LOL Power BI Workshop Oct 2023

🏏 IPL Player Analysis Dashboard 📊

Guide for Creating Visuals in IPL Player Analysis Dashboard

IPL Match Analysis - 6 Visuals, 2 Slicers, 3 Cards

Slicer - Year:

Tables Required - Match
New Measure - NA
DAX Formula - NA
Columns/Measures Required - Match(Season_Year)
Keys to Join - NA
Steps -
1. Select the Slicer in "Build Visual" from the Visualization Section.
2. Drag the "Season_Year" on the Empty Slicer Visual OR Drag the "Season_Year" on the "Field" Section which is present in the "Build Visual".
3. If you want to change the type of Slicer you can change the type of Slicer and then go to "Format your visual" which is present in the visualization section. Goto Slicer Setting -> Options here you can change the type of slicer.
4. The default type is "Between", For the above-created slicer the suitable type will be "Dropdown".

Slicer - Overs:

Tables Required - Ball_By_Ball
New Measure - NA
DAX Formula - NA
Columns/Measures Required - Ball_By_Ball(Over_id)
Keys to Join - NA
Steps -
1. Select the Slicer in "Build Visual" from the Visualization Section.
2. Drag the "Over_id" on the Empty Slicer Visual OR Drag the "Over_id" on the "Field" which is present in the "Build Visual".

3. If you want to change the type of Slicer you can change the type of Slicer and then go to "Format your visual" which is present in the visualization section. Goto Slicer Setting -> Options here you can change the type of slicer.
4. The default type is "Between", For the above-created slicer the suitable type will be "Between".

Card - Fours:

Tables Required - Ball_By_Ball
New Measure - Count Of Fours in Ball_By_Ball
DAX Formula - Count Of Fours = COUNTROWS(FILTER(Ball_By_Ball, [Runs_Scored] = 4))
Columns/Measures Required - Ball_By_Ball(Count Of Fours)
Keys to Join - NA
Steps -
1. Select the "Card" from "Build Visual".
2. Drag "Count Of Fours" on the Fields which is present in the "Build Visual".

Card - Sixes:

Tables Required - Ball_By_Ball
New Measure - Count Of Sixes in Ball_By_Ball
DAX Formula - Count Of Sixes = COUNTROWS(FILTER(Ball_By_Ball, [Runs_Scored] = 6))
Columns/Measures Required - Ball_By_Ball(Count Of Sixes)
Keys to Join - NA
Steps -
1. Select the "Card" from "Build Visual".
2. Drag "Count Of Sixes" on the Fields which is present in the "Build Visual".

Visual - Fours by Players:

Tables Required - Ball_By_Ball and Player_match for Batsman
If you don't already have a "Player_match for Batsman" Table, please create one to facilitate the creation of visuals related to Batsmen. Afterward, we will proceed to join the "Ball_By_Ball" and "Player_match for Batsman" Tables to develop the desired visuals.
New Measure - Count Of Fours in Ball_By_Ball
DAX Formula - Count Of Fours = COUNTROWS(FILTER(Ball_By_Ball, [Runs_Scored] = 4))
Columns/Measures Required -
Ball_By_Ball(Cout Of Fours)

and
Player_match for Batsman (Player_Name)
Keys to Join - Ball_By_Ball(Striker_match_SK) and Player_match for Batsman(Player_match_SK)
Steps -
1. Select the "Stacked Bar Chart" from "Build Visual".
2. Drag "Player_Name" on the x-axis.
3. Drag "Count Of Fours" on the y-axis.

Visual - Sixes by Players:

Tables Required - Ball_By_Ball and Player_match for Batsman
If you don't already have a "Player_match for Batsman" Table, please create one to facilitate the creation of visuals related to Batsmen. Afterward, we will proceed to join the "Ball_By_Ball" and "Player_match for Batsman" Tables to develop the desired visuals.
New Measure - Count Of Sixes in Ball_By_Ball
DAX Formula - Count Of Sixes = COUNTROWS(FILTER(Ball_By_Ball, [Runs_Scored] = 6))
Columns/Measures Required -
Ball_By_Ball(Cout Of Sixes)
and
Player_match for Batsman (Player_Name)
Keys to Join - Ball_By_Ball(Striker_match_SK) and Player_match for Batsman(Player_match_SK)
Steps -
1. Select the "Stacked Bar Chart" from "Build Visual".
2. Drag "Player_Name" on the x-axis.
3. Drag "Count Of Sixes" on the y-axis.

