**Data Analysis – Profit Analysis**

**Request**

**1. Identify Departments and Projects on Red:** Understand which departments or project are over budget, or underperforming, so we can take corrective action.

**2. Data Organization:** Ensure that data from various sources(e.g., employee information, salary data, department budget, and project details) is structured correctly and accessible for reporting.

**3. Power BI Dashboard Development:** Create a comprehensive dashboard that provides visibility into employee performance, salary distribution, and departmental project management.

**Workflow**

1. Build a **Database**
2. Develop SQL **Queries**
3. Connect to **Power BI**
4. Build a **Dashboard**

Journal

-Created a SQL database named “ProfitAnalysis”;

-Imported all tables from csv files: “employees”, “departments”, “projects”, “project\_assignments”, “completed\_projects”, “upcoming\_projects” and “Head\_Shots”.

Queries

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--Project status

WITH project\_status as (

Select

project\_id,

project\_name,

project\_budget,

'upcoming' AS status

From [upcoming projects]

union all

Select

project\_id,

project\_name,

project\_budget,

'completed' AS status

From completed\_projects)

--big table

Select

e.employee\_id,

e.first\_name,

e.last\_name,

e.job\_title,

e.salary,

d.Department\_Name,

d.Department\_Budget,

d.Department\_Goals,

pa.project\_id,

p.project\_name,

p.status,

p.project\_budget

From employees e

join departments d

on e.department\_id = d.Department\_ID

join project\_assignments pa

on pa.employee\_id = e.employee\_id

join project\_status p

on p.project\_id = pa.project\_id

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Power BI

-Imported data from Sql database

-Used the previous queries to create tables inside Power BI and adjusted the data types

-Imported the Headshots and adjusted the data type to enable visualization through web links

-Created a table named “Cost” and performed calculations to display Department costs and Yearly Capital.

-Dashboard

A screenshot of a computer

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