

Fundamentals Pilot Paper – Skills module

Performance Management

Time allowed

Reading and planning: 15 minutes

Writing: 3 hours

ALL FOUR questions are compulsory and MUST be attempted.

Do NOT open this paper until instructed by the supervisor.

During reading and planning time only the question paper may be annotated. You must NOT write in your answer booklet until instructed by the supervisor.

This question paper must not be removed from the examination hall.

The Association of Chartered Certified Accountants



Paper F5

Answer ALL FOUR questions

- 1 Triple Limited makes three types of gold watch – the Diva (D), the Classic (C) and the Poser (P). A traditional product costing system is used at present; although an activity based costing (ABC) system is being considered. Details of the three products for a typical period are:

	Hours per unit		Materials Cost per unit (\$)	Production Units
	Labour hours	Machine hours		
Product D	½	1½	20	750
Product C	1½	1	12	1,250
Product P	1	3	25	7,000

Direct labour costs \$6 per hour and production overheads are absorbed on a machine hour basis. The overhead absorption rate for the period is \$28 per machine hour.

Required:

- (a) Calculate the cost per unit for each product using traditional methods, absorbing overheads on the basis of machine hours. (3 marks)

Total production overheads are \$654,500 and further analysis shows that the total production overheads can be divided as follows:

	%
Costs relating to set-ups	35
Costs relating to machinery	20
Costs relating to materials handling	15
Costs relating to inspection	30
Total production overhead	<u>100</u>

The following total activity volumes are associated with each product line for the period as a whole:

	Number of Set ups	Number of movements of materials	Number of inspections
Product D	75	12	150
Product C	115	21	180
Product P	480	87	670
	<u>670</u>	<u>120</u>	<u>1,000</u>

Required:

- (b) Calculate the cost per unit for each product using ABC principles (work to two decimal places). (12 marks)
- (c) Explain why costs per unit calculated under ABC are often very different to costs per unit calculated under more traditional methods. Use the information from Triple Limited to illustrate. (4 marks)
- (d) Discuss the implications of a switch to ABC on pricing and profitability. (6 marks)

(25 marks)

- 2 Simply Soup Limited manufactures and sells soups in a JIT environment. Soup is made in a manufacturing process by mixing liquidised vegetables, melted butter and stock (stock in this context is a liquid used in making soups). They operate a standard costing and variances system to control its manufacturing processes. At the beginning of the current financial year they employed a new production manager to oversee the manufacturing process and to work alongside the purchasing manager. The production manager will be rewarded by a salary and a bonus based on the directly attributable variances involved in the manufacturing process

After three months of work there is doubt about the performance of the new production manager. On the one hand, the cost variances look on the whole favourable, but the sales director has indicated that sales are significantly down and the overall profitability is decreasing.

The table below shows the variance analysis results for the first three months of the manager's work.

Table 1

F = Favourable. A = Adverse

	Month 1	Month 2	Month 3
Material Price Variance	\$300 (F)	\$900 (A)	\$2,200 (A)
Material Mix Variance	\$1,800 (F)	\$2,253 (F)	\$2,800 (F)
Material Yield Variance	\$2,126 (F)	\$5,844 (F)	\$9,752 (F)
Total Variance	\$4,226 (F)	\$7,197 (F)	\$10,352 (F)

The actual level of activity was broadly the same in each month and the standard monthly material total cost was approximately \$145,000.

The standard cost card is as follows for the period under review

	\$
0.90 litres of liquidised vegetables @ \$0.80/ltr =	0.72
0.05 litres of melted butter @\$4/ltr	0.20
1.10 litres of stock @ \$0.50/ltr	0.55
Total cost to produce 1 litre of soup	1.47

Required:

(a) Using the information in table 1:

- (i) Explain the meaning of each type of variances above (price, mix and yield but excluding the total variance) and briefly discuss to what extent each type of variance is controllable by the production manager. (6 marks)
- (ii) Evaluate the performance of the production manager considering both the cost variance results above and the sales director's comments. (6 marks)
- (iii) Outline two suggestions how the performance management system might be changed to better reflect the performance of the production manager. (4 marks)

