

**BUSINESS AND MANAGEMENT
HIGHER LEVEL
PAPER 2**

Thursday 6 May 2004 (morning)

2 hours 30 minutes

INSTRUCTIONS TO CANDIDATES

- Do not open this examination paper until instructed to do so.
- Answer four questions.

1. IBM

Louis Gerstner, former chairman and CEO of the US computer giant *IBM*, once said that in the 1990s *IBM* stood for a “big, traditional company” with “controlled and reliable staff” in “dark suits, ties and white shirts”. What was interesting is that this description referred to people and culture, rather than to products or services.

Clear vision, strategy and marketing, combined with good financial management can carry a company, but no enterprise can succeed in the long run if these do not become part of the company’s culture. Inevitably, as the world changes, the culture may no longer reflect the purpose of the business, and may affect sales and profits. For *IBM*, worldwide standards were essential to ensure common products for customers operating on a global basis. However, in the 1990s, *IBM*’s departments and branches appeared to be bureaucratic and competing against each other rather than cooperating. Activities were repeated at every level of the organization, because managers did not trust their colleagues.

Although Gerstner recognized that the external environment was changing and that *IBM* needed to adapt to fast moving markets and new technologies, he found it difficult to update the firm’s existing highly structured company culture. Gerstner realized that only the workforce itself could change the culture of *IBM*; change could not be imposed. Gerstner created the conditions and provided the incentives for change. Employees began to take personal responsibility for outcomes, without waiting to be told what to do. *IBM* developed the ability to handle a high level of internal change and rather than hiding from conflict, employees began to manage, and even benefit from it.

[Source: adapted from *The Battle to Change Corporate Culture in IBM*: Louis Gerstner *The Times* 14 November 2002]

- (a) (i) Explain the term *corporate culture* with reference to *IBM*. [3 marks]
- (ii) Examine why Louis Gerstner felt it necessary to change *IBM*’s culture. [3 marks]
- (b) Evaluate the conditions that could be created and incentives that could be introduced, to reduce employees’ resistance to change. [8 marks]
- (c) Analyse the factors that influence the degree of centralization and decentralization in multinational companies like *IBM*. [6 marks]

2. Social Responsibility and BP

The notion that a company must only listen to its shareholders and be judged only on its commercial success is no longer adequate. The market wants more competitively priced, high quality products. It will also judge products by the reputation of the provider and the ethical integrity with which they have been produced.

BP is one of the world's largest petroleum and petrochemical groups with a turnover in 2001 of \$174 billion. Today's *BP* is fundamentally different from the *BP* of just a few years ago. Its new green logo represents *BP*'s commitment to environmental improvement. Its mission states that all activities should bring economic benefits and greater opportunities for all those affected by its business. *BP* has promised to go "beyond petroleum" by bringing economic regeneration to the communities in which it operates, and to develop sustainable forms of energy. It has invested \$200 million in a solar power business that has yet to make a profit. It was the first oil company to state publicly that climate change was a problem caused by oil use. It set a target to reduce its own pollution below 1990 levels. *The Washington Times*, however, suggested that *BP*'s tough pollution target was merely an attempt to secure competitive advantage.

So why is *BP* going "beyond petroleum"? Certainly, oil companies have little choice. Their business is not sustainable because oil will run out. In Alaska, for instance, *BP* is working flat out to sustain production, but the growth phase is over and decline is imminent. *BP* plans to develop a natural gas plant in the Indonesian province of West Papua, a remote and undeveloped part of the world. *BP* says that it wants this project to be a model of social responsibility and sustainable development.

[Source: adapted from *Corporate Social Responsibility – The Times* 16 December 2002
and *Business and Society*, Will Hutton – *The Observer* 8 July 2001]

- (a) (i) Examine the links between a firm's logo and its mission statement with reference to *BP*. [3 marks]
- (ii) Identify **three** policies that *BP* could implement in their new plant in West Papua to put their mission statement into practice. [3 marks]
- (b) Evaluate whether acting ethically and with social responsibility can provide *BP* with commercial and competitive advantage. [8 marks]
- (c) Analyse why *BP* might find it difficult to satisfy all its stakeholders. [6 marks]

3. China

China, with a population of some 1.3 billion people, is hungry for economic growth. Between 1979 and 2000, its GDP grew at 9.7 % per year on average. Young Chinese drink coffee at *Starbucks*, talk on mobile phones and use the Internet for their news and fashions. By night the neon signs illustrate the extent of foreign investment. They display *Nestlé*, *Samsung*, *Canon*, *Pepsi* and *Standard Chartered*. Shanghai, Beijing and the coastal cities are as dynamic now as Hong Kong was a few years ago.

