The Italian pilots meet the Pharaon Core Board

A general introduction to Objectives and Milestones

LEAD: University of Florence
Pilot Members: UP, CSS, CORO, ENT, OKEY
Technology Providers: ENT, CORO, SENLAB, SENTAB, ASC

University of Florence (UNIFI)

Laura Fiorini| Pilot Coordinator

Venue: Cooperativa Di Vittorio, Firenze (FI), Italy

March 31st, 2022

The objective of the Italian pilot is to: Propose personalized Integrated care for frail older adults

1. The idea is to present the **work done** and the **work planned** within the framework of Pharaon Objectives and milestone.

2. We will deliver a general presentation of objectives

3. and then we will present the work done within each milestone.

Apulia

Tuscany

# Pharaon – Overall Objective

pharaon

Objective 1: To identify the current state of interoperability between widely used platforms and partner solutions and solutions from third parties involved at Pharaon at the open calls, then develop and implement a generalised integration protocol.

Objective 2: To implement personalised analytics that provide older adults and their caregivers with the most pertinent physical and mental health as well as wellbeing information.

Objective 3: To demonstrate the feasibility of integrating the Pharaon platforms with existing systems related to intelligent transport and mobility, energy optimisation, and smart cities
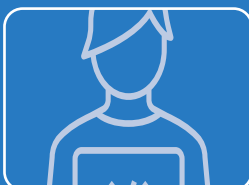
Objective 4: To ensure user-friendly human-computer interaction modes that addresses various capacity limitations, provides rapid access to useable information.

Objective 5: To systematically implement, test and validate the Pharaon platforms at a pre-validation stage providing early feedback to the function and usefulness of these platforms and their integrated technologies.

Objective 6: To involve new stakeholders and their technologies, products, or services in the different ecosystems through the launch of open calls.

Objective 7: To pilot the platforms in 6 different sites from 5 countries, with a scope of thousands of users including older adults, formal, and non-formal caregivers.

Objective 8: To prove the efficacy of the platforms by applying standards and proven metrics, such as MAFEIP1.

Objective 9: To widely share, disseminate and exploit the progress and outcomes of the project with a broad audience of caregivers, older adults, policy makers, the general public, and academics.

Objective 10: To liaise and inform standardisation bodies in order to align Pharaon solutions to the most recent standardisation efforts in the field and to contribute to those standards with the acquired technical and practical knowledge.

start from the project milestones....

And **evaluate how** ==**our work**== **is going....**
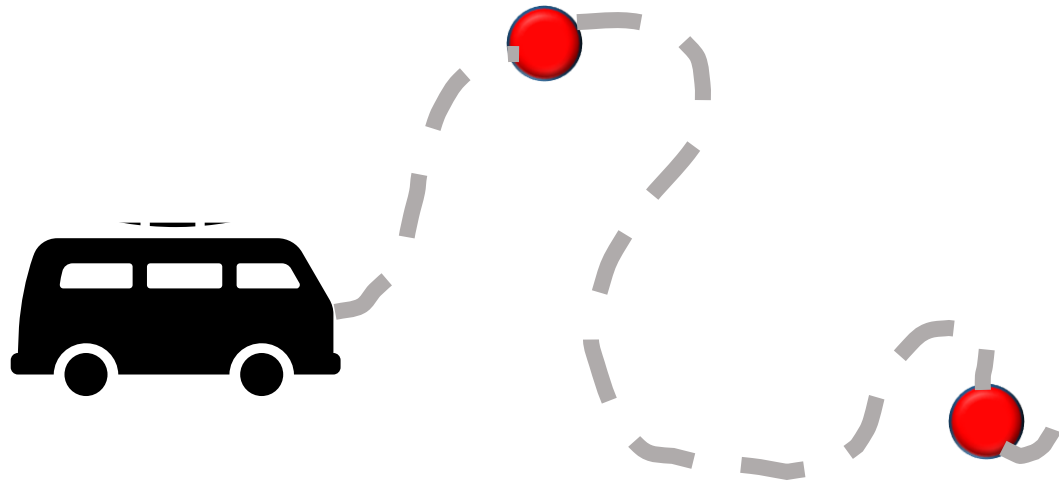
Milestone No. and Name	Due date	Status
MS2: System Requirements and Architecture	M22	==OK== ==WAITING FOR D2.2 FINAL REVISION BY EC==
MS3: Initial strategy for external promotion, legal and ethical issues	M27	==OK== ==WAITING FOR FINAL VERSION OF D10.1 (FEB 2022)==
MS4: First integrated Pharaon ecosystem released	M26	==OK== ==SUBMITTED M28==
MS5: Pre-validation	M27	==OK== ==SUBMITTED M27==
MS6: 1st Pilot Deployment Phase	M41	==Planned==
MS7: Final Phase of Pilot Deployment	M48	==Planned==
MS8: Strategy for Future Sustainability	M48	==Planned==

