

PROJECT PORTFOLIO

HR MANAGEMENT REPORT

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*Image Source: www.payrollpartners.com

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Introduction to the dataset

The objective of this Report is to evaluate the workforce and salaries in a mid-sized company.

In order to realize this objective, a sample database called „HR_project” was created, containing 7 different tables and 128 rows in total. The database takes after the open-source database SQL Sample Database (sqltutorial.org/sql-sample-database/) with some small modifications in employees’ personal data as initial database included only persons with employment length of 20 years or more. To make it more up to date few positions were modified as to include some junior and mid workforce as well.

The structure of the database „HR_project” presents as follows:

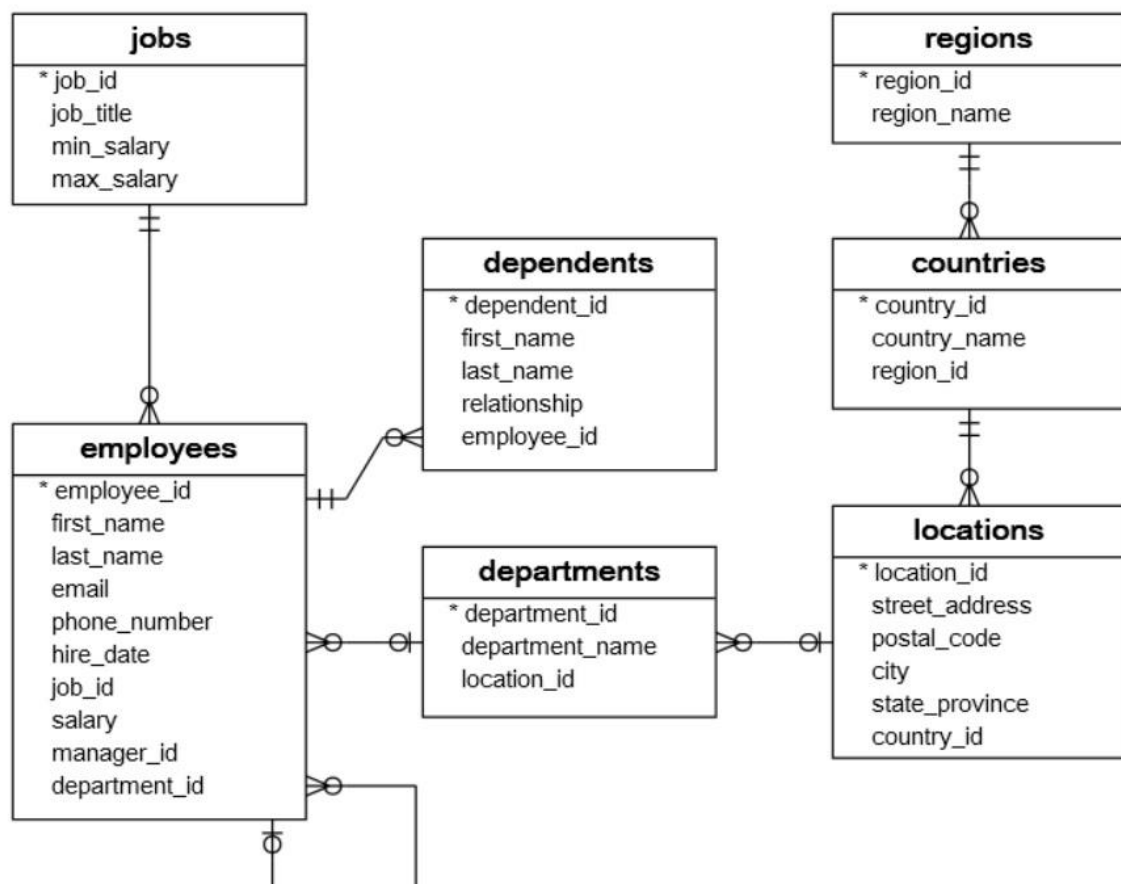


Image 1. HP_project database scheme

*Image Source: sqltutorial.org/sql-sample-database

The seven tables creating database HR_project are :

- The **regions** table: stores the data of regions such as Asia, Europe, America, and the Middle East and Africa. The countries are grouped into regions.
- The **countries** table: stores the data of countries where the company is doing business.
- The **locations** table: stores the location of the departments of the company.

- The **departments** table: stores department data.
- The **employees** table: stores the personal data of employees.
- The **jobs** table: stores the job data including job title and salary range.
- The **dependents** table: stores the employee's dependents.

These seven tables that are related contain key columns' names such as:

- **employee_id** - unique employee identification number in the company.
- **hire_date** – the date when an employee was hired.
- **salary** – actual salary earned by an employee.
- **job_id** - unique job title identification number in the company.
- **job_title** – job title held by an employee.
- **min_salary** - also called "salary floor" as it indicates lowest possible salary range per job title.
- **max_salary** - also called "salary ceiling" as it indicates highest possible salary range per job title.
- **dependent_id** - unique dependent identification number in the company.
- **relationship** – relationship between the dependent and the employee.
- **department_id** - unique department identification number in the company.
- **department_name** – name of the particular department within company.
- **location_id** - unique location identification number in the company.
- **city** – city in which particular employment takes place.
- **country_id** - unique country identification number in the company.
- **country_name** – name of the country where the city comes from.
- **region_id** - unique region identification number in the company.
- **region_name** – name of the region where the country comes from.

After data collection, all the data was imported into MySQL (MySQL Workbench 8.0, last updated: November 2022) and there further processed using advanced SQL queries to give more insight into problem statement.

The next step of the analysis included creation of HR Management Report via Google Sheets. These enabled re-processing of the data and further displaying them as compelling visualizations in the form of Google Dashboard. As a result, important insights could be spotted as well as a monthly template for HR & Management analysis was created.

Root Cause Analysis Process

The Analysis aimed to play an important role in HR data evaluation, including the comprehensive assessment of the company's workforce and workforce salaries. To ensure an effect, the following questions were asked out of the data:

- What is the distribution of employees and employees' salaries per region, country, city, department, job role?
- How many job roles are there in the company and what are salaries linked to them?
- Which 10. employees have maximum and minimum salaries in the company?
- Which employees are best paid in their departments and what are their job roles?
- Who are the employees who are paid higher salary than an average salary per region?
- Is the seniority (length of being hired) in the company correlated with higher salary average?
- Is the data complete (no missing cells) and errorproof?
- Who are family dependants and what is their relationship with company's employees?

In order to answer these questions and for the purpose of this Analysis, some assumptions were made. The salaries are believed to be monthly gross salaries. Since the company headquarters are located in the USA, the currency is set to be USD. The seniority of employment is calculated according to the given key: junior positions 0-2 years of employment, mid positions 3-5 years of employment, senior positions 6+ years of employment.

Data Processing in MySQL Workbench

a) Creation of the database

```
CREATE DATABASE HR_project;  
USE HR_project;
```

b) Creation of tables and initial inserts

Tables' creation and insights will not be analysed here as the initial source of the data comes from the open-source database SQL Sample Database (sqltutorial.org/sql-sample-database/), with minimum changes made that were mentioned in the „Introduction to the dataset” part of the Report.

Thus it feels wrong to display someone else's work as it could be misunderstood as my own creation. At the same time, the data might be seen under the link given above.

c) Modification of tables and initial inserts

This modification was made as there is a goal later to create one metatable containing all information from all seven tables and the columns „first_name” and „last_name” existed already in the employees table, therefore not to create data collision it was chosen to overwrite the columns' names in the dependents table.

```
ALTER TABLE dependents  
RENAME COLUMN first_name to first_name_d,  
RENAME COLUMN last_name to last_name_d;
```

d) Information withdrawal

Table 1. Creating View: regions_countries_locations – SQL CREATE VIEW

Presentation of company's locations worldwide, as per region, country, city, combined in a „view” – virtual table.

```
CREATE VIEW regions_countries_locations AS  
SELECT regions.region_id, region_name, countries.country_id, country_name, location_id,  
state_province, city, postal_code, street_address  
FROM countries  
RIGHT JOIN locations ON locations.country_id = countries.country_id  
RIGHT JOIN regions ON regions.region_id = countries.region_id  
WHERE location_id IS NOT NULL  
ORDER BY region_id;  
  
SELECT * FROM regions_countries_locations;
```

Table 2. Getting the number of company employees per region – SQL JOIN, GROUP_BY

The table presents number of employees per region. It might be spotted that company operates in two regions: Americas and Europe.

```
SELECT
region_name,
COUNT(*) AS number_of_employees
FROM departments d
JOIN regions_countries_locations rcd ON rcd.location_id = d.location_id
JOIN employees e ON e.department_id = d.department_id
GROUP BY region_name
ORDER BY number_of_employees DESC;
```

Table 3. Getting the number of company employees per country & city – SQL JOIN, GROUP_BY

The table gives the details of total number of staff in the company per city and country.

```
SELECT
country_name,
city,
COUNT(*) AS number_of_employees
FROM departments d
JOIN regions_countries_locations rcd ON rcd.location_id = d.location_id
JOIN employees e ON e.department_id = d.department_id
GROUP BY country_name, city
ORDER BY number_of_employees DESC;
```

Table 4. Getting the number of company employees per city, with indication of departments that are located in this city – SQL GROUP_CONCAT, JOIN, GROUP_BY

This table is an extension of the previous table and additionally it provides the information about the company departments that are located in relevant city.

```
SELECT
country_name, country_id, city,
GROUP_CONCAT(DISTINCT department_name) AS departments,
COUNT(*) AS number_of_employees
FROM departments d
JOIN regions_countries_locations rcd ON rcd.location_id = d.location_id
JOIN employees e ON e.department_id = d.department_id
GROUP BY country_name, country_id, city
ORDER BY number_of_employees DESC;
```

Table 5. Getting the number of employees in Seattle, the biggest company branch in terms of workforce, with the details per department – SQL JOIN, GROUP_BY, HAVING

The table provides the details of number employees working in Seattle per department.

```
SELECT
```

```

city,
d.department_name,
COUNT(*) AS employees_number
FROM departments d
JOIN regions_countries_locations rcd ON rcd.location_id = d.location_id
JOIN employees e ON e.department_id = d.department_id
GROUP BY city, department_name
HAVING city IN ('Seattle')
ORDER BY employees_number DESC;

```

Table 6. Creating View: departments_employees_jobs – SQL CREATE VIEW, JOIN

The virtual table departments_employees_jobs summarizes all the information provided separately by the tables departments, employees, jobs. Therefore it presents all of the major employee-related details.

```

CREATE VIEW departments_employees_jobs AS
SELECT employee_id, first_name, last_name, email, phone_number, hire_date, j.job_id, salary,
manager_id, d.department_id, job_title, min_salary, max_salary, department_name, location_id
FROM employees e
JOIN jobs j ON j.job_id = e.job_id
JOIN departments d ON d.department_id = e.department_id
ORDER BY employee_id;

```

```

SELECT * FROM departments_employees_jobs;

```

Table 7. Getting the total number of the job roles in the company

The table presents the total number of job roles in the company.

```

SELECT COUNT(DISTINCT job_title) FROM departments_employees_jobs;

```

Table 8. Listing the job roles in the company together with related employment number per job role

The table lists all job roles in the company and additionally gives the information about the number of persons employed at these positions.

```

SELECT
job_title,
COUNT(*) AS total_employees
FROM departments_employees_jobs
GROUP BY job_title
ORDER BY total_employees DESC;

```


Table 9. and 10. Getting the overview of 10 minimum/maximum salaries per job role in the company – SQL CASE STATEMENT, GROUP_BY

This table allows to assess 10. job roles with minimum salaries paid in the company; at the same time it provides the information about an average salary per position and whether the minimum salary fits in the salary range for the position according to the company guidelines ('salary floor' vs 'salary ceiling').

```
SELECT
job_title,
ROUND(MIN(salary),0) AS MIN_salary,
ROUND(MAX(salary),0) AS MAX_salary,
ROUND(AVG(salary),0) AS AVG_salary,
min_salary AS salary_floor,
max_salary AS salary_ceiling,
CASE
WHEN (MIN(salary) BETWEEN min_salary and max_salary AND MAX(salary) BETWEEN min_salary
and max_salary) = 1 THEN 'yes'
ELSE 'no'
END AS is_in_range
FROM departments_employees_jobs
GROUP BY job_title, salary_floor, salary_ceiling
ORDER BY MIN(salary) ASC
LIMIT 10;
```

