

## Foreword

Ubiquitous Computing has been the subject of discussion in various research areas for some time now. Over the past several years RFID and Near Field Communication (NFC) technologies have become the driving force behind the vision of Ubiquitous Computing. In particular, NFC could become a real Ubiquitous Computing technology in consumer hands if it succeeds in capturing distribution channels, for example due to integration into the mobile devices market. Even if that will be the case in the future, application developers and entrepreneurs interested in using RFID or NFC technologies will be faced with the challenges of negotiating the process of moving early prototypes into a final product. In particular, given the physical nature of the technology, it is imperative that the user be involved in the very early stages of development in order to bring successful, consumer-accepted applications to market.

In 2009, NFC technology still finds itself in the starting blocks—accordingly, these research results come at the right time. Previous approaches to the challenge of developing NFC applications have neither applied research methods specific to Ubiquitous Computing, nor have they integrated the appropriate design guidelines. Florian Resatsch's work focuses specifically on these issues and makes use of a unified developmental and evaluation process model.

The work draws on knowledge from a range of disciplines and combines these into a process for developing and evaluating Ubiquitous Computing applications using Near Field Communication (NFC) as an enabling technology. Various design guidelines for NFC applications are developed based on three engaging case studies. With these results Florian Resatsch shows the importance of combining various disciplines into a single multi-methodological approach in order to better understand the subject of "Ubiquitous Computing" from the user's perspective. His work makes clear the necessity of a process-oriented approach in enabling the development of information technology applications based on NFC.

Researchers in information systems will gain new insight into which research methods are applicable to which phases of product and prototype development. Important insights into the use and application of generic technology acceptance models and the piloting/prototyping of NFC-based applications are succinctly presented. Three case-studies, each in a different phase of the development cycle, add to the insights.

For practitioners a number of recommendations for orchestrating the development of user-friendly applications are provided. In particular, the compiled design guidelines can help entrepreneurs to focus early on important issues in the application development process. The specific guidelines on how to user-test the infrastructure and the detailed design parameters will prove helpful.

Given these contributions to the field I hope that this book by Florian Resatsch will find the attention it deserves.

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