MARK PLAN AND EXAMINER'S COMMENTARY

The mark plan set out below is that used to mark these questions. Markers are encouraged to use discretion and to award partial marks where a point was either not explained fully or made by implication. More marks are available than could be awarded for each requirement. This allows credit to be given for a variety of valid points which are made by candidates. The answers provided are more comprehensive than would be possible in the time available for candidates. They have been prepared to accommodate a wide range of possible answers and interpretations by candidates.

Question 1 – Fullerton Office Furniture Ltd

General comments

This is the mini case and also the main data analysis question.

The scenario in this question is a manufacturer of office furniture which it sells through two segments to UK businesses and schools. It has a single factory, with administrative offices, in Birmingham.

The two segments – Business and Schools – operate as separate divisions, serving different markets. Schools Segment furniture differs from Business Segment furniture in style and quality, so they are made on separate production lines. The Schools Segment's only customer is the Birmingham local education authority (LEA).

Wood is imported into the port of Liverpool and is then transported by road to the FOF factory.

FOF has been negotiating to renew the lease for the Birmingham premises, which expires at the end of the year. An alternative is to relocate the factory to Liverpool. A move to Liverpool would enable new design technology to be acquired. It would comprise an upgrade of the existing website plus an additional feature which would allow Business Segment customers to design their office layout and plan their furniture installations online.

An ethical issue has arisen where the CEO of a rival company had been providing free tickets for major sports events to the LEA's chief procurement officer (Jayne). The FOF Schools Segment Head (Trevor) questioned Jayne about this issue during a business lunch. She refused to answer his questions and said she would report him to her line manager for attempting to intimidate her.

	FOF - business 2017	FOF - business 2016	FOF schools 2017	FOF schools 2016	% change Business	% change Schools
Number of items sold	79,200	72,000	16,000	19,200	10.0%	-16.7%
Price per item (net of discounts)	£98	£100	£50	£50	-2.0%	0.0%
VC per item	£44	£40	£15	£16	10.0%	-6.3%
Distribution costs outward per item	£8	£8	£1	£1	0.0%	0.0%
Commission per item	£2.45					
Contribution per item	£43.55	£52	£34	£33	-16.3%	3.0%
	£	£	£	£		
Returns inwards	2,000	2,000	10,000	1,000	0.0%	900.0%
Sales	7,761,600	7,200,000	800,000	960,000	7.8%	-16.7%
Fixed production costs	3,000,000	2,800,000	240,000	240,000	7.1%	0.0%
Variable production costs	3,484,800	2,880,000	240,000	307,200	21.0%	-21.9%
Sales staff commissions	194,040	-	-	-		
Returns inward	2,000	2,000	10,000	1,000	0.0%	900%

Administration	250,000	250,000	100,000	100,000	0.0%	0.0%
Distribution						
- fixed	6,000	6,000	6,000	6,000	0.0%	0.0%
- variable	633,600	576,000	16,000	19,200	10.0%	-16.7%
Operating profit	**191,160**	**686,000**	**188,000**	**286,600**	-72.1%	-34.4%

Note: Items in red are taken directly from the question and are reproduced to show workings. No marks are available for items in red.

	FOF - business 2017	**FOF - business 2016**	**FOF schools 2017**	**FOF schools 2016**	**% change Business**	**% change Schools**
Number of schools			125	150		-16.7%
Number of customers	300	320			-6.3%	
Number of items sold	79,200	72,000	16,000	19,200	10.0%	-16.7%
Number of new customers	12	18			-33.3%	
Sales to new customers	£480,000	£756,000			-36.5%	
Operating margin	2.5%	9.5%	23.5%	29.9%		
Sales per school			£6,400	£6,400		0.0%
Sales per customer	£25,872	£22,500			15.0%	
Sales per new customer	£40,000	£42,000			-4.8%	
Sales per existing customer	£25,283	£21,338			18.5%	
Commissions	2.5%					
Discounts	2.0%					
Sales (net of commissions)	£7,567,560	£7,200,000				

Analysis

The causes for the change in operating profit need be analysed between the two segments as different causal factors apply in each case.

<u>Business Segment</u>

<u>Revenue</u>

In 2017, there have been price and quantity changes impacting on revenue. The working assumption is that "Sales revenue and sales volumes in the Business Segment would have been the same in 2017 as in 2016 if the new policy of offering sales discounts to customers and commissions to sales staff had not been introduced". The changes in revenue can therefore be isolated to these two factors.

The average selling price has been reduced from £100 to £98. This means that an average discount has been given of 2% compared to last year, which is a significant proportion of the maximum permitted discount of 5%.

Average revenue per item, net of commissions (average £2.45 per item) and discounts, has therefore decreased from £100 to £95.55 (100 – 2 – 2.45), a decrease of 4.45%.

On the positive side, sales volume has increased by 10% which, given the working assumption, is because of the new discounting and sales commission policy. The causal factors are that lower prices on a selective basis make the furniture more competitive, enabling more to be sold. The commissions mean the sales staff are better incentivised to make more sales.

The sales in 2016 can therefore be reconciled with the sales (net of commissions) in 2017 as follows:

£7,200,000 x 1.1 x 0.9555 = £7,567,560

This is a net revenue gain of £367,560, which is 5.1% growth. This demonstrates that demand is price elastic.

The wider industry picture should also be considered in assessing the revenue growth. FOF is one of the larger companies in the industry, so it has some economies of scale and protection against smaller new entrants. However, while industry sales are estimated to grow at about 3% in 2017, the working assumption is more modest at zero growth. Using the industry as a benchmark to judge performance, rather than FOF 2016 figures, the changes are less encouraging.

Costs and contribution

While revenues have increased, there has also been an increase in costs.

