MANAGEMENT CASE STUDY May 2018 EXAM ANSWERS

Variant 3

The May 2018 exam can be viewed at

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Section 1

Authority and responsibility

Authority is basically the right to exercise power. In theory, switching subsidiaries from investment centres to profit centres would reduce the level of authority because the subsidiary boards would no longer have the power to make investment decisions. That would reduce the level of autonomy significantly because they would then have to seek authority for making investments from the board of Menta Central Eurozon. That could leave the subsidiary boards feeling that their roles have been significantly reduced because they no longer have the ability to make investment decision.

There is, however, a doubt as to the level of authority that the subsidiary boards had to authorise investments. It is unlikely that Menta Central Eurozone permitted its subsidiary boards' unlimited authority to make investments. The chances are that the authority to make investments was limited in terms of both scale and scope, perhaps allowing them to acquire buses as replacements or to meet operational requirements. The boards would not have been able to raise equity or even seek significant debt on their own authority.

Responsibility is essentially a duty to perform specified duties, being held accountable for performing them properly. In theory, switching from investment centres to profit centres relieves the subsidiary boards of the responsibility for

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making sound decisions If investment decisions are to be made by a higher level of management then the subsidiaries cannot be held responsible for the manner in which funds are invested. Given the timescale of investments, that could be a significant concession, because subsidiary boards will no longer be held accountable for decisions that might have been made years in the past.

Again, there may be questions about the extent to which this represents a real change. The subsidiary boards will be responsible for generating profits, allowing for the resources at their disposal. That makes them responsible for putting the assets to full use, even if they did not have the final say in actually acquiring those assets. Furthermore, the subsidiary boards will almost certainly initiate many investment appraisals, albeit as proposals to be decided by the parent. They will undoubtedly still be held responsible for those investments.

Reporting differences

The basic principle underlying the identification of responsibility centres is that managers ought to be held accountable for the matters that they control. The reorganisation of the Group, so that subsidiaries are profit centres instead of investment centres should, in theory, lead to a change of emphasis in the management accounting system to focus on the controllable margins of each subsidiary . That would reduce the emphasis on assets and liabilities and would change the basis on which costs are reported. For example, if subsidiary boards cannot make investment decisions the depreciation is no longer under their direct control.

The focus on profit might allow for a greater emphasis on matters that subsidiary boards could control, such as their share of their local markets. Each subsidiary has a clearly designated area of operations and the management team could be held accountable for retaining and enhancing market share. The subsidiaries could be asked to report on the effectiveness of discretionary activities such as local advertising and marketing.

Given the nature of operations, there is a limit to the extent to which this emphasis on profit ought to be carried through to the management accounts. First of all, there is a large number of subsidiaries and each is a significant business in its own right It is important that local subsidiary boards are capable and competent managers, who should be held accountable for maximising the returns from the assets that have been entrusted to them. The board of Menta Central Eurozone cannot be expected to manage these subsidiaries individually.

There is also a sense in which the subsidiary boards may have to take more discretion than might otherwise be the case in conventional profit centres. Each is responsible for a specific area of operations and the parent board may not fully

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understand all of the constraints and opportunities that arise locally. The Menta business model means that most subsidiaries were acquired as going concerns and so each might operate assets that were chosen by the previous owners. While it might be unreasonable to hold the subsidiary managers responsible for asset-related costs, they might be the only ones who have the necessary knowledge of, say, a particular model of bus to be able to minimise those operating costs.

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Section 2

Big data

This challenge fits well within the big data framework. We have the velocity of data being received in real time from bus GPS trackers. There may also be real-time updating of traffic conditions from GPS sources. We have volume in terms of the large quantities of data being received. Finally, we have variety of data being collected both from GPS and from maintenance and other records. Ticket machines will also be capable of tracking passenger numbers.

