LEADING AND MANAGING CHANGE IN THE AGE OF DISRUPTION AND ARTIFICIAL INTELLIGENCE

MATHEW DONALD

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Praise for Leading and Managing Change in the Age of Disruption and Artificial Intelligence

> With *Leading and Managing Change in the Age of Disruption and Artificial Intelligence* Mat Donald has provided us with a much-needed management primer for the new economy. He effectively updates much of traditional management logic for a world that is characterized by dramatic change. A must read!

Leonard Schlesinger, Baker Foundation Professor, Harvard Business School and President Emeritus, Babson College

> We are beginning to understand change dynamics in fairly stable environments, but these principles break down in disruptive environments. Along comes Donald to provide the critical information needed to extend our understanding about how to effectively bring about change in disruptive environments, which are increasingly what organizations face in today's global society.

Eric B. Dent, Ph.D., Uncommon Friend Endowed Chair Professor, Florida Gulf Coast University

> This is an impressive and well-written book that is both thought-proving and eminently practical. We live in an age of disruption and, whether you lead or study organisations, this book will help you to understand its implications and how to manage the challenges it poses.

Bernard Burnes, Chair of Organisational Change, Stirling Management School, University of Stirling

> This book adapts organisational management and leadership to the modern age, where change is constant and affecting the way organisations operate. This book will be of benefit to anyone wanting to consider the future of organisational management and change.

Jens Mueller, Professor of Management Practice, Massey University

> We are living in a VUCA world; volatile, uncertain, complex and ambiguous. A time in which we may see and feel a shift of paradigms. This book describes global transitions which are influencing our businesses worldwide. Mat Donald points out global issues such as EU destabilization, rebalancing world powers, financial trade barriers and the influence of technology. These changes cannot be managed in a traditional and linear 'cause and effect' manner. Leadership in the new age requires skills that are more holistic, dialogic and take a systems and design thinking approach where the left and right brains act together. This book is excellent for students, managers, leaders and management consultants who work, or are starting to work, in an international business environment and want to understand 'a world that is on the move'.

Jos Pieterse, Ph.D., Institute of Business Management, Education and Technology, Hogeschool Fontys

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BY

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Emerald Publishing Limited
Howard House, Wagon Lane, Bingley BD16 1WA, UK

First edition 2019

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British Library Cataloguing in Publication Data
A catalogue record for this book is available from the British Library

ISBN: 978-1-78756-368-1 (Print)
ISBN: 978-1-78756-367-4 (Online)
ISBN: 978-1-78756-369-8 (Epub)

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With thanks to my family that have supported and encouraged me to complete this journey, being that of my wife, Louanne, and my sister, Kathryn Donnelly. Special recognition to my beloved Grandmother, Beryl Castledine, remembered as one that encouraged my academic thirst for knowledge from the youngest of age.

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Contents

List of Figures *xi*

List of Tables *xii*

Abbreviations *xiii*

About the Author *xv*

Preface *xvii*

Chapter 1 Introduction *1*

What is Disruption? *3*
Why is Disruption Important? *7*
What is Artificial Intelligence? *10*
What AI Has to Do with Organisations of the Future? *11*
Organisational Survival in the New Age *14*
Recap and Thinking Extension *18*
Summary *18*

Chapter 2 Organisational Impacts from Disruption *21*

Global Political Change *23*
UK and Brexit *23*
Trump *26*
Germany, France and European Community (EU) *30*
China, Russia and North Korea *32*
Middle East: Iran, Iraq, Syria and Turkey *34*
Trade and Defensiveness *36*
Financial Market Change *37*
Monetary Change and GFC: Prices and Market *38*
Cryptocurrencies and Emerging Currencies *39*
Currency Risk *40*

