

6

Consolidating and reporting information

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.

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 performance indicators such as labour productivity and net profit margin 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 need for consolidation of data

The situation becomes more complex when data has to be consolidated from different parts of an organisation, for example:

- the **different branches of a service business** such as a retailer which operates through a chain of shops in different towns
- the **different divisions of a manufacturer of goods** – for example a company making digital radios which is divided into:
 - a manufacturing division (building the electronics)
 - an assembly division (putting the electronics into the cases)
 - a sales and administration division (marketing, selling and distributing the radios)

In both these examples, financial and production data has to be consolidated so that financial statements for the business as a whole can be constructed and performance indicators extracted.

In this chapter we will deal with each of these two examples in turn.

CONSOLIDATION OF 'BRANCH' DATA

Some organisations consist 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. In these cases 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 shops in three separate locations and has the main office at one of the locations. The profitability for a period such as a month can easily be calculated by consolidating the figures for all three branches, as seen in the Case Study that follows.

Case
Study

ABC RETAIL: CONSOLIDATING INFORMATION

situation

ABC Retail Limited operates three shops – Branch A, Branch B, and Branch C. The table below shows the revenue and costs which provide the data for the Profit & Loss Account for the company for the month of March.

ABC RETAIL LIMITED

	Branch A £	Branch B £	Branch C £
Sales	50,000	65,000	75,000
Opening Stock	20,000	22,000	25,000
Purchases	25,000	30,000	36,000
Closing stock	18,000	21,000	24,000
Cost of goods sold	27,000	31,000	37,000
Wages	12,000	18,000	20,000
Other overheads	8,000	8,000	8,000

You have been asked to enter the figures in a table (shown below) to consolidate the results of the three branches in a total column and to calculate:

- gross profit percentage
- net profit percentage

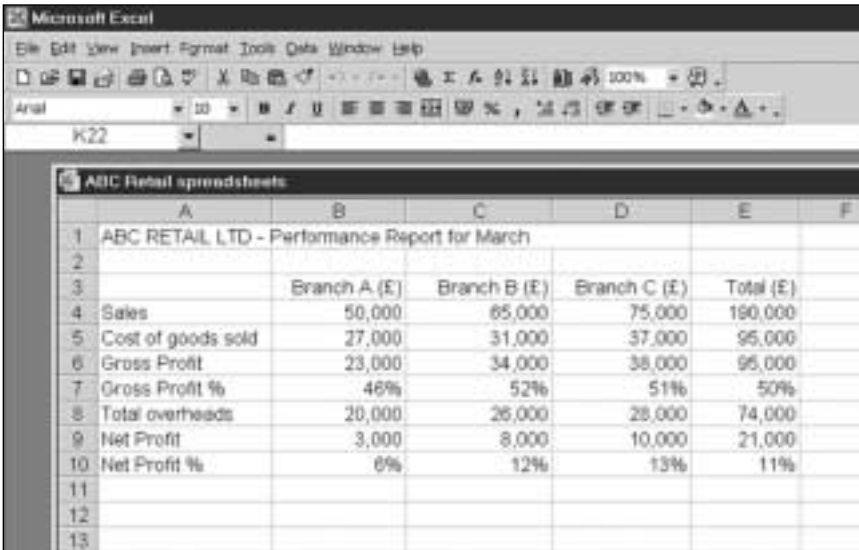
ABC RETAIL LIMITED

Profit and Loss Account for March

	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

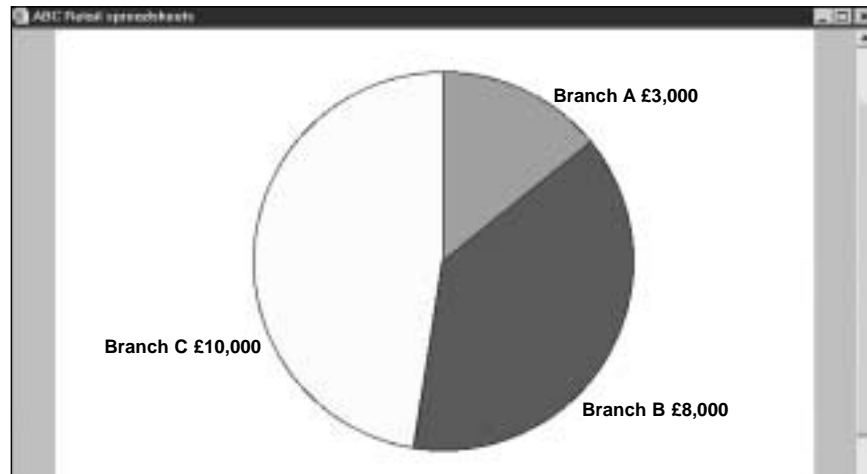
Your next step is to set up a spreadsheet to calculate the gross and net profit percentages and to extract a chart showing the net profit performance of the three branches of ABC Retail Limited (see next page).

