

Chapter 1 : Excel Pivot Table Tutorials for Dummies Step by Step | Download PDF

This article is a step by step guide on how to create PowerPivot workbook from AdventureWorks DW database that Microsoft ships with SQL Server R2. I will use this workbook later as a starting point for posts about DAX functions.

Excel takes a snapshot of the data and stores it in its memory. This snapshot is called the Pivot Cache. The reason a pivot cache gets generated is to optimize the pivot table functioning. Even when you have thousands of rows of data, a pivot table is super fast in summarizing the data. One downside of pivot cache is that it increases the size of your workbook. The area highlighted in orange is the Values Area. In this example, it has the total sales in each month for the four regions. Rows Area The headings to the left of the Values area makes the Rows area. In the example below, Rows area contains the regions highlighted in red: Columns Area The headings at the top of the Values area makes the Columns area. In the example below, Columns area contains the months highlighted in red: Filters Area Filters area is an optional filter that you can use to further drill down in the data set. For example, if you only want to see the sales for Multiline retailers, you can select that option from the drop down highlighted in the image below , and the Pivot Table would update with the data for Multiline retailers only. To analyze data using a Pivot Table, you need to decide how you want the data summary to look in the final result. For example, you may want all the regions in the left and the total sales right next to it. Once you have this clarity in mind, you can simply drag and drop the relevant fields in the Pivot Table. In the Pivot Table Fields section, you have the fields and the areas as highlighted below: The Fields are created based on the backend data used for the Pivot Table. The Areas section is where you place the fields, and according to where a field goes, your data is updated in the Pivot Table. As soon as you do this, it will appear in the Pivot Table in the worksheet. What were the total sales in the South region? Drag the Region field in the Rows area and the Revenue field in the Values area. It would automatically update the Pivot Table in the worksheet. Note that as soon as you drop the Revenue field in the Values area, it becomes Sum of Revenue. By default, Excel sums all the values for a given region and shows the total. If you want, you can change this to Count, Average, or other statistics metrics. In this case, the sum is what we needed. The answer to this question would be Q2 What are the top five retailers by sales? Drag the Customer field in the Row area and Revenue field in the values area. In case, there are any other fields in the area section and you want to remove it, simply select it and drag it out of it. Note that by default, the items in this case the customers are sorted in an alphabetical order. To get the top five retailers, you can simply sort this list and use the top five customer names. Right-click on any cell in the Values area. This will give you a sorted list based on the total sales. Drag the Region Field in the Rows area. Now drag the Customer field in the Rows area below the Region field. When you do this, Excel would understand that you want to categorize your data first by region and then by customers within the regions. You can sort the retailers based on the sales figures by following the below steps: Right-click on a cell that has the sales value for any retailer. This would instantly sort all the retailers by the sales value. Now you can quickly scan through the South region and identify that The Home Depot sales were and it did better than four retailers in the South region. Now there are more than one ways to skin the cat. You can also put the Region in the Filter area and then only select the South Region. I hope this tutorial gives you a basic overview of Excel Pivot Tables and help you in getting started with it. Here are some more Pivot Table Tutorials you may like:

Chapter 2 : Creating a Pivot Table in Excel - Step by Step Tutorial

>> *Creating a Pivot Table in Excel - A Step by Step Tutorial* If you are reading this tutorial, there is a big chance you have heard of (or even used) the Excel Pivot Table. It's one of the most powerful features in Excel (no kidding).

I will use this workbook later as a starting point for posts about DAX functions. At the end of this post there is a link to download this workbook in a zipped format. Into this PowerPivot sample we will be loading just fact table "FactInternetSales" and related dimension tables. Table structure relationships can be reviewed here [click on the picture for PDF document](#): This guide assumes that you already installed PowerPivot for Excel. After entering your connection information click "Next" In the next window you will be able to choose "How to import data". Options are "Select from a list of tables and views to choose the data to import" or "Write an SQL Query to specify the data to import". For our test environment we choose first option. Click "Next" In the next window you will be able to select tables and views that you would like to load into PowerPivot. You should select following tables: After you will click "Finish" button, importing will start and after few moments you will see following screen: After closing this importing wizard you will see imported tables in the PowerPivot environment. At the bottom of the workbook you will see list of tabs that represent tables and inside each tab you will see data from that table. Always review relationships that were automatically created for you. In our case SQL Server tables had foreign keys defined between them, so PowerPivot was able to use that information and automatically create correct relationships. But there is one thing that we would like to change. But PowerPivot has limitation - each table can participate just once in the relationship as "Related Lookup Table". But for our example we would like to create a relationship between FactInternetSales table and DimSalesTerritory table. To review existing relationship choose "Table" menu item and then click on the button "Manage Relationships": New window will pop up that will show you existing relationships between tables. You will get warning "If you delete the selected relationship s , reports that combine data from the following tables may be affected: Are you sure you want to delete the relationship s? To create new relationship select "Create" button. Then click on "Create" button and new relationship will be created. Now you can close "Manage Relationships" window. To hide column first select it, then right mouse click and choose menu "Hide Columns This option will let you see column in PowerPivot window, but it will hide it from Pivot window. We will hide following columns: Save your PowerPivot workbook again and then make a copy of that file in case your workbook will get corrupted during tests. You can also download this workbook from here [size](#): We also create Pivot report that was using data from different tables. This workbook will be used in other posts about DAX functions.

