



POWER BI PROJECT

ICC Cricket World Cup 2023 Analysis



NOVEMBER 18, 2023

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Problem Statement:

In this project I Created a Power BI Dashboard analysing the ICC cricket world Cup 2022 tournament.

Data source:

Got all the data regarding match and world cup from www.espnricinfo.com.

ESPN cricinfo															
Live Scores Series Teams News Features Videos Stats World Cup 2023															
Records Home 2023 Ask Cricinfo Statsguru World Cup World Cup (2023) World Cup (2019) T20 WC (M) Mor															
Player	Span	Mat	Inns	NO	Runs	HS	Ave	BF	SR	100	50	0	4s	6s	
V Kohli (IND)	2023-2023	10	10	3	711	117	101.57	784	90.68	3	5	1	64	9	
Q de Kock (SA)	2023-2023	10	10	0	594	174	59.40	555	107.02	4	-	-	57	21	
R Ravindra (NZ)	2023-2023	10	10	1	578	123*	64.22	543	106.44	3	2	-	55	17	
DJ Mitchell (NZ)	2023-2023	10	9	1	552	134	69.00	497	111.06	2	2	-	48	22	
RG Sharma (IND)	2023-2023	10	10	0	550	131	55.00	443	124.15	1	3	1	62	28	
DA Warner (AUS)	2023-2023	10	10	0	528	163	52.80	491	107.53	2	2	-	49	24	
SS Iyer (IND)	2023-2023	10	10	3	526	128*	75.14	465	113.11	2	3	1	36	24	
HE van der Dussen (SA)	2023-2023	10	10	1	448	133	49.77	530	84.52	2	2	-	39	8	
MR Marsh (AUS)	2023-2023	9	9	1	426	177*	53.25	395	107.84	2	1	2	42	20	
AK Markram (SA)	2023-2023	10	10	1	406	106	45.11	366	110.92	1	3	-	44	9	
DJ Malan (ENG)	2023-2023	9	9	0	404	140	44.88	400	101.00	1	2	-	50	9	
GJ Maxwell (AUS)	2023-2023	8	8	2	398	201*	66.33	265	150.18	2	-	1	40	22	
Mohammad Rizwan (PAK)	2023-2023	9	8	2	395	131*	65.83	414	95.41	1	1	-	38	5	
KL Rahul (IND)	2023-2023	10	9	4	386	102	77.20	391	98.72	1	1	-	37	9	
Ibrahim Zadran (AFG)	2023-2023	9	9	1	376	129*	47.00	493	76.26	1	1	-	39	5	
S Samarawickrama (SL)	2023-2023	9	9	2	373	108	53.28	365	102.19	1	2	1	36	4	
H Klaasen (SA)	2023-2023	10	10	1	373	109	41.44	280	133.21	1	1	-	28	19	
DP Conway (NZ)	2023-2023	10	10	1	372	152*	41.33	366	101.63	1	-	1	54	4	

Links-

1. <https://www.espnricinfo.com/records/tournament/team-match-results/icc-cricket-world-cup-2023-24-15338>
2. <https://www.espnricinfo.com/records/tournament/team-highest-innings-totals/icc-cricket-world-cup-2023-24-15338>
3. <https://www.espnricinfo.com/records/tournament/batting-most-runs-career/icc-cricket-world-cup-2023-24-15338>
4. <https://www.espnricinfo.com/records/tournament/bowling-most-wickets-career/icc-cricket-world-cup-2023-24-15338>
5. <https://www.espnricinfo.com/records/tournament/keeping-most-dismissals-career/icc-cricket-world-cup-2023-24-15338>
6. <https://www.espnricinfo.com/records/tournament/fow-highest-partnerships-for-any-wicket/icc-cricket-world-cup-2023-24-15338>

Data Transformation:

Performed initial data cleaning after Data Collection such as player name correction, handle missing value, replaced values, change data type etc. using Power Query. Transformed the final data for dashboard using Power Query of Power BI.

The screenshot shows the Power BI Desktop interface with a Power Query editor. The main table has the following columns: Player, Country, Match, Innings, Not Out, Runs, and Highest Score. The data is sorted by Runs in descending order.

