# **Chapter 54 An Approach to Revenue Management Strategies in the Hospitality Industry**



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**Abstract** YM is characterized as integrating the techniques, formulas, and strategies used to manage inventory, pricing, and sales policies. When linked to the hotel and tourism sector, YM manages availability, accommodation control, and discounts applied to overnight stays. RM is the evolution of YM, where using the full potentiality of the elements allows for maximizing revenue in periods of high demand and maximizing demand in periods of low revenue. RM is based on demand forecasting, price and inventory management, distribution channels, and revenue management performance. The world of hotel distribution is very complex and there is no way to control it. The Revenue Manager must be vigilant for the large price disparities in the various distribution channels. The distribution channels allow the hotel to reach a wider market share and an increase its competitive range. The Crowne Plaza Porto has a wide network of distribution channels represented by direct bookings and contracted distributors: Direct reservations come from four sources: Central Reservations Office (CRO), direct contact with the reservations department, the IHG brand website, and the mobile app. This research presents a qualitative methodology, applied to the Hotel Crowne Plaza Porto, whose purpose is to identify the segmentation introduced by two main segments: Individuals and Groups. The results of this research suggest that each of these segments is divided into several subgroups according to the specificity of

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their characteristics, and adequately identified, allowing the hotel's Revenue Manager to apply different strategies to the different customer groups, equally justified.

# 54.1 Introduction

This price management technique had its beginnings in the airline industry and was later, adapted for the hospitality industry because of the perishability of inventory. According to [1], Yield Management (YM) is a practice that emerged in the late 1970s because of deregulation in the aviation industry. Airlines decided to present discounted fares on sale to fill the seats left over on flights that were already confirmed. So, knowing that on a flight the costs are mostly fixed, it is better to sell at a lower price than not to sell at all, because the seat on the flight is perishable inventory, so once the flight takes off it is impossible to sell it.

In this perspective, the first YM techniques appear, which, according to [2] are intended to predict and influence customer demand and thus generate benefits for the company. Since unsold seats would not generate any kind of profit, discounts were applied to make them profitable, maximizing the total revenue obtained. With the adoption of this practice, companies have achieved a significant growth in profits, being recurrent in the industry, going from a static and simple market to a dynamic and diversified one. In the 1990s, with the migration of large hotel chains to computer systems, the expansion of these techniques to the hotel industry took place. In this sector, still according to [2] YM is more related to the use of supply and demand to maximize profits from the sale of products and services, considering existing availability, control of stays and discounts on lodging.

The visionary CEO of Marriott International, when analyzing the impact that all techniques had in the previous decade, decided to create a Revenue Management (RM) department to be able to control schedules, prices, and those services that should be maintained. He created the "One Yield" system that is still used today and allowed them to have their own reservation centers and create their own distribution channels [3].

It was this adaptation and investment in RM that allowed Marriott to be one step ahead of its competition, with a daily demand forecasting system, establishing guest reservation patterns, to optimize the availability of its inventory dependent on that demand and on reservations already made. The article is structured in three parts. In the first part a theoretical framework is presented, through a literature review. The second part presents the methodology, analysis, and discussion of results. The last part presents the conclusions and recommendations for future lines of research.

## **54.2** Literature Review

Based on YM techniques, thus RM was born. Both are linked to increasing revenues and maximizing profits, but they are not totally identical concepts.

According to [4], YM is characterized as the techniques, formulas, and strategies that are used to manage inventory, pricing, and sales policies. When linked to the hospitality and tourism sector, YM manages availability, stay control, and discounts applied to lodging. In the first stage, [2, 5] defined YM as RM. However, with the refinement of the concepts it was defined that RM is the evolution of YM, whereby using the full potentiality of the elements it allows maximizing revenue in periods of high demand and maximizing demand in periods of low revenue. The most common way to represent RM is to characterize it as a commercial management technique that helps sell the right product, at the right time, to the right customer, at the right price, and through the most appropriate distribution channel [5].

For [6], RM is "the selective use of pricing and other techniques to influence customer demand for a firm's products and services in order to increase total revenue and profits generated." On the other hand, [7] based RM on demand forecasting, price and inventory management, distribution channels, and revenue management performance.

