Professional Level – Essentials Module

Business Analysis

Monday 18 June 2012

Time allowed
Reading and planning: 15 minutes
Writing: 3 hours

This paper is divided into two sections:

Section A – This ONE question is compulsory and MUST be attempted

Section B – TWO questions ONLY to be attempted

Do NOT open this paper until instructed by the supervisor.

During reading and planning time only the question paper may be annotated. You must NOT write in your answer booklet until instructed by the supervisor.

This question paper must not be removed from the examination hall.

The Association of Chartered Certified Accountants

Paper P3

ACCA

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The question paper begins on page 3.

Section A – This ONE question is compulsory and MUST be attempted

The following information should be used when answering question 1

1 Introduction

Hammond Shoes was formed in 1895 by Richard and William Hammond, two brothers who owned and farmed land in Petatown, in the country of Arnland. At this time, Arnland was undergoing a period of rapid industrial growth and many companies were established that paid low wages and expected employees to work long hours in dangerous and dirty conditions. Workers lived in poor housing, were largely illiterate and had a life expectancy of less than forty years.

The Hammond brothers held a set of beliefs that stressed the social obligations of employers. Their beliefs guided their employment principles – education and housing for employees, secure jobs and good working conditions. Hammond Shoes expanded quickly, but it still retained its principles. Today, the company is a private limited company whose shares are wholly owned by the Hammond family. Hammond Shoes still produce footwear in Petatown, but they now also own almost one hundred retail shops throughout Arnland selling their shoes and boots. The factory (and surrounding land) in Petatown is owned by the company and so are the shops, which is unusual in a country where most commercial properties are leased. In many respects this policy reflects the principles of the family. They are keen to promote ownership and are averse to risk and borrowing. They believe that all stakeholders should be treated fairly. Reflecting this, the company aims to pay all suppliers within 30 days of the invoice date. These are the standard terms of supply in Arnland, although many companies do, in reality, take much longer to pay their creditors.

The current Hammond family are still passionate about the beliefs and principles that inspired the founders of the company.

Recent history

Although the Hammond family still own the company, it is now totally run by professional managers. The last Hammond to have operational responsibility was Jock Hammond, who commissioned and implemented the last upgrade of the production facilities in 1991. In the past five years the Hammond family has taken substantial dividends from the company, whilst leaving the running of the company to the professional managers that they had appointed. During this period the company has been under increased competitive pressure from overseas suppliers who have much lower labour rates and more efficient production facilities. The financial performance of the company has declined rapidly and as a result the Hammond family has recently commissioned a firm of business analysts to undertake a SWOT analysis to help them understand the strategic position of the company.

SWOT analysis: Here is the summary SWOT analysis from the business analysts' report.

Strengths

Significant retail expertise: Hammond Shoes is recognised as a successful retailer with excellent supply systems, bright and welcoming shops and shop employees who are regularly recognised, in independent surveys, for their excellent customer care and extensive product knowledge.

Excellent computer systems/software expertise: Some of the success of Hammond Shoes as a retailer is due to its innovative computer systems developed in-house by the company's information systems department. These systems not only concern the distribution of footwear, but also its design and development. Hammond is acknowledged, by the rest of the industry, as a leader in computer-aided footwear design and distribution.

Significant property portfolio: The factory in Petatown is owned by the company and so is a significant amount of the surrounding land. All the retail shops are owned by the company. The company also owns a disused factory in the north of Arnland. This was originally bought as a potential production site, but increasingly competitive imports made its development unviable. The Petatown factory site incorporates a retail shop, but none of the remaining retail shops are near to this factory, or indeed to the disused factory site in the north of the country.

Weaknesses

High production costs: Arnland is a high labour cost economy.

Out-dated production facilities: The actual production facilities were last updated in 1991. Current equipment is not efficient in its use of either labour, materials or energy.

Restricted internet site: Software development has focused on internal systems, rather than internet development. The current website only provides information about Hammond Shoes; it is not possible to buy footwear from the company's website.

Opportunities

Increased consumer spending and consumerism: Despite the decline of its manufacturing industries, Arnland remains a prosperous country with high consumer spending. Consumers generally have a high disposable income and are fashion conscious. Parents spend a lot of money on their children, with the aim of 'making sure that they get a good start in life'.

Increased desire for safe family shopping environment: A recent trend is for consumers to prefer shopping in safe, car-free environments where they can visit a variety of shops and restaurants. These shopping villages are increasingly popular.

