Slide 1: Why use a Decision Tree?

"A decision tree is a visual and intuitive tool that helps predict a value (e.g., movie rating) based on different criteria."

"It works like a flowchart with simple questions leading to an outcome."

"Decision trees highlight the most important factors influencing the result."

"No complex math is needed — it's easy to understand and interpret!"

Arbre de Décision pour la Prédiction de la Note d'un Film

"Start at the top (root node) and follow the branches based on simple yes/no questions."

"Each branch represents a decision or condition, like 'Is the movie Action?'"

"The leaves (end points) show the predicted value, such as the average movie rating."
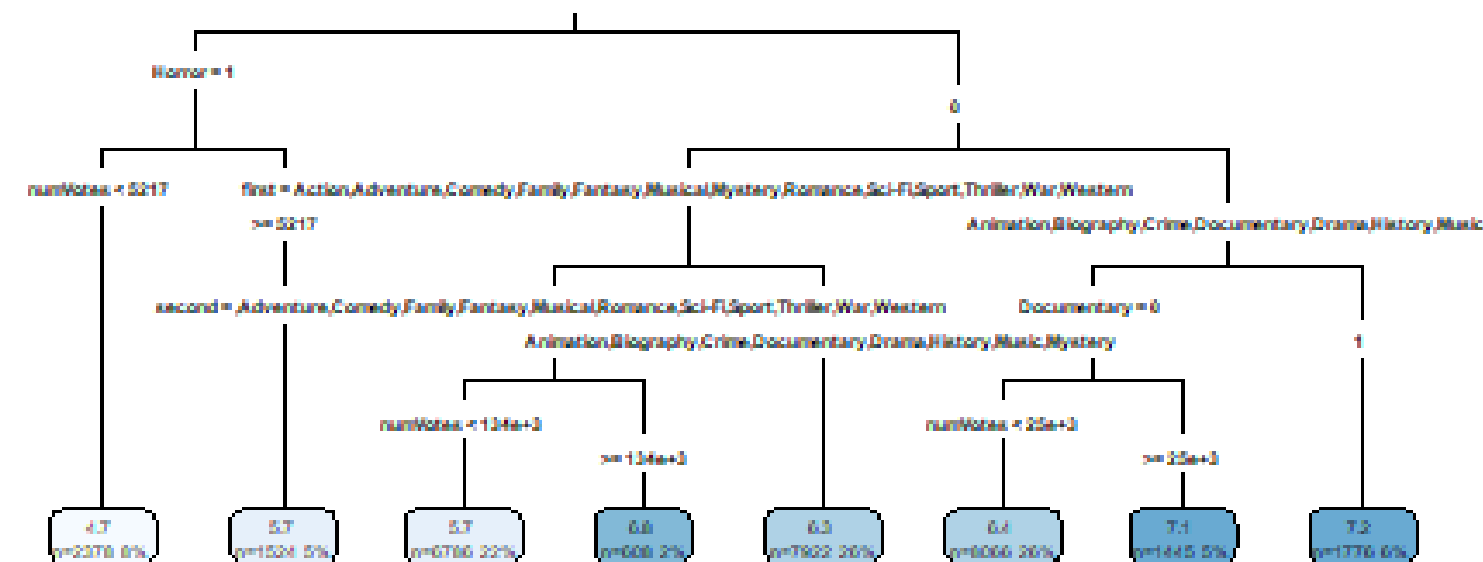
Example:

"Is the movie Action? → Yes"

"Is the movie Comedy? → No"

Predicted Rating = 7.2

"Decision trees provide clear and logical paths to understand predictions."

"Decision trees help us identify the key factors influencing a movie's rating: genres, release year, or number of votes."
"They are easy to understand and explain, even for non-experts."
"Applications of decision trees go beyond movies: predicting product success, customer behavior, or exam performance."
"In short: Decision trees simplify complex data into clear, actionable insights."