



ESCUELA POLITECNICA NACIONAL



FACULTAD DE INGENIERÍA DE SISTEMAS

ISWD433-FUNDAMENTOS DE SISTEMAS DE LA INFORMACIÓN

TÍTULO: 03. Hands-On Lab—Creating a Data Model in Power Pivot

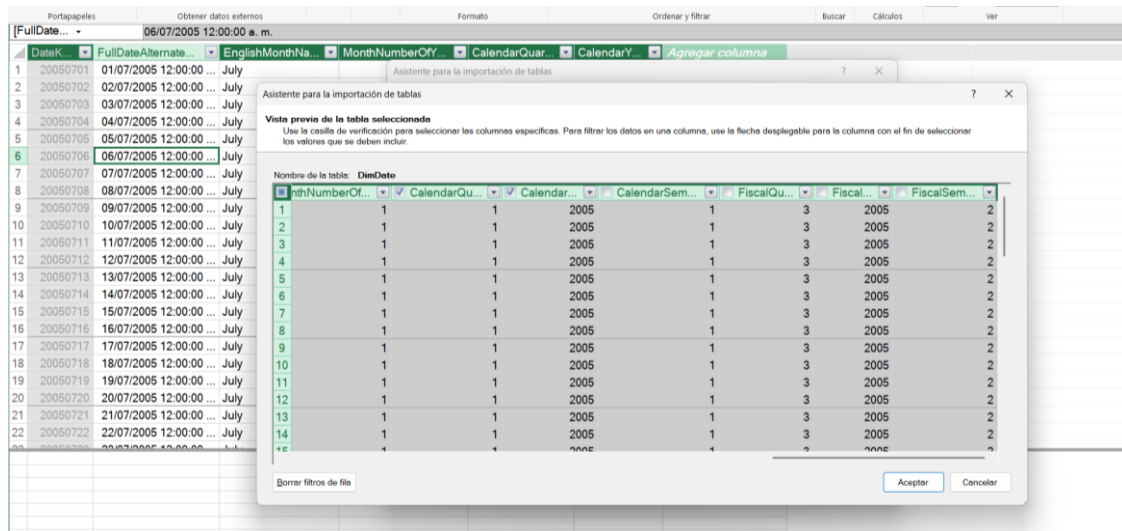
Alumnos: Fernando Huilca Villagómez

PROFESOR: Andrés Larco

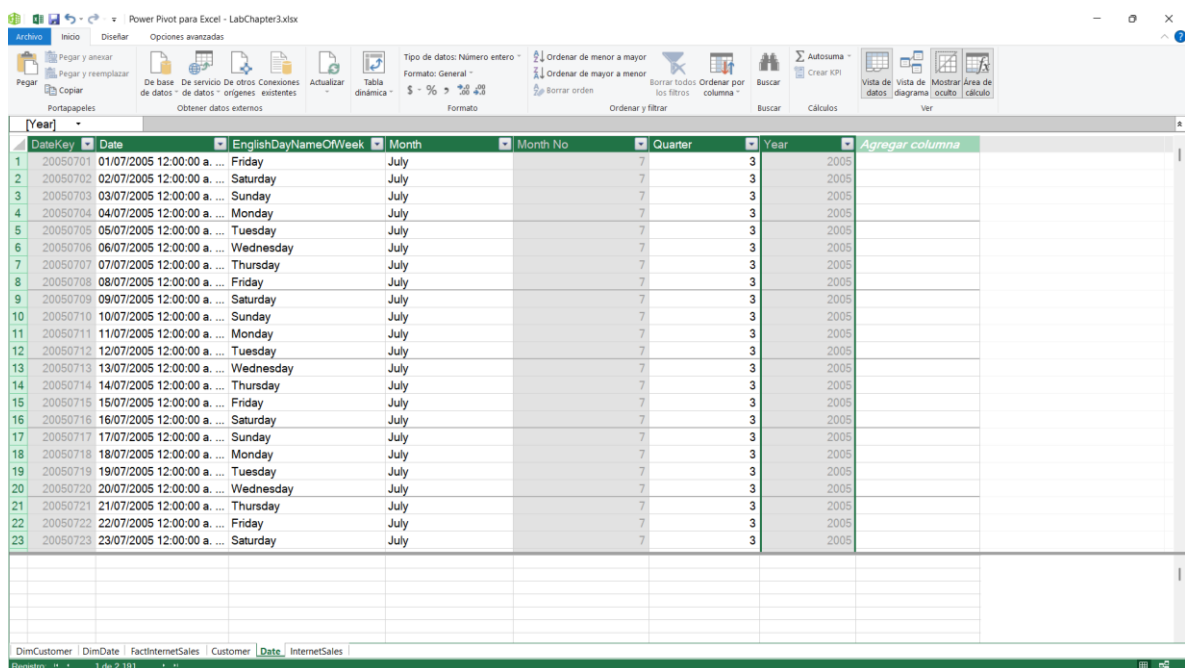


ESCUELA POLITÉCNICA NACIONAL
FACULTAD DE INGENIERÍA DE SISTEMAS
INGENIERÍA DE SOFTWARE

1. Open Excel 2013 and create a new file called LabChapter3.xlsx.
2. Using the Table Import Wizard in the Power Pivot data model, connect to the Adventureworks.accdb file in the LabStarters folder.
