Professional Level – Essentials Module

Business Analysis

March/June 2017 – Sample Questions

Time allowed: 3 hours 15 minutes

This question 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 question paper until instructed by the supervisor.

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The question paper begins on page 3.
Section A – This ONE question is compulsory and MUST be attempted

1 MFP (Mutual Farm Products) was formed in 1910 as a co-operative shop network owned by farmers in the country of Arboria. It progressively opened small shops across the country selling products produced by Arborian farmers. Over time its expanding network of shops began to offer non-farming products from a wide range of suppliers, but it has remained true to its co-operative roots. All employees are shareholders and receive annual dividends. Customers can also become shareholders and are rewarded with dividends which reflect the value of their spending in the shops. An increasing number of customers are becoming shareholders, reflecting a renewed interest in the country in mutual organisations, such as co-operatives. MFP only operates in Arboria and it has no plans to expand overseas. Arboria itself is a wealthy, industrialised country which continues to grow.

Supermarkets in Arboria

When supermarkets were first introduced in Arboria, MFP reflected this trend by opening its own supermarkets. However, its supermarkets tended to be (and continue to be) smaller than its well-known competitors and its network of smaller shops was largely retained. In contrast, other supermarkets focused on developing large out-of-town sites serving a large catchment population. In the top-ten supermarkets of Arboria, only MFP has, in addition, a network of smaller shops.

In 2012 MFP was the eighth largest shop and supermarket chain in Arboria. It reported revenues of $10bn, compared to the $40·5bn revenue of the market leader, HypCo. By 2016, MFP was the ninth largest shop and supermarket chain in the country, with revenues of $11bn, compared with HypCo's $45bn. During this period, two new supermarket chains have entered the Arborian market. These two new entrants, Super24/7 and Letto, already have a combined revenue of $50bn and are fourth and eighth respectively in the top ten Arborian supermarket chains. Both of these companies are overseas-based supermarkets operating a no-frills approach to retailing. Overall, the revenue of the top ten supermarket chains has increased from $300bn to $350bn in the last five years.

Margins in the sector are always under pressure and the large supermarkets continue to aggressively market their goods, highlighting price savings. They also provide customer incentives, such as loyalty cards and account discount schemes in an attempt to retain customers. For many products and services, price comparison websites show consumers the prices charged by competing supermarkets.

With the exception of MFP, all supermarkets are quoted companies with their shares largely owned by institutional investors who look for significant dividends and capital appreciation. MFP is the only co-operative in the top ten Arborian supermarket chains. Generally, suppliers to supermarkets are relatively small companies. Supermarkets’ control of consumer spending is so great that many suppliers aggressively compete to have their products stocked by the supermarket chains.

MFP has continued to promote and follow its ethical principles. It ensures that new shops and supermarkets are energy efficient. It also continues to pay its employees significantly more than its competitors. This concern for its employees’ welfare appears to lead to excellent customer service performance. For example, in a recent independent survey of supermarket customers, MFP was ranked first for personal customer service.

There is some evidence that people in Arboria are becoming disillusioned with their supermarkets and this is reflected in Appendix A, an extract from an article by the journalist Liz Bones in the influential daily newspaper, Arbor Today. Appendix B is an extract from an information sheet issued by the government to companies trading in Arboria.

Management at MFP

Management at MFP is aware that the company has certain weaknesses. For example, it acknowledges that it needs to streamline its supply chain and achieve cost savings. It also recognises that it has failed to exploit technological advances in product control, movement and storage.

However, before making changes, the management wishes to better understand the strategic position of MFP and the models used to assess this position. It has asked for a report which includes:

- An explanation of the purpose and value of PESTEL analysis and Porter’s five forces framework.
- An analysis which identifies external factors from the perspective of four elements of the PESTEL analysis: political, sociocultural, environmental and legal.
- An analysis of the market place using Porter’s five forces framework.
- The potential role of critical success factors (CSFs), key performance indicators (KPIs) and integrated reporting on formulating and monitoring strategy at MFP. The company does not currently use such concepts.
Appendix A: Have Arborians fallen out of love with the supermarket? By Liz Bones

For many years, the trend towards supermarket shopping has seemed unstoppable. The high streets of our towns have become increasingly deserted as grocers, butchers, toy shops and bookshops have disappeared under the combined onslaught of online retailers and expanding supermarkets. For example, ten years ago in the high street of Milton Magna there were three grocers, four butchers, two toy shops, one bookshop and only two supermarkets. Now, only one grocer and one butcher survive on the high street and both supermarkets have moved to out-of-town locations. In fact there are now five out-of-town supermarkets serving the people of Milton Magna.

