

Easy Way



Teach yourself...

PivotTables and PivotCharts

with

Microsoft Excel 2013

- ☒ Easy to follow
- ☒ Step-by-step instructions
- ☒ Written in plain English

A Cheryl Price Publication

Easy Way – PivotTables and PivotCharts (Excel 2013)

This book is designed to teach the PivotTables and PivotCharts features of Excel 2013. It contains simple step-by-step exercises to guide you through the learning process.

There are dozens of exercises including consolidation exercises, both theory and practical at the end of each section.

The process of consolidation and accumulation of learning is unique to the Cheryl Price books.

Retrievable exercise files are used with this book and listed on page ix. These are available as a free download from our web site at www.cherylprice.co.nz. Instructions for downloading the exercises are included on page x.

This book has been written using Microsoft Excel 2013 with Windows 8.1.

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T.Dip.WP, T.Dip.T

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Introduction

Welcome to Easy Way PivotTables and PivotCharts Excel 2013.

This book has been written using Microsoft Excel 2013 with Windows 8.1. (The Windows 7 operating system can be used. However screen shots will differ slightly from those shown in this book.)

Retrievable Exercise Files

Some exercise files have been created for you to prevent time in keying in many exercises. You can then open these files and use the features of Excel to manipulate and format text.

A list of these files is shown on page ix and instructions for downloading these files from our web site are included on page x.

What you will learn

In this course you will learn how to -

Use a pivot table to display data:

- Create and edit a pivot table
- Create a pivot table report including a pivot chart

How you will learn

This book is divided into sections. Each section page lists the learning outcomes for that section. You will work through each section and do all exercises.

Revision theory is included at the end of the section with a Consolidation Exercise at the end of Section 3. Our books include accumulation and consolidation of learning which carries across each section.

Word meaning boxes

Sometimes you will see a box at the left side of the page of a line that has dotted underlining. This box will contain information to help you understand the meaning of the underlined word (or how that word is formed). An example is shown below.

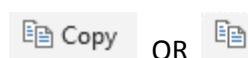
forecast
= to
calculate a
future
result

Data can therefore be altered to re-calculate budgets and to forecast results using different sales figures. Worksheets can be saved, opened and printed as required.

Different Excel buttons

Depending on the size of your Excel screen, buttons on the ribbon may vary to those shown in this book. The icon with the word of that feature may show, or the icon only.

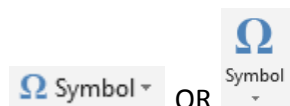
For example, the Copy button in the Clipboard group on the Home tab may be displayed in either of the following ways.



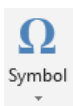
OR



The Symbol button can show as either -



OR



Shortcut keys

Shortcut keys are indicated in the left margin, usually the first time they are used. An example follows.

- Ctrl S 1 Click on the Save button  on the Quick Access Toolbar  .
- 2 Type a file name for your document then click on Save.

Glossary

Generally when a word(s) is first used that is a technical term or a word that you may not know that relates to an exercise, or a particular Excel 2013 feature, a description is given. You will also see that such words are in **SMALL CAPS**.

These terms are listed on each section page, an example is shown below. Explanations are also included in the Glossary at the end of the book.



In this section you will come across the following words highlighted in bold. This indicates that the word is included in the Glossary at the end of the book together with a description of that word.

AUTOCORRECT

CLIPBOARD

CORRECTION SIGNS

CUT

DRAW AND DROP

FIND

FORMAT

MICROSOFT OFFICE HELP

MOVE TEXT

NAVIGATION PANE

PROOF-READING

REDO

REPLACE

SELECTING TEXT

SYNONYMS AND THESAURUS

TYPING REPLACES SELECTION

UNDO

Icons used in this book

This book contains icons to help guide you in your learning.

The following list shows the icon and its meaning.



Learning Outcomes

Learning Outcomes are displayed on the section page and describe what you will learn in that section.



EXERCISE 1

These are the exercises that you are required to do. Often there will be an introduction sentence to tell you what you will be doing in that exercise.



These are notes for your information.



Revision

This appears at the end of each section and contains theory revision questions relating to features learnt in that section.



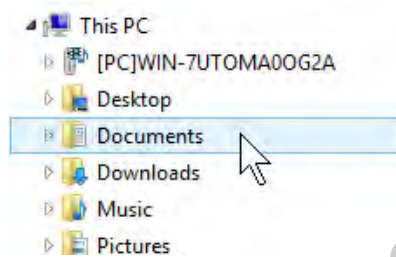
Consolidation Exercise

The Consolidation Exercise at the end of Section 3 covers a review of topics learnt in this book and provides additional practice.

Save Options

When a document is saved you will be requested to select the location, ie Computer then click on the Browse button and select the folder required. You can eliminate this procedure by selecting the location and saving directly to the Save dialog box and therefore bypass Backstage view.

For the purposes of this book we have used the Documents folder within This PC as the default folder. This folder is shown below which is the shortcut for the actual path name of C:\Users\User Name\Documents. This means that files you open and save will be on your hard drive.



Use the following instructions to specify the Documents folder as the default file location:

- 1 Click on the **FILE** tab then click on **Options**.
- 2 Click on **Save** at the left.
- 3 Ensure that the Documents folder is displayed as the Default local file location as shown below.

- ☒ Don't show the Backstage when opening or saving files
- ☐ Show additional places for saving, even if sign-in may be required.
- ☐ Save to Computer by default

Default local file location:

- 4 Also ensure that *Don't show the Backstage when opening or saving files* option displays a tick.
- 5 Remove the tick from the next option *Show additional places for saving, even if sign-in may be required.*
- 6 Click on OK.