Chapter 3 : How to Create Pivot Table in Excel: Beginners Tutorial

Step by step Pivot Table Tutorials for Beginners My this post is a total guide to make you a Master in Excel Pivot Table! Tighten your seat belt to become a data scientist!

If there are problems fix them else press OK button. There will be a report at the end. It will also customize your farm with recommended settings for a PowerPivot installation. Once operation is completed click Next. Either enters the product key or select free edition when prompted, accept the License Terms and click Next. On the Feature Selection page you will see all the required features selected, click Next. On the Installation Rules page click Next. On the Instance Configuration page, enter the instance name then click Next. On Disk Space Requirements, click Next button. The Analysis Services Service Account must be a domain account. Click Next to go to the Database Engine Configuration page. On the Analysis Services Configuration page, enter the name of an administrator for Analysis Services. At minimum click Add Current User to the administrators, this is required to ensure that PowerPivot is deployed correctly in the farm. Click Next button until you reach Ready to Install page. On the PowerPivot Configuration Tool complete all required information The database server should be the instance you install with SharePoint integration step 3 , you can leave the default port or change it based on your preferences, keep the passphrase handy as you will require it later during the configuration. If you entered the correct information validation should succeed and display below popup message: Now click Run button to begin the configuration of your PowerPivot farm. There will be a warning message click Yes button. You will see an Activity Progress popup window. Once completed you will see following popup message: Continue through Setup, selecting the defaults until you get to the Installation Type page. Enter the product key when prompted and navigate through Setup, selecting the defaults until you reach the Setup Role page. On the Instance Configuration page: Click Next on the Disk Space Requirements page. The following screenshot shows a domain user account, but for an Analysis Services server in VertiPaq mode, you can also use the default virtual account provided by Setup. Click Add if you want to add additional users as administrator. You should add anyone who will perform processing operations on the server. Click Next when you are finished. Click Next on Reporting Services Configuration page. Click Next until you are on Ready to install page, click Install button. Close the SQL Setup window. Create a Reporting Services application a. Specify a name for the service application and an application pool that this service will run under. While you can use an existing application pool such as Web Services Default, consider creating a new application pool to isolate Reporting Services from other web services like Excel Services and Secure Store Service. On the same page, specify the Database Server to use in provisioning the service application database. Ensure that Windows authentication default is selected. Also make sure the check box for the Web Application you wish to enable Crescent on in this case SharePoint is selected under Web Application Associations. After click Ok button f. Your installation is complete and your server is configured and ready to use. To add different content types.

Chapter 4 : Get started with Power Pivot in Microsoft Excel - Excel

Once the screen got generated, our next step is to select the data source. The data source can be from SQL Server, SQL Server Reports (.rdl) files, from any data sources from Azure, from any Data feeds - Open Data sources and it can also be from any text files or Excel files.

