



IPSUM  
COMPANY

**Business Report**

***IPUSM COMPANY***

## **IPUSM COMPANY - HR Performance & Compensation Analysis Dashboard (2019- 2020)**

**PREPARED BY**

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## Title

IPUSM COMPANY - HR Performance & Compensation Analysis Dashboard  
(2019-2020)

## Context

IPUSM COMPANY sought to move beyond traditional, disconnected HR metrics to an integrated analysis linking employee performance with compensation practices. The goal was to create a strategic tool for ensuring pay equity, optimizing bonus allocations, and justifying promotion decisions with concrete data across the 2019-2020 period.

### Problem / Question

How can IPUSM COMPANY's HR and management objectively analyze the relationship between employee performance ratings and compensation adjustments to ensure fairness, identify discrepancies, and align rewards with actual contribution?

## Tools Used

- Power BI: For developing the interactive HR analytics dashboard.
- DAX: For calculating key metrics like compensation change %, performance-comparison ratios, and year-over-year changes.
- Power Query: For integrating and cleaning data from HRIS (Human Resources Information System), payroll, and performance review systems.

## Process Walk-through

1. Data Integration & Anonymization: Combined data from performance review scores, salary histories, and departmental budgets for 2019 and 2020. Used Power Query to clean and anonymize employee identities for privacy.
2. Data Modeling: Built a relational model connecting tables for Employees, Departments, Dates, and Performance Reviews. Established a many-to-one relationship between the fact table and dimension tables.
3. DAX Calculations:

- Compensation Growth % =  $\text{DIVIDE}([2020 \text{ Salary}] - [2019 \text{ Salary}], [2019 \text{ Salary}])$
  - Avg. Performance Rating (2019-2020) =  $\text{AVERAGE}(\text{Performance}[\text{Rating}])$
  - Performance-to-Compensation Ratio  
=  $\text{DIVIDE}([\text{Compensation Growth \%}], [\text{Performance Change}])$  (To identify misalignments)
  - Departmental Budget Utilization % =  $\text{DIVIDE}(\text{SUM}(\text{Salary}[\text{Salary}]), \text{Budget}[\text{Departmental Budget}])$
4. Visualization & Dashboard Design: Created views to compare performance ratings vs. salary changes, analyze trends by department, and track overall compensation distribution.

## Key Findings

- A strong overall correlation was found between high performance ratings and above-average compensation growth, validating the company's reward philosophy.
- However, the analysis revealed specific outliers: several high-performing employees (<5%) received minimal salary increases, posing a retention risk.
- Certain departments showed significantly higher budget utilization (>95%) without a corresponding top-tier performance output, indicating potential inefficiency.
- The average compensation growth from 2019 to 2020 was 4.5%, but top performers saw an average increase of 7.2%.

## Visuals with a Purpose

- Scatter Plot (Performance Rating vs. Compensation Growth %): The centerpiece visual to instantly spot outliers and correlations for individual employees.
- Departmental Tree Map: To show the size of departmental budgets and their utilization at a glance.
- Clustered Bar Chart (Avg. Salary Increase by Department): To compare compensation trends across the organization.
- KPIs Cards (Company-wide averages): For quick, high-level summary of key numbers (e.g., Avg. Performance Rating, Avg. Salary Increase).

## Main Takeaway

The dashboard transformed subjective compensation discussions into objective, data-driven conversations. It served as an early-warning system for retention risks by identifying undervalued high performers and provided clear evidence for equitable budget allocation and promotion decisions.

## What I Learned from this Case Study

- The sensitivity and importance of handling HR data ethically (anonymization, access control).
- How to create composite metrics (like Performance-to-Compensation Ratio) that simplify complex relationships into actionable insights.
- The significant impact that visualizing outliers can have on strategic business decisions, particularly in sensitive areas like compensation.

## Reflection and Next Steps

- Reflection: The project successfully highlighted pay-for-performance alignment and discrepancies. A limitation was the lack of granular data on bonuses and stock options, which are part of total compensation.
- Next Steps:
  1. Incorporate bonus and equity data for a "Total Compensation" view.
  2. Add demographic data (with strict privacy controls) to conduct equity analyses for gender, ethnicity, etc.
  3. Develop a predictive model to flag future flight risks based on performance-compensation misalignment.

## Invite Feedback

I'm keen to hear your thoughts!

- From an HR perspective, what is the most valuable insight here?
- How could the visualizations be improved to make the findings more compelling for management?
- What other HR metrics would be crucial to include in a V2.0 of this dashboard?



