UDACITY
Part of Accenture

Calculation of Basketball Scoring Probabilities

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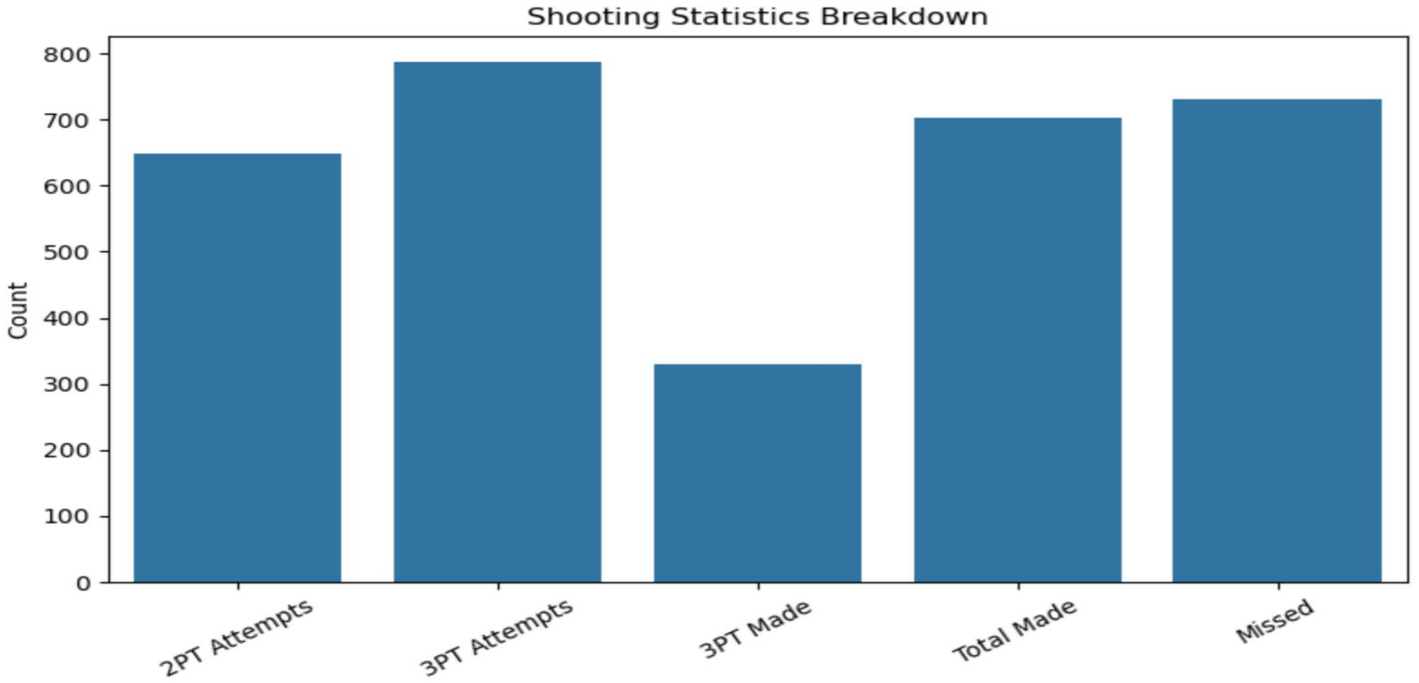
Agenda

Results of basketball scoring calculations

- Overall Shooting Statistics
- Probabilities
- Conditional Probabilities - Future
- Conditional Probabilities - Retrospective

