



GENERAL CERTIFICATE OF SECONDARY EDUCATION

BUSINESS STUDIES A (SHORT COURSE)

Paper 3 (Foundation Tier) and Paper 4 (Higher Tier)

1051/03/CS
1051/04/CS

CASE STUDY

Thursday 20 May 2010
Morning

Duration: 1 hour



INFORMATION FOR CANDIDATES

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- You may **not** take your previous copy of the case study into the examination.
- You may **not** take notes into the examination.
- This document consists of **12** pages. Any blank pages are indicated.

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Gus. T. Day plc (GTD plc)

GTD plc, a company in the private sector, makes blades for wind turbines. The factory is located in the North East of England. The business has seen rapid growth in both the number of customers and its profits in the past 5 years.



The growth of wind farms in some parts of the EU has been rapid and many of GTD plc's customers come from these countries. To some extent this is due to the fact that the land masses in Spain, France and Portugal are much greater than the UK but also because there has been a natural reluctance by people in the UK to have wind farms on their doorstep. Some comments from both sides of the argument are shown in Resource Sheet 1.

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Fifteen years ago Gus Day was the Managing Director of a civil engineering firm building bridges for motorways. He became interested in the way wind affected the design and building of the bridges. With research into new methods of creating energy from renewable sources coming up with more realistic solutions, Gus decided that it was time he went into business for himself. He left his job and began to research ways in which he could manufacture the blades for wind turbines. He was not interested in erecting the turbines, only in selling the blades to the rapidly growing European market. His customers would be businesses in these countries which would assemble and erect the wind turbines.

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In 1996 Gus set up his business as a sole trader and employed two of his friends, Karen and Bob to help get the business up and running. Gus raised some money from the bank, his own savings and a small grant from the government to rent a large unit on a local industrial park. This money also covered the initial research, development, raw materials and marketing costs involved in setting up the business.

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The first three years were very hard. It was difficult to break into the European market which was dominated by a few large firms in Germany and France. Extra money had to be found to install up to date design and manufacturing technology into the factory. A bank loan was taken out to cover this extra expenditure. Much of the time the business was running at the maximum of its overdraft facility.

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The business concentrated its marketing strategy on:

- personal selling
- guaranteed competitive prices
- always delivering on time.

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As a result of these strategies the business went from strength to strength. GTD was also making progress towards finding customers in the UK despite the unpopularity of wind farms in many parts of the community.

By 2003 GTD had customers in Portugal, Italy and Spain. It had also managed to break into the UK market and was supplying blades to a company in Scotland and one in North Wales. Gus realised that if GTD was going to maintain its reputation for delivering on time it would have to raise more money and expand its operations into a larger factory employing more workers. In 2004 Gus decided to float GTD on the stock exchange and became a public limited company.

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In 2010 GTD plc employs 40 workers and there are now five full-time directors. The structure of the company is shown in Resource Sheet 2.

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Although GTD plc is successful there are now many more competitors and the business must look for new ways of attracting customers.

The business is still located in the original factory but has outgrown its space and relocation is beginning to look like the only option. The Production Director, Wayne, is also interested in expanding the product line to include supplying all parts of the wind turbines so that it could be sold as a complete unit. The complete unit could then be assembled on site by local firms. Wayne thinks that very soon the market for the turbine blades will be saturated. The extra space needed for increased production and storage could mean acquiring an additional unit in the same location or a new factory in the UK. However this would mean that GTD plc would be reliant on suppliers for electrical units and other components for the wind turbines.

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The expansion would also mean that the method of production would have to change. The blades could continue to be made using batch production but some parts of the turbine would be made using flow production. This would mean more investment in technology.

Gus thought there were good reasons to discuss the future of GTD plc at a Board meeting. The agenda for the meeting is shown in Fig. 1.

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GTD plc	
Board Meeting April 25 th 2010	
Agenda	
1.	Apologies
2.	Minutes of last meeting – Gus T Day
3.	Product Development – Production Director
4.	Cost/profit analysis – Finance Director
5.	Sales Report – Marketing Director
6.	HRM report – HRM Director
7.	AOB

Fig. 1

As Production Director, Wayne outlined his ideas and asked for comments from the rest of the Board. The meeting went reasonably well until it was realised that there were serious problems with differing objectives of marketing, production, finance and HRM.

The Marketing Director, Karen, supported Wayne's ideas and put forward her idea to launch a new advertising campaign on the internet to find new markets further afield for the complete units. She has done some research into wind farms in India (see Resource Sheet 3) and is keen to carry out further investigations into this market.

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Karen's suggestion is that the business establish a new factory in India, organised and run by local workers. This factory would serve growing markets in India especially in the North where development of wind power has been rapid. The business would supply and sell the complete units to local businesses in this developing nation. The idea was to delegate control of the manufacturing process to local managers and workers but she realises that there may be problems with this.

