ACTIVITY OF SEARCHES IN INTERNET LIKE VARIABLE FOR DETEMINAR THE VISITORS TO MUSEUMS

Raúl Gómez Martínez
raul.gomez.martinez@urjc.es
Beatriz Rodríguez Herráez
beatriz.rodriguez@urjc.es
Diana Catalina Pérez-Bustamante Yábar
diana.perezbustamante@urjc.es
Universidad Rey Juan Carlos. Madrid

1. SEARCH ACTIVITY ON THE INTERNET AS AN EXPLANATORY VARIABLE IN ECONOMICS AND BUSINESS

The development of new technologies and the boom in social networks are creating emerging alternative approaches for academic and institutional research.

These new surveys will provide new ways of evaluating consumer behaviour. How consumers obtain information and assess their available options before taking decisions regarding purchases, is the general model for understanding consumer behaviour. But our approach goes farther by proposing an experiment and techniques to study and assess the mood of investors and consumers.

To understand the methodology of the study, reference will be made to authors and the specific papers reviewed. The R-Word Index of *The Economist* takes into account the number of articles published in newspapers such as the *Financial Times* and *The Wall Street Journal*, in which the word «recession» is used. Aaron Gerow and Mark Keane (2011) study the relationship between the frequency in use of different words and changing markets. These authors suggest that changes in the frequency of the distribution of the use of certain words in the press reflect market movements. Bollen et al (2010) state that this principle is followed by investment fund managers such as Derwent Absolute Return Fund Ltd., to establish their investment decisions.

As regards research in the financial sector, internet search activity measured with Google Trends is gaining ground while the statistics provided by internet searches are also becoming important. Gomez-Martinez (2011) developed a model in which the

performance of stock indices is explained by the mood of investors considering this mood, according to statistics from Google searches for certain terms related to financial markets.

Gomez-Martinez (2012) makes use of this principle when he proposes an investment model based on an index of risk aversion arising from the mentioned Internet searches. We understand that if this tool is valid to explain investor sentiment, it could also serve to explain the consumer selection process.

2. HYPOTHESIS AND METHODOLOGY

The proposal put forward in this article is to carry out research to find out the extent of interest in museums and if that situation could be analyzed via visitor attendance.

In line with that proposal, we assume the level of popularity of a museum and the degree of interest that this may generate could be measured by means of the statistical research regarding Google searches in which the name of the museum appears.

The hypotheses formulated for this proposal is:

H1.: the historical series of Google statistics constitute a variable with capacity to explain the attendance levels regarding cultural institutions (museums).

H2.: a higher interest in a museum implies a higher visitor volume.

Our research proposal is an econometric model where the explicative variable is the Google research statistics obtained for each museum. The explained variable is the total number of visitors.

The mentioned model was created by the researcher Gomez-Martinez y Prado (2013) using an econometrical model of panel data to analyze and interpret Google search activity. In the first case he analyzed if searches for acronyms of political parties via Google (the general public research) could explain the proposal vote. And in that case it was observed that more than 70% of the percentage of the proposal vote corresponded to the observed research.

So if Internet research activity can be used to explain and describe a situation, would it not be possible to propose the same type of research to explain museum visitor attendance?

3. CONCLUSIONS

It is vital to bear in mind that cultural tourism has increased considerably in Spain in recent years and continues to do so due to several factors. However, the most important factor to focus on is the dissemination of information by the public Tourism Boards and other interested entrepreneurs. Regarding the latter, mention must be made of the museums which try to ensure that information concerning their permanent or temporal collections reach the public. The institutions need to understand why the public wants to visit a museum, and this depends on different factors and variables that respond to the needs and wants of the visitors. This is also true as regards how the different visitors search for information to select a museum, exhibition or cultural activity. Why they go to that museum; how they search for what is on offer or why they select a

specific exhibition, could be questions that the institutions need to study and understand to come up with the best cultural offer to generate interest on the part of visitors.

Today the Internet communication tools are changing institutional research. Searches made via Internet by the end consumers, could provide institutions with significant information about their consumers' behaviour. Accordingly, we propose that this type of methodology should be taken into account by institutions because it would provide them with valuable information concerning their consumers.

The proposal put forward in this article is to demonstrate how historical statistical series are an important research tool, for example, as is the case of the search engine Google.

We use these tools to predict consumer behaviour, and in this case the analysis carried out refers to museum visitor attendance. Our study of the situation indicates that, to a certain extent, statistical searches have explicative capacity. The mentioned explicative capacity is greater in the more popular museums than in the smaller ones. At the same time, we confirm that the major interest for museums could be demonstrated with this type of research because Google shows us, on analyzing the data, that the information search is correlated with the visit. The degree of interest in specific museums translates into higher attendance.