

Best Bowling Performance

Omolewa Adetoro

2024-10-07

In this report we will look at which team had the best bowling performance using the T20 International Cricket Matches dataset which I cleaned.

The teams included in this dataset

- Afghanistan
- Australia
- Bangladesh
- England
- India
- New Zealand
- Pakistan
- South Africa
- Sri Lanka
- West Indies

Setting up my environment

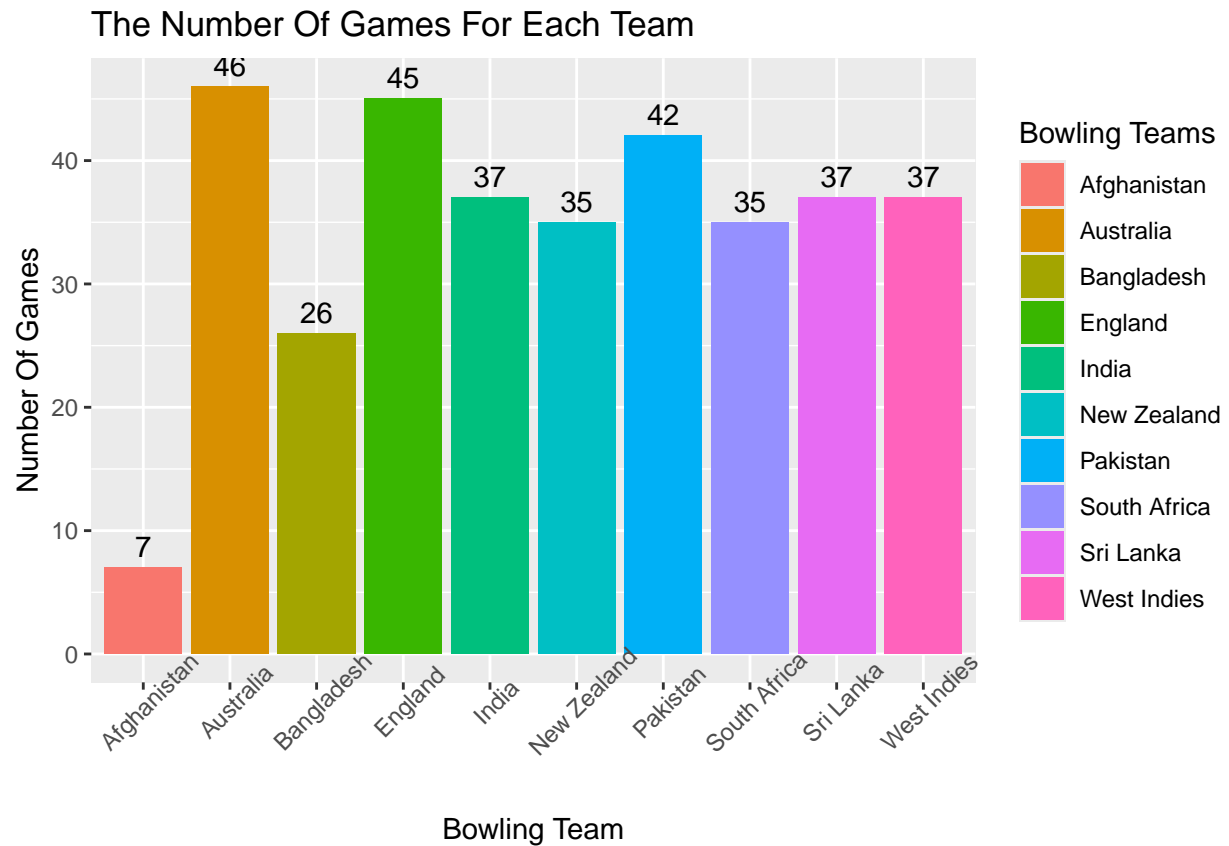
Notes: setting up my R environment by loading “tidyverse” and “scales” packages as well as “cricket_data” the clean csv file

```
library(tidyverse)
library(scales)
cricket_data = read.csv("~/Data Analysis Case Studies/Best Batting And Bowling Performance/clean cricket_data.csv")
```