If you wish to open and save files to OneDrive (ie the cloud) use instructions on the next page. If you have Windows 8, or have updated to Windows 8.1 from Windows 8, SkyDrive may be displayed instead of OneDrive but is essentially the same.

OneDrive

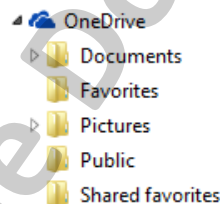
OneDrive is a cloud storage application from Microsoft. It is one of the major online file storage options competing with Dropbox and Google Drive.



Because files are stored “in the cloud” (in addition to your hard drive) it means that you can access those files from anywhere in the world because you will always have access to the OneDrive application and your files. You do however need an Internet connection for the files to be updated from your hard drive to OneDrive.



Saving to OneDrive

OneDrive is automatically set up when Microsoft Office 2013 (ie Office 365) is installed on your computer. A OneDrive folder will be displayed on the Navigation Pane in Windows Explorer as below.



Files can be saved manually by clicking on the Save button  on the Quick Access Toolbar, specifying a name for your file then clicking on the  OneDrive icon (you may wish to double click on Documents and save to that folder).

OneDrive as the Default File Location

Use the following instructions if you wish to specify OneDrive as your default file location.

- 1 Click on the **FILE** tab then click on **Options**.
- 2 Click on **Save** at the left.
- 3 Ensure that the C:\Users\User Name\OneDrive\Documents folder is displayed as the Default local file location as shown on the next page. (You may need to retype the location)
- 4 Also ensure that *Don't show the Backstage when opening or saving files* option displays a tick.

- 5 Remove the tick from the next option *Show additional places for saving, even if sign-in may be required.*

- ☒ Don't show the Backstage when opening or saving files
☐ Show additional places for saving, even if sign-in may be required.
☐ Save to Computer by default

Default local file location:

C:\Users\Cheryl\OneDrive\Documents

Browse...

- 6 Click on OK.

OneDrive Website

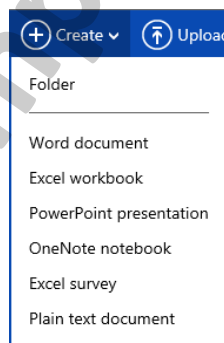
You can log in to the OneDrive website using your web browser with your login name and password.

The website is www.OneDrive.live.com.



You can upload photos and use files and share files.

New files can be created through OneDrive by clicking on **Create** and selecting the program you wish to use, eg Excel (web applications in OneDrive are slightly cut-down versions of Office 2013 programs).



Sharing Files

From within Excel 2013 you can save files to OneDrive (usually to the Documents folder) and then share those files. You can then click on the **FILE** tab, on **Share** and invite people to share files in OneDrive.

Alternatively, you can right click on a file in the OneDrive website (see above) and select Sharing.

Use Google in your web browser to search for additional information on OneDrive.

Exercise Files used in this book

(Instructions are included on the following page for downloading retrievable files from our web site at www.cherylprice.co.nz)



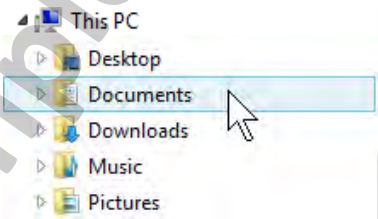

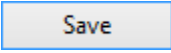
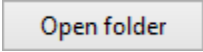
| Names of files | |
|---------------------------|-------------------------|
| Cavanagh Industries | PC Sales – PivotChart 2 |
| Home Ideas (Categories) 2 | PC Sales – PivotChart |
| Home Ideas (Categories) | PC Sales 2 |
| Home Ideas | PC Sales |
| Mykas – Adelaide | PivotChart 2 |
| Mykas – Brisbane | PivotTables |
| Mykas – Melbourne | PivotTables - Group |
| Mykas – Sydney | Real Estate Sales |
| Organic Foods Co 2 | Rep Sales |
| Organic Foods Co 3 | Sports Galore Orders |

Downloading Exercise Files

The exercise files listed on the previous page can be downloaded from the Cheryl Price web site using the instructions below.



For the purposes of this book we have specified Exercise files to be downloaded to the Documents folder within This PC which is the shortcut for the actual pathname of C:\Users\User Name\Documents. This is where files will be opened from and saved to.

| | |
|---|--|
| 1 | In the address bar of Internet Explorer, type: www.cherylprice.co.nz |
| 2 | Press Enter on the keyboard to display the Cheryl Price website. |
| 3 | Click in the Resources tab as shown at the right.  |
| 4 | Under the heading of Easy Way Books - Computing Click on Easy Way – PivotTables and PivotCharts |
| 5 | Under the Exercise Files heading click on the underlined blue hyperlink, ie PivotTables and PivotCharts Excel 2013 Free download The File Download dialog box will display. |
| 6 | <p>a Click on  Save as then</p> <p>b Change file name to <i>PivotTables and PivotCharts Excel 2013 Exercise Files</i>.</p> <p>c Click on the Documents folder shown below.</p>  <p> The Documents folder under This PC is the shortcut for C:\Users\User Name\Documents</p> <p>d Click on .</p> |
| 7 | <p>a Click on .</p> <p>b Right click on the zipped exercise file and select Extract All. Click on Extract. A folder will be created containing the exercise files.</p> <p>c Delete the Compressed (zipped) Folder.</p> |

Section

1

PivotTables



Learning Outcomes

At the end of this section you should be able to -

- ☐ Summarise data with PivotTables
- ☐ Understand the Pivot Cache
- ☐ Group and Ungroup data in a PivotTable
- ☐ Change the values calculated in a PivotTable
- ☐ Use a PivotTable for data consolidation
- ☐ Choose and apply a style to a PivotTable
- ☐ Change the PivotTable Layout



In this section you will come across the following words highlighted in bold. This indicates that the word is included in the Glossary at the end of the book together with a description of that word.