Climate Change 41
Resource Management 42
Property and Staff 44
Power Alternatives and Associated Costs 44
Technological Change 45
Scams 45
Smartphones and Technology 46
Technological Integration and Ease 47
Organisational Change in Global Organisations 47
Communication 48
Cross-cultural Mixes 50
Cohesion and Integration 50
Wiki and Impacts on Organisational Control 51
Knowledge Mobility 51
Employee Change 52
Knowledge and Skills Changes 53
Attitude Changes and Generational Imbalances: X, Y and Millennials 53
Work-life Balance Changes 54
Summary 55

Chapter 3 Organisational Implications of Artificial Intelligence 57

AI and Human Interactions 58
AI–AI Interactions or Communication 61
AI Creativity 62
Androids, Auto-updates and Model Changes 64
Communication and Information 66
Workplace Standards and Collective Bargaining 68
Organisational Structures with AI 69
Service and Maintenance: Trades Requirements 70
Version Controls and Advancement 71
Organisational Improvements 72
Summary 73

Chapter 4 Leading Organisations in the New Age 75

Leadership Fundamentals 75
Communication 80
Trust 86
Innovation 89
Transformational Leadership 91
New Age Pressures on Leadership 91

Chapter 5 Managing Organisations of the Future *93*

Management Fundamentals *93*
Strategic Management *95*
Stakeholder Management *102*
Market Management *104*
Operations and Project Management *108*
Human Resource Management *113*
Risk Management and Control *116*
Summary *120*

Chapter 6 Organisational Implications *121*

Strategy *121*
Structures and Processes *127*
Market Dynamics *131*
Staff Requirements *133*
Customer Service *140*
Summary *141*

Chapter 7 Organisational Change, Tools and Measures *143*

Change Factor Research *143*
Disruption Register *152*
Corporate Social Responsibility (CSR) *158*
Governance and Ethics *159*
Cultural Change *161*
Leadership and Management in the New Age *163*
Summary *167*

References *169*

Index *193*

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List of Figures

Figure 5.1. Proposed New Age Strategy Process. 100
Figure 5.2. Operational Cycle. 109
Figure 6.1. Strategy Iterative Gate Process (SIGP). 126
Figure 7.1. Positive Change Factors Frequency. 145
Figure 7.2. Negative Change Factors Frequency. 145
Figure 7.3. Positive and Negative Interview. 146
Figure 7.4. Word Similarity Clusters – Positive Factors. 147
Figure 7.5. Word Similarity Clusters – Negative Factors. 147

List of Tables

Table 4.1.	Leadership Qualities Assessment Table (LQAT).	79
Table 4.2.	Communication Regularity Table (CRT).	82
Table 4.3.	Communication Style Table.	83
Table 4.4.	Leadership Innovation Assessment Tool.	90
Table 5.1.	Strategic Management Technique Checklist.	97
Table 5.2.	New Age Stakeholder Assessment Table (NSAT).	105
Table 5.3.	New Idea Generation Function.	113
Table 5.4.	Risk Register Table.	117
Table 6.1.	New Age Strategy Assessment Tool (NASAT) For Ai/Robotic.	124
Table 6.2.	Staff Considerations for New Age.	136
Table 6.3.	Individual Change Skills Table.	137
Table 6.4.	Skills Assessment Tool for New Age (SATNA).	138
Table 6.5.	SATNA Example – Low-impact Change Role.	138
Table 6.6.	SATNA Example – High-impact Change Role.	139
Table 7.1.	Survey Data Cronbach's Alpha – Post-optimisation.	148
Table 7.2.	Independence Test – Management Association.	148
Table 7.3.	EFA Component Matrix.	149
Table 7.4.	EFA KMO and Bartlett's Test.	150
Table 7.5.	Factor Correlation Matrix.	150
Table 7.6.	Disruption Event Monitoring Table or Disruption Register – Part I.	155
Table 7.7.	DEMT or DISRUPTION Register– Part II.	156