With world demand for ICT products and services falling, companies in expensive markets, such as the US and Japan in particular, have turned from innovation towards cutting costs. In China more than two million university graduates qualify each year. Wages are about 50 cents per hour. American manufacturers, pay more than \$6. US companies such as *Dell* and *Siemens* as well as *Acer* of Taiwan and Japan's *Sony* and *Hitachi* have moved production to China. Foreign motor manufacturers are now among the highest Chinese taxpayers. Boom towns such as Shenzhen create an image of China as a country full of technology fanatics. It has 40 million Internet users and 178 million mobile-phone owners which is more than in America.

However, the wealth gap between rich and poor is widening. China is bureaucratic with a centrally planned economy. There are political risks associated with the new government, but after a year as a member of the World Trade Organization (WTO), China can claim to have achieved about 70 % of the tariff cuts agreed to on entry. Overall tariffs have come down from 15 % to 12 %. However, some agricultural tariffs have risen and new rules, such as health and safety requirements, discriminate against foreign firms who also complain about illegally copied books, music and software.

[Source: *IT puts fire in the belly of dragon economy – The Times*, 12 Dec 2002
and *China: Welcome the Final Frontier – Sunday Times* 3 Nov 2002]

- (a) (i) Describe **three** barriers to trade that countries like China may use to protect their domestic firms and industries from foreign competition. [3 marks]
- (ii) Examine **two** reasons why the World Trade Organization (WTO) pushes for these barriers to be reduced or removed. [4 marks]
- (b) Evaluate the extent to which globalization is encouraged by the development of new ICT (information and communication technology). [7 marks]
- (c) Using a PEST framework analyse the potential advantages and disadvantages to foreign firms of locating in China. [6 marks]

4. Dyson

James Dyson* and his research team have developed products achieving global sales of \$5 billion. James Dyson's vacuum cleaner was first sold in Japan, where it won the 1991 International Design Fair prize. To *Dyson*, "design" means how something works, not just how it looks – the design should evolve from the function. The Japanese were so impressed by the product's performance that it became a status symbol, selling for \$2 000 each.

In June 1993, *Dyson* opened a research centre and factory, and developed a vacuum cleaner that did not use a dust bag, and which collected particles as small as cigarette smoke. This bagless system was the first significant technological change to the vacuum cleaner since its invention in 1901 by *Hoover*.

Dyson engineers constantly re-examine products of all types. It took 60 000 hours of research to create an efficient, self-guiding robot vacuum cleaner using three on-board computers and 50 sensors. Another product improved was the washing machine. In 2000 *Dyson* launched the *Contrarotator* – the world's most innovative washing machine.

To provide legal protection for inventions, inventors have to pay substantial fees each year to prevent other companies from copying them. During the development years when James Dyson had no income, this process nearly bankrupted him. He risked everything. In 1999, *Hoover* tried to copy a *Dyson* and James Dyson was forced to protect his invention. After 18 months he won a legal battle against *Hoover* copying his vacuum cleaner design.

* Note: James Dyson founded the firm *Dyson*.

[Source: adapted from www.dyson.com]

- (a) (i) Explain why *Dyson* was able to set a high price of \$2 000 in Japan for its first bagless vacuum cleaner. [2 marks]
- (ii) Examine how and why *Dyson's* pricing strategy will change as its products move through their life cycles. [5 marks]
- (b) Evaluate methods by which small firms like *Dyson* can compete against larger firms and grow in international markets. [8 marks]
- (c) Analyse how and when in the process of new product development, market research will assist *Dyson*. [5 marks]

