Exploratory Study

Understanding:
- Motivations
- Typical Behaviour
- Struggles
- Environment
- Social context
- Language
...

1. Understand your users
2. Build final version
3. Test & Evaluate
4. Prototype design
5. Create design ideas
6. Translate needs into functionalities

Exploratory Study
Observe

Understand Your Users

User study:
ways to capture information

Register Features

Ask Questions
- **Quantitative**
  - Fixed & measurable reality
  - Analyzed numerically and statistically

- **Qualitative**
  - Dynamic & descriptive reality
  - Analyzed by themes

- **Field**
  - Natural Environment
  - Uncontrolled

- **Lab**
  - Artificial Environment
  - Well Controlled

- **Behavioural**
  - What people do

- **Attitudinal**
  - What people think / feel

- **Natural Environment**
  - Uncontrolled

- **Artificial Environment**
  - Well Controlled
Data Triangulation

- One question - several methods
- Cross verification

Quantitative
- Fixed & measurable reality
- Analyzed numerically and statistically

Qualitative
- Dynamic & descriptive reality
- Analyzed by themes

Field
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Behavioural
- What people do

Attitudinal
- What people think / feel
Understand Your Users: Exploratory Studies

Validity of Research Design

- External Validity
- Internal Validity

- Generalizability of outcomes
- Trustworthiness of measurement
Understand Your Users: Exploratory Studies

Validity of Research Design

External Validity
- Selection of the sample
- Size of the sample
- Experimental Situation
- Time of the study

Internal Validity
- Consistency of instruments
- Reactivity

Generalizability of outcomes

Trustworthiness of measurement
Understand Your Users: Exploratory Studies

Validity of Research Design

External Validity
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Generalizability of outcomes

Trustworthiness of measurement
Understand Your Users: Exploratory Studies

Reactivity

- Hawthorne (observer) effect
- Expectancy effect (expectancy bias)
- Conformity effect
- Social desirability effect
Understand Your Users: Exploratory Studies

Exploratory Study

- Motivational system
- Contextual knowledge & beliefs
- Cognitive (Mental) model
Understand Your Users: Exploratory Studies

Exploratory Study

Motivational system
- Goals and tasks ("need")
- Desirability ("want")
- Emotional charge ("fears", frustration, pleasure, etc.)

Contextual knowledge & beliefs
- A cognitive representation (understanding) of how something works / organised
- Based on previous experience & beliefs; defines reasoning

Cognitive (Mental) model
Understand Your Users: Exploratory Studies

Exploratory Study

Goals

Hypotheses

General directions

Open mind

There is a product

There is NO product
Understand Your Users: Exploratory Studies

There is a product

- True-Intent Studies
- Remote Unmoderated Usability Studies
- Intercept Surveys
- Clickstream Analysis

There is NO product

- Questionnaires
- Observations
- Interviews
- Diary/Camera Studies
- Participatory Design
- Ethnographic Field Studies
- Contextual inquiry
**Understand Your Users: Exploratory Studies**

- Ask about user’s goals and/or intentions when they entering the service
- Track their subsequent behavior
- Ask if they were successful in achieving their goal

**True-Intent Studies**
- Remote Unmoderated Usability Studies
- Intercept Surveys
- Clickstream Analysis

**Questionnaires**
- Observations
- Interviews

**Diary/Camera Studies**
- Participatory Design

**Ethnographic Field Studies**
- Contextual inquiry
Understand Your Users: Exploratory Studies

There is a product

- True-Intent Studies
- Remote Unmoderated Usability Studies
  - Intercept Surveys
  - Clickstream Analysis

- Quantitative/qualitative automated method
- Captures behaviors (through software on participant device) and attitudes (through embedded survey questions)
- Usually includes goals/scenarios

- Questionnaires
- Observations
- Interviews
- Diary/Camera Studies
- Participatory Design
- Ethnographic Field Studies
- Contextual inquiry
Understand Your Users: Exploratory Studies

There is a product

- True-Intent Studies
- Remote Unmoderated Usability Studies
- Intercept Surveys
  - A survey triggered during the use of a product
  - Usually very short
- Clickstream Analysis

- Questionnaires
- Observations
- Interviews
- Diary/Camera Studies
- Participatory Design
- Ethnographic Field Studies
- Contextual inquiry
Understand Your Users: Exploratory Studies

There is a product

- True-Intent Studies
- Remote Unmoderated Usability Studies
- Intercept Surveys

- Clickstream Analysis
  - Analyzing the record of elements that users clicks on/views, as they use a software product
  - Requires proper software instruments / tools for telemetry data collection enabled

- Questionnaires
- Observations
- Interviews

- Diary/Camera Studies
- Participatory Design

- Ethnographic Field Studies
- Contextual inquiry