However, there is increased evidence that shoppers are becoming disillusioned with supermarkets and yearn to return to the days when shops were smaller and service more personal.

Fiona McLean, of the department of sociology MidShire University, says that, ‘our research suggests that there is a significant number of consumers, commonly called green consumers, who are increasingly concerned about the environmental impact of food and other products that they are purchasing. This is not only in terms of the excessive and elaborate packaging of the goods, but also in terms of the ‘food miles’ that the product has travelled before it reaches the shelves of the shop or supermarket.’

In general, these green consumers have higher than average disposable income and they are prepared to pay a price premium for products which have been ethically sourced. Fiona also suggested that such consumers are part of a group who are increasingly angered by what they consider as the excessive profits of the large supermarket chains, the high remuneration packages paid to senior management and the large dividends paid to their institutional shareholders. ‘There is a feeling that supermarkets are run by fat-cat managers, exploiting small suppliers to reduce costs to create a margin for dividends that pacify demanding institutional investors’, she said.

Even the newer entrants, Super24/7 and Letto, are under threat. There is a consumer reaction against these overseas-based supermarkets which have followed a low-cost, no frills approach, with shelves stacked intensively with low priced products and where customer service is both impersonal and kept to a minimum. The low wages paid to staff in these supermarkets is also an issue for the green consumer.

So, perhaps Arboria is on the brink of a supermarket revolution! Television personalities such as Alexis Piazzio urge us to ‘think local’ and ‘shop local’. Perhaps after all, small is beautiful when it comes to shopping!!!

Appendix B: Arborian government information sheet 4560 (extract)

Disability legislation (The Access Act)

The recent extension of disability access legislation requires shops and supermarkets to help all disabled customers to access all shelf areas within the store. The previous legislation just required shops and supermarkets to provide disability access to the store areas. However, many disabled customers found that goods were out of reach when they were actually in the store. This extension to the legislation addresses this issue. So, for example, all products held within the store must be reachable for a person who is in a wheelchair and, if not, a store attendant must help. Failure to adhere to this legislation will lead to a fine of up to $1,000 per incident.

Pension reform

The new government recognises that the current state funded schemes will lead to a significant pension shortfall in the future. Consequently, it has declared its intentions to make it mandatory for employees to pay 5% of their gross pay into a pension scheme of their choice. The amount paid in will be matched by that paid in by the employer. So, for example, an employee earning $10,000 per year will pay $500 per year into his or her pension fund and the employer will also be required to pay $500 per year into the same fund. It proposes that the employer will be responsible for ensuring that pension payments are correctly made into government authorised schemes and to accurately process these payments, through automatic payroll deductions, every month. These proposals for pension reform are currently under discussion.
Required:

Write the report required by MFP management which:

(a) Analyses external factors from the perspective of FOUR elements of the PESTEL analysis: political, sociocultural, environmental and legal. The analysis should include an assessment of the likely effect of such factors in the context of the strengths and weaknesses of MFP. It should also include an explanation of the purpose and value of a PESTEL analysis. (18 marks)

(b) Analyses the market place (industry) using Porter’s five forces framework, assessing its implications for MFP. This analysis should also include an explanation of the purpose and value of the five forces framework. (18 marks)

(c) Evaluates the potential role of CSFs, KPIs and integrated reporting in setting and monitoring strategy within MFP. (10 marks)

Professional marks will be awarded in question 1 for the structure, coherence, style and clarity of the report. (4 marks)

(50 marks)
Save Our Pets (SOP) is a charitable organisation which rescues unwanted or mistreated pets and finds new homes for them. It is located in five different sites around Asteria, where it is based. As a not-for-profit organisation, operational efficiency is crucial for it to be able to deliver effective services from its limited funding. Therefore, when procuring goods and services, SOP always selects the cheapest option which meets its requirements. However, in some instances, this approach has led to greater costs in the long term as a result of poor quality. There was also one recent procurement project where the selected supplier, despite being paid a large deposit, went into liquidation before delivering the equipment which SOP had ordered.

