

The Adoption of Innovations by Organizations
A Model of Process and an Investigation of Determinants

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Abstract

Research into organizational adoption process has long been influenced by the work of sociologists. Rogers' (1962) model has been used by most researchers to describe the process of adoption of innovations by organizations. The applicability of the model has been questioned in this research. There are two reasons for this. First, the five stage adoption process model developed by Rogers is for the individual adoption decisions. In organizational adoption a group is the adopting unit in most cases. Second, organizational adoption is but one type of organizational decision and hence, organizational adoption should be based on organizational decision-making process rather than on the individual adoptions process model. This is the basic contention of this research. A model of organizational adoption process has been proposed in this work with the above issues in mind. This model is built upon a basic framework of organizational decision-making theory with useful guidelines drawn from adoption literature. The model consists of six major stages: 1. Stimulus Perception: Organizational adoption is evoked by perception of stimuli which vary along crisis-problem-opportunity continuum. Crisis and problem lead to search which, in turn leads to awareness of an innovation. On the other end of the continuum, individuals become aware of the innovation through sources like advertisements and perceive an opportunity in it. Both trigger the adoption process.

2. Information acquisition: In this stage, organizational members are engaged in collection and exchange of information. 3. Evaluations: Mental evaluation of innovation and cost-benefit analysis from this stage. 4. Idea Acceptance: Members interact between themselves to decide on adoption of the Innovation. 5. Trial: In some cases, innovation may be tried on a small scale before adoption. 6. Adoption: Full scale adoption of innovation is made here. Looping and Skipping of stages have also been conceptualized in the model.

Five sets of facts have been shown to influence the adoption process proposed above: 1) product-specific, 2) organizational, 3) individual, 4) interpersonal, and 5) environmental. Some of these influences have been hypothesized in this research. An attempt has been made to incorporate interaction of variables in these hypotheses which are termed as contingent hypotheses. For example, one of the hypotheses states that adopting organizations will have significantly higher level of organizational slack than nonadopting organizations for innovations requiring high level

of investment. Three demographic variables (age, education, and experience of decision group members), two sociological variables (membership in associations and clubs, and cosmopolitaness), one psychological variable (perceived risk), four organizational variables (size, slack, differentiation, and decentralization) and one environmental variable (market pressure) have been used in hypotheses formulation.

Three innovations were selected for the study: one production innovation (Numerically controlled Machines), one office equipment innovation (Electronic stencil cutting Machine), and one packing innovation (Hermetet cartons). A survey of adopting and non adopting organizations was made. Findings indicated that the model proposed was valid except for the identification of a stage not conceptualized therein. This stage was termed as 'negotiation' stage in which organizational members interact with the supplier to discuss the terms of offer and suggest product modifications. This stage was found to occur between interaction and trial stages of the model proposed. Findings also indicated occurrences of certain types of looping and skipping of stages not conceptualized earlier. These changes were incorporated and a revised model has been presented. Findings on contingent hypotheses indicated that type of education, type of experience, perceived risk and level of activity in organizations may be good indicators of organizational innovativeness under various specified conditions. On the whole, there was evidence to support that study of contingent hypotheses can provide better insight into organizational adoption behaviour.