CLASSIC PIVOTTABLE LAYOUT

COLUMN

EXCEL LIST

GROUP DATA

NORMAL LAYOUT

OUTLINE

PIVOT CACHE

PIVOTTABLE

PIVOTTABLE AREA

PIVOTTABLE FIELDS LIST

PIVOTTABLE REPORT

PIVOTTABLE STYLES GALLERY

PIVOTTABLE TOOLS CONTEXTUAL TAB

REFRESHING

REPORT LAYOUTS

ROW

SHORTCUT MENU

SOURCE DATA

STYLES

SUBTOTALS

VALUE FIELD SETTINGS

VALUES FIELD

PivotTables

A **PivotTable** is an interactive worksheet table that provides a method of summarising and grouping large amounts of data from an **EXCEL LIST**. Data can be formatted, and summarised using various calculations. A PivotTable is also referred to as a **PivotTable REPORT**.

rotated
=
turned
around

PivotTables are so called because row and column headings can be rotated around the data area to allow different views of the source data to be displayed. The fields from the list are placed around the PivotTable skeleton to define how the summarised information is shown and calculated.

When source data changes, the PivotTable can be updated.

Excel List

For the best results when creating a PivotTable your Excel list should have the following characteristics.

- The first row of the list contains the headers that identify the data in each column. The list does not have to start in row 1 of your worksheet or in column A.
- Each **COLUMN** (field) contains unique data.
- Each **ROW** (record) contains one set of data for a single item.
- There should be no blank rows or columns in the list.

The PC Sales workbook (which you will use in the first exercise), is a good example of such a list.

| | A | B | C | D | E | F | G |
|----|----------|------|-------|-------|-------|-------------|-----------|
| 1 | Product | Year | Month | Sales | Units | Salesperson | Region |
| 2 | Hardware | 2011 | Dec | 7686 | 5563 | Green | Brisbane |
| 3 | Software | 2010 | Sep | 2956 | 1242 | Hindley | Sydney |
| 4 | Software | 2011 | Oct | 8165 | 983 | Hindley | Melbourne |
| 5 | Hardware | 2010 | Jan | 4448 | 3833 | Hindley | Brisbane |
| 6 | Hardware | 2010 | Sep | 75 | 3216 | Hindley | Perth |
| 7 | Software | 2010 | Feb | 4923 | 8160 | Green | Melbourne |
| 8 | Hardware | 2010 | Dec | 2733 | 2790 | Green | Sydney |
| 9 | Software | 2010 | Apr | 450 | 9265 | Green | Perth |
| 10 | Software | 2011 | Jul | 797 | 3868 | Hindley | Brisbane |
| 11 | Hardware | 2010 | Mar | 8751 | 1773 | Hindley | Sydney |
| 12 | Hardware | 2010 | Mar | 2741 | 6290 | Green | Brisbane |
| 13 | Software | 2010 | Dec | 7047 | 9888 | Evans | Sydney |
| 14 | Software | 2011 | Oct | 7191 | 39 | Green | Brisbane |
| 15 | Hardware | 2011 | Jun | 5575 | 9970 | Green | Perth |
| 16 | Hardware | 2011 | Jul | 7612 | 3656 | Evans | Melbourne |
| 17 | Hardware | 2011 | Aug | 4873 | 2730 | Hindley | Brisbane |
| 18 | Hardware | 2010 | Feb | 8076 | 3670 | Green | Melbourne |
| 19 | Hardware | 2011 | Oct | 3338 | 1695 | Green | Sydney |
| 20 | Hardware | 2010 | Jan | 6544 | 9550 | Green | Sydney |
| 21 | Software | 2010 | Oct | 6955 | 8722 | Hindley | Perth |
| 22 | Software | 2010 | Feb | 4138 | 4661 | Green | Perth |
| 23 | Software | 2011 | Aug | 8447 | 8056 | Hindley | Perth |

Why Create a PivotTable?

summarise
= to
condense
or reduce

If you want to summarise data from an Excel list you could possibly use the automatic **SUBTOTALS** feature. For example, in the PC Sales workbook you could display Sales subtotals for each Region.

