

Student Data Management Analysis Project Report

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Data Analysis Project using Excel & Power BI

Aim & Objectives

The aim of this project is to analyse and manage student-related data effectively using Excel and Power BI.

The objective is to provide meaningful insights that help educational institutions track student performance, monitor attendance, and improve overall academic management.

- To organize and clean student data for effective analysis.
- To create interactive dashboards using Excel and Power BI.
- To visualize student performance, attendance, and demographics.
- To generate actionable insights for better decision-making.

Methodology & Tools Used

The project was carried out using the following tools and techniques:

- Microsoft Excel was used for data cleaning, organization, and building a preliminary dashboard.
- Power BI was utilized to create an interactive and dynamic visualization dashboard.
- Basic statistical techniques were applied to summarize the data.
- Insights were derived by analysing patterns and trends in the student dataset.

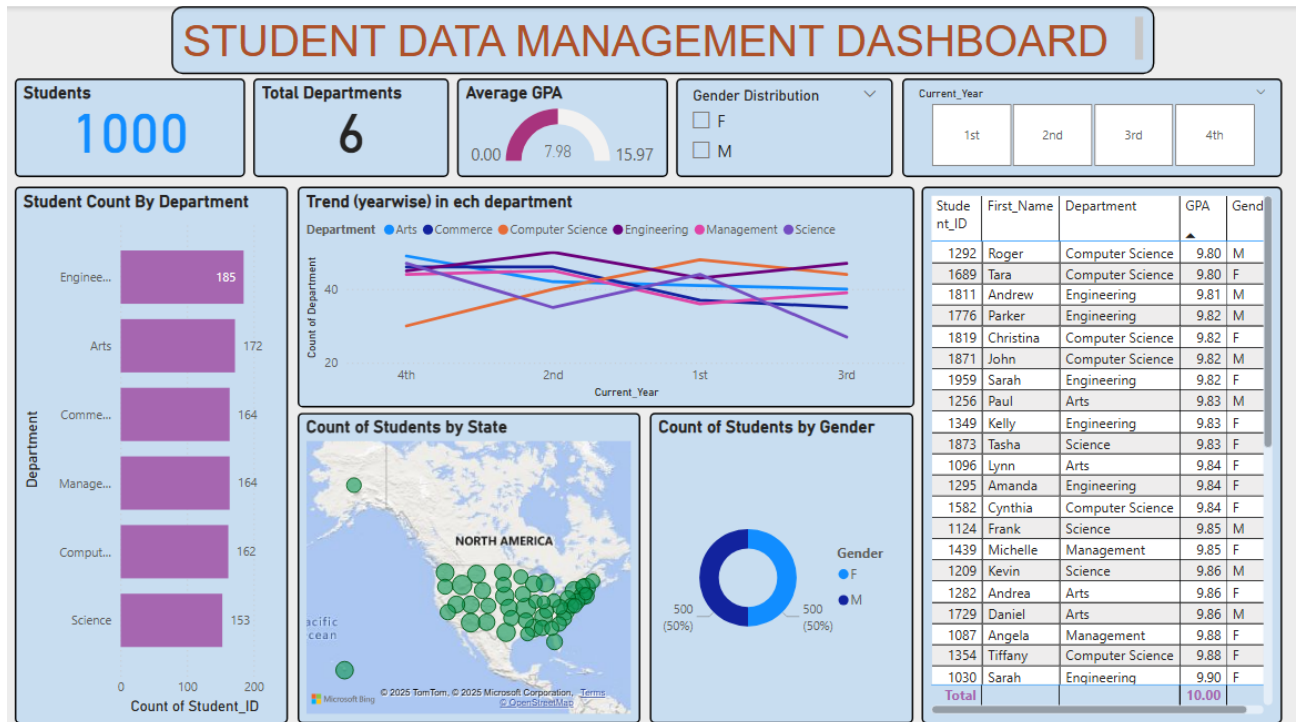
Analysis & Insights

Based on the analysis from both Excel and Power BI dashboards, the following insights were obtained:

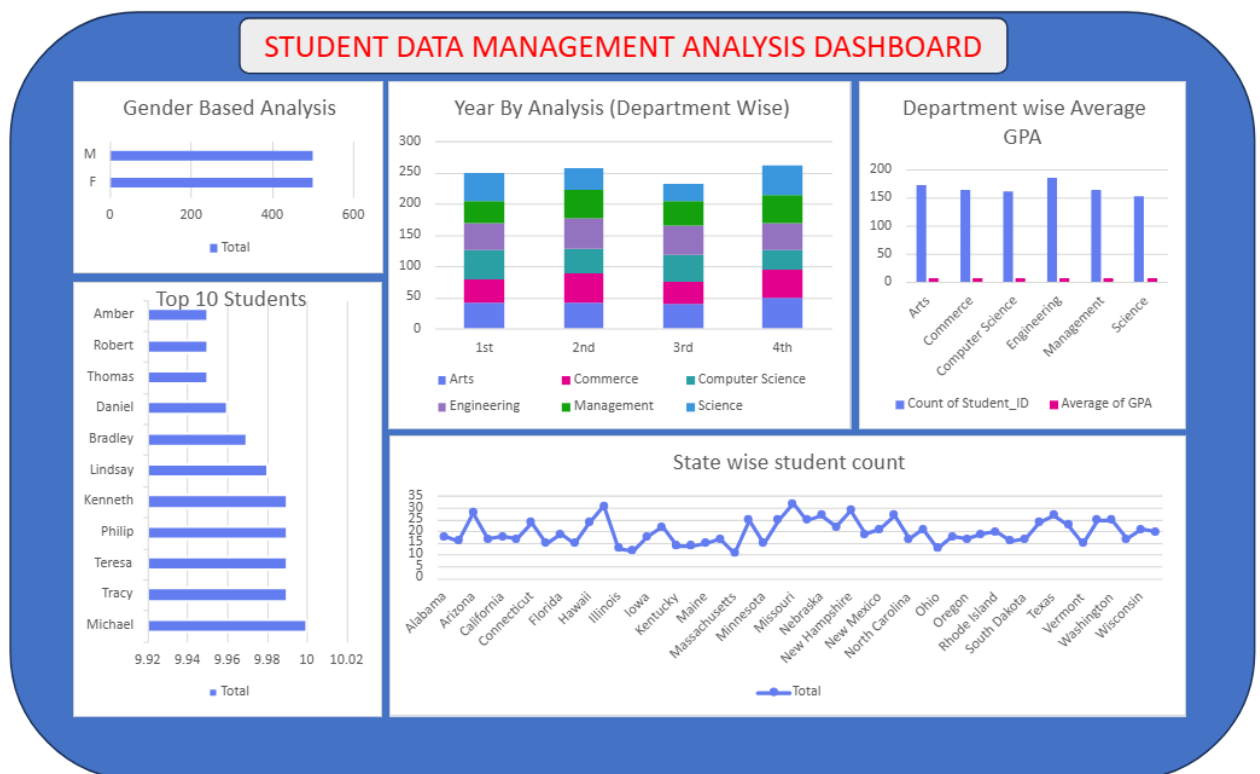
- Student attendance trends show variations across different classes and subjects.
- Performance analysis highlights top-performing students and areas needing improvement.
- Demographic breakdown provides better understanding of student distribution.
- Power BI dashboard allows interactive filtering for in-depth analysis.

Dashboard Screenshots

Power BI Dashboard



Excel Dashboard



Conclusion

This project demonstrates how Excel and Power BI can be effectively used for Student Data Management. The analysis provides valuable insights that can support academic planning, monitor student progress, and help institutions make data-driven decisions for improving educational outcomes.