Answers

1 (a) *Internal growth*, sometimes called organic growth, takes place when the company grows by building on and developing its own existing competencies. This is how MachineShop has grown to date. The frequent opening of new stores represents its organic growth. The company appears to be comfortable and successful in this approach.

As well as being familiar with this approach, internal growth has a number of other advantages for MachineShop.

First, MachineShop is the only company which really understands the market that it has positioned itself in. Consequently, there are no equivalent companies or competitors to target for acquisition and so there is no clear alternative to organic growth. This market knowledge is a core competence, creating and reinforcing competitive advantage.

Second, although the final cost of developing through organic growth may be greater than through acquisition, the spread of cost may be easier to bear. Acquisitions usually require a major expenditure at a certain point in time. A slower rate of change, associated with more gradual expenditure and sustainable growth, may also minimise disruption to other activities within the company. Acquisition can be a significant distraction and it could easily prevent the directors from continuing their successful expansion of the MachineShop stores.

In some circumstances, internal growth may be the only realistic option available to an organisation. This may be the case at MachineShop. It acknowledges that it is having difficulty in identifying companies to acquire or with which to pursue a strategic alliance. FRG, analysed in depth in the second part of this question, is the best fit that MachineShop can find, yet it is a business which primarily deals with trade customers and larger machines and it has no experience of selling to domestic consumers.

Internal development avoids the political and cultural problems arising from post-acquisition integration and coping with the different traditions and expectations of the acquired company. MachineShop has already experienced such problems with LogTrans and EngSup.

However, international expansion is often very difficult to achieve with internal growth. This can be due to government restrictions. For example, the government of Ceeland required, until recently, that firms trading in Ceeland were registered in that country and had at least one Ceelander director. Cultural differences also inhibit organic growth. The company will have little understanding of how business is done in the country, the expectations of stakeholders or the way that business transactions are agreed and executed.

An *acquisition* takes place when ownership is taken of another organisation. A compelling reason to develop by acquisition is the speed of entry it apparently provides into a new product or geographical market. This speed of entry is often associated with scale. MachineShop is considering the purchase of a company which already has revenues of $9m. It would take a long time to build a company of that size. One of the concerns of Dave Deen is that the MachineShop concept will be adopted by emerging competitors in countries where it does not have a presence. A prime motive for considering the acquisition of FRG is that it has a depot network, distribution and sales team already in place. FRG is also familiar with the organisational and social culture of Ceeland. It is aware of its laws and corporate responsibilities, tax and legislative regimes. If MachineShop tried to grow organically in Ceeland, it would be starting from scratch in a country where it had no experience of trading.

The acquisition may provide an opportunity for MachineShop to exploit its core competencies in a new market, as well as satisfying Dave Deen's desire for continuing growth and high profile business activity.

Rapid growth through acquisition may also offer immediate economies of scale. This is one of the attractions to Dave Deen. As the company grows larger, it should be able to reduce product costs, allowing it to raise the barriers to market entry, reducing the attraction of the market to potential competitors. Growth through acquisition is a quick way of delivering the scale and cost efficiency of operations required to deter potential competitors from entering the market that it understands and dominates.

Finally, acquisition may provide an opportunity for an organisation to address a lack of resources or competencies in certain areas. This is what prompted MachineShop's two acquisitions in 2010. LogTrans was bought to provide the company with internal logistics capacity and EngSup was purchased to assist in post-sales support.

Strategic alliances take place when two or more organisations share resources and activities to pursue a given strategy. Both companies seek to gain benefits through co-operation. In the context of MachineShop and FRG, the prime motive would be what Johnson, Scholes and Whittington term as 'co-specialisation'. An alliance would be used to enter a new geographical market where an organisation needs local knowledge and expertise. One of the features of strategic alliances is the range of alliances that might be pursued. Some alliances are very formal, others involve informal networking between organisations with no shareholding or common ownership involved.

A *joint venture* is an arrangement where a newly created organisation is jointly owned by the parents. In this instance, a new company could be created in Ceeland with the local company providing labour, local expertise and countrywide knowledge. MachineShop would provide the products, marketing expertise and finance. At the other end of the spectrum, MachineShop could consider a looser network arrangement where FRG would provide space in their stores for a MachineShop franchise to operate. In this way, MachineShop would gain depot space which they could use to build their own market. This would be an ideal way of prototyping the MachineShop concept in Ceeland to see if the market really does exist and that parallels with Arboria are not unrealistic. In return, FRG would receive a franchise fee which would help it improve its financial position, as well as it potentially benefiting from cross-purchases by customers attracted to the store by the MachineShop facility. Such a loose arrangement could be put in place very quickly, compared to any formal joint venture, acquisition or organic expansion.

One of the main problems of strategic alliances is the ability of the initiator to find an appropriate partner. It is not known if the company which is currently being targeted (FRG) would be interested in a strategic alliance. Hence a search for a partner would have to take place, which could prove difficult and time-consuming. There may also be a concern, at MachineShop, that once the partner understands the dynamics of the market, they will steal the idea and promote it as their own. Networking also offers a relatively modest and low profile approach to expansion and this may not give Dave Deen and his fellow directors the visible growth they seek. It may be too conservative and not exciting enough.

Summary

A case could be made for adopting any of these three distinct approaches and this is recognised by MachineShop itself. This is probably why it believes that growth will be achieved through a combination of organic growth, acquisition and strategic alliance. The latter two are really quite problematic given MachineShop's internal competencies and the market that it is in.

