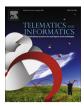
FISEVIER

Contents lists available at ScienceDirect

### Telematics and Informatics

journal homepage: www.elsevier.com/locate/tele



# The interplay of online shopping motivations and experiential factors on personalized e-commerce: A complexity theory approach



Ilias O. Pappas a,b,\*, Panos E. Kourouthanassis b, Michail N. Giannakos a, George Lekakos c

- <sup>a</sup> Department of Computer and Information Science, Norwegian University of Science and Technology (NTNU), Sem Sælands vei 7-9, 7491 Trondheim, Norway
- <sup>b</sup> Department of Informatics, Ionian University, Tsirigoti Sq. 7, 49100 Corfu, Greece
- <sup>c</sup>Department of Management Science and Technology, Athens University of Economics and Business, Patission Str. 76, 10434 Athens, Greece

#### ARTICLE INFO

Article history: Received 14 January 2016 Received in revised form 27 June 2016 Accepted 18 August 2016 Available online 6 October 2016

Keywords: E-commerce Online shopping motivation Online shopping experience Personalization Configurational analysis fsQCA

#### ABSTRACT

The present study aims to examine purchase behavior in personalized online shopping by employing complexity theory, based on customers' online shopping experience and online shopping motivations. To address its objectives, a conceptual model is proposed along with research propositions. The research propositions are validated through a survey on 401 customers' experience with online shopping, by using the data analysis tool fsQCA (fuzzy-set Qualitative Comparative Analysis). The results, indicate nine configurations of online shopping experience and online shopping motivations that lead to high purchase intentions. This study takes a step further the literature of online shopping and the theoretical ground of how customers' online shopping experience combines with their online shopping motivations in order to predict and explain increased intention to purchase. The findings offer implications for both researchers and online retailers, regarding the development of new theories in personalized e-commerce and the provision of personalized services.

© 2016 Elsevier Ltd. All rights reserved.

#### 1. Introduction

Online retailers have been implementing various strategies to attract and retain customers. Web personalization has been identified as an important factor in the area of marketing and information systems (Salonen and Karjaluoto, 2016). Personalization in online shopping is a strategy that may aid in persuading customers to select a product or service and lead to a purchase. Research in the area has focused on examining customers' online shopping experience in order to identify ways to convince customers to visit an online shop and increase their purchase intentions (Ho and Bodoff, 2014; Pappas et al., 2016b; Xu et al., 2011). However, it is important to identify the reasons that customers choose to visit an online store (i.e., their shopping motivations) and how their behavior differs based on their predisposition towards personalized online shopping. The traditional personalized strategies use customers' past purchases or browsing history to offer tailored content. Nonetheless, such strategies should be extended by taking into account customers' shopping motivations, as these motivations are most likely to influence customers' overall online behavior.

<sup>\*</sup> Corresponding author at: Department of Computer and Information Science, Norwegian University of Science and Technology (NTNU), Sem Sælands vei 7-9, 7491 Trondheim, Norway.

E-mail addresses: ilpappas@idi.ntnu.no (I.O. Pappas), pkour@ionio.gr (P.E. Kourouthanassis), michailg@idi.ntnu.no (M.N. Giannakos), glekakos@aueb.gr (G. Lekakos).

Shopping motivations are a critical factor in personalized online shopping and important determinants of purchase behavior. Customers may have various motivations and depending on how they combine with each other they may lead to a different behavior (Ganesh et al., 2010). Such motivations include finding the best price, searching for product promotions, online shopping convenience, stimulation from the interaction with the websites, receiving personalized services, quality of the received services, perceived value, information availability (Close and Kukar-Kinney, 2010; Ganesh et al., 2010; To et al., 2007). Based on their motivations, customers express different behaviors and they may be categorized into different categories (Lim and Cham, 2015; Rohm and Swaminathan, 2004). Customers have only some types of motivations that they consider more important from the others, indicating the complex interrelationships among online shopping motivations. Such complexity leads to the creation of multiple unique combinations of motivations that all are able to explain purchase behavior. Although some motivations may be more important than others when examined separately, identifying the more complex combinations of variables may lead to a better understand of online shopping behavior.

