Unit 2

Contextual analysis

Design-informing models

User needs & requirements

Contextual analysis

Contextual inquiry

Design

Create interaction design concepts

Analyze

Understand user work and needs

Prototype
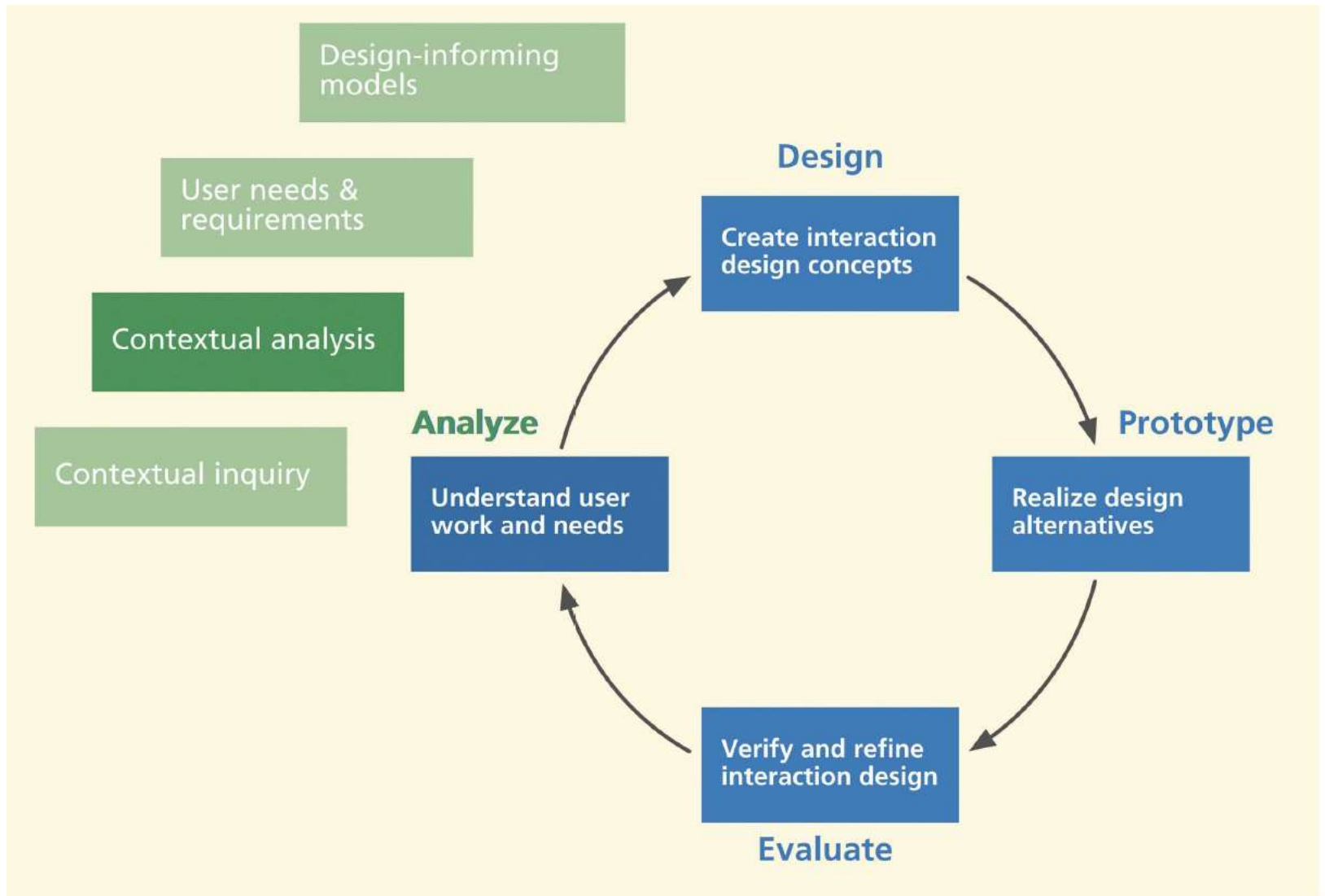
Realize design alternatives

Verify and refine interaction design

Evaluate

Contextual analysis

- Systematic analysis of contextual user work activity data

- Contextual analysis does not directly yield either requirements or design

How to do contextual analysis?

1. Identify work roles
2. Build initial flow model
3. Synthesize work activity notes
4. Build work activity affinity diagram from work activity notes
5. Communicate results to team via walkthroughs

1. Identify the work roles

- Work roles –collection of job responsibilities that accomplish some portion of the work
- Represent the direct relationship between users and the system as roles

1. Identifying work roles - Modeling work roles

- Model what is learned from interviewing and observing users
- Identify roles – name, description
- Profile of each role – contextual of use (personal motivation, freq of use, type of system interaction, social/physical technical environment), abilities(education, levels of expertise, skills, physical disabilities), personal (age, gender, etc.)

