Generalized Additive Models for Tourism Demand Modelling

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Abstract

In tourism literature, a debate emerged on the best approach to study tourism demand modelling. Joining this lively debate, we ask: Could Generalized Additive Models (GAMs) serve as a viable alternative to existing approaches used to study tourism demand? In this paper, we argue that GAMs hold great promise for tourism demand modelling. Their semi-parametric structure avoids rigid functional forms, addressing long-standing concerns raised in the above-mentioned debate. By retaining the data, GAMs aid interpretability not in spite of their flexibility, but because of it. GAMs aid the understanding of how models inform future outlooks, insights that are often missed but highly valued by tourism practitioners and policymakers. Examining the case study of Iceland, we introduce GAMs to tourism demand modelling, and by doing so, we expand the scholarly toolbox, offering a credible, transparent, and insight-rich alternative to existing approaches used in tourism demand modelling.

Track: Tourism Marketing