Table of Contents

Part I: Quality of Working Life

New Ways of Working: A Proposed Framework and Literature Review	3
Merle Blok, Liesbeth Groenesteijn, Christiaan van den Berg, and Peter Vink	
Beyond the Technology Acceptance Model: Elements to Validate the Human-Technology Symbiosis Model	13
The Interaction Effect of Posture and Psychological Stress on Neck-Shoulder Muscle Activity in Typing: A Pilot Study	22
Management Standardization versus Quality of Working Life	30
Human-Computer Interaction in Office Work: Evaluation of Interaction Patterns Using Office Equipment and Software during Data Entry and Navigation	40
Preventive and Pro-active Ergonomics Influence on Maintenance Excellence Level	49
Effects of Meeting Room Interior Design on Team Performance in a Creativity Task	59
LED Office Lighting to Promote Performance and Well-Being Katrin Moeller, Vincent Grote, Katharina Keller, Dieter Lorenz, Maximilian Moser, and Tran Quoc Khanh	68
Is the Presence of a Companion Animal Dog Beneficial for Computer Operators?	78
Analysis on Flight Fatigue Risk and the Systematic Solution	88



Part II: Health and Well-Being

Healthcare and Security: Understanding and Evaluating the Risks Aubrey Baker, Laurian Vega, Tom DeHart, and Steve Harrison	99
The Disability-Simulator: Simulating the Influences of Disabilities on the Usability of Graphical User Interfaces	109
Advancing Critical Care in the ICU: A Human-Centered Biomedical Data Visualization Systems	119
A Comparative Study of Children's eHealth Design between East and West: A Case Study of Children's Health Websites in China, Taiwan, the UK, and the US	129
Visually Exploring Multivariate Trends in Patient Cohorts Using Animated Scatter Plots	139
Emerging Triage Support Environment for Dementia Care with Camera System	149
Nonvisual Effects of Led Coloured Ambient Lighting on Well-Being and Cardiac Reactivity: Preliminary Findings	159
Part III: Interactive Devices and Interfaces	
The Effect of Vibrotactile Feedback on Novice Older Adults in Target Selection Tasks	171
Multi-Resolution-Display System for Virtual Reality Setups Jürgen Grüninger, Hilko Hoffmann, Uwe Kloos, and Jens Krüger	180
Alternative Workstations May Be New But Are They Better?	190
Improving the Online Video Chat Experience	199

Ta	ble of Contents	XIX
DeskTop: A Design Guideline to Creating a Multi-to Prototype		209
Changing Color over Time		218
SmartHeliosity: Emotional Ergonomics through Colou Oliver Stefani, Milind Mahale, Achim Pross, and M	Q	226
All in Hand Keyboard Designing and Researching B Ergonomics		236
Author Index		245