

# Learning to Display Values and Percentages Simultaneously in Power BI Bar Charts

Authored by  
**Mohammed looti**

November 12, 2025

## RECOMMENDED CITATION

Mohammed looti (2025). *Learning to Display Values and Percentages Simultaneously in Power BI Bar Charts*. PSYCHOLOGICAL STATISTICS. Retrieved from <https://statistics.arabpsychology.com/?p=17725>

## The Imperative for Dual Metric Visualization

In modern **business intelligence**, the core challenge often lies not just in aggregating data, but in presenting it with maximum clarity and context. Analysts frequently rely on the standard [bar chart](#) to illustrate absolute values, which effectively shows magnitude but fails to communicate proportional significance--how each segment contributes to the whole. To truly empower decision-makers, a visualization within [Power BI](#) must simultaneously convey the raw numerical value of a category alongside its respective percentage contribution to the total. This dual display is essential for a comprehensive understanding of data distribution and scale, pushing visualization techniques beyond basic graphing capabilities.

While standard visuals, such as clustered column charts, provide data labels for raw values, they typically lack an integrated, intuitive option to overlay the percentage of the grand total directly onto the visual element. To overcome this fundamental limitation and achieve a clean, cohesive display, the most robust methodological approach involves harnessing the adaptability of the [Table visual](#) in conjunction with precise [Conditional formatting](#) rules. This innovative combination effectively transforms a simple tabular structure into a sophisticated, hybrid visualization that functions as a customized [bar chart](#). The resulting output, demonstrated later, provides both a clear quantitative measure and its proportional context, significantly streamlining data interpretation for executive dashboards and detailed analytical reports.

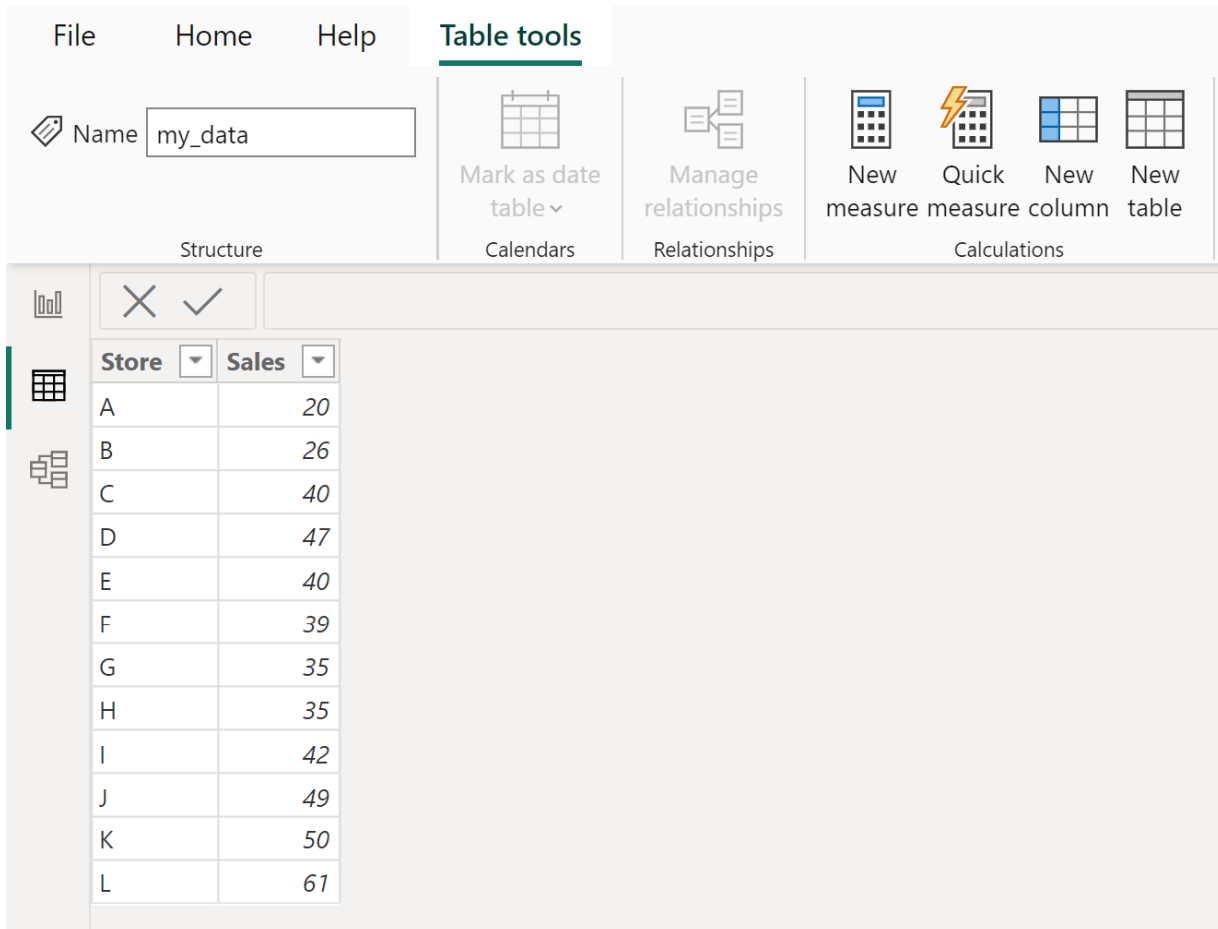
This comprehensive guide meticulously details the exact steps required to construct this high-impact visual. We will start with a basic dataset and systematically apply the necessary configurations within the [Power BI](#) Desktop environment. The ultimate outcome is a visual that seamlessly integrates absolute sales figures with their percentage representation, ensuring that critical insights regarding distribution are immediately apparent and actionable for the end-user.

