Preface

INTRODUCTION

Virtual communities have changed the way we work and live. Social networks have provided an environment in which people can meet to create virtual communities of family members, professionals, and business contacts. Changes in the environment in which virtual communities operate have led to an increased need for research in the area. There are many aspects of virtual communities that have to be studied. As technologies change, so does the environment for virtual communities, thereby increasing the need for better understanding of the community and group dynamics. This book, Technical, Social and Legal Issues in Virtual Communities: Emerging Environments is a collection of research papers that investigate a number of issues identified above.

This book consists of 20 chapters and is divided into three sections. Section 1 examines social aspects of virtual communities and social networking. Section 2 is a collection of chapters on business applications of social networks, and Section 3 examines cross-cultural and international studies in the field. The following paragraphs I summarize the essential findings of the chapters in each section.

Section 1: Social Aspects of Virtual Communities and Social Networking

This section includes chapters that report on research on social issues in the area of virtual communities and social networking. In the first chapter, Pagani and Hofacker, identify drivers and inhibitors of use and participation in social networks, and propose a theoretical model regarding use and participation in virtual social networks. According to the model, network size influences perceived usefulness of a social networking site. Perceived usefulness affects simple site use and active participation in the site. Site use and active participation in turn impact fear and risk. The conceptual model was empirically tested using data from a sample of users on Facebook and StudiVZ, a European social networking site. Results show that perception of network size positively influences perceived usefulness of a social network site. Perceived usefulness affects propensity to visit the site and actively participate. Any fears that users may have do not reduce their chances of visiting the site, but reduce the likelihood of users to contribute to the content.

In the second chapter, Mew and Money examine the effects of Computer Self Efficacy (CSE) on use and adoption of social networking. They argue that relationships between user characteristics and use/performance have not been adequately addressed. Therefore, they examine how a user's CSE can influence perception of system usefulness, how increased CSE helps users to perform better in and engage in complex tasks, and whether there is a synergistic relationship between CSE and task or system

complexity that leads to better performance. The theoretical model was empirically tested using data from 262 undergraduate and graduate students who use online social networking software. The study found significant relationships between CSE, task and system characteristics. It also found that greater the "fit" between CSE with task or system characteristics, higher the performance and use of the system.

In Chapter 3, *Team Identification, Team Performance, and Leader-Member Exchange Relationships in Virtual Groups*, authors Eveleth and Eveleth provide evidence to support the proposition that group identification matters in virtual environments. A leader-member exchange relationship can be influenced by the leader's willingness to help and mentor other team members. Members in groups where leader-member exchange relationship is high, and groups perform well, report stronger identification with the team.

Chapter 4, *Geographic Information Networks in American Indian Governments and Communities* by Palmer and Hannery examines the advantages and disadvantages of centralized and decentralized federal government geographic information networks. There are two types of models considered in this paper. One is a top-down federal government mandated system. Here the federal government agencies are responsible for the use and diffusion of the network. The other is a decentralized peer-to-peer network in which all nodes are responsible for the success of the system. These two models are discussed in detail and examples are provided.

The next chapter, *Understanding the Video Bloggers' Community*, examines the structure and workings of a video bloggers' community. The authors, Warmbrodt, Sheng, Hall and Cao performed a social network analysis to provide an insight into the structure of the community. Interviews with core bloggers provided information about the activities of bloggers. Results show that the community followed a core/periphery network structure. A core/periphery network structure has some form of centralization as a core, but also has a less centralized periphery. The network structure has an impact on the communication effectiveness of networks.

In Chapter 6, Daniel and Schwier analyze students' engagement and activities in a virtual learning community. In most virtual learning communities participants learn by exchanging information with others. In this research the authors used Social Network Analysis to examine structure of the community, and analyze relationships between participants. Interviews were used to gather information about user perceptions regarding their learning community.

In the final chapter of this section, authors Zhang, Jiang and Carroll draw upon social science research in identity theory and social identity theory to discuss social identity in Facebook community life. The study provides a framework for understanding how users actively manage their identity and identity presentations in a online community, and this identity is constantly changing and is dynamic compared to the static social identity they display in real-life, non-electronic environments. The researchers discuss how the environment of social computing allows users to actively manage their identity presentations.

In this section consisting of seven chapters, we discuss a number of social issues related to virtual communities and social networking. These research papers use different theories from the social sciences to explain social phenomena in the social computing environment. They employ a variety of research methods including social network analysis, survey questionnaires, and interviews. Overall, these chapters provide us with a valuable insight into the social issues that are important and changing in this new environment.

Section 2: Business Applications of Social Networks

In this section we have a collection of chapters that explore the utilization of social networks in business. Chapter 8 of the book entitled, *The Role of Virtual Communities in the Customization of E-Services*, Karakostas, Kardaras, and Zichova present a theoretical framework of factors influencing customization of e-services in a virtual community. They validate the model using case studies from two health focused health communities. Survey questionnaires were used to collect data to empirically validate the model. According to their findings, factors such as quality of the learning environment, social support, and the community's ability to influence public opinion, positively influence perceived usefulness and active participation in the community. These factors were also found to have a positive impact on customization of e-services by members of the community.

