How to Display Only the Top 10 Values in a Power BI Chart

Authored by

mohammed looti

January 10, 2026

ARABPSYCHOLOGY.COM

RECOMMENDED CITATION

mohammed looti (2026). *How to Display Only the Top 10 Values in a Power BI Chart*. PSYCHOLOGICAL SCALES. Retrieved from https://scales.arabpsychology.com/?p=125361

Yes, it is entirely possible to limit a Power BI chart to display only the top 10 values by utilizing the specialized "Top N filter" feature. This powerful mechanism enables users to precisely control the aggregation and granularity of the displayed data, allowing them to focus exclusively on the most impactful data points. By filtering for the top N values, analysts can effortlessly highlight key trends, outlier performance, or significant patterns that might otherwise be obscured in overly cluttered visuals. This capability is absolutely indispensable when working with extensive datasets, as it dramatically enhances readability and ensures that visual communications are both clear and focused.

The Necessity of Limiting Data in Visualization

In the realm of business intelligence and data analytics, clarity is paramount. When presenting data using visualizations, displaying too many data points can be counterproductive, leading to what is often referred to as "chart junk" or visual overload. For instance, a bar chart depicting sales performance across hundreds of different products will likely confuse the viewer rather than inform them. The human eye and cognitive processing ability are limited, making it difficult to discern meaningful differences or hierarchies when faced with an overwhelming amount of visual information. Therefore, focusing on the most relevant data--such as the top 10 performing items--becomes a critical strategy for effective reporting.

Analysts frequently encounter scenarios where they must answer specific, high-priority questions, such as identifying the ten highest-revenue customers or the top five most-cited production errors. In these situations, the ability to dynamically filter a visualization to show only the highest-ranking values (or 'N' values) is not merely a convenience; it is a fundamental requirement for deriving actionable insights. This selective display ensures that stakeholders immediately grasp the core message without needing to manually sift through hundreds of records in an underlying table.

Fortunately, Power BI provides robust, built-in functionality to handle this requirement efficiently. Rather than manipulating the underlying data model using complex Data Analysis Expressions (DAX) for simple ranking, users can leverage a straightforward filtering mechanism directly within the visualization pane. This approach promotes faster report creation and maintenance, allowing developers to focus on visual design and interpretation rather than complex data preparation tasks.

Understanding the Power BI "Top N" Feature

The "Top N filter" is a standard and highly accessible feature within the Power BI visualization toolkit. It operates as a specific type of visual level filter, meaning that its application is limited only to the selected visualization on the report canvas. This localized filtering ensures that other visuals drawing from the same dataset remain unaffected, providing granular control over the data presentation layer. The "Top N" setting allows the user to define a threshold--the 'N'--and specify

ARABPSYCHOLOGY.COM

whether they are interested in the highest (Top) or lowest (Bottom) results based on a specified measure.

This filter relies on three primary components to function correctly: first, the selection of either **Top** or **Bottom**; second, the numerical input for **N** (the count of items to display, e.g., 10); and third, the specification of the quantitative field used for ranking, referred to as the **By value** measure. The By value field must be a measurable quantity, such as sales amount, count of orders, or points scored, as this is the metric against which the ranking calculation is performed. Power BI uses this measure to determine which items qualify for inclusion in the final list before rendering the visual.

Utilizing the **Top N** visual level filter is significantly more straightforward than writing custom DAX ranking functions for visual presentation. While DAX provides absolute flexibility, the built-in filter is perfectly suited for quick, common ranking requirements. It efficiently handles the calculation of rankings across the distinct categorical elements present in the visualization (such as product names or player names), delivering immediate results upon application without requiring modifications to the underlying data model schema.

Prerequisites for Applying the Top N Filter

Before attempting to implement the Top N filter, it is essential to ensure that your report and visualization meet several key prerequisites. The fundamental requirement is that the visualization must contain both a categorical field (the items you want to rank, such as 'Team' or 'Player') and a corresponding measurable field (the value used for ranking, such as 'Points' or 'Sales'). Without both components, the Top N function cannot correctly determine which items to display or how to rank them.

Furthermore, the visual must already be configured on your Power BI report canvas. For instance, if you are using a standard bar chart, the categorical field should be placed in the Axis well and the measurable field should be placed in the Values well. It is also important to verify that the data quality is adequate; missing values or incorrect data types in the 'By value' field can lead to unexpected or incorrect filtering results.

Often, you may only want to display the top 10 (or top **N**) values in a chart in Power BI. Fortunately, this is easy to do by using the **Top N** visual level filter located within the Filters pane adjacent to the visualization settings. The following section provides a detailed, step-by-step example demonstrating the practical application of this powerful feature.

