

SEGMENTATION OF SENIORS BASED ON PRODUCTS BOUGHT ON THE INTERNET: IMPACT ON TOURISM INDUSTRY

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1. INTRODUCTION

Seniors constitute a particularly important group of consumers for quite a number of industries. Changes in the elderly population's lifestyle, which is more oriented toward leisure and enjoying their free time than past generations, benefit the tourism sector.

As mentioned by Berné et al. (2015) and Ramos et al. (2015), the use of Information and Communication Technologies has a special incidence on innovation in the tourism sector, leading to the research and development of new products. On the other hand, we have to take into account that innovation is not achieved by incorporating new technology, but by managing it correctly. In this respect, the application of e-commerce to tourism allows a reduction of geographic barriers, therefore achieving an international scale and accessing more customers (Ortega et al., 2012). As for users' behavior in relation to tourist services, individuals' purchasing and consumption habits have been influenced by new technologies (Kim & Fesenmaier, 2008; González-Rodrigo et al., 2010).

The main aim of this research is to analyze and to profile the behavior of elderly people when purchasing products and services on the Internet and, more specifically, to analyze the senior tourist who mostly purchases tourist products and services. Market segmentation based on products and services purchased on the internet can be used to classify and identify the different groups of customers and provide a clear understanding of each segment, regarding both reasons and motives, and characteristics and needs (Swinyard & Smith, 2003). This information can allow companies to achieve a clear strategic advantage over their competitors, since it will enable them to identify the attitudes and needs of the different segments, thus converting these strategic opportunities into effective action plans (Dibb et al., 2002).

2. LITERATURE REVIEW

The study of this segment (seniors) is of great importance for the tourism industry, because of their purchasing power (Kazeminia et al., 2015; Kuo & Lu, 2013; Van Den Berg et al., 2011; Dann, 2007) and their free time available (Fleischer & Pizam, 2002). This free time is frequently occupied in tourism activities (Losada et al., 2015). On the other hand, and according to Thébault et al. (2013), although there is a considerable disparity in the income level of elderly people, in developed countries their purchasing power is above average. This represents a potential customer base for the tourism industry which cannot be ignored. Lohmann and Danielsson (2001) revealed that the tourist behavior of current seniors is more closely related to the one showed by this segment 15 years ago than the seniors of only a few years ago. The current seniors segment is better educated, more demanding, and has different preferences; they traveled more during their youth and will probably continue to do so (Jang & Wu, 2006).

The importance of this elderly tourist segment has been widely recognized by both professionals and tourism sector researchers (Hunter-Jones & Blackburn, 2007). The literature has mainly been focused on: a) trip motivation of elderly tourists (Ward, 2014, Le Serre et al., 2013; Cheng & Wu, 2009; Boksberger & Laesser, 2009); b) psychological factors (Jang et al., 2009; Jang & Wu, 2006); c) characteristics of the experience (Batra, 2009; Hunter-Jones & Blackburn, 2007); d) needs of services offered to seniors (Chen et al., 2013; Wang et al., 2013) and sociodemographic characteristics (Pesonen et al., 2015; Peral et al., 2013; Jang & Ham, 2009). However, there has been little research into the influence of the Internet and the type of product purchased in the senior market (Vigolo & Confente, 2013). Indeed, the majority of the studies published about online purchasing behavior are focused on young consumers, the so called “Y Generation” (Nusair et al., 2012).

3. METHODOLOGY

We used official statistics micro data provided by the *Instituto Nacional de Estadística*, more precisely by the survey “*Equipamiento y Uso de Tecnologías de la Información y Comunicación en Hogares – TIC-H’15*”. The survey was answered by 15,507 households in Spain, from January to May 2015, using Computer-Assisted Personal Interviewing and Computer-Assisted Telephone Interviewing.

We selected those individuals 54 years or older who declared that they had used the Internet in the last 3 months. The sample consists of 2,541 individuals, of whom 868 have bought products and/or services on the Internet, the rest not having done so.

Firstly, we carried out Multiple Correspondences Analysis (MCA) with the binary variables referring to the products and services bought on the Internet (Question 42 in the questionnaire TIC-H’15). Secondly, once the MCA dimensions had been obtained (numerical variables), we carried out the cluster analysis using the Ward method. As the number of clusters increases, the percentage of explained variance also increases but, based on the article’s objective, the interpretability of the segments was a key factor to decide on the number of segments (three) to profile.

Table 1
CLUSTER FREQUENCY AND COORDINATES IN EACH MCA DIMENSION

Cluster	Frequency	%	Coordinates Dimension 1	Coordinates Dimension 2
1	449	51.7	-0.639	-0.569
2	64	7.4	2.266	-1.033
3	355	40.9	0.399	0.906
Total	868			

Finally, we related the three segments and the group of seniors who do not purchase products or services on the Internet, with illustrative variables. Such variables are both sociodemographic and behavioral in relation to the use of the Internet and of other electronic devices. All relationships with illustrative variables were significant at $\alpha=1\%$.

4. CONCLUSIONS

The consideration of three segments of senior internet users suggests that both tourist companies and public management entities cannot consider the eldest consumers as a single group, with a unique profile. It is necessary to segment the group of senior consumers to be able to effectively attract and persuade this market, for either commercial, administrative or health-related purposes.

The 3 segments of senior consumers are (n=868):

- 1) "Sporadic buyer on line" (51.7%). This is an elderly consumer with a low level of studies, who uses a limited range of Internet possibilities. It is a group which needs an extra effort to be made by public management entities and companies to be included in the new e-commerce market with all its resources and possibilities. They could thus go from being mere observers to active consumers. For this, communication has to be improved in order to increase confidence with the medium, and training is also required in order to facilitate the use of both computer equipment and the Net itself.
- 2) "Big buyer on line" (7.4%). The members of this group are the youngest seniors, with a high level of education, who use the resources offered by the Internet and buy a wide range of products. The frequency of connection is high, they are highly confident with the medium, and they are the ones who spend the most on online shopping. Firms have to take care of this segment, and try to adjust what they offer to the needs of this group, since it represents the segment which offers the most possibilities (it is the one with the most potential to be developed), even though it is the smallest.
- 3) "Buyer of tourism on the Internet" (40.9%). The users from this segment present a good level of computer knowledge; they use the Net to communicate and to look

for information, both news and in particular information about goods and services. It is the group most oriented toward information-seeking and toward tourism product and service purchasing on the Internet. Therefore, knowledge of this segment is crucial for both tourism companies and destination management offices, in order to be able to design an attractive offer and an effective online communication strategy.

On the other hand, the group of users who do not purchase products or services on the Internet also has particular and distinct characteristics. This group is the largest, compared to the other segments obtained that do use the Internet to buy products or services. They have a higher average age, a lower level of education and a lower monthly net income level. On the occupational level, in this group a higher percentage states that they are retired or incapacitated, or that they carry out household tasks.

The senior tourist mostly uses indirect channels to book their trips, such as tour operators, travel agencies or public boards. However, nowadays there is an increase in the use of electronic channels for both planning and purchasing tourism products and services. We could also talk about a certain level of security and confidence in the purchasing process, due to the fact that the users in the third segment acquire services which involve a risk, regarding the possible differences between the service purchased and the service consumed, and the price paid, which is usually high (this might be the case of holiday accommodation). What is certain is that 72.4% of the seniors included in the third segment are quite confident on the Internet and, according to the study by Amaro and Duarte (2013), trust and security have a great influence and represent a clear precursor of the online purchase.