Workforce Equality Analysis Report

Introduction

The purpose of this analysis is to evaluate fairness across different factories and job roles using the Equality Score metric.
Equality Score ranges from –100 to +100, where:

- 0 = ideal (no inequality)
- Positive or negative deviations indicate potential inequality
- Scores beyond ±20 show strong signs of discrimination

To simplify analysis, scores were categorized into three groups:

- Fair (±10)
- Unfair (between ±11 and ±20)
- Highly Discriminative (beyond ±20)

This classification helps identify problem areas and prioritize HR action.

Data Processing & Classification

A new column, Equality Class, was created using an Excel formula to classify each job role's score.

Classification Logic

Equality Score Range	Class
-10 to +10	Fair
-20 to -11 or +11 to +20	Unfair

Equality Score Range	Class
Less than -20 or greater than +20	Highly Discriminative

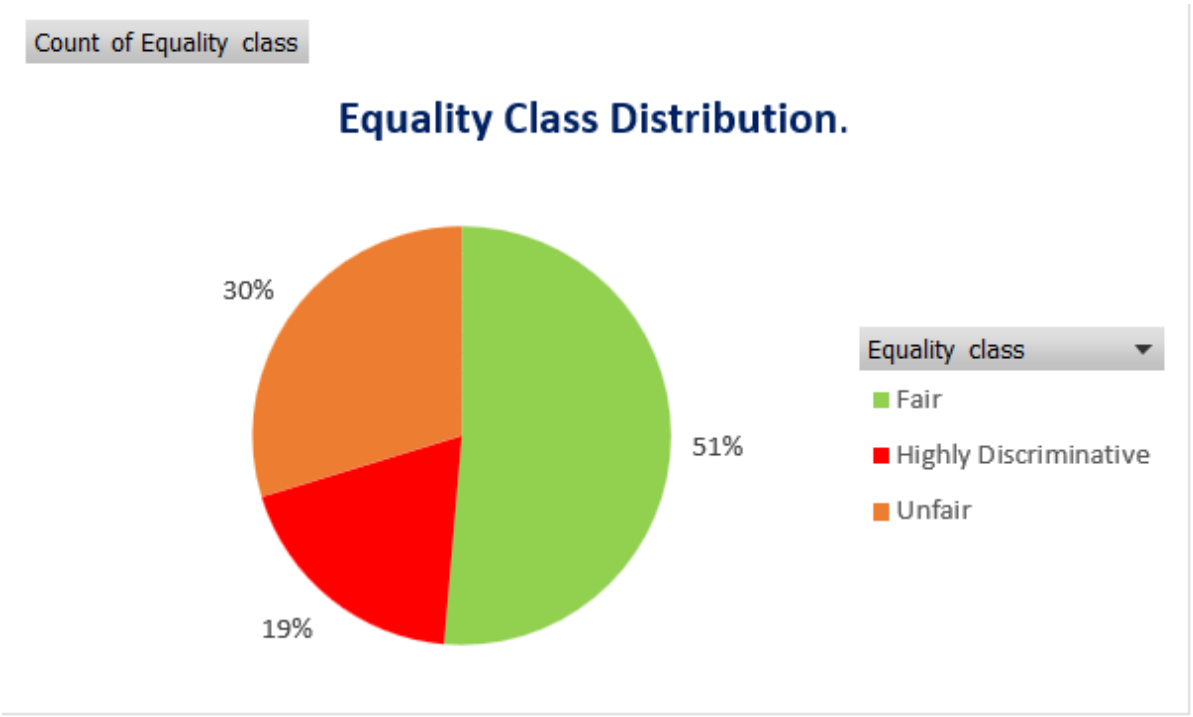
Visual Analysis

Equality Class Distribution (Pie Chart)

The pie chart shows the proportion of job roles in each category.
Key findings:

- Most job roles fall under the “Fair” category, indicating generally acceptable equality levels.
- A notable portion still falls under Unfair, which suggests moderate issues that require attention.
- A smaller but important number of roles are Highly Discriminative, showing severe inequality.

Average Equality Score by Factory (Bar Chart)



A bar chart was created to compare fairness across factories on average.

Key findings:

- Some factories show scores closer to zero, indicating balanced treatment.
- Factories like Shenzhen and Meiyo show more negative equality scores, signaling higher discrimination risk.
- Factories with slightly positive scores may have inconsistencies between job roles.

Insights & Interpretation

1. Fair roles dominate the dataset

This shows that most job positions maintain reasonable equality standards.

2. Unfair and Highly Discriminative roles still exist

Although fewer in number, these roles indicate systemic issues affecting employee fairness.

3. Certain factories show repeated negative scores

Factories with lower average scores (e.g., Meiyo, Shenzhen) may need targeted HR audits and policy revisions.

4. Inequality is not factory-wide but role-specific

Some job roles within a factory are fair while others show strong discrimination patterns.

Recommendations

1. Focus HR review on Highly Discriminative roles

These roles show the strongest red flags and should be investigated first.

2. Conduct factory-level equality audits

Factories with negative averages require deeper analysis to identify root causes.

3. Train managers on unbiased evaluation & compensation

Targeted training may improve fairness in decision-making.

4. Standardize policies across factories

Differences in Equality Scores hint at inconsistent processes across locations.

5. Re-evaluate job responsibilities and pay bands

Roles repeatedly classified as Unfair or Highly Discriminative may require restructuring.

Conclusion

The analysis reveals that while most roles maintain acceptable equality, several areas require immediate HR intervention. The dashboards and charts built in Excel provide a clear visual representation of fairness distribution and factory-level performance.
These insights can help improve workforce equality and strengthen organizational culture.