According to Weatherford and [4, 8] the RM is associated with the hotel industry, rental cars, airlines, conference centers, and other companies in various areas of activity, and the authors, after analyzing all these industries, have defined five basic points:

- Fixed inventory: The maximum capacity is maintained, regardless of existing demand, because increasing it requires too high costs.
- Perishable inventory: All inventory that is not sold represents a loss for the entity, since all capacity that can be sold and is not used is not accumulated for later use.
- Market segmentation: Adapt the offer, planning for the different target audiences
  that we want to reach; not all customers are looking for the same product/service,
  and not all have the same expectations.
- Advance booking method: There is the possibility not only to make bookings on
  the same day, but also to make them months or even years in advance. In this
  method, the key point is to ensure that the inventory price is adjusted for all times,
  because the Revenue Manager (RMr) must be able to adapt the price so that the
  marginal price covers the fixed costs and make a profit.
- Demand fluctuation: RM strategies are used in order to match occupancy to demand, i.e. maximize demand in periods of low revenue and in periods of high demand.
- For any RM strategy to work, it is necessary to understand and know on what basis it can be applied.

Although each author defends a different perspective on the subject, they end up converging and, even though there is no concrete definition to address the pillars of

RM, those that are referenced are: Segmentation, Forecast, Pricing, and Distribution Channels. This research will focus on segmentation.

• Segmentation refers to the customer and the target audience that we want to capture, because each one is different and has its own expectations. After defining the market and the target audience, hotels need to divide it into different segments that have similar characteristics. It is through segmentation that the marketing strategy (Marketing Mix) is defined, to attract the desired customers and to be able to enter the target market [9].

In order to do segmentation correctly, a number of parameters need to be considered, such as measurability (demographic and geographic characteristics), relevance (potential market profit), accessibility (how the target audience will access knowledge of the services), differentiation (variation of the offer taking into account the characteristics of each group), and feasibility (adapting a Marketing strategy for each market in order to be as profitable as possible) [9].

- Forecast: According to [10], forecasting is the process of estimating, calculating, or predicting future conditions. The accuracy of this forecast is crucial, both for RM systems to make the best optimization recommendations, and for RMr to be able to apply the best strategies.
- Pricing: As it directly affects the profitability of the business, from a company's
  point of view price is the most relevant component and is one of the most effective
  denominators that RMr can use to increase or decrease the demand for hotel rooms,
  which consequently influences positively or negatively the revenue obtained for
  each reservation made.
- Distribution channels: Distribution channels are the ways used by hotels to make their products or services available, and which can be used by consumers to make reservations [10–13].

After an analysis, by RMr, about the distribution channels where the hotel should be placed, it is always necessary to take into consideration the costs associated with each channel and if the one used is in fact the best one to capture the customer segmentation previously defined.

# 54.3 Methodology

According to the approach in the literature review, distribution channels allow hotel units to achieve a wider market share and an increase in competitive reach. The Crowne Plaza Porto has a vast network of distribution channels represented by both direct bookings and contracted distributors:

• Direct bookings come from four sources: Central Reservations Office (CRO), direct contact with the own reservations department, IHG brand website, and the mobile app.

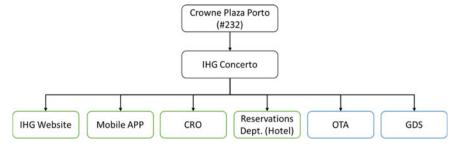


Fig. 54.1 Distribution channels of the Hotel Crowne Plaza Porto

**Table 54.1** IHG Mobile app features

Check-in/out Digital key		In-app chat	Digital TV command	
Make reservations	IHG Rewards Club	Room upgrade	Digital concierge	

• The contracted distributors come from two main sources: the OTAs that work on a commission basis and the GDS that are used by Business Travel Agencies (BTA) and travel agencies.

Figure 54.1 shows the available distribution channels at the Crowne Plaza Porto Hotel.