In the context of risk, a loose strategic alliance with a foreign agent seems an attractive route. However, the company would have to find a suitable partner and the approach may not deliver the visible growth required by the directors. An acquisition is risky, particularly in countries where MachineShop has no experience of trading. Furthermore, MachineShop's limited experience of acquisition to date has not been particularly successful, despite both acquired companies being based in Arboria. Organic growth offers the advantages of being proven and familiar. However, it may be difficult to achieve the rapid growth demanded, and is particularly risky to pursue in countries where the company has little understanding of trading arrangements, organisational and social culture and stakeholder expectations.

(b) Report

From: Business analyst
To: The Board of MachineShop

Introduction

This brief report looks at the potential acquisition of FRG by MachineShop. It uses the criteria of suitability, acceptability and feasibility, which is a standard framework for evaluating potential acquisitions. It concludes with my recommendation.

Suitability

Suitability is concerned with whether a strategy addresses the circumstances in which an organisation is operating, the strategic position. In the context of MachineShop, does an acquisition make sense and, in the narrower context, does the acquisition of FRG make sense? Johnson, Scholes and Whittington, noted authors on business strategy, have suggested that an acquisition makes particular sense if speed to market is vital. This appears to be the case at MachineShop, where the board wants the company to grow quickly whilst there are no direct competitors. In terms of capabilities, the delivery of economies of scale is also important and this has already been identified as a key benefit of the acquisition, further raising a barrier to entry to potential competitors. Finally, in terms of growth, acquisition appears to largely avoid the cultural problems that are bound to arise by trying to organically grow a company in a foreign land. Expansion in Ceeland is seen as an *opportunity* for rapid growth, exploiting important *strengths*, in particular the internal competencies of MachineShop. Acquisition, particularly in Ceeland, appears to offer the rapid growth which the company seeks.

Acceptability

Acceptability is concerned with the expected outcomes of a strategy. These can be seen in context of stakeholder reactions, risk and return. In the context of MachineShop, the primary stakeholders, the board, are likely to be excited by a foreign acquisition. It provides you with the high profile and the business excitement that you enjoy. However, in financial performance, the potential purchase of FRG looks less attractive. Any financial ratios calculated for FRG cannot really be compared with MachineShop, because the nature of the customers is quite different, with 65% of MachineShop's sales being made to domestic consumers, and so is the country and culture that the two companies operate in. However, whilst acknowledging this limitation, an analysis of the latest financial figures (Table 1) does not appear to paint a particularly attractive picture. FRG has gross profit and operating margins well below that of MachineShop. FRG also has a relatively low Return on Capital Employed (ROCE) of 6·45%, compared to 17·5% for MachineShop. The gearing ratio is higher (20·16%) and the interest cover is lower (2·67) than MachineShop.

Table 1: Comparison of MachineShop and FRG

	Calculation (1)	MachineShop	FRG
Gross profit margin	Gross profit/revenue	28·00%	16·67%
Operating margin	Operating profit/revenue	17·00%	8·89%
ROCE	Operating profit/capital employed	17·50%	6·45%
Gearing ratio	Long-term loans/capital employed	15·00%	20·16%
Interest cover ratio	Operating profit/finance charges	3·5	2·67

(1) *Other acceptable definitions will be credited*

Improving the financial performance of FRG might be seen as an *opportunity* for MachineShop, except that the post-acquisition performance has actually worsened at the two companies it acquired in Arboria and these were also marred by management and labour disputes. At present, improving the financial performance of acquired companies does not appear to be a core competence of MachineShop. MachineShop also has no experience of acquiring a foreign company and the scale of the acquisition is much greater than its two acquisitions to date. FRG has a turnover of $9,000,000, almost nine times the combined revenue of the two Arborian companies which MachineShop acquired in 2010.

Feasibility

Feasibility is concerned with whether an organisation has the resources and competencies to deliver a strategy. Financial resources are in place to fund an acquisition through a combination of loans and retained profit. However, no negotiations have yet been opened with FRG. As a result, no comment on the financial feasibility of the acquisition can yet be made. However, the difficulty of satisfactorily valuing a private company suggests that many months of negotiation might lie ahead, particularly given the number and composition of the shareholders of FRG. Trade unions may require certain post-acquisition guarantees about labour retention and reward. Such protracted negotiations would partly nullify, at least, the speed of growth that acquisition appears to offer.

Overall, acquisitions have a poor record in delivering business success. There are usually problems of integration and cultural fit. MachineShop has experienced this to some extent with both LogTrans and EngSup. At LogTrans, the directors had to be removed post-merger because of personality clashes. At EngSup, there was a problem in instilling in service engineers the need for appropriate customer service.

The post-financial performance of the two acquired companies has also been disappointing. Since acquiring LogTrans, gross profit, operating margin and ROCE have fallen and the company is more highly geared than it was before the merger with a reduced interest cover ratio. The same is true at EngSup. Table 2 summarises the data. MachineShop has to review its competencies in acquisitions, not just its competencies in its market. It must also recognise that both these acquisitions took place in Arboria, a country where it understands the culture, laws and regulations. It might be reasonable to expect that the acquisition of a foreign company would be even less successful.

