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# Fit4WORK

SELF-MANAGEMENT  
OF PHYSICAL AND MENTAL FITNESS  
OF OLDER WORKERS



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PROGRAMME



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SELF-MANAGEMENT OF PHYSICAL AND MENTAL FITNESS OF OLDER WORKERS

Including end users in everyday development of ICT solutions

Training materials

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# Plan

- User-centered design: approaches
- ELITE: users as members of the project team
- End users e-Inclusion
- Examples:
  - Agnes project
  - HELPS project
- Summary

## Challenge

**HOW TO EFFECTIVELY INVOLVE  
(OLDER) END USERS IN THE  
DESIGN AND DEVELOPMENT  
PROCESS?**

## User-centred design: user as the object of study

- Designer design from what they think is and experience as the user needs and ability
- This knowledge is gained from studying and discussing with the users

WE WILL **NOT** USE THIS APPROACH IN FIT4WORK

## Participatory design: include the users in design process...

- ...yet not as full members of the project team
- Reason: the elderly (oldre adults) do not understand the technology and language used
- Users feel trapped and may have no specific opinion about the given design

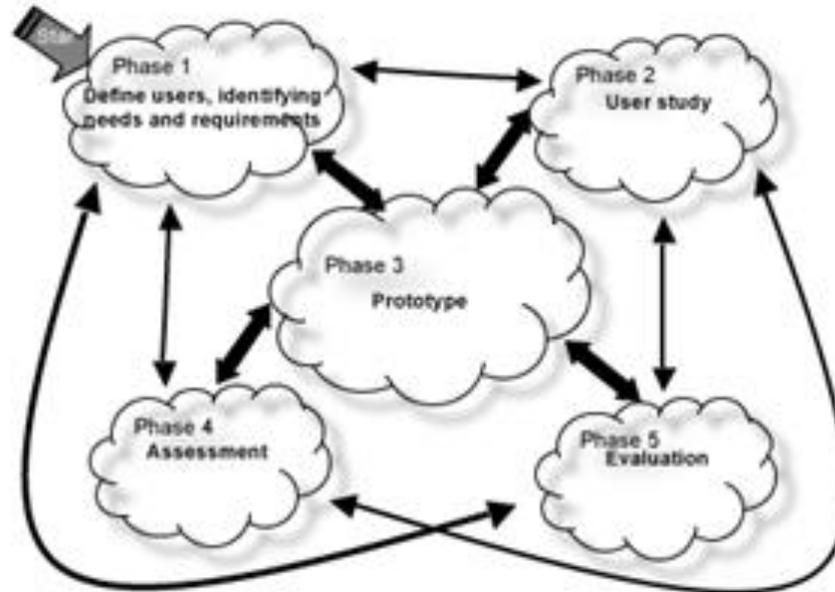
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**ELITE**

## ELITE: Let the user touch the prototype

- Prototype or mock-up is the communication medium!
- Users try, look at, touch and feel the prototype and thus can easily express their opinion

## ELITE: iterative design with the prototype in the center



## ELITE: Key guidelines

- Become an anthropologist – observe the user in their lives
- Base the design on earlier artefacts (or: artefacts known to the users)
- Hide the technology (if possible)
- Provide motivation and challenge
- Create a coherent hardware/software package

**End users e-Inclusion: Full participation of end users in the project**

**END USER IS AN (EXPERT) PROJECT TEAM MEMBER!**

## End users e-Inclusion : Building up users' experience with the new technology

- This way the users will:
  - have an opinion on the designed product
  - express that opinion

## End users e-Inclusion: challenges

- Get access to the user's everyday life and preferences;
- Help the user to express their expert knowledge;
- Handle tension between developers and the users;
- Change attitudes (own and users')

# EXAMPLE 1: AGNES



## Example 1: AGNES project

- AAL Joint Programme project: aal-2008-1-014
- Coordinator: Prof. John Waterworth
- Objective: user-sensitive ICT environment in users homethat supports the elderly person by detecting, communicating and responding to their needs and daily activities

