



Marcin Sikorski

**INTERACTION DESIGN
IN AGILE IT PROJECTS**

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Preface

Interactive systems, such as various types of software, online services or mobile applications, in recent years have become an integral part of everyday life. These systems are becoming increasingly complex from a technical viewpoint, especially in their “back-end” part, including necessary IT infrastructure, databases, web services and architectures that remain invisible for end-users. Despite engineering complexity of the back-end, from user’s perspective the operation of an interactive system should be as easy as possible. The user interface, often referred as “front-end”, should be designed to be simple to use, visually attractive, providing a positive User Experience (UX) and – above all – granting functionality and usability for end-users or customers.

For this reason, interaction design has recently emerged as a distinct professional area of information technology (IT). Interaction design is taking its roots from the scientific discipline of Human-Computer Interaction (HCI), which is located on the crossroads of social sciences (mainly management and cognitive sciences) and engineering sciences (mostly computer science and software engineering).

Quality of interaction and quality of user experience (UX) now are indispensable elements of IT product quality. Consequently, the User-Centred Design (UCD) approach, being a part of HCI, has been successfully applied for improving usability of IT products and adding a “customer’s voice” to IT projects.

IT projects have undergone radical changes in recent years. Nowadays due to market pressures, most of IT solutions, such as online services, websites, and mobile applications, are designed and developed using the agile approach. The agile approach in IT project management declares readiness for rapid changes in requirements, customer focus and quality assurance based on two pillars: excellent communication in the development team and intensive cooperation with customers. Agile approach introduced “sprints” – short, dynamic design cycles, frequent prototyping and regular evaluation of the developing product by prospective users and customers. Focusing on users’ needs, contemporary IT projects attempt

to combine techniques inherited from classical software engineering with novel techniques borrowed from the agile approach.

Therefore, the main goal of this book is to present the impact of agile approach on User-Centred Design, that resulted in gradual adaptation of interaction design methods to agile IT projects.

The first part of this book (chapters 1–4) provides an overview of interaction design principles for graphical, web and mobile user interfaces. All three types of user interfaces are now popular as typical points of access to applications and services users need for their daily activities.

The second part (chapters 5–10) present a critical review of user-centred techniques useful for improving usability of interactive products, primarily addressed to agile IT projects. A number of user-centred techniques useful at different stages of an agile IT project were presented, with focus on optimizing their positive impact to users, customers and project clients.

Regarding quality management terminology, the first part of the book represents a product-oriented perspective, while the second part is highlighting a project-oriented view, spanning all main stages of a typical IT project: the Strategy, Analysis, Design, Development (prototyping), Evaluation and Testing, and the Retrospective.

The author hopes that this book will be a source of valuable theoretical and practical knowledge for all researchers and practitioners (especially IT managers) involved in cooperation with users and customers in IT projects. Furthermore, readers interested in new trends in interaction design should also find here an inspiration for creating software-based solutions developed with adequate balancing engineering excellence with human needs and values.

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