Store	Sum of Sales	%GT Sum of Sales
A	20	4.13%
B	26	5.37%
C	40	8.26%
D	47	9.71%
E	40	8.26%
F	39	8.06%
G	35	7.23%
H	35	7.23%
I	42	8.68%
J	49	10.12%
K	50	10.33%
L	61	12.60%
<b>Total</b>	<b>484</b>	<b>100.00%</b>

## Structuring the Data Model in Power BI Desktop

Before any visualization can commence, ensuring the source dataset is correctly loaded and structured within the [Power BI](#) data model is a non-negotiable prerequisite. Our practical example utilizes a straightforward dataset designed to track sales performance across distinct store locations. This setup is highly typical in environments focused on retail or operational analytics, where quantifying each unit's contribution to the total sales pool is a primary key performance indicator (KPI).

The underlying data structure must contain a minimum of two critical components: first, a **categorical identifier**, such as "Store," which defines the rows in the visualization; and second, a **numerical measure**, like "Sales," which will be aggregated, analyzed, and used to calculate the proportional contribution. For clarity, we assume we are working with the following tabular structure. The overarching goal is to visually articulate the magnitude of the **Sales** value for every store while simultaneously calculating and displaying that store's proportion relative to the aggregated total sales across all locations.



The screenshot shows the 'Table tools' ribbon in Power BI Desktop. The ribbon includes a 'Name' field set to 'my\_data', a 'Structure' section, and several tool groups: 'Mark as date table' (with a dropdown arrow), 'Calendars', 'Manage relationships' (with a dropdown arrow), 'Relationships', and 'Calculations' (containing 'New measure', 'Quick measure', 'New column', and 'New table'). Below the ribbon, a data table is displayed with columns 'Store' and 'Sales'. The table contains 12 rows of data.