SOP is planning to implement a new enterprise resource planning (ERP) system, which will link the transaction processing systems of all functional departments at all sites. This will include the rehoming database, which includes details of all pets at all sites, allowing the different sites to search for suitable pets for potential customers. Although there are only a few appropriate systems on the market, SOP has identified and shortlisted three providers of modular packages which it believes could be easily adapted to meet its requirements. The shortlist was created using the price of the software as the sole criterion. There were three other suitable suppliers who were not shortlisted as their products were more expensive.

The board of SOP has provisionally decided to award the ERP system contract to a small software company, based in Asteria, called Itrus. At the board meeting convened to make the final decision, the financial director explained that Itrus offered the cheapest software solution, at a price of $200,000. However, the operations director was concerned about this selection, stating that, ‘selecting on the basis of price alone has not always worked for us in the past. I’m sure we should use more extensive selection criteria, particularly when selecting computer software. We need to look at a range of factors as well as price.’ After some discussion, the final decision on the contract was deferred. In the meantime, the board agreed that the company accounts of Itrus should be evaluated to assess its financial performance and the risk of it going into liquidation. Itrus has provided accounts for the last two years (see Figure 1) for the evaluation. It was also agreed that the operations director should define what factors, other than price, need to be taken into consideration when evaluating a potential software solution.

Figure 1: Itrus – Extracts from financial statements 2015 and 2016

<table>
<thead>
<tr>
<th>Extract from the statement of financial position</th>
<th>$’000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Non-current assets</strong></td>
<td></td>
</tr>
<tr>
<td>Property, plant and equipment</td>
<td>50</td>
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<tr>
<td>Goodwill</td>
<td>140</td>
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<tr>
<td>Total non-current assets</td>
<td>190</td>
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<tr>
<td><strong>Current assets</strong></td>
<td></td>
</tr>
<tr>
<td>Inventories</td>
<td>1</td>
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<tr>
<td>Trade receivables</td>
<td>190</td>
</tr>
<tr>
<td>Cash</td>
<td>5</td>
</tr>
<tr>
<td>Total current assets</td>
<td>196</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td>386</td>
</tr>
</tbody>
</table>
### Equity and liabilities

<table>
<thead>
<tr>
<th></th>
<th>2016 $'000</th>
<th>2015 $'000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Share capital</strong></td>
<td>148</td>
<td>148</td>
</tr>
<tr>
<td><strong>Retained earnings</strong></td>
<td>50</td>
<td>40</td>
</tr>
<tr>
<td><strong>Total equity</strong></td>
<td>198</td>
<td>188</td>
</tr>
</tbody>
</table>

### Non-current liabilities

<table>
<thead>
<tr>
<th></th>
<th>2016 $'000</th>
<th>2015 $'000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Long-term borrowings</strong></td>
<td>110</td>
<td>75</td>
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</tbody>
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### Current liabilities

<table>
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<tr>
<th></th>
<th>2016 $'000</th>
<th>2015 $'000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Trade payables</strong></td>
<td>68</td>
<td>253</td>
</tr>
<tr>
<td><strong>Short-term borrowings</strong></td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td><strong>Current tax payable</strong></td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total current liabilities</strong></td>
<td>78</td>
<td>260</td>
</tr>
</tbody>
</table>

### Total liabilities

<table>
<thead>
<tr>
<th></th>
<th>2016 $'000</th>
<th>2015 $'000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total liabilities</strong></td>
<td>188</td>
<td>335</td>
</tr>
</tbody>
</table>

### Total equity and liabilities

<table>
<thead>
<tr>
<th></th>
<th>2016 $'000</th>
<th>2015 $'000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total equity and liabilities</strong></td>
<td>386</td>
<td>523</td>
</tr>
</tbody>
</table>

**Extract from the statement of profit or loss**

<table>
<thead>
<tr>
<th></th>
<th>2016 $'000</th>
<th>2015 $'000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenue</strong></td>
<td>754</td>
<td>800</td>
</tr>
<tr>
<td><strong>Cost of sales</strong></td>
<td>(708)</td>
<td>(749)</td>
</tr>
<tr>
<td><strong>Gross profit</strong></td>
<td>46</td>
<td>51</td>
</tr>
<tr>
<td><strong>Administrative expenses</strong></td>
<td>(25)</td>
<td>(20)</td>
</tr>
<tr>
<td><strong>Finance costs</strong></td>
<td>(6)</td>
<td>(4)</td>
</tr>
<tr>
<td><strong>Profit before tax</strong></td>
<td>15</td>
<td>27</td>
</tr>
<tr>
<td><strong>Tax expense</strong></td>
<td>(3)</td>
<td>(5)</td>
</tr>
<tr>
<td><strong>Profit for the period</strong></td>
<td>12</td>
<td>22</td>
</tr>
</tbody>
</table>

