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EXPERIENCE AND FAMILIARITY'S ROLE IN THE DIFFUSION OF PHOTOVOLTAIC TECHNOLOGIES

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Abstract

Due to large shortfalls of electric-power generation, solar photovoltaic energy is one of the special-purpose decentralized forms of power-generating units that the government is trying to promote in an attempt to alleviate the power problem in India. Rogers' innovation decision model comprises of a sequence of stages progressing from knowledge acquisition to persuasion or interest followed by the adoption/rejection decision. Rogers emphasizes knowledge as the means to persuading decision makers to adopt or reject an innovation. Another major variable in Rogers' model is persuasion, the formation of a favourable or unfavourable attitudes toward the innovation being considered for adoption. Kaplan proposed an improved way of explaining how potential adopters mature to a level of innovation interest. In an attempt to fill the gap between Knowledge and Interest, Kaplan identified Motivation, Context, Experience and Familiarity, variables that were hitherto ignored. The present study explores the importance of decision makers' Experience and Familiarity with solar based technologies in the diffusion of these technologies. The data was collected from managers in hotels, using a structured questionnaire. The results of descriptive analysis shows that these managers had a moderate level of Experience and Familiarity with applications such as solar water heating, solar lighting etc. Therefore, concerted efforts must be directed toward providing potential adopters with more direct Experience with different PV based applications. Familiarity with the existing efforts to demonstrate and use different PV based applications in India can be increased through appropriate measures taken by the government.

Keywords: Diffusion, Experience, Familiarity, Photovoltaic Technologies.