Total variable costs have clearly needed to rise as volumes produced have increased by 10%. The assumption is that they would move in a linear fashion in relation to volume. This includes variable production costs and distribution costs outward.

In addition to volume related changes, there have also been changes in variable production costs per unit from £40 to £44 (10%). The increases in these costs could be due to the volume changes (eg additional overtime costs to make the additional units or capacity problems reducing efficiency) or they could be due to factors independent of volume changes, such as changes in sales mix or production inefficiencies.

Assuming they are due to independent factors, then the change in contribution due to discounting and commissions (ie using 2016 unit costs) is:

2017: 79,200 x (£95.55 – 40 – 8) = £3,765,960
2016: 72,000 x (£100 – 40 – 8) = £3,744,000

There has therefore been a marginal improvement in contribution of £21,960 (0.6%) based on these assumptions.

However, this is a best-case scenario. As already noted, some of the increase in variable production cost per unit may have been due to increased production volumes.

In addition, fixed production costs have increased by £200,000 (7.1%). This may have been due to these costs being a stepped function, where a significant increase in volume has caused increases in fixed costs. Specific reasons would need to be investigated.

Overall, a commission based on sales, rather than on contribution, may not provide the best incentives, as sales staff may give discounts too readily to secure a sale and focus on products with the highest price, rather than the highest contribution.

There has been a reduction in the number of new customers. This is important for future growth but it may be that sales staff are more incentivised to sell to existing customers for current sales rather than attempt to establish long term relationships for future sales, where they may not benefit personally from commissions, as they would in the short term.

Similarly, the total number of customers has fallen, which may be because sales staff are focussing on the larger customers. The fact that sales per customer have increased by 15% may provide some support for this proposition.

Overall, the Business Segment operating profit has decreased significantly (by 72.1%) from £686,000 to £191,160. This can be reconciled as follows:

	£
2016 operating profit	**686,000**
Increased contribution from discounts and commissions	21,960
Change in fixed production costs	(200,000)
Change in variable cost per unit (£4 x 79,200)	(316,800)
2017 operating profit	**191,160**

Conclusion – key drivers

Overall, there has been a significant decline in the operating profit of the Business Segment despite expanding industry sales. The key drivers affecting operating profit have, however, been related not to revenues and sales, but rather to the increase in variable production cost per unit and the increase in total fixed production costs.

Schools Segment

Revenue

The schools segment operates in a well-defined, finite, local geographical market. The size of the market has reduced given the reductions in the local authority's budget.

Market share in this sector is a key issue, where one competitor, EE, is dominating the market. However, while EE is larger in this market, it is smaller than FOF overall, as it has no business customers outside this market.

A summary of changes in market participants in terms of the number of schools supplied is provided below:

	2017	**2016**	**% change**
FOF	125	150	(16.7%)
EE	263	254	3.5%
Other	87	71	22.5%
Total	475	475	

Both the number of school orders and the volume of sales of the Schools Segment have decreased by 16.7%. The volume of sales per school is therefore constant.

The selling price is constant at £50 per item so this is not a key driver of change in operating profit. However, in an environment of reduced local authority expenditure, maintaining selling price at the 2016 level is evidence of good performance.

The key driver of the change in total revenue therefore appears to be the number of schools to which sales are made, which in turn depends on the number of tenders won.

The reduction in tenders of 16.7% in one year is significant and causal factors need to be identified.

The most obvious causal factor is the reduction in FOF's furniture quality based on the number of faults and returns inwards. This has damaged FOF's reputation in this market (it may also have affected Business Segment sales as the two segments use the same brand name).

A further factor could be increased competition in the sector. It appears that, of the 25 school customers lost from 2016, 9 have gone to EE and 16 to other smaller manufacturers.

In this respect the rumour that EE has been providing inducements to Jayne to win new tenders from FOF is not strongly supported by the data as EE has only won 9 of the 25 schools lost by FOF (see below).

The personal issue between Jayne and Trevor (see ethical issue below in section 1.4) seems unlikely to be a major factor as this did not take place until towards the end of 2017.

Costs and contribution

Variable production costs have fallen by £1 per unit sold from £16 in 2016 to £15 in 2017 (6.3%). Based on the information provided this, in part at least, seems due to the reduction in the costs and quality of wood as a raw material. Whilst generating a total £16,000 cost saving, it also seems likely to have caused adverse financial effects, being:

- increased cost of returns inward
- reduced sales volumes

There is also likely to be a longer term reputation effect.

While it may be inappropriate to attribute the whole of the volume change to the decision to source low-cost, low-quality wood, it is credible that this is a key driver of the fall in sales volume.

Overall, the Schools Segment operating profit has decreased significantly (by 34.4%) from £286,600 to £188,000. This can be reconciled as:

	£
2016 operating profit	**286,600**
Sales volumes (lost contribution)	
3,200 (£ 50 -16 - 1)	(105,600)
Variable cost saved per unit	
16,000 x £1	16,000
Returns inwards	(9,000)
2017 operating profit	**188,000**

This analysis demonstrates that the cost saving from lower costs of wood is largely offset by the increased cost of returns inwards, leaving a net saving of only £7,000 (£16,000 - £9,000).

Also, even if the lower quality wood is only one driver in causing sales volumes to fall then £7,000 is only a small proportion of the lost contribution from the reduction in sales volumes of £105,600. Given there is also likely to be non-financial reputational long-term damage, the reduced cost of wood from the new source appears likely to have adversely affected short-term performance and will impact long-term performance.

Conclusion – key drivers

The key driver of the change in operating profit in the Schools Segment is the decrease in sales volume.

Examiner's comments

This requirement was reasonably well answered on the whole. Most candidates provided a well-structured table with columns for data analysis, focusing on changes between years and by segment.