Monitoring Health
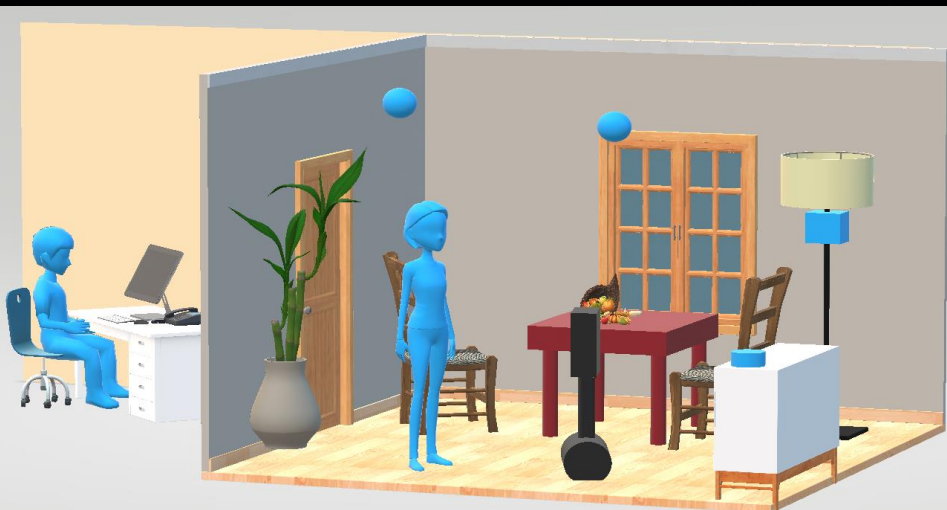
Stimulation

Socialization

Open Call

Activities performed within the Pilot: Pre-validation plan

Methodology and peculiarities of the italian pilot

pharaon

	PHASE – 1	PHASE – 2
WHO	27 users	26 users
HOW LONG	1/2h «private» interaction in a «controlled» environments (i.e. cooperative, hospital)	Techonology were installed at home
WHAT TEST	Single Technology	• Monitoring Service • Socialization Service

KPIs	• **Global KPIs:**
	  • ASQ
	  • SUS
	  • Malfunctioning: Issue Tracker GITlab
	• **Local KPIs**
	  • Qualitative data from interviews
	  • Log Diary
		• **Global KPIs:**
		  • ASQ
		  • Modified SUS
		  • Malfunctioning: Issue Tracker GITlab
		• **Local KPIs**
		  • Qualitative data from interviews
		  • Log Diary
		  • Cognitive Assessment
		  • Tecnostress
		  • TEI

# KITS	• # 1 for CSS • #1 for UP	• # 5 for UP • # 5 for CSS

Presenters: Pre-validation responsible for each pilot site

MS5: Pre-validation

Overview of the participants recruited

Apulia	Older Adult	Informa Caregiver	Formal Caregiver	Tot for Phase	Tot	%
Needs	10	10	5	25	25	7,14
Pre-Validation I	5	5	2	23		
Pre-Validation II	5	4	2		35	10,00
Pre-validation III	5	5	2	12		

17,14%

Tuscany	Older Adult	Informa Caregiver	Formal Caregiver	Tot for Phase	Tot	%
Needs	12	12	12	36	36	10,29
Pre-Validation I	5	5	5	30		
Pre-Validation II	5	5	5		45	12,86
Pre-validation III	5	5	5	15		

