

Data Analyst Support Needed for Workforce and Budget Management Dashboard

Objective

We need to develop a structured, data-driven approach to monitor workforce efficiency, financial risks, and project health. The goal is to create a Power BI dashboard that helps answer the following:

Which projects and departments are at risk of being over budget or underperforming?

Since department budgets are set at 2-year intervals, we also need to determine whether a single year's budget can cover all expenses.

Problems Identified

- Some departments and projects are exceeding budgets or underperforming, making it difficult to take corrective action in time.
 - Financial data is scattered across multiple sources (employee information, salary data, budgets, and project details), making reporting inefficient.
 - A centralized Power BI dashboard is needed to track financial health and workforce performance across departments.
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Target Audience

- Primary – Leadership team (decision-makers managing workforce and budget allocations)
 - Secondary – Financial analysts and project managers
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Use Cases: Workforce & Budget Monitoring

1. Identifying Departments and Projects in the Red

User Story:

As a department manager, I want to analyze which departments and projects are over budget or underperforming so that I can take corrective actions before the next budget cycle.

Acceptance Criteria:

- The dashboard should highlight departments/projects exceeding their budget.
 - It should allow filtering by department, project, and time.
 - Key financial metrics (e.g., total allocated budget vs. actual spending) should be visualized clearly.
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2. Organizing Data for Efficient Reporting

User Story:

As a data analyst, I want to ensure that financial and workforce data is structured correctly and accessible so that we can generate meaningful insights.

Acceptance Criteria:

- The data should be consolidated from various sources (employee data, salaries, budgets, and project details).
 - Data should be clean, validated, and formatted correctly for reporting.
 - Any data integrity issues (e.g., missing records, duplicates) should be flagged.
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3. Power BI Dashboard Development

User Story:

As a financial analyst, I want a Power BI dashboard to monitor employee performance, salary distribution, and departmental budget management so I can improve decision-making.

Acceptance Criteria:

- The dashboard should display real-time insights into workforce performance and budget health.
 - Key visualizations should include:
 - Departmental budget vs. actual spending
 - Employee salary distribution
 - Performance trends by project and team
 - It should be user-friendly and support filtering, sorting, and exporting reports.
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Success Criteria

- Leadership can easily identify underperforming departments and budget risks.
- Financial teams can quickly generate reports with organized data.

- The dashboard enables better budget planning for upcoming fiscal years.
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Data Requirements

To produce the required insights, the dataset should include:

- Department Name (string)
 - Project Name (string)
 - Total Allocated Budget (integer)
 - Actual Spend (integer)
 - Employee Count (integer)
 - Salary Distribution (decimal)
 - Performance Score (integer)
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Data Quality Checks

To ensure accuracy, we will conduct the following:

- Row count check (ensuring all departments/projects are included)
 - Column count check (verifying that all necessary fields are present)
 - Data type validation (ensuring numeric values are correct)
 - Duplicate and missing data check
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Additional Requirements

- Document the solution (including data sources, transformation process, and analysis conclusions).
- Publish the dashboard on GitHub with a README explaining its functionality.
- Ensure the solution is scalable for future budget cycles.