This table allows to assess 10 job roles with maximum salaries paid in the company; at the same time it provides the information about an average salary per position and whether the maximum salary fits in the salary range for the position according to the company guidelines ('salary floor' vs 'salary ceiling').

```
SELECT
job_title,
ROUND(MIN(salary),0) AS MIN_salary,
ROUND(MAX(salary),0) AS MAX_salary,
ROUND(AVG(salary),0) AS AVG_salary,
min_salary AS salary_floor,
max_salary AS salary_ceiling,
CASE
WHEN (MIN(salary) BETWEEN min_salary and max_salary AND MAX(salary) BETWEEN min_salary
and max_salary ) = 1 THEN 'yes'
ELSE 'no'
END AS is_in_range
FROM departments_employees_jobs
GROUP BY job_title, salary_floor, salary_ceiling
ORDER BY MAX(salary) DESC
LIMIT 10;
```

Table 11. Getting the payroll details per department – SQL Window Functions

The table presents an average salary per department as well as total payroll per department. Additional columns were added: the total company payroll, count of staff per department, total count of staff per company.

```
SELECT
DISTINCT department_id,
department_name,
ROUND(AVG(salary) OVER (PARTITION BY department_name),0) AS AVG_salary_per_dept,
ROUND(SUM(salary) OVER (PARTITION BY department_name),0) AS SUM_of_salaries_per_dept,
ROUND(SUM(salary) OVER(),0) AS total_payroll,
COUNT(*) OVER(PARTITION BY department_name) as COUNT_of_staff_per_dept,
COUNT(*) OVER() AS total_staff
FROM departments_employees_jobs
ORDER BY department_id;
```

Table 12. Listing 10. best paid employees in the company – SQL Windows Functions, RANK

The table lists 10. best paid employees in the company according to their monthly salary. Details given per person include employee ID, first and last name, department where they work, their monthly salary, rank of the person per department according to their salary level, rank of the person in the company according to their salary level.

```
SELECT
employee_id,
first_name,
last_name,
department_name,
salary,
RANK() OVER(PARTITION BY department_name ORDER BY salary DESC) AS salary_department_rank,
RANK() OVER(ORDER BY salary DESC) AS salary_company_rank
FROM departments_employees_jobs
ORDER BY salary_company_rank
LIMIT 10;
```

Table 13. and 14. Listing best paid employee per department in the company – SQL Windows Functions, RANK

This table gives the list of employees with the highest salary per department.

The details include information about an employee ID, first and last name, department where they work, monthly salary, salary range per job role according to company guidelines ('salary floor' and 'salary ceiling'), rank in the department salary ranking (1), rank in the company salary ranking.

```
SELECT
COUNT(DISTINCT department_name) AS number_of_depts
FROM departments_employees_jobs;
```

```

SELECT
employee_id,
first_name,
last_name,
department_name,
salary,
min_salary AS salary_floor,
max_salary AS salary_ceiling,
RANK() OVER(PARTITION BY department_name ORDER BY salary DESC) AS salary_department_rank,
RANK() OVER(ORDER BY salary DESC) AS salary_company_rank
FROM departments_employees_jobs
ORDER BY salary_department_rank
LIMIT 11;

```

Table 15. and 16. Calculation of employee seniority and relevant salaries per seniority – CREATE VIEW, CASE statement, DATEDIFF(), CURDATE(), JOIN, GROUP_BY

The first table concentrates on creation of seniority range according to the length of employment in the company: junior 0-2 years, mid 3-5 years, senior over 5 years of employment.

The second table gives the details of an average salary as per seniority rule and answers the question whether employees with higher seniority in general have higher salary levels. Additionally, the table summarizes how many juniors, mids and seniors are there in the company.

```

CREATE VIEW employee_seniority AS
SELECT
employee_id,
first_name,
Last_name,
hire_date,
ROUND(DATEDIFF(CURDATE(), hire_date)/365,0) AS years_worked,
CASE
WHEN ROUND(DATEDIFF(CURDATE(), hire_date)/365,0) BETWEEN 0 AND 2 THEN 'junior'
WHEN ROUND(DATEDIFF(CURDATE(), hire_date)/365,0) BETWEEN 3 AND 5 THEN 'mid'
WHEN ROUND(DATEDIFF(CURDATE(), hire_date)/365,0) > 5 THEN 'senior'
END AS seniority
FROM departments_employees_jobs;

SELECT
seniority,
ROUND(AVG(salary),0) AS avg_salary,
COUNT(*)
FROM employee_seniority es
JOIN departments_employees_jobs dej ON dej.employee_id = es.employee_id
GROUP BY seniority
ORDER BY avg_salary DESC;

```

Table 17. Summary of payroll in the company per region

The table summarizes the payroll per two company regions: Europe and Americas. Additionally, the information about count of staff per region and average salary per region are given.

```
SELECT
region_name,
ROUND(SUM(salary),0) AS salaries_total,
COUNT(employee_id) AS total_staff,
ROUND(SUM(salary)/COUNT(employee_id),0) AS avg_salary_per_employee
FROM departments_employees_jobs dej
JOIN regions_countries_locations rcl ON rcl.location_id = dej.location_id
GROUP BY region_name;
```

Table 18.-23. Listing employees who have higher salaries than an average per region: Europe and Americas – SQL Subquery example, CREATE VIEW, JOIN, GROUP_BY, HAVING

Firstly, the following tables present the details of the employees having salary higher than their region's average in Americas and the total number of such employees.

```
CREATE VIEW salary_higher_than_average_Americas AS
SELECT
employee_id,
first_name,
last_name,
salary,
region_name
FROM departments_employees_jobs dej
JOIN regions_countries_locations rcl ON rcl.location_id = dej.location_id
WHERE region_name = 'Americas'
AND
salary > (
SELECT
ROUND(SUM(salary)/COUNT(employee_id),0) AS avg_salary_per_employee
FROM departments_employees_jobs dej
JOIN regions_countries_locations rcl ON rcl.location_id = dej.location_id
GROUP BY region_name
HAVING region_name = 'Americas')
ORDER BY employee_id;
```

```
SELECT * FROM salary_higher_than_average_Americas;
```

```
SELECT COUNT(*) FROM salary_higher_than_average_Americas;
```

Secondly, the following tables present the details of the employees having salary higher than their region's average in Europe and the total number of such employees.

```

CREATE VIEW salary_higher_than_average_Europe AS
SELECT
employee_id,
first_name,
last_name,
salary,
region_name
FROM departments_employees_jobs dej
JOIN regions_countries_locations rcl ON rcl.location_id = dej.location_id
WHERE region_name = 'Europe'
AND
salary > (
SELECT
ROUND(SUM(salary)/COUNT(employee_id),0) AS avg_salary_per_employee
FROM departments_employees_jobs dej
JOIN regions_countries_locations rcl ON rcl.location_id = dej.location_id
GROUP BY region_name
HAVING region_name = 'Europe')
ORDER BY employee_id;

```

```
SELECT * FROM salary_higher_than_average_Europe;
```

```
SELECT COUNT(*) FROM salary_higher_than_average_Europe;
```

Table 24. Creation of a metatable that summarizes all the information coming from the dataset for the purpose of further processing it in Google Sheets and creating a Google Dashboard.

The table is created by linking two existing views regions_countries_locations and departments_employees_jobs with the table dependents. This table is later exported into csv file for further processing.

```

SELECT *
FROM departments_employees_jobs dej
LEFT JOIN regions_countries_locations rcl ON rcl.location_id = dej.location_id
LEFT JOIN dependents d ON d.employee_id = dej.employee_id;

```

Table 25. Checking for missing values in the dependents table.

After creation of the metatable it was reported that some NULL values were spotted for the columns coming from the dependents table. Therefore it was intended to check whether the NULL values were automatically allocated for non-relevant rows, or were there any missing values in the dependents table in the first place.

```
SELECT * FROM dependents;
```

```
SELECT * FROM dependents
```

```
WHERE dependent_id IS NULL OR  
first_name_d IS NULL OR  
last_name_d IS NULL OR  
relationship IS NULL;
```

Insights from the dataset – MySQL Workbench

Key insights from the dataset:

- The company operates in two regions, namely Europe and North America, and employs 40 people in total.
- The vast majority of workforce comes from America (32), with as many as 18 people located in Seattle, USA. Other cities include South San Francisco (7) and Southlake (5) in the USA and Toronto (2) in Canada.
- In Europe the company has branches in United Kingdom and Germany. UK employs 7 people in total (Oxford 6, London 1) and in Germany there is 1 employee operating from Munich.
- As for the departments, most of them are located in the USA: Accounting, Administration, Executive, Finance, Purchasing, Shipping and IT. Marketing department operates from Canada, Public Relations from Germany, while Sales and HR may be found in the United Kingdom.
- The departments with highest number of staff include: Purchasing (6), Finance (6), Shipping (7) and Sales (6).
- There is a total of 19 job roles in the company.
- Listing of the job roles and workforce numbers: Programmer, Accountant, Purchasing Clerk (5 people each), Stock Manager, Sales Representative (4 people each), Sales Manager, Shipping Clerk, Administration Vice President (2 people each). Rest of titles include one person per job role in the company: Company President, Marketing Manager, Accounting Manager, Finance Manager, Purchasing Manager, Stock Clerk, Administration Assistant, Marketing Representative, HR Representative, Public Relations Representative, Public Accountant.
- The total monthly company payroll equals to 316.400.
- 5 company departments with the highest payroll are respectively: Executive (58.000), Sales (57.700), Finance (51.600), Shipping (38.200) and IT (28.800).
- The rest of the departments payroll presents as follows: Purchasing (24.900), Accounting (20.300), Marketing (16.000), PR (10.000), HR (6.500), Administration (4.400).
- Considering average salaries, the highest salary in the company may be earned in the Executive department (AVG 19.333), Accounting department (AVG 10.150), PR (AVG 10.000), Sales (AVG 9.617), Finance (AVG 8.600).
- Again considering average salaries, the lowest salaries should be earned in the Purchasing department (AVG 4.150), Administration (AVG 4.400), Shipping (AVG 5.457), IT (AVG 5.760).
- Looking at salaries from the perspective of regional split, average salaries in Europe exceeded those in America (9.275 vs 7.569).
- At the same time, in America there were 15 people which salaries turned out to be higher than an average salary for the region, while in Europe there were just 3 persons which salaries

turned out to be higher than an average salary for the region. This indicates that the salary range is wider in America, than it is in Europe.

- 5 best paid jobs in the company were managing jobs and included: Company President (24.000), Administration Vice President (17.000), Sales Manager (14.000), Marketing Manager (13.000), Finance Manager (12.000), Accounting Manager (12.000).
- 5 lowest paid jobs in the company included: Purchasing Clerk (2.500), Stock Clerk (2.700), Marketing Representative (3.000), Shipping Clerk (3.900), Programmer (4.200).
- After conducting a check of employee actual salaries vs salaries range according to the company guidelines it was noted that no salary exceeded the maximum salary range given per job role. However, there were two situations in which the actual salary of an employee was lower than the minimum salary range given per their job role. These two cases should be further analysed as for the reasons behind them as well as whether adjustments in the salaries of the employees should be made. The positions involved included Marketing Representative and Stock Manager.
- Comparing an average salaries in terms of seniority of employment, it was noted that the employees who have worked longer in the company tended to earn more than those with shorter seniority. Average salary for senior worker in the company equalled to 8.877, while it was 5.529 for mid position and 3.800 per junior position. That should give a healthy attitude to seniority of employment, given the assumption that employees who work in the company longer have more relevant work experience and capability.
- In terms of workforce demography, it would be recommended that more junior employees were recruited. Currently in the company there are 30 seniors, 7 mids and only 3 juniors.

Major SQL statements, functions, managing database objects and constraints used:

| | |
|---|--------------------------|
| • | SQL CREATE DATABASE |
| • | SQL CREATE TABLE |
| • | SQL INSERT INTO |
| • | SQL ALTER TABLE |
| • | SQL SELECT |
| • | SQL DISTINCT |
| • | SQL LIMIT |
| • | SQL COMPARISON OPERATORS |
| • | SQL LOGICAL OPERATORS |
| • | SQL Alias |
| • | SQL JOIN |
| • | SQL LEFT JOIN |
| • | SQL GROUP BY |
| • | SQL ORDER BY |
| • | SQL WHERE |
| • | SQL HAVING |
| • | SQL CREATE VIEW |
| • | SQL AGGREGATE FUNCTIONS |
| • | SQL CASE |
| • | SQL IS NULL |
| • | SQL GROUP_CONCAT |
| • | SQL WINDOW FUNCTIONS |
| • | SQL RANK() |
| • | SQL PARTITION BY |
| • | SQL DATEDIFF() |
| • | SQL CURDATE() |
| • | SQL SUBQUERY |
| • | SQL CORRELATED SUBQUERY |

Data Processing in Google Sheets & Google Dashboard

Creation of the Google Sheet and renaming it to “Google Sheets HR Project”

Creation of the tab “Raw_data” and checking for missing values

Raw_data is the tab where the metadata table extracted from MySQL was copy pasted.

