UNIT 9 MANAGING DEMAND AND CAPACITY

Objectives

After studying this unit, you should be able to

- Explain the importance of managing demand and capacity for service organizations.
- Identify the demand patterns and their underlying reasons.
- Develop strategies for matching demand and capacity.
- Understand the concept of yield management.
- Provide strategies for managing customer waiting.

Structure

9.1 INTRODUCTION

In the first unit of this course you have studied the characteristics of services which distinguish them from goods. One of the characteristics is perishablity which means that services cannot be saved or stored. While marketers of physical goods hold inventories to buffer fluctuations in demand and supply, it is difficult or impossible for services marketers to do so. Therefore, many service businesses frequently find it difficult to match supply (capacity) and demand. At times there may be too much of demand (movie halls or restaurants on weekend evenings) and sometimes too little demand may exist (low weekend occupancies in business hotels). However, a theater owner or a restaurant cannot take an empty seat from Thursday night and add it to the capacity on Friday or Saturday night. A low occupation for a business hotel on weekends is an irretrievable loss. Similarly a hospital bed or an airline seat left vacant is a loss for ever. Inability to synchronize supply and demand has a significant impact on the service organization's bottom line through lost opportunity (when demand is greater than capacity) and through high costs (when demand is low in relation to fixed capacity resulting in under utilization of capacity)

Zeithaml, Parasuraman and Berry conducted an exhaustive survey in U.S.A (in 1980's) covering 1,000 service firms to find out the extent to which problems reported to be associated with services actually presented problems for the sample firms. Out of the eight commonly cited difficulties unique to services, only one problem area – 'The demand for services fluctuates' - received a mean score exceeding the mid-point on the 5 point scale (1 indicating no problem at all to 5 indicating a major problem). This problem received a score of 3.27 and another important finding was the absence of any significant difference across different types of services firms with regard to this problem.

Perception of demand fluctuation as a somewhat serious problem appeared to be universal. A similar study conducted in India in 1996-97 with reference to passenger airline industry covering more than a dozen airlines operating in India revealed similar results. The problem area that the demand fluctuates, received a mean score of 3.66 with 60 percent of the airlines indicating a score of 4 to 5. The next highest score was 2.94 with regard to problem area that service quality is difficult to control.

In this unit we will discuss various issued related to managing demand/capacity (supply) imbalances.

Activity 1

Compare a service organization with a manufacturing firm in terms of inventory capacity (e.g. car repair and maintenance service with an automobile manufacturer). Can you identify the implications for the service organization?

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9.2 UNDERSTANDING DEMAND PATTERNS

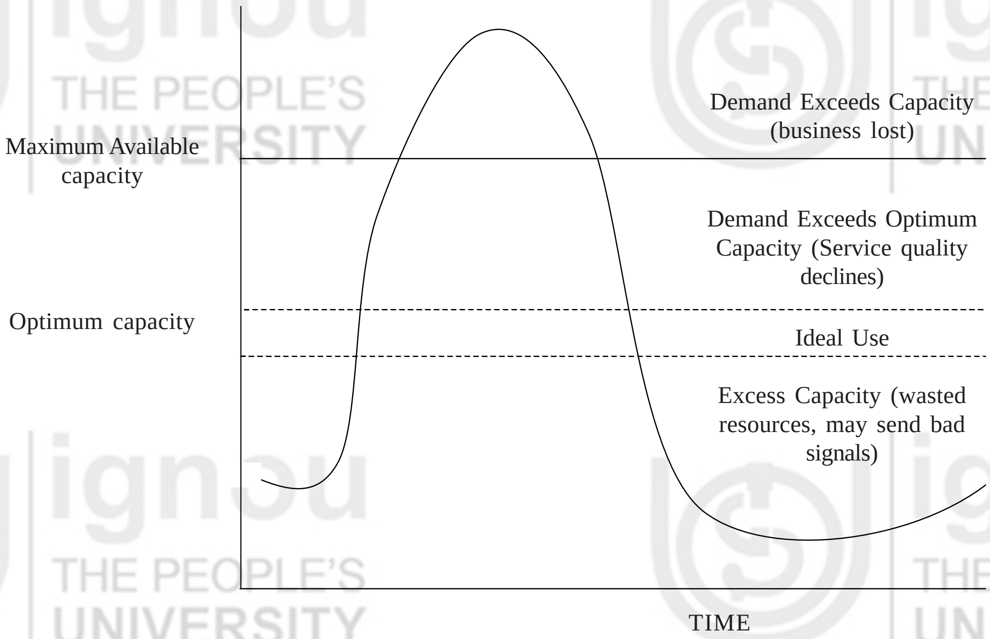
A service organization with a fixed capacity may be faced with one of the following four conditions:

