ACCELERATING ORGANISATION CULTURE CHANGE

ACCELERATING ORGANISATION CULTURE CHANGE

Innovation through Digital Tools

DR JACLYN LEE

Singapore University of Technology and Design, Singapore



United Kingdom – North America – Japan – India Malaysia – China Emerald Publishing Limited Howard House, Wagon Lane, Bingley BD16 1WA, UK

First edition 2020

Copyright © 2020 Emerald Publishing Limited

Reprints and permissions service

Contact: permissions@emeraldinsight.com

No part of this book may be reproduced, stored in a retrieval system, transmitted in any form or by any means electronic, mechanical, photocopying, recording or otherwise without either the prior written permission of the publisher or a licence permitting restricted copying issued in the UK by The Copyright Licensing Agency and in the USA by The Copyright Clearance Center. Any opinions expressed in the chapters are those of the authors. Whilst Emerald makes every effort to ensure the quality and accuracy of its content, Emerald makes no representation implied or otherwise, as to the chapters' suitability and application and disclaims any warranties, express or implied, to their use.

British Library Cataloguing in Publication Data

A catalogue record for this book is available from the British Library

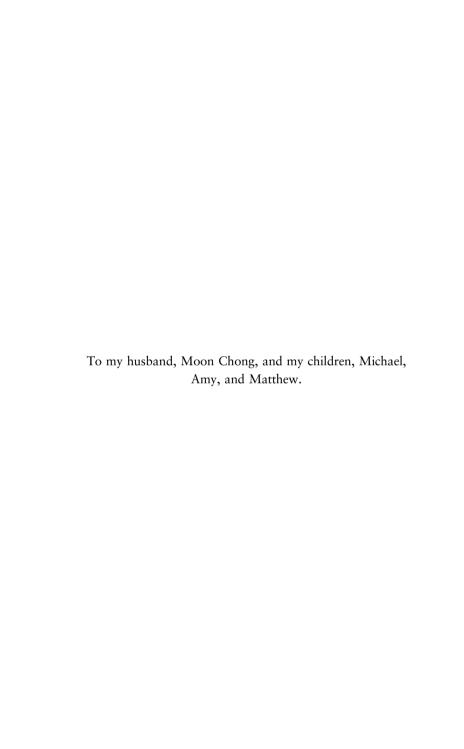
ISBN: 978-1-78973-968-8 (Print) ISBN: 978-1-78973-965-7 (Online) ISBN: 978-1-78973-967-1 (Epub)



ISOQAR certified Management System, awarded to Emerald for adherence to Environmental standard ISO 14001:2004.

Certificate Number 1985 ISO 14001





CONTENTS

isi	t of Figures	xiii
isi	t of Tables	xvii
re	eface	xix
40	knowledgments	XXI
١.	Change in the Digital Age	1
	1.1 Importance of Culture in Digital Transformation1.2 My Research Work in the Area of Digital Tools	2
	for Culture Change	4
	1.3 Rapid Digitization and Advent of Industry 4.0	5
	1.4 Future of Jobs	9
	1.5 Workforce Planning	13
	1.6 Role of Leaders in Digital Transformation	18
	1.6.1 A Visionary Mindset and Change	
	Management Capability	19
	1.6.2 Capabilities to Manage Multi-disciplinary	
	Teams	19
	1.6.3 Ability to Manage and Communicate in	
	Various Media Forms	20
	1.6.4 Ability to Develop Computational Thinking	
	Capabilities	20
	1.6.5 Harnessing Innovative and Adaptive	
	Thinking	21
	1.7 Culture as the Catalyst for Change	21

viii Contents

2.	Org	anisational Culture and Change Management	23
	2.1	Definition of Organisational Culture	23
	2.2	Cultural Alignment	25
	2.3	Organisational Change Management	26
	2.4	Barriers to Culture Change	30
	2.5	Managing Culture Change in Major	
		Transitions Using the Eight-step Model:	
		The Certis CISCO Story	37
	2.6	Culture Instruments	42
		2.6.1 The Competing Values Framework	43
3.	Acce	elerate Culture Change Through Digital Tools	45
	3.1	Introduction to Digital Tools for Culture Change	45
	3.2	Collaboration and Culture Conversations	47
	3.3	Digital Tools Used for Collaborative Decision	
		Making	48
	3.4	Structured Process in the Use of Digital Tools	49
	3.5	Features of a Culture Brainstorming Tool	51
4.	A Di	igital Toolkit for Culture Acceleration: CATM	53
	4.1	Introduction to CATM	53
	4.2	Competing Values Framework and OCAI	55
		4.2.1 The Competing Values Framework	57
		4.2.2 The Organisational Culture Assessment	
		Instrument	60
		4.2.3 The Six Dimensions of Culture	61
		4.2.4 How Is OCAI Used?	61
	4.3	Group Decision Support System	
		(Digital Brainstorming)	62
	4.4	How Does GDSS Work?	68
		4.4.1 Decision Rooms	68
		4.4.2 Usability	71
		4.4.3 Effective Utilization of the GDSS	72
		4.4.4 Facilitators and Group Systems Support	72