**Extract from the annual report**

<table>
<thead>
<tr>
<th></th>
<th>2016 $'000</th>
<th>2015 $'000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of staff</strong></td>
<td>25</td>
<td>40</td>
</tr>
</tbody>
</table>

**Required:**

(a) **Undertake a financial evaluation of Itrus, highlighting any areas of concern.**

(15 marks)

(b) **In the context of SOP, discuss what other factors, other than the price of the software, need to be considered when evaluating a potential software solution.**

Note: A description of the selection process itself is **NOT** required.

(10 marks)

(25 marks)
Rachel Glossop is the chief executive officer (CEO) of Rush Cosmetics, a company which manufactures and sells its own brand of environmentally friendly toiletries and cosmetics. The company is the market leader in its niche market, and is one of the top ten brands in the total cosmetics market in Yorkland, where it is based.

Rachel has always been perceived by her staff as a visionary manager. However, she sometimes lets her enthusiasm for certain ideas become an obsession. She often fails to think through all the implications of her ideas and will pursue them to fruition regardless of cost. Her managers are aware of this, but are also aware that it is her vision and drive which has helped the company reach the position it is in today.

Rachel has called a meeting of managers from the information technology, production, accounting, marketing and procurement departments. The company's business analyst has also been asked to attend the meeting. At the meeting she announced, ‘I have an idea…’, at which her managers thought about their busy schedules and inwardly groaned. ‘We’ll bring together people from all over Yorkland, get them to compete in a fun, but challenging, muddy obstacle race and turn it into a huge marketing event. We are going to host a mud run,’ she continued. ‘We’ll give away gift bags containing samples of our latest beneficial ‘mud’ skincare range and invite finishers of the race to experience an introductory treatment using our ‘sore muscle’ products.’

She emphasised that this would be a very significant marketing project and she asked Mary, the marketing manager, to be the project manager, with the other attendees at the meeting forming the project team. Amongst her list of requirements for the event were:

- An attention grabbing venue, such as the grounds of a stately home or palace
- Large display screens at the start and finish points and around the venue
- Digital timers for competitors
- Celebrity guests
- After-race entertainment, such as rock bands
- Media coverage

Before she could continue with her lengthening list of requirements, Rajesh, the production manager, asked why he had been invited to the meeting. He felt that this was purely a marketing exercise rather than a project, and suggested that the marketing department should run it just like any other marketing campaign.

Rachel replied, ‘I believe that this is a project. In fact, I’ve come up with a great name for it: we’ll call it the ‘Mud Rush’ project. It has all the characteristics of a project and it needs the full support of all of you. I’ll leave it in Mary’s capable hands, but I want regular updates.’ At which point, she left the room to attend another important meeting.

After her departure, the departmental managers discussed Rachel’s idea. Mary felt, and the others agreed, that despite Rachel’s enthusiasm, the event should still be fully justified from a business perspective and that it should be managed correctly in order to ensure its success. Rajesh stated that he was worried about negative repercussions if anyone should get injured and Mary stated that all the risks should be fully documented.

The business analyst agreed, and stated that this, and other project documentation, would be key to the success of the project and that much of this documentation should be produced during the early stages of the project.

Required:

Rachel had stated that the Mud Rush project ‘has all the characteristics of a project’.

(a) Explain the features which make this a project and distinguish it from routine work at Rush. (5 marks)

(b) Discuss, within the context of the Mud Rush project, why each of the following documents is needed to help ensure the eventual success of the project:

(i) Project initiation document;
(ii) Business case;
(iii) Project plan;
(iv) Risk analysis. (20 marks)
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Question 4 begins on page 10.
Deepland Housing Agency (DHA) is a public sector agency responsible for housing low-income families and vulnerable residents in Deepland. Its only source of funding is a fixed budget from central government, which is reviewed annually. Budgetary pressures are great and it is always difficult for DHA to ensure that adequate provision of social housing is available for those in greatest need.

DHA employs full-time, permanent advisers who interview applicants to assess their housing need. These advisers also sit on panels responsible for deciding whether applicants should be housed. They are also required to make regular monitoring visits to residents who have been housed by DHA. The emotional pressures on advisers are high, as they are often exposed to distressing cases of hardship affecting their fellow Deepland residents. Consequently, staff turnover is high.

