Pricing powered by Artificial Intelligence: An assessment model for the sustainable implementation of AI supported price functions

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Abstract

Artificial Intelligence in the price management process provides attractive opportunities to generate value, improve performance and achieve more sustainable business models, but guidance to enhance the use of AI for SME is sparse. Which are the relevant criteria for a sustainable implementation of AI for pricing purpose? Which type of AI supported price functions meet these criteria best? Theoretically motivated by the hedonic price theory and advances in AI research, we identify nine criteria and eight AI supported price functions (AISPF). A multiple attribute decision model (MADM), using the Best Worst Method (BWM) and combined compromise solution (CoCoSo) is set up and evaluated by pricing experts from Germany and Spain. The results suggest accuracy and reliability as the most prominent attribute to evaluate AISPF, while ethical and sustainable criteria are sorted least important. The AISPF which best meet the criteria are financial prices followed by procurement prices.

Subject Areas: *Decision Support Systems, Marketing Planning and Implementation, Marketing Strategy, Pricing, Sales Force*

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