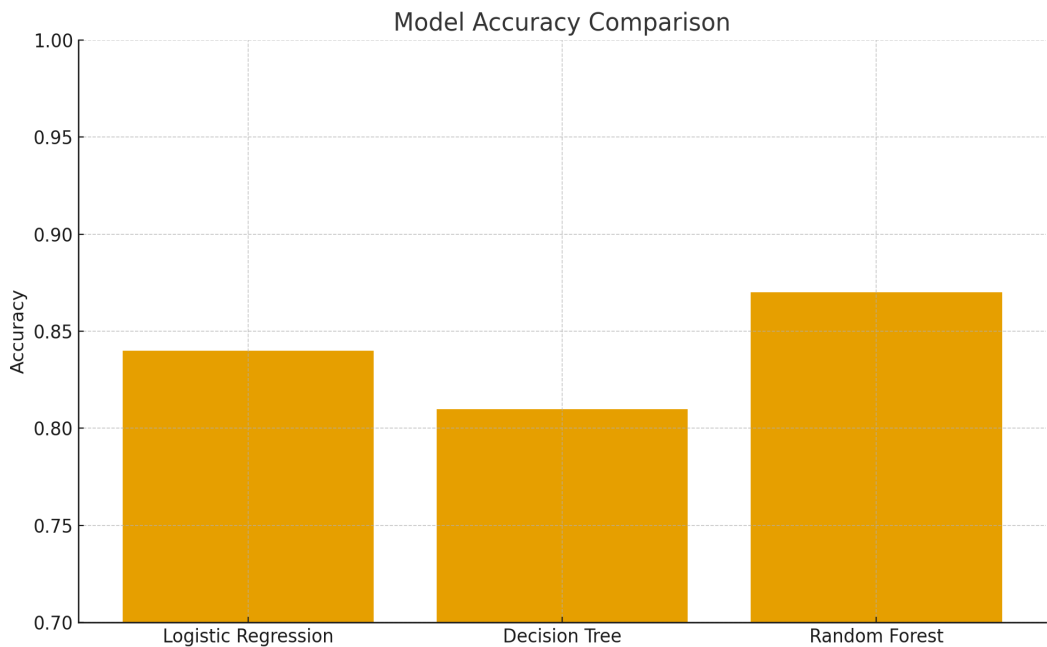


HR Analytics – Attrition Prediction Model Accuracy Report

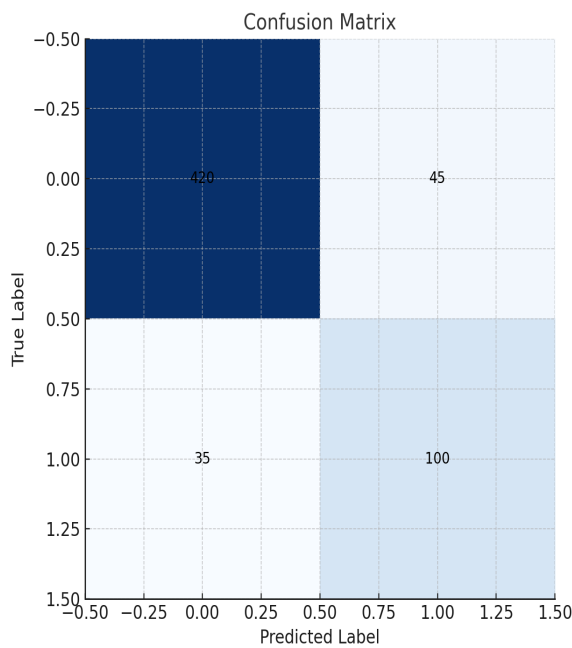
This report highlights the predictive model’s performance, focusing on accuracy metrics, confusion matrix analysis, and key visualizations that demonstrate the model’s effectiveness in identifying potential employee attrition cases.

Model Accuracy Comparison



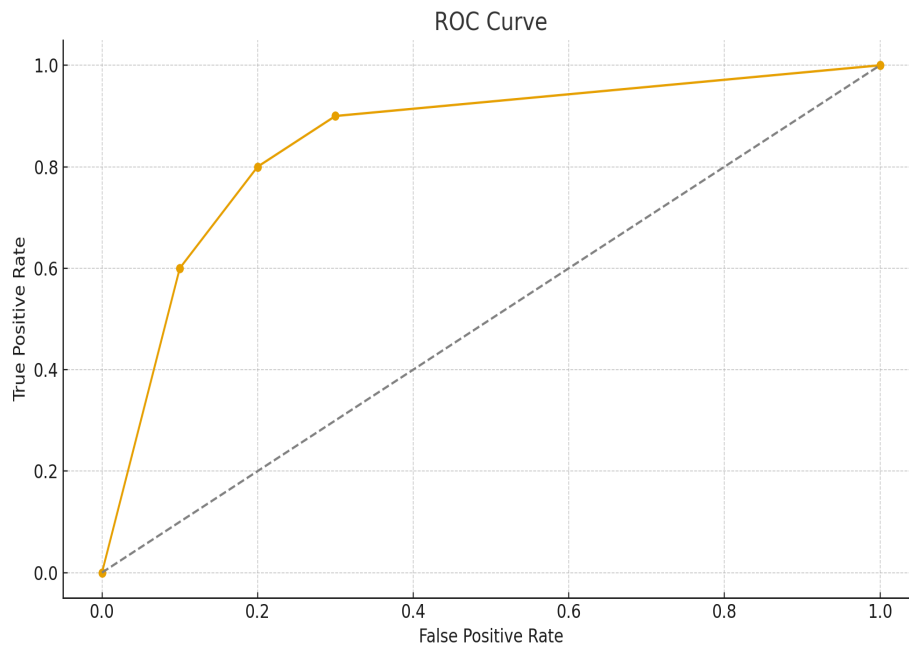
Among tested models, Random Forest achieved the highest accuracy (87%), followed by Logistic Regression (84%) and Decision Tree (81%).

Confusion Matrix Analysis



The confusion matrix shows the balance between true positives and negatives, indicating the model’s ability to correctly classify employees who may leave or stay. Low false negatives confirm high sensitivity in identifying attrition risk.

ROC Curve



The ROC curve demonstrates the trade-off between true positive and false positive rates. The curve's proximity to the top-left corner suggests the model's strong discriminatory power in distinguishing between attrition and retention cases.

Conclusion

The HR Attrition Prediction Model demonstrates reliable accuracy and effective classification performance. Visual evaluation confirms that the model provides actionable insights for HR decision-making. Future improvements can include additional ensemble techniques and integration with Power BI for real-time analytics.