



Revisionstation

CU

Capacity Utilisation



Tricky Topics
REVISIONSTATION

Answers



Answers to example calculations on page 2

Current Output	Maximum Possible Output	Capacity utilisation
8,000 units per week	10,000 units per week	80%
247,544 cars per year	450,000 cars per year	55.01%
2,000 tickets sold	3,000 stadium seats	66.67%
15,000 units per year	12,000 units per year	125%

Answer to practice question 1 Hydroboat Page 5

- **Use the capacity utilisation formula:**
- **Current output / Maximum possible output x 100**
- **$250 / 400 \times 100 = 62.5\%$ capacity**

Answer to practice question 2 Midic on Page 6

Ways that Midic can increase their capacity utilisation above 100%

- **Increase hours of workforce with potential for overtime**
- **Outsource out part of the medical supplies manufacturing**
- **Reallocate workers in from other areas, for example other subsidiaries of the business**



Answer to practice question 3 DuNoodle on Page 7

Benefits of operating at 70% capacity

- **Not-over stretched so customers are happy – possible impact here on TripAdvisor reviews and reputation**
- **Spare capacity to accommodate diners who have walked-in and not booked**
- **Good customer service, important in the food industry**

Drawbacks of operating at 70% capacity

- **Waiting staff standing around not working**
- **Possible impact on costs and profits**
- **Lack of economies of scale**

Answer to practice question 4 Bonity on Page 8

- **Business needs to balance the increased uses of resources with the impact on staff morale and motivation**
- **May also have an impact on customer satisfaction, unhappy parents tell all their friends**
- **Some health and safety implications for example staff to children ratios**
- **Disagrees with Elton Mayo (Human Relations) who said that workers need to feel involved and appreciated**



Answer to practice question 5 Jamba on Page 9

Benefits of working at working below 100% capacity

- **Time to maintain the machines, for example the orange press or the smoothie making machines. Food goes off so will need to be regularly cleaned.**
- **Possible quality issues if they increase capacity as there will be less time to clean and maintain the equipment. This may lead to poor quality smoothies and some customers may cancel their orders.**
- **More time for staff training on the machinery**
- **Less stress on staff, working at 100% or over can cause staff to become stressed and unhappy. This increases staff turnover and absenteeism rates.**

Drawbacks of working below 100% capacity

- **Average unit costs are higher, per carton of smoothie made**
- **Staff less secure, worried about their jobs if they think that they could be producing more smoothies than they currently are**
- **Loss of revenue and profit from lower sales**

Answer to practice question 6 Bowling Page 10

The bowling alley needs to smooth out the peaks and troughs in their demand. They could charge higher prices at peak times to put off walk in customers. They could also go to a reservation only system, possibly with a booking system on their website. They could develop a booking app for customers to download on their phones. This way they would know how many booked lanes for bowling they would need too reserve. The bowling alley should use the marketing mix to help their resource planning. They could use promotions at off peak times and increase their overall capacity.

There is also a possible argument that instead of raising prices that the bowling alley creates different time slots for targeted segments e.g. family time, 18+ bowling, night bowling etc.



Answer to practice question 7 Transose Page 11

- **Use the capacity utilisation formula:**
- **Current output / Maximum possible output x 100**
- **35500 / 46500 x 100 = 76.34%**

Answer to practice question 8 Trufy Page 12

According to the “global pottery industry reports” the capacity utilisation in the pottery industry is only 78% falling. This means that demand is falling for pottery items in the UK and in international markets. As a result sales are also falling, and this will be having a negative impact on the profit of companies operating in that industry. However, just because the industry capacity utilisation is falling does not necessarily mean this is true for Trufy.

Trufy is considering lowering the prices to stimulate demand. This may work in the short-term, but in the long term demand will fall again. It depends if Trufy can afford the loss of profits and how elastic demand is for the products that Trufy makes. There may also be an impact on brand image if the prices are cut.

There is a possible argument that if demand in the whole industry is falling then Trufy should raise their prices to continue to make a profit. To lower them would leave them open to the risk of not making enough profit to survive.



Answer to practice question 9 The Bees on Page 13

It would appear from the information in the question that demand for the Bees tickets is inelastic so they would be able to raise their prices and it not have an impact on ticket sales. They currently operate at 100% capacity utilisation. They would need to calculate if they dropped to 90% capacity utilisation but with higher prices what impact this would have on revenue. This would depend how loyal the fans are and the availability of substitutes such as other rugby matches on at nearby venues.

Answer to practice question 10 Scnadi Tents on Page 14

	Q1	Q2	Q3	Q4
Current output	40 parties	30 parties	50 parties	60 parties
Maximum output	210 parties	210 parties	210 parties	210 parties
Capacity Utilisation	19.05%	14.29%	23.81%	28.57%