



OPERATIONAL CASE STUDY November 2018 EXAM ANSWERS

Variant 3

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SECTION 1 - Profit analysis of health food and drink outlets:

Relevant Cost Analysis

Relevant costs and benefits are the future, incremental cash flows that arise as a result of the decision, in this case, the decision to open health food and drink outlets at a number of gyms. In order to determine the financial implication of the decision, we need to consider the incremental costs and benefits i.e. the additional costs and benefits that will arise as a direct consequence of the decision. The incremental contribution from the sale of the food and drink will be relevant as will any additional specific fixed costs incurred. General fixed overhead which will be incurred whether we go ahead with the food and drink outlet or not are unavoidable costs and, as such, are irrelevant costs.

With reference to the schedule and notes that you have provided:

Notes:

1. The net contribution from the sales of food and drinks will be relevant to the decision.
2. The cost of the staff hired to run the food and drink outlets will be relevant to the decision as these are incremental costs. Since the gym managers will be paid whether or not the food and drink outlets are opened, the cost is unavoidable and therefore irrelevant.
3. The share of electricity costs is irrelevant since this is an arbitrary apportionment of costs and the costs would be incurred whether or not the food and drink outlets are opened. However, the additional cost of \$5,000 is relevant since this is an incremental cost.
4. The apportioned fixed overhead costs i.e. lease cost and maintenance and cleaning costs are irrelevant since this is an arbitrary apportionment of costs and the costs would be incurred whether or not the food and drink outlets are opened.
5. As above
6. Marketing costs are relevant since these directly relate to the new food and drink outlets.
7. Depreciation costs are irrelevant since these are not a cash flow. However, the costs incurred in fitting out the food and drink outlets and purchasing the equipment and fixture and fittings are relevant costs.

Limitations of this approach and other factors

Under this type of analysis, the decision is made on the basis of short term cash flows. It is assumed that the decision is a one-off short term decision. However, we will not survive if we continually to make decisions on a relevant cost basis, in the longer term we need to cover all our fixed costs.

We would need to consider other factors such as the effect that this may have on our membership during the restructuring of the facilities. The financial implications in the long-term of releasing space to the food and drink outlets would also need to be considered including any opportunity costs from opening the food and drink outlets e.g. the contribution foregone from membership fees or from classes which could no longer be held due to a lack of space.

Financial accounting treatment of the surplus gym equipment

According to IFRS 5, non-current assets will be classified as 'assets held for sale' if their carrying amount will be recovered principally through a sales transaction rather than through continuing use.

In general, the following conditions must be met for an asset (or 'disposal group') to be classified as held for sale:

1. Management is committed to a plan to sell
2. The asset is available for immediate sale
3. An active programme to locate a buyer is initiated
4. The sale is highly probable, within 12 months of classification as held for sale (subject to limited exceptions)
5. The asset is being actively marketed for sale at a sales price reasonable in relation to its fair value
6. Actions required to complete the plan indicate that it is unlikely that plan will be significantly changed or withdrawn

Given those criteria, it is clear that, if the gym equipment is transferred to other gyms, it would remain on the statement of financial position under non-current assets and would continue to be depreciated in the normal way.

If management does make a decision to sell the remaining equipment and puts in place plans to find a buyer including actively marketing the equipment at a reasonable price, then the equipment would be treated as "held for sale" and would be held at the lower of the carrying amount and the fair value less costs of disposal. Assets held for sale will be shown in the statement of financial position under current assets and will no longer be depreciated.

If, however, management decide to store the equipment until a final decision is made then the asset should remain on the statement of financial position since according to IAS 16, relating to de-recognition, an asset should only be removed from the statement of financial position on disposal or when it is withdrawn from use and no future economic benefits are expected from the asset. In this case, the equipment which is held in storage may be used in the future to generate economic benefits. The equipment would also continue to be depreciated since according to IAS 16, depreciation begins when the asset is available for use and continues until the asset is derecognised, even if it is idle.

SECTION 2 - Sales forecasting using trend analysis and expected values

Explanation of use of figures to forecast sales revenue

In Table 1, the trend line is the trend in member number over the past three years. The trend is the average position over time with seasonal variations smoothed out.