1. **Excess demand:** The demand exceeds the maximum available capacity. This results in some customers being turned away. Also, even for the customers receiving the service, the quality of service may get affected (refer service delivery gap in the gaps model discussed in the previous unit). This may happen because of overcrowding and/or overstretching of resources.
2. **Demand exceeds the optimum capacity level**: Optimum capacity refers to the best use of capacity from the perspective of both, customers and the company. In most of the cases it is less than the maximum capacity. For example, in the counseling session at your study centre, while the maximum capacity of the rooms may be 60-70, the optimum capacity for conducting the session may be 30-40 only for ensuring proper interaction. In the situation when demand exceeds optimum capacity, while no one is turned away, customers may perceive deterioration in the quality of service delivered.
3. **Demand and supply are balanced at the optimum capacity**: This is the ideal situation. No one is turned away, no one is overworked in the staff and customers receives quality service.
4. **Excess capacity** : Demand is less than optimum capacity and therefore resources are underutilized. In certain cases this may also pose the risk that customers may have doubts about the service provider.

All the above four possibilities have been given in Fig. 9.1. The capacity of the service organization includes physical facilities, equipments and human resources.

The first step in finding out ways to manage demand and capacity is to understand the demand patterns and the factors which affect it. Better knowledge of demand patterns leads to better managerial decision making. The demand patterns may have a regular and predictable cycle or in some cases it may be largely random in nature and difficult to predict.

Fig 9.1: Implications of Cyclical Variations in Demand Relative to Capacity



(*Source:* Christopher Lovelock, Managing Services- Marketing Operations and Human Resources, 2nd Edn. Prentice Hall, p.155)

a) **Predictable Demand Variations:** Many businesses are subject to periodic cycles. These cycles may be daily (variations by hour), weekly (variation by day), monthly, seasonal and/or yearly. Try to identify services which may exhibit these types of predictable demand variations. For example, in case of a hotel there may be variation in demand on different days with business travelers going back on weekends, thereby reducing the demand. A hotel may also witness seasonal variation with high demand during a particular season due to large inflow of tourists. A restaurant faces hourly variations with low demand during 3.00 – 7.00 pm. (happy hours being offered by many restaurants during these times, with large price discounts). Amusement parks have greater demand during weekends as compared to weekdays and also greater demand is witnessed during school vacations.

As marketers you must find out if such predictable cycles exist in your business. If it is so, then you must find out and analyze the causes of these cyclical demand variations. Do these happen because of seasonal change, employment schedule, salary dates, school vacations, public or regional holidays etc? A proper analysis of these causes will help you in devising suitable strategy for managing the demand fluctuations.

b) **Random Demand Fluctuations:** At times the demand pattern may appear to be random with no apparently predictable cycle. Some degree of random variation in demand is faced by virtually all service firms. Although such variations cannot be predicted, marketers should nevertheless understand the underlying causes that typically cause them. For example bad weather may result in an unexpectedly low customer turnout at a movie hall or an amusement park. A disaster like accident, floods etc. may result in higher demand for health services and telecommunication services. A proper understanding of the underlying causes will prepare you to deal with such random demand fluctuations.

In order to understand the demand patterns and underlying causes, it may be useful to do a segmentation analysis. Different segments of customers may reveal different patterns as well as causes. Such an analysis will help you in pinpointing underlying causes of demand fluctuations and in identifying certain peaks of specific customer categories. This may help you in identifying certain segments which could be easily diverted to off-peak periods. You may also discourage segments that are not profitable or are inconsistent with the service image, at least during peak periods.

Once you properly understand the above issues you can suitably device strategies for matching demand and capacity.

