

LUMINA TECH: A COMPREHENSIVE ANALYSIS OF COMPENSATION EQUITY, GENDER PAY GAPS & ATTRITION TRENDS

TABLE OF CONTENT

1. Introduction
2. Problem Statement & Objectives
3. Key Findings & Recommendations
4. Conclusion

INTRODUCTION

Lumina Tech, a global leader in innovative solutions established in 1990 with 844 employees, is committed to fostering an inclusive and equitable workplace. This report presents the findings of a comprehensive compensation analysis undertaken to identify and address potential pay disparities across gender, ethnicity, age, and departments. This analysis aligns with the company's values of inclusivity, innovation, and employee satisfaction, aiming to ensure fair and equitable compensation for all employees while enhancing organizational performance and employee retention.

PROBLEM STATEMENT

Lumina Tech faces challenges in maintaining equitable compensation practices across its diverse workforce. Concerns exist regarding potential pay disparities based on gender, ethnicity, age, and departmental roles. These disparities may negatively impact employee morale, retention rates, and the company's ability to foster an inclusive and equitable workplace.

OBJECTIVES OF THIS ANALYSIS

1. Conduct a comprehensive pay gap analysis:

- Analyse gender and ethnicity-based pay gaps across demographics (age, department, location).
- Examine trends in compensation and attrition rates over time.
- Evaluate the distribution of total salaries and bonuses.

2. Develop actionable insights and recommendations:

- Visualize key findings through an interactive dashboard.
- Provide data-driven recommendations to address pay gaps and support equitable compensation practices.

KEY FINDINGS & RECOMMENDATIONS

1. Analysing Gender Pay Gap by Departments

- The gender pay gap varies considerably across departments, ranging from -12.1% in accounting (indicating women earn more) to a concerning 7.7% in Engineering (indicating men earn more).
- The departments that show higher gender pay gaps such as engineering, sales & IT may be due to male dominance in the role/industry, unconscious bias when hiring, promoting or negotiating salaries, stronger negotiating skills by men, etc while the departments that show lower gender pay gaps such as accounting, HR, finance could be due to the fact that they are historically female dominated
- **Board Member:** A negligible -0.5% gap. Which means that the pay gap in this department is almost non-existent

RECOMMENDATIONS

- Prioritize addressing departments with the largest pay gaps (Engineering, Sales, IT) through role-Level Analysis by conducting in-depth analysis within these departments to understand the root causes of disparities at the role level.
- Encourage women to pursue higher-paying roles and provide mentorship and sponsorship opportunities.
- Review and revise pay structures to ensure fairness and transparency.
- Encourage/Promote women into leadership roles and create clear career paths for advancement.
- Conduct regular, independent pay equity audits to identify and address any systemic issues.

2. Analysing Gender Pay Gap by Ethnicity

- The Asian & Caucasian men earn more than the women (gender Pay gap of 5.9% & 3.8% respectively)
- The Latino women earn slightly more than the men with gender pay gap of -1%
- The black women show the most significant disparity with a -27% pay gap, indicating they earn substantially more than men in their group.

RECOMMENDATIONS

- Conduct a more in-depth analysis to understand the specific factors contributing to these disparities within each ethnic group
- Develop and implement targeted interventions to address the unique challenges faced by each group, particularly the blacks, Asians & Caucasians
- Strengthen diversity and inclusion initiatives to create a more equitable and inclusive workplace for all employees.

3. Analysing Gender Pay Gap over time

- The gap fluctuates significantly from year to year, with both large positive values (indicating men earn more) and large negative values (indicating women earn more).

- 1993 had a significantly different gender pay gap of -137% which could be due to low data quality or unusual circumstances, This needs to be looked into on a deeper level.
- There is no consistent upward or downward trend in the data. The gap fluctuates year by year, making it difficult to identify a clear pattern or predict future changes
- Economic fluctuations, such as recessions or periods of high inflation, can impact the labour market and potentially influence the gender pay gap.

RECOMMENDATIONS

- Further Investigate the root causes of the observed fluctuations in the gender pay gap to inform policy interventions and targeted initiatives.
- Continuously monitor the gender pay gap over time to track progress and identify any emerging trends or concerns.

4. Analysing Ethnicity Pay Gap over time

- The ethnicity pay gap fluctuates significantly from year to year, but consistently remains high
- While there are some years with lower gaps, there is no clear indication of a consistent downward trend.
- The gap varies widely from year to year, suggesting there may be underlying factors that significantly impact the gap such as discrimination, unconscious bias, differences in education/experience among different ethnic groups.

RECOMMENDATIONS

- Conduct a thorough investigation into the root causes of the persistent ethnicity pay gap. This should include analyzing data on factors such as job roles, education, experience, and performance.
- Providing training on unconscious bias and anti-discrimination for all employees, including managers and decision-makers.
- Utilize data and analytics to inform hiring, promotion, and compensation decisions.

