

General Certificate of Education  
January 2008  
Advanced Subsidiary Examination

**BUSINESS STUDIES**  
**Unit 2 and Unit 3**

**BUS2/3/PM**



**Case Study**

To be distributed to candidates no sooner than  
Thursday 1 November 2007

**NOTICE TO CANDIDATES**

You will be given **one** copy of this Case Study for use during your preparation for the examination, which you may annotate as you wish, but which you will **not** be allowed to take into the examination.

You will be provided with a clean copy of the Case Study, along with the question paper, for use in the examination.

You are advised to carry out your own research using this Case Study. It is the business concepts and ideas raised by the Case Study which should be researched.

**Your teacher is encouraged to give assistance and advice as required.**

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## G&N Ltd

### Section A – Changing career plans

The Edinburgh Festival had been the best three weeks of Sara's life, but despite the brilliant reviews for the school play she had produced for the Festival, she came to realise that becoming a producer was unlikely to be a profitable career.

The school play had received the accolade of 'Best Musical' at the Festival and had sold out every evening in the final two weeks, but still failed to make a profit. All of the income had been eaten up by paying people to create the properties (props) and scenery and in providing transportation and accommodation.

Sara decided to change her career plans. Creativity was her greatest strength and, whilst this had played a part in her Drama A Level, it had also fitted in well with her A Level in Product Design. After the Festival she asked her parents, George and Neela Faulkner, whether she could join the successful family business *G&N Ltd*. Originally, the business had concentrated on making office furniture in its factory in Hull, but, in recent years, it had also started to produce display boards and materials for events and conferences.

There was no formal organisational structure to the business. Basically, Neela concentrated on marketing and George on production and distribution. Whenever Neela received an order for office furniture or display boards and materials for a conference or event, she would liaise with George. He would ensure that the relevant items were manufactured and delivered to the customer.

The manufacturing of office furniture and the manufacturing of display boards and materials for events and conferences are both very competitive markets. There are many businesses striving for market share but the growth in these markets ensures that there is always a capacity shortage. This means that it is easy to gain contracts although there is very little business during the holiday period in July and August, when few conferences are organised. Sara had taken advantage of this situation to get her father to make some props and scenery for the school play and he had even delivered them to Edinburgh.

### Section B – Sara's initial impact

For her Product Design A Level, Sara had designed a table that could be converted quickly into a chair or a flat display surface. Recognising the potential of this invention, her father had acquired patents on both this design and another display product that Sara had devised during her study of the A Level. The patented items were manufactured by *G&N Ltd* and had proved to be very profitable. They were simple to manufacture but attracted a very high price because of the flexibility to the customer. Furthermore, a number of large American and Asian manufacturers had offered *G&N Ltd* considerable sums of money to manufacture Sara's inventions abroad. At first, Sara believed that she could play a role in the business by creating new products and designs. However, try as she might, Sara was unable to come up with any other feasible product ideas.

Her parents soon recognised that Sara's role in the business was ineffective, so Sara was given the job of investigating alternative markets for the business. Sara remembered the difficulties that she had experienced in getting suitable props and scenery for her school play and believed that this could be a lucrative diversification for the family business.

Sara conducted some market research on props and scenery. She had already acquired price lists and delivery details from the leading suppliers of props and scenery, as these had been needed for the school's Edinburgh Festival production. She also possessed a list of the main theatre companies in Britain, as some of these companies had been willing to lend props for the Festival.

Sara wrote to each of these organisations, indicating that *G&N Ltd* would be able to manufacture the props and scenery that they required at a competitive price. George had agreed to match or better the price of any other competitor, as this was a market that he was eager to enter. He had recently read an article in the Sunday Times indicating that, after decades of disappointing Box Office returns, theatres were expecting to continue their recent revival in the United Kingdom. The article cited figures of 7% growth per annum over the next three years, although there was no certainty that this increase would be long term. With increasing living standards, more customers were tending to purchase luxury services such as entertainment, but sections of the entertainment industry were subject to vast fluctuations in popularity.

Sara was amazed at the response from theatre companies. Not only did many of them seem very keen on getting quotations, but also, many complained about the high prices that existing suppliers currently charged for props and scenery. The theatre companies also complained about the difficulties and costs involved in storing items that they owned.

### **Section C – A new venture**

Immediately, Sara recognised a business opportunity and wrote back to all of the theatre companies. The family business owned a huge warehouse in Hull, dating back to the times when *G&N Ltd* used just-in-case stock control methods. However, in recent years, market forces had led to a move to just-in-time delivery. *G&N Ltd* had found that very little storage was needed but had never disposed of the warehouse.

