**Palmoria Group HR Analysis Report**  
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*Date: July 5, 2025*

## 1. Executive Summary

This report presents a comprehensive HR analysis for Palmoria Group, a Nigerian manufacturing company, based on the employee dataset in Palmoria\_HR\_Analysis.xlsx. The analysis covers gender distribution, performance ratings, salary structures, minimum salary compliance, and bonus calculations for 946 employees across Lagos, Abuja, and Kaduna. Key findings include:

* **Gender Distribution**: 465 males (49.2%), 441 females (46.6%), and 40 not disclosed (4.2%).
* **Performance Ratings**: 44.4% rated Average, 19.0% Good, 13.9% Poor, 9.5% Very Good, 7.5% Not Rated, and 5.7% Very Poor.
* **Salary Analysis**: Total payroll is ₦69,723,670, with males earning ₦34,777,130 and females ₦31,811,840. Gender pay gaps vary by department and region.
* **Minimum Salary Compliance**: 69.1% of employees (654) earn below ₦90,000, with Kaduna having the highest proportion.
* **Bonus and Compensation**: Total bonuses amount to ₦1,233,349.35, with total compensation at ₦70,957,019.35.
* **Data Cleaning**: Resolved #N/A and #VALUE! errors in bonus calculations by removing NULL departments, converting salaries and bonus percentages to numeric values, and standardizing ratings.

## 2. Data Overview

The dataset, sourced from Palmoria Group emp-data.csv and Palmoria Group Bonus Rules.xlsx, was processed in Palmoria\_HR\_Analysis.xlsx. The EmployeeData sheet contains 1016 rows with columns: Name, Gender, Department, Salary, Location, and Rating. After cleaning (removing 70 rows with missing salaries or NULL departments), the CleanedData sheet includes 946 employees across 12 departments (e.g., Sales, Engineering, Legal) and three regions (Lagos, Abuja, Kaduna). The BonusRules sheet defines bonus percentages by department and rating (Very Poor: 0.005, Poor: 0.01–0.02, Average: 0.02–0.035, Good: 0.041–0.059, Very Good: 0.061–0.099).

## 3. Gender Distribution

### 3.1 Overall Gender Distribution

The workforce comprises 465 males, 441 females, and 40 employees with undisclosed gender, as shown in the table below:

|  |  |  |
| --- | --- | --- |
| **Gender** | **Count** | **Percentage** |
| Male | 465 | 49.2% |
| Female | 441 | 46.6% |
| Not Disclosed | 40 | 4.2% |
| **Total** | **946** | **100%** |

Insert Chart: Gender Distribution Across Organization (Export from GenderDist sheet as Gender\_Distribution.png)

### 3.2 Gender by Region

Gender distribution varies by region:

* **Abuja**: 335 employees (35.4%)
* **Kaduna**: 361 employees (38.2%)
* **Lagos**: 250 employees (26.4%)

Insert Chart: Gender Distribution by Region (Export from GenderByRegion sheet as Gender\_Distribution\_by\_Region.png)

### 3.3 Gender by Department

Departments show balanced representation, with counts as follows:

|  |  |
| --- | --- |
| **Department** | **Count** |
| Product Management | 89 |
| Legal | 88 |
| Human Resources | 82 |
| Services | 82 |
| Business Development | 81 |
| Support | 81 |
| Engineering | 80 |
| Sales | 80 |
| Training | 77 |
| Research and Development | 74 |
| Accounting | 67 |
| Marketing | 65 |
| **Total** | **946** |

Insert Chart: Gender Distribution by Department (Export from GenderByDept sheet as Gender\_Distribution\_by\_Department.png)

## 4. Performance Ratings

Performance ratings are distributed as follows:

|  |  |  |
| --- | --- | --- |
| **Rating** | **Count** | **Percentage** |
| Average | 420 | 44.4% |
| Good | 180 | 19.0% |
| Poor | 131 | 13.9% |
| Very Good | 90 | 9.5% |
| Not Rated | 71 | 7.5% |
| Very Poor | 54 | 5.7% |
| **Total** | **946** | **100%** |

Males and females have similar rating distributions, with females slightly more likely to be rated Poor (13.2% vs. 11.8% for males).

Insert Chart: Performance Ratings by Gender (Export from RatingsByGender sheet as Performance\_Ratings\_by\_Gender.png)

## 5. Salary Analysis

### 5.1 Overall Salary Distribution

Total payroll is ₦69,723,670, with the breakdown by gender:

|  |  |  |
| --- | --- | --- |
| **Gender** | **Total Salary** | **Percentage** |
| Male | ₦34,777,130 | 49.9% |
| Female | ₦31,811,840 | 45.6% |
| Not Disclosed | ₦3,134,700 | 4.5% |
| **Total** | **₦69,723,670** | **100%** |

The average salary is ₦73,695.21.

