Collaboration is central to human nature. Though people have always developed and exchanged ideas to advance their very existence, innovations in science and technology have revolutionized the way in which people now communicate. Electronic collaboration has emerged as the discipline at the intersection of technology and human interaction, having implications in all facets of everyday life. From social networking to telecommunication, e-collaboration has significantly impacted the way we conduct business, gain knowledge, and engage with technology.

In recent years, the technologies, applications, and activities generated by and for e-collaboration have grown in both number and popularity. As a result, researchers, practitioners, and educators have devised a variety of techniques and methodologies to develop, deliver, and, at the same time, evaluate the effectiveness of their use. The explosion of methodologies in the field has created an abundance of new, state-of-the-art literature related to all aspects of this expanding discipline. This body of work allows researchers to learn about the fundamental theories, latest discoveries, and forthcoming trends in the field of e-collaboration.

Constant technological and theoretical innovation challenges researchers to remain informed of and continue to develop and deliver new methodologies and techniques utilizing the discipline’s latest advancements. In order to provide the most comprehensive, in-depth, and current coverage of all related topics and their applications, as well as to offer a single reference source on all conceptual, methodological, technical, and managerial issues in e-collaboration, Information Science Reference is pleased to offer a three-volume reference collection on this rapidly growing discipline. This collection aims to empower researchers, practitioners, and students by facilitating their comprehensive understanding of the most critical areas within this field of study.

This collection, entitled *E-Collaboration: Concepts, Methodologies, Tools, and Applications*, is organized into eight distinct sections which are as follows: (I) Fundamental Concepts and Theories, (II) Development and Design Methodologies, (III) Tools and Technologies, (IV) Utilization and Application, (V) Organizational and Social Implications, (VI) Managerial Impact, (VII) Critical Issues, and (VIII) Emerging Trends. The following paragraphs provide a summary of what is covered in each section of this multi-volume reference collection.

Section I, *Fundamental Concepts, Methodologies, Tools, and Applications*, serves as a foundation for this exhaustive reference tool by addressing crucial theories essential to understanding e-collaboration. The field is introduced and explored in “A Basic Definition of E-Collaboration and its Underlying Concepts” by Ned Kock, who is also the editor of this collection. This selection defines e-collaboration on an operational level, while also providing an overview of primary concepts underlying the discipline. Another important basic topic in this section is explained by Thorsten Blecker and Ursula Liebhart in their contribution entitled “Prerequisites for the Implementation of E-Collaboration,” which explains that technology is the key to e-collaboration, though flexibility, interconnectivity, simplicity, interface,
autonomy, and usability are also integral to the success of any e-collaboration project. Later in this section, Ned Kock and Pedro Antunes explore the issue of implementation in greater depth in their contribution “Government Funding of E-collaboration Research in the European Union: A Comparison with the United States Model.” These are only some of the elemental topics provided by the selections within this comprehensive, foundational section that allow readers to learn from expert research on the elemental theories underscoring e-collaboration.

**Section II, Development and Design Methodologies,** contains in-depth coverage of conceptual architectures and frameworks, providing the reader with a comprehensive understanding of emerging theoretical and conceptual developments within the creation and utilization of e-collaboration tools and technologies. In opening this section, “A Use-Centered Strategy for Designing E-Collaboration Systems” by Daniel H. Schwartz, John M. Flach, W. Todd Nelson, and Charlene K. Stokes provides an overview of use-focused design and discusses a specific system called Knowledge Web. “Designing Interactive and Collaborative E-Learning Environments” by Hyo-Jeong So discusses instructional design methodologies for learning systems and environments, while “Developing REALSpace: Discourse on a Student-Centered Creative Knowledge Environment for Virtual Communities of Learning” by Kam Hou Vat provides a case study documenting the REAL (Rich Environment for Active Learning) project, whose aim is a focus on learner-centered education. Also included in this section is the selection “Customizing Multimedia and Collaborative Virtual Environments” by Paulo N. M. Sampaio, Ildeberto A. Rodello, Laura M. Rodriguez Peralta, and Paulo Alexandre Bressan, which provides a methodology for the development of multimedia and collaborative virtual environments. Overall, these selections outline design and development concerns and procedures, advancing research in this vital field.

**Section III, Tools and Technologies,** presents extensive coverage of various tools and technologies and their use in creating and expanding the reaches of e-collaboration. This section begins with the contribution “Collaborative Technologies, Applications, and Uses” by Ewan Oiry, which first provides an overview of collaborative technologies and their use, and then explores future trends in the field. Later contributions, such as “Blogging Technology and its Support for E-Collaboration” by Vanessa Paz Dennen and Tatyana G. Pashnyak and “Academic Weblogs as Tools for E-Collaboration Among Researchers” by María José Luzón explore the proliferation of weblogs or blogs, and the impact they have had in changing the way we communicate. Further selections explore additional tools and technologies, such as videoconferencing in “Videoconferencing as an E-Collaboration Tool” by Michael Chilton and Roger McHaney and instant messaging in “Instant Messaging as an E-Collaboration Tool” by Qinyu Liao and Xin Luo. The former of these selections contends that while videoconferencing is a viable e-collaboration tool, it cannot replace face-to-face communication. Similarly, in the latter of these selections, researchers from explore the use of instant messaging (IM) technologies, discussing how IM can be used to encourage a sense of community, but also has certain downsides such as a lack of security. The rigorously researched chapters contained in this section offer readers countless examples of modern tools and technologies that form the backbone of the e-collaboration discipline.