Table 2: Performance analysis, LogTrans and EngSup (2009–2012)

	LogTrans – 2012	LogTrans – 2009	EngSup – 2012	EngSup – 2009
Gross profit margin	17·86%	21·54%	21·43%	23·08%
Operating margin	9·29%	10·77%	11·43%	13·85%
ROCE	9·56%	13·46%	12·50%	15·52%
Gearing ratio	14·71%	9·62%	9·38%	6·90%
Interest cover ratio	2·17	4·67	4·00	5·63

It also has to be recognised that FRG is not a complete match to MachineShop. FRG is experienced in the business market, but has no experience of selling to domestic customers, a service that accounts for 65% of MachineShop's sales.

Conclusion

In theory, an acquisition would appear to be a suitable growth strategy given MachineShop's strategic position and objectives. However, whether the acquisition of FRG is appropriate is more doubtful. FRG does not appear to be financially performing particularly well and it has no experience of selling to domestic customers. Furthermore, MachineShop has no experience of acquiring a company outside Arboria or, indeed, a company as large as this one. Its two previous acquisitions were within Arboria and were relatively modest in size. Both acquired companies should have represented relatively good 'fits' within the supply chain of MachineShop. However, performance post-acquisition has been disappointing, with both companies reporting drops in profitability. MachineShop would have to improve their competencies in managing acquisitions.

Overall, the proposed purchase of FRG appears to be very risky and MachineShop might be better looking elsewhere for a more suitable acquisition. It might also consider entering into a dialogue with FRG about a strategic alliance of some sort (perhaps followed by acquisition), which might offer an attractive alternative to immediate purchase of the company.

(c) Michael Porter developed his diamond to explore the determinants of national competitive advantage. Its primary use is at a national and regional level as a framework for exploring the competitiveness of a nation (or region) and as a framework for determining policy initiatives. However, it might also be used in this context to analyse, in a more structured way, the competitive nature of Ceeland, the country which MachineShop is keen to expand into, and also to understand factors that might have contributed to MachineShop's success in Arboria. The diamond has four principal determinants.

The first of these is *factor conditions* which are the inputs necessary to compete in any industry, such as labour, land, natural resources, capital and infrastructure. The case study scenario suggests that the transportation system in Ceeland is cheap and effective and ease of distribution is one of the factors which attracted MachineShop to the country. Furthermore, the country has a well-established digital communications structure, and as MachineShop expects to make extensive use of internet order placement, this is also important. Both of these are examples of *advanced factors* which offer more sustainable advantages than basic factors, such as natural resources and unskilled labour and they would make Ceeland attractive to MachineShop. However, both these factors are also *generalised factors* which do not provide as decisive and sustainable a basis for competitive advantage as other more *specialised factors*.

The second facet is the *demand conditions*, the nature of home demand for an industry's product or service. This appears particularly significant in the context of MachineShop. Porter argues that the home market usually has a disproportionate impact on a firm's ability to perceive and interpret buyer needs. One of the reasons for this is the attention the home market requires. Product development usually takes place in the home market. Pride and ego focus attention on succeeding in this market. Pressure from buyers is immediate and the proximity and cultural similarity of these buyers mean that their needs are well understood.

MachineShop has reaped the benefits of supplying a vigorous, growing and demanding home market in Arboria which, it believes, may allow it to anticipate buyer needs in other countries. Dave Deen believes that macroeconomic factors suggest that Ceeland is quickly beginning to resemble Arboria. MachineShop has to hope that his perception is correct and that consumers' needs are not just idiosyncratic to Arboria. Further research needs to be undertaken to ensure that Ceeland's cultural and social values will really lead to the changes in consumer behaviour that the economic trends are suggesting. If they do, then MachineShop will have definitely benefited from demands placed on it from the sophisticated and demanding buyers in Arboria.

The third element of the diamond is *related and supporting industries*. This concerns the presence in the nation of supplier industries or related industries which are internationally competitive. There is some evidence of this in the scenario (MachineShop already buy from a Ceeland supplier), although the government (see later) is encouraging the production of light engineering and so related, supporting industries may eventually develop in Ceeland.

The fourth element concerns *firm strategy, structure and rivalry*. Porter suggests that there is a strong association between vigorous domestic rivalry and the creation and persistence of competitive advantage in an industry. This has not really been a major factor in the success of MachineShop because it has no obvious rivals in the market in Arboria, particularly for domestic customers. A similar situation is likely to occur in Ceeland and so vigorous domestic rivalry will be lacking.

Porter also considers the nature of chance and the role of the government. The role of government is particularly significant in this scenario and it influences elements of the diamond. For example, it has:

– Invested heavily in transportation systems and information technology (factor conditions),
– Lifted regulations on what type of machine can be used by an unqualified operator (demand conditions),
– Removed the requirement for all companies trading in Ceeland to be registered in that country and to have at least one Ceelander director (firm strategy, structure and rivalry),
– Encouraged the production of light engineering (related and supporting industries).

So, although Porter's diamond is probably more relevant to understanding industries and countries, it does provide a framework for understanding the national competitive structure that individual firms compete within. Ceeland appears to be relatively attractive from the perspective of factor and demand conditions. However, the stimulus experienced by a company operating in a country where there are internationally competitive suppliers or related industries, or where there is a great degree of rivalry between competitors, will be missing.

2 (a) ATD has been reliant on intuitive estimating, with the sales manager predicting sales from his experience. The company is now evaluating more formal techniques of estimating and a business analyst has produced initial spreadsheets using linear regression and time series analysis. The business analyst has now left the company, leaving his work unexplained.