Findings

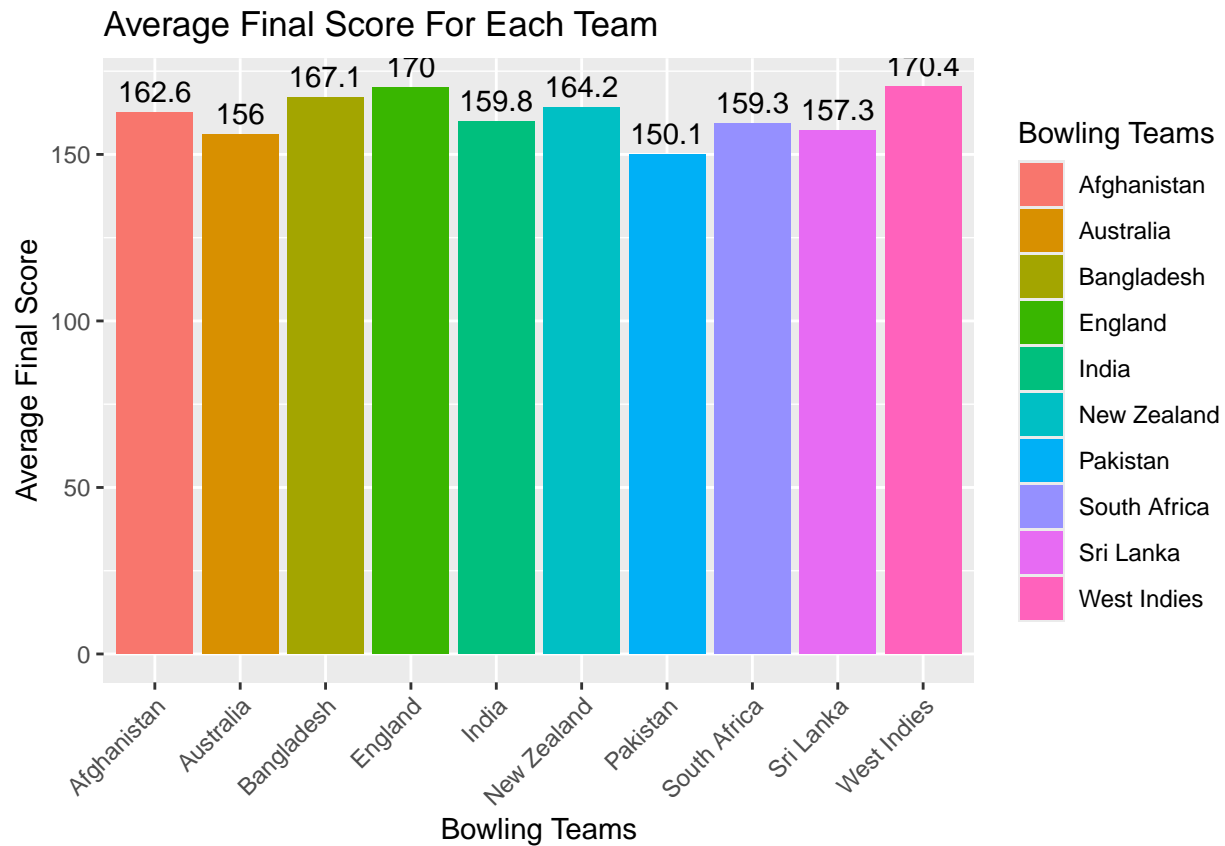
In this section, we will explore a series of visualizations and analyses to determine which teams have the best bowling performance. Our focus will be on how effectively they defended against opposing batting teams. To assess this, we will examine the lowest scores, as they reflect how well the bowling team disrupted the batting side's performance, thereby enhancing their own.

The number of games each team played



There are a total of 347 matches, and each team played various amount of games. Due to this we will be using averages to ensure the reliability of the report.