- (b) The board has asked that the variances be calculated for Month 4. In Month 4 the production department data is as follows:

Actual results for Month 4

Liquidised vegetables:	Bought	82,000 litres	costing \$69,700
Melted butter:	Bought	4,900 litres	costing \$21,070
Stock:	Bought	122,000 litres	costing \$58,560

Actual production was 112,000 litres of soup

Required:

Calculate the material price, mix and yield variances for Month 4. You are not required to comment on the performance that the calculations imply. Round variances to the nearest \$. (9 marks)

(25 marks)

- 3** BFG Limited is investigating the financial viability of a new product the S-pro. The S-pro is a short-life product for which a market has been identified at an agreed design specification. The product will only have a life of 12 months.

The following estimated information is available in respect of S-pro:

1. Sales should be 120,000 in the year in batches of 100 units. An average selling price of \$1,050 per batch of 100 units is expected. All sales are for cash.
2. An 80% learning curve will apply for the first 700 batches after which a steady state production time will apply, with the labour time per batch after the first 700 batches being equal to the time for the 700th batch. The cost of the first batch was measured at \$2,500. This was for 500 hours at \$5 per hour.
3. Variable overhead is estimated at \$2 per labour hour.
4. Direct material will be \$500 per batch of S-pro for the first 200 batches produced. The second 200 batches will cost 90% of the cost per batch of the first 200 batches. All batches from then on will cost 90% of the batch cost for each of the second 200 batches. All purchases are made for cash
5. S-pro will require additional space to be rented. These directly attributable fixed costs will be \$15,000 per month.

A target net cash flow of \$130,000 is required in order for this project to be acceptable.

Note: The learning curve formula is given on the formulae sheet. At the learning rate of 0.8 (80%), the learning factor (b) is equal to -0.3219.

Required:

- (a) Prepare detailed calculations to show whether product S-pro will provide the target net cash flow.** (12 marks)
- (b) Calculate what length of time then second batch will take if the actual rate of learning is:**
- (i) 80%;
 - (ii) 90%.

Explain which rate shows the faster learning. (5 marks)

- (c) Suggest specific actions that BFG could take to improve the net cash flow calculated above.** (8 marks)

(25 marks)

- 4 The following information relates to Preston Financial Services, an accounting practice. The business specialises in providing accounting and taxation work for dentists and doctors. In the main the clients are wealthy, self-employed and have an average age of 52.

The business was founded by and is wholly owned by Richard Preston, a dominant and aggressive sole practitioner. He feels that promotion of new products to his clients would be likely to upset the conservative nature of his dentists and doctors and, as a result, the business has been managed with similar products year on year.

You have been provided with financial information relating to the practice in appendix 1. In appendix 2, you have been provided with non-financial information which is based on the balanced scorecard format.

Appendix 1: Financial information

	Current year	Previous year
Turnover (\$'000)	945	900
Net profit (\$'000)	187	180
Average cash balances (\$'000)	21	20
Average debtor / trade receivables days (industry average 30 days)	18 days	22 days
Inflation rate (%)	3	3

Appendix 2: Balanced Scorecard (extract)

Internal Business Processes

	Current year	Previous year
Error rates in jobs done	16%	10%
Average job completion time	7 weeks	10 weeks

Customer Knowledge

	Current year	Previous year
Number of customers	1220	1500
Average fee levels (\$)	775	600
Market Share	14%	20%

Learning and Growth

	Current year	Previous year
Percentage of revenue from non-core work	4%	5%
Industry average of the proportion of revenue from non-core work in accounting practices	30%	25%
Employee retention rate.	60%	80%

Notes

1. Error rates measure the number of jobs with mistakes made by staff as a proportion of the number of clients serviced
2. Core work is defined as being accountancy and taxation. Non-core work is defined primarily as pension advice and business consultancy. Non core work is traditionally high margin work

Required:

