MARK PLAN AND EXAMINER'S COMMENTARY

The marking plan set out below was that used to mark this question. Markers were encouraged to use discretion and to award partial marks where a point was either not explained fully or made by implication. More marks were available than could be awarded for each requirement. This allowed credit to be given for a variety of valid points which were made by candidates.

Question 1

Total Marks: 43

General comments

This is the mini case at 43 marks, and also the main data analysis question. It was well attempted.

The scenario is about Outil plc, a large listed home improvement retailer that operates with three divisions. The Homestyle division sells DIY-related products to homeowners and tradespeople in the UK through large stores. The Fixings division sells a wide range of tools and other items, mainly to UK tradespeople, via a catalogue, website and small stores. It has grown rapidly, opening 50 new stores last year. Further development of Outil's business saw the acquisition, in 2015, of an Eastern European trade chain, the new Targi division. This provides equipment and materials for professional building companies and tradespeople in Eastern Europe.

Outil's board has been concerned for some time about the deterioration in performance of the Homestyle division, which is a mature business (candidates were provided with extracts from the management accounts). The Homestyle director believes performance will improve in line with the housing market, especially as a competitor has gone under. However the MD believes Outil should refocus as a retail group, servicing tradespeople only. Smaller Homestyle division stores would be re-branded as Targi or Fixings outlets. The larger stores would need to be closed, but employees, where possible, would be transferred to other divisions. An alternative strategy proposed by the Fixings division director is to sell the Homestyle division to raise funds for expansion. Testing the market by opening four trial Fixings stores in Germany, with a dedicated German website, is suggested.

1.1 Report on performance

To: Outil Board
From: Business Advisor
Date: x/x/xx
Re: Future strategic direction

Calculations are shown in the appendix:

Overall company results

	Outil total 2015	UK total 2015	Outil total 2014
Gross margin	34.0%	34.7%	35.9%
Contribution as % revenue	6.9%	6.5%	9.0%
Operating margin	6.1%	5.8	8.2%
ROCE	22.4%	21.7%	30.9%

% change in

	2014 to 2015 Outil total	2014 to 2015 UK total
Revenue	+24.9%	+5.7%
Gross profit	+18.1%	+2.1%
Traceable costs	+26.0%	+10.7%
Divisional contribution	-5.1%	-23.7%
Apportioned central costs	+14.3%	-2.9%
Operating profit	-7.0%	-25.7%
Net assets	+28.4%	+5.4%

Divisional performance year to 31 December 2015

	Homestyle	**Fixings**	**Targi**
Gross margin	29.3%	42.0%	30.1%
Divisional contribution as % revenue	5.7%	7.6%	8.7%
Operating profit margin	5.0%	6.9%	8.0%
ROCE	18.0%	27.3%	25.2%
Sales mix	49%	36%	15%
Divisional contribution mix	41%	40%	19%
Share of net assets	49%	33%	18%
Revenue per store (£m)	10.46	4.95	7.26
Profit per store (£000)	520	342	583
Ave store size (sqm)	10,000	3,500	5,600
Revenue per sq m	£1,046	£1,414	£1,296
Profit per sq m	£51.98	£97.65	£104.04
Employees/store	58	18	30
Sq metres covered per employee	172	194	187
Revenue per employee (£'000)	181	272	243

Commentary on overall company performance

Despite a 24.9% increase in sales revenue, Outil's total operating profit has fallen 7% and ROCE has dropped from 30.9% to 22.4%. Both gross and operating profit margins have fallen by approximately 2 percentage points.

However it is hard to properly compare the performance of the business between 2014 and 2015 due to substantial changes during the year, notably the acquisition of the Targi stores and the expansion of the Fixings division.

Targi needs to be excluded from the 2015 results so that a more relevant comparison can be made of the combined results of the Homestyle and Fixings divisions. Once this is done it becomes apparent that whilst revenue has increased 5.7%, operating profit has fallen by 25.7%.

The Homestyle director says that the division's revenue is relatively unchanged year-on-year so the increase in revenue is likely to have arisen as a result of the 50 new Fixings stores. The scenario suggests the deterioration in profit is due to the Homestyle division's sales mix, increased delivery costs and promotional pricing strategies.

Segmental information for 2014 would enable more analysis of the causes of performance.

Commentary on divisions
Comparing the divisional performance:

Almost half the company revenue comes from the Homestyle division but this only accounts for 41% of the divisional contribution. Whilst the Homestyle stores have a similar gross profit margin (29.3%) to the new Targi stores (30.1%), their operating margin is much lower (5% compared to 8%) and the ROCE considerably less (18% compared to 25.2%).

This is borne out by the fact that despite each Homestyle store being almost twice the size of the Targi ones (10,000 sqm vs 5,600), with about 45% more revenue per store (£10.46m compared to £7.26m), the average profit per store is lower at £520k compared to £583k.

This may reflect the differences in the markets (UK v Eastern Europe), customer base (consumers v tradespeople) and operating models (the Targi division carries a limited product range which it sells in large volumes at low prices).

There may also be exchange differences arising in the Targi results.

The UK based Fixings division, which sells to a mix of tradespeople and consumers, has the highest gross margin (42%) and the highest ROCE at 27.3%. It accounts for 36% of group sales and 40% of the contribution.