To this end, in offline shopping, a recent study in the Spanish market has identified customers' shopping motivations, which are able to influence their perceptions and in turn, affect their behavior (González-Benito et al., 2014). Thus, it is interesting to examine these motivations in cultures with similar characteristics, such as the Greek market, and in the context of online shopping. Furthermore, the economic recession reshaped the shopping habits of offline and online consumers. Consumers tend to be more price conscious and avoid impulse purchases trying to pre-organize their purchases (Hampson and McGoldrick, 2013). We expect that this behavior will also be evinced in the context of online shopping, therefore this study will inform the findings of online shopper typologies that have been executed prior to the economic recession by identifying different types of customers, based on their online experience and online shopping motivations.

The majority of the studies examining motivations in online shopping, almost uniformly, employ variance-based statistical approaches (e.g. regression-based Structural Equation Modeling) that rank the hypothesized predictive adoption factors based on their regression 'weights', suggesting that behavior on personalized online shopping may be explained through a single hierarchy (or configuration) of these factors. Consequently, such approaches offer one single solution, considered as the best solution, that explains the outcome, leaving however a significant amount of the outcome unexplained. Furthermore, focusing on net effects may be misleading (Woodside, 2013), since besides the main relation among the variables, an opposite relationship will exist for some cases in the same sample, thus creating the need to test the data for such contrarian cases (Woodside, 2014). To this end, different configurations of the examined variables may lead to the same outcome depending on how they combine with each other. Such configurations lead to multiple solutions, which in total represent a larger part of the sample, and are likely to explain a larger amount of the outcome.

This work builds on configuration theory and complexity theory in order to identify specific causal patterns among factors that may predict customers' purchase behavior when using personalized services. In detail, the objective of this research is to identify how online shopping experience and online shopping motivations combine together to form patterns that explain high purchase intentions. To this end, this study aims to answer the following research question

**R.Q.:** What configurations of online shopping experience and online shopping motivations lead to increased intention to purchase from online stores during the period of economic recession?

Through these configurations managers and decision makers of online shops will be able to gain a better understanding on how their customers experience the purchase process, and more importantly, what types of customers are more likely to purchase based on how they are motivated. The configurations depict the different combinations of the examined factors, and each configuration describes a unique combination of customers' online shopping experience and motivations, which can be comprehended as customers' behavioral group. Multiple configurations will lead to multiple behavioral groups. The identified configurations have unique values which explain the same outcome, and each configuration shows how a group of customers behaves. To this end, a configuration analysis is performed with the data analysis tool fsQCA (fuzzy set Qualitative Comparative Analysis) (Ragin, 2008). This study connects configurational analysis with complexity theory in the area of personalized online shopping, because when fsQCA is applied together with complexity theory researchers are able to gain a better and deeper insight on their (Leischnig and Kasper-Brauer, 2015; Ordanini et al., 2014; Woodside, 2014). Complexity theory "can explain any kind of complex system-multinational corporations, or mass extinctions, or ecosystems such as rainforests, or human consciousness. All are built on the same few rules" (Lewin, 1992, back cover). Complexity theory and configuration theory are appropriate for explaining the complex interrelations existing among variables, since the way they combine and their interdependencies are the ones leading to the desired outcome (Fiss, 2007; Woodside, 2014; Wu et al., 2014). We expand on the contributions of other studies from the areas of sociology (Ragin, 2008), business management (Pappas et al., 2016b), marketing (Wu et al., 2014), e-government (Kourouthanassis et al., 2016), learning (Pappas et al., 2016a,c) and others.

The paper is organized as follows. The next section presents related work and the conceptual model along with the research propositions. Section 3 presents the applied measures for data collection, and section 4 describes the research methodology. Section 5 presents the empirical results derived, and the final section of the paper includes discussion of the findings and conclusions highlighting theoretical and practical implications.

## Download English Version:

# https://daneshyari.com/en/article/4957682

Download Persian Version:

https://daneshyari.com/article/4957682

<u>Daneshyari.com</u>