

Preface

The rise of the internet has spawned countless modes of communication. From asynchronous message boards to real-time chat rooms, these communication channels have enabled people to connect with one another in new ways. Virtual communities are a natural byproduct of this connectedness. Without geographical boundaries, virtual communities enable people to participate in the social sphere and develop interpersonal relationships regardless of location.

The quickly developing technologies virtual communities use to stay connected makes it challenging for experts and practitioners to stay informed of the field's most up-to-date research. That is why Information Science Reference is pleased to offer this four-volume reference collection that will empower students, researchers, and academicians with a strong understanding of critical issues within virtual community research by providing both broad and detailed perspectives on cutting-edge theories and developments. This reference is designed to act as a single reference source on conceptual, methodological, technical, and managerial issues, as well as provide insight into emerging trends and future opportunities within the discipline.

Virtual Communities: Concepts, Methodologies, Tools and Applications is organized into eight distinct sections that provide comprehensive coverage of important topics. The sections are: (1) Fundamental Concepts and Theories, (2) Development and Design Methodologies, (3) Tools and Technologies, (4) Utilization and Application, (5) Organizational and Social Implications, (6) Managerial Impact, (7) Critical Issues, and (8) Emerging Trends. The following paragraphs provide a summary of what to expect from this invaluable reference tool.

Section 1, ***Fundamental Concepts and Theories***, serves as a foundation for this reference text by addressing crucial theories essential to the understanding of virtual communities. Chapters such as *The E-Learning Phenomenon* by Lalita Rajasingham, and *The Evolution of Virtual Universities* by Marion Cottingham give an introduction and overview of virtual communities in the modern classroom. *How the Crowd Can Teach* by Jon Dron and Terry Anderson attempts to explicate the effective use of the Net for learning and teaching by differentiating between several modes of networked social organization. Additional selections, including *Creating and Sustaining Community in a Virtual World* by David P. Colachico, and *E-Collaboration and E-Commerce in Virtual Worlds* by Ned Kock focus on providing backgrounds and introductions to specific concepts within virtual communities. These and several other foundational chapters provide a wealth of expert research on the elemental concepts and ideas surrounding virtual communities.

Section 2, ***Development and Design Methodologies***, presents in-depth coverage of the conceptual design and architecture of virtual communities, focusing on aspects including social networking, virtual communities of practice, and e-business. Designing and implementing effective processes and strategies are the focus of such chapters as *A Social Framework for Software Architectural Design* by Manuel Kolp and Yves Wautelet, and *Agent-Based Network Infrastructure for E-Communities* by M. Mari, A.

Poggi, and M. Tomaiuolo. *An Abstract Framework for Modeling Argumentation in Virtual Communities* by Tudor Groza, Siegfried Handschuh, John G. Breslin, and Stefan Decker offers an abstract model for argumentation which captures semantics independently of the domain and provides a possible usage of the framework in the context of virtual communities. *A Service Oriented Ontological Framework for the Semantic Validation of Web Accessibility* by Rui Lopes, Konstantinos Votis, Luís Carriço, and Spiridon Likothanassis presents SWAF, the Semantic Web Accessibility Framework, a base framework for supporting the integration of accessibility services into Web design and development processes. With contributions from leading international researchers, this section offers copious developmental approaches and design methodologies for business information systems.

Section 3, ***Tools and Technologies***, presents extensive coverage of the various tools and technologies used in the development and implementation of virtual communities. This comprehensive section includes such chapters as *Virtual Community Mentoring in Higher Education*, by Jamie S. Switzer, and *Using Notification Systems to Create Social Places for Online Learning* by James M. Laffey and Christopher J. Amelung, which describe various techniques and models for providing quality distance learning. *Institutional Opportunities and Challenges of the Wireless City* by Sukumar Ganapati explores the institutional opportunities and challenges of adopting wireless communications for mobile government at the local level. Finally, chapters such as *Collaborative Writing Tools in the Virtual Workplace* by Norman Youngblood and Joel West, and *Folksonomy; The Collaborative Knowledge Organization System* by Katrin Weller, Isabella Peters, and Wolfgang Stock present tools to adapt to the challenges of virtual collaboration. In all, this section provides coverage of a variety of tools and technologies that inform and enhance modern virtual communities.