The Fixings stores are the smallest (3,500 sq metres and £4.95m revenue per store) but it is the most efficient revenue generator at £1,414 per sq metre, which is consistent with the information in the scenario about the majority of the store space being used to display products.

There may be differences in rental costs between the stores eg smaller stores may be in town and therefore more expensive per sq metre than larger, out of town stores.

Given the different store sizes it is not particularly useful to compare performance measures on a per store basis, instead comparisons have been made per square metre. These show that the Homestyle division lags quite a long way behind both the Fixings and Targi divisions in terms of revenue per sq metre, profit per sq metre and revenue per employee. Since it accounts for almost half the net assets of the group, Homestyle's weak performance will have had a significant impact on the overall results.

Further information
Additional information that would be useful includes:

Rental costs of the stores operated by each division

Information regarding the age and current value of assets used by each division, including any operating leases, since this will influence ROCE

In addition to profit-based performance measures, investors may also use measures such as EPS, PE ratio. Information regarding the investors in Outil and their target ratios would be useful.

Wider non-financial performance measures for the divisions would also assist in comparing performance and assessing underlying causes of profitability.

Conclusion
The Homestyle division does appear to be underperforming relative to the other divisions currently. This division is the only one that relies exclusively on consumers and the performance may be a result of internal inefficiencies or a permanent decline in the DIY market. In deciding what to do with the division it is not just historic performance but also future prospects that are relevant. Therefore details of budgets/plans for the Homestyle division for 2016 onwards would be useful.

This requirement was well answered. The majority of candidates included an initial table (or an appendix) of data calculations, covering both the company and divisional performance. The weaker candidates failed to provide sufficient quantitative analysis, often restricting their answers to a discussion with a few percentage changes thrown in. Many answers did not use a report format for their answer despite being asked to do so.

The quality of the calculations varied; stronger candidates identified that, for a like-with-like comparison with 2014, Targi's results needed to be excluded from the overall company results for 2015. For comparability, they also provided divisional calculations on a per square metre or per employee basis. Weaker answers considered overall movements (including Targi's 2015 results) and/or provided calculations which ignored the differing sizes of the three divisions.

In terms of the qualitative analysis, weaker candidates who had performed more limited calculations had less to discuss and ended up repeating information already provided in the question, with little or no added value.

The stronger candidates commented on the fact that the revenue improvements in 2015 arose as a result of the acquisition of Targi and the 50 new Fixings stores, and used the differences in the store models and the target markets to explain the varied divisional performance.

Total possible marks	19
Maximum full marks	17

1.2 Homestyle division strategies

The managing director and the Fixings director both support focussing on the trade business and believe the group would be better off without the Homestyle division, favouring closure and sale respectively. The logic for this is to improve overall company performance, either by reducing costs or increasing return on assets by deploying resources to activities with a bigger return on capital.

On a basic level the Homestyle division is making £151 million positive contribution to group results and without it absolute profit would decrease significantly. The loss of the Homestyle division, which is contributing 49% of net assets and sales, and 41% of divisional contribution, would make Outil a much smaller company, albeit a more profitable one in terms of margins and ROCE. The fact that the company is smaller in terms of revenue, profits and net assets might affect its ability to raise finance.

The exact impact would also depend on the extent to which UK divisional sales are interdependent – if the Homestyle division is closed or sold, would customers buy from Fixings instead or would the Homestyle division customers who currently also buy from the Fixings division transfer their business elsewhere?

Other financial factors to consider are the extent to which central costs would be saved by closing or selling the division. The exit costs referred to by the managing director in terms of lease penalties and redundancies also need to be ascertained.

Sale of division vs Closure

Closure of the Homestyle division would necessitate change management, discussed in 1.3 below. However it would allow Outil to retain those Homestyle stores that are located in prime sites and creates an obvious opportunity to expand the Targi brand into the UK and to continue to open more Fixings stores. To some extent this will depend on how easy store sites are to come by and to what extent the existing Homestyle stores are located in areas where the company wants to operate.

If the change management issues and disruption arising as a result of restructuring are significant then a sale may be better and would obviously generate cash. However a key factor in the decision to sell would be whether there are any buyers and the price that they are willing to pay. This will depend on expectations of future prospects for the home improvement market. One possibility is that the managers of the division might be interested in a purchase, since according to the Homestyle division director the market is due to improve.

Retention of the division

The Homestyle director believes that the division has performed well in difficult circumstances and managed to survive when a near competitor has had to close. Whilst it is relatively not as profitable as the other divisions, it is at a different stage in the lifecycle and may be seen as a cash cow, making £151 million positive contribution.

A key consideration is whether the decline in the demand for DIY products from Homestyle consumers is a temporary or permanent situation. If the latter, then Outil may feel it is best to sell or close the division before the market declines even further. If the decline is temporary then a decision to close or sell the division may be premature.

Conclusion

Ultimately Outil needs to consider what is best for its shareholders. Outil's objective is to maximise the wealth of its shareholders, although as a listed company there may be a conflict between different groups of shareholders as to which direction the business should take.

One possible way to resolve the conflict is to consider demerging the Homestyle division so that shareholders can decide for themselves whether they wish to retain shares in it. A demerger is the opposite of a merger – the splitting up of a business into separate operating companies. Existing shareholders exchange shares in Outil plc for shares in the individual companies, but no cash is raised.