Example : Ticketing system

- Ticket seller
- Ticket buyer
- Event manager
- Financial manager
- Advertising manager
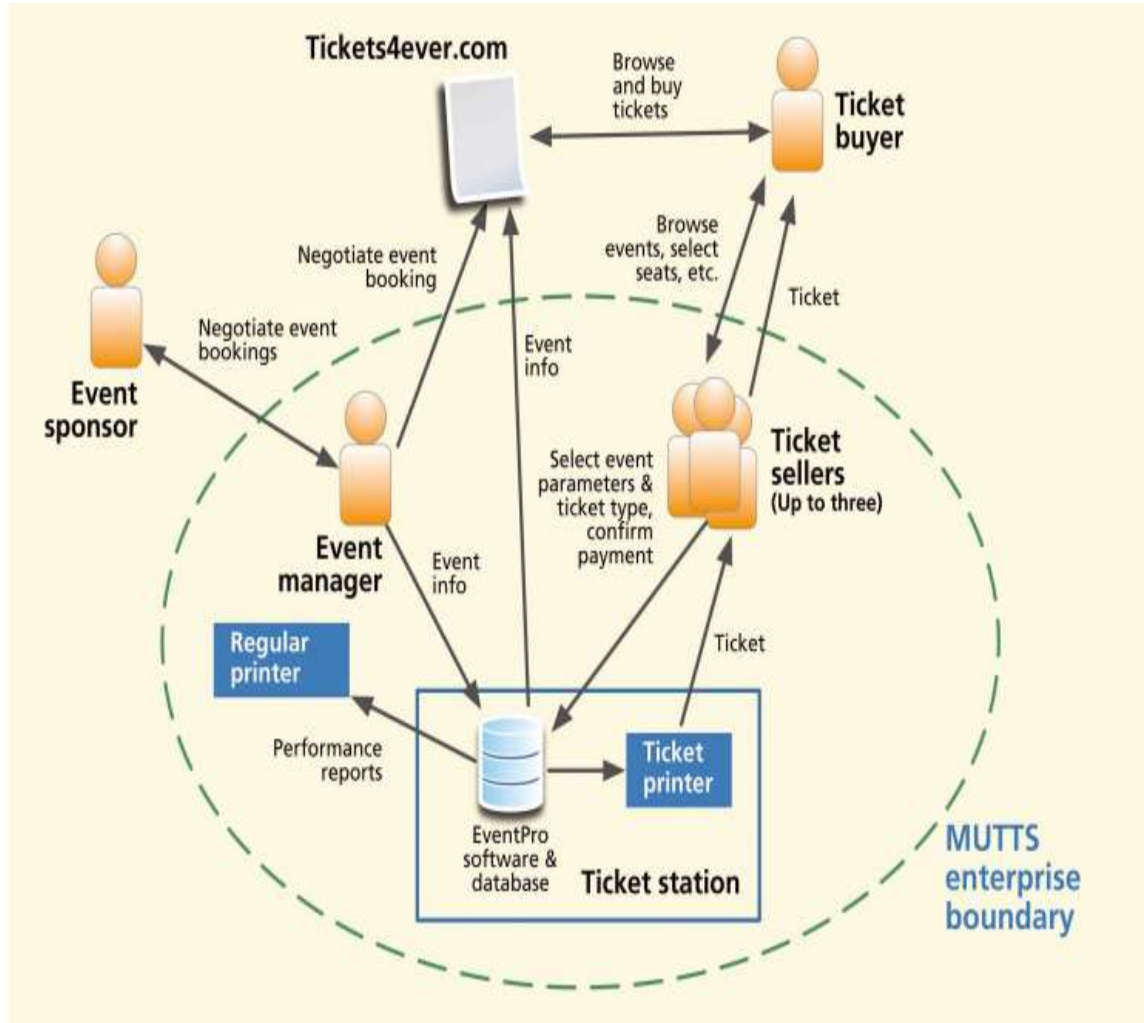
2. Build initial flow model

- Diagram
  - Show interconnections among the components of work domain
  - Information flow among components
  - Components include key work roles and machine roles
  - How entities communicate

2. Build initial flow model

- Sketch initial flow model
- Draw nodes of diagram to represent work roles
- Label nodes with work role names
- Add additional labeled nodes for other entities (eg.db)
- Label with what flows(eg.order infromation0
- Include the flow outside system adn label with flow channel(eg.phone, email)

2. Build initial flow model

Flow model

3. Synthesize work activity notes

- Sync with whole team session
- Interview and observation recordings
- Tag each work activity notes with ID
- Paraphrase and synthesize
- Filter out all noise and fluff
- Be brief
- Connect with work roles

3. Synthesizing work activity notes

- Example : work activity notes
- User(ticket buyer, id=u17)raw comment
  - It is too difficult to get enough information about events from a ticket seller at the ticket window. For example, sometimes I want to see information about popular events that are showing downtown this week. I always get the feeling that there are other good events that I can choose from but I just do not know which ones are available and the ticket seller usually is not willing or able to help much, especially when the ticket window is busy.

3. Synthesizing work activity notes

- Work activity notes: <u>break up raw comment-</u>
  - It is too difficult to get enough information about events from a ticket seller at the ticket window. For example, sometimes I want to see information about popular events that are showing downtown this week.
- Synthesize work activity notes :
  - User(ticket buyer, id=u17) It is too difficult to get enough information about events from a ticket seller at the ticket window.
  - User(ticket buyer, id=u17) I want to see information about popular events that are showing downtown this week.

3. Synthesizing work activity notes

- Work activity notes: <u>break up raw comment-</u>
  - I always get the feeling that there are other good events that I can choose from but I just do not know which ones are available and the ticket seller usually is not willing or able to help much, especially when the ticket window is busy.
- Synthesize work activity notes :
  - User(ticket buyer, id=u17) I would like to be able to find my own events and not depend on the ticket seller to do all the browsing and searching.
  - User(ticket buyer, id=u17) There are potential communication gap because the ticket seller usually does not understand my needs.

4. Build work activity affinity diagram from work activity notes

- A work activity affinity diagram is a way to sort data into categories and sub-categories when you don't know in advance what the categories will be.

- Collect many work activity notes from all team members

- Allocate time and discuss and paste/ stick the information on the wall. If the points are related, stick the paper close.

- Grow the clusters of related work activity notes and label cluster

Example
Team studying clusters to form groups

5. Communicate results to team via walkthroughs

Example, WAAD