

BEST TWO OPENING PAIRS -TWENTY20-



Focus Area : Cricket

Team Name : Data Ninja

Members :

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Introduction

Cricket is a bat-and-ball game played between two teams of eleven players on a field at the center of which is a 22-yard (20-meter) pitch with a wicket at each end, each comprising two bails balanced on three stumps' ten batters have been dismissed, the innings ends and the teams swap roles. There are main three formats in cricket. They are Test, one day, and twenty20 formats.

In cricket, irrespective of the format of the game, batting always happens in between pairs. The two batsmen who bat together are called batting partners. The pair of batsmen who come to bat at the beginning of an inning is called opening batsmen or opening partners. In Twenty20 cricket, the opening partners must start their inning with a definite strategy. When any one of the opening batsmen loses his wicket, the partnership comes to an end. In Twenty20 opening in the shortest format is all about aggression. There's no time to assess the pace and bounce, so players have to trust their instincts and take a bit of risk. An opener endeavors to find the fence at least twice an over. And if the player doesn't manage to hit balls in his preferred areas, he must innovate or create the desired lengths and lines to find the fence. The first six overs can decide the future of a match in a Twenty20 game and it's criminal to let them pass without inflicting enough damage. The player can bide his time, but in this format, that means a couple of deliveries at most.

Objective of the analysis

In Twenty20 matches opening partnership plays a major role throughout the match and a weak opening partnership has a strong effect on losing a match. After the 2014 T20 world cup, the Sri Lankan team didn't have a stable opening partnership. The Sri Lankan team has tried for many opening partners too. So, in this study, we are trying to figure out and suggest two opening pairs for the Sri Lankan Twenty20 cricket team.

Data cleaning process

- Process of obtaining data from statsguru.
- T20 batting was selected and Sri Lanka was selected for the team field.
- Then both home and away conditions were selected and the starting date was fixed to 2016(since we are only considering new players except retired players).
- Won, Lost, tied matches were selected and innings by innings list was selected from the view format field and data was extracted.
- Individual player statistics were obtained by using a search bar and taking their T20 Career

Data cleaning process – Player Stat Table

- Individual player statistic tables (Avishka Fernando, Kusal Mendis, Dhanushka Gunathilaka) were merged into one table called Player stat.
- Then Data types of that table columns were changed according to the correct type of that data. (All the numerical value columns were in Text data format. Therefore, we have changed those into Decimal and whole-number data types.)

- A new column was added to the table for player images. (Column name – URL [Contains URLs for player's images] Data type - URL).

Player	Season	Matches	Innings	Runs	Highest_Score	Average	No_of_balls_faced	Strike_rate	No_of_100s	No_of_50s	No_of_Ducks	No_of_4s	No_of_6s	
Dhanushka Gunathilaka	2015-2021	30	29	558	57	19.58	467	121.62	0	3	0	61	14	https://media.gettyimages.com/photos/dhanushka-gunathilaka-id128111107.jpg
Kusal Mendis	2016-2021	29	29	538	79	18.55	423	127.18	0	5	3	44	23	https://media.gettyimages.com/photos/kusal-mendis-id128111107.jpg
Avishka Fernando	2019-2021	20	19	250	37	13.15	262	95.41	0	0	2	22	4	https://media.gettyimages.com/photos/avishka-fernando-id128111107.jpg

Data cleaning process – Player MatchStat Table

- A new table was extracted from the Player stat table with the columns of Season and No of matches.