This requirement was reasonably well attempted. Most candidates used the comments from the directors to structure their answers regarding the future of the Homestyle division.

Weaker candidates tended to consider only two of the three options however and often failed to discuss the Homestyle director's proposal that the division should be kept going until the market improves. They also ignored the requirement to refer to their calculations in 1.1.

Stronger candidates used their analysis in 1.1 (as requested) to identify that the Homestyle division makes up a significant element of the group and that the group's performance might be significantly affected by any closure or sale. Many discussed the division's position in the industry lifecycle and considered the related issues of divisional interdependence and central costs.

Only a minority of candidates identified that Outil's board needs to consider what is best for its shareholders.

Total possible marks	11
Maximum full marks	10

1.3 Impact on two stakeholders of closure and strategies to reduce barriers to change

The nature of the change being proposed for the Homestyle division, which involves downsizing and redundancy, is transformational and likely to be met with resistance for a variety of stakeholder groups, (for example):

- Employees
- Customers
- Investors
- Suppliers

Mendelow's matrix could be used to assess the power and interest of the various stakeholders and to identify key stakeholders who are likely to cause problems by resisting the change. For example the Homestyle employees are likely to have high levels of interest and may have some power to disrupt the change, depending on the degree of unionisation.

Examiner Note: Discussion of two groups only was required. The obvious one, which most candidates chose to start with, was the employees.

Barriers to change	Impact	Strategies to reduce barriers
Employees		
Group inertia may block change where the changes are inconsistent with the norms of the teams/stores or where they threaten their interests	There may be strikes and other forms of resistance from the staff who are to be made redundant or transferred. Staff who are to remain may be demotivated by the loss of colleagues or the need to relocate/transfer stores.	Lewin Schein's iceberg model could be used here to assist with appropriate change management strategies. Unfreeze existing behaviour: • Identify those stores to close and those to re-brand. Unions and staff must be consulted and the case for change made clear.
Cultural barriers: Internally the new proposal put forward will result in fundamental changes to the structure and culture of Outil.	This will particularly affect the director of the Homestyle division and the store managers who may be reluctant to implement decisions that they perceive to be against their own interests.	• Make redundancy announcements. If staff are to be made redundant they may be motivated by reasonable redundancy terms, the provision of references and outplacement assistance, contingent on their co-operation

Power structures may be threatened by the re-distribution of resources and decision-making authority. There are also barriers which affect individuals and result in them seeing the change as a threat to earnings and job security.	This will not only affect employees of the stores that are closed but also those employees who are required to work in a re-branded store for a different division which may have different working practices	Move to the new structure: • Implement redundancies and provide appropriate exit support • Get retained staff on side and ready for the change. • Participation in the process may improve motivation Refreeze: Once the changes have been made, remaining staff will need support to adapt to the new business model. Examiner note: Alternatively Gemini's 4 Rs could have been used.
Customers		
Customers may block change where the changes are inconsistent with the norm or where they threaten their interests	Homestyle customers who also buy from the Fixings division may choose to transfer their business to competitors	Change management will need to focus on communication of which stores will close and which will be re-branded. Key trade customers will need to be reassured that as far as the Fixings division is concerned it is business as usual. Homestyle division customers will need to be encouraged to source supplies where possible from the Fixings division Outil will need to manage its reputation through the media by explaining how and why the decision has been taken
Investors		
Investors may block change where the changes are inconsistent with the norm or where they threaten their interests	Shareholders may consider selling shares as a result of the changes	Change management will need to focus on: • Identifying those stores which are to close and those which are to be re-branded • Announcing the change to market and other stakeholders • Managing investor relations Communication will be an essential part of the process: Shareholders will be interested in the impact on share price, profitability and dividends. Outil will need to provide reassurance regarding the state of their investment and how the strategy will benefit them. Outil will need to manage its reputation through the financial press and analysts by explaining how and why the decision has been taken.

Suppliers		
Suppliers may block change where the changes are inconsistent with the norm or where they threaten their interests	Suppliers may take legal action for breach of contract in the event of termination	Legal advice should be sought regarding contractual obligations with suppliers. Change management will need to focus on: • Communicating the change to suppliers • Managing supplier relations Communication will be an essential part of the process

This requirement was one of the best answered on the paper. The vast majority of candidates had no problem identifying two stakeholder groups that would be affected by the closure of the Homestyle division and were clearly well-versed in technical knowledge for the change management discussion. Marginal candidates tended to demonstrate one of the following weaknesses: ignoring the requirement to refer to change models, discussing the model(s) in generic terms without application to the scenario, or focussing their discussion on one stakeholder group only (usually the employees).

Total possible marks	9
Maximum full marks	8

1.4 Expansion of Fixings division: Merits of test marketing/opening trial stores

Test marketing involves a trial run of a product or concept before proceeding to a full launch.

Test marketing the plan to expand internationally would involve a trial of all aspects of the marketing mix in a limited area. It is designed to reduce risk and gather information about the likely success prior to a full roll-out.

The marketing strategy for the Fixings division may need to be modified for international business differences in language, culture and customs. There may also need to be obvious product modifications, such as voltage changes for power tools etc. This could be minimised by using overseas suppliers rather than shipping from the UK.

