Exercise 1: Change column headings

Task 1. Create a Discovery.

- 1. In the Data tab of Watson Analytics, click the American Time Use Survey data set.
- 2. In the Ask a question about your data box, type What is the relationship between Children and Golfing by Age Range?
- 3. Press Enter.
- 4. Under the first Most Relevant label, click What is the relationship between Children and Golfing by Age Range?

Task 2. Change a column heading.

In the graph, you want to change the name of one of the column headings to something more meaningful. In this case you want to change Children to Number of Children.

- 1. In the data tray at the bottom of the page, click Children. Note: you may have to use the arrow to scroll.
- 2. Click Children, and then click Properties
- 3. Click Change Name.
- 4. Type Number of Children.
- 5. Press Enter.
- 6. Click the x to close.

The change is automatically applied to the column headings and the item in the data tray. Notice the Number of Children (Average) label on the x-axis of the graph. Notice the question section at the top of the page includes Number of Children. Notice the Number of Children item label in the data tray at the bottom of the page.

- 7. At the top of the page, click the down arrow.
- 8. Beside New discovery set, click the x.
- 9. Click Don't save.

Exercise 2: Perform analysis using natural language questions

Task 1. Pose a natural language question in the Data tab.

You can pose a natural language question directly in the Data tab of Watson Analytics.

- 1. In the Ask a question about your data box, type show me top 5 cities by sales revenue.
- 2. Press Enter.

Watson Analytics provides you with a list of relevant starting point Discoveries that span multiple data sets in your environment, as indicated by the different data set names in the Discoveries.

Task 2. Pose a natural language question in the Discover tab.

You can also type a natural language question while on the Discover tab, and again have Watson Analytics assess the available data sets, and return relevant starting points.

- 1. Click the Discover tab.
- 2. In the Ask a question about your data box, type show me top 3 cities by sales revenue?
- 3. Press Enter.

Task 3. Pose a natural language question while inside a Discovery set.

After entering and submitting your natural language question on either the Data or Discovery tabs, you can choose one of the starting points to begin your analysis.

1. Click the How do the values of Deal Size Revenue (USD) compare by City Discovery set

The Discovery and Discovery set opens, and is based on the data set on which the starting point was derived. Any additional Discoveries you create are also based on this data set. You can continue to perform analysis using this starting point Discovery, or you can create another Discovery, by submitting another natural language question while inside the Discovery set.

2. At the top of the page, beside the Discovery 1 tab label, click +.

Any question you submit while inside a Discovery set will be assessed against only the data set currently in use. It will not be assessed against all the data sets in your environment. Notice the data set label, Auto Parts R Us, indicating that data for this Discovery will be based on this data set.

If you are unsure of how to phrase a question, you can get some guidance using the How to ask a question feature.

3. Click How to ask a question.

In this view, you can select from a variety of keywords and phrases, including How do the values of, compare by, What is the breakdown of, What are the top, etc., in combination with data items, to help you phrase your question.

Keywords are grouped into categories. For example, if your intent is to analyze totals for a given key metric, you could use the Aggregate data category.

- 4. Under Select a category, click the down arrow.
- 5. Click Aggregate data.

All of the keywords from the Aggregate data category appear.

Another example might be data comparison, in which case you might want to analyze the values of a key metric, in relationship to one or more variables or dimensions.

- 6. Under Select a category, click the down arrow.
- 7. Click Compare data.
- 8. Beside the first instance of What is the breakdown of, click the down arrow beside Elapsed Days in Sales Stage.
- 9. Click Deal Size Revenue (USD).
- 10. Beside the first instance of What is the breakdown of, click the down arrow beside Rows.
- 11. Click Route to Market.

Once you are satisfied with your phrasing options, click Ask.

12. Click Ask.

Your question appears at the top of the page, and starting point visualizations, based on your question, are returned. You can now open one of the visualizations, and continue your analysis.

- 13. Click What is the breakdown of Deal Size Revenue (USD) by Route to Market.
- 14. At the top of the page, click the down arrow.
- 15. Beside New discovery set, click the x.
- 16. Click Don't save.

Exercise 3: Edit targets in a predictive analysis

Task 1. Upload a file and create a Discovery using a Spiral visualization

- 1. Upload the WA_Fn UseC_ Marketing Campaign Eff UseC_ FastF.csv file on your hard drive.
- 2. Click the WA_Fn UseC_ Marketing Campaign Eff UseC_ FastF data set.
- 3. In the Ask a question about your data box, type what impacts sales?
- 4. Press Enter.
- 5. Under Most relevant, click the What drives SalesInThousands Spiral visualization.

The Spiral visualization opens and includes a default target. You can edit the target.

Task 2. Edit the target and change the aggregation type.

1. In the data tray at the bottom of the page, click and drag Promotion to the center of the spiral.

After changing the target, it is updated in the spiral, in the label below the spiral, and in the target name in the question you typed. You can also identify the factors impacting the updated target.

You may also want to change the aggregation type of the target.

- 2. Right-click the Promotion label below the spiral.
- 3. Click Summarize.
- 4. Choose a different aggregation type.
- 5. At the top of the page, click the down arrow.
- 6. Beside New discovery set, click the x.
- 7. Click Don't save.

Exercise 4: Navigate the spiral

Task 1. Create a Discovery using a Spiral visualization.

- 1. Click the WA_Fn UseC_ Marketing Campaign Eff UseC_ FastF data set.
- 2. Under Most relevant, click the What drives SalesInThousands spiral visualization.

The visualization opens displaying a target in the center of the spiral, with icons surrounding it.

Task 2. Identify factors impacting the target

You want to identify the factors impacting this key performance indicator. You can do this by hovering over the surrounding icons in the spiral. In some cases, there is a combination of factors having impact, or there might be only a single factor. Combination factors and single factors are represented by different icons. Factors closest to the center of spiral have the highest predictive strength, and typically, combinations of factors will have a higher predictive strength than a single factor.

1. Place the cursor over the dots around the target.

Also notice that as you hover over the factors, they become highlighted in the table to the right of the spiral.

2. Place the cursor over the dots again.

In this case, you can identify that the factor, or factors, having the highest predictive strength for the Sales target are MarketSize and MarketID.

3. Place the cursor over the MarketSize and MarketID dot.

Now that you know which factors are predictors of the target, you can continue your analysis of these factors using the table.

4. In the table, beside MarketSize and MarketID, click +.

Clicking the plus symbol beside the factor or factor combination in the table, opens a new Discovery and visualization revealing more details regarding the relationship between the factors and the target. In this case, you can identify the relationship between the two factors, with MarketSize being on the y-axis and MarketID on the x-axis, and details regarding actual sales.

- 5. At the top of the page, click the down arrow.
- 6. Beside New discovery set, click the x.
- 7. Click Don't save.