

**TESTING A MODEL OF DESTINATION IMAGE FORMATION:
APPLICATION OF NONPARAMETRIC BAYESIAN RELATIONAL
MODELING TO DESTINATION IMAGE ANALYSIS**

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ABSTRACT

This presentation introduces a methodological framework that analyzes a model of destination image formation (Baloglu & McCleary 1999; Beerli & Martin 2004). Specifically, the main aims of this study are to investigate what type of stimulus factors (information sources) are connected to the formation of destination image, and to explore if there is a connection between their strength of willingness to visit a destination and their patterns to associate with the destination. The study employs an advanced nonparametric Bayesian relational model (Glückstad, Herlau, Schmidt, Rzepka, Araki and Mørup 2013; Mørup, Glückstad, Herlau & Schmidt, 2014) for a two-steps analysis. The first step attempts to segment consumers according to patterns of attributes consumers associate with three arbitrary selected destinations. The second step statistically analyzes latent structural patterns per segment by contrasting two independent datasets, one consisting of information sources and members of a segment and another consisting of destination attributes and the members of the segment. The results of two-steps analysis demonstrated that patterns of attributes respondents associate with the three selected destinations differ across individuals and the applied method enabled to segment respondents according to the differences, and consumers' associations, their willingness to visit the destinations and types of information sources they have accessed to learn about the destinations are connected to each other.

Keywords: Bayesian relational modeling, destination image formation, knowledge representation, categorization, segmentation

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