Deliverable 3.3

Co-creation & Co-design session results

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Noah Project

Summary

Co-creation session

Every pilot (Belgium, Italy and Romania) organised a co-creation session/focus group during the period 2017-2018 to find the needs and expectations of the elderly and caregivers.

Objectives

Elderly:

- Gain insights into elderly's current concerns/issues in relation to living independent.
- Identify needs and expectations of elderly regarding smart technology and monitoring life style.
- Identify expactations of elderly regarding features and characteristics of home sensor kit

Care professionals

- Identify needs and expectations of care professionals regarding smart technology and monitoring life style.
- Validate with care professionals the concept of a home sensor kit, connected with an app.
- Identify expactations of care professionals regarding features and characteristics of home sensor kit.

Based on the users insights, the prototype of the app for elderly and care givers can be further developed and tuned to the users' needs.

Screening and recruitment participants

Screening

- Elderly 65+ and informal caregivers (family members)
    - 5 – 8 elderly
    - Living alone at home

- Mix men/women
- Mix elderly and informal caregivers
- Already in need of home care assistence

- Care professionals
    - 5 – 8 care professionals
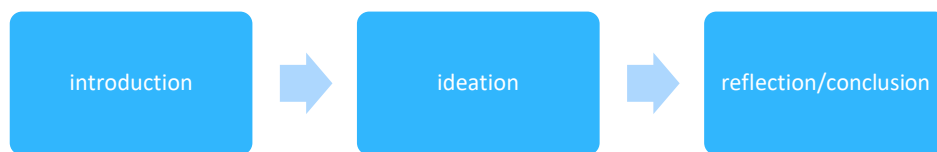   - Profile: nurse, home care assistant, staff of emergency centre

Recruitment

- Belgium: 1 focus group and 3 separate interviews
- Italy: 2 focus groups
- Romenia: 2 focus groups

Methods

introduction	→	ideation	→	reflection/conclusion

Topics elderly & informal caregivers

01	Challenges and concerns

What are your biggest concerns and challenges in living alone at home?

What is your biggest frustration?

02	Motivation and opportunities

What is key for you to live at home as long as possible?

03	Acceptance technology

Do you use something of new technology in your daily life?

What is your idea towards (smart) technology?

04	Ideation on NOAH sensor kit

Do you think that this sensor kit supports you in living alone at home?

Would it enhance your independence?

Topics care professionals

01	Current concerns and issues

What is your main issue now, regarding care assistance?
What is your biggest frustration?
What is key for you to provide a good quality of care?

02	Acceptance smart technology

In your job, do you already use connected tools like alarm systems, connected bracelets, apps...?
If yes: how do you use it. How often?
What is your idea towards new technology?

03	Ideation on NOAH sensor kit

Do you think that this sensor kit supports your daily practice in taking care of people at home?
In what circumstances do you believe you would get the most support of it?
How would it fit in your daily practice?

04	Ideation on long term monitoring

What is your idea on long time monitoring?
What gains and benefits do you think you get out of this solution?
What are tresholds to use this solution?

Results elderly and informal caregivers

01	Challenges and concerns

Belgium:

_ Lack of information and communication between health care providers
_ Living at home as long as possible
_ High costs, affordability
_ Fragile situation: *'What if something happens to me? Who takes care of my husband?*

Italy:

_ Need of assistance: *'Will anyone help me?'*

Romenia:

_ Health problems
_ Loneliness
_ Being dependent

02   Motivation and opportunities

Belgium:

- Wide range of home care services
- Reimbursment: *'You can get reductions and reimbursment for a lot of things. But you need to go through a lot of administration.'*

Romenia:

- Household
- Music and dancing
- Games: *'Sudoku'*

03   Acceptance technology

Belgium:

- More and more elderly often use smartphones, tablet, pc…: *'I ask my grandchildren to help me with my tablet.'*
- No gadget, but practical support in daily life: *'I would like to have some sensors under my bed that light up when I step out of my bed'.*
- Supports mental activity: gaming, exercises

Italy:

- Yes if: simple, doesn't interfere, userfriendly, not stigmatizing, cheap, not impersonal
- No: *'More stuff in my house.'*

Romenia:

- More and more elderly often smartphone, internet, smart TV
- *'We have to stay up to date'*

04	Ideation on NOAH sensor kit

Belgium:
- Can be very supportive for informal caregivers: *'Especially when you get a warning or a notification when something goes wrong.'*
- Can cause more concern/ anxiety: *'looking the whole time at my app to see if my mom is alright.'*
- No privacy issue: *'If there are no cameras involved, I don't mind.'*

Italy:
- Better insight and information
- Security
- Independent life at home
- Connections
- Warnings

Romenia:
- Surveillance: *'The joy that somebody takes care of me.'*
- Security
- Increases independence
- Increases confidence between family members