Activity 2

Select a restaurant in your neighborhood and find out its demand patterns and also identify the underlying reasons.

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9.3 STRATEGIES FOR MATCHING CAPACITY AND DEMAND

Managers can use a wide variety of strategies for matching capacity and demand. This requires a clear understanding of demand patterns as well as the organization’s capacity constraints. The strategies to be adopted can be broadly divided into two categories :

1) Changing demand to fit supply (capacity) – marketing mix strategies
2) Changing supply (capacity) to fit demand – input scheduling strategies

Let us discuss the above two strategies in detail.

1) Strategies for Managing Demand

The organization should determine the optimum level of demand for its given capacity. Once this has been determined, it can vary its marketing mix elements of product, price, place and promotion to change demand in line with the capacity.

a) **Product:** As a service provider you can alter the service offering to even the demand. The changes in service offering may be seasonal or based on days of the week or time of the day depending on the nature of demand fluctuations. A hotel for example may focus on weekend family entertainment and recreation package to cope up with low demand from business executives during weekends. A management institute may offer more management development programmes during the vacation period of its regular management programme students. However, as marketers you must ensure that by offering different types of services the image or positioning of the service firm is not diluted or confused. Increasing demand during slack period doesn’t mean that you should take business from any segment that is available.

b) **Pricing:** The demand curve suggests that quantity of product demanded varies with the price. Many service marketers reduce price during the periods of low demand to increase the demand. Airlines offer low fares during odd hours like late night flights, movie theaters offer a lower price ticket for the morning show, hotels offer large discounts during off seasons and also higher than normal prices during say Christmas or New year, restaurants and many retail outlets offer happy hours wherein discounts are offered. Using price as an effective tool for managing demand would require a proper understanding of the demand curve – its shape, slope etc.

Also, you should appreciate the existence of different demand curves for different segments during the same time period. As marketers you may also face an additional challenge when multiple segments are served at the same time and these segments have paid different prices. This requires putting in certain usage conditions (for example for availing low priced fares in airlines customers have to book in advance and there are higher cancellation charges) and/or providing value enhancement to higher paying customers.

c) **Place (Distribution):** Many service firms modify their time and place of delivery as a strategy to match demand and capacity. Bank may change its timings on specific days or during specific period, finance companies use mobile vans for distribution and collection of forms, hospitals like Apollo have created satellite clinics to deal with routine consultations, tests and medical services.

d) **Promotion:** You can also shift the demand by properly communicating with your customers. The customers should be made aware of the peak timings of the demand and also the benefits they can get in availing the service during non-peak timings. They should also be properly informed about changes in product, pricing and distribution. This can be done by putting signages at the service outlets (like banks) or advertising. Service firms can also use sales promotion to manage demand. Many airlines offer free ticket for companion in the business class, some business hotels offer free stay for spouse during the weekend stay. Proper promotional strategy can help the service organization in shifting demand from high to low period as well as stimulating demand during low periods.

Activity 3

Select any service organization and analyze how it uses it marketing mix elements to influence demand.

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2) Strategies for Managing Capacity

Managing capacity involves changes in different components of the resources of a firm like people, facilities, equipments, time etc. By making changes in these components you can achieve a better match between demand and capacity.

a) **Using Part-time Employees:** During periods of peak demand, service firm may hire additional part-time employees. This helps in increasing capacity as well as reducing costs. However, issues like attitude of part time employees, training concerns, higher turnover etc have to be properly addressed.

b) **Employees Working Overtime:** Some of the concerns raised above regarding part time employees can be eliminated by having employees work over time. However, working for longer hours may have adverse impact on service quality and also involves higher costs as overtime charges are generally at higher rates.

c) **Cross Training Employees:** Cross training of employees results in a flexible capacity, wherein employees can perform several different jobs. Southwest Airlines strongly believes in this philosophy. The same employee may move from ticketing to gate counters. This helps in avoiding underutilization of resources and also increasing the efficiency of the employees.

d) **Scheduling:** During peak demand periods people, facilities, and equipments are used at full capacity. However, facilities and equipments also require proper maintenance. This can be scheduled during periods of low demand. Similarly, for human resources, off-peak periods can be used for training purposes as well as for granting vacations.

