Workforce & Project Performance Insights

Identifying The Key Areas of Concern

The goal of this project

Identify At-Risk Departments and Projects: Determine which departments and projects are over budget or underperforming to enable corrective actions.

Dataset Structure

The dataset consisted of seven Excel tables, including information about Employees, Projects and Departments

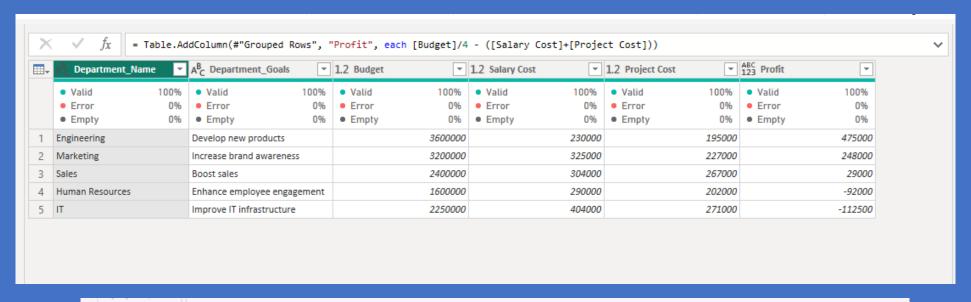
Cleaning and combining data from seven Excel tables into one table.

А	В	С	D	E	F	G	Н	1	J	К	L	М
employee_i ▼	first_nam 🔻	last_nam ▼	job_title ▼	salary 🔻	Department_Budget 🔻	Department_Nam 🔻	Department_Goals ▼	project_id 🔻	project_name ▼	status ▼	Project Cost ▼	
1001	Liam	Brown	Software Engineer	***************************************	£1,200,000.00	Engineering	Develop new products	201	Website Overhaul	upcoming	£60,000.00	
1002	Emma	Taylor	Marketing Manager	***************************************	£800,000.00	Marketing	Increase brand awareness	202	Social Media Strategy	upcoming	£45,000.00	
1003	Michael	Johnson	Data Scientist	#######################################	£600,000.00	Sales	Boost sales	203	Product Launch	upcoming	£80,000.00	
1004	Emily	Brown	HR Manager	#######################################	£400,000.00	Human Resources	Enhance employee engagement	204	CRM Integration	completed	£50,000.00	
1005	Robert	Williams	Sales Executive	#######################################	£600,000.00	Sales	Boost sales	205	Brand Repositioning	completed	£70,000.00	
1006	Linda	Miller	Operations Manager	#######################################	£800,000.00	Marketing	Increase brand awareness	206	Mobile App Development	upcoming	£70,000.00	
1007	William	Jones	Business Analyst	#######################################	£1,200,000.00	Engineering	Develop new products	207	SEO Optimization	upcoming	£50,000.00	
1008	Sophia	Davis	Product Manager	***************************************	£400,000.00	Human Resources	Enhance employee engagement	208	Customer Support System	completed	£55,000.00	
1009	David	Martinez	IT Specialist	#######################################	£450,000.00	IT	Improve IT infrastructure	209	Market Research	completed	£30,000.00	
1010	Olivia	Wilson	Finance Analyst	#######################################	£450,000.00	IT	Improve IT infrastructure	210	New Marketing Campaign	upcoming	£60,000.00	
1011	Noah	Garcia	Data Analyst	#######################################	£600,000.00	Sales	Boost sales	211	Salesforce Implementation	upcoming	£65,000.00	
1012	Ava	Rodriguez	UX Designer	#######################################	£800,000.00	Marketing	Increase brand awareness	212	Customer Journey Mapping	upcoming	£40,000.00	
1013	Ethan	Williams	Network Engineer	#######################################	£450,000.00	IT	Improve IT infrastructure	213	Infrastructure Upgrade	completed	£75,000.00	
1014	Chloe	Jones	Accountant	***************************************	£600,000.00	Sales	Boost sales	214	Budget Planning 2026	upcoming	£52,000.00	
1015	Lucas	Brown	Technical Writer	##########	£1,200,000.00	Engineering	Develop new products	215	API Documentation	completed	£85,000.00	
1016	Mia	Davis	Project Coordinator	***************************************	£400,000.00	Human Resources	Enhance employee engagement	216	Employee Onboarding System	upcoming	£35,000.00	
1017	Jackson	Miller	Security Analyst	#######################################	£450,000.00	IT	Improve IT infrastructure	217	Threat Assessment	upcoming	£58,000.00	
1018	Isabella	Wilson	Public Relations Specialist	***************************************	£800,000.00	Marketing	Increase brand awareness	218	Media Outreach	completed	£72,000.00	
1019	Owen	Garcia	Database Administrator	*******	£450,000.00	IT	Improve IT infrastructure	219	Data Migration	upcoming	£48,000.00	
1020	Scarlett	Rodriguez	Training Specialist	***************************************	£400,000.00	Human Resources	Enhance employee engagement	220	Skills Development Program	upcoming	£62,000.00	

