SIGHCI 2014 Proceedings

Special Interest Group on Human-Computer
Interaction

2014

Why do users click on product images? The effect of perceived arousal

Jia Li
East China University of Science and Technology, jiali@ecust.edu.cn

Jinwei Cao
University of Delaware, jcao@udel.edu

Follow this and additional works at: http://aisel.aisnet.org/sighci2014

Why do users click on product images? The effect of perceived arousal

Jia Li

School of Business, East China University of Science and Technology

jiali@ecust.edu.cn

Jinwei Cao

Department of Accounting and Management Information Systems, University of Delaware

jcao@udel.edu

ABSTRACT

As the competition on C2C (customer-to-customer) electronic commerce platforms is fierce, how to attract users to click and view a product from almost infinite number of alternatives becomes a significant research question. Most extant studies try to answer this important question from the cognitive perspective. However, in this paper we try to interpret it from the affective perspective. Specifically, we propose a research model based on the stimulus-organism-response (S-O-R) framework, associating product image design elements, perceived arousal embedded in the image, and users' approach behavior toward the product. We also suggest that product type (utilitarian product versus hedonic product) may moderate the effect of perceived arousal on users' approach behavior. A lab experiment with a mixed factorial design will be conducted to test out the proposed research model. We expect that the findings will help individual sellers better choose product images based on product type, and instruct them how to design the arousal evoking (or avoiding) product images.

1. INTRODUCTION

Given the highly competitive electronic commerce context, how to attract users to click and view a product from almost infinite number of alternatives is an important question for both individual sellers and third party platform providers. Most extant studies on this topic are from the cognitive perspective. However, from the affective perspective, product images could also be able to explain why the user clicks and views a product. In this study, we follow the new affective aspects of user interface design to investigate the effect of arousal on users' product image click behavior.

2. RESEARCH MODEL

Based on the stimulus-organism-response (S-O-R) model, we conceptualize that the arousal evoking design elements of a product image (i.e., visual complexity, order and color warmness) influences users' approach-avoidance behavior toward that product through users' perceived arousal embedded in the product image (see figure 1). More specifically, we develop the following hypothesis.

H1: Visual complexity is positively associated with perceived arousal embedded in the product image.

H2: Order is negatively associated with perceived arousal embedded in the product image.

H3: Color warmness is positively associated with perceived arousal embedded in the product image.

H4a: When shopping for utilitarian products, the perceived arousal embedded in the product image negatively influences the users' approach tendency toward the product.

H4b: When shopping for hedonic products, the perceived arousal embedded in the product image positively influences the users' approach tendency toward the product.
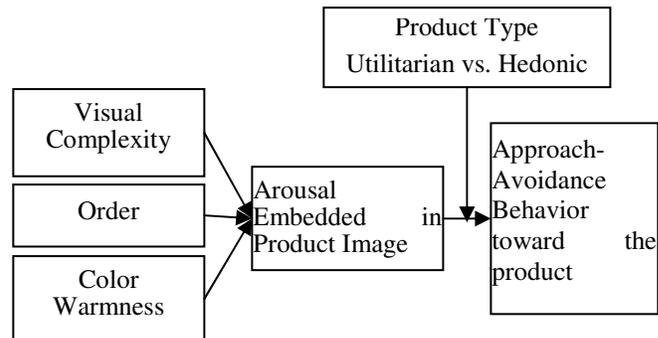

Figure 1 Research model

3. RESEARCH METHOD

A laboratory experiment with a 2 × 2 × 2 ×2 design will be conducted to test the hypotheses. Visual complexity, order, and color warmness will be chosen as between-subjects factor, and product type will be chosen as within-subjects factor.

Besides the main study variables, the control variables include the users' gender, income, online shopping experience, arousal seeking tendency (AST), and perceived trust toward the product as they may affect user's approach behavior toward the product. At least 360 university students will be recruited as subjects in the experiment. Around 45 (360/8) participants will be randomly assigned to one of the eight conditions (2 visual complexity × 2 order × 2 color warmness).