You would first have to sort the data by Region, then apply the Subtotal feature (Data Tab, Outline Group).

| 1 | 2 | 3 | A | B | C | D | E | F | G | H |
|---|----|---|----------|------|-------|-------|-------|-------------|-----------------------|---|
| | 1 | | Product | Year | Month | Sales | Units | Salesperson | Region | |
| | 2 | | Hardware | 2011 | Dec | 7686 | 5563 | Green | Brisbane | |
| | 3 | | Hardware | 2010 | Jan | 4448 | 3833 | Hindley | Brisbane | |
| | 4 | | Software | 2011 | Jul | 797 | 3868 | Hindley | Brisbane | |
| | 5 | | Hardware | 2010 | Mar | 2741 | 6290 | Green | Brisbane | |
| | 6 | | Software | 2011 | Oct | 7191 | 39 | Green | Brisbane | |
| | 7 | | Hardware | 2011 | Aug | 4873 | 2730 | Hindley | Brisbane | |
| | 8 | | Software | 2011 | Jan | 5594 | 9025 | Hindley | Brisbane | |
| | 9 | | Software | 2010 | Sep | 668 | 3448 | Green | Brisbane | |
| | 10 | | Hardware | 2010 | Jan | 6081 | 9185 | Green | Brisbane | |
| | 11 | | Software | 2011 | Jan | 9662 | 9441 | Green | Brisbane | |
| | 12 | | Hardware | 2011 | Feb | 5010 | 3030 | Hindley | Brisbane | |
| | 13 | | Hardware | 2010 | Feb | 3571 | 5178 | Hindley | Brisbane | |
| | 14 | | Software | 2010 | Oct | 2428 | 3981 | Hindley | Brisbane | |
| | 15 | | Software | 2010 | Nov | 8670 | 2891 | Hindley | Brisbane | |
| | 16 | | Hardware | 2011 | Sep | 66 | 6740 | Green | Brisbane | |
| | 17 | | | | | 69486 | 75242 | | Brisbane Total | |
| | 18 | | Software | 2011 | Oct | 8165 | 983 | Hindley | Melbourne | |
| | 19 | | Software | 2010 | Feb | 4923 | 8160 | Green | Melbourne | |
| | 20 | | Hardware | 2011 | Jul | 7612 | 3656 | Evans | Melbourne | |
| | 21 | | Hardware | 2010 | Feb | 8076 | 3670 | Green | Melbourne | |
| | 22 | | Hardware | 2010 | Sep | 2420 | 4873 | Hindley | Melbourne | |
| | 23 | | Software | 2010 | Oct | 7347 | 5881 | Green | Melbourne | |
| | 24 | | Software | 2011 | May | 9566 | 7406 | Green | Melbourne | |
| | 25 | | Software | 2010 | Oct | 2516 | 9191 | Hindley | Melbourne | |
| | 26 | | Hardware | 2011 | Jul | 9082 | 8966 | Green | Melbourne | |

Using the automatically applied **OUTLINE** you could show or hide data levels, but if you required subtotals based on other fields you would have to re-sort the list and apply the Subtotal feature again.

When you summarise your data in a PivotTable, you can display different views of the data without having to recreate the table each time.

Creating a PivotTable

The Pivot Cache


When a PivotTable is created, it is not directly linked to the data source. This is because when you begin the process, the first step that Excel takes is to create a duplicate copy of the data source and store it in a *Pivot Cache*. This occurs every time you create a PivotTable from a data source, which automatically increases the file size and the amount of memory being used.

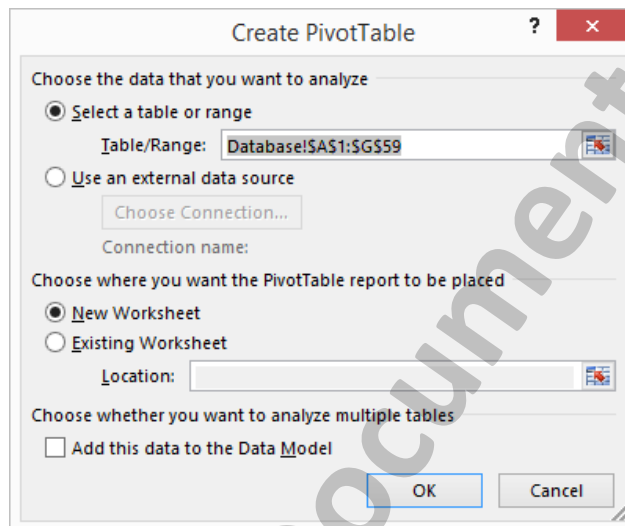
When you make changes to the data source, this is not automatically reflected in the PivotTable. This is easily managed by **REFRESHING** the data.

Efficient use of the **PIVOT CACHE** and how to refresh data is covered later in this section.