Contents ix

	4.4.5 Current GDSS Technologies	73
	4.5 Design Principles of CATM	73
	4.5.1 Introduction to Design Theories	
	Underpinning CATM	75
	4.5.2 Action Research	78
	4.5.3 Design Science	80
	4.5.4 Overlap of AR and DR	87
	4.5.5 Action Design Research Methodology	88
	4.5.6 Key Features and Capabilities of CATM	91
	4.5.7 Framework of CATM Using ADR	94
	4.5.8 Design Iterations	98
	4.5.9 Prototype Evaluation	114
	4.5.10 Digital Tool Evaluation Methods	115
5.	Developing a Culture of Innovation: The Singapore	
	University of Technology and Design Story	119
	5.1 Background	119
	5.2 Phase 1 of the Culture Project	125
	5.2.1 Problems Observed	126
	5.3 Deployment of CATM in SUTD	128
	5.4 Screenshots of CATM	129
	5.5 Response and Profile of Survey Participants	130
	5.5.1 Participation Rates	131
	5.5.2 Participant Profiles	132
	5.6 Results on Efficiency of CATM versus Manual	
	Method	133
	5.7 Description of Data about Culture Change	
	Using CATM	134
	5.7.1 Validity and Reliability of the OCAI	
	Instrument Used in the SUTD Culture	
	Project	135
	5.8 Results of Organisation-wide OCAI Scores	136
	5.8.1 Results of Each Stakeholder Group	137

x Contents

	5.8.2 Diagrammatic View of Perceived Current	
	Culture by All Stakeholder Groups	142
	5.8.3 Diagrammatic View of Desired Culture by	
	All Stakeholder Groups	143
	5.8.4 Perception of Culture by Regions	144
	5.8.5 Results on Four Orthogonal Cultural	
	Dimensions	145
	5.8.6 Perceptions of Each of the Six Dimension	
	of Culture	146
	5.9 Description of Culture Change Using CATM	150
	5.9.1 Session 1: Pilot Testing with the Senior	
	Management Team (22 Participants)	151
	5.9.2 Session 2: Pilot Testing with Staff Members	152
	5.9.3 Session 3: Pilot Testing with Faculty	153
	5.10 Validation of CATM	153
	5.11 Implementation Outcomes of Ideas Generated	
	from CATM	155
	5.12 Success from 2014 to 2019	159
).	Managing Culture Change in a Technology Set-up	
	Using CATM	163
	6.1 Introduction of Mr Tan Tse Yong, the Accidental	
	Entrepreneur	163
	6.2 Interview with Mr Tan Tse Yong on the	
	Effectiveness of CATM	166
	6.3 Results of Using the CATM Tool in a Tech Start-up	168
	6.3.1 Digital Brainstorming Sessions	168
7.	Future of Digital Tools in Change Management	173
	7.1 Digital Platforms for Change Management	173
	7.2 Future State of Work	174
	7.3 Future of Collaborative Tools	176
	7.4 Putting the Human Back into Employee	
	Communications	178

Contents xi

7.4.1 Interview with Dr Jovina Ang, Managing	
Director of Communications	179
7.5 Other Thoughts from Digital Leaders	181
7.6 What's Next in the Future of Culture Change	182
References	
Index	203

LIST OF FIGURES

Figure 1.1	The Future of Jobs.	10
Figure 1.2	What Is Really Happening.	11
Figure 1.3	Ranking of Singapore in the Automation Readiness Index.	12
Figure 2.1	The Eight Steps to Culture Change.	27
Figure 4.1	Architecture of CATM.	54
Figure 4.2	Competing Values Framework (CVF).	59
Figure 4.3	The Action Design Research Model.	90
Figure 4.4	Organisation-dominant BIE in the CATM Project.	98
Figure 4.5	Design Iterations.	99
Figure 4.6	Process Flow for Enabling Group Discussion on Culture Change Using CATM.	113
Figure 5 1		129
Figure 5.1	Entire Process Flow of the OCAI Survey.	129
Figure 5.2	The Initial Message from the First and Founding President of SUTD.	130

xiv List of Figures

Figure 5.3	Process Flow for Enabling Group Discussion on Culture Change Using	
	CATM.	131
Figure 5.4	Participation Rates.	131
Figure 5.5	Total Number of Participants.	132
Figure 5.6	Results of Organisational-wide OCAI.	136
Figure 5.7	OCAI Graph for Senior Management Group.	138
Figure 5.8	Results of OCAI Graph for Staff Group.	139
Figure 5.9	Results of the OCAI Survey for Faculty.	140
Figure 5.10	Results of the OCAI Survey for Students.	141
Figure 5.11	Estimated Mean Scores of Each Category on Current Culture.	142
Figure 5.12	Estimated Mean Scores of Each Category on Desired Culture.	143
Figure 5.13	Estimated Means Score of Each Region on Current Culture.	144
Figure 5.14	Estimated Means Scores of Each Region on Desired Culture.	145
Figure 5.15	Usefulness of CATM.	154
Figure 5.16	Ease of Use of CATM.	154
Figure 5.17	Ease of Learning CATM.	154
Figure 5.18	Overall Satisfaction with the CATM.	155
Figure 5.19	Balloons Adorning Family Day 2019.	160
Figure 5.20	Miss Evelin Tay – Associate at ASD Pillar.	161