However, in many cases the analysis focused exclusively on headline percentage changes between periods, plus operating profit margin and per item/per customer/per school ratios. Far less common was any deeper analysis such as the effects of volume, discounts, commissions or costs. Similarly, many candidates did not identify the key drivers of change in profits in either segment.

The weakest candidates did not produce a data table and instead tended to weave some numbers into their narrative. They tended to lose marks by failing to present the data systematically, thereby failing to identify data patterns which would have revealed important issues facing the firm.

The discussion was generally reasonable in most cases, providing reasons for the data trends and suggesting causal relationships. Weaker candidates merely asserted whether the numbers had increased or decreased, which is not sufficient.

Most candidates used sensible sub-headings for the discussion, separately analysing each segment, but weaker candidates merged their analysis of the two segments.

1.2

The key factors relating to the choice of premises include:

- Cost
- Lease term
- Location (for logistics of inward and outward distribution)
- Size
- Transition and relocation

Cost

It is clear that, based on the figures presented, the direct rental cost is significantly greater for the existing factory under the proposed new leasing agreement (£360,000) than for the prospective Liverpool factory (£260,000). While both rentals are greater than the current rental, this is of no direct relevance to the decision for the selection of future premises.

In absolute terms, the difference is substantial at £100,000 which is 26% of the operating profit of £379,160 for 2017. The issue is therefore important in financial terms. It is however possible that these costs are negotiating positions and will change during the process of making a final agreement.

The above costs only relate to direct costs. FOF currently spends £12,000 a year on inward distribution costs of wood from Liverpool to Birmingham. It the factory moves to Liverpool then this cost is likely to be minimal. This would give a cost saving of around £12,000.

However, there are likely to be additional costs associated with outward distribution for both the Business Segment and the Schools Segment. In particular, all the Schools Segment sales are local to the current factory in Birmingham, hence the distribution cost of only £1 per item. This is likely to increase significantly if FOF is to be based in Liverpool.

The Business Segment case is less clear, as its customers are throughout the UK. Whilst Birmingham is central to the UK this does not mean it is central to the dispersion of FOF's business customers. An assessment of the logistics would need to be made to determine the difference in distribution costs.

Other non-financial distribution factors are considered below.

Lease term

The leaseholder for the Birmingham premises is requiring a 10-year commitment while the Liverpool leaseholder requires only 5 years. The 10-year commitment has greater risks if the scale, nature or existence of the FOF business were to change. Possible methods to mitigate risks could include: break clauses; the ability to sub-let; and the nature of rent reviews.

Overall, the five-year lease would appear to be a lower risk choice, particularly as the sales volumes have changed in 2017, and may change further in future.

Location for distribution logistics

Aside from the costs of distribution, there is an impact on the logistics of the upstream and downstream supply chain.

While the Liverpool location is important for the import of wood, this occurs only once per month and, if suitable levels of inventories are held, the location near the port does not appear to be a major advantage.

Much more frequent and significant is outward distribution, where there are many more orders. Lead times to customers and the ability to service customers efficiently are therefore key factors. This needs to be assessed for Business Segment customers, but the Schools Segment very clearly has a major advantage from its current Birmingham location, compared with Liverpool, in terms of logistics and speed of delivery.

Aside from the physical delivery of goods, the building of relationships with schools and the local authority and the negotiation of contracts are facilitated by the Birmingham office premises location.

Size

The Liverpool factory is larger than the Birmingham factory. This may facilitate the new design and production systems (see section 1.3 below). Even if this does not take place, there could be other uses of the additional space, such as increasing production capacity or furniture storage for customers.

Transition and relocation

A key factor is the transition to the new factory. Much of this will be temporary disruption from moving equipment and other facilities. This will have a financial cost and may disrupt production activities for a short period.

The main issue however is relocating employees. Many employees may not want to relocate to Liverpool and there may be the loss of some key staff as a result of the move. Legal advice will need to be taken in respect of employment law regarding the level of required financial compensation for those employees not willing to relocate.

Even those employees who do move may be unhappy at doing so and there could be a demotivating effect. Relocation costs would need to be paid to these employees.

Consultation with employees will be needed and an assessment made of their resistance to any relocation. The ability to employ new staff with the right skills in Liverpool will need to be assessed.

Conclusion

The new premises may of themselves have a lower direct cost than the current premises and better meet the needs of FOF, but the change in location is likely to disrupt the logistics of distribution and cause some problems in the longer term.

In the shorter term, in the transitional period the disruption and demotivation of staff are likely to be major factors. Further information is needed but the possibility of an alternative facility may persuade the Birmingham leaseholder to reduce the rent from the level being requested in negotiations.

Examiner's comments

Generally, this requirement was answered well, with better answers identifying and discussing the key differences between the two locations. Weaker candidates generally spent too much time on the change management and staff movement issues and failed to give a good all-round assessment of the key factors such as supply chain management, cost, lease term and size. Better answers used the numerical data in the question.

Some candidates' answers were structured around a Suitability, Acceptability and Feasibility framework (SAF) and these tended not to score well, as the key issues were not normally illuminated by applying the framework

1.3

The new system is likely to provide a number of distinct benefits:

- improved production efficiency, which will lower variable production costs per unit
- improving management information for marketing decisions in identifying customer needs
- improved customer service in designing space requirements for new furniture.

The above advantages come at a price. This includes a financial cost of £180,000 per annum. There may also be an opportunity cost in terms of alternative use of the space in the Liverpool premises (eg it could alternatively be used for additional production capacity or furniture storage for customers). Such a cost would need to be assessed but the allocation of a proportion of the rental cost would not be valid to help decision making as it would be arbitrary.

Production efficiency

The annual production cost savings at current production levels would be:

79,200 x £1.50 = £118,800

The net additional annual cost is therefore £180,000 - £118,800 = £61,200

An alternative perspective is that sales volumes may grow and the savings will be greater with a reduced variable cost.

