

Online versus Offline Pricing Practices by Swiss Hotels: An Empirical Study

Roland Schegg^a,
Christelle Marchand^a,
Tatiana Shabander-Welch^b, and
Jamie Murphy^b

^a Lausanne Institute for Hospitality Research
Ecole hôtelière de Lausanne, Switzerland
roland.schegg@ehl.ch

^b Information Management and Marketing Department
University of Western Australia, Australia
jmurphy@ecel.uwa.edu.au

Abstract

This study investigated online and offline pricing in four channels directly under a hotel's control: telephone, e-mail and online price lists and reservation request forms on the website. The results of two consecutive surveys helped analyse the pricing policy of 122 Swiss hotels in 2001. In general, hotels offered lower prices via online channels – e-mail, online price lists and reservation request forms. Calling the hotel gave the most expensive price. The e-mail channel was about 5% and 2% cheaper than the telephone channel in the first and second surveys respectively. Web site prices were between e-mail and telephone prices for the first survey and less than e-mail prices for the second survey. About one out of two hotels offered multiple rates to customers over the studied channels. Two out of three (64%) hotels in the second survey gave virtually identical prices via Web forms and e-mail.

Keywords: pricing, Swiss hospitality industry

1 Introduction

Dimitrios Buhalis, chair of the 3rd Annual Changing Distribution Channels in the Travel Industry Conference, concluded that electronic distribution is here to stay. Operators that successfully adapt electronic distribution will add value, develop their brand and build customer loyalty; those that fail face disintermediation (Sigala & Buhalis, 2002). For hoteliers, the Internet appears to be a double-edged sword. Online travel is a lucrative market and can streamline distribution, but Internet shoppers expect – and wait for – lower room prices (Enz, 2003).

Despite their miserly habits, online consumers are a valuable market. They are affluent and frequent travelers (O'Connor, 2003) and spent twice as much as their offline

counterparts in an Australian study (Bolin, 2002). Customers searching the Web for a “good deal” have also expanded from business and leisure travelers to include corporate travel purchasing (Sharkey, 2003).

Across many industries, online competition often drives prices down (Koch & Cebula, 2002; Vulkan, 2003) and leads consumers to expect lower prices online (Koch, 2003). These perceptions of better prices online exist in hotels (Enz, 2003; O'Connor & Frew, 2002; Varini, Engelmann, Claessen, & Schleusener, 2003). Customers can comparison shop for last-minute hotel bargains via online intermediaries as well through hotel Web sites (O'Connor, 2003; O'Connor & Frew, 2002).

Offloading unsold rooms though, creates a dangerous hotel industry trend; customers wait for a better deal. For hotels offering last-minute pricing, “the demand boost will not be large, but the loss of revenue will be painful” (Enz, 2003, p. 5). Many hotels seem to use Internet distribution channels without a clear understanding of how this technology affects their pricing and revenue (Enz, 2003). The pricing issue underscores the importance of understanding the distribution costs and distribution share associated with each channel that a hotel uses (O'Connor & Frew, 2002).

Hotels can cut costs with a direct, low-cost distribution channel, but how do they use this new online tool? Do they promote the electronic channel by lowering room prices for the cheap online channel, sharing the saving with their clients and possibly increasing sales? This study explores the pricing practices of Swiss hotels across their immediate offline and online distribution channels.

2 Online pricing

Consumers began using the Internet to seek lower prices and entertainment; today it is also a convenient way to shop (Koch & Cebula, 2002; Vulkan, 2003). Paradoxically, consumers rarely compare online prices (Clay, Krishnan, & Wolff, 2001; Vulkan, 2003). Growing numbers of Web pages makes finding a better price increasingly tedious. Customers give up searching (Koch & Cebula, 2002), trading savings for convenience (Clay et al., 2001; Varini et al., 2003; Yelkur & DaCosta, 2001).

Consumers may find higher prices online due to factors such as auctions, price discrimination, and branding (Koch & Cebula, 2002; Vulkan, 2003). Consumers shopping in an interactive environment should choose a familiar brand over an unfamiliar one due to the known brand's implicit guarantee (Alba et al., 1997). Brands decrease price elasticity and increase the seller's power (Oh, 2003; Vulkan, 2003), with one study showing that online, brands charged 3.1 per cent more than non-brands (Koch & Cebula, 2002).

