User Needs Assessment

Goal:
To learn about users, their tasks and context in order to use this information in design.

Steps:
User identification:
institution, environment, and types

- what is the organizational context and what are the implications of it for the interface/system?

- what are the major user groups?

- what are their characteristics?

Needs analysis:
determining user goals, purposes, and objectives

- what do users want to accomplish using the system?

- what are their overall goals?

- what do users need from the system to accomplish these goals?

Task analysis:
determining the tasks and activities that users accomplish in meeting their needs

- what tasks do users carry out to accomplish their goals?

User modeling:
synthesizing needs, tasks, and resources

- develop use scenarios to help develop and evaluate the system

Tools:
- document analysis (analyze organizational docs, docs related to tasks and goals of users, docs describing previous UNA efforts, workflow descriptions, etc.

- user observations, interviews, questionnaires (learn about user characteristics, tasks, needs, context, etc - important to observe and interact with users in their own environment)

- log analysis, if applicable (can point to typical workflow, problems with workflow, etc)

- task analysis

Outcomes:
- typical user groups and their characteristics (e.g. domain experts comfortable with computers, elementary school students with limited reading ability, seniors with sight problems)

- typical tasks that users need to carry out when using the system (e.g. search, select, order)

- a set of use scenarios for the system (e.g. scientist looking for news and updates to a type of dataset that he downloaded a month ago)

Important:
- users may not be able to recognize and express their own needs

- users are not always right

- many important individual differences

References:
For further reading, please see the Annotated Bibliography.

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