

Guidelines for designing green products considering customers' cultural preferences

ABSTRACT

The increasing customer awareness of environmental sustainability during the last decade has had an influence on many manufacturers to produce green products. However, issues arise regarding the actual preferences of customers for green products, which often differ depending on cultural influences. Cultural values can affect the decisions of designers to determine detailed design specifications that relate to customer preferences. Currently, few guidelines consider cultural values as an aspect of green product design. Thus, the aim of this study is to develop a guideline that incorporates the influence of cultural values on green product design. Malaysia was selected as the location of this study. The sources of data to establish a guideline were obtained from customer perspectives on green products. Structural equation modeling (SEM) was used to identify cultural influences and preferences on green product characteristics as the input strategies for the proposed guideline. Professional designers from different profiles were asked to identify the applicability of the guideline. Based on the results, the designers agreed that the influence of cultural values is an important aspect that should be considered in the development of green products. The implication of the guideline is discussed in this paper to accelerate decisions of designers in developing green products. © 2021 by the authors. Licensee MDPI, Basel, Switzerland.