

THE OPEN UNIVERSITY OF SRI LANKA
DEPARTMENT OF ELECTRICAL & COMPUTER ENGINEERING
DIPLOMA IN INFORMATION SYSTEMS AND TECHNOLOGY
ECM3266 – Introduction to Business Studies



FINAL EXAMINATION (2015/2016)

(CLOSED BOOK)

Date: 26th November 2016

Time: 09.30 – 12.30 hrs.

Read the following case study and answer all the questions given below.

Platypus Accessories (PA)

The beginning

Haile and Tirunesh met at university in 2005. Haile was studying for a degree in Business Management and Tirunesh was a Design student. After leaving university in 2008 Haile thought he had identified a gap in the market for technology accessories. Having purchased a mobile (cell) phone, he noted that there were no high quality designer phone accessories aimed at young fashion conscious consumers. With the help of a detailed business plan, Haile convinced Tirunesh of the business opportunity and together they were able to raise Rs.40,000 from savings and family to start PA in 2009. The initial investment was used to:

- Set up a private limited company in country A
- Rent a warehouse
- Design a small range of fashion phone accessories
- Contract a small manufacturer in an emerging economy to produce 10,000 units
- Design and create a website.

Initially PA sold products through its website and sales growth was supported by advertising in a variety of fashion magazines.

A rapid rise

The business benefited from a clear vision of how it should develop and sales boomed in the first two years of trading. Haile and Tirunesh were able to secure contracts from leading fashion outlets, in country A, to stock their accessories. In 2012 revenue was Rs.2.4m, exceeding the expectations of Haile and Tirunesh. In 2014 revenue is forecast to reach Rs.3m with a net profit margin of 10%. Haile considers marketing to be essential. The business promotes itself in a range of magazines, trade fairs and music festivals. It has successfully established its brand image with its target market by using celebrities in its advertising. The current marketing budget is set at 9% of revenue. A carefully targeted marketing plan has helped reduce seasonal variation in sales.

Finance from retained profits has allowed PA to expand its product range. It now includes:

- Headphones
- Speakers for mobile phones
- Soft cases for notebook and tablet computers.

Many of the accessories have a relatively short product life cycle. To maintain demand, Tirunesh produces new designs constantly to take advantage of fashion trends and particular events such as the football World Cup in 2014. Data from online sales shows that 40% of customers make repeat purchases of phone cases within a 12 month period. PA does not directly employ any other designers but commissions work from young fashion designers and artists. This has helped ensure that PA reflects its mission statement of developing products that are 'fun, colourful and creative.'

Labour dispute set to worsen

Miruts is the human Resources Director. He aims to keep tight control of labour costs in PA's 3 distribution centres. Average annual pay of employees in the distribution centres is Rs.5000; this is 6% below the industry average for country A. Labour legislation forces PA to negotiate with CRS, a trade union, to which 60% of the 40 employees belong. Miruts has been in pay negotiations for the last 3 months and the company's final pay offer has just been rejected by CRS. The majority of employees are unskilled and Miruts considers them easily replaceable. Tumo, the union representative, said: 'employees have been angered by the management's tough approach to negotiations. It is unacceptable to threaten to impose a 1.5% pay increase tied to changes in working practices. This is at a time when PA is a highly profitable company. The management say this is their final offer. We are also disappointed that management have not responded positively to our offer to go to arbitration. 'trade union members have voted in favour of a strike if demands for a 4% pay increase are not met. Miruts told a local newspaper: 'We firmly believe that our final pay offer is very fair and reasonable. We are disappointed that this issue has resulted in CRS threatening to strike.'

Distribution problems

In May operations at PA were thrown into chaos when one of the distribution centres was damaged in a fire. This was caused by the carelessness of an employee smoking in the packing area. Managers of the centre were unprepared for dealing with the consequences of a fire, consequently the centre will be closed for up to 3 months whilst the damage is assessed and repaired. Some employees have been redeployed to other centres to help with increased workload there, but others have lost their jobs. The Operations Director is concerned that there will be disruption to deliveries to both retailers and online customers. PA is now considering introducing contingency planning as part of its long term plan.