These tutorials use Excel with Power Pivot enabled. For more information on Excel , click here. For guidance on enabling Power Pivot, click here. First, you need to make sure you have the Power Pivot add-in enabled. To enable Power Pivot, follow these steps. We imported Hosts by copying it and pasting it into Excel, then formatted the data as a table. To add the Hosts table to the Data Model, we need to establish a relationship. In Excel, click the Hosts tab to make it the active sheet. This step adds the Hosts table to the Data Model. It also opens the Power Pivot add-in, which you use to perform the remaining steps in this task. Notice that the Power Pivot window shows all the tables in the model, including Hosts. Click through a couple of tables. Use the slide bar to resize the diagram so that you can see all objects in the diagram. Notice that four tables are unrelated to the rest of the tables: You notice that both the Medals table and the Events table have a field called DisciplineEvent. Upon further inspection, you determine that the DisciplineEvent field in the Events table consists of unique, non-repeated values. The DisciplineEvent field represents a unique combination of each Discipline and Event. In the Medals table, however, the DisciplineEvent field repeats many times. Create a relationship between the Medals table and the Events table. A line appears between them, indicating a relationship has been established. Click the line that connects Events and Medals. The highlighted fields define the relationship, as shown in the following screen. To connect Hosts to the Data Model, we need a field with values that uniquely identify each row in the Hosts table. Then we can search our Data Model to see if that same data exists in another table. With Hosts selected, switch back to Data View. Extend the Data Model using calculated columns To establish a relationship between the Hosts table and the Data Model, and thereby extend our Data Model to include the Hosts table, Hosts must have a field that uniquely identifies each row. In addition, that field must correspond to a field in the Data Model. You can, however, create new columns by using calculated fields based on the existing data. By looking through the Hosts table, then looking at other Data Model tables, we find a good candidate for a unique field we could create in Hosts, and then associate with a table in the Data Model. Both tables will require a new, calculated column in order to meet the requirements necessary to establish a relationship. In Hosts, we can create a unique calculated column by combining the Edition field the year of the Olympics event and the Season field Summer or Winter. In the Medals table there is also an Edition field and a Season field, so if we create a calculated column in each of those tables that combines the Edition and Season fields, we can establish a relationship between Hosts and Medals. The goal is to create a calculated column in the Hosts table, and then in the Medals table, which can be used to establish a relationship between them. Select the Hosts table in Power Pivot. Adjacent to the existing columns is an empty column titled Add Column. Power Pivot provides that column as a placeholder. There are many ways to add a new column to a table in Power Pivot, one of which is to simply select the empty column that has the title Add Column. In the formula bar, type the following DAX formula. As you type, AutoComplete helps you type the fully qualified names of columns and tables, and lists the functions that are available. Use tab to select AutoComplete suggestions. You can also just click the column while typing your formula, and Power Pivot inserts the column name into your formula. Values are populated for all the rows in the calculated column. Such fields are called a primary key. You can rename any column by double-clicking it, or by right-clicking the column and choosing Rename Column. When completed, the Hosts table in Power Pivot looks like the following screen. The Hosts table is ready. Start by creating a new column in the Medals table, like we did for Hosts. Notice that Add Column is selected. This has the same effect as simply selecting Add Column. The Edition column in Medals has a different format than the Edition column in Hosts. Before we combine, or concatenate, the Edition column with the Season column to create the EditionID column, we need to create an intermediary field that gets Edition into the right format. In the formula bar above the table, type the following DAX formula. Values are populated for all the rows in the

calculated column, based on the formula you entered. Rename the column by right-clicking CalculatedColumn1 and selecting Rename Column. Type Year, and then press Enter. When you created a new column, Power Pivot added another placeholder column called Add Column. In the formula bar, type the following DAX formula and press Enter. Sort the column in ascending order. The Medals table in Power Pivot now looks like the following screen. Notice many values are repeated in the Medals table EditionID field. What is unique in the Medals table is each awarded medal. The unique identifier for each record in the Medals table, and its designated primary key, is the MedalKey field. The next step is to create a relationship between Hosts and Medals. You can also switch between Grid view and Diagram view using the buttons at the bottom of the PowerView window, as shown in the following screen. Expand Hosts so you can view all of its fields. We created the EditionID column to act as the Hosts table primary key unique, non-repeated field, and created an EditionID column in the Medals table to enable establishment of a relationship between them. We need to find them both, and create a relationship. Power Pivot provides a Find feature on the ribbon, so you can search your Data Model for corresponding fields. Position the Hosts table so that it is next to Medals. Power Pivot creates a relationship between the tables based on the EditionID column, and draws a line between the two columns, indicating the relationship. In this section, you learned a new technique for adding new columns, created a calculated column using DAX, and used that column to establish a new relationship between tables. You can also use the associated data to create additional PivotTables, PivotCharts, Power View reports, and much more. Create a hierarchy Most Data Models include data that is inherently hierarchical. Common examples include calendar data, geographical data, and product categories. Creating hierarchies within Power Pivot is useful because you can drag one item to a report “the hierarchy” instead of having to assemble and order the same fields over and over. The Olympics data is also hierarchical. For each sport, there is one or more associated disciplines sometimes there are many. And for each discipline, there is one or more events again, sometimes there are many events in each discipline. The following image illustrates the hierarchy. You then use these hierarchies to see how hierarchies make organizing data easy in PivotTables and, in a subsequent tutorial, in Power View. Expand the Events table so that you can more easily see all of its fields. Press and hold Ctrl, and click the Sport, Discipline, and Event fields. With those three fields selected, right-click and select Create Hierarchy. A parent hierarchy node, Hierarchy 1, is created at the bottom of the table, and the selected columns are copied under the hierarchy as child nodes. Verify that Sport appears first in the hierarchy, then Discipline, then Event. Double-click the title, Hierarchy1, and type SDE to rename your new hierarchy. You now have a hierarchy that includes Sport, Discipline and Event. Your Events table now looks like the following screen. Create a Location hierarchy Still in Diagram View in Power Pivot, select the Hosts table and click the Create Hierarchy button in the table header, as shown in the following screen. An empty hierarchy parent node appears at the bottom of the table. Type Locations as the name for your new hierarchy. There are many ways to add columns to a hierarchy. Ensure that your hierarchy child nodes are in order. From top to bottom, the order should be: If your child nodes are out of order, simply drag them into the appropriate ordering in the hierarchy. Your table should look like the following screen. Your Data Model now has hierarchies that can be put to good use in reports. In the next section, you learn how these hierarchies can make your report creation faster, and more consistent. Use hierarchies in PivotTables Now that we have a Sports hierarchy and Locations hierarchy, we can add them to PivotTables or Power View, and quickly get results that include useful groupings of data.