In this tab, conditional formatting took place to highlight all cell values that are NULL (empty, no value). It was reported that 59 cells were marked red, which indicates NULL values.

Further on the action was taken to understand the origin of NULL values.

It was spotted that the missing cells in columns “phone_number” and “manager_id” were data that should be filled after the consultation.

It was also assumed that the missing cells in columns “dependent_id”, “first_name_d”, “last_name_d”, “relationship” and “employee_id” (at the end of the table) were created automatically when the metatable was formed, as not each employee had had a dependent. For such employees who did not have a dependent, empty cells with NULL values were allocated in non-relevant columns.

Creation of the tab “Copied_data” and splitting missing values according to the type

Copied_data tab was chosen to be the tab based on which pivot tables for the dashboard will be later formed.

For the sake of transparency and reliability it was assumed that NULL positions will be corrected before the data will be passed to create pivot tables and charts. For these reason IF() function was used when coping the data from the Raw_data tab.

For the columns A-X (all columns without columns linked to the dependents) the following formula was used:

```
=IF(Raw_data!A1="NULL","missing data",Raw_data!A1)
```

The formula copied value by value from the Raw_data tab, unless there was a NULL value; in such case a “missing data” would overwrite a NULL value.

For the columns Y-AC (columns linked to the dependents) the following formula was used:

```
=IF(Raw_data!Y1="NULL","does not apply",Raw_data!Y1)
```

The formula copied value by value from the Raw_data tab, unless there was a NULL value; in such case a “does not apply” would overwrite a NULL value.

In this tab also conditional formatting was used to highlight NULL-related values. The cells would turn orange if “missing data” was a cell value. This way it should bring attention of the HR employee that this is the information that needs correction.

Creation of the Google Sheets Dashboard in the tab “Dashboard”

The final goal of processing data in Google sheets was to establish a dynamic Dashboard. For this sake a tab Dashboard was introduced and filled with pivot tables and charts linked to the Copied_data tab. As a result, crucial data was presented in the easiest to evaluate and most efficient way.

Moreover, the Dashboard serves a purpose of the ready to access template for the future periods. It is just needed to refill Raw_data tab with current data and the Dashboard tab will reload itself instantly.

The Dashboard details will be presented in the next two chapters of this report.

[Google Sheets Dashboard link](#)

[Due to the long-term Google Sheets error geocharts are not displaying after publishing on the web as they should]

Visualizations – Google Sheet HR Management Report

Part One: Workforce Overview

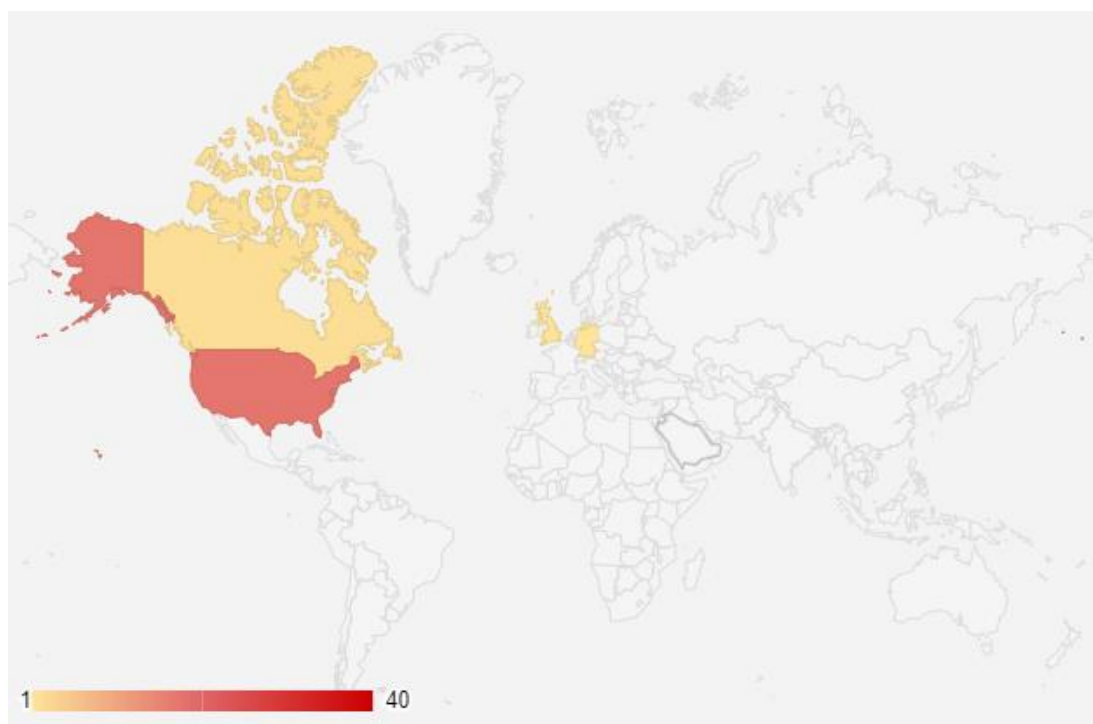
Employees count per region (table)

| region_id | region_name | | |
|-------------|-------------|--------|-------------|
| | Americas | Europe | Grand Total |
| 1 | | 8 | 8 |
| 2 | 32 | | 32 |
| <hr/> | | | |
| Grand Total | 32 | 8 | 40 |

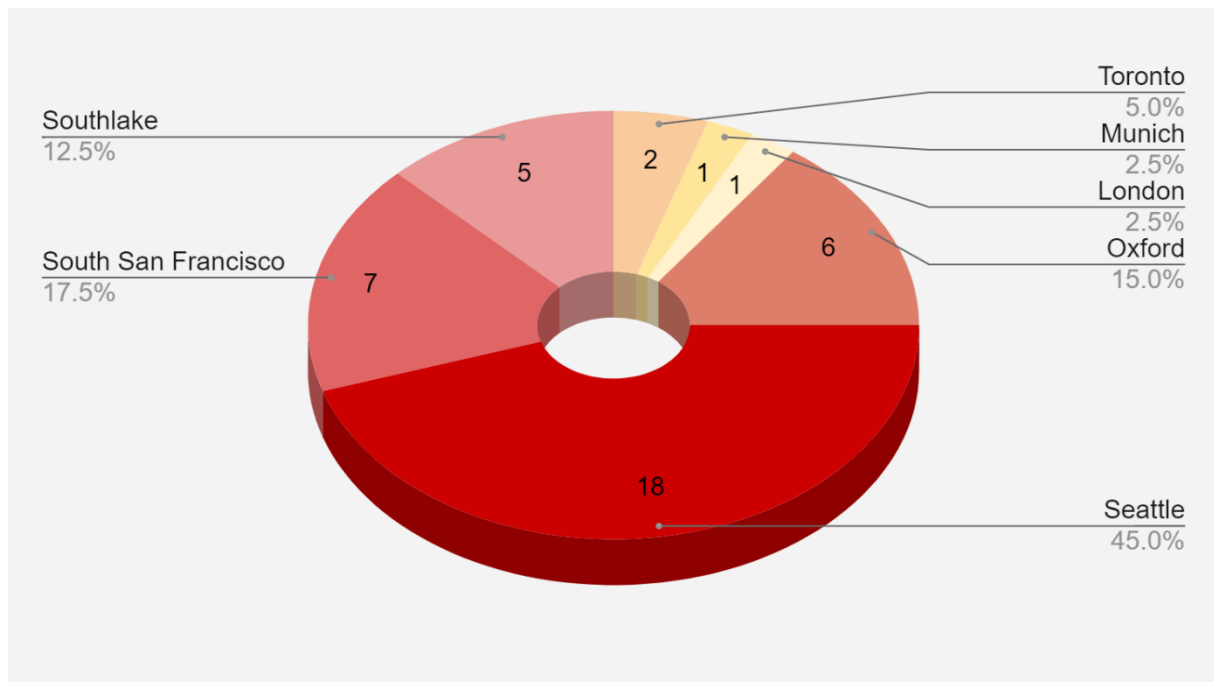
Employees count per country (table)

| country_id | country_name | city | Total |
|-------------|--------------------------|---------------------|-------|
| CA | Canada | Toronto | 2 |
| DE | Germany | Munich | 1 |
| UK | United Kingdom | London | 1 |
| US | United States of America | Oxford | 6 |
| | | Seattle | 18 |
| | | South San Francisco | 7 |
| | | Southlake | 5 |
| Grand Total | | | 40 |

Employees count per country (chart)



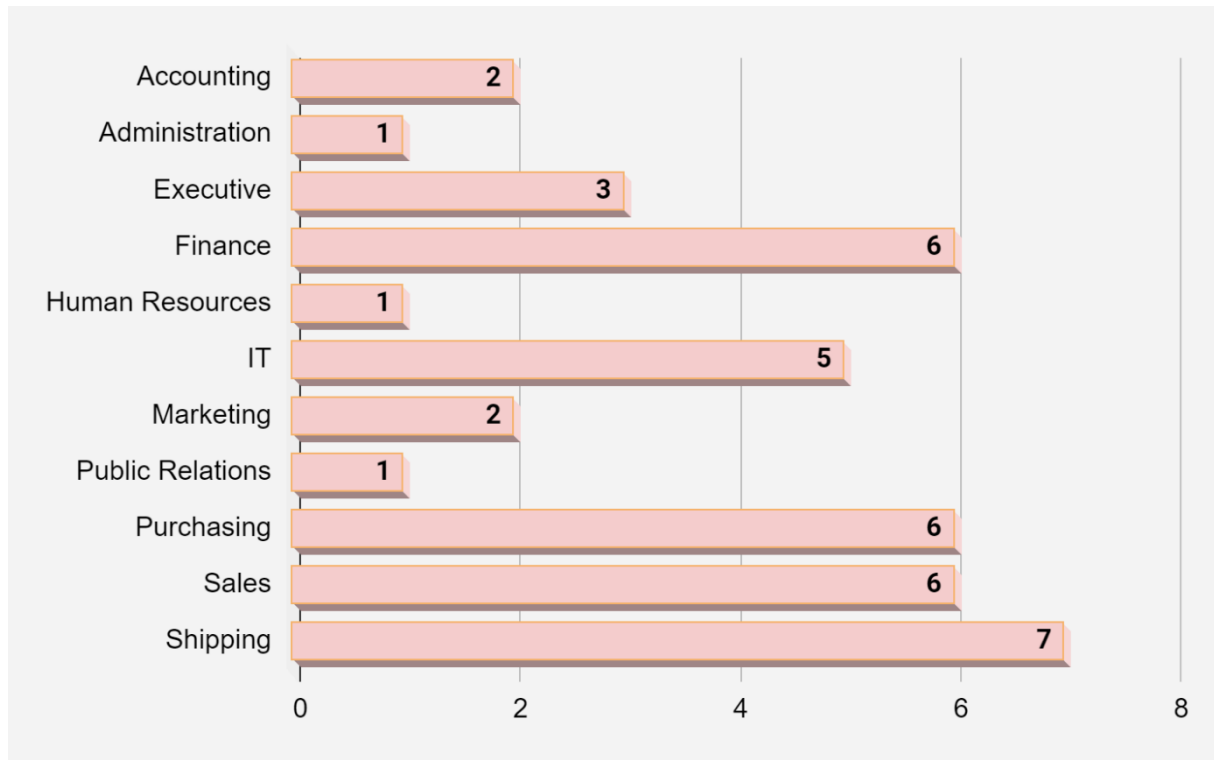
Employees count per city (chart)



Employees count per department (table)

| department_name | city | | | | | | | Grand Total |
|--------------------|----------|----------|----------|-----------|---------------------|-----------|----------|-------------|
| | London | Munich | Oxford | Seattle | South San Francisco | Southlake | Toronto | |
| Accounting | | | 2 | | | | | 2 |
| Administration | | | 1 | | | | | 1 |
| Executive | | | 3 | | | | | 3 |
| Finance | | | 6 | | | | | 6 |
| Human Resources | 1 | | | | | | | 1 |
| IT | | | | | | 5 | | 5 |
| Marketing | | | | | | | 2 | 2 |
| Public Relations | | 1 | | | | | | 1 |
| Purchasing | | | 6 | | | | | 6 |
| Sales | | 6 | | | | | | 6 |
| Shipping | | | | 7 | | | | 7 |
| Grand Total | 1 | 1 | 6 | 18 | 7 | 5 | 2 | 40 |