In addition to the above, service firms can also meaningfully manage its capacity by increasing customer participation (customers can be used as productive resources e.g. self-service in restaurants), outsourcing, modifying the capacity (e.g. reconfiguring hotel rooms), renting facilities or equipments, and taking a subcontract work.

The strategies discussed above for managing demand and capacity have been summarized in Table 9.1

Table 9.1: Strategies for Matching Demand and Capacity

	High Demand/Slack Supply	**Slack Demand/Over Supply**
Managing Demand (Changing demand to fit capacity)	• Educate customers to curtain usage during peak periods (through signages or advertising) • Offer incentives for usage during non-peak periods • Charge full price–no discounts or premium pricing • Take care of regular customers first	• Modify service offerings • Offer discounts, sales promotion schemes • Modify hours of operations • Bring service to the customers
Managing Capacity (Changing capacity to match demand)	• Hire part-time employees • Keep employees overtime • Cross train employees • Outsource, rent facilities/ equipments	• Schedule training of employees • Maintenance, repairs, renovations • Schedule employee vacations • Take on subcontract work

9.4 YIELD MANAGEMENT

Yield management is a method for managing demand and capacity profitably by service organizations. It extensively uses computer based technology to study patterns in consumer behaviour in order to manage differential pricing. Yield management has gained widespread acceptance in airline and hotel industry. It helps a firm sell the right capacity to the right type of customer, at the right time for the right price. Put in simple terms,

$$\text{Yield} = \frac{\text{Actual revenue}}{\text{Potential revenue}} = \frac{\text{Actual capacity used X Average actual price}}{\text{Total capacity X Maximum Price}}$$

It is a measure of the extent to which an organization's resources are being used to their full revenue generation potential. Yield can be increased by an organization by a properly planned differential pricing strategy. Yield management techniques are useful and appropriate: i) when a firm is operating with a relatively fixed capacity, ii) when demand can be segmented, iii) when inventory is perishable, iv) when the product is sold in advance, v) when demand fluctuates substantially, and vi) where marginal sales cost is low, but capacity change costs are high (Sherly Kimes, 1989). Yield management may require a lot of mathematical programming, economic models and expert systems.

Take the example of an airline. It may not be in a position to sell all its seats at full prices. This may result in a number of seats remaining vacant. Once an aircraft takes off with vacant seats, that capacity is lost for ever. Considering that incremental cost of taking additional passengers is low, airlines offer discounted / apex fares with certain conditions, in order to bring in more revenues and increase the yield. Same is the case with hotels.

$$\text{Yield in case of hotel would be} = \frac{\text{room – nights sold X actual average room rate}}{\text{room – nights available X published room rate}}$$

Take a hypothetical example of a 100 room hotel with a rate of Rs. 2,000 per night i.e. potential revenue is Rs. 2 lakh per night. However, it doesn't get full occupancy at these rates and attract only 50% occupancy, resulting in a yield of 50 percent. On the other hand if the room rates are reduced by 40% i.e. to Rs. 1,200 per night, it attracts 100% occupancy. In this case the yield

becomes 60%

However, a combination of the two can be a better alternative for the hotel. Selling 50% of the rooms at full tariff and remaining 50% at reduced tariff of Rs. 1,200 would result in higher yield $\left(\frac{160{,}000}{200{,}000}\right)$ of 80 percent.

$$\left(\frac{1200 \times 100}{2000 \times 100}\right)$$

In order to make yield management successful, the marketers should identify the main market segments being served / those can be served. The next step would be to do a proper sales forecast for each segment at particular price levels. Based on this forecast a proper mix of different customer segments at different times can be suggested for maximizing the yield. These steps should be done on a continuous basis so as to adjust to the changing market conditions as well as making use of greater information available about segment wise demand patterns.

