



UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
General Certificate of Education Advanced Level

BUSINESS STUDIES

9707/31

Paper 3

May/June 2012

CASE STUDY

3 hours

Additional Materials: Answer Booklet/Paper

READ THESE INSTRUCTIONS FIRST

If you have been given an Answer Booklet, follow the instructions on the front cover of the Booklet.

Write your Centre number, candidate number and name on all the work you hand in.

Write in dark blue or black pen.

You may use a soft pencil for any diagrams, graph or rough working.

Do not use staples, paper clips, highlighters, glue or correction fluid.

Section A

Answer **all** questions.

Section B

Answer **one** question.

The businesses described in this question paper are entirely fictitious.

You are advised to spend 40 minutes on Section B.

At the end of the examination, fasten all your work securely together.

The number of marks is given in brackets [] at the end of each question or part question.

This document consists of **5** printed pages and **3** blank pages.



Patel Bicycles (PB)

Kalei Patel is proud of her business achievements. She started with a \$25 loan from a micro-finance bank. She bought six old bicycles that she repaired and sold for a profit. Since then she has expanded her business rapidly and it recorded sales revenue of \$217m last year. She is now one of the country's best known business executives.

PB is a private limited company with Kalei owning 75% of the shares. It is split into three divisions, each one operated as a separate profit centre. The three divisions are as follows. 5

- **Bikes For All.** This is the largest of the three divisions. It mass produces bicycles in four factories and sells them to wholesalers in 50 countries. The bikes are made with cheap imported components and there is no above or below the line promotion. Prices are low. 10
- **SpecBikes.** This division makes hand built specialist bicycles. The annual output of SpecBikes is less than 10% of the total output of PB. Each SpecBike product is sold for 20 times the price of the average mass produced bicycle. These specialist bicycles are exported to six high income countries. 15
- **ElecBikes.** This is the smallest division in terms of output and sales turnover. With new environmental laws in many countries, the PB Board of Directors believe that the demand for electric bicycles will increase. \$22m has been invested in developing new technology batteries for use in ElecBikes bicycles. These batteries last much longer than other products on the market. 'This form of product development should be the future for the company' the Operations Director reported at the last Board meeting. However, sales of ElecBikes started slowly in 2010 and have not grown much since then. They are sold through specialist retailers who have been offered generous credit terms to encourage them to stock these bicycles. 20

Recent accounting data from these three divisions are shown in Appendix 1.

New factory location needed

The four factories that manufacture all Bikes For All products are located in one country. Having four locations is causing management and communication problems. Kalei and the other company directors want to build a new factory that will allow all four existing factories to be closed. All production of Bikes For All bicycles would then be in one factory. The Operations Director has collected data on two possible locations for this new factory (Appendix 2). 25

Style of leadership in the three divisions

Kalei has often described herself as being a well organised person who believes that there are set methods and rules that should be used when leading a business. She has appointed three managers to lead the three business divisions. Interestingly, each manager takes a different view of the best business leadership style. 30

- Bikes For All is led by Abbas. He considers that production line workers should be given clear instructions, money incentives for work produced and temporary employment contracts to – in his words – 'make them focused on keeping their jobs'. 35
- SpecBikes is led by Gary. He is an ex-Olympic cyclist whose enthusiasm for his job is shared by most of his workers. Gary encourages SpecBikes' workers to be involved in making all major decisions and he keeps them well informed. 40
- ElecBikes is led by Vip. ElecBikes started out as a research division and has only recently started producing products for sale to consumers. Vip is a mechanical engineering graduate who encourages her teams of researchers to solve problems themselves and arrive at solutions with little central direction. 45

Having different leadership styles does not worry Kalei as long as the divisions deliver the profits and business growth that are her main objectives. However, she has recently been 45

asking herself whether the leadership styles used are contributing to the different levels of profitability in the three divisions.