- (a) Using the information in appendix 1 only, comment on the financial performance of the business (briefly consider growth, profitability, liquidity and credit management). (8 marks)
- (b) Explain why non financial information, such as the type shown in appendix 2, is likely to give a better indication of the likely future success of the business than the financial information given in appendix 1. (5 marks)
- (c) Using the data given in appendix 2 comment on the performance of the business. Include comments on internal business processes, customer knowledge and learning/growth, separately, and provide a concluding comment on the overall performance of the business. (12 marks)

(25 marks)

End of Question paper

Formulae Sheet

Learning curve

$$Y = ax^b$$

Where y = average cost per batch

a = cost of first batch

x = total number of batches produced

b = learning factor ($\log LR / \log 2$)

LR = the learning rate as a decimal

Regression analysis

$$y = a + bx$$

$$b = \frac{n\sum xy - \sum x \sum y}{n\sum x^2 - (\sum x)^2}$$

$$a = \frac{\sum y}{n} - \frac{b\sum x}{n}$$

$$r = \frac{n\sum xy - \sum x \sum y}{\sqrt{(n\sum x^2 - (\sum x)^2)(n\sum y^2 - (\sum y)^2)}}$$

Demand curve

$$P = a - bQ$$

$$b = \frac{\text{change in price}}{\text{change in quantity}}$$

$$a = \text{price when } Q = 0$$

Answers

1 TRIPLE Limited

(a) Traditional cost per unit

	D	C	P
	\$	\$	\$
Material	20	12	25
Labour (\$6/hour)	3	9	6
Direct costs	23	21	31
Production overhead (\$28/machine hour)	42	28	84
Total production cost /unit	<u>65</u>	<u>49</u>	<u>115</u>

(b) ABC cost per unit

Examiners note: Each step required has been given its own sub-heading to make the procedure clear. The basic principle is to find an overhead cost per unit of activity for each element of overhead cost. In some cases it might then be possible to find an overhead cost per unit directly; here it is probably easier to split overheads between each product type first and then find a cost per unit as shown.

(i) Total overheads

These were given at \$654,500

(ii) Total machine hours (needed as the driver for machining overhead)

Product	Hours/unit	Production units	Total hours
D	1½	750	1,125
C	1	1,250	1,250
P	3	7,000	21,000
Total machine hours			<u>23,375</u>

(iii) Analysis of total overheads and cost per unit of activity

Type of overhead	Driver	%	Total overhead \$	Level of driver activity	Cost/driver
Set-ups	Number of set ups	35	229,075	670	341.90
Machining	Machine hours	20	130,900	23,375	5.60
Materials handling	Material movements	15	98,175	120	818.13
Inspection	Number of inspections	30	196,350	1,000	196.35
		100	654,500		

(iv) Total overheads by product and per unit

Overhead	Product D		Product C		Product P		Total	
	Activity	\$ Cost	Activity	\$ Cost	Activity	\$ Cost	Activity	\$ Cost
Set-ups	75	25,643	115	39,319	480	164,113	670	229,075
Machining	1,125	6,300	1,250	7,000	21,000	117,600	23,375	130,900
Material Handling	12	9,817	21	17,181	87	71,177	120	98,175
Inspection	150	29,453	180	35,343	670	131,554	1,000	196,350
Total overhead cost		<u>77,213</u>		<u>98,843</u>		<u>484,444</u>		<u>654,500</u>
Units produced		750		1,250		7,000		
Costs per unit		\$94.95		\$79.07		\$69.21		

(v) Cost per unit

	D	C	P
	\$	\$	\$
Direct costs (from (a))	23.00	21.00	31.00
Overheads (from (iv))	94.95	79.07	69.21
	<u>117.95</u>	<u>100.07</u>	<u>100.21</u>

(c) Comment

The overhead costs per unit are summarised below together with volume of production.

Product	D	C	P
Volume	750	1,250	7,000
Conventional overheads	\$42	\$28	\$84
ABC overheads	\$95	\$79	\$69

The result of the change to Activity Based Costing is clear, the overhead cost of D and C have risen whilst that of P has fallen.

This is in line with the comments of many who feel that ABC provides a fairer unit cost better reflecting the effort required to make different products. This is illustrated here with product P which may take longer to make than D or C, but once production has started the process is simple to administer. This may be due to having much longer production lines.