Determining the appropriate pricing strategy for the international market may need to take into account increased costs -- for example, shipping and export services. Fixings will need to assess competitor pricing. If the expansion is to be in Germany, Euro currency fluctuations will also need to be considered.

The test market selected should normally be small, self-contained and representative of the wider market.

Problems:

- Even the largest test market is not totally representative of the national market
- Although the main objective of test marketing is to reduce the amount of investment put at risk, it may still involve significant costs. If a major part of the investment has already been made the reduction in risk may be minimal, for example if the Fixings division has to develop an international website or create a large central depot to service a small number of test stores
- Test marketing may give competitors advance warning of Outil's intentions

Conclusion: If test marketing enables large parts of the investment costs relating to an international expansion strategy to be deferred until a reliable estimate of national sales can be made, then it is desirable.

Trial stores

Opening trial stores in Germany offers two important benefits. First, it provides Fixings division with an opportunity to test demand for its products under typical market conditions in order to obtain a measure of its sales performance. As well as enabling top management to make an accurate prediction of its potential national turnover, it may familiarise international customers with the Fixings brand.

Second, it provides an opportunity for management to identify and correct any weaknesses in the strategy or marketing plan before making the commitment to a national sales launch.

Questions to be considered are:

- Where to open the stores?
- How long a test?
- What are the success criteria?

The strategy requires a specific German website to be launched which will need to be tested by a local language and culture expert.

The stores will need a wide range of inventory and if there are only a handful of them, there may not be sufficient volumes for minimum order quantities to get best prices.

If the decision to open stores is taken, this can be done organically (which is how the Homestyle division has previously grown) by opening company-owned stores, or venturing overseas via licensing deals and joint-venture partnerships.

An alternative to opening trial stores would be to test the international demand for Fixings division products via an e-commerce site in the first instance. This would allow it to see which products sell. Goods could then be dispatched from UK or direct from German/European suppliers.(Outil already operate in Eastern Europe through Targi so may already have supply and distribution networks in place.)

Conclusion:
Expanding delivery via a website is likely to be a better way of testing the waters of the German market initially. If this is successful then trial stores could be opened.

This was the lowest scoring requirement in question 1, but still reasonably well answered. In general, candidates coped well with identifying the benefits of test-marketing prior to international expansion, although only the better candidates identified this as a risk management strategy. Stronger candidates then went on to consider the merits of the specific proposal to open up four trial stores in Germany. Weaker candidates tended to mix up both elements of the requirement in one discussion, often focussing on one part to the detriment of the other.

Total possible marks	9
Maximum full marks	8

Question 2

Total Marks: 33

General comments

This question was the best attempted overall but contained the highest and lowest scoring requirements of the paper.

The scenario relates to DPP Ltd, a food processing company based in the West of England. It buys potatoes form local farmers then peels, washes and processes them before selling them to various food manufacturers. Most of DPP's clients produce ready meals for the major supermarkets. Client contracts are typically renegotiated every three years, although terms change frequently.

DPP's raw material costs and selling prices are driven by the market price of potatoes, which fluctuates considerably, depending on the availability and quality of the annual crop. DPP acquires the majority of its potatoes from four local farms, with whom it has exclusive purchase agreements. The market-leader Estima plc is a vertically integrated business which grows its own potatoes and supplies raw and cooked potato ingredients to the catering industry and prepared food manufacturers.

DPP is considering two proposals to improve its profitability:
Proposal 1: a new contract with a famous national fast food chain to supply it with pre-prepared uncooked potatoes. To implement this strategy DPP would need to acquire a new machine to grade and cut the potatoes and rent a further 9,000 sq metres of premises. Working cost and revenue assumptions were provided.

Proposal 2: Reduce costs and increase revenue through better use of waste products which would also be positive from a sustainability point of view and help differentiate DPP from Estima.

Ethical issue: Potters Pies is one of DPP's major clients and manufactures pies for two supermarkets (Giant and Quality). Potters' contract with Giant will only be renewed if it lowers the price. Andrew Baxter, a director at Potter Pies, has asked DPP to drop the price it charges Potters for potatoes for the Giant contract by 5%. In exchange Potters is prepared to increase the price it pays for potatoes for the Quality contract by the same amount. Andrew intends to recover this cost increase from Quality by pretending that the price increase is due to a change to higher quality potatoes. He has intimated to DPP that if it goes along with his wishes, he will ensure Potters retains DPP as the preferred supplier rather than moving the business to Estima.

2.1 Porter's Five forces model is used to analyse the competitive environment within an industry. An analysis of the key forces can help DPP understand the factors which will affect its profitability

Barriers to entry:

Unless incumbents have strong and durable barriers to entry, profitable markets attract new entrants, which erodes profitability.

Barriers to entry in DPP's industry seem relatively high. They include:

- Economies of scale from large volume processing – evident from the fact that the ready meal manufacturers have decided to outsource and that Estima controls 30% of the market
- Investment required for capital intensive processing and specialised logistics (fresh food products)
- Existing players have three year contracts with the large ready-food manufacturers
- Heavily regulated industry with high compliance costs
- Existing firms may have access to suppliers of ingredients, possibly on favourable terms

Barriers are reduced by:

- Limited product differentiation and low switching costs
- Smaller entrants could avoid the need for expertise in the distribution of fresh products by outsourcing distribution

It appears that DPP is more likely to face competition from existing firms than new entrants. Local potato farmers may be too small to enter the market.

