ERNST & YOUNG

INFORMATION MANAGEMENT SERIES

Development Effectiveness

Strategies for IS Organizational Transition

Vaughan Merlyn and John Parkinson

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John Wiley & Sons, Inc.

New York • Brisbane • Chichester • Singapore • Toronto

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Library of Congress Cataloging in Publication Data

Merlyn, Vaughan.

Development effectiveness: strategies for IS organizational transition / by Vaughan Merlyn [and] John Parkinson: with Bob Phillips and Roy Youngman.

p. cm. — (Ernst & Young information management series) Includes bibliographical references.

ISBN 0-471-58954-3

1. Management information systems 2 Information resources management 3 Organizational effectiveness 4 Total quality management I Parkinson, John, 1950- II Phillips, Bob III. Youngman, Roy IV Title V Series HD30.213.M47 1994 658.4'038'011—dc20

93-6045

Printed in the United States of America 10 9 8 7 6 5 4 3 2 1

It must be considered that there is nothing more difficult to carry out nor more doubtful of success nor more dangerous to handle than to bring about a new order of things. Niccolo Machiavelli

Niccolo Machiavelli The Prince

The productivity of people requires continuous learning, as the Japanese have taught us. It requires adoption in the West of the specific Japanese Zen concept where one learns to do better what one already does well.

Peter Drucker

No one knows what they want until you give them what they ask for.

Jerry Weinberg

If you want to understand something, try to change it.
Walter Fenno Dearborn

Preface

Although the application of information technology (IT) to the solution of business problems is still in its relative infancy (less than 50 years old) in comparison with many other aspects of business and organization management, it has already assumed a central role in enterprise effectiveness and the pursuit of competitive positions. There is, therefore, great pressure on information systems (IS) professionals to move the process of developing information systems away from the category of "craft" and toward that of an engineering discipline that can provide low cost, rapidly developed, and effective business systems to meet complex, changing enterprise needs.

At the same time, the enabling technologies available to support these new developments, both for the development process itself and for the target application environment, continue to evolve rapidly. Making use of the new technologies requires a constant updating of skills and a careful evaluation of relevant experience in a work force reduced by demographic factors that cannot be countered by any simple short-term actions. As a final constraint, investment capital for new systems and new technologies is increasingly scarce. New developments therefore have to be

justified more thoroughly than ever, and new information systems must be much more effective in use in order to be acceptable. Responding to all of these issues poses *the* major challenge for IS organizations over the coming decade.

Historically, the IS organization has responded with more (and usually more expensive) technology at the expense of establishing a sound infrastructure for development and by largely ignoring the need to manage individual and organizational change in a constantly changing business and technical environment. Even if business could continue to afford such an approach, it has not worked well. Information systems still take too long to develop, are often delivered late, cost too much, and provide too little business benefit. A significantly better process is needed and needed soon, but whatever replaces our past and present efforts must learn from their shortcomings and from previous attempts at improvement.

Any new process must also accommodate the results, however poor we may now think them, of the last two or more generations of development efforts. These produced the information systems that run our businesses today, systems that cannot be replaced overnight.

We must seek out a process that recognizes the importance of managing change in an acceptable fashion, so that organizations and individuals are not overwhelmed. At the same time, the new process must deliver improvements in quality and performance quickly enough that an increasingly skeptical enterprise will allow the IS organization time to put its complete house in order.

Most IS organizations will not achieve the necessary transformation in outlook and approach without some, perhaps a great deal of, external help. This book sets out an approach to improving the effectiveness of the IS organization that is a useful blend of insights from a variety of theoretical viewpoints and practical experience of making these changes work in real-world situations. It is not a complete or guaranteed answer for anyone, but it should be a sufficient starting point for the IS organization that knows it needs to become more effective and is wondering where and how

to begin, or how to accelerate improvement initiatives already under way.

We have divided the book into three parts. In *Part I*, we identify and describe the factors that have created the present situation for the IS organization, consider what can be learned from past efforts, and set an agenda for the sustained high performance IS organization we wish to create.

In Part II, we examine the key issues of organizational change management, organizational design, and measurement related to a successful transition from the current state of most IS organizations to the desired high-effectiveness future state.

In *Part III*, we describe a model process for planning and managing the required transition.

Acknowledgments

Acknowledgments are due to the large number of people who have made key contributions to this book. Bob Phillips and Roy Youngman, our colleagues in Ernst & Young's U.S. National Office, started out with us as authors and made important contributions before other commitments and demands for their considerable talents diverted them. Mary Silva Doctor, Charles Gold, Sheila Smith, and Rick Swanborg at the Center for Information Technology and Strategy contributed generously, inspired by the participating sponsor companies of the IS Leadership Multi-Client Research Program. Thanks to Kent Boesdorfer, Mark Hefner, and Joyce Olson of Ernst & Young's Organizational Change Management group for helping us appreciate the complexities of cultural change. This book is the richer for their ideas and insights.

The many colleagues at the firm's two research centers in Boston and Las Colinas, a number of our line consulting partners, as well as several patient executives at some of our consulting clients who read and reviewed parts of the manuscript, gave generously of their time and experience to question our ideas and assertions. Their comments and suggestions added greatly to the

xx Acknowledgments

content of our work. We have borrowed freely from our discussions with all of them. Any errors in presentation or understanding are, naturally, ours, not theirs.

We also gratefully acknowledge the support and encouragement received from our partners throughout Ernst & Young's U.S. Management Consulting practice—in particular: Alan Stanford, national director of Information Technology Consulting; Dale Wartluft, national director of Systems Planning and Delivery; Blaine Hurst, formerly director of the Center for Information Technology Planning and Delivery, and now Chief Information Officer with Boston Chicken; and Bud Mathaisel, director of the Center for Information Technology and StrategySM.

Special thanks to Jennifer Burgin, Pauli Morin, and Janet Santry for their help with reference material and graphics.

Finally, thanks to Jon Zonderman, who helped us structure and merge our written ideas, and to our editor Susan Barry of John Wiley & Sons, Inc.

> Vaughan Merlyn John Parkinson Boston, 1993 Dallas, 1993

Authors' Note

Those who believe the challenges of effective development are all technological, and that the solutions lie in new technologies, will be disappointed in this book's light treatment of technology. This is, however, deliberate. There are many excellent sources of material about new and emerging technologies. We believe that it is the process and people implications of new technology that are typically short changed, both by IS management, and by the literature. We have therefore chosen to focus this book on these aspects.

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