Products D and C are relatively minor volume products but still require a fair amount of administrative time by the production department; ie they involve a fair amount of `hassle`. This is explained by the following table of `activities per 1,000 units produced`.

	Set-ups	Materials movements	Inspections
D	100	16	200
C	92	17	144
P	69	12	96

This table highlights the problem.

- Product P has fewer set-ups, material movements and inspections per 1,000 units than or C
- As a consequence product P's overhead cost per unit for these three elements has fallen
- The machining overhead cost per unit for P is still two or three times greater than for products D or C, but because this overhead only accounts for 20% of the total overhead this has a small effect on total cost.
- The overall result is P's fall in production overhead cost per unit and the rise in those figures for D and C

(d) Pricing and Profitability

Switching to ABC can, as in this case, substantially change the costs per unit calculations. Consequently if an organisation's selling prices are determined by a version of cost-plus pricing then the selling prices would alter.

In this case the selling price of D and C would rise significantly, and the selling price of P would fall. This, at first glance may be appealing however:

- Will the markets for D and C tolerate a price rise? There could be competition to consider. Will customers be willing to pay more for a product simply because Triple Ltd has changed its cost allocation methods?
- Product P is a high volume product. Reducing its selling price will have a dramatic effect on revenue and contribution. One would have to question whether such a reduction would be compensated for by increased volumes.

Alternatively, one could take the view that prices are determined by the market and therefore if Triple Ltd switches to ABC, it is not the price that would change but the profit or margin per unit that would change.

This can change attitudes within the business. Previously high margin products (under a traditional overhead absorption system) would be shown as less profitable. Salesmen (possibly profit motivated) can begin to push the sales of different products seeking higher personal rewards. (Assuming commission based on profits per unit sold)

It must always be remembered that if overheads are essentially fixed then they should be ignored in business decision making. Switching to ABC can change reported profits per unit but it is contribution per unit that is perhaps more important.

2 (a) **SIMPLY SOUP Limited**

(i) Meaning and Controllability of the variances

Material Price Variance

Indicates whether Simply Soup has paid more (adverse) or less (favourable) for its input materials than the standard prices set for the period. For example, if a new supplier had to be found and the price paid was more than the standard price then Simply Soup would incur an extra cost. This extra cost is the price variance.

Price variances are controllable to the extent that Simply Soup can choose its suppliers. On the other hand, vegetables are a seasonal and weather dependent crop and therefore factors outside Simply Soups control can influence prices in the market. The key issue is that the production manager will not control the price paid that is the job of the Purchasing Manager.

Material Mix Variance

Considers the cost of a change in the mix of the ingredients to make soup. For example adding less butter (which is expensive) and more stock (which is cheaper) will be a cheaper mix than the standard mix. A cheaper mix will result in a favourable variance.

The recipe determines the mix. The recipe is entirely under the control of the production manager.

Material Yield Variance

This shows the productivity of the manufacturing process. If the process produces more soup than expected then the yield will be good (favourable). At the moment 2.05 litres of input produces 1 litre of soup, if 2.05 litres of input produces more than 1 litre of soup then the yield is favourable. Greater yield than expected can be a result of operational efficiency or a change in mix.

The production manager controls the operational process so should be able to control the yield. Poor quality ingredients can damage yield but the production manager should be in control of quality and reject dubious ingredients. The production manager is also responsible for things like spillage. Higher spillage can also reduce yield.

(ii) Production manager's performance

Cost Efficiency

The production manager has produced significant favourable cost variances. The total favourable variance has risen from \$4,226 to \$10,352 in the first three months. This last figure represents approximately 7.1% of the standard monthly spend.

The prices for materials have been rising but are probably outside the control of the production manager. The rising prices may have put pressure on the production manager to cheapen the mix.

The mix has become cheaper. This could be seen as a cost efficient step. However, Simply Soup must question the quality implications of this (see later).

The yield results are the most significant. The manager is getting far more out of the process than is usual. The new mix is clearly far more productive than before. This could easily be seen as an indicator of good performance as long as the quality is maintained.

