



Yield Management

Yield management is based on supply and demand. Prices tend to rise when demand exceeds supply; prices tend to fall when supply exceeds demand. Pricing is the key to profitability. To increase revenue, the hospitality industry is attempting to develop new forecasting techniques that will enable it to respond to changes in supply and demand with optimal room rates. The hospitality industry's focus is shifting from high – volume bookings to high – profit bookings. By increasing bookings on low – demand days and by selling rooms at higher prices on high – demand days, the industry improves its profitability. In general, room rates should be higher when demand exceeds supply. They should be lower (in order to increase occupancy) when supply exceeds demand.

KEY TERMS IN YIELD MANAGEMENT

1. **Break even analysis (BEA)** = this analyses the relationship between costs, revenue, sales volume, allowing one to determine the revenue required to cover all costs.

2. **Contribution margin** = Sales less cost of sale for a department or given product. It represents the amount of sales revenue contributed towards fixed cost and profit.

3. **Cost Per Occupied Room (CPOR)** = the variable or added cost of selling a product that is incurred only if the room is sold. It is also called marginal cost.

4. **Discount grid** = a chart indicating the occupancy percentage needed to achieve equivalent net revenue at various discount levels.

5. **Displacement** = this is the name of the phenomenon of turning away of transient guests (who would pay a better room rate) due to the lack of rooms, a situation created by the acceptance of group business (who would pay a lesser room rate/ discounted rate). It is also called non-group displacement.

OR the turning away of a guest able and willing to pay a higher room rate due to the lack of room availability because rooms have already been sold to guests who paid a lower price.

6. **Equivalent occupancy (percentage)** = given a quantum or actual change in the ARR, this is the occupancy



percentage required to produce the same net revenue as was produced by the old price and occupancy.

7. Market Share Index (MSI) = a comparison of the hotel's ARR or RevPAR against its competition to determine

whether it is getting its share of the business in the market.

8. Fixed cost = the cost that remains constant in the short run even though the sales volume is variable (increases or decreases).

9. Wash-down Factor/ Slippage = under-consumption of or failure to achieve a committed number of group nights by a TA or company.

10. Group Booking Pace = the rate at which the group business is being booked.

11. Hurdle Rate = this means the lowest acceptable room rate for a given period. This is very variable and is set by the YM team.

12. Minimum Length Of Stay (MLOS) = a YM availability strategy requiring that a reservation must be for a specified number of nights in order to be accepted by the hotel. This is used in order to maximize yield on low occupancy days that lie immediately before or after a high occupancy day/ days.

13. Potential Average Rate (PAR) = a collective statistic that effectively combines the potential average single or double rate, multiple occupancy percentage and rate spread to produce the average rate that would be achieved if all the rooms were sold at full rate.

14. Revenue Management/ Yield Management = A technique based on supply and demand, used to maximize revenue by lowering prices to increase sales during periods of low demand and raising prices during periods of high demand to increase revenue.

15. Sell through = Revenue management strategy that works as a MLOS strategy except that the length of the required stay can begin before the date the strategy is applied, i.e. any part of the stay duration should touch the specific date on which sell through is applied. (referred to as LOS or length of Stay in Fidelio)

16. Stay- sensitive Hurdle Rate = this indicates the lowest room rate is dependent on the period of stay of the



guest. For example, the general hurdle rate applicable today is Rs. 2000/- . If the guest stays for a longer period, say, 3-4 nights, the minimum rate that could be offered could be reduced to say, Rs. 1000/- .

17. Room spoilage = rooms going unoccupied after the hotel stops taking reservations for a given date.

18. Elastic market = if a small increase in price produces a drastic drop in demand the market is said to be price elastic. Conversely, if a small increase in price produces no effect or little effect on demand the market is price inelastic.

19. Price sensitive guests = the guest who reacts to changes in room rates (usually FITs and holiday-makers) is said to be price sensitive. This is in contrast to corporate and company guests or other sponsored guest who are not price sensitive.

20. Rate and Stay restrictions = the term is used when applying or not applying discounts to guests on room rate and applying minimum length of stay when required- to improve yield.