23,14 %

Participants
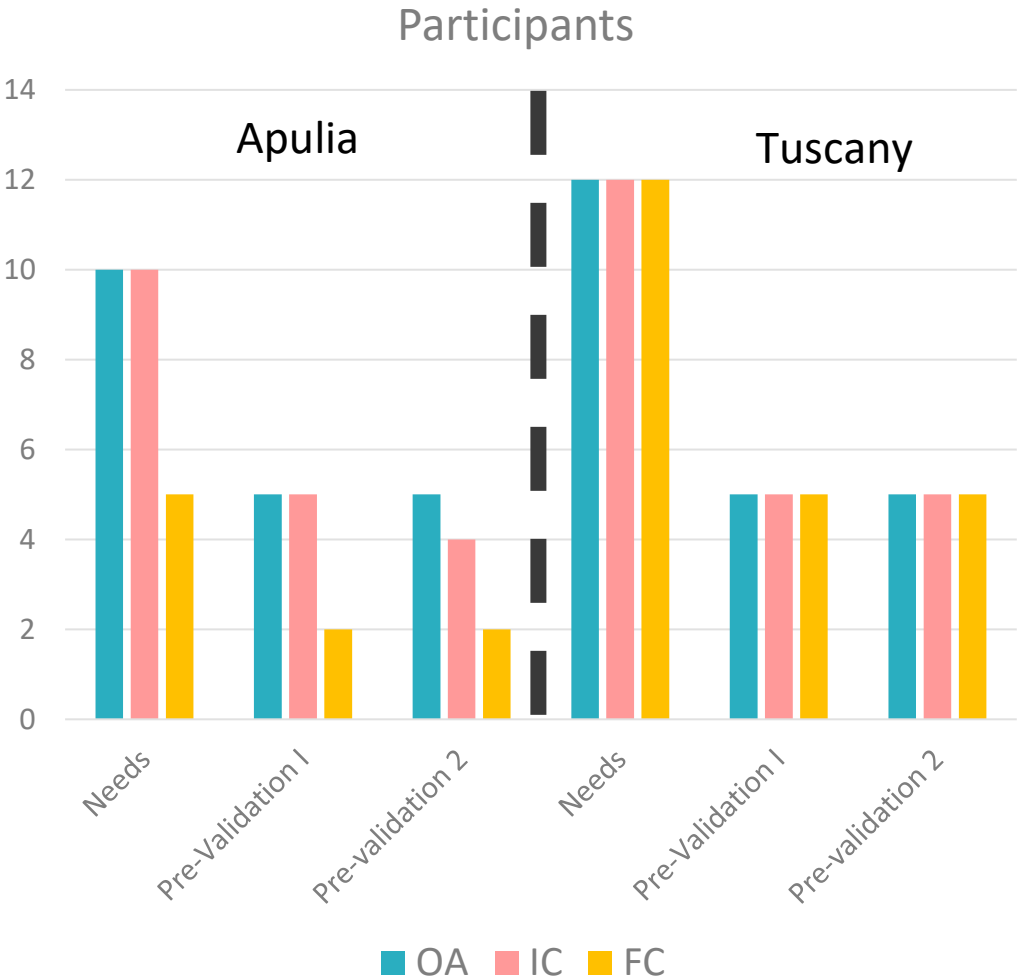
Presenters: Pre-validation responsible for each pilot site

MS5: Pre-validation

What we tested

	Partner	Phase I : Tech	Phase II: Integrated Services				
			Socialization Service	Monitoring Service	Socialization Service		Monitoring Service
Vanilla App	SENTAB		X		X		
TV Box	SENTAB				X		
Tablet	SENTAB	NA	X				
Discovery Dashboard	ASC			X			X
IoTool	SENLAB	-		X			X
SmartHabits	ENT	-		X			X
Ohmni	CORO						X*
SmartWatch	SENLAB	-	X*	X	X*		X
Environmental Sensors	SENLAB	-		X			X

* Not yet integrated – work in progress

Presenters: Pre-validation responsible for each pilot site

MS5: Pre-validation

Experience become actions

Lessons Learned from Pre-validation
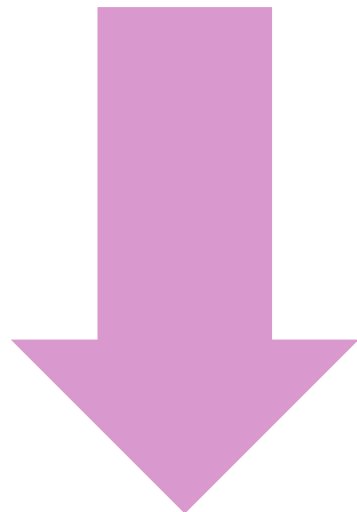
Robot