Growth of the green consumer: The numbers of 'green consumers' is increasing in Arnland. They are conscious of the energy used in the production and distribution of the products they buy. These consumers also expect suppliers to be socially responsible. A recent television programme on the use of cheap and exploited labour in Orietaria was greeted with a call for a boycott of goods from that country. One of the political parties in Arnland has emphasised environmentally responsible purchasing in its manifesto. It suggests that 'shorter shipping distances reduce energy use and pollution. Purchasing locally supports communities and local jobs'.

Threats

Cheap imports: The lower production costs of overseas countries provide a constant threat. It is still much cheaper to make shoes in Orietaria, 4000 kilometres away, and transport the shoes by sea, road and train to shops in Arnland, where they can be offered at prices that are still significantly lower than the footwear produced by Hammond Shoes.

Legislation within Arnland: Arnland has comprehensive legislation on health and safety as well as a statutory minimum wage and generous redundancy rights and payments for employees. The government is likely to extend its employment legislation programme.

Recent strategies

Senior management at Hammond Shoes have recently suggested that the company should consider closing its Petatown production plant and move production overseas, perhaps outsourcing to established suppliers in Orietaria and elsewhere. This suggestion was immediately rejected by the Hammond family, who questioned the values of the senior management. The family issued a press release with the aim of re-affirming the core values which underpinned their business. The press release stated that 'in our view, the day that Hammond Shoes ceases to be a Petatown company, is the day that it closes'. Consequently, the senior management team was asked to propose an alternative strategic direction.

The senior management team's alternative is for the company to upgrade its production facilities to gain labour and energy efficiencies. The cost of this proposal is $37·5m. At a recent scenario planning workshop the management team developed what they considered to be two realistic scenarios. Both scenarios predict that demand for Hammond Shoes' footwear would be low for the next three years. However, increased productivity and lower labour costs would bring net benefits of $5m in each of these years. After three years the two scenarios differ. The first scenario predicts a continued low demand for the next three years with net benefits still running at $5m per year. The team felt that this option had a probability of 0·7. The alternative scenario (with a probability of 0·3) predicts a higher demand for Hammond's products due to changes in the external environment. This would lead to net benefits of $10m per year in years four, five and six. All estimated net benefits are based on the discounted future cash flows.

Financial information: The following financial information (see Figure 1) is also available for selected recent years for Hammond Shoes manufacturing division.

Figure 1: Extracts from the financial statements of Hammond Shoes (2007–2011)

Extracted from the income statements (all figures in $m)	2011	2009	2007
Revenue	700	750	850
Cost of sales	(575)	(600)	(650)
Gross profit	125	150	200
Administration expenses	(95)	(100)	(110)
Other expenses	(10)	(15)	(20)
Finance costs	(15)	(10)	(5)
Profit before tax	5	25	65
Income tax expense	(3)	(7)	(10)
Profit for the year	2	18	55
Extracted from statements of financial position (all figures in $m)			
Trade receivables	70	80	90
Share capital	100	100	100
Retained earnings	140	160	170
Long term borrowings	70	50	20

In 2007, Hammond Shoes paid, on average, their supplier invoices 28 days after the date of invoice. In 2009 this had risen to 43 days and in 2011, the average time to pay a supplier invoice stood at 63 days.

Required:

(a) **Analyse the financial position of Hammond Shoes and evaluate the proposed investment of $37·5 million in upgrading its production facilities.** (14 marks)

(b) **Using an appropriate framework (or frameworks) examine the alternative strategic options that Hammond Shoes could consider to secure its future position.** (20 marks)

Professional marks will be awarded in part (b) for the clarity, structure and style of the answer. (4 marks)

(c) **Advise the Hammond family on the importance of mission, values and objectives in defining and communicating the strategy of Hammond Shoes.** (12 marks)

(50 marks)

Section B – TWO questions ONLY to be attempted

2 Introduction

Flexipipe is a successful company supplying flexible pipes to a wide range of industries. Its success is based on a very innovative production process which allows the company to produce relatively small batches of flexible pipes at very competitive prices. This has given Flexipipe a significant competitive edge over most of its competitors whose batch set-up costs are higher and whose lead times are longer. Flexipipe's innovative process is partly automated and partly reliant on experienced managers and supervisors on the factory floor. These managers efficiently schedule jobs from different customers to achieve economies of scale and throughput times that profitably deliver high quality products and service to Flexipipe's customers.