Overall Shooting Statistics

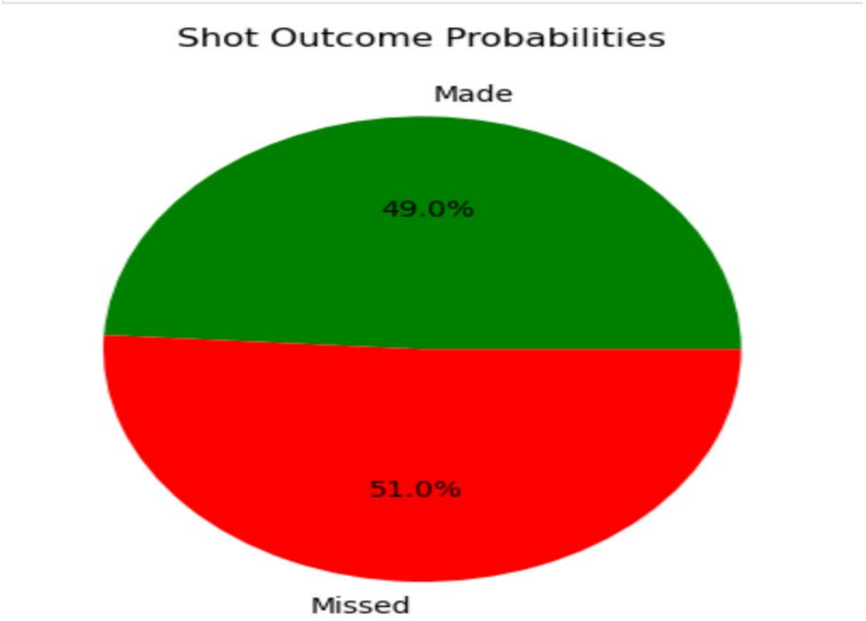
- Total Shots: 1434
- Made Shots: 703
- Missed Shots: 731
- 2-Point Attempts: 648
- 3-Point Attempts: 786
- 3-Point Made: 329
- Overall Shooting Accuracy: 49.02%



“Steph Curry attempted more 3-point shots than 2-point shots in this dataset, but his overall accuracy was below 50%.

Probabilities

- • P(Made) = 0.49
- • P(Missed) = 0.51
- • P(3PT) = 0.55
- • P(Made | 3PT) = 0.42
- • P(Made ∩ 3PT) = 0.23

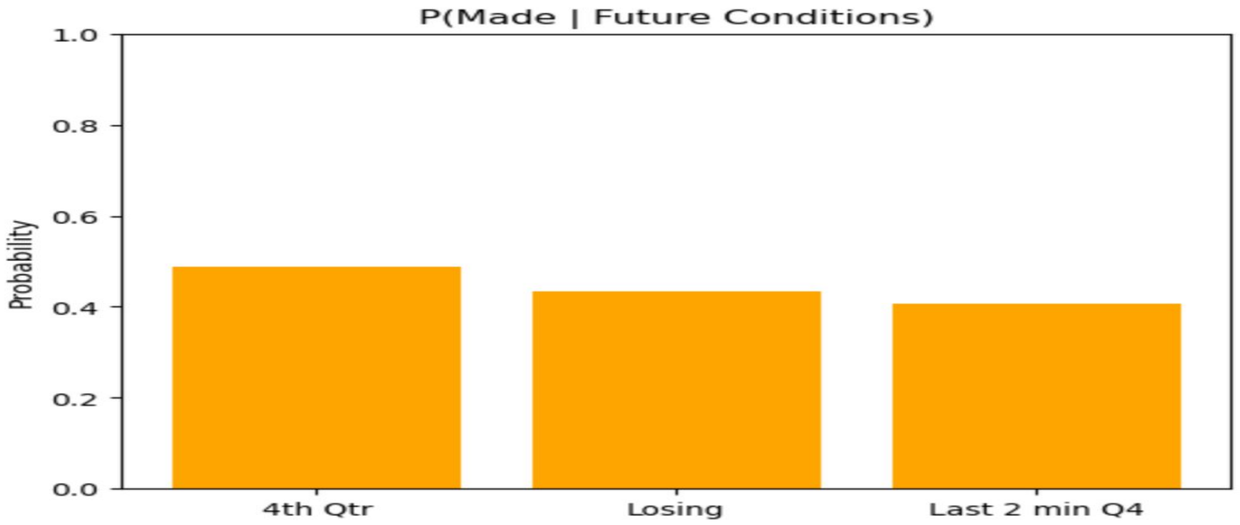


"Steph Curry attempted more 3-point shots than 2-point shots. However, his success rate for 3-point shots is around 42%."

Conditional Probabilities - Future

- • P(Made | 4th Qtr) = 0.49
- • P(Made | Losing) = 0.43
- • P(Made | Last 2 min of 4th Qtr) = 0.41

"Steph Curry's shot success rate slightly drops in critical game moments, such as the last 2 minutes of the 4th quarter or when trailing."



Conditional Probabilities - Retrospective

- P(3PT | Made) = 0.47
- P(4th Qtr | Made) = 0.26

"Roughly 47% of Curry's made shots were 3-pointers, and 26% occurred in the 4th quarter. This highlights his preference for long-range shots even in pressure moments."