The first number in the equation (2,500) represents the number of members at the start of the first quarter of 2015. The second part of the equation represents the future increase or decrease in member numbers. For Gym A, the trend for each successive quarter is for member numbers to increase by 100.

The second part of the analysis looks at variations around the trend that are caused by seasonal factors. For example, we can see that in the period January to March member numbers are expected to be 20% higher than the trend. This is a reflection of the rise that we normally see in member numbers following the Christmas festivities when many people make a concerted effort to lose weight and be more active. In June-September, the summer months, the member numbers are expected to be 12% lower than the trend reflecting the fact that during the summer people are on holiday and may have lots of other distractions which keep them from the gym.

We can use the information in Table 1 to calculate the expected number of members for Gym A for the first quarter of 2019. Quarter 1 of 2019 is quarter 17 therefore the number of members can be estimated as:

$$Y = (2,500 + 100 (17)) \times 1.20$$

Limitations of the approach

The usefulness of the approach taken is limited by the fact that the trend line used to forecast the member numbers is based on only three years of past data and we would be assuming that the trend from this short space of time will continue into the future. In reality, the market preferences may change and hence it might well be that in the future the trend in member numbers changes. The trend is also based on the past data from only one gym; it may be better to calculate the trend for each of the gyms which will be used in the trial period.

To improve the analysis, we could use scenario planning to produce budgets at different level of member numbers for example, a low, medium and high level of member numbers, rather than produce a single budget based on the member numbers from the trend analysis. The information from the different budgets will enable us to determine a range of potential outcomes.

Social media marketing

Explanation and benefits

Social media sites such as Facebook and Twitter have a large number of users. Firms mainly those using business to consumer (B2C) models, such as ourselves, use these sites for marketing purposes and market research.

It is useful to monitor brand names that are mentioned on these sites to capture any reviews of our gyms or of our competitors' gyms. Consumers are using social media to raise the profile of customer complaints and the message can reach a large number of people very quickly, so knowing about this and giving an appropriate and rapid response is very important.

There are numerous social media platforms that could be used to communicate the launch of the new health food and drink outlets including Twitter, Instagram and Facebook. We could use these platforms to communicate the launch and also details of the food and drink that we will be offering. In addition, we could do market research via the social media sites, for example on the number of members that might use the food and drink outlets. It would be possible to offer social media users an incentive in return for signing up to news feeds or offering such feedback. There is also the possibility of hosting live discussions, chats, polls and competitions to both raise interest and get valuable feedback on trends and preferences.

Viral marketing can also be very powerful although perhaps more difficult to achieve. This is achieved by encouraging individuals to pass on our message through 'sharing' experiences and thoughts with their own followers which can spread a message very quickly and to large numbers of people via websites such as YouTube or other social media sites. Celebrity endorsements or connections can be very useful, as we saw when Johnny Wren opened our latest gym, driving up the number of people that will see our content.

Our market research suggests that a significant percentage of our members are accessing our website to book classes using their mobile phones. It is therefore important that our mobile phone app is appealing to consumers and easily navigated. The app will be in a different format to our internet site but can also be used to deliver our marketing message to customers. It is therefore important to ensure that content is suitable for mobile devices.

Recommendation

Social media marketing is a very popular way to promote to target customers who are technology driven. This could potentially have a very significant positive impact for GymFit since our target audience are individuals who are key users of social media. The audience reach is vast; huge numbers of people use these platforms and can be reached at very low cost compared to other forums. Messages can also be spread very quickly and easily changed to keep the content fresh. A decision whether to use social media marketing to launch our food and drinks outlet will depend on the potential alternative marketing methods available but given all of these benefits and no significant issues, there is a strong case for the use of social media marketing.

SECTION 3: Determining the supply level for freshly prepared food

Decision criteria

Maximax criterion:

The maximax criterion is where the decision maker takes an optimistic approach. In this approach, the alternative that maximises the maximum pay-off achievable under each alternative will be selected.

We would therefore choose to supply at the high level which has the maximum payoff of C\$84,459.