Employees count per department (chart)

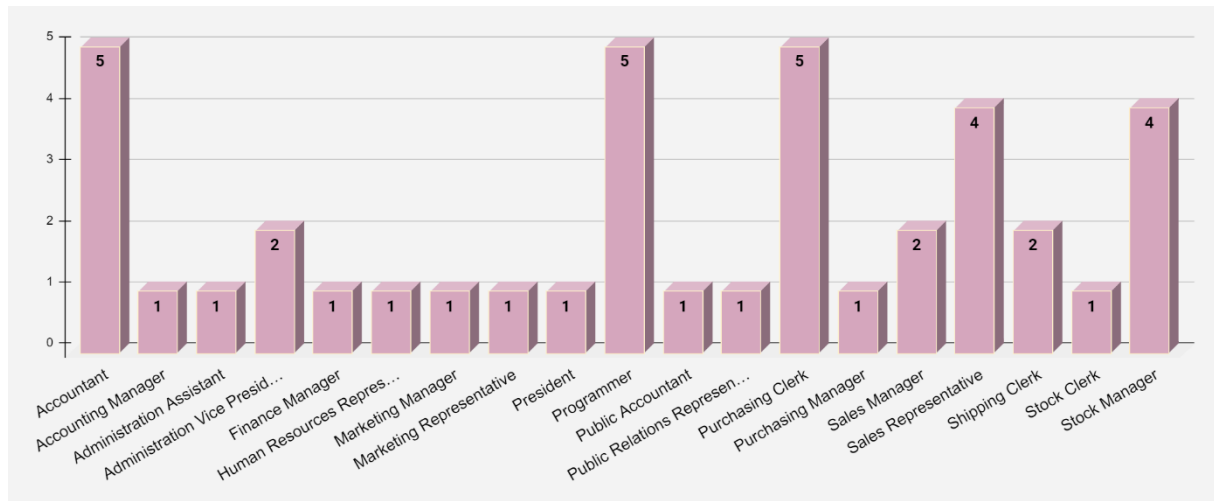


Job roles count in the company (table)

| <i>job_title</i> | <i>department_name</i> | <i>country_id</i> | Total |
|---------------------------------|------------------------|-------------------|-------|
| Accountant | Finance | US | 5 |
| Accounting Manager | Accounting | US | 1 |
| Administration Assistant | Administration | US | 1 |
| Administration Vice President | Executive | US | 2 |
| Finance Manager | Finance | US | 1 |
| Human Resources Representative | Human Resources | UK | 1 |
| Marketing Manager | Marketing | CA | 1 |
| Marketing Representative | Marketing | CA | 1 |
| President | Executive | US | 1 |
| Programmer | IT | US | 5 |
| Public Accountant | Accounting | US | 1 |
| Public Relations Representative | Public Relations | DE | 1 |
| Purchasing Clerk | Purchasing | US | 5 |
| Purchasing Manager | Purchasing | US | 1 |
| Sales Manager | Sales | UK | 2 |
| Sales Representative | Sales | UK | 4 |

| | | | |
|--------------------|----------|----|-----------|
| Shipping Clerk | Shipping | US | 2 |
| Stock Clerk | Shipping | US | 1 |
| Stock Manager | Shipping | US | 4 |
| Grand Total | | | 40 |

Job roles count in the company (chart)



Part two: Salaries overview

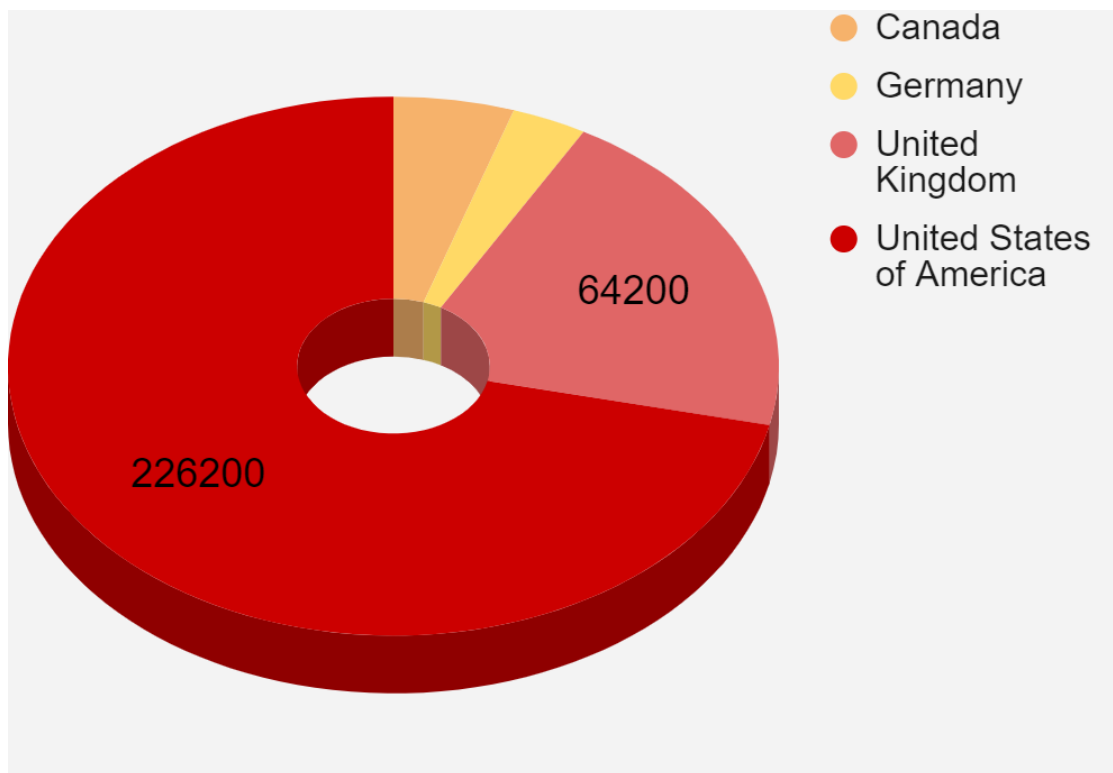
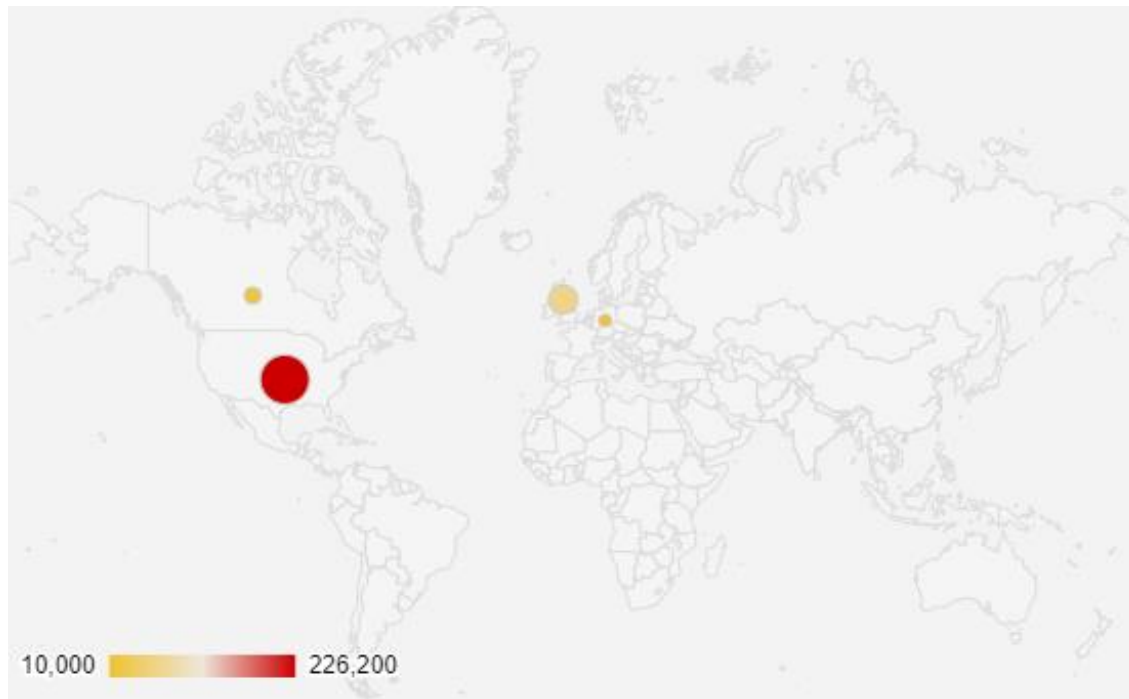
Employees' salaries per region (Total salaries)(table)

| region_name | SUM of salary | Staff COUNT | AVG of salary | MIN salary | MAX salary | Salary floor | Salary ceiling |
|--------------------|---------------|-------------|---------------|-------------|--------------|--------------|----------------|
| Americas | 242200 | 32 | 7569 | 2500 | 24000 | 2000 | 40000 |
| Europe | 74200 | 8 | 9275 | 6200 | 14000 | 4000 | 20000 |
| Grand Total | 316400 | 40 | 7910 | 2500 | 24000 | 2000 | 40000 |

Employees' salaries per country (Total salaries)(table)

| country_name | SUM of salary | Staff COUNT | AVG salary | MIN salary | MAX salary | Salary floor | Salary ceiling |
|--------------------------|---------------|-------------|-------------|-------------|--------------|--------------|----------------|
| Canada | 16000 | 2 | 8000 | 3000 | 13000 | 4000 | 15000 |
| Germany | 10000 | 1 | 10000 | 10000 | 10000 | 4500 | 10500 |
| United Kingdom | 64200 | 7 | 9171 | 6200 | 14000 | 4000 | 20000 |
| United States of America | 226200 | 30 | 7540 | 2500 | 24000 | 2000 | 40000 |
| Grand Total | 316400 | 40 | 7910 | 2500 | 24000 | 2000 | 40000 |

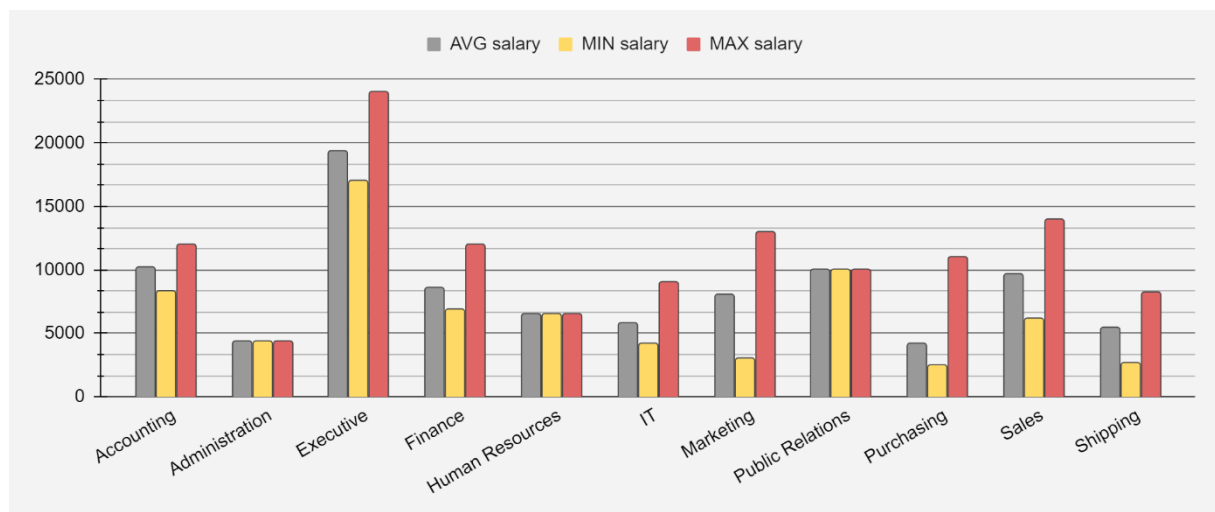
Employees' salaries per country (Total salaries)(chart)



