

Preface

This book's origins lie in the editors' own experiences of developing and reviewing experimental studies of design; and in particular, from our collaborative excitement when combining new methods and disciplinary insights with more traditional experimental design research.

Researchers face ever-growing technical, methodological, and theoretical possibilities and we have found in our own research, as well as that of our students, that getting to grips with these topics can prove somewhat daunting. This book aims to both help researchers share in our enthusiasm for experimental design research, and provide practical support in bringing together the many different perspectives and methods available to develop scientifically robust and impactful experimental studies.

Fundamentally, this book builds on the methodological foundations laid down by many authors in the design research field, as well as our field's long tradition of boundary spanning empirical studies. Without these works this book would not have been possible. In this sense each chapter reflects and builds on key thinking in the design research field in order to provide the reader with chapters that not only constitute distinct research contributions in their own right but also help bring cohesive insight into experimental design research as a whole.

Throughout the writing process our focus has continually been on bringing together insights for researchers both young and established, with the aim to take experimental design research to the next level of scientific development. In particular it is not our aim to lay down a prescriptive set of methodological rules, but rather provide researchers with the concepts, paradigms and means they need to understand, bridge and build on the many research methodologies and methods in this domain. Thus this book forms a bridge between specific methods and wider methodology in order to both develop better methods and also contextualise their work in the wider methodological landscape.

Over the last decades design research has grown as a field in terms of both its scientific and industrial significance. However, with this growth has come with challenges of scientific rigour, integrating diverse empirical and experimental approaches, and building wider scientific impact outside of design research. We see

this book as a contribution to this process of scientific and methodological development, and more generally see this process of growth as a necessary and inspiring development taking design research into the future alongside its more fundamental brethren, such as psychology, artificial intelligence or biotechnology. This book reflects our vision of design research as an ever more rigorous and scientifically exciting field, and we think that this is also reflected in the substantial and insightful works provided by each of the chapter authors, without whom this book would have been impossible!

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