#### Unit 3

Designing the interaction

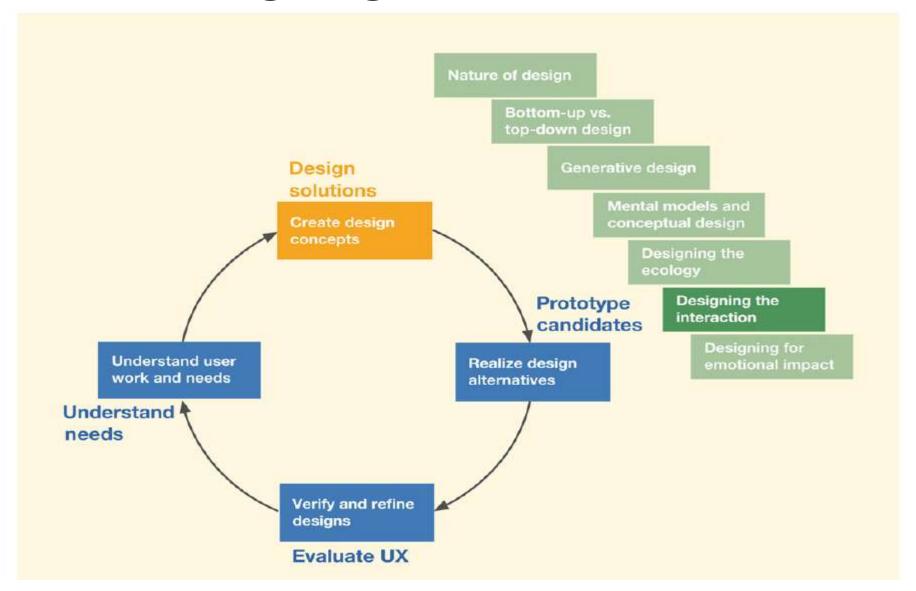
## Designing the interaction

- Creating an interaction design –
- storyboards
- wireframes
- intermediate interaction design –
- interaction design production –
- case study

#### Designing the interaction

 Interaction needs are about being able to perform required tasks in the work domain using the product or system being designed.

## Designing the interaction



#### Designing for Interaction

- Designing for Interaction Needs Is about Supporting Tasks :
  - how people use the system or product to perform tasks within the broader work practice and covers all touch points where the user interacts with the ecology.
  - Apple's iTunes ecology include supporting users with signing up, logging in, searching or browsing for songs by artist, title, album, and rating, selecting, playing, pausing, rating, and manipulating songs.

## Designing for Interaction

- Different Device Types in the Ecology Require Different Interaction Designs.
- For example, the interaction design for a search task will be different for desktops, phones, tablets, and watches—with smaller and less capable devices providing fewer options and more constrained results.
- For example, the interaction design of an application on the Android platform will be different from that for the Apple or Microsoft platforms.

- Start by Identifying All Devices and Their Roles in the Ecology:
  - For example, depending on the nature of work practice, you can think of a smart watch as mostly a tracking and notification device whereas a desktop can be the central hub where the majority of the content is generated.
  - Other devices such as phones and tablets can be used for the combination of both content generation and consumption tasks.

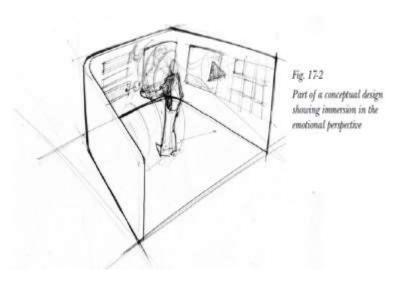
- Proceed with Generative Design :
  - The first goal is to create as many ideas as possible for the overall theme or metaphor of the interaction conceptual design (next section) for each device in the ecology.
  - Think of how a given task sequence can be handled by multiple devices as the user switches contexts in the ecology.

- Establish a Good Conceptual Design for the Interaction:
  - An example is a calendar application on a desktop in which user actions look and behave like writing on a real calendar.
  - A more modern example is the metaphor of reading a book on an iPad. As the user moves a finger across the display to push the page aside, the display takes on the appearance of a real paper page turning. Most users find it comfortingly familiar.

- Leverage Interaction Design Patterns :
  - For example, suppose you are working on an email communication system. If you want to take advantage of an established standard interaction design concept that we know works for desktop systems.
  - Another example of using a concept or idea from the target work domain in an interaction design is the use of a shopping cart on an online shopping website. As users shop, they can click on the cart icon to see what is in their cart, just like shopping in the physical world.

- Establish the Information Architecture for Each Device :
  - What information will be available for interaction on each device? How will it be structured?
  - What happens when a user tries to access information not available on that device?
  - What is the best way to represent that information in the design?
  - What are the modalities with which users can access that information (voice, touch, etc.)?

# Example: Interaction Conceptual Design for the Ticket Kiosk System



- The center screen is the interaction area, where immersion and ticket-buying action occur.
- The left screen contains available options or possible next steps; for example, this screen might provide a listing of all required steps to complete a transaction, including letting the user access these steps out of sequence.
- The right screen contains contextual support, such as interaction history and related actions; for example, this screen might provide a summary of the current transaction so far and related information such as reviews and ratings.
- Each next step selection from the left panel puts the user in a new kind of immersion in the center screen, and the previous immersion situation becomes part of the interaction history on the right panel.
- Addressing privacy and enhancing the impression of immersion: When the ticket buyer steps in, rounded shields made of classy materials gently wrap around.
- An "Occupied" sign glows on the outside.
- The inside of the two rounded half-shells of the shield become the left and right interaction panels.
- Note: We might need to evaluate whether this could induce feelings of being "trapped by the machine."