Antecedents and Consequences of User Satisfaction with E-Mail Systems

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ABSTRACT

E-mail is an important component of the e-collaborative environment. This study contributes to the literature by using the American Customer Satisfaction Index (ACSI) framework to model the antecedents and consequences of customer satisfaction with e-mail systems. We employ a survey to gather empirical evidence to test the modified ACSI model for e-mail systems. Additionally, we test whether spam has an influence on a user's satisfaction with his or her e-mail system. Our results generally support the notion that the ACSI framework can be used to model e-mail user satisfaction, but we do not find statistically significant evidence that spam affects overall user satisfaction with their e-mail system.

Keywords: American Customer Satisfaction Index (ACSI); electronic collaboration; electronic mail; unsolicited (spam) e-mail; user satisfaction

INTRODUCTION AND BACKGROUND

E-mail is a form of computer-mediated communication that facilitates important aspects of e-collaboration. It may be conceptualized as a socio-technical system comprised of two components. The first component of e-mail includes technology, software, user training, industry standards, and practices. The second component consists of the social and psychological factors shap-
ing individual acceptance and usage (Lucas, 1998).

Information communication technologies such as e-mail are the foundation for collaborative efforts that allow geographically dispersed individuals to work as a team (Kock, 2005). The pervasive use of e-mail provides evidence of its importance as a communication medium. It has been reported that in 2003, 31 billion e-mail messages were sent daily worldwide with an average of 56 e-mails per e-mail address and 174 e-mails per person (Industry Canada, 2004). Over 600 million individuals around the world were using e-mail systems by the end of 2004 (Radicati Group Inc., 2004). The phenomenal number of users was brought about partially by the declining costs of computing, fees for long-distance communication (Sproull & Kiesler, 1991), and advances in computer and telecommunications technologies.

The widespread use of e-mail also has introduced some problematic situations. For example, extreme user overload has resulted from the proliferation of e-mail as a communications medium (Ireland, 1997; Sherwood, 2002). At the same time, the increasing number of unsolicited commercial e-mail messages (typically regarded as junk mail or spam) (Boykin & Roychowdhury, 2005; Buder, 2005; Erbland, 2005; Goodman, Heckerman, & Rountwhaite, 2005; Holmes, 2005; Pfleeger & Bloom, 2005; Van Duine, 2005; Whitworth & Whitworth, 2004) has exacerbated the information overload problem. Unwanted communication is often credited as being the most critical component of e-mail overload (Hinde, 2002).

Currently, the flood of unsolicited messages is growing significantly and may soon account for half of all U.S. e-mail traffic (Krim, 2003). An average e-mail user receives 6 spam messages per day. Among the salient drivers for this growth of spam is that senders find it more expensive to target their e-mail messages to potential customers rather than simply send the same message to large distribution lists (Gopal, Walter, & Tripathi, 2001). In addition, there are insufficient and effective anti-spam regulations in place. At the moment, only 26 countries have mandated anti-spam laws, leaving the opportunity for legal spamming activities in more than 100 other countries.

Spam messages range from irritating e-marketing offers to potentially dangerous messages with infected files (Anonymous, 2004). Consequences of the growing flood of unsolicited commercial messages are that the usefulness of e-mail as a communication means may be impinged upon (Hall, 1998), productivity is lost (Whitworth & Whitworth, 2004), and users are harassed (Khoo & Senn, 2004). From the perspective of e-mail service providers, the negative effects of spam may hinder prospective future business. The magnitude of e-mail communication represents a potentially lucrative business opportunity for e-mail service providers. For them, the volume of e-mails and subscribers can translate into advertising dollars and in some cases, user fees. Accordingly, it is believed that spam can have crucial effects on both users’ use of e-mail.