Cognitive task analysis method for system interface design

Abstract:

Poor perception from human interpretation on system interface design may deviate human critical judgment about state of a system. As a result accidents may occur due to misinterpretation on displayed information available on the screen. In relation to that, this paper describes designing scenarios for system interface design which reflects with user's working context. System interface design that familiar with working context will help to increase user's satisfaction and the ease of use of a particular system. Moreover, through the process in designing scenarios also leads to the identification of problems and how experts deal with challenging tasks in using the system. Human abstract thinking which could not be gather in a quantitative way motivate authors to employ Cognitive Task Analysis method in collecting system interface design requirements from the experts as to design task scenarios. In general experts involve in this study are from the manufacturing industries where their daily scope of work is in system maintenance tasks. There are five phases involve in Cognitive Task Analysis; define tasks, select participants, task observation, task diagram and knowledge audit. Results from the interview and observation session will give an essential clue in designing scenarios for system interface design. This is because in knowing a correct problem to solve and provide cues at a needed point in time will help users to interpret information on system interface design.