List of Figures xv

Figure 6.1	Mr Tan Tse Yong.	163
Figure 6.2	Results of Overall Culture Survey for FITLION	169
Figure 6.3	Results of Digital Brainstorming Session 1.	170
Figure 6.4	Results of Digital Brainstorming Session 2.	171
Figure 7.1	Talent Market and Work Arrangements.	176
Figure 7.2	Dr Jovina Ang.	179
Figure 7.3	The Four Key Values of Digital Culture.	184

LIST OF TABLES

Table 1.1	Algorithm Wave, Augmentation Wave, and Autonomy Wave.	7
Table 1.2	In Demand Skills in Al, Automation and Technology as of 2019.	14
Table 4.1	Group Process Losses.	63
Table 4.2	Key Findings from Group Processes (Intervention Studies).	74
Table 4.3	Components of a Design Theory for Managing Risk as Illustrated in Software Development.	84
Table 4.4	Summary of the ADR Process in the Culture Acceleration Tool and Methodology (CATM).	95
Table 4.5	Methodology for Software User Testing.	115
Table 5.1	The Vision and Design of SUTD Contrasted with Those of Traditional Universities.	122
Table 5.2	Percentage Distribution of Nationality of Participants.	132
Table 5.3	Length of Service of Participants.	133
Table 5.4	Results with Respect to Efficiency.	133

xviii List of Tables

Reliability Results.	136
OCAI Numerical Results for Overall Culture.	137
OCAI Scores for Senior Management Group.	138
OCAI Results for Staff Group.	139
OCAI Results for Faculty.	141
OCAI Scores for Students.	142
Summary of Current Cultural Dimension as Perceived by Different Stakeholder Groups.	145
Summary Table Outlining the Desired Cultural Dimension for Different Stakeholder Groups.	146
The Six Dimensions of Culture.	147
Perceptions of the Six Dimensions of Culture by Different Stakeholder Groups.	149
Table of Change Ideas from Staff (In Verbatim).	152
Table of Change Ideas from Faculty.	153
Dimensions of Culture.	169
	OCAI Numerical Results for Overall Culture. OCAI Scores for Senior Management Group. OCAI Results for Staff Group. OCAI Results for Faculty. OCAI Scores for Students. Summary of Current Cultural Dimension as Perceived by Different Stakeholder Groups. Summary Table Outlining the Desired Cultural Dimension for Different Stakeholder Groups. The Six Dimensions of Culture. Perceptions of the Six Dimensions of Culture by Different Stakeholder Groups. Table of Change Ideas from Staff (In Verbatim). Table of Change Ideas from Faculty.

PRFFACE

After completing my PhD in 2015, I wondered what was next for me. Should I just place the Doctoral Certificate on a shelf and dust if off every few years? I knew that was not what I wanted. After a few months of deliberation, I decided I should use my knowledge to help make a difference to the industry and to the profession in which I work.

I started writing columns on LinkedIn and also began sharing the results of my PhD work at conferences. The more I wrote, the more people gravitated toward my words and my sharing. Soon, my LinkedIn followers increased substantially and many Human Resource (HR) professionals, students, and mid-career professionals began approaching me seeking advice on their careers, as well as professional advice in the areas of HR, Data Analytics, Organizational Development (OD), and Culture. I also began working with many Small to Medium Enterprise (SME) owners to help with their culture transformation journeys.

A full four years after my Doctorate on Digital Culture Change, I've garnered many new experiences from these interactions and decided to put my ideas together with my research into a new book called *Accelerating Organisation Culture Change*.

This book contains elements of my research as well as experiences I've gained along the way, together with

xx Preface

interviews and insights from CEOs and other seasoned professionals with whom I've interacted over the years.

I hope you will find this an inspiration, and the sharing will help you in your culture transformation journey.

ACKNOWLEDGMENTS

This book is the result of my research and work in the area of digital tools for culture change. Many people made this research and book possible and I would like to acknowledge and thank them for their guidance, coaching, support, and wisdom in the process.

Firstly, I would like to thank Professor Kuldeep Kumar who has been my inspiration in doing this work. He spent tireless evenings working with me and guiding me in my research and I learnt so much from him. Professor Jos Hillegersberg, who is my other promoter, is someone I am forever grateful for giving me the opportunity to enroll in the University of Twente as a PhD candidate and for teaching me all I need to know about ADR.

Others who have made this book possible are my HR team at SUTD, particularly Adeline Wang and Sharon Yeo, who worked tirelessly with me throughout the years to test out the digital toolkit and made it work.

Lastly, my grateful thanks to Professor Thomas Magnanti, President Emeritus of SUTD, who gave me support for this research and Professor Chong Tow Chong, my current President, who encouraged and gave me the room to experiment within SUTD.