Store	Sales
A	20
B	26
C	40
D	47
E	40
F	39
G	35
H	35
I	42
J	49
K	50
L	61

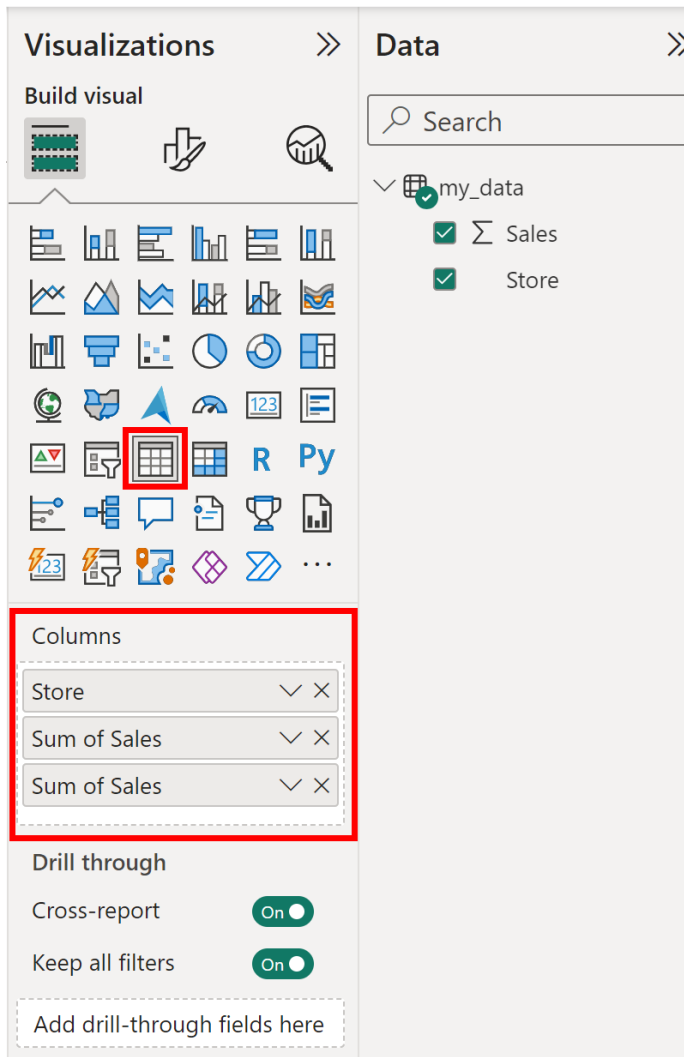
Once the integrity and structure of the data model have been confirmed, the initial step in the visual creation process requires navigating the [Power BI](#) Desktop interface. To begin modifying the canvas, the user must click the [Report View](#) icon, which is conveniently located on the left-hand navigation pane. This action transitions the workspace into the primary design environment where all subsequent visuals will be added, precisely configured, and aesthetically formatted.

## Building the Table Visual and Strategic Data Duplication

The foundation of this sophisticated technique rests on the selection and configuration of the [Table visual](#), which must be chosen from the extensive panel of options available under the **Visualizations** tab. Crucially, the table structure offers flexibility that standard column charts lack, allowing us to seamlessly integrate raw values, graphical bars, and calculated percentages into distinct, yet aligned, columns. After placing the table onto the report canvas, the next essential maneuver involves careful placement and manipulation of the underlying data fields within the visual's configuration pane.

To construct the required components, start by dragging the categorical field, **Store**, into the Columns panel. Following this, the core measure representing the quantitative value, **Sales**, must

be dragged into the Columns panel not just once, but twice. This act of **duplication** is strategically necessary because each resulting instance of the **Sum of Sales** will serve a separate, specialized function. The first instance will be graphically transformed using **Data bars** to provide the visual representation, while the second instance will be converted mathematically into the percentage calculation.

