Visualizing employee Attendance trends With Excel charts

STUDENT NAME: Saranya S R

REGISTER NO:122202465

DEPARTMENT:B.Com (corporate secretaryship)

COLLEGE: Dr. MGR janaki college of Arts and science for

women

PROJECT TITLE

Visualizing employee attendance trends with excel charts

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AGENDA

- 1.Problem Statement
- 2.Project Overview
- 3.End Users
- 4. Our Solution and Proposition
- 5.Dataset Description
- 6.Modelling Approach
- 7. Results and Discussion
- 8.Conclusion



PROBLEM STATEMENT

Our organization struggles to effectively track and analyze employee attendance patterns, leading to:

- Inefficient management of absenteeism and tardiness
- Lack of insight into attendance trends and potential underlying causes
- Inability to identify employees who may need support or intervention
- Difficulty in making data-driven decisions to improve attendance and overall workforce productivity



PROJECT OVERVIEW

Design and develop an interactive visualization tool to track and analyze employee attendance patterns, providing insights

- •. to improve attendance management, employee engagement, and overall workforce productivity.
 - Collect and integrate attendance data from existing HR systems.
 - Design and develop a user-friendly visualization dashboard.
 - Implement interactive features for exploring attendance trends.
 - Conduct analysis to identify patterns, anomalies, and correlations.
 - Develop recommendations for improving attendance and productivity.

WHO ARE THE END USERS?

- **1. HR Managers:** To identify attendance patterns, manage absenteeism, and develop strategies to improve employee engagement.
- **2. Team Managers:** To monitor team attendance, identify trends, and address potential issues affecting team productivity.
- **3. Department Heads:** To oversee attendance trends across departments, make informed decisions, and optimize workforce planning.
- **4. Business Analysts:** To analyze attendance data, identify correlations, and provide insights for business improvement.
- **5. Employees:** To view their own attendance records, understand company policies, and manage their own attendance.

OUR SOLUTION AND ITS VALUE PROPOSITION



- **1. Gain insights:** Identify attendance patterns, trends, and anomalies to inform data-driven decisions.
- 2. Improve attendance management: Reduce absenteeism, tardiness, and turnover by addressing underlying causes.
- **3. Enhance employee engagement:** Foster a positive work environment by recognizing and supporting employees with attendance challenges.
- **4. Boost productivity:** Optimize workforce planning, reduce costs, and increase overall business performance.
- **5. Simplify attendance tracking:** Integrate with existing HR systems for effortless data management.

Dataset Description

- **1. Employee Attendance:** Daily attendance records (Employee ID, Date, Attendance Status)
- **2. Employee Info:** Basic employee information (Employee ID, Name, Job Title, Department)
- **3. Attendance Trends:** Aggregated attendance data (Date, Total Present, Total Absent, etc.)
- **4. Absence Reasons:** Reasons for absences (Reason, Frequency, Percentage)
- **5. Employee Performance:** Performance ratings (Employee ID, Performance Rating, Review Date)

THE "WOW" IN OUR SOLUTION

- Interactive Heatmap: Visualize attendance patterns
- Al-powered Insights: Predictive analytics for attendance
- **Real-time Alerts:** Swift response to attendance issues
- Employee Engagement Portal: Easy access to attendance records
- Data-Driven Storytelling: Turn data into actionable stories



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MODELLING

Modeling Approach:

- 1. Collect attendance data
- 2. Clean and prepare data
- 3. Extract relevant features
- 4. Group employees with similar attendance patterns
- 5. Predict future attendance trends
- 6. Identify unusual attendance patterns
- 7. Visualize attendance trends and insights

Modeling Techniques

- 1. Regression-
- 2. Decision trees-
- 3. Clustering
- 4. Anomaly detection

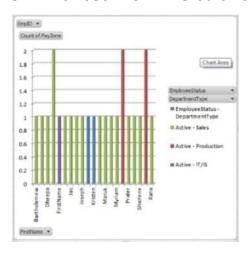
Modeling Tools:

- 1. Python libraries (Pandas, Scikit-learn, Matplotlib)
- 2. Data visualization tools (Tableau, Power BI)

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RESULTS

- 1. Better attendance insights
- 2. Increased employee engagement
- 3. Data-driven decision making
- 4. Improved productivity
- 5. Enhanced work-life balance



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conclusion

It seems like you're looking for a concise conclusion. Here's a simple one.

Visualizing employee attendance trends helps organizations improve attendance, engagement, and productivity by identifying patterns, addressing underlying causes, and making data-driven decisions.