Hands on Exercise for Data Cubing – Part 2

Log on to elab using <u>your eID credentials</u>

Session I – ~~Steps to Deploy from SSDT~~ Browsing the cube (Larson – Chapter 12; Pages 486-490)

- For step 1, start Visual Studio 2017
- Ignore steps 2-12 (since you created the cube directly in your Analysis Services Database, there is no need to deploy it.). Instead, do the following:
  - Click File→Open→Analysis Services Database. Select your analysis services database (it should be displayed in the box below the Database drop-down list) in the Connect to Database dialog box. Click OK.
  - Expand the Cubes folder in the Solution Explorer window. You should see the Max Min Manufacturing DM cube (that you created and processed in Data Cubing HOE – Part 1) listed. Right click the cube and select Browse from the context menu. You should see the Browse window similar to the one shown in Figure 12-3 (page 487).
  - Complete steps 14-19 (**Note:** You may have to click the "**Click to execute the query**" link for the results to be displayed).

Session II – Adding a KPI to the Max Min Manufacturing DM Cube (Larson – Chapter 12; Pages 508-511)

If you closed VS2017 after Session I, complete steps 1 and 2, otherwise, go to step 3.

- For step 1, start Visual Studio 2017
- For step 2 - Click File→Open→Analysis Services Database. Select your analysis services database (it should be displayed in the box below the Database drop-down list) in the Connect to Database dialog box. Click OK.
- Complete steps 3 to 11.
- For step 12 – We have to process the cube before using SSDT's KPI browser to look at the result of our efforts. To do this, select Build→Process from the Main menu. In the Process Cube dialog box, click the Run button (bottom right). The Process Progress dialog box will open. If your KPI is constructed correctly, the processing will complete successfully and you will see the Process Succeeded message in the status bar. Close the Process Progress dialog box and then the Process Cube dialog box.
- Ignore steps 13-14
- **Note for Step 15**: The Browser View on the KPIs tab toolbar does not appear to work in Visual Studio 2017. If you wish, you can view the Percent Rejected KPI in the Cube's Browser window instead, and complete steps 15-22. The Status will not show in a Gauge. Rather, just the numeric values (i.e., 1, 0.5, 0, -0.5, 1) will be displayed.

Session III – Default Members and the OrderBy Property (Larson – Chapter 13; Pages 555-559)

If you closed VS2017 after Session II, complete steps 1 and 2, otherwise, go to step 3.

- For step 1, start Visual Studio 2017
- For step 2 - Click File→Open→Analysis Services Database. Select your analysis services database (it should be displayed in the box below the Database drop-down list) in the Connect to Database dialog box. Click OK.

- Complete steps 3-27.
- Ignore steps 28-30.
- Right click the Max Min Manufacturing DM cube (it will be listed within the Cubes folder) in the Solution Explorer window and select Process from the context menu. In the Process Cube dialog box, click the Run button (bottom right). The Process Progress dialog box will open. If your cube is constructed correctly, the processing will complete successfully and you will see the Process Succeeded message in the status bar. (If the cube does not process successfully, make a note of the errors, redo any steps that were done incorrectly, and try processing again). Close the Process Progress dialog box and then the Process Cube dialog box.

Session IV – Time-Based Analytics (Larson – Chapter 13; Pages 578-581)

If you closed VS2017 after Session III, complete steps 1 and 2, otherwise, go to step 3.

- For step 1, start Visual Studio 2017
- For step 2 - Click File→Open→Analysis Services Database. Select your analysis services database (it should be displayed in the box below the Database drop-down list) in the Connect to Database dialog box. Click OK.
- Complete steps 3-15.
- Ignore step 16. Instead, right click the Max Min Manufacturing DM cube (it will be listed within the Cubes folder) in the Solution Explorer window and select Process from the context menu. In the Process Cube dialog box, click the Run button (bottom right). The Process Progress dialog box will open. If your cube is constructed correctly, the processing will complete successfully and you will see the Process Succeeded message in the status bar. (If the cube does not process successfully, make a note of the errors, redo any steps that were done incorrectly, and try processing again). Close the Process Progress dialog box and then the Process Cube dialog box.
- For step 17, select the Browser tab.
- Complete steps 18-28.

Session V – Browsing the cube with Excel – Creating a Pivot Table (Larson –Chapter 17; Pages 785-798)

If you closed VS2017 after Session IV, complete steps 1 and 2, otherwise, go to step 3.

