slight. The progression suggests that investment in education pays off in terms of job advancement.



### Average years in current role by Education Level



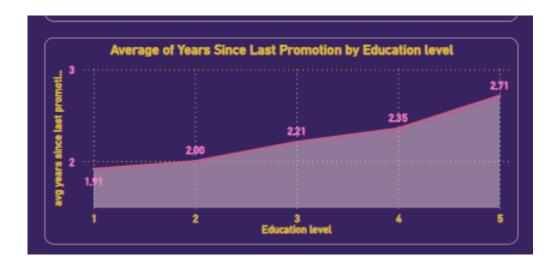
This chart represents the average duration individuals have spent in their current roles, broken down by education level.

- Level 1 (3.12 years): Individuals with the lowest education level spend an average of 3.12 years in their current roles. This may indicate either a higher turnover or less career progression within the same organization.
- Level 2 (3.91 years): The duration increases to 3.91 years, suggesting that with higher education, individuals tend to stay longer in their roles.
- Level 3 (4.29 years): The average tenure further increases to 4.29 years, indicating a continuing trend of longer stays in roles with higher education.
- Level 4 (4.42 years): A slight increase to 4.42 years, maintaining the trend of longer tenures for higher education levels.
- Level 5 (4.83 years): The highest education level correlates with the longest tenure in roles, at an average of 4.83 years. This suggests that individuals with the highest education levels tend to stay longer in their positions, possibly due to more specialized roles or career satisfaction.

This observations indicates that Higher education levels are associated with longer durations in current roles. This could be due to various factors, including greater job security, satisfaction, and fewer opportunities for rapid advancement at higher levels.



# Average of Years Since Last Promotion by Education Level



This chart illustrates the average number of years since the last promotion, categorized by education level.

- Level 1 (1.11 years): Individuals with the lowest education level have spent an average of 1.11 years since their last promotion. This suggests a more frequent promotion rate or turnover.
- Level 2 (2.00 years): There is a noticeable increase to 2.00 years, indicating that promotions are less frequent for this group compared to those at level 1.
- Level 3 (2.21 years): The average time since the last promotion increases further to 2.21 years. This trend suggests a decrease in promotion frequency with increasing education levels.
- Level 4 (2.35 years): At this education level, the average duration since the last promotion is 2.35 years, indicating a continued trend of less frequent promotions.
- Level 5 (2.71 years): The highest education level correlates with the longest duration since the last promotion, at an average of 2.71 years. This might reflect the challenging nature of advancing from already high positions or the specialized nature of roles at this level.

By examining the tooltips, we observe that as educational levels increase, so do the years at the company and in the current role.



### Areas of improvement

- Promotion Frequency for Higher-Level Positions: Managers and Research Directors have the longest average time since the last promotion (4.83 years and 3.19 years, respectively). This suggests a potential stagnation at higher levels, which could lead to decreased motivation and retention issues among senior staff.
- Career Development in Human Resources: The Human Resources department has the shortest average tenure in current roles (3.54 years) and the shortest time since the last promotion (1.78 years). This indicates a need for better career development and retention strategies within this department.
- Job Satisfaction and Tenure: Job satisfaction levels show minimal impact on tenure, This suggests that other factors may be more significant in influencing employee retention.
- Educational Level and Career Progression:
  Higher education levels are associated with longer durations in current roles and less frequent promotions. For instance, individuals with the highest education level (level 5) have the longest tenure in roles (4.83 years) and the longest time since the last promotion (2.71 years). This indicates a need for tailored career development programs for highly educated employees to ensure their advancement.
- High Turnover in Certain Roles:
   Roles such as Sales Representatives and Laboratory
   Technicians have shorter tenures and more frequent
   promotions, suggesting higher turnover or quicker transitions.
   Addressing these dynamics can help stabilize these positions.

### Recommendation

Our recommendation focuses on adapting new career development programs tailored to different educational levels:

Develop development plans specifically designed for the educational backgrounds of employees. These plans should include targeted training to enhance learning and development opportunities, skill-building aligned with the career goals of highly educated employees, this can include partnerships with educational institutions for further studies, industry conferences, and leadership development programs. The company should provide a clearly defined promotion pathways that reflect the needs and aspirations of employees at various educational levels. Additionally, implement a system for regular review and feedback on the progress of employees. This should encompass discussions on career aspirations, challenges faced, and adjustments to development plans to ensure continuous growth and satisfaction.