Managerial Implications

Sherly Kimes in her widely quoted article "Yield management – A tool for capacity constrained service firms (Journal of Operations Management, Oct. 1989) has identified a number of management issues to be taken into account while implementing a yield management system. While yield management may give a firm competitive advantage, it could also result in the following :

- **Loss of competitive focus :** As most yield management systems focus on maximizing revenue or yield, it may result in neglecting important issues like service quality. That is to say, short term profit maximization may over shadow long term competitive advantages.
- **Customer Alienation :** A customer who pays a higher price for a service than other customers may feel alienated and dissatisfied. He may consider it to be unfair to him. Therefore proper customer education should be an integral part of any yield management system to be effective.
- **Employee Morale Problem:** Yield Management seems to take away discretion from sales and reservation people. Therefore, it should be properly structured to allow for some judgment on the part of the employees.
- **Lack of Employee Training :** A yield management system will require extensive training of all employees. They should understand its objectives as well as its operation and how its affects their jobs.

Also in order to make the yield management successful a strong information system within the organization as well as commitment from the top management is essential.

9.5 MANAGING CUSTOMER WAITING

In the previous sections you have learnt about demand patterns and strategies to match demand and capacity. However sometimes it is not possible to match demand and capacity and waiting by customers become inevitable. Waiting is a common phenomenon at hospitals, restaurants, banks, hair cutting saloons etc. In such situations waiting time becomes one of the key factors in consumer's evaluation of service. While reducing waiting time is important for marketers, it is equally if not more, important to reduce the customer's perceived waiting time. If a customers perceived waiting time is less, he will be more satisfied with the service. Thus service waits can be controlled by two broad techniques viz. Operations Management and Perception Management.

1) **Operations Management** : It involves reducing the amount of time customers have to wait. This can be done in a number of ways. Firstly the firm should analyze its operational processes in order to identify and remove inefficiencies or bottlenecks, if any. Secondly, in case waiting cannot be avoided, a reservation system can be used. This will help in getting the customer out of a queue. Thirdly, customers can be encouraged to use the facilities during non-peak hours. Fourthly, greater use of information technology can be made wherein customers can use telephone, computers, etc to conduct business. For example, banks can deploy ATMs, provide phone banking and internet banking to reduce pressure at the branches. Lastly, as marketers you can also differentiate waiting customers wherein some customers may wait for more time while others receive a quicker service. The differentiation can be done on the basis of a number of factors like importance of the customer, urgency of the job, duration of the service transaction and payment of a premium price. In case queues cannot be avoided, the organization has to decide on the type of queuing system to be adopted. There are number of possibilities in this regard. Take for example the computerized railway reservation centres wherein there are multiple-queues and the customer has the option to join whichever queue he wants to and can also switch over to other queue if the wait appears to be shorter in that. Another option is to have a single queue system wherein first cum first serve rule applies to everyone. A slight variation of single queue system can be that each customer on arrival is given a number and waits at the reception area enabling the customer to sit, relax and mix up with other customers.

Exhibit 9.1. Managing Waiting Lines at Sri Venkateswara Temple, Tirupati

More than fifty thousand pilgrims visit the Sri Venkateswara Temple every day. 'Sarvadarsanam' (darshan for all) timings are different on different days of week. On normal days, about 18 hours are allotted for Sarvadarsanam and on peak days it is open for 20 hours. There is also a provision of 'Special Darshan' on purchase of tickets. Pilgrims who use the queue for Special Darshan have a shorter waiting time. This queue merges with the Sarvadarsanam queue at a fixed point and the darshan timings are the same as that for Sarvadarsanam.

The Sudarsanam token system was introduced to minimize the waiting time for Sarvadarsanam, Special Darshan and other paid darshan/sevas. Some of its features:

- The tokens are available free of cost at a number of convenient places in the town.
- The time for darshan is indicated on the token.
- Pilgrims can enter the Vaikuntam Queue Complex at Tirumala at the time indicated on

the tokens.

- They can have darshan within two hours of entering the Queue Complex.
- As this system saves on waiting time, it provides pilgrims with enough time to visit temples in the vicinity.
- In order to keep a track of the number of pilgrims and ensure their smooth flow, one token is issued per head. Collective tokens for groups are not issued.

