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 – Bespoke Oak Beds

General comments

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

The scenario is a listed company which manufactures high quality, hand-made hardwood bed-frames.

BOB currently makes two types of oak bed-frames: the Classic and the Deco. BOB has been criticised by environmental groups for using hardwood and the BOB board believes that sustainability issues are beginning to damage the company's reputation.

Although BOB is currently profitable it is in slow decline and is trying to develop a new strategy. Two proposed new strategies are being considered: (i) purchase bedroom furniture from an overseas manufacturer, so full matching bedroom furniture sets can be sold including beds; and (ii) become the preferred contract market supplier of bed-frames to a house building company, selling a new, lower cost product line of softwood beds.

If the second strategy succeeds, then BOB could consider extending it in future to make all its beds from softwood, instead of hardwood (oak).

An ethical dilemma has arisen. A fault has been detected in one production run of Deco oak bed-frames which has already been sold. It will not become apparent to customers for some years. Disclosure of this fault would result in damage to the company's reputation and possible redundancies.

(a)

Analysis

	Classic	Deco	Total
Sales revenue	11,250,000	12,960,000	24,210,000
Total variable cost	(6,875,000)	(8,280,000)	(15,155,000)
Total contribution	4,375,000	4,680,000	9,055,000
Fixed costs (equal FC per bed)	(3,348,361)	(4,821,639)	(8,170,000)
Operating profit/(loss)	1,026,639	(141,639)	885,000
Margin % (Contribution/sales)	38.9%	36.1%	37.4%
% share of revenue	46.5%	53.5%	100%
% share of contribution	48.3%	5.7%	100%
% share of sales volume	41.0%	59.0%	100%
Operating margin %			3.7%
Fixed cost/Total costs % (operating gearing)			5.0%

Overall company safety margins:

Safety margin (Beds) 885,000/350 and 260	2,529	3,404	
Safety margin (%)	20.2%	18.9%	
Total costs	£10,223,361	£13,101,639	£23,325,000
Total cost per bed	£818	£728	£765
Fixed cost per bed (equal allocation per bed)	£268	£268	£268

(i) Comparison of two products

Caution needs to be exercised in comparing the two products, which are largely interdependent in production processes and marketing. In this sense, the performance of one product is dependent on the performance of the other product. Nevertheless, it is important to gather information about how each product is generating revenue and driving costs. The wider strategic contribution of each product would also need to be assessed to make a more complete evaluation.

It is clear from the above data analysis that neither product is significantly dominant over the other in terms of scale of production, revenue generation or costs incurred.

Whilst both products are upmarket, the selling price of the Classic is 25% above that of the Deco, placing it further upmarket in the pricing spectrum. The pricing policy, to a large extent, reflects the higher costs of materials and labour, which are also 25% greater for the Classic than the Deco.

Other variable costs are the same for both products and it is therefore this factor which creates the difference in % margin between the two products. Some care needs to be exercised in that, whilst it is a variable cost, it could be an indirect cost which has been allocated equally and arbitrarily between the two products (eg electricity that is not metered separately for the manufacture of each product).

Fixed costs have not been allocated between the two products. It is possible that cost drivers could be identified which would show the activities which cause some of these fixed costs. At least some fixed costs could then be attributed to the two products using activity based costing. This would give a clearer indication of the individual financial performance of the two products, although it is unlikely that all fixed costs could be allocated in this way.

A very crude way to allocate fixed costs would be on a per unit basis. The assumption here is that producing each unit (a bed frame) is the best guide to what causes fixed costs. Accepting this proposition as a starting point, the average fixed cost of producing one unit of output is approximately £268 (£8,170,000)/30,500). To this figure is added the identifiable variable cost per unit.

Reviewing this data it can be seen that the Deco sells for £720 which is below the full cost calculated in this (crude) manner of £728. (See table above).

The Classic sells for £900 which is significantly above its full cost calculated in this (crude) manner of £818. See table.

A more important measure to evaluate comparative performance is contribution. On a per unit basis, the Classic generates a contribution of £350 per bed compared with £260 for the Deco. The Classic therefore has a 35% greater contribution per unit.

In terms of sales volumes, 18,000 Deco beds are sold in the year, compared to only 12,500 for the Classic. The Deco therefore sold 44% more beds in the year than the Classic.

Putting together the factors of margin and volume it can be seen (see table) that the lower priced, lower margin Deco is forecast to contribute over half (51.7%) of the total contribution earned by BOB in the year ending 31 December 2015.

(ii) Performance of BOB

There are no comparison data for previous years to assess performance, but a number of issues can be highlighted.

From the perspective of the company, overall fixed costs become more meaningful as they can be viewed on a company-wide basis, rather than from the perspective of one product which requires arbitrary allocations.

In this respect, operating gearing is high, as indicated by fixed costs comprising 35% of total costs. This makes BOB subject to the risk of operating profit fluctuations as a result of changes in sales volumes.

The impact of high fixed costs and the risk of making losses are also indicated by the relatively small operating profit margin of only 3.7%, despite the relatively healthy contribution margin of 37.4%.

For the company as a whole the analysis in the table above shows the margins of safety for changes in the volume of sales of each product that would make the company, as a whole, break even.

For the Classic (assuming Deco sales remain constant) the margin of safety is 20.2% which is (£885,000//£4,375,000). An alternative calculation is a margin of safety of 2,529 units (£885,000/350). This means sales of Classic beds can fall by 20.2% (2,529/12,500) before the company reaches break even.

For the Deco (assuming Classic sales remain constant) the margin of safety is 18.9% which is (£885,000//£4,680,000). An alternative calculation is a margin of safety of 3,404 units (£885,000/260). This means sales of Deco beds can fall by 18.9% (3,404/18,000) before the company reaches break even.

The margin of safety can also be viewed in terms of each product's break even point.

For the Classic (assuming fixed costs are allocated on a per unit basis) a fall of 2,932 units (£1,026,369/£350) would result in a break even position. This is a margin of safety of 23.5% (2,932/12,500) before sales of the Classic reach break-even.

