

Annex 10. New sources and the digital domain within the Basque Tourism Observatory

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The present executive summary refers to the dynamic pricing monitor embodied in the Basque Tourism Observatory, which represents a real proof of the use it can be done of online market data.

Dynamic Pricing Monitor

Competitive Intelligence based on Internet is one of the most robust trends triggering the awakening of a growing interest in the field of strategic management and eScience (Teo and Choo, 2001; du Toit, 2003). This concept integrates both technology and market surveillance. As a result, it provides an excellent tool for anticipating and estimating consumer habits on a changing environment (Shih, Liu and Hsu, 2010).

In the field of Tourism, managers demand good information in order to make decisions. Competitive Intelligence organises the information, sorts it, analyses it and evaluates it providing easy and valuable information to final users. An essential aspect of Competitive Intelligence in the arena of tourism implies pointing out competitors and help managers with the following key questions: What is happening in the market? Which are the current trends? Who are the competitors? How are our products positioned in the minds of consumers? Which needs are important to consumers? Are needs being met by the products on the market?

Dynamic pricing provides an opportunity, from a consumer point of view, to purchase products at different prices at different times. Electronic commerce means, business being conducted anywhere, at any time, especially in the field of tourism (Buhalis and Law, 2008). In such conditions, the decision of the customer to purchase airline seats or hotel rooms on the internet depends on several factors such as information quality (Wong and Law, 2005), time, past experiences (Kim and Kim, 2004) and frequency (Magnini and Karande, 2011). However, the most important factor influencing hotel selection is price (Tanford, Raab, and Kim, 2012; Lockyer, 2005; Tso and Law, 2005). Customers choose a destination and then select accommodation based on price and available rooms (Wu, Zhang, and Fujiwara, 2011), using the most convenient distribution channel.

One of the areas where traditional data sources run short is hotel performance measurement. Certainly there are national statistical institutes where there are purposely built surveys to analyze the profitability of the hotel sector (namely Spanish National Statistic Institute (INE), 2009; Statistics New Zealand, 2011; Statistics Norway, 2012), and they draw figures based on monthly averages and are published with a certain delay. However, revenue management pricing practices can benefit from, instead of monthly data, a daily indicator of the hotel Average Daily Rate.

Information technology, measurement and Businesses Intelligence, provide a novel direction to support enterprise business in a new way. At the same time, there is a high amount of relevant information available in the market but companies and non-professional knowledge managers do not easily access it.

Acknowledging this reality brought the Basque Tourism Observatory to design a monitor that concentrates on Hotel Pricing, being able to monitor prices day by day, providing valuable and daily information for the local, regional or even national levels. In this sense the Basque Tourism Observatory is acting as a tourism intelligence platform for different tourism actors within the

region. The Observatory serves the Autonomous Community of the Basque Country, a region located in the North of Spain. Price competitiveness is an essential component in the overall tourism competitiveness of any tourism destination or industry and currently countries and industries have developed or use price indicators. This monitor, and the method it implements, provides a low cost and uncomplicated system to count with daily hotel prices within a few hours.

The Pricing Monitor represents the implementation of a robust and efficient data collection process from an out of the ordinary source, an Internet Distribution System (IDS). Moreover, it opens the possibility of posing a wide range of research questions that can be answered with such data, providing a significant source of business intelligence information for destination managers.

The monitor can provide information per each hotel that uses a certain IDS as their distribution channel. Therefore, the Observatory can provide information concerning hotel prices per municipality, being able to compare data from one municipality with another in the same province (out of the three embodied in the Basque Country) or even with other provinces in Spain, or any other country where the given IDS is used as a major distribution channel. The monitor is currently collecting data from Spain, Ireland, France, Greece, Tunisia, Morocco, Croatia and Turkey.

The methodology behind the monitor comprises a web crawler that obtains prices and availability for twin bedded rooms on every available hotel for a given IDS, taking into account location and time scope. The data extraction process is launched automatically every 24hours, it aims at a specific region, at a given date and processes the response to extract the prices for a twin bedded room on every hotel on the list obtained as response. If there are different rates for the same hotel, the cheapest price is selected.

Currently the monitor collects daily rates of more than nine thousand hotels in Spain, more than twelve thousand in France and more than seven hundred in Ireland. Which means that the monitor and the methodology it follows provides responses to questions such as, to name but a few:

- Which is the average rate for a three star hotel in Cork for a specific date?
- Which city is more expensive for Easter period Madrid? Dublin? Paris?
- How many hotels sell their rooms through IDSs of a given city, region, country?
- Which is a convenient date to book a room? Does this date vary in different cities? How?
- How does a given event impact on occupancy & rates in a city? Does it have and impact beyond such city, into neighbouring municipalities?

Therefore, the monitor can respond to numerous performance questions for a given hotel, for a given city, moreover, it allows such a hotel or city to benchmark itself with others, even cross country comparisons.

Another element that might be worth highlighting is that the monitor, given the significant load of information that it collects and the logic it follows, it can analyze the past as much as the future. It can analyze how a given event has impacted not only on the city that hosts it, but also in neighbouring cities or regions.

Figure 1, reflects upon the average prices for a double room of the province of Biscay (within the Basque Country) **for the next 14 days**, here exemplifying that the monitor can bring light into the future. The forecast of 14 days, attends to a demand of the hotel business.

Figure 1 Basque Tourism Observatory - Viewpoint



The graph on the right shows:

- Percentage of Hotels having sales online
- Average price in € for all hotels
- Average price in € for three star hotels

This is probably the element that provides the edge, pricing information for the future. Traditional information sources cannot possibly provide hotel managers, tourism destination managers or other information consumers with this valuable information.

Furthermore, one relevant point needs to be made concerning comparability. National Statistical Institutes using traditional methods tend to have the advantage of providing comparability among countries, regions within a given country and in certain values in-between countries. As opposed to regional initiatives to measure performance, where the methodologies used tend not to be easily transferable to other settings. However, in this case, given that most hotels in the world use IDSs, the current monitor is capable to grow and start collecting data of more and more countries, and continue providing benchmark among countries, regions, cities...etc. In the case of the Basque Country, a given city, for instance Bilbao, can choose to compare itself through the monitor with other cities within Spain or any other of the countries where data is being collected at this moment in time.

In sum, revenue management needs just-in-time information on daily hotel prices. National statistical institutes publish monthly time series with a delay of months and there is where initiatives such as the current monitor of the Basque Tourism Observatory can contribute. Moreover, Web crawling of IDS provides an excellent opportunity to test new statistical methodologies.

FURTHER LINKS:

<http://observatorioturisticodeuskadi.basquetour.net/SitePages/index.aspx#>

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