



General Certificate of Education
Advanced Level Examination
June 2013

Business Studies

BUSS3

Unit 3 Strategies for Success

Wednesday 12 June 2013 1.30 pm to 3.15 pm

For this paper you must have:

- an AQA 12-page answer book
- a calculator.

Time allowed

- 1 hour 45 minutes

Instructions

- Use black ink or black ball-point pen.
- Write the information required on the front of your answer book. The **Examining Body** for this paper is AQA. The **Paper Reference** is BUSS3.
- Answer **all** questions.
- Do all rough work in your answer book. Cross through any work you do not want to be marked.

Information

- The marks for questions are shown in brackets.
- The maximum mark for this paper is 80.
- You will be marked on your ability to:
 - use good English
 - organise information clearly
 - use specialist vocabulary where appropriate.

Formulae for Financial Ratios

Financial ratio	Formula
Current ratio	current assets : current liabilities
Acid test ratio	liquid assets : current liabilities Where liquid assets are current assets – inventories (stock).
Return on capital employed % (ROCE)	$\frac{\text{operating profit}}{\text{total equity} + \text{non-current liabilities}^{**}} \times 100$ ** Where this equals capital employed.
Asset turnover	$\frac{\text{revenue}}{\text{net assets}}$
Inventory (stock) turnover	$\frac{\text{cost of sales}}{\text{average inventories (stock) held}}$
Payables (Creditors) days (Payables** collection period)	$\frac{\text{payables}^*}{\text{cost of sales}} \times 365$ * Payables = creditors throughout this formula.
Receivables (Debtors) days (Receivables** collection period)	$\frac{\text{receivables}^*}{\text{revenue}} \times 365$ * Receivables = debtors throughout this formula.
Gearing	$\frac{\text{non-current liabilities}}{\text{total equity} + \text{non-current liabilities}^{**}} \times 100$ ** Where this equals capital employed.
Dividend per share (in pence)	$\frac{\text{total dividends}}{\text{number of issued ordinary shares}}$
Dividend yield (%)	$\frac{\text{ordinary share dividend (in pence)}}{\text{current market price (in pence)}} \times 100$

Read the **case study** and answer **all** the questions that follow.

Electric Dreams

Nicholson plc is a specialist manufacturer of taxis that has been in business for more than 50 years. The company operates two factories, the original one is based in the West Midlands and the other is situated in the North East of England. *Nicholson plc*'s taxis have a reputation for exceptional quality and reliability.

In recent years, the company has suffered from falling sales and a decline in profitability. This has been due to:

- a fall in demand in the UK taxi market because taxi firms are replacing their vehicles less regularly
- an inability to compete with cheaper overseas competitors
- a lack of innovation in terms of developing new car models.

Nicholson plc's Chief Executive, Peter Nicholson, is the great-grandson of the founder of the business. Aged 28, Peter has recently completed a Masters qualification in Business Administration (MBA) and he is keen to implement some of the ideas that he has learned. Peter intends to achieve the objective of rejuvenating the brand image of *Nicholson plc* and to achieve an annual operating profit of at least £15 million by 2018.

Peter's first decision

Peter was appointed in January 2013. He wants to change the organisational structure of the business. He believes that the company has to respond more quickly to changes in its market and has to involve the workforce more in decision-making. During his MBA course, Peter had spent a three-month work placement at Nissan, where he had been impressed by the company's extensive use of kaizen groups.

Nicholson plc has a traditional, hierarchical organisational structure. Most of the managers throughout the organisation are experienced and have worked for the company for many years. However, Peter considers that they do not listen to the ideas of the workforce enough. Peter is keen to cut costs and to improve the speed of decision-making. To achieve this, he proposes to remove two management levels from the organisational structure. This will result in ten managers being made redundant. The span of control of the remaining managers will double. Furthermore, Peter wants to encourage greater empowerment of the workforce by establishing kaizen groups throughout the organisation.

Turn over ►

The proposal

During his work placement at Nissan, Peter had observed the development of the Nissan 'Leaf', the first mass-produced electric car. He believes that the development of electric vehicles (EVs) has great commercial potential.

Secondary research forecasts that by 2020, 10% of the global car market will be made up of EVs. The main reasons for the predicted increased popularity of EVs are:

- the rise in fuel costs forcing consumers to look for more efficient alternatives
- greater awareness amongst both consumers and governments of the environmental impact of vehicle exhaust emissions.

As a consequence of these factors, the vast majority of car manufacturers intend launching their own range of EVs within the next few years.

Peter believes that *Nicholson plc* should consider developing an electric version of its traditional taxi. He has asked his Marketing Director, Jayne Corcoran, to investigate this market further and to present her findings at the next Board meeting.

Jayne sent out a questionnaire to *Nicholson plc's* current customers, the results of which are shown in **Appendix A**. The price of the electric taxi would be £10 000 more than the current version. Jayne proposed a marketing plan that would emphasise the economic and environmental benefits resulting from electric taxis.

Operationally, Peter wishes to convert the factory in the North East to production of the electric taxi and maintain production of the existing taxi at the West Midlands site. He has approached the research and development department of an electrical engineering company in the North East, who would provide the specialist technical expertise required for the manufacture of the battery for the electric taxi. The target market would be taxi firms in major cities in both the UK and other European countries. Because of the fall in demand in the UK market, Peter considers that the greatest potential for growth is from Europe. Consequently, the North East would be a good base for exports. In addition it would be possible to increase the factory's current capacity by 50%.