## Example 1: focus groups

- Build up relation with the users to;
  - have access to their lives;
  - understand their point of view

## Example 1: Modernfamilies social network platform

1. Users introduced to Moderfamilies individually;
2. Users used the platform for two weeks;
3. Users interviewed – felt uncomfortable about the question, answered to have been busy
4. Users used the platform for another month;
5. Interviewed again – the same answer

**USERS THOUGHT THE TECHNOLOGY SEEMED TOO HARD TO USE AND THAT THEY WERE INCOMPETENT TO USE IT**

## Example 1: Modernfamilies in group meeting

1. Platform introduced and demonstrated to the group – researchers explained it can indeed be hard to use even for them;
2. Some users commented they have had their relatives talked about Facebook;
3. Facebook was introduced to the whole group;
4. The users started to use both: Modernfamilies and Facebook;
5. During the next group meeting users expressed their opinion about being happy with FB:
  - they could see what their grandchildren were up to;
  - they could meet old friends from school;
  - they could meet old friends from other countries and places where they had lived.
6. Users able to express advantages and disadvantages of MF in comparison with FB

## Example 1: tension between developers and the users

- Developers want to create advanced innovative and effective ICT
- Users want something simple and easy to use

## Example 1: mutual understanding between developers and users

- Frank experiences and opinions exchanged
- Developers not feeling the need to be in charge of the design and development process;
- Developers following the lead of the users: if the users do not want a specific feature, it gets changed or removed

## Example 1: changing attitude of the users

- Users usually negative towards new technology – example: Agnes emotion detector
  1. In Agnes no user wanted a camera in their home;
  2. The technology demonstrated and explained during the group meeting;
  3. All users wanted to have a camera: *When I wake up and start the computer I want to see what mood I am in*
  4. After this: users more open to new solutions

## Example 1: video

<http://platontv.pl/exp?page=1&expression=silhouette&id=2081>

# EXAMPLE 2: HELPS



**HOUSING AND HOME CARE  
FOR THE ELDERLY AND VULNERABLE PEOPLE  
AND LOCAL PARTNERSHIP STRATEGIES IN CENTRAL EUROPEAN CITIES**

## Example 2: HELPS project

- Local Action in the city of Poznań: realized by PSNC
- Objective: design and develop several (simple) AAL applications

## Example 2: shared preventive e-Health station



## Example 2: HELPS focus group

- Group of five persons – participants of the daily care center where the station was to be installed
- Diverse age, health status and background of the participants
- First meeting: explaining about the project, the objective of the common exercise, attempting to learn a couple things about the persons invited by the center management to participate

## Example 2: second meeting

- Arriving at the center with:
  - first design of the application including all necessary functions enabling to communicate with the medical devices;
  - the hardware;
  - cookies 😊
- Surprisingly the users right away able to express their opinions, even though the whole technology stack was completely new to them

## Example 2: third meeting

- We reacted to the complaint about inability to control the use of all the devices: added voice instructions guiding the users through all the devices
- The users loved and approved the new feature

## Example 2: further meetings

- The working session was organized every 2nd week, always on Thursday, always at 1:30 pm
- We always attempted to react to the users' opinions and comments: *I don't understand this*
- While one person was testing the prototype, we talked to others about various things that happened to them during the week or about things that happened to us: good relationship created
- Motivation: an opportunity to use the medical devices to check the health status
- Challenge: improve the (health) result from the previous meeting

## Example 2: video

<http://platontv.pl/exp?page=1&expression=helps&id=5772>

# SUMMARY

## Fit4Work approach

**REPEAT THE EXPERIENCE!**

## Fit4Work approach

1. Create the first design of the application;
2. Discuss it with the small user focus group, allowing them to use the mock-up or prototype;
3. Improve the design according to the opinions;
4. Go back to 2 and repeat



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