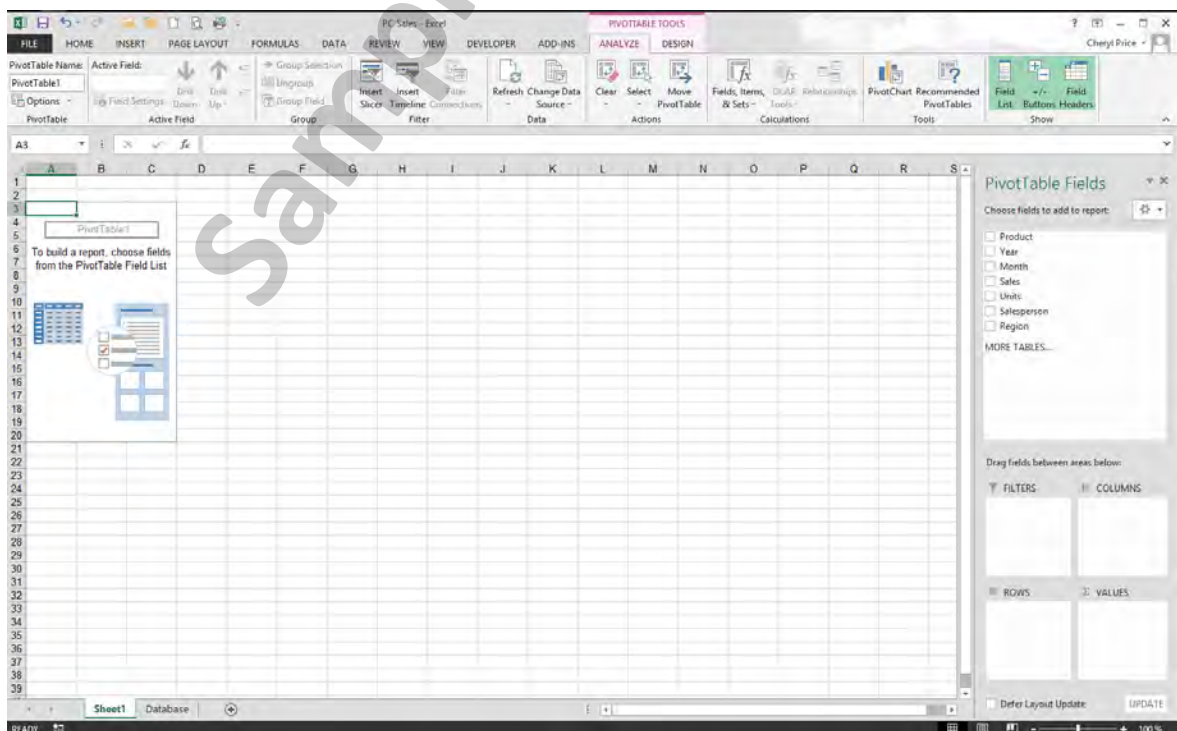
EXERCISE 1

- 1 Open the workbook called **PC Sales**
- 2 Ensure the **Database** worksheet is displayed.
- 3 With the cursor anywhere within the list, click on the **INSERT** tab then on . The Create PivotTable dialog box is displayed.
- 4 Ensure the *Select a table or range* and *New Worksheet* options are selected and that the Table/Range is as shown below.



- 5 Click on OK.




A new sheet is inserted to the left of the Database worksheet (Sheet1); a **PIVOTTABLE AREA** is displayed, together with the **PIVOTTABLE FIELDS LIST** Task Pane (at the right) and the PivotTable Tools, Analyze and Design tabs as shown below.



There are two ways in which a PivotTable can be used and manipulated:

- **NORMAL LAYOUT** as shown on the previous page.
- **CLASSIC PIVOTTABLE LAYOUT** which displays a grid – fields displayed in the PivotTable Fields list can be dragged onto the grid (see illustration on next page).

6 Change the PivotTable layout view to Classic PivotTable Layout as follows:

- a On the PivotTable Tools, Analyze tab, click on  Options .
- b In the PivotTable Options dialog box click on the Display tab.
- c Ensure a tick is displayed in this option:
 **Classic PivotTable layout (enables dragging of fields in the grid)**
- d Click on OK.



This applies the Classic PivotTable layout to the current PivotTable only.

The PivotTable area is displayed showing all the field areas in the PivotTable.

The fields in the database are listed in the PivotTable Fields list Task Pane at the right of the screen.

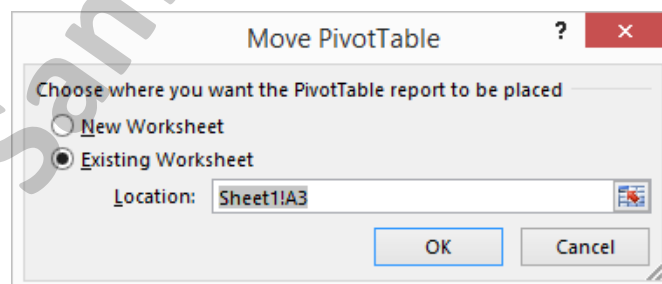
PivotTable Location Notes

When creating a PivotTable you specify where you want it located in the Create PivotTable dialog box. The usual recommendation (which is the default option in the Create PivotTable dialog box) is that it is placed on a new worksheet.

If you decide later that you want to move a PivotTable to a different location, follow these steps:

- 1 Select a cell in the PivotTable.
- 2 In the Actions group on the PivotTable Tools, Analyze tab, click on  Move PivotTable .

The Move PivotTable dialog box is displayed.



