

this chapter covers . . .

In the last few chapters we have explained and illustrated:

- *the ways in which performance indicators can be applied to data which has been extracted from an organisation*
- *the statistical techniques that can be applied to this data, producing graphs and charts to illustrate situations and trends.*
- *the use of spreadsheets to help in these processes*

Your studies also require that you are able to consolidate this data, which may come from different operating divisions of a business. You will also need to make adjustments to the data. You may then be required to bring data together to produce a single profit and loss account, for example, and then to analyse the figures, extract performance indicators and produce graphs and charts to incorporate in a short report.

NVQ PERFORMANCE CRITERIA COVERED

unit 7: PREPARING REPORTS AND RETURNS

element 7.1

prepare and present periodic performance reports

- A consolidate information derived from different units of the organisation into the appropriate form*
- B reconcile information derived from different information systems within the organisation*
- D account for transactions between separate units of the organisation in accordance with the organisation's procedures*
- E calculate ratios and performance indicators in accordance with the organisation's procedures*

CONSOLIDATING INFORMATION

Reporting on the performance of a business which is based in one location, or which has a simple product range, is a straightforward affair. Financial and production data can be brought together to produce interim financial statements such as profit and loss accounts and balance sheets for the benefit of management. Many computer accounting programs can do this automatically and spreadsheets can be set up to process the data so that sales, profits and stock levels can be monitored, and action taken if the need arises.

the 'branch' situation

But what if the organisation consists of a number of separate 'branches' – for example travel agents, shops, hotels – all of which keep separate accounting records of sales and expenses, and in some cases stock? The accounting data will need to be consolidated to produce a single financial statement or report which will provide 'the whole picture'. This is normally a case of simple arithmetic, and can easily be set up on a spreadsheet.

Take, for example, a business which runs a chain of small shops in three separate locations – A and B and C – and has the main office at one of them. The profitability for a period such as a month can easily be calculated by consolidating the figures for all three branches:

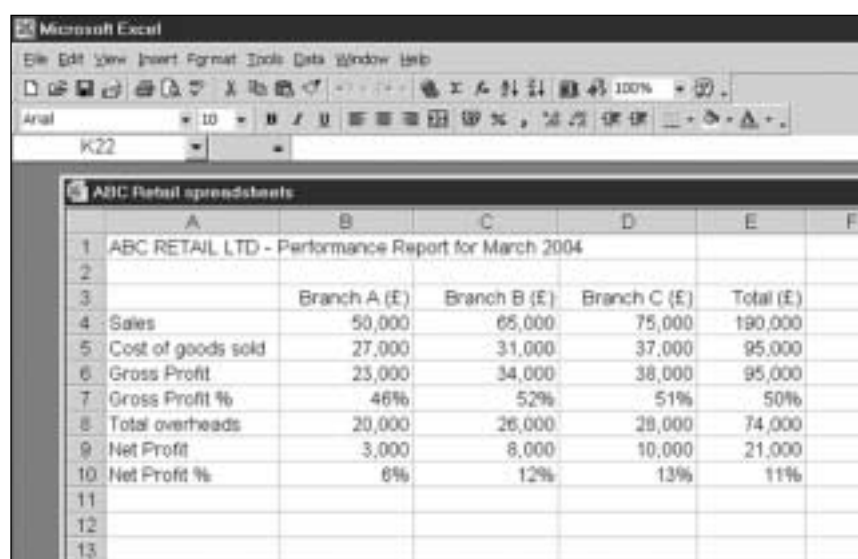
ABC RETAIL LIMITED				
Profit and Loss Account for March 2004				
	Branch A	Branch B	Branch C	Total
	£	£	£	£
Sales	50,000	65,000	75,000	190,000
Opening Stock	20,000	22,000	25,000	67,000
Purchases	25,000	30,000	36,000	91,000
Closing stock	18,000	21,000	24,000	63,000
Cost of goods sold	27,000	31,000	37,000	95,000
Gross Profit	23,000	34,000	38,000	95,000
Wages	12,000	18,000	20,000	50,000
Other overheads	8,000	8,000	8,000	24,000
Total overheads	20,000	26,000	28,000	74,000
Net Profit	3,000	8,000	10,000	21,000

reporting the data

The data in the profit and loss account on the previous page can be analysed to provide performance indicators such as:

