

The 7 stages of action cheat sheet

Key: #. Stage Name
(Question that the designer has to ask himself)
pp: potential problems
ss: suggested solutions

1. Goals

(How easily can one determine the function of the device?)

pp: mistakes (errors arising from misconception)

ss: provide a good conceptual model

2. Intention to act

(How easily can one tell what actions are possible?)

pp: mistakes (errors arising from misconception)

ss: make things (functions) visible, provide a good conceptual model

3. Sequence of actions

(How easily can one determine the mapping from intention to physical movement?)

pp: gulf of execution (failure to translate intention to action)

ss: provide a good mapping between controls and functions, provide physical and cultural constraints for action, embed knowledge on how to act on the design (cues, labels), don't require great precision to distinguish between controls

4. Execution of the action

(How easily can one perform the action?)

pp: slips (errors arising from acting incorrectly on correct intentions)

ss: provide feedback for all user actions, offer a trail of the sequence of actions performed, mind that there are several action levels (high /low) in which the slip can occur, minimize the causes (interlocks), make possible to reverse actions, make it easy to discover that an error occurred, take errors not as problems but as alternate courses of action

7. Evaluation of interpretation

(How easily can one determine if the system is in the desired state?)

pp: mistakes (errors arising from misconception)

ss: provide a good conceptual model for your design

6. Interpreting the perception

(How easily can one determine mapping from system state to interpretation?)

pp: gulf of evaluation (failure to translate feedback to something meaningful)

ss: provide a good mapping between states and indicators, embed knowledge on how to interpret on the design (cues, labels), don't require great precision to distinguish between indicators

5. Perceiving the state of the world

(How easily can one tell what state the system is in?)

pp: slips (errors arising from acting incorrectly on correct intentions)

ss: make things (indicators) visible, provide feedback for all user actions

