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## The Impact of Internet on Pricing Strategies in the Tourism Industry

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### **Abstract**

The Internet has had a dramatic effect on the distribution of tourism products. The reintermediation which has taken place has led all distributors to implement more dynamic pricing strategies from the widespread use of Yield Management (YM) practices

to price discount strategies. The Internet also influences the consumers' perception of pricing strategies. Consumers are increasingly aware of YM practices and the Internet has become the essential tool for finding the best price. However, there continues to be a certain disconnect between the channels used for searching for the best price available and those used by the clientele of luxury hotels in France to make their booking. Indeed, the telephone still dominates for this type of clientele when carrying out this type of transaction as they find it easier to use, it is entrenched in their habits and is perceived as being more secure.

**Keywords: Tourism, Internet, pricing strategies, Yield Management, Hotel**

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## **INTRODUCTION**

When studying the impact of IT on the tourism sector the most noticeable effect has been on distribution as it involves cross over exchanges between suppliers, intermediaries and customers which can be dematerialized. The Internet is used during different phases of the sale and thus radically changes Customer Relationship Management.

For suppliers and intermediaries, the Internet offers three main advantages; it gives them easier access to customers, it allows them to create personalized offers and to reduce distribution costs. For the customers, the Internet is a means of reducing the cost of purchase (cost of looking for information and the price of sale) by making comparisons between and having access to a greater number of offers. These two combined effects explain the importance of the price variable on this channel.

The arrival of Internet has changed the structure of intermediation and pricing practices in the tourism industry with the arrival of new players, the repositioning of the traditional players such as the Global Distribution System (GDS) and the development of direct sales for producers.

This research studies the impact of the Internet on pricing strategies used by distributors in the travel and tourism sector and the perception of pricing practices by consumers.

## **MECHANISMS FOR PRICE SETTING AND PRICING STRATEGIES BY SUPPLIERS**

Price determination is at the heart of economic theory as the price helps balance supply and demand in different markets creating a general equilibrium. In the goods and services market, demand increases with the lowering of prices and the inverse is true for supply. Comparing the two leads to the definition of a price and to an optimal quantity of exchange (Walrasian process of price formation). This theoretical model assumes, besides the rationality of the agents, perfect information to enable the consumers to compare the producers' offers and the absence of any friction or imperfection in the market. Internet, through its capacity to put buyers and sellers in contact at a low cost and to share price information, reduces market imperfections. It also encourages the use

of innovating pricing strategies, such as auctions, which are more difficult to implement in the real model as buyers and sellers must be brought together in the same place. Consequently, price formation on the Internet is closer to Walrasian price discovery than in physical markets.

Work by Elmaghraby and Keskinocak (2003) has managed to identify two types of pricing mechanism: the mechanism of posted prices and that of price discovery. In the first instance, the seller determines the price and adjusts it during the period of sale (price maker) depending on the demand and the remaining lifespan of the goods or service. The more perishable the product, the more rapidly the price is adjusted as in the case of tourism products (nights in a hotel, seats on a flight, etc.). In the second instance, the price results when supply meets demand through auctions. Open ascending price auctions (otherwise known as English auctions) have been popularized by the e-commerce site eBay. The price varies in real time during the period of sale depending on buyers' interest. The seller is price taker but he can also ensure he receives a minimum price of sale by fixing a reserve price (visible or not) in order to cover his costs.

### ***Price maker pricing strategies and Yield Management***

When distributors in the tourism sector set prices they mainly use Yield Management (YM) techniques. According to Capiiez (2002), "the objective of using Yield Management is to optimize revenue for service industries. It identifies market segments, assesses potentialities and sets the prices. It creates the rules for reducing prices and movement to establish an advanced reservation process. It controls the efficiency and the implementation. It ensures the management of available capacity by adapting the pricing and offer of services to the specificities of each identified segment."

Therefore, YM is a system of management whose aim is to maximize revenue from a specific service (hotel room, airline seat...) by adjusting the price and capacity according to the type of customer. The application of YM techniques therefore requires three functions to have previously been set: the demand forecast, the maximization of profit and control of sales (Anderson & Carroll, 2007).

Airline companies first started using YM techniques when the airline industry was deregulated in the 1970s and have since fine-tuned them. Today all airline companies use YM to maximize the use of their capacity, their overall revenue and consequently their operating results (Clemons et al, 2002). The hotel industry adopted the principles of YM later, in the 1980s. Like the airline companies, hotels use YM as a method of maximizing profits. The aim is to increase net yield by previous allocation of available capacity of rooms to predetermined market segments at an optimum price. Even if this implementation happened at a later date, it is important to highlight that hotel managers have long used various pricing strategies to maximize their profits by taking into account seasonal demand for rooms and the limitations of capacity (Espinet et al, 2003).