3. Select the tables and fields listed and import the data.



4. In the data view mode of the Power Pivot Model Designer, rename and hide the columns indicated in the table. To hide a column, right click on it and select Hide From Client. Tools in the context menú.





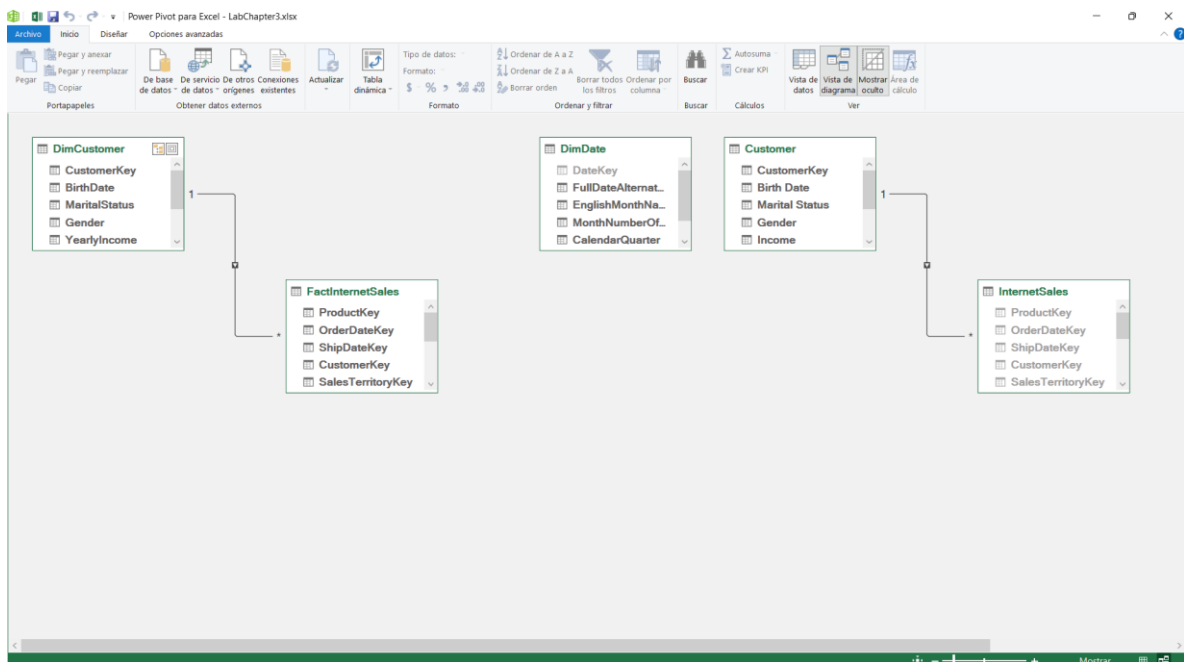
ESCUELA POLITÉCNICA NACIONAL
FACULTAD DE INGENIERÍA DE SISTEMAS
INGENIERÍA DE SOFTWARE

Se renombrarán las columnas correspondientes y se ocultarán los datos solicitados en la práctica.

