MANAGEMENT CASE STUDY MAY 2016 EXAM ANSWERS

Variant 2

The May 2016 exam can be viewed at

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Section 1

Treatment of research costs

There are two main issues that have led to the treatment of IC Research's contribution to the group profit.

IC Optical is a quoted company. The law requires that we prepare financial statements that "present fairly" and comply with IFRS.

IAS 38 *Intangible assets* sets out some very specific requirements for the recognition of development work as an asset. Those requirements can be listed separately, but for our purposes, it is sufficient to note that they effectively make it very difficult to classify outlays as assets. Once a cost has been classified as "research" (and therefore written off) that cost cannot be reinstated as an asset under "development".

A further problem is that any assets recognised in IC Research's statement of financial position will be valued at their cost. The only transactions on which it is possible for IC Research to recognise a profit for IC Optical is when it sells its output to a third party. The primary purpose of IC Research is to serve the IC Optical Group and so most of its output will be intended for fellow group members.

It might be possible to create profits in IC Research's financial statements in an artificial manner by transferring any intellectual property created at its value rather than its cost. Unfortunately, that would lead to significant problems in valuing these results, particularly when they are relatively minor improvements to existing products and processes. Alternatively, outputs could be sold on the basis of hours charged to a project at a rate that covered labour, overheads and profit. Again, that could be very artificial and would require very detailed record keeping. Furthermore, any profit on transfers between group members would have to be eliminated in the preparation of consolidated financial statements. That would do very little to enhance the sense that IC Research was making a valued contribution to group profits.

Motivating using an alternative performance measurement system

IC Optical might use a balanced scorecard approach to monitor performance. Research staff need to be motivated to focus on the factors that they can control. For example, it might be far more motivational to have a balanced scorecard for each major project that is under way in IC Research. That way the head of each project team will be motivated to ensure that the project(s) under his or her control is managed effectively.

Part of the success of any balanced scorecard approach will depend on the extent to which feedback is provided on factors that are controllable. For example, senior management in IC Research may have little control over financial matters and so that quadrant may be of little relevance. It may be far more effective to focus on the customer quadrant, with a view to serving the wider needs of IC Optical. What research strategy will enhance the company's profitability?

Other managers should focus more on learning and growth because it would be possible for professional research staff at all levels to bid for training in particular skills that they have identified as useful.

Other approaches to measuring performance would be acceptable.

Informing the board

The board may well have a different agenda in reviewing these results in comparison to the managers. The key is to enable the board to understand how the research activities that matter are progressing.

The board would benefit from having a scorecard for each major research project. The focus might be on internal business processes. For example, there could be measures relating to whether major milestones are being achieved. Given that the emphasis is on developing products for use in a competitive retail environment, the board would wish IC Optical to develop products quickly in order to get ahead of competitors.

The board should also develop measures that focus on the overall activities of IC Research as a whole. It is, for example, difficult to establish whether value for money is being obtained from research and some measures could be developed in the financial quadrant. The board could, for example, expect to receive feedback on the process of incorporating research findings into products and processes that are being used in the generation of revenue. The balanced scorecard approach could permit the management of IC Research to express their contribution using multiple criteria, reducing the risk of dysfunctional behaviour. For example, progress might be measured in terms of the number of projects that have been converted into products or processes, the revenues or cost reductions attributable to the application of research results and so on.

Section 2

Commercial implications

IC Research provides IC Optical with an in-house “technical” research facility. It works on improvements to new products and processes and not on market research.

IC Research makes its contribution through development projects, that are expected to have an immediate application and through “blue sky” research that may have a longer-term benefit to the company. IC Optical presently benefits from all of this activity through its ownership of IC Research.

Under new ownership, IC Research may aim to devote more attention to development activities that can be sold immediately to commercial customers. If the blue sky research dries up then IC Optical may lose some of its commercial advantage in respect of innovation. On the other hand, IC Optical is currently forced to pay for all of the work undertaken by IC Research, which means that it is paying for the speculative research projects that may turn out to have little or no commercial application.