- gross profit percentage
- net profit percentage

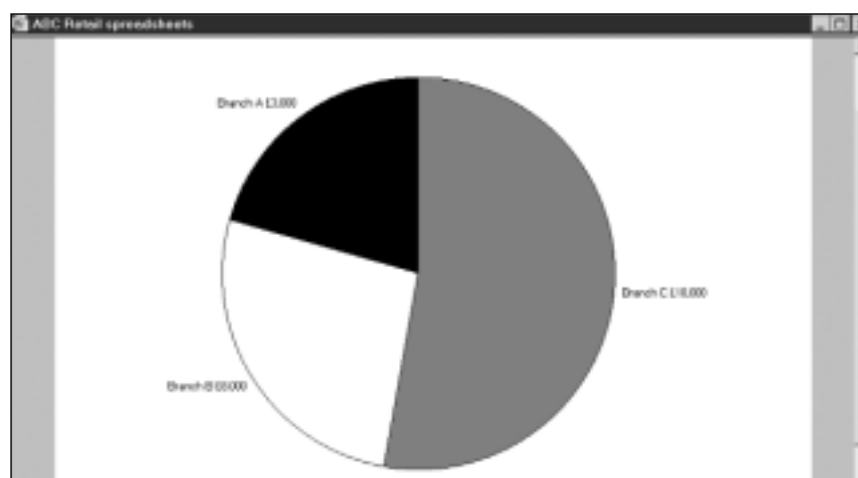
A report could be set up on a spreadsheet as follows:

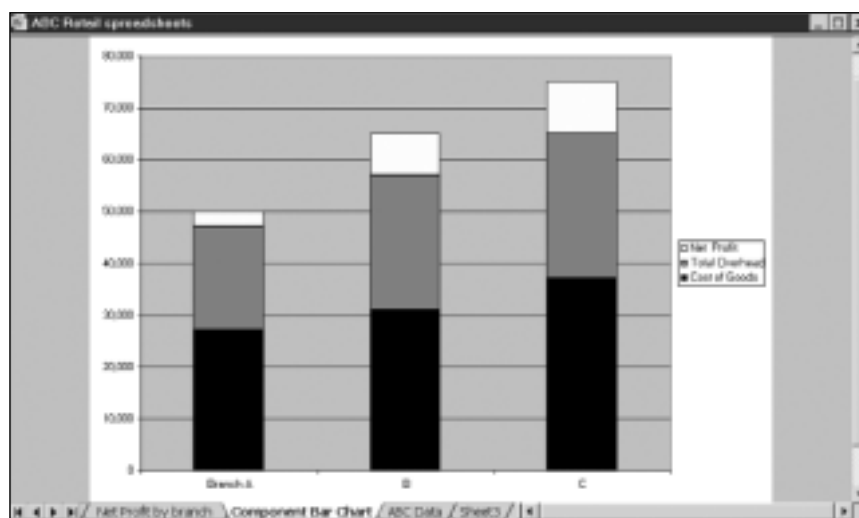


The screenshot shows a Microsoft Excel spreadsheet titled 'ABC Retail spreadsheets'. The spreadsheet displays a performance report for March 2004 for ABC Retail Ltd. The data is organized into columns for Branch A (€), Branch B (€), Branch C (€), and Total (€). The rows include Sales, Cost of goods sold, Gross Profit, Gross Profit %, Total overheads, Net Profit, and Net Profit %.

