Chapter IV
The Efficiency of Different Search Patterns in Electronic Market

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ABSTRACT

Electronic markets are expected to facilitate consumer information search and product comparison to the extent that consumers are able to accumulate nearly perfect information. The authors present an analysis of search patterns based on a laboratory experiment on product search processes. They identified three types of search patterns in the experiment: sequential, agent search, and iterative search. They studied the factors affecting the choice and the outcome of agent search pattern compared to the other search patterns. The results show that the employed search pattern has an impact on search cost and the efficiency of search measured with purchase price and the time used for searching. Agent search seems to combine low search costs with high efficiency. Sequential search still emerged as the dominant search pattern even though it leads to the most expensive purchase. Iterative search pattern search pattern.
INTRODUCTION


There are nearly 60 factors that have been found to influence the consumer pre-purchase information search (Schmidt and Spreng 1996; Srinivasan and Ratchford 1991). In the past decades, some researchers have modeled the relationships among these 60 factors influencing the consumer search behavior (Kulviwat et al. 2004, Schmidt and Spreng 1996, Srinivasan and Ratchford 1991, Punj and Staelin 1983). Consumer information search has been one of the most enduring literature streams in consumer research (Beatty and Smith 1987). Marketing and consumer behavior researchers have been examining consumer’s pre-purchase information seeking behavior since at least 1917 (Copeland 1917) and even today most consumer information processing and decision making models include pre-purchase information search as one of the key components (Bettman 1979, Bettman et. al 1990, Engel et al. 1990, Howard and Sheth 1969, Olshavsky 1985). The research of consumer behavior in electronic markets and consumer choice of distribution channels is in need of sound theoretical frameworks that enable researchers to integrate electronic markets research with adjacent fields of study.

Consumer search is the main method, besides advertising, for acquiring information necessary for making purchase decisions. Consumers look for products with desired qualities and sellers offering these products at competitive prices in an attempt to decide what, when, and from whom to purchase. Markets are dynamic, which results in information becoming obsolete (Stigler 1961). Changing identity of sellers and buyers, and also fluctuations in supply and demand, result in uncertainty. Identification of prospective products and sellers is often the dominant motive of search. Another, yet related, cause is consumers’ inability to ascertain product quality and seller reliability before the purchase decision (Stigler 1961, Moorothy et. al. 1997, Bakos 1997, Öörni 2003).

Information search precedes many consumer decisions (Newman and Staelin 1971, Bettman et. al 1990, Moorothy et. al. 1997, Punj and Staelin 1983, Beatty and Smith 1987, Smith and Spreng 1996). However, information search is often costly (Stigler 1961, Wu et al. 2004, Öörni 2002). The main cost factor is typically the opportunity cost of the searcher’s time (Wu et al. 2004, Öörni 2003). Search costs depend on consumer’s ability to search, which heavily impacts the pattern of search one can adopt (Öörni 2002).

We have three claims in our work: 1) Consumers employ different search patterns in their pre-purchase search (H1), 2) Age, gender and knowledge have an effect on choosing a search pattern (H2), 3) Different search patterns influence the outcomes of search activity (H3). In the body of this paper, we will first discuss the prototypical search patterns identified in consumer behavioral literature; sequential and agent search. This work connects the search pattern to the outcomes of