

The image features a light gray background with two horizontal black lines. The top line is positioned near the top of the frame, and the bottom line is near the bottom. Two smooth, dark gray curves are present: one starts at the left edge, rises to cross the top line, and then levels off; the other starts at the bottom edge, rises to cross the bottom line, and then levels off.

# Employee Turnover Prediction



# Introduction

In this presentation, we will explore how **decision trees** and **random forests** can be used to predict *employee turnover*. We will discuss the benefits and challenges of these methods and their applications in HR analytics.

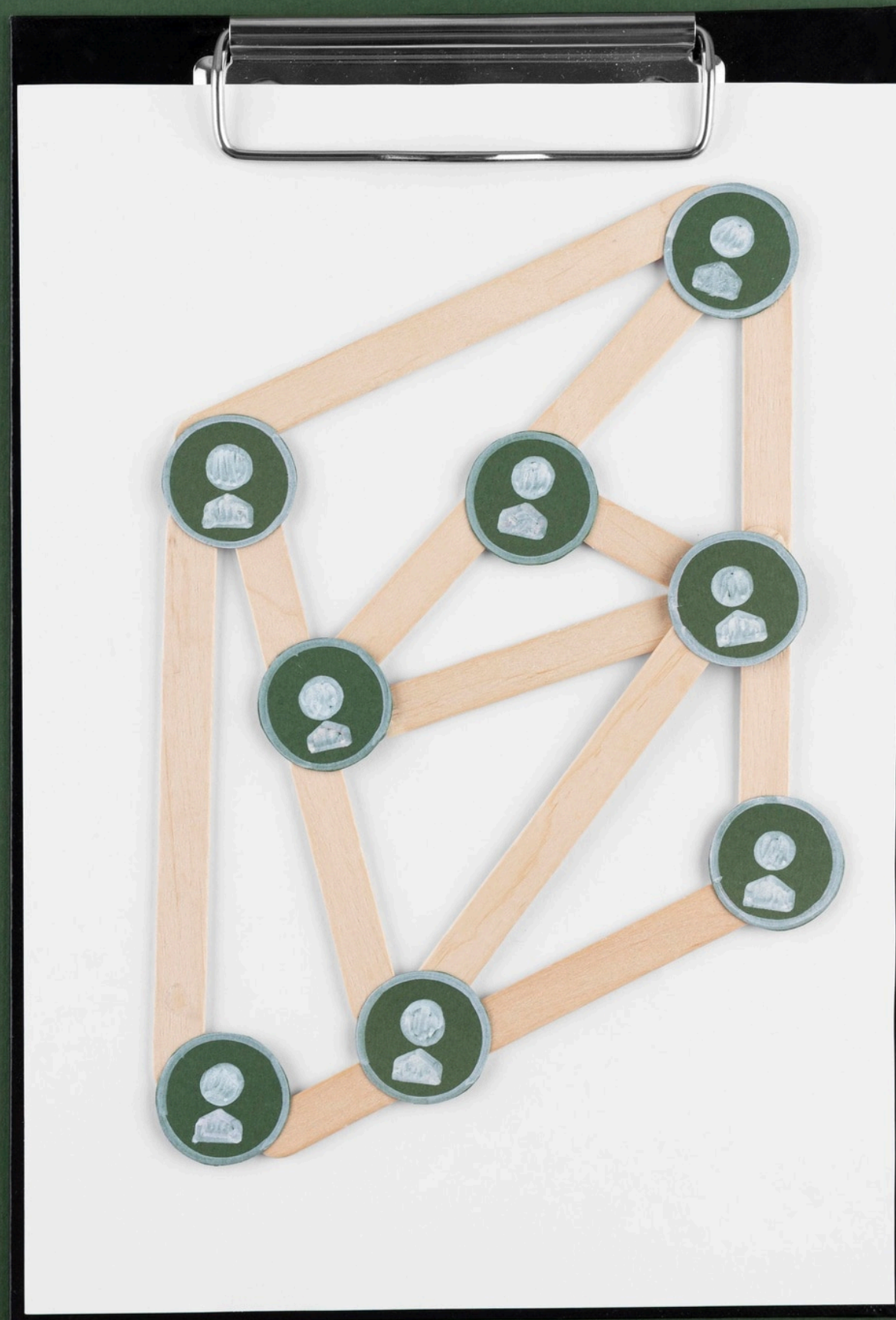


# Understanding Employee Turnover

Employee turnover is a critical issue for organizations, impacting **productivity**, **costs**, and **company culture**. By analyzing factors such as *job satisfaction*, *salary*, and *work-life balance*, we can predict and prevent turnover.







## Decision Trees in Employee Turnover Prediction

Decision trees are powerful tools for **classification** and **prediction**. By creating a tree-like model based on employee data, we can identify key factors leading to turnover, such as *job tenure*, *performance*, and *engagement*.





## Random Forests for Enhanced Predictions

Random forests are an ensemble learning method that combines multiple decision trees to improve accuracy and reduce **overfitting**. By aggregating the predictions of individual trees, we can enhance the reliability of turnover forecasts.



## Challenges and Considerations

While decision trees and random forests offer valuable insights, challenges such as **interpretability**, **feature selection**, and **data quality** must be addressed. Understanding these considerations is crucial for successful implementation.



# Conclusion

In conclusion, leveraging decision trees and random forests can provide organizations with valuable insights into employee turnover. By understanding the key drivers and leveraging predictive models, companies can take proactive measures to retain talent and foster a positive work environment.



**Thank you!!**