	A	B	C	D	E	F
1	ABC RETAIL LTD - Performance Report for March 2004					
2						
3		Branch A (€)	Branch B (€)	Branch C (€)	Total (€)	
4	Sales	50,000	65,000	75,000	190,000	
5	Cost of goods sold	27,000	31,000	37,000	95,000	
6	Gross Profit	23,000	34,000	38,000	95,000	
7	Gross Profit %	46%	52%	51%	50%	
8	Total overheads	20,000	26,000	28,000	74,000	
9	Net Profit	3,000	8,000	10,000	21,000	
10	Net Profit %	6%	12%	13%	11%	
11						
12						
13						

Charts can then be produced from this data to illustrate the comparative levels of profitability of the three branches (pie chart below) and the uses put to the sales revenue received (bar chart on the next page)





DEALING WITH STOCK TRANSFERS

transfers of stock with added margin

It is not uncommon for different divisions of a business to transfer stock between themselves as the need arises. Individual companies in large manufacturing groups may even 'sell' stock or manufactured items to each other and add on a profit margin. For example, a company manufacturing car engines may transfer them to another company in the group which produces the finished vehicles, charging the engine at cost plus an agreed margin.

transfers of stock at cost

In some businesses which involve divisions or 'branches', the transfer of the stock may be carried out *at cost*. No margin will be added on. Examples of this include transfers of stock between shops and transfers between divisions of a company, eg transfers of finished products between a manufacturing division and a sales division. Your studies of Unit 7 will always deal with such transfers *at cost*.

recording transfers of stock

These transfers need to be recorded by the individual branches or divisions, together with the sales, purchases, expenses and stock figures as appropriate. But the important point is that *transfers should not be included in the sales or purchases of the group*. If the transfers are recorded as part of sales (transfers out) or purchases (transfers in) for branches or divisions, *they should be deducted or excluded when compiling the group figures*.

It is likely that the transfers will be recorded separately (not as part of sales and purchases), as in the table below. In this particular case a 'transfer out' is shown as a minus and a 'transfer in' as a plus. You will see that the net effect of the transfers between the branches on the total group is zero.

ABC RETAIL LIMITED				
	Branch A	Branch B	Branch C	Total
	£	£	£	£
Sales	50,000	65,000	75,000	190,000
Opening Stock	20,000	22,000	25,000	67,000
Purchases	25,000	30,000	36,000	91,000
Closing stock	18,000	21,000	24,000	63,000
Stock transfers	– 2,000	+ 800	+ 1,200	zero

the problem of stock in transit

But what would happen, if at the end of the month, £200 of stock from Branch A had been sent off to Branch B, but had not yet arrived, or had not yet been recorded by Branch B? You would be able to detect this because the total figure for transfers out would not equal the total for transfers in. In the case of the table shown above the transfer total column would not be zero, but would shown as – £200.

dealing with stock in transit

The situation in the case mentioned in the paragraph above is:

- Branch A has recorded the stock as having been despatched and so will have reduced its closing stock figure by £200
- Branch B will not have made any adjustments to its figures at all
- There will be £200 of stock missing from the total group closing stock

The rule is therefore that the value of stock in transit should be:

- *added back to the closing stock of the branch which sent it*
- *deducted from the total of the stock transferred by that branch*

In other words, stock in transit should be treated as if it is still at the branch which sent it. In this case the closing stock of Branch A will be £18,000 + £200 = £18,200 and the transfer figures will become:

$$-£1,800 \text{ (Branch A)} + £600 \text{ (Branch B)} + £1,200 \text{ (Branch C)} = \text{zero}$$

We will now look at two Case Studies. The first involves the three branches of a clothing store 'CoolTime' and shows how the **profit and loss data** is combined, adjusted and consolidated, and appropriate performance indicators extracted and illustrated. The second looks at the combining of **sales data** from two divisions of a manufacturing company, Potter PLC.