Reservations made through IHG's website (www.ihg.com) are submitted to the brand's reward programs and a 5.75% fee is charged. The mobile app is available for both Android and iOs under the name "IHGTM: Offers and Prizes" and allows guests to make a reservation for the next two days with 10% off the Best Flex rate with breakfast included (Table 54.1).

The CRO can be contacted through the contact number on IHG's website (800 450 076), has its offices located in Lisbon and has dozens of staff ready to provide assistance, in several languages, 24 h a day. All bookings are eligible for IHG Rewards Club and those made through this channel have a 5.75% fee.

Guests can make their reservations with the hotel's reservations department, which has one employee for individual reservations and three employees for group reservations, events, and tour series. The correspondence must be done through e-mail and/or telephone contact.

# 54.4 Results

Currently, a large part of the guests make their individual reservations online, knowing this, the Crowne Plaza Porto Hotel is present in all OTA, however, due to the strong presence in the market, we analyze Booking and Expedia. These OTA's work on a

commissionable basis and Booking receives 14.9% of the base for each reservation made (an amount that can be changed according to the positioning strategy of the hotel in the platform ranking); Expedia has two commission percentages, one for reservations made during the week and another at the weekend, both adjustable, according to market demand and receives between 21 and 23% of each reservation made. The rates that these OTAs practice are always associated with the Best Flex rate.

The reservations made through the GDS arrive at the hotel through the four main systems (Amadeus, Sabre, Galileo, and Worldspan) and are made by BTAs and travel agencies, and the rates they charge are either based on the contracted price (when they work with companies with special rates agreed with the hotel), or are associated with Best Flex, and a 10% commission is charged for each reservation that is made through this route.

The contracted companies that work with special rates represent a very important source of revenue for the Hotel Crowne Plaza Porto and, the rates are negotiated between an employee responsible for performing this analysis by means of the frequency of the stays and the profit that will be generated from them, and a responsible person in each company, and, the rates, are not known by the guests.

In summary, the distribution channels of the Crowne Plaza Porto Hotel are twofold: commission-based and based on contracted prices.

The commission-based approach is very dependent on the hotel's occupancy and RMr strategy, this can be applied to stop sales to OTAs and thus the hotel's presence on the platforms becomes non-existent, which leads to the impossibility of marketing its services. On the other hand, on the contracted rates side, the Local Negotiated Rates (LNR) and the Key Negotiated Rates (KNR) should be noted. These are ondemand bookings and are a good source of revenue for the hotel by guaranteeing a considerable volume of reservations on a regular basis, despite their low contribution.

The segmentation in Hotel Crowne Plaza Porto is introduced by two main segments: Individuals and Groups. Each of these segments is divided into several subgroups according to their characteristics. Table 54.2 presents the detailed segmentation of the hotel.

Dividing segmentation into different subgroups allows the hotel RMr to apply different strategies for different types of guests. The advantages are:

- Each segment has functionalities that facilitate the application of different strategies to offer specific products. The Crowne Plaza Porto has several collaborators, each one with its own responsibility (individual reservations, group reservations, events, tour series, agencies), and this way, they make contact directly with the clients of the correct segment.
- A separate segment of IHG is its rewards programs (P&P Discount and Airline Delay) and these cover many customers, which makes this program of great importance to the brand and makes it one of the most successful in the world. This program allows many benefits to its members in all the brand's hotels, and with a large flow of customers participating in it, the directors are looking to develop new programs and incentives to keep the participants loyal to the brand.

