Persuasive Technology and Users Acceptance of E-commerce: Users Perceptions of Website Persuasiveness

Muna M. Alhammad, Henley Business School, University of Reading, Reading, UK
Stephen R. Gulliver, Henley Business School, University of Reading, Reading, UK

ABSTRACT

Persuasive technologies have been extensively applied in the context of e-commerce for the purpose of marketing, enhancing system credibility, and motivating users to adopt the systems. Recognising that persuasion impacts on consumer behaviour to purchase online have not been investigated previously. This study reviews theories of technology acceptance, and identifies their limitation in not considering the effect of persuasive technologies when determining user online technology acceptance. The study proposes a theoretical model that considers the effect of persuasive technologies on consumer acceptance of e-commerce websites; with consideration of other related variables, i.e. trust and technological attributes. Moreover the paper proposes a model based on the UTAUT2, which contains relevant contributing factors; including the concept of perceived persuasiveness.

Keywords: Consumer Behaviour, e-Commerce, Perceived Persuasiveness, Persuasive Technology, Technology Acceptance, UTAUT2

INTRODUCTION

Human computer interaction (HCI) research, in the context of e-commerce, focuses mainly on the design of e-commerce website interfaces; with the aim of improving the effectiveness and/or efficiency of the decision making processes that leads a user towards a purchase from the Internet (Benbasat, 2010). E-commerce websites are becoming increasingly functionally persuasive, and are incorporating increasingly dynamic persuasive techniques; similar to those applied by face-to-face sales-persons, to enhance system credibility, facilitate the process of buying online, and motivate users to adopt the systems (Kaptein, 2011). An example of a persuasive technique, which is commonly applied on e-commerce websites, is customer review boards; where each product is linked to reviews from previous consumers, to allow customers to compare alternatives.

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Studies have used many approaches to investigate what motivates consumers’ decision making behaviour, and results show behaviour change as a result of technology (Kukar-Kinney & Close, 2010), trust (Kim, Ferrin, & Rao, 2008) and individual differences (Zhou, Dai, & Zhang, 2007). Limited research, however, has considered how persuasion actually impacts consumer’s online buying behaviour. In this research, we aim to examine the current state of technology acceptance theories, and whether they considered the influence of persuasive technology on determining users’ acceptance of technology. The paper then introduces, and examines, the concept of ‘perceived persuasiveness’ as a primary variable that motivates customers to buy (or not) from e-commerce websites. As such, this study incorporates a range of explanatory variables, related to technology acceptance, that are required to understand why customers accept or reject buying from such e-commerce website. These inseparable variables are integrated in a research model (See Figure 1), which will be empirically tested as a part of our on-going research.

The remainder of the paper is organised as follows: Firstly, we present a theoretical background for our work, and define and justify the research gap. Secondly, we introduce perceived persuasiveness; variables associated with it, and propose the research model. Finally, we propose how this model should be validated, discuss possibilities for future research, and conclude the paper.

PERSUASIVE TECHNOLOGY AND ATTITUDE CHANGE

Although the concept of persuasion arouses a variety of understandings, persuasion, generally, is defined as a communication process in which a persuader sends a persuasive message to the recipient (persuadee) with the intention of influencing recipients’ attitudes or behaviour;

Figure 1. Perceptions of persuasive design and behavioural intention model (PPD-PI Model)

![Figure 1. Perceptions of persuasive design and behavioural intention model (PPD-PI Model)](image-url)
Developing Security Enabled Applications for Web Commerce
www.igi-global.com/chapter/developing-security-enabled-applications-for-web-commerce/153497?camid=4v1a