Corporate Social Responsibility implications of Yield Management based decisions in hotel management: the consumer perspective

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Abstract

An essential element in Yield Management (YM) strategies is to charge different prices for essentially the same service; that approach, however, could be contradiction with CSR transparency requirements. In this paper this problem is analyzed from a theoretical, normative and consumer perspective. Several YM price segmentation criteria are analyzed. Existing customer protection laws and national and international CSR guidelines and standards are reviewed to establish whether they collide with YM techniques being applied in the hotel sector. The Spanish customer attitude towards the acceptability of the various YM techniques is estimated through structured interviews with customer associations. Results indicate that YM techniques are perceived by customer associations as being acceptable from the customer stakeholder perspective. On the other hand, both the various consumer protection legal norms and the Corporate Social Responsibility (CSR) guidelines and standards devote special attention to the information received by the consumer before and during the purchase, demanding increasing degrees of transparency. This requirement could be construed by some stakeholders as being in conflict with certain YM segmentation approaches. Special care must be taken, therefore, in the thorough analysis of each new segmentation approach being contemplated, to ensure its full legal and CSR compliance.

Keywords: Corporate Social Responsibility, CSR, Yield Management, Consumers, Hotel management

1. Introduction ¹⁹

Yield Management (YM) techniques segment customers according to their price sensitivity ("willingness to pay"), in an attempt to charge different prices for essentially the same service (e.g., a certain category of hotel room on a given date), depending on segmentation variables such as the channel or timing of the sale/ booking. An essential element in this strategy is to avoid price insensitive customers gaining access to the service at the lower prices; however, this must be achieved in a manner compatible with legal and ethical requirements including information disclosure and transparency.

This study analyzes from a customer perspective the segmentation approaches used by the YM (also called Revenue Management) techniques applied in the hotel sector. It has been

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developed within the framework of a multiyear, multicenter research project currently being carried out by a team of Spanish universities on the application of management decision practices by Small and Medium Enterprises in the hotel sector. It will thus analyze exclusively service sectors, with particular focus on the hotel industry.

The contribution of YM approaches is contingent on the customer's acceptance of their application. They may in some instances bring about customer rejection or even lead to conflicts that damage the long term performance of the company (Talluri andVan Ryzin, 2004). To avert this risk companies resort to organizational and/or marketing tools to make these techniques more palatable for the customers, such as creating real or artificial differences in the quality or utility of the services provided, as discussed below. On the other hand, if most customers are sufficiently informed and adopt a strategic approach, the application of YM might backfire, resulting in lower yields for the company as the customers effectively exploit price differences (Anderson and Wilson, 2003). YM approaches are therefore often aimed at situations in which most customers are not well informed and/or do not exhibit strategic behavior. Furthermore, their success is contingent on accurately forecasting their customers' strategic behavior. In their analysis of markedly seasonal sectors, Aviv and Pazgal have studied customers with strategic behavior, who consciously adjust their willingness to pay according to the position in the seasonal cycle. If the seller overlooks this, and wrongly assumes that customers will adopt a myopic attitude in their purchasing decisions, he might loose 20% of its sales (Aviv and Pazgal 2005). It is thus foreseeable that increasing sophistication in the hotel sector consumers (through learning, advice by agents, better searching and comparison tools...) might result in a reduction of the profitability generated by YM techniques.

The importance of avoiding annoying the customer through perceived unfairness in the application of YM techniques is highlighted by long term oriented evaluation methods. The application of full lifetime value approaches, that value customers according to the net present worth of all expected future incomes resulting from the interaction with those customers (Venkatesan and Kumar, 2004), show how that value can be diminished through the application of YM practices that damage the relationship with the customers and their trust level. Overbooking provides a clear example of a practice that often generates negative reactions, even if economic compensations or alternative services are provided.

The price volatility that results from YM's dynamic pricing approach might force customers to hedge their bets more carefully, intensifying the effort devoted to identifying alternative offers and carrying out price comparisons (Mauri, 2006). That could cause an increase in the information related transaction cost and reduce the market efficiency.