A year ago, the Chief Executive Officer (CEO) at Flexipipe decided that he wanted to extend the automated part of the production process by purchasing a software package that promised even further benefits, including the automation of some of the decision-making tasks currently undertaken by the factory managers and supervisors. He had seen this package at a software exhibition and was so impressed that he placed an order immediately. He stated that the package was 'ahead of its time, and I have seen nothing else like it on the market'.

This was the first time that the company had bought a software package for something that was not to be used in a standard application, such as payroll or accounts. Most other software applications in the company, such as the automated part of the current production process, have been developed in-house by a small programming team. The CEO felt that there was, on this occasion, insufficient time and money to develop a bespoke in-house solution. He accepted that there was no formal process for software package procurement 'but perhaps we can put one in place as this project progresses'.

This relaxed approach to procurement is not unusual at Flexipipe, where many of the purchasing decisions are taken unilaterally by senior managers. There is a small procurement section with two full-time administrators, but they only become involved once purchasing decisions have been made. It is felt that they are not technically proficient enough to get involved earlier in the purchasing lifecycle and, in any case, they are already very busy with purchase order administration and accounts payable. This approach to procurement has caused problems in the past. For example, the company had problems when a key supplier of raw materials unexpectedly went out of business. This caused short-term production problems, although the CEO has now found an acceptable alternative supplier.

The automation project

On returning to the company from the exhibition, the CEO commissioned a business analyst to investigate the current production process system so that the transition from the current system to the new software package solution could be properly planned. The business analyst found that some of the decisions made in the current production process were difficult to define and it was often hard for managers to explain how they had taken effective action. They tended to use their experience, memory and judgement and were still innovating in their control of the process. One commented that 'what we do today, we might not do tomorrow; requirements are constantly evolving'.

When the software package was delivered there were immediate difficulties in technically migrating some of the data from the current automated part of the production process software to the software package solution. However, after some difficulties, it was possible to hold trials with experienced users. The CEO was confident that these users did not need training and would be 'able to learn the software as they went along'. However, in reality, they found the software very difficult to use and they reported that certain key functions were missing. One of the supervisors commented that 'the monitoring process variance facility is missing completely. Yet we had this in the old automated system'. Despite these reservations, the software package solution was implemented, but results were disappointing. Overall, it was impossible to replicate the success of the old production process and early results showed that costs had increased and lead times had become longer.

After struggling with the system for a few months, support from the software supplier began to become erratic. Eventually, the supplier notified Flexipipe that it had gone into administration and that it was withdrawing support for its product. Fortunately, Flexipipe were able to revert to the original production process software, but the ill-fated package selection exercise had cost it over $3m in costs and lost profits. The CEO commissioned a post-project review which showed that the supplier, prior to the purchase of the software package, had been very highly geared and had very poor liquidity. Also, contrary to the statement of the CEO, the post-project review team reported that there were at least three other packages currently available in the market that could have potentially fulfilled the requirements of the company. The CEO now accepts that using a software package to automate the production process was an inappropriate approach and that a bespoke in-house solution should have been commissioned.

Required:

(a) **Critically evaluate the decision made by the CEO to use a software package approach to automating the production process at Flexipipe, and explain why this approach was unlikely to succeed.** (12 marks)

(b) The CEO recommends that the company now adopts a formal process for procuring, evaluating and implementing software packages which they can use in the future when a software package approach appears to be more appropriate.

Analyse how a formal process for software package procurement, evaluation and implementation would have addressed the problems experienced at Flexipipe in the production process project. (13 marks)

(25 marks)

3 Introduction

The country of Mahem is in a long and deep economic recession with unemployment at its highest since the country became an independent nation. In an attempt to stimulate the economy the government has launched a Private/Public investment policy where the government invests in capital projects with the aim of stimulating the involvement of private sector firms. The building of a new community centre in the industrial city of Tillo is an example of such an initiative. Community centres are central to the culture of Mahem. They are designed as places where people can meet socially, local organisations can hold conferences and meetings and farmers can sell their produce to the local community. The centres are seen as contributing to a vibrant community life. The community centre in Tillo is in a sprawling old building rented (at $12,000 per month) from a local landowner. The current community centre is also relatively energy inefficient.