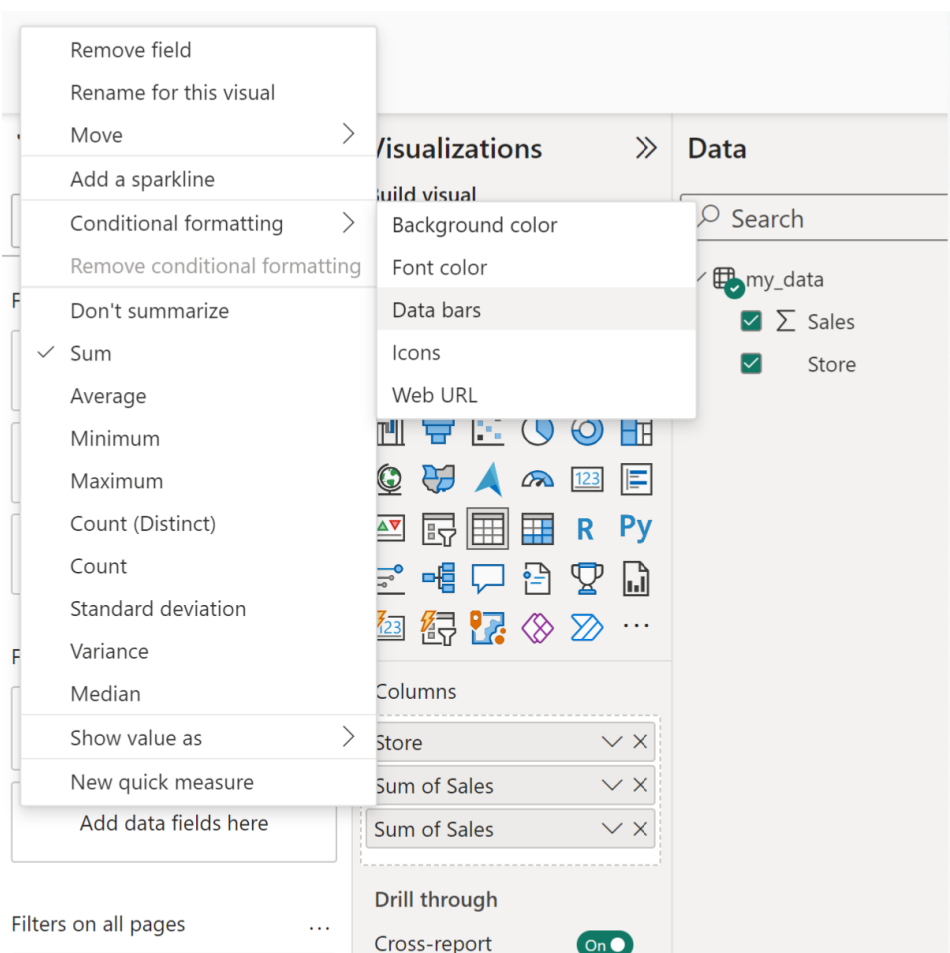


It is vital at this stage to confirm that the data aggregation is correctly set; for transactional data like sales, this typically defaults to the "Sum" function. By creating this parallel structure through the duplication of the sales measure, we are effectively preparing two independent visual channels that, while mathematically linked by the source data, can be cosmetically and calculationally distinct. This dual preparation is crucial for enabling the independent formatting steps necessary to achieve the desired effect: a true **bar chart** appearance combined with precise percentage labeling.

## Transforming Values with Conditional Formatting

With the columns correctly established in the table, the immediate focus shifts to converting the first instance of the measure--the first **Sum of Sales**--into a compelling graphical element, thereby simulating the bar chart effect within the table framework. This transformation is executed through the robust application of **Conditional formatting**, a powerful feature in **Power BI** that allows the dynamic modification of a visual's appearance based on underlying data values. Specifically, we will leverage the highly effective **Data bars** option.

To apply this formatting, initiate a right-click action directly on the first **Sum of Sales** field within the Visualizations pane. This action will reveal a context menu. Hover the cursor over the **Conditional formatting** option, which will then present a submenu from which you must select **Data bars**. When the configuration dialog box appears, you are given the opportunity to customize bar colors, direction, and the minimum/maximum range. Crucially, for this specific technique, you must ensure that the 'Show bar only' option remains **unselected**. This ensures that the raw numerical value remains visible alongside the graphical bar visualization, successfully satisfying the requirement to display both the value and its graphical representation.