Applying segmentation requires choosing the segmentation variables or dimensions. The customer population is heterogeneous along two dimensions: they may have different valuations for the product and different degrees of patience (waiting costs). (Su, 2007). Not all segmentation variables are equally acceptable to customers. Quantitative studies in restaurants showed that some measures, such as the use of discount coupons or applying different prices at lunch and dinner time were well accepted. Applying different prices in weekends and weekdays received a neutral to negative valuation, and charging different prices according to the location of the table was rejected by most customers (Kimes and Wirtz, 2003). Choi and Mattila (2005) have applied scenario simulation techniques to the analysis of the amount and type of information required by customers in the hotel sector in order to perceive that they were being treated fairly.

2. Objectives and Methodology

This bibliography review shows that the price discrimination techniques that form the basis of YM's approaches might generate negative reactions, even conflict, if customers perceive them as unfair. The authors participate in a publicly funded multiyear, multicenter research project aimed at the development of YM based Decision Support Systems for the Spanish hotel sector. Therefore, this paper aims at the analysis, from a customer perspective, of the tolerability of the segmentation / price differentiation approaches used by the YM techniques applied in the hotel sector. Its specific objectives are:

- Establish whether either the compulsory legal framework or the voluntary Customer Social Responsibility (CSR) standards collide with some YM techniques potentially applicable in the hotel sector, and in that case how to avoid that conflict.
- Gauge the Spanish customer attitude towards the acceptability of the various YM techniques, estimated through the opinion of their representatives, the customer associations.

The research methodology used in this study involved:

• Determine and categorize the YM techniques (and corresponding segmentation approaches) to be analyzed. Three price differentiation criteria have been explored:

According to purchasing/booking timing (anticipation or lead time)

According to channel (Internet ...)

Price differentiation through artificially handicapping a service offering with no associated cost savings (similar to the lower air fares requiring a Saturday night stay, to discourage business travelers)

Analyze the various customer protection laws and CSR guides (e.g. AENOR's Ethics -Companies Social Responsibility management system or the draft ISO 26000 Guidance on Social Responsibility), particularly the items more directly linked to the YM segmentation approaches. This analysis focuses on the chapters devoted to the implementation of CSR "principles" and the consumer stakeholders.

Study the consumer perception and lines of action. Structured interviews have been conducted with the major Spanish associations for customer protection and representation. Items explored included the current perception by these customer organizations of each of the analyzed segmentation techniques, and their historical and prospective stance towards their application. Interviews reviewed the general perspective for the various types of products and services and then focused on the specifics of the hotel sector.

3. Analysis of customer protection laws and CSR guides

To assert the viability of the application of the YM based Decision Support Systems for the hotel sector currently being developed, it is essential to ensure that they are not in conflict with either compulsory laws or generally accepted social codes of conduct such as the emerging Corporate Social Responsibility (CSR) standards and guidelines.

3.1 Applicable legal framework

Various drivers collude to promote a gradual strengthening of the legislation aimed at customer protection. In the Spanish case, the mandatory adoption of the highly developed European directives is one of these drivers promoting the legislative renovation. After enacting the 44/2006 law "*Mejora de la protección de los consumidores y usuarios*" (Additional consumer and users protection), in order to clarify and integrate the dispersed prior legislation, the Real Decreto Legislativo 1/2007 was approved, integrating the 1984 "*Ley General para la Defensa de los Consumidores y Usuarios*" and various other complementary laws derived from the adoption of the European directives. Thus, the Spanish legal system now encompasses European directives on consumer and user protection in areas such as: contracts signed outside commercial premises, distance signing of contracts and defective product liability.

3. 2 Spanish CSR guidelines: AENOR's CSR management guide

The "Sistema de gestión de la responsabilidad social de las empresas" (CSR management system) guideline (AENOR, 2007) stems from the consensus among the members of AENOR's technical normalization committee AEN/CTN 165, encompassing representatives of the various stakeholders. The committee includes representatives of the stakeholders: firms, workers, government, consumers, NGOs and research centres, coordinated by the Secretary of the Spanish Normalization Society (AENOR). The guide does not include specific references to commercial practices (i.e. YM), but rather more general indications concerning the commitments that the company must fulfill with the various stakeholders.