Visual - Leading Run Scorers:

Tables Required - Ball_By_Ball and Player_match for Batsman
If you don't already have a "Player_match for Batsman" Table, please create one to facilitate the creation of visuals related to Batsmen. Afterward, we will proceed to join the "Ball_By_Ball" and "Player_match for Batsman" Tables to develop the desired visuals.
New Measure - NA
DAX Formula - NA
Columns/Measures Required -
Ball_By_Ball(Runs_Scored)
and
Player_match for Batsman (Player_Name)
Keys to Join - Ball_By_Ball(Striker_match_SK) and Player_match for Batsman(Player_match_SK)

Steps -

1. Select the "Stacked Bar Chart" from "Build Visual".
2. Drag "Player_Name" on the x-axis.
3. Drag "Runs_Scored" on the y-axis.

Visual - Leading Wicket Takers:

Tables Required - Ball_By_Ball and Player_match

New Measure - Count Of Wickets in Ball_By_Ball

DAX Formula - Count Of Wickets = COUNTROWS(FILTER(Ball_By_Ball, [Bowler_Wicket] = 1))

Columns/Measures Required - Ball_By_Ball(Count Of Wickets) and Player_match(Player_Name)

Keys to Join - Ball_By_Ball(Bowler_match_SK) and Player_match(Player_match_SK)

Steps -

1. Select the "Stacked Bar Chart" from "Build Visual".
2. Drag "Player_Name" on the x-axis.
3. Drag "Count Of Wickets" on the y-axis.

Visual - Highest Strike Rates:

Tables Required - Ball_By_Ball and Player_match for Batsman

If you don't already have a "Player_match for Batsman" Table, please create one to facilitate the creation of visuals related to Batsmen. Afterward, we will proceed to join the "Ball_By_Ball" and "Player_match for Batsman" Tables to develop the desired visuals.

New Measure - Strike Rate in Ball_By_Ball

DAX Formula - Strike Rate = DIVIDE(SUM('Ball_By_Ball'[Runs_Scored]), COUNT('Ball_By_Ball'[Ball_id])) * 100

Columns/Measures Required -

Ball_By_Ball(Strike Rate)

and

Player_match for Batsman (Player_Name)

Keys to Join - Ball_By_Ball(Striker_match_SK) and Player_match for Batsman(Player_match_SK)

Steps -

1. Select the "Stacked Bar Chart" from "Build Visual".
2. Drag "Player_Name" on the x-axis.
3. Drag "Strike Rate" on the y-axis.

Visual - Batting Averages:

Tables Required - Ball_By_Ball and Player_match for Batsman

If you don't already have a "Player_match for Batsman" Table, please create one to facilitate the creation of visuals related to Batsmen. Afterward, we will proceed to join the "Ball_By_Ball" and "Player_match for Batsman" Tables to develop the desired visuals.

New Measure - Batting Average in Ball_By_Ball

DAX Formula - Batting Average =

```
DIVIDE(
        SUM('Ball_By_Ball'[Runs_Scored]),
        DISTINCTCOUNT('Ball_By_Ball'[PlayerOut_match_SK])
)
```

Columns/Measures Required - Ball_By_Ball(Batting Average) and Player_match(Player_Name)

Keys to Join - Ball_By_Ball(Striker_match_SK) and Player_match for Batsman(Player_match_SK)

Steps -

1. Select the "Stacked Bar Chart" from "Build Visual".
2. Drag "Player_Name" on the x-axis.
3. Drag "Batting Average" on the y-axis.

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🏏 IPL Team Analysis Dashboard 📊

Guide for Creating Visuals in IPL Team Analysis Dashboard

IPL Team Analysis - 5 Visuals, 2 Slicers, 2 Cards

Slicer - Year:

Tables Required - Match
New Measure - NA
DAX Formula - NA
Columns/Measures Required - Match(Season_Year)
Keys to Join - NA
Steps -
1. Select the Slicer in "Build Visual" from the Visualization Section.
2. Drag the "Season_Year" on the Empty Slicer Visual OR Drag the "Season_Year" on the "Field" Section which is present in the "Build Visual".
3. If you want to change the type of Slicer you can change the type of Slicer and then go to "Format your visual" which is present in the visualization section. Goto Slicer Setting -> Options here you can change the type of slicer.
4. The default type is "Between", For the above-created slicer the suitable type will be "Dropdown".