Power of suppliers:
A key issue is the availability and quality of potatoes. The price is driven by market factors so one individual supplier is unlikely to be able to drive up the price. Limited product differentiation and low switching costs also reduce supplier power. Suppliers are likely to have more power when potato harvests are poor and supplies are limited.

DPP's workforce are also a supplier but the work is probably relatively unskilled and there is likely to be a plentiful supply of workers so individually they will have low power.

DPP has exclusive contracts with four local farms which will help guarantee supply. To the extent that the farms rely on DPP for income, DPP may be in a stronger bargaining position than the suppliers. It has a weekly-paid workforce on the minimum wage and there is no indication of labour supply issues.

Power of customers
The power of customers is driven by the number of buyers in the market and the cost to the buyer of switching from one supplier to another. It is likely to be high.

If there are a few powerful ready-meal manufacturers, they will be able to dictate terms. Here the power of the buyers' buyers is also relevant. Since ready-meal manufacturers supply to large retailers their margins are likely to be low and this will influence the amount they are prepared to pay for processed potatoes. Contracts are also renewed regularly and there is little to differentiate the product.

DPP is dependent on a small number of key customers and its customers are themselves very dependent on the large retailers who have high power, as evidenced by the example of Giant and Potters Pies. This is also reflected in the fact that DPP's contracts are renegotiated every three years and contract terms tend to change frequently.

Candidates were well-prepared to discuss three of Porter's five forces and this was the highest scoring element of the paper. The best candidates discussed the model as it applies to the potato processing industry, summarised the strength of each force in the industry and then recognised the impact this would have on DPP. Weaker candidates tended to confuse the industry and company discussion.

Total possible marks	9
Maximum full marks	9

2.2 Evaluation of fast food contract

Appendix of possible calculations

Potato prices: EV calculation

Year 1 price = £125

Year 2 price: (0.40 * £125)+ (0.60*£160) = £146

Year 3 price: 0.40 * [(0.45*£115)+(0.55*£135)] + 0.60 * [(0.65*£150)+(0.35*£170)] = £144.60

Annual profits from contract

		Year 1 **£**	**Year 2** **£**	**Year 3** **£**	**Total** **£**
Revenue	9,000 * £210	1,890,000	1,890,000	1,890,000	5,670,000
Potatoes	9,000 @ £125/£146/£144.60	1,125,000	1,314,000	1,301,400	3,740,400
Labour and other VC	9,000 @ £65	585,000	585,000	585,000	1,755,000
Contribution	9000 @ £20/(/£1)/(£0.40)	180,000	(9,000)	3,600	174,600
Other operating costs		25,000	25,000	25,000	75,000
Profit		155,000	-34,000	-21,400	99,600

Examiner note: A range of different approaches could be used to determine profitability

Alternative calculation of contract profitability:

Costs	**Workings**	**£**
Labour and other VC	9,000 @ £65 = £585,000pa x 3	1,755,000
Operating costs	25,000 pa x 3	75,000
		1,830,000
Potatoes	Year 1: 9,000 @ £125	1,125,000
	Year 2: 9,000 @ £146	1,314,000
	Year 3: 9,000 @ £144.60	1,301,400
Total costs		5,570,400
Total revenue	27,000 * £210	5,670,000
Expected profit		99,600

Sensitivity to price of potatoes:

The annual revenue of £1,890,000 less labour and increased operating costs of £610,000 generates £1,280,000 per annum to cover the costs of purchasing 9,000 tonnes potatoes.

This amounts to £142.20 per tonne.

Anything paid above this price will be loss-making for DPP.

The EV is a long –term average and in fact the purchase price of potatoes will vary from £115 to £170 per tonne.

The profitability at different purchase prices can be considered:

Price	**115 £**	**125**	**135**	**150**	**160**	**170**
Net revenue	1,280,000	1,280,000	1,280,000	1,280,000	1,280,000	1,280,000
Cost of Potatoes	1,035,000	1,125,000	1,215,000	1,350,000	1,440,000	1,530,000
Profit/loss	245,000	155,000	65,000	-70,000	-160,000	-250,000

Evaluation

At the proposed fixed price of £210 per tonne for the three year contract, DPP will make an additional £99,600 of operating profit overall, so on the face of it the contract is financially viable. However this is an operating margin of only 1.8% (99,600/5,670,000), which is less than the current margin (352k/10.8m = 3.3%). Also the profit is not spread evenly.

The key issue affecting profitability is the price that DPP is going to have to pay for potatoes.
On the basis of the agreed price of £125 for year 1 of the contract, there will be a profit in year 1 of £155,000. However based on the expected value calculations, the contract will make losses of £34,000 and £21,400 in the subsequent two years.

Potato prices are dependent on crops planted and harvested and market supply. It is not clear how accurate or reliable the price forecasts are. The average price used in the contract profitability calculation will not actually apply. There is a 40% chance that the actual price in year 2 is £125 and DPP will make a further £155,000 profit. However it is more likely (p=0.6) that the price will be £160, and the actual loss will be £160k.

The maximum that DPP can afford to pay for potatoes is £142.20 per tonne (see sensitivity working). Thus in year three the contract will be profitable if purchase prices are £115 or £135 and loss making at £150 or £170.