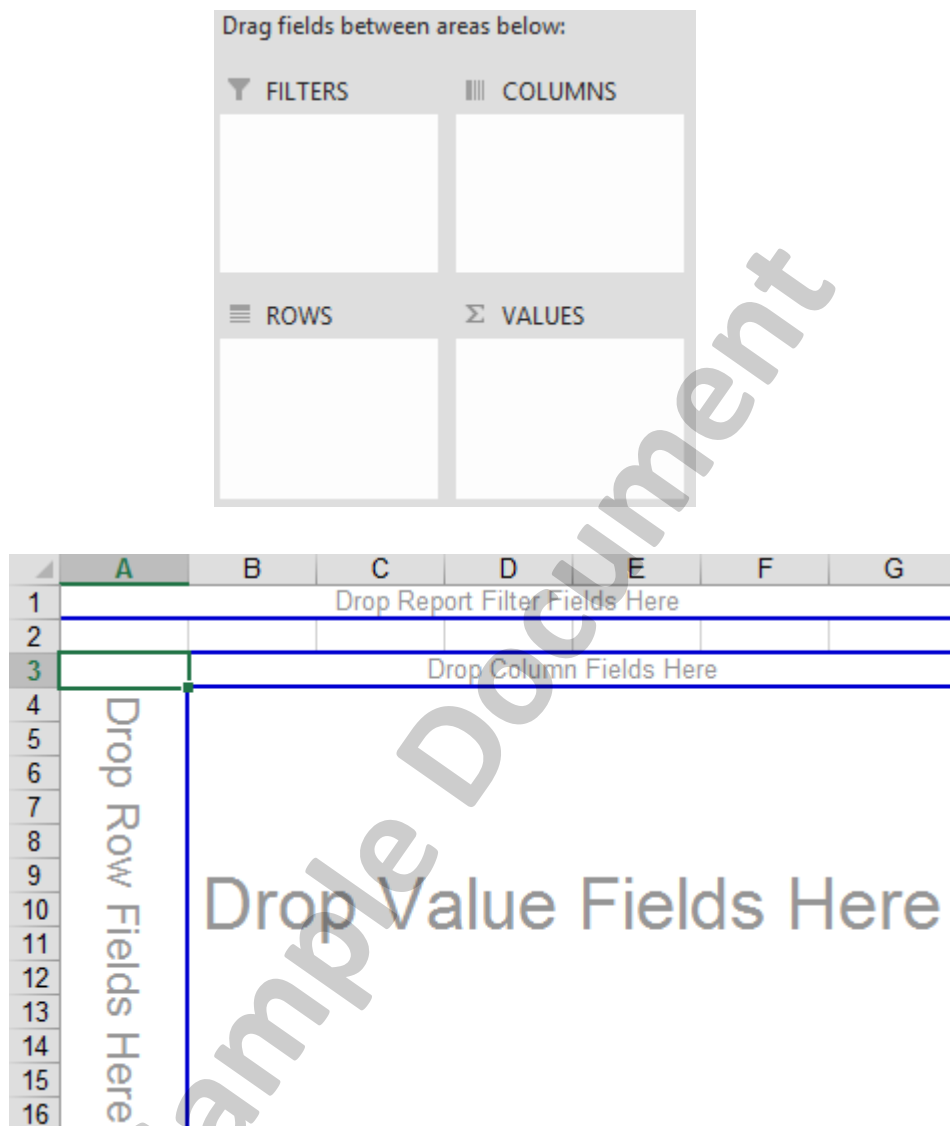
- 3 Specify where you want the PivotTable moved to, then click on OK.

PivotTable Organisation

You specify the fields you want to include in the PivotTable by either dragging them to the appropriate area in the lower half of the Task Pane

OR

To the PivotTable area itself (if you are displaying the Classic PivotTable layout).



The four areas that make up a PivotTable are described on the next page. These are shown in the PivotTable Area and also in the lower half of the PivotTable Fields list.



The names used in the PivotTable Area are slightly different to those used in the PivotTable.

filtered
=
sorted,
extracted

Report Filter/Filters

This contains the field(s) that control how the data is presented and how it can be filtered.

In effect, individual PivotTables are created for each possible value in the Report Filter Field as well as for all the values.

For example, in **PC Sales** the Report Filter Field could be **Year**, which would produce three pivot tables:

- one for 2010
- one for 2011
- one for both years combined

Only one of these PivotTables is displayed at any given time, depending on which Report Filter Field value is selected.

Similarly, if **Region** was specified as the Report Filter Field, the data for all regions or for individual regions could be displayed.

Column Fields/Columns

Column Fields are used to create the horizontal axis of the PivotTable.

If more than one field is placed in the Column Labels area you should place them in descending order of importance.

For example, you would place **Month** below **Year** in the Column Labels box in the PivotTable Fields list so that sub-totals for each month within each year could be created.

Row Fields/Rows

Row Fields are used to create the Vertical Axis of the PivotTable.

You can place more than one field in the Row Labels area using the same method as described above for placing multiple Column Fields.

Value Fields/Values

Field(s) placed in the Values area contain the data to be summarised using any of the available functions such as Sum, Average, etc.

A PivotTable must have at least one **VALUES FIELD**.

Totals and Subtotals

When a PivotTable is created, subtotals and grand totals are automatically generated. These can be deleted or hidden if required.

Because these totals are produced based on the data in the list, you should ensure that the list does not also contain subtotals.



EXERCISE 2

The PivotTable will initially be set up to display the sales for all products for each salesperson within each region.

- 1 Drag the **Product** field to the Filters area as shown below.

The screenshot shows the 'PivotTable Fields' task pane on the left. Under 'Choose fields to add to report:', the 'Product' field is selected. Arrows indicate dragging 'Product' from this list to the 'FILTERS' area. Below the task pane, a separate 'FILTERS' box shows 'Product' has been added. At the bottom, a PivotTable grid is shown with 'Product (All)' in the filter dropdown. The grid has a header row (1) and a large data area (rows 4-16, columns B-G) labeled 'Drop Value Fields Here'. A diagonal label 'Drop Row Fields Here' is also present. An arrow points from the 'Product' field in the task pane to the filter dropdown in the grid.

Drag the Product field from here down to the Filters area

The Product field is now displayed in the Filters area

The Product field is also displayed in the PivotTable grid as shown below.

- 2 Drag the **Salesperson** field to the Rows area.
- 3 Drag the **Region** field to the Columns area.
- 4 Drag the **Sales** field to the Values area. This will be labelled *Sum of Sales* – Sum is the default function.

The fields are also displayed in the actual PivotTable area on your worksheet.

If you are using the Classic PivotTable layout you can also drag the fields onto the appropriate section of the PivotTable area.