Slicer - Overs:

Tables Required - Ball_By_Ball
New Measure - NA
DAX Formula - NA
Columns/Measures Required - Ball_By_Ball(Over_id)
Keys to Join - NA
Steps -
1. Select the Slicer in "Build Visual" from the Visualization Section.
2. Drag the "Over_id" on the Empty Slicer Visual OR Drag the "Over_id" on the "Field" which is present in the "Build Visual".

3. If you want to change the type of Slicer you can change the type of Slicer and then go to "Format your visual" which is present in the visualization section. Goto Slicer Setting -> Options here you can change the type of slicer.
4. The default type is "Between", For the above-created slicer the suitable type will be "Between".

Card - Total Runs:

Tables Required - Ball_By_Ball
New Measure - Total Runs in Ball_By_Ball
DAX Formula - Total Runs = SUM('Ball_By_Ball'[Runs_Scored]) + SUM('Ball_By_Ball'[Extra_runs])
Columns/Measures Required - Ball_By_Ball(Total Runs)
Keys to Join - NA
Steps -
1. Select the "Card" from "Build Visual".
2. Drag "Total Runs" on the Fields which is present in the "Build Visual".

Card - Total Wickets:

Tables Required - Ball_By_Ball
New Measure - Count Of Wickets in Ball_By_Ball
DAX Formula - Count Of Wickets = COUNTROWS(FILTER(Ball_By_Ball, [Bowler_Wicket] = 1))
Columns/Measures Required - Ball_By_Ball(Count Of Wickets)
Keys to Join - NA
Steps -
1. Select the "Card" from "Build Visual".
2. Drag "Count Of Wickets" on the Fields which is present in the "Build Visual".

Visual - Matches Won:

Tables Required - Match and Team
New Measure - NA
DAX Formula - NA
Columns/Measures Required - Match(match_winner) and Team(Team_Name)
Keys to Join - Match(Team1) with Team(Team_SK)
Steps -
1. Select the "Stacked Column Chart" from "Build Visual".

2. Drag "Team_Name" on the x-axis.
3. Drag "match_winner" on the y-axis. The count of this Measure is assigned on the y-axis.

Visual - Toss Winner Decision:

Tables Required - Match
New Measure - NA
DAX Formula - NA
Columns/Measures Required - Match(Toss_Name) and Match(Toss_Winner)
Keys to Join - NA
Steps -
1. Select the "Stacked Column Chart" from "Build Visual".
2. Drag "Toss_Name" on the x-axis.
3. Drag "Toss_Winner" on the y-axis. The count of this Measure is assigned on the y-axis.
4. Click on the Visual we have created, and then select the "Pie Chart" from the "Build Visual" menu. Since we have a limited number of categories on the x-axis, a "pie chart" is the most appropriate choice for this visual representation.

Visual - Wickets Taken by Team:

Tables Required - Ball_By_Ball and Team
New Measure - NA
DAX Formula - NA
Columns/Measures Required - Ball_By_Ball(Bowler_Wicket) and Team(Team_Name)
Keys to Join - Ball_By_Ball(BowlingTeam_SK) with Team(Team_SK)
Steps -
1. Select the "Stacked Column Chart" from "Build Visual".
2. Drag "Team_Name" on the x-axis.
3. Drag "Bowler_Wicket" on the y-axis. The Sum of this Measure is assigned on the y-axis.
4. Apply filter for TOP 7 values.