Big call on TV

Training of facilitators

Prolonged use of technology

Weekly update

Smartwatch

Environmental data frequency

Caregiver dashboard

Length of training sessions with older adults

Actions for deployment

1. **Change wearable technology. It is not usable.**
2. **Change environmental sensor (CSS)**
3. New ethics assessment and risk assessment
4. **Necessity to update user stories**
5. Change the recruitment process
6. Reinforce the training
7. Consolidate the evaluation framework and divide the training sessions
8. Reliable technology. We need to pre-validate any new functionalities

Revisions of User Stories

Revision

GOAL MODEL	PGM_I01: Manage Health		PGM_I01: Socialize	
USE CASE SCENARIO	PUCS_I01.1: Monitor Health	PUCS_I01: Manage Health	PUCS_I02: Socialize	

Service	Priority
[4] Physical Exercise Stimulation & Monitoring	T A
[5] Cognitive Exercise Stimulation & Monitoring	
[2] Make a necessity call	

Service	Priority
[2] Physicological Support prescribed	A
[2] Educational Support	T
[3] Monitor the status of older person	
[4] Environmental monitoring	

Service	Priority
[1] Share information on life memories, hobbies and habits	
[2] Mantain Relationship	
[3] Be informed about events and life styles	*content sharing

+ detailed user stories for each scenario
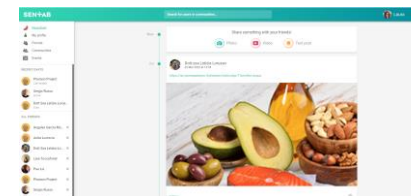
+ Open Call

MS5: Pre-validation
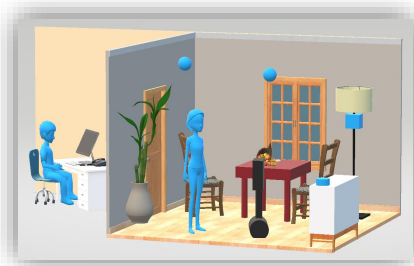
Technology after the pre-validation Phase

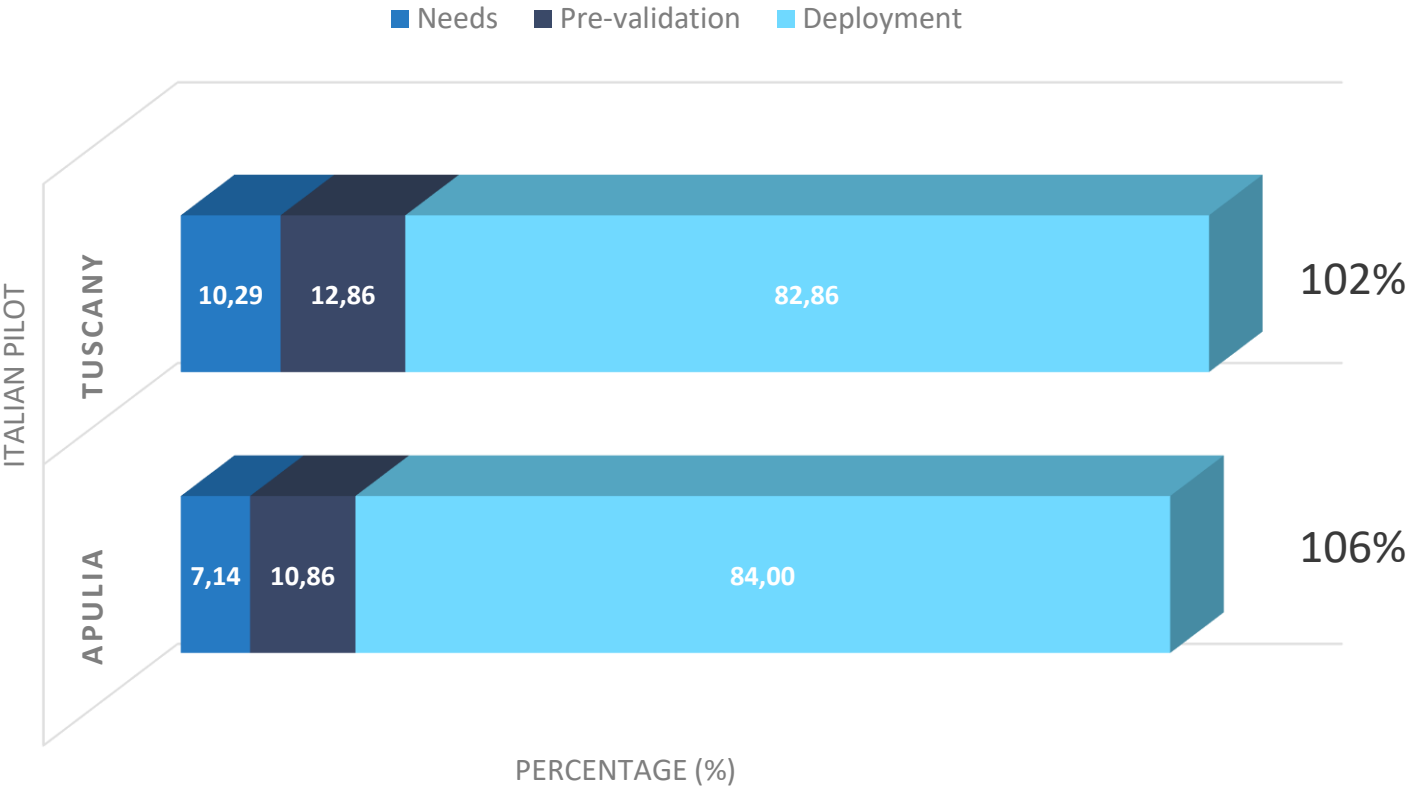|	Tuscany	In Common	Apulia
SERVICE A: SOCIALIZATION & STIMULATION			
SERVICE B: MONITORING			Air quality Sensor