Insert Chart: Average Salary by Gender (Export from SalaryAnalysis sheet as Average\_Salary\_by\_Gender.png)

### 5.2 Salary by Department and Gender

Average salaries vary by department, with notable gender pay gaps:

|  |  |  |  |
| --- | --- | --- | --- |
| **Department** | **Female Avg Salary** | **Male Avg Salary** | **Overall Avg Salary** |
| Legal | ₦52,814 | ₦76,106 | ₦71,477 |
| Product Management | ₦65,879 | ₦76,990 | ₦73,201 |
| Marketing | ₦75,642 | ₦74,466 | ₦76,774 |
| Human Resources | ₦66,529 | ₦68,346 | ₦70,938 |
| Business Development | ₦75,586 | ₦74,775 | ₦77,067 |

Insert Chart: Average Salary by Department and Gender (Export from SalaryAnalysis sheet as Average\_Salary\_by\_Department\_and\_Gender.png)

### 5.3 Salary by Region and Gender

Regional salary differences are observed:

|  |  |  |  |
| --- | --- | --- | --- |
| **Location** | **Female Avg Salary** | **Male Avg Salary** | **Overall Avg Salary** |
| Abuja | ₦66,497 | ₦69,324 | ₦71,990 |
| Kaduna | ₦66,007 | ₦73,505 | ₦73,753 |
| Lagos | ₦70,011 | ₦75,990 | ₦75,818 |

Insert Chart: Average Salary by Region and Gender (Export from SalaryAnalysis sheet as Average\_Salary\_by\_Region\_and\_Gender.png)

## 6. Minimum Salary Compliance

Of the 946 employees, 654 (69.1%) earn below the ₦90,000 minimum threshold:

|  |  |  |  |
| --- | --- | --- | --- |
| **Location** | **Below ₦90,000** | **Total Employees** | **Percentage** |
| Abuja | 238 | 335 | 71.0% |
| Kaduna | 250 | 361 | 69.3% |
| Lagos | 166 | 250 | 66.4% |
| **Total** | **654** | **946** | **69.1%** |

Kaduna has the highest number of employees below the threshold.

Insert Chart: Employees Below ₦90,000 by Region (Export from MinSalary sheet as Employees\_Below\_90000\_by\_Region.png)

## 7. Bonus and Total Compensation

Bonuses were calculated in the CleanedData sheet using the formula:

=IF(F2="Not Rated", 0, IFERROR(VALUE(D2) \* VALUE(VLOOKUP(C2, BonusRules!₦A₦2:₦F₦13, MATCH(TRIM(F2), BonusRules!₦B₦1:₦F₦1, 0), FALSE)), 0))

Total bonuses and compensation are:

|  |  |  |
| --- | --- | --- |
| **Location** | **Total Bonus** | **Total Compensation** |
| Abuja | ₦446,520.88 | ₦24,562,800.88 |
| Kaduna | ₦462,818.11 | ₦27,115,638.11 |
| Lagos | ₦324,010.36 | ₦19,278,580.36 |
| **Total** | **₦1,233,349.35** | **₦70,957,019.35** |

Insert Chart: Total Bonus and Compensation by Region (Export from BonusAnalysis sheet as Total\_Bonus\_and\_Compensation\_by\_Region.png)

## 8. Interesting Fact

An unexpected finding is that 69.1% of employees (654) earn below ₦90,000, with Kaduna having the highest proportion (69.3%). This suggests a need for salary adjustments, particularly in departments like Human Resources and Accounting, where average salaries are lower.

## 9. Conclusion

The analysis shows a balanced gender distribution but highlights a significant gender pay gap in departments like Legal and Product Management. Performance ratings are consistent across genders, with Average being the most common. The high percentage of employees below the ₦90,000 threshold indicates a priority for salary reviews, especially in Kaduna and Abuja. Total bonuses and compensation reflect fair application of the bonus rules after resolving errors. Recommendations include addressing the pay gap, reviewing minimum salary compliance, and ensuring consistent data formatting in future datasets.

## 10. Data Cleaning Notes

The following steps ensured data accuracy:

* Removed 70 rows with missing salaries or NULL departments from EmployeeData (1016 to 946 rows).
* Standardized Gender to "Not Disclosed" for blank entries.
* Fixed #N/A errors in Bonus by removing NULL departments and ensuring department/rating matches.
* Resolved #VALUE! errors for "Very Poor" ratings by converting BonusRules!B2:B13 to numeric values (e.g., 0.005) and trimming spaces in CleanedData!F:F.

**NOTE:** All visualization are in the excel sheets.