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# Chapter 13 An evaluation framework



### The aims are:

- Introduce and explain the DECIDE framework.
- Discuss the conceptual, practical, and ethical issues involved in evaluation.

# DECIDE: a framework to guide evaluation

- <u>D</u>etermine the *goals*.
- Explore the *questions*.
- Choose the evaluation methods.
- <u>I</u>dentify the *practical issues*.
- Decide how to deal with the ethical issues.
- <u>E</u>valuate, analyze, interpret and present the data.

### Determine the goals

- What are the high-level goals of the evaluation?
- Who wants it and why?
- The goals influence the methods used for the study.
- Goals vary and could be to:
  - identify the best metaphor for the design
  - check that user requirements are met
  - check for consistency
  - investigate how technology affects working practices
  - improve the usability of an existing product

### Explore the questions

- Questions help to guide the evaluation.
- The goal of finding out why some customers prefer to purchase paper airline tickets rather than e-tickets can be broken down into subquestions:
  - What are customers' attitudes to e-tickets?
  - Are they concerned about security?
  - Is the interface for obtaining them poor?
- What questions might you ask about the design of a cell phone?

### Choose the evaluation approach & methods

- The evaluation method influences how data is collected, analyzed and presented.
- E.g. field studies typically:
  - Involve observation and interviews.
  - Involve users in natural settings.
  - Do not involve controlled tests.
  - Produce qualitative data.

### Identify practical issues

For example, how to:

- Select users
- Find evaluators
- Select equipment
- Stay on budget
- Stay on schedule

#### Decide about ethical issues

- Develop an informed consent form
- Participants have a right to:
  - Know the goals of the study;
  - Know what will happen to the findings;
  - Privacy of personal information;
  - Leave when they wish;
  - Be treated politely.

## Evaluate, interpret & present data

- Methods used influence how data is evaluated, interpreted and presented.
- The following need to be considered:
  - Reliability: can the study be replicated?
  - Validity: is it measuring what you expected?
  - Biases: is the process creating biases?
  - Scope: can the findings be generalized?
  - Ecological validity: is the environment influencing the findings? i.e. Hawthorn effect.

### Key points

- Many issues to consider before conducting an evaluation study.
- These include: goals of the study; involvment or not of users; the methods to use; practical & ethical issues; how data will be collected, analyzed & presented.
- The DECIDE framework provides a useful checklist for planning an evaluation study.

### A project for you ...

- Find an evaluation study from the list of URLs on this site or one of your own choice.
- Use the DECIDE framework to analyze it.
- Describe the aspects of DECIDE that are explicitly addressed in the report and which are not.
- On a scale of 1-5, where 1 = poor and 5 = excellent, how would you rate this study?