Table 54.2 Segmentation of the Crowne Plaza Hotel

Segment Name	Description	Example	
Individuals			
Transient (Non-contracted)			
D—Discount	Reservations made for rooms with discount rates only, but always with several fences to compensate the discount for the hotel	Advance Saver Fare (RO) Opaque, package rates	
Y—Long-Term Stay	Special rate reservations for guests who stay for a longer period	Rates lower than LNR for periods of, for example, 2 months	
Corporate			
G—Corporate Regular (International)	Reservations made at the lowest room rate available—aimed at the corporate segment	Best Flex tariff with discount for companies with an international dimension	
P—Corporate Preferred	Bookings made by regular travel agents/consortia with contracted BTA rates	Carlson Wagonlit	
B—Business Products/Promotions	Reservations made by people who opt for flexible reservations with or without breakfast	Best Flex RO and Best Flex BB (BAR Rate)	
L—Corporate Local Negotiated	Reservations made at rates agreed upon between the hotel and the different companies	All LNR and KNR	
M—Government/Diplomat/Military	Reservations made at special rates for individuals with government, army, or diplomatic agency affiliations who are traveling for leisure or business	Reservations of a local regional, or national nature where no prior agreement is required	
Wholesale			
W—Wholesale	Individual reservations made by wholesalers	Hotelbeds; Voyage Privé; TravelZoo	
Package			
K—Leisure Package	Bookings made at non-refundable rates and with various increments in order to create value	Advance Saver Fare with BB; HB/FB; or Park included	
S—Leisure Package Seasonal	Bookings made during festive seasons, with promotional packages of dinner included, to generate incremental revenue in low season periods	Christmas Dinner	

(continued)

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Segment Name	Description		
P&P Discount & Airline Delay			
V—P&P Discount & Airline Delay	Bookings made on P&P discounted rates; flight delay discount; IHG employee discount	Employee rates; Friends & Family; IHG Points	
Groups			
Meetings and Groups (More than 9 roo	oms)		
C—Corporate Meeting	Reservations made as part of a corporate event or group booking of one of the hotel rooms		
I—Encourage	Bookings made by a group organized as part of an event/leisure for its participants	Annual Events	
A—Association Meeting	Bookings made as part of an international, national, regional, or local association event		
F—Trade Fair/Exhibition	Reservation made by a group attending a convention or trade show (may not be held at the hotel)	Exhibitions or Fairs that take place at Exponor	
Leisure Groups (More than 9 rooms)			
T—Tour Series	Reservations made by a number of tour groups with contracted rates and defined dates	Tourist Groups	
U—Ad hoc	Reservations made by a group typically associated with a leisure/social aspect without a contract and pre-established dates (on request)	Wedding groups; soccer clubs	
Other			
Airline crew			
O—Airline	Reservations associated with long-term contract airlines	TAP; TAAG	
Complimentary			
N—Complimentary	Reservations made for free	Guests	
House Use			
H—House Use	Reservations made for the	On Duty	

Although different segments generate different revenues, they usually occupy a similar percentage of the business from year to year. Some segments are connected and interdependent with the corporate segment, these are:

- 1. The Business Products/Promotions rate, created in January 2022, separating from the Corporate Regular, although both are based on the Best Flex rate, the purpose of the two is different, because the IHG management, when analyzing it, concluded that it was necessary to separate the corporate side from the other guests.
- 2. The Discount and Long-Term Stay segments present the best deals available, however these require at least one fence to be filled in order to be available. The higher the discount, the more fences have to be reached. In the case of the Crowne Plaza Porto Hotel, all guests staying longer than 4 nights are eligible for the Long-Term Stay segment and they get a discount between 15 and 20% if they choose the BB rate.
- Another segment that is linked to the Best Flex rate is the Leisure Package, which
  is calculated through the Discount segment with the supplement of the breakfast
  value. If breakfast is included, the rate will always be considered as a package
  (except those included in KNR/LNR and Long-Term Stay)
- 4. The Leisure Package Seasonal is applied during festive periods and is associated with the Best Flex rate, with the addition of other extras such as dinner.
- 5. The Corporate Preferred segment represents the BTA and is associated with Best Flex with the addition of extras.
- 6. The remaining individual segments (Corporate Local Negotiated, Government/Diplomat/Military, Wholesale, and P&P Discount and Airline Delay) have no connection to the Best Flex tariff, but rather to a tariff negotiated between both parties depending on the volume of business.

The group segment is introduced by Meetings, which is essentially the hotel's core business (subdivided into Corporate Meeting, Incentive, Association Meeting, and Trade Fair/Exhibition) and Leisure Groups (subdivided into Tour Series that have a block of rooms available for the whole year, under a contract between the hotel and the companies that conduct these tours; and Ad hoc that are groups on request that make reservations for specific dates, without the need for repetition).

