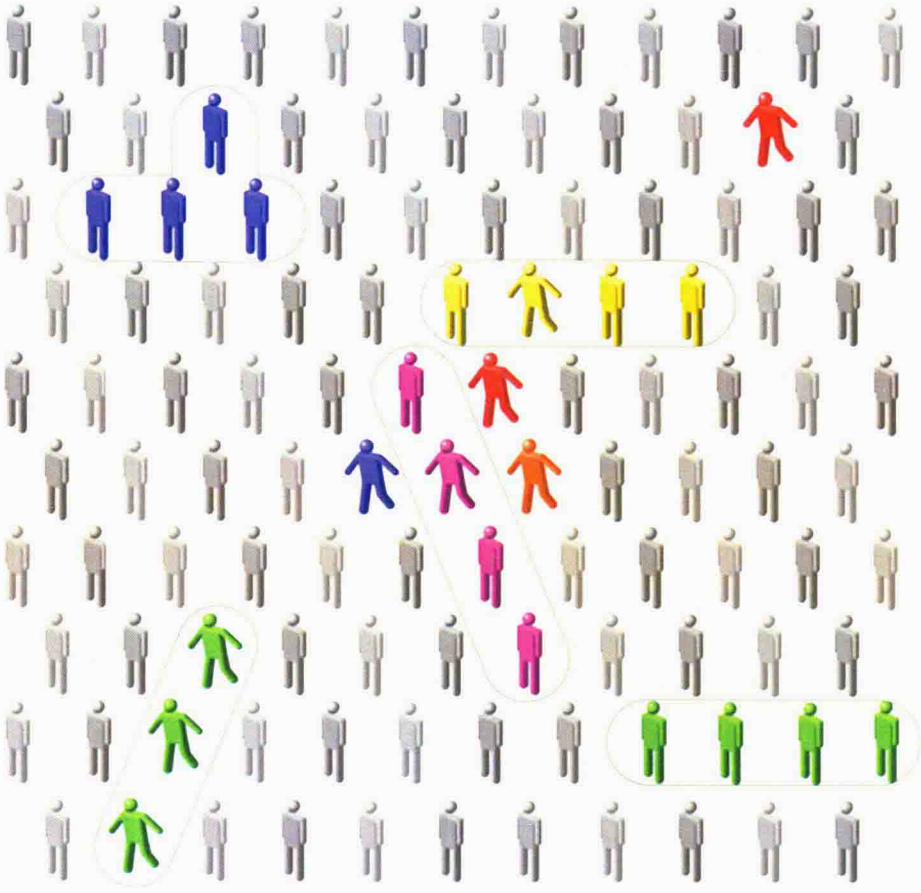

Cross-Cultural Design for IT Products and Services

Pei-Luen Patrick Rau • Tom Plocher • Yee-Yin Choong

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Cross-Cultural Design for IT Products and Services

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Foreword

This book is published at a very opportune time when there are major activities around the globe including, but not limited to, products and services that are sold worldwide across different cultures, languages, and countries

Industries establish facilities in other countries where they employ local personnel and personnel from the country of origin of the corporation. There are cases of business and diplomatic negotiations in cross-culture settings. For these situations, this book with its 14 chapters, 26 tables, 95 figures, and 276 references provides both the depth and breadth of knowledge to maximize the effectiveness of communication and affective utilization of products and services across different geographic locations. For this purpose, the book effectively illustrates the role of different languages and different cultures within a country and illustrates the effectiveness of cross-culture design by case studies. The chapters conclude with specific guidelines on design of cross-cultural products and services. As such, the book should be of value and great utility to all corporations operating in different languages, cultures, and countries and for researchers working in the cross-cultural area.

Gavriel Salvendy
October 2011

The Authors

Pei-Luen Patrick Rau (BA, Mechanical Engineering, National Taiwan Univer-sity, 1992; MS, Manufacturing, School of Industrial Engineering, Purdue University, 1996; PhD, Human Factors, School of Industrial Engineering, Purdue University, 1998) is a professor in the Department of Industrial Engineering at Tsinghua University in Beijing. He founded and since 2002 has directed the Human–Computer Interaction (HCI) and Usability research center at Tsinghua University, and also directs the Institute of Human Factors and Ergonomics at Tsinghua University. The Institute of Human Factors and Ergonomics at Tsinghua University received the President's Medal from the Ergonomic Society in the United Kingdom (2008). He was named National Science Fund China's Distinguished Young Scholar (2011). His human factors courses were awarded "Excellent Course" from Beijing (2009) and from Tsinghua University. He also received a number of awards from Tsinghua University, including Award for New Academics, Excellent Teaching Achievement, Outstanding Young Teacher award, Excellent Teaching for International Master Program, and Excellent Instruction for Student Research Training. His research themes include cross-cultural design and human-centered design, and he published book chapters and articles on these topics in HCI and related journals and conferences.

Thomas Plocher (MS, Psychology, Yale University, 1975; BA, Psychology, Hamline University, 1973) recently retired from Honeywell International, Inc., and currently works as an industry consultant and educator on human factors and global engineering teamwork. During his 35 years working as a senior human factors engineer at Honeywell, Tom was involved in both research and development. On the development side, Tom applied user-centered design methods to new product development across diverse businesses, including industrial process control, fire systems, video surveillance and security, and health monitoring. In 2005 he was recognized with a Honeywell Technical Achievement Award for his conceptualization and design of Honeywell's FirstVision™ product. He was the first human factors engineer to receive that prestigious award from Honeywell. On the research side, Tom developed numerous innovative technology solutions to difficult human–computer interaction problems, particularly in the areas of hands-free interaction, small screen design, and graphical visualizations of built spaces. His 15 awarded U.S. patents and numerous patents pending resulted from this research. Tom worked with and mentored global engineering and research teams in China since 1998, fueling his interest in cross-cultural collaboration and cross-cultural design. For over 10 years, he has had a highly productive research collaboration with the Institute of Psychology, Chinese Academy of Sciences. He also served as industry advisor and participant in the Cultural Usability (CULTUSAB) research consortium, sponsored by the Danish Research Council. From 2006 to 2009, this multinational team of researchers from Denmark, India, China, and the United States investigated how culture affects

usability evaluation and recommended best practices for cross-cultural usability testing. He is the coauthor, with Patrick Rau and Yee-Yin Choong, of several handbook chapters on cross-cultural design of user interfaces.

Yee-Yin Choong (BA, Electronics Engineering, National Chiao-Tung University, Taiwan, 1987; MS, Electronics Engineering, National Chiao-Tung University, Taiwan, 1989; M.Eng, School of Industrial Engineering, Pennsylvania State University, 1991; PhD, Human Factors, School of Industrial Engineering, Purdue University, 1996) is a research scientist at the National Institute of Standards and Technology (NIST) since 2006. Prior to joining NIST, she was a senior Usability Engineer at General Electric for 10 years. During her graduate work at Purdue University, she pioneered the research linking cross-cultural psychology with human–computer interaction (HCI) by studying the impacts of information organization and presentation styles on computer performance of Chinese and Americans due to cultural differences. From her groundwork in cross-cultural HCI research, other researchers have published work that was inspired by her research. Her research has been focused on applying human factors and usability disciplines on any systems with a human-interaction component. The research expands from graphical user interface design, symbol and icons design, to biometrics technology, and cyber security. She has authored and coauthored numerous publications throughout her career.

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