Chapter 1.16

Personalization Systems and Their Deployment as Web Site Interface Design Decisions

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ABSTRACT

This chapter reviews the different types of personalization systems commonly employed by Web sites and argues that their deployment as Web site interface design decisions may have as big an impact as the personalization systems themselves. To accomplish this, this chapter makes a case for treating Human-Computer Interaction (HCI) issues seriously. It also argues that Web site interface design decisions made by organizations, such as the type and level of personalization employed by a Web site, have a direct impact on the communication capability of that Web site. This chapter also explores the impact of the deployment of personalization systems on users’ loyalty towards the Web site, thus underscoring the practical relevance of these design decisions.

INTRODUCTION

Organizations, in anticipation of the emergence of Web interface as a major point of contact between companies and customers, are beginning to employ a wide variety of technologies to build meaningful relationships with their customers. While Web interface may not be the only point of contact that customers use, organizations are aware of the advantages of using the Web to cater to the needs of the customers. This concept of “self-service” not only reduces costs for the company in the long run, but also increases customer satisfaction by addressing the transactional and the relational needs of the customer. In this chapter, I review the different types of personalization systems commonly employed by Web sites and argue that their deployment as Web site interface design decisions may have as big an impact as the personalization systems themselves. To accom-
plish this, I make a case for treating HCI issues seriously and argue that Web site interface design decisions made by organizations, such as the type and level of personalization employed by a Web site, has a direct impact on the communication capability of that Web site. I also focus on the practical relevance of these Web site design decisions by examining their effect on users’ loyalty towards the Web site.

BACKGROUND: PERSONALIZATION SYSTEMS

Most of the technologies and tools that companies use to manage their relationship with their customers usually fall under the banner of Customer Relationship Management (CRM) System. Even though personalization is just one piece of the CRM pie, it is a very crucial piece as effective personalization significantly enhances the ability of the organization to initiate a discourse with its customers to the point where any and all of these dialogues are seamlessly integrated with the database’s historical and transactional information. Based on the data stored in these databases and recent history (the pages customers viewed in the last session), Web sites automatically attempt to improve their organization and presentation of content. These Web sites, armed with a host of appropriate tools — including intelligent agents, recommendation engines and the like — attempt to anticipate the context of the interaction with their customers and personalize each customer’s shopping experience (Andre & Rist, 2002; Billsus, Brunk, Evans, Gladish, & Pazzani, 2002).

Personalization is a process of providing special treatment to a repeat visitor to a Web site by providing relevant information and services based on the visitor’s interests and the context of the interaction (Chiu, 2000; Cingil, Dogac, & Azgin, 2000). Personalization is needed to successfully manage customer relationships, promote the right product the customer is interested in, and

Figure 1. Overview of personalization techniques

![Diagram of personalization techniques]

Collection of Visitor Information

- Implicit Profiling
- Explicit Profiling
- Legacy Data

Personalization Processes

- Three Filtering Techniques: Simple, Content Based and Collaborative Filtering
- Business Rules

Dynamic Assembly and Display of Content as Web Page