

## *The Intelligence Advantage* *Organizing for Complexity*

*Michael D. McMaster (Butterworth Heinemann, 1996)*

Michael McMaster's intention in writing this book is to explore the possibilities of human organization. To do so, he presents and draws on recent ideas from advances in philosophy, science and technology. Written in a lively, down-to-earth style, the book blends complexity theory with postmodern thought to provide readers with useful and understandable organization design principles, metaphors and analogies as well as effective management and work practices. His book presents a new and sufficiently complete theory of organizations that is consistent with contemporary thinking and provides a framework for approaching fundamental challenges facing corporations today.

At the basis of this book is a successful combination that blends the science of complexity with approaches to dialogue, inquiry and the nature of human existence from interpretive philosophy. The author suggests that we may be witnessing the end of an era. Approaches developed during the industrial age are being displaced, yielding to theories and ways of thinking emerging from an awakening to new levels of understanding in the areas of complex systems, intelligence, information theory and language. This Age of Information (or Age of Knowledge) is unfolding rapidly and we are all part of it. Unfortunately, the author suggests, most of us are not aware of just how fundamental the shift is, nor how to develop organizations and actions to match it adequately.

Drawing on a diverse set of fields, including language, philosophy, physics, and even computer science, scientists are moving towards an integration. They are opening doors to new levels of understanding by exploring biological entities as creators of information and influencers of the ecology in which they live. This perspective is beginning to inform views of society as well, and at multiple levels of structure: individuals, corporations and governments.

The book is divided into four main sections, beginning with an introduction to complexity theory and then exploring the basis of a new organ-

ization theory based on it. In the third section, devoted to organizational applications, the author helps us understand this new theory by applying it to the main questions confronting corporations today. The book concludes with a discussion of how to move beyond theory to practice.

The first section of the book provides the foundation for new thinking and outlines an approach to organizations that views them as independent entities with their own intelligence. It introduces complexity theory, discusses the nature of intelligence, and establishes the context for a new theory of organization, underlining the importance of this new theory for operational success. It also draws attention to the importance of language for the development and application of new ideas within a culture. The second section translates the new thinking into fundamental principles which form the basis for a new theory of organization. Pointing to the challenges inherent in breaking with the past, it addresses issues fundamental to the design and management of human organizations: leadership, learning and freedom.

The third and fourth sections explore the transformation process that comprises part of the journey from an organizational design based on principles from the Industrial Age to those based on the Information Age. The main strategic questions facing managers today are dealt with: how to meet the challenges of rapid change and increased competition; how to continually expand what is possible for the firm; how to create structures to match fast-changing markets with intelligent action; and how to harness the drive and intelligence of every human being in the corporation. In his elaboration of how to move beyond theory to practice, the author explains how to distinguish different phases of an organizational transformation process, and discusses the personal challenges that leaders of such transformations will confront as they think, speak and act. The author also underlines the importance, and power, of a leader's declaration of a period of transition in order to provide a context for change.

McMaster achieves his objectives in this book. It is clear and easy to read, with ideas presented and analyzed in a simple, readily understandable way that stands in contrast to other books on similar topics. It is a very good popularization of "new paradigms" in philosophy and management. Those new to ideas linking complexity and management will appreciate it and it is an excellent book for them. On the other hand, those with more experience in this area as well as academic researchers should not hope to find new insights. But managers will find throughout

it intelligent and useful tools to guide their actions. These marry quite well concepts from the study of complexity and organization science, and are supported by examples and illustrations from empirical studies. Based on this book, the application of insights from the study of complexity to organizations looks very promising indeed.

MICHEL SALOFF-COSTE (EDITED BY STEVE MAGUIRE)

*Life at the Edge of Chaos*  
*Creating the Quantum Organization*

Mark D. Youngblood (*Perceval*, 1997)

James Gleick, in his landmark book *Chaos*, argues that, at least in the view of some scientists, twentieth-century science will be remembered for just three things: relativity, quantum mechanics and chaos. He goes on to argue that of the three, only chaos theory applies to the world we can see and touch—the universe of objects at a human scale.

In a vibrant, almost evangelical new book, Mark DYoungblood draws on a combination of insights from complexity science (a branch of chaos theory) and the experiences of a vast number of business practitioners to create a new framework for analyzing and understanding the problems involved with organizational change. Youngblood's book is ambitious, and he describes himself as something on the order of a businessman's Joseph Campbell. He attempts to tackle the issues of organizational change not merely within the business organization, or even within certain specific types of organization, but instead venturing across the entire spectrum of human endeavor. His analysis ranges from the individual and the family through the business enterprise to society as a whole and its major issues of public policy.

The book is easily accessible to the lay reader, and while it does not contain much in the way of actual science, it is nonetheless a valuable new look at organizational change for the average manager. Where Youngblood really draws his intellectual roots is not so much from chaos theory or complexity studies, as from the philosophical school of thought which evolved out of Henry Sheffer's study of symbolic logic at Harvard