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The Ergonomic Observer A New Flexible Interface Technique for Online Work and Teamwork Analysis

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THE ERGONOMIC OBSERVER¹

A NEW FLEXIBLE INTERFACE TECHNIQUE FOR ONLINE WORK AND TEAMWORK ANALYSIS

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TIME, COSTS, AND ...NERVES.

When:

- interfaces doesn't match the user's mental model,
 - user-system interactions aren't fast and accurate,
 - functionality's can't solve all required tasks,
 - systems doesn't support the user in learning,
- than the users will loose time, cost, and their nerves!

When the user is an ergonomist, than this situation is the irony of ergonomics. For example when he uses a traditional system of computerised event recording. Than he is distracted from his observation, because of the cryptic machine language, i.e. function keys, key codes, menu lists, which are difficult to memorise. Further more: All has to be predefined, the observer can't enlarge or change the configuration ad hoc or for different tasks. This is the point, where an ergonomist has to design a new and ergonomic recording method of observational data: The FIT-System!

THE FIT-SYSTEM

The Hardware of the FIT-System (Flexible Interface Technique) is a palm size computer and a transparency template on the palm's touch screen (figure 1).

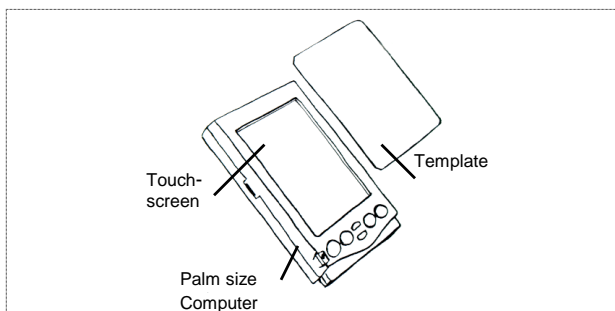


Figure 1: Hardware components of the FIT-System.

The observer design his own interface for the analysis on the template. That means he uses his own semantics, draw and use his own symbols for event recording.

The observer records the identified events by typing on the related symbols (figure 2)

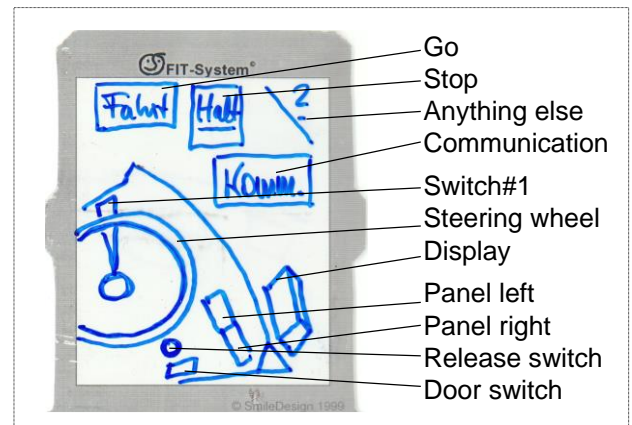


Figure 2: FIT-Template example to record tasks.

The Co-ordinates of each point and the actual time code are stored in the palm computer's memory. After all observations, the datafiles can transferred to a personal computer (PC), where the data is represented in a data manager program as points. Polygons can be drawn with the PC mouse to encircle them, and to assign a definition. Result is a time table of events, statistics and graphs in a spreadsheet application.

The FIT-System is international (USA, BRD, AU, CH, HU) well-tried in it's applications. It works with all palm size organisers. Homepage is: www.SmileDesign.ch

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¹ In: Proc. of the 14th Triennial Congress of the International Ergonomics Association. San Diego, 2000.