In her letter to the theatre companies, Sara offered cheap storage for props and scenery. *G&N Ltd* would store any items until the theatre company required them again. However, if in the meantime a request was received for that particular item from another theatre company, *G&N Ltd* would lease this item in return for 50% of the hire fee. If no prop or scenery was available from stock, *G&N Ltd* would manufacture the item requested as a one-off. Because of their flexibility, Sara's own designs were particularly popular choices.

After a few months, the demand for storage rose rapidly. George was surprised by the volume of existing props and scenery that theatre companies had deposited in the warehouse. The timing was perfect, as the pantomime season was about to begin, and *G&N Ltd* was inundated with requests for suitable props and scenery. Every single request was met from stock, as different theatres traditionally rotated pantomimes over a period of years. The only criticism that *G&N Ltd* received concerned the credit terms in its contracts with the theatre companies; these terms allowed *G&N Ltd* to charge very high interest rates if payments were late.

*G&N Ltd* earned tremendous goodwill over the next two months. This was not only because they met every order for props and scenery, but also, because the vast majority of the theatre companies benefited from the 50% fee they received on their own items that had been ordered by other theatre companies. *G&N Ltd's* understanding of just-in-time methods, gained from its original manufacturing and conference and events activities, helped immensely, as theatre companies wanted the props and scenery to be delivered just before the productions commenced.

## Section D – Expansion

As the business grew, *G&N Ltd* realised that it had insufficient capacity to cope with both the manufacturing of its various items and the storage of existing props and scenery. George was worried by the increases in unit costs that were occurring as the factory output reached maximum capacity. This was demonstrated by the average costs of manufacturing a Display Board (**Table 1**).

**Table 1: Average cost of a Display Board at different levels of output**

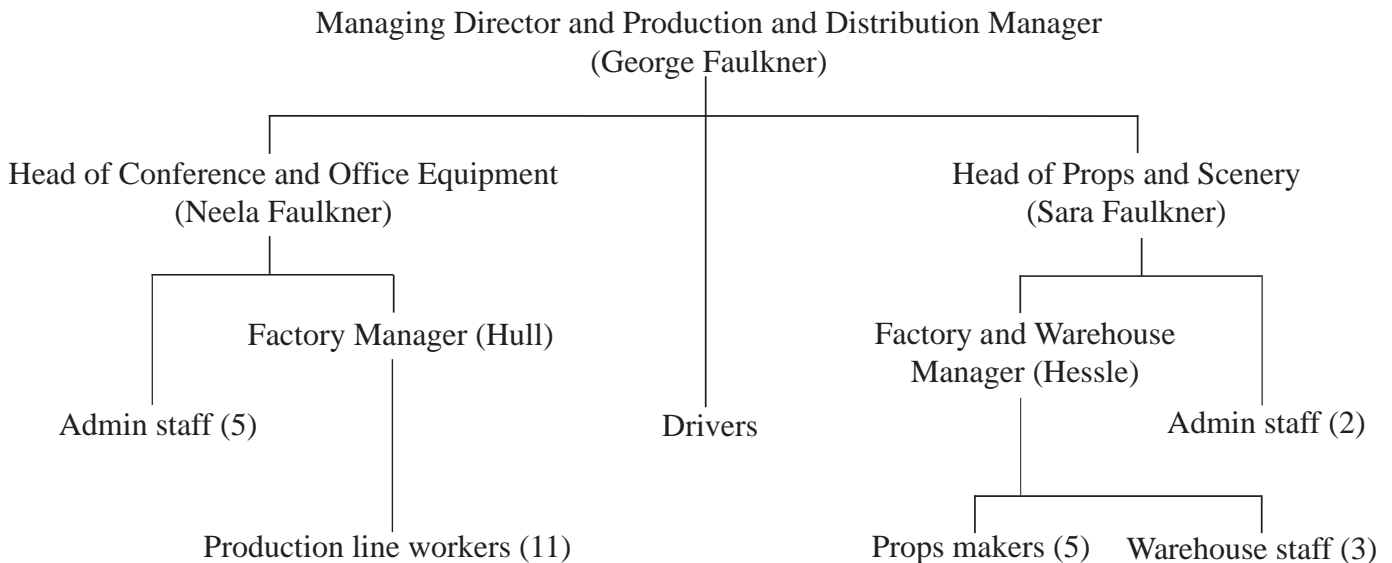
Units of output	Average fixed cost per unit £	Average variable cost per unit £	Average total cost per unit £
100	15.00	20.00	35.00
200	7.50	14.00	21.50
300	5.00	10.40	15.40
400	3.75	16.00	19.75

George, Neela and Sara held a meeting to discuss the way ahead. They decided to use the existing factory in Hull to manufacture the office furniture and display boards and materials for conferences and events. These were standardised items that could be mass-produced using flow production. They planned to purchase a new factory which would use job production to make the one-off specialised props and scenery.

