

Specifications - Business Intelligence and Data Analysis Project

Business Objective:

Human Resources Optimization:

- Enhance recruitment efficiency by identifying top-performing profiles. (KPI 1: Average time to fill a position)
- Optimize resource planning by anticipating personnel needs. (KPI 2: Accuracy rate of personnel needs forecast)
- Increase employee retention by addressing professional development needs. (KPI 3: Employee retention rate)
- Reduce absenteeism costs by anticipating high-risk periods. (KPI 4: Average cost of absenteeism)
- Ensure compliance with company policies and regulations through accurate reporting. (KPI 5: Compliance rate with policies)
- Facilitate strategic decision-making by providing crucial workforce information. (KPI 6: Utilization rate of workforce information by decision-makers)

Business Intelligence (BI) Goals:

Workforce Reporting:

- Dynamically track and report the number of employees by department, position, social status, and experience. (KPI 7: Accuracy of workforce reports)
- Provide dashboards to visualize workforce variations over time. (KPI 8: Dashboard utilization rate)

Leave Management Analysis:

- Analyze leave usage trends. (KPI 9: Accuracy of leave usage trend analysis)
- Predict peak absenteeism periods for better resource planning. (KPI 10: Accuracy rate of peak absenteeism prediction)

Skills Management:

- Generate reports on current employee skills. (KPI 11: Accuracy of employee skills reports)
- Identify skill gaps and recommend training programs. (KPI 12: Skill gap identification rate)

Salary Analysis:

- Create reports on salary distribution by department, position, and experience. (KPI 13: Accuracy of salary distribution reports)
- Analyze salary profitability in relation to performance. (KPI 14: Accuracy of salary profitability analysis)

Contract and Assignment Tracking:

- Monitor active contract types and generate alerts for renewals. (KPI 15: Renewal alert rate for contracts)

HR Performance Indicators:

- Develop Key Performance Indicators (KPIs) to evaluate HR process effectiveness. (KPI 16: Accuracy of KPIs for evaluating HR process effectiveness)
- Measure productivity, employee satisfaction, and retention. (KPI 17: Productivity, employee satisfaction, and retention rates)

Professional Experience Analysis:

- Study the impact of professional experience on performance. (KPI 18: Accuracy of professional experience impact analysis).

Data Mining Objectives for Prediction in the BI Project:

Early Departure Prediction:

- Develop a prediction model to identify employees likely to leave the company. (KPI 19: Accuracy of early departure prediction)
- Utilize variables such as job satisfaction, compensation, tenure, and past performance to enhance prediction accuracy. (KPI 20: Improvement in prediction model accuracy)

Training Needs Anticipation:

- Implement a data mining model to anticipate employees' training requirements. (KPI 21: Accuracy of anticipated training needs)
- Consider criteria such as skill development, performance evaluations, and individual goals to recommend personalized training programs.

Profiling:

- Select the best CVs based on specific needs.

Employee Satisfaction Prediction

- Description: Develop a predictive model for employee satisfaction based on various variables such as salary, benefits, years of experience, etc.(KPI: Accuracy rate of employee satisfaction prediction.)

Sustainable development objectives:

Sustainable Development Goal 5: Gender equality

- Promote gender equality in human resources management by implementing policies and practices favoring gender parity in recruitment, remuneration and career opportunities.
- Assess and monitor gender pay gaps within the organization and take action to reduce them.

Sustainable Development Goal 8: Decent work and economic growth

- Promote training and skills development to support the professional growth of employees.
- Encourage diversity and inclusion in recruitment and promotion, valuing the talents of all members of the organization.

decision-makers

1. Chief Human Resources Officer (CHRO): The CHRO is often the top decision-maker responsible for HR policies, strategies, and overall human capital management.
2. Executive Leadership: This includes top executives such as the CEO, CFO, and COO who make strategic decisions related to workforce planning, budget allocation, and organizational goals.