spreadsheet calculating gross and net profit margins



	A	B	C	D	E	F
1	ABC RETAIL LTD - Performance Report for March					
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						

pie chart showing comparative net profit for the three shops



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 34 will always deal with these 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 be shown as - £200. The situation here 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:

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

Case Study

COOLTIME: CONSOLIDATING BRANCH 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			
	<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.
- 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 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:

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

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. The formulas used are:

Cost of goods sold = Opening stock + Purchases – Closing stock

Gross profit = Sales – Cost of goods sold

Net profit = Gross profit – Total overheads

4 the short report

The short report interprets the data and performance indicators calculated in tasks 1 to 4. These, together with any charts produced, will be included as appendices to the short report, the purpose of which is to highlight points that should be made to the owner.

Report to Julie Mye
Report from A Student

date

COOLTIME PERFORMANCE REPORT FOR WEEK ENDED 3 APRIL

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 targeted 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.

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.

Note to students

As an alternative to the short report format shown here, you may also use a more informal approach and state your findings using bullet points or emboldened headings. Ask your tutor for guidance, or, in the case of an assessment, read the instructions very carefully.

CONSOLIDATING DATA FROM DIFFERENT DIVISIONS

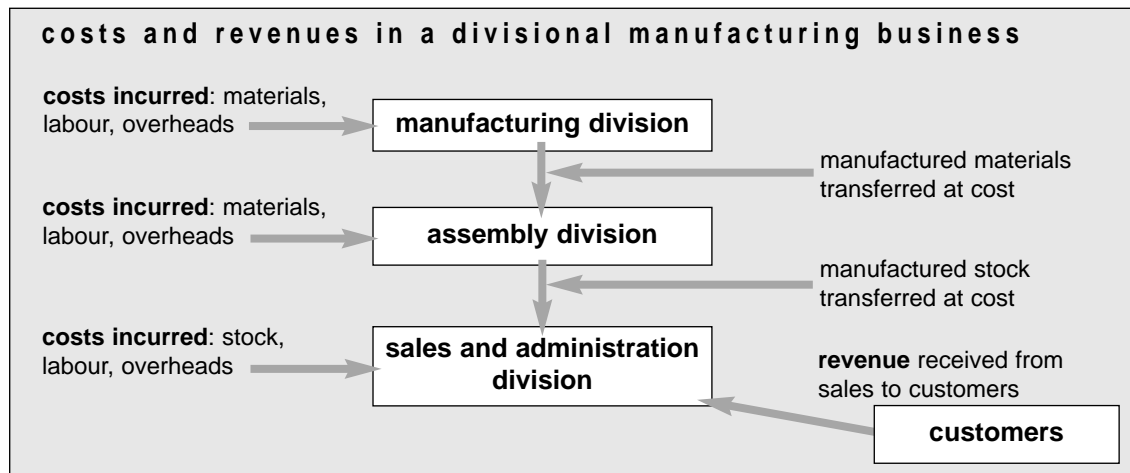
Another scenario in which reported data can be consolidated might involve a business where there are separate divisions which pass stock and goods to each other as part of the manufacturing and sales process. At the beginning of the chapter we gave the example of a company that manufactures radios which pass through:

- a **manufacturing division**, which puts together the electronic components
- an **assembly division** which assembles the radios and puts them in boxes with appropriate packing materials and printed instructions and warranty
- a **sales and administration division** which markets, sells and distributes the radios

All three divisions:

- incur **costs** (labour, materials and overheads)
- receive **revenue** – ie the value of the radios that they pass on to another division, or, in the case of sales and administration, the sales revenue from their customers

It is therefore possible to construct for each division a **statement of costs and revenue**. These can then be **consolidated** into an overall statement of costs and revenue which forms the basis of the **profit and loss account** of the business. Study the diagram below.



