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Consumer Channel Choices: The Role of Knowledge and Choice Uncertainty

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Abstract

This paper introduces the concepts of knowledge uncertainty and choice uncertainty as important factors influencing consumer channel choices. Knowledge uncertainty is hypothesized to influence the choice between electronic and conventional channels whereas choice uncertainty is hypothesized to influence the choice between multi-source and dedicated channels. A framework is built combining these two sets of hypotheses into a 2x2 matrix predicting consumer channel choice under different combinations of knowledge and choice uncertainty and a theoretical model is developed identifying antecedents of each type of uncertainty.

Introduction

The widespread diffusion of the Internet has created an explosion in the growth of electronic channels, including direct channels (that is, individual company web sites), electronic markets, or “electronic intermediaries over which multiple buyers and sellers do business” (Malone et al., 1987), and other cybermediaries (Sarkar et al. 1995). This paper draws upon consumer choice and media choice research to identify the conditions under which consumers are likely to adopt and use such electronic channels in preference to traditional channels. We will illustrate and ground our arguments in the insurance industry. This industry offers a wide range of channel choices, both electronic and traditional, as well as a diverse range of product offerings, thereby offering a rich context for the ideas in this paper. Ultimately, however, we expect that the framework developed here should be generalizable across a range of industries that offer similar product and channel diversity (e.g., financial services, travel).

The Technology Acceptance Model (TAM) is perhaps the most widely accepted model explaining and predicting the acceptance and usage of IT innovations, such as the Internet or electronic markets (Davis 1989, Davis et al. 1989). TAM has consistently shown that a key influence on individuals’ acceptance and usage of technological innovations is perceived usefulness, a

measure of the individual's subjective assessment of the utility offered by the innovation (e.g., Davis et al. 1989, Adams et al. 1992, Taylor and Todd 1995). Very little work, however, has examined the antecedents that influence *how* individuals’ beliefs about the usefulness of an innovation are formed. Our intent in this research is to examine the antecedents that influence customers’ perceptions of usefulness, or relative advantage, and hence their likely adoption, of electronic vis-à-vis conventional channels.

Extant research has focused on economic factors, such as reduced transaction execution costs, or efficient price comparisons, as the primary source of relative advantage for electronic channels. The premise of this paper is that, while economic considerations are clearly important, they are not, by themselves, sufficient to explain consumer channel choices, and that acquiring and comparing price information is just one of many steps in the process of making a purchase.

We propose that the nature of uncertainty surrounding a consumer’s purchase process can be an important factor in their choice of channels. The literature on consumer choice differentiates between two kinds of uncertainty – *knowledge uncertainty*, or uncertainty regarding information about alternatives, and *choice uncertainty*, or uncertainty about which alternative to choose (Urbani, Dixon, and Wilkie, 1989). It is our contention that these two forms of uncertainty influence two different dimensions of channel choice. The level of knowledge uncertainty influences the choice between *electronic and conventional channels*, while the level of choice uncertainty will affect a consumer’s preference for *dedicated versus multi-source channels*. Thus, our argument rests on the premise that different channels differ in their ability to reduce different forms of uncertainty.

Next, we define knowledge and choice uncertainty in the context of the insurance industry and identify antecedents of a consumer’s perceived levels of these forms of uncertainty. Our conceptual model is depicted in Figure 1.

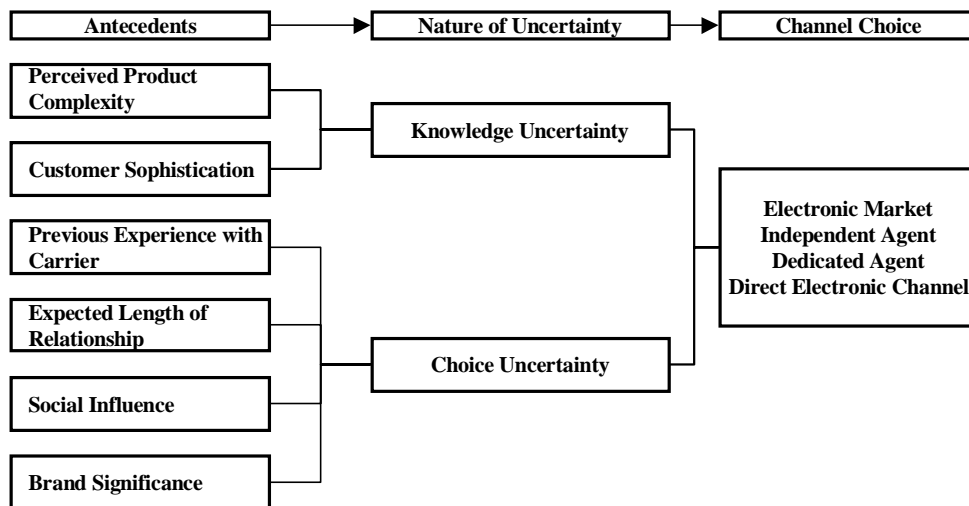


Figure 1. Model of the Antecedents of Channel Choice Selection for Insurance Consumers

