The Chartered Institute of Management Accountants®

OPERATIONAL CASE STUDY November 2018 EXAM ANSWERS

Variant 4

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SECTION 1 - Evaluation of the proposed options:

Financial evaluation

Based on the financial figures given, there is a significant difference in the two options in terms of the ongoing royalty fees and the costs that are payable by GymFit.

GymFit achieves the same net income under both options and, assuming the franchisee under Option B incurs the same level of costs for the cost items that GymFit incurs, then the same net income is available to the franchisees. There is a risk here however that the franchisee may not make the same level of investment in both training and advertising costs in order to increase their net profit and this would have a potential long-term effect on member numbers and ultimately on the royalty income received by GymFit.

However, under Option A, GymFit is taking a higher risk since they are responsible for a significant amount of fixed costs and these would need to be covered before any profit would be made whilst under Option B GymFit only incurs the IT costs. This is reflected in the break-even point where under Option A the break-even number of members is 2,948 whilst under Option B the break-even number of members is significantly lower at 952. Under Option A, once the fixed costs have been recovered, GymFit would earn income at a much higher rate since they would receive C$8 per member compared to C$3.50 per member under Option B. The break-even point of 2,948 members under Option A would however require the member numbers to fall by over one-third which is a substantial reduction.

The other risk to the income received by GymFit is that under Option B the franchisee is able to set the membership fees. The calculations showing the franchisees and franchisor's position assumes a membership fee of C$20 which may not be achieved. A lower fee set by the franchisor may result in higher member numbers, but it may not be enough to achieve the estimated total income from membership fees.

Recommendation

Based on the financial information provided, I would therefore recommend Option A as the preferred option as contribution is earned at a higher rate and assuming growth in member numbers, we would be significantly better off with this option. We would also be able to control the membership fees and the level of expenditure on advertising and training.

Other factors

- We are relying on the franchisees effectively to run the gyms on our behalf. We need to ensure that the chosen franchisees are reliable and financially secure. We should therefore carry out 'due diligence' and ensure that we are satisfied with the long-term financial stability of the franchisees.
- The experience of the franchisees in the gym market is also a major consideration as the gyms will be marketed under the GymFit brand.
- Data privacy and security should also be considered as this presents a major risk to GymFit in the event of a data security breach.

Factors required for a successful strategic alliance and how they are achieved

- Strategic synergy i.e. the alliance of the partners should result in more strength when combined than the individual partners have independently and at least one of the partners should be able to gain a leadership position.

  The most obvious benefit of franchising to GymFit is the ability to expand the business by utilising the manpower and capital of the franchisees. The inherent risks usually associated with expansion are thereby reduced. GymFit is therefore able to exploit and market its business more effectively by increasing the number of its outlets far more rapidly than would otherwise be the case.

  The franchisees contribute the bulk of the necessary capital requirement through the payment of initial and ongoing franchise fees, and their own working capital. They also carry the ongoing expenses, such as the staff salaries of the gyms, as part of their own business, removing what is a significant overhead for GymFit.

- A potentially good partner will have strengths that complement weaknesses of the other partner.

  Franchising will enable the franchisees to compete effectively in the marketplace and take advantage of economies of scale. In addition, the brand name of GymFit has already been established and has market acceptance.

  The franchisee also has access to quality training and assistance to establish the business from day one thereby avoiding many of the pitfalls and mistakes of setting up from scratch. The ongoing support and advice from GymFit will provide a valuable resource for franchisees.

  The pooling of the resources of other franchisees and the contribution from GymFit will allow the franchisee access to extensive advertising whether in his own area or nationwide. This increases the brand awareness and usually the profitability of the franchised business.

- Forming the alliance should reduce the risks of the venture.

  The greatest benefit to the franchisee is the reduction in the risk of business failure. As GymFit has a proven business concept in the marketplace, most of the obvious problems have been solved and, therefore, the risks to the franchisee is minimised.

- Both companies must want to do this and be willing to co-operate fully.