Conversely, IC Optical may take the view that the costs of speculative research may be relatively low given that the research staff are salaried and many of the running costs will be fixed. The marginal cost of additional studies will be very low while IC Research is 100% owned. It will be much greater if the company is operating independently.

Selling IC Research will leave IC Optical as a major customer, with considerable influence over the newly independent company. IC Optical will be able to count on the loyalty of IC Research for the foreseeable future.

IC Research provides IC Optical with a number of indirect benefits that could be difficult to value. The links between IC Research and the Central University of Zimland may assist in the recruitment of optometry graduates Central University of Zimland. If IC Optical is first choice because of familiarity with the company then the company may have first choice of the best graduates and will be able to enhance customer service.

Cash flows

The parties to this negotiation need to identify the relevant costs and decide whether the proposal suits their needs.

From a logical point of view, IC Optical should start by comparing the cash flows arising from IC Research in either case, with or without the disposal.

If IC Research is sold then IC Optical will receive a cash amount that is equivalent to the cost of conducting research and development in house for the next five years. That will be beneficial in the short term because the cash will be available to meet working capital and other commitments in the short term.

IC Optical will have far more discretion over the level of research and development that it is willing to pay for. There is no particular commitment to pay staff and so it would be possible to vary the level of expenditure. That would, however, give competitors the ability to use the research facility to a greater extent.

The level of work actually undertaken by Lim Optics may be affected by the sale. The new owners may be more motivated if they are working for themselves and so it may be more attractive than anticipated for IC Optical to commission work. Paradoxically, that might actually be in IC Optical's interest because the additional projects may tend to be positive NPV investments. There could be additional cash outflows arising from this, even though they are in the long-term interests of IC Optical

The final agreement on projected cash flows may be difficult to reach. That may prove a major distraction and waste of management time.

IC Optical's shareholders may believe that the sale has been underpriced, even if we announce the basis on which the payment was determined. That may provide a further incentive for IC Optical to underspend on research and development during the initial five years and that could lead to a dysfunctional decrease in cash outflows.

Section 3

Valuing future sales of intellectual property

The pattern of future sales implies that a major project will be completed in year 3 and that outputs will fluctuate quite significantly in the other years. This investigation should commence by considering the realism of those assumptions.

IC Research has two major projects under way at present. The first step would be to review the reports that have been filed on those projects since they got underway. The focus of that review will be the question of when the projects are expected to end and whether they are expected to be of value to IC Optical. Both could, in principle, lead to new products that might have some retail value for IC Optical. Ideally, the finance staff from IC Optical will be able to confirm the likelihood of completion of those projects within five years on the basis of reports that were filed and submitted by research staff before the prospect of a sale was discussed.

The projected number of projects that will be completed over the next five years should be compared to previous years in order to ensure that the trends seem realistic. Marcus Lim has an incentive to understate both the number of projects and their likely value and so any decrease in the former should be queried. The values of past findings will require some additional work because there is unlikely to be an observable market in intellectual property. Again, the starting point should be past years' results, perhaps reviewed by Andrei Yudin or a member of his staff. The finance staff may have to conduct hypothetical discussions with colleagues from various disciplines along the lines of discussing how much would have been paid for the research findings obtained from IC Research in the past. That would give a starting point for the evaluation of the likely findings that Lim Optical is likely to offer for sale over the next five years.

The finance department could make it clear to Marcus Lim and his colleagues that they will anticipate selling prices to be related to the hypothetical valuations suggested during this negotiation. It would, for example, be possible to develop a schedule of the projects that are likely to be completed over the first year or two after the sale and to agree a selling price for each in advance, assuming that it is successfully completed. In that case, Lim Optics will have to accept a reduced price for these findings if they are, indeed completed and offered to IC Optical the event that the findings are sold within five years.

Ethical considerations

The CIMA Code of Ethics provides a valid and relevant starting point.

