

CGMA MANAGEMENT CASE STUDY FEBRUARY 2019 EXAM **ANSWERS**

Variant 3

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SECTION 1

Value chain activities

Creating an in-house laboratory makes Crowncare directly responsible for inbound logistics, operations and outbound logistics relating to laboratory services. At present, the responsibility for managing inventories of materials, manufacturing quality and delivery lies with the laboratories whom we trade with. Crowncare would be directly responsible for each of those areas if it established its own laboratory. Equally, our own laboratory would give us control, which could be advantageous in terms of managing priorities.

Having a laboratory could support marketing and sales activities by demonstrating a commitment to detail and to excellence by Crowncare. The fact that we would no longer have to pay the margin charged by an independent laboratory could create opportunities to reduce prices, or simply to promote discretionary treatments that require laboratory work more forcefully.

The laboratory would offer little change in the way of after sales service. Defective items are likely to require replacement rather than adjustment and so having an in-house laboratory would not enable, say a chipped crown to be repaired. Perhaps the greater control would enable Crowncare to rectify any problems by prioritising the creation of a defective bridge or crown. Support activities would also be affected.

Crowncare would have far greater control over the technology development activity. If, say, a new manufacturing process becomes available then Crowncare's Board can decide to acquire it and use it heavily across the Group. Independent laboratories might be reluctant to invest because they cannot necessarily guarantee that they will sell the output and so their customers cannot necessarily have access to the resulting benefits.

Crowncare will face fresh challenges in human resource management because the recruitment and retention of skilled staff will become the Group's direct responsibility. If an independent laboratory loses a key technician then Crowncare can simply shift to

an alternative laboratory, but that is more difficult to justify when there is an in-house facility.

The in-house laboratory would have little impact on procurement or broader issues of firm finance. Those activities will be relatively unaffected because Crowncare will undoubtedly have supervisory and administrative staff to take care of them. The size of the laboratory may dictate whether certain issues are cost-effective. For example, a larger laboratory can take advantage of its size in the procurement process, seeking discounts and so on.

WACC

Crowncare is presently funded entirely by equity, so the WACC is the same as the cost of equity. That is essentially the rate of return expected by the shareholders for taking the risk of investing in a particular company's shares. The dividend valuation model might be used, firstly by looking at historical dividends and dividend growth and secondly by looking at shareholder expectations arising from the change brought about by the acquisition of a dental laboratory. If the shareholders believe that their investment has become more risky then the value of the equity will fall and the cost of equity will increase.

Crowncare is unquoted and so the share price cannot be observed. The cost of equity may be estimated by looking for quoted dental companies and using market prices to estimate their cost of equity. The impact of the investment could be estimated by looking for a quoted dental company because the overall cost of equity could then be estimated as a weighted average of the two costs of equity. It may be necessary to search for quoted companies that are in broadly similar lines of business, such as medical care, because it is unlikely that there will be a direct comparison.

Crowncare is presently funded by equity. Borrowing heavily to acquire a large laboratory will reduce the weighting attached to equity from 100% to a lower amount. Debt is generally cheaper than equity, so borrowing heavily to expand the company would reduce the WACC. Borrowing will, however, increase the risk to shareholders because Crowncare will have to service the loan from profits and cash flows. Increasing risk also increases the cost of equity and that will offset the savings to some degree. The overall effect will require significant estimates and assumptions and so there can be no real certainty about the net effect on WACC.

Borrowing will also reduce WACC because loan interest is an expense for tax purposes. Dividends paid to shareholders attracts no tax relief and so borrowing further reduces WACC because of the tax saving.

Section 2

Transfer pricing

The biggest challenge is that Tonlab and each of Crowncare's practices are subsidiaries, each of which prepares its own set of financial statements and so reports its own profit or loss. The problem is compounded by the fact that Tonlab's staff receive a profit-related bonus. That creates a situation in which dysfunctional behaviour might arise if either the laboratory or one of the practices pursues its own agenda. For example, a practice might order a crown from Davnlab because it will appear to cost V\$375 instead of V\$400, but the cost to the Group as a whole would be only V\$286 if the order was placed with Tonlab.

