

## HMI Assignment 2

Q) Explain in detail about basic categories of Smith and Mosier guidelines.

→ Successful designers of interactive systems know that they can and must go beyond intuitive judgements made hastily when a design problem emerges. Fortunately, guidance for designers is available in the form of

1. specific and practical guidelines,
2. middle-level principles, and
3. high-level theories and models.

The practical guidelines prescribe cures for design problems, caution against dangers, and provide helpful reminders based on accumulated wisdom. The middle-level principles help in analysing and comparing design alternatives. For developers of high-level theories and models, the goal is to describe objects and actions with consistent terminology so that comprehensible explanations can be made to support communication and teaching. Other theories are predictive, such as those for reading, typing, or pointing times.

Display design is a large topic with many special cases. Smith and Mosier (1986) offer five high-level goals as part of their guidelines for data display:

1. Consistency of data display: During the design process, the terminology, abbreviations, formats, colours, capitalization, and so on should all be standardized and controlled by use of a written (or computer-managed) dictionary of these items.



2. Efficient information assimilation by the user: The format should be familiar to the operator and should be related to the tasks required to be performed with the data. This objective is served by rules for neat columns of data, left justification for alphanumeric data, right justification of integers, lining up of decimal points, proper spacing, use of comprehensible labels, and appropriate measurement units and numbers of decimal digits.
3. Minimal cognitive load on the user: Users should not be required to remember information from one screen for use on another ~~system~~. Screen tasks should be arranged such that completion occurs with few actions, minimizing the chance of forgetting to perform a step. Labels and common formats should be provided novice or intermittent users.
4. Compatibility of data displayed with data entry: The format of displayed information should be linked clearly to the format of the data entry. Where possible and appropriate, the output fields should also act as editable input fields.
5. Flexibility for user control of data displayed: Users should be able to get the information from the display in the form most convenient for the task on which they are working.



The internal mechanism of the disc drive uses a spring loaded method to push the tray out in some cases.

These issues can be eliminated by regular cleaning of the rails along the tray and keeping the cabinet in a clean place, away from dust.

The below-mentioned image represents the common location of the emergency eject pin-hole.