The contribution in future would, if other costs remain constant, be:

£95.55 – 42.50 – 8 = £45.05

Annual sales will therefore need to increase by the following in order to recover the annual fixed costs for the digital system:

£180,000/£45.05 = 3,996 units

This is a 5% increase in sales volume compared with 2017 sales.

Marketing information

Useful marketing information can be gathered by the new website software when customers use it to help select the appropriate office layout and plan furniture installations. It gives information to FOF that they may be thinking about making a purchase and the pages of the website being used may give information about the type of furniture they are interested in. This enables email and other advertising communications to the customer or a visit from sales staff for larger orders.

This targeted relationship marketing may increase sales by improved information specific to the customer. It may also provide better general understanding of how and when FOF customers make purchases.

Data analytics could also be applied to the data captured to enable better understanding of customers and markets plus improved production planning.

Customer service

A better customer service improves the overall perceived quality by customers of the purchase from FOF and may increase sales without the need for sales staff to travel to client premises. Better suiting the client needs would help competitive advantage particularly over the smaller competitors. For example, with one third of industry competitors having revenue below £1 million it is unlikely that they will have sufficient scale economies to afford an annual cost of £180,000 for the digital system.

Examiner's comments

The answers to this requirement were the weakest on the paper. The numerical analysis was very poor for most candidates – the vast majority did not calculate the correct break-even quantity, and only a minority managed even to arrive at the correct additional cost of the new technology. Some credit was given for understanding the impact of the decision on variable cost and displaying an awareness of break-even. The discussion was a little better and many candidates did recognise the value of the data analytics to the business.

1.4

In making any ethical evaluation, it is first necessary to establish the facts. In this case, an overheard conversation is not good evidence. The claims about Jayne having been receiving free tickets for major sports events from the chief executive of EE may not have occurred. Moreover, even if it had taken place, the extent is unclear.

Even if tickets had been provided by the CEO, to a greater or lesser extent, this is not strong evidence that Jayne has necessarily been favouring EE in awarding tender contracts for furniture for schools. While EE has increased the number of schools it supplies by nine in 2017 compared with 2016, the increase is far greater for other smaller suppliers at 16.

It would be appropriate, as a starting point, to establish the basic facts of whether Jayne has been accepting tickets from the CEO of EE. If she has accepted tickets, it is important to establish whether they were free (a gift) or she paid market value in an arm's length transaction. In the latter case, the issue of personal benefit is much reduced as it is an exchange, rather than a transfer of value.

As the context of the case is in the public sector, consideration should be given to the Nolan Principles on Standards in Public Life. Relevant principles, for Jayne, in the current context include:

- **Selflessness**: holders of public office should take decisions solely in terms of the public interest. They should not do so to gain financial or other material benefits for themselves, their family or their friends.
- **Integrity**: holders of public office should not place themselves under any financial or other obligation to outside individuals or organisations that might influence them in the performance of their duties.
- **Honesty**: holders of public office have a duty to declare any private interests relating to their public duties and to take steps to resolve any conflicts arising in a way that protects the public interest.

The issue of legality needs to be considered in terms of whether an inducement has been given under the Bribery Act 2010. If the claimed facts are established, then consideration should be given to whether legal advice should be obtained.

Aside from any legal issues, there are a number of ethical issues that arise.

The first ethical issue is a potential conflict of interest for Jayne. This is between Jayne's duty to act in the public interest in the disbursement of public funds in obtaining 'best value' and her self interest in obtaining free tickets. If she awards a contract to EE when she knows they are not the best value provider, then there is a strong case that self-interest has overridden the public interest and this could be a serious ethical breach with potential legal consequences.

A second potential ethical threat is one of intimidation. Potentially this could be perceived to be in either direction. Trevor confronted Jayne about this issue over lunch. If Jayne is innocent of the claimed facts she could perceive this as being intimidated by Trevor, even if it was not intended to be so. On the other hand, if the facts about free tickets are true, then Jayne's counter-claim to report Trevor to her superior for attempting to intimidate her could itself be a form of intimidation towards Trevor to deflect any criticism.

In making a decision as to how to proceed, some guidance is given by applying the Institute of Business Ethics three tests:

- Transparency
- Effect
- Fairness

Transparency – whether the EE CEO's gift/transaction (if any) should be made transparent by being disclosed at least within the LEA is a key issue in this case. Jayne needs to bear in mind how people (the public of Birmingham, EE shareholders, directors, competitors, schools, employees) would react if they found out subsequently that she may have been influenced by self- interest, rather than solely by the public interest. As a minimum, Jayne should have disclosed the nature of any transactions/gifts that took place. The local authority should have in place a code of conduct for employees receiving gifts or undertaking transactions with suppliers. Jayne should have disclosed whether or not she complies with such a code.

Effect – whom does the decision to disclose or not disclose affect or hurt? Clearly if the gift/transaction was not in the public interest, local taxpayers and businesses would not have received full value on an arm's length basis. Schools will also not have received value for their budgets. Competitors in the industry, such as FOF, may also have suffered from unfair competition.

Fairness – would Jayne's acceptance, then non-disclosure, be considered fair by those affected? The public and schools expect the local authority to act properly on their behalf and would not consider it fair to suffer a loss in order to favour Jayne's personal interests. Also, in terms of the other stakeholders, knowingly not disclosing the personal interest may be seen as unfair and a breach of business trust. FOF would almost certainly not regard the loss of business to further Jayne's personal interests to be fair.

Honesty and integrity

Further ethical issues are those of honesty and integrity, which involve, not just non-disclosure of personal interest, but also hiding the fact of, and consequences of, any gift/transaction for tickets.

Actions

Transparency remains important in seeking to make clear, if only in retrospect, the basis on which any gifts/transactions between Jayne and the EE CEO took place. It is also necessary to establish evidence that it may have influenced her decision-making in awarding contracts.