Employees' salaries per department (Total salaries)(table)

| department_name | SUM of salary | Staff COUNT | AVG salary | MIN salary | MAX salary | Salary floor | Salary ceiling |
|--------------------|---------------|-------------|-------------|-------------|--------------|--------------|----------------|
| Accounting | 20300 | 2 | 10150 | 8300 | 12000 | 4200 | 16000 |
| Administration | 4400 | 1 | 4400 | 4400 | 4400 | 3000 | 6000 |
| Executive | 58000 | 3 | 19333.33 | 17000 | 24000 | 15000 | 40000 |
| Finance | 51600 | 6 | 8600 | 6900 | 12000 | 4200 | 16000 |
| Human Resources | 6500 | 1 | 6500 | 6500 | 6500 | 4000 | 9000 |
| IT | 28800 | 5 | 5760 | 4200 | 9000 | 4000 | 10000 |
| Marketing | 16000 | 2 | 8000 | 3000 | 13000 | 4000 | 15000 |
| Public Relations | 10000 | 1 | 10000 | 10000 | 10000 | 4500 | 10500 |
| Purchasing | 24900 | 6 | 4150 | 2500 | 11000 | 2500 | 15000 |
| Sales | 57700 | 6 | 9616.66 | 6200 | 14000 | 6000 | 20000 |
| Shipping | 38200 | 7 | 5457.14 | 2700 | 8200 | 2000 | 8500 |
| Grand Total | 316400 | 40 | 7910 | 2500 | 24000 | 2000 | 40000 |

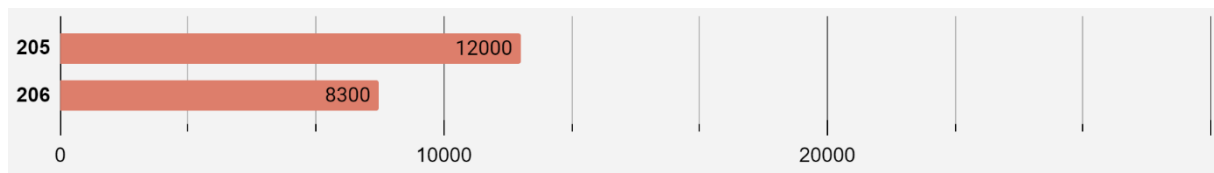
Employees' salaries per department (Total salaries)(chart)



Employees' salaries overview per employee per department (Total salaries)(table+chart)

Accounting

| employee_id | last_name | first_name | department_name | job_title | country_id | city | SUM of salary |
|--------------------|-----------|------------|-----------------|--------------------|------------|---------|---------------|
| 205 | Higgins | Shelley | Accounting | Accounting Manager | US | Seattle | 12000 |
| 206 | Gietz | William | Accounting | Public Accountant | US | Seattle | 8300 |
| Grand Total | | | | | | | 20300 |



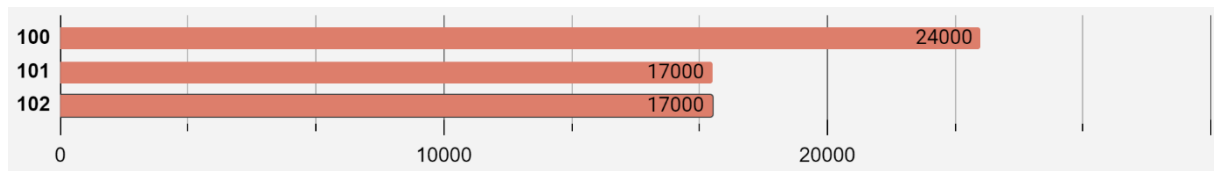
Administration

| employee_id | last_name | first_name | department_name | job_title | country_id | city | SUM of salary |
|-------------|-----------|------------|-----------------|--------------------------|------------|---------|---------------|
| 200 | Whalen | Jennifer | Administration | Administration Assistant | US | Seattle | 4400 |
| Grand Total | | | | | | | 4400 |



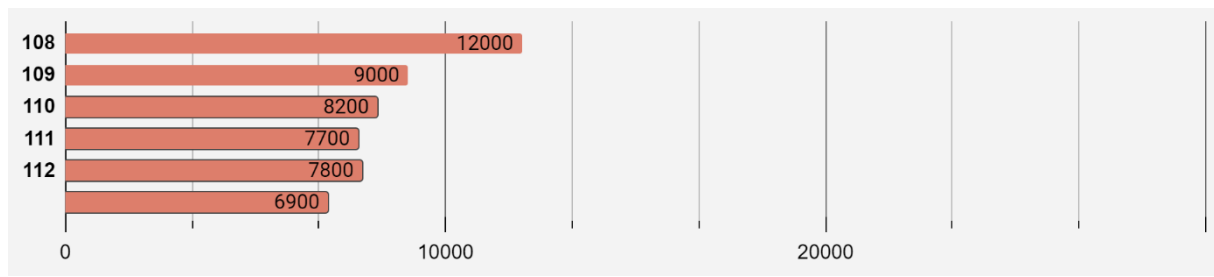
Executive

| employee_id | last_name | first_name | department_name | job_title | country_id | city | SUM of salary |
|-------------|-----------|------------|-----------------|-------------------------------|------------|---------|---------------|
| 100 | King | Steven | Executive | President | US | Seattle | 24000 |
| 101 | Kochhar | Neena | Executive | Administration Vice President | US | Seattle | 17000 |
| 102 | De Haan | Lex | Executive | Administration Vice President | US | Seattle | 17000 |
| Grand Total | | | | | | | 58000 |



Finance

| employee_id | last_name | first_name | department_name | job_title | country_id | city | SUM of salary |
|-------------|-----------|-------------|-----------------|-----------------|------------|---------|---------------|
| 108 | Greenberg | Nancy | Finance | Finance Manager | US | Seattle | 12000 |
| 109 | Faviet | Daniel | Finance | Accountant | US | Seattle | 9000 |
| 110 | Chen | John | Finance | Accountant | US | Seattle | 8200 |
| 111 | Sciarra | Ismael | Finance | Accountant | US | Seattle | 7700 |
| 112 | Urman | Jose Manuel | Finance | Accountant | US | Seattle | 7800 |
| 113 | Popp | Luis | Finance | Accountant | US | Seattle | 6900 |
| Grand Total | | | | | | | 51600 |



HR

| <i>employee_id</i> | <i>last_name</i> | <i>first_name</i> | <i>job_title</i> | <i>department_name</i> | <i>country_id</i> | <i>city</i> | SUM of salary |
|--------------------|------------------|-------------------|--------------------------------|------------------------|-------------------|-------------|---------------|
| 203 | Mavris | Susan | Human Resources Representative | Human Resources | UK | London | 6500 |
| Grand Total | | | | | | | 6500 |



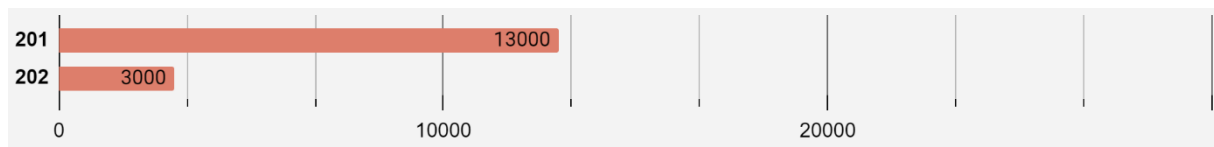
IT

| <i>employee_id</i> | <i>last_name</i> | <i>first_name</i> | <i>department_name</i> | <i>job_title</i> | <i>country_id</i> | <i>city</i> | SUM of salary |
|--------------------|------------------|-------------------|------------------------|------------------|-------------------|-------------|---------------|
| 103 | Hunold | Alexander | IT | Programmer | US | Southlake | 9000 |
| 104 | Ernst | Bruce | IT | Programmer | US | Southlake | 6000 |
| 105 | Austin | David | IT | Programmer | US | Southlake | 4800 |
| 106 | Pataballa | Valli | IT | Programmer | US | Southlake | 4800 |
| 107 | Lorentz | Diana | IT | Programmer | US | Southlake | 4200 |
| Grand Total | | | | | | | 28800 |



Marketing

| <i>employee_id</i> | <i>last_name</i> | <i>first_name</i> | <i>department_name</i> | <i>job_title</i> | <i>country_id</i> | <i>city</i> | SUM of salary |
|--------------------|------------------|-------------------|------------------------|--------------------------|-------------------|-------------|---------------|
| 201 | Hartstein | Michael | Marketing | Marketing Manager | CA | Toronto | 13000 |
| 202 | Fay | Pat | Marketing | Marketing Representative | CA | Toronto | 3000 |
| Grand Total | | | | | | | 16000 |



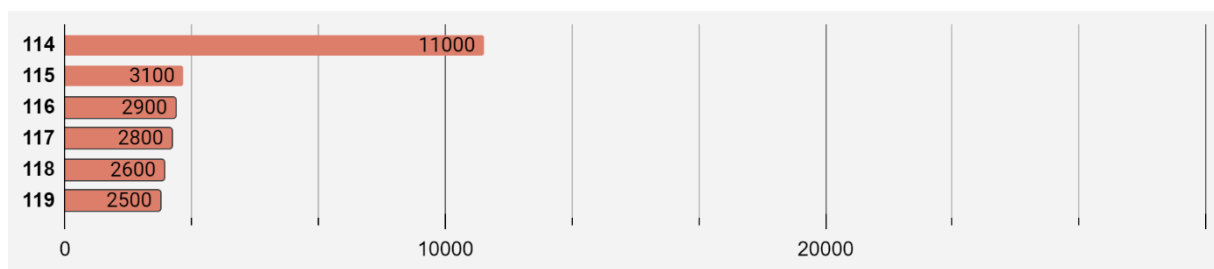
Public Relations

| employee_id | last_name | first_name | department_name | job_title | country_id | city | SUM of salary |
|-------------|-----------|------------|------------------|---------------------------------|------------|--------|---------------|
| 204 | Baer | Hermann | Public Relations | Public Relations Representative | DE | Munich | 10000 |
| Grand Total | | | | | | | 10000 |



Purchasing

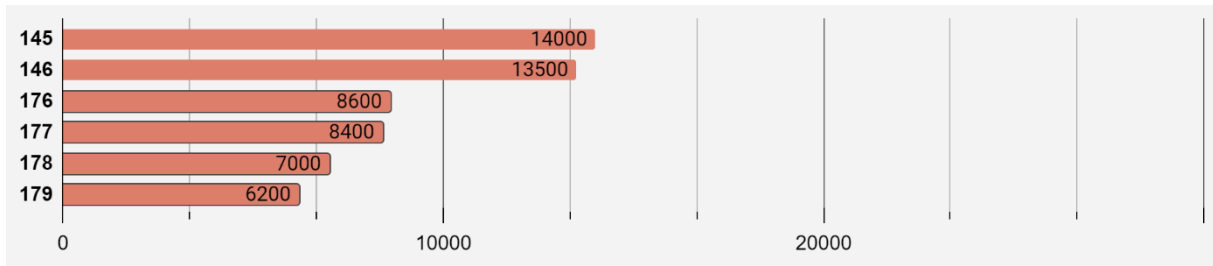
| employee_id | last_name | first_name | department_name | job_title | country_id | city | SUM of salary |
|-------------|------------|------------|-----------------|--------------------|------------|---------|---------------|
| 114 | Raphaely | Den | Purchasing | Purchasing Manager | US | Seattle | 11000 |
| 115 | Khoo | Alexander | Purchasing | Purchasing Clerk | US | Seattle | 3100 |
| 116 | Baida | Shelli | Purchasing | Purchasing Clerk | US | Seattle | 2900 |
| 117 | Tobias | Sigal | Purchasing | Purchasing Clerk | US | Seattle | 2800 |
| 118 | Himuro | Guy | Purchasing | Purchasing Clerk | US | Seattle | 2600 |
| 119 | Colmenares | Karen | Purchasing | Purchasing Clerk | US | Seattle | 2500 |
| Grand Total | | | | | | | 24900 |



Sales

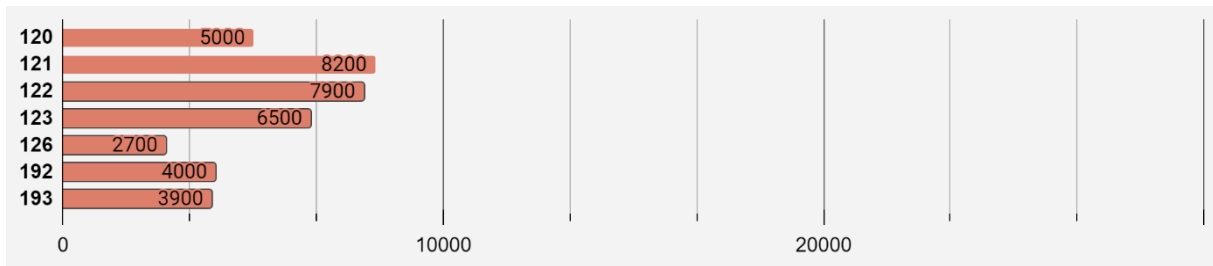
| employee_id | last_name | first_name | department_name | job_title | country_id | city | SUM of salary |
|-------------|------------|------------|-----------------|----------------------|------------|--------|---------------|
| 145 | Russell | John | Sales | Sales Manager | UK | Oxford | 14000 |
| 146 | Partners | Karen | Sales | Sales Manager | UK | Oxford | 13500 |
| 176 | Taylor | Jonathon | Sales | Sales Representative | UK | Oxford | 8600 |
| 177 | Livingston | Jack | Sales | Sales Representative | UK | Oxford | 8400 |
| 178 | Grant | Kimberely | Sales | Sales Representative | UK | Oxford | 7000 |

| | | | | | | | |
|--------------------|---------|---------|-------|----------------------|----|--------|--------------|
| 179 | Johnson | Charles | Sales | Sales Representative | UK | Oxford | 6200 |
| Grand Total | | | | | | | 57700 |