5. Analysing Gender Pay Gap by Age groups

- Older Age Groups:** The largest pay gap is observed in the 61- 69 age group (8.3%), indicating that men in this group earn significantly more than women. This could be due to a variety of factors, including historical disparities in pay and promotion opportunities, as well as potential biases that have accumulated over time.
- Middle Age Groups:** The pay gap decreases in the middle age groups (43-51 and 34-42) but still Favors men. This suggests that while progress may have been made in recent decades, some pay inequities persist.
- Younger Age Group:** Interestingly, the youngest age group (25-33) shows a negative pay gap (-3.9%), indicating that women in this group earn more than men. This could be due to a variety of factors, such as higher educational attainment among women, or a greater willingness to negotiate salaries and seek promotions.

RECOMMENDATION

- d. Conduct further analysis to understand the specific factors driving the pay gap in each age group. This could include examining job roles, experience, performance, and career trajectories
 - e. Develop targeted interventions to address the specific challenges faced by women in different age groups. For example, mentorship programs for younger women, leadership development opportunities for mid-career women, and pay equity audits for older workers.
6. Analysing Compensation by Region
- **USA:** Annual Salary: \$72.8M, Avg. Annual Salary: \$113K. This suggests a larger workforce, or higher-paying roles compared to other regions. They have all the ethnic groups working here but there is a significant ethnicity pay gap of 10.7%, which may indicate potential systemic biases or inequities within the US operations.
 - **China:** Annual Salary: \$24.8M, Avg. Annual Salary: \$114K. While the average salary is slightly higher than the USA, the total annual salary is significantly lower, indicating a smaller workforce. They have a homogenous workforce i.e. only Asians work here.
 - **Brazil:** Annual Salary: \$15.6M, Avg. Annual Salary: \$112K. Similar to China, the average salary is competitive, but the total annual salary suggests a smaller workforce or lower overall compensation compared to the USA. They also have a homogenous workforce i.e. only Latinos work here.

RECOMMENDATION

- Develop competitive compensation packages that align with the cost of living and industry standards in each region.
 - Consider the cost of living in each region to understand the true purchasing power of salaries.
 - Conduct a comprehensive analysis within the USA branch to understand the root causes of the 10.7% ethnicity pay gap.
 - Implement targeted interventions to address the identified disparities such as bias training, pay equity audits.
 - Implement strategies to increase diversity within all branches to enable more meaningful analysis of ethnicity pay gaps.
7. Analysing Attrition rate Vs Avg. Bonus & Annual Salaries over time
- **We can see** significant fluctuations in the attrition rate, ranging from 0% to 23%. This volatility suggests that there may be potential underlying issues with employee retention over the years.
 - While there's some fluctuation, a clear correlation between attrition rate, average salary, and average bonus is not immediately evident.
 - In 1994 there was high attrition (23%) with relatively lower average bonus compared to some years with 0% attrition.
 - There were some years with 0% attrition; they showed varying levels of average salary and bonus, indicating that high compensation alone may not guarantee low attrition.

RECOMMENDATIONS

- Conduct in-depth investigations into the reasons for high attrition periods. Employee surveys, exit interviews, and focus groups can provide valuable insights into employee motivations and concerns.
- Analyse the impact of factors beyond compensation on employee retention, such as career development opportunities, work-life balance, company culture.
- Ensure competitive salaries and bonuses, regularly reviewing and adjusting compensation packages as needed.

CONCLUSION

This analysis showed us a picture of compensation and its impact on employee retention at Lumina Tech. While the company has made progress in some areas, significant challenges remain.

Key Insights:

- **Gender Pay Gap:**
 - **Widespread Disparity:** The analysis reveals a persistent gender pay gap across departments and age groups, with men generally earning more than women.
- **Ethnicity Pay Gap:**
 - **Significant Disparity in the USA:** A significant ethnicity pay gap exists in the USA branch, requiring immediate attention.
- **Attrition Fluctuations:** Attrition rates have fluctuated significantly, indicating potential underlying issues with employee engagement and retention beyond compensation.
- **Regional Variations:** Compensation levels and pay gaps vary across regions, with the USA exhibiting the highest average compensation.

Recommendations:

- **Address Pay Equity:**
 - **Gender:**
 - **Empower Women:** Actively empower and encourage women to pursue higher-paying roles and challenge themselves to advance their careers.
 - **Conduct In-Depth Analysis:** Conduct in-depth analysis of pay gaps across departments and age groups, implement targeted interventions (e.g., salary adjustments, training) to address disparities.
 - **Ethnicity:**
 - **Thorough Investigation:** Conduct thorough investigations into the root causes of the ethnicity pay gap in the USA, implement bias training, and promote diversity initiatives.
- **Enhance Employee Retention:**

- **Investigate Attrition Drivers:** Conduct in-depth analysis of attrition causes through employee surveys, exit interviews, and focus groups.
- **Invest in Employee Engagement:** Implement strategies to improve employee engagement, such as career development programs, flexible work arrangements, and employee recognition programs.
- **Competitive Compensation:** Ensure competitive salaries and bonuses, regularly reviewing and adjusting compensation packages as needed.
- **Regional Considerations:**
 - **Develop Region-Specific Strategies:** Tailor compensation and benefits packages to address the cost of living and competitive market conditions in each region.
 - **Focus on Talent Acquisition:** Attract and retain top talent in regions with higher average compensation through competitive packages and attractive benefits.

By implementing these recommendations, Lumina Tech can create a more equitable and rewarding workplace for all employees. This will not only improve employee morale and retention but also enhance the company's reputation as an employer of choice and contribute to long-term success.