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ARTICLE

The contextual parameters influence on the eco-block building purchase decision in Mauritius

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Abstract
Concern for unsustainable buildings has obliged the global construction industry to embrace energy-efficient building envelope. In Mauritius, building insulation like the eco-block technology was initiated to reduce energy consumption from air-conditioning, ensure energy cost savings and improve thermal comfort. An investigation of the factors which motivate society's acceptance of the new building is important to enable its wider-scale implementation. Normally, the adoption decision-making process is a generic model to understand the different stages leading to the purchase decision of a specific innovation. However, the model is restricted in terms of obtaining an in-depth contextual understanding towards the selection process. The contribution of this research is, therefore, to develop a new adoption decision-making framework that aims to explore the contextual factors and examine Mauritians' purchase decision of the eco-block building, filling the literature gaps. A survey questionnaire was designed and distributed to Mauritians based on the researcher's judgment, where 257 responses were useful to undergo structural equation modelling. The findings revealed that dissatisfaction with the thermal comfort of existing buildings during hot season, importance to reduce energy, household size, internal product features, economic incentives and public education have significant influence on the building acceptance. Contrastingly, building age, awareness of building insulation alternatives, external product features and past experience have no effect on adoption decision. Accordingly, the predictor variables within the contextual model could satisfactorily explain 21.1% of the eco-block building purchase behaviour. The contextual framework can eventually assist building developers to use the research outcomes and formulate successful implementation strategies.

Keywords Building insulation adoption · Eco-block building purchase decision · Adoption decision-making process · Contextual factors

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