CS 352
Introduction to Usability Engineering

Outputs

Input

- Surveys/questionaires
- Interviews
- Observations
- Documentation
- Automatic data recording/tracking

Outputs

- List of problems
- Task outlines
- Scenarios and use cases
- Diagrams and flow charts
- Visualizations with counts of phenomena

Task Outline, example

Using a lawnmower to cut grass

Step 1- examine lawnmower

- Make sure grass is dry
- Look for objects laying in the grass

Step 2- inspect lawnmower

- Check components
- Grass bag connected correctly
- Blade is securely attached

Task Outlines

- Use expanding collapsing outline tool
- Add detail progressively
- Can add linked outlines for specific subtasks
- Good for sequential tasks
- Does not support parallel tasks well
- Does not support branching well

Scenarios

- Describe tasks in sentences
- Effective for communicating general idea
- Richer than task outlines
- Not effective for branching or parallel tasks

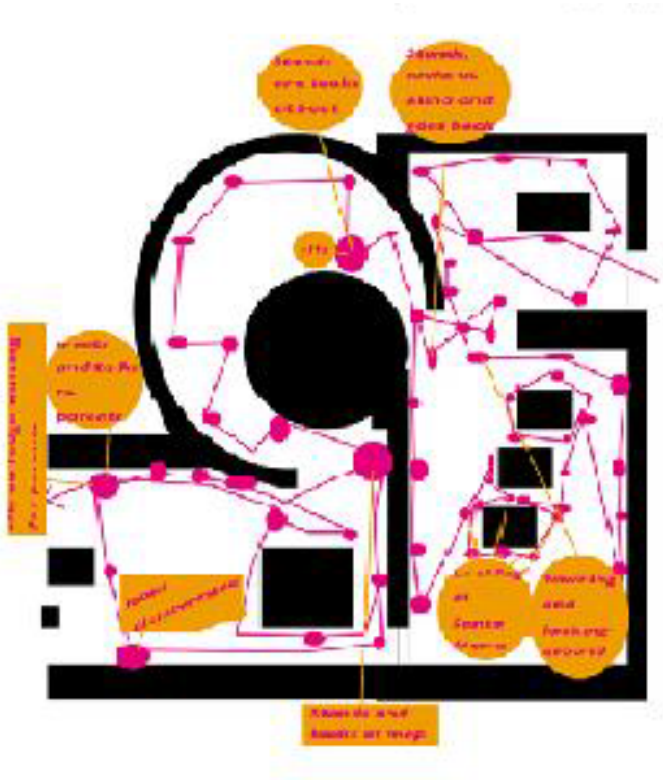
- Scenario- informal narrative description
  - Focus on tasks/activities, not technology used
  - One path through a use case

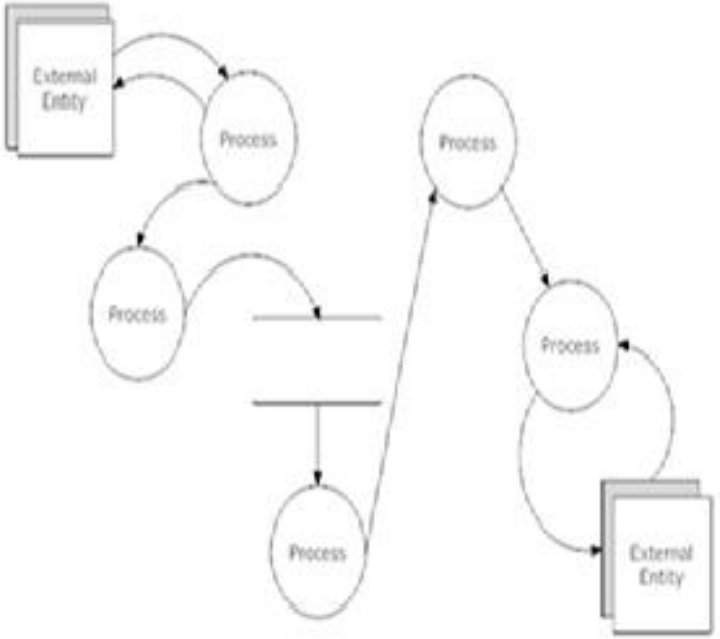
Use Cases

- Focus on user-system interaction, not tasks
- Less effective than scenarios for user emotions and reasoning
  1. System displays options
  2. User chooses their option
  3. System prompts user
  4. User enters OR
  3. Options is invalid
     3. System displays error message