Section 4, ***Utilization and Application***, describes how people are using virtual communities and offers insight and information for their growth and evolution. Including chapters such as *Cyber Security and Anti-Social Networking* by Malcolm Shore, and *Destructive Creativity on the Social Web* by Steve Wheeler, this section investigates numerous methodologies that have been proposed in and around virtual communities, as well as their results. As this section continues, a number of case studies centered around virtual communities are presented from multiple industries across the world, in selections such as *Virtual Team Identity Construction and Boundary Maintenance* by Marshall Scott Poole and Huiyan Zhang, *E-Governance in India* by Malathi Subramanian and Anupama Saxena, and *E-Government in Saudi Arabia* by Maher Al-Fakhri, Robert Cropf, Gary Higgs, and Patrick Kelly. Contributions found in this section provide comprehensive coverage of the practicality and current use of virtual communities.

Section 5, ***Organizational and Social Implications***, includes chapters discussing the organizational and social impact of virtual communities. *Relationships and Etiquette with Technical Systems* by Christopher A. Miller explores the human-like relationships that users establish with machines. *Trust in Social Networking* by Max Kennedy and Toru Sakaguchi attempts to understand trust in social networking. *Virtual Worlds and the 3-D Internet* by Carolyn McKinnell Jacobson examines how organizations are utilizing immersive virtual environments in their operations. This section ends with *The Impact of Social Networking Websites on the Education of Youth* by Sunitha Kuppuswamy and P.B. Shankar Narayan, which explores the impact of social networking sites on the education of youths. Overall, these chapters present a detailed investigation of the complex relationship between individuals, organizations and virtual communities.

Section 6, ***Managerial Impact***, presents focused coverage of virtual communities as they relate to improvements and considerations in the workplace. *Administrative Leadership and the Electronic City* by Greg Streib and Ignacio Navarro identifies and discusses several perspectives on the readiness of administrative leaders to develop and manage e-government systems. Other chapters such as *Fostering Creativity in Global Virtual Teams* by Margaret Oertig discuss virtual campuses, knowledge sharing, and

the technical infrastructure that supports them. In all, the chapters in this section offer specific perspectives on how managerial practices and developments in virtual communities inform each other to create more meaningful user experiences.

Section 7, **Critical Issues**, addresses vital issues related to virtual communities. Chapters such as *Creativity in Asynchronous Virtual Teams* by Rosalie J. Ocker, and *Enhancing E-Collaboration Effectiveness through the Use of Wikis* by Anand Simha and Rajiv Kishore discuss different modes of collaboration for virtual teams. Additional selections, such as *Moving from E-Government to T-Government* by Vishanth Weerakkody and Gurjit Dhillon, *Network Organisation to Improve Virtual Campus Management* by Francois Fulconis and Thierry Garrot, and *Virtual Transactional and Relational Exchanges* by Andrew Gaudes and Mary Brabston address critical success factors in the maintenance of virtual communities.

Section 8, **Emerging Trends**, highlights areas for future research within the field of virtual communities, while exploring new avenues for the advancement of the discipline. Beginning this section is *Mobile Social Web: Opportunities and drawbacks* by Thorsten Caus and Stefan Christmann. This selection defines the mobile social web, explains categories of mobile communities, and discusses success factors and drawbacks from technical, social, and economic perspectives. Virtual mentoring is presented in *Virtual Mentoring* by Narissra Maria Punyanunt-Carter and Emilio S. Hernandez, and *Millennials, Social Networking, and Trust* by Kurt Komaromi, Fahri Unsal, and G. Scott Erickson pioneers research on how the millennial generation perceives the trustworthiness of various online entities. These and several other emerging trends and suggestions for future research can be found within the final section of this exhaustive multi-volume set.

Although the primary organization of the contents in this multi-volume work is based on its eight sections, offering a progression of coverage of the important concepts, methodologies, technologies, applications, social issues, and emerging trends, the reader can also identify specific contents by utilizing the extensive indexing system listed at the end of each volume. Furthermore to ensure that the scholar, researcher and educator have access to the entire contents of this multi volume set as well as additional coverage that could not be included in the print version of this publication, the publisher will provide unlimited multi-user electronic access to the online aggregated database of this collection for the life of the edition, free of charge when a library purchases a print copy. This aggregated database provides far more contents than what can be included in the print version in addition to continual updates. This unlimited access, coupled with the continuous updates to the database ensures that the most current research is accessible to knowledge seekers.

As a comprehensive collection of research on the latest findings related to using technology to provide various services, *Virtual Communities: Concepts, Methodologies, Tools and Applications*, provides researchers, administrators and all audiences with a complete understanding of the development of applications and concepts for virtual communities. Given the vast number of issues concerning usage, failure, success, policies, strategies, and applications of virtual communities in organizations, *Virtual Communities: Concepts, Methodologies, Tools and Applications* addresses the demand for a resource that encompasses the most pertinent research in the development, deployment, and impact of virtual communities.