21. Guest mix/ sales mix = Mix of guest of the hotel that are from different market segments- corporate, FITs, leisure groups, convention guests, families, etc. Having such a guest mix ensures that the hotel is not dependent upon one market segment alone. So, in the event of one market segment being affected, the other guests still reserve at the hotel, thus not affecting its overall performance.

22. Open and Closed rates = the hotel's YM team determines various rates for offering the guests according to their business value to the hotel or/ and the market conditions (low/high seasons). For example, a discounted rate may be 'closed' during high season and 'open' during low season or a corporate rate may be 'closed' for a group or FIT guest while being 'open' for a company guest that gives the required business to the hotel.

23. Booking Lead Time/ Booking Horizons = describes a measure of time of how far in advance the bookings are



made. For example, groups may make reservations 6 months ahead of arrival while an FIT may the reservation only a couple of days before arrival. Here, 6 month or 2-3 days would be referred to the **lead time or booking horizon**.

24. Rate Fencing = 'fencing' means that each market segment has a limited number of rooms available for reserving. Instead of taking as many categories of guests as request a room, the hotel decides how many rooms to open for each category for that period- day, week or month. So leisure groups may have only 10% of the total rooms available for booking while corporate groups may have 15% of the rooms and Fits will be given, say, 40% and walk-ins may be allotted 5% rooms, etc.

Application of Yield Management in Hospitality Sector

In the hospitality industry, yield management – sometimes called revenue management – is a set demand – forecasting techniques used to determine whether prices should be raised or lowered and whether a reservation request should be accepted or rejected in order to maximize revenue. Hospitality industry managers have successfully applied such demand – forecasting strategies to room reservation systems, management information system, room and package pricing, rooms and revenue management, seasonal rate determination, pre-theatre dinner specials, and special, group, tour operator, and travel agent rates.

Application of Yield Management to Rooms Division:-

Capacity Management

Capacity Management involves a number of methods of controlling and limiting room supply.

For example, hotels will typically accept a statistically supported number of reservations in excess of actual room availability in an attempt to offset the effects of early check-outs, cancellations, and no-shows. Capacity management (also called selective overbooking) balances the risk of overselling against the potential loss of revenue arising from spoilage r(rooms going unoccupied after reservations were closed out).

Other forms of capacity management include determining how many walk-ins to accept on the day of arrival based on expected cancellations and no-shows.



Capacity management usually varies with room type. That is, it might be economically advantageous to overbook more in lower-priced rooms because upgrading to higher-priced rooms is an acceptable solution to an oversell problem. The amount of such overbooking depends, of course, on the demand for the higher-priced rooms. In sophisticated computerized yield management systems, capacity management may also be influenced by the availability of rooms at neighboring hotels or competing properties.

2. Discount allocation

Discounting involves restricting the time period and product mix (rooms available at reduced prices (prices below rack rate). For each discounted room type, reservations are requested at various available rates, each set below rack rate. The theory is that the sale of a perishable item (the guestroom) at a reduced price is often better than no sale at all. The primary objective of discount allocation is to protect enough remaining rooms at a higher rate to satisfy the projected demand for rooms at that rate; while at the same time filling rooms that would otherwise have remained unsold. This process is repeated for each rate level from rack rate on down. Implementing such a scheme requires a reliable mechanism for demand forecasting.

A second objective of limiting discounts by room type is to encourage upselling. This technique requires a sound estimate of price elasticity and/or the probability of upgrading. (Elasticity refers to the relationship between price and demand.)

3. Duration control

Duration control places time constraints on accepting reservations in order to protect sufficient space for multi-day requests (representing higher levels of revenue).

This means that, under yield management, a reservation for a one night stay may be rejected, even though space is available.

For example, if Wednesday is close to selling out but other nights are not, a hotel may want to optimize the revenue potential of the last few rooms on Wednesday by requiring multi-day stays, even at a discounted rate, rather than accepting reservations for Wednesday only. Similarly, if the hotel will be close to capacity Tuesday, Wednesday and Thursday, then accepting a one-night stay during any of those days may be detrimental to the hotel's overall room revenue. Hotels facing such dilemmas often require all reservations for projected full-occupancy periods to be for more than one evening.

