

## Case study 9: Mark scheme

Chapter 24: The role of marketing

Chapter 25: Marketing planning

### Twinkle Lights Ltd

Chen Liao has a small company selling festive lights. These are outsourced from a manufacturer in China that makes lights according to Twinkle's specifications and then packs them under the Twinkle brand. Although this has always worked well for Twinkle Lights, due to the weakness of the Chinese currency, Chen is a little worried about recent political attempts to protect the local market from cheap Chinese imports. He estimates that he has 2% of the local market, but competition is fierce. He orders once a year in order to gain purchasing economies of scale.

After a night out with friends, Chen came up with an idea for a new product: festive, cordless LED toilet seats. He is convinced that this will be a success if marketed as a premium-priced gift. He has therefore contacted his manufacturer in China and arranged for 10,000 toilet seats to be produced. He needs a loan to pay for them. One of his friends, manager of the marketing department of a big local company, has now told Chen that he should really have done some market research. He said that products resulting from market-oriented marketing have more chance of success than those resulting from product-oriented marketing. As a result of this, Chen went on the internet and looked up 'festive LED toilet seats'. He did not find any, but found other LED toilet seats. Nevertheless, he considered that his idea had a USP, so he decided to do some market research. He sent his sister to do a survey of 50 people in the local market one Thursday morning.

In the meantime, his annual order for festive lights is needed. He looks at the sales for the last three years in order to estimate what his needs may be for the coming year. Sales of lights have increased every year but he finds it hard to anticipate possible demand. The problem is that if he orders too many they may have to be in stock for long periods and sometimes they deteriorate. If he orders too few he may miss potential sales. He has therefore collected sales data for the last four years in order to help him to do a quantitative forecast.

#### Quarterly sales of Twinkle Lights 2007–2010

| Year | Quarter | Sales \$000 |
|------|---------|-------------|
| 2007 | 1       | 20          |
|      | 2       | 120         |
|      | 3       | 800         |
|      | 4       | 150         |
| 2008 | 1       | 27          |
|      | 2       | 127         |
|      | 3       | 850         |
|      | 4       | 158         |

|             |   |     |
|-------------|---|-----|
| <b>2009</b> | 1 | 32  |
|             | 2 | 132 |
|             | 3 | 900 |
|             | 4 | 160 |
| <b>2010</b> | 1 | 33  |
|             | 2 | 134 |
|             | 3 | 950 |
|             | 4 | 165 |

**SL questions: 20 marks, 35 minutes**

- 1** Define the term ‘purchasing economy of scale’. **(2)**

This is a saving made on the price of goods when bulk orders are made. This may be to persuade customers to buy bigger quantities. It reflects the fact that a large order often only needs the same processing cost as a smaller order, and so this saving can be passed on to the customer as an incentive to buy.

Apply **Resources table 3a** mark band descriptors.

- 2** Calculate the size of the local festive lights market. **(4)**

$$\begin{aligned}
 \text{Market size} &= \frac{(\text{total of 2010 sales} \times 100)}{2} \times 1000 \\
 &= \frac{(33 + 134 + 950 + 165 \times 100)}{2} \times 1000 \\
 &= £64,100,000
 \end{aligned}$$

**4 marks:**

A totally correct answer.

**3 marks:**

One minor error.

**2 marks:**

Two minor errors.

**1 mark:**

A good attempt made, but with several mistakes.

**0 marks:**

A poor attempt.

- 3 Comment on the weaknesses of Chen's market survey. (5)
- A sample of 50 people is probably unrepresentative as a sample of the market.
  - Sampling on a Thursday morning would probably only include retirees, jobless people, mothers/fathers with children or housewives/husbands. This would probably not reflect Chen's target market for a premium-priced gift item.
  - There is no indication of what sampling method his sister used when she was in the market.
  - A market is probably an unsuitable place to find people who would want to buy a premium-priced product.

SL: apply **Resources table 1** mark band descriptors.

- 4 What is meant by 'product- oriented marketing'? (2)
- This is based on selling products the business develops rather than products developed to fill an identified consumer market.

Apply **Resources table 3a** mark band descriptors.

- 5 Evaluate Chen's new product, taking account of internal and external factors. (7)
- Internal strengths:
- already established business in a similar festive items market
  - solid, ongoing relations already in existence with suppliers and distribution chains.
- Internal weaknesses:
- no experience of or contacts in the gift market
  - a loan is needed to pay for the 10,000 toilet seats, or Chen could find himself facing liquidity problems
  - little marketing knowledge or experience, except with festive lights.
  - existing distribution chains for lights may not be the same as those needed for toilet seats
  - Chen has ordered 10,000 toilet seats with no fully identified market or distribution chain.
- External opportunities:
- success in a lateral opportunity like this could give experience and contacts for the development and marketing of other new products
  - no identified current competitors
  - if all goes well locally, Chen could expand to other countries.