The section of the guide devoted to commitments with consumers indicates that the company must provide goods and services which are socially responsible, i.e., that meet criteria such as quality, reliability, and, increasingly, universal access. In this guide, universal access is a condition or feature that must be met not only by products and services, but also by the environments through which they can be accessed and the processes and devices required for their utilization. Thus, products and services must be comprehensible and usable by all customers autonomously and in safe and comfortable conditions. Accessibility must be sought right from the product/service design phase, thus meeting the exigency of "design for everybody".

Even though this universal access concept has been basically promoted by the ONCE (Organización nacional de ciegos, national blind association), it is potentially applicable to any other marginalized group such as those affected by the digital breach. A YM approach including channel-based discrimination could be reckoned as not compliant with universal access, since some social groups lack the training/ability to book their hotel rooms through online channels.

Another section of the guide discusses customer contracts (i.e. how to establish the commitment that must later be fulfilled), stating that contracts should be drafted according to the principles of transparency, veracity, trust and good faith. Those principles apply not just to the products and services (hotel services in our case), but also to their prices, quotations and warranties. It therefore emphasizes the need for transparency that can in turn generate trust, thus posing again the question of whether practices based in incomplete transparency in the pricing system will foster or damage the customer's trust.

3.3 International CSR standards: ISO 26000 Guidance on Social Responsibility

The up-and-coming ISO 26000 Guidance on Social Responsibility is an international Standard currently being developed by the ISO/TMB Working Group on Social Responsibility which is currently working on the draft n° 4. The 7 main topics to be developed in this Guide are: organizational governance, human rights, labour practices, the environment, fair operating practices and consumer issues.

Consumer protection has thus being identified as one of the 7 key topics to be developed in the guide. Besides, they are deemed to have great influence through their market power, which can be exerted through responsible consumption.

Among customer related principles to be upheld it cites: The right to be informed, i.e. the right to be given facts needed to make an informed choice, and to be protected against dishonest or misleading advertising or labeling. The right to consumer education, i.e. the right to acquire knowledge and skills needed to make informed, confident choices about goods and services while being aware of basic consumer rights and responsibilities and how to act on them.

The section on "fair marketing, information and contractual practices" emphasizes the need to provide consumers with information that allow them to make informed decisions about purchases and to compare the characteristics of different products and services. ... When communicating with consumers,... not including critical omissions of information... provide complete, accurate understandable and comparable information, ...provide clear and sufficient information about prices, terms, conditions and costs (ISO, 2008, pp.54 -56).

Regarding initiatives that should be pursued by companies to foster the education and awareness of the consumers, to help them to be well-informed, conscious of their rights and responsibilities, they should be aimed at supporting consumers to make knowledge purchasing decisions and to consume responsibly. A particular reference is made to disadvantaged consumer groups, including those with low or non-existent literacy levels, on which education and attention must be focused. Again this might raise doubts as to whether channel based price segmentation, at least partially based on the existence of some segments or digitally illiterate customers with no access to online sales channels, could be in conflict with this normative trend towards supporting those starting from a disadvantageous educational situation.

4. Consumer associations inquiry

In order to establish the Spanish consumer's attitude towards Revenue Management, and whether its techniques (such as price discrimination for identical hotel rooms based on reservation time, or overbooking) are deemed unjust, unethical or even illegal, we have interviewed their representatives, the customer associations, asking them to explain their positions.

Out of the various potential YM techniques, our direct inquiry to the customer associations focused on price discrimination. We carried out structured interviews around three main types of price discrimination with top level representatives of three organizations: Consejo Nacional de Consumidores y Usuarios (National Committee of Consumers and Users), Instituto Nacional del Consumo (National Consumers Institute) and Confederación de Consumidores y Usuarios (CECU) (Users and Consumers Federations). They were asked about how these

practices affected the consumers, and how they were perceived by them. The types of price discrimination around which the interviews were structured were:

- 1. Prices that vary with the time at which the hotel room is booked (they can go up, but also go down as with last minute offers; however, the price at which the booking was made is respected).
- 2. Prices depending on the distribution channel (e.g. cheaper offers available through Internet). Sometimes this might just reflect differences in channel costs; the focus of this study is on the cases where price discrimination can not be attributed to cost reductions.
- 3. Artificial adjustment of the quality of the good (reducing its utility for the customer), even if no cost reduction ensues, to encourage self-selection. Galileo's planned global navigation satellite system will offer both Open Service (OS), which will be free, and the encrypted Commercial Service (CS), which will be available for a fee and will offer better accuracy. Some discounted airline tickets require that travelers stay over a Saturday night, even if that is of no direct benefit to the airline; however, it makes the ticket less attractive to business travelers while as it is still acceptable to tourists.