Diagrams

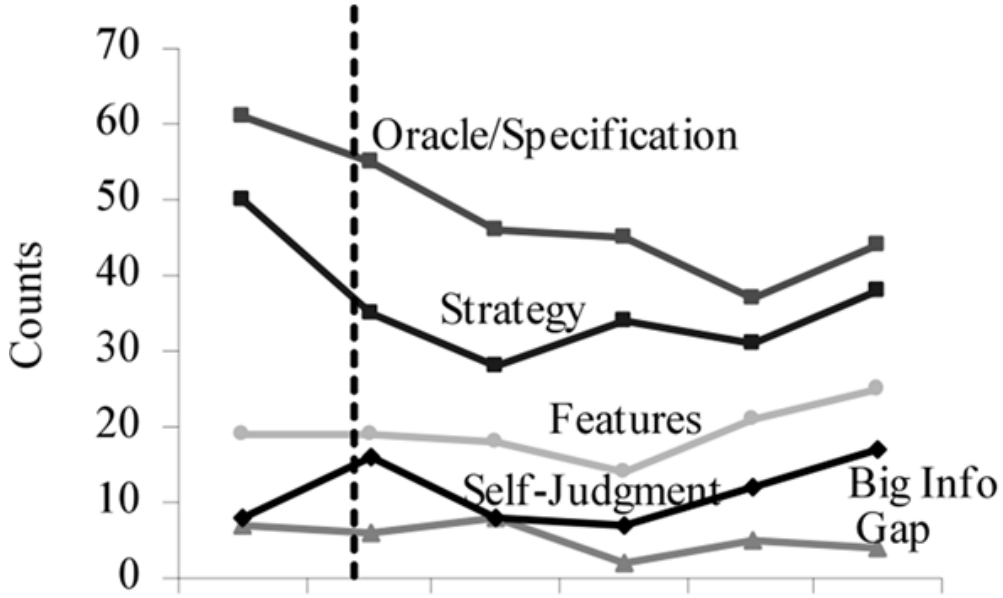
- To show sequence, space, relationships