	ProductKey	OrderDateKey	ShipDateKey	CustomerKey	SalesTerritoryKey	Order Number	Order Line Number	RevisionNumber	Quantity	Unit Price	Product Cost
1	376	20070702	20070709	16688		SO51189		1	1	\$2,443.35	\$1,554.95
2	376	20070707	20070714	18212		SO51268		1	1	\$2,443.35	\$1,554.95
3	376	20070709	20070716	16702		SO51300		1	1	\$2,443.35	\$1,554.95
4	376	20070710	20070717	18246		SO51321		1	1	\$2,443.35	\$1,554.95
5	376	20070711	20070718	18243		SO51336		1	1	\$2,443.35	\$1,554.95
6	376	20070715	20070722	18214		SO51407		1	1	\$2,443.35	\$1,554.95
7	376	20070723	20070730	18222		SO51529		1	1	\$2,443.35	\$1,554.95
8	376	20070724	20070731	18210		SO51543		1	1	\$2,443.35	\$1,554.95
9	376	20070803	20070810	18250		SO51965		1	1	\$2,443.35	\$1,554.95
10	376	20070803	20070810	18470		SO52018		1	1	\$2,443.35	\$1,554.95
11	376	20070807	20070814	18308		SO52210		1	1	\$2,443.35	\$1,554.95
12	376	20070808	20070815	18482		SO52211		1	1	\$2,443.35	\$1,554.95
13	376	20070811	20070818	18307		SO52407		1	1	\$2,443.35	\$1,554.95
14	376	20070812	20070819	18252		SO52408		1	1	\$2,443.35	\$1,554.95
15	376	20070812	20070819	16713		SO52468		1	1	\$2,443.35	\$1,554.95
16	376	20070817	20070824	18483		SO52670		1	1	\$2,443.35	\$1,554.95
17	376	20070823	20070830	18273		SO52963		1	1	\$2,443.35	\$1,554.95
18	376	20070829	20070905	18248		SO53289		1	1	\$2,443.35	\$1,554.95
19	376	20070830	20070906	18485		SO53346		1	1	\$2,443.35	\$1,554.95
20	376	20070903	20070910	18489		SO53720		1	1	\$2,443.35	\$1,554.95
21	376	20070909	20070916	16744		SO54096		1	1	\$2,443.35	\$1,554.95
22	376	20070918	20070925	18710		SO54579		1	1	\$2,443.35	\$1,554.95
23	376	20070920	20070927	18487		SO54657		1	1	\$2,443.35	\$1,554.95

5. Switch the Power Pivot window to diagram view. You should see the Date, Customer, and Internet Sales. The Customer table and the Internet Sales table have a relationship defined between them. This was discovered by the Table Import Wizard.

A continuación, se muestra la visualización de las tablas y las relaciones lógicas que estas mantienen entre sí.



