



## 1 Super Heroes (SH)

SH is a leisure (theme) park aimed at 10–18 year olds. It is owned by two companies, X and Y, which started SH as a joint venture. Company X owns many leisure centres and swimming pools. Company Y owns many brands based on superheroes.

SH employs 200 full-time workers and an extra 50 seasonal workers during the busiest times of the year. The park has 10 large rides which take up 2 km<sup>2</sup> of land. There are also many smaller rides, restaurants, toilets and shops. The price of an entrance ticket is \$11 per customer. Table 1.1 shows the costs for SH in 2019.

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**Table 1.1: SH costs for 2019**

Total fixed costs (per year)	\$12m
Variable costs (per customer)	\$3
Total costs	\$42m

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One of the larger rides at SH is the Iron Blaster. The number of customers who use this ride has decreased each year for the last three years. This has led the management of SH to consider its options for internal growth.

### *Option 1 – A new virtual reality (VR) ride*

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This option would involve developing the Iron Blaster into a VR ride. Most of the structure of the Iron Blaster could be used but customers would be given a VR headset to wear during the ride. The cost of developing the VR ride would be \$2m. The Iron Blaster ride would be closed for a three month period during the off-peak season for the development to be carried out. No employees would be made redundant or dismissed.

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### *Option 2 – A new hotel*

SH does not currently have a hotel. It could demolish the Iron Blaster to provide the space to build one. Many of the competitors of SH have a hotel near or within their leisure parks. Hotel customers would pay a high price for a room but have free access to the leisure park's facilities. Market research suggests that the average hotel customer would spend twice as long in the leisure park than a non-hotel customer. The cost of developing the hotel would be \$15m and take a year to build. All of the employees currently working on the Iron Blaster ride would face redundancy or dismissal.

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- (a) (i) Define the term 'joint venture' (line 2). [2]
- (ii) Explain the difference between 'redundancy' and 'dismissal' (line 28). [3]
- (b) (i) Refer to Table 1.1 and any other information. Calculate the total revenue from entrance tickets for SH in 2019. [4]
- (ii) Explain **one** way in which SH could increase the sales of entrance tickets. [2]
- (c) Analyse **two** factors that may have determined the location of SH. [8]
- (d) Recommend which one of the two options SH should choose for internal growth. Justify your recommendation. [11]

## 2 Flight Food (FF)

FF is a large secondary sector business that supplies airlines with in-flight meals. Meals are manufactured using batch production. A different variety of meal is made each hour with a five minute changeover time between batches. FF makes use of Just in Time (JIT) to manage inventory wherever possible. Trucks arrive each hour and deliver the materials needed for production. 5

The market for airline meals is very competitive. FF uses market segmentation when deciding which meals are most likely to appeal to different airlines. FF must adapt to changes in tastes and the demands of each airline.

FF is a labour intensive business. The workers are employed with short-term (six month) employment contracts. They are only offered new contracts if they meet their production targets. Table 2.1 shows some production data for FF's two work teams. 10

**Table 2.1: Worker data for FF**

	<b>Team A</b>	<b>Team B</b>
Number of workers	100	50
Productivity (per worker per day)	300 meals	240 meals

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The Board of Directors of FF is considering changing the manufacturing process to flow production. This would require purchasing Computer Aided Manufacturing (CAM) equipment and using a capital intensive production process. Production targets would no longer be used for employees because the machinery would be set at a specific production rate. 20

Sabrina, the Operations Director, has put forward the following advantages for moving to flow production:

- more products made each hour
- lower employment costs
- improved quality.

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Ben, the Human Resource Director, is worried about the change from a labour intensive process to a capital intensive process.

(a) (i) Define the term 'secondary sector' (line 1). [2]

(ii) Explain the term 'market segmentation' (line 6). [3]

(b) (i) Refer to Table 2.1. Calculate the total number of meals per day produced by both teams. [2]

(ii) Explain **two** ways in which FF may be affected by the lower productivity of employees working in Team B. [4]

(c) Analyse **two** possible disadvantages for FF of using Just in Time (JIT) to manage inventory. [8]

(d) Evaluate the possible effects on FF of a change from a labour intensive process to a capital intensive process. [11]

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