Maximin criterion:

Under the maximin criteria we would select the alternative that maximises the minimum pay-off achievable under each alternative. This is where a pessimistic approach is taken.

If we choose to supply at the low level, the minimum payoff = C\$50,676

If we choose to supply at the medium level, the minimum payoff = C\$36,855

If we choose to supply at the high level, the minimum payoff = C\$23,034

We would therefore choose to supply at the low level since this gives the maximum of the minimum payoffs of C\$50,676.

Minimax regret criterion:

Under this criterion the alternative that minimises the maximum regret under each alternative is selected. This is generally used where we want to minimise the effect of making a bad decision. 'Regret' refers to the opportunity loss through having made the wrong decision. This is also where a pessimistic approach is taken to the decision.

The regret matrix shows the regret depending on the level of demand for the food and the level of supply which we had chosen. For example, if the level of demand turned out to be at the low level we would have no regret if we had chosen to supply at the low level. The regret for each of the supply levels would be the difference between a contribution of C\$50,676 and the contribution from each of the other supply levels.

Having calculated the regret for each different level of demand, we can then establish the maximum regret for each supply level. In this case the maximum regret would be C\$33,783 at the low level, C\$16,891 at the medium level and C\$27,642 at the high level.

If we want to minimise the maximum regret, we would choose to supply at the medium level.

Usefulness of the decision criteria

As can be seen, the decision maker would choose a different level of supply depending on what decision criteria was used. We would also need to consider the potential for loss of goodwill with members who were not able to purchase freshly prepared food. If we want to be sure of keeping all our members happy we should supply at the high level each day but this option makes the largest potential loss if only the low level is demanded. If, however, we factored in the possible cost from lost goodwill, this may not be the worst option. It may

therefore be worthwhile accepting this potential loss for a period of time and monitoring the actual demand. We could then adjust the supply once we have a clearer idea of demand and the variability of demand.

Evaluation of suppliers

Financial stability:

Financial stability of our suppliers is important for us as we need to ensure that we have continuity of supply. From the information given in Table 3, we can see that Suppliers B and C are likely to have the greatest financial stability as they have been trading much longer than Supplier A. In addition, Suppliers B and C, have significantly higher revenue than Supplier A. Supplier A may be unable to cover its total costs given its lower revenue figure as the business is less likely to have the benefit of economies of scale. Supplier B is also part of a larger group which suggests that, if they did have any financial difficulties, they would have the backing of the group to support them.

Liquidity:

Supplier C has the safest current and quick ratios of all three suppliers at 1.4 and 1.1. This indicates that if all of its suppliers insisted on being paid at once that there is enough cash and receivables to cover the debt at short notice. However, it is questionable whether these ratios are too high and looking at the receivables and payable days there is some cause for concern. The receivable days, at 65 days, are relatively high compared to the other suppliers and payable days, at 45 days, tells us that Supplier C is paying its suppliers before it is receiving payment from its customers. The high receivable days may reflect the fact that Supplier C has two contracts with supermarket chains who, because of their relative power, are able to pay their suppliers later than other customers.

It is possible that Supplier B is employing a more aggressive credit control policy than Supplier C as the receivable days are significantly lower than Supplier C and the payables days are 17 days more than the receivable days. A quick ratio of 0.8 is normally considered to be low from a liquidity perspective. Both the current and quick ratios for Supplier A are within acceptable bounds.

Potential credit terms:

As Supplier A is a relatively new business we could expect to be offered better settlement terms in order for them to build their business. Their receivable days are 56 days which from our perspective is better than with Supplier B which has average days of 43 days.

Based on the average receivables days we would get the best credit terms from Supplier C, however as discussed above, the high receivable days for Supplier C may be due to their supermarket contracts and we may not be offered similar terms. With Supplier B, it is possible that we can negotiate a settlement discount or better terms than the average receivable days suggest.

Recommendation:

All of the companies are located in Celtland so there will be no difficulties with currency exposure. Our gyms are located throughout Celtland and therefore Supplier C may be the better option as it may be able to supply the gyms from different locations which are nearby.