Figure 1 is a least square analysis of the sales data, defining the equation of a straight line that 'best' fits the data by minimising the squares of deviations of actual values from the mean. In least squares analysis, one set of data is defined as the independent variable (x – in this case, time) and the other set of data, sales, is defined as y – the dependent variable. From the data presented in Figure 1 the line of best fit is:

$y = 125{\cdot}022 + 1{\cdot}84x$

This equation can be used to predict a value for the next quarter (2013 quarter 3):

$y = 125{\cdot}022 + 1{\cdot}84(15)$
$y = 152{\cdot}62$

The positive value of b suggests that the overall sales trend is upwards.

The correlation coefficient 'r' shows the strength of the statistical relationship between the two variables. In Figure 1 the value of r is 0·253, which suggests that the two variables are weakly connected. The coefficient of determination (r^2) shows that 6·4% of the variation in sales (y) is due to the passage of time (x). Low coefficients of correlation (and determination) are usual when data is widely scattered around the mean and/or are related in a non-linear fashion. Both these factors might be applicable here, particularly due to the pattern caused by large seasonal variations.

At ATD, linear regression appears to be of little practical use. The predicted value for 2013 quarter 3 appears too low (it is lower than all actual quarter 3 figures to date and much lower than the previous quarter 3 figure of 169). The technique might be more useful if the annual data was plotted (hence eliminating the seasonal variation) or to identify alternative variables which better explained the seasonal variation and to calculate a correlation coefficient between these and the sales data.

Time series analysis uses a moving average to define a trend. In Figure 2, the moving average has been calculated on a quarterly basis, which seems appropriate as this is how the data has been presented. The trend line is calculated from the average of the first two quarters (for example, quarters 1–4 and quarters 2–5) to allow the trend to be centralised against an actual sales value. The difference between the actual values and the trend line is also averaged to produce a seasonal variation. Any difference left between the actual sales value and the seasonally adjusted trend is defined as a residual variation. Figure 2 also shows the seasonally adjusted trend values.

Forecasting future values is achieved by extrapolating the trend line and then adding or subtracting the seasonal variation. There is no agreed way of extrapolating the trend. A scatter graph could be drawn and a trend line drawn by hand. Alternatively, a least square regression of the trend values could be performed to define a line of best fit. Using a 'best guess' approach, a trend value of 149 might be hypothesised for quarter 1 of 2013, giving a predicted value of 134·3 (149 – 14·7), just below the actual recorded value of 137. Predicted values would also be calculated for subsequent quarters. For example, based on a (hand drawn) trend value of 151, the predicted value for quarter 3 of 2013 would be 173·55 (151 + 22·55), which subjectively seems much more realistic than the 152·55 suggested by the least squares analysis.

The moving average method also explicitly defines the significant seasonal variations for this product and so reflects these in the predicted values, meaning that production capacity, inventory levels and resource purchase requirements are sensitive to the fluctuating demand. The high residual variation in 2012 quarter 4 probably needs some investigation. It is possible that demand is falling faster than might be expected and this will have important consequences for estimated sales figures.

One of the problems of both techniques is that forecasts are based on past data. Sudden changes in the market will not be immediately reflected in the forecasts. Thus there may still be a role for the sales manager to use his experience, intuition and judgement to amend the forecasts produced by the statistical analysis.

Finally, of the two approaches presented here, time series analysis seems the most appropriate technique for sales forecasting at ATD.

(b) A budget is essentially a short-term business plan. It is usually expressed in financial terms and it serves as a mechanism for converting the long-term plan and objectives of the company into an actionable blueprint for the near future, usually the next year. Most businesses have sales ambitions and it is the achievement of these that drive many budgets. At ATD, like in many organisations, the ability to sell sufficient products is the main problem. Setting and achieving sales targets, both in terms of volume and price, is a preoccupation, and in most organisations it is the limiting factor that the budgetary system is based around. In such circumstances, the sales budget is the first budget to be prepared as it determines the overall business activity for the forthcoming period. It is the level of sales that determines inventory requirements, production capacity, raw material purchases, etc. At ATD, the sales forecast not only determines the level of activity but also the pattern of that activity, with seasonal variations that will have to be taken into account in other activities. Such seasonal variations might reveal other limiting factors, such as production capacity or inventory storage space and these would have to be investigated and policies determined.

Budgets should allow proper, realistic targets to be set not only for sales but also for functions where there is clear accountability (such as production management and inventory management). Targets need to be rigorous and achievable. They also need to be connected to clear organisational demarcation where targets are under the control of a manager who has responsibility for that target. Thus budgeting should improve forecasting through requiring a rigorous and collectively responsible process. Flexing the budget would allow the performance of parts of the organisation to be assessed in the context of missed sales targets. For example, an analysis might reveal that the production manager has reduced target raw material costs even though lower sales volumes mean that overall revenue targets have not been met. At present, the production manager is frustrated because he feels that he is working 'tirelessly to keep costs down, but my only reward is that I cannot replace one of my best purchasing administrators who left last month'. However, we only have his assertion about his ability to keep costs down. With a flexed budget, the business can actually see if he has effectively controlled costs. Flexed budgets and their associated variances provide an important insight into how different functions or departments (and their managers) are actually performing.

