Chaos, Complexity and Leadership 2013
Springer Complexity

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More information about this series at http://www.springer.com/series/11637
I commemorate all the days of my mother, Mübeccel Erçetin that teaches me;
to be as strong as to burn the ships, the ports and me at time and to build up ships, ports thousands times with the remaining sides of me;
to live with pain, happiness, burden, responsibility, accident, mishaps, and everything in life;
not to be overwhelmed by the fear of which I have the most although almost nobody has it;
not to ask for anything that I do not deserve; and to get happiness and love, feel it and to re-present it in a new fresh way...

To, My mother, things we lost in love, things we lost in fire!

Şefika Şule Erçetin

To Prof. Kamel Ariffin Mohd Atan

Santo Banerjee
Preface

This book is one of a series of best chaos and complexity in leadership evidence-based syntheses commissioned by the International Science Association. It is part of a commitment to strengthen the chaos and complexity in the leadership evidence base that informs operations of the various knowledge and academic fields in view of science, leadership, politics, economics, and education in the academia and the knowledge society in general. It aims to contribute to an ongoing evidence-based discourse amongst policy makers, educators, and researchers in the academia regarding chaos and complexity in leadership in the contemporary world.

The need to ensure high quality leadership has become one of the dictates of the knowledge society. The framework for effective leadership underscores the importance to provide adequate initial leadership education, continuous professional development for leaders and trainers, and to make leadership an attractive career choice for all people of different walks of life.

In this structural context, we are pleased to present the 2013 edition of Chaos and Complexity in Leadership of the Springer publication, which gives an exhaustive picture of researches relating to the leadership dimension from various walks of knowledge bases. It examines important aspects of chaos and complexity and how they relate to the distinct forms of knowledge ranging from science to humanities or arts.

Chaos and complexity in Leadership makes a valuable contribution to the debate on the plight of leaders and academics alike at both the theoretical and practical levels. Based on studies conducted through varying research models abound, the book provides standardized and readily comparable quantitative and qualitative perspectives which offer a wide-ranging overview of key issues related to chaos and complexity in leadership at all levels.

Chaos and complexity has also wide applications in the field of science and engineering. Especially in control and communication, it has significantly increasing amount of research in the last two decades.

Many social phenomena can be modeled into nonlinear systems; the corresponding dynamics are highly complex and chaotic in nature. Some social models are not in completely disorder but highly nonlinear in nature and are on the
edge of chaos. The nonlinear nature can be observed in social networks, opinion formations, models for business cycles, democratic voting, arms races, etc.

The content of the book is twofold. We have a small part of the applications of chaos and complexity in science, engineering, and other fields. The rest are the dynamics in leadership.

We recommend chaos and complexity in leadership to all practitioners and policymakers affiliated to the field of leadership mainly. We are confident that the volume will be of great use to those responsible for designing policies and those charged with implementing them. We are indebted to our esteemed researchers for having accorded Chaos, Complexity, and Leadership the due and timely attention they merit and so exhaustively at that.

Enjoy reading through

Turkey

Malaysia

Şefika Şule Erçetin

Santo Banerjee
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Chapter 1
Solution to Chaotic Situations in Higher Education: New Generation Universities as Intelligent Organizations

A. Murat Tuncer and Şuay Nilhan Açıkhan

Abstract Higher education institutions have been affected by three major developments since 1980s: globalization, growing requirements to lifelong learning and fast and intense developments in information and communication technologies. In this chapter we focus on technology, chaos, new generation and how they interact each other. We try to answer the question of whether new generation universities as intelligent organizations could be a solution to the current chaotic situations of universities or not? New generation was born in a technological world and hence are substantially different from the generations before them. Now, in the twenty-first century, all organizations, whether it to be on the macro scale such as nations or the micro scale such as universities, are trying to find ways of overcoming the challenges created by the technological revolution. At the individual level, researchers, analysts, presidents alike try to create new solutions to deal with these challenges by multidimensional cooperation. The most important characteristic of new generation universities is that they are intelligent organizations. In this chapter, we discuss new generation universities as intelligent organizations on five dimensions as solution to cope with research and development challenges (1) Research and development; (2) teaching, virtualization, mobility; (3) professionalization; (4) organizational culture; (5) glocal citizenship; (6) publication level.