In 2010 a business case was put forward to build a new centre on local authority owned land on the outskirts of Tillo. The costs and benefits of the business case are shown in Figure 1. As required by the Private/Public investment policy the project showed payback during year four of the investment.

All figures in $	Year 1	Year 2	Year 3	Year 4	Year 5
Costs: Initial	600,000				
Costs: Recurring	60,000	60,000	60,000	60,000	60,000
Benefits: Rental savings	144,000	144,000	144,000	144,000	144,000
Benefits: Energy savings	30,000	30,000	30,000	30,000	30,000
Benefits: Increased income	20,000	20,000	70,000	90,000	90,000
Benefits: Better staff morale	25,000	25,000	25,000	25,000	25,000
Cumulative net benefits	(441,000)	(282,000)	(73,000)	156,000	385,000

Figure 1: Costs and benefits of the business case for the community centre at Tillo

New buildings built under the Private/Public investment policy must attain energy level targets and this is the basis for the estimation, above, of the *energy savings*. It is expected that the new centre will attract more customers who will pay for the centre's use as well as increasing the use of facilities such as the cafeteria, shop and business centre. These benefits are estimated, above, under *increased income*. Finally, it is felt that staff will be happier in the new building and their motivation and morale will increase. The centre currently employs 20 staff, 16 of whom have been with the centre for more than five years. All employees were transferred from the old to the new centre. These benefits are shown as *better staff morale* in Figure 1.

Construction of the centre 2010–2011

In October 2010 the centre was commissioned with a planned delivery date of June 2011 at a cost of $600,000 (as per Figure 1). Building the centre went relatively smoothly. Progress was monitored and issues resolved in monthly meetings between the company constructing the centre and representatives of the local authority. These meetings focused on the building of the centre, monitoring progress and resolving issues. Most of these issues were relatively minor because requirements were well specified in standard architectural drawings originally agreed between the project sponsor and the company constructing the centre. Unfortunately, the original project sponsor (an employee of the local authority) who had been heavily involved in the initial design, suffered ill health and died in April 2011. The new project sponsor (again an employee of the local authority) was less enthusiastic about the project and began to raise a number of objections. Her first concern was that the construction company had used sub-contracted labour and had sourced less than 80% of timber used in the building from sustainable resources. She pointed out the contractual terms of supply for the Private/Public policy investment initiatives mandated that sub-contracting was not allowed without the local authority's permission and that at least 80% of the timber used must come from sustainable forests. The company said that this had not been brought to their attention at the start of the project. However, they would try to comply with these requirements for the rest of the contract. The new sponsor also refused to sign off acceptance of the centre because of the poor quality of the internal paintwork. The construction company explained that this was the intended finish quality of the centre and had been agreed with the previous sponsor. They produced a letter to verify this. However, the letter was not counter-signed by the sponsor and so its validity was questioned. In the end, the construction company agreed to improve the internal painting at their own cost. The new sponsor felt that she had delivered 'value for money' by challenging the construction company. Despite this problem with the internal painting, the centre was finished in May 2011 at a cost of $600,000. The centre also included disability access built at the initiative of the construction company. It had found it difficult to find local authority staff willing and able to discuss disability access and so it was therefore left alone to interpret relevant legal requirements. Fortunately, their interpretation was correct and the new centre was deemed, by an independent assessor, to meet accessibility requirements.

Unfortunately, the new centre was not as successful as had been predicted, with income in the first year well below expectations. The project sponsor began to be increasingly critical of the builders of the centre and questioned the whole value of the project. She was openly sceptical of the project to her fellow local authority employees. She suggested that the project to build a cost-effective centre had failed and called for an inquiry into the performance of the project manager of the construction company who was responsible for building the centre. 'We need him to explain to us why the centre is not delivering the benefits we expected', she explained.

Required:

(a) The local authority has commissioned the independent Project Audit Agency (PAA) to look into how the project had been commissioned and managed. The PAA believes that a formal 'terms of reference' or 'project initiation document' would have resolved or clarified some of the problems and issues encountered in the project. It also feels that there are important lessons to be learnt by both the local authority and the construction company.

Analyse how a formal 'terms of reference' (project initiation document) would have helped address problems encountered in the project to construct the community centre and lead to improved project management in future projects. (13 marks)

(b) The PAA also believes that the four sets of benefits identified in the original business case (rental savings, energy savings, increased income and better staff morale) should have been justified more explicitly.