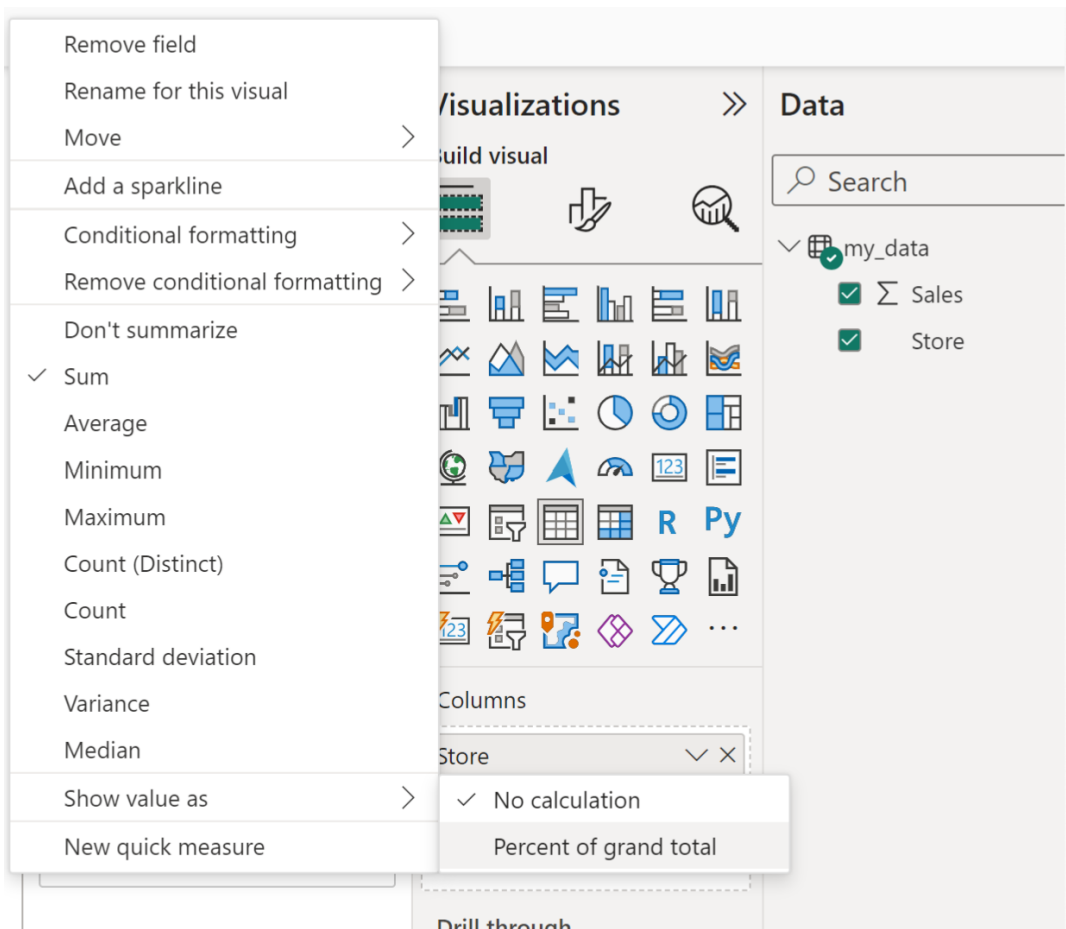


The immediate result of applying the [Data bars](#) is the conversion of the column into a powerful visual comparison tool. Each cell now inherently contains the numerical sales figure and a horizontal bar whose length is proportional to the total range of sales values in the column. This successfully addresses the first major component of our objective: displaying the absolute value and a proportional graphical bar. Attention must now shift to integrating the proportional context via the duplicated measure.