Consumers have been chosen for this study since they are the stakeholders most directly affected by the strategy being analyzed. Under a Corporate Social Responsibility (CSR) approach, the interaction among the various stakeholders is deemed to determine the ultimate objectives of a company. In this stakeholders model, multiple Agency relationships develop, in which one party (the principal) delegates work to another (the agent), who performs that work. Agency theory is concerned with resolving the problems that arise when (a) the desires or goals of the principal and agent conflict and (b) it is difficult or expensive for the principal to verify what the agent is actually doing. It also studies the problem of risk sharing that arises when the principal and agent have different attitudes towards risk (Eisenhardt, 1989).

In this case, the principal (citizens / consumers) can delegate their representation in an agent (customer associations), in a manner similar to how the principal "workers" delegates on the agent "unions" or certain citizens delegate in NGOs. Double agency relationships also exist, with two levels of delegation; the government is an "agent" of the political parties, which are themselves "agents" of the citizens (principal) (Durán, 2005). Thus, consumer associations undertake the direct representation of consumers (representation in public bodies and legal defense), provide info (studies, dissemination) and help to shape public opinion (directly through its members and indirectly through their media access).

- Currently, a weak point in how markets operate is the low level of trust customers have in firms, which leads to inefficiency and high transaction costs. CSR aims to increase the firm's trustworthiness by implementing correcting mechanisms. A prerequisite to raise the level of trust is to increase the transparency, fostering the flow of quality information between firms, their customers and society at large.
- Customer's perception of company's transparency is quite negative. In a study on CSR perception by consumers carried out in 2006, interviewing a sample of 664 Spanish consumers, average score for transparency was only 3,83 on a 10 point scale (CECU, 2006).

- This is the second edition of this study by the Confederación de Consumidores y Usuarios CECU, which in 2004 pioneered the analysis of CSR perception. The perception of the information received was even worse, attaining an average score of 3,05. The survey also evaluates potential government actions aimed at promoting and developing CSR; measures to increase compulsory information provision and transparency are generally backed by respondents.
- All this leads to the conclusion that, from the customer's perspective, firms should increase their transparency and improve their information flows. This raises the question of whether these requirements can be reconciled with YM's price discrimination approaches, which might rely on the lack of information by customers of the segmentation variables.
- The following section contains the outcome of the structured interviews and the analysis of the documentation provided.

4.1 Consumers opinion: price variations due to purchasing / booking time

- When asked about their position regarding prices that change according to the time at which the purchase or booking was made, customer organizations did not object to that practice as such.
- Their main exigencies concerned transparency, i.e., that the consumer is properly informed, and that the contractual conditions are clear and are fulfilled. Thus, if prices changes over time, that should be for different customers, since once a booking or purchase is done the price can not be modified.
- Another line of customer advocacy is the fight against abusive clauses (the recently enacted 44/2006 Law for the improvement of the protection of consumers and users specifically states what are considered abusive clauses in contracts). It is generally understood, however, that YM is concerned with reductions from the maximum prices, not abusive prices.
- Regarding specifically the hotel sector, CECU (as a confederation of associations operating in several autonomous regions) participated in the development of the Ethical Code for Hotel Sector Companies, promoted by the hotel federation of the Comisiones Obreras union (the ETHOS project), from 2001 to 2003, in cooperation with companies from the hotel sector. The project aims at the creation of a "responsible firm" label or stamp. The code encompasses best practices in Human Resources management, labour relations, environmental management, health and safety in the workplace and relationships with suppliers, customers and the overall community. It focuses on labour, however it also states that the responsibility of hotels should also be oriented towards their customers. Hotel companies should take measures towards developing satisfied and loyal customers that perceive the quality of the service they are receiving. (FECOHT, 2003 pag. 61).
- Out of the 21 best practices concerned with the responsibility towards customers, none of them focuses exclusively and specifically on prices; they address broader issues such as fulfilling commitments or ensuring proper service levels. Some examples of measures included are: a) setting up suggestion boxes b) complaint forms c) satisfaction surveys d) redesigning red tape to reduce customer wait time e)