Identifying dysfunctional behaviour is complicated by the fact that there are varying margins for different products. For example, the mark-up for a porcelain crown is $V\$114/V\$286 = 40\%$, whereas on a gold crown it is $V\$28/V\$140 = 20\%$. That could create a situation in which it would be better to use any free capacity at Tonlab to make a porcelain crown for an external customer, even though one of Crowncare's practices would then be forced to buy a gold crown from an external laboratory.

As a starting point, internal sales should be priced at external market prices that take account of any discounts that would be offered by competing laboratories. For example, the transfer price of a porcelain crown should be set at V\$375 because that appears to be the market price now that Tonlab belongs to the Crowncare Group. If practices can buy from Tonlab for the same price as from external suppliers then they will have no incentive to go elsewhere.

Dysfunctional behaviour on Tonlab's part will only arise when it has to choose between internal and external orders and it chooses to work for a third party to the detriment of the Crowncare Group. One way to address that would be for Tonlab to be transparent over the constraints that prevent it from accepting an internal order. For example, Tonlab might wish to reject a request for a V\$375 internal order for a porcelain crown in favour of a V\$400 external order for the same item. If Tonlab is required to show the financial implications of rejecting the external order to the Crowncare practice then it will be apparent that the internal order should receive priority.

Resolving conflict

The relationship between Tonlab and the practices appears to be based on high assertiveness and low cooperativeness, creating a competitive conflict. This is potentially damaging because both sides feel that they have to "win", despite the damage that might cause to Crowncare as a whole. Crowncare must address this conflict as a matter of urgency by clarifying the factors that have caused the conflict. The first step is to develop an understanding of the cause of the conflict. Tonlab is the largest dental laboratory in Capital City and at least some of the practices must have used its services before the acquisition. As a starting point, it would be worth establishing whether the present conflicts are with practices who used Tonlabs in the past, or whether they are only starting to work with Tonlabs now that it is a member of the Crowncare Group. Lead times and pricing are fundamental aspects of doing business, so the specific concerns have to be identified.

Once the causes of the conflicts have been identified then Crowncare's Board should intervene if necessary to ensure that an agreed set up operating procedures can be established for internal sales. For example, if practices are demanding unduly tight deadlines then there should be an established norm for delivery and Tonlabs should aim to meet that. If a dentist requires work urgently then it may be necessary to commission the work from an external laboratory rather than disruption Tonlab's schedule.

There should be a formal system in place so that the relationship between Tonlabs and the rest of the group can be discussed with a view to reducing conflicts. It may be appropriate to have a regular meeting that is attended by a sample of Heads of Practice, the Head of Tonlabs and a member of Crowncare's Board. Regular contact and clear communication should enable both sides to establish an acceptable common ground, with the Board taking steps to impose a solution if agreement cannot be reached.

Section 3

Industrial accident

Employers are generally responsible for the health and safety of their employees and it can be difficult to escape liability for an injury that has been sustained. All tasks should be subject to a risk assessment and appropriate steps taken to mitigate any risks. In this case, the risk of drilling into a dental crown had been assessed and the risk of an eye injury caused by a fragment had been identified and the need to wear eye protection noted. The employee should then have been briefed and provided with training in the safe operation of the equipment, including the safety precautions.

The fact that all of the necessary steps had been taken by Tonlabs, including the provision of approved safety goggles, is effectively proof that the risks were known and understood by the company. That created a duty to ensure that the employee was provided with a safe working environment, including proper supervision. Sally was permitted to work with a hand piece despite the fact that she was not wearing the necessary safety equipment and so it will be extremely difficult for Tonlabs to argue that it has not been negligent. The supervisor compounded that by giving misleading and invalid advice about the use of ordinary spectacles as eye protection.

As an employee, Sally has a legal duty to consider her own safety and that of her co-workers. If the eye protection that Tonlabs had issued was unsuitable then she should have insisted on its replacement and should have asked to be assigned to another task until a safe replacement was forthcoming. Employers cannot, however, permit employees to endanger themselves, even if those employees are aware of the risks and are exposing themselves voluntarily. The fact that others were in the habit of taking the same risk as Sally simply increases Tonlab's responsibility to have taken action,

TARA/provision

The TARA framework would have classified this as a low probability, high consequence risk. The fact that staff frequently undertake this task without eye protection demonstrates that the likelihood of fragments causing injury is relatively low. The consequences of an employee suffering an eye injury are, however, serious. According to the TARA framework, this injury should be addressed by transferring or sharing it, perhaps through insurance.