In Chapter 9, authors Suki, Ramayah and Ming discuss job search using social networking sites. The Technology Acceptance Model (TAM) was used as the conceptual model to explain use of social networking sites. According to TAM external variables influence perceived ease of use and perceived usefulness of a social networking site, and these in turn influence use attitude toward using the site. Attitude affects behavioral intention to use, and actual use. An additional variable, perceived enjoyment was also used in the study. Data was collected from job seekers and analyzed using Structural Equation Modeling. Results showed that intention to use is significantly affected by perceived usefulness and is not influenced by perceived ease of use. Also, perceived usefulness has a positive effect on ease of use, and perceived enjoyment has a positive effect on intention to use online social networking sites as a job search tool. The results collectively confirm that the TAM, with modifications, can explain the use of social networking sites for job search.

The next chapter poses an interesting question: Should employees accept their boss's Facebook "friend" request? Here authors, Karl, Peluchette, and Schlaegel examine gender and cultural differences related to this question. Data was collected from respondents in the US and Germany. The results of the study show that initial reaction of an individual after receiving such a "friend" request from their boss is a positive one; this reaction is followed by an intention to question it. Most people are likely to accept such a request, but they do have reservations about doing so. No gender differences were found. Significant cultural differences were found though – US respondents were found to have more negative and questionable reaction to the "friend" request than their German counterparts.

In Chapter 11 business models for online social networks are presented. According to the authors, Rana and Caton, social networks reflect real-world relationships. These relationships in the social networking environment serve as "social clouds" according to the authors, and these clouds help participants share resources. The creation of Social Clouds can give rise to new business models. In this paper the business models are presented and discussed.

In Occupational Networking as a Form of Professional Identification: The Case of Highly Skilled IT Contractors (Chapter 12), Voutsina examines he role of occupational identity of information technology contractors. In this study data was collected using interviews. Results show that virtual communities among IT contractors become the center of social interaction and their primary object of professional identification.

Section 3: Cross Cultural and International Studies

Third and final section of the chapters include cross cultural and international studies. In the chapter, Tracing Community Life Across Virtual Settlements, Akoumainakis uses concepts from the theory of virtual settlements and practice-based analysis to provide a practice lens for analyzing cross-settlement community life in virtual communities. The result is a conceptual model that frames boundary spanning virtual communities based on the principles of virtual settlements.

In Chapter 14, The Impact of Social Networking Websites on the Education of Youth, Kuppuswamy and Narayan, claim that some of the existing features and capabilities of social networking sites can be used to provide a better educational experience for the younger generation. Although a lot has been said of websites serving as a distraction for students, the authors argue that social networking sites can be useful for education based on sound pedagogical principles and proper supervision by teachers. Data was collected using questionnaires and in-depth interviews. Based on evaluation of the data, the authors present information about student use of social networking websites, and how they can be used in education.

The next chapter provides a cross-cultural examination of student attitudes and gender differences in Facebook profile content. In this study the authors Karl, Peluchette and Schlagel do a comparative study of students in the US and Germany. They found that males in both countries would be most likely to self-promote themselves. Students from both countries identified items that they would like to post on their profiles but did not want employers to see them.

In Chapter 16, Networking identities: Geographies of interaction and computer mediated communication; Simour discusses the social computing environment from a computer-mediated communication perspective. This paper examines how virtual communities affect people's lives and the role computer-mediated communication plays in the creation of virtual communities and shaping individuals' identities. The paper utilizes virtual participation on the net and face-to-face interviews for data collection.

Computational Trust in SocialWeb is the next chapter (chapter 17). In this chapter, Zolfaghar and Aghale review existing research in the area of computations trust in SocialWeb. They argue that success of the SocialWeb is dependent on the perceived trust placed on technologies by users. The chapter presents an overview of existing trust mechanisms available in SocialWebs and discusses the strengths and weaknesses of each. The authors also present key research issues in the area of computational trust.

In the next chapter (chapter 18), Kanagavel and Velayutham investigate the impact of social networking on college students in India and the Netherlands. They conducted a cross-cultural empirical study of the use of social networking sites by Indian and Dutch students that involved online observation and survey questionnaires. They found that Dutch students participate more actively than Indian students, and for most students, in both countries, online interaction is only a supplement to face-to-face social interaction.

In Managing Collaborative Research Networks (Chapter 19), Dimitrova and Koku examine how communities of practice work. Using survey questionnaires and follow-up semi-structured interviews they capture the management practices in the community. They found that communities of practice have both an online and a face-to-face component.

In the last article of this section and the book, Kimble identifies some research challenges for studies of virtual communities using online tells. The author used social network analysis and a survey to collect data from members of a geographically distributed research consortium. Based on analysis, he identified four areas for future research: the continuing role of face-to-face communication in virtual communities, the significance of the dual nature of such groups, the importance of the structure of such communities, and the role played by exogenous factors.

In summary, this collection of papers in the area of virtual communities and social networking discusses a wide variety of issues that are relevant to both research as well as practitioner communities. I believe the book makes a valuable contribution to the research in this area.

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