Results care professionals

01	Current concerns/issues

Belgium:
- Lack of time and personal contact.
- Administration is too time consuming
- Information and communication with family members and informal caregivers

Romenia:
- Bureaucracy: *'Less documents to fill in, more staff'.*
- Lack of education
- Resistance to change
- Ingratitude

02   Acceptance smart technology

Belgium:
- More and more smart technology: electronic patient file, communication tools..
- High degree of openness towards technology in heatlh care.
- Supports daily care
- Userfriendliness is key: *'I just want it to work. I don't have time to have a lot of fuss with it.'*

Italy:
- Technology as a service (not as a tool)
- More customisation

Romenia:
- Not so much experienced with technology in home care
- Focus on utility and efficiency
- Openess towards technology: *'We have to stay up to date'.*

03   Ideation on NOAH sensor kit

Belgium:
- Notifications and warnings very useful for immediate action
- Pitfall: spending more time behind the screen.
- Danger: control mechanism *'It is not OK if this system is being used to see if I work fast enough.'*

Italy:
- Better service
- Better relationships
- Control on my work.
- Importance of 'red light' messages
- Push alert?

Romenia:
- Creating comfort and a sense of security
- Increases the quality of life and social network.
- Installation: non invasively, fast service, easy to use, training

04	Ideation on long term monitoring

Belgium:

- Insights in behaviour: sleep pattern, fall risks
- Scepticism: *'Every person is unique. What would you learn?'*

Italy:

- Facts, no explanation
- Reliability
- Data storage?

Romenia:

- Useful to monitor daily status to improve quality of life.
- Longitudinal (anthropological) study on habits in private environment → product development

Conclusion

- Similarities in 3 regions

- Openess towards technology

  - Both on elderly as at professional side.

  - Technology as a service (not a tool)

  - Focus on utility and efficiency

- Communication and information in home care is key.

- NOAH concept:

  - Improves quality of life (more independent, more secure)

  - Improves quality of care (warnings and notifications)

  - Improves social network (connections)

- **Points of attention:**

  - Simple and userfriendly

  - Privacy

  - Training professionals

Co-Design session

Every pilot (Belgium, Italy and Romania) organised a co-design session with end users during the period April-Mai 2018 to design a general framework of the app..

Objectives

2 separate sessions

Elderly:

- Validate the end-user services
- Co-design interface of the end-user app through rapid prototyping

Care professionals

- Validate the care giver services
- Co-design interface of the care giver app through rapid prototyping.

Based on the prototypes, the interface of the app (for end-users and care giver) can be further developed and tuned to the users' needs

Screening and recruitment participants

Screening

- Elderly 65+ and informal caregivers (family members, neighbours, friends…)
    - 6 - 8 elderly
    - Living alone at home
    - Mix men/women
    - Mix elderly and informal caregivers
    - Already in need of home care assistence
    - Previous knowledge or experience with smartphone is not necessary

- Care professionals
    - 6 - 8 care professionals
    - Profile: nurse, home care assistant, staff of emergency centre

Recruitment

- Belgium: 3 elderly and 2 (informal) caregivers
- Italy: 3 elderly and 4 caregivers
- Romenia: 15 elderly and 7 caregivers

Methods

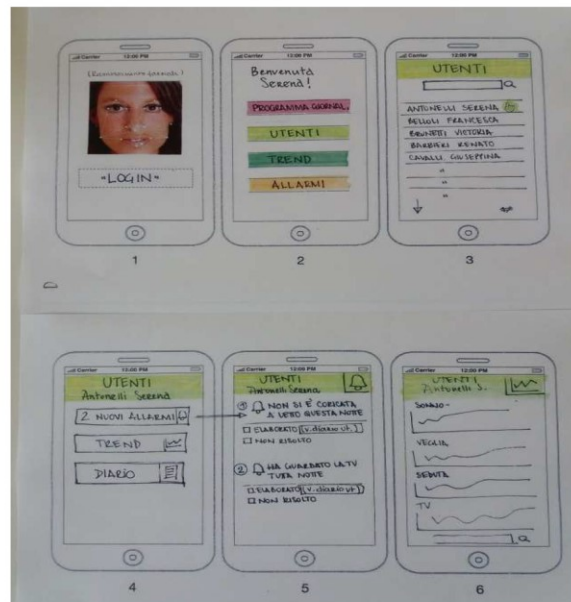| introduction | → | co-design | → | reflection/conclusion |