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## **Business Report**

*Cover Page*

*Salary Report*

*Salary & Bonuses Distribution*

*Bonus Report*

*Employees Performance Detailed*

*Employees Performance Analysis*



Cover Page

**Salary Report**

Salary & Bonuses Distribution

Bonus Report

Employees Performance Detailed

Employees Performance Analysis

**1,249K ج.م.**

Sum of Salary

**13K ج.م.**

Average Of Salaries

**35K ج.م.**

Highest Salary

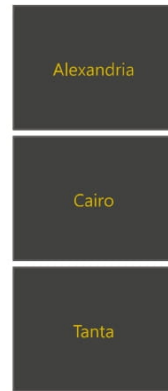
**1K ج.م.**

Lowest Salary

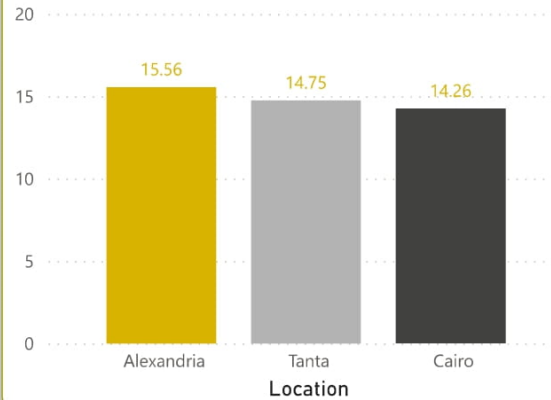
**94**

Number Of Emplpyees

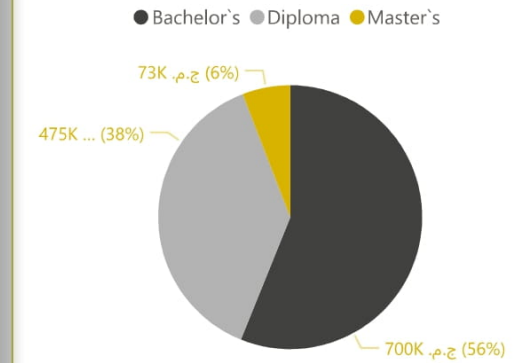
#### Locations



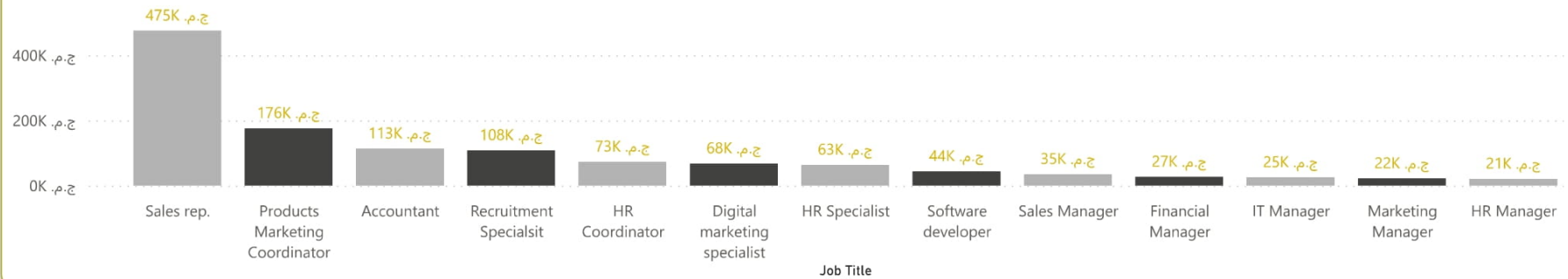
#### Average of Experience Years Per Locations



#### Total Salaries By Academic Qualfication



#### Total & Average of Salaries Per Job Title







Cover Page

Salary Report

Salary & Bonuses...