Shipping

| employee_id last_name first_name department_name job_title country_id city | | | | | | | SUM of salary |
|--|-------------|---------|----------|----------------|----|---------------------|---------------|
| 120 | Weiss | Matthew | Shipping | Stock Manager | US | South San Francisco | 5000 |
| 121 | Fripp | Adam | Shipping | Stock Manager | US | South San Francisco | 8200 |
| 122 | Kaufling | Payam | Shipping | Stock Manager | US | South San Francisco | 7900 |
| 123 | Vollman | Shanta | Shipping | Stock Manager | US | South San Francisco | 6500 |
| 126 | Mikkilineni | Irene | Shipping | Stock Clerk | US | South San Francisco | 2700 |
| 192 | Bell | Sarah | Shipping | Shipping Clerk | US | South San Francisco | 4000 |
| 193 | Everett | Britney | Total | | | | 3900 |
| Grand Total | | | | | | | 38200 |

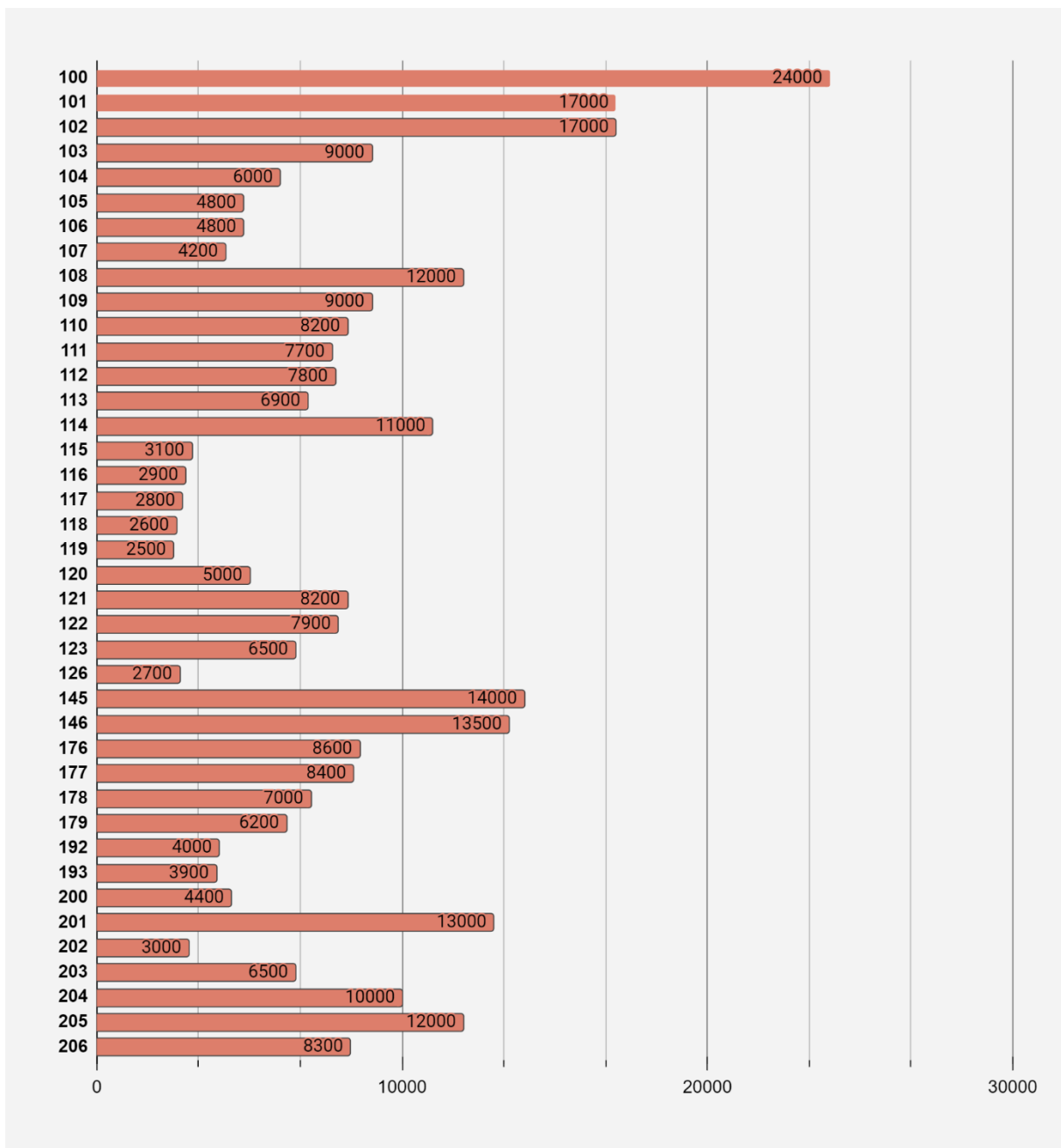


List of all employees by employee ID (Total salaries)(table+chart)

| <i>employee_id</i> | <i>last_name</i> | <i>first_name</i> | <i>department_name</i> | <i>job_title</i> | <i>country_id</i> | <i>city</i> | SUM of salary |
|--------------------|------------------|-------------------|------------------------|-------------------------------|-------------------|-------------|---------------|
| 100 | King | Steven | Executive | President | US | Seattle | 24000 |
| 101 | Kochhar | Neena | Executive | Administration Vice President | US | Seattle | 17000 |
| 102 | De Haan | Lex | Executive | Administration Vice President | US | Seattle | 17000 |
| 103 | Hunold | Alexander | IT | Programmer | US | Southlake | 9000 |

| | | | | | | | |
|-----|-------------|-------------|----------------|--------------------------|----|---------------------|-------|
| 104 | Ernst | Bruce | IT | Programmer | US | Southlake | 6000 |
| 105 | Austin | David | IT | Programmer | US | Southlake | 4800 |
| 106 | Pataballa | Valli | IT | Programmer | US | Southlake | 4800 |
| 107 | Lorentz | Diana | IT | Programmer | US | Southlake | 4200 |
| 108 | Greenberg | Nancy | Finance | Finance Manager | US | Seattle | 12000 |
| 109 | Faviet | Daniel | Finance | Accountant | US | Seattle | 9000 |
| 110 | Chen | John | Finance | Accountant | US | Seattle | 8200 |
| 111 | Sciarra | Ismael | Finance | Accountant | US | Seattle | 7700 |
| 112 | Urman | Jose Manuel | Finance | Accountant | US | Seattle | 7800 |
| 113 | Popp | Luis | Finance | Accountant | US | Seattle | 6900 |
| 114 | Raphaely | Den | Purchasing | Purchasing Manager | US | Seattle | 11000 |
| 115 | Khoo | Alexander | Purchasing | Purchasing Clerk | US | Seattle | 3100 |
| 116 | Baida | Shelli | Purchasing | Purchasing Clerk | US | Seattle | 2900 |
| 117 | Tobias | Sigal | Purchasing | Purchasing Clerk | US | Seattle | 2800 |
| 118 | Himuro | Guy | Purchasing | Purchasing Clerk | US | Seattle | 2600 |
| 119 | Colmenares | Karen | Purchasing | Purchasing Clerk | US | Seattle | 2500 |
| 120 | Weiss | Matthew | Shipping | Stock Manager | US | South San Francisco | 5000 |
| 121 | Fripp | Adam | Shipping | Stock Manager | US | South San Francisco | 8200 |
| 122 | Kaufling | Payam | Shipping | Stock Manager | US | South San Francisco | 7900 |
| 123 | Vollman | Shanta | Shipping | Stock Manager | US | South San Francisco | 6500 |
| 126 | Mikkilineni | Irene | Shipping | Stock Clerk | US | South San Francisco | 2700 |
| 145 | Russell | John | Sales | Sales Manager | UK | Oxford | 14000 |
| 146 | Partners | Karen | Sales | Sales Manager | UK | Oxford | 13500 |
| 176 | Taylor | Jonathon | Sales | Sales Representative | UK | Oxford | 8600 |
| 177 | Livingston | Jack | Sales | Sales Representative | UK | Oxford | 8400 |
| 178 | Grant | Kimberely | Sales | Sales Representative | UK | Oxford | 7000 |
| 179 | Johnson | Charles | Sales | Sales Representative | UK | Oxford | 6200 |
| 192 | Bell | Sarah | Shipping | Shipping Clerk | US | South San Francisco | 4000 |
| 193 | Everett | Britney | Shipping | Shipping Clerk | US | South San Francisco | 3900 |
| 200 | Whalen | Jennifer | Administration | Administration Assistant | US | Seattle | 4400 |
| 201 | Hartstein | Michael | Marketing | Marketing Manager | CA | Toronto | 13000 |
| 202 | Fay | Pat | Marketing | Marketing Representative | CA | Toronto | 3000 |

| | | | | | | | |
|--------------------|---------|---------|------------------|---------------------------------|----|---------|---------------|
| 203 | Mavris | Susan | Human Resources | Human Resources Representative | UK | London | 6500 |
| 204 | Baer | Hermann | Public Relations | Public Relations Representative | DE | Munich | 10000 |
| 205 | Higgins | Shelley | Accounting | Accounting Manager | US | Seattle | 12000 |
| 206 | Gietz | William | Accounting | Public Accountant | US | Seattle | 8300 |
| Grand Total | | | | | | | 316400 |



List of employees' dependents (table+chart)