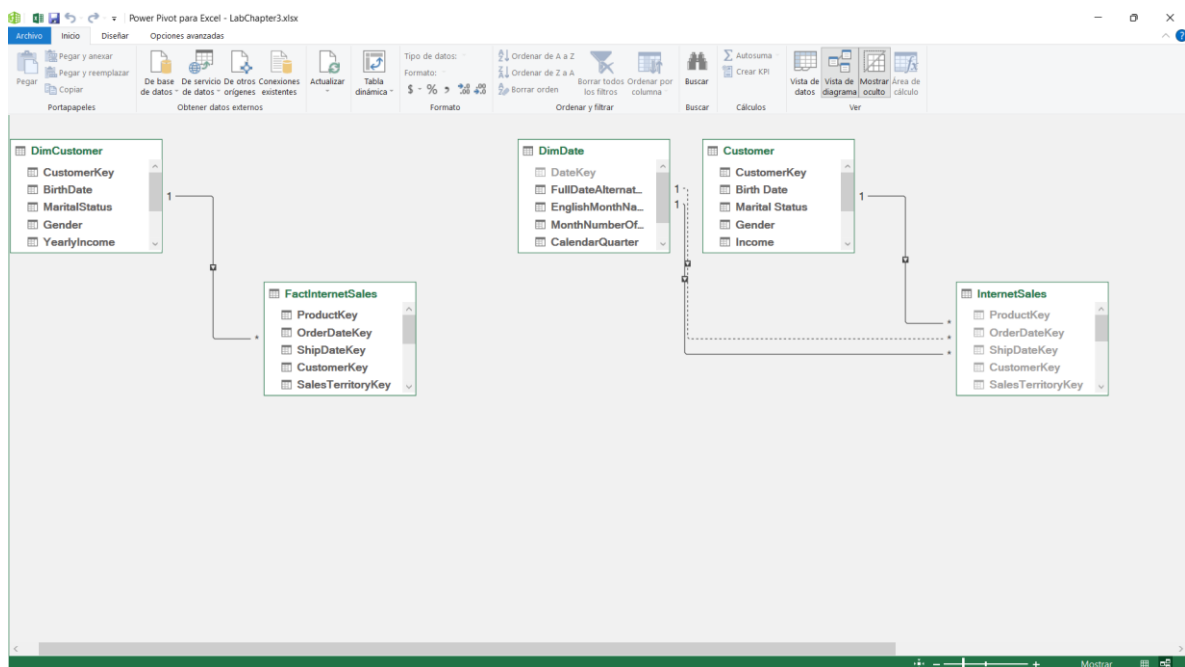


**ESCUELA POLITÉCNICA NACIONAL
FACULTAD DE INGENIERÍA DE SISTEMAS
INGENIERÍA DE SOFTWARE**

5. Switch the Power Pivot window to diagram view. You should see the Date, Customer, and Internet Sales. The Customer table and the Internet Sales table have a relationship defined between them. This was discovered by the Table Import Wizard.

6. Drag the DateKey from the Date table and drop it on the OrderDateKey in the Internet Sales table. Similarly, create a relationship between the DateKey and the ShipDateKey. Double click on this relationship to launch the Edit Relationship window (see Figure 3-18). Try to make this an active relationship. You should get an error because you can only have one active relationship between two tables in the model.

Se lleva a cabo con una configuración lógica de las entidades y sus relaciones.



7. On the Home tab of the Power Pivot Model Designer window, click the Existing Connections button. You should see the connection to the Adventureworks.acdb created earlier. Open this connection and select the query option for importing the data.

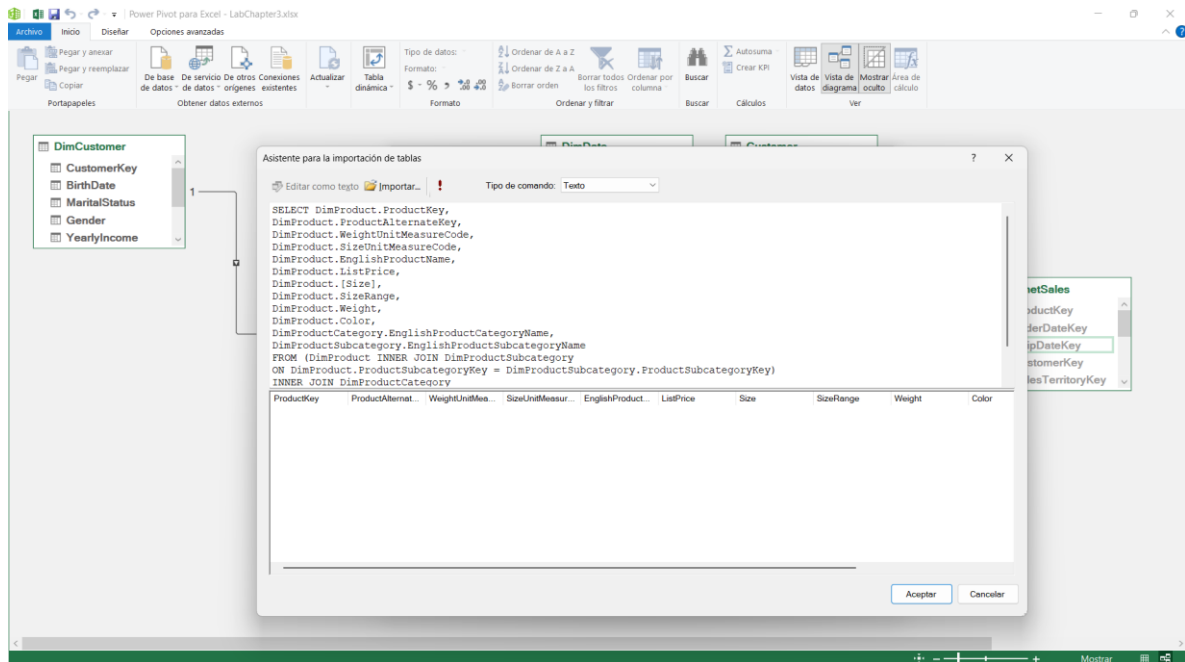
8. In the Specify A SQL Query window, change the query friendly name to Product and click the Design button.

