
Thursday 26 April 2007

9 to 12

PAPER 2

*Answer not more than **four** questions.*

All questions carry the same number of marks.

*The **approximate** percentage of marks allocated to each part of a question is indicated in the right margin.*

There are no attachments.

STATIONERY REQUIREMENTS

20 page answer booklet

Rough work pad

SPECIAL REQUIREMENTS

Engineering Data Book

CUED approved calculator allowed

You may not start to read the questions printed on the subsequent pages of this question paper until instructed that you may do so by the Invigilator

1 You have just been appointed the product manager in “Precision Co.”, a medium sized high-technology business developing precision instrumentation.

(a) Describe the role of a product manager in this firm and how this might differ from the product management role in other types of organization. [20%]

The product range that you have inherited includes three classes of products: “entry level”, “mid range” and “high performance”. The entry level products sell for approximately £10k, the mid-range for £25k and the high performance products for £100-250k. You have access to some key competitor information (Figure 1) and the sales (volumes and values) over the last 20 years (Figure 2) for Precision Co.

(b) Using appropriate marketing concepts, outline your assessment of the current status of these products. [35%]

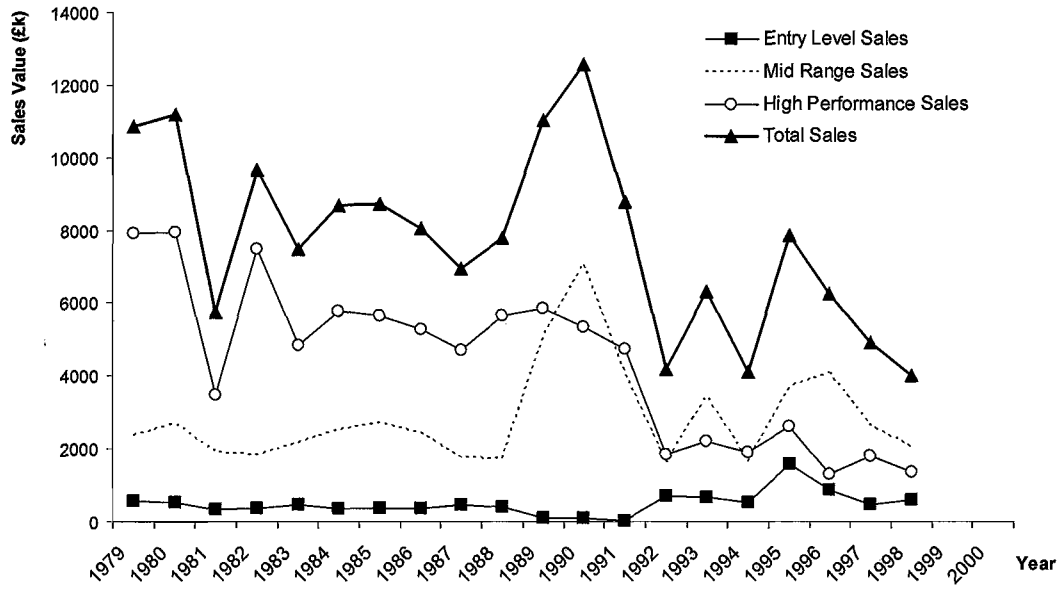
(c) Propose a marketing plan, and recommend further research necessary in order to improve sales and future profitability for this product range. [30%]

(d) Comment on the strengths and weaknesses of using product life-cycle data as a basis for your analysis.

