

Market Basket analysis

- You can create co-occurrence visualizations in Tableau.
- used to discover and understand customer purchasing behaviour.
- Ones who bought Product A, how many products did he buy of Product B , C , D

Step 1: Create a parameter that you will use to dynamically modify the view based on the item you select.

Step 2: Create calculated fields that you will use to return which items are also ordered when a particular item is ordered.

Step 3: Create a set to determine whether an order has the item that was selected in the parameter control.

Step 4: Build the view to display which items are also contained in an order with the selected item.

Step 1 - Create Parameter

1. In the Create Parameter dialog box, do the following:

a) Name the parameter. For this example, name the parameter **Order Contains...**

b) For **Data Type**, select **String**.

c) For **Allowable Values**, select **List**.

d) In the **List of values** section, click **Clear All**, and then click **Add from Field> Sub Segment**.

e) Click OK.

2. Right click the **Order Contains...** parameter, and then select **Show Parameter Control**.

Step 2 - Create Calculated fields

1. Select **Analysis> Create Calculated Field**.

2. Call it :**Order Also Contains....**

3. Under the text box, enter the following:

IF [Sub Segment] <>[Order Contains] then [Sub Segment] end

4. Verify that the calculation is valid, and then click OK.

5. Create another calculated field by selecting **Analysis> Create Calculated Field**.

6. Call it **Product Matches**.

7. Under text box, enter the following:

IF [Sub Segment] = [Order Contains...] THEN 1 END

8. Verify that the calculation is valid, and then click OK.

Step 3 - Create Set

- Click the Order ID dimension down arrow in the Data pane, and then select Create > Set.
- In the Name text box, enter “Order Has Selected Product”.
- On the Condition tab, select By field, and in the drop-down lists, make the following selections and entries to build the condition:
 - In the first drop-down list, select **Product Matches**.
 - In the second drop-down list, select **Sum**.
 - In the next drop-down list, select **>=**.
 - In the last text box, enter 1.
 - Click OK.

Step 4 - Build view

1. Drag **Order Also Contains** to the **Columns** shelf.
2. Drag **Order ID** to the **Rows** shelf. If a Warning dialog box appears, click **Add all members**.
3. On **Rows**, click the **Order ID** down arrow, and then select **Measure> Count (Distinct)**.
4. Right-click the **Null** value on the x-axis, and then select **Hide**.
5. Drag the **Order Has Selected Product** set to the **Filters** shelf.
6. Click the swap button on the toolbar.