Status of work done to achieve MS6

Action Research Plan

Code	Domain	TIMELINE	RESPONSIBLE
PILOT ORGANIZATION			
PO1	Definition of Activity Research Plan	June 2020 (revision March 22)	Pilot Coordinator
PO2	Periodic meeting of the italian pilot site	EVERY WEEK (THU at 11 AM)	Pilot Coordinator
P03	Periodic meeting at Tuscany/Apulia lever	EVERY MONTH	Pilot Managers
REFLECTION			
RE1	Reflect together after each Phases (tops/flops, lesson learnt, fine-tune following phase)	Reflection Pre-validation I 07.10.2021 Reflection Pre-validation II 02.02.2022	Pilot Coordinator
CELEBRATE MILESTONE			
CM1	Communication (newsletter, social media)	Open Call → Italian pilot newsletters Pre-validation → Pharaon newsletter	Dissemination managers
CM2	Pharaon Celebration Day	START/END OF DEPLOYMENT tbd	Pilot Managers
STAKEHOLDER INVOLVMENT			
SI1	Organize periodic meeting with local social service to monitor the interest and the potential benefit.	INTERMEDIATE and FINAL DEPLOYMENT	Pilot Coordinator
SI2	Organize local event to involve different stakeholders (e.g. Pharaon Cafe, Artefacendo) or join local initiative on the territory.	INTERMEDIATE and FINAL DEPLOYMENT	Pilot Managers
SI3	Joint scientific pubblications	AFTER REACHING PR. MILESTONE - Needs Analysis -> Published	Members of the pilot

Status of work done to achieve MS6

Deployment plan

POPULATION DISTRIBUTION

■ Needs ■ Pre-validation ■ Deployment

ITALIAN PILOT

TUSCANY
- 10,29 | 12,86 | 82,86 — 102%

APULIA
- 7,14 | 10,86 | 84,00 — 106%

PERCENTAGE (%)

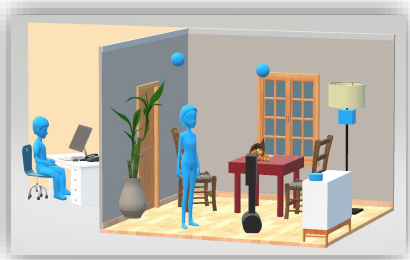|	OA	IC	FC	Total
DoA	300	300	100	700
Apulia	150	150	50	350
Tuscany	150	150	50	350

