



The Adoption of Internet Shopping by Electronic Retail Consumers in Greece: Some Preliminary Findings

Adam Vrechopoulos

Department of Information Systems and Computing Uxbridge, Middlesex, UB8 3PH, UK
HELTRUN (Hellenic ELectronic Trading Research UNit) Athens University of Economics & Business
Patisision 76, 10434, Athens, Greece

Email: avrehop@aueb.gr

George Siomkos

University of Macedonia, 156 Egnantia, 540 06 Thessaloniki, Greece

Email: siomkos@uom.gr

Georgios Doukidis

Department of Information Systems and Computing Uxbridge, Middlesex, UB8 3PH, UK
HELTRUN (Hellenic ELectronic Trading Research UNit) Athens University of Economics & Business
Patisision 76, 10434, Athens, Greece

Email: gjd@aueb.gr

Abstract

This paper aims at developing profiles of shoppers who are already users of the Internet and of consumers who are interested to adopt Internet shopping as an innovation. It offers some preliminary empirical findings on the characteristics and behaviour of the two groups. According to the theories and processes of consumer adoption decision and diffusion of innovation, demographic and behavioral characteristics, as well as perceptions and preferences of electronic retail consumers in Greece are measured. An analysis to indicate significant differences between the two groups is performed and findings are briefly discussed. The survey conducted offers empirical data based on which detailed profiles of Internet users ("innovators") and interested-to-adopt shoppers ("early adopters") are developed.

INTRODUCTION

Understanding consumers and the consumption process brings a number of benefits, among them the ability to assist managers in their decision making, provide marketing researchers with a knowledge base from which to analyze consumers, and assist the average consumer in making better purchase decisions [1]. Online purchases constitute a fundamental change for customers; therefore, a key task for electronic commerce is to find out who the actual and potential customers are [2]. To that end, retailers use new and

innovative technologies to gain sustainable competitive advantages [3]. However, the phenomenal growth of the Internet in the last few years may be spawning a new subculture – that of Web users [4]. Consumer behaviour in online retailing has not yet been subject of many research projects. As a result, little is known about the demographics of online customers and even less about the factors influencing their decision to buy [5]. Web-consumers are well informed and very demanding regarding services offered to them and seek high quality information and treatment [6].

When a new product or an innovative technology is introduced in the market, consumers learn about it, decide whether to adopt it or not. Adoption implies that consumers have accepted the innovation and use it on a regular basis [7].

Innovations are diffused in the market as individual consumers make their decisions to adopt them (upper part-Figure 1) [8], at different time intervals. As a result of this aggregation, a normal distribution develops which represents the diffusion process (bottom part - Figure 1). The consumers in a market adopt the same innovation at different times. Based on the time of adoption, typically five categories of consumers can be distinguished [9]. Marketers develop specific strategies to target each category separately [10].

Innovators are those consumers who first adopt the new product or the innovation. They are few in number and are eager to try new ideas and products, and are well-educated and can afford any financial risk involved in adoption. They are very well informed about new products by other innovators as well as by impersonal and scientific sources of information.

Early adopters are more socially integrated in their local communities than innovators, and are more likely to be opinion leaders. They are typically younger, more educated, belong to a higher social class, read much more specialized magazines about new products and innovations than the average consumer. They frequently get in contact with salespeople of new products and play a crucial role as opinion leaders who influence other consumers.

Early majority consumers adopt the innovation right before the average consumer in the market does. These consumers think a lot before they decide to adopt an innovation. Their characteristics include: larger age, higher educational level, and higher socioeconomic status than the average member of society. They rely heavily on opinion leaders (i.e., early adopters).

Late majority consumers delay adoption of the innovation mainly because they are distrustful about new ideas. They decide to adopt after they feel a strong social pressure. They mostly rely on opinions expressed informally by people they know well. They watch electronic media less frequently than others.

When laggards decide the adoption of a "new" product, or an innovation in general, the product is most likely close to its withdrawal from the market or its substitution from another new one. Laggards are especially distrustful about innovations and are socially isolated. They are older consumers of lower socioeconomic levels. Laggards constitute a consumer category of no interest to marketers.

METHODOLOGY & SAMPLE

The study was conducted as part of the ACTIVE (Advertising and Commerce Through Internet in the context of the Virtual Enterprise) ESPRIT project. The sample of the survey comprised of 500 respondents who were customers of a large supermarket chain operating in the greater area of Athens. The selection of the sample participants was conducted based on random sampling procedures from nine different areas of Athens. The basic criteria for participation were: age range 18-45 and use or ownership of a PC. The fieldwork lasted for three weeks. The sample was well-balanced in terms of some basic demographic characteristics (i.e. sex, age, marital status) of the respondents, and more skewed (toward the

higher levels) in terms of family income and education. This last observation is explainable by the "PC use/ownership" criterion for participation in the survey.

