



**ADVANCED GCE**  
**BUSINESS STUDIES**  
Business Strategy

**2880/CS**

**CASE STUDY**

**To be opened on receipt**

**JANUARY 2009**



**INSTRUCTIONS TO CANDIDATES**

- This Case Study **must** be opened and given to Candidates on receipt.

**INFORMATION FOR CANDIDATES**

- This Case Study may **not** be taken into the examination room.
- This document consists of **8** pages. Any blank pages are indicated.

### The Brunelleschi Cake Company Ltd (BCC)

In 2008 the Brunelleschi Cake Company manufactured over 230 different types of bakery products. These ranged from chilled products, e.g. cream cakes and éclairs through to hot puddings such as fruit crumbles. In the financial year just ended, 2008, it had a turnover of £66.5m, making it one of the leaders in its industry. It has three production sites in the Midlands. All sites are designated as 'non-smoking'. The largest site, which also serves as the administrative centre, is in Snitterfield. Site details are given in Table 1.

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**Table 1: Site summary**

	Snitterfield	Bromsgrove	Kidderminster
Area, hectares	4.0	0.8	0.8
Production area, m <sup>2</sup>	8,500	1,500	2,300
Production	Chilled Celebration cakes Desserts	Chilled Celebration cakes Desserts	Celebration cakes Hot puddings
Staff	540 production 50 administration	95 production	270 production
Space to expand, m <sup>2</sup>	Nil	1,500	1,000

Founded by Italian émigré Carlo Brunelleschi in 1925, the business has grown beyond all recognition in its 83 years. The founding family sold the business in 1976 to a publicly quoted food manufacturer, which later sold it in 2004 to a private equity firm, FoersWain (FW). FW was never really interested in manufacture. Instead, it made its return by stripping-out BCC's portfolio of 53 high street stores from its balance sheet before itself selling the manufacturing capability to its current (French) owners, Luchon (Pâtisserie de Pyrenees). Luchon saw BCC as a route into the UK market to exploit the rapid recent growth in the bakery and premium dessert market, and, in particular, supplying the leading UK supermarket chains. Like its competitors, BCC has seen its sales rise, see Appendix 1. Consequently, Luchon has embarked on an ambitious strategy of winning new business over and above the four multiples it currently has as customers. This is required in order to achieve its objective of 10% sales growth and a 1% improvement in gross margins in 2010.

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The UK bakery market can be segmented into four main categories: chilled (any product, such as cream cakes, which have to be manufactured, distributed and stored at less than 3°C), hot puddings, celebration cakes and desserts. However, gaining accurate data on sales, by value, is difficult. This is because BCC's customers are reluctant to share data about how much they purchase from competitors, and in turn, competitors are reluctant to share data with each other. Market growth forecasts are based upon BCC's own research, which uses a combination of econometrics and other quantitative techniques, see Table 2.

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**Table 2: Market data**

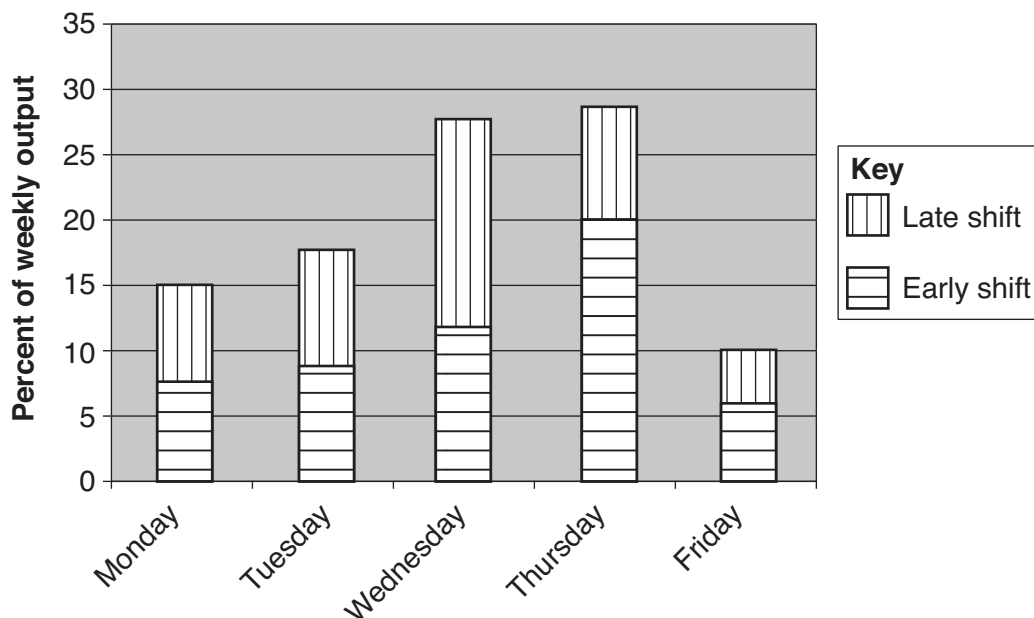
	BCC's market share, 2008	Forecast UK market growth, 2009–10
Chilled	20%	25%
Hot puddings	23%	9%
Celebration cakes	8%	4%
Desserts	28%	35%