  A franchisee is the manager and owner of his own business and, therefore, brings a far more personal commitment and motivation to the job. As the owner of a business, a franchisee should be eager to make it succeed, putting in the hours to ensure that customers and profits are maintained and maximised.

Once GymFit is satisfied it has found suitable franchisees to develop and expand its business it then has more freedom to concentrate on other areas whether it is the improvement of the franchise concept or potential growth areas of its existing business.

- The structure, risks, operations and rewards must be fairly apportioned among members and results, methods and resource commitments must be clearly understood.

  These elements have yet to be established but will be clearly set out in the franchise agreement.

SECTION 2 - Sales revenue forecasting

Tables 1 and 2

Tables 1 and 2 show the possible member numbers and fee levels and their associated probability. The figures for the member number and fee level have been multiplied by their respective probability and totalled to arrive at an expected value for member numbers and fee level. The expected value member numbers and the expected value fee level have then been multiplied to give an expected value for membership level of C$108,870.

Limitations of using expected value

There are a number of limitations to using expected value as follows:

1. An expected value is the weighted average of all the possible outcomes, weighted according to the probability of those outcomes occurring. The weighted average is not an actual outcome but is based on the assumption that the same decision is repeated many times. In this case, we have a one-off decision and therefore the use of weighted average is limited.
2. The probabilities assigned to each possible outcome are estimates based on our knowledge of the market which is limited as franchising is a new venture for us.
3. The use of expected values assumes that the decision maker is risk neutral. This means that the range of possible outcomes and their probabilities are ignored.

Explanation of the probability distribution in Table 3 and its usefulness in assessing risk

The probability distribution shows the nine possible outcomes using the data in Tables 1 and 2. three different levels of member numbers combined with three different fee levels. The total fee income for each of the nine possible outcomes is calculated by multiplying the number of members by the fee per member. The probability of each outcome is the joint probabilities of the variables. This is calculated by multiplying the probability of the number of members with the probability of the fee per member. We can then multiply the fee income for each outcome by the joint probability for each outcome. The total of this represents the expected value of the total fee income. The same figure for expected value of C$108,870, calculated from Tables 1 and 2, can be arrived at if the figures given in the probability distribution are totalled.

The probability distribution is useful as it allows us to carry out further analysis and gives us an indication of the risk of the project. We can establish the probability of the total fee income being above or below a particular level. For example, there is a 28% probability of the total fee income being C$120,000 or above and a 40% probability of the total fee income being C$100,000 or below.

Alternatively, we could determine the most likely outcome that is the fee income with the highest joint probability. In this case, there is a 20% probability of the total fee income being either C$95,000 or C$114,000.

IFRS 8 Operating Segments

Operating and reportable segments

There are two aspects to consider, firstly whether the franchised gyms would represent an operating segment of the business and, if so, whether itthey would be classified as a reportable segment.

IFRS8 defines an operating segment as a component of an entity:

a. that engages in business activities from which it earns revenues and incurs expenses.
b. whose operating results are regularly reviewed by the entity's chief operating decision maker to make decisions about resources to be allocated to the segment and to assess its performance.
   and
c. for which discrete financial information is available.

The franchised gyms satisfy a) as they will certainly earn revenue and incur expenses. They will also satisfy b) since, as stated in your email, they will be treated as a separate division and we will produce budgets for this division and will therefore review divisional performance. The outcome of these performance reviews will support any decisions about allocating resources. They will also satisfy c) since we will be producing budgets for the division, we will need to collect actual sales and cost information separately for the division. The franchised gyms can be separately identified as can the costs associated with these gyms. It should also be possible for us to separately identify the accounts receivable and accounts payable for the franchised gyms.

A segment should be classified as a reportable segment if it contributes 10% or more of the total of any of the following:

- revenue
- profitable segments
- loss making segments
- assets

Conclusion

The estimated sales revenue for the franchised gyms of C$12 million is not relevant. The fee income that we receive from the gyms will represent the revenue for GymFit and at C$2.4 million this is well below the 10% required for the franchised gyms to be a reportable segment.