Source: www.tirumala.org

2) **Perception Management**: Limited success of operations management in waiting line management has led to increased interest in managing the perceptions of wait experience. If you cannot control the actual wait duration, then control the customer's perception of it. Maister has proposed following eight principles that you can use as service marketers to influence customer's perception of waits and their satisfaction with waiting lines

   - Unoccupied time feels longer than occupied time.
   - Preprocess waits feel longer than in-process waits.
   - Anxiety makes waits seem longer.
   - Uncertain waits are longer than known, finite waits.
   - Unexplained waits are longer than explained waits.
   - Unfair waits are longer than equitable waits
   - The more valuable the service, the longer the people will wait.
   - Solo waiting feels longer than group waiting.

Therefore, you should appreciate that though operations management techniques are important, however, while developing strategies for waiting lines you should never overlook the effects of perceptions management. The following suggestions can be used in order to make waiting fun or at least tolerable.

1) Determine the acceptable waiting time for your customers.
2) Since unoccupied time feels longer than occupied time, keep customers occupied by installing distractions that entertain and physically involve them. For example, television sets can be installed in the waiting areas, magazines or reading materials related to the service can be provided. Exhibit 9.2 provides an interesting illustration in this regard.
3) Provide 'waiting duration information' i.e. information about the expected length of a wait and/or 'queuing information' i.e. a consumer's position in the queue, with continuous updates. Michael Hue & David Tse suggest that in short waits, no information is needed. In case of intermediate waits, waiting duration information appears to be a better choice than queuing information. However, in case of long waits, waiting duration information may be less effective then queuing information. Also providing queuing information is more important as compared to waiting duration information when service organization has difficulty in accurately estimating the length of wait or when the waiting line is not visible to customers.
4) If unexpected delays occur, explanation should be given to the customers. This helps in reducing uncertainty and customer irritation. The key is to impress upon the customer that he has not been forgotten. Simple things like providing a glass of water or a cup of tea to the waiting customer can help.
5) Try to modify customer arrival behaviour.
6) Keep resources not serving customers out of sight. This can be done by keeping idle employees out of view and conducting activities that do not involve customer interactions out of the customer's sight.
7) Try to reduce pre-service waiting by transferring some of the pre-service waiting to the service encounter phase. For example, menu cards may be

provided to the customers while waiting, to decide on their orders, medical information may be collected from the patient prior to actually meeting the doctor.

8) A smiling service person who knows his job well can be very helpful in overcoming many negative effects of waiting. Therefore, training and incentives / rewards for providing good service should be made.

Exhibit 9.2. "Waiting in line : Experiment by Bank of America"

Bank of America through their review of data realized that there might be opportunities to reduce perceived wait times without reducing actual wait times. An earlier study by market researchers had also revealed (the study was conducted by intercepting some 1000 customers standing in bank lines) that after a person stands in line for more than three minutes, a wide gap opens between actual and perceived times. While a two-minute wait may usually feel like a two-minute wait, a five minute wait may feel like a ten-minute wait. Also, psychological studies have revealed that if you distract a person from a boring chore, time seems to pass much faster.

In the summer of 2001 the bank installed television sets over the teller booths at one of its branches to test its hypothesis that "if you entertain people in line by putting television sets in the transaction zone – above the row of tellers in a branch lobby – you will reduce perceived wait times by at least 15%". The results obtained were significant. After the installation of the T.V. sets the degree of overestimation of wait times dropped from 32% to 15% at the test branch. Before the implementation of this experiment, customers who waited longer than five minutes, significantly overestimated their waiting time by 32%. (Average actual time : 6.17 minute, Average perceived time : 8.16 min). After the installation of monitors in the bank lobby these overestimates for the same customer groups dropped to 15% (Average actual time : 6.14 minutes, Average perceived time : 7.04 min). Considering that long waits have direct impact on customer satisfaction, the bank through a research also concluded that a branch with more than a thousand households in its customer base would be able to recoup up the cost of installing T.V. sets in less than a year because of increased customer purchases and retention due to higher customer satisfaction. (Based on the study analysis that every one point improvement in bank's customer satisfaction index added $1.40 in annual revenue per household and that the reduction in perceived wait times would translate into a 5.9 point increase in overall banking-centre customer satisfaction)

Source: Stefan Thomke, "R&D Comes to Service: Bank of America's Path breaking Experiments," Harvard Business Review, April 2003, p.76-77.