If you place a field in the wrong area, simply drag it to the correct area.

The PivotTable is displayed as shown below.

The screenshot shows an Excel spreadsheet with a PivotTable in the Classic layout. The PivotTable is located in the range B4:F8. The PivotTable Fields task pane is open on the right side of the screen.

| Product | (All) | | | | |
|--------------|----------|-----------|-------|--------|-------------|
| Sum of Sales | Region | | | | |
| Salesperson | Brisbane | Melbourne | Perth | Sydney | Grand Total |
| Evans | | 8973 | 6028 | 18229 | 33230 |
| Green | | 34095 | 49970 | 32385 | 26371 |
| Hindley | | 35391 | 16207 | 26289 | 32632 |
| Grand Total | | 69486 | 75150 | 64702 | 77232 |
| | | | | | 286570 |

The PivotTable Fields task pane shows the following fields:

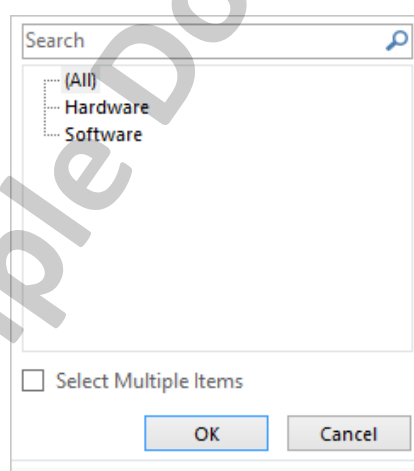
- Product (checked)
- Year (unchecked)
- Month (unchecked)
- Sales (checked)
- Units (unchecked)
- Salesperson (checked)
- Region (checked)

The task pane also shows the following fields in the 'Drag fields between areas below' section:

- FILTERS: Product
- COLUMNS: Region
- ROWS: Salesperson
- VALUES: Sum of Sales

- 5 Rename the worksheet **PivotTable 1**.
- 6 Click on the Product (All) down arrow in cell B1.

The options shown below will be displayed.




- 7 Select Hardware to view only hardware sales. Click on OK.

The screenshot shows the Excel spreadsheet with the PivotTable filtered to show only hardware sales. The PivotTable is located in the range B4:F8.

| Product | Hardware | | | | |
|--------------|----------|-----------|-------|--------|-------------|
| Sum of Sales | Region | | | | |
| Salesperson | Brisbane | Melbourne | Perth | Sydney | Grand Total |
| Evans | | 7612 | 6028 | 8516 | 22156 |
| Green | | 16574 | 28134 | 22077 | 12615 |
| Hindley | | 17902 | 2420 | 10858 | 22746 |
| Grand Total | | 34476 | 38166 | 38963 | 43877 |
| | | | | | 155482 |

The down arrow button now shows as , indicating that the PivotTable is filtered.

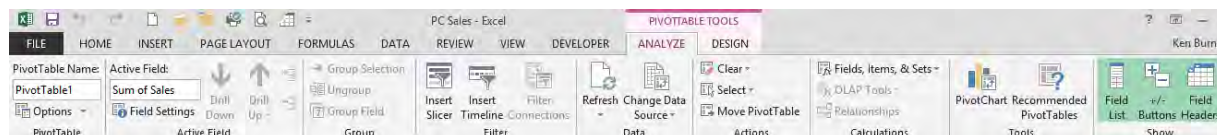
- 8 Click on the Product , select Software and click on OK.

PivotTable Tools Contextual Tab

When you select any cell in a PivotTable, the **PIVOTTABLE TOOLS CONTEXTUAL TAB** is displayed on the ribbon. It includes two tabs – Analyze and Design.

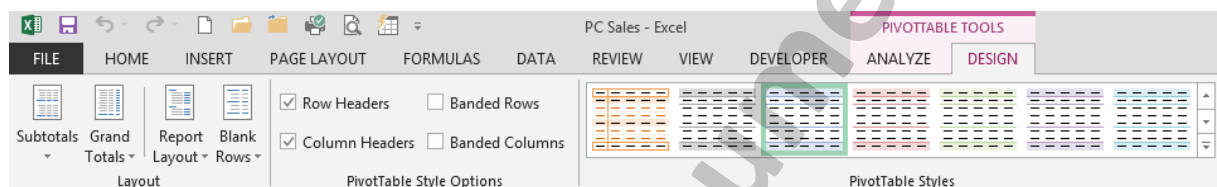
The Analyze Tab

The Analyze tab includes a wide range of options that allow you to modify calculations, update the table data, show or hide elements of the PivotTable, etc.



The Design Tab

The Design tab allows you to adjust the layout of the table, apply preset styles to the table, etc.



The PivotTable Fields list is also displayed whenever your active cell is within the PivotTable.



EXERCISE 3

- Click outside the PivotTable. The PivotTable Tools contextual tab and the PivotTable Fields list are hidden.

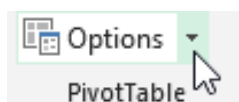
Displaying Report Filter Pages

Individual PivotTables for each unique value in the Filters field can be created on separate sheets (pages) in the workbook.

