Data Attributes Table

The data attributes table contains a list of all attributes that each product has. Furthermore, every attribute is extended with some meta information which also can be seen in the table.

Data Attributes ⓘ						Q Filter Attributes	
Attribute ▲	Values	Multi Values	Type	Fill Rate		Distinct Values	Used
Bike Type	☰	⬭	Text ⌄	▬▬▬▬▬▬ 82%		6	⬤

Structure

- **Attribute:**
  Displays all column headers of the uploaded file. Every attribute contains a set of different values.

- **Values:**
  Opens a modal window which displays all distinct values of the respective attribute. Furthermore you can define an attribute specific multi value separator.

- **Multi Values:**
  By activating this switch button all attribute values which are separated by a character delimiter (e.g. a comma) will be interpreted as individual values for the corresponding attribute.

  Example for attribute "*color*":
  - The value "*black,blue*" will be converted into the two values "*black*" and "*blue*".

- **Type:**
  The *Type* determines which kind of data the attribute has. Changing the type causes a conversion process. That means that each value of the attribute will be evaluated whether a conversion to the new type is possible. If one of these values cannot be converted, a type change is not possible and causes the appearance of a warning message. Note that empty cells don't generate any conflicts but cells which include terms like "none", "null" or "-" are interpreted as strings (text) and therefore cause errors by converting them into "*Number*" or "*Boolean*".

  The three possible types are shortly described below:
  - **"Text"** can contain all kinds of input and therefore is the **default** setting

  - **"Number"** describes a natural or decimal number format (e.g. **799.99**)

    > ⚠ **Hint 1**
    >
    > At the moment only dot-separated decimals can be converted into a "Number". Comma-separated values like **799,99** are **not supported** right now.

    > ⚠ **Hint 2**
    >
    > Empty value representations like "#NULL!" are also not supported. Respective data cells have to be emptied beforehand!

  - **"Boolean" describes a boolean type (such as yes/no, true/false or 1/0 pairs)**

  - **"Range"** represents a numeric interval and must be given in the form **min..max** (e.g "0..99"). It can be used in connection with the continuous numeric question type to find products containing the range matching the user input.

- **Fill rate:**
  Describes how much the attribute is filled with values (in percent). This is helpful to see if some products have few or no values for the corresponding attribute. With that information it is easier to decide if that attribute can be used reasonable in the advisor.

- **Distinct Values:**
  Shows the number of different, unique values for the corresponding attribute.

- **Used:**
  By activating the switch button the attribute can be connected to a Question in the *Concept Board*. Otherwise this attribute is not selectable.

- **Filter Attributes:**
  By entering text in this input field the table will be filtered by all attribute names which contain the text.

All these descriptions are also readable in the info icon right next from the "Data Attributes" title.

After a successful data upload all attributes can be connected to Questions in the *Concept Board* (see Data Binding and Connections). If you haven't created any Questions or even entered the *Concept Board* right now please go to the pages Create the advisor concept or Questions and Answer Options.

Read more about Control Bar, Data Source Properties or the Data Source Visualization