SECTION 3: Corporate and Social Responsibility (CSR)

Legal responsibilities:

There is an obligation for any business to follow the laws and regulations of its country. We have always followed government regulation in Celtland and would expect any organisation with which we are associated to do the same. It is not clear how the data security breach has arisen but Gym Leisure, in common with other companies in Celtland, has an obligation to comply with any legal requirements surrounding data protection and clearly these obligations have not been fulfilled.

Ethical responsibilities:

There is also an ethical responsibility for a business to act in a fair, just and honest manner. It is important that companies adopt honest business practices, but these responsibilities also apply to employees. The application of the law is the minimum standard required by employees however to help employees make the right decision, employer need to develop, communicate and enforce clear standards of conduct.

Benefits of being perceived as socially responsible:

As we are associated with this company it is imperative that we ensure that the company has a clear strategy on CSR.

The company's CSR strategy with regard to areas such as data security and privacy can act as a method of differentiation. The commitment to ensure that the data obtained from members is not used or sold will help them in portraying a positive image as a socially responsible company. They will be seen as caring about the wellbeing of their members. External stakeholders may more readily associate with the company, indeed, we only entered into the relationship with the company on the understanding that it had appropriate data protection procedures in place. This positive image should attract members who may not be prepared to disclose data online without adequate assurance of data privacy and security.

Internal stakeholder support may be gained as a result of its improved image and it should be able to attract and retain the best employees. Employee motivation may increase and a positive company culture will result. The combination of all these factors will generate a positive image for the company both internally and externally, increase member loyalty and generate a more positive attitude towards the company. The improved company image should ultimately result in increased sales revenue.

What-if analysis

Explanation of the figures and risk of our cost structure

What-if analysis involves revising the budget on the basis of a series of varied assumptions. One or more assumptions can be changed at a time to determine the impact on the budget overall. In this case, we have changed our assumptions about the average number of members per gym to determine the impact on the budgeted profit. We could do this for each of the different variables within the budget and determine the variables to which the profit figure is most sensitive. We will be also able to determine by how much each of the variables can change before we make a loss.

It is apparent from the schedule that profit is very sensitive to a change in member numbers. We can see that a 10% change is member numbers results in a change in profit of slightly over 50% and that a change of 20% will result in a loss-making situation. A change in member numbers will affect both sales revenue and variable costs whilst the fixed costs will remain the same despite the volume change.

GymFit has a relatively high level of fixed cost, in other words it has high operational gearing. A company with high operational gearing is considered to be high risk since a relatively low change in volume will result in a relatively high change in profit, as is clearly demonstrated by the schedule. Companies with high operational gearing are reliant on scale since the higher the volumes the lower the fixed cost per unit or in our case per member. The break-even point is relatively high, however, once the fixed costs are covered we will start to achieve contribution at a relatively fast rate since our contribution per member is high as our variable costs are low.

Benefits and limitations

What-if analysis provides us with more information about the effect on profit of changes to different variables and the sensitivities of profit to these changes. It allows us to make a decision about whether we are prepared to accept the risks involved. It will also allow us to decide whether it is worth spending time and money on, for example, further advertising to improve member numbers. We can also make contingency plans for the eventuality that the member numbers turn out to be much lower than expected.

What-if analysis, however, is limited as it assumes that changes to variables can be made independently however many variables are interdependent, for example, the number of members is likely to be very dependent on the membership fee set.

We can establish from the analysis that contribution needs to fall by just under 20% (14,740 / 74,191 = 19.9%) before we make a loss, but it does not tell us the probability of that change happening. The contribution is also dependent on both the membership fee and the number of members. A change in the membership fee per member would impact the revenue figure but a change in number of members would impact both revenue and variable costs. The contribution is therefore more sensitive to a fall in the membership fee than a fall in the number of members. We could however determine the probabilities of different member numbers and then calculate an expected value for both the member numbers and profit. However, this analysis is very dependent on the accuracy of the probabilities.