9.6 MANAGING DEMAND AND WAITING LINES: CASE OF AN AMUSEMENT PARK

Introduction: In this section we are giving you a brief case situation concerning an amusement park. Also given are the comments and possible solutions to the problems raised, given by top executives of service companies (The case situation and the comments / solutions have been excerpted from a Harvard Business Review Case Study – details given in sources at the bottom of this section). In the last part of this section we have also brought out some of the innovative practices adopted by successful amusement parks with regards to managing demand and waiting lines. Before we move over to the case situation, let us fist take a brief look at the amusement park industry as such.

The industry has it origin about 400 years ago in the Danish capital Copenhagen. In India the industry is in the growth stage with around 1000 crore said to have been invested in the last few years. This growth is primarily a result of higher disposable incomes and an increasing willingness on the part of the customers to consider new forms of entertainment. Foreign companies like Universal Studio, Time Warner and Disney are eyeing the Indian market. Presently the leading players in the Indian market include Appu Ghar in Delhi and Essel World near Mumbai with a lot of new players like Sammy's Dreamland in Bangalore also coming up.

Case Situation: The amusement park with a successful history was now facing problems. It had its first money losing year last year followed by another one now. The park had three ways to bring in more revenues: increase visit per customer, increase average spending per visit or attract new customers. Because of a mature industry (U.S.A) all three were hard to do. As pulling in people from broader geographical areas seemed an unlikely proposition due to the wide availability of such parks, attracting new customers required new value proposition. With this background, it was proposed to offer a "preferred guest card" to win more business from moneyed and time pressed group of people. Under this plan, visitors could pay an additional fee to get free rein of the park: Card Holders would enter the ride through separate lines which would give them first crack and they would be seated immediately at any in-park restaurant. It was hoped that this plan will help to up-sell the people who are already coming to the park. And by making it possible to spend less time in queues, the guest card will also attract a different type of customer – time starved, high-income professionals and their families, who might otherwise avoid the whole experience. However, certain objections were raised against such a scheme. "I don't even think it's a great experience for the preferred guests. Who want to feel all that animosity diverted at them? The key to this business is the customers feeling good while they are here. With this scheme neither side's coming back" commented an executive. A possible solution given to this was to separate the lines and limiting the percentage of special tickets issued on any given day. If the 'preferred guest card' scheme was not implemented the park might be forced to raise price across the board.

Before moving on to the next part, analyze the above situation and identify possible solutions.

What Experts Say : In this part comments of three senior executives from different service industries have been briefly given

i) A cofounder of a premium health care service:
   - Creating two types of service at different prices will create problem for the park.
   - Raise the admission price instead

ii) Chief Marketing office of a leading bank:
   - It makes good business sense to segment customers and to offer a different level of service-at a higher price-to those at the upper end of the market.
   - The key is to do it discreetly and in a way that does not degrade the quality of service to the basic customer.
   - The expedited line should be hidden from the view of those waiting in longer one.

iii) A former CEO of large Airlines:
   - Service differentiation at an amusement park must be subtler than what has been proposed.
   - The park can offer all its guests the opportunity to reserve a time slot for a particular ride. A fixed number of seats may be allocated to reservation (say a third or a half) and then give the customers lining up an option to wait or to make ride reservation for later in the day.

Some Practices in Successful Amusements Parks: Disney lands offer a form of reservation – Fastpass – by which guests may go up to one of the rides offering the Fastpass service and obtain reservation to come at a certain time. At the specified time they come back and bypass the waiting line saving an hour or more in waiting. However, the customers are limited to one Fastpass every four hours in order to ensure that the rides are able to accommodate both Fastpass and regular customers. Further, line management at Disney also involves continuously entertaining waiting customers and providing them with the information regarding the duration of their waits. Signs are posted at intervals in the queue, stating the expected time until service commencement. Because of Fastpass, rather than waiting in line, customers spend more money in the restaurant and shops. Dreamworld in Australia caters to both international as well as local customers. Considering different price sensitivities of local and international customers (while a Japanese couple will pay $78 - $39 per person entrance fees – without hesitation as this is a small portion of their vacations, a local family of four looking for weekend entertainment may view $136- $39 adult charge and $ 29 charge for children — amounts to a large portion of their entertainment expenses). Dreamworld offers a separate package to local customers involving yearly passes at much lower prices. It is a common practice for tourist attractions such as Dreamworld to offer special rates for local residents. It is however very important for the parks to know its customer mix.