The average final score of each team



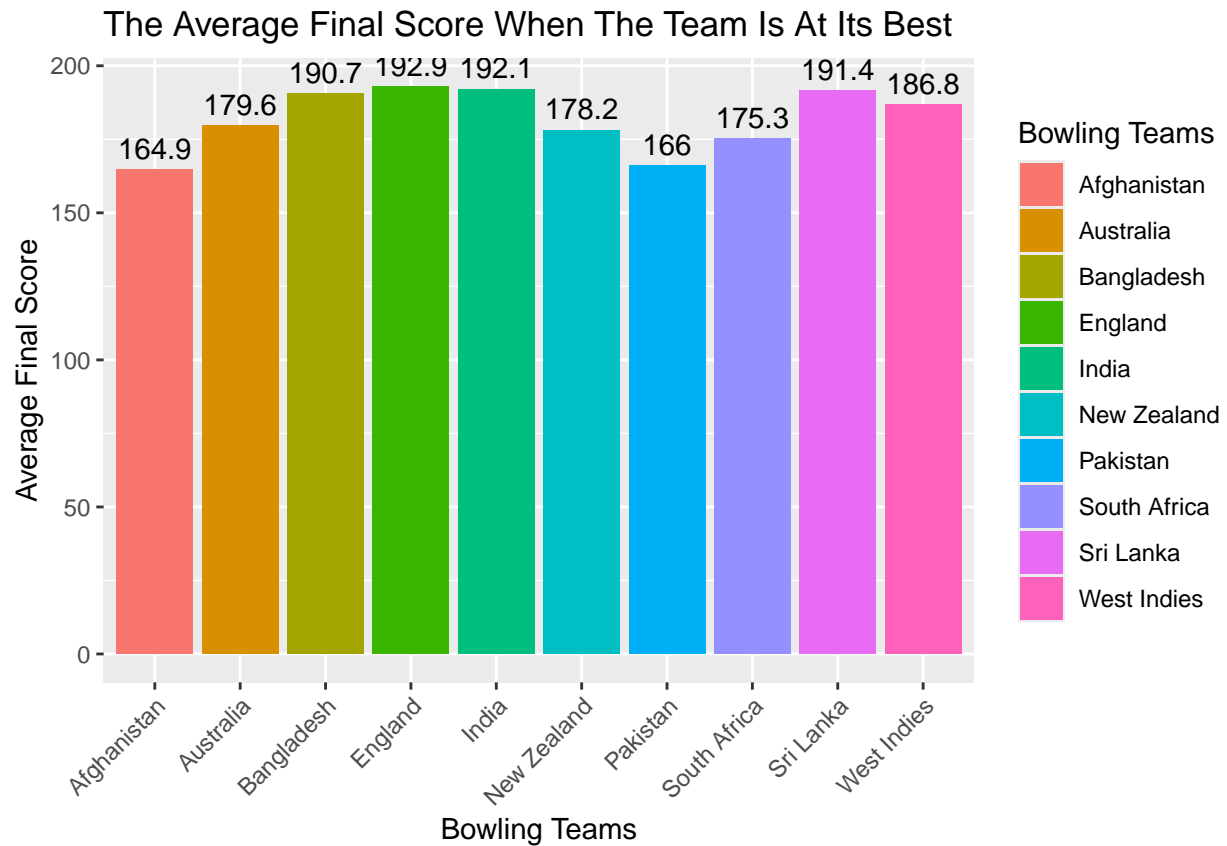
The average scores for each team are displayed here, with Pakistan having the lowest and West Indies the highest. Since we're evaluating the performance of the bowling teams, a lower score indicates stronger defense against the batting team. However, simply considering overall averages doesn't provide enough insight into which team has the best bowling performance. To gain a clearer perspective, the following visualizations and analysis will focus on scenarios where the batting teams delivered their best performances against the bowling team.