Abbreviations

- Australian Securities Exchange (ASX)
- Australian Institute of Project Management (AIPM)
- Security Exchange Commission (SEC)
- Artificial Intelligence (AI)
- Business to Business (B2B)
- Business to Customer (B2C)
- Change Management Tool (CMT)
- Chief Information Officer (CIO)
- Compact Disk (CD)
- Confirmatory Factor Analysis (CFA)
- Corporate Social Responsibility (CSR)
- Disruption Event Monitoring Table (DEMT)
- Electronic Funds Transfers (EFT)
- Enterprise Resource Programmes (ERP)
- European Union (EU)
- Exploratory Factor Analysis (EFA)
- Global Financial Crisis (GFC)
- Global Positioning Systems (GPS)
- Group of Seven (G7)
- Human Resource Management (HRM)
- Information Technology (IT)
- Intellectual Property (IP)
- Just in Time (JIT)
- Key Performance Indicator (KPI)
- Kaiser-Meyer-Olkin Measure of Sampling (KMO)
- Leadership Qualities Assessment Table (LQAT)
- Net Present Value (NPV)
- New Age Function (NAF)
- New Age Stakeholder Assessment Table (NSAT)
- New Idea Generation (NIGF)
- Non-Government Organisations (NGO)
- North American Free Trade Agreement (NAFTA)
- North Atlantic Treaty Organization (NATO)

- Programmable Logic Controller (PLC)
- Project Management Office (PMO)
- Resistance to Change (RTC)
- Trans-Pacific Partnership (TPP)
- United States Dollars (USD)
- Universal Serial Bus (USB)

About the Author

The author, Dr. Mat Donald, has over 30 years of business experience, commencing in chartered accounting performing audit and company accounting, advisory work. Once leaving chartered accounting, the author's career moved into industry where he has worked in a number of large multinationals in Fast Moving Consumer Goods, Construction, Services, Electricity generation and Mining. He has held various senior management roles including Divisional Accounting Manager, Commercial Manager and Financial Controller in a variety of listed ASX and SEC organisations amongst others. Whilst well experienced in the multinational, the author also has experience in small privately owned organisations, thus providing unique insight into large and small organisations.

The breadth of the author's experience provides a unique insight into organisational operations that will be relevant to a wide variety of readers, irrespective of their functional background or experience level. The author completed a Bachelor of Economics (Major Accounting) at Macquarie University in Australia and has qualified as a Fellow of CPA Australia. The author has significant interest in improving organisations in both an operational and academic context. In 2010, the author has completed a Master of Project Management (Distinction Average) at The University of Adelaide, where he has since qualified as a Member of the Australian Institute of Project Management. In 2018, the author received a Ph.D. (Business) at Western Sydney University, researching leadership, management and organisational change.

Since completing the Ph.D. (Business), the author has emerged as an academic, qualifying to teach at three Australian Universities, including subjects of management, leadership, accounting, business strategy and international business. In 2018, the author taught Management with Charles Sturt University and in 2017 tutored in accounting at Macquarie University. The author has presented at IQPC conferences, more recently presenting conference papers to the Australian Institute of Project Management (Donald, 2014, 2016). The author is a regular contributor in LinkedIn online forums, also having an article published with *The Conversation* (Donald, 2018). The topics that the author regularly promotes are related to organisational change, Management, Leadership, discrimination and ageism, where he is regularly available for key note and other speaking opportunities.

The author's experience in organisational change has included mergers, acquisitions, computer implementations, process, large projects and business improvement. The Ph.D. research of the author included in-depth interviews with senior

change managers that confirmed his held belief that change is generally still not delivered in an optimal way. There are many published guides and now elaborate qualifications towards change; yet, all too often, the change is either unsuccessful or damages staff relations in the rush to complete. It is clear to the author that a new age of change is ahead, where more thought and understanding is required on the topic.

