Gender gaps in the process of **Internet diffusion** in **rural tourism**

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Objectives | The adoption of information and communication technologies (ICT) is crucial for the competitiveness of rural tourism businesses. It is therefore important to know the relationship between firm's owners and employees' demographic characteristics like gender and ICT adoption. A review of the literature that deals with the issue of gender and ICT shows the existence of an important traditional 'gender gap' in relation to the use of ICT (Galyani, 2010). Gender is one of the relevant variables to explain the delays in the adoption of Internet due to both, differences in attitudes toward technology and obstacles in access to use and benefits of it (Primo, 2003). The purpose of this study is to analyse the possible existence of a digital gender gap in the process of Internet diffusion in the specific context of rural tourism.

Methodology | Rogers' diffusion of innovations theory (Rogers, 2003) was applied to establish the diffusion curve and to identify adopter categories, according to the moment in time when adoption takes place. Rogers suggests a total of five categories of adopters in order to standardize the usage of adopter categories in diffusion research. He proposes that adopters of any new innovation or idea can be categorized as innovators (2.5%), early adopters (13.5%), early majority (34%), late majority (34%) and laggards (16%).
These categories, based on standard deviations from the mean of the normal curve, provide a common language for innovation researchers. When graphed, the rate of adoption formed what came to characterize the Diffusion of Innovations model, an 'S-shaped curve' (S curve). The graph essentially shows a cumulative percentage of adopters over time: slow at the start, more rapid as adoption increases, and then levelling off until only a small percentage of laggards have not adopted.
Rogers' theory was applied to represent the process of Internet diffusion over time and diffusion curves were analysed by gender, in order to approach the possible existence of gender inequality in rate of adoption, and the gender composition of adopter categories. Adoption rate is usually measured by the length of time required for a certain percentage of the members of a social system to adopt an innovation (Rogers, 2003).

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The empirical study to represent diffusion curves and identify adopter categories took place in several stages. In 2006, a representative sample was taken for rural tourism establishments (small scale accommodation facilities located in the countryside) in the specific geographical area comprising Galicia (Spain). The sample consisted of 115 establishments. Later in the same year, an *ad hoc* questionnaire was designed to collect information about each establishment's presence on the Internet, namely the moment in time when its online presence had commenced, and the gender of its owners and employees. The second stage of the research took place in 2012, when data about online presence was collected for all establishments considered in the first phase (there was not any case of rural houses that closed their activity within this 6 period of time). Online presence in the second stage was verified by linking to the Galician digital directory of rural tourism establishments.

This study proposed the following hypotheses:

H1: Internet diffusion in rural tourism takes place according to Rogers' model.

H2: The rate of internet adoption – online presence – is influenced by gender of its owners and employees.

H3: Adopter categories are influenced by gender of its owners and employees.

By using SPSS, the curve of Internet adoption by the rural tourism establishments was represented and the adopters' categories were determined. Subsequently, the rural tourism establishments were classified according to the feminization rate of owners and employees and the adoption curves dependent on gender were represented to determine the existence of significant differences between the two curves. Finally, an ANOVA analysis was performed to test the possibility of significant differences in adopters' categories by gender.

Main results and contributions | The findings suggest that there are no significant gender differences as to the moment in time when the establishment owners take the decision to incorporate the establishment to the Internet. A gender analysis of adoption curves provides no evidence for differences in adoption rate. Additionally, after analysing the information on adopter categories, it seems that an establishment's belonging to one or another adopter category is not influenced by gender of its owners and employees. Thus, the study appears to confirm the first research hypothesis, but not the second or third. The process of Internet diffusion in Galician rural tourism seems to be taking place according to Rogers' model, and it is considered not to be related to the gender of the owners and employees of rural tourism establishments.

Conclusions | In conclusion, results did not show evidence for a gender gap in the process of diffusion of basic level internet in the rural tourism industry of Galician. Contrary to what was found in previous studies and according to this study, the basic use of ICT in rural tourism is not related to gender. The female owners and employees in the establishments seem to have overcome the economic, social or cultural barriers that limit or prevent access to ICT. They have an attitude toward technology that is similar to that of men, preventing the presence of the so-called 'gender gap'. It would be advisable to add depth to the future studies by analysing active internet participation, use of social networks and Web 2.0 tools.

References |

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