There is also significant evidence to suggest that departmental managers will be motivated if they are required to strive to achieve targets that they themselves have helped set, fostering a sense of ownership and commitment. This would help address the managers' feelings of powerlessness and the sense that they are undervalued. Their morale should improve as they see their experience and opinions valued. Benefits should also accrue for the organisation as a whole. As knowledge from different departments is pooled, understanding, target setting and co-ordination should be improved due to the number of different departments involved in budget setting.

Because budgets include planning, feedback and control elements, they offer important insights into how an organisation should react to failed sales targets. The response of the CEO has been to take general measures which appear, on the face of it, to offer immediate savings, but have an unpredictable effect. Such indiscriminate measures as a ban on business travel, cancelled marketing initiatives and a complete freeze on recruitment may be legitimate responses, but without a budget, it is not really possible to assess their effectiveness. A proper variance analysis might suggest better reactions, and indeed if reduced sales targets are compensated for in some way by reduced raw material and labour costs, then the overall performance might not warrant, in the short term, such an extreme response. The organisation needs to respond to variances and exercise proper controls, revising plans (and budgets) if necessary. The suggested measures may be counter-productive. For example, banning business travel might prevent the production manager from travelling to a supplier where he would be able to negotiate reduced material costs. Cancelled marketing initiatives might further affect the capability of the organisation to meet sales targets and a complete freeze of recruitment may affect the organisation's effectiveness and its capacity to deliver products on time and to the required quality.

Thus a formal budgeting process would allow ATD to address three particular areas of concern. The ability of the organisation to make realistic forecasts, the poor morale of departmental managers and the appropriateness of the organisation's response to its failure to hit predicted sales targets.

3 (a) Tutorial note: *Any short-term strategy which produces reasonably justifiable income increases or cost savings (in the context of the scenario) is acceptable.*

A simple analysis of the financial data shows why the trust is currently running at a loss.

The annual fixed costs are $60,000. Monthly visitor figures are 1,000 per month. The gardens are only open for eight months per year. So, as a result, 8,000 visits generate $40,000 direct income. The contribution from café sales is estimated at $1·25 per visitor. Only 60% of visitors use the café, generating an annual contribution of $6,000. This leaves an annual financial shortfall of $14,000 per year, which explains why the trust is gradually using up the legacy left by Clive Popper.

Immediate actions that might be considered include:

Reduce the admission fee to the price consumers are willing to pay. Surveys have suggested that the price that consumers are willing to pay is $3·25. Reducing the admission price to this level would mean that a breakeven visitor volume would be 15,000, assuming that 60% of these visitors still use the café and the contribution from café sales remains $1·25. This assumes that the contribution from each admission would be $3·25, as the scenario does not identify any variable cost associated with each visit. Here are the workings, where n is the required number of visitors:

$0{\cdot}6n \times 1{\cdot}25 + 3{\cdot}25n = 60{,}000$
$0{\cdot}75n + 3{\cdot}25n = 60{,}000$
$4n = 60{,}000$, so $n = 15{,}000$

15,000 visits x 3·25 = $48,750 admittance revenue

15,000 visits x 0·6 x 1·25 = $11,250 profit from café sales, giving a total revenue of $60,000

Obviously the trust will have to consider the likelihood of such a dramatic increase in visitor numbers (from the current 8,000 per year). If visitor numbers do not increase as significantly as a result of reducing the price to $3·25, then overall contribution towards fixed costs may actually fall. In fact, reducing the price to $3·25 would require an increase in visitors of (4n = 14,000) 3,500 from the previous level not to make the financial performance of HGT any worse than it is currently.

Introduce a season's membership card. Evidence suggests that 20% of visitors would consider purchasing an annual membership card, if it were priced at $9. This would have the advantage of providing a short-term boost to cash flow. However, the actual income is difficult to estimate. There are 8,000 visits per year, but the scenario does not specify how many individual visitors there are. It seems likely that some people are likely to make more than one visit in a year. However, if an estimate of 6,000 individual visitors is used, then this would give a relatively immediate income of 6,000 x 0·2 x 9 = $10,800 which could be used to meet short-term cash flow problems. Obviously, income from future visits will be lost, but it could be argued that the promise of subsequent free admission will encourage people to visit more, leading to more use of, and income from, the café.

Short-term actions that might be considered include:

Relocate the café. The café was much more popular when it was located in the gatehouse, where café users were not required to pay an admission fee for the garden. Moving the café inside the garden may have seemed like a good idea at the time, but takings have reduced considerably. It should be relatively easy to relocate the café to the gatehouse because the site it previously occupied is still empty. There will be some costs associated with removal and refurbishment, but if the café returns to its previous levels of use, then profit from this source should be $625 per month (500 visitors x $1·25 contribution), or $5,000 over the eight-month season (8 x $625).

Increase revenues from the café. There have been some criticisms that the café menu is limited in scope and does not offer substantial lunches. Perhaps the limited nature of its menu means that revenue is unnecessarily low and that better, more appealing drinks and food may be offered at a higher contribution. There may also be scope for reducing supply costs. A more attractive menu may also lead to an improvement in the take up of customers. Currently, only 60% of garden visitors actually use the café. For example, an increase in contribution to $1·75 per visit and an increase to a 75% take up of customers would lead to an increase of $4,500 in revenue ((8,000 x 0·75 x 1·75) – 6,000) over the eight-month season, based on current visitor numbers.

Reduce display advertising.