Player	Country	Match	Innings	Not Out	Runs	Highest Score
V Kohli	India	10	10	3	711	711
Q de Kock	South Africa	10	10	0	594	594
R Ravindra	New Zealand	10	10	1	578	578
DJ Mitchell	New Zealand	10	9	1	552	552
RG Sharma	India	10	10	0	550	550
DA Warner	Australia	10	10	0	528	528
SS Iyer	India	10	10	3	526	526
HE van der Dussen	South Africa	10	10	1	468	468
MR Marsh	Australia	9	9	1	426	426
AK Markram	South Africa	10	10	1	406	406
DI Malan	England	9	9	0	404	404
GJ Maxwell	Australia	8	8	2	398	398
Mohammad Rizwan	Pakistan	9	8	2	395	395
KL Rahul	India	10	9	4	386	386
Ibrahim Zadran	Afghanistan	9	9	1	376	376
S Samaravickrama	Sri Lanka	9	9	2	373	373
H Klaasen	South Africa	10	10	1	373	373
DP Conway	New Zealand	10	10	1	372	372
DA Miller	South Africa	10	10	2	356	356
Azmatullah Omarzai	Afghanistan	9	8	3	353	353
Shubman Gill	India	8	8	1	350	350
Abdullah Shafique	Pakistan	8	8	0	336	336
P Nissanka	Sri Lanka	9	9	1	332	332
Mahmudullah	Bangladesh	8	7	1	328	328
Babar Azam	Pakistan	9	9	1	320	320
Rahmat Shah	Afghanistan	9	9	1	320	320
Haidarullah Khaki	Afghanistan	9	9	3	310	310

Data Modelling:

Connected all the datasets with based on some defined primary keys such as team, match date and match ids. Also, created many measures, calculated columns and parameters for data analysis and dash boarding using DAX.

Data Analysis Expression (DAX)

- Total_run = $\text{SUM}(\text{Most_run}[\text{Runs}])$
- Total_4s = $\text{SUM}(\text{Most_run}[4\text{s}])$
- Total_6s = $\text{SUM}(\text{Most_run}[6\text{s}])$
- Total_boundaries = $\text{Most_run}[4\text{s}] + \text{Most_run}[6\text{s}]$
- Total_ball_faced = $\text{SUM}(\text{Most_run}[\text{Ball Faced}])$
- strike_rate = $\text{DIVIDE}([\text{Total_run}], [\text{Total_ball_faced}], 0) * 100$
- Total_boundaries_runs = $\text{Most_run}[4\text{s}] * 4 + \text{Most_run}[6\text{s}] * 6$
- Total_boundary_run = $\text{SUM}(\text{Most_run}[\text{Boundary_runs}])$
- Boundary% = $\text{DIVIDE}([\text{Boundary_run}], [\text{Total_run}], 0) * 100$
- Total_wickets = $\text{SUM}(\text{Most_wickets}[\text{Wickets}])$
- Total_run_conceded = $\text{SUM}(\text{Most_wickets}[\text{Runs Conceded}])$
- Total_ball_bowled = $\text{SUM}(\text{Most_wickets}[\text{Balls}])$
- Bowling_strike_rate = $\text{DIVIDE}(\text{Most_wickets}[\text{Total_ball_bowled}], [\text{Total_wickets}], 0)$
- Highest_score = $\text{MAX}(\text{Most_run}[\text{Highest Score}])$
- Hundreds = $\text{SUM}(\text{Most_run}[\text{Hundred}])$
- Total_dismissal = $\text{SUM}(\text{Wicketkeeper_dismissals}[\text{Dismissals}])$
- Highest_partnership = $\text{MAX}(\text{Partnerships}[\text{Runs}])$

- Highest_partnership_run = CONCATENATE(Partnerships[Highest_partnership], " Run")

Reports:

Data visualization for the dataset was done using Microsoft Power BI Desktop:

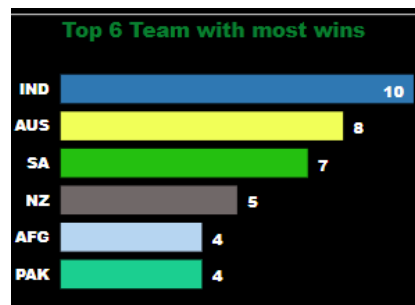
➤ Best Performers-

Here displaying the best performers and using the slicer we can see the best performer of a specific team.

ICC Cricket World Cup 2023 Analysis					
Team					
All					
Most Run	Most Wickets	Highest Score	Best Bowling Figure	Most Dismissal By Wicketkeeper	Highest Partnership
V Kohli 711 Runs	Mohammed Shami 23 Wickets	GJ Maxwell 201	Mohammed Shami 7/57	Q de Kock 20	R Ravindra, DP Conway 273 Run

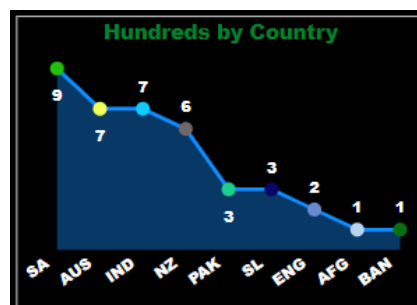
➤ Best Team-

Here displaying the team with most wins in the tournament. We show it in stacked bar chart and it shows India had the most wins (10) in the tournament.