### ***The impact of Internet when developing pricing strategies***

Internet gives specific coverage to producers' YM pricing policies, whether or not they sell directly to the public, as the final customers are instantly informed of price changes through the distribution channel. However, these techniques do not allow certain segments of consumers to be taken into account. In particular, as prices rise when

occupancy rates increase, prospective customers reserving late may desist if they are price-conscious. By not taking this segment into account, suppliers face a potential loss of revenue.

Producers also resort to price discount strategies but direct sales at a discount price carry the risk of damaging image and brand integrity. Therefore they use specific distribution channels such as travel agencies which specialize in discount or the Internet to sell off their low price products.

The price discount strategies which these agencies implement target consumers who are more concerned with the price than the destination or other aspects of the tourism product. There are four main types of strategy:

- The sale of 'low cost' products is based on a limited selection of the cheapest products with a minimum level of quality (such as charter flights), or products from little known suppliers with whom the distributors negotiate harder on the price.
- The sale of "down-graded" products is based on products to clear as they near their expiry date (under a fortnight) or products which have low demand at certain times of the year (e.g.: a hotel in Tunisia in winter). There is limited choice but significant reductions, sometimes up to 70% (e.g.: Lastminute.com, Anyway.com, Travelprice.com),
- The sale of opaque products: products which have certain hidden characteristics (such as the airline company, the number of stop-overs, the exact holiday location, etc.) are sold at a knock-down price. After the sale, all the characteristics of the product are revealed (for example: Hotwire.com, Priceline.com). The consumer must make a choice in a situation where the information available on the product is limited. This can lead to dissatisfaction if the perceived product quality is too far removed from the quality delivered (Teboul, 1999),
- Auction sale with very low starting price. However, the auction could result in a very low price (especially if there is no reservation price set by the seller), or to a price along the same lines as those from other distribution channels if the competition between buyers is high.

Another possibility for suppliers consists in modulating the impact of the price on consumer buying behavior by selling package holidays (Travel Packages). This phenomenon partly explains their strong growth in particular for online distribution. They represent around a third of travel spending in Europe and the United States<sup>1</sup> (Tourism Magazine, June 21008). More precisely, travel packages are made up of two or more products which could be bought separately but which are combined for the sale, normally for one all-inclusive price (Stremersch and Tellis, 2002).

Internet has clearly revolutionized the market for travel packages by giving travel agencies and destinations the possibility to create and distribute them. The consumer can therefore choose, via intermediaries, ready-made packages or to make them up for themselves (dynamic package). Although it offers the advantage of being tailor-made,

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<sup>1</sup>[http://www.corporate.canada.travel/corp/media/app/en/ca/magazine/article.do?path=templatedata%5Cctx%5CmagArticle%5Cdata%5Ccen%5C2008%5Cissue01%5Cresearch%5Cprice\\_competitiveness](http://www.corporate.canada.travel/corp/media/app/en/ca/magazine/article.do?path=templatedata%5Cctx%5CmagArticle%5Cdata%5Ccen%5C2008%5Cissue01%5Cresearch%5Cprice_competitiveness)

dynamic packaging does have several constraints. It begins with a real time check of stock and of the pricing of each category of service, assesses supply then assesses the whole package in response to the demands of a customer. This process requires a high-performance information system especially concerning real-time interfaces between the company offering the packages and all the suppliers involved, connections are made by 'switchers' such as Pegasus. This constraint is vital for suppliers to be able to keep control of their stocks and prices. The development of dynamic packaging systems has brought about a new way of selling perishable travel stock through direct links between the supplier and the sellers (Anderson et al, 2007).

Consumers are often less conscious of the price than as to whether the elements within the package are complementary thus differentiating it from other products. Generally speaking, the more the elements of the package complement each other, the greater the surplus that can be passed on to the client and the less the price influences the choice. For example, a casino which puts together a package (including the hotel room, meals, admission to the entertainment rooms and airport shuttle service) is offering not only an integrated experience for the customer, but is reducing their research costs and increasing their comfort.

## **CUSTOMERS' PERCEPTION OF PRICING STRATEGIES**

In order to better understand consumers' perception of pricing practices in the hotel industry, we questioned 160 customers of the Novotel Vaugirard hotel in Paris (France) face to face. The questionnaire was administered from the 3<sup>rd</sup> to the 19<sup>th</sup> September 2007 in Paris.