As the Deco makes a loss (assuming fixed costs are allocated on a per unit basis) there is no margin of safety.

A more likely scenario to assess risk is that both Deco and Classic bed sales volumes fall. The margin of safety would then depend on the relative proportions, but it is clear that a fall in the sales volume of 10% in both products would create a small loss of £20,500 ((1,250 x £350) + (1,800 x £260) - £885,000).

Risk is moderated to some extent by the relatively even balance between the two products, but nevertheless this is a small portfolio. If one product were to lose favour with customers then the profit from the other product would be insufficient to cover fixed costs.

Examiner's comments

Requirement (a)(i)

This requirement was generally well answered. The majority of candidates included an initial table (or an appendix) of data calculations. Weaker candidates tended to be over-descriptive and failed to provide any detailed quantitative analysis.

The quality of the calculations varied; weaker candidates restricted themselves to calculating % splits of revenue and costs. Stronger candidates provided margin calculations and overall volumes, together with respective contributions.

Fixed cost allocation was less well addressed and those who did attempt this, often allocated fixed costs equally between the two products, although sometimes recognising that any method of allocation is essentially arbitrary. Very few suggested better allocation methods, such as identifying relevant cost drivers.

In terms of the qualitative analysis, the weaker candidates, having already performed less adventurous calculations, had little to discuss and therefore simply explained the determinants in the revenues/costs per unit and in total and effectively ended up repeating information already provided in the question, with little or no added value. The stronger candidates looked beyond just the basic numbers and commented on 'other variable costs' being the same for both products (and their impact on Deco's margin in particular), and also on how the apportionment of fixed costs could significantly impact overall profits for either the Classic or the Deco.

Requirement (a)(ii)

Most candidates calculated overall profit, margin and market share. Only the minority calculated operating gearing and even fewer attempted break even and margin of safety calculations, for BOB as a whole, or for the individual products.

Most did recognise the very low operating margin for BOB, although fewer explicitly commented on the significance of this.

Some attributed the low margin to strong competition in the industry rather than being more directly caused by high fixed costs. Only a minority of the better candidates said that previous years' data would be useful in this regard in order to see the trend of relative fixed cost magnitude.

Available marks	15
Maximum full marks	13

(b)

i) Strategy A – Import from WEF

Volume WEF (beds)	**2,000**
	£
Price	1,300
WEF cost	480
Revenue	2,600,000
Costs:	
WEF	960,000
Lost revenue from 150 beds	108,000

Variable costs extra 1,850 beds	851,000
Contribution	681,000

ALTERNATIVE CALCULATION 1:

	£
Price	1,300
WEF cost	480
Revenue	2,600,000
Costs:	
WEF	960,000
Lost contribution from 150 beds	39,000
Variable costs extra 2,000 beds	920,000
Contribution	681,000

ALTERNATIVE CALCULATION 2:

Contribution of WEF:
2,000 sets at £360 (1,300 – 480 - 460) = £720,000

Lost contribution of existing 150 Deco beds
150 @ £260 = £39,000

Incremental = £681,000

(ii)

Strategy A is estimated to make a positive contribution of £681,000 in the year ending 31 December 2016. In the short term, this would therefore appear to be favourable in generating additional profit and satisfying a trend in consumer demand for sets of bedroom furniture.

The margin on each bedroom furniture set seems reasonable. The sale price of a complete bedroom furniture set (ie with a bed) is £1,300 and Deco beds normally sell at £720. If the remaining price of £580 is fully attributed to the WEF bedroom furniture set, then at a cost of £480 this gives a mark-up of 20.8%, which is reasonable. In total, the mark-up amounts to £200,000 (£100 x 2,000) and is one element of the contribution of £681,000. The other element of the contribution is the increased sales of Deco beds at £481,000 (1,850 x £260).

As a manufacturer of beds, BOB may not have the core competences to make other types of bedroom furniture itself. The 2,000 sets ordered from WEF may also be too small for BOB to set up a new production facility for other types of bedroom furniture. The proposal to outsource is therefore, in principle, not unreasonable.

It does however raise the question of whether the volume of 2,000 is sufficient to justify a new strategy in attempting to satisfy the consumer demand for bedroom furniture sets, particularly when these sales are expected to displace some sales that would be made in the absence of an agreement with WEF.

Risks
A major risk is loss of reputation, as the WEF furniture is inferior in quality to the BOB furniture. This may not be perceived at first by customers and consumers but, in the longer term, it may mean reduced sales, not only of bedroom furniture sets, but also of beds as the core product may lose customer confidence.

A further risk is that BOB would be tied into a one-year contract with a minimum of 1,900 bedroom furniture sets. This is close to the expected level of sales of 2,000. As a consequence, if sales of bedroom furniture sets fall below expected levels, then there may be an obligation to purchase volumes from WEF which cannot be sold in the current year. This risk could however be mitigated by taking any excess purchases into inventory for sale in 2017, while terminating the agreement with WEF from 1 January 2017.

A further risk includes foreign exchange risk if the contract with WEF is not in £ sterling. However, as the contracts are annual, prices can be renegotiated at the year-end if there are significant exchange rate fluctuations.

(i) Strategy B – contract with LH

Strategy B	
Volume LH (beds)	9,000
	£
Price	600
Revenue	5,400,000
Variable cost - labour	2,025,000
Variable cost – raw materials	1,080,000
Other variable costs	900,000
Classic revenue loss	225,000
Increased overhead	245,100
Contribution	924,900

(ii)	
Cost per bed	**£**
Labour	225
Materials	120
Other variable costs	100
Classic revenue loss	25
Increased overhead	27.23
Total incremental cost per bed	£497.23

Strategy B is estimated to make a positive contribution of £924,900 in the year ending 31 December 2016. In the short term, this would therefore appear to be beneficial and compares favourably with the £681,000 contribution generated by Strategy B.