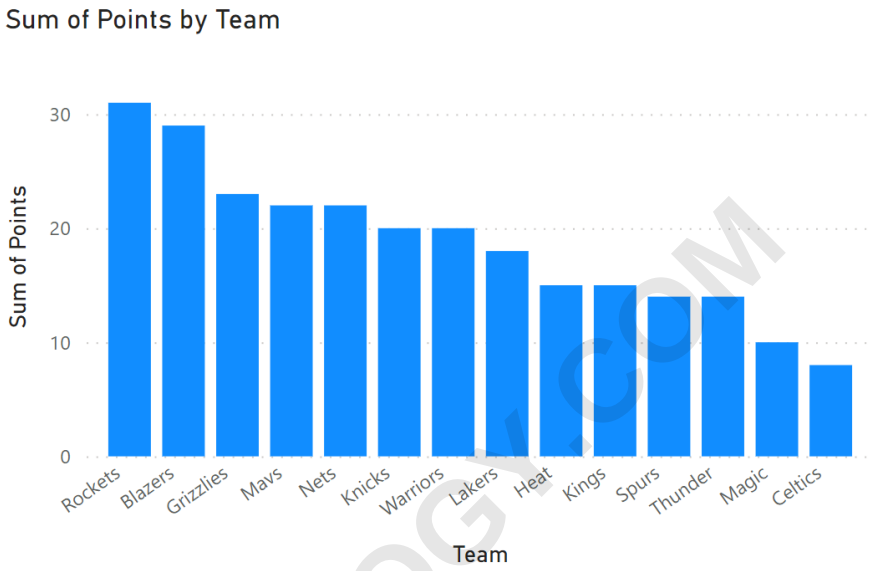
Step-by-Step Example: How to Only Show Top 10 Values in Chart in Power BI

To illustrate the process of applying the Top N filter, let us consider a practical scenario involving sports analytics. Suppose we have the following bar chart in Power BI that currently displays the

ARABPSYCHOLOGY.COM

total points scored across a comprehensive list of basketball players from various teams:

Team	Points	Assists
Blazers	29	2
Celtics	8	7
Grizzlies	23	15
Heat	15	9
Kings	15	4
Knicks	20	9
Lakers	18	6
Magic	10	3
Mavs	22	8
Nets	22	8
Rockets	31	4
Spurs	14	10
Thunder	14	5
Warriors	20	3



Currently the chart shows the points scored by all 14 players in our table. However, suppose that we would only like to display the players with the top 10 points scored. The process begins with ensuring the visual is selected and navigating to the Filters pane.

Activate the Chart: To begin, click the bar chart to make it active and ensure its settings appear in the Filters pane.

Access Filter Options: Then, locate the filter card corresponding to the categorical field (in this example, **Team**) under the Visual level filters section of the **Filters** tab. Click the dropdown arrow next to **Team**.

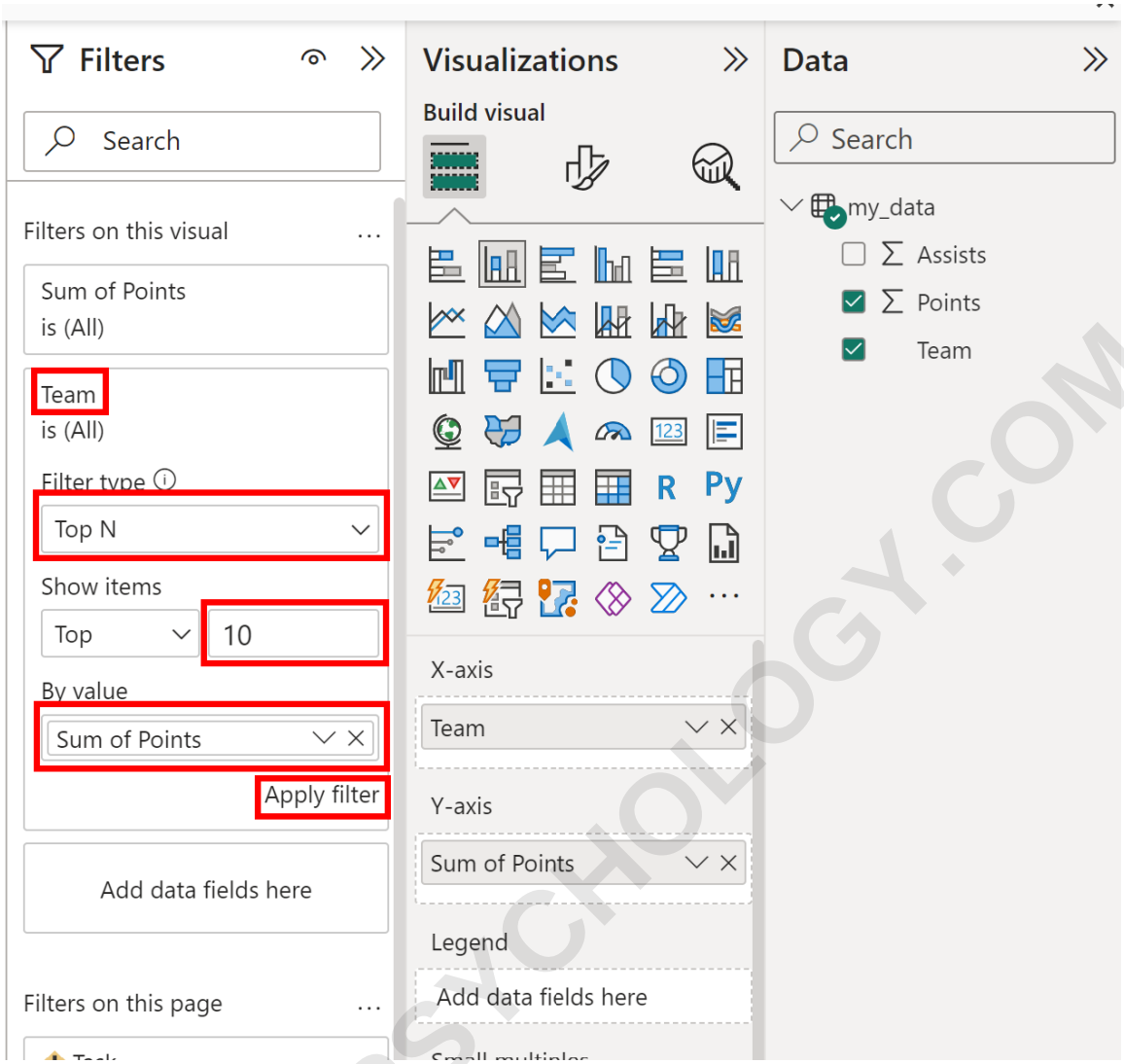
Select Top N Filtering: Next, click the dropdown arrow under **Filter type** and explicitly choose the **Top N** option.