Note that any internal transfers of stock (at varying stages of assembly) between divisions will be **recorded** at **cost price**, but of course no actual money will change hands. The sales division will add a profit margin when selling to its external customers, and this is when the money revenue is received. The Case Study which follows shows how this data is consolidated.

Case
Study

SOLARIO MANUFACTURING: CONSOLIDATING DATA

situation

Solario Manufacturing Limited is a high-tech company set up by its owner Soni Djim to manufacture solar powered portable radios which are starting to prove very popular with the environmentally-conscious public.

The business is organised in three divisions:

- the Manufacturing Division buys in the components and makes the electronic content
- the Assembly Division assemble the radios, using the electronic content and materials for the casing and packaging
- the Sales and Administration Division takes the finished stock of radios and sells them to the customers; it also manages the administration of the company

At the end of the accounting year (30 June 2006) you have been asked to consolidate the summary cost statements for the Manufacturing and Assembly Divisions with the summary cost and revenue statement for the Sales and Administration Division to produce a total statement of costs and revenues. You have asked to note that:

- all transfers between divisions are accounted for at cost
- the effects of any transfers between divisions must be removed when preparing the consolidated statement

solution

The first statement is the Cost Statement of the Manufacturing Division. Note that:

- the costs involved are raw materials, labour costs and factory overheads
- the bottom line shows the actual cost of the manufactured electronic content of the radios passed to the Assembly Division

Cost Statement: Manufacturing Division**Year ended 30 June 2006**

		£
	Opening stock of raw materials	65,000
add	Purchases of raw materials	460,000
		<u>525,000</u>
less	Closing stock of raw materials	72,000
	Total usage of raw materials	<u>453,000</u>
add	Factory labour costs	350,000
add	Factory overheads	<u>250,000</u>
	Transfer cost to Assembly Division	<u>1,053,000</u>

The next stage is the Cost Statement of the Assembly Division. This Division finishes the manufacturing process and passes the completed radios to the Sales and Administration Division. The radios are transferred at cost price (see the bottom line), ie the total cost of manufacture, including factory labour and overheads.

Cost Statement: Assembly Division

Year ended 30 June 2006

	£
Opening stock of raw materials	52,000
add Purchases of raw materials from external suppliers	250,000
add Transfer cost from Manufacturing Division	1,053,000
	<u>1,355,000</u>
less Closing stock of raw materials	85,000
Total usage of raw materials	<u>1,270,000</u>
add Factory labour costs	325,000
add Factory overheads	355,000
Transfer cost to Sales and Administration Division	<u>1,950,000</u>

The final stage of the process (shown below) is to draw up the Cost and Revenue Statement of the Sales and Administration Division. This statement starts with the revenue received from sales of the radios and then deducts the manufacturing cost of the radios sold and the wages and administration costs of the Division. The resultant bottom line shows the net profit of the company (ie total revenue less total costs).

Cost and Revenue Statement: Sales and Administration Division

Year ended 30 June 2006

	£	£
Sales		4,000,000
Cost of goods sold:		
Opening cost of finished goods	150,000	
add Transfer cost from Assembly Division	1,950,000	
	<u>2,100,000</u>	
less Closing stock of finished goods	140,000	
Total cost of goods sold	<u>1,960,000</u>	
add Sales and administration salaries	600,000	
add Other sales and administration costs	<u>700,000</u>	
Total costs		3,260,000
Net profit		<u>740,000</u>

Case
Study

SOLARIO MANUFACTURING: PERFORMANCE REPORTING

task 1 – calculating the performance indicators

You have been asked by the management of Solario Limited to calculate some performance indicators. They have sent you an email:

Please calculate for the financial year ending 30 June 2006:

- 1 gross profit margin (to nearest %)
- 2 net profit margin (to nearest %)
- 3 return on capital employed (to nearest %)
- 4 manufacturing cost (£) of each radio produced
- 5 sales revenue (£) per employee

Note the following data:

- Capital employed for year ended 30 June 2006 £12 million
- Number of radios produced in year ended 30 June 2006 156,800
- Staff employed in the year ended 30 June 2006 296