Benefits or Importance of Yield Management

1. Improved forecasting
2. Improved seasonal pricing



3. Identification of new market segments
4. Identification of market segment demands
5. Enhanced coordination between the front office and sales divisions
6. Determination of discounting activity
7. Improved development of short-term and long-term business plans
8. Establishment of a value based rate structure.
9. Savings in labour costs and other operating expenses
10. Planned responses to guest inquiries or requests regarding reservations.

Differential Pricing:-

Differential pricing is the process of charging different prices to different customers for the same exact product. Also sometimes called price differentiation or price discrimination, the reason a company might implement this strategy can be as varied as location differences, seasons, brands or even time of day.

The pricing strategy is commonly used in the hospitality and service sectors where prices fluctuate a lot such as those airline tickets or hotel accommodations you were looking at in our opening example. It can also be used in industries such as restaurants or establishments with admissions or ticket fees.

The benefits of a differential pricing strategy could include:

- The ability to expand your target audience to a new group of consumers
- An increase in overall sales thanks to reaching a new audience
- Making your business more attractive through low price offerings
- The opportunity to build customer loyalty from first-time buyers

There could be some disadvantages, however, including:

- A decrease in profits from a drop in pricing, either temporarily or permanently
- Losing some customers who can't afford to pay full price after a promotional price ends
- Customers purchasing a product at a reduced price and reselling it for a profit

Types of Rate Codes used in hotels



Rack Rate: Is the Standard rate or Published tariff defined by the hotel management for a particular room category / type. This is generally printed on the tariff sheet of the hotel and these details are also submitted to the local government authorities for hotel licensing and in some countries for Gov. tax compliance. In other word's these rates are always without any sorts of discounts.

Corporate or Commercial Rate: These are rates offered to companies that provide frequent business for the hotel or its chain. This rate may vary according to the volume of business guaranteed by the companies.

ADHOC Rate Code: These are normally non-standard rates which are offered as special one-time rates for first time corporate's.

Group Rate: These are rates which are offered to groups, meetings and conventions using the hotel for their functions.

Promotional Rate Codes: These rates are generally offered during low occupancy periods to any guest to promote occupancy. Early Bird Rates, Stay for 3 and pay for 1 etc. are some examples. These rates may also include certain add-ons to attract the customers like free WiFi for 24 Hrs, free buffet dinner etc.

Incentive Rate Code: The Rate offered to individuals who belong to an association or holders of special membership cards or Credit cards. Eg: Amex / VISA / Master cardholders get 5% discount on Rack Rate, Lufthansa Frequent Flyer members get a 25% discount etc. For hotels, these rates always give potential referral business.

Early-bird Rate: This type of rates are only open X days before arrival. Eg: Open only when 7 Days before arrival, 14 Days Before Arrival, 30 Days Before arrival Etc.

Family Rate: A rate reserved for families with children. Usually, these rates include Extra Bed charges and may also include some free add-on activities for children.

Package Rate: Rates that includes a guest room in combination with other available events or activities. (Eg: Best of London package which includes room rental, all meals, site seeing, airport transfers etc.) Package rate can be also a simple room and meal package like American Plan (AP), Modified American Plan (MAP), Continental Plan (CP) etc.

Best Available Rates (BAR): These rate codes are the lowest discounted rate available for a day which can be offered to the guest by the Reservation or Front desk staff. BAR can be of different types:



'Dynamic BAR' - Has different tiers and each tier will be opened and closed according to the occupancy of the hotel. (The new age hotel management software's does this automatically for the Revenue Managers.)

Complimentary Rate: A Room rate with zero room charge which is offered to special guests, industry leaders, Gov. officials etc.

House use Rate: A Room rate with zero room charge which is used for rooms stays for hotel purpose. Eg: Manager or duty room, In-house General / Resident manager room etc.

Potential High and Low Demand Tactics

High Demand Tactics includes:-

Close or restrict discounts – Analyze discounts and restrict them as necessary to maximize the average rate. You may offer discounts to those who book longer stays, or restrict bookings to shorter stays.

Apply a minimum length of stay restrictions carefully – A minimum length of stay restriction can help a property increase room nights. For groups, study the groups' patterns and decide how many days they are likely to add to their stay.

Reduce group room allocations is another great tactics – Communicate with group leaders on a regular basis. Make sure the group actually needs the number of rooms identified in its contract. If not, make adjustments.