This strategy uses the existing core competences of bed manufacturing. However, it is operating in a different sector of the market. The Classic bed is normally sold for £900 and in this contract the price is £600 which is a discount of 33.3%, albeit for a product made from an inferior softwood.

The incremental cost per bed at the estimated level of sales is £497.23. The selling price gives a mark-up on cost of £102.77 at the planned level of output. This is a reasonable mark-up on full cost of 20.7%.

Professional scepticism should however be applied to the working assumptions (eg on price and overhead changes). If the underlying assumptions are not valid then the calculations and conclusions need to be questioned.

As a new customer, LH provides incremental revenues and profit. There is some interdependency with existing markets due to the price reduction, but this has already been taken into account in determining the above amounts.

There may be some benefit in publicity of a sustainability policy in that BOB is now using some softwoods, rather than only hardwoods. In fact, however, it is still using as much hardwood as ever and the softwood usage is incremental production.

Risks
The revenue loss and the increased overhead are fixed costs which will be incurred at any level of sales volume.

To estimate risk, a break-even value can be calculated:

Contribution per unit = 600 – (225 + 120 + 100) = £155

Break even = (225,000 + 245,100)/155 = 3,033 beds

There is therefore a healthy margin of safety, as sales to LH would need to fall to 33.7% of the estimated level before a loss would be incurred on the contract.

Other risks are:

- LH's policy of selling new-build houses, fully furnished may be temporary and may be withdrawn at any time as there is no minimum sales guarantee. Strategy A may therefore be longer term as it uses existing markets
- Strategy B relies on one customer, but Strategy A is more diversified with many customers
- The policy is for two years and therefore the commitment is longer term than Strategy A if the arrangement is not successful
- The fact that there is no minimum quantity means that there is no effective commitment from LH who might change its mind at any time, with BOB's overheads already incurred.
- Conversely, there is no maximum, so if demand from LH is high, BOB may reach capacity and may only be able to meet contractual commitments to LH by reducing production for existing customers, thereby incurring an opportunity cost in the short term and a loss of reputation to deliver reliably in the long term.
- Even if capacity is not reached, there is a need to gear up production for a 72% increase in Classic-style beds (perhaps with incremental fixed costs) which may then not come about.
- The fact that demand from LH is uneven, and the lead time is only one month, makes the capacity problem worse.

Conclusion

The short-term financial gain is greater for Strategy B than Strategy A. However such a gain comes with greater risks. The decision would depend on how reliable the estimates are perceived to be and the extent to which additional contractual protection could be put in place (eg a minimum and a maximum level of sales).

As it stands, the risk issue with Strategy B is significant, which on balance suggests Strategy A should be selected, despite the lower financial return.

Examiner's comments

Requirement (b)(i)

In general, this requirement was not well answered. Only a small minority managed to calculate both contributions correctly. Most candidates calculated neither correctly. The most common error with Strategy B was to ignore the revenue loss and increased overhead, thereby arriving at a total contribution of £1,395,000. For Strategy A, most candidates omitted the lost contribution from the existing Deco sales so only calculated the contribution on the new sales, £720,000.

Requirement (b)(ii)

In general, candidates coped well with identifying the risks and benefits of each strategy, and the majority also provided a justified conclusion. Only the stronger candidates commented on break even.

Weaker candidates produced a generalised commentary, sometimes mixing A and B up in one discussion.

Available marks	19
Maximum full marks	17

(c)

The shift to using entirely softwoods would be a fundamental change for BOB.

In favour of such a change would be significantly lower raw material costs (40% lower based on Strategy B) and lower labour costs (10% lower based on Strategy B).

These cost changes would however fundamentally change the nature of the product and move it downmarket significantly. It would therefore be in a lower market segment with a lower price.

Given that BOB's reputation has been built around an upmarket product and the established customer base has required good quality hardwood furniture, a sudden movement downmarket would require the establishment of a new customer and consumer base. This seems to be a substantial and unnecessary risk.

Either of the proposed two strategies would be regarded as incremental to existing production and therefore lower risk. Even if either of the two strategies themselves went wrong, the existing customer base would remain largely as it is.

One favourable aspect of the proposal to change from hardwood to Canadian softwoods for the entire production is that it could be justified as a better policy for environmental sustainability. However the production would still require wood, so the environmental damage may be reduced, but not removed.

In terms of environmental protection it could also be argued that any future environmental damage would be in a developed nation (Canada) rather than in the developing nations of Central America, as is currently the case. This may mean the social consequences of deforestation could be less severe.

Overall, a change to use only softwoods would be a major change in the entire business model with significant risks for all stakeholders. A slightly more favourable sustainability programme would seem inappropriate compensation for this major commercial risk. Other efforts to improve sustainability could be used (eg a more intensive replanting programme; aid to local communities in areas affected; and working with agencies promoting sustainability in the affected areas).

Examiner's comments
In general, this requirement was reasonably well answered. Very few candidates failed to spot the sustainability advantages of shifting to softwood, however most focused on the fact it would reduce pressure from environmental groups and failed to consider the business sustainability aspect. Many candidates picked up on the point that softwood is more sustainable than hardwood as regrowth time was quicker.

Many candidates failed to observe the key point that this was a major change in the strategy of BOB, being a move from being a luxury product differentiator in the market, to lowering prices with a lower quality product. The majority of candidates discussed the key points regarding the potential financial impact of the change and how it could affect operations.

Available marks	9
Maximum full marks	8

(d)

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 in terms of what has happened, although the extent and consequences of the faulty production run need to be clear, with reasonable certainty, before any action is taken.

The issue of legality and compliance needs to be considered and legal advice taken by BOB. If the goods are faulty, it needs to be established whether there is any breach of contract or other statutory consumer rights arising from the nature of the fault (eg could the fault be a breach of health and safety laws?).

The fact that the warranty is three years and the fault is expected to arise only after four years implies the issue is one of commerciality and ethics, rather than legality, but this needs to be ascertained by taking legal advice.

