

Acceptance of ICT-Enabled Services Among Bangladeshi Farmers

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Abstract

This paper is aimed at presenting a proposed work that focuses on the decision-making process regarding the acceptance of ICT-enabled services among Bangladeshi farmers. For this purpose, an Artificial Society Model (ASM hereafter), introduced by the authors, is being used. This *psychology-oriented ASM of decision-making* deals with knowledge-based decision-making process. It consists of a set of agents that represents groups of people who respond similarly to certain problem. The agents are characterized by the extent of knowledge that they have on the problem. The knowledge of an agent is expressed by a mathematical function. Thinking process of the agent is simulated by using a linkage model of cognitive psychology. A message is formed by the agent, based on the knowledge function and the conclusion (decision) of the agent on the given problem, which is also expressed mathematically, and is transferred to another agent and modifies the knowledge function of the agent that receives the message. As a result, the model enables to simulate dynamics of decision making processes in society. Such modeling helps us to understand various natural and social phenomena such as the issue discussed in this article, i.e. decision-making process regarding the acceptance of ICT-enabled services among Bangladeshi farmers.

Keywords: ICT-enabled Services, Decision Making Process, Artificial Society Model