

CSC 428F/2514F

# HUMAN-COMPUTER INTERACTION

Lecture 16  
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## INTERFACE EVALUATION: TALES OF PRACTICAL EXPERIMENTS IN R&D ENVIRONMENTS

presented by  
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## 1. “Practical” and “R&D” tests characterized

In this lecture, practical R&D tests are explored. In practical R&D, *answers* are needed so that development decisions can be illuminated. Grad students note: you will be fired instantly if you tell your boss “We uncovered more questions than answers.”

The goals of tests and experiments in this context are...

- provide unambiguous answers applicable to the decision,
- make sure everybody can understand what you did and what you found,
- be on time and under the budget,
- if you can, see if the question is the right one, *ex post facto* (well, sometimes you *do* uncover more questions than answers; at least don't smile when you tell your boss)

Think in terms of “system effectiveness” because if a tree falls in the forest and nobody hears it.... ALWAYS think “system.”

## 2. Market and Functional Spec answers

1. These issues relate to the larger shape and flow of the program: get them right and the rest is easy. Interaction logic (as distinct from simple ol' screen interface design) is often uncovered and illuminated at this stage, at least partially.
2. But often, you are reaching into the future and sailing in uncharted waters.
3. In general, less structured questions respond to less structured tests.
4. There exist many sets of questions which are homologous to “flat tire” questions. That is, it is like asking a chemist, “When will this tire get a flat?” The question is legitimate, but the job of the HCI specialist is to reframe the question so as to be able to shed light on the decision.

The “Product Space” analysis for the all-singing all-dancing lawyer’s friend from LegalWare. In addition to conventional market research issues, we explored the global perceptions of this feature-burdened software through paired-comparisons using bi-polar scales (1985)

### 3. Engineering Psychology answers

Questions which appear *factoid-like* sometimes are really illusions in that they are hiding *basic issues* and the same is true of other simple-appearing questions.

Studies for NYNEX in preparation for the installation of 120 visitor information-bearing monitors for the Javits Convention Center in New York City and one SONY Jumbotron (1987)

### 4. Perceptual Interface answers

The interface for MIL-SPEC-1492: making a tool for a closed-user group which jet-propels access to a large old-time hoard of information borne in many formats (1989)

### 5. Response answers

Studies of Mondex gear for the Royal Bank and CIBC (1997)