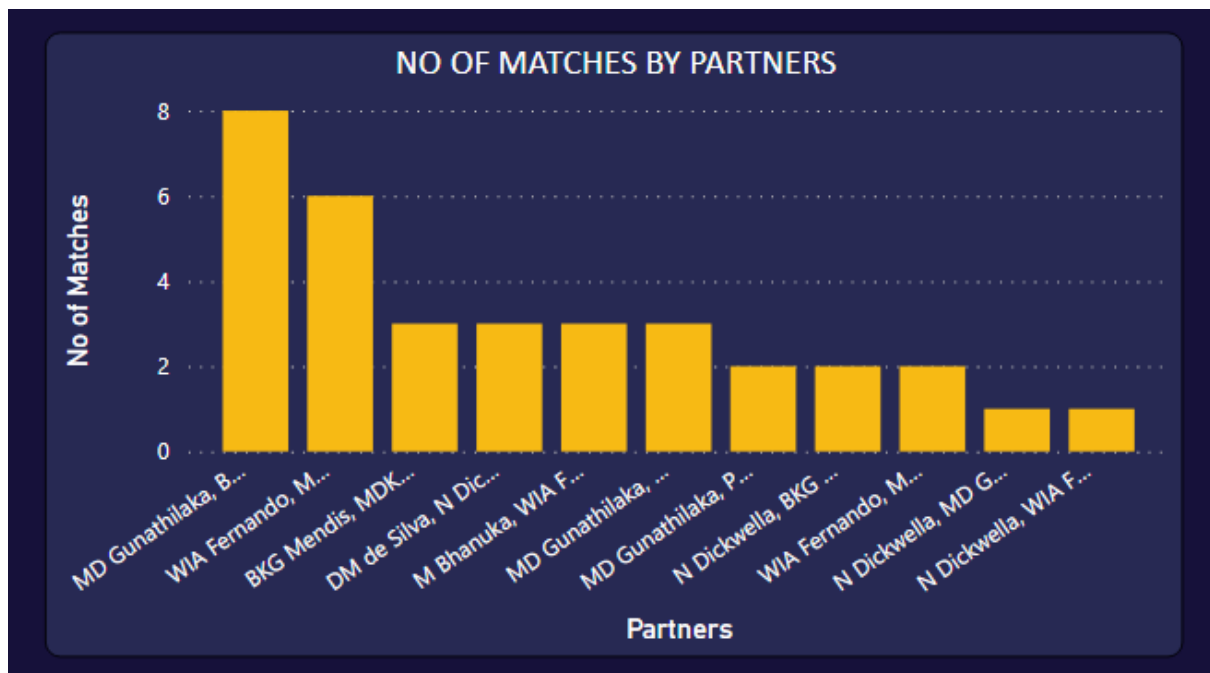
Opening Player	Season	Matches
Dhanushka Gunathilaka	2016-2021	30
Kusal Mendis	2016-2021	29
Avishka Fernando	2019-2021	20

Data cleaning process – Opening Partnership Table

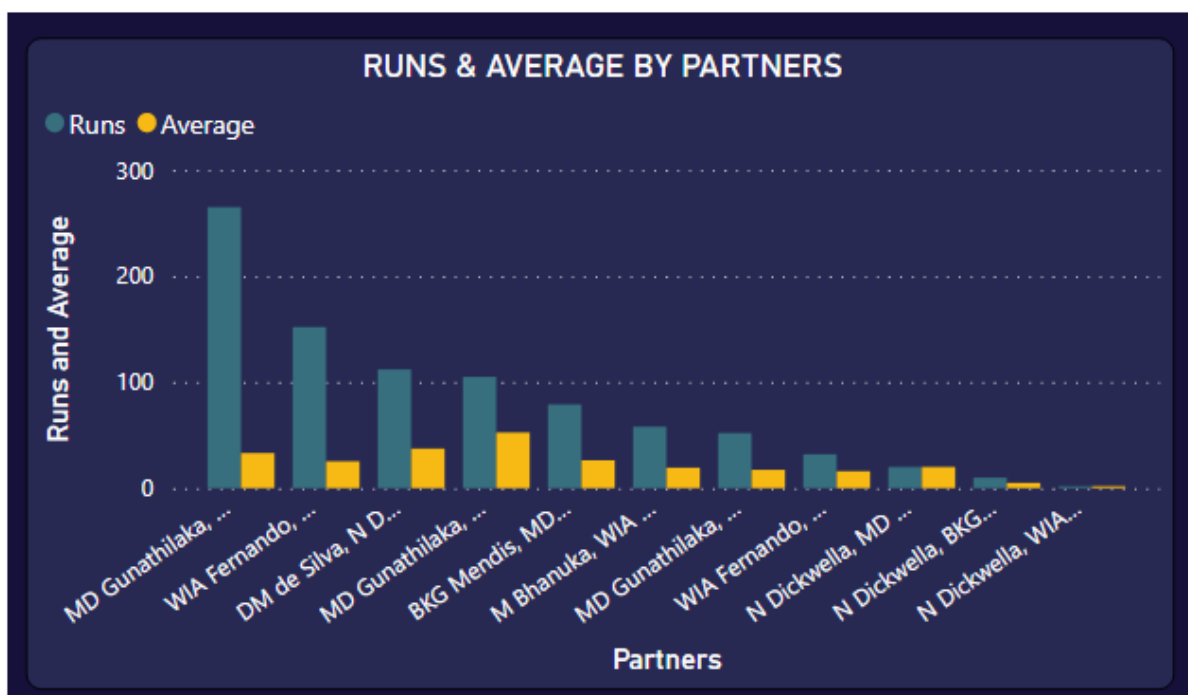
- The opening partnership table was filtered for only 11 partners. (Removed the players who don't play now for SL Cricket.)
- Then some columns were removed from the table.
- Then rows with the same partners were merged.
- Then the columns with wrong data types were adjusted.
- The average partnership column was calculated using the Total runs column and no of matches column