Other factors to consider:

(a) Are all the additional costs of the machine and premises space reflected in the £25,000 incremental fixed costs?
(b) If DPP turns the contract down, will it go to a competitor?
(c) If the fast food chain does not renew the contract after three years will DPP be able to use the machine and the additional warehouse space it has rented?
(d) Is there scope to add a clause to the contract for variation in prices depending on the market conditions?
(e) Can DPP pass the risk on to their suppliers by agreeing three year supply prices now?

Conclusion: further research should be undertaken before a final decision to go ahead is taken.

Answers to this requirement, which produced the lowest scores on the paper, were polarised. The weakest answers either concentrated on a numerical analysis of the proposed fast-food contract but provided no discussion, or simply produced a qualitative discussion with no supporting calculations.

The better candidates produced more balanced answers and showed good knowledge of expected values and conditional probabilities, scoring full marks on the calculations. Weaker candidates were unsure how to calculate an expected price in year 3, often averaging the numbers rather than applying the conditional probabilities. They also made errors on the fixed overheads, including the absorbed overheads as well as the incremental element.

Total possible marks	12
Maximum full marks	10

2.3

Sustainability involves using natural resources in a way that does not lead to their decline. The Bruntland definition is: “meeting the needs of the present without compromising the ability of future generations to meet their own needs.” In a wider context sustainability does not just address environmental issues but also economic and social sustainability, so would encompass long-term financial stability, working conditions and fair treatment of suppliers, among other things.

It is not really clear whether the motivation for DPP’s proposed use of waste products is primarily commercial (reduced costs and increased revenues) or based on wanting to adopt a more sustainable approach to business. Certainly the conversion of potato peelings to power will reduce DPP’s consumption of energy resources. The sale of starch residue is likely to generate additional revenue at relatively low cost. Whether it will be a net benefit to the environment will depend on how the residue is currently disposed of. Irrespective of environmental sustainability, the diversification of earnings streams and the ability to generate additional revenue will make DPP’s business more financially sustainable.

Benefits of proposed strategy:

- In the long-run the use of waste as an energy source will reduce costs
- Sale of potato peelings for cattle food will generate additional revenue
- Accreditation for its sustainable approach may enhance DPP’s reputation
- It may attract new environmentally conscious customers
- Large retailers who place emphasis on CSR may insist on suppliers adopting sustainable practices and this may help DPP win contracts.

Costs of implementing a sustainability strategy:

- Additional fixed costs associated with installing the digester

Overall the strategy would appear to be commercially viable and may help increase DPP’s environmental and financial sustainability.

Other possible sustainability contributions could come from:

- Increasing the proportion of more modern, fuel efficient vehicles through a regular replacement programme
- Use of cleaner high grade diesel fuel even if this is more expensive
- Improved vehicle utilisation to reduce the number of empty load journeys which waste fuel
- Better refrigeration/chilling processes to reduce emissions
- Ensuring that health and safety is maintained at the highest standards
- Promoting diversity and equal opportunity and providing fair pay and benefits for all workers
- Working in partnership with suppliers, making sure suppliers are treated fairly and that contract terms are transparent and fair to both parties

Most candidates were well prepared for a sustainability discussion, although a surprising number still seem to believe this is limited to environmental aspects. Whilst this did gain credit, weaker students who adopted this approach restricted the marks available to them. Better answers identified the financial and environmental benefits of the proposals for waste management and considered a range of alternative proposals to improve sustainability in all three areas (economic, environmental and social).

Total possible marks	7
Maximum full marks	7

2.4 Ethical issues

Ethics pertains to whether a particular behaviour is deemed acceptable in the context under consideration. In short, it is ‘doing the right thing’.

In making any ethical evaluation it is first necessary to establish the facts. In this case, it would seem that the facts are reasonably clear: Potters is asking DPP to drop its price on one contract (Giant) but is prepared in return to pay more on another contract (Quality). A key question here is whether there is an ethical issue at all or whether this could be deemed to be a normal part of price negotiations in the ordinary course of business.

Andrew’s proposal implies a lack of personal ethics on his part, both in relation to his willingness to mislead Quality and also given the implied threat in respect of DPP’s contract with Potters. This may be symptomatic of a wider cultural issue within Potters. Alternatively it may be that Andrew is simply passing on the pressure that Potters has come under from Giant and reflects Andrew’s desperation to retain a prestigious contract.

The issue of legality needs to be considered and legal advice taken. Andrew has not promised any direct financial incentive but has offered the inducement of a guaranteed contract renewal which might be considered a bribe.

In making a decision as to how to proceed, it is helpful to apply the Institute of Business Ethics three tests:

- Transparency
- Effect
- Fairness

Transparency - would DPP mind people (other customers, suppliers, employees) knowing that it has agreed to this transaction? In the first instance, there appears to be a degree of transparency between DPP and Potters but the same cannot be said in relation to Potters’ retail customers. In particular Potters intends to deliberately mislead Quality regarding the price increase.

Effect – whom does the decision affect or hurt? To an extent the impact on Giant is positive since they win by renewing their contract with Potters at a lower price. However this is at Quality’s expense. If the contract volumes are the same, DPP will be no worse off financially. However DPP might be accused of colluding with Potters to procure a contract and this may be deemed unfair to other ready-meal manufacturers who are also tendering.