Andrei's proposal is a very clear breach of the fundamental principle of integrity. The deliberate misstatement of our intentions is hardly "straightforward, honest and truthful". Even though the figures are only estimates and may turn out to be accurate, there is deliberate misstatement with a view to mislead. The fact that the intention is to force a buyer to overpay means that the failure to act with integrity is all the more material.

It could also be argued that there is a breach of objectivity. Marcus Lim has suggested a fairly mechanical decision model into which we should put estimates that have been reached by discussion. If we deliberately bias our estimates to include revenues that will not occur then we are very clearly in breach.

As a management team, we are responsible for the reputation of IC Optical. Any deliberate distortion of such an important figure due to unprofessional behaviour could lead to the loss of that reputation.

The fact that we are using this misstatement to compensate for an alleged misstatement by Marcus Lim is hardly “practical”. All that we are doing is creating the possibility that negotiations will become drawn out when the other side evaluate our predictions. If we have decided that the disposal is in our interests then we risk failing to make the sale if both sides end up arguing over concerns about the falsification of expectations. It would be far more efficient to offer credible predictions and to challenge those offered by Marcus Lim. It may be that he will be able to justify his estimates, in which case we will lose credibility with an individual who will remain an important business contact once the sale is concluded.

Section 4

Impact on financial statements

There is no share premium in the statement of financial position of IC Research. There is nothing to suggest that the company was acquired as a going concern. Thus, it is logical to assume that IC Research was brought into existence and funded through a direct capital injection of Z$100m. That suggests that there is no goodwill to be taken into account in calculating the gain or loss on disposal.

There will be a gain or loss on disposal in the consolidated financial statements for the year ended 31 March 2017. That will be determined by comparing the net assets of IC Research (probably roughly the Z$255m currently shown) with the proceeds of disposal.

The proceeds of disposal will be determined by the fair value of the consideration. If we accept the Z$344.1m as the fair value then we will show a gain of Z$344.1m – 255.0m = Z$89.1m. Any tax on this transaction will also have to be taken into account.

We need to decide whether the implicit value of the loan from IC Optical is in line with its fair value. Lim Optics will have a large loan secured against existing assets and so the fair value may be diminished by the risk of default.

The consolidated financial statements will change in the longer term. Equity will increase because of the gain on disposal. Profits may be affected by the net additional cost, if any, of buying intellectual property at its market value in comparison to the cost of its creation. There will be a little compensation due to the interest from the loan to Lim Optics. Overall, that suggests that there may be a decrease in return on capital employed.

Change management issues

The change management issues will be significant.

Firstly, IC Optical has a Research and Development director. The question that may be raised is whether there is a role for Andrei Yudin if there is no in-house research facility to oversee and manage at a strategic level. The reasons for the change should be articulated in such a way that it is clear whether this board position will remain or whether Andrei will either have to accept a different title or even step down from the board altogether.

The need for change in research and development, if any, will have to be determined. The sales of IC Research is effectively being driven by pressure from its existing management team and so it seems unlikely that the board of IC Optical will be prepared to change the research activities. This “business as usual” approach will have to be communicated to senior managers.

The new relationship between IC Optical and Lim Optics will require a greater understanding of the research and development process. When IC Research was in-house there was more scope for leaving the design of a research agenda to Marcus Lim and the other senior research staff. Now, we will have to develop projects that we wish Lim Optical to conduct on our behalf, knowing that each project will be charged for. This may require training for senior management so that we do not waste money on pointless research while avoiding the opportunity cost of doing insufficient.

There may be a need to shift thinking with respect to commissioning research projects. Managers may be reluctant to bid for projects because they may fail and the fact that a fee is paid may highlight the project's subsequent failure. A protocol will have to be developed for the evaluation of such projects, allowing for the possibility that a "failed" project can be justified on the basis of expectations or knowledge gained. We will also have to develop the means to track the progress of projects that are being conducted by an external organisation rather than an in-house facility.