Pivot table displaying the 4-year budget, annual salary, and annual project costs grouped by department

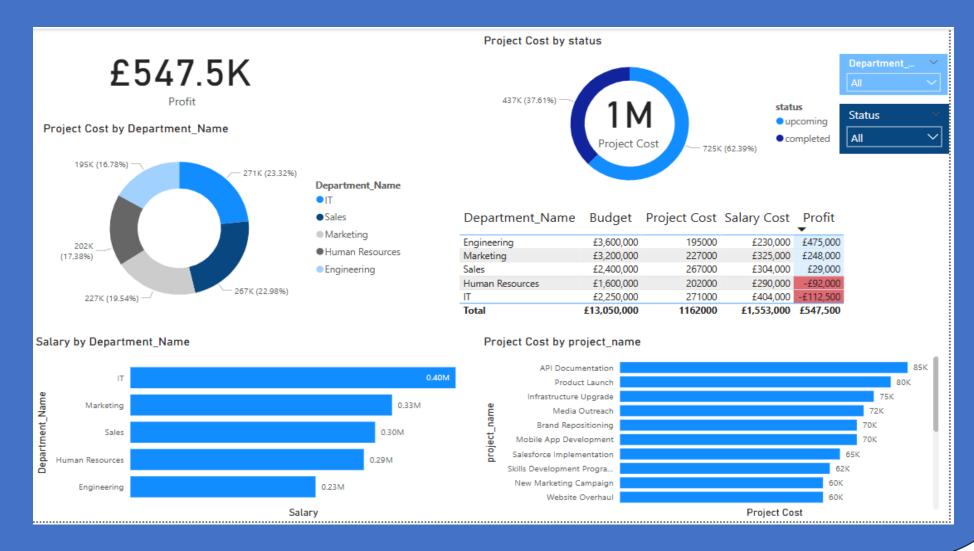
Row Labels	Sum of Department_Budget	Sum of salary	Sum of Project Cost	
Engineering	3600000	230000	195000	
Human Resources	1600000	290000	202000	
IT	2250000	404000	271000	
Marketing	3200000	325000	227000	
Sales	2400000	304000	267000	
Grand Total	13050000	1553000	1162000	

Analysing data in Power BI and calculating the profit column



Department_Name ▼	Department_Goals ▼	Project Cost	Budget *	Salary Cost ▼	Profit *
Engineering	Develop new products	195000	£3,600,000	£230,000	£475,000
Marketing	Increase brand awareness	227000	£3,200,000	£325,000	£248,000
Sales	Boost sales	267000	£2,400,000	£304,000	£29,000
Human Resources	Enhance employee engagement	202000	£1,600,000	£290,000	-£92,000
IT	Improve IT infrastructure	271000	£2,250,000	£404,000	-£112,500

Dashboard



Insights and Recommendations

The two departments not making a profit are:

- Human Resources: Profit of -£92,000
 - **IT:** Profit of -£112,500

Actionable Insights:

- Conduct a detailed analysis of the HR and IT team's structure, roles, and responsibilities.
- Identify any potential redundancies or areas where tasks could be streamlined or automated to optimise salary costs.
- Break down the Project Cost into specific projects. Evaluate the ROI and necessity of each project. Are there any projects that can be delayed, scaled back, or eliminated to reduce costs?