The conditions I used to define a team's best batting performance are:

- The top-order batsmen are batting
- The lower-order of batsmen are not involved
- The team is not under pressure, measured by maintaining a run rate of 7 or higher
- A powerplay has occurred
- The team shows aggression by scoring 45 or more runs in the last 5 overs.
- The tail-enders (e.g bowlers) are not involved in batting

By doing this we will be able to see how well the bowling team perform when their opposing team shows great promise.

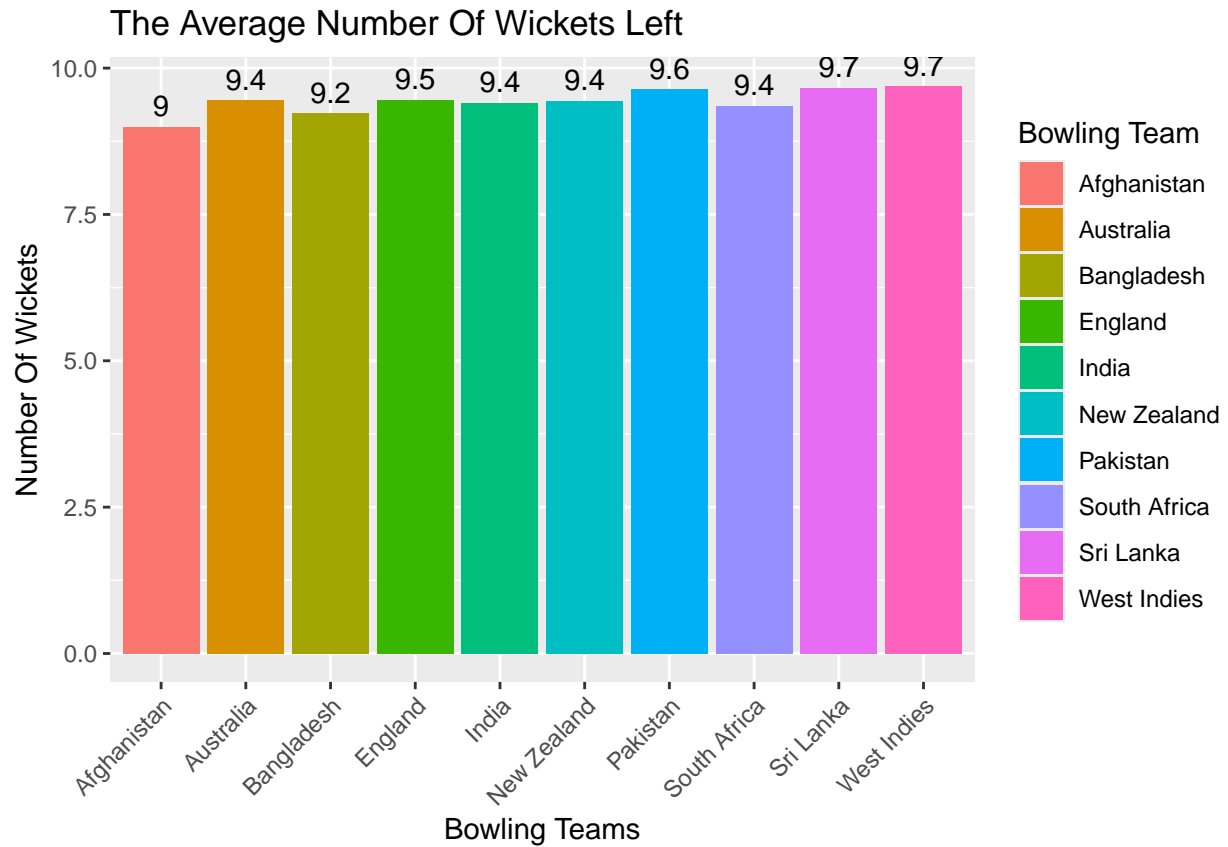
The average of final score when the teams are playing at their best



Here, we see the average scores for each team, with Afghanistan achieving the lowest and England the highest.

