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Laetitia Lambillotte,

Nathan Magrofuoco,

Ingrid Poncin,

Jean Vanderdonckt,

Louvain Research Institute in Management
and Organizations

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(president-lourim@uclouvain.be)

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Laetitia Lambillotte, Louvain Research Institute in Management and Organizations
Nathan Magrofuoco, Louvain Research Institute in Management and Organizations
Ingrid Poncin, Louvain Research Institute in Management and Organizations
Jean Vanderdonckt, Louvain Research Institute in Management and Organizations

Summary

Worldwide companies develop personalized websites with the aim of improving online customer experience. Personalization enable them able to learn from their online customers and tailor customer experience accordingly. Whereas prior research suggests that personalized content is generally more efficacious than non-personalized content, Li (2016) recently shows that perceived personalization, instead of actual personalization, generates more favorable responses. With an experimental approach, this research tries to extend this research by investigating how personalization influences online customer experience. Building on the theory of salience, a first study examines how content that is perceived as personalized (no matter from what process they are produced) generates a more playful online customer experience. Congruence appears to be key to understand the observed process.

Keywords: Congruence, Online Customer Experience, Perceived Personalization, Personalization, Playfulness

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Corresponding author:

Laetitia Lambillotte
CERMA

Louvain Louvain Research Institute in Management and Organizations / Campus Mons
Université catholique de Louvain
Chaussée de Binche 151 office B208
B-7000 Mons, BELGIUM
Email: laetitia.lambillotte@uclouvain.be

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President-lourim@uclouvain.be, LouRIM, UCL, 1 Place des Doyens, B-1348 Louvain-la-Neuve, BELGIUM
<https://uclouvain.be/en/research-institutes/lourim>

Influence of personalization on online customer experience

1. Introduction

Providing optimal online customer experiences has become a challenge for companies (Lemon and Verhoef, 2016). To address this challenge, many companies develop personalized websites. With personalization, they expect to improve online customer experience (Ho and Bodoff, 2014).

Prior research suggests that personalized content is more efficacious than non-personalized content (e.g.: Bodoff and Ho, 2014; Tam and Ho, 2006). However, some non-personalized content may be perceived as personalized and some personalized content might be perceived as not personalized, generating differences between actual and perceived personalization (Komiak and Benbasat, 2006; Li, 2016). In an advertising context, Li (2016) has shown that perceived personalization, rather than actual personalization, generates more favorable responses towards the message of an online advertising banner.

Therefore, our research objective is to extend Li (2016)'s study by focusing on the personalization of the online customer experience. With an experiential approach, we investigate the extent to which personalization influences the online customer experience and particularly its playfulness dimension. With a first study, we show that content perceived as personalized (no matter from what process they are produced) generates a more playful online customer experience because it is perceived as more congruent.

In the next sections, we present the theoretical background, our research method, results and discussion.

2. Theoretical background

2.1. Online customer experience

Providing an optimal customer experience is key for companies to have a competitive advantage in the long term (Gentile, Spiller, and Noci, 2007) and to favor customer satisfaction and loyalty (Lemon and Verhoef, 2016). Meyer and Schwager (2007, p. 118) define customer experience as "an internal and subjective response that customers have to any direct or indirect contact with a company".

Companies also provide an online experiential environment for customers through their websites (Rose, Clark, Samouel, and Hair, 2012). The online customer experience then refers to subjective responses that customers have to any interaction with a company online (Rose et al., 2012). The experiential literature has identified cognitive and affective dimensions of online customer experience (Rose et al., 2012). Among these, literature has highlighted the importance of the "playfulness"

dimension, which can be defined as "a positive and pleasant emotional reaction that a person feels when interacting with a website" (Ben Mimoun and Poncin, 2015, p. 72).

However, providing an optimal online experience has become a key challenge for companies (Ho and Bodoff, 2014). Customers can quickly decide to leave a website if the content does not meet their expectations (Srinivasan, Anderson, and Ponnnavolu, 2002). In this competitive online environment, companies increasingly decide to personalize their websites (Bodoff and Ho, 2016).

2.2. Personalization

Personalization refers to the ability to automatically adapt website content to customers based on their data information (Ho and Bodoff, 2014). Personalization encompasses two different constructs: actual personalization and perceived personalization.

Actual personalization refers to the actual adaptation initiated by the system (Li, 2016). It consists of a three-step process: learning, matching and evaluation (Murthi and Sarkar, 2003). In the learning stage, companies collect data information to learn more about their customers and infer their preferences (Murthi and Sarkar, 2003). In the matching phase, companies use this information to personalize content (Aguirre et al., 2015; Murthi and Sarkar, 2003). In the evaluation phase, companies assess the impact of personalization on online customer experience (Aguirre et al., 2015).

Perceived personalization reflects the extent to which a customer perceives content as personalized (Li, 2016). Despite companies' efforts to personalize their content, some personalized content is perceived as non-personalized while some generic content is perceived as personalized (Komiak and Benbasat, 2006; Li, 2016). Two main reasons explain these discrepancies (Li, 2016). First, customers do not necessarily have well-defined preferences while browsing a website (Simonson, 2005). Companies could therefore incorrectly assume customers' preferences. Second, different ways exist to signal personalization to customers. In many cases, personalization will not be highlighted. Therefore, customers might not notice that a content is personalized (Li, 2016). Second, errors can occur when inferring customer preferences. These may not reflect their real preferences (Li, 2016). In an advertising context, Li (2016) recently showed that perceived personalization, instead of actual personalization, generates more favorable responses towards the message proposed on an advertising banner.

