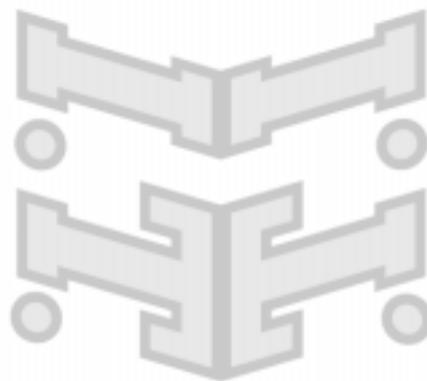




Information Technology  
Foundation Course

**Using I.T. in a Business**



World ORT Union





# DO



# I.T.



## Information Technology Foundation Course

### CASE STUDY

### FRANK'S CD BUSINESS



#### Introduction

Frank has set up a company that is involved in the wholesale distribution of compact discs to shops. His company employs five people - a secretary, a purchasing clerk, two sales clerks, and Frank himself, who is responsible for the day-to-day running of the business.

At present most of the company's work is paper-based. Frank has noticed that his secretary is currently using a typewriter for all letters and memos, and keeping carbon copies in a filing cabinet. Frank realises that, in order for his company to grow, he must make use of Information Technology. The problem is he does not know where to start! Perhaps you can help?

#### Activity 1

You will need to have studied the following two modules of the *DO IT* course to complete the task:

**HARDWARE** - Peripheral Devices and **APPLICATION SOFTWARE** - Word processors.

**Using your own word processor program create a report for Frank that tells him how his secretary might make use of Information Technology and what kind of input, output and storage devices she will need to use.**

#### Hints

- ▶▶ Think about the style and size of font you will use in your report, and consider the page layout. Consider whether you want to use **bold** or *italic* or underlined type. You may want to use 'bullet' points (large dots) for lists of points, or to highlight paragraphs.
- ▶▶ It is good practice to regularly save your work to disc while you are working, in case you lose it because of a system or power failure. [You could investigate how to get your word processor to automatically save your work every ten minutes]
- ▶▶ You may want to use a spelling and grammar checker on your work, either while you work or at the end.
- ▶▶ When you are happy with your work save it to disc with a suitable file name and print yourself a copy.

**DO****I.T.****Information Technology Foundation Course****CASE STUDY****Activity 2**

You will need to have studied the following two modules of the *DO IT* course to complete the task:

**SOFTWARE** - Databases and **APPLICATION SOFTWARE** - Spreadsheets

**Put yourself in the place of the purchasing clerk, salesperson, and Frank himself, and use your wordprocessor to produce a report explaining how Information Technology could assist you. Think about what might be involved in each person's jobs.**

**Hints**

A purchasing clerk's work will involve:

- a. purchasing fresh stocks of CDs
- b. keeping track of what CDs are selling best
- c. keeping track of CD suppliers



A salesperson's work will involve:

- a. advertising the company's products
- b. spending a lot of time travelling and working outside the office
- c. keeping up to date information on customers



Frank's work will involve:

- a. preparing the pay cheques for the employees
- b. dealing with accounts matters
- c. overseeing the company's progress
- d. planning the future direction of the company

**Save your report to disc and print out a copy for yourself when you are happy with it.**

**P** **rogress report**

Frank's CD business is really starting to do well. Customer orders for stocks of CDs are coming in every day. Frank realises that he and his salespersons are soon going to have a problem searching for a customer's details as the paper-based filing cabinet is getting too large to use effectively. Frank has decided to make use of a computer database.

**Activity 3**

You will need to have studied the **APPLICATION SOFTWARE** - Databases module to complete the task.

**Prepare a database, using your own database program, that will allow Frank's employees to store and retrieve information about each of his customers.**

**Hints**

Tasks to perform **on paper** before creating the Customer database:



List all the fields that you would like to include in the database



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**Activity 3 continued**

- ▶▶ Sketch a rough grid of how your database table will look
- ▶▶ Enter some dummy data into you table to see how it will look

**Now proceed using your computer program. Print out your final Table.**

**F** **urther progress**

Frank’s business is now doing so well that he has employed someone to handle the company accounting. The first task of this new employee will be to produce a spreadsheet model of Frank’s CD company. Frank will use this model to see the possible effect of business changes on the company’s profits.

