

# Chapter 2:

People,  
Activities,  
Contexts,

and

Technologies:

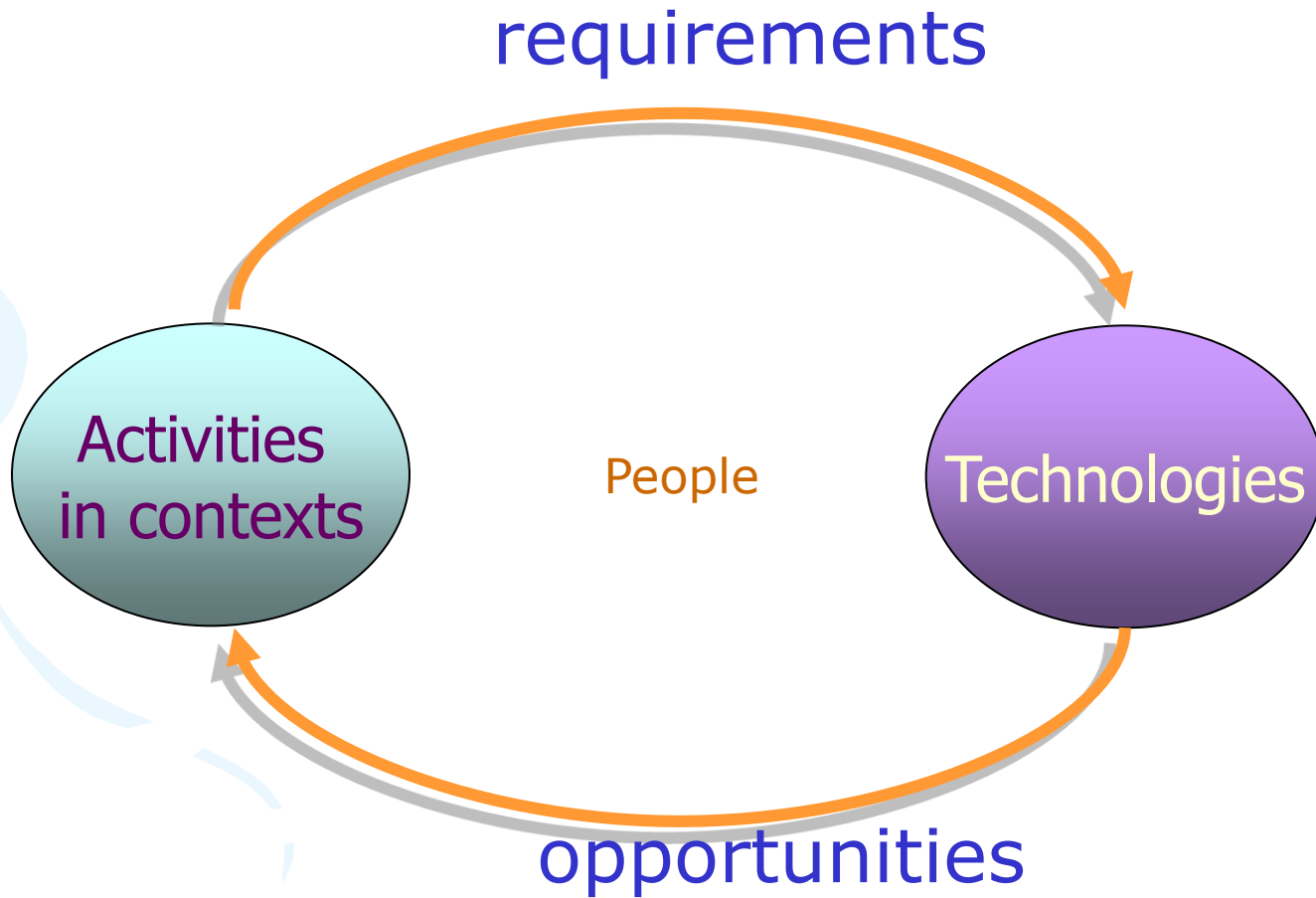
A framework  
for designing  
interactive systems



# Chapter 2 (PACT):

- 2.1 Introduction
- 2.2 People
- 2.3 Activities
- 2.4 Contexts
- 2.5 Technologies
- 2.6 Scoping a problem with PACT
- 2.7 Process of interactive systems design
- 2.8 Doing design

## 2.1 Introduction



Three balloons (green, blue, and purple) are positioned on the left side of the slide. Each balloon has a string and several small yellow triangular flags attached to it. The green balloon is at the top, the blue one is in the middle, and the purple one is at the bottom.

## 2.2 People

- Physical differences
- Psychological differences
- Usage differences



## 2.2 People- Physical differences

- Differences in physical characteristics (height, weight)
- Differences in personalities and cognitive skills and preferences
- Variability in the 5 senses has a huge effect on how accessible, how usable, and how enjoyable using a technology for people in different contexts

Three balloons (green, blue, and purple) are positioned on the left side of the slide, each with yellow triangular streamers trailing from its string.

## 2.2 People- Physical differences (2)

- Ex:
  - Color blindness
  - short-sightedness
  - long- short-sightedness
  - hearing impairments
  - dexterity impairments ...affect many people

Three balloons (green, blue, and purple) are positioned vertically on the left side of the slide. Each balloon has a string and several small yellow triangular flags attached to it.

## 2.2 People- Physical differences (3)

- Ex: Wheelchair users, people having big fingers.
- $\Rightarrow$  Which physical affects of people that can take into account in the design ?



## 2.2 People- Psychological differences

- Spatial ability
- Languages
- Cultures
- Needs, abilities, attention and memory, depending on the stress and the tiredness
  - remembering long numbers & complicated instructions
  - recognizing vs remembering things
  - grasping how something works)
- Experiences and conceptual models of things
- ⇒ Mental model





## 2.2 People- Psychological differences (2)

- Have not good mental model ⇒
  - Only perform actions by rote
  - Don't know why something goes wrong and not be able to recover
- Ex: When using
  - software systems
  - 'simpler' domestic systems
- ⇒ Design so that people will form correctly and usefully their mental models of:
  - How they work
  - What they do

Three balloons (green, blue, and purple) are positioned vertically on the left side of the slide. Each balloon has a string and several small yellow triangular flags attached to it.

## 2.2 People- Usage differences

- Types of users of a technology:
  - Experts
  - Novices
  - Discretionary users

Three balloons (green, blue, and purple) with yellow streamers and small yellow triangles are positioned on the left side of the slide.

## 2.2 People- Usage differences (2)

- Experts:
  - Use regularly a system
  - Learn all sorts of details
- Novices:
  - Need to be guided through interactions
- Discretionary users:
  - Do not have to use a system
  - Be often quickly put-off if the things are difficult to do



## 2.2 People- Usage differences (3)

- Types of groups of people:
  - *Homogeneous* groups: everyone are broadly similar and want to do much the same thing.
  - *Heterogeneous* groups



## 2.2 People- Usage differences (4)

- Design for *homogeneous* groups:
  - Can be taken by a design team
  - Provide much more detailed input for the representatives
- Design for *heterogeneous* groups:
  - Particular
  - To respond to particular needs of particular people