Case Study

COOLTIME: CONSOLIDATING INFORMATION

situation

CoolTime is a chain of three fashion shops, owned by Julie Mye. The main shop and the office is in Staines, and the other two shops are in Bracknell and in Slough. You work as an accounts assistant in Staines and report directly to Julie Mye.

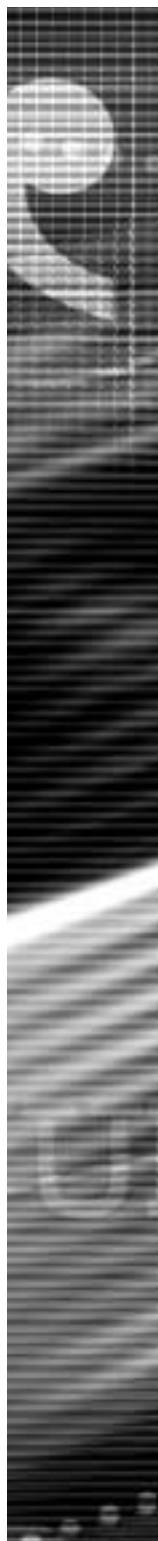
Part of your job requires you to compile information every Monday on the financial performance of the three shops for the previous trading week. The data from Bracknell and Slough is sent to you by email.

The data for last week is as follows:

Julie Mye, trading as CoolTime			
Transactions for the week ended 3 April 2004			
	<i>Staines</i> £	<i>Bracknell</i> £	<i>Slough</i> £
Sales	20,200	10,590	11,850
Purchases	9,800	3,100	4,220
Wages	3,200	2,200	2,300
Other overheads	2,750	2,800	2,600
Opening stock	18,000	10,500	14,250
Closing stock	16,900	9,800	12,900
Stock transfers to Bracknell and Slough	1,200		
Transfers from Staines		450	550

Notes

- On 3 April £200 of stock was transferred to Bracknell from Staines. This was not recorded in the books of Bracknell until 5 April.
- No adjustments for the stock transfers that were recorded (see table above) need to be made to the sales or purchases figures of the three branches.



required

- 1 Check the data received from the three shops and adjust the appropriate figures for any stock in transit.
- 2 Using the data produced in (1), draw up a profit and loss account for the week ended 3 April 2004.
- 3 Draw up a performance report on a spreadsheet which calculates the following performance indicators (use percentages correct to two decimal places):
 - (a) gross profit margin
 - (b) net profit margin
- 4 Produce charts to illustrate the performance report:
 - (a) a pie chart showing the comparative sales of the three shops
 - (b) a component bar chart, divided into three segments, showing the use of the sales revenue by each of the three shops. The segments consist of:
 - the cost of goods sold
 - overheads
 - net profit
- 5 Compile a short word-processed report addressed to Julie Mye, commenting on the performance of the three shops and incorporating the data and chart produced in tasks 1 to 4.

solution

1 adjusting the data for stock transfers

Before the profit and loss account can be drawn up, adjustment must be made for the £200 of stock in transit from Staines to Bracknell which is causing a discrepancy. Transfers 'out' total £1,200 and transfers 'in' total £1,000 (£550 plus £450), a difference of £200.

The solution is to treat the stock as if it has not left Staines:

- add £200 back to the Staines closing stock figure:
 $£16,900 + £200 = £17,100$
- deduct £200 from the Staines transfer figure:
 $£1,200 - £200 = £1,000$

The group total closing stock figure will now be correct and the net total effect of the transfers will be zero:

$$- £1,000 \text{ (Staines)} + £450 \text{ (Bracknell)} + £550 \text{ (Slough)} = \text{zero}$$

Tutorial note

No stock transfer adjustments need to be made to the sales and purchases figures in this Case Study, as they have already been carried out.

2 drawing up the profit and loss account

The profit and loss account can now be drawn up.

Note that the closing stock figure of the Staines branch has been adjusted upwards by £200 to £17,100 for the stock in transit, which is now treated as being back at Staines again. Otherwise all the other figures are unaltered.