Financial efficiency

Kalei is able to compare the financial efficiency of all three divisions because they are separate profit centres. She does this by calculating accounting ratios. Recent results for Bikes For All and SpecBikes are shown in Appendix 1. She is worried about the poor financial efficiency of ElecBikes. She is thinking about how to improve this without disrupting production or reducing customers' interest in these new products. 50

Marketing in the mass market

Bikes For All is currently profitable but operates in an increasingly competitive mass market. PB has a strategy of keeping average costs as low as possible. However the profit margin on each unit sold remains very low because prices are low. Any attempt by PB to increase margins through raising the prices of its mass market bicycles leads to falling revenue. The price elasticity of demand is high. Kalei has asked the Board of Directors to discuss strategies for making demand less sensitive to price increases. She said at the last Board meeting: 'We need to look at all parts of Bikes for All's marketing strategy if we are going to increase sales of these bicycles profitably.' 55
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Strategic choices

Despite her business success, Kalei wants to expand PB into new markets and products. She recognises the potential danger of just being known as a 'bicycle maker'. She knows diversification will be risky. However to stay within one industry is also taking a chance because new rivals or technological advances could make PB uncompetitive. At a recent meeting of the National Business Directors Association, Kalei was offered the chance to choose between two strategic projects. Each strategy would cost PB approximately \$25m. 65
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Strategy A: The owner of Rely Industries offered her a share in a joint venture making small electric cars. These would be made in Rely's car factories using PB's skills in battery technology and working with lightweight materials.

Strategy B: The Chief Executive of ASB Steel suggested that ASB and PB could work together to develop new types of carbon fibre and other lightweight materials. These new materials could revolutionise the manufacture of products such as bicycles, suitcases and vacuum cleaners. 75

Kalei is pleased by the fact that these two business leaders had chosen her company for these possible expansion projects. The problem is . . . which strategy to choose?

Appendix 1: Accounting Data

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			Bikes For All	SpecBikes	ElecBikes
Revenue	2010	\$m	112	83	12
Revenue	2011	\$m	110	93	14
Gross profit	2010	\$m	35	38	(4)
Gross profit	2011	\$m	29	42	(1)
Inventory level at end of 2011		\$m	5	6	4
Accounts receivable at end of 2011		\$m	6	8	3
Inventory turnover ratio	2011		16.2	8.5	See Question 2(a)
Days' sales in receivables (debtor days)	2011		19.9 days	31.4 days	See Question 2(a)

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Appendix 2: Two options for the new Bikes For All factory location

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	Location X	Location Y
Country	Same country as present four factories	Low wage emerging economy
2011 GDP growth of country	3%	8%
2011 Average weekly wage of manufacturing workers	\$320	\$100
2011 Unemployment rate	5%	15%
Index number of estimated level of corruption in country (Global average = 100)	140	80
Universities offering engineering degrees	23	1
Nearest major road connection	5 km	85 km
Nearest international airport	35 km	120 km
Estimated labour productivity (per worker per year)	2000 bikes	1500 bikes
Estimated contribution per bicycle	\$20	\$25
Annual fixed costs of new factory	\$5m	\$3m
Estimated annual net cash flow from sales of factory's products	\$30m	\$44m
Capital costs of building new factory	\$50m	\$70m

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Section A

Answer **all** questions.

- 1 Analyse **two** benefits of operating PB as three separate divisions. [10]
- 2 (a) Refer to Appendix 1. Calculate the following ratios for the ElecBikes division in 2011:
- (i) inventory turnover [3]
 - (ii) days' sales in receivables (debtor days). [3]
- (b) Assess whether reducing accounts receivable and inventory levels are the best ways to improve the financial efficiency of the ElecBikes division. [14]
- 3 Discuss whether the leadership styles used within PB's three divisions are appropriate. [14]
- 4 (a) Refer to Appendix 2. Calculate the average rates of return (ARR) over 5 years for **both** locations. [6]
- (b) Recommend the location where the Bikes for All division should open its new factory. Justify your answer using your results from **4(a)**, further analysis of data in Appendix 2 and any other relevant information. [14]
- 5 Discuss how the business could make the demand for the bicycles produced by Bikes for All less sensitive to price increases. [16]

Section B

Answer **either** Question 6 **or** Question 7.

- 6 Evaluate the usefulness to Kalei of doing a SWOT analysis of Patel Bicycles. [20]
- 7 Discuss the strategic decision-making techniques that Kalei could use when making the choice between Strategy A and Strategy B. [20]

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