

## OTHER EVALUATIVE USER RESEARCH METHODS

### 1. Introduction

- Evaluative user research methods are used to evaluate existing designs, prototypes, or systems.
- These methods help determine whether a product meets usability and user experience goals.
- They are applied after design solutions are proposed or implemented
- Evaluative research focuses on measuring performance rather than discovering needs.
- It supports validation of design decisions using real data and observations.

### 2. Purpose of Evaluative User Research

- To assess whether users can successfully complete tasks.
- To identify usability problems and interaction issues.
- To measure effectiveness, efficiency, and satisfaction.
- To compare different design alternatives.
- To improve product quality before or after launch.
- To reduce redesign cost and development risks.

### 3. Characteristics of Evaluative Research

- Conducted during mid or late stages of design.
- Focuses on existing interfaces or prototypes.
- Uses both qualitative and quantitative methods.
- Measures real user behavior or expert judgments.
- Results are often actionable and measurable.

### 4. Usability Inspection Methods

- Inspection methods involve experts evaluating interfaces.
- End users are not directly involved.
- Useful when time, budget, or users are limited.
- Helps identify obvious usability violations.

### 5. Heuristic Evaluation

- A usability inspection method conducted by experts.
- Interface is evaluated against usability heuristics.
- Commonly uses Nielsen's 10 heuristics.

- Each evaluator works independently.
- Usability issues are documented and prioritized.
- It is fast, low-cost, and easy to conduct.

### **Limitations**

- Does not represent real user behaviour.
- Depends heavily on evaluator expertise.

## **6. Nielsen's Usability Heuristics**

- Visibility of system status.
- Match between system and real world.
- User control and freedom.
- Consistency and standards.
- Error prevention.
- Recognition rather than recall.
- Flexibility and efficiency of use.
- Aesthetic and minimalist design.
- Help users recognize and recover from errors.
- Help and documentation.

## **7. Cognitive Walkthrough**

- Evaluates how easily **new users can learn the system**.
- Focuses on task-by-task interaction flow.
- Evaluators simulate user thinking process.
- Questions are asked at each step of task completion.
- Emphasizes learnability and first-time use.

### **Limitations**

- Not suitable for experienced users.
- Does not measure satisfaction or long-term usage.

## **8. Usability Testing (Evaluative Perspective)**

- Real users perform predefined tasks.
- Observers record task success, errors, and time.
- Can be conducted on working prototypes or final products.
- Used to validate design improvements.
- Provides both qualitative and quantitative data.

## **9. A/B Testing**

- Compares two or more design versions.
- Users are randomly assigned to different variants.
- Performance metrics are collected automatically.
- Common metrics include clicks, conversions, and task success.
- Used extensively in web and mobile applications.

### **Limitations**

- Requires large user base.
- Focuses only on measurable outcomes.

## **10. Surveys and Questionnaires**

- Collect structured feedback from users.
- Used after interaction with a product.
- Easy to distribute to large audiences.
- Provides quantitative insights.

## **11. System Usability Scale (SUS)**

- Standardized questionnaire with 10 statements.
- Measures perceived usability of a system.
- Produces a usability score from 0 to 100.
- Simple, reliable, and widely used.

## **12. User Experience Questionnaire (UEQ)**

- Measures overall user experience quality.
- Covers attractiveness, efficiency, clarity, and dependability.
- Suitable for evaluating interactive systems.
- Provides benchmark comparisons.

## **13. Analytics and Usage Data Analysis**

- Uses real user interaction data.
- Tracks navigation paths, time spent, and drop-off rates.
- Helps understand actual user behaviour.
- Useful for post-launch evaluation.

### **Limitations**

- Does not explain user motivations.
- Needs complementary qualitative methods.

**14. Heatmaps**

- Visual representation of user interaction intensity.
- Shows areas of frequent clicks or attention.
- Helps evaluate layout and content placement.
- Useful for identifying ignored UI elements.

**15. Click Tracking**

- Records where users click or tap.
- Helps evaluate navigation and button effectiveness.
- Identifies misleading or ineffective UI components.

**16. Eye-Tracking Studies**

- Tracks eye movement and gaze patterns.
- Evaluates visual hierarchy and attention flow.
- Useful for analyzing layouts and advertisements.
- Requires specialized hardware.

**17. Accessibility Evaluation**

- Evaluates usability for people with disabilities.
- Follows standards like **WCAG**.
- Includes keyboard navigation and screen reader testing.
- Ensures inclusiveness and legal compliance.

**18. Field Studies (Evaluative)**

- Conducted in real user environments.
- Observes real-world usage conditions.
- Identifies contextual and environmental issues.
- Time-consuming but highly realistic.

**19. Comparative Evaluation**

- Compares product with competitors or previous versions.
- Helps identify strengths and weaknesses.
- Supports strategic design improvements.
- Requires clearly defined evaluation criteria.

**20. Advantages of Evaluative User Research Methods**

- Validates design decisions with evidence.
- Improves usability and user satisfaction.

- Reduces redesign costs.
- Supports continuous improvement.
- Enhances product success rate.

## **21. Limitations of Evaluative User Research Methods**

- Focuses only on existing solutions.
- May miss new user needs.
- Some methods require expertise and resources.
- Quantitative data may lack emotional insights.

## **22. When to Use Evaluative Research:**

- During prototype validation.
- Before product launch.
- After major design changes.
- During post-launch optimization.