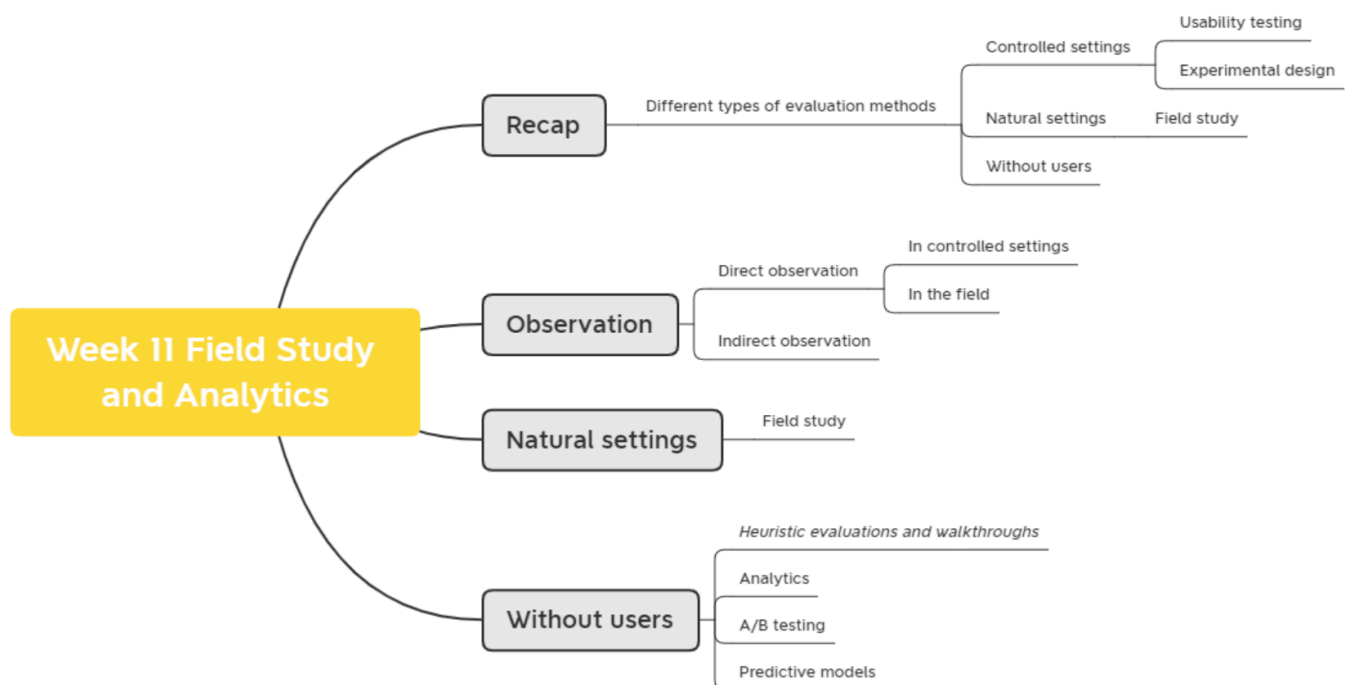


Field Study and Analytics

Week11-Field Study and Analytics

Learning Outcomes

1. To plan and carry out an **observation**
2. Understand the use of a **field study**
3. Explain the role of **analytics** in evaluation
4. Describe how **A/B testing** is used in evaluation
5. Understand the use of **predictive models**



Recap: Evaluation methods examples

表格

Observations 观察

Observation types

- Direct observation
 - In the **field**
 - In **controlled environments**

- Indirect observation: tracking users' activities
 - Diaries
 - Interaction logging
- Video and photographs collected remotely by drones or other equipment

A detailed framework (Robson, 2014) to guide observation

- **Space:** What is the physical space like and how is it laid out?
- **Actors:** What are the names and relevant details of the people involved?
- **Activities:** What are the actors doing and why?
- **Objects:** What physical objects are present, such as furniture?
- **Acts:** What are specific individual actions?
- **Events:** Is what you observe part of a special event?
- **Time:** What is the sequence of events?
- **Goals:** What are the actors trying to accomplish?
- **Feelings:** What is the mood of the group and of individuals?

Direct observation in the field

- Decide on how involved you will be
 - from **passive observer** to **active participant**
- How to gain **acceptance**
- How to handle **sensitive** topics, for example, culture, private spaces, and so on
- How to collect the data:
 - What data to collect
 - What equipment to use
 - When to stop observing

Research in the wild

How would you conduct an **in-situ study** in your project?

Ethnography 民族志

- Ethnography is a philosophy with a set of techniques that include **participant observation** and **interviews**
- **Ethnographers immerse themselves in the culture** that they study
- **Participation** is the key
- **Richer and more detailed** than other methods, but **expensive and challenging**

More on Ethnography

- **Co-operation** of people being observed is required
- Informants are useful
- Data analysis is **continuous**
- **Questions get refined** as understanding grows
- Reports usually contain examples

Online Ethnography

人们在线上的表现和线下的表现极大概率是不相同的

- Virtual, Online, Netnography
- Online and offline activity
- Interaction online differs from face-to-face
- **Virtual worlds** have a persistence that physical worlds do not have
- Ethical considerations and presentation of results are different

Observations and materials that might be collected 可能收集的观察结果和材料

- **Activity** or job descriptions
- **Rules and procedures** that govern particular activities
- **Descriptions** of activities observed
- **Recordings** of the talk taking place between parties
- **Informal interviews** with participants explaining the detail of observed activities
- **Diagrams of the physical layout**, including the position of artifacts
- Other information collected when observing activities:

在制作 Portfolio 的时候可以考虑引入更多的图像类内容，能够带来相较于文字来说更直观的解释。

- **Photographs** of artifacts (documents, diagrams, forms, computers, and so forth)
- **Videos** of artifacts
- **Descriptions** of artifacts
- **Workflow diagrams** showing the sequential order of tasks
- **Process maps** showing connections between activities

Observation Methods 观察方法

Direct Observation 直接观察

Indirect observations 间接观察

- Tracking users' activities
 - Diaries
 - Interaction logs
 - Web analytics
- Video, audio, photos, and notes are used to capture data in both direct and indirect observations

Field study 现场研究

- Field studies are done **in natural settings**
- **"In the wild"** is a term for prototypes being used freely in natural settings
- Seek to understand what users do **naturally** and how technology impacts them
- Field studies are used in product design to:
 - Identify opportunities for new technology
 - Determine design requirements
 - Decide how best to introduce new technology
 - Evaluate technology in use

Example: