Capacity Utilization

Unit 4 – Operations

What is business Operations?

- Operations refers to core activities of any business.
- For example in the case of bank it would be to provide financial services to its customers like lending money etc.
- Similarly the core activities of a school is to provide educational services to students.
- For any manufacturing business the operations will comprise of production of the product that the business produces.

Capacity Utilization

- Capacity refers to the maximum level of output that a business can produce at certain point in time.

- Capacity utilization is the percentage of capacity that is currently being used by the business.

Capacity Utilization = Current Level of Output / Capacity * 100

Excess Capacity versus Shortage of Capacity

- Excess Capacity or Spare Capacity is when a business is operating / producing less than its maximum capacity.

Excess Capacity = Maximum Capacity – Current Level of Output

- Shortage of Capacity is when the market demand of your product is higher than the prevailing business capacity.

Shortage of Capacity = Current Level of Demand – Maximum Capacity

Why is Excess Capacity / Spare Capacity a problem?

- It is a problem for the business to have excess capacity because some of business expenses are fixed which means that these expenses need to be paid regardless of the level of output produced by the business like rent, electricity, wages.

- With lower capacity the business could have saved these expenses so it is not rational for the business to have excess capacity.

Why is Shortage of Capacity a problem for the business?

- Shortage of capacity is when market demand for the product is higher than the maximum level of output that the business can produce so technically you are giving up on the opportunity to produce more.

Solutions for Excess Capacity

1. To take production contracts from other businesses to ensure that business is producing on maximum capacity.
2. To produce to your own products and stock up.
3. To explore other markets where the business can sell the additional output.
4. Rationalization is when a business gets rid of its excess factory by moving to a smaller premises, laying off extra workers, etc etc.

Rationalization

- Pros:

1. However it will help you to cut fixed cost which will increase business efficiency.
2. This can be a good idea if none of the other solutions are working or if the decrease in demand is permanent.

- Cons:

1. It is not a recommended strategy unless businesses are sure that this reduction in product demand is permanent.

Explore Other / Foreign Markets

- Pros:

1. This is a good strategy to expand the business by relying on alternate markets apart from your main markets.

Cons:

1. It can be difficult since the company does not know much about the foreign markets, consumers’ tastes etc and so on.

To produce now and stock up for sale in

future

- PROS:

1. It will help business earn higher profits in future when you sell this stock. Moreover, it can also be a competitive advantage for the business if their competitor do not have their products stocked up for later use.

2. Relatively higher profit margins compared to if this capacity would have been used for producing your competitors’ products. Cons:

1. What if the demand for your product does not increase as much as you expected it to be. Hence it would result in wastage of resources including the cost of manufacturing and storage cost and so on.

To take Production Contracts from Competitors

Pros:

1. The business gets to earn some return on its excess capacity which could have gone to waste otherwise.

2. The machinery will be operational and so will not get damaged due to staying idle.

Cons:

1. It can be problematic for the business because you are helping your competitors get ahead of you. Your competitor can capture a bigger

market share which will be difficult for you to regain later on.

Solutions for Shortage of Capacity

1. The business can outsource its production activities.
2. To expand your production facilities
3. To cut on production of products that have low demand.

Outsourcing your production activities

- Pros:

1. The company can at least try to have its demand met by engaging in practical solution.

2. The outsourcing company can make higher revenue compared to if they would have waited to increase their capacity through establishment of their own production plant.

- Cons:

1. It might be a challenge to supervise the quality of the products produced by another business.
2. The production orders might miss deadlines and therefore late deliveries can affect your brand name.
3. The profit margins in this case are lower compared to if the company would have produced the product on its own.

To expand your production facility

- Pros:

1. The business can control the quality of its products and so it would not need to worry about the quality standards like in the case of outsourcing.
2. The increase in capacity will be permanent and so the business can expect to meet even further increase in demand for its products in future.

- Cons:

1. It will take longer for the business to establish / expand on its production process. It can take between few months to few years.
2. Will require huge amount of investment.

To cut production of products that have low demand

- Pros:

1. This can be quickly implemented without any major investment unlike the expansion of production facility.
2. The additional demand can be met early on as compared to if the business would have waited for its production plant to be ready.

Cons:

1. The product for which the production is being cut will result in reduced revenue for the business.
2. This is not a permanent solution as expansion of production facility can be.