The average number of wickets left

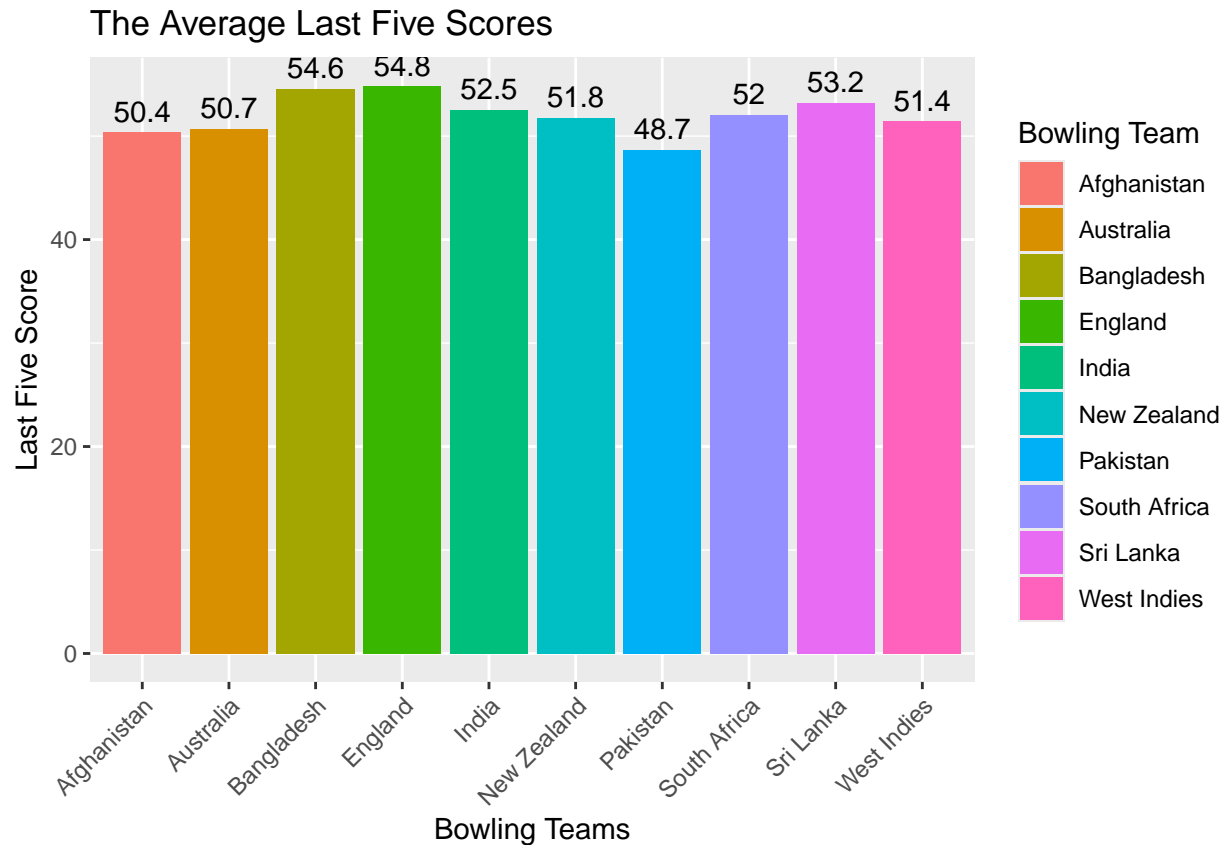
Retaining wickets is advantageous for the batting team, as it increases scoring opportunities and boosts their confidence. It also puts psychological pressure on the bowling team, knowing they must work harder to take the remaining wickets. Conversely, having fewer wickets left at the end of the game highlights the skill of the bowling team, as it demonstrates their ability to consistently dismiss the opposition.



In this case, we can see that each team averaged at least 9 wickets remaining by the end of the first innings.

The average score of the last five overs

The batting team typically scores the most runs during the final five overs, making this phase crucial in determining the outcome of the game.



As shown here, the Pakistan have achieved the lowest average score during this key period.

