



Free Training Transcript: Ask Data

Intro

Welcome to this video on Getting Started with Ask Data. Ask Data is an easy, powerful, and smart new way for us to interact with our data using natural language. Just type in questions and see the results. Let's give it a try.

Accessing Ask Data

Ask Data works on all our published data sources in both Tableau Server and Tableau Online. Ask Data is available for all user roles with direct access to data sources: Creators, Explorers and Interactors. Use the link provided below to follow along. We'll be using data from the global Superstore.

To use Ask Data, first navigate to the data source you have questions about.

Basics

Our natural language questions should be based on the available dimensions and measures of our data. Hovering over dimensions and measures reveals pertinent information such as Most Common Values, Role, Type, Remote Column Name, Minimum, Maximum, and Average values.

Quick Example

Let's type in our first question: "How much profit did we make?"

When we press Enter, the answer is displayed. It's that simple!

Analytical Phrases

Notice that Ask Data has converted our natural language question into a short, analytical phrase. If we type "by Quarter" to the right of the analytical phrase, a second analytical phrase is added, and profit is broken down by quarter. Adding analytical phrases allows for ad hoc analysis. Let's ask another question.

Aggregation and Grouping

Questions containing only dimensions will often count the number of values. For example, when we ask, “How many customers do we have?” the result shows that a distinct count was performed. This ensures that repeat customers are only counted once each. If we click on the analytical phrase, we can modify the aggregation to “Count” (to include repeats) or to “Group by” (to see the list of customers).

Measures also have aggregation types. When we ask, “What was the average profit per year?” we see relatively small numbers because the profit is averaged across every customer, order, and product sold. To see the total profit for each year, we click on the analytical phrase for our measure and change the aggregation type to sum.

Now the total profit per year displays.

Filtering

Dimensions

We can filter by asking questions such as “What were our sales for the corporate segment?” To save time, ask “What were our corporate sales?”. Ask Data automatically understands that the word “corporate” refers to the segment and adds a filter to show the Corporate segment only.

To modify our filter, click on the currently selected criteria, and choose specific values or apply a wildcard.

Dates

We filter dates by including specific time periods in questions such as “What were our monthly sales in 2018?”. Alternatively, we can ask questions using time periods that are relative to today’s date, such as “What were our monthly sales in the previous year?”. Additional time expressions include “last”, “next”, “following”, “starting at”, “ending at”, and “between”.

Measures

We filter our measures by asking questions such as “Which orders had high profits?”. To refine our filter, click on “high”, and specify criteria for “at least”, “between”, or “at most”. Other words to try include “low”, “cheap”, and “expensive”.

Sorting

Ask Data automatically sorts our results. We can also specify the sort order using the words such as “ascending”, “descending”, and “alphabetical”. For example, we can ask “Sort customer names in alphabetical order”.

Limits

We specify the number of results by asking questions such as “What were the top 5 cities based on sales?” We can click on “top” to modify our top or bottom selection.

Now the top 10 cities are displayed.

Specifying the Viz Type

Ask Data automatically chooses an appropriate viz based on our question. For example, when we ask, “What were the sales in each state?”, the results are automatically displayed as a map. To specify a viz type, we select one from the viz dropdown list. Alternatively, we can specify a viz type as part of our question. For example, “What were sales in each state as a treemap?”

Synonyms

We can assign multiple names to dimensions and measures. For example, we may want to refer to the Sales measure as either “income” or “revenue”. Let’s click on the dropdown for Sales and select “Edit Synonyms”. We’ll enter the desired synonyms separated by a comma. Now when we hover over Sales, we see the assigned synonyms. When we ask a question, such as “What was the revenue?”, the synonym “revenue” resolves to the Sales measure. Keep in mind that synonyms can be seen and used by others who use the same data source.

Asking More Complex Questions

We can combine all of what we’ve learned so far to create more complex questions. When we ask, “In California, what were the top 10 cities based on sales in 2018?”, we are specifying a state, a year, and the number of cities to display.

When we ask, “Compare revenue and profit ratio for each category and subcategory as a treemap”, we are using revenue as a synonym for sales and specifying a viz type at the same time. The results show us that tables have high sales (based on the rectangle size) but a low profit ratio (based on the color).

Saving

We can save our Ask Data vizzes as workbooks. Click the save icon and select Save as.

Data Source Best Practices

If you manage and publish data sources, prepare your data sources based on anticipated user questions. Also, be sure to give Ask Data users access to the published data sources.

Additional Help

For additional help on the use of Ask Data, please visit onlinehelp.tableau.com.

Closing

Thank you for watching this video on Ask Data. We invite you to continue with the free training videos to learn more about using Tableau.