Sources

i) Economic Times, New Delhi – Dec 16, 2003 – "Foreign majors eye amusement park industry" by Rahul Sachitanand.

ii) Harvard Business Review, Nov. 2001, HBR Case Study " Are Some Customers More Equal Than Others ?" by Nunes and Johnson, pp 37-50.

iii) "Marketing for Hospitality and Tourism", 3rd edn., by Kotler, Bowen and Makens, Prentice Hall, 2003 – page 418, 459-460.

iv) "Waiting for Services : The Relationship between Delays and Evaluations of Service," by Shirley Taylor, Journal of Marketing, April 1994, p.66.

Activity 4

Visit any amusement park and/or talk to your friends about their experience at amusement parks. Identify strategies adopted by the parks to manage demand (e.g. on weekdays vs. weekends, special package for specific customers groups etc.) and waiting lines.

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9.7 SUMMARY

This unit deals with issues related to managing demand and capacity in service organizations. Considering the fact that services are perishable, demand fluctuation is considered to be a somewhat serious problem for services marketers. A service organization with a fixed capacity may be faced with four different situations viz. excess demand, demand exceeding the optimum capacity level, demand and supply being balanced at the optimum capacity and excess capacity. The first step towards developing strategies for matching demand and capacity is to study the demand patterns and the underlying causes. The strategies for matching demand and capacity can be broadly divided into two categories – changing demand to fit supply and changing supply to fit demand. These two strategies have been discussed in detail in this unit. Subsequently yield management technique for managing demand and capacity profitably has been explained. Despite strategies for matching demand and capacity being in place, waiting by customers becomes inevitable in a number of service industries. Service waits can be controlled by operations management and perceptions management. This unit outlines certain suggestions which can help you in better management of waiting lines. The last section of the unit gives you a brief case situation concerning demand management and waiting lines issues in an amusement park.

9.8 SELF ASSESSMENT QUESTIONS

A) Objective Types Questions

1. Which of the following strategies would you recommend to manage demand when it is too high?
   a. offer discounts
   b. bring the service to the customers
   c. offer incentive to customers for usage during non-peak times
   d. all of the above
2. Providing separate check-in lines for first class passengers by an airlines is an example of differentiating waiting customers on the basis of
   a. urgency of the job
   b. payment of premium price
   c. duration of service transaction
   d. none of the above
3. Which of the following is not true regarding waiting by customers?
   a. uncertain waits are longer than known waits
   b. unexplained waits are longer than explained waits
   c. in-process waits feels longer than the pre-process waits
   d. unoccupied time feels longer than occupied time.
4. In which of the following demand conditions would you witness the situation in which no customer is being turned away but the quality of service may still suffer due to crowding or staffing being pushed beyond their abilities to deliver consistent quality?
   a. excess demand
   b. demand exceeds optimum capacity
   c. demand and supply are balanced at the level of optimum capacity
   d. excess capacity
5. Appropriate situation for effective yield management application includes:
   a. ability to segment markets
   b. product sold in advance
   c. fluctuating demand
   d. all of the above
6. Which of the following strategies for flexing capacity to match demand would be appropriate when demand is too low?
   a. perform maintenance, repairs
   b. schedule vacations
   c. schedule employee training
   d. all of the above

7. Several major restaurant chains offer discounts on days when business is normally slow. This strategy is employed because service are
   a. perishable
   b. variable
   c. inseparable
   d. intangible

Answers

1. c	2. b	3. c	4. b	5. d
6. d	7. a			

B. Discussion Questions

1. Explain why is it important for service organizations to match demand and capacity. What are the implications of a mismatch between the two?
2. Explain the significance of determining the demand patterns. Select any service organization of your choice and describe its demand patterns and its underlying causes.
3. Describe the strategies for matching supply and demand giving suitable examples.
4. Explain the term 'Yield Management'. Identify some of the managerial issues to be taken into account while implementing a yield management system.
5. Select a service organization you are familiar with, where customers have to wait in line for service. Develop a waiting line strategy for the organization.

9.9 FURTHER READINGS

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