Finally, consumers should also find greater price dispersion on the Internet than in off-line markets (Pan, Ratchford, & Shankar, 2003). Studies on books and the airline tickets showed prices ranges from 18 to 59 per cent (Clay et al., 2001; Koch &

Cebula, 2002). The range of prices on the Web and that customers can easily compare services, products and prices, should force some prices down (Clay et al., 2001; Vulkan, 2003) and make it increasingly difficult for some companies to earn a profit (Birch & Young, 1997). This rationale supports Enz's (2003) argument that lower prices online are dangerous for the hotel industry.

3 Traditional Pricing in the Hotel Industry

Their intangible and perishable characteristics complicate pricing hotel rooms (Yelkur & DaCosta, 2001). About two out of three service firms determine prices based on their costs and the other third base prices on competition and market willingness to pay differentials (Yelkur & DaCosta, 2001). Differential pricing though must be justified to the consumer (Vulkan, 2003). One way hotels justify different prices is by adding value such as access to special amenities (e.g. gym or parking) or services (Varini et al., 2003). Regardless of these added benefits though, hotel rooms are perishable goods.

For hotels, as well as other industries with perishable inventories, yield management is a logical evolution of pricing (Hanks, Cross, & Noland, 2002). Yield management, which matches pricing to inventory-depletion, selects the optimal rate to charge at that time in order to maximise capacity and revenue (Toh & Dekay, 2002). Not all businesses adopt this approach, though. Swiss hoteliers, for example, generally change their prices once a year and compared to lower rated hotels, five-star Swiss hotels vary their prices more often based upon supply and demand (Varini et al., 2003).

Regardless of their category, hoteliers use several pricing strategies. In slow times, hotels may let customers request prices lower than the quoted price (Hanks et al., 2002; O'Connor, 2003). In busy times, hotels overbook in order to cover last minute cancellations (Toh & Dekay, 2002). Three pricing strategies that borrow from the airline industry practice of advanced purchase discounts and variable refunds are single rates, room type rates and fenced rates (Hanks et al., 2002).

4 Online distribution: changing rules in the hospitality industry

Travel companies, such as the low-cost carriers Easyjet and Ryan Air, successfully apply distribution-based pricing, charging additional fees or different rates based on distribution channels (O'Connor, 2003). This pricing underscores the importance of hotels understanding the distribution costs associated with each channel and the distribution share of each channel (O'Connor & Frew, 2002).

New entrants in the today's travel marketplace however, online intermediaries such as Expedia <www.expedia.com>, hotels.com and Travelocity <www.travelocity.com>, are changing the buying and selling of hotel rooms, the economics of distribution, and supply chain management. These new online channels often limit a hotel firm's

control over its customer relationships and inventory, altering the balance of power among hotels, travel intermediaries, and technology providers. Increasingly, third parties sell rooms beyond the hotelier's control, dictate prices and charge fees that erode hotel profits (Enz, 2003).

Therefore, it behooves a hotel to direct reservations to channels that meet its distribution needs but at lower operating costs. The Web, which offers convenient access to multiple information sources, can help hotels add value and reduce costs. Hotels sell rooms online, via travel agents, their own websites and online intermediaries (O'Connor & Frew, 2002). Online channels potentially let hotels adjust their inventory instantaneously, adapting room prices to the supply and demand (O'Connor, 2003).

This dynamic pricing, whereby prices fluctuate constantly and instantaneously (Hanson, 2000), along with wide price ranges and price discrepancies across channels leads to confused customers that question and complain about prices (Cox, 2001; Kimes, 2002; O'Connor, 2003; Vulkan, 2003; Yelkur & DaCosta, 2001). "In spite of the hype regarding Internet commerce and threats of disintermediation, it's clear that both the GDS and travel agents remain critically important in the hotel-distribution process (O'Connor & Frew, 2002, p. 44)."

The Internet has the potential to facilitate customer segmentation, customization and pricing. Hotels have access to the technology that is changing marketing, but seem unsure how to apply this technology (O'Connor, 2003; Yelkur & DaCosta, 2001).

In perhaps the first study of online pricing in the hotel industry, O'Connor (2003) found that customers were more likely to find lower prices on the company's Web site than over the phone (central reservation service) or third-party websites sites in the economy and mid-price range hotel segment. In the up-market hotel brands, however, rates were more likely to be higher on the web site compared to other channels. These lower prices were via online intermediaries rather than hotel websites. The present study extends prior research by investigating prices via e-mail and hotel websites.