Note: *Although the savings from cancelling the subscription is long term (greater than three months), the action to cancel has to be implemented immediately. However, credit will be given to the candidate whether this is included in part (a) or part (b).*

There is always concern that reducing advertising expenditure is an inappropriate instinctive response to financial problems. However, evidence from the consumer survey suggests that the display advertisements are not effective and although six months of advertisements have been booked, three of these can be cancelled without penalty. The survey suggests that 5% of visitors heard about the garden through the Heritage Gardens magazine. Even if all visits represented individual visitors, this would only lead to 50 visits per month (1,000 x 0·05), producing an income of $287·50 per month ($250·00 (admittance fee: 50 x $5) and $37·50 spent at the café (50 x 0·6 x 1·25)). So, the monthly cost of $500 per advert is only generating $287·50 in income. Furthermore, it has to be recalled that the survey only asked respondents for one choice about how they heard about the gardens. Respondents who heard about the garden through the Heritage Gardens magazine might have also heard about it through other media.

(b) **Tutorial note:** *There is considerable scope around all the 'p's of the marketing mix in the question and candidates may well interpret the applicability of some of these as either short or long-term strategies. For example, although reducing the price to the target price could be made immediately, it is understandable if some candidates would wish to consider it as a longer-term strategy. Furthermore, the effect of cancelling the subscriptions might also be included in this section as its effect will not be felt until three months' time This model answer focuses on product and promotion. However, answers centred, for example, on physical evidence and price will be given as much credit as long as they are relevant to the scenario.*

In the long term, HGT needs to reflect more on what product it actually offers to the consumer. Most of the marketing is currently focused on the historical importance of the garden and the efforts that have been made to restore it. HGT stresses the restoration effort and the importance of William Wessex as a garden designer. This is very much the trust's perception of what is important, with a focus on history and restoration.

However, whether this is the focus of visitors is open to question. To them, the garden offers *an experience*, and HGT needs to understand what that experience is. Perhaps it is the opportunity to wander around in a peaceful, safe, attractive environment, enjoying the plants and flowers. Certainly, the consumer survey suggests that this is the motivation of 85% of visitors. Perhaps this should be the main basis of the marketing message.

In understanding this experience, HGT might also be able to augment the product to help visitors enjoy the gardens and to increase visitor numbers. For example, more visitors with young children might be attracted if a supervised play area were provided well away from the garden. HGT might also consider selling appropriate supporting products in the café. HGT needs to think more widely about the product: what it is from a customer's perspective and what can be done to improve their experience of the product. For example, it might consider selling plants.

HGT has also just focused on the private visitor. Businesses might also benefit from running events in the garden environment, particularly those with products aimed at well-being or gardening. The definition of the customer may also require re-definition.

Finally, the product is constrained by its opening season – eight months. HGT has assumed that there will be fewer visitors in the four months when the weather is colder. However, this assumption has never been tested and it could be argued that the garden offers walking 'in a peaceful, beautiful, safe environment' the whole of the year. Indeed, the reason given by 65% of the respondents for visiting the garden arguably remains relevant in the colder period. Perhaps special events can be organised to compensate for the relative scarcity of flowering plants in this season. The effect of extending the opening season on fixed costs will also have to be evaluated.

Promotion has focused on display advertising. Perhaps these display advertisements have the wrong message (heritage and restoration) and are placed in the wrong magazine (Heritage Gardens). Evidence from the survey supports this. Only 5% of visits were prompted by the expensive advertisements in the Heritage Gardens magazine. Again, focusing on heritage rather than a peaceful garden experience might be the fundamental issue here. HGT needs to reconsider its message and how it can be effectively communicated.

Publicity and public relations have been particularly poor. The work in the garden has not been recorded in the local press. Consequently, many of the people in the local area are not aware of the garden. HGT needs to actively engage with local newspapers, local radio and tourist agencies to raise its profile. The recent articles written by the trust's administrator have been one of the main reasons prompting visits to the garden. However, it has taken a crisis within the trust to prompt it to use this relatively simple form of promotion.

The internet also has many possibilities. At present the site is relatively static, concentrating again on the restoration of the gardens and stressing their historical importance. There is no interaction with the user. HGT should reconsider the design and content of the site. Again it needs to ensure that the message about the experience is relevant. There is also an opportunity to use the internet to build a community to support the gardens and perhaps this can be part of the service offered to those taking up annual membership, introduced in the short-term suggestions. The internet also provides an opportunity to:

- Reconsider the pricing structure. Perhaps discounts could be given for pre-booking. Pricing may also be differentiated by age. Currently there is one price per visit. However, lower prices could be offered to the elderly, children and those on state support benefits.
- Providing *physical evidence* – showing visitors through webcams and videos the type of experience that they will get by visiting the garden.
- Improving the *process* of purchasing tickets, particularly in applying for an annual membership.

4 **(a)** Victor urgently needs to revisit his business model to look at the opportunities presented by new technology and new media. Revenues from his current business are falling due to reduced advertising spend and fewer subscribers. On the other hand, production, distribution and office costs are increasing. These problems are not unique to the *BA Times*. The sales of printed magazines and the profits of publishers are falling dramatically throughout Umboria.

Perhaps because of his conventional publishing background, Victor still perceives his core business as the publishing of a printed magazine. The *BA Times* does have a website, but it is designed to provide tempting tasters for the magazine, running extracts of stories that can only be read in full by people who subsequently buy a printed copy of the magazine. Thus the website is seen as a way of marketing the magazine and, in itself, provides far fewer services and information than the magazine. Emerging technology provides Victor with the opportunity to revisit this business model in the context of four of the '6Is' of e-marketing: individualisation, interactivity, intelligence and independence of location.