Draft an analysis for the PAA that formally categorises and critically evaluates each of the four sets of proposed benefits defined in the original business case. (12 marks)

(25 marks)

4 Jayne Cox Direct is a company that specialises in the production of bespoke sofas and chairs. Its products are advertised in most quality lifestyle magazines. The company was started ten years ago. It grew out of a desire to provide customers with the chance to specify their own bespoke furniture at a cost that compared favourably with standard products available from high street retailers. It sells furniture directly to the end customer. Its website allows customers to select the style of furniture, the wood it is to be made from, the type of upholstery used in cushion and seat fillings and the textile composition and pattern of the covering. The current website has over 60 textile patterns which can be selected by the customer. Once the customer has finished specifying the kind of furniture they want, a price is given. If this price is acceptable to the customer, then an order is placed and an estimated delivery date is given. Most delivery dates are ten weeks after the order has been placed. This relatively long delivery time is unacceptable to some customers and so they cancel the order immediately, citing the quoted long delivery time as their reason for cancellation.

Jayne Cox Direct orders wood, upholstery and textiles from long-established suppliers. About 95% of its wood is currently supplied by three timber suppliers, all of whom supplied the company in its first year of operation. Purchase orders with suppliers are placed by the procurement section. Until last year, they faxed purchase orders through to suppliers. They now email these orders. Recently, an expected order was not delivered because the supplier claimed that no email was received. This caused production delays. Although suppliers like working with Jayne Cox Direct, they are often critical of payment processing. On a number of occasions the accounts section at Jayne Cox Direct has been unable to match supplier invoices with purchase orders, leading to long delays in the payment of suppliers.

The sofas and chairs are built in Jayne Cox Direct's factory. Relatively high inventory levels and a relaxed production process means that production is rarely disrupted. Despite this, the company is unable to meet 45% of the estimated delivery dates given when the order was placed, due to the required goods not being finished in time. Consequently, a member of the sales team has to telephone the customer and discuss an alternative delivery date.

Telephoning the customer to change the delivery date presents a number of problems. Firstly, contacting the customer by telephone can be difficult and costly. Secondly, many customers are disappointed that the original, promised delivery date can no longer be met. Finally, customers often have to agree a delivery date much later than the new delivery date suggested by Jayne Cox Direct. This is because customers often get less than one week's notice of the new date and so they have to defer delivery to much later. This means that the goods have to remain in the warehouse for longer.

A separate delivery problem arises because of the bulky and high value nature of the product. Jayne Cox Direct requires someone to be available at the delivery address to sign for its safe receipt and to put the goods somewhere secure and dry. About 30% of intended deliveries do not take place because there is no-one at the address to accept delivery. Consequently, furniture has to be returned and stored at the factory. A member of the sales staff will subsequently telephone the customer and negotiate a new delivery date but, again, contacting the customer by telephone can be difficult and costly.

Delivery of furniture is made using the company's own vans. Each of these vans follow a defined route each day of the week, irrespective of demand.

The company's original growth was primarily due to the innovative business idea behind specifying competitively priced bespoke furniture. However, established rivals are now offering a similar service. In the face of this competition the managing director of Jayne Cox Direct has urged a thorough review of the supply chain. She feels that costs and inventory levels are too high and that the time taken from order to delivery is too long. Furthermore, in a recent customer satisfaction survey there was major criticism about the lack of information about the progress of the order after it was placed. One commented that 'as soon as Jayne Cox Direct got my order and my money they seemed to forget about me. For ten weeks I heard nothing. Then, just three days before my estimated delivery date, I received a phone call telling me that the order had been delayed and that the estimated delivery date was now 17 June. I had already taken a day off work for 10 June, my original delivery date. I could not re-arrange this day off and so I had to agree a delivery date of 24 June when my mother would be here to receive it'.

People were also critical about after-sales service. One commented 'I accidently stained my sofa. Nobody at Jayne Cox Direct could tell me how to clean it or how to order replacement fabrics for my sofa'. Another said 'organising the return of a faulty chair was very difficult'.

When the managing director of Jayne Cox Direct saw the results of the survey she understood 'why our customer retention rate is so low'.

Required:

(a) Analyse the existing value chain, using it to highlight areas of weakness at Jayne Cox Direct. (12 marks)

(b) Evaluate how technology could be used in both the upstream and the downstream supply chain to address the problems identified at Jayne Cox Direct. (13 marks)

(25 marks)

End of Question Paper