	Entry level			Mid range			Performance		
	Average Price	Volume per annum	Typical margin	Average Price	Volume per annum	Typical margin	Average Price	Volume per annum	Typical margin
Precision Co.	£10,000	60	30%	£25,000	100	45%	£150,000	6	60%
Competitor 1	£6,000	100	40%	£20,000	80	40%	£130,000	3	50%
Competitor 2	£7,500	150	50%	£18,000	150	35%	£100,000	2	60%
Competitor 3	£12,000	30	40%	£25,000	80	50%	£200,000	15	60%
Competitor 4	£10,000	30	60%	£24,000	60	50%	£100,000	2	60%

Figure 1 – Competitor Information

Product Life-cycles - Value



Product Life-cycles - Volume

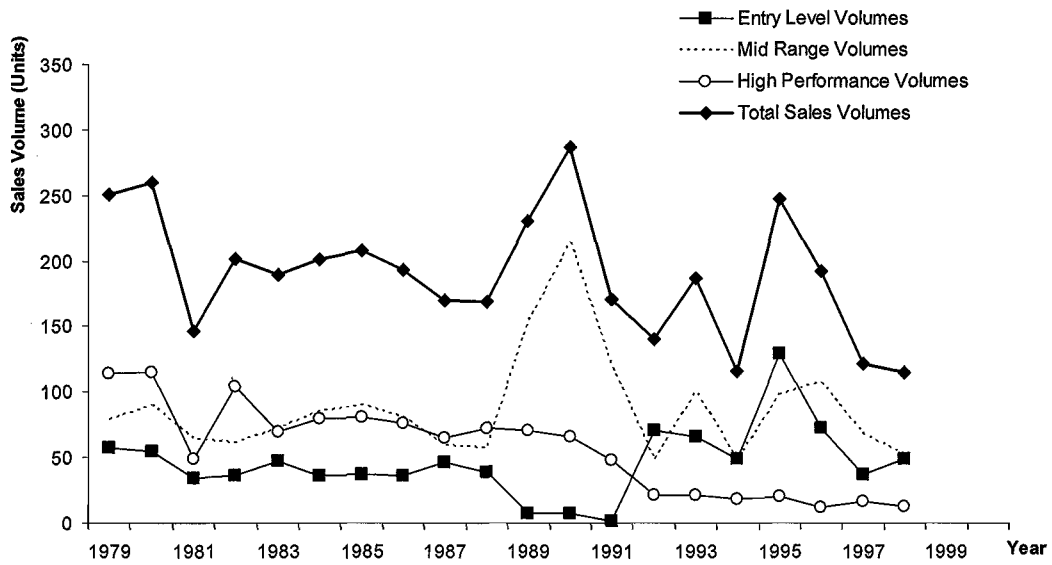


Figure 2: Product Life-cycle Information

2 An entrepreneur expressed the following view: “Start up companies flourish on change in the business environment and are continually reorganizing themselves to take advantage of it. But in established firms there is strong resistance to change, especially change imposed internally.” What evidence leads you to assent to or dispute his views? Could established firms introduce innovations more effectively by adopting practices used by new firms? [100%]

3 “Moving work offshore where labour is both abundant and low cost is a logical extension of scientific management (i.e., task decomposition), whether in the factory or the office.” Explain and assess this argument, citing case evidence to support your position. Can anything be done to mitigate stressful working conditions associated with scientific management in offshore sites of work? [100%]

4 (a) The Product Life-cycle (PLC) is a well established concept in marketing. Describe how management tools, based on this concept, might be applied to the management of a manufacturing operation. [25%]

(b) Outline how the PLC model might be linked to a firm’s decision on foreign direct investment (FDI). [25%]

(c) Describe the nature and characteristics of an international manufacturing network. [25%]

(d) Discuss the relationship between the PLC and international manufacturing networks. [25%]

5 (a) Explain what is meant by the concept of “technology management” in the context of a technology intensive business. Give a process model for technology management, discuss its relevance in operationalising this concept, and illustrate with examples. [40%]

(b) Define both disruptive and sustaining technology, and discuss what the significance of these might be for the technology strategy of a company. Give examples of disruptive and sustaining technology in the photographic industry. [30%]

(c) How might “technology intelligence” concepts be applied to anticipate the effects of disruptive technology? [30%]

6 “One of the most powerful ways of integrating information – making it more concise, comprehensive, convenient and accessible – is by using images” (Eppler).

Making use of the Eppler and Burkhard framework, or otherwise, discuss this statement in relation to the use of visualisation in the process of strategy development and implementation. [100%]

END OF PAPER