Partners	No_of_Matches	Total_Runs	Total_Overs	Average_Partnership
MD Gunathilaka, BKG Mendis	8	265	27.2	33.13
WIA Fernando, MD Gunathilaka	6	152	19.7	25.33
DM de Silva, N Dickwella	3	112	11.3	37.33
BKG Mendis, MDKJ Perera	3	79	9.7	26.33
MD Gunathilaka, MDKJ Perera	3	52	7.3	17.33
M Bhanuka, WIA Fernando	3	58	10.2	19.33
MD Gunathilaka, P Nissanka	2	105	12.3	52.50
WIA Fernando, MDKJ Perera	2	32	3.6	16.00
N Dickwella, BKG Mendis	2	10	2	5.00
N Dickwella, MD Gunathilaka	1	20	3	20.00
N Dickwella, WIA Fernando	1	1	0.3	1.00

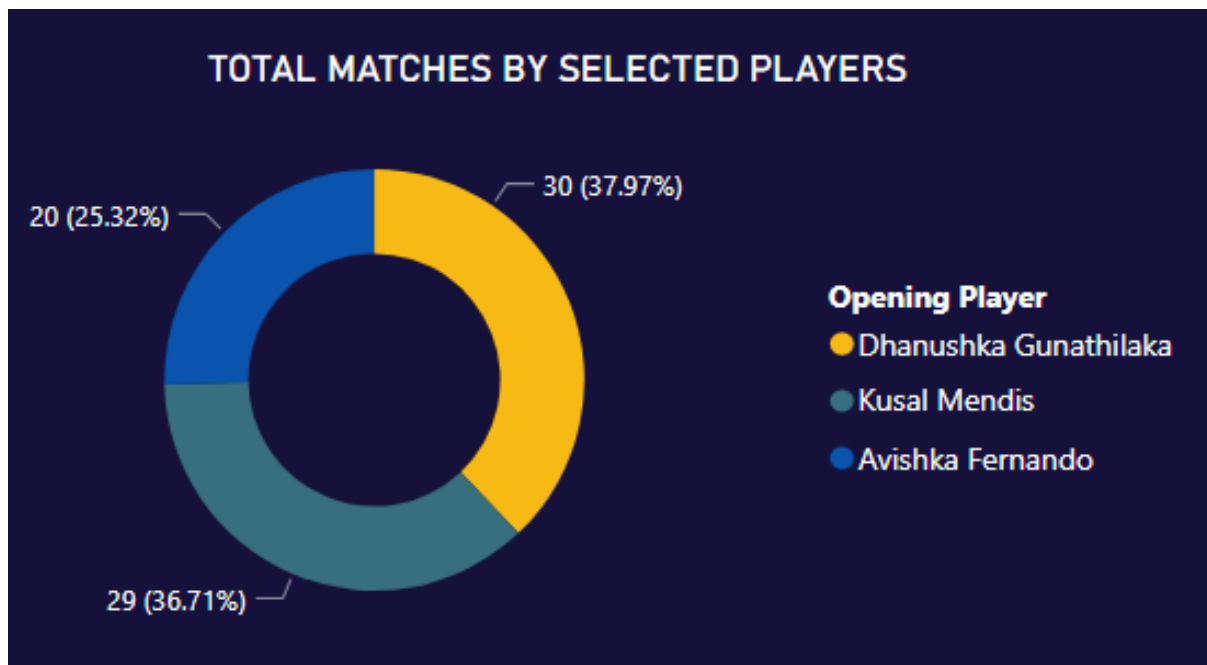
Story told by the data



According to the graphical representation of No of matches by partners, the highest number of t20 matches are played by MD Gunathilaka and BKG Mendis and it is a total of 08 matches since 2016. Then the second-highest number of matches are played by WIA Fernando and MD Gunathilaka, it is 06 matches. Other opening pairs have played a lesser number of matches than these two pairs.