At the Crowne Plaza Porto Hotel, the "group" segment is responsible for the largest revenue volume due, essentially, to meeting and event room reservations, F&B consumptions, and stays resulting from these meetings, which represent between 50 and 60% of the hotel's business mix (Table 54.3).

Based on the Crowne Plaza Hotel's internal reports, in 2019 (standard year of tourism analysis), the main feeder markets were:

The role of the RMr is to understand what the possible feeder markets are and performs this analysis using the political and macroeconomic terms of each of these and in which segments they fit, to subsequently define the strategy and indicate the guidelines to the commercial department.

MICE		Tour Series	Tour Series		Leisure	
Portugal	23,22%	USA	37,67%	Greece	17,29%	
Spain	20,80%	Japan	20,51%	Brazil	12,04%	
Germany	10,26%	Brazil	10,37%	Portugal	10,08%	
France	7,99%	Portugal	9,22%	China	7,49%	
United Kingdom	6,57%	Greece	6,82%	Malaysia	5,92%	

**Table 54.3** Top feeder markets in the top three segments (2019)

Source Crowne Plaza Porto, adapted

# 54.5 Conclusions

The relevance of the present study is associated with the existing gap regarding the topic of distribution channels and rate optimization, in hotel RM, in operational terms.

Through a careful analysis of this study, one can understand how the reservations and RM department of the Crowne Plaza Porto Hotel are structured, as well as the distribution channels where it is present, segmentation, defined competition, and pricing principles for rate optimization.

In summary, the segmentation of the Crowne Plaza Porto Hotel has two major segments: the individuals that have a standard procedure and the groups that require more time and attention because they can be accepted or rejected according to the displacement analysis.

The displacement analysis happens when the hotel may overbook on purpose, the RMr after performing an analysis of the revenue that will be generated by accepting a new group, comes across too many guests compared to the rooms it has available in the inventory. In this situation, it needs to relocate them to other hotels, which may or may not belong to the same group.

Regarding the topics covered throughout the research, both distribution channels and rate optimization were analyzed, to make it easier to understand the inherent concepts and their impact on hotel units. Finally, the current study contributes to the area of RM, both with the exposure of one of the city's iconic MICE hotels, the Crowne Plaza Porto (in the Northern Region of Portugal), but also with a more recent view of the world of distribution channels and the way RMr optimizes rates, in a hotel unit. The main limitations, felt during the development of this research, are essentially related to the little literature available and accessible on the subject, to the few permissions given within the organization. RM itself is an area with several articles and studies conducted throughout its history, however, it is a very diverse area and is constantly updated and evolving, so there are articles whose information is already too outdated. Besides, with few RMr currently in activity, it becomes complicated to have recent articles that keep up with the development of the area.

In this sense, there is clearly a scarcity of articles on topics such as distribution channels and price optimization, thus preventing a more in-depth knowledge, in both areas of RM, from being transmitted to professionals in the area as well as trainees.

The use of these platforms is determinant, not only for a more realistic contact with how RM is practiced, but also for a reliable analysis of RMr's positioning in the market. Some of these methods involved the use of other platforms where the hotel is presented for marketing, and making associations, assumptions, and hypotheses.

This study is intended to enrich the field of RM and to provide an updated view of the theme and the work method practiced at the Crowne Plaza Porto Hotel.

Furthermore, for future research, it is recommended to explore the impact that rate optimization and restrictions may have on distribution channels. As a complement, it is also recommended to conduct interviews with OTA Account Managers and hotel RM Directors, as it would be interesting to understand their perspective on the subject. We acknowledge the possibility that this study may serve as a base material for hypothetical investigations that may be carried out. The field of RM is a large unfinished work, whose pages are constantly changing and evolving, therefore, the focus on approaching new perspectives and conducting new studies will be useful, if conducted by professionals in the field or researchers.

In the hotel business, the competition is fierce and is defined by details that determine the choice of the guests. Competition, as it plays a key role for the hotel, requires the study of its competitors, as well as the monitoring of movements and updates to maintain a competitive positioning.

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