Unless a formal communication shortly arrives from Jayne's superior, Trevor should attempt to contact Jayne in writing, setting out his concerns and requesting a meeting to discuss the issues.

If Trevor knows the staff that he overheard, it may be possible to speak to them to obtain any more details.

Clarification of the basis on which FOF's recent tenders have not been successful should be obtained.

If there is no response to his enquiries, then Trevor should contact senior staff in the LEA to discuss the issues and obtain clarification and evidence. If there is no response, then Trevor should contact legal representatives of the LEA.

Examiner's comments

The answers to this requirement were variable in quality. Most candidates did not apply professional scepticism. For example, many candidates did not question either the validity of the claim about the tickets or Jayne's assertion that Trevor's behaviour was intimidating, when he appeared to be merely attempting to establish the facts.

Discussion also often tended to focus on Trevor to the exclusion of Jayne although, with some candidates, it was the other way around.

Many candidates used the Transparency, Effect, Fairness (TEF) structure and language. However, many candidates limited their discussion to these three TEF principles, rather than going on also to explore other ethical principles and issues raised by the scenario, including a conflict of interest and issues of honesty and integrity. They thereby produced a restricted and narrow answer which was constrained by the TEF framework, rather than enhanced by it.

Most candidates made some reference to legal issues, including bribery. Only a small minority referred to the public sector context and the Nolan principles.

Some candidates provided a reasonable discussion of the ethical issues/principles but then provided a weak discussion of the actions. Most candidates set out some suggested actions for Trevor as required, but others then went on to stray beyond what was asked in the requirement by also setting out actions for Jayne.

Question 2 – Berlina Kitchen Appliances

General comments

The scenario in this question is a manufacturer of electrical appliances for use in domestic kitchens. It is based in an Eastern European country, Ruritania, which had until recently operated a closed economy. More recently, there has been a movement towards free market liberalisation of the Ruritanian economy and a desire to open up to international trade by encouraging foreign direct investment. This enabled BKA to be acquired by an industry-leading German company, Stigel.

Prior to acquisition, BKA was a low-cost producer but operated a hierarchical and centralised organisational structure with a rigid control system but poor quality products. There are four types of product which are produced in four separate divisions.

To turn around BKA, Stigel set up a five-year change management plan. Following a benchmarking exercise, critical success factors (CSFs) and key performance indicators (KPIs) will be set for a new performance measurement system for BKA. One director suggested reducing the change management plan to two years. A table of CSFs and target KPIs over time is provided.

2.1

Benchmarking uses comparisons with best practice to encourage improvement and change to achieve sustainable competitive advantage.

There are various types of benchmarking which BKA can use:

Internal: Internal benchmarking could involve a comparison between the four BKA production lines. The four production lines use similar processes of mass production so reasonable comparisons could be made for at least some processes. In terms of inputs, this might include taking a reasonably standardised task and comparing: cost; time taken; quality (e.g. measured by faults or complaints). It may also provide overall comparisons of cost and operating efficiency between production lines, after adjusting for variations in the type of product. In so doing, internal benchmarking may raise questions of why differences occur, rather than direct answers as to what to do about any differences.

Internal benchmarking may also apply in terms of outputs such as selling prices, customer satisfaction and growth.

The strength of internal benchmarking is that it attempts to raise the standard of the weakest performing production line to that of the highest performing production line by showing what can be achieved within the same company.

A weakness of internal benchmarking is that it is inward looking and ignores the relative performance of competitors over whom we are attempting to gain a sustainable competitive advantage.

More aspirational internal benchmarking could be against Stigel's factory in Germany. If ultimately sales are to be made on global markets, then the German factory standards may better indicate what can be achieved and what needs to be achieved. These benchmarks may not be attainable in the short term for BKA, given current plant and equipment and working methods, but such benchmarks could illustrate the gap that needs to be closed for goals of international competitiveness to be achieved.

Competitive (or External): External benchmarking compares the performance of BKA to other companies operating in the same industry. In the current context, this might be similar companies such as Muskov, or more generally, companies manufacturing kitchen appliances operating in Eastern Europe. However, such companies may have similar problems to BKA and may not represent best practice. Under the new strategy in the change management plan, competitive benchmarking may involve global comparisons if this is the market in which the company intends to operate. For this exercise, any competitive benchmarking carried out by Stigel in respect of its own rivals may also be appropriate as an aspirational benchmark for BKA.

External benchmarking attempts to identify any competitive advantage or disadvantage compared to rivals. A weakness is that the quality of information is much lower than internal benchmarking as only information in the public domain is usually available, unless there is shared information within a benchmarking group.

Activity (or Best in Class) This involves comparing each of the activities or processes to similar activities in whatever industry they can be found. This could be different for each function: eg production; marketing, procurement.

Comparators for production processes could be other industries where mass production is a key factor. This could perhaps be for motor vehicle manufacture where competitive pressures for production efficiency, yet high quality and reliability, may have given rise to innovative and efficient processes. Similarly, marketing activity could be benchmarked against specialist marketing companies or advertising agencies which are hired by many companies for their expertise.

Generic: This involves benchmarking against conceptually similar processes. This might involve examining processes in environments where the quality of manufacture is fundamental eg medical equipment. Alternatively, procurement activities could be benchmarked against leaders across industries such as Amazon or Toyota. Customer satisfaction could be benchmarked against relationship marketing activities by leading hotel chains.

Examiner's comments

Marks tended to polarise on this requirement. The major problem for a significant number of candidates was a lack of basic knowledge in being unable to identify the four types of benchmark.

Those candidates who were able to identify the four types of benchmark normally scored well, although in some cases discussion often displayed confusion between competitive and best-in-class benchmarks. With regard to internal benchmarking, only a minority considered the additional possibility of benchmarking against Stigel's factory in Germany.