Visual - Net Run Rate Of Teams:

Tables Required - Ball_By_Ball and Team

New Measure - Net Run Rate in Ball_By_Ball

DAX Formula - Net Run Rate =
VAR TotalRunsScored = SUM('Ball_By_Ball'[Runs_Scored]) + SUM('Ball_By_Ball'[Extra_runs])
VAR TotalOversFaced = SUMX('Ball_By_Ball', 'Ball_By_Ball'[Over_id]) / 6
VAR TotalRunsConceded = SUMX(FILTER('Ball_By_Ball', 'Ball_By_Ball'[Innings_No] <> 1),
'Ball_By_Ball'[Runs_Scored]) + SUMX(FILTER('Ball_By_Ball', 'Ball_By_Ball'[Innings_No] <> 1),
'Ball_By_Ball'[Extra_runs])
VAR TotalOversBowled = SUMX(FILTER('Ball_By_Ball', 'Ball_By_Ball'[Innings_No] <> 1),
'Ball_By_Ball'[Over_id]) / 6
RETURN
(TotalRunsScored / TotalOversFaced) - (TotalRunsConceded / TotalOversBowled)

Columns/Measures Required - Ball_By_Ball(Net Run Rate) and Player_match(Team_Name)

Keys to Join -
Ball_By_Ball(MatcH_id) and Match(match_id)
Match(Team1) and Team(Team_Name)

In this scenario, you need to combine three tables because there is no direct way to join the 'Ball_By_Ball' and 'Team' tables due to the lack of a common key. To address this, you're using the 'Match' table as a bridge to indirectly combine them. The 'Net Run Rate' of a team is specific to the matches they've played, making the 'Match' table a relevant intermediary. This approach allows you to link the team's performance data in 'Ball_By_Ball' with the corresponding matches in the 'Match' table.

Steps -
1. Select the "Stacked Column Chart" from "Build Visual".
2. Drag "Team_Name" on the x-axis.
3. Drag "Net Run Rate" on the y-axis.

Visual - Total Runs Of Teams:

Tables Required - Ball_By_Ball and Team
New Measure - Total Runs in Ball_By_Ball
DAX Formula - Total Runs = SUM('Ball_By_Ball'[Runs_Scored]) + SUM('Ball_By_Ball'[Extra_runs])
Columns/Measures Required - Ball_by_Ball(Total Runs) and Team(Team_Name)
Keys to Join -
Ball_By_Ball(MatcH_id) and Match(match_id)
Match(Team1) and Team(Team_Name)

In this scenario, you need to combine three tables because there is no direct way to join the 'Ball_By_Ball' and 'Team' tables due to the lack of a common key. To address this, you're using the 'Match' table as a bridge to indirectly combine them. The 'Net Run Rate' of a team is specific to the matches they've played, making the 'Match' table a relevant intermediary. This approach allows you to link the team's performance data in 'Ball_By_Ball' with the corresponding matches in the 'Match' table.

Steps -

1. Select the "Stacked Column Chart" from "Build Visual".
2. Drag "Team_Name" on the x-axis.
3. Drag "Total Runs" on the y-axis.

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🏏 IPL Match Analysis Dashboard 📊

Guide for Creating Visuals in IPL Match Analysis Dashboard

IPL Match Analysis - 6 Visuals, 2 Slicers, 3 Cards

Slicer - Team:

Tables Required - Team
New Measure - NA
DAX Formula - NA
Columns/Measures Required - Match(Team_Name)
Keys to Join - NA
Steps -
1. Select the Slicer in "Build Visual" from the Visualization Section.
2. Drag the "Team_Name" on the Empty Slicer Visual OR Drag the "Team_Name" on the "Field" Section which is present in the "Build Visual".
3. If you want to change the type of Slicer you can change the type of Slicer and then go to "Format your visual" which is present in the visualization section. Goto Slicer Setting -> Options here you can change the type of slicer.
4. The default type is "Between", For the above-created slicer the suitable type will be "Dropdown".

Slicer - Year:

Tables Required - Match
New Measure - NA
DAX Formula - NA
Columns/Measures Required - Match(Season_Year)
Keys to Join - NA
Steps -
1. Select the Slicer in "Build Visual" from the Visualization Section.
2. Drag the "Season_Year" on the Empty Slicer Visual OR Drag the "Season_Year" on the "Field" Section which is present in the "Build Visual".

3. If you want to change the type of Slicer you can change the type of Slicer and then go to "Format your visual" which is present in the visualization section. Goto Slicer Setting -> Options here you can change the type of slicer.
4. The default type is "Between", For the above-created slicer the suitable type will be "Dropdown".