Results app (informal) caregivers

- Push notifications and alerts (**short term**)
- Monitoring health (physical and mental) status (**long term**)
- Technical status sensors: battery low, disconnection…
- Follow-up appointments (doctor, hairdresser, recycle bin)
- Consulting on different devices (smartphone, tablet, pc)
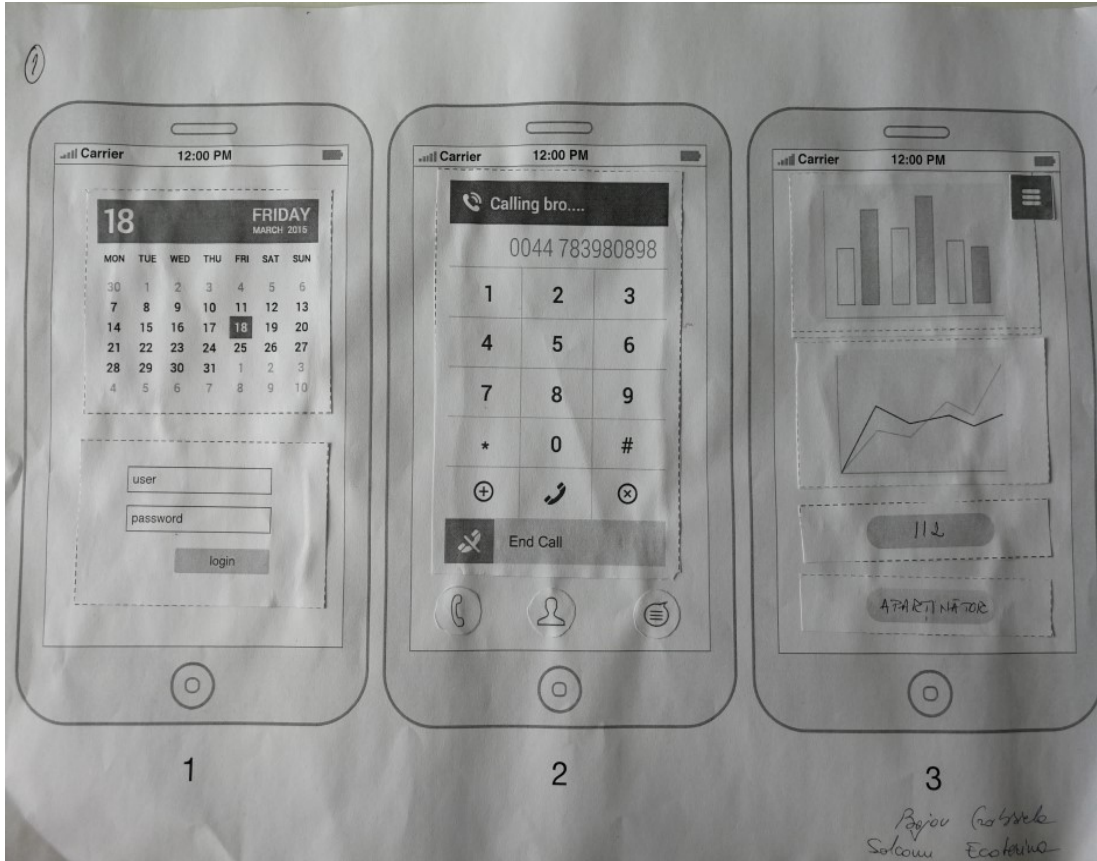
Illustrations

