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The other side of security is privacy. In order to make your Web site more secure, you must ask the user or customer to give up some privacy. In the Internet world, where someone can invade your privacy by taking a snapshot of your computer screen without you even being aware of it, we need to be on guard. Without resorting to trickery, companies still exercise a great deal of power over the data their customers provide them. The same tenets of ethical and legal behavior apply to Web site design as to the design of any traditional application which accepts personal data from customers. However, the Web allows the data to be collected faster and allows different data to be collected (such as the browsing habits of customer). In general, information technology makes it possible to store more data and distribute it more widely. In this month's feature article, Fay Cobb Payton explores three technologies—personalization techniques, e-marketing technologies, and analytics—that impact privacy in our world today.

Ecommerce: Technologies That Do Steal!

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Industry forecasts have all suggested that the growth of ecommerce is clear and will be directly related to business-to-business (B2B) and business-to-consumer (B2C) activity from the United States, Europe, Asia-Pacific, and Japan. While Turner (2000) suggests that security is the dominant concern of electronic commerce, information privacy—as implied by Turner—cannot be overlooked as organizations move rapidly to enable B2B and B2C online marketplaces. Thus, the balance among privacy, security, and social participation stand to provide major challenges to ecommerce. In fact, Mason, Culnan, Ang, and Mason (2001) contend that "new technologies, in particular ecommerce applications, will greatly augment individuals' and organizations' ability to collect and use information about people and their behavior" (p. 209).

Ecommerce Challenges the Notion of Individual Privacy

While noting that ecommerce is not limited to online purchasing (Kendall, 2000), emerging and current technologies stand to challenge current definitions of privacy, which Mason et al. (2001) defines as the state of being free from intrusion in one's private life or affairs. Despite this notion, information technology and ecommerce applications have proven to erode such freedom. Among these applications are personalization, emarketing, and analytics (*PC Magazine,* 2001), which have combined to define ecustomer relationship management (eCRM). What do these applications enable organizations to do, and how does each contest privacy as defined by Mason et al. (2001)?

Emerging Technologies Impacting Privacy

Technologies that enable us to accomplish more in less time can have other implications. In this column, I will examine three of them: personalization technologies, EMarketing technologies, and analytics.

Personalization technologies

Personalization technologies enable organizations to tailor the individuals' Web experience to one's preferences. For example, if you purchased a book from BarnesandNoble.com, the Website can suggest another novel in a similar category based on your online behavior. Personalization applications are growing significantly in the banking, cable, retail, and

numerous other industries. Most notably, these applications can make use of a range of tools that include data mining, databases, cookies, and rules-based forecasting and inferencing. All of which engender dynamic transformation of organizational activities while extending the traditional meaning of what is the organization and where is its location.

How does this challenge current privacy definitions? A recent comment by Forrester Research public policy analyst Jay Stanley indicates the two faces of ecommerce with regard to information privacy. He concluded: "Data is like gold. There will be 1,001 temptations for ecommerce companies to cash in on this" (http://www.informationweek.com listserv, January 2001).

To this end, data are an asset that typically is unseen on the balance sheet, but it has value once it is collected, analyzed, and potentially redistributed to customers in some meaningful manner. The caveat is whether or not the customer demonstrates favorable conduct by responding to the newly suggested book from the BarnesandNoble site. While the customer frequently does not request these additional data steams, the use of an electronic profile is common practice, quite unbeknownst to the customer—thereby resulting in what some consider a "probing" in personal affairs and preferences.

EMarketing technologies

EMarketing technologies, acting as decision support tools, enable organizations to develop more targeted marketing programs based on likely customer interests. Once these interests are determined, organizations can use targeted direct mailings such as tailored Web sites with banner ads and emails to entice customers to purchase a given product. The idea is to increase customer response through a directed effort and reduce the costs associated with mass campaigns.

Given the decision support functionality associated with emarketing technologies, the organization must make a conscious decision to target a customer. That is, the technology merely offers a recommendation but does not act on its own suggestion as an expert system might. Thus, customers are correct at pointing to the decision makers in the organization and not the technology per se that is enabling the use of their personal data. While the organizational decision (as recommended by the technology) may be to extend a discount to regular purchasers of Dell Computers who are also known consumers of Compaq goods and services, corporate policy should offer some guidance on "how far" an organization can go without compromising privacy.

In many cases, organizations display a privacy policy link on their Web sites. Typically, these online statements include information on collection of data; secondary use of data, children, and the Internet; and cookies (just to name a few). These privacy policies, however, are widely diverse and often limited in detail about current organizational practices and treatment of customer data.

Analytics

Lastly, analytics help organizations gain insight into the customer. Often characterized by the presence of touch points, organizations can gather volumes of data about customers including purchase patterns and demographics via touch points (e.g., call centers, online help, and help desks). Touch points offer customers a myriad of techniques to interact with the organization. Data from these touch points can be warehoused for trend analyses and forecasting that are based on years of accumulated statistics. Once deployed and evaluated for their usefulness, analytic tools can facilitate Web traffic and market segmentation. It is worth noting that analytics, in conjunction with ecommerce, has redefined CRM as eCRM.

Unresolved Privacy Issues in B2C Ecommerce and Emerging Emarketplaces

What remains at issue regarding privacy? Misuse and errors in customer information prevail as overriding concerns along with security issues. These concerns not only impact the B2C domain, but the emergence of emarketplaces will also test information sharing agreements among cooperative partners that have, to some degree, evolved from a completely competitive strategic model. Further, questions regarding the proper balance among privacy, information technologies, security and legal issues, is at the forefront of IT professionals' concerns as well as the new Bush administration (http://www.informationweek.com/819/prezletter.htm).

Finally, industry analysts' projections of ecommerce growth are consistent. Ecommerce is here to stay, with emarketplaces, global markets, and business models transforming the way business is conducted and data are treated. In this context, former definitions of privacy are proving to no longer apply as information technologies redefine organizational practices and business models.

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