Define the Top Count: Then type the desired count, **10**, under the **Show items** setting. Ensure that the selection is set to display **Top** items.

Specify the Ranking Measure: This step defines the metric used for ranking. Drag the quantitative field, **Points**, and drop it into the **By value** area.

Execute the Filter: Lastly, click **Apply filter** to execute the ranking calculation and update the visualization:

ARABPSYCHOLOGY.COM

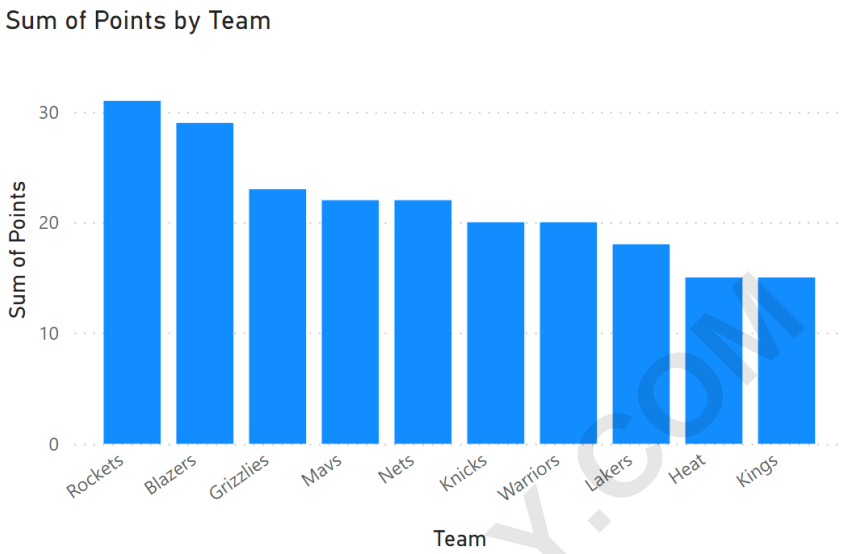


Refining the Visualization: Results and Impact

Once you click **Apply filter**, the bar chart will be instantaneously filtered to only show the players with the top 10 points scored, dramatically cleaning up the visual presentation:

ARABPSYCHOLOGY.COM

Team	Points	Assists
Blazers	29	2
Celtics	8	7
Grizzlies	23	15
Heat	15	9
Kings	15	4
Knicks	20	9
Lakers	18	6
Magic	10	3
Mavs	22	8
Nets	22	8
Rockets	31	4
Spurs	14	10
Thunder	14	5
Warriors	20	3



This resulting visualization is far more impactful for communicating comparative performance. Stakeholders no longer need to manually compare many small bars; the focus is instantly drawn to the most significant data points. This selective display is vital for maintaining the efficiency and effectiveness of data communication, particularly in executive dashboards where attention spans are limited and key insights must be communicated instantly.