The Bank Manager agreed to lend *G&N Ltd* £1.5 million at a variable interest rate, linked to the Bank of England base rate. *G&N Ltd* sold its existing warehouse in Hull and used this money and the bank loan to purchase a new factory and a much larger warehouse in nearby Hessle which, like Hull, was an area of high unemployment. The Hessle factory would concentrate on making the one-off specialised props and scenery.

The bank was impressed by *G&N Ltd*'s business plan but was concerned about the lack of any formal organisational structure within *G&N Ltd*. At its insistence, George constructed an organisational chart that clarified responsibilities and lines of communication. This chart is shown in **Figure 1**.

**Figure 1: Organisational chart of *G&N Ltd*:**



Footnote: Numbers shown represent full-time equivalent (FTE) employees. [www.theallpapers.com](http://www.theallpapers.com)

The theatre companies demanded high quality props and scenery and *G&N Ltd* recognised that this was a key factor if it were to succeed. *G&N Ltd* used quality control techniques in Hull. However, on George's advice, TQM (Total Quality Management) was introduced into the factory in Hessle, with much greater delegation of responsibility being given to employees.

The organisational chart (**Figure 1**) represented the organisational structure in *G&N Ltd* immediately after the opening of the Hessle factory and warehouse. However, Sara was keen to introduce a matrix management structure into the Props and Scenery Division.

## Section E – Mixed fortunes

The Props and Scenery Division was benefiting from the economic boom. The demand for the goods and services that it provided was income elastic and mostly price inelastic. This was because theatre companies were particularly interested in the convenience of an all-in-one service and less concerned with price. *G&N Ltd* had greatly extended its production capacity but the following year, as the pantomime season again approached, *G&N Ltd* was suddenly inundated with orders for materials for events and conferences. This problem was initially resolved through sub-contracting some of the production, but this caused a number of problems.

George was upset because these problems coincided with an unfavourable article in the national press. A journalist had examined the pricing structure of *G&N Ltd's* props and scenery activities and realised that the prices charged to theatre companies varied according to the degree of competition. In southern England, an area in which *G&N Ltd* was a monopoly business, its prices were much higher than those charged in northern England, where *G&N Ltd* had a number of competitors. The journalist accused *G&N Ltd* of unfair competition, although George argued that distribution costs in the south of England were much higher and that this was the main reason for the higher prices.

George was also annoyed because *G&N Ltd* was the only supplier to manufacture props and scenery within the United Kingdom. The business was based in an area of high unemployment and George was determined to help the local economy by creating jobs in the local community. Inevitably, this meant higher costs for *G&N Ltd* compared to those of suppliers that bought cheap items from overseas. However, two of the key aims of *G&N Ltd* were to improve the welfare of the workforce and to help the local community. This had been the reason why George had decided to locate the new factory in Hessle, on the outskirts of Hull, rather than move to an alternative location. George always ensured that his workers received higher wages and better fringe benefits than those in other local factories. He felt also that he was achieving these aims by charging higher prices to those theatre companies that he believed could afford to pay, and it just happened that most of these were in the south.

*G&N Ltd* had also experienced problems in supplying display boards and materials to conferences and events. A number of products had been faulty or broken and, on a few occasions, the items delivered had not been the items ordered by the customer. One conference organiser had cancelled a contract because the items delivered had been the wrong colour and did not match the quantities ordered. Neela blamed these problems on the disruption to manufacturing caused by changes to the organisational structure and to the fall in morale that occurred when it was announced that none of the Hull employees would be offered jobs in the new factory in Hessle.

## Section F – One business; two approaches

Neela was very well organised and tended not to consult with the administration staff in her office in Hull. On the same site, the workers in the Hull factory were largely unskilled, undertaking routine tasks on a production line. The Factory Manager used an authoritarian style of leadership. The workers were paid by piecework and, with seasonal demand, their wage levels tended to be unpredictable. Quality control methods were strictly enforced and there was minimal delegation of responsibility.

This contrasted sharply with the approach in Hessle. Sara, partly through her lack of experience, greatly valued the contributions of the staff. Consequently, she consulted on all major decisions and relied heavily on delegation in both the office and the factory. The Hessle factory used job production techniques and there was considerable job enrichment for employees. In this factory, the employees experienced a much more democratic style of management. The workers were skilled and their opinions were both sought and utilised by the Factory Manager. Workers were paid a salary plus a profit share that yielded high returns. A kaizen system operated effectively and many changes had been introduced in response to the ideas of the workers. Many of these ideas enhanced considerably the efficiency and profitability of the factory.