Your workings for these performance indicators are as follows:

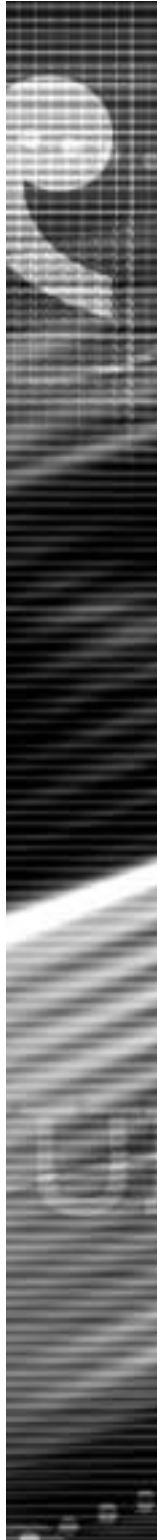
$$\begin{aligned} \text{gross profit margin \%} &= \frac{\text{gross profit} \times 100}{\text{sales}} \\ &= \frac{2,040,000 \times 100}{4,000,000} \\ &= 51\% \end{aligned}$$

$$\begin{aligned} \text{net profit margin \%} &= \frac{\text{net profit} \times 100}{\text{sales}} \\ &= \frac{740,000 \times 100}{4,000,000} \\ &= 19\% \end{aligned}$$

$$\begin{aligned} \text{return on capital employed \%} &= \frac{\text{net profit} \times 100}{\text{capital employed}} \\ &= \frac{740,000 \times 100}{12,000,000} \\ &= 6\% \end{aligned}$$

$$\begin{aligned} \text{manufacturing cost per radio} &= \frac{£1,950,000}{156,800 \text{ radios}} \\ &= £12.44 \end{aligned}$$

$$\begin{aligned} \text{sales revenue per employee} &= \frac{£4,000,000}{296 \text{ employees}} \\ &= £13,513.51 \end{aligned}$$



solution 1

You present the data you have calculated in the form of an email or a memo as follows:

Performance indicators for the year ended 30 June 2006

Gross profit margin %	=	51%
Net profit margin %	=	19%
Return on capital employed %	=	6%
Manufacturing cost per radio	=	£12.44
Sales revenue per employee	=	£13,513.51

task 2 – adjusting the figures for price rises

You have been asked to provide further management information in the form of a comparison of the company's costs and revenues for the last two financial years: 2005 and 2006. Because of changing price levels, you will have to adjust (increase) the figures for 2005 by certain percentages so that a true comparison can be made with the figures for 2006. The changes over the year are:

- selling prices have risen by 5%
- raw materials costs have risen by 3%
- the cost of factory labour has risen by 4%
- factory overheads have risen by 5%
- sales and administration salaries have risen by 4%
- other sales and administration costs have risen by 5%

solution 2

You process the data on the computer spreadsheet shown at the top of the next page.

The two columns on the right are the original unadjusted figures for 2005, the two columns on the left show the same set of results, but the cells which have a grey background have been adjusted by the percentages listed above so that they be compared more accurately with the 2006 figures.

For example the rise of 5% in sales prices has been adjusted as follows:

$$£3,500,000 \times 1.05 \text{ (ie } 100\% + 5\% \text{ rise)} = £3,675,000.$$

Similarly the 3% rise in raw materials prices is adjusted as follows:

$$£650,000 \times 1.03 \text{ (ie } 100\% + 3\% \text{ rise)} = £669,500.$$

and so on . . .

Solario Ltd: Consolidated Statement of Revenues and Costs Year ended 30 June 2005					
		Adjusted		Unadjusted	
		£	£	£	£
	Sales		3,675,000	+ 5%	3,500,000
	Cost of goods sold				
	Opening stock of finished goods	130,000		130,000	
add	Total usage of raw materials	669,500		650,000 + 3%	
add	Total factory labour	855,200		830,000 + 4%	
add	Total factory overheads	630,000		600,000 + 5%	
		2,084,700		2,010,000	
less	Closing stock of finished goods	150,000		150,000	
	Total cost of goods sold		1,934,700		1,860,000
	Gross profit		1,740,300		1,640,000
less	Sales and administration salaries	582,400		560,000 + 4%	
less:	Other sales and administration costs	714,000		680,000 + 5%	
			1,296,400		1,240,000
	Net profit before taxation		443,900		400,000

task 3 – comparing the two years

Your final task also involves a spreadsheet. You are required to compare selected figures from the 2006 consolidated statement of costs and revenues with the adjusted 2005 figures and calculate the difference (variance) between them, both as a money amount and also as a percentage.