The agency is undergoing a process improvement programme to try and maximise its use of available resources and to improve effectiveness, efficiency and economy. Three of its processes are currently under scrutiny:

**Process one – Scheduling of customer appointments**

Anyone who requires the services of DHA must have an initial interview at DHA to determine their level of need. Some residents contact DHA directly, but most are referred to DHA by other agencies, such as social services, hospitals or employment offices. It is part of the receptionist’s role at DHA to provide appointments to clients, subject to the availability of advisers. Currently, the receptionist records appointments on a whiteboard in the advisers’ office. However, receptionists struggle to accurately maintain the schedule as it is difficult to keep adviser availability up to date. This leads to two problems: first, allocating appointments to an adviser who is, or becomes, unavailable and second, failing to schedule appointments for advisers who are actually available.

DHA has already assessed this process and decided that an automated approach would be more efficient. Although a bespoke solution was considered, it is currently envisaged that an off-the-shelf scheduling system would be more appropriate. There are a number of such packages available in the market, but a preferred package has been identified. It appears to fulfil most of DHA’s requirements and is already widely used in similar environments which rely heavily on booking appointments, e.g. doctors’ surgeries. The receptionist would retain their role, but would record appointments on a real-time system which accurately reflects the current availability of DHA advisers. The advisers would have the ability to update their own availability on a daily or weekly basis and the receptionist would be able to schedule appointments for advisers’ available time slots.

**Process two – Staff training and development**

Given the high staff turnover, DHA has undertaken exit interviews with departing advisers to determine their reasons for leaving. A major issue which has emerged from such interviews is a lack of staff training and development to help advisers with both the practical operational procedures of the role and the emotional distress which the work often involves.

In a separate survey, some DHA residents and applicants complained that advisers had been arrogant and rude towards them. An extract from a recent formal complaint stated ‘It was very difficult for me to participate in the interview. I was referred by the social services agency which convinced me you would be able to help. I have always been self-sufficient and it is only extreme circumstances that have put me in this position. I did not feel that my unique circumstances were taken into consideration and I felt that the adviser treated me as if I was of low intelligence because of the situation I found myself in.’

Another complaint read ‘although I have six children, the DHA adviser recommended me for a small house because the guidelines only cover families of up to three children and he had to follow the procedures for that. When I questioned this he said ‘be grateful, you’re getting a house’.’

DHA staff training is currently provided on an annual basis, all taking place within one week in April when the agency is closed. This training is used to discuss current issues and approaches in DHA and any amendments to operational procedures. A manual of these operational procedures is issued to all staff which contains flowcharts of actions required for the majority of situations which they will face. Advisers are expected to be familiar with operational procedures and to follow them.

**Process three – Legal advice and compliance**

Deepland has a complex legal system, and there are employment, tax and health and safety laws which directly affect DHA. The ruling political party changes regularly, and with it the laws.
DHA currently employs a full-time, permanent, legal team which keeps managers, advisers and other staff up to date with changes in legislation. The team comprises five different employees, each of whom spends approximately 50% of their time on work for the agency, 30% in professional training and 20% under-utilised. The professional training is necessary to keep up to date with legislation in their particular area of expertise. Although the team is under-utilised, the company retains five staff as they each have different areas of expertise.

DHA is concerned that this team is expensive to employ and that the increasing number of laws and compliance requirements makes it difficult for them to identify all issues which could potentially affect DHA. Consequently it is considering the options for the future provision of this service.

Required:

(a) DHA has already decided to use a commercial off-the-shelf (COTS) system for process one, its appointment scheduling system, but needs to make a decision on how to improve processes two and three; staff training and development and legal advice and compliance.

Determine the position of processes two and three on Harmon’s process-strategy matrix. Given its position on the matrix, recommend how improvements in each of these processes should be implemented, stating any potential difficulties in making such improvements. (10 marks)

(b) (i) Justify the decision to implement the scheduling of appointments (process one) with a commercial off-the-shelf (COTS) solution rather than developing a bespoke solution.

(ii) Explain any risks associated with the commercial off-the-shelf package based approach and discuss how each risk might be handled.

Note: The following mark allocation is provided as guidance for this requirement:

(i) 7 marks
(ii) 8 marks

(15 marks) (25 marks)

End of Question Paper