Knowledge Uncertainty

In the context of insurance, the term knowledge uncertainty refers to consumers' confidence in their ability to identify and evaluate their sources and levels of risk exposures, and hence to determine the appropriate levels of coverages, and combination of other insurance policy attributes. This, in turn, is influenced by the following antecedent conditions:

1. **Perceived Product Complexity:** Previous literature on electronic markets has suggested that if a product has high complexity of description, it is difficult to create an electronic market that permits standardized comparisons. Our use of the term, however, refers to the complexity of a product as perceived by a consumer, that is, the consumer's understanding of the number of product attributes about which he/she needs to make choices. For example, a life insurance contract may be perceived by one consumer simply in terms of the amount of the death benefit. For other consumers, however, a life insurance contract may be closer to Smith's (1982) view of the policy as a "package of options or rights to the policyowner that is not precisely duplicated by any other combination of commonly available contracts." Clearly, these consumers will have different perceptions of the complexity of a life insurance contract.

2. **Customer Sophistication:** This factor has both a direct and an indirect effect on knowledge uncertainty. On the one hand, the level of a customer's sophistication and knowledge affects his/her perception of the complexity of a product. At the same time, the less knowledgeable and sophisticated a consumer is about a product, the less

likely they are to feel confident in their ability to select the appropriate combination and levels of attributes.

The level of knowledge uncertainty directly influences the choice between electronic and conventional channels. High levels of knowledge uncertainty create high disparity in product knowledge between consumer and vendor, thus resulting in communication that is highly equivocal. Thus, richer media which offer multiple cues and instantaneous feedback and provide greater capabilities in reducing such equivocality (Daft et al. 1987) are likely to be preferred. That is:

Proposition 1: The higher the level of knowledge uncertainty, the more likely consumers will be to choose richer conventional channels over leaner electronic channels.

Choice Uncertainty

Choice uncertainty, in the context of insurance, refers to a consumer's uncertainty about the choice of carriers. This, in turn, is influenced by the following factors:

1. **Previous experience with carrier:** Customers who have previously had favorable experiences with certain carriers, especially in the area of claims settlement, are likely to be more inclined to continue with the same carrier, thereby reducing their level of choice uncertainty.

2. **Expected length of relationship:** The longer the expected length of a buyer-seller relationship, the higher the perceived choice uncertainty. For instance, an auto insurance contract is typically for a period of twelve months, while the duration of a whole-life insurance

policy may span decades. Since the consequences of a consumer's commitment to purchase insurance from a specific carrier are shorter term for auto insurance, the perceived choice uncertainty is likely to be lower for the initial carrier selection.

3. Social Influence: Consumers who are subject to strong social influences to select a specific vendor will face lower choice uncertainty. Social influence provides both evaluative and normative information about the consequences of choosing a specific vendor, thus reducing uncertainty involved in the choice. For instance, an individual who selects a specific vendor based on recommendations of family members, will feel more confident in his/her selection.

4. Brand Significance: This refers to a consumer's preference for brand names. The stronger this preference, the lower the effective size of the choice set and hence the lower the perceived choice uncertainty.

The level of choice uncertainty influences the choice between dedicated and multi-source channels. The higher the level of choice uncertainty, the more likely the consumer is to choose a multi-source channel such as an electronic insurance market (e.g., Insure Market or InsWeb) or an independent insurance agent (that is, an agent that represents multiple carriers). With low levels of choice uncertainty, a consumer is more likely to choose a dedicated channel such as a direct writer (an agent dedicated to a single carrier, such as Allstate or State Farm) or a specific carrier's individual web site.

Proposition 2: The higher the level of choice uncertainty, the more likely consumers will be to choose multi-source channels over dedicated channels.

Table 1 combines and summarizes the above arguments on the predicted channel choices as a function of the nature of uncertainty.

Conclusion

This paper developed a framework describing the effects of choice and knowledge uncertainty on consumer

channel choices. In addition, a theoretical model of the antecedents and consequences of choice and knowledge uncertainty was also developed. Empirical research is, of course, needed to validate both the framework and the theoretical model.

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Table 1. Uncertainty and Channel Choice

		Choice Uncertainty	
		High	Low
Knowledge Uncertainty	High	Independent Agent	Direct Writer (Dedicated Agent)
	Low	Electronic Market	Direct Electronic Channel (Single Carrier Web site)