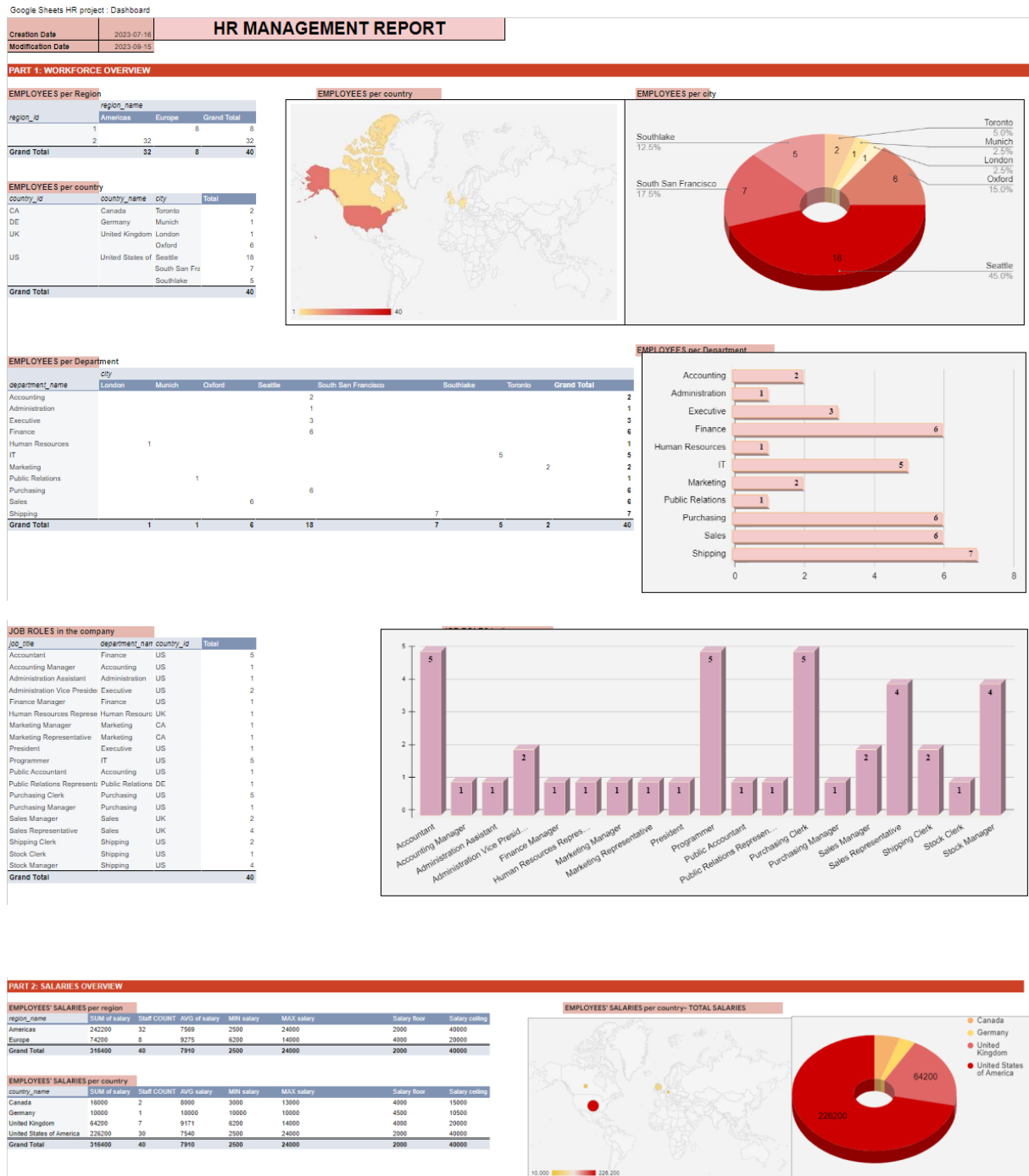
| employee_id | last_name | first_name | dependent_id | relationship | last_name_d | first_name_d | COUNT |
|----------------|------------|-------------|----------------|----------------|----------------|----------------|-------|
| 100 | King | Steven | 4 | Child | King | Jennifer | 1 |
| 101 | Kochhar | Neena | 5 | Child | Kochhar | Johnny | 1 |
| 102 | De Haan | Lex | 6 | Child | De Haan | Bette | 1 |
| 103 | Hunold | Alexander | 14 | Child | Hunold | Vivien | 1 |
| 104 | Ernst | Bruce | 15 | Child | Ernst | Cuba | 1 |
| 105 | Austin | David | 16 | Child | Austin | Fred | 1 |
| 106 | Pataballa | Valli | 17 | Child | Pataballa | Helen | 1 |
| 107 | Lorentz | Diana | 18 | Child | Lorentz | Dan | 1 |
| 108 | Greenberg | Nancy | 12 | Child | Greenberg | Karl | 1 |
| 109 | Faviet | Daniel | 7 | Child | Faviet | Grace | 1 |
| 110 | Chen | John | 8 | Child | Chen | Matthew | 1 |
| 111 | Sciarra | Ismael | 9 | Child | Sciarra | Joe | 1 |
| 112 | Urman | Jose Manuel | 10 | Child | Urman | Christian | 1 |
| 113 | Popp | Luis | 11 | Child | Popp | Zero | 1 |
| 114 | Raphaely | Den | 27 | Child | Raphaely | Julia | 1 |
| 115 | Khoo | Alexander | 22 | Child | Khoo | Elvis | 1 |
| 116 | Baida | Shelli | 23 | Child | Baida | Sandra | 1 |
| 117 | Tobias | Sigal | 24 | Child | Tobias | Cameron | 1 |
| 118 | Himuro | Guy | 25 | Child | Himuro | Kevin | 1 |
| 119 | Colmenares | Karen | 26 | Child | Colmenares | Rip | 1 |
| 145 | Russell | John | 28 | Child | Russell | Woody | 1 |
| 146 | Partners | Karen | 29 | Child | Partners | Alec | 1 |
| 176 | Taylor | Jonathon | 30 | Child | Taylor | Sandra | 1 |
| 200 | Whalen | Jennifer | 3 | Child | Whalen | Ed | 1 |
| 201 | Hartstein | Michael | 19 | Child | Hartstein | Bob | 1 |
| 202 | Fay | Pat | 20 | Child | Fay | Lucille | 1 |
| 203 | Mavris | Susan | 13 | Child | Mavris | Uma | 1 |
| 204 | Baer | Hermann | 21 | Child | Baer | Kirsten | 1 |
| 205 | Higgins | Shelley | 2 | Child | Higgins | Nick | 1 |
| 206 | Gietz | William | 1 | Child | Gietz | Penelope | 1 |
| does not apply | Bell | Sarah | does not apply | does not apply | does not apply | does not apply | 0 |
| | Everett | Britney | does not apply | does not apply | does not apply | does not apply | 0 |
| | Fripp | Adam | does not apply | does not apply | does not apply | does not apply | 0 |

| | | | | | | | |
|--------------------|-------------|-----------|-------------------|-------------------|-------------------|-------------------|-----------|
| | Grant | Kimberely | does not apply | does not apply | does not apply | does not apply | 0 |
| | Johnson | Charles | does not apply | does not apply | does not apply | does not apply | 0 |
| | Kaufling | Payam | does not apply | does not apply | does not apply | does not apply | 0 |
| | Livingston | Jack | does not apply | does not apply | does not apply | does not apply | 0 |
| | Mikkilineni | Irene | does not apply | does not apply | does not apply | does not apply | 0 |
| | Vollman | Shanta | does not apply | does not apply | does not apply | does not apply | 0 |
| | Weiss | Matthew | does not apply | does not apply | does not apply | does not apply | 0 |
| Grand Total | | | | | | | 30 |

Visualizations – Google Sheet Dashboard at a glance

Google Sheets Dashboard link

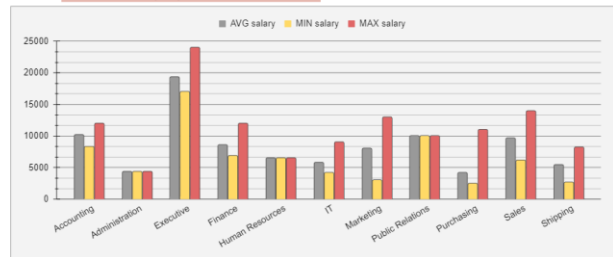
[Due to the long-term Google Sheets error geocharts are not displaying after publishing on the web as they should]



EMPLOYEES' SALARIES per department

| department_name | SUM of salary | Staff COUNT | AVG salary | MIN salary | MAX salary | Salary Row | Salary Col |
|------------------|---------------|-------------|-------------|------------|------------|------------|------------|
| Accounting | 20300 | 2 | 10150 | 4300 | 12000 | 4200 | 16000 |
| Administration | 4400 | 1 | 4400 | 4400 | 4400 | 3000 | 6000 |
| Executive | 58000 | 3 | 19333.33333 | 17000 | 24000 | 15000 | 40000 |
| Finance | 51600 | 6 | 8600 | 6900 | 12000 | 4200 | 16000 |
| Human Resources | 6500 | 1 | 6500 | 6500 | 6500 | 4000 | 9000 |
| IT | 26800 | 5 | 5360 | 4200 | 9000 | 4000 | 10000 |
| Marketing | 16000 | 2 | 8000 | 3000 | 13000 | 4000 | 15000 |
| Public Relations | 10000 | 1 | 10000 | 10000 | 10000 | 4500 | 10500 |
| Purchasing | 24900 | 6 | 4150 | 2500 | 11000 | 2500 | 15000 |
| Sales | 57700 | 6 | 9616.66667 | 6200 | 14000 | 6000 | 20000 |
| Shipping | 36200 | 7 | 5171.42857 | 2700 | 8200 | 2000 | 8500 |
| Grand Total | 316400 | 40 | 7910 | 2500 | 24000 | 2000 | 40000 |

EMPLOYEES' SALARIES per department



Google Sheets HR project : Dashboard

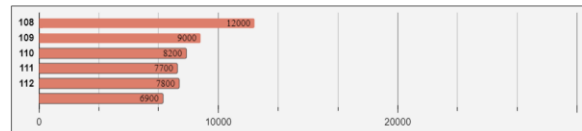
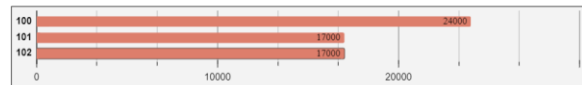
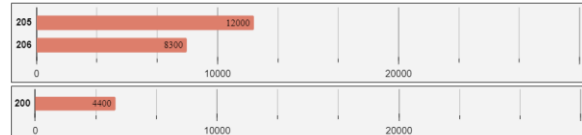
SALARIES OVERVIEW per employee per department

| employee_id | last_name | first_name | department_name | job_title | country_id | city | SUM of salary |
|-------------|-----------|------------|-----------------|--------------------|------------|---------|---------------|
| 205 | Higgins | Shelley | Accounting | Accounting Manager | US | Seattle | 12000 |
| 206 | Gietz | William | Accounting | Public Accountant | US | Seattle | 8300 |
| Grand Total | | | | | | | 20300 |

| employee_id | last_name | first_name | department_name | job_title | country_id | city | SUM of salary |
|-------------|-----------|------------|-----------------|---------------------|------------|---------|---------------|
| 200 | Whalen | Jennifer | Administration | Administration Asst | US | Seattle | 4400 |
| Grand Total | | | | | | | 4400 |

| employee_id | last_name | first_name | department_name | job_title | country_id | city | SUM of salary |
|-------------|-----------|------------|-----------------|---------------------|------------|---------|---------------|
| 100 | King | Steven | Executive | President | US | Seattle | 24000 |
| 101 | Kochhar | Neena | Executive | Administration Vice | US | Seattle | 17000 |
| 102 | De Haan | Lex | Executive | Administration Vice | US | Seattle | 17000 |
| Grand Total | | | | | | | 58000 |

| employee_id | last_name | first_name | department_name | job_title | country_id | city | SUM of salary |
|-------------|-----------|-------------|-----------------|-----------------|------------|---------|---------------|
| 100 | Greenberg | Nancy | Finance | Finance Manager | US | Seattle | 12000 |
| 109 | Faviet | Daniel | Finance | Accountant | US | Seattle | 9000 |
| 110 | Chen | John | Finance | Accountant | US | Seattle | 8200 |
| 111 | Sclera | Ismael | Finance | Accountant | US | Seattle | 7700 |
| 112 | Uman | Jose Manuel | Finance | Accountant | US | Seattle | 7800 |
| 113 | Popp | Luis | Finance | Accountant | US | Seattle | 6900 |
| Grand Total | | | | | | | 51600 |



Google Sheets HR project : Dashboard

HR

| employee_id | last_name | first_name | job_title | department_name | country_id | city | SUM of salary |
|-------------|-----------|------------|-----------------|-----------------|------------|--------|---------------|
| 203 | Mavris | Susan | Human Resources | Human Resource | UK | London | 6500 |
| Grand Total | | | | | | | 6500 |

| employee_id | last_name | first_name | department_name | job_title | country_id | city | SUM of salary |
|-------------|-----------|------------|-----------------|------------|------------|-----------|---------------|
| 103 | Hunold | Alexander | IT | Programmer | US | Southlake | 9000 |
| 104 | Ernst | Bruce | IT | Programmer | US | Southlake | 6000 |
| 105 | Austin | David | IT | Programmer | US | Southlake | 4900 |
| 106 | Pataballa | Valli | IT | Programmer | US | Southlake | 4900 |
| 107 | Lorentz | Diana | IT | Programmer | US | Southlake | 4200 |
| Grand Total | | | | | | | 26800 |

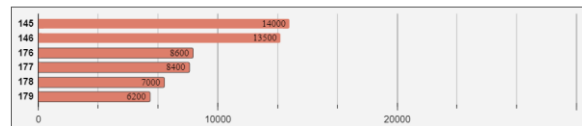
| employee_id | last_name | first_name | department_name | job_title | country_id | city | SUM of salary |
|-------------|-----------|------------|-----------------|--------------------------|------------|---------|---------------|
| 201 | Hartstein | Michael | Marketing | Marketing Manager | CA | Toronto | 13000 |
| 202 | Fay | Pat | Marketing | Marketing Representative | CA | Toronto | 3000 |
| Grand Total | | | | | | | 16000 |

| employee_id | last_name | first_name | department_name | job_title | country_id | city | SUM of salary |
|-------------|-----------|------------|------------------|--------------------------|------------|--------|---------------|
| 204 | Baer | Hermann | Public Relations | Public Relations Officer | DE | Munich | 10000 |
| Grand Total | | | | | | | 10000 |

| employee_id | last_name | first_name | department_name | job_title | country_id | city | SUM of salary |
|-------------|------------|------------|-----------------|--------------------|------------|---------|---------------|
| 114 | Raphaely | Den | Purchasing | Purchasing Manager | US | Seattle | 11000 |
| 115 | Khoj | Alexander | Purchasing | Purchasing Clerk | US | Seattle | 3100 |
| 116 | Baida | Shelli | Purchasing | Purchasing Clerk | US | Seattle | 2900 |
| 117 | Tobias | Sigal | Purchasing | Purchasing Clerk | US | Seattle | 2600 |
| 118 | Himuro | Guy | Purchasing | Purchasing Clerk | US | Seattle | 2600 |
| 119 | Colmenares | Karen | Purchasing | Purchasing Clerk | US | Seattle | 2500 |
| Grand Total | | | | | | | 24900 |