Reduce or eliminate 6 P.M holds – Reduce or eliminate the number of unpaid rooms that are being held until 6 p.m. When demand is high, you need rooms available to fill.

Tighten guarantee and cancellation policies tactics – Tightening guarantee and cancellation policies helps to ensure payment for room nights. Charge credit cards for the first night's stay on the day the reservation is made.

Tactics on raise rates to be consistent with the competitors – Charge rates consistent with the competition, but limit rate increases to those rates published in the central reservations systems and listed in brochures for the period.

Consider a rate raise for packages – If you are already offering a package discount, consider raising the rate for that package.

Apply full prices to suites and executive rooms – In a high-demand situation charge full price for suites and executive rooms.

Reserve close to arrival dates – By allowing the reservations to be taken for a certain date as long as the guest arrives before that date, a property is able to control the volume of check-ins.

Evaluate the benefits of sell-throughs – With a sell-through, the required stay can begin before the date the strategy is applied. This is often used when one day has a peak in occupancy and management does not want the peak to adversely affect reservations on either side of the peak day.

Apply deposits and guarantees to the last night of stay – For longer lengths of



stay, make sure the deposits and guarantees apply to the last night of the stay, minimizing early departures.

Potential Low Demand Techniques:

Low-Demand Tactics includes:-

Sell value and benefits tactics – Rather than just quoting rates, make sure guests know you have the right product for them at the best value. Sell the various values and benefits of staying on your property versus others that the guests may be considering.

Tactics on Offer packages – To increase room nights, one tactic is to combine accommodations with a number of desirable products and services into a single package with one price. Mention any additions, renovations, or new amenities. Non-room revenue can be included, for example – free movies, discounted attraction tickets, and shopping coupons.

Keep discount categories open – Discounts are directed toward particular markets or are instituted during a particular time or season. During low-demand time, it is important to accept discounts to encourage room nights.

Encourage upgrades is another great tactics – Move guests to a better accommodation or class of service to enhance their experience and encourage them to come back to the property again and again.

Offer stay-sensitive price incentives – A stay sensitive price incentive provides a discount for guests who stay longer. For example, a guest staying 3 nights might get an additional Rs.2000/- per night discount, while a guest staying one night might not

Remove stay restrictions – Remove any stay restrictions so guests are not limited as to when they can arrive or depart. Guests who can stay only one night will be encouraged to stay as well as those who are staying for a week. This will help to maximize occupancy.

Involve your staff – Create an incentive contest to increase occupancy and room nights. Make sure to involve all members of revenue department as well as central reservations staff.

Establish relationships with competitors – Having a cordial relationship with competitors can help with referrals and can help to carry out cross-marketing efforts.

Lower rates tactics – There is great value in keeping guests at the property as long as you are at least covering the cost of occupancy. You may want to lower your rates as low as possible. Identify the hurdle rate, which is the lowest rate acceptable at that given date.

FORECASTING ROOM AVAILABILITY

Forecasting room availability is forecasting the number of rooms available for sale on any future date. This type of forecasting helps manage the reservation process, guides the front office staff for an effective rooms management, and can be used as an occupancy forecast, which is, further, useful in attempting to schedule the necessary number of employees for an expected volume of business.



In order to forecast room availability, the following data are needed

- Number of expected room arrivals
- Number of expected room walk-ins
- Number of expected room stayovers
- Number of expected room no-shows
- Number of expected room understays
- Number of expected room check-outs
- Number of expected room overstay

These above-mentioned data help the front office in conduct various daily operational ratios such as:

No-shows percentage = (number of no-show rooms) / (number of rooms reserved)

Walk-ins percentage = (number of walk-in rooms) / (total number of rooms arrivals)

Overstays percentage = (number of overstay rooms) / (number of expected check-outs)

Understays percentage = (number of understay rooms) / (number of expected check-outs)

Maximizing Yield

Increased revenue:

Yield management in the hospitality industry helps you to make the most of your occupancy. It ensures a higher revenue, even if your occupancy is not 100%. (Regardless of the peak or weak season.) A solid yield management strategy can increase your revenue significantly

Higher demand = Higher room rates.

2. Decreased errors

with hotel yield management strategies, there's no chance of making mistakes while setting the price of the rooms. The accurate demand forecasting eliminates any miscalculated risks.