Quality

The concern is that the production manager has sacrificed quality for lower cost and greater quantity. The sales director has indicated that sales are falling, perhaps an indication that the customers are unhappy with the product when compared to competitor offers. The greater yield and cheaper mix may well have produced a tasteless soup.

Overall

Overall there has to be concern about the production manager's performance. Cost control and efficiency are important but not at the expense of customer satisfaction and quality. We do not have figures for the extent to which sales have been damaged and small reductions may be acceptable.

(iii) Changes to the performance management system

The performance management system needs to take account of the quality of the soup being produced and the overall impact a decision has on the business.

Quality targets need to be agreed with the manager. These are difficult to quantify but not impossible. For example soup consistency (thickness) is measurable. Regular tasting will indicate a fall in quality; tasters could give the soup a mark out of 10 on taste, colour, smell etc.

The production manager should not be rewarded for producing lots of cheap soup that cannot be sold. The performance management system should reflect the overall effect that decisions have. If the production manager's actions have reduced sales then sales volume variances should be allocated to the production manager as part of the performance assessment.

(b) Variance calculations

Material Price Variance

$$\text{Mixed Vegetables: } \left[\left(\frac{\$69,700}{82,000} \right) - 0.80 \right] \times 82,000 = \$4,100 \text{ (A)}$$

$$\text{Butter: } \left[\left(\frac{\$21,070}{4,900} \right) - 4 \right] \times 4,900 = \$1,470 \text{ (A)}$$

$$\text{Stock: } \left[\left(\frac{\$58,560}{122,000} \right) - 0.50 \right] \times 122,000 = \$2,440 \text{ (F)}$$

Material Mix Variance

Mixed Vegetables: $(82,000 - 91,712.2^*) \times 0.80 = \$7,770 (F)$

Butter: $(4,900 - 5,095.1) \times 4 = \$780 (F)$

Stock: $(122,000 - 112,092.7) \times 0.50 = \$4,954 (A)$

Total Mix Variance $\$3,596 (F)$

Note: it is only the total mix variance that is a valid variance here

Total input volume = $(82,000 + 4,900 + 122,000) = 208,900$

* Standard mix for mixed vegetables is $= \$91,712.2$

Note: alternate approaches are acceptable.

Material Yield Variance

$[112,000 - 101,902.4] \times 1.47 = \$14,843(F)$

The standard inputs add up to 2.05 units $(0.9+0.5+1.1)$. This produces 1ltr of soup. The actual inputs were 208,900 litres and therefore the standard expected output should be

$$208,900 \frac{1}{2.05} = 101,902.4 \text{ litres}$$

3 BFG Limited

(a) Sales	120,000 units
Sales Revenue	\$1,260,000
Costs:	
Direct materials (W1)	\$514,000
Direct Labour (W2)	\$315,423
Variable overhead	\$126,169
Rent	\$180,000
Net cash flow	<u>\$124,408</u>
Target cash flow	\$130,000

The target cash flow will not be achieved

Workings:

(1) Direct material:	Batches	
		\$
	First 200 @ \$500	100,000
	Second 200 @\$450	90,000
	Remaining 800 @\$405	324,000
	Total	<u>514,000</u>

(2) Direct labour

$$\begin{aligned} \text{For first seven hundred batches } y &= ax^b \\ y &= 2,500 \times 700^{-0.3219} \\ y &= \$303.461045 \end{aligned}$$

$$\text{Total cost for first 700 batches} = \$303.461045 \times 700 = \$212,423$$

All batches after the first 700 will have the same cost as the 700th batch. To calculate the cost of the 700th batch we need to take the cost of 699 batches from the cost of 700 batches.

$$\begin{aligned} \text{For 699 batches } y &= a \times b \\ y &= 2,500 \times 699^{-0.3219} \\ y &= \$303.600726 \end{aligned}$$

$$\text{Total cost for first 699 batches} = \$303.600726 \times 699 = \$212,217$$

$$\text{Cost of 700th batch is } \$212,423 - \$212,217 = \$206$$

Total cost for the 12 months of production

$$\$212,423 + (\$206 \times 500) = \$315,423$$

(3) Variable overhead is \$2 per hour or 40% of direct labour

- (b) To calculate the learning factor BFG will have had to measure the time taken to make the first batch (500 hours) and then the time taken to make the second batch. The learning rate measures the relationship between the average time taken between two points as production doubles. The easiest way to measure the learning rate is when the production doubles between the first and second batches.

