Preface

This work is an attempt to fill the need for a comprehensive textbook on policy and management issues that arise when considering information technology in the public sector. This book has the goal of presenting a balanced view to information technology. Public information technology is presented neither as a panacea leading to a future in which most human problems are solved, nor as a malevolent tidal force leading to control and oppression.

To reveal the conclusion here at the beginning, the book focuses on the intersection between information technology and four varying theoretical perspectives. The role of theory is not so much to provide the “correct” view of a complex topic as it is to direct us toward interesting questions. By counter-posing theories, we ask these questions from a variety of viewpoints that, it is hoped, will enrich our analysis in the process. Still, the core content of this text is not primarily theoretical. Rather, the focus of the book is on the political issues raised by information policy in the public sector and on the administrative issues that manager’s encounter in the process of governing.

Present day reality demonstrates that information technology and networking infuse every level of government and every domain of government service. More and more, effectively managing public agencies occurs only to the extent that the heads of agencies are able to mobilize information technology resources and integrate them with human, financial, and policy resources. This book begins and ends on a theoretical note, perhaps unexpected by believers in the myth that public administration is a theory-poor discipline. Knowledge of public information technology policies and management has become essential to preserve public administration as an endeavor that provides effectiveness and accountability in the context of serving the public interest.

As we begin to explore the role of public information technology and e-governance, Chapter 1 provides a discussion of the theoretical and historical roots that underpin its evolution. It starts with an examination of the historic periods of information technology in government and goes on to explore several constructs that have emerged through the years to capture various visions of information technology assimilation. These views provide the foundation for exploring the subsequent chapters. The chapter also considers the role of technology in the political process touching on important issues pertaining to e-activism, e-campaigning, e-voting, e-legislating, e-civics, and e-participation.

In terms of the theories of information technology and social change discussed in Chapter 1, Chapter 2 concentrates on governmental transparency. Specifically, it covers the role that information access plays in promoting governmental transparency, efficiency, and responsiveness. It sheds light on the potential gains of information access and transparency, as well as the possible implications it may have on privacy rights. The chapter presents the debate over an individual’s right to privacy and the public’s right to information. The argument is over who owns public records and who has the right to put limits on its use. It also considers information equality and the digital divide, examining gender, race, income, and age differences.
Chapter 3 examines cybercrime, electronic commerce, and security policy. This chapter considers the current state of computer security along with the methods used to both exploit and prevent system infractions. It also relates some of the major legislative activities that seek to address security shortfalls. Identity theft is also examined. Regulatory policies pertaining to e-commerce and computer fraud, protecting intellectual property, regulation of pornography on the Web, and regulation of e-gambling are all discussed. The chapter also touches on a number of security guidelines that managers should be aware of and possibly exercise to protect critical information assets.

Chapters 5 and 6 shift focus and concentrate on the managerial issues associated with information technology. Chapter 5 presents a framework for strategic planning, promoting the alignment of the agency’s IT plans with its overall mission and encouraging clarification of roles and responsibilities for achieving desired results. Chapter 5 examines the implementation factors that organizations rely on to encourage success, and Chapter 6 focuses on how to evaluate information technology to select among IT alternatives and manage the agency’s investment portfolio.

Chapter 7 comes full circle and explores the four theories introduced in Chapter 1 (systems theory, technological determinism, sociotechnical theory, reinforcement theory) to major topics and trends in public sector information systems.

While no “unified field theory” of public information systems has been presented, the practical world of IT does have theoretical implications. One’s theoretical perspective will guide how one goes about interpreting the potential and promise of IT and will inform the choices one makes about its direction. Those who claim to be “practical” and “have no theory” inevitably make assumptions about the nature and direction of information technology.

The public executive who is unprepared to integrate theory with praxis operates at a severe disadvantage. In an era when public managers face mounting budgetary austerity and increasing demands for service, knowledge of public information technology theory, policies, and management has become essential to preserve public administration as an endeavor that provides effectiveness and accountability in the context of serving the public interest.