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Section I. Fundamental Concepts and Theories

This section serves as the foundation for this exhaustive reference tool by addressing crucial theories essential to the understanding of database technologies. Chapters found within these pages provide an excellent framework in which to position database technologies within the field of information science and technology. Individual contributions provide overviews of data warehousing and database management systems, while also exploring critical stumbling blocks of this field. Within this introductory section, the reader can learn and choose from a compendium of expert research on the elemental theories underscoring the research and application of database technologies.

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Arnaud Giacometti, Université François Rabelais de Tours, France
Section IV. Utilization and Application

This section introduces and discusses the ways in which information technology has been used to shape the realm of database technology and proposes new ways in which IT-related innovations can be implemented within organizations and in society as a whole. These particular selections highlight, among other topics, the implementation of mobile databases and database-driven portals. Contributions included in this section provide excellent coverage of today’s environment and insight into how database technology impacts the fabric of our present-day global village.

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Section V. Organizational and Social Implications

This section includes a wide range of research pertaining to the social and organizational impact of database technology around the world. Chapters in this section analyze online databases, data security, and organizational decision support. The inquiries and methods presented in this section offer insight into the implications of database technology at both a personal and organizational level, while also emphasizing potential areas of study within the discipline.

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This section presents contemporary coverage of the managerial implications of database technology. Particular contributions address e-services, database grids, and project databases. The managerial research provided in this section allows executives, practitioners, and researchers to gain a better sense of how database technology can inform their practices and behavior.


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Section VII. Critical Issues

This section addresses conceptual and theoretical issues related to the field of database technology, which include security issues in numerous facets of the discipline including security within medical and web-powered. Within these chapters, the reader is presented with analysis of the most current and relevant conceptual inquiries within this growing field of study. Particular chapters also address quality of service issues in information quality, data cleaning, and data classification. Overall, contributions within this section ask unique, often theoretical questions related to the study of database technology and, more often than not, conclude that solutions are both numerous and contradictory.

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Section VIII. Emerging Trends

This section highlights research potential within the field of database technology while exploring uncharted areas of study for the advancement of the discipline. Chapters within this section highlight evolutions in knowledge discovery, data integration, and models that inform database technology. These contributions, which conclude this exhaustive, multi-volume set, provide emerging trends and suggestions for future research within this rapidly expanding discipline.

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