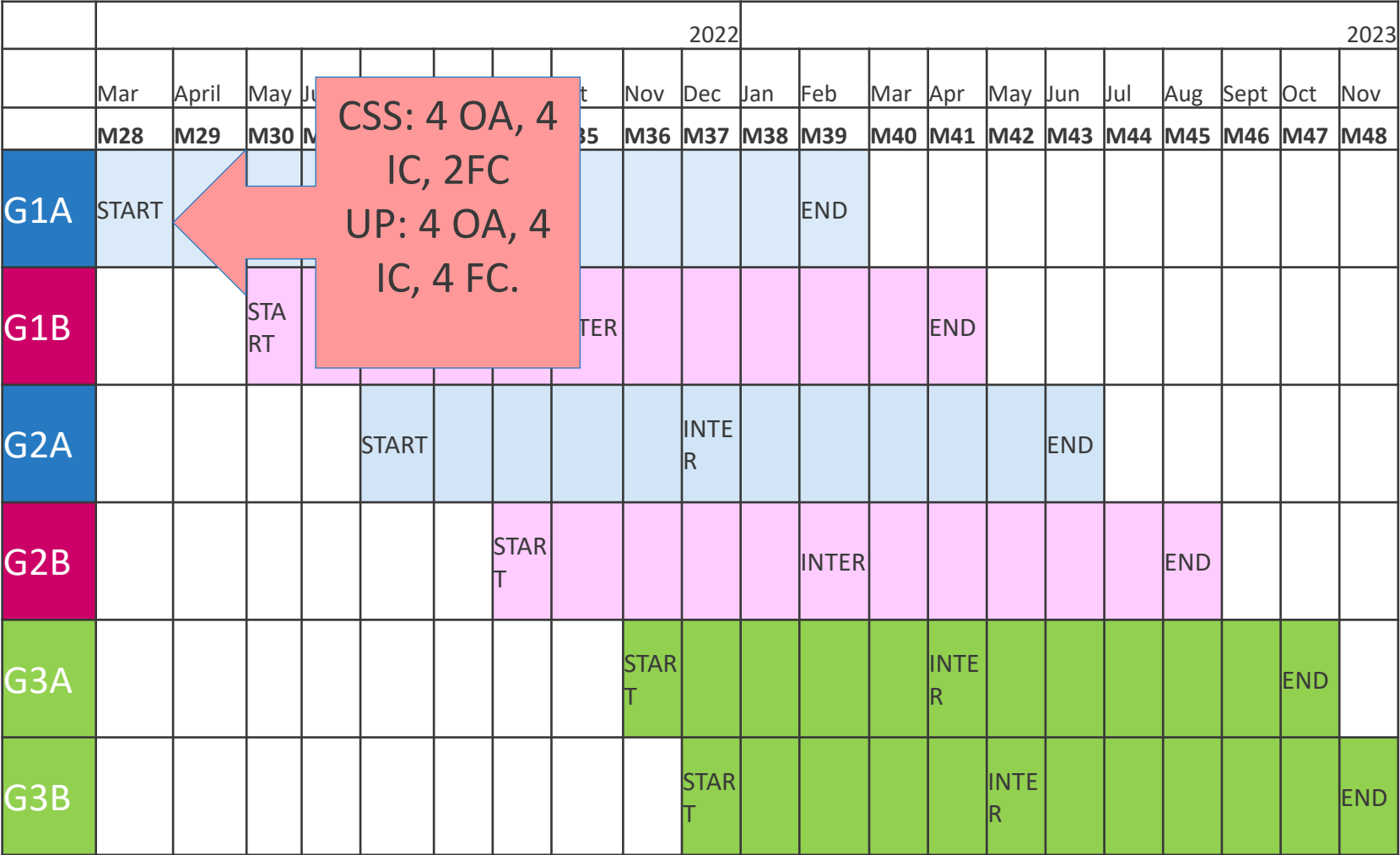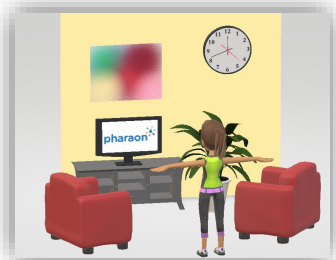# Status of work done to achieve MS6

Recruitment overview

From D7.1

SERVICE A:
SOCIALIZATION & STIMULATION

SERVICE B:
MONITORING

SERVICE C:
OPEN CALL
(Cognitive & Physical Stimulation)

	Mar	April	May	Ju				t	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov
	M28	**M29**	**M30**	**M**				**35**	**M36**	**M37**	**M38**	**M39**	**M40**	**M41**	**M42**	**M43**	**M44**	**M45**	**M46**	**M47**	**M48**
G1A	START											END									
G1B			STA RT					TER					END								
G2A				START					INTE R						END						
G2B					START				INTER							END					
G3A							START				INTE R						END				
G3B								START				INTE R							END		

2022　　2023

CSS: 4 OA, 4 IC, 2FC
UP: 4 OA, 4 IC, 4 FC.