Individualisation

A survey of people who had not renewed their subscription revealed that some subscribers believe that the magazine includes too much information which is irrelevant to them. One respondent commented that, 'I am studying the ABC syllabus and so in-depth articles on ICFC topics and examinations are not relevant to me. I quite enjoy reading the news parts, but not the in-depth analysis of examinations that I am not taking.' One ABC candidate remarked that, 'I have reached the final stage of my examinations. I do not want to read articles about the stages I have already passed. I reckon only about 15% of *BA Times* is relevant to me now.'

A key feature of the new technology and media is the opportunity to *individualise* or tailor the product to meet specific requirements and for that tailoring to be driven and performed by the customer. So, for example, if all the resources are made available on a website, the customer only needs to access those resources that he or she wants. This can be achieved by him or her just ignoring menu options for other institutes or examinations or, more innovatively, by configuring the website so that it just reflects an individual's interest (*myBATImes*). Furthermore, through registering interests either directly on the website, or through linked social and business networking sites, the candidate can be kept informed of articles, news, comments and blogs relevant to their interests, institute and examination stage. A centralised website resource would allow Victor to expand the number of relevant resources available (which he is under pressure to do) without making his printed magazine any larger or more expensive. He can also supplement conventional text articles with webcasts and podcasts. If the candidate wants a hard copy of any article, then he or she can locate it and print it out, thus transferring printed costs to the subscriber. The website should be considered as a comprehensive knowledge centre where all relevant resources are stored.

Interactivity

A key characteristic of the internet is the opportunity it provides for interactivity. Traditional printed media, such as magazines, are predominantly *push media* where the message is broadcast from the company to the customer. There is limited interaction with the customer. Evidence of this is provided in the scenario, where, although there are readers' letters, the monthly gap between issues means that many topics just lose their currency, or are made irrelevant by changed circumstances. The only person who can immediately comment on topics raised in a reader's letter is the editor of the magazine. One of survey respondents commented on this. 'Some of the readers' letters are really irritating or just plain wrong, but the editor seldom makes a comment! It really annoys me!' A key characteristic of the internet is *interactivity*. Issues raised on a website can be commented on immediately and threads developed. In general, the internet is a *pull media* where the customer initiates contact and is seeking information on a website.

Communities of interest are important features of the internet. The *BA Times* largely fails to exploit its unique position of being independent of the two large professional associations. It could provide writers with an opportunity for controversy and speculation, generating feedback which would unlikely to be acceptable to the official websites of the professional associations. The site itself can become a natural host to communities of interest, discussing and documenting topics relevant to that community and making resources available to new members. Feedback can also be provided on written articles, asking for clarification or providing extra information.

The interactivity of the website is also enhanced by the ability to continually update it. Reference has already been made to the time gap between issues. Significant events may take place the day after a print deadline. The website can be updated immediately to report on emerging issues and concerns. This should again increase the use of the website, ensuring that users see the *BA Times* as a valuable source of information.

Intelligence

The Internet can be used as a relatively low cost method of collecting information from and about customers. Online questionnaires can be used to help understand how users rate the website and to understand what products and services they are looking for. Website analytics can be used to identify which pages are looked at and what browsers and search terms are used to arrive at such pages. Both questionnaires and analytics will help Victor tailor the content to his potential customers.

By exploiting editorial independence and interactivity, the site can become the one-stop resource for all aspiring business analysts. If this becomes the case, then capturing information about visitors will allow Victor to build up a very significant resource which cannot only be used to improve the website but also (as long as permission is given) to provide intelligence to other companies which wish to exploit this market, for example, learning providers and, indeed, the professional associations themselves.

Independence of location

Finally, a further clear benefit of contemporary technology is its ability to provide an organisation with independence of location. Although this answer has focused on the central role of a website resource, Victor could exploit opportunities for independence of location within the current printed magazine model. Production currently takes place in an expensive area of Umboria, a country where wage rates are also high. Production could be moved to a country where wages, equipment and operational costs are cheaper and then shipped to customers from there. Similarly, the Head Office could be moved to a cheaper area, offering the company potential savings on overhead costs.

(b) Victor himself is a potential barrier to the extensive use of new technology and media. His background is in printed magazines and this is a product that he feels comfortable with. He likes the physical, tactile feel of magazines and evidence suggests that his product is well liked and respected in the industry. But, increasing costs and changing reading habits mean that the future of the printed magazine industry looks bleak. However, even if Victor can overcome his preference for printed media, he has a further problem in understanding how new technology is going to turn round the fortunes of the *BA Times* and return it to profit.

A simple option is to *just employ new technology to reduce costs*. This might give him some breathing space in which to develop a future business strategy or plan his retirement. Alternatively, he could consider an option to embrace the new technology more extensively and re-position the printed *BA Times* as just one channel to his target market. It is possible that the introduction of a comprehensive web resource may lead to a further fall in the circulation of a printed copy version of the *BA Times*. However, this would have to be researched. Perhaps his readership contains people like himself who would still want to receive a physical copy of a magazine.

If a more radical shift to new technology and new media is to be justified, then Victor would have to be convinced of the possibility of generating income from at least three sources. These would offset a fall in income from the printed magazine and also address the issue of the financial viability of the company.