The sample group was balanced in terms of the male/female ratio (52% men). There were also an almost equal proportion of people who were staying for business purposes as for leisure (36.9% against 38.1%). However, concerning age and profession we touched on a specific customer segment: 57% of people were under 40 years of age and 60% were from a higher social category (businessperson, freelancer, manager). This is due to the specific area chosen, the clientele of a 3-star Parisian hotel. It is therefore logical that 58% of them answered that they more often stay in 3-star hotels and that 17% of them stay in higher class hotels (4 stars or more). Moreover, 49% stay at the hotel more than 7 times per year and 36% have at least one loyalty card for hotel chains such as Accord, Hilton, Choice Privilege, Best Western, Starewood, etc. It is therefore a population which regularly uses hotel services and of which 36% is a member of a loyalty scheme.

Mainly we were interested by the choice of reservation method.

We crossed the two nominal variables:

- Which method do you normally use to reserve your accommodation?
- For which reasons have you chosen this method? For this question, two possible answers were permitted.

The Chi-2 test gives a significance coefficient of 0.044. We can therefore deduce (with a risk of 4.4%) that there is a link between the channel of reservation and the choice of this channel. In particular, the respondents preferred to use the telephone despite the

increased power of the Internet due to habit and ease. However, as soon as they wanted to find a better price, they used the Internet channel whether they were searching through the site of a virtual travel agency (for example Bookings.com) or directly on the hotel's own site.

<b>Reservation channel / why?</b>	Habit	Easy	Best price	Other
Travel Agency	7	12	1	6
Internet agency	5	14	26	2
Hotel Internet website	6	15	16	1
Phone Agency	29	35	8	4
Other	3	7	3	4

We attempted to confirm this hypothesis by asking the respondents if they carried out research on their room rate.

77 people said they had carried out research to find the best price before reserving a room.

We then crossed the two nominal variables:

- If yes, which method do you most often use?
- For which reasons have you chosen this method? In this question, a maximum of two answers were allowed.

The Chi-2 test gives a significance coefficient of 0.021. The use of Internet as a means of researching the best price was confirmed (with a risk of 2.1%). This result shows that there is a certain disconnect between the channels used for finding the best price and that used for reserving. The telephone still dominates as it is easier to use and is entrenched in their habits. However, Internet is preferred for finding pricing information but that does not necessarily mean that the transaction is carried out by this channel.

For example, if the people questioned find a comparable price by phone, they will then reserve using that method. We haven't looked into the reasons for this choice in the questionnaire, but some semi-directive interviews with the consumers enabled us to suppose that the telephone seemed safer than Internet to carry out the transactions.

<b>Channel to look for best price/ Why ?</b>	Habit	Easy	Best price	Other
Word of mouth	4	8	6	3
Internet	11	19	36	7
Travel Agency	5	5	3	2
Phone Agency	3	1	2	1
Other	0	0	1	1

Moreover, 97 people said that they had noticed pricing differences for the same room in the same hotel outside the periods of high and low occupancy.

In order to study if this identification of YM practices is linked to the search for best rates, we crossed the nominal variables:

- Do you carry out research on your room rate? (Q8)
- Have you already noticed the difference in rates for the same room in the same hotel

outside periods of high and low occupancy? (Q12)

The Chi-2 test gives a significance coefficient of 0.001. The link between the two variables is confirmed but the direction of the relationship is not specified. We do not know if it is the identification (Idenf.) of YM practices which encourages the consumers to find out about the rates, or if it is their research on rates which makes them aware of YM practices.

Q8/Q12	Idenf. of YM	No idenf. of YM
No research	26	57
Research best price	71	6

In conclusion, the advent of the Internet has had a dramatic effect on the distribution of tourism products by giving greater power to the final customer who is now able to compare offers and also to the producer who can sell direct to the customer. This does not mean that distributors will disappear but that there is a reintermediation based on the reduction of distribution costs, a reworking of the offer and more dynamic pricing strategies from YM to price discount strategies.

The Internet also influences the consumers' perception of pricing strategies. Consumers are increasingly aware of YM practices. But this research has not allowed us to determine if it is the identification of YM practices which encourages the consumers to find out about the prices, or if it is their research on prices which makes them aware of YM practices.

Finally, Internet is the essential tool for researching the best price even if there continues to be a certain disconnect between the channels used for searching for the best price and those used by the clientele of luxury hotels in France to make their reservation. Indeed, the telephone still dominates for this type of clientele when carrying out this type of transaction as they find it easier to use, it is entrenched in their habits and is perceived as being more secure.

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