**Section IV, Utilization and Application,** investigates the use and implementation of e-collaboration tools, technologies and practices in a number of different settings. This section begins with “Levels of Adoption in Organizational Implementation of E-Collaboration Technologies” by Bjorn Erik Munkvold, which explores how e-collaboration technologies are adopted at multiple levels (individual, group, and organizational) and how this process can be studied. Later selections, such as “E-Collaboration as a Tool in the Investigation of Occupational Fraud” by Bobby E. Waldrup, “The Support of E-Collaboration Technologies for a Blood Bank” by P. Sasi Kumar, P. Senthil, G. Kannan, and A. Noorul Haq, and “E-Collaboration for Internationalizing U.S. Higher Education Institutions” by Jaime Ortiz provide specific examples of e-collaboration utilization and application in a number of different contexts. This section
concludes with articles pertaining to social networking, online dating, computer-supported learning, and e-government, providing a complete understanding of the successes and limitations of e-collaboration.

Section V, Organizational and Social Implications, includes a wide range of research pertaining to the organizational and cultural implications of e-collaboration. The section begins with “Digital Disempowerment in a Network Society” by Kenneth L. Hacker, Shana M. Mason, and Eric L. Morgan, which explores how differences in participation in a network society impact the degree to which individuals are empowered or disempowered. Contributions such as “Supporting Distributed Groups with Group Support Systems: A Study of the Effect of Group Leaders and Communication Modes on Group Performance” by Youngjin Kim and “A Tool for Assisting Group Decision-Making for Consensus Outcomes in Organizations” offer perspectives on group decision making and support systems, analyzing the factors that impact successful group communication. The relationship between e-collaboration and education is explored in-depth in selections such as “Inter-Organizational E-Collaboration in Education” by Susanne Croasdaile, and “E-Collaboration Technologies Impact on Learning” by Saurabh Gupta and Robert Bostrom. Overall, this section highlights implications in both the social and organizational arenas that are derived from the study of e-collaboration.

Section VI, Managerial Impact, presents contemporary coverage of the managerial applications and implications of e-collaboration. Core concepts covered include the impact of e-collaboration on business practices and trends in business communication, policies and strategies. “An Adaptive Workforce as the Foundation for E-Collaboration” by Charlene K. Stokes, Joseph B. Lyons, Daniel H. Schwartz, and Stephanie D. Swindler begins the section with an overview of the areas of business that have been impacted by e-collaboration and also explores a specific performance model for organizational implementation. Also included are the articles “Reconsidering IT Impact Assessment in E-Collaboration” by Az-Eddine Bennani, “A Research Agenda for Identity Work and E-Collaboration” by Niall Hayes and Mike Chiasson, and “Managing Intercultural Communication Differences in E-Collaboration” by Minna Norhayati Zakaria, which expound upon the specific issues that impact successful e-collaboration implementation in the workplace. This section concludes with insights on topics including computer-mediated communication, virtual project management, and the nature of virtual teams—a few of the subjects necessary to understand managerial implications of e-collaboration.

Section VII, Critical Issues, presents readers with an in-depth analysis of the more theoretical and conceptual issues within this growing field of study by addressing topics such as security within virtual environments. Selections such as “Hacker Wars: E-Collaboration by Vandals and Warriors” by Richard Baskerville and “Spam as a Symptom of Electronic Communication Technologies that Ignore Social Requirements” by Brian Whitworth analyze particular security concerns that impact virtual environments. In all, the theoretical and abstract issues presented and analyzed within this collection form the backbone of revolutionary research in and evaluation of e-collaboration.

The concluding section of this authoritative reference tool, Emerging Trends, highlights research potential within the field of e-collaboration while exploring uncharted areas of study for the advancement of the discipline. The development of new types of virtual and electronic communities is explored in selections such as “Reconfiguration of Communities in Cyberspace” by SungBok Park and Ha Sung Hwang. Contributions such as “Bridging the Gap between Web 2.0 and Higher Education” by Martin Weller and James Dalziel and “Destructive Creativity on the Social Web: Learning through Wikis in Higher Education” by Steve Wheeler investigating emerging topics for discussion and study in education research. This final section demonstrates e-collaboration, with its propensity for constant change and evolution, will continue to both shape and define the modern face of education, business, culture and, most importantly, human interaction.

Although the contents of this multi-volume book are organized within the preceding eight sections which offer a progression of coverage of 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. In addition to providing content not included within the print version, this aggregated database is also continually updated to ensure that the most current research is available to those interested in e-collaboration.

As e-collaboration continues to expand, both in scope and application, this exciting and revolutionary field will prove even more necessary to everyday life. Intrinsic to our ever-modernizing, ever-expanding global society are collaboration and technology, the two aspects that define the contents of these articles. Continued progress and innovation will only further establish how necessary and vital it is for us to establish a sure understanding of e-collaboration and the changes and challenges influencing today’s modern, dynamic world.

The diverse and comprehensive coverage of e-collaboration in this three-volume, authoritative publication will contribute to a better understanding of all topics, research, and discoveries in this developing, significant field of study. Furthermore, the contributions included in this multi-volume collection series will be instrumental in the expansion of the body of knowledge in this enormous field, resulting in a greater understanding of the fundamentals while also fueling the research initiatives in emerging fields. We at Information Science Reference, along with the editor of this collection, hope that this multi-volume collection will become instrumental in the expansion of the discipline and will promote the continued growth of e-collaboration.