fast reaction procedures to handle problems f) fluid and constant communication g) provide customers with full and reliable information about payment means and procedures and about warranties on services provided h) fulfill customer commitments i) properly schedule the hotel resources for the different seasons, to ensure a quality level of service to customers at all times.

• Even though overbooking was not explicitly included in the questionnaire, consumer associations interviewed took the opportunity to show their rejection of this practice, even though it is legal and regulated. In their view, overbooking is in conflict with the last three "best practices" (g, h, i) listed above. They supported their position with recent examples drawn from air tickets (closely related with the hotel sector, particularly through packaged trips), specifically intercontinental flights with overbooking. They argued that these practices have bred mistrust and anguish among passengers and have led to an increase in the safety airport waiting time that travelers add, as a precaution, to the established anticipation, thus generating inefficiency and provoking a feeling of breaking the rules of the game.

Customer associations were already critical of some aspects of the new European directives on airline passenger rights when it was enacted in 2006 (after a long waiting time, since 2001, that led to some claims of legal vacuum and insecurity). It had positive elements, such as assigning higher compensations and indemnities due to delays, cancellations and overbooking, and contemplating new situations. However, several consumer associations (including FECU and FACUA, Federación de Consumidores en Acción or Federation of Consumers in Action) argued that compensations were inadequate to compensate the damage inflicted, and that these practices actually generated profit for the companies. Furthermore they claimed that "by regulating by law the overbooking indemnities, they are accepting as normal and "legalizing" a course of action that should be rejected and that is damaging for the interests and the rights of the consumers". Other organizations such as the OCU (Organización de Consumidores y Usuarios) stated that "stipulated indemnities are too low to discourage companies from using overbooking", which is a procedure that they considered simply as a breach of contract that was being sanctioned by law (Consumer, 2005). From the airlines perspective, some considered the law excessive, avowing it would distort the operation of the market, while as others considered it a positive step.

4.2 Consumers opinion: price variations due to the distribution channel

The consumer associations stated that they found it logical that different channels offered different prices. They consider normal that differences exist among buyers depending on the skill and effort devoted to looking for the best offer.

A reason cited by these consumer associations to justify their position is that sales channels do not have monopoly power. The consumer can freely choose which channel to use. The consumer can decide to book his room by calling the hotel directly, through Internet, through his travel agency... It is a personal choice, influenced by the cultural attitude towards the ICT (Information and Communication Technology). Furthermore, the user may have to foot some costs associated with the use of certain channels such as Internet: telephone line, hardware, space for the PC etc.

They also mentioned that Internet does not always offer the cheapest rates. Specific examples of travel offers on the Internet being bested by conventional channels were provided. Cinema tickets are sold through the Internet at a premium due to the service fee.

The only concern voiced in this section referred to the digital breach. Substantial differences might exist in cultural and educational levels and consequently in ease of access to online resources. Their proposed approach involves institutional support to universalize the access to the online medium and channels, through public education, training centres and adequate ICT infrastructure.

Their main exigency is guaranteeing security in sales through the Internet. The objective is to increase the level of trust, by imposing strict security in online sales and ensuring that the use of credit cards is safe.

4.3 Consumers opinion: Artificial adjustment of the quality of the good to facilitate price discrimination through self-selection

The immediate reference for this practice is the airline sector, which pioneered this approach. The consumer associations considered customer segmentation of the type applied by Iberia with the Apex tariffs for European flights as reasonable. Those users that do not require total flexibility in their travel arrangements and dates can use those tariffs and benefit from lower fares. Nowadays a large variety of potentially attractive tariffs exist, often resulting from alliances among companies.