5 Methodology

This study investigated online and offline pricing in those channels directly under a hotel's control. A random process, stratified across hotel category and linguistic region, selected 130 hotels with a Web site. The hotels were members of Switzerland's largest hotel association, the Swiss Hotel Association. As Switzerland has four national languages and English is popular with Swiss tourists, the surveys used English so as not to favor any region.

For the first survey, hotel prices came from three distribution channels: telephone, email and online price lists. In order to check the consistency of the results, a second survey one month later in a busier season replicated the study and included a fourth

channel, reservation request forms on the website. Similar to e-mail, the online forms send an electronic request to the hotel, which hotel employees then answer.

Each survey requested two dates, a first choice and an alternative one, should the former not be available. The first request was for one night on 27 October 2001 or 21 December 2001. The second request was for one week (2-9 or 9-16 February 2002). The second survey was during the school skiing holidays, when resort hotels would not accept bookings for less than a week.

Filtering out hotels closed over the desired booking time or that failed to reply yielded a final sample of 122 hotels with telephone and email rates. For 111 hotels, three channels were available: telephone, email and prices listed on the website. The second survey added room rates through web forms and allowed comparing 71 hotels on four channels.

The dependent variables were responding and including the requested price information. In the event of an invalid response, a second request was sent seven days later. The independent variables were the number of rooms (1-29, 30-49, 50-99, >100), linguistic regions (German and French/Italian), geographic region (mountain, lake, city and other), and hotel category (1-2 stars, 3 stars and 4-5 stars).

6 Results and discussion

The results showed varying use of channels by the hotels. Over half (58%) the sample offered a Web form, while 12 per cent used real-time booking. Customers fill in Web forms to request information, whereas real-time booking allows the customer to book a room directly over the Web.

In general, hotels offered lower prices via online channels – Web sites, Web forms and e-mail (see table 1). Calling the hotel gave the most expensive average price, arguably to account for the extra labor. The e-mail channel was about 5% and 2% cheaper than the telephone channel in the first and second surveys respectively.

For the first survey, which asked rates in an off-season period, the differences were statistically significant at $p < 0.05$. The differences for the second survey though, were smaller, suggesting less price differentiation among channels during a high season (every second hotel in the sample was in a mountain resort). Web site prices were between e-mail and telephone prices for the first survey and less than e-mail prices for the second survey.

With respect to the price consistency between the telephone and e-mail (N=122), hotels offered the same rates in over half of the cases (55% for survey 1 and 57% for survey 2) and more than one out of four hotels (29% in survey 1 and 26% in survey 2) gave rates over telephone higher than over e-mail. Only one out of six hotels (i.e. 16%) offered higher rates via e-mail. Comparing three channels (telephone, e-mail,

web form), the proportion of hotels that offered equal rates across the channels remained at the same level (53.5% for survey 2).

The proportion of hotels that offered consistent pricing was higher than the figures observed by O'Connor (2003). This author studied 45 major hotel brands and found that over one-third of them offered consistent prices across different channels, with hotels at the low end of the market being more likely to offer consistent rates.

One possible reason for the high proportion of economy properties having consistent rates might be a conservative pricing policy; i.e. hotels have a single fixed price for their product irrespective of demand (O'Connor, 2003). This view is in line with results by Varini et al. (2003) who found that in most Swiss hotels conduct no serious pricing research and standard rates generally change only once per year.

Price integrity between telephone and e-mail was stronger with 1-2 stars hotels (69%) than with higher rated hotels (53%). Hotels in the French -speaking part charged more via e-mail in three out of ten cases and rates were only higher via telephone in 13% of the hotels. The situation differed for Swiss-German hotels, with only 15% of the hotels' prices higher via e-mail, compared to 33% of the hotels that sold their rooms at a higher rate via telephone.

Two out of three (64%) hotels in the second survey gave virtually identical prices via Web forms and e-mail. That a hotel employee answers both the e-mail and Web form requests supports this identical pricing.

