Prospects for Personalization on the Internet

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Abstract

Personalization is a key component of an interactive marketing strategy. Its purpose is to adapt a standardized product or service to an individual customer's needs. The goal is to create profit for the producer and increased value for the consumer. This goal fits nicely into traditional notions of segmentation. Applications of personalization have advanced greatly in conjunction with the Internet, since it provides an environment that is information rich and well suited to interactivity. This article reviews past research on personalization and considers some examples of personalization in practice. We discuss what we believe are key problems and directions for personalization in the future.
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Introduction

Personalization is intimately connected with the idea of interactive marketing and refers to the customization of some or all the elements of the marketing mix to an individual level. Personalization is more refined than customization, in that the personalization is automated by the marketer on behalf of the customer, as opposed to customization that a customer requests on her own behalf. For example, a customer ordering specific options for a micro-computer from Dell would be an example of customization, while Dell preloading an individualized software bundle that it expects a particular user would like to purchase is an example of personalization. This distinction is quite important because it puts the burden on the marketer to determine the appropriate degree of customization. As a consequence the marketer must anticipate what the customer wants. Generally this is done by leveraging customer-level information using analytical tools. Hence, personalization is paired closely to the technology and applications for which it is employed.

Our proposed definition of personalization is the adaptation of products and services by the producer for the consumer using information that has been inferred from the consumer's behavior or transactions. A primary enabler of this personalization is technology. Either technology used to create the adaptations, communicate with the consumer, gather consumer information, or used to make inferences about the consumer. Our definition is consistent with recent efforts to define personalization, but given that no commonly accepted definition exists, any definition is not without controversy (Venasen 2007). Perhaps most controversial in our assessment of personalization is whether it should include customizations made at the request of the consumer, which we have called customization. Our reason for taking this narrower focus on personalization is partly philosophical, namely to differentiate it from customization, and also to identify the component that we think has the most potential to be aided by the Internet.

The promise of personalization has always been that it can deliver on the idea of a customer-oriented marketing strategy. Blattberg and Deighton (1991) prominently mention personalization in developing their concept of interactive marketing. They held out the goal that interactive marketing would allow the customer to be provided more pertinent information with less effort. This embodies the idea of what we refer to as personalization. Personalization then is meant to eliminate tedious tasks for the customer, and allow the marketer to better identify the user's needs and goals from past behavior.

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Table 1
Definitions of personalization.

Source	Definition
Peppers and Rogers (1997)	"Customizing some feature of a product or service so that the customer enjoys more convenience, lower cost, or some other benefit."
Hanson (2000)	"A specialized form of product differentiation, in which a solution is tailored for a specific individual." (p. 450)
Allen, Kania, and Yaeckel (2001)	Company-driven individualization of customer web experience. (p. 32–33)
Imhoff, Loftis and Geiger (2001)	"Personalization is the ability of a company to recognize and treat its customers as individuals through personal messaging, targeted banner ads, special offers on bills, or other personal transactions." (p. 467)
Wind and Rangaswamy (2001)	Changes in a product or service to better match customer needs. These changes can be initiated by the customer (e.g., customizing the look and contents of a web page) or by the firm (e.g., individualized offering, greeting customer by name, etc.). (p. 15)
Cöner (2003)	Personalization is performed by the company and is based on a match of categorized content to profiled users.
Roberts (2003)	"The process of preparing an individualized communication for a specific person based on stated or implied preferences." (p. 462)

Entries listed chronologically. Adapted from Venasen (2004) and Vankalo (2003).

It is important to understand that personalization predates the Internet, and as a consequence is broader than this single technology. However, it is clear that the Internet has cultivated much of the interest in personalization and has advanced its practice more than any other technology. Therefore in this paper we intentionally focus on personalization in the context of the Internet, and present our perspectives on current applications of and future directions for personalization. Our primary goal is not to present a systematic survey of personalization, but rather to identify examples of excellence that represent the state of the art for the practice of personalization on the Internet, and then to consider future challenges for personalization.

Our focus on personalization is not meant to slight the importance of other elements of the marketing strategy, but to think about how personalization can improve the functioning of these other elements. We would argue that personalization does not exist alone but as a component within an overall marketing strategy. Additionally, high degrees of personalization are not always beneficial. The explicit costs of personalization may exceed its value. For example, the cost of customizations in manufacturing may be high relative to their value. This would suggest that traditional segmentation strategies are preferable. Alternatively, the implicit costs of personalization to consumers may exceed their value. White et al. (2008) suggests that consumers may respond negatively when messages are personalized but the perceived value of the service is low. Finally, personalization may lessen the social or brand identity of a product which lessens its effectiveness. Calder and Malthouse (2005) provide the example of a personalized pair of jeans that fit perfectly, but lack the peer identification that a standardized pair of jeans may possess, which would again lessen the value of personalization.

Survey of research on personalization

The marketing community's interest in personalization has spawned a wide variety of research. To better organize the work that has been done, in this section we classify this research into several areas: definitions of personalization, conceptual framework for personalization models, methodology for implementing personalization, and the effectiveness of personalization.

We leave a discussion of privacy and its related research to the section on new directions for personalization when we discuss future challenges for personalization.

Definitions

Personalization is often invoked as an important element in an interactive marketing strategy (Blattberg and Deighton 1991). There are numerous versions of interactive marketing offered in the literature including customerization (Wind and Rangaswamy 2001), customer relationship management (Imhoff, Loftis, and Geiger 2001), one-to-one marketing (Allen, Kania, and Yaeckel 2001; Peppers and Rogers 1997), permission marketing (Godin 1999), customer intimacy (Wiersema 1998), real-time marketing (McKenna 1997), McKinsey's continuous relationship management, Gartner Group's technology-enabled marketing, enterprise relationship management, Internet marketing (Hanson 2000; Roberts 2003), database marketing, and e-marketing.

All of these forms of marketing refer to the concept of using technology to help identify and satisfy the customer's needs — which is at the core of any marketing strategy. However, each of these invocations of interactive marketing adopts different definitions for personalization and how it should be used in practice. In Table 1 we provide a list of definitions for personalization compiled by Vankalo (2003). The common element in all these definitions is that personalization is an adaptation of the marketing mix to an individual customer based upon the marketer's information about the customer.

Conceptual framework for personalization

Given the variety of different interactive marketing strategies, it is not surprising that we lack a unified framework for personalization and customization; however two authors have recently proposed personalization frameworks that attempt to integrate the various viewpoints. Venasen (2007) proposes that personalization is a broad concept that encompasses execution, marketing outputs in the form of products/services, promotion/communication, price and delivery, and the creation of value for both the customer and the marketer (see