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 – this would suggest that the issue should be disclosed (ie made transparent). BOB needs to bear in mind how people (existing customers, suppliers, employees) would react if they found out subsequently that BOB was aware of the fault but had not disclosed it.

Effect – whom does the decision to disclose or not disclose affect or hurt? Clearly the consumers who purchased the goods would be unfavourably affected by non-disclosure, as they would not have the items replaced (as would presumably be the case if the fault were to be disclosed, notwithstanding that the expected useful life is in excess of the guarantee period). The employee stakeholder group could be adversely affected by disclosure if it resulted in redundancies. However, if there was non-disclosure, that was later made public, the employees may also be adversely affected.

Fairness – would non-disclosure be considered fair by those affected? One argument could be that the goods' useful life will still exceed the guarantee period and therefore BOB has fulfilled its obligations on sale. However, the guarantee sets a minimum and there might be a reasonable expectation that the beds would last far longer in most circumstances. As a result, knowingly not disclosing a fault may be viewed as unfair on consumers and a breach of implicit business trust. The issue of fairness would apply to the employee stakeholder group who may lose their jobs, through no fault of their own, if disclosure were to be made.

Honesty and Integrity
Further issues are those of honesty and integrity, which involve not just avoiding deception (eg lying), but also making reasonable disclosures of known facts that have consequences.

Actions

There may be commercial incentives and disincentives in making reasonable disclosure, but these are separate from ethical considerations.

The marketing director appears to be suggesting that the commercial disincentives are major and should override the need to act ethically towards consumers in this case. However, the need to act ethically and to 'do the right thing' should not be moderated by commercial consequences or by the interests of other stakeholders such as employees.

Moreover, acting ethically in dealing with the fault may establish an ethical reputation to compensate for any loss in commercial reputation from allowing the fault to occur in the first instance, if the company were able to survive and keep the factory open.

An initial action for BOB would be to use its information systems to attempt to trace the customers (furniture retailers and department stores) to which the faulty goods were sold by using the serial numbers. This is an issue where the individual products are identifiable.

If they have been sold to relatively few stores, then disclosure should be made to these stores. It may be that they are still in inventory in these stores, with no consumers affected. A key issue however is whether the faulty goods which have been sold by the retailers can be traced by the retailers to the individual consumers who purchased them (eg did they retain records of the serial numbers?).

If they can be traced, then consumers affected can be compensated by BOB with new furniture. There seems no ethical requirement to inform any customers or consumers who were not affected (ie who did not receive any faulty goods) as no direct consequences arise for these customers.

If the goods cannot be traced to individual consumers by retailers, then wider disclosure may be required via a general 'product recall' notice, so potentially affected consumers can come forward and identify themselves.

Examiner's comments

This requirement was reasonably well answered, on the whole.

A large majority of candidates adopted the 'transparency, effect, fairness' structure for analysing the ethical issues. However, the actual application of this structure varied in terms of success, with weaker candidates not completely sure of the correct interpretation of the principles in the context of the scenario.

Honesty and integrity were mentioned by relatively few candidates, which is surprising given that ethics questions involving these principles have been tested with regularity.

Many of those who considered the legality issue asserted conclusively that selling the faulty beds either was, or was not, illegal, without any analysis and without considering the need to take legal advice.

Actions to be taken by management were ignored by a number of candidates, or just considered briefly. Very few mentioned traceability, via the firm's information systems, of customers who had purchased the faulty beds.

Only the best answers gave due consideration to the dilemma facing BOB with regard to commercial versus ethical considerations, including its responsibility to its employees as well as to its customers.

Most candidates simply suggested a "product recall" without thinking practically about this, eg the feasibility of tracking down the specific customers/retailers. Alarmingly, some candidates suggested that due to the possible commercial impact of the fault becoming public knowledge, the company should not make any disclosure.

Available marks	9
Maximum full marks	8

Question 2 – Drummond & Drew LLP

General comments

The scenario relates to a large firm of commercial architects (DD), currently based in a single office in London. DD has grown gradually over many years, but recently growth has slowed.

DD has a management structure of: partners, other qualified architects, support staff and administrative staff.

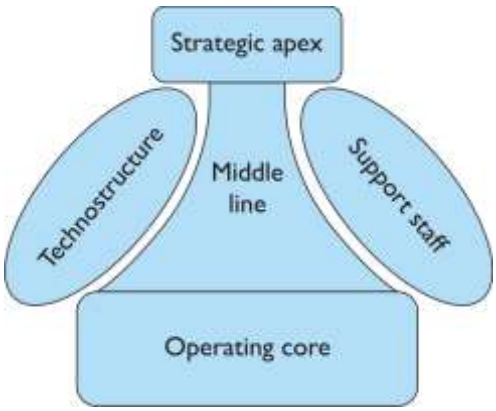
Whilst historically most of DD's projects have been in the UK, over the past five years there has been an increasing number of overseas projects, particularly in Dubai and the other Gulf States, which have been serviced from the London office.

A potential large new project in Dubai (the Sunrise) has arisen but, to be eligible to bid, DD must make a commitment to establish an office in the region. This can be achieved either by acquiring an existing architect firm in Dubai or by setting up a new DD office there.

(a)

DD is a professional service provider, based on expert knowledge. There is a need for their formal and informal structures to be appropriate to the communication and control needs of the business. The structure also needs to be appropriate to external client needs as a large amount of time is spent at construction sites.

One way of analysing DD's structure is with reference to Mintzberg's organisational configurations.



Mintzberg suggests that each component of the organisation has its own dynamic. The precise shape (configuration) of the organisation will be determined by the degree of influence each exerts.

The 12 partners who form the senior management team of the DD partnership are the strategic apex. As the owners of the business, they currently control all strategy and operations by taking all the key decisions.

The key component (or building block) within DD appears to be the operating core, with architects working directly on providing services to clients which are directly fee earning.

The managers comprise the middle line and may seek to increase control over the operating core of architects, even if they do not control the detail of their work.

Other support staff only gain influence when their expertise is vital but this may include IT where it is central to assignments (eg graphics or management information).