Fairness – would the action be considered fair by those affected? It is likely that competitors and Quality would not take kindly to the fact that DPP has acted with Potters to knowingly deceive them and misrepresent its product as having improved in quality.

Honesty
A final issue is one of honesty. The inducements may fail the honesty test as they are not earned, authorised or disclosed by, or on behalf of, the giver or the recipient.

Actions

DPP should be guided by any legal advice

Whilst DPP may benefit initially by agreeing to Andrew's request, it would suffer reputational damage if the transaction came to light. Having succumbed once to the implicit threats from Potters, DPP may in future come under more pressure from Potters, in return for its silence. The best action would be for DPP to act honestly and therefore not agree to Andrew's request, which is asking the company to turn a blind eye to dishonesty. DPP might also consider whether it needs to raise the issue of Andrew's behaviour with Potters' directors.

The ethics requirement was very well attempted. The vast majority of candidates now acknowledge the need for a balanced discussion which addresses any legal as well as ethical issues and uses appropriate ethical language. Weaker candidates are still tending to limit their analysis to a discussion of transparency, effect and fairness. Better candidates went beyond this to consider Andrew's thinly disguised intimidation threat and to question whether DPP would be demonstrating integrity and honesty by colluding with Andrew's proposed deception. It was encouraging to see that most candidates went on to propose some appropriate next steps to resolve the issue, which was expected for maximum marks.

Total possible marks	8
Maximum full marks	7

Question 3

Total Marks: 24

General comments
This question was reasonably well attempted.

The scenario in this question is about the not-for-profit Zed museum based in Italy. It hosts a very fine collection of sculptures and modern art and is a popular destination for locals and tourists.

After the death of its wealthy founder, Emilio Zed, the museum is experiencing a financial crisis and its future is under threat. The Zed museum has a sizeable collection, only a fraction of which is on display at any one time. However despite its valuable asset base, the assets are not liquid and cannot be sold to pay current expenses. Most of the items in the collection were given to the museum to hold, conserve, and use in exhibitions or programmes for future generations.

A new chief executive has been appointed by the trustees to address the situation and attract a wider audience and additional revenue streams. She is keen to operate the museum on a more commercial basis and exploit the museum's asset base by licensing the museum's brand and collection to a wealthy businessman, Kazuo Tada. He wants to operate a Zed museum on a Japanese island that he is developing as an exclusive cultural tourist attraction.

Some of the trustees have argued that the licensing deal is not appropriate for a world-class museum. They also argue that the proposed expansion strategy is contrary to the Museum's founding principles. The chief executive is also evaluating how best to measure the museum's success. Historically performance has simply been evaluated by measuring the number of visitors.

3.1 Stakeholders

As a NFP organisation, Zed is likely to have multiple stakeholders with a range of different interests and potentially conflicting goals. A challenge is to integrate the interests of the museum's internal stakeholders (trustees, volunteers, staff) and external stakeholders (donors, visitors, community, government donors) to allow the museum to achieve financial sustainability, make efficient use of its resources, and fulfil its educational role and public interest remit.

Stakeholders can be analysed using Mendelow's power and influence matrix:

Trustees: have significant power and influence over the day-to-day running of Zed. They may be interested in status/reputation/external recognition. They will also be concerned about the possibility of being found liable for losses if the museum is insolvent. Some trustees may have a network of contacts to assist Zed with funding/expertise or access to new collections/donations.
Trustees are key stakeholders and it is important that they are kept on board as they may attempt to block changes to the status quo, such as the proposed licensing strategy.

Donors: may be interested in the proper use of their funds/artefacts. They may seek recognition or confidentiality. Overall their interest in the museum is probably medium-high. Their power may depend on the size/value of any donation and the donor's ability to raise the profile of the museum or their connections in the art world.
Given the current financial crisis, retention of existing donors or attraction of new ones is critical to the survival of the museum.

Staff: Paid staff will be interested in job satisfaction, pay and security, although volunteers may be doing the job for the love of art and the learning and experience it brings. Power and influence are based on the museum's need for their resources and the availability of labour, but it could be argued that staff are likely to have little power as individuals. However it would be easy for volunteers to withdraw their labour in disgust, since they have nothing to lose as they are not reliant on the museum for income. This could cause the museum problems, depending on the extent to which it relies on volunteer labour rather than paid staff. As a result the level of power is difficult to identify fully.

As the staff are likely to be stakeholders with high interest but possibly medium power, the key here is communication so they feel informed and involved in the museum's future.

Most candidates considered the interest and influence of the three stakeholder groups identified. Better candidates used their knowledge of Mendelow to draw this together and analyse the relative importance of each group and the impact of their relationship with the museum in light of the current scenario.