Julie Mye, trading as CoolTime				
Profit and Loss Account Account for the week ended 3 April 2004				
	<i>Staines</i> £	<i>Bracknell</i> £	<i>Slough</i> £	<i>Total</i> £
Sales	20,200	10,590	11,850	42,640
Opening Stock	18,000	10,500	14,250	42,750
Purchases	9,800	3,100	4,220	17,120
Closing stock	17,100	9,800	12,900	39,800
Cost of goods sold	10,700	3,800	5,570	20,070
Gross Profit	9,500	6,790	6,280	22,570
Wages	3,200	2,200	2,300	7,700
Other overheads	2,750	2,800	2,600	8,150
Total overheads	5,950	5,000	4,900	15,850
Net Profit	3,550	1,790	1,380	6,720

3 drawing up the performance report

Julie will want to see the performance indicators which can be extracted from these figures. She will be particularly interested in:

- sales revenue from each of the branches
- gross profitability
- net profitability

The tables shown on the next page show:

- the spreadsheet file format with the appropriate formulas
- the completed performance report

	A	B	C	D	E	F
1						
2						
3		Staines (£)	Bracknell (£)	Slough (£)	Total (£)	
4	Sales	20200	10590	11850	=SUM(B4:D4)	
5	Cost of goods sold	10700	3800	5570	=SUM(B5:D5)	
6	Gross Profit	9500	6790	6280	=SUM(B6:D6)	
7	Gross Profit %	=B6/B4*100%	=C6/C4*100%	=D6/D4*100%	=E6/E4*100%	
8	Total overheads	5950	5000	4900	=SUM(B8:D8)	
9	Net Profit	3550	1790	1380	6720	
10	Net Profit %	=B9/B4*100%	=C9/C4*100%	=D9/D4*100%	=E9/E4*100%	
11						
12						
13						
14						

spreadsheet formulas used for the performance report

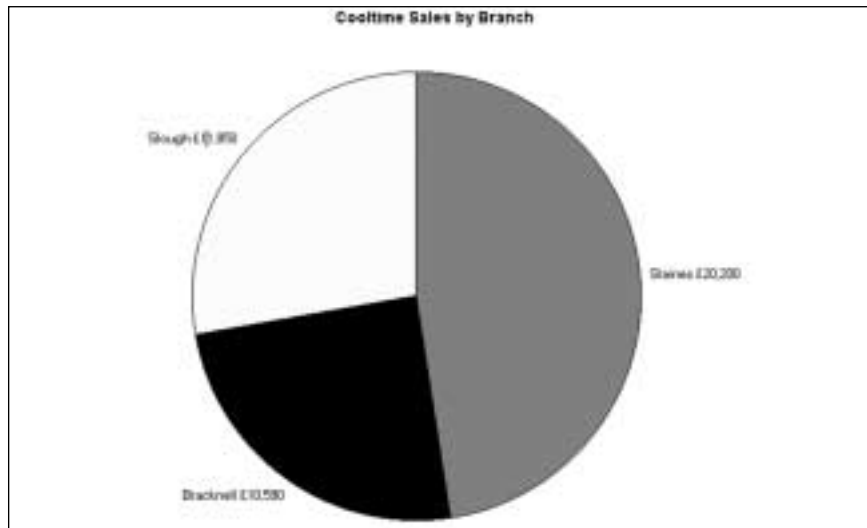
	A	B	C	D	E	F	G	H
1	Cooltime - Performance Report: week ending 3 April 2004							
2								
3		Staines (£)	Bracknell (£)	Slough (£)	Total (£)			
4	Sales	20,200	10,590	11,850	42,640			
5	Cost of goods sold	10,700	3,800	5,570	20,070			
6	Gross Profit	9,500	6,790	6,280	22,570			
7	Gross Profit %	47.03%	64.12%	53.00%	52.93%			
8	Total overheads	5,950	5,000	4,900	15,850			
9	Net Profit	3,550	1,790	1,380	6,720			
10	Net Profit %	17.57%	16.90%	11.65%	15.76%			
11								
12								
13								
14								

completed performance report

4 the charts

These charts have been produced from the spreadsheet shown on the previous page.