The technostructure consists of the small technical and regulatory team whose reason for existence is the design of procedures and standards. The team seeks an environment that is standardised as it is highly regulated.

DD's existing structure might be seen as Mintzberg's professional bureaucracy configuration, suitable for the standardisation of skills.

Key features of DD's structure are:

- The key building block is the operating core of architects who are fee earning.
- The environment is a complex static which has many elements but is not rapidly changing
- The internal factors are professional with simple systems arising from working from one geographic location with commissions driving reporting systems
- Skills are largely standardised professional skills but with some specialisations in complex assignments.

An alternative model might be Handy's shamrock organisation.

Handy defines the shamrock organisation as a 'core of essential executives and workers supported by outside contractors and part-time help'. This structure permits the buying-in of services as needed, with consequent reductions in overhead costs. It is also known as the flexible firm.

Handy has four elements to the shamrock:

The professional core comprises permanently employed staff who provide the core competencies and distinctive knowledge base of the organisation. For DD this would comprise the partners and architects but also some other employees (IT, administration etc)

The flexible labour force are temporary short-term contract architects who can be deployed when required by peaks in demand (eg from variations in the number and size of commissions in progress).

The contractual fringe are external providers (specialist architects) who can undertake specialist services on complex commissions but are not required frequently and thus can be engaged more economically on short-term contracts than by being employed permanently.

The use of specialist and non-specialist temporary contracts by DD allows short-term flexibility as the number and size of commissions in operation vary over time, and specialist skills are acquired on an occasional basis as the need arises. In the longer term it permits rapid downsizing in times of recession and can save on the costs of benefits such as pensions, holiday pay and health insurance.

Customers are a fourth cluster, to whom DD may be able to 'sub-contract' some tasks. In the case of DD this is less likely to refer to the clients themselves but rather to other contractors used by clients (eg construction companies) which may employ staff with skills similar to those of DD staff (eg chartered surveyors). This may be convenient to DD if the site is geographically remote (eg in parts of the UK a long distance from London) while construction company staff are on site.

Recommendation

The model of an operating core from the Mintzberg model with a contractual fringe and flexible labour force from the Handy model appears to work well for DD given its current professional bureaucracy configuration around a single head office. The ability of this structure to cope with more complex changes of multiple locations, overseas operations and a wider range of commission types would be questionable.

Examiner's comments	
Candidates who used recognised frameworks or models tended to score better than candidates who referred to general types of organisational structure. Those who recognised the direct relevance of Mintzberg's structure and provided supporting contextualised discussion provided the best answers. The best candidates complemented the discussion of Mintzberg with reference to Handy's shamrock organisational structure. Poorer answers talked vaguely about tall or flat structures or referred, in general terms, to divisionalised, matrix and functional structures. Also, weaker candidates tended to be too generic rather than applying discussion to the particular circumstances of a professional services organisation, as required by the scenario.	
Available marks Maximum full marks	11 10

(b)

DD already has some revenue from international clients but as this activity expands, the capability of continuing to service clients from the UK for the construction phase of commissions becomes less plausible.

Whilst planning and design could largely be carried out from the UK, the inability to service the construction phase of the Sunrise contract is likely to mean that DD would not be used for design and planning as a single architect firm would normally be used for all phases.

The costs of setting up and maintaining a local presence in the Gulf States needs to be measured against: (i) the cost of servicing clients from the UK and (ii) the ability and capacity to generate additional contribution from servicing more clients if there were to be a physical presence in the region.

The expansion being considered by DD can be evaluated using alternative strategic models.

The *Ansoff model* is a two-by-two matrix of Products (new and existing) and Markets (new and existing).

DD is attempting to enter a new geographical market with its existing professional service of commercial architecture. According to the Ansoff model this is market development. Having a recognised core competence in commercial architecture services, DD has used this in the UK to build its business but, due to competition, it is struggling to expand further. Overseas markets, in particular the Gulf States for DD, offer new opportunities for expansion.

It could be argued that the move into architectural services for domestic housing is a new type of service to be provided in a new market. According to the Ansoff model this is a strategy of diversification. The new service is strongly related to the existing service so it may also be termed related diversification.

Diversification involves developing new products for new markets. It involves the greatest risk of all Ansoff's strategies. In terms of providing the service it can require new skills, new techniques and different ways of operating. In terms of marketing the service it may also require adaptation to a new business-to-consumer model in addition to the existing business-to-business model.

Lynch's expansion method matrix is another two-by-two matrix matching company growth (organic growth and external development) with geographical location (home country and international).

Under this model, all of DD's traditional growth appears to have been carried out organically and services/markets have been developed largely domestically. Over the past five years there has been some international growth, mainly in the Gulf States, which has been serviced from the London office and so has been organic.

Porter's Diamond relates to developing a strategy in a global environment and the need to understand the competitive advantages DD may enjoy as result of physically locating in the Gulf States.

The factors include: firm strategy, structure and rivalry (eg local cultural factors with respect to the architecture industry, local capital markets, rivalry from local architect firms already established in the Gulf States); factor conditions (eg local skills available and other human resource factors; local technical knowledge and education; land for building; infrastructure); demand conditions (local demand for building projects in commercial and private building sectors); and related and support industries (eg a well-developed local construction industry).

The more these factors in Porter's Diamond point towards favourable local conditions for architect firms, the greater the benefits from DD making a local investment and commitment to the region rather than servicing it from the London office.

Ohmae's 'five C's' framework (*The Borderless World*) identified a number of reasons which might encourage a firm to act globally. This model identifies factors that may influence DD's decision of whether to establish an office in Dubai.

Ohmae's factors which may influence DD's decision include: the customer (whether the architect service requirements of Gulf States are similar to those of the UK where DD has core competences); the company (a greater volume of sales spreads existing fixed costs, although DD may incur additional fixed costs by local investment); competition (strength and response of local competition); currency volatility (currency of costs to match revenues with local investment); country (access to local resources through setting up a local office, such as HR).

