## Service Marketing: A practical approach Prof. Dr. Biplab Datta Vinod Gupta School of Management Indian Institute of Technology-Kharagpur

# Lecture-26 Managing Demand and Capacity-II

Hi there, welcome to this session on services marketing with a practical approach.

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Lesson 26 Managing Demand and Capacity - II

Yield Management

Waiting Line Strategies

Then now discuss lesson 26 that is managing demand and capacity part II. This consist of yield management and waiting line strategies.

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### Yield Management

As you might have understood by now, there can be demand-capacity mismatches faced by a service business. One way to balance capacity utilisation, pricing, market segmentation and financial returns is yield or revenue management. This method tries to maximise the yield, where

Yield = Actual revenue/Potential revenue

The potential revenue is the product of full capacity and the maximum price that can be charged per unit capacity. However, the actual revenue is the product of the actual capacity that could be rented out a certain price(s).

This concept can be clarified with the following example:

As you might have understood by now, there can be demand-capacity mismatches faced by a service business. One way to balance capacity utilisation, pricing, market segmentation and

financial returns is yield or revenue management. This method tries to maximise the yield, where yield is equal to actual revenue by potential revenue. The potential revenue is the product of full capacity and the maximum price that can be charged per unit capacity.

However, the actual revenue is the product of the actual capacity that could be rented out a certain prices. The concept can be clarified with the following example.

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#### Yield Management

#### Example:

Consider a movie theatre with 250 seats, where one seat can be sold at a maximum price of INR 200.

However, when the theatre tries to sell the seats at INR 200 each, only 100 seats get sold while the rest of seats remain unsold. In this case, Yield = Actual revenue/Potential revenue = 100 x 200 / 250 x 200 = 40%

Now, the theatre finds out that it can sell all its seats at INR 70. In that case, Yield =  $250 \times 75 / 250 \times 200 = 37.5\%$ 

Now let us try to sell 100 seats at Rs. 200 each and the remaining 150 seats at a discounted rate of INR 75 per seat. In that case, Yield =  $(100 \times 200 + 150 \times 75) / 250 \times 200 = 62.5\%$ 

You can now understand how the yield could be increased beyond 40% letting some seats out at the maximum price and some other seats discounted price to a segment of customers who were unwilling to p maximum price of a seat. In this way, the application of yield mana concept allows us to balance the capacity utilisation, price, segmentation the yield from the service business.

So consider a movie theatre with 250 seats, where one seat can be sold at a maximum price of 200 INR. However, when the theatre tries to sell the seats at Rs. 200 each, only 100 seats get sold while the rest of the seats remain unsold. In this case, yield equal to actual revenue by potential revenue that is 100 multiples by 200 by 250 into 200 that is 40%. Now the theatre finds out that it can sell all its seats at INR 75 in that case yield would be 250 into 75 by 250 into 200 that is 37.5%.

Now let us try to sell 100 seats at Rs. 200 each and the remaining 150 seats at a discounted rate of INR 75 per seat. In that case yield is 100 into 200 plus 150 into 75 divided by 250 into 200 is equal to 62.5%. You can now understand how the yield could be increased beyond 40% by letting some seats out at the maximum price and some other seats at a discounted price to a segment of customers who were unwilling to pay the maximum price of a seat.

In this way the application of yield management concept allows us to balance the capacity utilisation, price, segmentation, and the yield from the service business.

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Waiting Line Strategies

Bielen and Demoulin wrote in 2007 that customers are dissatisfied when they have to wait for service delivery, Moreover, your business may lose customer if their wait becomes long and intolerable. You can use four strategies when you have to deal with customer waiting. These strategies are discussed in the

following paragraphs.

Employ Operational Logic

If customer waits are common, the first step is to analyse whether the operational logic of the service system is making customers wait more than necessary. For instance, Zeithaml and colleagues have written in their book entitled "Services Marketing" that when a bank found that its customers long

queues, it developed a computer-based customer information system to allow tellers to answer questions more quickly, implemented an electronic queuing system, hired "peak time" tellers, expanded its hours and provided customers

with alternative delivery channels.

When queuing is inevitable 3 types of waiting line configurations can be used

as depicted in Figure 18.1 below.

