Unraveling the Personalization Paradox: The Effect of Information Collection and Trust-Building Strategies on Online Advertisement Effectiveness

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Abstract

Retailers gather data about customers' online behavior to develop personalized service offers. Greater personalization typically increases service relevance and customer adoption, but paradoxically, it also may increase customers' sense of vulnerability and lower adoption rates. To demonstrate this contradiction, an exploratory field study on Facebook and secondary data about a personalized advertising campaign indicate sharp drops in click-through rates when customers realize their personal information has been collected without their consent. To investigate the personalization paradox, this study uses three experiments that confirm a firm's strategy for collecting information from social media websites is a crucial determinant of how customers react to online personalized advertising. When firms engage in overt information collection, participants exhibit greater click-through intentions in response to more personalized advertisements, in contrast with their reactions when firms collect information covertly. This effect reflects the feelings of vulnerability that consumers experience when firms undertake covert information collection strategies. Trust-building marketing strategies that transfer trust from another website or signal trust with informational cues can offset this negative effect. These studies help unravel the personalization paradox by explicating the role of information collection and its impact on vulnerability and click-through rates.
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Retailers use sophisticated, personalized marketing strategies that exploit consumer data to influence purchase decisions (Hawkings 2012), so much so that these data have become the "life-blood of retail" (National Retail Federation n.d., p. 20). Many online retailers partner with publishers such as Google and Yahoo that collect consumer data, then use the collected information to present personalized advertisements (Angwin 2012). In addition, with the spread of social networking sites, retailers—which represent the largest sector of Internet advertising spending, accounting for 22% in 2011 (Interactive Advertising Bureau 2012)—have entered into these media spheres to present consumers with more targeted advertising. Facebook thus became the most popular ad publisher in 2011, with a 31.2% market share (comScore 2011), but also has come under close scrutiny of its advertising practices and covert data collection methods (Singer 2010). These trends suggest the need for retailers to find more sustainable methods of data collection and use (McCann Worldwide 2011).

Advocates of covert data collection techniques contend that the consumer benefits from them, because the data collection does not disrupt their online surfing experience (Milne, Bahl, and Rohm 2008), whereas granting consent to each data collection encounter would force users to take 2.5 times longer to complete online tasks (Interactive Advertising Bureaux Europe 2011) and disrupt the flow of their shopping (National Retail Federation n.d.). Yet consumers may experience discomfort when they receive personalized advertisements (Tucker 2012), because it prompts them to realize their information has been collected without their consent. For example, when the U.S. retailer Urban Outfitters launched a website that personalized each customer's experience by gender, customers instantly recognized the personalization and confronted the clear knowledge that the

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retailer had collected their information without their awareness. They reacted by accusing Urban Outfitters of being "too close for comfort" and making illegitimate uses of their data, which quickly led Urban Outfitters to abandon the personalization strategy (Singer 2012). Thus, despite evidence that response rates improve with greater personalization, such efforts also could increase consumer discomfort, leading to lower response rates. This phenomenon gives rise to what we refer to as the personalization paradox: Personalization can be both an effective and an ineffective marketing strategy, depending on the context. The effects of various data collection methods on this paradox remain unclear, though retailers using online advertising could benefit from recommendations about which tools or marketing communication to use to avoid or minimize the negative effects of personalization.

Current research offers little guidance; it mostly emphasizes consumers' reactions to the delivery of personalized services (Sundar and Marathe 2010; Tam and Ho 2006), without accounting for the information collection process needed to personalize services or consumers' reactions. Literature on covert marketing practices provides some insights though. For example, Miyazaki (2008) studies disclosures of the use of cookies, a common covert information collection technique, and finds that when consumers realize a cookie is going to be installed (e.g., after notification on web browsers) but receive no prior disclosure in privacy statements, they exhibit lower behavioral intentions toward the website. Although personalization can signal greater relevance and increase customer adoption (Tam and Ho 2006), no research indicates whether it triggers negative reactions similar to those prompted by an explicit cookie notification (Miyazaki 2008).

Furthermore, research that addresses the mechanism underlying negative reactions to data uses tends to rely on cognitive reasoning, such that customers weigh the pros and cons of allowing firms to use their data (Awad and Krishnan 2006). Yet in many cases, consumers form attitudes quickly, instinctively, and without in-depth thinking, in reaction to a stimulus (Shiv and Fedorikhin 1999). Such affective responses strongly influence retail shopping experiences (Arnold and Reynolds 2009) and consumer judgments (Avnet, Pham, and Stephen 2012). Milne, Bahl, and Rohm (2008) suggest that consumers may experience an affective sense of vulnerability in response to covert information collection, but empirical tests of this proposition or its implications for consumer behavior are lacking. In addition, customers likely accept feelings of vulnerability in environments marked by trust (Urban, Amyx, and Lorenzon 2009), and various retailer-driven marketing strategies seemingly might increase customer trust (Bart et al. 2005; Kim and Kim 2011; Pan and Zinkhan 2006). Such trust-building strategies in turn might offset the negative reactions brought about by feelings of vulnerability.

This article seeks to make three main contributions. First, using evidence from exploratory field studies on Facebook and secondary data, we corroborate the existence of the personalization paradox and probe the interdependencies among the collection and use of data for personalization and their impact on consumer behavior in social media settings. This effort represents a response to calls for more empirical generalizations related to personalization strategies in retailing (Grewal et al. 2011). With new insights into the personalization paradox, we find that employing covert data collection undermines the beneficial impact of increased relevance on advertising effectiveness. Second, we conceptualize consumers' perceived vulnerability as a negative influence on the experience of personalization in social media-mediated environments. Drawing on psychological ownership theory, we propose that vulnerability occurs when personalization provokes discomfort, because the consumer comes to a sudden realization of the covert data collection. This conceptualization offers an affective alternative to the common cognitive rationale for low click-through rates on online advertisements, namely, as due to privacy concerns. In turn, we operationalize consumer vulnerability with a newly developed, robust, five-item measure and validate its impact on advertising effectiveness. Third, we test the impact of two trust-building strategies—transferring trust from the media context or signaling trust with cues—that may offset the experience of vulnerability. If the personalized advertisement appears on a trustworthy website, its credibility can mitigate the negative effect of covert data collection. Similarly, information icons that systematically inform customers about how their information is being collected and used provide trust-building cues that can reduce the negative impacts of covert data collection.

Conceptual Background

Personalization

Personalization refers to a customer-oriented marketing strategy that aims to deliver the right content to the right person at the right time, to maximize immediate and future business opportunities (Tam and Ho 2006). The strength of this strategy is that it requires a minimum amount of effort by the customer, who relies mostly on the marketer to identify and meet his or her needs (Montgomery and Smith 2009). This central aspect of personalization provides a stark contrast with customization, which occurs when the consumer specifies the elements of his or her preferred marketing mix (Arora et al. 2008).

Firms routinely practice personalization, both offline and online. In face-to-face service encounters, firms encourage employees to adjust their behaviors toward each customer, such as referring to a customer by name or modifying the service offering to accommodate customers' needs (Shen and Ball 2009). The applicability of personalization expands significantly in online environments too. Search engines, such as Google and Yahoo, can refine each user's search results by incorporating prior search information; online retailers, such as Amazon.com and Barnes & Noble, provide personalized recommendations based on collaborative filtering, that is, on a user's similarity to other users and their preferences (Montgomery and Smith 2009). Online advertisers also issue behaviorally targeted advertisements, reflecting a user's online behavior (Goldfarb and Tucker 2011).