Preface

The constantly changing landscape of IT Policy and Ethics 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 three-volume reference collection that will empower students, researchers, and academicians with a strong understanding of critical issues within IT Policy and Ethics 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.

*IT Policy and Ethics: Concepts, Methodologies, Tools and Applications* is organized into six distinct sections that provide comprehensive coverage of important topics. The sections are: (1) Fundamental Concepts and Theories, (2) Tools and Technologies, (3) Frameworks and Methodologies, (4) Cases and Applications, (5) Issues and Challenges, and (6) 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 extensive reference tool by addressing crucial theories essential to the understanding of IT Policy and Ethics. Introducing the book is *Introduction to Continuous Authentication*, a great foundation laying the groundwork for the basic concepts and theories that will be discussed throughout the rest of the book. Another chapter of note in Section 1 is titled *Semantic Policies for Modeling Regulatory Process Compliance*, which discusses the novel techniques of integrating new technologies to assist IT management policies and tactics. Section 1 concludes, and leads into the following portion of the book with a nice segue chapter, *Mass Media Strategies*. Where Section 1 leaves off with fundamental concepts, Section 2 discusses tools and technologies in place for IT Policy and Ethics.

Section 2, “Tools and Technologies”, presents extensive coverage of the various tools and technologies used in the implementation of IT Policy and Ethics. Section 2 begins where Section 1 left off, though this section describes more concrete tools at place in the modeling, planning, and applications of IT Policy and Ethics. The first chapter, *Reversible Information Hiding and its Application to Image Authentication*, lays a framework for the types of works that can be found in this section, a perfect resource for practitioners looking for the types of technologies currently in practice in IT Policy and Ethics. Section 3 is full of excellent chapters like this one, including such titles as *Multimodal Biometric Hand-Off for Robust Unobtrusive Continuous Biometric Authentication; Continuous User Authentication Based on Keystroke Dynamics through Neural Network Committee Machines*, and *An Electronic Contract Signing Protocol Using Fingerprint Biometrics*, to name a few. Where Section 2 described specific tools and technologies at the disposal of practitioners, Section 3 describes frameworks and methodologies within the field.
Section 3, “Frameworks and Methodologies”, presents in-depth coverage of the conceptual design and architecture of IT Policy and Ethics, focusing on aspects including network layer coding, key management, policy management, security management, social network analysis, access control, and many more topics. Opening the section is Using a Social Learning Community to Actively Engage Students’ Participation in a Virtual Classroom. This section is vital for developers and practitioners who want to measure and track the progress of IT Policy and Ethics through the multiple lens of parametric design. Through case studies, this section lays excellent groundwork for later sections that will get into present and future applications for IT Policy and Ethics, including, of note: Creating Ongoing Online Support Communities through Social Networks to Promote Professional Learning and MAC and PHY-Layer Network Coding for Applications in Wireless Communications Networks. The section concludes with another excellent work on Medium Access Controls, titled Medium Access Control Protocols for Wireless Sensor Networks.

Section 4, “Cases and Applications”, describes how the broad range of IT Policy and Ethics efforts has been utilized and offers insight on and important lessons for their applications and impact. Section 4 includes the widest range of topics because it describes case studies, research, architectures, theory, analysis, and guides for implementation. Topics range from social networking, music, political participation, and crowdfunding to e-simulation, youth, and many more. The first chapter in the section is titled The Integration of Social Networking in Creating Collaborative Partnerships in Education. The breadth of topics covered in the chapter is also reflected in the diversity of its authors, from countries all over the globe. Section 4 concludes with an excellent view of a case study in a new program, Improving the Effectiveness of Advertising in Internet Social Networking.

Section 5, “Issues and Challenges”, presents coverage of academic and research perspectives on IT Policy and Ethics tools and applications. The section begins with Security Policy Issues in Internet Banking in Malaysia. Other issues covered in detail in Section 5 include gender, game theory, security, biometrics, plagiarism, and much more. The section concludes with Digital Convergence and Horizontal Integration Strategies, a great transitional chapter between Sections 5 and 6 because it examines an important trend going into the future of the field. The last chapter manages to show a theoretical look into future and potential technologies, a topic covered in more detail in Section 6.

Section 6, “Emerging Trends”, highlights areas for future research within the field of IT Policy and Ethics, opening with Stepping over the Edge. Section 6 contains chapters that look at what might happen in the coming years that can extend the already staggering amount of applications for IT Policy and Ethics. Other chapters of note include Privacy-Aware Organisation-Based Access Control Model (PrivOrBAC) and A Social Relational Network-Based Architecture for Maintaining the Media Integrity and Optimizing the Quality of Experience. The final chapter of the book looks at an emerging field within IT Policy and Ethics, in the excellent contribution, Securing the External Interfaces of a Federated Infrastructure Cloud.

Although the primary organization of the contents in this multi-volume work is based on its six 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 providing various services, *IT Policy and Ethics: Concepts, Methodologies, Tools and Applications*, provides researchers, administrators, and all audiences with a complete understanding of the development of applications and concepts in IT Policy and Ethics. Given the vast number of issues concerning usage, failure, success, policies, strategies, and applications of IT Policy and Ethics in countries around the world, *IT Policy and Ethics: Concepts, Methodologies, Tools and Applications* addresses the demand for a resource that encompasses the most pertinent research in technologies being employed to globally bolster the knowledge and applications of IT Policy and Ethics.