Aside from these models, a key decision is needed as to whether to service client needs from London or to establish an office in Dubai (whether by setting up from scratch or by acquisition).

Key factors include the following:

A new office is likely to involve more fixed costs than servicing from London. This will increase the operating gearing of the Gulf State operations. As a result, if the Dubai office is successful then there may be advantages of lower variable costs of servicing clients (eg reduced travel time and travel costs for architects). This may depend on whether, under existing arrangements, travel costs can be charged on to the clients without affecting competitiveness.

Under existing arrangements, 10 full time staff were used on Gulf State assignments. The data provided shows that this could increase to 27 in 2017, then to 39 in 2018, before falling to 26 in 2018 and beyond as the Sunrise contract ends. This is quite a significant increase in staff and presumably there are revenues anticipated which, prima facie, would justify investing in a physical presence in the region.

The presence in the region compared to the scale of staff at the London office would also indicate that it is substantial. If the staff are proportional to fees then this would imply a significant increase in revenue and indicates that the operation would be of a viable scale if forecasts are achieved. If however the venture fails then there may be significant exit costs of terminating the commitment (eg redundancy, selling the office or terminating the lease).

Operating gearing risks and exit cost risks can be mitigated by keeping the real option and deferring the decision to invest in Dubai until it is known whether or not the Sunrise commission has been won assuming a commitment to future investment is acceptable under the tendering terms of the contract. This will give work for 12 staff in 2017 along with 10 other staff on commercial work, which is only the equivalent to that already being serviced from London, so looks to be an achievable objective. Any additional staff need then only be taken on as and when new commissions are achieved.

The fall in the number of staff after the completion of the Sunrise contract could be accommodated either by sending London staff to Dubai on a two year secondment or by hiring short term contract staff, or a combination of both.

A further advantage of investing in a physical presence in Dubai would be the ability to hire local architects with local knowledge of regulations, culture and conditions.

Having an office in Dubai to house staff may also release space in the London office which may be useful if there are space constraints there.

A final factor may be foreign exchange risk. It could be viewed that the foreign investment may lead to greater foreign exchange risk but it may also be a form of natural hedging to reduce risk by incurring costs in local currencies to match against revenues earned from those countries.

Examiner's comments

Those candidates who applied a model such as Ansoff, Lynch, Porter's Diamond or Ohmae, often scored higher because their answer had structure and direction. The use of such models also widened the scope of the answers, ensuring key areas were specifically addressed. However, only a minority used such models, with the majority relying on a 'common sense' approach.

While the use of models was not specifically mentioned in the requirement, models are a core part of the syllabus and form part of the 'toolkit' for strategic analysis. Selection of appropriate models, where relevant, should therefore be considered by candidates to structure answers and to solve strategic problems in a variety of situations, and not only where directed to do so by the requirement. Candidates should not feel confined to using only one model in such circumstances.

A minority made use of Porter's Five Forces, and some credit was given for this where the analysis was appropriate.

Answers too often failed to deal with the specific issues that would be faced by DD and instead discussed very general overseas expansion issues/considerations that could apply to any company, in any industry.

The relevance of the key Sunrise development was, rather surprisingly, only referred to by a small minority.

Relatively few candidates made any reference to the data provided in the question. As a general rule, if there are numbers in the question, then there should be numbers in the answer.

Maximum full marks	12

(c)

According to the Lynch model, a business can expand organically (internal development) or via external development.

External development can include an acquisition or it can include working with another partner (eg joint venture or other form of alliance). DD only appears to be considering either an acquisition or internal development.

There are a number of factors that would favour an acquisition of a local architect's practice in Dubai:

- Existing knowledge of the local environment, culture, regulations and markets providing useful initial expertise. It may be that DD has some expertise in these areas from its previous work in Dubai, but local knowledge is likely to be an additional benefit
- An instant skill base in terms of resources and employees is likely to mean faster growth
- It provides experience of existing supply chain and networks
- A locally known established brand and reputation with an existing customer base – this may be viewed more favourably by local businesses and government than a foreign-owned brand.
- An acquisition buys out a potential competitor and better enables DD to compete with the other domestic companies
- There are likely to be synergies as local staff can provide local knowledge but conversely DD can introduce innovations from its UK experience
- Gets round any barriers to entry in terms of resistance from local architects, construction firms and government.

Direct investment by setting up a new office from scratch offers the following merits:

- It may be difficult to find a suitable partner in terms of size or market positioning in the time scale available, allowing time for negotiation and completion
- There may be a conflict between strategies and cultures of DD and an acquired local firm which may hinder integration
- If an acquisition is made in Dubai, the local knowledge acquired may be limited to Dubai and not stretch across all the Gulf States
- Direct investment will allow DD to be free to pursue its own strategy
- The price DD is required to pay for a local firm is likely to include a goodwill premium, the cost of which may outweigh the possible benefits noted above. Organic growth by setting up an office from scratch avoids paying for goodwill, therefore DD can acquire a larger tangible asset base for the same cost as an acquisition
- Direct investment may offer a chance for more gradual expansion and an opportunity to test the market and learn. It also enables a choice of clients rather than inheriting a client list, some of which may be unsuitable for the skills base offered by DD
- Avoids any hidden or unforeseen losses that do not come out as part of due diligence eg litigation based on historic work by the acquired firm that has been negligently performed
- There may be damage to, or dilution of, DD's good local reputation if a local firm is acquired with an inferior reputation or brand name.

The core competencies that have allowed DD to prosper in the UK may not be fully realised in an overseas country. The above arguments regarding the ability of DD to replicate in Dubai what it has achieved in the UK may be summarised within Kay's framework on sources of core competencies:

Architecture
Internal architecture – is the relationship with employees. These are likely to be entirely or largely new employees, where a new relationship needs to be established.

External architecture – this includes relationships with external stakeholders such as suppliers, contractors and clients.

Network architecture – collaboration between businesses and local networks needs to be established from scratch.

Reputation
It is likely that DD will need to establish a new reputation locally. This may prevent it from initially charging a price premium as in the UK.