Chapter 5 : Beginner's Guide to PowerPivot for Excel - CodeProject

Excel Power Pivot i About the Tutorial The first step to proceed with Power Pivot is to ensure that the POWERPIVOT tab is available on the Ribbon. If you have.

Download PowerPivotfromOData - 3. Be it schools, marketing agencies, financial institutions dealing with day to day market changes, sales, inventory â€” everyone needs data. This data need to be analyzed and presented to make vital information. There are lots of tools in the market that deal with providing this information. Some of them include QlikView, Monarch, etc. Every software has its own capabilities and features. PowerPivot is a powerful data mashup and data exploration tool based on xVelocity in-memory technologies providing unmatched analytical performance to process billions of rows at the speed of thought. This tip would explain various features of PowerPivot and ways to utilize them. Background On 12 May , Microsoft introduced SQL Server PowerPivot, an Excel-based data discovery tool giving business users the ability to combine and analyze large amounts of diverse data. SQL Server PowerPivot is a data discovery tool, including powerful data mashup capabilities, an xVelocity in-memory repository and basic visualization tools, that gives business users the ability to combine and analyze large amounts of diverse data. Microsoft included just enough data slicers and filtering functionality in the initial release to qualify as a limited interactive visualization tool. PC World Magazine says it this way: As the name implies, PowerPivot is a PivotTable on steroids. With PowerPivot, you can pull into Excel large amounts of data from multiple database tables, databases or other sources of data, and sort and filter them almost instantly. Data can be reorganized around one column or compared against columns from another data source. You can divide the data by time, geographic origin or some other parameter. Microsoft Excel has been widely used for data aggregation and lightweight analysis, but limitations have precluded its use as a high-end ad hoc analysis tool, including limits to the data size it can handle and the number of rows it offers, its slow calculations, its lack of understanding of dimensional models and its lack of centralized spreadsheet management and control. PowerPivot begins to address this limitation â€¦ Select the appropriate file and install PowerPivot. Once the installation is complete, you should be able to see PowerPivot in your Microsoft Excel Ribbon as shown below: Let us consider the sales data across different time frames from various regions. I am not including the entire data for our understanding purposes. Once the screen got generated, our next step is to select the data source. Select the Excel file which has the data. Please find link to several sample files under References section. The first row has the headings here. You can actually import data from multiple sheets and define relationships among them. Now, you can start creating your charts as you would normally do with your Pivot Tables and Pivot Charts. Refer to the simple table and chart created for the provided data. Now, let us see how to import data from Data Feeds using some online open data sources. Once you have selected the data source, the window imports all the data to its in memory. Once data is imported, you can then customize your charts as you wish. I have shown the below report where I am filtering based on postal code to see how many parking slots are currently available along with the summary of total parking lots existing.