Now coming to waiting line strategies. Bielen and Demoulin wrote in 2007 that customers

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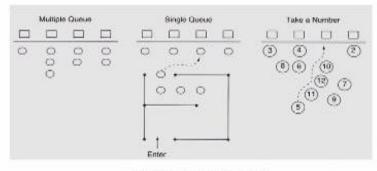
customer information system to allow tellers to answer questions more quickly.

Implemented an electronic queuing system, hired peak time tellers, expanded its hours and

provided customers with alternative delivery channels. When queuing is inevitable 3 types of

waiting line configurations can be used as depicted in figure here.

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Waiting Line Configurations

Source: J. A. Fitzsimmons and M. J. Fitasimmons, Service Management, 5th ed. (New York: Irwin/McGraw-Hill, 2006)

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So there is multiple queues, single queue and take a number. So in multiple queues there are multiple servers and multiple queues are found to reach a particular server. Again multiple queues when a single queue can be found and then this person at the single queue can move to any of the servers who are not serving at that point of time. Take a number, here the people come and take a number from an automatic number discharging box.

And they wait for their number to be flash and then they reach in a particular server. So this calls the take a number. So there are 3 waiting line configurations.

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Research by Zhou and Soman published in 2003 suggests that the probability of a customer continuing to wait in a queue varies directly as the length of the queue behind that customer.

#### Employ a Reservation Process

You might already be knowing about a reservation process in a train for instance. When a service provider has a doubt that a flight will have to leave with less than full capacity due to last minute cancellations or no show, they can resort to overbooking. In case of overbooking, the overbooked passenger knows is overbook status and can be paid a compensation if the s(he) cannot be provided a seat in the flight.

Differentiate waiting customers: The usual "queue discipline" is first come, first served. However, some customers can be served before others using different modes of differentiation. These include:

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In case of overbooking, the overbooked passenger knows the overbook status and can be paid a compensation if the he or she cannot be provided a seat in the flight. Differentiate waiting customer: The usual queue discipline is first come, first served. However, some customers can be served before others using different modes of differentiation. These include importance of the customer.

Customers who do more business with the service provider are more important to the business and can be served using a different queue. Urgent of the job: Emergency patients get attention before others do. Duration of the service transactions: Relatively shorter transactions are served before longer ones. Premium price: Customers willing to pay premium price are served before other.

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Make waiting pleasurable or at least tolerable: In 1985 David Maister wrote a classic article entitled the "They Psychology of Waiting Lines" which proposed several principles about waiting, each of which has implications for how organisations can make waiting more pleasurable or at least tolerable.

The principles are as follows:

- Unoccupied time feels longer than occupied time, so involve customers in co-creating the service while waiting
- Pre-process waits feel longer that in process waits
- Remove customer worries like whether the other line is going to move faster.
- Uncertain waits are longer than know finite waits. When customers do not know how long they have to wait, they are more anxiety and dissatisfied as compared to when they know the length of time they have to wait.
- · Unexplained waits are longer than explained waits
- Unfair waits are longer than equitable waits
- The more valuable the service, longer the customer is willing to wait
- · Solo waits feel longer than group waits

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Pre-process waits feels longer than in process waits. Remove customer worried like whether the other line is going to move faster. Uncertain waits are longer than know finite waits. When customers do not know how long they have to wait, they are more anxious and dissatisfied as compared to when they know the length of time they have to wait. Unexplained waits are longer than waits. Unfair waits are longer than equitable waits. The more valuable the service, longer the customer is willing to wait. Solo waits feel longer than group waits.

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We have discussed strategies for matching supply and demand and the concept of yield management. We have also discussed various waiting line strategies, including the principles of making waiting pleasurable or at least tolerable. In the next lesson we will discuss the 5th P related to service delivery, i.e. the management of the physical evidence related with services.

We have discussed strategies for matching supply and demand and the concept of yield management. We have also discussed various waiting line strategies, including the principles of making waiting pleasurable or at least tolerable. In the next lesson we will discuss the 5<sup>th</sup> P related to service delivery. That is the management of the physical evidence related with services. Thank you for listening this lesson. I hope it helps. Thank you.