With competitive benchmarking, many referred to comparisons with Muskov, but hardly any recognised that the latter may well have similar problems to BKA. Most candidates did recognise the difficulties in accessing competitor information.

Weaker candidates displayed a lack of understanding of benchmarks, often confusing these with KPIs.

2.2

General comments

CSFs are those factors which are essential to the success of an organisation. Outperforming competitors in these areas is essential to gain competitive advantage.

KPIs are performance standards to measure and control the achievement of the areas critical to success (ie CSFs). They include target measures of what needs to be achieved in each area in specific quantitative terms. Actual performance is then compared with these targets. However, KPIs do not of themselves indicate how these targets can be achieved.

Overall assessment of KPIs

The KPIs need to be well defined and quantifiable. All of the three KPIs suggested appear to meet this criterion and although there may be some issues of data collection, these do not appear to be insurmountable.

They must be well communicated. All of the three KPIs suggested appear to be capable of being clearly communicated to the relevant staff.

They must be relevant to the line of business. It would appear that these KPIs are being applied to BKA as a whole. Given the apparent intended autonomy of each production line as a profit centre, it is important to measure the performance of each division separately by using separate KPIs for each production line. In this way, a good performance by one production line does not hide the poor performance of another.

Customer satisfaction

KPIs

The measure of the number of customers being 'satisfied' might not be enough to outperform the competition and may be too low a hurdle. Perhaps the KPI would be better as a relative measure compared to a key competitor (see benchmarking above) or industry norms.

A further problem is that the measure of itself is not enough to indicate the reasons for customer satisfaction or dissatisfaction. More targeted measures about whether the customer is satisfied with specific aspects (eg delivery, design, reliability, features) might elicit measures that can more easily be acted upon.

The responses to questionnaires by customers may exhibit bias, as not all customers have responded. For example, dissatisfied may have a greater motivation to respond to the questionnaire.

As noted above, separate measures of customer satisfaction for each type of product (ie production line) would also focus management attention where required.

Alternative KPIs may include (for each division):

- Proportion of satisfied customers compared with the market leader.
- Customer retention rates.
- Number of customer complaints received.

Targets

The level of current achievement of customer satisfaction is low at 72%, being less than three in four customers. This might be due to a lack of customer choice under central government control in the past. It seems unlikely that BKA will retain over a quarter of its customers (who are less than satisfied) under the new regime in Ruritania where there is more choice by customers.

The targets for 2018 and 2019 require substantial improvement, but still tolerate 10% of unsatisfied customers in 2018 and 5% in 2019 which may still be considered high. It may however be that some customers responding to questionnaires in 2018 receive their goods and service in 2017.

It should be noted that the type of customer in 2018 and 2019 will be partly different from the customers in 2017 as there will be a proportion living in overseas countries. These customers may be more used to purchasing electrical appliances from global suppliers and therefore have higher expectations to judge satisfaction. The figures for 2017, 2018 and 2019 may therefore be non-comparable as the population of the respondents will differ. Segmentation of the responses into Ruritanian and other customers may give more intertemporal consistency in the data.

Production quality

KPIs

Production quality is important but has a number of aspects. The KPI of 'number of faults reported in the first year after sales' measures only one aspect of quality – reliability. Other aspects could include the capability of (say) a washing machine to clean clothes well at a range of temperatures when it is working as it should. More subtly, it could include quality of design. At best, therefore, this KPI is only a partial measure of the achievement of the CSF.

Alternative KPIs may include (for each division):

- The number of faults compared to the market leader; one month, one year and three years after sale.
- Cost of faults repaired under guarantee, stratified in cost ranges.
- Rankings in consumer press reports on product performance.

Targets

The target of the number of faults reported in the first year after sales is a lagged measure. Even if immediate improvements in quality are made on the first day of the change management plan (eg by importing into Ruritania washing machine motors from Germany) then faults could still be reported in 2018 in respect of sales made in 2017 under the 'old regime'.

Currently the proportion of faults is high and, whilst improvements are targeted, they remain high in 2019. Targets set relative to competitors are required (see benchmarking) in order to ascertain whether these levels are likely to give competitive advantage, even for a low-cost product.

Penetrate export markets

KPIs

This KPI is not sufficiently specific in specifying whether the measure is sales volume or sales value. If sale prices are higher outside Ruritania then this measure may be distorted, or at least not what was intended.

Also, measuring the proportion of sales outside Ruritania may not be the best measure of success if Ruritanian sales are falling as long-term government contracts are not being renewed. An absolute measure to target overseas sales might better capture the plan to expand outside Ruritania.

The nature of the markets is also not specified in the KPI. It could include neighbouring countries which are similar to Ruritania and are still developing closed or semi-closed economies which are not competing in global markets. This is different to selling in countries exposed to global competition in global markets.

Alternative KPIs may include (for each division):

- Sales revenue in each of the following geographical areas: Western Europe; Ruritania; Rest of Europe; America; Rest of the World.
- Growth in sales revenue in each of the following geographical areas: Western Europe; Ruritania; Rest of Europe; America; Rest of the World.

Targets

By 2019, there is a target to have 30% of sales outside Ruritania. This is a stretching target within two years in the context of a five-year plan, particularly as there is a low lase to start from, with very few existing customers outside Ruritania.

The KPI may provide inappropriate incentives to BKA marketing staff in attempting to achieve the target by focusing on 'easier' sales in less developed countries, rather than in open economies subject to global competition, such as in Germany.

Examiner's comments

This requirement provided a clear direction to address each agreed CSF and provide KPIs based on the information in the scenario and the tabulated data provided. However, many candidates ignored this guidance and, instead, tried (inappropriately) to shoehorn the structured information given in the scenario into a Balanced Scorecard framework. Models can help to structure an answer when the information provided is diverse and unstructured, but this was not the case in this requirement. There were clearly defined and structured performance issues, based on the specific needs of the company, which should have been used directly to address the issues as required.