Alternatively, we could determine scenarios using the estimated member numbers as the ‘expected’ case but also produce a ‘worst-case’ budget and a ‘best-case’ budget. This will give us a range of possible outcomes and allow us to make decisions accordingly.

SECTION 4: Performance of Gym Leisure franchised gyms for January to March 2019

Variance analysis

The performance report clearly shows that both Gym A and the other gyms have been affected by the problems arising from the data security breach and the fraudulent activities of the employee in Gym A.

The average number of members for Gym A was 3,900 in total compared to a budget of 4,800. Both full fee members and student members were below budget which has resulted in an adverse fee income quantity variance for Gym A of C$51,300. The fee income quantity variance measures the effect on fee income of the total number of members being higher or lower than budget based on volumes at the budgeted mix. The lower member numbers are probably due to the difficulties experienced in the gym with the data security breach. The staff hours for Gym A are also below budget which suggests that either the staff have left because of the difficult working environment or that the reduced number of members has resulted in low income for them from classes. The lack of availability of classes may have resulted in further members leaving the gym.

The fee income mix variance measures the effect on fee income of the mix of members being different than budget. In this case, the fee income mix variance for Gym A is favourable since although volumes for both types of membership were below budget, the full fee members which have the higher membership fee, was affected less than the student members. Perhaps the student members take a data security breach more seriously than other members.

The membership fee for Gym A is also below budget which suggests that the gym has tried to reduce membership fees to increase the number of members. This has resulted in a C$18,000 adverse price variance. Unfortunately, this has not been successful since the combined quantity and mix variances are adverse.

The position for the other gyms is considerably better although both the price variance and quantity variances are also adverse. It should be remembered though that there are five other gyms and the impact may also have been experienced by other franchised and non-franchised gyms. Overall, the reduction in members is concerning and steps should be taken to reverse the trend. The reduced membership income will result in less income for GymFit but the most concerning issue is the ability of Gym Leisure to continue to operate the gyms in the longer term.

Gym managers' concerns

The gym managers' concerns are valid since it is unfair that the company's reward system is based on factors that they cannot control. It is unclear whether the manager from Gym A could be held responsible for the data breach but it is clear that it was not the responsibility of the other gym managers.

In future reporting, it may be better to split the variances between their operational and planning elements. The operational variances would then reflect the position relating to factors that are within the control of the operational managers and would be a better basis for the reward system.

Treatment of equity investment

Determining the type of investment

If we were to acquire a 30% equity stake in Gym Leisure, then this may be classified as an investment in an associate. In accordance with IAS 28 Investments in Associates and Joint Ventures, an associate investment is one where the investor has "significant influence" over an investee entity and this is presumed to occur when the investor holds more than 20% of the voting rights of the investee.

"Significant influence" is defined as the power to participate in the financial and operating policy decisions of an entity but is not control over those policies. It is usually evidenced by representation on the board of directors and/or material transactions between the entities.

Clearly, we will own 30% of the voting rights of the company, we will have a seat on the board and there will be material transactions with the company. We will also be the major shareholder.

However, as the remaining 70% of the shares will be owned by the directors of Gym Leisure including George Benson, who will own 25% it is questionable whether we can be deemed to have significant influence. If the directors worked together they would be able to outvote us on a regular basis.

If we determine that we don't have significant influence, we would treat the investment as a simple investment.

How to treat the investment in the financial statements

If we are deemed to have significant influence, we will need to apply equity accounting to our investment in the company.

In the statement of financial position this means that we will include a line within non-current assets called 'Investment in Associate'. At the year end the value of this investment will be calculated as the cost of the investment plus the share of the associate's profit (in this case 30%) since the date of acquisition, less any impairment loss.

In the statement of profit or loss our share of the associate's profit for the year (or from the date of acquisition in the first year) will be included as a single line after profit from operations.

If it is determined that this is a simple investment, then we would record the investment as a non-current asset and record any dividends received as income in our statement of profit or loss.