Building on the theory of salience (Fiske and Taylor, 1991; Guido, 1996; Pryor and Kriss, 1977), our main hypothesis is that perceived personalization (more than actual personalization) positively influences online customer experience and particularly its playfulness dimension.

2.3. Theory of salience

The theory of salience explains that a stimulus that attracts attention generates more favorable responses from customers (Guido, 1998; Pryor and Kriss, 1977). This may be explained by the fact that a salient stimulus is perceived as more congruent (Guido, 1996, 1998). Congruence refers to a "structural correspondence between two entities"

(Nathalie and Virginie, 2010, p. 70). It includes two dimensions: relevance and expectancy (Fleck and Maille, 2010; Fleck and Quester, 2007). In the context of personalization, relevance can refer to a correspondence between customer preferences and the content displayed on the website. Expectancy may represent the extent to which customers expect to be exposed to the content displayed on the website, based on their preferences. Tam and Ho (2006) also identified content relevance, which is one of the dimensions of congruence, as an antecedent to the evaluation of website content. Therefore, we assume that content perceived as personalized (no matter from what process they are produced) will generate a more playful online customer experience because it is perceived as more congruent. We hypothesize that:

H1: Content produced from a personalization process will not always be perceived as more congruent than content produced from a generic process.

H2: Content that is perceived as personalized will be perceived as more congruent than content that is perceived as not personalized.

H3: Content that is perceived as personalized will generate a more playful customer experience than content that is perceived as not personalized.

H4: Congruence mediates the effect of perceived personalization on playfulness.

3. Methodology

In a first study, we developed a furniture website to carry out a between-subject experiment. The website presented four categories (sofas, coffee tables, lamps and carpets). We recruited 59 participants (51% female, Mage= 35.7 y.o.) that were informed that the study consisted of two parts.

First, participants received a link to the website and were invited to select their four favorite products by category. In order to increase the ecological validity of our study and the informants' interest in the requested exercise, we informed them that five of them would win one of their favorite products.

Five days later, participants were invited to our research laboratory to participate in the second part of the study. These were randomly assigned to one of two conditions: actual personalization and no actual personalization. A pre-test was carried out to check the optimal level of personalization. In this pre-test, we considered 3 different levels of web personalization (medium and high) and a control group without personalization (Lavie and Meyer, 2010). At the end of the pre-test, we decided to keep only two experimental groups, namely the control group without personalization and the high level of personalization. In the non-personalized condition, the website remained unchanged between the two stages. In the personalized condition, the website automatically adapted itself and displayed the four favorite products selected by the participants on the first pages of each category. In this study, personalization

was not signaled or highlighted. Participants were then invited to create a shopping basket. Finally, they were invited to answer a questionnaire.

All the scales used are from the literature. Perceived personalization was measured with an adaptation of the 4-items scale developed by Maslowska, Smit, and van den Putte (2016) ($\alpha=0.85$). Congruence was assessed with an adaptation of the 6-items scale developed by Fleck and Quester (2007) ($\alpha=0.86$) and playfulness with the 7-items scale developed by Ahn, Ryu, and Han (2007) ($\alpha=0.89$). Our manipulation was checked with the item “display of the products was based on the wishing list I made during my first visit on the website.” The questionnaire ended with socio-demographic questions. All variables were measured on 7-point Likert scales.

4. Results

The manipulation check shows that the manipulation is as expected ($M_{np}=4.24$; $M_p=5.17$; $t=-2.14$; $p=.04$). We conducted an independent sample t-test to check that content produced from a personalization process isn't perceived as more congruent than content produced from a generic process. Results support this hypothesis as content congruence wasn't significantly higher in the personalization condition ($M_p=5.3$), compared to the no personalization condition ($M_{np}=5.1$) ($t=0.85$; $p=.40$).

To test the effect of perceived personalization on congruence, we created a dummy-coded variable and we performed an independent sample t-test. As expected, content that is perceived as personalized is perceived as more congruent ($M_p=5.48$) than content that is perceived as not personalized ($M_{np}=4.8$) ($t=-2.8$; $p=.007$).

To test the mediating role of congruence, we used Preacher and Hayes (2008)'s mediation model. Results show that perceived personalization has an indirect effect on playfulness. Perceived personalization as a positive effect on congruence ($\beta = .36$, $p=0.001$) and congruence has a positive effect on playfulness ($\beta = .38$, $p=0.01$), leading to an overall positive indirect only effect of perceived personalization on playfulness ($\beta = .14$; 95%, $CI=[+.0249, +.3147]$).

In summary, the results of study 1 confirm our hypotheses. That is, content perceived as personalized (no matter from what process they are produced) will generate a more playful online customer experience because it is perceived as more congruent.

5. Conclusion

This research contributes to the literature on customer experience by focusing on the online experience on personalized websites. Although companies expect that personalization will improve customer experience on their website, this study shows that perceived personalization, instead of actual personalization, has an effect on the playfulness dimension of online customer experience. This effect is mediated by congruence.

This research presents some limits. For this first study, we created a website focused on the furniture category. In our second study, we plan to examine other product categories. Besides, this study focused on the playfulness dimension of online customer experience. Other measures could be investigated in future research such as immersion and perceived control. In this first study, we used a Tobii eye tracker to investigate complementary measures of online customer experiences. These data are currently analyzed. Finally, personalization wasn't highlighted and signaled in this first study. This is why we plan to investigate in a second study how different signaling cues influence perceptions of personalization and online customer experience.

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