The calculations you will have to perform in each case are:

$$2006 \text{ figure (£)} - \text{adjusted } 2005 \text{ figure (£)} = \text{variance (£)}$$

To work out the percentage variance use the formula:

$$\frac{\text{variance (£)} \times 100}{\text{earlier year figure (£)}} = \text{variance percentage}$$

solution 3

Solario Ltd: Comparison of actual 2006 results with adjusted 2005 results				
	Actual 2006 £	Adjusted 2005 £	Variance £	Variance %
Sales	4,000,000	3,675,000	325,000	8.8
Gross profit	2,040,000	1,740,300	299,700	17.2
Sales and administration salaries	600,000	582,400	17,600	3.0
Other sales and administration costs	700,000	714,000	-14,000	-2.0
Net profit before taxation	740,000	443,900	296,100	66.7

UNIT 34 ASSESSMENT

The Solario Case Study on the previous six pages has been included because it will give you a good idea of what to expect in your Unit 34 assessment. Remember that you are also likely to have to provide a written (or word processed) report on the figures produced in the assessment.

There are a number of practice assessments in the Osborne Books Accounting Work Skills Workbook, and you will see that they follow the pattern of this Case Study

Your assessment is also likely to require you to use the performance indicators to complete a report form issued by an external body, for example an application for finance from a bank. This is covered in the next chapter.

If you carry out the Student Activities at the end of this chapter, you should be well prepared for the Unit assessment.

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.
- 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.
- Consolidation of data can also take place with businesses which operate different divisions, typically in a manufacturing company where the data from manufacturing, assembly, sales and administration departments can be brought together to produce a consolidated statement of revenues and costs.
- Transfers of stock between these divisions will normally (as with branches) be made at cost price. These transfers must be taken out of the calculation when consolidation of data takes place.
- When comparing the financial results of two years it may be necessary to apply a percentage adjustment to one set of figures to compensate for increases in costs and sales prices. A more accurate comparison can then be made.

Key Terms

consolidation	the combination of financial and other data from separate operating branches or divisions of an organisation
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
statement of costs and revenue	a statement, similar to a profit and loss account, which calculates profit as the difference between revenue and costs

Student Activities

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

On 28 March 2006 £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 3 April.

Complete the gross profit calculations for FitMan Wholesale Limited, having made appropriate adjustments for stock in transit. If you wish, set up the calculation on a spreadsheet.

Remember:

- Cost of goods sold = opening stock + purchases – closing stock
- Gross profit = Sales – Cost of goods sold

FITMAN WHOLESale LIMITED			
Profit and Loss Account (extract) for week ended 31 March 2006			
	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			

- 6.2** Complete the gross profit calculations for the retail group shown below. If you wish, set up the calculation on a spreadsheet.

Make appropriate adjustments for stock in transit. No adjustments need to be made to the sales or purchases figures. Remember that cost of goods sold = opening stock + purchases – closing stock.

XYZ RETAIL LIMITED				
Profit and Loss Account (extract) for week ended 31 March 2006				
	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 29 March £500 of stock was transferred from Branch X to Branch Y. This was not recorded in the books of Branch Y until 3 April.

- 6.3** 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 2006

	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 2005 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:

- Consolidate the figures from the two shops into a profit and loss account for the business for the three months ended 30 June 2006, 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.
- Draw up (or extract from a spreadsheet) a compound bar chart showing for the two years
 - sales revenue
 - gross profit
 - net profit
- Write comments on the combined performance of the two shops over the two years. Use a wordprocessing package and set out your comments clearly using emboldened headings and bullet points.

- 6.4 Chronos Manufacturing Limited makes digital clocks, employing 315 people in its factory in Newtown, Wales. The company is organised in three divisions:

Electronics Division manufactures the clock mechanisms from imported components.

Casings Division completes the manufacturing process by installing the mechanisms in a variety of clock casings, ranging from reproduction antique to ultra modern. When the products leave Casings Division they are ready for despatch to customers.