Increased advertising: The very breadth of the *BA Times* (news, articles, three associations, many examinations) probably makes display advertising only attractive to the larger learning providers which provide courses at all levels across all qualifications. Targeted advertising is much easier on the web and so the new resource may attract advertising from a wider range of learning providers. An extended product range (for example, recruitment resources) made available on the website should also bring in new advertisers from different sectors. If Victor can establish the *BA Times* website as the premier one-stop resource for business analysts, then attracting significant advertising should be no problem.

Subscription services within the website: Many websites contain both free and subscription resources. High quality free services can be a taster for attracting customers to the resources which are only available for a subscription. This is an established approach in web-based services and is particularly relevant in a competitive environment like examinations. Candidates may believe that investing relatively small amounts of money in extra services might give them an edge in preparing for examinations.

Income from selling intelligence: The facility of websites to capture information about visitors and their interests has already been discussed in the answer to the first part of this question. This will be of potential use to other organisations and with the person's consent can be forwarded and sold.

Victor is also concerned about the reaction of advertisers to any proposal to adopt new technology within the *BA Times*. However, it is likely that Victor will receive a positive response from advertisers. At present, advertising revenue is falling. In general, there is a growing disenchantment with push marketing technologies, where advertisers cannot be sure that their message has reached the intended market. Advertising on a comprehensive website has many of the advantages that have already been discussed. Advertisements can be made specific and individualised, they can be quickly and easily updated, and the effectiveness of an advertisement or a campaign can be relatively easily analysed through the responses received from the website.

Finally, Victor is concerned about the effect on subscribers who cannot access a website or, like him, value a printed copy and wish to still receive one. At this stage, there is no reason why a smaller run of the printed version cannot be maintained by exploiting technology to reduce printing, distribution and office costs. Contribution to overheads will be reduced, but income from other sources (see above) should compensate for this. Some advertisers may also wish to continue advertising in the printed edition to supplement their web-based marketing.

The nature of the web resource also allows Victor to reconsider the range of products he has to offer. At present the magazine is focused on news and preparing candidates for examinations. Income is derived from learning providers advertising in the pages of the magazine. Victor might consider moving into related business areas that would appeal to his readership. From the feedback given, the most obvious candidate is probably recruitment. One of the respondents to the survey commented that, 'I became a business analyst to get a job, not just to sit examinations and read about examining bodies.' Victor might have lost focus here. For many candidates, taking examinations is a means to an end, not an end in itself, and job opportunities and careers do not seem to be considered in the *BA Times* at present. Articles about certain job roles and interview advice might be provided and a potential new income stream should open up for Victor from recruitment agencies placing advertisements for jobs which they have been contracted to fill.

1 (a) 1 mark for each relevant point up to a maximum of 6 marks for each method. It is possible that candidates will include a financial assessment of the post-acquisition performance of LogTrans and EngSup in this part and so marks given for financial calculations (see part (b)) for these two companies may be allocated to this part question. Up to a total of 18 marks for the question.

(b) 1 mark will be allocated for each relevant point and interpretation up to a maximum of 18 marks. It is expected (but not mandated) that this will include a financial calculation for FRG. This will be marked as follows:

– Gross profit margin: 0·5 mark
– Operating margin: 0·5 mark
– ROCE: 0·5 mark
– Gearing ratio: 0·5 mark
– Interest cover: 0·5 mark

Financial calculations may also be included for LogTrans/EngSup (refer to part (a)) and these will be marked as follows:

– Gross profit margin: 1 mark
– Operating margin: 1 mark
– ROCE: 1 mark
– Gearing ratio: 1 mark
– Interest cover: 1 mark

Professional marks

– Structure of the report: up to 2 marks
– Clarity of the analysis: up to 1 mark
– Soundness of the conclusion: up to 1 mark

(c) 1 mark for each appropriate point up to a maximum of 5 marks for general points made about the model. 1 mark for each appropriate point up to a maximum of 5 marks for points that specifically reference conditions in Arboria or Ceeland.

2 (a) 1 mark for each relevant point up to a maximum of 5 marks for an explanation of the least squares regression data. This may include:

– The expression of the equation ($y = 125{\cdot}022 + 1{\cdot}84x$)
– A predicted value using the equation
– The calculation of the coefficient of determination

1 mark for each relevant point up to a maximum of 5 marks for an explanation of the time series analysis data. This may include:

– A predicted value using a reasonable assumption
– Explanation of residual variation
– Explanation of seasonally adjusted values

1 mark for each relevant point up to a maximum of 5 marks for relevance of the approaches to ATD.

(b) 1 mark for each relevant point up to a maximum of 10 marks.

3 (a) 1 mark for each relevant point up to a maximum of 15 marks. The answer might include certain calculations, which will be marked as follows:

– Calculation of direct income: 0·5 mark
– Calculation of café income: 0·5 mark
– Calculation of financial shortfall: 1 mark
– Breakeven analysis for consumer price: 2 marks
– Calculation of income from annual subscriptions: 1 mark
– Income if café returns to previous level of use: 1 mark
– Calculations associated with increased café revenue: 1 mark
– Cost saving associated with display advert cancellation: 2 marks

(b) 1 mark for each relevant point up to a maximum of 10 marks.

4 (a) 1 mark for each relevant point up to a maximum of 15 marks, with a maximum of 5 marks for each individual 'i'.

(b) 1 mark for each relevant point up to a maximum of 10 marks.