## AB Trend, AB Control, AB Analysis Tools

The AB Trend tool creates measures of trend and seasonal patterns that can be used in helping to match treatment to control units for A/B testing.

The AB Controls tool matches 1 to 10 control units to each member of a set of previously selected test units, based on criteria such as seasonal patterns and growth trends for a key performance indicator along with other user provided criteria.

The AB Analysis tool compares the percentage change in a performance measure to the same measure either over the same time period one year earlier, or a user specified time period, for two different groups.

Due to the nature of how these tools work, this sample may take longer to run than other One Tool Examples.

1) Run the workflow (Ctrl+R).

2) Select a Browse tool to view its output in the Results window.

AB Trend

Using the dropdowns, select the columns with the unit ID, reporting period dates, and performance measure.

In the Date Values section, choose the date period type, number of periods, and the start date.

AB Control

The D input anchor accepts a data stream that contains the unit-level measures to match control units to treatment units. The T anchor accepts a data stream containing a column that provides the unit identifiers for a test's treatment units.

Use the dropdowns to select the columns for the treatment units and the unit identifier for the measure selection. Select the boxes for the measures you want to use and select the number of control units per treatment unit. The last option determines whether each control is assigned to only a single treatment unit. This option is selected by default.

The C output anchor contains a data stream with the column Controls, the unit identifier code for each control unit. The A output anchor contains a report showing the relationship between each treatment unit and its assigned control units.

## AB Analysis



The AB Analysis tool requires 3 inputs. The C anchor accepts a data stream with a column with a unique identifier for each control unit. Connect the data stream that contains a column with a unique identifier for each treatment unit to the T anchor. Finally, the P anchor accepts a data stream with a column that contains a performance measure to be compared between the treatment and control groups, a date column identifying the period each value belongs to, and a unit identifier that allows the treatment and control units to be properly identified.

To configure the tool, use the dropdowns to map the incoming data columns to the required columns.

A Browse tool is necessary to view the results from the O anchor. The O anchor shows a summary report of the test results.

The I anchor is an interactive HTML dashboard that displays in your browser. To view, select the link in the Results window showing the path for the HTML file.

The E and G output anchors can be viewed using the Browse Everywhere feature, or a Browse tool if desired. The E anchor is a data table showing the values used to populate the Dot Plot found in the O and I outputs. The G output is a table showing the values used to population the Time Comparison Plot found in the O and I outputs.