Decide the occupancy slabs

Out of several factors, here are a few important ones which affect your occupancy slabs:

Based on seasons

Generally, a hotel's year is classified in two seasons: 1. High season and 2. Low season.



Festivals are considered the peak seasons for hotels. During festivals, hotels witness a hike in their bookings.

Let me tell what you have to do:

Simply find out the maximum occupancy during the high and low season. Compare it with your year-round average occupancy. You can even analyze the upcoming year's calendar and find out the following holidays.

Major festivals of your region

Long weekends

Annual holiday periods (Holi, Diwali, Christmas, New Year, etc.)

Public holidays

School holidays

Local events (annual festivals, sporting events, concerts, etc.)

Once you have analysed occupancy, you can create the occupancy slabs smartly to drive more revenue.

Measuring Yield

Room Occupancy

To calculate room occupancy, express the rooms sold as a percentage of the room available:

Room Occupancy = (Total Rooms Sold / Total Rooms Available) x 100%

For Example, for the 31 days in July,

- Total Rooms Sold = 2480
- Total Rooms Available = 3100

Room Occupancy = (2480 / 3100) X 100% = 80%

Average Room Rate

The average rate shows how much a room is being sold for across the hotel.

Average Rate = (Room Revenue / Rooms Sold)

To calculate the average rate when, for example, room income is 340000 and total rooms sold is 85 rooms:

Average Rate = (340000 / 85) = 4000.00



Revenue Achieved

Average rate alone does not give a measure of performance against the potential of the hotel. To do that, many hotels look at the revenue as a percentage of the possible maximum.

$$\% \text{Revenue Achieved} = (\text{Actual Revenue} / \text{Potential Revenue}) \times 100\%$$

In the example hotel, the tariff (excluding VAT and sales tax) is as follows:

Room type	1 Guest	2 Guests
Double	60.00	75.00
Twin	55.00	80.00

The actual revenue was 3400

The potential maximum revenue is

$$50 \text{ Double} \times 75.00 = 3750$$

$$50 \text{ Twin} \times 80.00 = 4000$$

$$\hline 7750$$

$$\text{Revenue Achieved} = (3400 / 7750) \times 100\% = 43.87\%$$

RevPar

Even average rate and percentage revenue achieved do not provide a measure against competitor hotels. For this reason, many hotels now use a combination of average rate and occupancy.

This is referred to as 'Revenue Per Available Room' or RevPar. Another term for this is 'rooms yield'

$$\text{RevPar} = \text{Average Rate} \times \text{Occupancy}\%$$



For the sample hotel,

Average Rate = 40.00

Occupancy = 85%

RevPar = 40.00 x 85 = 34.00

This allows comparison to be made with competitor hotels with different tariffs and number of rooms. RevPar for a typical month for a competitor hotels in a European city could be as follow:

Hotel	No. of rooms	RevPar()
A	200	43.70
B	130	29.92
C	140	25.39
D	105	25.82
E	165	37.14

Average Daily Rate

Average daily rate use to calculate the average price or rate for each hotel room sold for a specific day. It is one of the most common financial indicators to measure how successful the performance of the hotel is against other hotels that have similar characteristics such as size, clientele and location and/or its own previous figures.

$$\text{ADR} = \frac{\text{Room Revenue}}{\text{Rooms Sold}}$$

A boutique hotel's revenue today is 20000.000, of which the rooms sold for today is



100 rooms. Using the data provided, a hotel wants to know its Average Daily Rate so it can accurately assess its performance.

Answer :

$$\text{ADR} = \frac{20000}{100} = 200$$

Average room revenue

ARR can also be used to measure the average rate for a longer period of time (weekly, monthly).

$$\text{ARR} = \frac{\text{Total Room Revenue}}{\text{Total Rooms Occupied}}$$

Example :

In 1 month, a boutique hotel has previous revenue 10000,000 and total rooms occupied in that month is 100,000 rooms. Using the data provided, a hotel wants to know its Average Room Revenue so it can accurately assess its performance.