9. In the designer click the Import button. Open the ProductQuery.txt file in the lab starter folder. Click the red exclamation mark (!) to run the query (see Figure 3-19). This query combines data (i.e., denormalizes) from the Product, ProductCategory, and ProductSubcategory tables.

Se realiza una búsqueda utilizando SQL mediante la ejecución del siguiente script.



ESCUELA POLITÉCNICA NACIONAL
FACULTAD DE INGENIERÍA DE SISTEMAS
INGENIERÍA DE SOFTWARE



10. After verifying that you are getting data, click the OK button and the Finish button on the next screen.

11. After importing the data, hide the ProductKey and update the column names as follows:

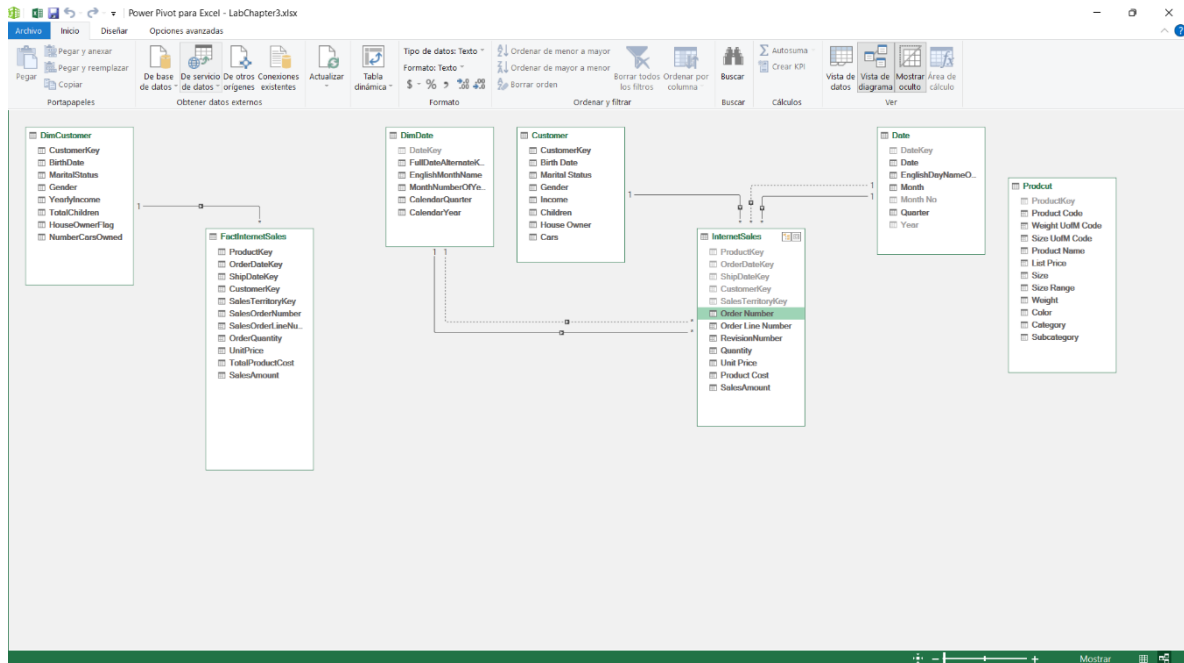
ProductKey	Size Unit Measure Code	Product Name	List Price	Size	Size Range	Weight	Color	Category	Subcategory	Agregar columna
1		Sport-100 Helmet, Red	33.6442	NA			Red	Accessories	Helmets	
2		Sport-100 Helmet, Red	33.6442	NA			Red	Accessories	Helmets	
3		Touring Pedal	80.99	NA			Silver/...	Components	Pedals	
4		Sport-100 Helmet, Red	34.99	NA			Red	Accessories	Helmets	
5		Sport-100 Helmet, Black	33.6442	NA			Black	Accessories	Helmets	
6		Sport-100 Helmet, Black	33.6442	NA			Black	Accessories	Helmets	
7		Sport-100 Helmet, Black	34.99	NA			Black	Accessories	Helmets	
8		Sport-100 Helmet, Blue	33.6442	NA			Blue	Accessories	Helmets	
9		Sport-100 Helmet, Blue	33.6442	NA			Blue	Accessories	Helmets	
10		Sport-100 Helmet, Blue	34.99	NA			Blue	Accessories	Helmets	
11		AWC Logo Cap	8.6442	NA			Multi	Clothing	Caps	
12		AWC Logo Cap	8.6442	NA			Multi	Clothing	Caps	
13		AWC Logo Cap	8.99	NA			Multi	Clothing	Caps	
14		LL Fork	148.22	NA			NA	Components	Forks	
15		ML Fork	175.49	NA			NA	Components	Forks	
16		HL Fork	229.49	NA			NA	Components	Forks	
17		LL Headset	34.2	NA			NA	Components	Headsets	
18		ML Headset	102.29	NA			NA	Components	Headsets	
19		HL Headset	124.73	NA			NA	Components	Headsets	
20		LL Mountain Handlebars	40.4909	NA			NA	Components	Handlebars	
21		LL Mountain Handlebars	44.54	NA			NA	Components	Handlebars	
22		ML Mountain Handlebars	56.2909	NA			NA	Components	Handlebars	
23		ML Mountain Handlebars	61.92	NA			NA	Components	Handlebars	