Bonus Report

Employees Performance Detailed

Employees Performance Analysis

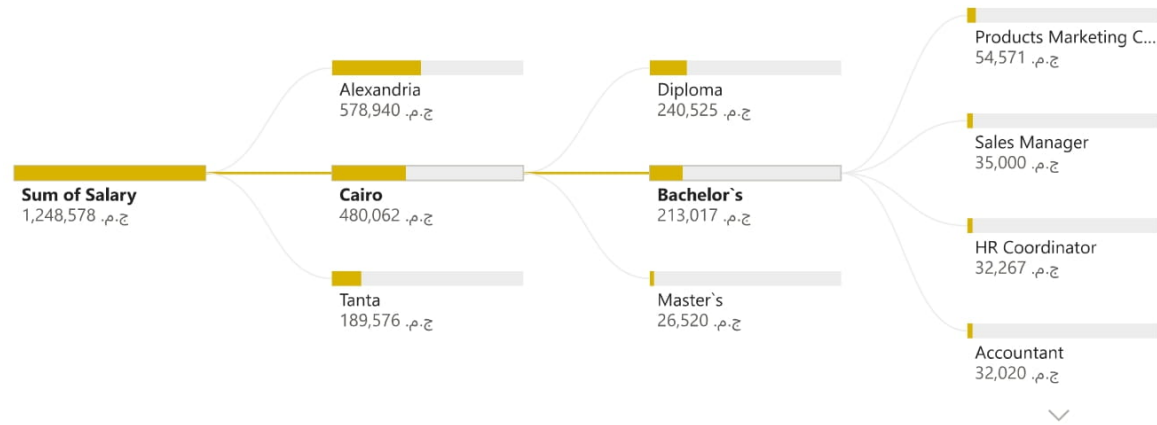
Location

Cairo

Acadmeic Qualifi... x

Bachelor`s

Job Title x



Total Bonus and Average Of Salary by Location and Job Title

Cairo				Alexandria				Tanta			
Sales rep. 48K م.ج				Sales rep. 43K م.ج				Accountant 15K ... Sales rep. 13...			
Recruitment Specialsit 1...				Recruitment Special...				Software... Digi...			
HR Speciali...				Products Marketing ...				Accountant 8K م.ج			
Sales Mana...				HR M... Marke...				HR Specialist 3K...			
				HR Coordinato...				IT Manage...			
				HR Special...							



[Cover Page](#)[Salary Report](#)[Salary & Bonuses Distribution](#)[Bonus Report](#)[Employees Performance Detailed](#)[Employees Performance Analysis](#)**1,514K ج.م.**

Sum of Salary After Bonus

**265K ج.م.**

Total Bonus

**33**

No. Of Employees Of Full Bonus

**40**

No. Of Employees Of Half Bonus

**21**

No. Of Employees Of No Bonus

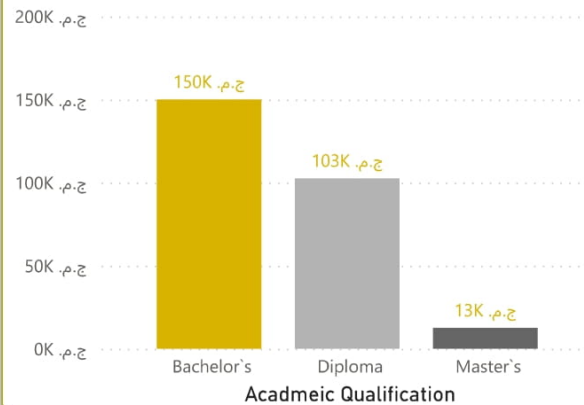
#### Locations

Alexandria

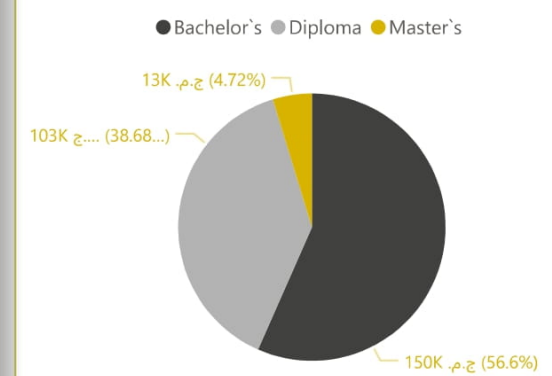
Cairo

Tanta

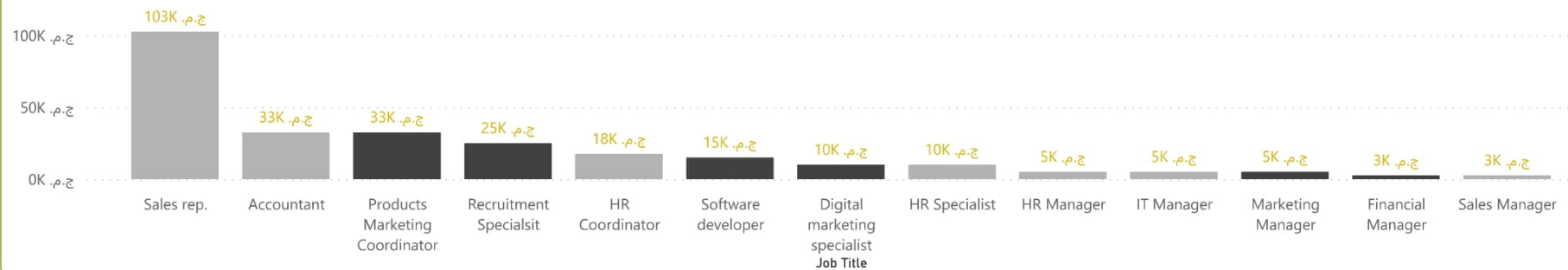
#### Average of Experience Years Per Bonuses



#### Total Bonuses By Academic Qualification



#### Total & Bonus Per Job Title & Number Of Employees





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Cover Page

Salary Report

Salary & Bonuses Distribution

Bonus Report

Employees Performan...