**Activity 4**

You will need to have studied the **APPLICATION SOFTWARE - Spreadsheets** module to complete the tasks.

**1** **Set up the following spreadsheet using your own spreadsheet program.**

The data shows CD sales (in US \$) for the last six months in just three categories of music CDs.

**Hints**

- ▶▶ You may need to adjust column widths and row heights, put some text in bold or italics and put suitable borders around cells. You may need to consult your manual or Help files to do this. You do not need to colour cells.

	A	B	C	D	E	F	G	H
1	<b>Table 1 - CD Sales Report for the last six months for music CDs</b>							
2	<b>Month</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	
3	<b>Category</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>Totals</b>
4	<b>Pop</b>	4000	3500	3200	3700	4800	5200	
5	<b>Classical</b>	800	1200	1500	1700	1850	1950	
6	<b>Jazz</b>	900	750	700	680	650	600	
7	<b>Totals</b>							

**Save the table under a suitable file name, such as ‘cetable1’.**

**2** **Now Insert suitable formulae into the cells in the Totals column and row to add up the sales for the different categories and the different months.**

**Hints**

- ▶▶ You can copy a formula down or across once you have placed it in one cell. You may need to consult your manual or Help file on this.

**Save the table under a suitable name, such as ‘cetable1a’.**



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**Activity 4 continued**

- 3 **Plot**
  - a. a line graph to show how the sales of Pop music have varied over the six months
  - b. the same data as a bar graph
  - c. the same data as a pie chart
  - d. three line graphs on the same chart to show the variation of the three categories of CD sales over the six months.

**Hint**



You may have a chart plotting button in a toolbar on screen to do this. You may need to get some help from your manual or Help file.

*Need help? If you get stuck, or you want to check your work, you will find samples of some of this work displayed in the appendix section of the documentation*

**Activity 5**

- 1 **Set up the following spreadsheet which compares sales of six categories of CD for the year and evaluates profits. Three of the categories are music CDs and the other three are computer CD-ROMS.**

	A	B	C	D	E	F
1	<b>Table 2 - CD Sales Report for the last year for Music CDs &amp; CD-ROMS</b>					
2	<b>Category</b>	<b>Retail</b>	<b>% of total</b>	<b>Wholesale</b>	<b>Gross</b>	<b>% of total</b>
3	<b>of CD sold</b>	<b>Sales (\$)</b>	<b>CD sales</b>	<b>costs (\$)</b>	<b>profits (\$)</b>	<b>profit</b>
4	Pop	52000		35000		
5	Classical	14000		8100		
6	Jazz	9400		5200		
7	Reference	26000		18700		
8	Educational	19000		9400		
9	Entertainment	27000		13000		
10	<b>Totals</b>					

**Save the table under a suitable file name, such as 'cdtable2'.**

- 2 **Now insert suitable formulae into the three blank columns and the Totals row to complete the table. Now Save the table under a suitable file name such, such as 'cdtable2a'.**

**Hints**



Try to round off your % columns to one decimal place - you may have a button in a toolbar on screen to do this.



If you have done this correctly your % columns should add up to about 100.



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**Activity 5 continued**



Check some of the calculations of profit on paper to see if they are about right.

**3 Plot a pie chart using the Retail sales data in the table (not the % sales). Try to display the category names as well as the % figures and add a title to the chart.**

**4 Try to change some of the data to see what other cells change as well. For example, what if Classical CD sales doubled as well as their wholesale costs? Do not save these changes in the table.**

**Hint**



See if the pie chart % figures agree with your calculated figures in the next column of the table. Try it for the Gross profit figures as well.

**5 Now plot a bar chart of:**

- a. the % sales data**
- b. the % profit data**
- c. both sets of data on the same graph**

Your chart plotter may call it a *bar chart* or a *histogram* or a *column chart* - we want to finish up with vertical blocks - a 3D type looks good.

**Hint**



You may have to copy the relevant columns of your table to an adjacent position in a new part of your worksheet in order to do part c., or you may be able to highlight non-adjacent columns for plotting, perhaps by holding down your Control key while you drag your mouse.



**Need help?** *If you get stuck, or you want to check your work, you will find samples of some of this work displayed in the appendix section of the documentation*

