

Stay safe.
Customers are required to wear a face mask.



A User statement is not necessarily a User Requirement.
Right?!

Thank you for your cooperation in protecting the health and well-being of our staff and guests.

Knut Polkehn







- With the system the user must be able to select to attend.
- With the system, the user must be able to recognise,
  - what user requirements are and what they are not.
  - how user requirements can be derived.
  - how user requirements can be formulated.
  - why user requirements have to be formulated most concretely.
  - how to avoid to vaccinate user requirements with an expected solution
- With the system, the user must be able to input their questions.



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# #1 With the system the user must be able to select to attend.





But, why you should attend?

Maybe, you need to listen the talk or you need to have the content. Or, you just need to get to know something new.



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#2 With the system, the user must be able to recognise, what user requirements are and what they are not



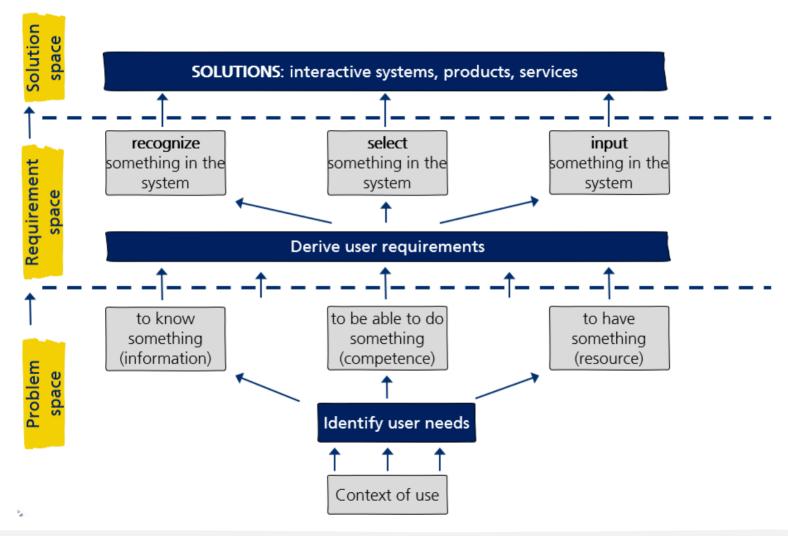
- Requirements on Use
   NOT: Requirements from the User
- "The User is always right...
- ... but **only regarding their needs** not the suggested solutions"
- A User Requirement is related to the quality of the information exchange between User and Solution and not to the solution istself



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Tree Guiding Questions to translate User Needs in User Requirements

- What does the user need to be able to recognise in the interactive system in order to satisfy their need?
- What does the user need to be able to select in the interactive system in order to satisfy their need?
- What does the user need to be able to input in the interactive system in order to satisfy their need?

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Context of use information (Extract from a context of use description)	Identified user needs (examples)	Derived user requirements
Often, patients do not get their treatment at the agreed time of their appointment. Having to wait is very annoying for patients. Sometimes they sit in the waiting room for 90 minutes and don't know how long it will take until it is their turn.	Example of an informational need:  UN1: The patient (user group) needs to know when a fixed appointment will actually begin (information) in order to make good use of the remaining time (intended outcome).	UR1: With the system, the user must be able to recognise, when their planned treatment is expected to actually begin.



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#4 With the system, the user must be able to recognise, how user requirements can be formulated.



With the system, the user must be able to recognise / select / input / <an information or resource> under <optional condition>.

# Examples:

- With the system, the user must be able to recognise that all dishes have been cleaned (information) before placing an additional dish for cleaning (condition).
- With the system, the user must be able to select the height of each storage compartment (resource) in the fridge for placing a frying pan with precooked food by using only one hand (condition).



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#5 With the system, the user must be able to recognise, why user requirements have to be formulated most concretely.



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# **Examples:**

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# #6 With the system, the user must be able to recognise, how to avoid to vaccinate user requirements with an expected solution



### Formulating User Requirements: Immunisation Trap

An unconsciously chosen approach in which requirements are specified that represent known or presented solutions instead of being derived solution-neutrally on the basis of needs in the context of use.

#### Remarks:

- Such specified requirements are called immunised requirements.
- The targeted derivation of user requirements on the basis of context of use information avoids the immunisation trap.

### **Example for Immunisation Trap**

#### **Immunised Requirement**

"With the system, the user must be able to select heat levels 1, 2, 3, 4, 5 on the heating valve. "

### Non-immunised Requirement

"With the system, the user must be able to select the desired temperature on the heating system."







# Thank You for your Attention!