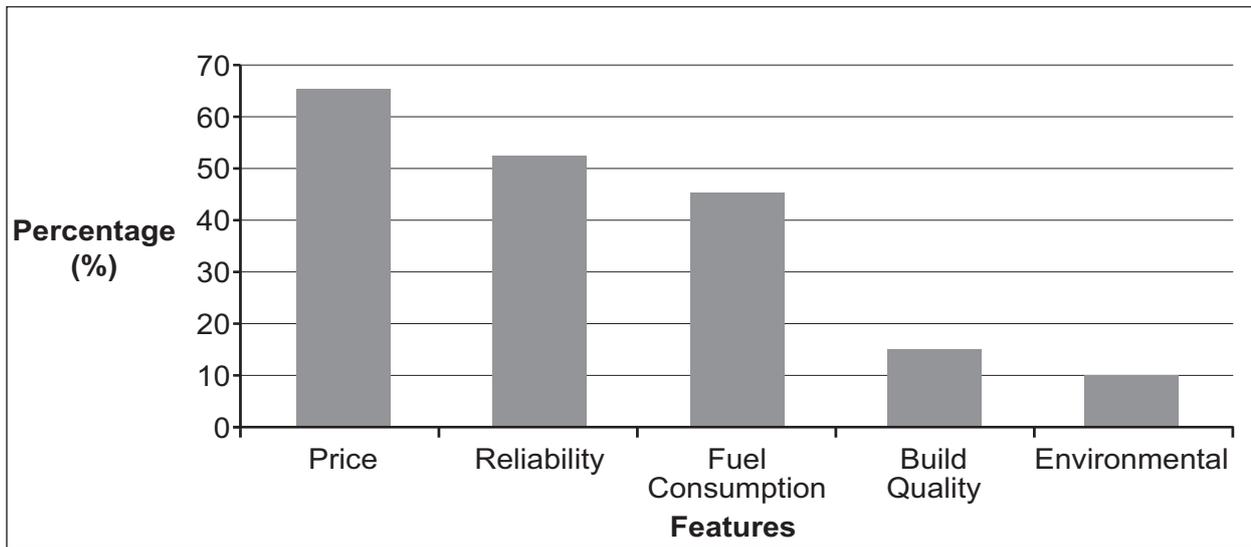
However, the Operations Director believes that the workforce at the West Midlands factory is more skilled and consistently produces higher quality taxis than the North East. Also the West Midlands site has currently greater production capacity. He has also expressed concerns about manufacturing the electric taxi for European customers, as this would be a totally new market for the business.

The Finance Director is worried about the financial viability of the project. 'Due to the rapid changes in technology in this market, the electric taxi strategy must achieve a payback of less than four years and I would also want an average rate of return of at least 12%. I estimate that a significant budget would be required for the research and development, factory conversion and marketing costs. The company has limited financial resources and my concern is that we will struggle to raise the necessary finance for such a risky venture.'

STATISTICAL APPENDICES

Appendix A: Marketing data

Figure 1: Most important features sought when buying a taxi



Source: Survey of taxi firms

Figure 2: Attitudes towards electric taxis

	Agree %	Neither Agree or Disagree %	Disagree %
Would seriously consider buying an electric taxi	42	37	21
The limited mileage of an electric taxi would be a concern	65	27	8
Would be prepared to pay a premium price for an electric taxi	7	27	66

Source: Survey of taxi firms

Appendix B: Operations and Human Resources Data 2013

Table 1: Forecast comparative cost and price data for the electric taxi production

	West Midlands	North East
Fixed costs per year	£10m	£11m
Labour cost per taxi	£1000	£500
Material cost per taxi	£5000	£5000
Selling price per taxi	£40 000	£40 000

Turn over ►

Table 2: Current comparative data for the West Midlands and North East factories

	West Midlands	North East
Factory capacity	500 taxis per year	400 taxis per year
Defective products	5%	8%
Distance to nearest suitable port	200 miles	20 miles
Labour turnover per year	5%	10%
Average number of days lost due to sickness per employee per year	7	12

Appendix C: Nicholson plc – Financial Information**Table 1: Forecast costs to convert the North East factory to electric taxi production and estimated returns****North East factory**

Conversion cost £10 million

Year	Net cash flow (£m)
1	2.4
2	3.0
3	4.0
4	5.8

Source: Figures provided by Peter Nicholson

Table 2: Investment appraisal data to convert the West Midlands factory to electric taxi production

Payback period	3 years 6.9 months
Average rate of return	16.25%

Source: Figures provided by Peter Nicholson

Table 3: Selected financial information for 2012 and 2013

	2013 (£m)	2012 (£m)
Current assets	70	80
Current liabilities	40	30
Non-current liabilities	140	70
Total equity	90	90
Operating profit (year ending 31 March)	5	8

Question 1

0 | 1 Peter Nicholson wishes to convert the factory in the North East to production of the electric taxi. Using the data in **Appendix C, Table 1**, calculate the payback period and the average rate of return. *(8 marks)*

Question 2

0 | 2 Peter Nicholson proposes to remove two management levels from the organisational structure and to encourage greater empowerment of the workforce. Do you think that this is a good idea? Justify your view. *(18 marks)*

Question 3

0 | 3 If the electric taxi proposal is accepted, do you think that the production of the electric taxi should commence at the North East factory or at the West Midlands factory? Justify your view. *(18 marks)*

Question 4

0 | 4 Using all the information available to you, complete the following tasks:

- analyse the key arguments **for** and **against** the electric taxi proposal
- make a justified recommendation on whether the electric taxi proposal should be accepted.

(36 marks)

END OF QUESTIONS

There are no questions printed on this page