Streamlining operations

PA outsources production to a number of different manufacturing companies based in country Y and country Z. Further details are provided in Appendix c. To improve efficiency the Operations Director has been considering reducing inventories at its distribution centres. She believes that a move towards just-in-time (JIT) inventory control will improve cash flow and reduce wastage. This would contribute to the corporate objective of increasing net profit margin to 14%, contained in the business plan. She has been considering Enterprise Resource Planning (ERP) will be Rs.60,000. This should enable sales to increase without any need for extra staff.

New opportunities

In early 2014 PA entered negotiations with Eastern Airports which operates 4 airports in country A. Haile is keen to develop the PA brand by buying the leases for retail units within the shopping malls of these airports. At the recent Board meeting Haile told the other directors. 'This represents an exciting opportunity for PA. 60 million international and domestic passengers pass through

Eastern Airports each and they are a captive market. I believe that our products will complement the existing products being sold within the airport shopping malls. If we give the new PA shops an attractive up-market image then we can easily achieve an 11% average rate of return and a positive net present value at a discount rate of 8% over the initial 5 years of the lease. The implementation of the strategy will need careful planning.'

The Finance Director was not so sure about the high level of investment required. He commented that: 'although the shops are relatively small, the cost of the lease is double that of a shop in an out-of-town mall. I am not convinced by your estimates of future cash inflows. The Government has decided to impose a tax on all domestic and international flights and it is rumoured that there will be an increase in indirect taxes in 2015. The Government has decided to impose a tax on all domestic and international flights and it is rumoured that there will be an increase in indirect taxes in 2015. This government really is committed to reducing its borrowing. The economic outlook is not great.'

The Human Resources Director has identified workforce planning as a key issue to consider. Haile is aware that there will need to be careful coordination of deliveries to meet airport requirements.

Appendix A: Forecasted net cash flows from shops in Eastern Airports

End of Year	Net cash flow Rs.000s
0	(600)
1	95
2	160
3	200
4	240
5	270

8% discount factors

Year 1	0.93
Year 2	0.86
Year 3	0.79
Year 4	0.74
Year 5	0.68

Appendix B: Macroeconomic trends in country A

	2013	2014(forecasted)	2015(forecasted)	2016(forecasted)
Annual GDP growth %	5	4	2.2	2
Annual inflation rate %	4	5.4	6.3	4.5
Index of Average Index rate (2010=100)	120	114	110	108
Interest rates	8	10	10	10
Unemployment rate %	7	8	9	11
Indirect taxation %	16	18	20	20

Appendix C: Manufacturing suppliers

Product	Manufacturer(s)	Lead time
Headphones	3 different firms in country Y	Between 10 and 15 days
Speakers for mobile phones	1 firm in country Y	4 days for orders up to 3000 units
Soft cases for notebook and tablet computers	2 firms in country Z	Average 18 days
Plastic cases for mobiles and MP3 players	6 different firms in country Y	Between 5 and 20 days depending on manufacturer

Turn over

ANSWER ALL QUESTIONS.

1. Analyse the advantages to PA of market segmentation. **(10 marks)**
2. Discuss the factors that are likely to influence the decision of whether to introduce JIT inventory control. **(20 marks)**
3. Using Appendix A, Calculate for the proposed investment in Eastern Airports:
 - (a) (i) Average Rate of Return (ARR) **(5 marks)**
 - (ii) Net Present Value (NPV) **(5 marks)**
 - (b) Using your answers to part (a) and any other relevant information, recommend whether PA should invest Eastern Airports. **(20 marks)**
4. Discuss whether PA should consider increasing its pay offer to employees. **(20 marks)**
5. Refer to the data in appendix B, evaluate how the forecast changes in country A's macroeconomic performance might influence PA's future profitability. **(20 marks)**

TOTAL MARKS: 100