External threats:

- politicians are trying to protect local markets from Chinese imports – could seriously disrupt Chen’s supplies if trade tariffs or quotas are introduced or if the Chinese currency is forced to revalue upwards
- if the Chinese currency is forced to revalue, Chen’s imports could be more expensive and his profit margins could be under pressure
- may be significant competition if the idea is seen as a good one – many other companies who make similar products could easily make festive versions.

SL: apply **Resources table 1** mark band descriptors.

A justified conclusion is required.

### HL questions: 25 marks, 45 minutes

Graph paper is needed.

**1** Explain what a USP is. **(2)**

This is a unique selling point. It is a special feature of a product or service which gives it an advantage in the market.

Apply **Resources table 3a** mark band descriptors.

**2** Calculate the size of the local festive lights market. **(4)**

$$\begin{aligned}
 \text{Market size} &= \frac{(\text{total of 2010 sales} \times 100)}{2} \times 1000 \\
 &= \frac{(33 + 134 + 950 + 165 \times 100)}{2} \times 1000 \\
 &= £64,100,000
 \end{aligned}$$

**4 marks:**

A totally correct answer.

**3 marks:**

One minor error.

**2 marks:**

Two minor errors.

**1 mark:**

A good attempt made, but with several mistakes.

**0 marks:**

A poor attempt.

- 3 Calculate the 8-point seasonal average sales and seasonal variation for sales of Twinkle lights.  
(9)

\$000

| Year | Qtr | Sales<br>(s) | 4-point<br>average | 8-point average<br>(e) | Seasonal<br>variation<br>(s – e) | Average<br>seasonal<br>variation* |
|------|-----|--------------|--------------------|------------------------|----------------------------------|-----------------------------------|
| 2007 | 1   | 20           |                    |                        |                                  |                                   |
|      | 2   | 120          |                    |                        |                                  |                                   |
|      | 3   | 800          |                    | 273.375                | 526.625                          | 559.8                             |
|      | 4   | 150          | 272.5              | 275.125                | (101.50)                         | (127.5)                           |
| 2008 | 1   | 27           | 274.25             | 282.25                 | (255.25)                         | (267.5)                           |
|      | 2   | 127          | 276                | 289.5                  | (162.5)                          | (174)                             |
|      | 3   | 850          | 288.5              | 291.125                | 558.875                          | 559.8                             |
|      | 4   | 158          | 290.5              | 292.375                | (134.375)                        | (127.5)                           |
| 2009 | 1   | 32           | 291.75             | 299.25                 | (267.25)                         | (267.5)                           |
|      | 2   | 132          | 293                | 305.75                 | (173.75)                         | (174)                             |
|      | 3   | 900          | 305.5              | 306.125                | 593.875                          | 559.8                             |
|      | 4   | 160          | 306                | 306.5                  | (146.5)                          | (127.5)                           |
| 2010 | 1   | 33           | 306.25             | 313                    | (280)                            | (267.5)                           |
|      | 2   | 134          | 306.75             | 319.875                | (185.875)                        | (174)                             |
|      | 3   | 950          | 319.25             |                        |                                  |                                   |
|      | 4   | 165          | 320.50             |                        |                                  |                                   |

\* average of seasonal variations for all quarters for which it has been calculated

**7–8 marks:**

A totally correct answer, well presented and using a clear format.

**5–6 marks:**

Is mostly accurate and includes no more than two mistakes. May not be well presented.

**4–5 marks:**

A simplistic answer with up to four mistakes.

**2–3 marks:**

An attempt that may not go beyond the first 4-point moving average.

**1 mark:**

An attempt which may lack logic but reflects some idea of the concepts behind moving averages.

**0 marks:**

An answer with little basis in moving averages theory or calculation.

- 4 Graph the results from question 2 and use this to estimate the first quarter sales for 2011.

**(6)**

**5–6 marks:**

A fully labelled graph which is accurately drawn and extrapolated to produce an estimate of quarterly moving average sales. The average seasonal variation (negative \$267.5k) is then taken away from the answer in a clear and logical calculation to produce an estimate of Q1 2011 sales.

**3–4 marks:**

There may be up to two minor errors within the graph, but the calculation to estimate Q1 2011 sales is clear and correct.

**1–2 marks:**

A graph and calculation have been attempted but they may include several mistakes.

- 5 Explain **two** reasons why ordering 10,000 festive LED toilet seats may not have been a good business decision. **(4)**

- The order was made without any market survey, so is really nothing more than a wild guess.
- This is a market with few barriers to entry and so placing a large order when there are already potential competitors is a significant financial risk.
- The order will need to be paid for and no finance is in place to do this – this could result in a liquidity crisis and possible bankruptcy.
- No full marketing audit or plan on which to base the order has been made.
- Any other relevant and supported point.

Apply **Resources table 3b** mark band descriptors.