Data Gathering & Accessibility

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Introduction to Data Gathering

Definition:

Systematic process of collecting relevant and accurate information to understand user behavior and system requirements.

Importance:

- Provides insights into user interactions.
- Helps in designing systems that meet user needs effectively.

Challenges:

- Can be time-intensive and resource-dependent.
- Requires careful planning and execution.

Types of Data Collection

1. Secondary Data Collection

Definition:
Refers to pre-existing data that has already been collected and analyzed by others for a different purpose.

Advantages:
Cost-effective and saves time.

Limitations:
May lack relevance or specificity to the current study.

Sources:

1. Government publications.
2. Reports from international organizations.
3. Technical journals, books, magazines, and newspapers.
4. Research papers and organization reports.

Types of Data Collection

1. Primary Data Collection

Definition:
Primary data refers to original information gathered directly by the researcher for a specific study or investigation.

Advantages:

- Tailored to specific research needs.
- Provides detailed and firsthand information.

Limitations:

- Requires significant time and resources.

● Methods:

1. **Observation:** Directly observing user actions and behaviors.
2. **Questionnaires:** Structured forms to gather user feedback.
3. **Interviews:** One-on-one discussions for detailed insights.
4. **Focus Groups:** Group discussions to gather diverse perspectives.

Task Analysis

Definition:

Task analysis involves a structured approach to understanding how users perform specific tasks and achieve goals within a system. It focuses on identifying steps, behaviors, and challenges to optimize user interactions and improve system usability

Purpose:

- Identifies user goals, behaviors, and pain points.
- Breaks down tasks into actionable steps to optimize processes.

Importance:

- Enhances system usability and accessibility.

Techniques for Task Analysis

1 Hierarchical Task Analysis (HTA):

Decomposes intricate tasks into simpler, actionable components, offering a clear and organized view of user workflows and activities.

2 Cognitive Task Analysis (CTA):

Examines how users think, plan, and make decisions when interacting with a system, offers valuable insights into cognitive strategies and problem-solving processes

3 Activity Diagram:

Visualizes the step-by-step progression of user activities in a system or process, aids in understanding workflows and task sequences, ensuring precise and user-centered system development.

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THANK YOU

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