Power BI

► Lab 06

Exploring Power Map in Excel 2013

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**SUMMARY**                                                              | 22   |
About the Author

This lab was designed and written by Peter Myers.

Peter Myers has worked with Microsoft database and development products since 1997. Today, he specializes in all Microsoft BI products and provides mentoring, technical training, and education content authoring for SQL Server, Office, and SharePoint. Peter has a broad business background supported by a bachelor’s degree in applied economics and accounting, and he extends this with solid experience backed by current MCSE and MCT certifications. He has been a SQL Server MVP since 2007.

Document Revisions

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Lab Overview

Introduction

Note: This lab is the sixth in a series of seven labs, which explore self-service BI with Excel 2013 and Office 365 Power BI. If you plan to complete all of the labs, we recommend that you complete them in the order in which they were designed, although the labs can be completed in any order you choose.

This lab was produced by using the Microsoft Power Map Preview for Excel version 2013 published 27 May, 2014.

In this lab, you will use Power Map to produce a tour consisting of four scenes to spatially and temporally present revenue data for the Tailspin Toys sales operations. You will then embed a video of the tour into a PowerPoint presentation.

Objectives

The objectives of this exercise are to:

- Introduce working with Power Map
- Preparing a Power Pivot data model for Power Map
- Create a tour consisting of four scenes
- Play and view a tour
- Produce a video of the tour
- Embed the video into a PowerPoint presentation

Exercises

This hands-on lab comprises the following exercise:

1. Exploring Power Map

Estimated time to complete this lab: **30 minutes**
Exercise 1: Exploring Power Map

In this exercise, you will create a Power Map tour consisting of four scenes.

Task 1 – Opening and Exploring the Excel Workbook

In this task, you will open an existing Excel workbook (completed in Lab 05).

1. To open Excel, on the taskbar, click the Excel program shortcut.
2. In Excel, click Open Other Workbooks (located at the bottom of the left panel).

![Open Other Workbooks](image)

**Figure 1**
Identifying the Open Other Workbooks Command

3. Select Computer, and then click Browse.
4. In the Open window, navigate to the D:\PowerBI\Lab06\Starter folder.
5. Select the Sales Analysis.xlsx file, and then click Open.

**Note:** This is the workbook completed in Lab 05.

6. If prompted with a security warning, click Enable Content.

![Enable Content](image)

**Figure 2**
Enabling the Workbook Content

7. On the File ribbon tab (also known as the backstage view), select Save As, select Computer, and then click Browse.
8. In the Save As window, navigate to the D:\PowerBI\Lab06 folder.
9. Click Save.
Task 2 – Enabling the Power Pivot Add-in

In this task, if necessary, you will enable the Power Pivot Add-in. In Excel 2013, by default, the Power Pivot Add-in is disabled.

1. On the File ribbon tab, select Options.

   **Note:** If the PowerPivot ribbon tab is available, there is no need to complete the steps in this task; continue the lab from Task 3.

2. In the Excel Options window, select the Add-Ins page.

3. In the Manage dropdown list, select COM Add-Ins, and then click Go.

4. In the COM Add-Ins window, select the Microsoft Office PowerPivot for Excel 2013 add-in, and then click OK.

5. Notice the addition of the PowerPivot ribbon tab.
Task 3 – Modifying the Power Pivot Data Model

In this task, you will modify the Power Pivot Data Model to unhide columns. Columns were intentionally hidden to prepare the data model for business user querying. However, Power Map does not surface hierarchies, so the columns used as hierarchy levels will need to be unhidden. Also, the Date column from the Date table was also hidden, and will need to be unhidden to allow time animations.

1. On the PowerPivot ribbon tab, click Manage.

   ![Image](image.png)

   **Figure 3**
   *Launching the Power Pivot Window*

2. If necessary, maximize the Power Pivot window.

3. Select the Product table.

   ![Image](image.png)

   **Figure 4**
   *Selecting the Product Table*

4. Right-click the Product column header, and then select Unhide From Client Tools.

5. Repeat the last step to unhide the Category column also.

6. Select the Date table, and then unhide the Date, Day, Month, Quarter and Year columns.

   **Tip:** It is possible to multi-select contiguous columns, and then right-click the selection to unhide several columns at the same time.
Task 4 – Creating a Power Map Tour

In this task, you will create a tour. A tour is a collection of related scenes – with each scene representing a spatial visualization of data. You will create four related scenes.