Sales of chilled product vary throughout the week, as well as the year. For many households a cream cake is an indulgence product. Marketing Director, Monica Zhuang, has some research suggesting that whilst UK income rose by an average of 4%, sales of chilled cakes rose by 6% in the same period. Many consumers will abstain from purchasing Monday through to Thursday, so building a 'comfort credit'. This credit is then 'cashed in' when doing the weekly shop with the purchase of a chilled product as a treat for being 'good'. Hence, BCC tends to experience a big rise in demand from its retail customers late on a Wednesday afternoon so that the products can be in the distribution chain and so on the supermarket shelves first thing Friday morning. A lead time of 18 hours is typical in the industry, with a product shelf life of three days and a further three days before the product becomes unfit for human consumption.

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To cope with the asymmetric demand across the week, see Fig. 1, Production Director, Jan West, wants to change the shift patterns currently used at all three BCC sites.

**Fig. 1: Weekly output profile, chilled products**

At present BCC operates two manufacturing shifts per day, one from 8am to 4pm and one from 4pm to midnight, with shifts (A and B) rotating on a weekly (five day) basis. Between midnight and 8am a specialist cleaning shift is employed to ensure that stringent food hygiene regulations are complied with. However, Jan is keen that employees see the legal hygiene requirements as a bare minimum. Hence, for example, employees are required to wash their hands using a disinfectant gel every time they enter the production area, regardless of how long they have been away from it. Failure to comply with this would be grounds for disciplinary action, and

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possibly dismissal if there was any suspicion that poor hygiene had led to the contamination of a batch of production. Contamination would lead to the batch being sent to waste (landfill). Likewise, theft or consumption of any product would lead to summary dismissal. 45

On the production floors different types of employees wear different coloured hair nets. This is seen as an aid to communication and managerial control. Probationary employees wear pink hair nets; supervisory staff wear blue; all other grades wear green; whilst visitors, contractors and others wear red. Training is done on the job, and typically takes a few hours for each task. To progress from probationary status requires a combination of four weeks of employment and experience of each product made on that site. Effective communication on the production floor is a problem given the noise of the production machinery and the ethnic diversity of the staff employed. The production method used is flow, with the lines being changed to different products depending upon the production schedule. Changing a line from a batch of one product to another takes time and reduces the business' efficiency. To help claw back some of this lost efficiency, production operatives are only allowed to take a break when a line change is needed. Production operatives are paid minimum wage plus £0.10 per hour. Because so many of the products are hand finished, production is highly labour intensive, albeit very low skilled. Any increase in wages is fiercely resisted by management given the impact it would have on total labour cost. 50 55 60

To investigate how Jan can improve employees' contribution to BCC's objectives, she asked each of the production managers at Snitterfield to collect key performance indicators for the last 120 shifts (12 weeks). She then asked Nitin Rishi, an undergraduate on a six month work placement, to collate all of the data, see Appendix 2. Each shift has a complement of 380 employees. In addition to collating the data, Nitin made the following comments: 65

- labour turnover is 24%, and rising;
- average service for production operatives is 10.4 months;
- production operatives complain about a lack of consultation and involvement. 70

After several months of negotiation, Sales Director, Patricia Dumont, has secured an order from a new customer, Price Pulveriser (PP). PP is a small, but rapidly growing, no-frills discount supermarket. Patricia is keen to accept the order because it will broaden BCC's customer base, both in size and also in terms of consumer socio-economic group. The order would require 10% of manufacturing capacity, with PP having the option to increase this to 15% the following year. Patricia has had to concede a very competitive price on chilled products. However, the margins agreed for celebration cakes, hot puddings and desserts would give an average contribution just 7% lower than existing customers. When Patricia announced her success to the other Directors she was met with complaints about a lack of realism and criticised for her failure to communicate with her fellow directors throughout the negotiations. To secure such a low cost, PP's order would use lower quality ingredients, something which Jan said could lead to confusion in production. Monica voiced concerns about how BCC's two premium customers might react. These two customers, who take approximately 40% of BCC's output, place great emphasis in their marketing to consumers about the exclusivity of their products, something these customers feel could become tarnished. Finally, Finance Director, Serge Muttardi, worried about the credit terms being considered and the impact this would have on BCC's cash flow. 75 80 85