5. Wholeheart Bakery

Wholeheart Bakery has been manufacturing breakfast cereals since 1976. Their best selling product has always been wheat flakes. However, as competition increased during the years 1988 to 1998, sales of *Wholeheart* wheat flakes fell 45 % to 75 000 boxes per week, despite additional promotion and improved quality. *Wholeheart Bakery* was now producing at only 50 % of the capacity of their Falconwood factory, which only made wheat flakes. Closure of the factory was suggested. Fortunately that year *Wholeheart Bakery* accepted an approach by a national supermarket chain, *Max-Mart*, to manufacture 50 000 wheat flakes boxes per week for them to be sold under the supermarkets own brand, “M-Power”. The wheat flakes were identical, but with different packaging design. By 2000, sales of the *Wholeheart* brand had declined further to 60 000 boxes per week, but *Max-Mart* purchase order had increased to 60 000 units to supply newly opened shops.

In March 2004, *Max-Mart* acquired another large supermarket chain and asked *Wholeheart Bakery* if they could now supply them with 150 000 boxes of wheat flakes per week. The production manager met the board of directors and presented the following summary:

- accepting the *Max-Mart* order would mean *Wholeheart Bakery* would no longer manufacture their own *Wholeheart* brand of wheat flakes, as acquiring a new factory was not financially viable.
- there may be problems producing at full capacity at the Falconwood factory. To justify the change, profit levels should increase 30 % over present levels.

Present output and financial data

	Wholeheart wheat flakes	<i>Max-Mart</i> wheat flakes
<i>Weekly production</i>	60 000 units	60 000 units
Unit price received	\$1.30	\$1.10
Variable cost per unit	\$0.40	\$0.40

Fixed Costs of the Falconwood factory = \$56 000 per week

(This question continues on the following page)

(Question 5 continued)

- (a) (i) Showing full working, calculate the total weekly profit/loss being made by *Wholeheart Bakery* at the present levels of output. [3 marks]
- (ii) Calculate the change in profit/loss if *Wholeheart Bakery* accepts the offer to manufacture exclusively for *Max-Mart*. [1 mark]
- (iii) What price per box would *Wholeheart Bakery* need to charge *Max-Mart* to achieve the required 30 % increase in profits over present levels? Show your working. [3 marks]
- (b) To what extent should the decision to accept or reject *Max-Mart's* order be based on the financial data provided by the production manager? [6 marks]
- (c) Analyse the reasons for the growth of own brands (supermarket/private brands) and suggest how manufacturers can maintain market share. [7 marks]

6. Primature Inc

Following a 13 % increase in orders over the last six months, *Primature Inc* is considering the expansion of its production facilities. It is presently producing at 98 % of its production capacity. The production manager is examining two expansion options:

Option 1 – The construction of an extra production line in the present factory building at a cost of \$1.5m. This will increase capacity by 16 %.

Option 2 – The construction of an additional factory unit at a cost of \$3.5m. The new building could be designed to allow for cell production and just in time (JIT) management. This would cut costs and provide additional future production flexibility and human resource advantages. Capacity could be increased by a maximum of 40 %.

The recent increase in orders is as a result of improved economic conditions. However, the finance director is not convinced it is wise to invest in either option before it is clear that the increase in economic growth will be maintained. He believes unit price and revenues can be increased at current output, provided economic growth remains constant or improves. Economists differ on their forecasts for the next five years. 40 % of those asked believe that the economy will strengthen over the next five years. 30 % believe that average growth over that period will remain constant, whilst 30 % believe there will be a decline in economic growth. The production manager estimates the following profit/loss outcomes for each of these predictions:

	Option 1 (new line) \$m	Option 2 (new factory) \$m	Option 3 (no expansion, increase unit price) \$m
Economy strengthens	6	9	4
Constant economic growth	3	4	3
Declining economic growth	1	2	-1

- (a) (i) Construct a fully labelled decision tree showing *Primature Inc*'s options with the financial costs and outcomes for each option. [3 marks]
- (ii) Using your decision tree, decide which option *Primature Inc* should select on purely financial grounds. Show full working to support your choice. [4 marks]
- (b) Describe **three** benefits of using decision trees. [3 marks]
- (c) Evaluate the extent to which additional non-financial and financial factors may support, or not support, the choice of option selected for *Primature Inc* in your answer to question (a)(ii). [10 marks]