At 80%

Time for first batch		500	
Average time for two batches @80%	500×0.8	=	400
Total time for two batches	2×400	=	800
Time for second batch	$800 - 500$	=	300

At 90%

Time for first batch		500	
Average time for two batches @90%	500×0.9	=	450
Total time for two batches	2×450	=	900
Time for second batch	$900 - 500$	=	400

The 80% learning rate reduces the time taken for the two successive batches above by a greater amount (or faster). Hence the 80% learning rate is the faster learning.

- (c) Possible actions to improve the net cash flows are:

- Increase the price charged. The question states that an agreed specification has been reached, however further research may reveal that a higher price could be tolerated by the market. Equally a form of price skimming may be possible to improve short term net cash flow.
- Reduce the labour cost per batch by removing unnecessary operations or processes. It may be possible to simplify the design without damaging the ability to achieve the price stated.
- Improve the learning rate. This may involve improving the training or the quality of people involved in the production process. This does take time and costs money in the short run.
- Consider substitute materials (without damaging the product specification). Also look for new suppliers to reduce the input cost.
- Consider ways to reduce the level of variable overhead incurred by the product.
- Investigate whether the production of product X could take place in existing space and hence avoid the extra rent charge. Re-negotiate the rent charge with the landlord.

4 Preston Financial Services

- (a) Financial analysis

There are various financial observations that can be made from the data.

- **Turnover** is up 5% – this is not very high but is at least higher than the rate of inflation indicating real growth. This is encouraging and a sign of a growing business.
- The main weakness identified in the financial results is that the **net profit margin** has fallen from 20% to 19.8% suggesting that cost control may be getting worse or fee levels are being competed away.
- **Profit** is up 3.9%. In absolute terms profits are impressive given that Richard Preston is the sole partner owning 100% of the business.
- **Average cash balances** are up 5% – indicating improved liquidity. Positive cash balances are always welcome in a business.
- Average **debtors days** are down by 3 days – indicating improved efficiency in chasing up outstanding debts. It is noticeable that Preston's days are lower than the industry average indicating strong working capital management. The only possible concern may be that Richard is being particularly aggressive in chasing up outstanding debts.

Overall, with a possible concern about margins and low growth, the business looks in good shape and would appear to have a healthy future.

- (b) Financial performance indicators will generally only give a measure of the past success of a business. There is no guarantee that a good past financial performance will lead to a good future financial performance. Clients may leave and costs may escalate turning past profits to losses in what can be a very short time period.

Non financial measures are often termed "indicators of future performance". Good results in these measures can lead to a good financial performance. For example if a business delivers good quality to its customers then this could lead to more custom at higher prices in the future.

Specifically the information in appendix 2 relates to the non financial measures within the balanced scorecard.

Internal business processes are a measure of internal efficiency. Interestingly these measures can indicate current cost efficiency as much as any future result

Customer knowledge measure how well the business is dealing with its external customers. A good performance here is very likely to lead to more custom in the future.

Innovation and learning measures that way the business develops. New products would be reflected here along with indicators of staff retention. Again this is much more focused on the future than the present.

Measuring performance by way of non-financial means is much more likely to give an indication of the future success of a business.

- (c) The extra non-financial information gives much greater insight into key operational issues within the business and paints a bleaker picture for the future.

Internal business processes

Error rates

Error rates for jobs done are up from 10% to 16%, probably a result of reducing turnaround times to improve delivery on time percentages. This is critical as users expect the accounts to be correct. Errors could lead to problems for clients with the Inland Revenue, bankers, etc. What is worse, Richard could be sued if clients lose out because of such errors. One could say that errors are unlikely to be revealed to clients. Businesses rarely advertise mistakes that have been made. They should of course put mistakes right immediately.

