College Event Feedback Analysis Report

1. Introduction

Student feedback plays a crucial role in improving the quality of college events and academic programs. This project focuses on analyzing structured feedback data collected through a Google Form to understand student satisfaction levels and identify key areas of improvement. The analysis uses Python and basic data science techniques to convert raw survey responses into meaningful insights that can support better decision-making for future events and courses.

2. Objective

The primary objectives of this project are:

- To clean and prepare feedback data collected from students
- To analyze satisfaction ratings on a 1–5 scale
- To identify strengths and improvement areas across different feedback dimensions
- To visualize trends using charts and graphs
- To provide actionable recommendations for organizers and academic teams

3. Dataset Overview

The dataset consists of student feedback collected via a Google Form. It contains numerical ratings (1–5 scale) across multiple dimensions such as subject knowledge, clarity of explanation, course structure, assignment difficulty, and overall course recommendation. Each row represents feedback from an individual student.

4. Data Cleaning & Preparation

- Removed unnecessary index columns generated during CSV export
- Standardized column names for consistency
- Converted all feedback columns to numeric format
- Handled missing or invalid values
- Created an overall satisfaction score by averaging individual feedback dimensions

This ensured the dataset was clean, consistent, and ready for analysis.

5. Methodology

- Descriptive statistics were used to analyze overall satisfaction levels
- An overall rating score was computed to represent student satisfaction
- Aspect-wise averages were calculated to compare performance across feedback dimensions
- Data visualizations were created using bar charts to highlight trends

Note: The dataset contained only structured rating data and did not include open-ended comments or event metadata.

6. Key Insights

- Overall student satisfaction was found to be moderate to high
- Teaching clarity and subject expertise received the highest ratings
- Assignment difficulty and course structuring showed relatively lower scores
- Students were more likely to recommend courses that provided strong academic support

These insights help identify what is working well and where improvements are needed.

7. Visual Analysis

The following visualizations were created:

- Distribution of overall satisfaction ratings
- Average rating across each feedback dimension
- Comparison of strengths and weaker areas based on mean scores

These visuals make it easier to interpret patterns and communicate findings clearly.

8. Recommendations

Based on the analysis, the following recommendations are suggested:

- Maintain high teaching clarity and subject knowledge standards
- Review assignment difficulty to balance learning and workload
- Improve course structure to enhance flow and engagement
- Include open-ended feedback questions in future surveys for deeper insights

9. Limitations

- The dataset did not contain text comments, limiting sentiment analysis and word cloud generation
- Event-level and department-level details were not available, preventing event-wise comparison
- Analysis was based solely on structured numerical feedback

10. Future Scope

- Collect open-ended feedback to enable NLP-based sentiment analysis
- Include event type and department information in future surveys
- Build interactive dashboards using Power BI or Google Looker Studio
- Automate feedback reporting for continuous improvement

11. Conclusion

This project demonstrates how structured student feedback can be effectively analyzed using Python and data visualization techniques. By identifying satisfaction trends and improvement areas, the analysis provides a practical framework for enhancing the quality of college events and academic programs through data-driven decision-making.

Project Notebook:
Google Colab link to the complete analysis and visualizations:
https://colab.research.google.com/drive/1zG9m04p0p-b9SohSjjDcMtElPALJPkKC