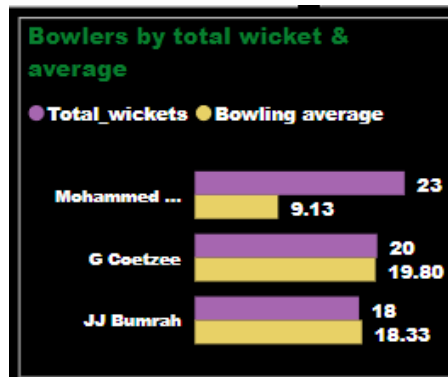
➤ Most Hundreds –

Here displaying the hundreds made by each country in the tournament. We show it in area chart, and it shows South Africa made the most number of hundred (9) in the tournament.

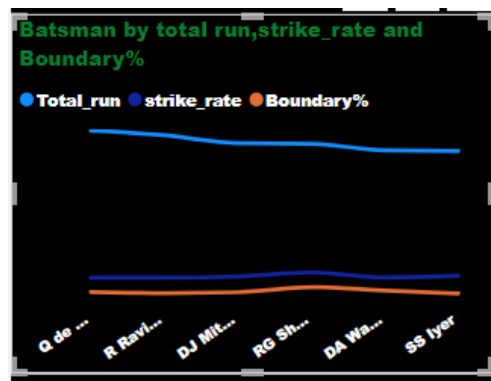


➤ Bowlers by total wickets & average –

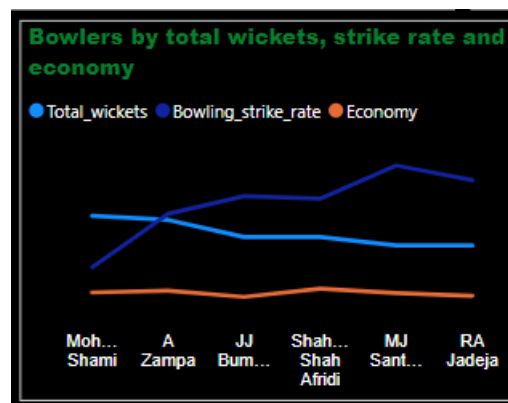
Here we filtered players with more than 15 wickets and having bowling strike rate of less than 20. We show the top 3 bowlers in the clustered bar chart considering the factors.



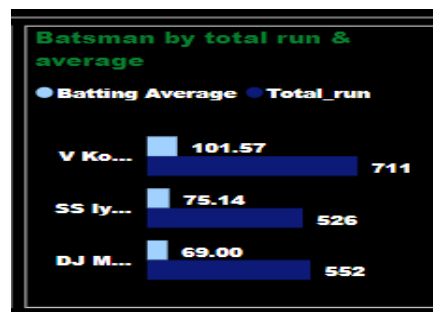
- Batsmen by total run, strike rate & Boundary% –
Here we filtered players with more than 500 runs, Boundary% more than 30% and strike rate more than 100. We show the top 6 batsman in the line chart diagram considering these factors.



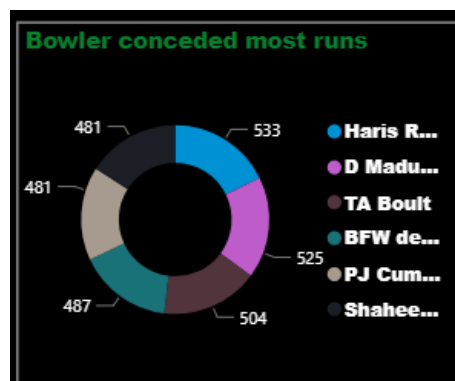
- Bowler by total wicket, strike rate & economy –
Here we filtered players with more than 15 wickets, economy less than 6 and strike rate less than 50. We show the top 6 bowlers in the line chart diagram considering these factors.



- **Batsman by total run & average –**
Here we filtered players with more than 500 runs and average more than 65. We show the top 3 batsman in the clustered bar chart diagram considering these factors.



- **Bowler conceded most runs –**
Here we displayed the bowlers with most runs conceded in the Donut chat. We see Harris Rauf from Pakistan had conceded the most runs (533) in the tournament.



- **Players with most 6s –**
Here we displayed the batsman with maximum number of 6s in the tournament in the Word cloud. We see Rohit Sharma from India hit most 6s (28) in the tournament.



Conclusion:

From this assignment we learned the use of Power BI. We learned how to analysis data sets and visualize the results in the Dashboard.