Computer Security Within Organizations

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Computer Security Within Organizations

Adrian R. Warman

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Preface

Important: this book is designed to provide a summary of some aspects of the subject matter covered. It does not purport to be comprehensive or to render legal advice.

This book is aimed at managers and those studying management, the people for whom computer systems are simply another tool amongst many others that can be applied to the tasks of running an organization.

The objective of this book is to examine the concepts of computer security from managerial and organizational perspectives. As a consequence, there is very little discussion about technical issues such as data encryption mechanisms or operating system domain partitioning, because these are operational issues that need not be addressed by management. The book is not intended to supply a checklist of security topics, as these are provided in other excellent texts.

However, an understanding of how operational issues affect the usage of computers and information systems is very much of interest to managers, and it is this that forms the theme of this book.

The book begins with a consideration of the current situation. An overview of basic security concepts is provided in chapter one, before moving on to look at the way in which problems with technology have come about. Chapter two suggests that the very nature of technology actively contributes to the problems, not least because of the way in which computer systems are developed and utilized. The system development process has a significant effect upon the security of the final system. Chapter three looks first at general development methods, before considering the specifics of secure system development.

The discussion then turns to the social and management aspects of computer security. The increasing strategic value of information and information processing systems means that managers must consider them much more carefully than before. Chapter four considers information technology security from the organizational and management perspective. Security mechanisms can be viewed as serious constraints upon work activities, and even intrusions upon the personal privacy of users. If computer security is to be feasible, at the very least it will require the understanding and active support of all those it affects. There is a need to spread the message to all those involved - and yet to do so may represent a problem in its own right. Chapter five looks into some of these issues.

Legislation has a profound influence on what is permitted on a national and international level, and inevitably affects organizational computer systems. Chapter six considers some of the legal issues. Finally, chapter seven is a speculative discussion of remaining issues such as the effectiveness of controls, and also suggests a number of ways in which the discipline of computer security may change over the next few years.

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