George and Neela had enjoyed a lifetime's experience in the office furniture trade and Sara understood the theatre. Together, they were able to adapt this understanding to the workforce planning needed for *G&N Ltd*. The huge variations in demand meant that a flexible workforce was needed throughout the business. The growth of the company led to a need for external recruitment. Sara achieved this by directly targeting the workforce of a local company that was experiencing financial difficulties. She offered significantly higher wages and *G&N Ltd* was able to acquire highly trained workers very quickly. However, George was unhappy about the impact of Sara's actions on costs of production and thought that they should investigate the use of more capital intensive production methods in the Hessle factory. Sara disagreed with this view although her attempts to recruit workers suffered a setback when two new workers were injured in an accident caused by a combination of faulty machinery and inadequate safety training.

Despite these issues, the business went from strength to strength.

## Section G – Planning the future of the Props and Scenery Division

Three years after the opening of the Hessle factory, George, Neela and Sara sat down to plan the long-term future of the Props and Scenery Division. Sara's involvement in the business had totally transformed its fortunes. Although the Props and Scenery Division was a smaller part of *G&N Ltd*, it generated the majority of the company's profit. *G&N Ltd* had changed from a mildly successful family business to a major national player in a niche market.

At the monthly Board meeting, George submitted a paper for discussion which set out *G&N Ltd*'s long-term objectives, for the next five years, for the Props and Scenery Division:

- increase sales by 20% per annum
- improve profit levels by 33% per annum
- increase market share in props and scenery supply in the UK from 55% to 70%
- establish a base in two more European countries
- reduce average costs by 10% per annum.



The success of the Props and Scenery Division had been based on serving its stakeholders well. The theatre companies consistently rated the quality of goods and service highly, although there had been complaints about faults in one or two items of scenery.

The Division's success was assisted by a lack of competition but this success was encouraging new businesses into this developing market. As a consequence, George was planning to move into the European props and scenery market. However, Sara was reluctant to take this risk as she had no understanding of European theatre. George compiled a SWOT analysis (**Table 2**) relating to this particular venture, whilst Sara analysed the four main European markets (**Table 3**).

**Table 2: SWOT analysis of G&N Ltd's plan to move into the European Props and Scenery market**

Strengths	Weaknesses
Company's expertise in manufacturing one-off items	Sara's lack of business experience
Reputation for reliability and flexibility	G&N Ltd's relatively high costs of manufacturing
Market leader in UK for props and scenery	Absence of a manufacturing base in mainland Europe
Excellent profit levels and cash flow	Lack of understanding of the European market

Opportunities	Threats
Much faster growth in theatre visits in Italy and Spain than in the UK	Low economic growth rates in some European countries
Predicted fall in the £/€exchange rate	Less of a tradition of theatre visits in most European countries
Lack of competition: no firms providing a comparable, integrated service	Rivals establishing a European base

Source: GEORGE FAULKNER

Sara immediately objected to the first weakness. Furthermore, she was worried that potential difficulties in providing just-in-time deliveries might damage the company's second strength – its reputation for reliability and flexibility.

She presented her findings on the European markets (**Table 3**).

**Table 3: Factors influencing possible success of G&N Ltd in major European countries**

Factor	United Kingdom	France	Germany	Italy	Spain
Index number of delivery costs from the UK per order of props and scenery	100	150	150	200	220
Annual theatre visits (Index number)	100	75	60	85	50
% growth in theatre visits (1997–2007)	25 %	20 %	25 %	55 %	35 %
Number of existing competitors	3	2	4	6	1

Source: SARA FAULKNER

George believed that if they were to expand into Europe, they should convert from 'Ltd' to 'plc'. Neela and Sara, however, argued that they could find the necessary funds from the 'Ltd's' retained profits. George suggested the breakdown of shareholdings shown in **Table 4**.

**Table 4: Suggested shareholding in G&N plc**

Shareholder	Shareholding
George Faulkner	£1.25 million
Neela Faulkner	£1.25 million
Sara Faulkner	£0.5 million
New shareholders	£4.5 million

The £4.5 million raised from new shareholders would finance a new factory, a new warehouse and three lorries.

George, Neela and Sara studied the latest Treasury macroeconomic forecasts to see whether they would provide any guidance on future strategy (**Table 5**).

**Table 5: UK economic forecasts**

Year	Real GDP growth %	Unemployment %	Inflation rate %	Interest rates %	£/€ exchange rate	Consumer spending % growth
2008	2.5	5.0	1.6	4.75 %	1.40	2.0
2009	2.8	4.8	1.8	5.5 %	1.40	4.0
2010	2.8	4.8	1.9	5.5 %	1.37	4.5
2011	3.0	4.5	2.0	5.75 %	1.35	5.0

Source: [www.hm-treasury.gov.uk](http://www.hm-treasury.gov.uk)

## END OF CASE STUDY