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Data Protection Agreement

- Status
- Focus on Joint controllership
- Shared the template with othe pilot coordinators

Ethical requests

- Approval for deployment
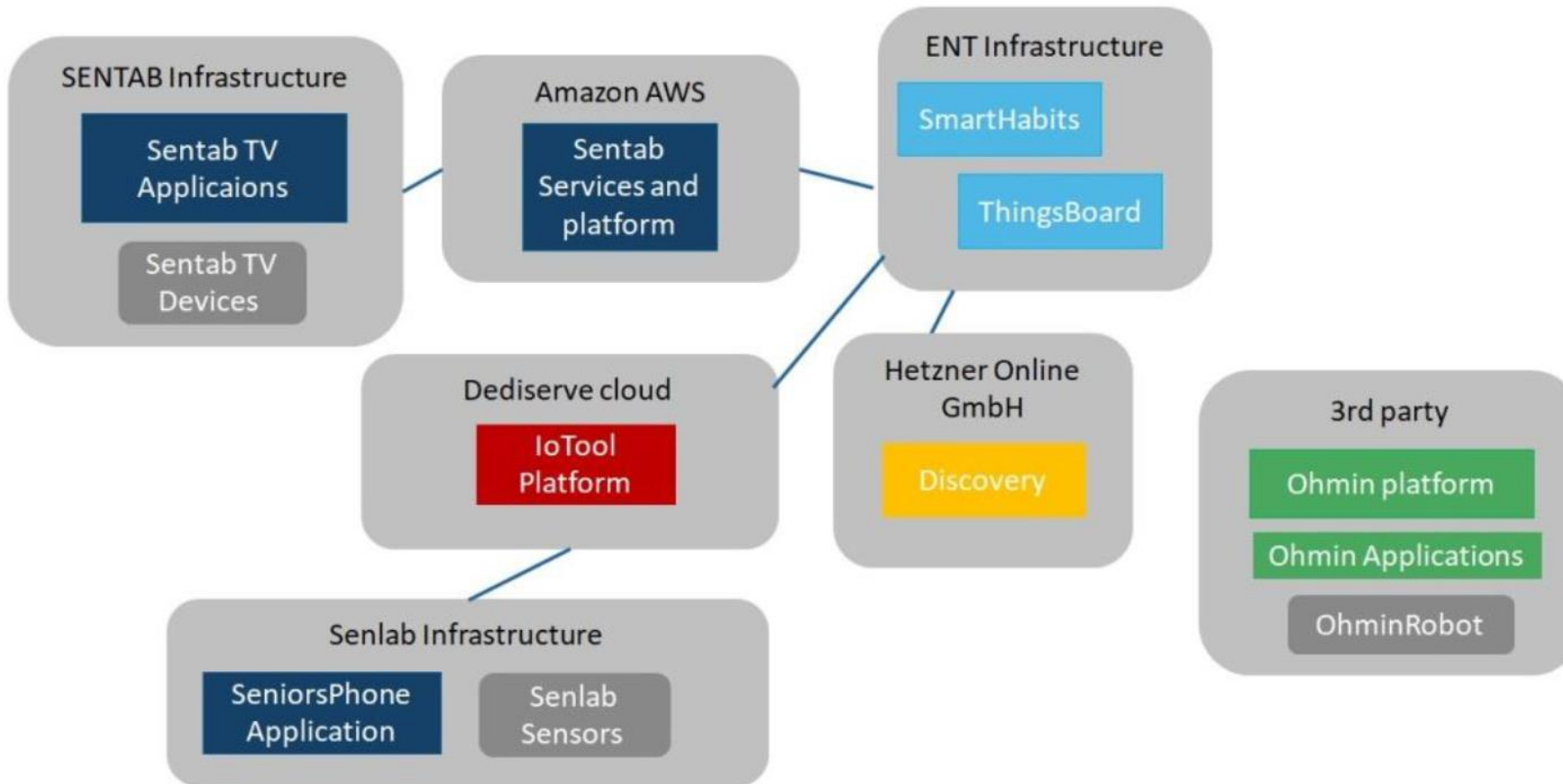- Need to manage Open Calls