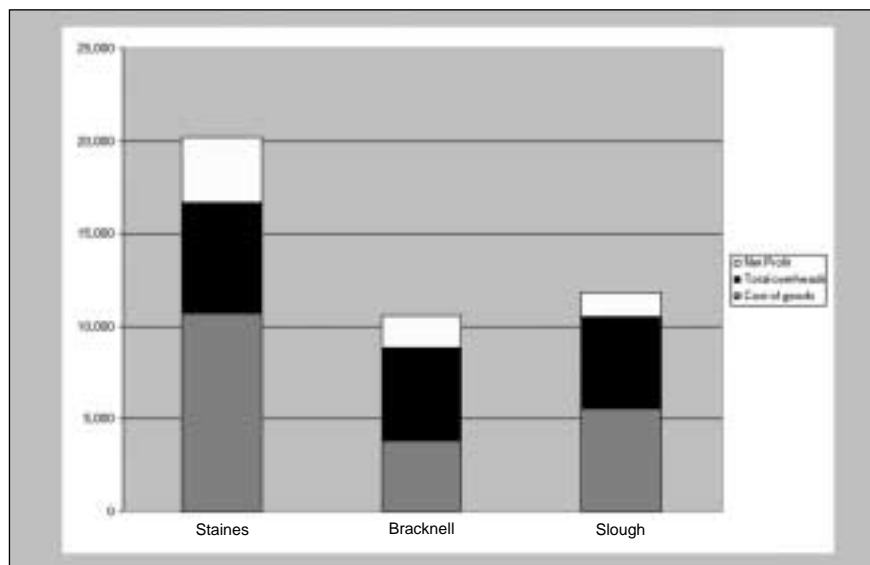
(a) pie chart showing comparative sales by branch



(b) component bar chart

Note that each bar is divided into three segments representing what use has been made of the sales revenue from each of the three branches:

- the cost of goods sold
- overheads
- net profit



5 the short report

The short report interprets the data, performance indicators and bar chart produced in tasks 1 to 4. These will be included as appendices to the short report, the purpose of which is to highlight points that should be brought to the proprietor's attention.

Report to Julie Mye
Report from A Student

7 April 2004

COOLTIME PERFORMANCE REPORT FOR WEEK ENDED 3 APRIL 2004

Introduction

This report has been produced as part of the regular weekly performance reporting of the three shops in the CoolTime chain.

Procedure

The data for this report has been received from each of the three branches: Staines, Bracknell and Slough. The data has been processed at the Staines office.

Findings

The gross profit percentages are as follows:

Staines	47.03%
Bracknell	64.12%
Slough	53.00%

The Bracknell and Slough results are comfortably above the 50% minimum figure recommended by management. The Staines result of 47.03% may reflect a number of sales promotions (sales price reductions) offered by that store last week in order to stimulate sales, and so does not give cause for concern.

The net profit percentages are as follows:

Staines	17.57%
Bracknell	16.90%
Slough	11.65%

The only figure that gives cause for concern here is the Slough figure of 11.65% which falls well short of the 15% minimum targeted by management. The ratio of overheads to net profit for Slough shown on the enclosed bar chart clearly illustrates this problem.

Conclusions

The profitability of the CoolTime group of stores continues to be very satisfactory, with the exception of the net profitability of the Slough branch.

Recommendations

The Slough branch should be asked to provide a breakdown of its overheads for the last month so that they can be analysed and discussed with the shop manager, with a view to improving bottom line net profit.

Appendices

Data tables and charts.

Case Study

POTTER PLC: CONSOLIDATING SALES FIGURES

situation

Potter PLC manufactures high quality bone china products such as dinner plates and tea sets. Most of its sales are carried out by its Sales Division, but it also sells through its popular factory shop, operated by its Manufacturing Division in Dursley.