Other Visualizations

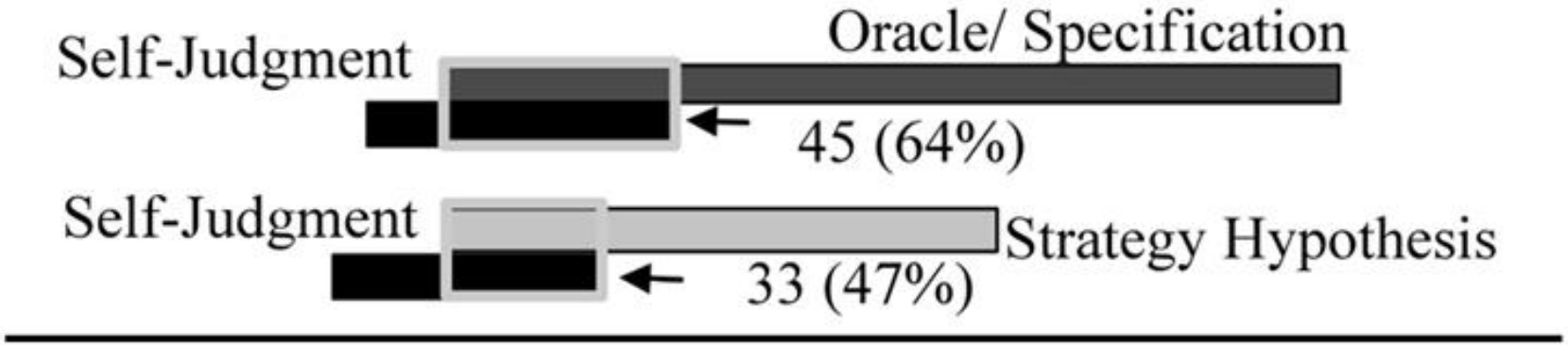
- Count phenomena over time



  - Dotted bar is where task 1 ended and task 2 began

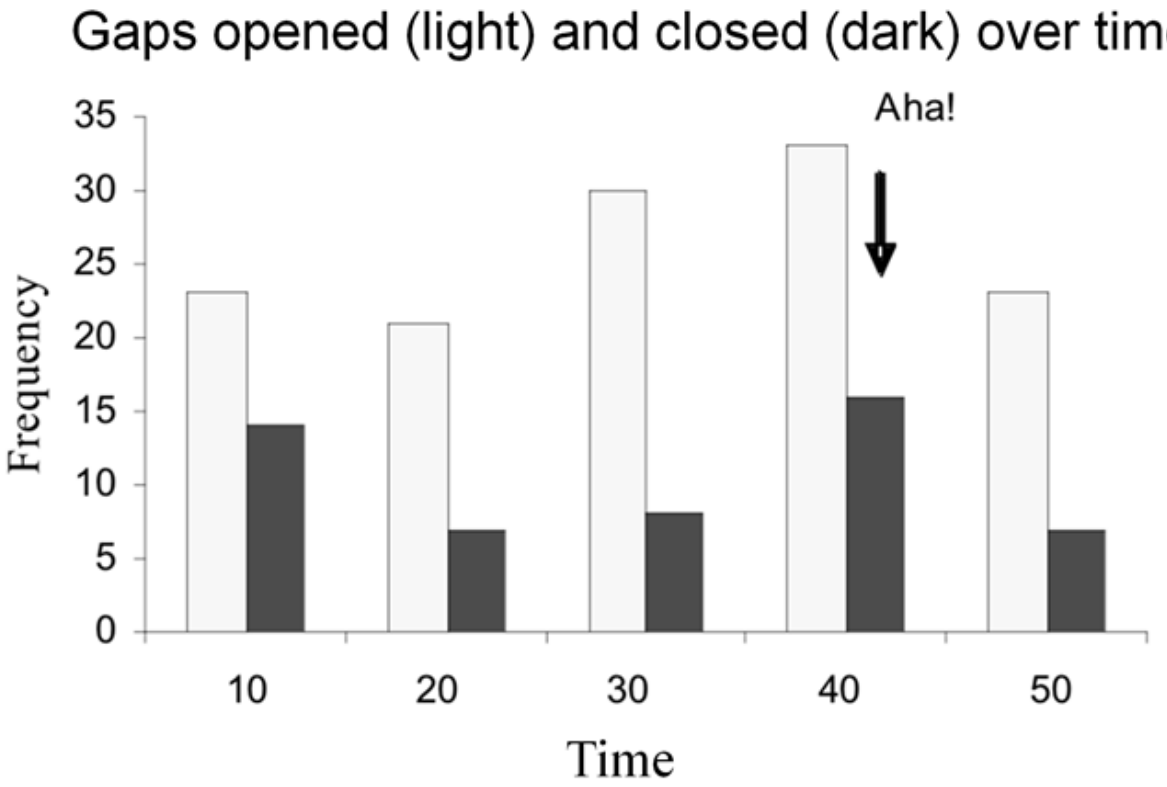
Visualizations (cont)

- Co-occurrence of phenomena



Visualizations (cont)

- Across time to show an interesting change



Summary

- Inputs- Data from interviews, observations, etc.
- Outputs- Ways to make sense of it
  - Task outline, to understand task
  - Scenario, to understand one user's way to do it
  - Use case, to understand several users' ways
  - Diagrams, to understand relations, paths, sequences
  - Visualizations, to understand frequencies, patterns, and relationships