

## Lesson 8 – Exercise 8.1: Clustering

### Business Scenario

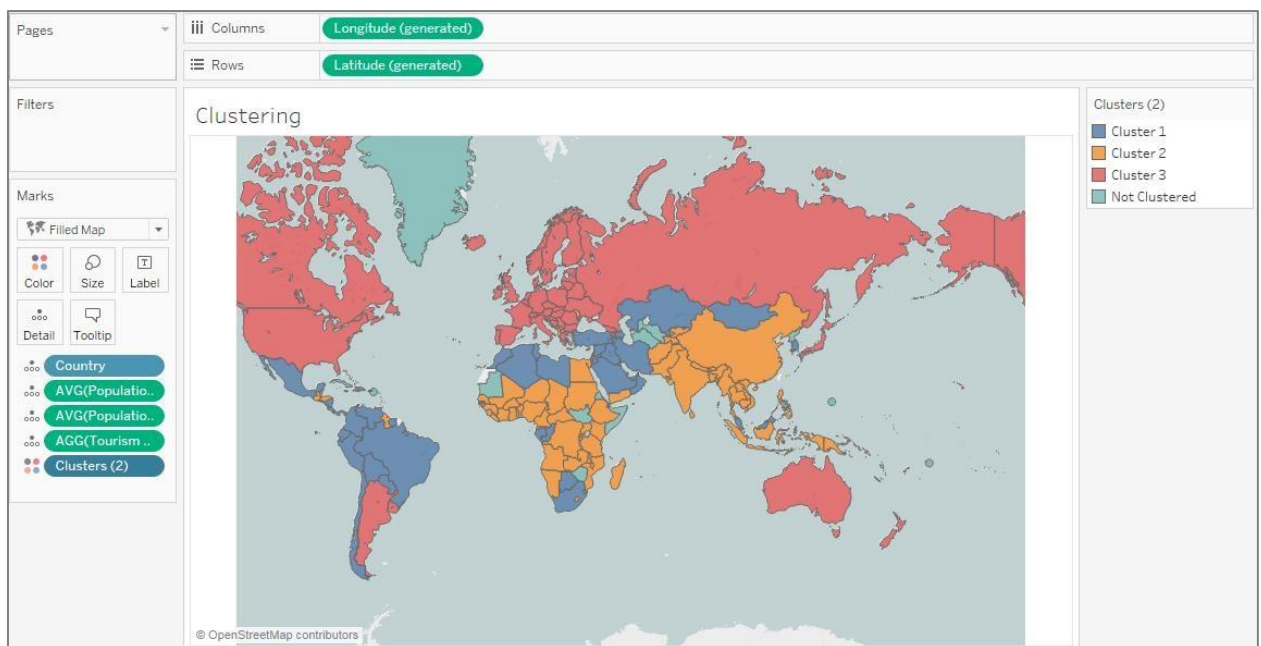
A well-known travel company wants to expand its customer base. The branding manager of the company needs to devise an effective scheme to appeal to potential customers. For this, he needs to analyze life expectancy and population of each country so that it can help the company identify the countries where there the right kind of clientele is present. Create a visualization to answer the following questions:

- Which cluster will you choose and why?

### Overview

- Use the saved World Indicators data source.
- Create a filled map view.
- Create a calculated field to show the money that people of a country spend annually on international travel.
- Add a cluster to the view.
- To see the information, select describe clusters.

The result should resemble the image given below:



## Detailed Instructions

1. Open **Tableau 10.x** (You can go to Start Menu -> All Programs -> Tableau 10.x).
2. Connect to the **World Indicators** sample data source.
3. From Dimensions, double-click on **Country**.
4. Using the Marks card, change the mark type to **Filled Map**.
5. Go the **Analysis** menu and select **Create Calculated Field**.
6. Name this calculation as **Tourism Per Capita**.
7. In the formula window, enter formula as:  
**SUM([Tourism Outbound])/SUM([Population Total])**
8. From Measures, drag **Population Urban**, **Population 65+**, and **Tourism Per Capita** to **Detail**.
9. Make sure the average aggregation is selected for the first two measures.
10. To cluster the data points, navigate to the **Analytics Pane**.
11. Drag **Cluster** from the **Analytics** pane and drop it in the view. Tableau displays the Cluster dialog box and adds the measures in the view to the list of variables
12. Close the Clusters dialog box by clicking the X in the upper-right corner.
13. Click the **Clusters** field on the **Marks** card and choose **Describe Clusters**.
14. Close the **Describe Clusters** dialog box.
15. Rename this sheet as **Clustering**.

**Keep the workbook open for the next exercise.**

## Answers

Based on the view, these are the answers to the questions in the problem statement:

- Which cluster will you choose and why?  
Answer – **Cluster 3**. It has highest values in all the aspects.