Most candidates appraised at least some of the suggested KPIs but very few provided a critique of the targets set or suggested that KPIs should be set at divisional level rather than company-wide level. The great majority of candidates only set out alternatives at the firm level, usually without consideration of targets or the timeframe within which they are being applied.

2.3

(a) Rapid implementation or piecemeal change

Rapid change is appropriate when the organisation is in crisis. This appears to be the case with BKA given the under-investment in the past and the lack of competitiveness. This is particularly the case as it is losing customers as long-term contracts are not being renewed. However, while rapid change may be desirable, it may not be feasible given:

- The potential barriers to change (see below)
- The need to retrain and develop new skills in updating production processes
- The need to establish new global markets for the products
- The need to implement new investment
- The scale of change needed – which is transformational change in this case

As a consequence, a flexible plan may be appropriate. This covers not just controllable events but the need to change the culture of existing managers and employees and the need to create new markets.

The five-year plan and the required KPIs in the first two years set some challenging targets (see above). A two-year plan would mean that revised targets to achieve ultimate goals become extremely challenging and may not be perceived as attainable. They may therefore cause employees and management to dismiss the change management as unreasonable.

Also, the plan involves achieving internal and external goals. Whilst internal factors may be pushed through, wisely or unwisely, external factors are less controllable. To change customer perceptions of the BKA products may take time given the company's history. Attempting to change customer perceptions in international markets at the same time as being in the process of improving production quality and customer satisfaction may be unreasonable.

If the plan is to rebrand BKA products as Stigel at the end of the planning period, then two years may be overoptimistic and there may be real risks of damaging the core Stigel brand by a premature launch.

(b) Barriers to change

Cultural barriers

Structural inertia is the cumulative effect of all the systems and procedures that the organisation has installed over the years to ensure consistency and quality. These act as barriers to change.

The BKA change management plan proposes fundamental changes that will affect the culture of the organisation. In order to mitigate the damaging aspects of this, Lewin argues that the old culture of cost centres and lack of divisional responsibility will need to be unfrozen; the changes should be made; and then a refreezing of the new culture of profit centres and more divisional autonomy should take place.

Power structures may be threatened by the redistribution of decision-making authority or resources, or the changing of lines of communication.

This will in particular affect lower levels of management and thus they may be reluctant to implement changes which will be against their own interests.

Personnel barriers

There are also barriers which affect individuals and result in them seeing the change plan as a threat. This may affect employees who perceive that the goal of increasing the number of units of output produced per employee to result in downsizing. It may also apply where there are likely to be substantial changes in work practices and redundancies of old skills in favour of new skills. These fears may be countered by transparency as to who may be affected or reassurance that retraining will take place and that the number of units of output produced per employee can be increased by raising output without making any redundancies.

Habit - habitual ways of work are hard to change, and the new and unknown is often uncomfortable. This may be part of the old centralised top-down culture of BKA.

Security - is almost inevitably threatened. Both job security and the security of familiarity are threatened with Stigel as the new foreign owners. This may vary according to whether particular production lines are most seen as under threat of closure.

Effect on earnings **–** continuing cost reductions and changes in work practices may affect the earnings of individuals. Increasing pay contingent on the change programme and improved performance may mitigate this by ‘buying off’ some of the resistance to change.

Fear of the unknown reduces people’s willingness and interest in learning new skills; they may lack the confidence to take on a new challenge where work practices change. New foreign ownership and unfamiliar processes and practices may increase this fear.

Selective information processing results in employees ignoring management arguments for change. An effective communication strategy with consultation by the BKA senior management is therefore needed to help mitigate this.

One model that can be used to mitigate barriers to change is the Gemini 4Rs model comprising:

- Reframing – establish a new emphasis and vision on quality and creating the willingness to change
- Restructuring – create new divisions and profit centres with increased automated production methods, and align the new culture to these
- Revitalising – adapt to the new international competitive environment appropriate for selling in global markets
- Renewal – gain staff commitment for the new structure and processes through a new reward structure and individual learning.

Examiner’s comments

Requirement 2.3a

Many candidates were critical of rapid change with reference to behavioural factors and barriers to change so many answered aspects of part (b) in this requirement. Only a minority saw the issues in a broader strategic context, with the need for rapid change driven by the changing competitive and technological environment.

Requirement 2.3b

Most candidates showed awareness of personnel barriers to change, fewer also being aware of cultural barriers. A minority confused organisational culture with international cultural differences between Germany and Ruritania. Most discussed mitigation measures and the majority referred to Lewin’s framework (but also Gemini).

Weaker candidates made no use of any framework, just referring generally to motivational issues.

Some weaker candidates also merged their answers to 2.3a and 2.3b. This normally resulted in unstructured and often confused responses.

Question 3 – Cancer Concern Ltd

General comments

The scenario in this question is a not-for-profit, UK-based charity.

CC uses available funds to support its two main charitable activities: (a) Cancer research; and (b) Hospices.

CC's income has fallen recently due to changes in laws which restrict some types of charitable fund raising. The trustees must therefore choose how much it allocates to each of its two main charitable activities after retaining some funds as reserves, to maintain financial stability and to use for future charitable activities.

The trustees are reviewing CC's strategy and mission, and agree that a new and more detailed mission statement must be produced. This will be used to help determine a new strategy and new fund allocation priorities.

3.1a

Patients and future patients

To reduce expenditure on research projects, stricter filtering criteria could be applied to potential projects to raise the probability that funded projects will succeed.