- Photograph
- Graphics

Illustrations

- Check status sensors
- Graphics

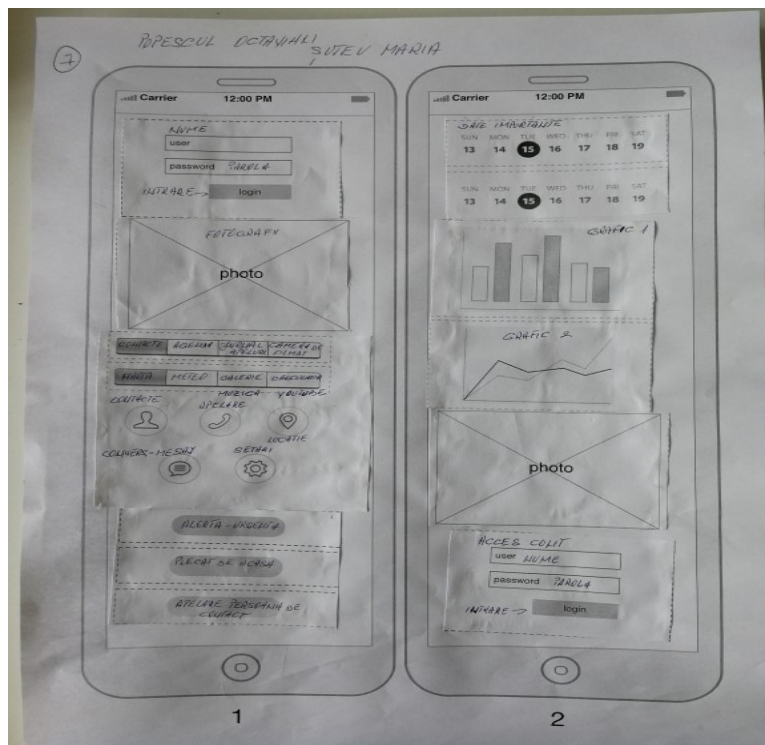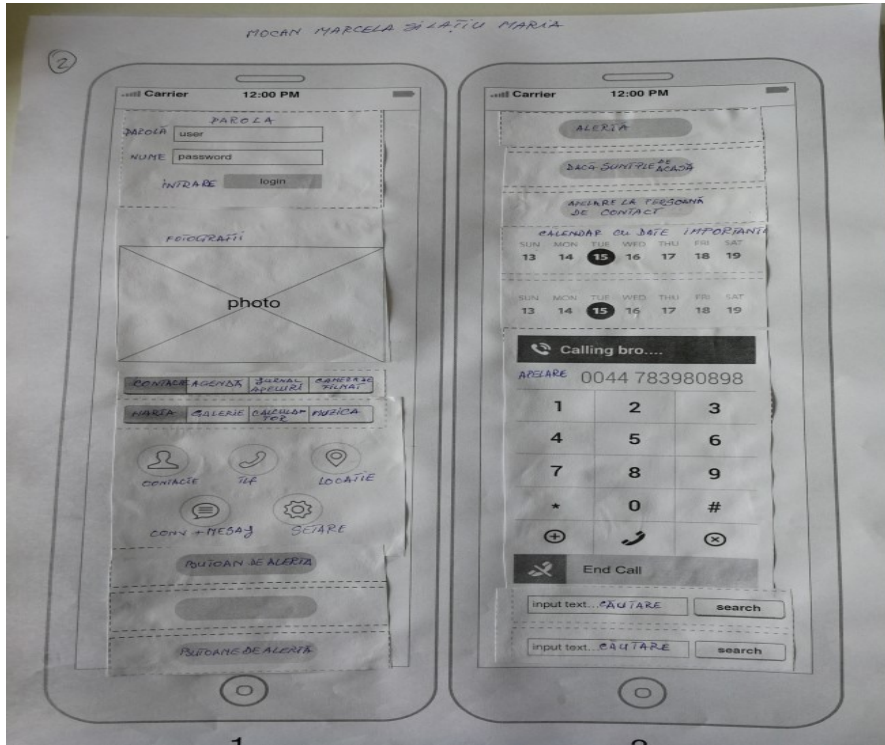# Illustrations

NOAH AAL Project
Documentation

Results app elderly

- Emergency button
- Main phone contacts (3-5)
- Diary: personal notes, personal well being, mood sensor
- Agenda – appointments
- Ownership: senior wants to decide who has admin rights for what.
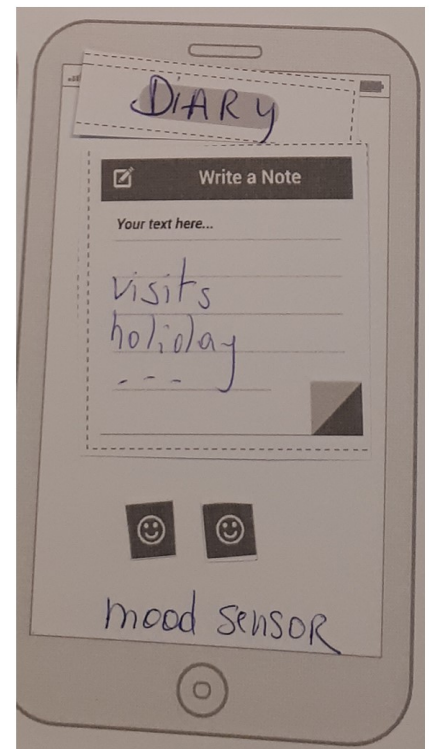
Points of attention:
- Focus on sensor kit (no phone book, no WhatsApp, no Facebook)
- Userfriendly AND secured login
- Senior: no big interest in own monitoring.

Illustrations

- Diary
- Writing notes
- Mood sensors (smileys)

Conclusion

General ideas

- No '1 fits all' : possibility to tailor (show and hide)
- Focus on app (informal) caregivers
- Focus on data sensor kit: visualized and easy to interpret/comprehend
- Consulting on different devices (smartphone, tablet, pc)

Points of attention:
- Need of training
- Data protection

Points of discussion

- Priority to app caregivers?
- Login screen: secured but easy (visual recognition?)?
- Romenia: XL − Belgium: Small: customizable?
- Userfriendly: drop down menus?

Caregivers app:
- Login
- Notifications and alarms
- Trends
- Follow-up appointments
- Technical status sensors

Minimal viable product for testing!