Administration Division organises the marketing and sales of the clocks and also provides the other support functions of the company.

At the end of the financial year you are handed the summary cost statements for the Electronics and Casings Divisions and the cost and revenue statement of the Administration Division.

You are to consolidate the data from these three statements on the spreadsheet on the next page. You may set up the spreadsheet if you wish. You should note that all transfers between divisions are at cost and the effects of them should be removed when preparing the consolidated statement.

Cost Statement: Electronics Division		
Year ended 30 June 2006		
		£
	Opening stock of raw materials	32,500
add	Purchases of raw materials	230,000
		<u>262,500</u>
less	Closing stock of raw materials	36,000
	Total usage of raw materials	<u>226,500</u>
add	Factory labour costs	176,400
add	Factory overheads	<u>131,600</u>
	Transfer cost to Casings Division	<u>534,500</u>

Cost Statement: Casings Division		
Year ended 30 June 2006		
		£
	Opening stock of raw materials	25,500
add	Purchases of raw materials from external suppliers	126,700
add	Transfer cost from Electronics Division	534,500
		<u>686,700</u>
less	Closing stock of raw materials	41,000
	Total usage of raw materials	<u>645,700</u>
add	Factory labour costs	181,000
add	Factory overheads	<u>174,300</u>
	Transfer cost to Administration Division	<u>1,001,000</u>

Cost and Revenue Statement: Administration Division

Year ended 30 June 2006

		£	£
	Sales		1,876,000
	Cost of goods sold:		
	Opening cost of finished goods	75,600	
add	Transfer cost from Casings Division	1,001,000	
		1,076,600	
less	Closing stock of finished goods	<u>71,900</u>	
	Total cost of goods sold	1,004,700	
add	Sales and administration salaries	310,000	
add	Other sales and administration costs	<u>356,000</u>	
	Total costs		1,670,700
	Net profit		<u>205,300</u>

	A	B	C	D	E	F
1	Chronos Manufacturing Limited: Consolidated statement of cost and revenues					
2	Year ended 30 June 2006					
3						
4			Electronics Division	Casings Division	Admin Division	Consolidated
5			£	£	£	£
6						
7		Sales				
8						
9		Cost of goods sold				
10		Opening stock of finished goods				
11	plus	Total usage of raw materials				
12	plus	Total factory labour				
13	plus	Total factory overheads				
14						
15	less	Closing stock of finished goods				
16		Total cost of goods sold				
17						
18		Gross profit				
19						
20	less	Administration salaries				
21	less	Administration costs				
22						
23		Net profit				

- 6.5 Helios Limited makes compact weather 'stations' which record and compile data such as daily sunshine hours, rainfall, wind speed and atmospheric pressure. The company employs 220 people in its factory in Milton Keynes. The company is organised in three divisions:

Manufacturing Division manufactures the internal mechanisms for the weather stations.

Assembly Division completes the manufacturing process by assembling the mechanisms

Administration Division organises the marketing and sales of the weather stations and provides the other support functions of the company.

At the end of the financial year you are handed the summary cost statements for the Manufacturing and Assembly Divisions and the cost and revenue statement of the Administration Division.

You are to consolidate the data from these three statements on the spreadsheet on the next page. You may set up the spreadsheet if you wish. You should note that all transfers between divisions are at cost and the effects of them should be removed when preparing the consolidated statement.

Cost Statement: Manufacturing Division		
Year ended 30 June 2006		
		£
	Opening stock of raw materials	48,750
add	Purchases of raw materials	345,000
		<u>393,750</u>
less	Closing stock of raw materials	54,000
	Total usage of raw materials	<u>339,750</u>
add	Factory labour costs	264,600
add	Factory overheads	196,500
	Transfer cost to Assembly Division	<u>800,850</u>

Cost Statement: Assembly Division		
Year ended 30 June 2006		
		£
	Opening stock of raw materials	38,250
add	Purchases of raw materials from external suppliers	190,050
add	Transfer cost from Manufacturing Division	<u>800,850</u>
		<u>1,029,150</u>
less	Closing stock of raw materials	61,500
	Total usage of raw materials	<u>967,650</u>
add	Factory labour costs	271,500
add	Factory overheads	261,450
	Transfer cost to Administration Division	<u>1,500,600</u>