Innovative ability
Innovation in design is likely to be able to be 'transported' from the UK to the overseas markets but it is an industry where tastes vary across countries and thus is unlikely to give the same competitive advantage.

Conclusion
Much will depend on the price of any acquisition but, given DD already has some experience and reputation in the region and an international reputation, there may be some merit in DD setting up its own office. If further local knowledge is required, an acquisition could take place later. Alternatively, some other form of strategic alliance could take place with a local firm.

Examiner's comments Most candidates considered both direct investment and acquisition of an existing firm, and most also recognised the significance of existing knowledge and competencies. Candidates approached this requirement in different ways. Some tried to compare the differences between organic growth and growth by acquisition, whereas others approached it by thinking about the key aspects of expansion and which method best suited DD in that respect. Only a significant minority gave due emphasis to the importance of timing in the decision. The remainder may not have done so because they had not considered the Sunrise development in requirement (a). Most did nevertheless make the point that organic development will take longer than acquisition, but without much elaboration. The candidates who scored highest related their answer to the scenario and to DD. Weaker candidates simply listed the advantages and disadvantages of each approach, without attempting to draw emphasis to which issues were more important, or to provide an overall conclusion to provide coherence to the list of points made.	
Available marks Maximum full marks	9 8

Question 3 – Mississippi Muzic Ltd

General comments

The scenario in this question was a company, MM, which operates four London nightclubs, each with a restaurant. The clubs are upmarket, the entrance charge for each visit is high, and drinks and meals are expensive. The target market is young, high-income professionals. MM has attracted a loyal core of members and the clubs are, on average, 95% full on Friday and Saturday nights.

The new CEO believes that the company is not making best use of its database of members' details for marketing.

MM now wishes to increase revenue by marketing its clubs more effectively and has identified two possible strategies:

Strategy 1 – to encourage existing members to visit the clubs more frequently, and to dine in the restaurants more often, by using its database more effectively for relationship marketing purposes.

Strategy 2 – to appeal to new types of customer, other than young professionals, in order to fill its spare capacity from Sunday to Thursday.

(a)

To: Jane Flinkstein
From: Business Adviser
Date: 9 December 2015
Subject: Marketing strategy - Mississippi Muzic Ltd

The use of the database to market to existing customers should be part of a strategy of customer relationship marketing.

This is the marketing process that seeks to attract, maintain and enhance customer relationships by focusing on the whole satisfaction experienced by the customer when dealing with the firm. Building up customer relationships requires a change of focus from the 'transaction-based approach' to a relationship approach.

The concept of a club membership and the holding of a database on members' attributes and purchase habits can facilitate retaining customers over a long period by providing them with good customer service which is appropriate to their particular needs and enables two-way communication.

The database can therefore be regarded as a Customer Relationship Management system (CRM). CRM describes the methodologies, software, and usually Internet capabilities that help an enterprise manage customer relationships.

CRM can consists of:

- Helping MM to identify and target their best customers, manage marketing campaigns with clear goals and objectives, and generate quality leads.
- Assisting MM to improve sales management by optimising information shared, and streamlining existing processes (for example, taking reservations of table bookings and orders using mobile devices).
- Allowing the formation of relationships with customers, with the aim of improving customer satisfaction and maximising profits; identifying the most profitable customers (eg large groups) and providing them with the highest level of service.
- Providing employees with the information and processes necessary to know the main customer groups, understand their needs, and effectively build relationships between the company and its membership base.

The information held can be used to market the clubs' activities to individual customers in a targeted manner that will suit their individual circumstances. However, it is unlikely to be cost effective to have individual marketing for each customer's attributes. Some grouping of the data may therefore be appropriate as a form
of market segmentation to enable specific marketing on a group basis.

Examples might be:

- People who have not visited for a while. These could be targeted to come back with some inducement (eg free entry)
- Groups who visit regularly, but who have not used the restaurant (perhaps provide a restaurant voucher)

The existing information could be used to gain better communication through social media (eg Facebook and Twitter), as a means of achieving competitive advantage. Again some inducement could be offered for initial join-up.

Social media could be particularly effective at creating a community of MM club members. When followers become part of the MM club community, it gains instant access to them. That means MM can find out what challenges they are facing and what they like and don't like about MM's offerings. MM staff can engage in ongoing dialogue that can be more valuable than any kind of paid market research.

Social media also provides MM with the opportunity to remind followers over and over again about what it has to offer, which can shorten the sales cycle dramatically.

Patterns of attendance could be established. If someone visits occasionally, but always on a Saturday when they do visit, then particular events and features on a Saturday could be marketed to that group.

In order to widen the customer base, members visiting regularly could be given incentives to bring a friend to join.

Aside from the specific attributes, more general attributes could be used to analyse and use the database, as part of a strategy of segmentation. One example would by age, whereby as members get older, then individual nights could be themed to their age group (eg over 30s) or profession (eg accountant only nights).

Improved data collection, storage and analysis tools may indicate previously unknown opportunities for sales. Such tools may include data-mining software which allows relationships to be discovered between previously unrelated data.

Examiner's comments

Most candidates considered both the database and marketing issues in the context of customer relationship management, a significant minority referring to the latter explicitly.

Many made use of the four "Ps" of marketing, although only the better ones who did this used the model to focus on particular customer segments.

The majority of candidates did not use a report format for their answer despite being asked to produce a report.

Available marks	9
Maximum full marks	8

(b)

Market research is the systematic gathering, recording and analysing of information relating to the marketing of goods and services.

Market research can help in identifying the potential size of specific markets and provides information about customer characteristics, needs and wants, attitude to price and quality, and competitors' products. Market research may also help in defining appropriate elements of the marketing mix (product, price, place, promotion).

There are various forms that market research can take.

Desk research
This is the gathering and analysis of existing or secondary data. This is likely to be of background significance in establishing the characteristics of the potential market identified, but is nevertheless important.

