

The Effect of Income Level on E-Commerce Adoption: A Multigroup Analysis



Ángel F. Agudo-Peregrina

Universidad Politécnica de Madrid, Spain

Ángel Hernández-García

Universidad Politécnica de Madrid, Spain

Emiliano Acquila-Natale

Universidad Politécnica de Madrid, Spain

INTRODUCTION

In the past years, profiles of the average e-shopper have gradually changed as Internet expanded and new segments of consumers have started using electronic commerce. Socio-demographic characteristics of online shoppers are more heterogeneous: while a few years ago the average e-shopper was a middle-aged male with high income and high educational level, it is difficult to define such a precise average profile nowadays. As a consequence of this, there is renewed interest in the study of demographic variables for segmentation, such as gender and age. However, despite this interest, other socio-demographic segmentation variables have been left apart. One of the most noteworthy omissions in this regard is the study of the effect of income level in the adoption of electronic commerce, a topic where the scarcity of research is alarming. This research investigates and explores the influence of income level in e-shopping behavior. In order to explore how e-shoppers' income level might affect e-commerce adoption—or, more precisely, how it moderates the effect of variables influencing e-commerce acceptance—the research proposes a model based on UTAUT2 that includes seven antecedent variables influencing purchase intention and purchasing behavior in e-commerce. The study also presents an empirical study to validate this model.

Internet shopping is becoming more relevant and integrated with everyday life. Electronic commerce maintains a constant growth rate (eMarketer, 2013) and it is ubiquitous (e.g. mobile commerce), leading to more heterogeneous groups of e-shoppers with very different lifestyles.

Regarding the heterogeneity of e-shoppers, there is a shift from the first days of e-commerce, when the average e-shopper was essentially a male shopper, of middle age, and with high purchasing power and high educational level (Donthu & García, 1999), toward a profile of the average Internet shopper that is more difficult to define due to the current high heterogeneity among e-shoppers.

For example, in Spain the ratio of male e-shoppers (52.6%) is currently approximately the same as female e-shoppers (47.4%) (Urueña, Valdecasa, Ballester, Antón, Castro, & Cadenas, 2013). Furthermore, despite the fact that middle-aged people still are the main group of e-shoppers (66.2%), younger and older—less than 25 and more than 50 years old, respectively—online shoppers are increasingly using electronic commerce in more recent years. In the same way, the number of Internet shoppers from lower social classes is also expanding (22.3% of the total in 2013, 8.3% more than in 2009) (Urueña et al., 2013).

Changes in differences among online shopping behaviors based on socio-demographic variables for segmentation have raised the interest of scholars and practitioners. Thus, prior research has explored the influence of differences of online shopping behaviors between groups of shoppers depending on their gender (Rodgers & Harris, 2003; Hasan, 2010; Pascual-Miguel, Agudo-Peregrina & Chaparro-Peláez, 2015) or age (Joines, Scherer, & Scheufele, 2003; Doolin, Dillon, Thompson, & Corner, 2005). However, literature on differences based on other demographic variables, such as income level, is still scant.

The objective of this study is to bridge that research gap. Thereby, this research focuses on the analysis of how income level may affect the factors that predict purchase intention and purchasing behavior in Internet shopping. In order to do so, the structure of this article is as follows: the next section presents a background of the research, introduces the concepts of electronic commerce acceptance and use, and covers prior research on the effect that demographic variables have on e-commerce adoption and purchasing behaviors; after presentation of the background, the subsequent section describes the study methodology, which is followed by a presentation of the results of the analysis from the empirical study; the final sections cover a discussion of the findings, avenues of future research and a summary of the conclusions from this study.

BACKGROUND

Information Technology and Acceptance Models

Rogers's (1962) theory of diffusion of innovations (DoI, also known as IDT, Innovation Diffusion Theory) addresses the adoption process of different technologies and innovations in a given social context. For Rogers, innovations have five distinctive characteristics that influence the adoption of a certain technology by users. Moore and Benbasat (1991) refined these characteristics after their review of the theory of diffusion of innovations focused on information systems.

In parallel, two related but different approaches to the study of technology acceptance evolved from the theory of reasoned action (TRA, Fishbein & Ajzen, 1975): the theory of planned behavior (TPB, Ajzen, 1985) and the technology acceptance model (TAM, Davis, 1986). The main principle of TRA is that behavioral intention is the main predictor of human behavior, and that behavioral intention is determined by attitude towards a certain behavior –an internal and individual component– and subjective norms –a component that reflects the influence of the social context in which a behavior occurs. TRA has been successfully applied to many different behaviors, but the detractors of TRA argued that a main limitation of the theory was that its validity was restricted to behaviors under which the individual has a conscious control (Sheppard, Hartwick & Warshaw, 1988). Upon the principles of TRA, and in order to circumvent that limitation, the TPB adds another antecedent of behavioral intention: perceived behavioral control. On the other hand, the proposition of TAM aimed to adapt the principles of TRA to the study of information technology acceptance and use, focusing on the adoption of computers and information systems in organizations (Davis, Bagozzi, & Warshaw, 1989). In the first formulation of TAM, Davis et al. (1989) propose two antecedents of attitude: perceived usefulness and perceived ease of use. However, TAM omitted the second component of TRA –subjective norms–, which was later introduced as predictor of both perceived usefulness and behavioral intention in the revision of the model that led to TAM2 (Venkatesh & Davis, 2000).

15 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/the-effect-of-income-level-on-e-commerce-adoption/149116

Related Content

A Maturity Model for E-Commerce Adoption By Small And Medium Enterprises In Indonesia

Evi Triandini, Arif Djunaidyand Daniel Siahaan (2017). *Journal of Electronic Commerce in Organizations* (pp. 44-58).

www.irma-international.org/article/a-maturity-model-for-e-commerce-adoption-by-small-and-medium-enterprises-in-indonesia/172804

Mobile Data Technologies and Small Business Adoption and Diffusion: An Empirical Study of Barriers and Facilitators

Jeanette Van Akkerenand Debra Harker (2003). *Mobile Commerce: Technology, Theory and Applications* (pp. 218-244).

www.irma-international.org/chapter/mobile-data-technologies-small-business/26476

Managing Changes in Service Oriented Virtual Organizations: A Structural and Procedural Framework to Facilitate the Process of Change

Waeal J. Obidallahand Bijan Raahemi (2017). *Journal of Electronic Commerce in Organizations* (pp. 59-83).

www.irma-international.org/article/managing-changes-in-service-oriented-virtual-organizations/172805

IBF: An Integrated Business Framework for Virtual Communities

Fernando Ferri, Alessia D'Andreaand Patrizia Grifoni (2012). *Journal of Electronic Commerce in Organizations* (pp. 1-13).

www.irma-international.org/article/ibf-integrated-business-framework-virtual/69155

Security and Privacy in E-Commerce

(2012). *Electronic Commerce Management for Business Activities and Global Enterprises: Competitive Advantages* (pp. 366-402).

www.irma-international.org/chapter/security-privacy-commerce/67595