Cost and Revenue Statement: Administration Division

Year ended 30 June 2006

	£	£
Sales		2,814,000
Cost of goods sold:		
Opening cost of finished goods	96,000	
add Transfer cost from Assembly Division	<u>1,500,600</u>	
	1,596,600	
less Closing stock of finished goods	<u>93,100</u>	
Total cost of goods sold	1,503,500	
add Sales and administration salaries	450,000	
add Other sales and administration costs	<u>525,000</u>	
Total costs		2,478,500
Net profit		<u>335,500</u>

	A	B	C	D	E	F
1	Helios Limited: Consolidated statement of cost and revenues					
2	Year ended 30 June 2006					
3						
4			Manufacturing	Assembly	Administration	Consolidated
5			£	£	£	£
6						
7		Sales				
8						
9		Cost of goods sold				
10		Opening stock of finished goods				
11	plus	Total usage of raw materials				
12	plus	Total factory labour				
13	plus	Total factory overheads				
14						
15	less	Closing stock of finished goods				
16		Total cost of goods sold				
17						
18		Gross profit				
19						
20	less	Administration salaries				
21	less	Administration costs				
22						
23		Net profit				

6.6

Note

This activity continues the scenario introduced in Activity 6.5. You should check with your tutor that your calculations for Activity 6.5 are correct before proceeding with Activity 6.6.

- (a) You have been asked by the management of Helios Limited to calculate some performance indicators. They have asked you to work out for the financial year ending 30 June 2006:

- 1 gross profit margin (to nearest %)
- 2 net profit margin (to nearest %)
- 3 return on capital employed (to nearest %)
- 4 manufacturing cost (£) of each weather station
- 5 sales revenue (£) per employee

They provide you with the following data:

Capital employed for year ended 30 June 2006	£5 million
Number of weather stations produced in year ended 30 June 2006	100,040
Staff employed in the year ended 30 June 2006	200

They ask you to set the data out ready for presentation, either in a Powerpoint slide, or in a wordprocessed format, eg a table, with an appropriate heading.

- (b) You have been asked to provide further management information in the form of a comparison of the company's costs and revenues for the last two financial years: 2005 and 2006.

Because of changing price levels, you will have to adjust (increase) the figures for 2005 by certain percentages so that a true comparison can be made with the figures for 2006. The changes over the year are:

- selling prices have risen by 4%
- raw materials costs have risen by 2%
- the cost of factory labour has risen by 3%
- factory overheads have risen by 4%
- sales and administration salaries have risen by 3%
- other sales and administration costs have risen by 4%

The data should be entered in the 'adjusted' column of the spreadsheet at the top of the next page.

- (c) You have been asked to compare the adjusted 2005 figures with the 2006 results and enter them on the spreadsheet shown at the bottom of the next page. You need to work out the difference in the figures over the two years, both in money amounts and also in percentage terms.

You have also been asked to make brief comments on the the performance of the business over the two years. Set out your comments in a word processed file, using a table for the figures and headings and bullet points for your comments as appropriate.

	A	B	C	D	E	F
1	Helios Ltd: Consolidated Statement of Revenues and Costs					
2	Year ended 30 June 2005					
3						
4			Adjusted		Unadjusted	
5			£	£	£	£
6						
7		Sales				2,550,000
8						
9		Cost of goods sold				
10						
11		Opening stock of finished goods			95,000	
12	add	Total usage of raw materials			475,000	
13	add	Total factory labour			486,000	
14	add	Total factory overheads			425,000	
15					1,483,000	
16	less	Closing stock of finished goods			96,000	
17		Total cost of goods sold				1,367,000
18						
19		Gross profit				1,163,000
20						
21	less	Administration salaries			395,000	
22						
23	less:	Administration costs			498,000	
24						893,000
25		Net profit before taxation				270,000

	A	B	C	D	E
1	Helios Ltd: Comparison of actual 2006 results with adjusted 2005 results				
2					
3					
4		Actual 2006	Adjusted 2005	Variance	Variance
5		£	£	£	%
6					
7		Sales			
8					
9		Gross profit			
10					
11		Net profit			
12					
13		Factory labour costs			
14					
15		Administration salaries			
16					