



SASTRA

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Chapter 8

User-Centered approaches to interaction design

B.Tech CSBS
VII Semester

Handled by
Smt. T.M.Latha

Outline

1. Importance
2. User-Centered Approach
3. Understanding user's work
4. Involving user in design

Importance

- The aspects that gives importance to the product's usability is
 - Expectation Management
 - Process of making sure that user's views and expectations of the product is realistic
 - Ownership
 - Users who involved and contributed to product's development feel sense of 'ownership'

User-centered approach

- Three principles that lead to the development of useful and easy to use computer system
 - Early focus on users and tasks
 - Observing the user's normal task
 - Studying the nature of the task
 - Involving user in design process
 - Empirical measurement
 - In early development
 - Users' reactions to printed scenarios and manuals are observed
 - Final stage
 - User reactions to simulations and prototypes are observed and analyzed
 - Iterative design
 - Design, test, measure and redesign

- Early focus on users and tasks
 - User's tasks and goals are the driving force behind the development
 - Users' behavior and context of use are studied and the system is designed to support them
 - Users' characteristics are captured and designed
 - Users are consulted throughout development from earliest phases to the latest and their input is seriously taken into account
 - All design decisions are taken within the context of the users, their work, and their environment

- Ethnography
 - Writing the culture
 - Observers
 - immerse themselves in user's environment
 - Participate day-to-day work
 - Joining in conversations
 - Attending meetings
 - Reading documents
 - Aim is to make implicit explicit

- Ethnography
 - Can be associated with development as
 - Ethnography of
 - Study of developers and their workplace
 - Aim is to understand the practices of development
 - Ethnography for
 - Ethnographic studies that can be used as a resource for development
 - Eg. Studies of organizational work
 - Ethnography within
 - Techniques on ethnography integrated into methods and approaches for development

- Presents data from ethnographic study as
 - View points
 - Concerns
- Viewpoints and concerns
 - Viewpoints
 - set of focus questions
 - Guide observer to particular aspects of the workplace

Distributed coordination

- How is the division of labor manifest through the work of individuals and its coordination with others?
- How clear are the boundaries between one person's responsibilities and another's?
- What appreciation do people have of the **work/tasks/roles** of others?
How is the work of individuals oriented towards the others?

Plans and procedures

- How do plans and procedures function in the workplace?
- Do they always work?
 - How do they fail?
What happens when they fail?
 - How, and in what situations, are they circumvented?

Awareness of work

- How does the spatial organization of the workplace facilitate interaction between workers and with the objects they use?
- How do workers organize the space around them? Which artifacts that are kept to hand are likely to be important to the achievement of everyday work?
- What are the notes and lists that the workers regularly refer to?
- What are the **location(s)** of objects, who uses them, how often?

- Concerns
 - Kind of goal
 - Represent criteria to guide requirements activity

THANK YOU