In this case, the mechanical application of TARA would not have helped Crowncare to reach an optimal response to this risk. First of all, Crowncare's insurers might refuse to offer cover for claims that are attributable to negligence and any claim for compensation might be rejected if negligence was an issue. Secondly, the only other stakeholders with whom to share this risk would be the employees who were exposed to the risk of injury and the law does not permit employers to permit their staff to be at risk. In this case, the response should have been for Tonlabs to have enforced its own safety procedures, thereby avoiding the risk.

The question of whether a provision is necessary depends on the likelihood that Crowncare will have to pay compensation and the extent to which that compensation can be estimated reliably. These are the criteria set out in IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*.

The question of likelihood should be discussed with Crowncare's lawyers. The employee may find it difficult to prove a case in court, especially when taking account of the fact that she may not be able to afford the legal costs involved. Having said that, it could raise a great deal of negative publicity for Crowncare if it is seen to make an inadequate response to the employee over this matter.

Legal cases are generally settled by negotiation, outside of the court. Again, Crowncare's lawyers will be able to advise on the extent to which a payment can be estimated. The claim for loss of earnings should be a relatively easy figure to estimate. The question of compensation for pain and suffering is more subjective.

Section 4

NPV

The fact that Citydent believes this to be a positive NPV investment does not necessarily mean that our evaluation is incorrect. Citydent's estimates of future cash flows and of the required rate of return could have been unduly optimistic. Their technicians and their dentists may have been keen to work with the very latest equipment and that could have reduced the rigour of their investment appraisal. They may have overstated the extent to which this will attract patients. Even though we have lost some patients, Citydent's new service will only benefit those patients who find it convenient to attend the dentist in the city centre and who are so busy that a return appointment to fit a crown is an inconvenience.

This could have been Citydent's first investment in crown manufacture. In that case, their cost would be restricted to the difference between the new technology and existing machinery. Crowncare already has a fully-equipped laboratory and so we would have had to invest the whole cost of the new technology, making it a more significant investment for the same return. Citydent's investment in this equipment may not be comparable to our own and so we cannot assume that their decision to proceed makes it a positive NPV investment for us.

Citydent has a single site operation with eight dentists. We are spread across Capital City and so we would have to invest more heavily in infrastructure if we equipped our laboratory with this equipment. Once the patient's mouth had been scanned and the data transmitted to the laboratory we would have to find a way to bring the newly-made crown to the practice. That would probably involve buying a vehicle and hiring a driver to courier the crowns, which would add significantly to our operating costs and could reduce the convenience to our patients.

Our initial evaluation of this new technology could have been unduly pessimistic. We could have considered alternatives, such as equipping a Crowncare practice close to our laboratory with a scanner and referring patients who required a crown in a single sitting to that practice. That would give us an opportunity to evaluate the new technology and we could have promoted the service in competition with Citydent. The cost of equipping the remaining practices could then have been evaluated and considered in the light of our experience and the response from our patients.

Depreciation/competitor analysis

Alison's argument would involve a breach of the professional behaviour requirement of the CIMA Code of Ethics. That requires compliance with relevant laws and regulations. It would also breach objectivity because she is suggesting that we allow bias to enter into the preparation of our financial statements. She is also in danger of breaching the concept of professional competence and due care because her position as a board member makes her responsible for the supervision and management of those under her control.

It is irrelevant to argue that the shareholders all work for Crowncare and can be briefed on the manipulation of the financial statements. They may not necessarily understand the briefing and could still be misled. The financial statements are also studied by third parties, including lenders and other stakeholders, and they could be misled. Crowncare is a company, which means that it operates in the privileged position of offering limited liability and the publication of financial statements that present fairly is one of the safeguards that underpins that privilege.

Crowncare is in competition with other dentists and so we should undertake ongoing and comprehensive competitor analysis. That does not necessarily mean that we should be able to predict every competitor's intentions. We can use publicly available information to evaluate the strategies of our competitors and their resources and capabilities.

For example, we know how many patients each dentist in a practice can realistically manage and so we can estimate the scope that any given competitor has to expand patient numbers without recruiting additional staff. We can study the treatments that our competitors currently offer by looking at their websites.

In this case, we knew that the 3D scanning technology was available and it was obvious that a competitor would have been just as capable of investing as we were. At best, we could only have taken the impact on our competitive position if a competitor had invested into our consideration of the technology.