Total possible marks Maximum full marks	9 9

3.2 Desirability of licensing

Advantages

- The museum is in financial crisis and licence fees would offer it a quick, new source of revenue which could ensure survival
- The assets cannot be sold and there is insufficient room to display them all so this ensures they are generating value for Zed
- Licensing increases awareness and knowledge of the museum and raises its profile/reputation.
- Expansion risk is shared with the licensee.
- This strategy allows more people to share in/enjoy the donated items
- It increases the opportunities for learning and education due to wider reach and is consistent with Zed's constitution to "encourage visitors to explore collections for inspiration, learning and enjoyment "

Disadvantages

- Licensees may have their own agendas and the museum may suffer as a result of their self-interest
- Zed may lose control of its collections which goes against its constitution to safeguard the long-term public interest in the collections
- There may be conditions regarding the use of the building and the collections – restrictive legacies may prohibit them leaving the museum or specify they are for the benefit of Italian citizens only
- The licensed museum's staff may not have suitable experience/expertise
- Zed may be accused of allowing commercial objectives to override its constitution and licensing may not be deemed ethical for a NFP organisation
- Licensing may create financial ties with foreign governments/nationals that restrict the museum's independence

Specific issues relating to the Japanese museum:

- There may be disparity between the cultural priorities of Italian Zed and the Japanese billionaire.
- The sizeable donation may compromise Zed's independence
- Will there be a demand for imported Italian culture on the Japanese island?
- There will be significant costs and logistics of transporting collections and ensuring their safety/security/conditions
- There may be significant language and cultural differences

Conclusion

It is not unusual for museums and art galleries to share objects and exhibitions and to put collections on loan. Some other international museums have embarked on licence strategies to strengthen their global brand.

Zed's founding principles require it to "recognise the interests of people who made, owned, collected or donated items in the collections " and to "consult and involve the local community, users and supporters" and it should engage with these people before making a final decision.

Clearly some action is required since the museum is in imminent danger of insolvency. In addition to licensing, other strategies may be available to raise revenue eg increase admission fees, charge for special exhibitions, sell merchandise online.

The approach required here was a consideration of the benefits for Zed of a licensing strategy in general, together with the specifics of the Japanese proposal. Many candidates mixed up the two elements under one discussion of advantages and disadvantages. Whilst this approach usually scored acceptable marks, those who first considered whether licensing was a sensible option for the museum before considering some of the issues associated with the particular Japanese option tended to make a more diverse range of points. The better candidates recognised that, given the museum's financial crisis, imminent action was required.

Total possible marks	9
Maximum full marks	8

3.3 Approach to performance measurement

Currently Zed is looking at performance from a very narrow angle: the number of people through its doors. One of its founding principles is to "review performance to innovate and improve". To fulfil this Zed needs a wider system of performance measurement and, given its NFP status, this needs to take into account both financial and non-financial aspects. An effective system of performance measurement will demonstrate to external stakeholders that the museum's founding principles and objectives are being met and show Zed's stewardship of its assets: its collections, intellectual capital, and brand.

Given the broad range of stakeholders, a balanced scorecard approach may be relevant. This highlights four perspectives: financial, customer, internal business processes, and innovation and learning. The trustees should identify critical success factors – the areas that are vital for the museum to be a long-term sustainable organisation – and these should guide the choice of KPIs and the setting of targets within each area.

Financial

It is difficult to assign monetary value to art/culture and many of the traditional financial measures of performance (eg ROCE, profit margin) will not apply here. However given the financial crisis that Zed finds itself in, the financial perspective is vitally important. To remain viable the museum may have to manage its costs more closely. It could consider the 3Es commonly used in the public sector: Economy, Efficiency and Effectiveness. These will help assess whether the museum's resources have ben put to good use to add value to society.

Appropriate financial KPIs might include:

- Admission fees received
- Grant income received
- Average value of financial donations
- Average value of exhibits donated
- Sales of merchandise
- % of budget spent on marketing
- Licence fees received
- Ratio of income to operating costs
- Revenue generated from café
- Cost of restorations undertaken
- Cost of fund-raising activities

Customer

This is the only area currently being monitored. However Zed needs to know what its users feel about the museum and its exhibitions. They may be seeking education and/or entertainment.

Appropriate KPIs might include
- Monthly attendance figures
- % of return visitors
- Number of first-time visitors
- Average score in visitor satisfaction ratings
- Mix of visitors - local: tourists
- % of time museum open to visitors

Internal business processes
This considers how Zed goes about delivering its services and the impact this has on its effectiveness.

Appropriate KPIs might include

- % of total collection on display
- Number of new pieces acquired in the year
- % of income spent on admin rather than collections and activities
- Ratio of paid staff: volunteers
- Ratio of staff: visitors
- Number of damaged artefacts

Learning and development:
The museum should be a place of personal growth for both its staff and its visitors and it also wants to play a role in encouraging learning on the part of the visitors to the museum.

Appropriate KPIs might include

- No. of articles published by museum staff in journals
- No. of institutions to which museum has lent items
- % of budget spent on staff training
- Staff turnover/absenteeism
- No. of new collections/exhibitions acquired
- No. of visits by schools/colleges

Answers to the performance measurement requirement were sometimes disappointing. Poorer efforts tended to ignore the request to recommend a suitable approach to performance measurement and simply provided a list of KPIs. Stronger candidates discussed the need to extend the current and very narrow approach to measuring performance (visitor numbers). A number of options were acceptable here in the context of a NFP experiencing financial difficulties and included balanced scorecard, the 3 Es or consideration of a range of financial and non-financial measures. The weakest candidates still appear to be confused about the difference between CSFs/goals and KPIs which are measures of the extent to which these goals have been achieved.

Total possible marks	8
Maximum full marks	7