Financial Expense Optimization

Problem statement:

A mid-size enterprise tracks expenses across departments such as HR, IT, Finance, and Operations. Despite stable revenue, operational costs are rising, causing profit margins to shrink.

Objective of the Project:

The primary objectives of this project are:

- To analyze department-wise and category-wise expenses
- To monitor monthly spending trends
- To compare actual expenses against budgeted values
- To identify departments exceeding budget limits
- To recommend cost-control measures using data-driven insights

Dataset Description:

The dataset used in this project is a **Financial Management Dataset** containing more than **100 expense records**.

Key Attributes:

- **Expense_ID** – Unique identifier for each expense record
- **Date** – Expense transaction date
- **Month** – Month and year for trend analysis
- **Department** – HR, IT, Finance, Operations, Sales
- **Expense_Type** – Salary, Travel, Software, Rent, Utilities, etc.
- **Actual_Expense** – Actual amount spent
- **Budget_Expense** – Planned budgeted amount
- **Payment_Mode** – Cash, Card, or Bank
- **Approval_Status** – Approved or Pending

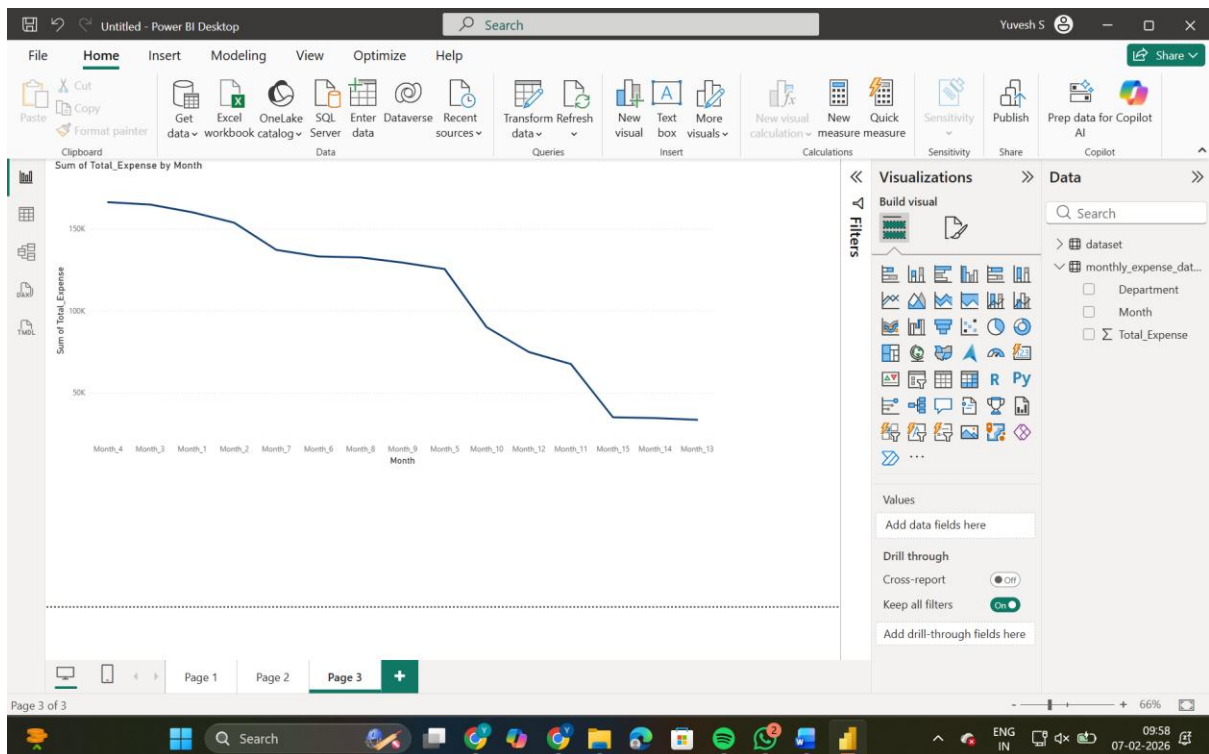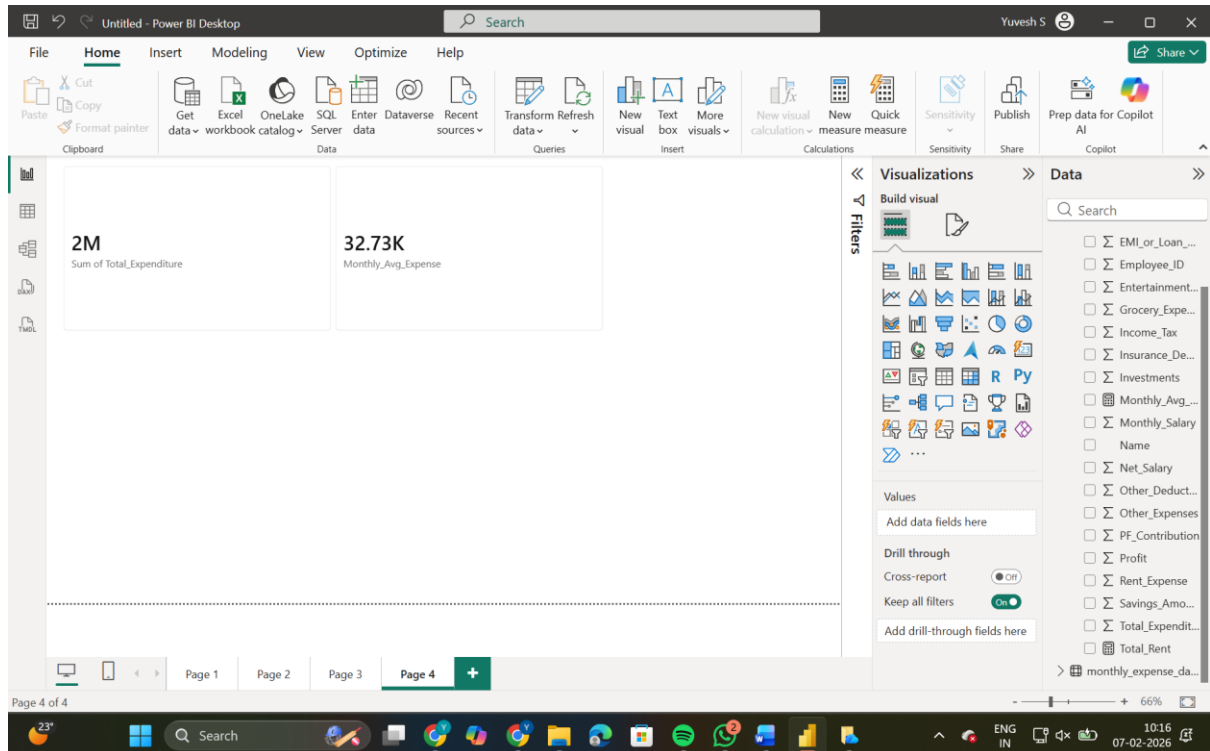Which departments incur the highest total expenses?
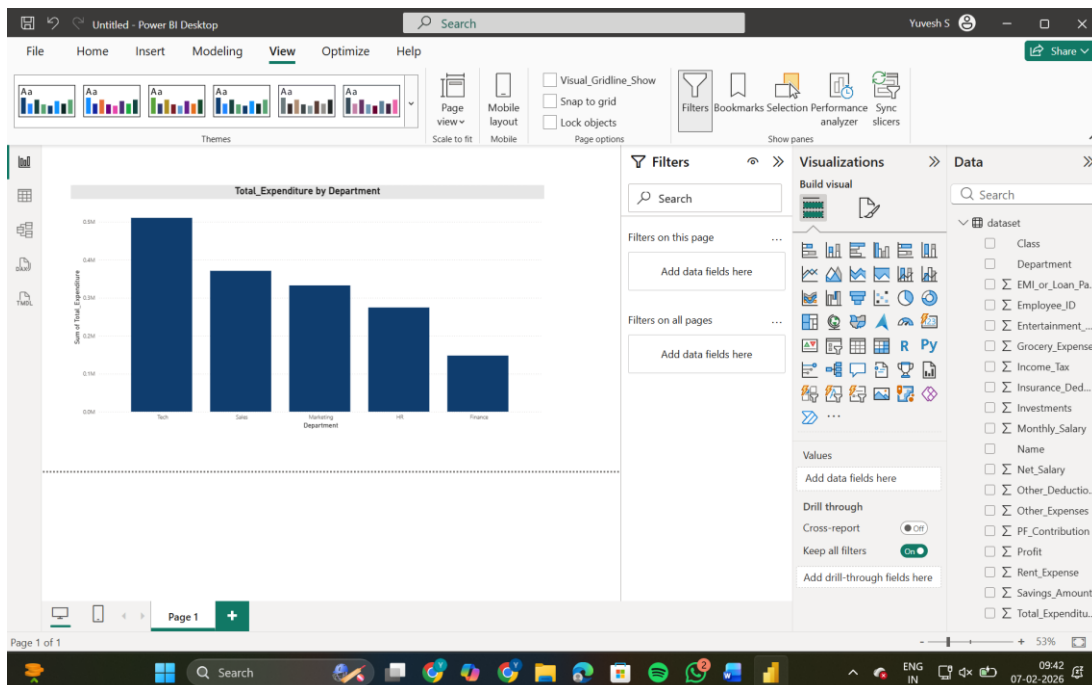
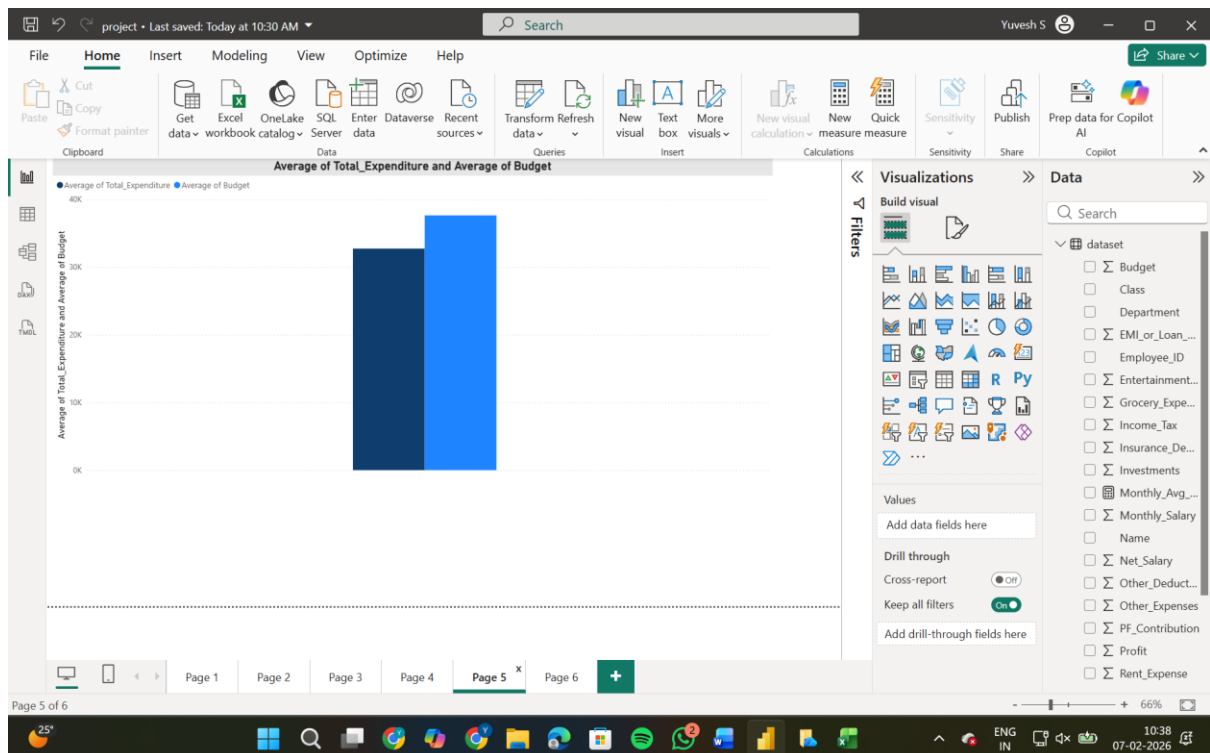Analyze expense distribution across expense types
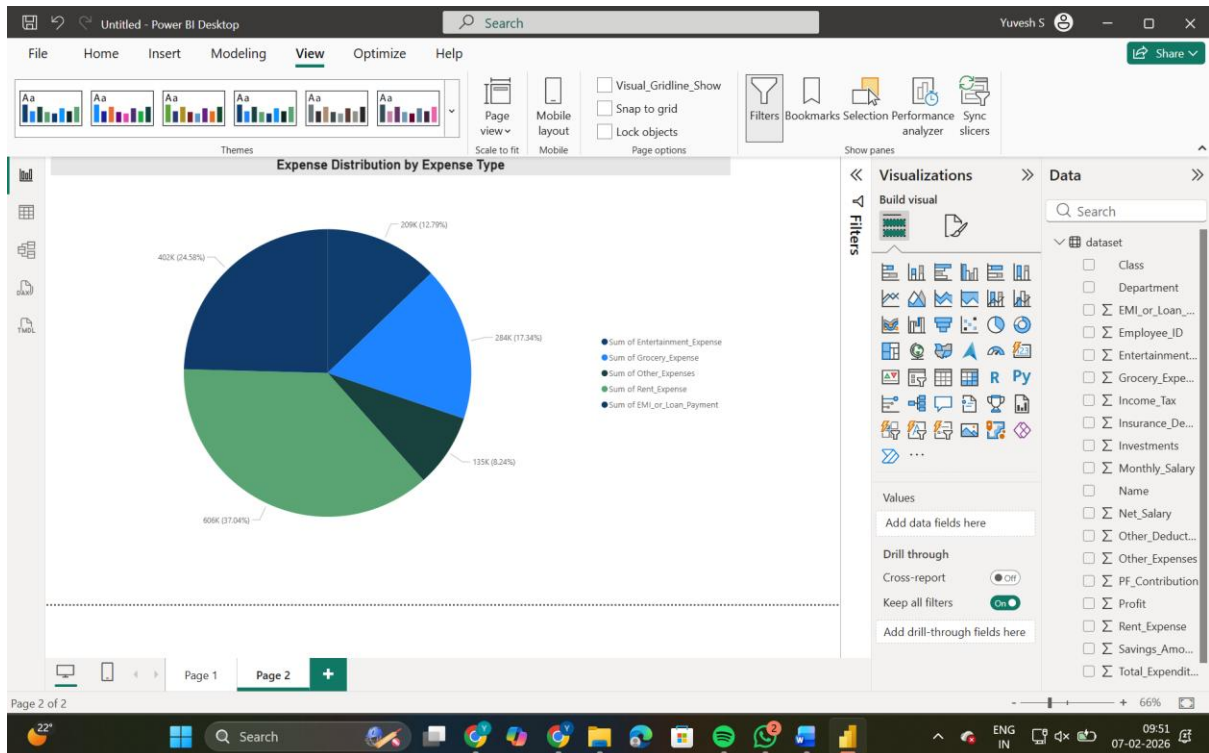
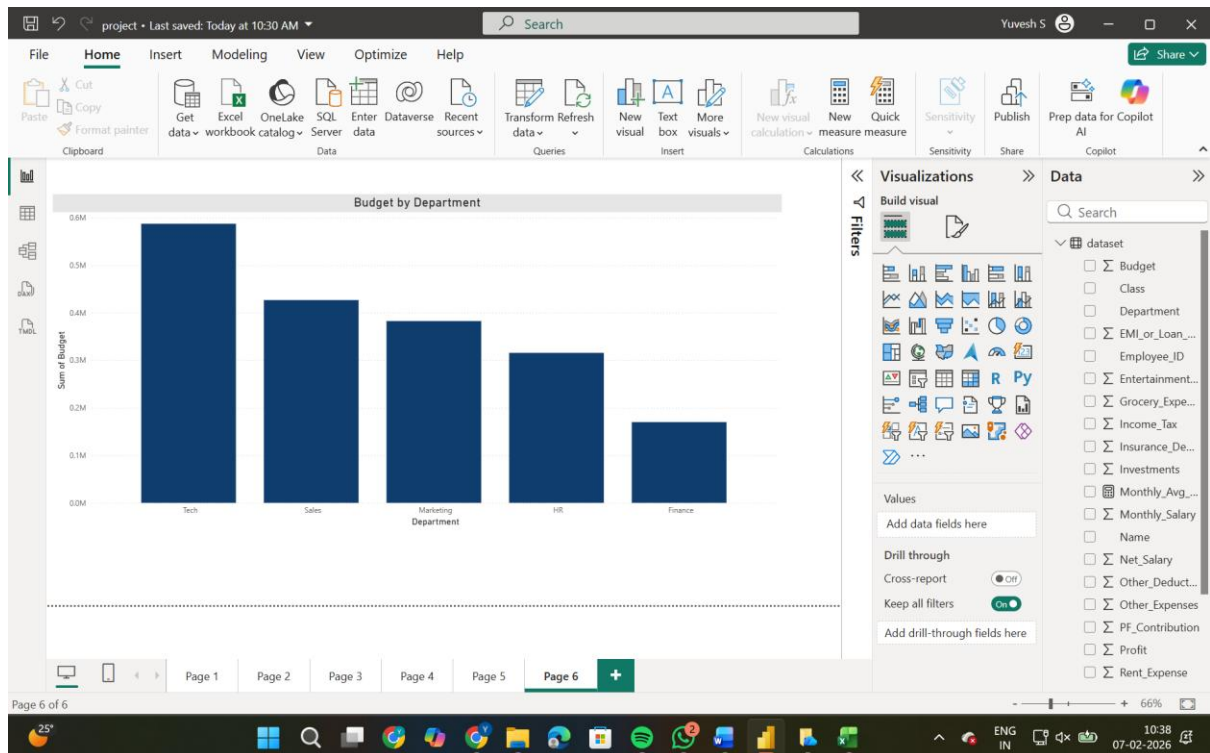How do monthly expenses trend over time?

Create DAX measures for Total Expenses and Monthly Average Expense.

Compare actual expenses against budget using visuals.

Identify departments exceeding budget limits.

What cost-control actions can be recommended?

The organization should enforce department-wise budget limits with continuous expense monitoring to control overspending. High-cost expense categories need regular review to eliminate waste and optimize vendor contracts. Monthly expense trend analysis and budget-versus-actual comparisons can help detect cost overruns early. Dashboard-driven insights will support informed decision-making and promote financial discipline.

Dashboard: