BOOK REVIEW

Handbook of Research on User Interface Design and Mobile Evaluation for Mobile Technology

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Handbook of Research on User Interface Design and Evaluation for Mobile Technology
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Fifteen or so years ago, I fell in love with mobile technology—I purchased my first mobile phone, the “Rabbit” phone. It came with a pager and when it buzzed I put on my coat, walked a quarter of a mile to an “access point” in the street. Once there, I pressed the “connect” button on the handset and got a dial tone. I called my answer phone; it told me the number of the caller. After dialling the number, I was connected and spoke with them, in the street.

Yes, compared to the sophisticated devices we have today it was clunky and inconvenient (indeed I could have just used my landline in my house). However, it seemed like I was using a bit of the future. I haven’t felt the same excitement as I did then with any other mobile innovation; not even now with a handset that has remarkable graphics and an interface that you can stroke and touch.

I am always looking for inspirations, whispers of the future, that point the way to dramatic shifts in the way we live with technology. So, when the two, large, impressively produced volumes of this handbook arrived on my desk, I stared at them nervously for a while before beginning to cut off the polyurethane packaging. Would they be good as I thought they would be? Could they be worth the several hundred dollars the publisher asks for them?

A year before this courier delivery, the Handbook’s editor, Jo Lumsden, had asked me to write its Foreword. I was delighted to do so, excited by the abstracts and samples I read. But writing a foreword to a book is, perhaps, like penning the welcome text in a summer musical festival brochure: you do it in mid-winter, long before the music actually bursts onto the stage.

As I write this review, sitting in the hot sun, in a beautiful Swansea park, I am pleased to say the reality does not disappoint. The book is a
comprehensive survey of state-of-the-art mobile issues, practises and innovations; a diverse ensemble that none-the-less plays well.

It looks and feels like a handbook—it is big and solidly constructed, formed I feel to withstand lots of use; ideal for an institutional library. The page design, printing quality and figure reproduction is functional—important for a book that readers will turn to for answers; the design promotes focussed information seeking. Those of you who think the physical book belongs to a bygone era can purchase an online version; if you do, you might use its content to think about how a future mobile reading device might better the present day hardcover version.

The mobile interface research community is not in its infancy—there has been an annual gathering at the Mobile HCI conference, for example, for over a decade; and, there are a good number of books and textbooks on the subject. So, what’s the value of another coming together of this community, in book form? The value of this book is the way it captures the current thinking in the field; I was about to say, ‘snapshot’ but that’s entirely the wrong word for an offering that is unique in the breadth of topics and perspectives covered in depth.

Of course, as anyone involved in human-centred evaluations knows, quantitative measures are only one part of the picture but the statistics associated with this book are impressive—there are five sections with a total of sixty-four chapters, over a thousand pages of text; hundreds of authors drawn from academic and industrial research labs across the world. These people and the organisations they represent are leading players in the mobile HCI arena—just the crowd you would want to sit down and have a long coffee with.

While a very big book like the Handbook can be daunting, the editor has done a good job at providing a framework to make the collection usable. The grouping of chapters into the five sections—covering design, interaction techniques, assistive technologies, evaluation and case studies—has been done well. The detailed table of contents gives an abstract for each chapter and each section has a short introduction.

Reading it through gives you a feel for the key best practices as well as the important interactive technologies for the future. It comes too at a time when we are entering a new phase in mobile device and service development. While research prototypes have long promised a rich, sophisticated set of possibilities, the commercial offerings have seemed conservative. This situation is likely to change, though, with dramatic improvements in bandwidth availability and affordability, falling costs in components like sensors, touch displays and haptic outputs along with the opening up of platforms for third-party software development. With this blossoming design space, the Handbook can provide great pointers in terms of where to focus your efforts.

“Handbook” suggests doing, so one question is how you might put it to practical use rather than to store it on your bookshelf. I’ve user-tested the book by thinking about some research tasks I regularly carry out and seeing if it would help: it does. So, needing inspiration that moves your thinking away from seeing mobiles as handsets? You could turn to Seymour’s chapter on “The Garmet as Interface”. Want to find out the real value and problems of using contextual data? You’d do far worse than to turn up Dey & Hakkila’s chapter on “Context-awareness and Mobile Devices”. Wondering whether the cost of field studies is worth it? Dive into Kaikkonen’s chapter succinctly entitled, “Will Laboratory Test Results be Valid in Mobile Contexts?” (like all good reviews, I won’t spoil the story—you need to read the book for the answer!) What about wider issues? Well, there too, the book has a number of interesting voices including a contribution from Lehikoninen on the “Theory and Application of the Privacy Regulation Model”.

If you ask people, like I do, about what their mobile means to them, they often talk about it being a life-support system; a remote control for their world; something they couldn’t imagine functioning without. While clearly important for everyone, mobile technology is increas-
ingly becoming wonderfully empowering for important classes of user—those with physical and mental impairments, those living on the wrong-side of the “digital divide”, amongst others. An admirable aspect of this collection is its inclusion of a number of articles that sensitively address some of these issues; a great encouragement to the rest of us to engage in such research and design work.

In her Preface to the book, Lumsden explains that the book’s mission is to get readers thinking, to inspire them—you!—to keep innovating on methods and technologies. It’s a great aspiration, one we all need to share; and, this book will certainly play a part in helping the community to change the world for billions of people for the better.

Matt Jones is a reader and is helping to set up the Future Interaction Technology Lab at Swansea University. He has worked on mobile interaction issues for the past ten years and has published a large number of articles in this area. He is the co-author of Mobile Interaction Design, John Wiley & Sons (2006). He has had many collaborations and interactions with handset and service developers including Orange, Reuters, BT Cellnet, Nokia and Adaptive Info; and has one mobile patent pending. He is an editor of the International Journal of Personal and Ubiquitous Computing and on the steering committee for the Mobile Human Computer Interaction conference series. Married with three mobile, small children; when he’s not working he enjoys moving quickly on a bike whilst listening to music and the occasional podcast.