The data must be collected and stored in a manner that is accessible and can be interrogated in order to search for patterns. Menta will have to take advice about the storage of this data, so that it can be searched and analysed efficiently. It will also be necessary to identify a suitable interrogation tool

The next step will be to relate the running costs of each model of bus to different driving conditions encountered in each of the routes operated by Menta Central Eurozone. Ideally, we will be able to determine that some models of bus are more fuel efficient than others when operating in heavy traffic and those buses might be transferred to city-centre routes where traffic is heavy. We might also consider whether there could be other efficiencies, such as using buses that have larger passenger capacity on routes where buses tend to run full.

There are also sufficient data points for us to consider the implications of running mixed fleets from each depot. It may be that repair costs are greater, because mechanics do not specialise to the same extent and because of the need to carry larger inventories of spares. We can link the cost of maintenance to the composition of each local fleet to establish whether there is a difference.

Reporting issues

Investing in a large fleet of new buses will undoubtedly reduce reported profit, as well as increasing capital employed. The shareholders may be concerned that key ratios such as return on equity or return on capital employed are lower than they were previously. As a starting point, we might analyse the impact on the key ratios by identifying the figures that will be affected. New buses are likely to have higher depreciation charges than the old buses that they replaced. The investment is likely to require an increase in debt or equity so that capital employed increases.

One way to minimise the impact on the financial statements will be to delay the acquisition until after the end of the financial year. That means that the decision to invest will have been taken, but the buses will not be purchased until the very start of next year. That will give Menta the opportunity to generate a whole year's efficiencies and savings to offset the increase in capital employed.

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Another way to reduce the impact will be to replace buses that have been heavily depreciated in the first instance so that any disposals are less likely to result in significant losses on disposal. Losses on disposal will reduce operating profits and will further decrease profits and return on capital. That saving may be offset by the fact that retaining newer buses may increase the annual depreciation charge.

If the model of bus that has been identified as a replacement is still open to discussion, then depreciation can be minimised by choosing the bus that has the longest expected useful life. Ideally that bus will have the lowest expected operating costs, which would be consistent with the high life expectancy in terms of useful life. The shareholders could then be reassured that the additional capital costs will be offset by the expected savings and so they should not be unduly concerned by any decrease in return on capital.

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Section 3

Timetable

Menta has a very large fleet, which means that it will be ordering hundreds of new buses. That order will take time to fulfil and it may be difficult for the manufacturer to guarantee that there will be no delayed deliveries. That concern might be addressed in part by ensuring that the manufacturer is motivated to complete the order on time. Perhaps Menta should not drive too hard a bargain so that there is sufficient profit from the sale for the manufacturer to give it priority. Or there could be a penalty clause for delayed deliveries.

Each subsidiary will probably lobby for new buses rather than being given used buses from elsewhere in the group. That could lead to dysfunctional behaviour, such as attempts to reject perfectly serviceable buses on the grounds that they are defective or substandard. This could be addressed in part by making it clear from the outset that the parent company will decide on the allocation of buses, with no exceptions. Another solution would be to impose a charge on the subsidiaries for any repairs that prove necessary after the transfer, so that the subsidiaries who receive used buses can be confident that their buses are in good condition.

Transferring buses between subsidiaries could interfere with ongoing operations, which could disrupt revenue streams and customer goodwill. For example, buses may have to be taken out of service to be repainted before they are transferred between subsidiaries One solution would be to retain a pool of older buses that can be used to maintain services on a temporary basis to cover any shortfall in a particular depot . Another solution would be to accept the temporary inefficiencies of operating some depots with an even greater diversity than in the past, with replacement buses arriving piecemeal.

TQM

The first aspect of TQM would be to aim to avoid the need for repairs, on the basis that preventing returns to the depot or roadside rescues will be far less disruptive to operations. The starting point will be to ensure that the routine checks specified by the bus manufacturers are carried out as scheduled and any problems are addressed, even if they are not necessarily likely to cause an imminent breakdown. Buses should also be subject to a basic inspection by their drivers before they leave the depot. Drivers should be trained to look for possible problems and to take responsibility for reporting anything that they are unsure about.