Card - Total Runs:

Tables Required - Ball_By_Ball
New Measure - Total Runs in Ball_By_Ball
DAX Formula - Total Runs = SUM('Ball_By_Ball'[Runs_Scored]) + SUM('Ball_By_Ball'[Extra_runs])
Columns/Measures Required - Ball_by_Ball(Total Runs)
Keys to Join - NA
Steps -
1. Select the "Card" from "Build Visual".
2. Drag "Total Runs" on the Fields which is present in the "Build Visual".

Card - Total Wickets:

Tables Required - Ball_By_Ball
New Measure - Count Of Wickets in Ball_By_Ball
DAX Formula - Count Of Wickets = COUNTROWS(FILTER(Ball_By_Ball, [Bowler_Wicket] = 1))
Columns/Measures Required - Ball_By_Ball(Count Of Wickets)
Keys to Join - NA
Steps -
1. Select the "Card" from "Build Visual".
2. Drag "Count Of Wickets" on the Fields which is present in the "Build Visual".

Card - Matches:

Tables Required - Match
New Measure - NA
DAX Formula - NA
Columns/Measures Required - Match(match_id)
Keys to Join - NA
Steps -

1. Select the "Card" from "Build Visual".
2. Drag match_id (as count) on the Fields which is present in the "Build Visual".

Visual - Matches by City:

Tables Required - Match
New Measure - NA
DAX Formula - NA
Columns/Measures Required - Match(City_Name) and Match(match_id)
Keys to Join - NA
Steps -
1. Select the "Stacked Bar Chart" from "Build Visual".
2. Drag "City_Name" on the x-axis.
3. Drag "match_id" on the y-axis. The count of this Measure is assigned on the y-axis.

Visual - Matches by Win Type:

Tables Required - Match
New Measure - NA
DAX Formula - NA
Columns/Measures Required - Match(Win_Type) and Match(match_id)
Keys to Join - NA
Steps -
1. Select the "Stacked Column Chart" from "Build Visual".
2. Drag "Win_Type" on the x-axis.
3. Drag "match_id" on the y-axis. The count of this Measure is assigned on the y-axis.

Visual - Matches by Man Of The Match:

Tables Required - Match
New Measure - NA
DAX Formula - NA
Columns/Measures Required - Match(ManOfMach) and Match(match_id)
Keys to Join - NA
Steps -
1. Select the "Stacked Column Chart" OR "Stacked Area Chart" from "Build Visual".
2. Drag "ManOfMach" on the x-axis.

3. Drag "match_id" on the y-axis. The count of this Measure is assigned on the y-axis.

Visual - Bowler Wickets by Bowling Skill:

Tables Required - Ball_By_Ball and Player_match
New Measure - NA
DAX Formula - NA
Columns/Measures Required - Ball_By_Ball(Bowler_Wicket) and Player_match(Bowling_skill)
Keys to Join - Ball_By_Ball(Bowler_match_SK) and Player_match(Player_match_SK)
Steps -
1. Select the "Stacked Column Chart" from "Build Visual".
2. Drag "Bowling_skill" on the x-axis.
3. Drag "Bowler_Wicket" on the y-axis. The sum of this Measure is assigned on the y-axis.

Visual - Matches, Total Runs, Wickets by City Map:

Tables Required - Ball_By_Ball and Match
New Measure - NA
DAX Formula - NA
Columns/Measures Required - Ball_By_Ball(Bowler_Wicket), Ball_By_Ball(Total Runs), Match(City_Name), and Match(match_id)
Keys to Join - Ball_By_Ball(matcH_id) and Match(match_id)
Steps -
1. Select the "Map" from "Build Visual".
2. Drag "match_id" on the Bubble Size. The count of this Measure is assigned to the Bubble Size.
3. Drag "Total Runs" on the Tooltips.
4. Drag "Bowler_Wicket" on the Tooltips. The sum of this Measure is assigned to the Tooltips.

Visual - Sum Of Wickets by Out Type:

Tables Required - Ball_By_Ball
New Measure - NA
DAX Formula - NA
Columns/Measures Required - Ball_By_Ball(Bowler_Wicket) and Ball_By_Ball(Out_type)
Keys to Join - NA
Steps -
1. Select the "Stacked Column Chart" from "Build Visual".

2. Drag "Out_type" on the x-axis.
3. Drag "Bowler_Wicket" on the y-axis. The sum of this Measure is assigned on the y-axis.