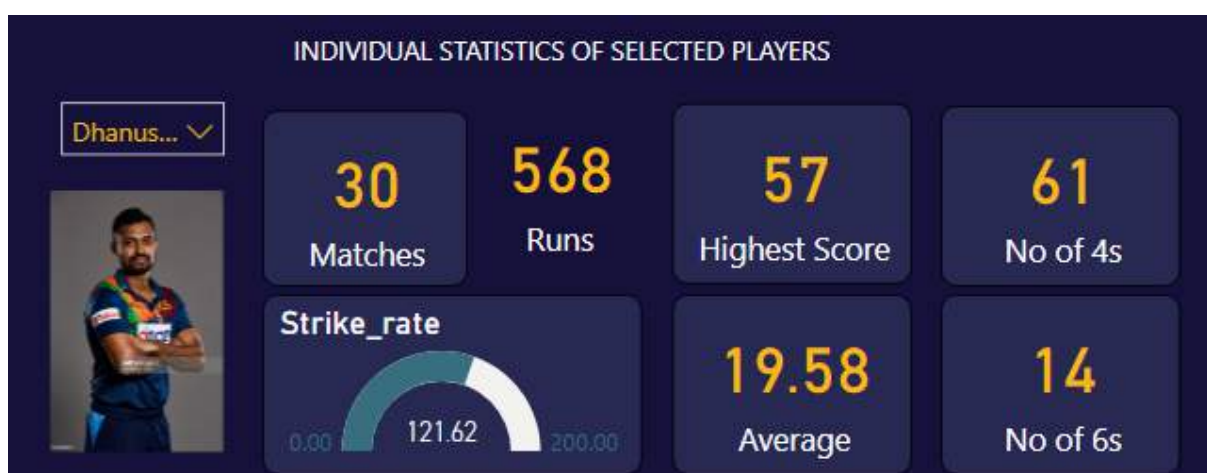


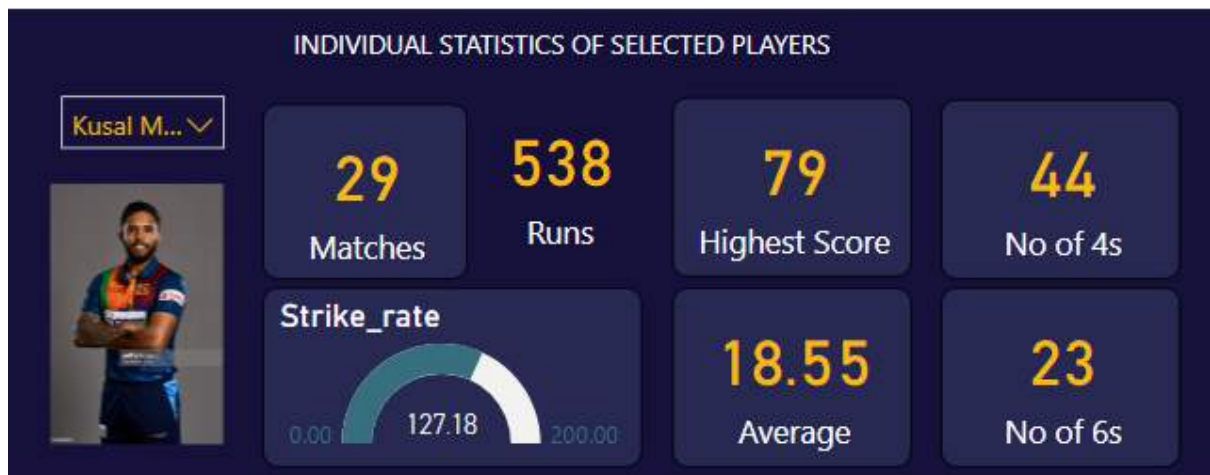
According to Runs & Average by Partners graph, BKG Mendis and MD Gunathilaka have the highest number of 265 runs with an average of 33.13 runs per match among all other opening partners from 2016. And WIA Fernando and MD Gunathilaka have maintained an average of 25.33 runs per match with 152 total runs. Meanwhile, all the other partners have scored runs below 152 but some of them have maintained a good average also.



As mentioned above MD Gunathilaka, BKG Mendis and WIA Fernando are the most experienced and well-performed players. Therefore, this donut chart represents the total number of matches for those selected three players (Since debut). According to the graph, it is clearly shown that MD Gunathilaka has played the most number of matches than others with the 37.97%. Unless the debut year these three players have played the approximately same number of matches.

In addition to that, there is a panel in the dashboard where individual statistics of selected players are shown for further information.





According to the highest number of matches played and total runs scored, pair MD Gunathika, BKG Mendis, and pair WIA Fernando, MD Gunathilaka are the top two pairs among all the other pairs. And also, these three players in those two pairs have considerable experience during the referred period.

Conclusions

- From the above analysis, it is confidently emphasized that MD Gunathilaka, BKG Mendis, and WIA Fernando are the most suitable players for the opening partnership.
- From the above-mentioned players, we can suggest the pair MD Gunathilaka, BKG Mendis, and the pair MD Gunathilaka, WIA Fernando as the suitable opening partners for the Sri Lankan T20 team.