The purchase of BCC by Luchon has given it access to its parent company's finances. Given the age of some of its manufacturing equipment, and the communication problems associated with split site operations, there has been a suggestion that all BCC manufacture is consolidated. Various sites have been considered, with two emerging as being suitable. A key consideration for Luchon is the return each offers on the investment needed. To assist in this, each site has been assessed on its ability to increase gross margins over and above BCC's current 8%. The key features of each site are shown in Table 3. 90

**Table 3: Site comparison**

	Coventry	Kenilworth
Area, hectare	4.8	3.2
Production area, m <sup>2</sup>	15,000	12,000
Production	Chilled Hot puddings Celebration cakes Desserts	Chilled Hot puddings Celebration cakes Desserts
Staff required	900	900
Space to expand, m <sup>2</sup>	5,000	3,000
Capital cost, land and equipment	£25m	£28m
Increase in gross margin	1.6%	2.1%
Access	M6 (junction 2) 1 mile Served by public transport	M40 (junction 15) 6 miles

## Appendix 1

### BCC, output data

Year	Quarter	Output*
2004	1	74.80%
	2	75.61%
	3	78.05%
	4	82.11%
2005	1	74.80%
	2	76.42%
	3	78.86%
	4	83.74%
2006	1	75.61%
	2	78.05%
	3	80.49%
	4	87.80%
2007	1	77.24%
	2	79.67%
	3	84.55%
	4	90.24%
2008	1	85.37%
	2	91.06%

\* = output as a percentage of assumed capacity

## Appendix 2

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Turn over

Weeks	Day	Absenteeism, people per shift				Reported accidents per shift				Waste, % of production			
		Shift A Early	Shift A Late	Shift B Early	Shift B Late	Shift A Early	Shift A Late	Shift B Early	Shift B Late	Shift A Early	Shift A Late	Shift B Early	Shift B Late
1 and 2	Monday	12	15	8	12	0	0	0	0	4	4	4	4
	Tuesday	8	9	6	8	0	0	0	0	4	4	3	3
	Wednesday	0	3	2	3	0	0	0	0	5	6	4	4
	Thursday	0	2	2	3	0	3	0	0	4	6	2	2
	Friday	20	32	12	18	1	2	0	0	14	18	9	12
3 and 4	Monday	11	14	9	11	1	0	0	0	4	4	8	8
	Tuesday	0	2	4	4	0	0	0	0	4	4	4	3
	Wednesday	0	2	3	6	1	1	0	0	3	5	4	2
	Thursday	7	12	3	5	0	1	2	0	5	6	6	9
	Friday	21	35	15	21	1	1	0	0	15	21	14	14
5 and 6	Monday	9	11	6	6	0	0	0	0	5	5	4	4
	Tuesday	1	5	3	5	0	0	0	0	3	4	5	5
	Wednesday	1	4	2	6	0	0	0	0	3	4	4	4
	Thursday	6	4	3	8	0	1	0	8	3	6	4	34
	Friday	23	39	13	19	0	0	1	0	14	19	9	8
7 and 8	Monday	11	14	7	7	0	0	0	0	7	6	4	4
	Tuesday	10	14	3	5	0	0	0	1	4	4	4	4
	Wednesday	1	9	3	6	1	0	0	0	4	4	5	5
	Thursday	0	5	2	8	1	0	0	0	6	6	4	4
	Friday	33	42	14	23	3	0	0	0	13	23	4	12
9 and 10	Monday	28	36	8	12	0	0	0	0	4	3	4	6
	Tuesday	12	15	4	6	0	0	1	0	4	3	5	5
	Wednesday	8	6	2	5	0	1	0	0	4	5	4	6
	Thursday	6	11	3	5	0	1	0	0	5	4	4	8
	Friday	19	26	15	22	2	3	0	2	9	18	8	12
11 and 12	Monday	9	15	7	9	1	0	0	0	9	11	4	6
	Tuesday	3	6	3	8	0	0	0	0	4	6	3	6
	Wednesday	0	9	3	7	0	0	1	0	3	5	4	4
	Thursday	4	10	4	7	0	3	0	0	4	6	4	4
	Friday	17	33	11	15	2	0	0	0	10	20	5	18

## Appendix 3

## The Brunelleschi Cake Company Ltd (BCC)

Balance Sheet as at 01 October 2008

NB Internal use only – unaudited

£000s

## Fixed Assets

Land and Buildings  
Equipment35,148  
2,335  

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37,483

## Current Assets

Stock  
Debtors  
Cash1,168  
19,355  
376  

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20,899

## Current Liabilities

Creditors falling due within one year

7,008

## Net Current Assets

13,891

## Total Assets less Current Liabilities

51,374

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## Creditors falling due after one year

Bank and other borrowings

30,000

## Net Assets

21,374

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Share Capital<sup>(1)</sup>

100

## Profit and Loss account

21,274

## Equity shareholders' funds

21,374

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<sup>(1)</sup> Authorised share capital 500,000 £0.25 ordinary shares