## Calculating Percentage of Grand Total

With the first sales column serving as the visually engaging bar chart, we now dedicate our efforts to the second sales column, whose sole purpose is to display the item's proportional contribution. This measure must be dynamically recalculated to express its figure not as an absolute sum, but as a percentage of the overall grand total sales. This critical transformation is seamlessly handled by [Power BI](#)'s highly efficient built-in quick calculation features, which conveniently bypass the necessity of writing potentially complex Data Analysis Expressions (DAX) formulas for standard calculations.

To perform this calculation, right-click on the second instance of **Sum of Sales** located within the Columns panel. This action will once again reveal a context menu that contains options related to data aggregation and display formats. Hover over the **Show value as** option, which will expand to present a selection of common, standard quick calculations. From this list, the user must select [Percent of grand total](#). Upon selection, [Power BI](#) automatically processes and adjusts the values in this column, displaying them as percentages, typically formatted to two decimal places, relative to the aggregated sum of all sales across the entire dataset.



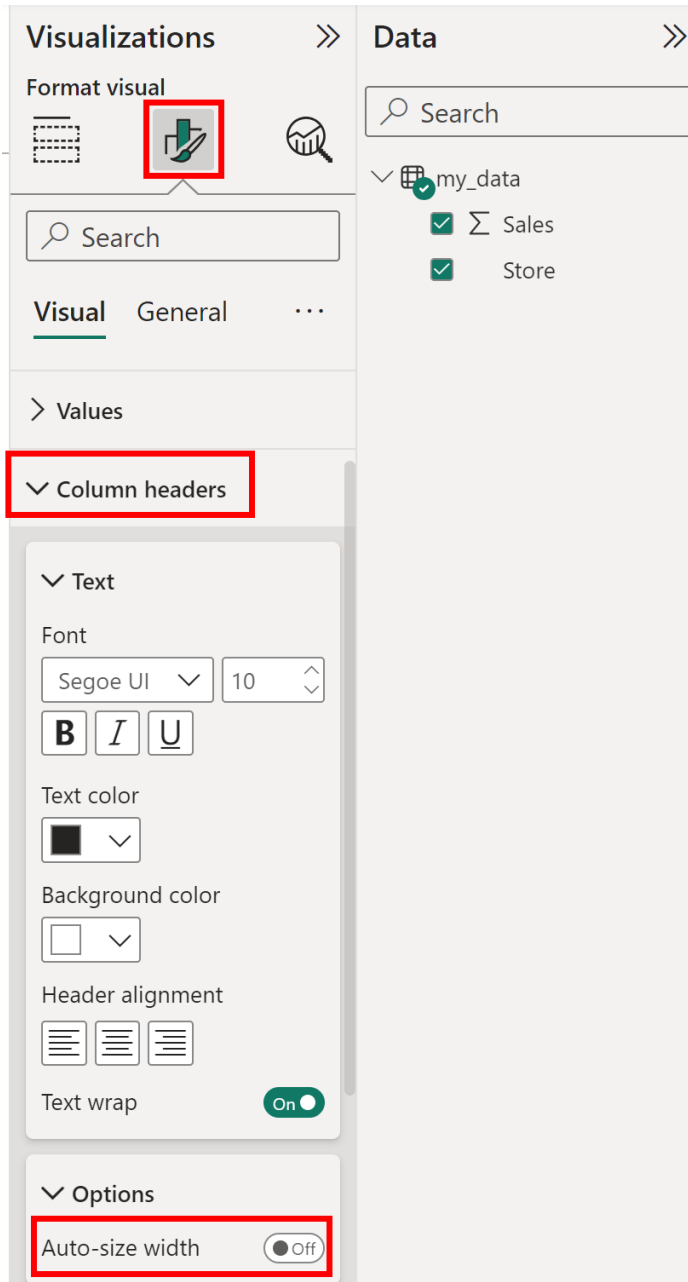
At this point, the resulting visual is fully functional: it presents the store name, the sales value complete with its proportional **Data bars**, and the precise percentage contribution. However, the default layout settings of the table frequently result in bars that are visually condensed or cramped, which can significantly impede immediate readability and effective interpretation. Therefore, a final round of optimization focusing on visual layout is essential to maximize the impact and usability of this hybrid chart.