1. Switch to Excel.
2. If prompted to apply the data model changes in Power View, click **OK**.
3. On the **Insert** ribbon tab, inside the **Power Map** group, click the arrow, and then select **Launch Power Map**.

   ![Launch Power Map](image)

   **Figure 5**
   *Launching Power Map*

4. In the Power Map window, if necessary, maximize the window.
5. In the **Tour Editor** pane (located at the left), notice the first, and default, scene of the tour.
6. Click **Tour 1**, replace the text with **US Sales**, and then press **Enter**.

   ![Tour 1](image)

   **Figure 6**
   *Locating the Tour Name*
Task 5 – Configuring the First Scene

In this task, you will configure the first (default) scene to display revenue by product category for the northeast region of the United States.

1. To configure the first scene, hover over the scene until the configuration icon appears.

![Figure 7](Locating the Scene Configuration Icon)

2. Click the configuration icon.

3. In the Task Panel pane (located at the right), in the Scene Name box, enter Northeast Sales.

4. On the Home ribbon tab, from inside the Map group, click Themes and select the second theme on the first row.

![Figure 8](Locating the Second Theme)

5. On the Home ribbon tab, from inside the Map group, click Map Labels.
6. To define the first layer for the scene, in the Task Panel pane, click the Field List icon.

7. In the field list, notice that the fields are grouped by table name, and that the tables are sorted alphabetically by name.

8. In the State table, check the State field.

9. In the Geography and Map Level pane (located beneath the field list), notice that the State field has been added.

10. If necessary, in the corresponding dropdown list, select State/Province.

   **Note:** The data model column data category configured in Lab 04 is set to State or Province, and so this dropdown list should default to that setting, but sometimes doesn’t.

11. Notice also that the map view zooms out to display all data points at the spatial midpoint of each state.

12. To configure the layer data visualization, click Next (located at the bottom of the pane).

13. To analyze revenue, in the fields list, in the Sales table, check the Revenue field.

14. In the map, notice that the state revenue values are displayed by bars, and that a legend is added to the scene.

15. To categorize the revenue, in the field list, in the Product table, check the Category field.

16. In the map, notice that the bars are converted to stacked bars.

17. To change the chart type to a clustered column chart, in the layout area, select the Clustered option.

**Figure 9**
*Locating the Field List Icon*

**Figure 10**
*Locating the Clustered Option*
18. On the **Home** ribbon tab, from inside the **Layer** group, click **Shapes** and then select the **Triangle**.

19. To show the map of northeast USA, on the **Home** ribbon tab, from inside the **Map** group, click **Find Location**.

20. In the **Find Location** window, enter **Maine**, and then click **Find**.

   **Tip:** The find location feature can be used to find any type of geographic location, including countries, cities, states, addresses and even landmarks.

21. To close the **Find Location** window, click **X**.

22. Use the pan and zoom controls to fill scene with the entire northeast region of the United States, and to see the clustered columns in perspective.

![Figure 11](image1.png)  
*Locating the Pan and Zoom Controls*

![Figure 12](image2.png)  
*Reviewing the Scene Display*
23. Resize the legend to a smaller width and relocate to an area of the scene that does not conceal the data on the map.

24. To configure the first layer for the scene, in the Task Panel pane, click the Layers icon.

![Layers Icon](image13)

Figure 13
Locating the Layers Icon

25. To configure the first (default) layer, click the Layer 1 configuration icon.

![Layer Configuration Icon](image14)

Figure 14
Locating the Layer Configuration Icon

26. To edit the layer name, hover Layer 1 to reveal the Layer Name box, and then click the edit button located at the left of the box.