In the case of Strategy 2, much of the relevant desk research may already have been collected in relation to the initial establishment of the nightclubs. However, new relevant data might include both general economic intelligence and market intelligence.

General economic intelligence would include data about the general economy as it applies to the target markets. his might include:

- general macroeconomic data on growth, inflation, unemployment etc (as leisure is a luxury good of choice it may suffer disproportionately in a recession)
- spending habits in the UK (family expenditure survey)
- demographic trends (census): this may be of particular importance in the context of the narrow age profile that might normally attend nightclubs.

Market intelligence may include:

- industry information on the nightclub/restaurant industry (eg prices, new trends, new music tastes, customer volume changes, advertising, trade journals, magazine articles)
- information on the demand for entertainment/leisure activities (national surveys, published local surveys, industry intelligence).

Field research
Field research involves the collection of new, primary information. It is usually more costly than desk research, but it is likely to be more relevant to the circumstances of MM.

A key advantage is that the nightclubs already exist and can thus be used as the basis for some forms of field research, as although most people are young professionals, the database would identify those members attending midweek and their attributes. The database could therefore be a key part of the field research for Strategy 2, as well as helping to develop Strategy 1.

The key answers to establish are:

- what sections of the population attend, or could be induced into attending, nightclubs on Sunday to Thursday
- how much these people would be willing to pay for entrance and for food/drink
- how frequently they would attend
- whether preferences would be concentrated for any particular night in any age group, gender, or income grouping
- whether the clubs are associated with any particular image (which may indicate the type of advertising and target market that might be appropriate)
- whether there is a demand for an alternative use midweek (eg just as a restaurant).

Trial testing
For Strategy 2, this could involve testing the service provided by the clubs on a sample of the public. This may take the form of random sampling to extrapolate the results into the general population. This could involve free tickets for midweek nights in return for feedback on the experience. Alternatively, quota sampling may be used where the clubs are tested on a sample with predetermined characteristics (eg age or gender), again with feedback. Some detail of the respondents will be needed if information is required on the differential response of different market segment groupings.

Experimentation
Experimentation may have some similar characteristics to trial testing, but is likely to be more controlled to isolate different factors such as slight changes in the product composition and presentation. For Strategy 2 this might involve changing the format or prices on a certain night during the week to test the appeal to target markets.

Test marketing
Test marketing involves a restricted launch of a new product in a small segment of the total market eg a geographical region. Ideally, the test should be small, self-contained, representative and adequately promoted. The test may be based upon the results of the above types of market research.

For Strategy 2, this might involve making changes in one of the four London clubs with respect to the types of music, food or prices on particular midweek nights. It may even involve more permanent changes in the environment to develop appeal outside the core market.

Examiner's comments

Most candidates discussed desk and field research and displayed understanding of the differences between the two approaches and the uses to which each could be put. Only a small minority took this further, and considered possibilities for test marketing, trial testing and experimentation.

Stronger candidates were able to suggest specific questions that DD would be seeking to answer, whereas a weaker answer provided only generic desk/field research commentary.

Available marks	9
Maximum full marks	8

(c)

Segmentation strategy

Segmentation is 'the division of the market into homogeneous groups of potential customers who may be treated similarly for market purposes'.

Strategy 2
The segmentation strategy for the existing core market is both demographic and socio-economic eg young professionals.

It may however be appropriate to adopt a different segmentation strategy on mid-week days. The nature of the service offered could then be tailored to the new market.

Examples might include:

- *Students* – this is a similar demographic segmentation to the core group, but a different socio-economic segmentation, as they would be a low income group. Students may not have such long working hours and be more willing to socialise, at a lower price, during weekdays.
- *'Middle-aged' people* – a different demographic segmentation might be over 30s/40s/50s nights. More established in their careers, they might be of similar high socio-economic groups to the core market, but have different tastes in music and environment.

- *Retired* – an older age range still would be a further demographic segmentation, and might have more time flexibility, but different social and leisure needs.
- *Unemployed* – Low socio-economic group, but significant spare time mid-week. Could also be split demographically.

While the segments may be split on a 'day of the week' basis, there may be a danger of altering the general culture of the nightclub, making it less appealing to the core market. The physical attributes of the nightclubs (eg décor) may also not lend themselves to different types of entertainment.

As well as splitting on a day of the week basis, segmentation could be by different types of membership. This could vary the membership fee but also facilitate subsequent targeted communication and keep the core group as a separate and distinctive membership.

Pricing

Strategy 2
The core market has a premium pricing strategy, but a nightclub can distinguish its markets on the basis of time – with each night of the week being a separate market. As such, it enables a policy of price discrimination between the different markets by charging different prices on different nights, and would thus be linked to the above segmentation strategy.

Nevertheless, this is only an advantage if there is a different price elasticity of demand in each of the markets. Given the widely different socio-economic groups being targeted, this seems very likely. Thus, while demand may be inelastic for the core market, it may be very elastic for other low income markets such as students and the unemployed. This would suggest a much lower price on these nights.

A key factor in assessing price is the price being changed by the closest competitors, which should be determined in a competitor analysis.

This should include the prices being charged for drinks and in the restaurant as well as the entrance fee. Indeed, one pricing strategy would be to have free entrance (or a minimal cost) on some nights in order to generate revenue from drink and food. This may be possible given the low marginal cost of attracting additional customers.

Examiner's Comments

In general, the segmentation element of the question was dealt with much better than the pricing aspects. Poorer efforts at pricing used the four "Cs" model with little application to the scenario, often simply 'knowledge dumping' by quoting all the pricing strategies that candidates knew. Weaker candidates also did not link their explanation of pricing strategy to their earlier discussion on segmentation.

The best responses covered market segmentation and pricing well, and explained the relationship between these, giving some emphasis to price discrimination between segments and between days of the week.

Some also made the point that it may be difficult for the club to offer a different experience on different days of the week, as it may be too focused in terms of décor and general offering on higher-end customers. Some also referred to problems of leakage between segments, thereby making price discrimination more difficult.

Available marks	9
Maximum full marks	8