

## Chapter 4.13

# Social Computing: Implications for E-Government

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### ABSTRACT

This article examines the area of social computing and its implications for electronic government (e-government). Social computing is a broad term that refers to different products and services that supports human interaction in a computer mediated environment. Terms such as online communities, peer networking, and social software have overlapping meanings with social computing (Parameswaran and Whinston, 2007). E-government refers to the delivery of government services via information and communications technology to citizens, businesses, employees, government agencies and special interest groups. In this article we present a theoretical model for the application of social computing in the area of e-government and we use an analysis of state websites to assess the extent of social computing development in the e-government domain.

Our findings indicate that social computing is in its infancy in e-government applications. We make recommendations and analyze the potential value and challenges of social computing in e-government.

### INTRODUCTION

Social computing refers to a variety of web-based products that allow individuals to interact with each other in both synchronous and asynchronous environments. Social computing is demonstrated through means such as online communities, virtual games, newsgroups, and online chats. In May 2006, approximately 74% of United States internet users visited a social networking site (comScore, 2006).

The prominence and popularity of government websites is minuscule when compared to

social computing environments. In the global arena, many countries have undertaken ambitious e-government projects to interact with their constituents. The four main constituents interacting with governments are citizens, employees, businesses, and other governments. Globally, e-government has advanced at different rates and varies depending on the level – local, country, or region. The global e-government leaders, identified by the United Nations (UN) e-government readiness index are ranked as 1. Sweden, 2. Denmark, 3. Norway, 4. United States, and 5. Netherlands (UN E-government survey, 2008). The e-government readiness index is a composite value that includes components for the country's telecommunications infrastructure, the stage of e-government development, and the human capital index (adult literacy and gross enrollment ratio) (UN E-government survey, 2008).

Social computing provides an avenue to take e-government to the next level of development. In this article we explore the value of incorporating social computing capabilities into e-government initiatives. As e-government advances, interactive components can enhance user involvement. This study presents a theoretical framework for inclusion of social computing in e-government projects. We then use state websites to examine the current level of adoption of social computing in e-government, and present recommendations for future research projects. The aim of this study is to fill the gap in the existing literature with respect to the application of social computing in the domain of e-government.

## SOCIAL COMPUTING

Social computing is a broad term that refers to different products that support human interaction in a computer mediated environment. Terms such as online communities, peer networking, and social software have overlapping meanings with social computing (Parameswaran and Whinston,

2007). Social computing incorporates tools such as threaded messages, blogs, and wikis for individuals to share information (Neumann, Hogan, and MacDonaill, 2005). Additionally, virtual worlds, social networks, multi-player games, and newsgroups are also examples of social computing. Social computing is different from traditional face-face social environments because it is: “mostly decentralized, highly dynamic, highly transient, fluid boundaries, rich content, highly mobile, very highly scalable (Parameswaran and Whinston, 2007 pp.338).” Globally, six of the ten most popular websites are social computing environments (Alexa, 2008), for the list of top ten most visited websites see Table 1.

The term “blog” derived from the term weblog, is typically a website where an individual makes periodic entries. A blog is defined as a website with dated entries – or “posts” – in reverse chronological order, written by a single author or a group of authors, often accompanied by links to other blogs that the site's editor visits on a regular basis, in order to allow for further exploration of the sources. In many cases, those frequently visited pages are grouped in a list of favorites or “blogroll”. Each post usually allows for comments, and can also provide an instrument to “track back” or back link posts in other blogs that refer to the original one. With these instruments, visitors can not only follow a specific blog, but also expand their sources to other blogs that link to or are linked from the first one, forming a web of related blogs.

Early blogs were started by web enthusiasts who would post links to “cool stuff” that they found on the Internet. They added commentary and began posting daily. They read and linked to each other's blogs. In this sense, Kumar et al. (2004) affirm that blogs tend to be quirky, highly personal, typically read by repeat visitors, and provide an inside into a very active community. Vogelstein (2005) identifies blogging technology as among the top “10 tech trends to watch in 2005” by Fortune magazine. Ashley (2002) mentions

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