The quarterly sales figures produced by the two divisions are as follows:

	Sales Division	Manufacturing Division		
	<i>Total</i> £000	<i>Factory shop</i> £000	<i>to Sales Division</i> £000	<i>Total</i> £000
2003				
Jan - Mar	510	50	250	300
Apr - Jun	650	64	315	379
Jul - Sep	540	88	270	358
Oct - Dec	496	48	251	299

You have been asked to consolidate the sales figures to produce total sales figures for the company for each quarter, and also on a cumulative basis for the year.

solution

To produce quarterly sales figures for the whole company you will need to add together the sales figures for the Sales Division and the factory shop sales figures from the Manufacturing Division. (Note that the 'to Sales Division' figures of the Manufacturing Division are internal transfers and so will not be included).

The quarterly figures also need to be added together on a cumulative basis (for example the cumulative figure for the end of June is the total of the first two quarters' sales).

A table can then be drawn up as follows:

POTTER PLC		
Combined sales figures for Sales and Manufacturing Divisions 2003		
	<i>Total Sales by Quarter</i> £000	<i>Cumulative Sales</i> £000
Jan - Mar	560	560
Apr - Jun	714	1,274
Jul - Sep	628	1,902
Oct - Dec	544	2,446

The management of Potter PLC will then be able to compare these figures with the figures for the previous year to see how the company is performing. Line graphs or bar

Chapter Summary

- Businesses which operate separate branches or divisions will have to consolidate data from those separate divisions when compiling financial statements and performance reports.
- Businesses which operate separate branches or divisions and which deal with stock or finished products may get involved in transferring the stock or products between the branches or divisions.
- Transfers may be at cost, or they may be at cost plus a margin.
- The net total of all transfers at cost should be zero as a transfer into one branch or division (a positive figure) is numerically equal to the same transfer from another branch or division (a negative figure).
- When compiling financial data for performance reports, businesses must take care to account for stock or products 'in transit' as these can cause discrepancies.
- Any stock in transit must be accounted for by the branch or division sending it. This may involve adding it back into the closing stock of that branch or division and deducting it from the total of transfers out of the branch or division.

Key Terms

consolidation	the combination of financial and other data from separate operating branches or divisions of an organisation <i>Important note: the term 'consolidation' is used here in a general sense only. It does not apply in this Unit to the concept of 'consolidated accounts' which will form part of your studies at NVQ Level 4.</i>
stock transfers	transfers of stock or other products between separate branches or divisions of a business
stock in transit	stock or other products which have been transferred from one branch or division of a business to another
transfer price	the price agreed between separate divisions of a business when transferring stock or products at a profit: <i>cost of product + agreed margin = transfer price</i> in your studies you will be dealing with transfers 'at cost', ie at zero margin

Student Activities

14.1 FitMan Wholesale Limited is a mens clothes supplier which has two branches.

On 28 March 2004 £1,000 of stock was transferred from the Hornchurch branch to the Basildon branch at cost. This was not recorded in the books of the Basildon branch until 2 April.

Complete the gross profit calculations for FitMan Wholesale Limited, having made appropriate adjustments for stock in transit.

FITMAN WHOLESALE LIMITED			
Profit and Loss Account (extract) for week ended 28 March 2004			
	Hornchurch	Basildon	Total
	£	£	£
Sales	71,000	55,000	
Opening Stock	32,000	24,000	
Purchases	35,000	25,000	
Closing stock	31,000	23,000	
Cost of goods sold			
Gross Profit			

14.2 Complete the gross profit calculations for the retail group shown below. Make appropriate adjustments for stock in transit. No adjustments need to be made to the sales or purchases figures.