Chapter 6 : Tutorial: Extend Data Model relationships using Excel, Power Pivot, and DAX - Excel

STEP 3: Go to Power Pivot It allows you to harness the power of Business Intelligence right in theinnatdunvilla.com the tutorial on how to enable Power Pivot in Excel

Wrapping up Pivot Table History Pivot Table feature as a program was first introduced to business houses by Lotus throughout the year . In the year , Steve Jobs saw the program and immediately ordered to develop it for its then-new NeXT computer platform. Finally, this program was added to its NeXT platform in the year . A version for Windows was introduced in the year . After that, pivot table has become the most powerful weapon for a data warrior! Or, are you an intermediate level user of Excel and do you find it hard understanding the features of Pivot Tables? Learning the basics of Pivot Tables is really an easy and fun thing! Start learning it today, I can guarantee that, if you are like me, you will finish it today! So, just start learning Excel Pivot Tables today! Why is Learning Pivot Table Important? Cortana, the data processing Engine of Bing, made a perfect record, predicting every match correctly in the World Cup . Cortana analyzed, manipulated, summarized every bit of data that could be collected about players, venues of the games, coaches, environments and much more. If Cortana used its capability in sports betting, it could earn billions of dollar in just one month! Data is taking over the world. So analyzing, manipulating, and summarizing data in the shortest possible time has become the most demanded job nowadays. And data analysis without Pivot Table? Yes, possible, but while Pivot Table can make a report in just 5 seconds, you might need 5 valuable hours to prepare the same report. Life without pivot table Take a look at this video and get a feel of the days when there was no pivot table! Life after pivot table Here are our lives, lives with Excel Pivot Table feature. Tighten your seat belt to become a data scientist! I have divided this Pivot Table guide into two parts. In the first part, Introducing Pivot Tables, I shall just introduce you with Pivot Table, and in the second part, Analyzing Data with Pivot Tables, I shall use a good number of examples to make the learning handier.

Chapter 7 : Step by Step Guide of Installing Power View with PowerPivot – SQL BI

Step 6 – In PowerPivot window, in View group, click on Diagram View. Step 7 – Use the slide bar to resize the diagram so that you can see all tables in the diagram. Step 8 – Rearrange the tables by dragging their title bar, so that they are visible and positioned next to one another.

Next Page PowerPivot is an easy to use data analysis tool that can be used from within Excel. You can use PowerPivot to access and mashup data from virtually any source. You can create your own compelling reports and analytical applications, easily share insights, and collaborate with colleagues through Microsoft Excel and SharePoint. Using PowerPivot, you can import data, create relationships, create calculated columns and measures, and add PivotTables, slicers and Pivot Charts. To start, get some more data into your workbook. You can copy and paste data from a Web Page also. Insert a new Worksheet. Name the table Hosts and rename the Worksheet Hosts. Hosts Table gets added to the Data Model in the Workbook. The PowerPivot window opens. You will find all the Tables in the Data Model in the PowerPivot, though some of them are not present in the Worksheets in the Workbook. Also, DisciplineEvent column in the Events table consists of unique, non-repeated values. Click on Data View in Views Group. Check DisciplineEvent column in the Events table. A line appears between the Events Table and the Medals Table, indicating a relationship has been established. The line and the fields defining the relationship between the two tables are highlighted as shown in the image given below. To do so, a field with values that uniquely identify each row in the Hosts table is to be found first. Then, search the Data Model to see if that same data exists in another table. This can be done in Data View. There are two ways of doing this. Click on Data View in the View group. Click on the Grid button on Task Bar. The Data View appears. There is no such field in Hosts Table. You cannot edit or delete existing data using PowerPivot. However, you can create new columns by using calculated fields based on the existing data. Adjacent to the existing columns is an empty column titled Add Column. PowerPivot provides that column as a placeholder. The Add Column is filled with values. Check the values to verify that they are unique across the rows. To change the name of the column, select the column, right-click on it. Ensure that the tables Medals and Hosts are close to each other. PowerPivot creates a relationship between the two tables. A line between the two tables, indicates the relationship.

Chapter 8 : Using Excel Tables in Power Pivot | Free Microsoft Excel Tutorials

In this special guest segment from episode 23 of Coffee Talk, Microsoft Collaboration Technology Specialist Brent Whichel walks us through PowerPivot creations step by step.

Chapter 9 : Advanced Excel Power Pivot

How to use PowerPivot to understand your data Mark Whitehorn provides a step-by-step guide to one of the excel 's most powerful tools T he closest many companies come to.