Customer Knowledge

Client retention

The number of clients has fallen dramatically – this is alarming and indicates a high level of customer dissatisfaction. In an accountancy practice one would normally expect a high level of repeat work – for example, tax computations will need to be done every year. Clearly existing clients are not happy with the service provided.

Average fees

It would appear that the increase in revenue is thus due to a large increase in average fees rather than extra clients – average fee is up from \$600 to \$775, an increase of 29%! This could explain the loss of clients in itself, however there could be other reasons.

Market share

The result of the above two factors is a fall in market share from 20% to 14%. Looking at revenue figures one can estimate the size of the market as having grown from \$4.5m to \$6.75m, an increase of 50%. Compared to this, Preston's figures are particularly worrying. The firm should be doing much better and looks to being left behind by competitors.

Learning and Growth

Non-core services

The main weakness of the firm seems to be its lack of non-core services offered. The industry average revenue from non-core work has increased from 25% to 30% but Richard's figures have dropped from 5% to 4%. It would appear that most clients are looking for their accountants to provide a wider range of products but Richard is ignoring this trend.

Employee retention

Employee turnover is up indicating that the staff are dissatisfied. Continuity of staff at a client is important to ensure a quality product. Conservative clients may resent revealing personal financial details to a variety of different people each year. Staff turnover is possibly a result of extra pressure to complete jobs more quickly without the satisfaction of a job well done. Also staff may realise that the lack of range of services offered by the firm will limit their own experience and career paths

Conclusion

In conclusion, the financial results do not show the full picture. The firm has fundamental weaknesses that need to be addressed if it is to grow into the future. At present it is being left behind by a changing industry and changing competition. It is vital that Richard reassesses his attitude and ensures that the firm has a better fit with its business environment.

In particular he should seek to develop complementary services and reduce errors on existing work.

**Pilot Paper F5
Performance Management**

Marking Scheme

1	(a) For each product Total	1 mark	3 marks
	(b) Total machine hours Cost per driver calculation Overheads split by product table Cost per unit calculation Total	2 marks 3 marks 4 marks 3 marks	12 marks
	(c) Explanation		4 marks
	(d) Comment on pricing, markets, customers and profitability Total		6 marks 25 marks
2	(a) For each variance Explanation of meaning of variance Brief discussion of controllability	1 mark 1 mark	6 marks
	(b) Comment on cost variance Price: Outside Production Managers Control Rising prices pressures Mix Cheaper mix and comment Yield High yield results and comment Quality Comment on quality implications Overall summary	 1 mark 1 mark 1 mark 1 mark 1 mark	6 marks
	(c) Improvements to performance measurement system For each sensible suggestion 2 marks		4 marks
	(d) Variance calculations Price: 1 mark for each ingredient Mix: Yield: Method marks should be awarded as appropriate Total	3 marks 3 marks 3 marks	9 marks 25 marks
3	(a) Sales Direct material Direct labour first seven months last five months Variable overhead Rent Decision Total for part (a)	1 mark 2 marks 3 marks 3 marks 1 mark 1 mark 1 mark	12 marks
	(b) Second batch times 80% 90% Comment on faster learning Total for part (b)	2 marks 2 marks 1 mark	5 marks
	(c) Actions to improve net cash flow (2 marks per explained idea) Total for part (c) Total		8 marks 25 marks

4	(a) Financial commentary		
	Turnover growth	2 marks	
	Profitability	2 marks	
	Cash position	2 marks	
	Debtor management	2 marks	
	Total		8 marks
	(b) Future performance		
	General explanation with example	2 marks	
	Comment on each area	3 marks	
	Total		5 marks
	(c) Assessment of future prospects.		
	Internal business processes		
	Error rates	3 marks	
	Not revealed to clients	1 mark	
	Customer Knowledge		
	Retention	1 mark	
	Fee levels	2 marks	
	Market share/size	1 mark	
	Learning and growth		
	Lack of product range	2 marks	
	Employee retention	2 marks	
	Total		12 marks
	Total		25 marks