

1 Basics of user experience and usability

To develop an understanding of usability, the terms relating to usability and related disciplines are defined and explained.

- Introduction
- The benefits of usability
- Problems caused by inadequate usability
- Definitions and basic explanations of terms

2 Perception and information processing

Observing the basic principles of human perception is essential for good usability and user experience. Good interaction design also always takes into account which information can be perceived correctly and at the right time by which type of person. This includes, among other aspects:

- Visual perception
- Color blindness
- Environmental influences
- Gestalt laws
- Mental models

3 Standards and guidelines

The purpose of standards is the national and international coordination of products and the promotion of rationalization, quality assurance and occupational safety. Standards standardize test methods and facilitate communication in business and technology.

- The importance of standards and norms
- ISO 9241
- W3C Web Content Accessibility Guidelines - ISO/IEC 40500

4 User-Centered-Design

User-Centered-Design is an approach to the development of interactive systems that focuses on the user and their requirements, knowledge, skills, and needs.

- Basics of user-centered design
- Planning user-centered design
- The quality of data and results
- Verification versus validation

5 Analysis of user requirements

To design a system optimally for the future actual users, it is necessary to have all relevant information available for the implementation or design of the system that may be relevant for use.

- The four components of requirements analysis
- Specifying concrete user requirements
- Creating usability and user experience goals
- Scenarios, user stories and use cases

6 Developing design solutions

Design solutions are always developed within an organizational context and its possibilities and limitations of the developing organization. General principles must be observed here.

- Basic requirements for design
- Prototypes and mockups
- UX design and software development processes

7 Evaluation - understanding the user perspective

The early and continuous evaluation of user requirements and design solutions as part of a user-centered development process is a key activity to ensure an efficient process and the quality of a final design solution.

- Basics of evaluations
- Evaluation methods and procedures with user integration
- Expert-based procedures (expert reviews)
- Analysis, prioritization, implementation of findings
- Questionnaires