![Edit Button](image15)

Figure 15
Locating the Edit Button

27. Replace the text with Product Category, and then press Enter.

28. Notice that the legend title updates to display the layer name.

29. In the map, hover the cursor over various columns to reveal tooltip information.
Task 6 – Creating a Second Scene

In this task, you will create a new scene to display revenue by product category for the west coast region of the United States. This scene will include a text box to relay textual information.

1. To create a second scene, on the Home ribbon tab, from inside the Tour group, click Add Scene.

   **Note:** A new scene is a clone of the scene that was in focus when the scene was created.

2. To edit the scene, in the Task Panel pane (located at the right), click Scene Options.

   ![Layer Options](image)
   ![Scene Options](image)

   **Figure 16**
   *Locating the Scene Options*

3. In the Scene Name box, enter West Coast Sales.

4. In the Effect dropdown list, select FlyOver.

   **Note:** Effects provide camera-like effects.
5. Use the pan and zoom controls (or use the Find Location feature or mouse drag operations) to reposition the map over the west coast region of the United States.

![Figure 17]

**Figure 17**

*Reviewing the Scene Display*

6. Relocate the legend to an area of the scene that does not conceal the data on the map.

7. On the **Home** ribbon tab, from inside the **Insert** group, click **Textbox**.

8. In the **Add Text Box** window, in the **Title** box, enter **West Coast Sales**.

9. In the **Description** box, enter **Exceeding all expectations!**, and then click **Create**.

10. Resize and relocate the textbox to an area of the scene that does not conceal the data on the map.

**Task 7 – Creating a Third Scene**

In this task, you will create another new scene to display revenue by demographic for the entire United States.

1. To create a third scene, on the **Home** ribbon tab, from inside the **Tour** group, click **Add Scene**.

2. In the **Task Panel** pane, in the **Scene Name** box, enter **Revenue Growth by Demographic**.

3. In the **Task Panel** pane, click the **Layers** icon.

![Figure 18]

**Figure 18**

*Locating the Layers Icon*
4. To delete the **Product Category** layer, click the **X** icon.

5. When prompted to confirm the deletion, click **Delete**.

6. To remove the **West Coast Sales** textbox, right-click any part of the textbox, and then select **Remove**.

7. Pan and zoom to show the entire United States.

8. In the **Task Panel** pane, click the **Add Layer** icon.

   ![Image](image1.png)

   **Figure 19**

   *Locating the Add Layer Icon*

9. In the field list, in the **State** table, check the **State** field.

10. If necessary, in the corresponding dropdown list, select **State/Province**, and then click **Next**.

11. In the field list, in the **Sales** table, check the **Revenue** field.

12. In the field list, in the **Product** table, check the **Demographic** field.

13. In the layout area, select the **Bubble** visualization.

   ![Image](image2.png)

   **Figure 20**

   *Locating the Bubble Visualization*

14. In the field list, in the **Date** table, check the **Date** field.

   **Note:** Date fields (of data type date) can be used to animate a scene across time.
15. In the field list, to the right of the Time box, click the clock symbol, and then select Data Stays Until it is Replaced.

![TIME]

Date (None)

**Figure 21**
Locating the Time Calculation Mode Icon

16. Verify that the layer layout is configured as follows.

![SIZE]

Revenue (Sum)

**Figure 22**
Reviewing the Layer Layout

17. In the map, right-click the date and time textbox (located at the top left corner), and then select Edit.


19. Click Accept.

20. In the Task Panel pane, click the Layers icon.

21. To the right of the Layer 1 layer, click the configuration (cog) icon.

22. In the Layer Name box, replace the text with Demographic.

23. Resize the legend.

24. In the Formatting section of properties, enhance the bubble characteristics by modifying the Size and Thickness to levels that suit.
Task 8 – Creating a Fourth Scene

In this task, you will create a final scene to display revenue by demographic for the state of California. This scene will also include an annotation to relay textual information based on field data.

1. To create a fourth scene, on the **Home** ribbon tab, from inside the **Tour** group, click **Add Scene**.
2. In the **Task Panel** pane, select **Scene Options**.
3. In the **Scene Name** box, enter **CA Revenue Growth by Demographic**.
4. In the **Effect** dropdown list, select **Push In**.
5. Pan and zoom to show the entire state of California.