A critical aspect of using the **Top N filter** is understanding how ties are handled. If, for instance, the 10th and 11th ranked players have an identical score, Power BI must decide how to handle this boundary condition. Generally, Power BI will include all tied values that meet the threshold criteria. This means that if multiple players tie for the 10th position, the resulting visual might display more than 10 bars (e.g., 11 or 12), ensuring complete and accurate representation of the ranked data. Always check your data for potential ties when relying on strict numerical limits.

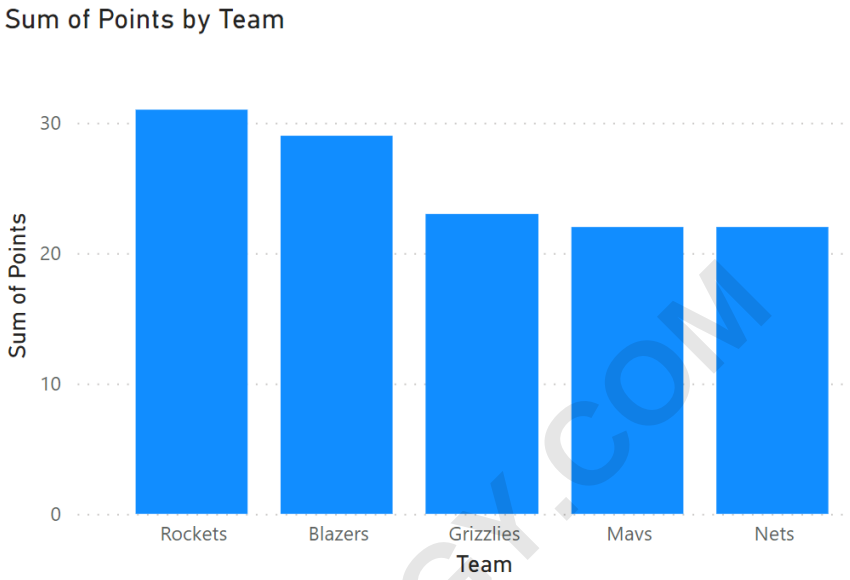
Flexibility of the Top N Filter: Beyond the Top 10

The utility of the **Top N filter** is not constrained merely to the number 10. The 'N' value is entirely dynamic, meaning you could type any number you'd like next to **Show items** to show a different number of bars instead. This flexibility allows analysts to quickly pivot their focus, perhaps from a broad view of the top 25 performers to a highly granular focus on the elite top 3 performers, all within seconds and without altering the underlying report query or data model.

For example, if we typed **5** then only the players with the top 5 points values would be shown:

ARABPSYCHOLOGY.COM

Team	Points	Assists
Blazers	29	2
Celtics	8	7
Grizzlies	23	15
Heat	15	9
Kings	15	4
Knicks	20	9
Lakers	18	6
Magic	10	3
Mavs	22	8
Nets	22	8
Rockets	31	4
Spurs	14	10
Thunder	14	5
Warriors	20	3



Furthermore, the filter allows for immediate inversion of the ranking criteria. Instead of focusing on the highest values (**Top**), we can easily switch the filter setting to **Bottom**. To show the bottom 10 values instead, simply click **Bottom** under the **Show items** dropdown menu. This feature is invaluable for identifying underperforming elements, which might require management intervention or further investigation, providing a crucial capability for root cause analysis.

Conclusion: Best Practices for Data Filtering

The **Top N filter** in Power BI is an essential tool for creating focused, professional, and visually compelling reports. Its ease of implementation combined with its powerful ability to segment data makes it one of the most frequently used features for business reporting across large datasets. However, responsible use of filtering requires adherence to several best practices to ensure data integrity and accurate interpretation.

When applying the Top N filter, always clearly document the applied criteria, particularly when sharing reports with others. Ensure that the 'By value' measure is correctly aggregated (e.g., Sum, Average, Count) according to the business question being asked. Additionally, consider whether applying the filter at the visual level is appropriate, or if a Page level or Report level filter might be necessary if the desired segmentation needs to apply universally across multiple visuals.

Mastering the use of the **Top N filter** accelerates the process of data discovery and reporting. By intentionally limiting the scope of displayed data points, users ensure that their reports highlight truly significant insights, thereby maximizing the impact and utility of every visualization created in Power BI.

ARABPSYCHOLOGY.COM

Related Power BI Tutorials

The following resources explain how to perform other common and advanced tasks in Power BI, helping users further enhance their data reporting capabilities:

Tutorial on conditional formatting techniques within tables and matrix visuals.

Guide to implementing custom ranking using DAX expressions when the built-in Top N functionality is insufficient.

Explainer detailing the differences between visual, page, and report level filtering scopes.

ARABPSYCHOLOGY.COM