Answer :

$$\text{ARR} = \frac{10000000}{100000} = 100$$

Average revenue per guest/ average spent (ARG)

It is the ratio of room income to the total number of guests staying in the hotel.

$$\text{ARG} = \frac{\text{Room Income}}{\text{Total Number of Guests}}$$



Total number of guests staying in the hotel

Potential Average Single Rate

The hotel has varied its single rate by room type, so we need to calculate the potential average single rate.

$$\text{Potential Average Single Rate} = \frac{\text{Single Room Revenues at Rack Rate}}{\text{Number of Rooms Sold as Singles}}$$

Potential Average Double Rate

Since we also have varied rates by room type the potential average double rate must be calculated.

$$\text{Potential Average Double Rate} = \frac{\text{Double Room Revenues at Rack Rate}}{\text{Number of Rooms Sold as Doubles}}$$

Potential Average Single Rate:

$$\text{Potential Average Single Rate} = (\text{Single Room Revenues at Rack Rate}) / (\text{Number of Rooms Sold as Single})$$

- **Example 1 - Potential Avg. Single Rate (Where the single rate is same for all room types):**

Total Number of Rooms sold in Single = 25

Rack Rate / Published Tariff for Single = 125.00

Single Room Revenue at Published Tariff = 25 * 125.00
= 3125.00

Potential Avg. Single Rate : 3125.00 / 25 = 125.00



Potential Average Double Rate:

Potential Average Double Rate = (Double Room Revenue at Rack Rate) / (Number of Rooms Sold as Double)

- **Example 1 - Potential Avg. Double Rate (Where the Double rate is same for all room types):**

Total Number of Rooms sold in Double = 55

Rack Rate / Published Tariff for Double = 175.00

Double Room Revenue at Published Tariff : 55 * 175.00 = 9625.00

Potential Avg. Double Rate: 9625.00 / 55 = 175.00

Multiple Occupancy Percentage:

Multiple Occupancy Percentage = (Number of Rooms Occupied by more than 1 Person) / (Total Number of Rooms Sold) * 100

- **Example Multiple Occupancy Percentage Calculation (Based on Rooms Occupied)**

Total Number of Rooms with More than One Adult on 10th September 2017 = 115

Total Number of Rooms Occupied on 10th September 2017 = 207

Hotel's Occupancy Percentage = 115 / 207 * 100
= 55.55 %

Rate Spread:

Rate Spread = (Potential Average Double Rate) - (Potential Average Single Rate)

- **Example Rate Spread**

Potential Average Double Rate : 175

Potential Average Single Rate: 135



Rate Spread: (Potential Average Double Rate – Potential Average Single Rate) =

$$175 - 135 = 40$$

Room Rate Achievement Factor:

$$\text{Room Rate Achievement Factor} = (\text{Actual Average Rate}) / (\text{Potential Average Rate}) \\ * 100$$

- **Example Room Rate Achievement Factor**

Actual Average Rate: 200

Potential Average Rate: 300

Room Rate Achievement Factor: $200 / 300 * 100$

$$= 66.66\%$$

Overstay Percentage

This is the percentage of scheduled departures who remain on in the hotel, even after their scheduled date of departure.

$$\text{Overstay Percentage} = \frac{\text{Number of overstays}}{\text{Total number of scheduled departures}} \times 100 \%$$

Understay percentage

This is the percentage of those guests who leave before their expected date of departure or don't stay until the announced date of their departure.

$$\text{Understay Percentage} = \frac{\text{Understay}}{\text{Stayovers}} \times 100 \%$$



No - show percentage

This is the percentage of those guest who don't come in their expected date of arrival or they don't come until the announced date of their arrival.

$$\text{No-show percentage} = \frac{\text{Number of did-not arrive guests (DNA)}}{\text{Number of confirmed reservation guests}} \times 100 \%$$

Cancellation percentage

It is the percentage of total number of cancellations as against total number of reservations.

$$\text{Cancellation Percentage} = \frac{\text{Total number of cancellations}}{\text{Total number of confirmed reservations}} \times 100 \%$$

Example :

A city hotel has previous 3 guests cancelled their reservation, of which the total confirmed reservation guests is 50 guests. Using the data provided, a hotel wants to know its Understay Percentage so it can accurately assess its performance.

Answer :

$$\begin{aligned} \text{Cancellation Percentage} &= \frac{3}{50} \times 100 \% \\ &= 6 \% \end{aligned}$$