Besides, this segmentation is perceived as part of a general trend, in most industries, towards differentiating products and services to effectively segment the market in focused niches that foster specialization.

These commercial strategies must comply with regulations such as the prohibition in Spain of selling below cost ("dumping"), included in the law "Ley de Ordenación del Comercio Minorista Ley 7/1996". However, other countries do not have this legal limitation against selling below costs. That is a cause of concern for consumer associations in their role of customer protection, in sectors such as tourism. Tour operators release international offers, aimed at customers from various countries and including different countries as destinations. Complying with non-harmonized legal requirements is a delicate issue.

5. Conclusions

The study results indicate that segmentation approaches generally utilized in YM are perceived by customer associations as being acceptable from the customer stakeholder perspective, and can even be considered as a source of market efficiency.

On the other hand, both the various consumer protection legal norms and the Corporate Social Responsibility (CSR) guidelines and standards devote special attention to the information received by the consumer before and during the purchase, demanding increasing degrees of transparency. This requirement could potentially be construed by some stakeholders as being in conflict with certain YM segmentation approaches.

Special care must be taken, therefore, in the thorough analysis of each new segmentation approach being contemplated, to ensure its full legal and CSR compliance. As an illustrative example of the complexity of this scenario, Spanish law prohibits "dumping" (selling below cost), which is permitted in other European legal frameworks; these legal inconsistencies add to the challenges faced by organizations such as hotels, which often have an international market and whose sales and purchases result from the interaction of multiple agents frequently located in different countries.

References

AENOR (2007). Ethics. Companies Social Responsibility management system. AENORediciones. Drafted by Technical Committee AEN/CTN 165 Spanish Standard Body.

Anderson, C.K., Wilson, J.G. (2003) Wait or buy? The strategic consumer: pricing and profit implications. *Journal of Operational Research Society*, 54:299-306.

Aviv, Y.; Pazgal, A. (2005) Optimal pricing of seasonal products in the presence of forward-looking consumers. Working paper. Olin School of Business, Washington University.St Louis. Dic 2005.

Choi S., Mattilla, A.S. (2005) "Impact of information on customer fairness perceptions of hotel revenue management". *Cornell Hotel and Restaurant Administration Quaterly*, 46:444-451.

Confederación de Consumidores y Usuarios-CECU (2006) *La opinión y valoración de los consumidores sobre la Responsabilidad Social de la Empresa en España.* Resultados de la 2^a encuesta, noviembre 2006.

Consejo de Consumidores y Usuarios (2006) Memoria de Actividad 2006. Madrid.

Consumer.es (2005) Las nuevas indemnizaciones por over-booking. Eroski http://www.consumer.es/web/es/economia_domestica/2005/02/17/116995.php

Durán, A. (2005) *Análisis del proceso de elaboración e implantación de instrumentos de Responsabilidad Social Corporativa*. Tesis Doctoral Alicia Durán Heras. Programa de Ingeniería Mecánica y Organización Industrial. Universidad Carlos III de Madrid.

Eisenhardt, M.K. (1989). "Agency theory: An assessment and review". Academy of Management Review, 14(1):57-74.

Federación de Comisiones Obreras de la Hostelería-FECOHT (2003) Código Ético de

Responsabilidad Social. http://www.fecoht.ccoo.es/ethos.pdf

ISO (2007). Guidance on Social Responsibility. ISO /WD 26000.Working Draft 3-Rev .ISO TMB/WG SR N

Kimes, S.E.; Wirtz, J. (2003) Has revenue management become acceptable?. *Journal of Service Research*, 6:125-135.

Mauri, A.G. (2006) *Yield Management and Relationships with Customers, Distribution Channels and Human Resources in the Hotel Sector*. Università IULM dell'Istituto di Economia e Marketing Milano. Working Paper(July 2006).

Talluri, K.T. and van Ryzin, G.J. (2004) The theory and practice of revenue management. Boston, Kluwer Academic Publishers.

Venkatesan R., Kumar V. (2004) "A customer lifetime value framework for customer selection and resource allocation strategy". Journal of Marketing, 68(4).