12. Create a relationship between the Internet Sales and the Product tables using the ProductKey. Your final diagram should look like Figure 3-20.



ESCUELA POLITÉCNICA NACIONAL
FACULTAD DE INGENIERÍA DE SISTEMAS
INGENIERÍA DE SOFTWARE

Se muestran las nuevas relaciones establecidas con las tablas importadas.



13. To create a linked table, enter the data shown in Figure 3-21 into an empty spreadsheet tab in Excel.

14. Select the cells, right click, and in the Quick Analysis context menu, select the Table tab and click the Table button (see Figure 3-22). In the Table Tools Design tab, rename the table SalesTerritory.

15. On the Power Pivot tab, click the Add To Data Model button. Once the table is in the model, change the name to Sales Territory, hide the SalesTerritoryKey, and create a relationship to the Internet Sales table.

16. To create a hierarchy, select the Sales Territory table in the Power Pivot window's diagram view and click the Create Hierarchy button. Drag and drop the Sales Territory Group, Country, and Region on the hierarchy. Rename the hierarchy Sales Territory (see Figure 3-23).

17. Create a Calendar hierarchy named Calendar in the Date table using Year, Quarter, and Month.

18. Switch to the data view in the designer and select the Date Table tab. Select the Month column and set its Sort By Column to the Month No. column.

19. When done save and close Excel

Se presenta la tabla dinámica que muestra las interacciones entre las tablas ingresadas.



ESCUELA POLITÉCNICA NACIONAL
FACULTAD DE INGENIERÍA DE SISTEMAS
INGENIERÍA DE SOFTWARE

Autoguardado

Buscar

LabChapter3

ArchivoInicioInsertarDibujarDisposición de páginaFórmulasDatosRevisarVistaAutomatizarAyudaPower PivotAnalizar tabla dinámicaDiseñoComentariosCompartir

AdministrarMedidasKPIAgregar a modelo de datosDetectarConfiguración

Modelo de datosCálculosTablasRelaciones

A1fxEtiquetas de fila

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Etiquetas de fila												
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12	Total general												
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													
23													
24													
25													
26													
27													
28													
29													
30													

Campos de tabla dinámica

ActivoTodas

Seleccionar campos para agregar al informe

gro

No hay coincidencias

Arrastrar campos entre las áreas siguientes:

Filtros

Columnas

FilasSalesTerritoryKey

Valores

☐ Aplazar actualización del diseño

Actualizar

Hojal

ListaAccesibilidad: todo correctoPromedio: 5.3Recuento: 12Suma: 55100%