Preface

Whilst there has been considerable change to organisations in the last 30 years, a new age of change is ahead. It is now evident that the resulting change will be faster, more complex and less predictable than in the past. The dynamic of organisational change will have implications for the way leaders build organisations, teams and business plans, as the change ahead will be assisted by globalisation. Managers will need to manage change in a time when the future is less predictable, speed is increasing and information is more available in large quantities. Whilst the artificial intelligence (AI) may replace many workers the roles, the reduction in staff ratios will likely pose new challenges to the traditional manager. As leadership and management are critical factors to organisational change success (Donald, 2014, 2016), the new age of disruption and the AI has the potential to disrupt organisational systems, structures and management practices.

This is a broad-based book for those in leadership and management roles of the future, where the issues ahead will be immediate and broad. The book is written in way that is relevant to managing and leading irrespective of one's technical or functional background. This book will be useful to those in a variety of management roles of many functions including medicine, operations, engineering, finance or many other backgrounds. Some industries may be more exposed to the AI than disruption, especially where the roles are repeatable, labour intensive or require precision and fast knowledge. Disruption is emerging from a number of broad sources that the manager of the future may need to consider in order to prevent chaos or failure in their organisations. This book provides modern insights into emerging issues and provides critical thinking about options and directions.

The breadth of this book will be useful for a wide range of professionals, be they experienced or not, wishing to understand how roles may change in the modern age ahead. The topics covered by this book will be useful for students studying management, leadership, change, economics, accounting, engineering, human resources and many others. Future and current organisational leadership and management will benefit from the appreciation and critique of modern events in this book, where critical thinking is included. Organisations will likely be impacted by disruption and the AI in the future, where preparation and appreciation of these phenomena are relevant to organisational survival irrespective of organisational type or size.

The change in the new age will require managers, leaders, professionals and students to appreciate that the challenges ahead will likely be varied, fast moving and difficult to solve. Organisations that fail to change at an appropriate speed

in a suitable manner may be vulnerable to error or even failure. The industrial revolution of the nineteenth century saw whole industries evaporated in just a few decades, where change of the future may even be much faster. The forecast is not all negative, as opportunities will present for those able to identify and take advantage. Whilst some practices may need to change in the future there is still much of the past 70 years of research and knowledge on the topics that remain relevant.

Disruption events are explored in this book so as to expose and inform business owners, leaders, managers and entrepreneurs of future issues to consider. Changes of the new age may increase the type and speed over time, creating changes to organisational responsibilities of those in governing positions and on boards. A higher degree of oversight may be required as management will be required to be abreast of big data, information and change, where fast uninformed or ill thought decisions may likely diminish value and organisational success. It will be important for governance and boards to ensure that authority delegations are appropriate and clear, whilst ensuring that processes are not slow, bureaucratic of hinder prompt decision making. The controls in the new age will need to increase accountability, provide appropriate rewards for outcomes rather than promises.

This book commences with a discussion of disruption, which is far broader topic than merely new computers or technology. Chapter 3 explores how the AI is emerging and may lead to large scale loss of jobs, occupation and even whole industries. Those with leadership or management experience will find this book refreshing through its exploration of current organisational dilemmas. The book is useful for the experienced manager, business owner or the student wishing to understand current topics in organisational change, leadership and management. This book does not prescribe simple solutions for the new age as likely the future forward will include thought provoking critical thinking as the predominant tool for the future. The use of critical thinking will enable the practitioner and student to identify alternatives, evaluate and choose rational decisions. Solutions and directions of the future will likely be limited by fast-paced time constraints, varying reliability of information and limited resources. These restrictions to decision making will ensure that any one strategy is unlikely will be unique, optimisable, stable or be long lived.

This book is unique on the market as it provides the broad knowledge of leadership and management topics in the context of organisational change in the new age. Included herein are tools, tables and analysis that may assist the student and the experienced manager prepare organisations for the future. There is unlikely to be a clear path forward for any organisation as the change ahead is complex and fast, aided by the interconnectivity of globalisation and new communication forms. Organisations may require new skills and more focus on the external or political environment than ever before, where an introspective approach may not be sustainable in the new age.