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The HRM Director, Ahmed, felt that the workforce should be properly consulted over the expansion plans. He had recently attended an 'off the job' training course about how businesses should manage change in terms of planning, communication, legal requirements and other human resource factors. He was concerned that if a change was imposed on the workforce, either in terms of location or changes in the product, there would be serious repercussions. Many of the workforce were highly skilled engineers who would not be easy to replace. 75

Ahmed informed the meeting that there were much more urgent issues to deal with. These were as follows: 80

- (i) Some workers were complaining of skin problems from the dust produced from polishing and sanding the fibreglass blades.
- (ii) One of the designers, Dave, a key member of the team continually failed to meet deadlines which held up the whole process. 85
- (iii) There was some discontent among the employees about the fringe benefits given to the directors. The workers thought that they should **not** have free petrol for their company cars as it affected the overall image of the business as an environmental company.

Bob, the Finance Director, had done some initial projections in terms of cost (for the first six months) for Karen's proposal to establish a factory in India. These projections can be seen in Fig. 2. 90

Cost (first 6 months)	£(000s)
Factory building	100
Machinery	50
Equipment	20
Wages	30
Power	40
Training	10
Marketing	30

Fig. 2

However, Bob had not provided similar financial projections for Wayne's proposal that the business expand the product line and Wayne was not pleased. He thinks that his ideas are not taken as seriously as Karen's. Wayne told the meeting that the shareholders would be much more willing to support his proposal for a factory in the UK as there would be a lot less upheaval and more control over operations. Karen argued that the new factory would have to be so big to store the completed blades that there would be more opportunities in another country to develop such a factory compared to the UK. 95

Bob, the Finance Director, told Gus that he was much more concerned with problems nearer to home. The three most urgent problems were: 100

- (i) three large companies, to whom GTD plc supplied blades, had not paid in full within three months.

- (ii) the threat of rising wage costs and the need to take account of this in planning for the future of the business. 105
- (iii) pricing had been based on a cost plus approach for five years. With increased competition Bob thinks that other strategies should be discussed.

Bob has produced a projected Trading, Profit and Loss Account and Balance Sheet (see Resource Sheet 4 and Resource Sheet 5) to show how GTD plc might stand at the end of 2011. 110

At the end of the meeting Gus told everyone to go away and study the information and to come back to a further meeting in a week when he and Bob had looked at the financial options available to raise the money it would cost for a new factory in the UK or India.

RESOURCE SHEET 1**Comments from Community**

'The impact of a wind farm here would be a beautiful valley dominated by turbines almost the height of the hills.'

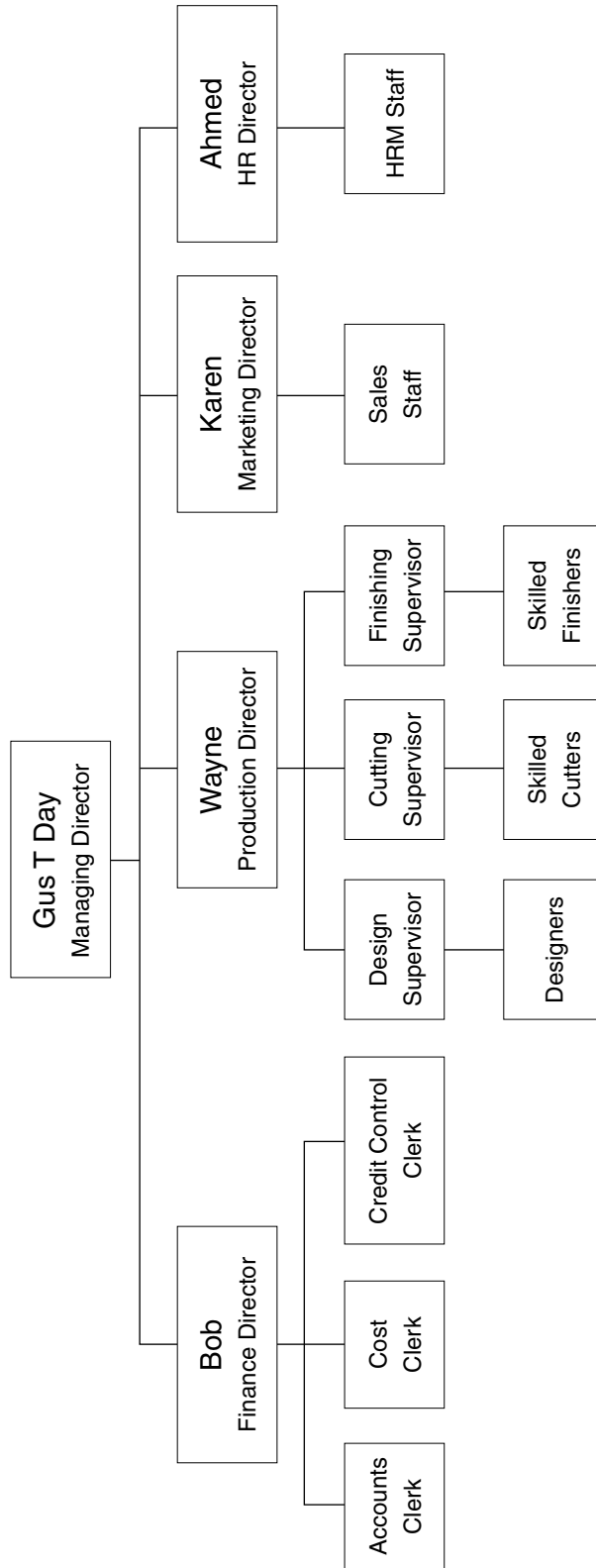
'My views are spoiled by 25 pylons for a gas power station. I would prefer to see wind turbines.'