ANALYSIS OF RESULTS

Internet shoppers and future adopters evaluated Internet shopping on sixteen dimensions. In Figure 2 the means are plotted on a snake-plot and t-tests were run in order to identify statistically significant differences between each pair of means. Results indicated that the most significant differences (significance level $\alpha=.005$) are in the evaluation of the characteristics: "sense of being in a store," "recommendations about products" and "entertainment," with Internet shoppers systematically assigning lower evaluations on them than future adopters' evaluations

Other significant differences ($\alpha=.01$) identified, were the evaluations of the "on-screen projection of shopping list," and "immediate help on exploring the store" characteristics. Less significant differences had to do with the evaluation of "product image on the screen," "video projection of products," and "personal support during shopping" at $\alpha=.025$; "direct cost calculation of total purchases," and "recommendations about products through e-mail," at $\alpha=.05$.

Results from Figure 2 show that in general both groups of consumers rate Internet shopping high in dimensions related to information about products, which facilitate consumer product comparisons, evaluations and final consumer decisions. Above average evaluations are given by both groups regarding recommendations about products that they receive on the screen, as well as support and help on exploring the store, and on getting personal attention and assistance. These observations refer to the evaluation of characteristics of the virtual store's layout and design. Interestingly enough, Internet shoppers who already have the actual experience, rate the "sense of being in a store" dimension below average, while future adopters perceive the atmosphere in a virtual store more positively than Internet shoppers do. Overall, results indicate that future adopters, who do not have the experience with Internet shopping yet, evaluate virtual stores and Internet shopping more positively than Internet shoppers do.

PROFILING INTERNET USERS & INTERESTED-TO-ADOPT

Based on Figure 1, Internet users are "innovators" and interested-to-adopt are "early adopters". Some highlights of the two groups' profiles are presented in Table 1, after analysis of the empirical data from the study.

The reported characteristics help managers in developing successful targeting and positioning strategies, and constitute a future research foundation area for a more thorough analysis by both IS and marketing researchers.

For example, demographic and behavioral characteristics of consumers interested to adopt Internet shopping, help managers develop promotion strategies for targeting them, and using them, at a later stage – after their adoption of the innovation – as opinion leaders persuading other consumers (i.e., early majority) to also adopt. In addition, information on perceptions and preferences regarding Internet shopping contribute toward the design of the total product offering, e.g., characteristics of services offered, payment, purchase limits, presentation of products, information provided, etc. Practical implications also arise for the appropriate and effective design of the virtual store layout and HCI.

Figure 1: The consumer adoption decision & diffusion of innovation processes

Figure 2: Evaluation of virtual retail store characteristics by Internet shoppers and interested to adopt**Table 1****The profiles of Internet users ("innovators") and interested-to-adopt ("early adopters")**

Characteristics	INTERNET USERS	INTERESTED TO ADOPT
Sex	mostly male	male and female
Age	25-44	18-44
Education	university graduates & postgraduate studies	university graduates
Avg. Monthly HH Income (GRD)	300,000 - 2,000,000	300,000 - 1,000,000
Family Status	single	married
Occupation	scientists; private employees; free lancers	private employees; scientists; public servants
Reasons for using Internet	news-information access; entertainment; information about products; product purchases	
To purchase products, they use (how often)	Internet; phone orders (sometimes; few times)	advertising material & store catalogues; phone orders; telemarketing
Reasons for buying products from home	to save time; 24-hour shopping; better briefing about products	save time; 24-hour shopping; the only way to buy some products
What products buy from home/job	hardware & software; CD/disks; books & magazines; travel tickets; electronics	already buy: books & magazines; CD/disks; electronics; clothes; home equipment; travel tickets; cosmetics; sport items
Preferred payment method	cash on delivery; credit card through Internet	cash on delivery
Most valuable services offered by Internet store	high quality service – quick delivery; low prices; 24-hour service; wide product variety	wide product variety; low prices; 24-hour service; home/job delivery
Incentives for buying through Internet	sales promotion; low prices; discount in total amount of purchases	low prices; sales promotions; discount in total amount of purchases
Min tolerable purchase limit	<= 10,000 GRD	<= 20,000 GRD

for free home delivery

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