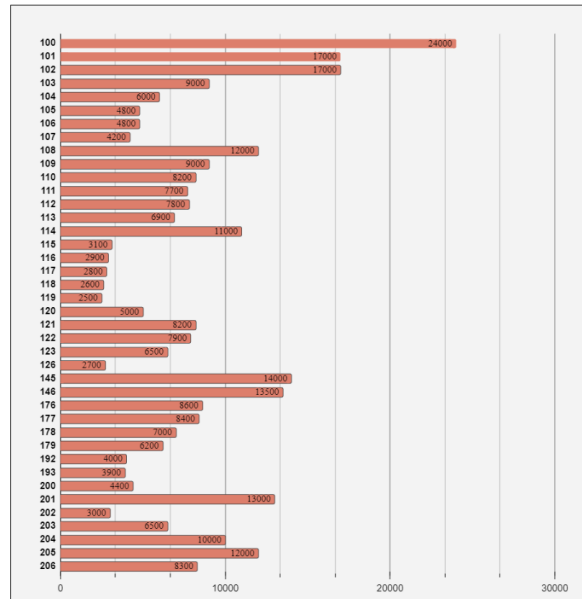
| employee_id | last_name | first_name | department_name | job_title | country_id | city | SUM of salary |
|-------------|------------|------------|-----------------|----------------------|------------|--------|---------------|
| 145 | Russell | John | Sales | Sales Manager | UK | Oxford | 14000 |
| 146 | Partners | Karen | Sales | Sales Manager | UK | Oxford | 13500 |
| 176 | Taylor | Jonathan | Sales | Sales Representative | UK | Oxford | 8600 |
| 177 | Livingston | Jack | Sales | Sales Representative | UK | Oxford | 8400 |
| 178 | Grant | Kimbberly | Sales | Sales Representative | UK | Oxford | 7000 |
| 179 | Johnson | Charles | Sales | Sales Representative | UK | Oxford | 6200 |
| Grand Total | | | | | | | 57700 |

| employee_id | last_name | first_name | department_name | job_title | country_id | city | SUM of salary |
|-------------|-------------|------------|-----------------|----------------|------------|---------------------|---------------|
| 120 | Wiles | Matthew | Shipping | Stock Manager | US | South San Francisco | 5000 |
| 121 | Frip | Adam | Shipping | Stock Manager | US | South San Francisco | 8200 |
| 122 | Kauffman | Payam | Shipping | Stock Manager | US | South San Francisco | 7900 |
| 123 | Vollman | Shanta | Shipping | Stock Manager | US | South San Francisco | 6500 |
| 126 | Mikkilineni | Irene | Shipping | Stock Clerk | US | South San Francisco | 2700 |
| 152 | Bel | Sarah | Shipping | Shipping Clerk | US | South San Francisco | 4000 |
| 193 | Everett | Bilbey | Shipping | Shipping Clerk | US | South San Francisco | 3900 |
| Grand Total | | | | | | | 36200 |



LIST OF ALL EMPLOYEES

| employee_id | last_name | first_name | department_name | job_title | country_id | city | SUM of salary |
|-------------|-------------|-------------|------------------|--------------------------|------------|---------------------|---------------|
| 100 | King | Steven | Executive | President | US | Seattle | 24000 |
| 101 | Kochhar | Neena | Executive | Administration Vice | US | Seattle | 17000 |
| 102 | De Haan | Lex | Executive | Administration Vice | US | Seattle | 17000 |
| 103 | Hunold | Alexander | IT | Programmer | US | Southlake | 9000 |
| 104 | Ernst | Bruce | IT | Programmer | US | Southlake | 6000 |
| 105 | Austin | David | IT | Programmer | US | Southlake | 4800 |
| 106 | Pataballa | Valli | IT | Programmer | US | Southlake | 4800 |
| 107 | Lorentz | Diana | IT | Programmer | US | Southlake | 4200 |
| 108 | Greenberg | Nancy | Finance | Finance Manager | US | Seattle | 12000 |
| 109 | Faviet | Daniel | Finance | Accountant | US | Seattle | 9000 |
| 110 | Chen | John | Finance | Accountant | US | Seattle | 8200 |
| 111 | Sciarra | Ismael | Finance | Accountant | US | Seattle | 7700 |
| 112 | Uman | Jose Manuel | Finance | Accountant | US | Seattle | 7500 |
| 113 | Popp | Luis | Finance | Accountant | US | Seattle | 6900 |
| 114 | Raphaely | Den | Purchasing | Purchasing Manager | US | Seattle | 11000 |
| 115 | Khoo | Alexander | Purchasing | Purchasing Clerk | US | Seattle | 3100 |
| 116 | Baida | Stelli | Purchasing | Purchasing Clerk | US | Seattle | 2900 |
| 117 | Tobias | Sigal | Purchasing | Purchasing Clerk | US | Seattle | 2800 |
| 118 | Himuro | Guy | Purchasing | Purchasing Clerk | US | Seattle | 2600 |
| 119 | Colmenares | Karen | Purchasing | Purchasing Clerk | US | Seattle | 2500 |
| 120 | Viess | Matthew | Shipping | Stock Manager | US | South San Francisco | 5000 |
| 121 | Frip | Adam | Shipping | Stock Manager | US | South San Francisco | 8200 |
| 122 | Kauffman | Payam | Shipping | Stock Manager | US | South San Francisco | 7900 |
| 123 | Vollman | Shanta | Shipping | Stock Manager | US | South San Francisco | 6500 |
| 124 | Mikkilineni | Irene | Shipping | Stock Clerk | US | South San Francisco | 2700 |
| 145 | Russell | John | Sales | Sales Manager | UK | Oxford | 14000 |
| 146 | Partners | Karen | Sales | Sales Manager | UK | Oxford | 13500 |
| 176 | Taylor | Jonathan | Sales | Sales Representative | UK | Oxford | 8600 |
| 177 | Livingston | Jack | Sales | Sales Representative | UK | Oxford | 8400 |
| 178 | Grant | Kimberly | Sales | Sales Representative | UK | Oxford | 7000 |
| 179 | Johnson | Charles | Sales | Sales Representative | UK | Oxford | 6200 |
| 192 | Beil | Sarah | Shipping | Shipping Clerk | US | South San Francisco | 4000 |
| 193 | Everett | Britney | Shipping | Shipping Clerk | US | South San Francisco | 3900 |
| 200 | Whalen | Jennifer | Administration | Administration Asst | US | Seattle | 4400 |
| 201 | Hartstein | Michael | Marketing | Marketing Manager | CA | Toronto | 13000 |
| 202 | Fay | Pat | Marketing | Marketing Representative | CA | Toronto | 3000 |
| 203 | Mavris | Susan | Human Resources | Human Resources | UK | London | 6500 |
| 204 | Baer | Hermann | Public Relations | Public Relations F | DE | Munich | 10000 |
| 205 | Higgins | Shelley | Accounting | Accounting Manager | US | Seattle | 12000 |
| 206 | Gietz | William | Accounting | Public Accountant | US | Seattle | 8300 |
| Grand Total | | | | | | | 316400 |



DEPENDENTS

| employee_id | last_name | first_name | dependent_id | relationship | last_name_d | first_name_d | COUNT |
|----------------|-------------|-------------|----------------|----------------|----------------|----------------|-------|
| 100 | King | Steven | 4 | Child | King | Jennifer | 1 |
| 101 | Kochhar | Neena | 5 | Child | Kochhar | Johnny | 1 |
| 102 | De Haan | Lex | 6 | Child | De Haan | Bette | 1 |
| 103 | Hunold | Alexander | 14 | Child | Hunold | Vivian | 1 |
| 104 | Ernst | Bruce | 15 | Child | Ernst | Cuba | 1 |
| 105 | Austin | David | 16 | Child | Austin | Fred | 1 |
| 106 | Pataballa | Valli | 17 | Child | Pataballa | Helen | 1 |
| 107 | Lorentz | Diana | 18 | Child | Lorentz | Den | 1 |
| 108 | Greenberg | Nancy | 12 | Child | Greenberg | Karl | 1 |
| 109 | Faviet | Daniel | 7 | Child | Faviet | Grace | 1 |
| 110 | Chen | John | 8 | Child | Chen | Matthew | 1 |
| 111 | Sciarra | Ismael | 9 | Child | Sciarra | Joe | 1 |
| 112 | Uman | Jose Manuel | 10 | Child | Uman | Christian | 1 |
| 113 | Popp | Luis | 11 | Child | Popp | Zero | 1 |
| 114 | Raphaely | Den | 27 | Child | Raphaely | Julia | 1 |
| 115 | Khoo | Alexander | 22 | Child | Khoo | Elvis | 1 |
| 116 | Baida | Stelli | 23 | Child | Baida | Sandra | 1 |
| 117 | Tobias | Sigal | 24 | Child | Tobias | Cameron | 1 |
| 118 | Himuro | Guy | 25 | Child | Himuro | Kevin | 1 |
| 119 | Colmenares | Karen | 26 | Child | Colmenares | Rip | 1 |
| 145 | Russell | John | 28 | Child | Russell | Wendy | 1 |
| 146 | Partners | Karen | 29 | Child | Partners | Alan | 1 |
| 176 | Taylor | Jonathan | 30 | Child | Taylor | Sandra | 1 |
| 200 | Whalen | Jennifer | 3 | Child | Whalen | Ed | 1 |
| 201 | Hartstein | Michael | 19 | Child | Hartstein | Bob | 1 |
| 202 | Fay | Pat | 20 | Child | Fay | Lucille | 1 |
| 203 | Mavris | Susan | 13 | Child | Mavris | Uma | 1 |
| 204 | Baer | Hermann | 21 | Child | Baer | Kirsten | 1 |
| 205 | Higgins | Shelley | 2 | Child | Higgins | Nick | 1 |
| 206 | Gietz | William | 1 | Child | Gietz | Penelope | 1 |
| does not apply | Beil | Sarah | does not apply | does not apply | does not apply | does not apply | 0 |
| does not apply | Everett | Britney | does not apply | does not apply | does not apply | does not apply | 0 |
| does not apply | Frip | Adam | does not apply | does not apply | does not apply | does not apply | 0 |
| does not apply | Grant | Kimberly | does not apply | does not apply | does not apply | does not apply | 0 |
| does not apply | Johnson | Charles | does not apply | does not apply | does not apply | does not apply | 0 |
| does not apply | Kauffman | Payam | does not apply | does not apply | does not apply | does not apply | 0 |
| does not apply | Livingston | Jack | does not apply | does not apply | does not apply | does not apply | 0 |
| does not apply | Mikkilineni | Irene | does not apply | does not apply | does not apply | does not apply | 0 |
| does not apply | Vollman | Shanta | does not apply | does not apply | does not apply | does not apply | 0 |
| does not apply | Viess | Matthew | does not apply | does not apply | does not apply | does not apply | 0 |
| Grand Total | | | | | | | 30 |

Conclusion

In this HR Management Report it was aimed to establish complex and efficient HR data evaluation process.

To reach the goal, first relevant data was processed and exported from an SQL database. Then, data would be loaded into Google Sheets and further processed to reach the form of a Dashboard consisting of pivot tables and charts.

In the Analysis the workforce and its salaries were assessed.

To begin with, the data was thoughtfully analysed, its consistency checked and clarification marks set where needed.

The employees count was analysed taking into account region, country and city they were located in. It was also considered what was employees number per department and what job roles might be found in the company. Employees' dependents were investigated and listed.

Further on the focus shifted to workforce salaries. Employees' salaries were analysed considering region, country and department workers were employed at. It would be checked whether all salaries fulfil the requirements of the salaries range given by the company. It would be also inspected what is minimum and maximum salary and what is an average salary per region, country and department respectively. Employees with maximum and minimum salaries would be tracked and seniority of employment would be assessed in linkage with salaries earned.

Later on more attention was brought to the detailed assessment of salaries per employee and per department. Finally, list of all employees and their salaries would be presented and compared.

Exact details and findings can be discovered section per section in this report.