Table 1. Average room rates in Swiss Francs for each channel and paired samples T Test statistics

All hotels (N=122)		Survey 1		Survey 2			
average channel rate in CHF		telephone	email	telephone	email		
		163.2	155.3	177.5	173.7		
paired samples T Test		<i>telephone-email</i>		<i>telephone-email</i>			
	<i>t</i>	3.085		1.501			
	<i>df</i>	121		121			
	<i>significance</i>	0.003		0.136			
Only hotels with room rates listed on website (N=111)		Survey 1			Survey 2		
average channel rate in CHF		telephone	prices on website	e-mail	telephone	prices on website	e-mail
		161.3	156.3	153.2	176.2	171.2	171.5
paired samples T Test		<i>telephone-email</i>	<i>telephone-web</i>	<i>email-web</i>	<i>telephone-email</i>	<i>telephone-web</i>	<i>email-web</i>
	<i>t</i>	2.964	2.367	1.314	1.694	2.317	-0.128
	<i>df</i>	110	110	110	110	110	110
	<i>significance</i>	0.004	0.020	0.192	0.093	0.022	0.898
Only hotels with reservation request form (N=71)		Survey 2					
average channel rate in CHF		telephone	prices on website	e-mail	reservation request form		
		175.4	169.0	166.9	167.9		
paired samples T Test		<i>telephone-email</i>	<i>telephone-web</i>	<i>telephone-web form</i>	<i>email- web form</i>		
	<i>t</i>	2.326	2.139	2.049	-1.302		
	<i>df</i>	70	70	70	70		
	<i>significance</i>	0.023	0.036	0.044	0.197		

7 Conclusions and future research

This study explored pricing practice over traditional and electronic channels by small and medium-sized Swiss hotels. About one out of two hotels offered multiple rates to customers over the studied channels. While the prices varied, these results show that compared to the traditional telephone channel, Swiss hotels' online prices were slightly more advantageous for the customers. Pricing varied however, across hotel characteristics such as location and category.

These results suggest that many Swiss hotels should review their pricing across the channels that they control and the distribution costs associated with each channel (O'Connor & Frew, 2002). Arguably, higher rates are on the channels that have high cost structures (O'Connor, 2003). Distribution costs depend largely on the number of intermediaries between the supplier and the customer. In the present study though, intermediaries do not play a role. The hotels are in direct control of all analysed channels and should therefore at least offer consistent prices over all channels. This is true especially for those hotels that ask higher rates through the online channels, because customers expect increasingly to find the cheapest rates over direct electronic routes (O'Connor, 2003).

Successful businesses offer superior products or service, but when products are similar, customer service and perceived value are the decisive factors having a strong link to customer satisfaction, which then yields customer loyalty and long-term profitability (Szymanski & Henard, 2001). An important consideration for many hoteliers might therefore be to offer value for money. One value adding strategy is offering a product of good quality at a lower price. Hoteliers could promote the electronic channel by lowering room prices for the cheap online channel, sharing the saving with their clients and possibly increasing sales.

Based on their review of pricing across channels and channel distribution costs as well as pricing of the competition, hotels should define a coherent and transparent pricing policy, and then communicate this policy to all stakeholders. This means for example updating the pricing information on the websites and training for telephone/e-mail receptionists that addresses pricing and marketing of cheaper online rates to clients.

The results of this exploratory study fail to generalize to non-Swiss Hotel Association hotels as well as non-Swiss hotels. Although hotels may let customers request prices lower than the quoted price (Hanks et al., 2002; O'Connor, 2003), this study did not ask for lower prices across these channels. Asking for a better price, via email or the telephone is one of several fruitful research avenues.

This research explored only pricing practice of direct distribution channels. Future research could take into account other hotel distribution routes such as online intermediaries. Longitudinal Swiss studies and comparison studies in other countries could clarify if this 2001 snapshot reflects an aberration or generalisable picture. The

use of artificial neural networks (Davies, Goode, Mazanec, & Moutinho, 1999; Haykin, 1999) or multivariate statistics such as structural equation modeling (Anderson & Gerbing, 1988; Boomsma & Hoogland, 2001), could explore the complex relationships between hotel characteristics, channels and prices.