XYZ RETAIL LIMITED				
Profit and Loss Account (extract) for week ended 28 March 2004				
	Branch X	Branch Y	Branch Z	Total
	£	£	£	£
Sales	80,000	75,000	80,000	
Opening Stock	30,000	22,000	25,000	
Purchases	40,000	37,000	38,000	
Closing stock	28,000	21,000	24,000	
Cost of goods sold				
Gross Profit				
Transfers from X	2,000			
Transfers to Y and Z		1,000	500	

Note: On 27 March £500 of stock was transferred from Branch X to Branch Y. This was not recorded in the books of Branch Y until 1 April.

- 14.3** Your name is Owen Gerrard and you work as an accounts assistant for Anne Field Enterprises, a sole trader business which operates two sports shops in the North West, one in Liverpool and one in Southport. You work in the Liverpool office and are currently collecting the quarterly financial figures for the two branches so that you can consolidate them into a single profit and loss account.

The figures provided by the two branches are shown below. They include net transfers of stock at cost price between the two shops. Your line manager has told you that these transfers, which are included among the sales and purchases, should not be included in the consolidated figures.

The records from the Liverpool shop show that £200 of stock was sent to the Southport branch on 30 June. This stock in transit was not recorded in the Southport records until 2 July.

Anne Field Enterprises: Profit and Loss Account data for 3 months ended 30 June 2004

	Liverpool Branch		Southport Branch	
	£	£	£	£
Sales		120,000		100,500
Transfers to Southport at cost		<u>5,100</u>		-
		125,100		
Opening stock	56,000		46,000	
Purchases	<u>61,000</u>		53,000	
Transfers from Liverpool at cost	-		<u>4,900</u>	
	117,000		103,900	
Less closing stock	<u>52,500</u>		<u>48,500</u>	
Cost of goods sold		<u>64,500</u>		<u>55,400</u>
Gross Profit		60,600		45,100
Overheads		<u>48,000</u>		<u>39,400</u>
Net Profit		<u>12,600</u>		<u>5,700</u>

You note from the records that the combined profit and loss account figures for the two shops for the same period in 2003 were as follows:

	£
Sales	185,000
Cost of goods sold	112,000
Gross profit	73,000
Overheads	62,000
Net profit	11,000

You are to:

- for
- Consolidate the figures from the two shops into a profit and loss account for the business the three months ended 30 June 2004, making the necessary adjustments to exclude transfers of stock, and stock in transit. No further adjustments need be made.
 - Draw up a table setting out comparative figures for the two years, including: sales, cost of goods sold, gross profit, gross profit percentage, overheads, net profit, net profit percentage (percentages should be calculated to two decimal places). Use a spreadsheet if possible.

- (c) Draw up (or extract from a spreadsheet) a compound bar chart showing for the two years
- sales revenue
 - gross profit
 - net profit
- (d) Write comments on the combined performance of the two shops over the two years.

14.4 Eveshore Farms Limited is a company which supplies the big supermarkets with speciality produce such as asparagus and soft fruit. Most of its sales are carried out by its Sales Division, but it also sells through its local farm shop, operated by its Production Division in Eveshore.

The quarterly sales figures produced by the two separate divisions are as shown below. In the column on the far right are set out the total quarterly sales figures for the previous year.

	Sales Division	Production Division			
2004	Total	Farm shop	Transfers to Sales Division	Total	Total Sales 2003
	£000	£000	£000	£000	£000
Jan-Mar	125	25	62	87	130
Apr-Jun	146	26	73	99	151
Jul-Sep	139	35	72	107	165
Oct-Dec	119	29	58	87	138

You are to

- (a) Draw up a table (or spreadsheet) which shows:
- the consolidated total sales figures for Eveshore Farms Limited for each quarter of 2004
 - comparative total sales figures for 2003
 - the cumulative sales figures for each quarter of 2004
 - comparative cumulative sales figures for each quarter of 2003
- (b) Draw a line graph (or derive one from the spreadsheet) which shows the cumulative total sales figures for 2003 and 2004.
- (c) Write brief comments on your findings.