Store	Sum of Sales	%GT Sum of Sales
A	20	4.13%
B	26	5.37%
C	40	8.26%
D	47	9.71%
E	40	8.26%
F	39	8.06%
G	35	7.23%
H	35	7.23%
I	42	8.68%
J	49	10.12%
K	50	10.33%
L	61	12.60%
<b>Total</b>	<b>484</b>	<b>100.00%</b>

## Optimizing Column Width for Visual Impact

The conclusive phase of implementation is dedicated entirely to crucial aesthetic refinements, specifically adjusting the column width to ensure that the graphical [Data bars](#) are sufficiently prominent and legible for accurate, rapid comparison. By default, the [Table visual](#) employs an automatic sizing mechanism for its columns. When data bars are introduced, this often leads to a constrained, narrow view that diminishes the visual effectiveness. Overriding this automatic behavior is therefore critical for enhancing overall visual clarity and data comprehension.

To initiate these necessary formatting adjustments, select the visual and then click the **Format your visual** icon (represented by the paintbrush symbol) located under the **Visualizations** tab. Within the formatting panel, navigate specifically to the section dedicated to **Column headers**. Under the **Options** dropdown within the **Column headers** settings, the key control to locate and modify is **Auto-size width**, which must be toggled off. Disabling auto-sizing immediately transfers manual control over the column dimensions back to the user, allowing targeted allocation of horizontal space--specifically maximizing the width of the column containing the **Data bars**.



Once the auto-sizing feature is disabled, the width adjustment is performed directly on the visual itself. Move the mouse cursor over the right boundary of the **Sum of Sales** header in the table view. When the cursor changes into a resize arrow icon, click and drag the boundary firmly to the right. This simple manual action significantly increases the column width, consequently lengthening the [Data bars](#) and making comparative analysis far more effective. The final, optimized product is a highly readable, hybrid visualization that successfully marries the precision of numerical values, the contextual power of data bars, and the proportional perspective of the calculated percentage within a single visual element.

Store	Sum of Sales	%GT Sum of Sales
A	20	4.13%
B	26	5.37%
C	40	8.26%
D	47	9.71%
E	40	8.26%
F	39	8.06%
G	35	7.23%
H	35	7.23%
I	42	8.68%
J	49	10.12%
K	50	10.33%
L	61	12.60%
<b>Total</b>	<b>484</b>	<b>100.00%</b>

This specialized approach successfully transcends the inherent limitations of standard visualization types available in [Power BI](#), providing users with a crucial comprehensive view that simultaneously addresses both absolute performance metrics and proportional contribution metrics within one elegantly formatted table structure.

## Advancing Your Power BI Skills

Mastering complex data visualization in [Power BI](#) frequently necessitates the deployment of creative solutions, such as the hybrid **Table visual** paired with **Conditional formatting**, to convey intricate information clearly and succinctly. The technique detailed within this guide provides a proven, high-impact methodology for presenting dual metrics--absolute value and percentage--a requirement critical for sophisticated and demanding reporting environments.

We strongly encourage data analysts and BI practitioners to extend their learning by exploring other advanced formatting options and custom DAX calculations. These tools can be leveraged to further refine and customize visualizations, allowing for even greater control over the visual narrative and analytical depth presented to stakeholders.

To build upon the foundational skills demonstrated here, consider reviewing the following curated tutorials that explain how to perform other common and advanced analytical tasks within the [Power BI](#) environment:

Tutorial: [How to Calculate Rolling Average in Power BI](#)

Guide: [Using Parameters to Dynamically Filter Data in Power BI](#)

Reference: Implementing Advanced DAX Patterns for Time Intelligence

By continuously exploring the expansive depth of Power BI's features, practitioners can ensure their reports are not only mathematically accurate and reliable but are also visually compelling, highly informative, and instantly actionable for business decision-making.