Supplier C has contracts with supermarkets to supply freshly prepared food which suggests that its operation is geared up for this type of market and it should be reliable. However, it may not have the same experience of health food as Supplier A and may also not provide the same quality of food as Supplier A. If quality is an important criterion in our selection, we may want to consider Supplier A.

SECTION 4: Variance analysis

It is clear from the variance report that we are not performing as well as budget. There have been a number of things which have gone wrong in the period with the result that, for the first quarter of operation our actual contribution is significantly lower than budget. The total sales variance for the period is adverse with the sales price variance being most significant, accounting for \$16,400 of the total variance.

Sales price variance

This is calculated by comparing the actual price received with the original price budgeted and multiplying the difference by the actual quantity sold. Both salads and sandwiches have an adverse price variance which probably reflects the need to discount prices in an attempt to avoid being left with unsold food at the end of the day.

Sales mix and quantity variances

The sales mix and quantity variance give us an interesting insight into what is happening. In total, the sales volume variance (sales mix plus sales quantity variance) was adverse. Sales volumes for salads are 3,100 less than budget whilst for sandwiches they are 1,100 less than budget. By breaking this down further into the sales mix and sales quantity variance, we can see that we are actually \$1,900 worse off because the sales mix is different to what we estimated in the budget. The sales mix variance is calculated by comparing the actual sales with the actual sales at the budgeted mix. We had anticipated in the budget that sales would be split evenly between salads and sandwiches but it is apparent that we are selling a higher proportion of sandwiches. This explains the adverse sales mix variance since sandwiches have a lower contribution per unit than salads. This information is useful for future planning of our purchases of freshly prepared food. The adverse sales quantity variance of \$12,390 is significant since this tells us that our members are buying less from us than we expected. The sales quantity variance is calculated by comparing the budgeted sales with the actual sales at the budgeted mix. This suggests that our estimates of sales volume have been incorrect but sales may also have been affected by the difficulties with supplies in the early days of operation and that customers who were left disappointed have not returned.

Prepared food price variance

The prepared food price variance reflects the price we have paid our suppliers for the bought-in salads and sandwiches. It is calculated by comparing the budgeted price with the actual price and multiplying this with the actual quantity purchased. The adverse variance has arisen as we had to use a different more expensive supplier.

Prepared food wastage variance

The prepared food wastage variance is calculated by comparing the actual quantity sold to the actual purchase quantity, which in this case is in line with budget, and multiplying the difference by the standard cost. We have purchased more than we were able to sell and the adverse usage budget of \$10,260 is the cost associated with the quantity of unsold food that was given to charity at the end of each day.

Training of catering staff

Advantages and disadvantages of using in-house training

Advantages

- Course content and timing can be tailored to our specific needs rather than having to fit in with the timing of courses offered externally.
- We will be able to offer on-the-job training which will allow the specific technical equipment which we use in our health food and drink outlets and/or work methods to be used.
- In house-training is generally significantly cheaper than outside training however as we are only running the outlet in a few of our gyms it may be more cost effective to use external training courses.
- In-house training would normally allow us to involve our own managers in providing expert sessions however, as this is a new operation for GymFit, we may want to bring in outside experts. Alternatively, we could send a small number of staff for outside training and they could then provide the 'expert' sessions for the other staff.
- We will be able to easily monitor what is happening during the training, receive feedback and link the training to specific outcomes that are then monitored by the participants.
- The participant will only be GymFit staff and the training session will help to generate a team spirit within the group of catering staff. It may also help to develop a culture whereby we learn from each other by sharing experiences and offering advice.

Disadvantages

- Participants are not exposed to influences from other organisations and particularly as this is a new operation for us there would have been benefits from learning from the practices of other organisations.
- As the training sessions will be held on the premises, participants may be called away at short notice to deal with work problems.
- If a participant's immediate colleagues or bosses are present at the training session it may inhibit open discussion.

Benefits to the company of providing training for employees

As well as ensuring that our staff are properly trained to do their jobs, a formal training process will have other benefits. Staff are likely to feel more valued and keen to give something back to the company. Staff will be more motivated and as a result productivity should increase. Staff that are properly trained are likely to get more job satisfaction than they would if they felt that they were not able to do their job to the required standard and it should therefore be easier to retain staff.