Mechanics should be well trained to maintain the specific models of buses that they are responsible for and to keep up to date on any new information released by the manufacturers. Menta should report any recurring problems to the manufacturers, in the hope that these can be addressed and rectified This is particularly true of the new model that is being acquired because we will have no prior experience of its operation

Menta should create a commitment to the reliability of its services by gathering information about the serviceability of buses and demonstrating that senior management takes an active interest in it. It may help to publish rankings of the number of breakdowns and repairs by depot in order to create a sense of pride in

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good performance. The mechanics should be reassured that any reduction in the number of repairs will not put their jobs at risk, so that there is no danger of dysfunctional behaviour.

Each depot should strive for continuous improvement. For example, each breakdown might be discussed in order to establish why it occurred. If it was a compliance failure then it may be appropriate to carry out some additional training as a reminder of procedures. If it was an unforeseen problem, then the possibility of lessons such as the need for additional checks could be discussed.

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Section 4

Payback

The shareholder is correct to argue that payback has significant limitations. If the board wishes to maximise shareholder wealth, then it should have evaluated the different models of bus on the basis of net present value. A positive net present value represents an increase in shareholder wealth and so the model of bus that gives the greatest NPV is the one that will give the greatest increase in shareholder wealth. The payback model has a number of limitations in comparison to NPV, most notably that it ignores both the time value of money and the cash flows after the payback period. In theory, payback could give an invalid ranking of the different models if, hypothetically, the bus with the shortest payback had a very short useful life then it could be a poorer choice than one that takes longer to pay itself back, but carries on for twice as many years thereafter .

The payback model does have a number of benefits that could apply to this project. Firstly, it requires a formal evaluation of future cash flows, even if it ignores the need for discounting. In a comparison between various models of bus, it is to be hoped that the annual savings will remain relatively steady throughout the life of each bus. That may suggest that payback will give roughly the same ranking as NPV when comparing buses. That is, of course, subject to a number of assumptions, such as reasonably consistent useful lives. If Menta's management is using its common sense, then it would be looking out for obvious signs of such anomalies

It could be that Phil Whiteford was speaking loosely when he referred to payback. The choice of bus could have been based on net present value, but that concept can be difficult to understand. Payback is an easier concept to grasp, which might make it a more suitable concept to mention in the context of a newspaper interview. If a bus has both a high net present value then it will generate strong cash inflows, which is not inconsistent with a rapid payback. The high initial cash inflows are also indicative of a short-term forecasting horizon and so the gains are not as likely to be subject to forecasting errors.

Competitive advantage

The shareholder may be correct in her argument in the sense that the new buses are unlikely to attract new customers to Menta Local bus journeys tend to be relatively short and passengers are unlikely to make a conscious choice to travel on a Menta bus just because it is slightly more comfortable.

The fact that the new bus can carry more passengers at once and uses less fuel in the process means that it may enable Menta to reduce its fares There could be a competitive advantage to be had from delaying fare increases or keeping those below those of local competitors.

The fact that the buses are being purchased in large quantities excludes competitors from matching Menta by buying this model. There could, however, be new models from other bus manufacturers that are almost as good and that might undercut Menta's advantage.

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WACC

WACC depends on both the cost of debt and the cost of equity. Debt is generally secured against the company's assets and so lenders are unlikely to be concerned about errors made by the company's management**.** The cost of debt would only increase if the errors were so significant that the capital markets felt that there was a risk of default because there are costs associated with foreclosing on loans**.**

The cost of equity can be linked to expectations of future dividends**.** If the management team appears to be incompetent, then the rate at which dividends are discounted will increase because of higher risk and so the cost of equity will increase**.**

While the shareholders do expect the directors to have a strong grasp of technical accounting matters, they are likely to be more concerned with their understanding of the business If Phil Whiteford has a strong grasp of the bus business, then that will probably count for more than a slip in explaining an investment appraisal technique

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