- For step 1, start Visual Studio 2017
- For step 2 - Click File→Open→Analysis Services Database. Select your analysis services database (it should be displayed in the box below the Database drop-down list) in the Connect to Database dialog box. Click OK.
- Expand the Cubes folder in the Solution Explorer window. You should see the Max Min Manufacturing DM cube listed. Right click the cube and select Browse from the context menu.
- Click on the Excel icon on the tool bar - 

- Microsoft Excel should open, followed by the Microsoft Excel Security Notice dialog box. Click Enable.
- **Note:** You can also create a connection to your cube in the analysis services database from Excel. The instructions are in the Appendix at the end of this document.

Steps to Create the PivotTable Layout (Larson –Chapter 17; Pages 791-794)

- Complete steps 1-16.
- Experiment by adding/changing/removing filters, columns, rows, and values from the field list.
- Save the spreadsheet to your class folder for CIS 570 (i.e., "S: drive").

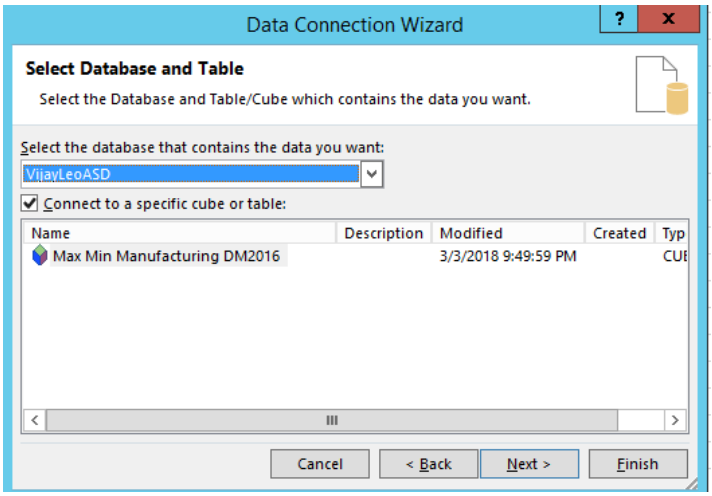
Creating a Pivot Chart (Larson –Chapter 17; Pages 794-798)

- Complete steps 1 – 4.
- For step 5, select the connection to your Analysis Services database (e.g., buscissql\cisbi SmithASD).
- Complete steps 6-15.
- Experiment by adding/changing/removing filters, categories, series, and values from the field list.
- Save the spreadsheet.
- You are done.

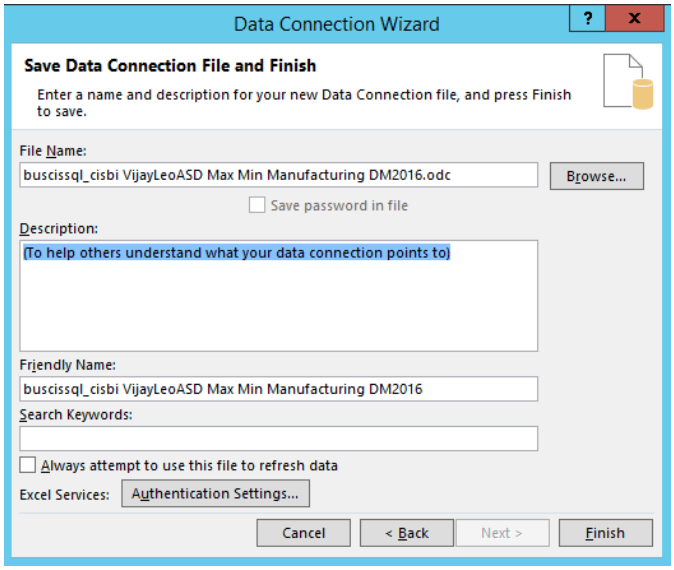
Appendix (FYI)

Steps to Create the Connection to a Cube on Analysis Services (Larson –Chapter 17; Pages 787-790

- Complete steps 1-8.
- For steps 9 and 10 – Enter **buscissql\cisbi** for Server name. For Log on credentials, Use Windows Authentication should be selected (the default).
- Complete step 11.
- For step 12 – Select your Analysis Services Database **(e.g., if your last name is Smith, your analysis services database will be called SmithASD)** from the "Select the database that contains the data you want" drop-down list.
- For step 13 – Select Max Min Manufacturing DM (or, Max Min Manufacturing DM2016) cube. The Select Database and Table page of the wizard should appear similar to the figure shown below:



- For step 14 – Click Next. The Save Data Connection File and Finish page of the Data Connection Wizard appears as shown below:



- Complete steps 15 – 16.