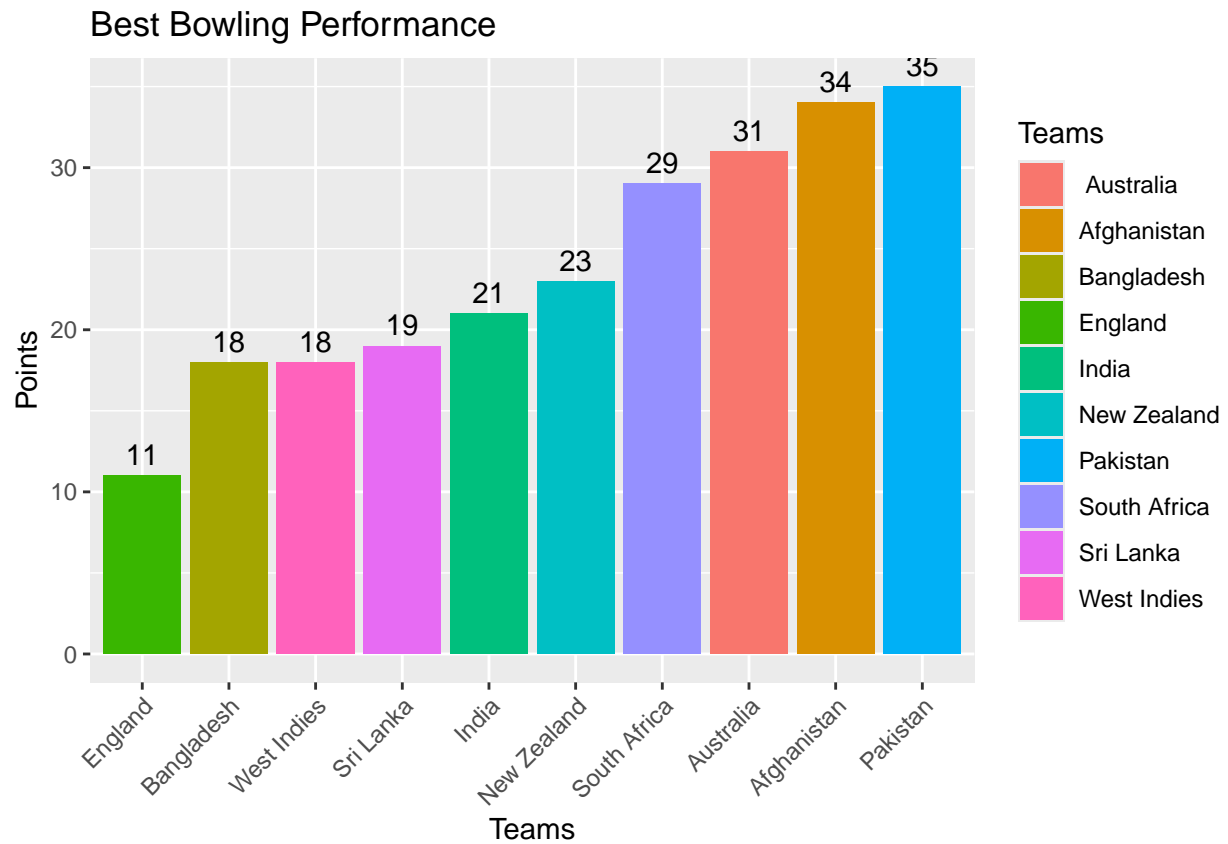
Conclusion

To identify the team with the best batting performance, I ranked them in three categories:

- Average score
- Average wickets left
- Average runs in the last five overs

Each team received a score ranging from 1 to 10, with 10 points awarded for the lowest rank and 1 point for the highest. The scores from all categories were then totaled to determine the final ranking.

Final ranking of the best batting performance



Best Bowling Performance

1. Pakistan
2. Afghanistan
3. Australia
4. South Africa
5. New Zealand
6. India
7. Sri Lanka
8. West Indies & Bangladesh
9. England