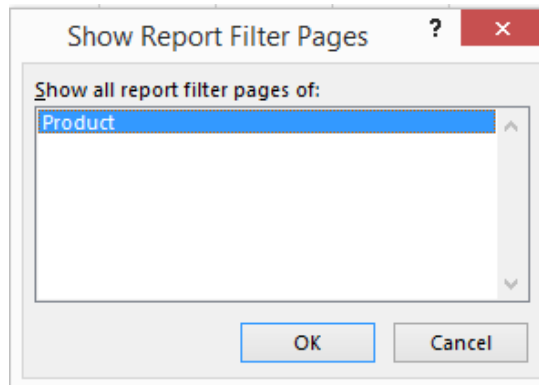


EXERCISE 4

- 1 Select a cell in the table, click on the Product down arrow in cell B1 and select (All).
- 2 Click on OK.
- 3 On the PivotTable Tools, Analyze tab, click on the Options button down arrow in the PivotTable group.

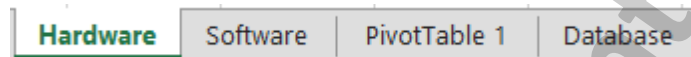


- 4 Select **Show Report Filter Pages...**



- 5 Click on OK.

Two new worksheets will be inserted into the workbook, one for each Product category.



- 6 Review the Hardware and Software worksheets, and then return to PivotTable 1 (which shows All).

Changing the Layout

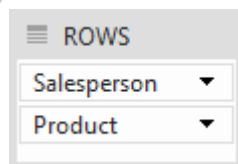
In the following exercise the PivotTable layout will be changed to display the product sales for each salesperson with a subtotal for each salesperson.



EXERCISE 5

The lower half of the PivotTable Fields list will be used to reorganise the fields by dragging them from one box to another.

- 1 Drag the Product field which is in the Filters box so it is under the Salesperson field in the Rows section of the PivotTable Fields list as shown below.



The table will be displayed as follows.

| | A | B | C | D | E | F | G |
|----|--------------------------------|----------|----------|-----------|-------|--------|-------------|
| 1 | Drop Report Filter Fields Here | | | | | | |
| 2 | | | | | | | |
| 3 | Sum of Sales | | Region | | | | |
| 4 | Salesperson | Product | Brisbane | Melbourne | Perth | Sydney | Grand Total |
| 5 | Evans | Hardware | | 7612 | 6028 | 8516 | 22156 |
| 6 | | Software | | 1361 | | 9713 | 11074 |
| 7 | Evans Total | | | 8973 | 6028 | 18229 | 33230 |
| 8 | Green | Hardware | 16574 | 28134 | 22077 | 12615 | 79400 |
| 9 | | Software | 17521 | 21836 | 10308 | 13756 | 63421 |
| 10 | Green Total | | 34095 | 49970 | 32385 | 26371 | 142821 |
| 11 | Hindley | Hardware | 17902 | 2420 | 10858 | 22746 | 53926 |
| 12 | | Software | 17489 | 13787 | 15431 | 9886 | 56593 |
| 13 | Hindley Total | | 35391 | 16207 | 26289 | 32632 | 110519 |
| 14 | Grand Total | | 69486 | 75150 | 64702 | 77232 | 286570 |

- Rearrange the fields as follows.

| FILTERS | | COLUMNS | |
|-------------|---|--------------|---|
| Salesperson | ▼ | | |
| Product | ▼ | | |
| ROWS | | VALUES | |
| Region | ▼ | Sum of Sales | ▼ |

The PivotTable is now displayed as shown below.

| | A | B |
|----|--------------|---------|
| 1 | Salesperson | (All) ▼ |
| 2 | Product | (All) ▼ |
| 3 | | |
| 4 | Sum of Sales | |
| 5 | Region ▼ | Total |
| 6 | Brisbane | 69486 |
| 7 | Melbourne | 75150 |
| 8 | Perth | 64702 |
| 9 | Sydney | 77232 |
| 10 | Grand Total | 286570 |

- Click on the Salesperson (All) down arrow ▼, select Evans and click on OK.
- Click on the Product (All) down arrow ▼, select Software, and click on OK.

| | A | B |
|---|--------------|------------|
| 1 | Salesperson | Evans ▼ |
| 2 | Product | Software ▼ |
| 3 | | |
| 4 | Sum of Sales | |
| 5 | Region ▼ | Total |
| 6 | Melbourne | 1361 |
| 7 | Sydney | 9713 |
| 8 | Grand Total | 11074 |

- Redisplay the data for all Salespersons and Products.
- If necessary, click in the PivotTable to show the PivotTable Fields list.

Rearrange the PivotTable to display as shown below. (See if you can do this on your own – then look at the next page to see how the fields are positioned in each field box.)

| | A | B | C | D | E | F | G |
|----|----------------|---------|----------|-----------|-------|--------|-------------|
| 1 | | | | | | | |
| 2 | Salesperson | (All) ▼ | | | | | |
| 3 | | | | | | | |
| 4 | Sum of Sales | | Region ▼ | | | | |
| 5 | Product ▼ | Year ▼ | Brisbane | Melbourne | Perth | Sydney | Grand Total |
| 6 | Hardware | 2014 | 16841 | 17525 | 16783 | 32947 | 84096 |
| 7 | | 2015 | 17635 | 20641 | 22180 | 10930 | 71386 |
| 8 | Hardware Total | | 34476 | 38166 | 38963 | 43877 | 155482 |
| 9 | Software | 2014 | 11766 | 14786 | 11543 | 19144 | 57239 |
| 10 | | 2015 | 23244 | 22198 | 14196 | 14211 | 73849 |
| 11 | Software Total | | 35010 | 36984 | 25739 | 33355 | 131088 |
| 12 | Grand Total | | 69486 | 75150 | 64702 | 77232 | 286570 |