To reduce expenditure on hospices consideration could be given, for example, to closure of underutilised hospices (if any) and transferring patients to other hospices. Replacement of paid staff with volunteers and reductions in the scope of service provided to patients could be considered. However, all these proposals are likely to have an effect on the effectiveness of the service provided to patients and therefore reduce achievement of the aims of the charitable trust.

Universities, hospitals and researchers

Universities, hospitals and researchers may be affected by a reduction in funding allocated by CC to research projects. Aside from the self-interest of these stakeholders, reductions in funding may reduce the effectiveness of the research outcomes although, by its nature, research is uncertain, so the impact of funding withdrawal is also uncertain. Withdrawal of funding from some existing projects may mean that historical allocations of funds may not have the opportunity to yield successful research outcomes.

Professional staff and volunteers at hospices

Reductions in professional staff at hospices to save money may lead to demotivation and reduced effectiveness of the services provided to patients. While volunteers are not paid, they may be unwilling to work more hours to compensate for the loss of professional staff, or may be less effective if they do so.

Consultations with all staff to discuss the issues arising from reduced income may be a means of gaining acceptance of changes and participation in developing solutions.

Donors to CC

Reduction of funding to either of the two activities may indirectly affect donors' perception of CC and therefore their willingness to continue to make donations to CC in future. For example, the closure of a hospice which had helped a relative may cause future donations to cease and thereby limit the benefit of any cost reduction by also reducing income. In addition, legacies to CC may be cancelled if the historic activities of the charity are rebalanced.

3.1b

In deciding, at the margin, whether to make donations to research projects or hospices there is a trade-off between the interests of current cancer patients and potential future cancer patients. There is also a trade-off between the near certainty of the activity of looking after patients in hospices and the uncertainty of a research project which may yield widespread, long-term benefits or may fail completely.

In deciding how to allocate the reduced level of income between activities, CC trustees must ensure that they are complying with legal and other regulatory requirements and are within the terms of the trust deed.

This may require a choice, not just between the two main activities but between any other obligations within those activities (eg restricted funds may become repayable if a hospice is closed; or there may be duties in the trust deed to fund certain activities).

There may also be obligations in the trust deed with respect to the level of reserves which must be maintained (which are currently 'limited'). It may be that funds need to be allocated to increase reserves rather than for either of the two activities to maintain financial stability.

Funds not set aside for the above purposes need to be allocated by trustees and, while this requires judgement, it is important that there are criteria to guide that judgement. In particular, it is important that best use is made of the available funds in order to promote the aims of the charity. Continuing an equal split may be arithmetically appealing but may not satisfy appropriate criteria for judging where the greatest benefit from fund allocations can be achieved.

Key stakeholders are the patients suffering from cancer and patients who will suffer from cancer in the future. While their interests may be the primary purpose of the charity in determining the allocation of funds, it is also important to consider the interests of other stakeholders who are important in enabling the care of patients and on whom the purposes of the charity are dependent. There is significant subjectivity in making these judgements, but priorities need to be established based on agreed principles.

Such principles make include:

- The 3Es – economy, effectiveness and efficiency
- Cost-benefit trade-offs
- The value based on qualitative and quantitative outcomes
- Reputational impact

Examiner's comments

Requirement 3.1a
Answers to this requirement were normally quite good.

Relevant stakeholder groups were generally well identified, although weaker efforts tended to ignore the cancer research charitable activity for some reason.

Addressing the issue of conflicts tended to be restricted to problems associated with lower allocations of funds, rather than conflicts between stakeholders. Only the better candidates considered the longer-term consequences of current reductions in funding. A number of candidates reverted to Mendelow's matrix which meant they identified stakeholders but then often failed adequately to cover impact.

Requirement 3.1b
Most candidates restricted discussion to prioritisation criteria and cost-benefit analysis and tended to ignore legal/regulatory/trust deed considerations.

Nevertheless, a significant minority addressed most areas very well, additionally identifying tensions between the need to secure financial stability for the charity and perceptions of outsiders, donors in particular.

3.2

Mission statement

We exist to promote the discovery of new treatments for cancer and care for those suffering from terminal cancer.

We aim to achieve this by:

- supporting innovative and effective research projects, by established researchers, relating to diagnoses, treatments and prevention of cancers; and

- delivering expert care for people suffering from terminal cancer and emotional support for their families.

We will enable these aims by raising funds in a cost-effective and ethical manner and by making distribution decisions based on our values and the best use of funds in effectively promoting our aims and providing the greatest probable benefit to the greatest number of people suffering from cancer, now and in the future.

We will pursue these aims within the constraints of the law, other regulations, the terms of the CC trust deed, the public interest and financial constraints.

We do not seek to make a profit or surplus, but we will aim to secure the financial stability and sustainability of the CC charitable trust by maintaining appropriate reserves to meet its current and future obligations.

<u>Justification</u>

The revised mission statement sets out more clearly the purposes and scope of CC's activities. It clarifies why the organisation exists and sets out the activities it will undertake to achieve these purposes.

The mission statement also provides broad guidance to help judgement to be exercised to discern how funds will be allocated between the two key activities.

It also sets out the financial, legal and regulatory constraints on CC's activities and the standards and values by which decisions will be guided.

It contains the four aspects on the Ashridge model for mission statements:

- Purpose
- Strategy
- Policies and standards of behaviour
- Values

Examiner's comments

Candidates' performance varied in quality for the justification of the revisions to the mission statement, with many referring to generic criteria for mission statements such as Ashridge. However, fewer mentioned the need for financial stability and sustainability for the charity.

The presentation of mission statements produced variation in quality and length. Generally, the mission statements provided were of the correct tone. However, there was a tendency for weaker candidates to be too brief, despite the instruction in the question for a longer mission statement to include key purposes and values, and recognition of the impact of financial constraints. In particular, many candidates failed to recognise funding limitations explicitly within their mission statement.