'Although wind power alone cannot be the only source, it must be part of a renewable energy supply - please put one in my back yard.'

'Noise pollution from the wind farm 930 m from our home has caused us to abandon our home and rent a house 5 miles away.'

RESOURCE SHEET 2

Organisation Structure for GTD plc



RESOURCE SHEET 3

Research about wind farm energy in India.

Research	Information
	India ranks 4 th in the world among wind energy producers.
Number of wind farms	At 31.3.08 there were installations in 10 out of 28 states in India.
Government involvement	95% owned by the private sector. 5% by the public sector.
Partnerships	There are many opportunities for wind farm manufacturers, installers and parts suppliers to work alongside Indian companies. This is usually done through an agency.
Infrastructure	There is a substantial amount of financial assistance and support for development of the infrastructure such as road and communication improvement. This assistance comes from the Indian Renewable Energy Development Agency.

Extract from Article 'Equator Initiative – Tapping the Wind – India'

Muppandal Wind Farm, Tamil Nadu

The state of Tamil Nadu is ahead of all other states in terms of installed wind turbine capacity. The state has experienced a very good and speedy response from the private sector ever since the emergence of wind power in the country.

Wind farms have sprung up all along the 19-mile road from Muppandal to Kanyakumari, a town wedged between the Bay of Bengal, the Arabian Sea and the Indian Ocean. Muppandal and other areas in Tamil Nadu generate about half of India's 2000 MW of wind energy, which is itself about 2 percent of India's total power output. The government wants the sector to expand rapidly and pass its target of adding 5000 MW of wind energy by 2012.

The Indian government has helped to finance wind farm development with tax breaks for foreign firms looking to establish fields of wind turbines in the southern region of India. The turbines not only produce a renewable and environmentally friendly source of electricity, they also spawn investment in the local community, which has raised incomes on a wider scale.

RESOURCE SHEET 4

GTD plc

Forecast Trading, Profit and Loss Account for the year ended 31 December 2011

2010		2011	
£(000)		£(000)	£(000)
	Revenue from –		
3000	Sale of blades to UK	4000	
3000	Sale of blades to rest of EU	4000	
	Less –		
1500	Cost of Sales	2000	
4500	GROSS PROFIT		6000
	Less expenses –		
1083	Wages/Salaries	1284	
20	Insurance	22	
12	Business Rates	14	
8	Heat and Light	10	
25	Interest on Loan	25	
50	Training	55	
42	Motor expenses	60	
<u>100</u>	<u>Depreciation</u>	<u>150</u>	
1340			1620
3160	NET PROFIT		4380
<u>790</u>	Tax (25%)		<u>1095</u>
2370	Profit after tax		3285
<u>1370</u>	Dividend paid		<u>1285</u>
<u>1000</u>	Retained Profit		<u>2000</u>

RESOURCE SHEET 5

Forecast Balance Sheet for the year ended 31 December 2011

2010		2011	
£(000)		£(000)	£(000)
	Fixed Assets		
3000	Factory	3000	
1000	Machinery/equipment	1500	
<u>500</u>	Vehicles	<u>1000</u>	
4500			5500
	Current Assets		
2000	Stock	2100	
1100	Debtors	1500	
1000	Bank	500	
	Less Current Liabilities		
1000	Creditors	1000	
3100	Working Capital		3100
600	Less Long Term Loan		600
7000	Net Assets Employed		<u>8000</u>
	Financed by –		
6000	Shareholders funds		6000
1000	Retained profit		2000
<u>7000</u>	Capital Employed		<u>8000</u>

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