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Neural Network Approach For Clustering Host Community: Based on Perceptions Toward Tourism, Their Satisfaction Level and Demographic Attributes in Iran (Lahijan)

Authors : Nasibeh Mohammadpour, Ali Rajabzadeh, Adel Azar, Hamid Zargham Borujeni,

Abstract : Generally, various industries development depends on their stakeholders and beneficiaries supports. One of the most important stakeholders in tourism industry (which has become one of the most important lucrative and employment-generating activities at the international level these days) are host communities in tourist destination which are affected and effect on this industry development. Recognizing host community and its segmentations can be important to get their support for future decisions and policy making. In order to identify these segments, in this study, clustering of the residents has been done by using some tools that are designed to encounter human complexities and have ability to model and generalize complex systems without any needs for the initial clusters' seeds like classic methods. Neural networks can help to meet these expectations. The research have been planned to design neural networks-based mathematical model for clustering the host community effectively according to multi criteria, and identifies differences among segments. In order to achieve this goal, the residents' segmentation has been done by demographic characteristics, their attitude towards the tourism development, the level of satisfaction and the type of their support in this field. The applied method is self-organized neural networks and the results have compared with K-means. As the results show, the use of Self- Organized Map (SOM) method provides much better results by considering the Cophenetic correlation and between clusters variance coefficients. Based on these criteria, the host community is divided into five sections with unique and distinctive features, which are in the best condition (in comparison other modes) according to Cophenetic correlation coefficient of 0.8769 and between clusters variance of 0.1412.

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