Advances in Social and Organizational Factors

Advances in Human Factors and Ergonomics 2014

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Preface

An exploration of how ergonomics can contribute to the solution of important societal and engineering challenges, Advances in Social and Organizational Factors discusses the optimization of sociotechnical systems, including their organizational structures, policies, and processes. It includes coverage of communication, crew resource management, work design, design of working times, teamwork, participatory design, community ergonomics, cooperative work, new work paradigms, organizational culture, virtual organizations, telework, and quality management.

The book provides research on urban infrastructures and how to shape urban spaces, including stadiums and museums. It covers warning systems in cars, voice-based interfaces, and the positive effects on manufacturing processes available from health informatics and management systems. Several chapters examine the role human factors can play in counter-terrorism efforts and in interpreting deceptive behaviors. They provide suggestions on how to improve enterprise resource planning systems and stress the importance of lifelong learning, personalized learning, and work-life balance. The book also highlights issues with special populations, detailing how to design and adapt products and work situations for these groups. In addition to exploring the challenges faced in optimizing sociotechnical systems, the book underlines themes that play a role in all the challenges and how they are linked to each other. It concludes with an exploration of emotional ergonomics and the important positive effects of making people happy and healthy. With chapter authors from around the globe, the book supplies a broad look at current challenges and possible solutions. This book contains a total of eight sections that covers the following topics.

- I. Explores how human factors can contribute to a broad range of solutions for issues in sociotechnical systems
- II. Discusses the effects of changes at the organizational level and new ways of work
- III. Highlights the role of ergonomics in safety and security
- IV. Examines the relationship between trust and safety in team performance

The organizers would like to thank all the authors for their contributions. Each of the chapters were either reviewed by the members of the editorial board or germinated by them. For these our sincere thanks and appreciation goes to the members of the board listed below.

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We sure hope this book contributed to increase in knowledge in the field of social and organizational Ergonomics and that you find the papers in this book interesting and helpful to you and your work.

July 2014

Peter Vink
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Editor