References

- Alba, J., Lynch, J., Weitz, B., Janiszewski, C., Lutz, R., & Sawyer, A. (1997). Interactive Home Shopping: Incentives for Consumers, Retailers, and Manufacturers to Participate in Electronic Markets. *Journal of Marketing*, 61(July), 38-53.
- Anderson, J. C., & Gerbing, D. W. (1988). Structural Equation Modeling in Practice: A Review and Recommended Two-Step Approach. *Psychological Bulletin*, 103(3), 411-423.
- Birch, D., & Young, M. A. (1997). Financial Services and the Internet - What Does Cyberspace Mean for the Financial Services Industry? *Internet Research: Electronic Networking Applications and Policy*, 7(2), 120-128.
- Bolin, R. (2002). *Domestic Tourism Internet Usage: Pinning Down the E-Tourist*. Paper presented at the Tourism and Hospitality on the Edge, 12th International Research Conference of the Council for Australian University Tourism and Hospitality Education, Fremantle, Australia.
- Boomsma, A., & Hoogland, J. J. (2001). The Robustness of LISREL Modeling Revisited. In R. Cudeck, S. du Toit & D. Sörbom (Eds.), *Structural Equation Modeling: Present and Future* (pp. 139-168). Chicago: Scientific Software International.
- Clay, K., Krishnan, R., & Wolff, E. (2001). Prices and Price Dispersion on the Web: Evidence from the Online Book Industry. *The Journal of Industrial Economics*, 49(4), 521-539.
- Cox, J. L. (2001). Can Differential Prices Be Fair? *Journal of Product and Brand Management*, 10(5), 264-275.
- Davies, F., Goode, M., Mazanec, J., & Moutinho, L. (1999). LISREL and Neural Network Modelling: Two Comparison Studies. *Journal of Retailing and Consumer Services*, 6, 249-261.
- Enz, C. A. (2003). Hotel Pricing in a Networked World. *Cornell Hotel and Restaurant Administration Quarterly*, 44(1), 4-5.
- Hanks, R. D., Cross, R. G., & Noland, R. P. (2002). Discounting in the Hotel Industry: A New Approach. *Cornell Hotel and Restaurant Administration Quarterly*, 43(4), 94-103.
- Hanson, W. (2000). *Principles of Internet Marketing*. Cincinnati: Southwest College Publishing.
- Haykin, S. (1999). *Neural Networks: A Comprehensive Foundation* (2 ed.). New Jersey: Prentice-Hall.
- Kimes, S. E. (2002). Perceived fairness of yield management. *Cornell Hotel and Restaurant Administration Quarterly*, 43(1), 21-30.
- Koch, J. V. (2003). Are Prices Lower on the Internet? Not Always! *Business Horizons*, 46(1), 47-52.
- Koch, J. V., & Cebula, R. J. (2002). Price, Quality, and Service on the Internet: Sense and Nonsense. *Contemporary Economic Policy*, 20(1), 25-37.
- O'Connor, P. (2003). On-line Pricing: An Analysis of Hotel-Company Practices. *Cornell Hotel and Restaurant Administration Quarterly*, 44(1), 88-96.

- O'Connor, P., & Frew, A. J. (2002). The Future of Hotel Electronic Distribution. *Cornell Hotel and Restaurant Administration Quarterly*, 43(3), 33-45.
- Oh, H. (2003). Price Fairness and its Asymmetric Effects on Overall Price, Quality, and Value Judgments: the Case of an Upscale Hotel. *Tourism Management*, 24(4), 387-399.
- Pan, X., Ratchford, B. T., & Shankar, V. (2003). Can Price Dispersion in Online Markets Be Explained by Differences in E-Tailer Service Quality? *Journal of the Academy of Marketing Science*, 30(4), 433-445.
- Sharkey, J. (2003). E-mail is big factor in recovery. *The New York Times*. (Retrieved April 16, 2003 from World Wide Web:
<http://www.nytimes.com/2003/04/15/business/15ROAD.html>)
- Sigala, M., & Buhalis, D. (2002). Changing Distribution Channels in the Travel Industry--New Channels, New Challenges. *Information Technology and Tourism*, 5(3), 185-186.
- Szymanski, D.M., & Henard, D.H. (2001). Customer Satisfaction: A Meta-Analysis of the Empirical Evidence. *Journal of the Academy of Marketing Science*, 29(1), 16-35.
- Toh, R. S., & Dekay, F. (2002). Hotel Room-Inventory Management: An Overbooking Model. *Cornell Hotel and Restaurant Administration Quarterly*, 43(4), 79-90.
- Varini, K., Engelmann, R., Claessen, B., & Schleusener, M. (2003). Evaluation of the Price-Value Perception of Customers in Swiss hotels. *Journal of Revenue and Pricing Management*, 2(1), 47-60.
- Vulkan, N. (2003). *The Economics of E-Commerce*. Princeton, New Jersey: Princeton University Press.
- Yelkur, R., & DaCosta, M. M. N. (2001). Differential Pricing and Segmentation on the Internet: the Case of Hotels. *Management Decision*, 39(4), 252-261.