Chapter 9
User Behaviors and Knowledge Exchange in Health Infomediary

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ABSTRACT

Online health infomediaries have the objective of knowledge exchange between participants. Visitor contribution is an important factor for the success of the infomediaries. Providers engaged with infomediaries need visitor identification for reputational incentives. However, identification or classification of visitors in online health infomediaries is sparse in literature. This chapter proposes two dimensions of participation, the intention and intensity levels of visitors, to conceptualize four user categories: community supporters, experiencer providers, knowledge questors, and expertise contributors. The authors validate these categories using a unique large data set collected from a health infomediary for cosmetic surgery, and consisting of 162,598 observed activities of 44,350 visitors, at different participation levels in the year 2012-13. They use cluster analysis to describe similarities and differences among the four user categories. Practice implications are discussed.

EMERGENCE OF DIGITAL INFOMEDIARIES

The emergence of digital platforms where people exchange health information to effectively manage their health has become an important addition alongside doctors and hospitals for healthcare information. It is estimated that a substantial number of Americans search the Internet to better understand a medical condition (Fox & Duggan, 2013) and to make self-diagnoses. More specifically, people turn to the Internet for disease-specific overviews (Dickerson et al., 2004; Koch-Weser, Bradshaw, Gualtieri, & Gallagher, 2010; Schwartz et al., 2006), symptoms (Ybarra & Suman, 2006), and self-assessments

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as they make decisions regarding medical attention (McMullan, 2006). These information-seeking U.S. adults are mostly younger, more educated, and more affluent than other health information seekers (Tian & Robinson, 2008). In addition, the use of online social health networks, websites, and platforms is increasing with the understanding that online communication and support is highly effective for managing personal health (Giustini, 2006; Heidelberger, 2011; Thackeray, Neiger, Hanson, & McKenzie, 2008).

The term online health infomediary is used to denote a socio-technical system to support creation, revision, and exchange of health information across the Internet. The technology is comprised of online digital platforms that support connectivity to social networking services, websites, and discussion groups. People who use the platform in turn create, update, exchange, and distribute health information over electronic communication networks to provide easy access to visitors. In electronic commerce contexts, infomediaries are defined as independent, third-party firms directing consumer traffic to downstream retailers in a distribution network in electronic markets (Kuruzovich, Viswanathan, Agarwal, Gosain, & Weitzman, 2008). The online health infomediary provides conduits for health-related information and knowledge exchange, and thus, it helps healthcare providers increase their clinical competence with the means for continuous patient monitoring and patient support mechanisms (Green & Hope, 2010; McNab, 2009).

A key distinction separating health infomediaries from other infomediaries is the lack of transaction costs during the transfer of information consumed by users. In contrast, infomediaries collect a percentage of total sales or a fixed fee over transactions conducted. In that sense, the health infomediary setting resembles that of public good provision. Despite the heath infomediary's potential monetary value, many providers are starting such infomediaries to provide benefits for many who simply cannot access such information through traditional means. Because of the failure to capture value through transactional costs, health infomediaries are susceptible to early demise. In efforts to sustain and succeed, infomediaries recruit and request participation from visitors since a critical mass of user participation accelerates growth of their health information repository, which would further attract both advertisers and new visitors alike. Retention of users, and more important their contributions, is crucial to maintaining this critical mass. This chapter provides a classification of user behaviors that are important in the health infomediary and illustrates it with a case of AlterOn[1]—a reconstructive surgery infomediary.

THE CONCEPT OF SOCIAL AND HEALTH INFOMEDIARIES

Infomediaries decouple the information components of goods from their physical components and deliver the digitized information to consumers (Kambil & Van Heck, 1998). They are independent, third-party firms directing consumer traffic to downstream retailers in a distribution network in electronic market contexts (Kuruzovich et al., 2008). Infomediaries help consumers easily find price and product attributes across categories of products and services, such as financial services, travel, and auto retailing, to name a few (Sawhney, Verona, & Prandelli, 2005). Several studies have demonstrated empirically the positive business value of infomediaries (Chevalier & Mayzlin, 2006; Ghose & Han, 2011; Ghose, Ipeirotis, & Li, 2012). In parallel, online discussion communities, without having strong business motives necessarily, have grown exponentially, each with its own purpose, structure, and user types, garnering user-generated content (UGC) (Rheingold, 1993; Sproull, Kiesler, & Kiesler, 1992). As much as 84% of Internet users have participated in an online community (Horrigan, 2001).