Employees Performance Analysis

Location	Average of PER 2019	Average of PER 2020	Average of Total Average	Average of Delta
<b>Cairo</b>	<b>82%</b>	<b>76.69%</b>	<b>79.41%</b>	<b>-5.46%</b>
+ أحمد سمير	89%	52.00%	→ 70.50%	-37.00%
+ هند بهاء	89%	69.50%	→ 79.25%	-19.50%
+ أحمد فريد	87%	83.00%	↑ 85.00%	-4.00%
+ الاء أحمد	87%	69.00%	→ 78.00%	-18.00%
+ مي محمد ابراهيم	87%	87.00%	↑ 87.00%	0.00%
+ نور يحيي	87%	94.00%	↑ 90.50%	7.00%
+ فادي نور	86%	47.00%	↓ 66.50%	-39.00%
+ كامل عصام	86%	94.00%	↑ 90.00%	8.00%
+ محمد أحمد	84%	91.00%	↑ 87.50%	7.00%
+ محمد راضي	84%	84.00%	↑ 84.00%	0.00%
+ مهاب أسامة	84%	69.00%	→ 76.50%	-15.00%
+ ندي إبراهيم	84%	91.50%	↑ 87.50%	8.00%
+ عبد الرحمن محمد	82%	81.00%	↑ 81.50%	-1.00%
+ محمد علاء	82%	57.00%	↓ 69.50%	-25.00%
+ يحيي هادي	82%	69.00%	→ 75.50%	-13.00%
+ نورهان أحمد	81%	82.00%	↑ 81.50%	1.00%
+ تغريد يحيي	80%	54.00%	↓ 67.00%	-26.00%
+ حازم أحمد	80%	59.00%	↓ 69.50%	-21.00%
+ منه أحمد	80%	90.00%	↑ 85.00%	10.00%
+	80%	72.00%	→ 76.00%	-8.00%
<b>Total</b>	<b>82%</b>	<b>70.72%</b>	<b>76.37%</b>	<b>-11.29%</b>



Cover Page

Salary Report

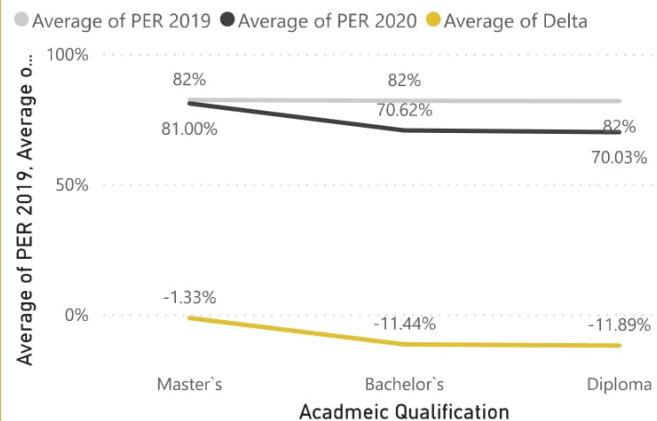
Salary & Bonuses Distribution

Bonus Report

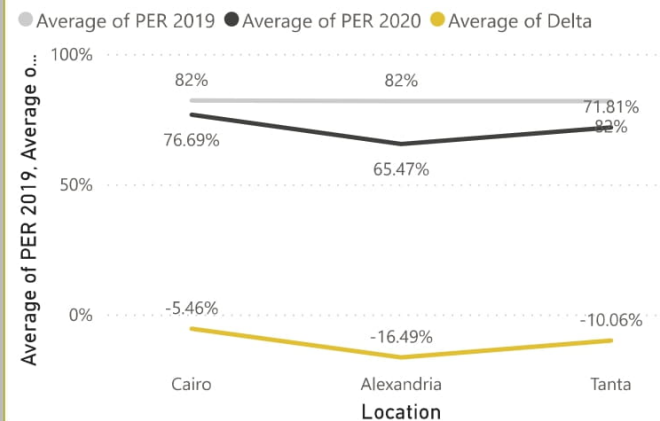
Employees Performance Detailed

Employees Performance

Average of PER 2019, Average of PER 2020 and Average of Delta by Acadmeic Qualification



Average of PER 2019, Average of PER 2020 and Average of Delta by Location



Average of PER 2019, Average of PER 2020 and Average of Delta by Job Title

