

Working with Users - the Human Factor

7 Questions Driving User Centred Systems

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Based on: Ritter / Baxter / Churchill (2014), Foundations for Designing User-Centred Systems, Springer

Functionality

- ❖ What is the reason for buying or commissioning the system?
- ❖ What is it that the system is supposed to do?
- ❖ What will be achieved by deploying the system?

Usability

- ❖ hard to define - comprises performance of and attitude to system
- ❖ ISO 9241: “the usability of a product is the degree to which
 - ❖ specific users
 - ❖ can achieve specific goals
 - ❖ within a particular environment
 - ❖ effectively
 - ❖ efficiently
 - ❖ comfortably
 - ❖ in an acceptable manner”

Learnability

- ❖ How easy is it to learn the system?
- ❖ What do users need to know in order to learn the system?
- ❖ What documentation is required?
- ❖ How consistent is the system with others that people already know?

Efficiency

- ❖ What is the optimal level of efficiency?
- ❖ Computer-centric: speed of the system
- ❖ Human-centric: time user spends completing a task
- ❖ Can be measured in time or actions / operations

Reliability

- ❖ How likely is it that the system will fail?
- ❖ How easy is it for a user to break the system?
- ❖ How consistent and predictable is system behaviour?
- ❖ How safety critical is the system?

Maintainability

- ❖ How easy is it to understand what the system does for maintenance purposes?
- ❖ How easy is it to upgrade a system?
- ❖ How easy is it to fix errors and add new functionality?
- ❖ Covers users, developers, and administrators

Utility

- ❖ Why should we bother?
- ❖ What is the expected shelf life?
- ❖ Will people work with or around the system?