![Image of a map showing California with a bubble chart and demographic segments.](image)

**Figure 23**

*Reviewing the Scene Display*

6. Select the largest segment of the bubble (representing about 60% of revenue for the Advanced demographic). Ensure that the segment is highlighted.
7. Right-click the selected segment, and then select **Add Annotation**.
8. In the **Add Annotation** window, above the **Title** box, select the second option, and then in the adjacent dropdown list, select **Demographic**.
9. Above the **Description** box, select the **Fields** option, and then, in this order, check the **Date** and **Revenue** fields.

**Add Annotation**

Choose data fields you would like to add, or type your own.

![Image showing the Add Annotation dialog box with fields selected.]

**Figure 24**

*Reviewing the Annotation Configuration*

10. Click **OK**.

**Task 9 – Playing the Power Map Tour**

In this task, you will play the tour.

1. To play the tour, on the **Home** ribbon tab, from inside the **Tour** group, click **Play Tour**.
2. When the tour has completed, click the arrow located at the bottom left corner of the screen, or press **Escape**.
Task 10 – Creating a Video

In this task, you will create a video of the tour.

1. To create a video of the tour, on the Home ribbon tab, from inside the Tour group, click Create Video.

2. In the Create Video window, select the Quick Export & Mobile option.

   Note: Higher video quality requires a longer time to render.

Please choose a quality for your video:

- **Presentations & HD Displays**
  For best viewing on high definition displays and presentations.
  1080p

- **Computers & Tablets**
  For best viewing on computer monitors and tablets.
  720p

- **Quick Export & Mobile**
  A smaller video for quick exporting and sharing on mobile devices.
  360p

Figure 25
Reviewing the Video Quality Configuration

3. Click Create.

4. In the Save Movie window, navigate to the D:\PowerBI\Lab06 folder.

   Note: The file name defaults to the tour name.

5. Click Save.

6. When the video rendering has completed, click Close.
Task 11 – Embedding the Video into a PowerPoint Presentation

In this task, you will embed the video into a PowerPoint presentation.

1. To open PowerPoint, on the taskbar, click the PowerPoint program shortcut.
2. In PowerPoint, click Open Other Presentations (located at the bottom of the left panel).

   ![Open Other Presentations Command](image)

   **Figure 26**
   *Locating the Open Other Presentations Command*

3. Select Computer, and then click Browse.
4. In the Open window, navigate to the D:\PowerBI\Lab06\Assets folder.
5. Select the US Sales Review.pptx file, and then click Open.
6. On the File ribbon tab, select Save As | Computer, and then click Browse.
7. In the Save As window, navigate to the D:\PowerBI\Lab06 folder, and then click Save.
8. In the left pane, select the third slide.
9. On the Insert ribbon tab, from inside the Media group, click Video, and then select Video On My PC.

   ![Video Command](image)

   **Figure 27**
   *Locating the Video Command*

10. In the Insert Video window, navigate to the D:\PowerBI\Lab06 folder.
11. Select the US Sales.mp4 file, and then click Insert.
12. Resize the image file to fill the slide area.
14. To start the presentation, on the Slide Show ribbon tab, from inside the Start Slide Show group, click From Beginning.

15. To navigate to the third slide, click the down arrow key twice.

16. To start the video, hover the cursor over the presentation, and then click the Play button.

![Figure 28 Locating the Play Button](image)

17. When the video has completed, click the down arrow key to proceed to the next slide.

18. To exit the presentation, press Escape.

Task 12 – Finishing Up
In this task, you will finish up by closing Excel.

1. To close PowerPoint, click the X button in the top right corner.

2. To close the Power Map window, on the File ribbon tab, select Close.

3. To save the workbook, on the File ribbon tab, click Save.

4. To close Excel, click the X button in the top right corner.

Summary

In this lab, you produced a tour consisting of four scenes to spatially and temporally present revenue data for the Tailspin Toys US sales operations. You then embedded a video of the tour in a PowerPoint presentation.