Ethical Risks management

- Use of name/surname for social network
- FitBit
- Data sharing

Presenters: Gianna Vignani, Francesco Giuliani, Italian Data Managers
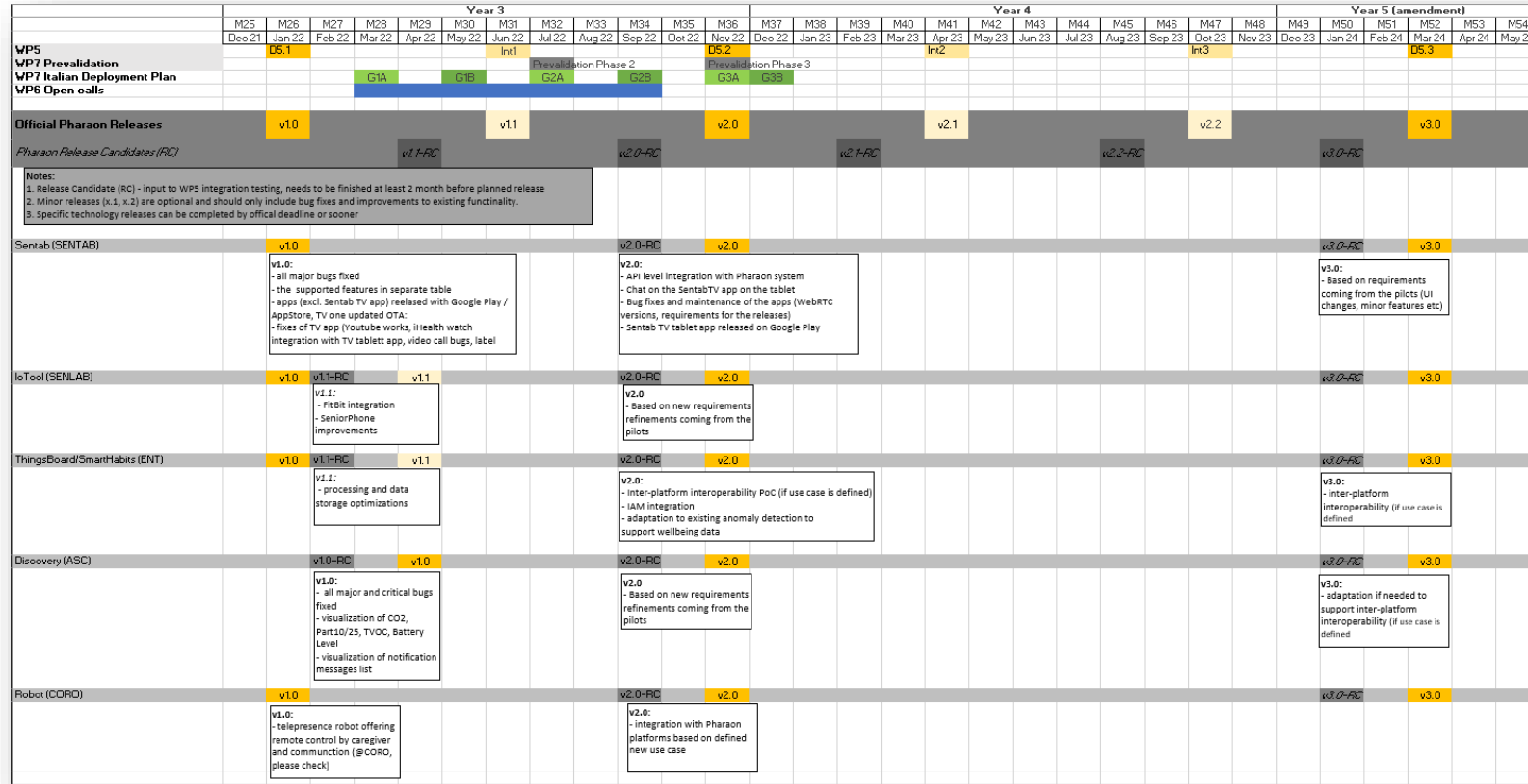
From D5.1

Figure 18: Overview of the Staging Environment for the Italian Pilot

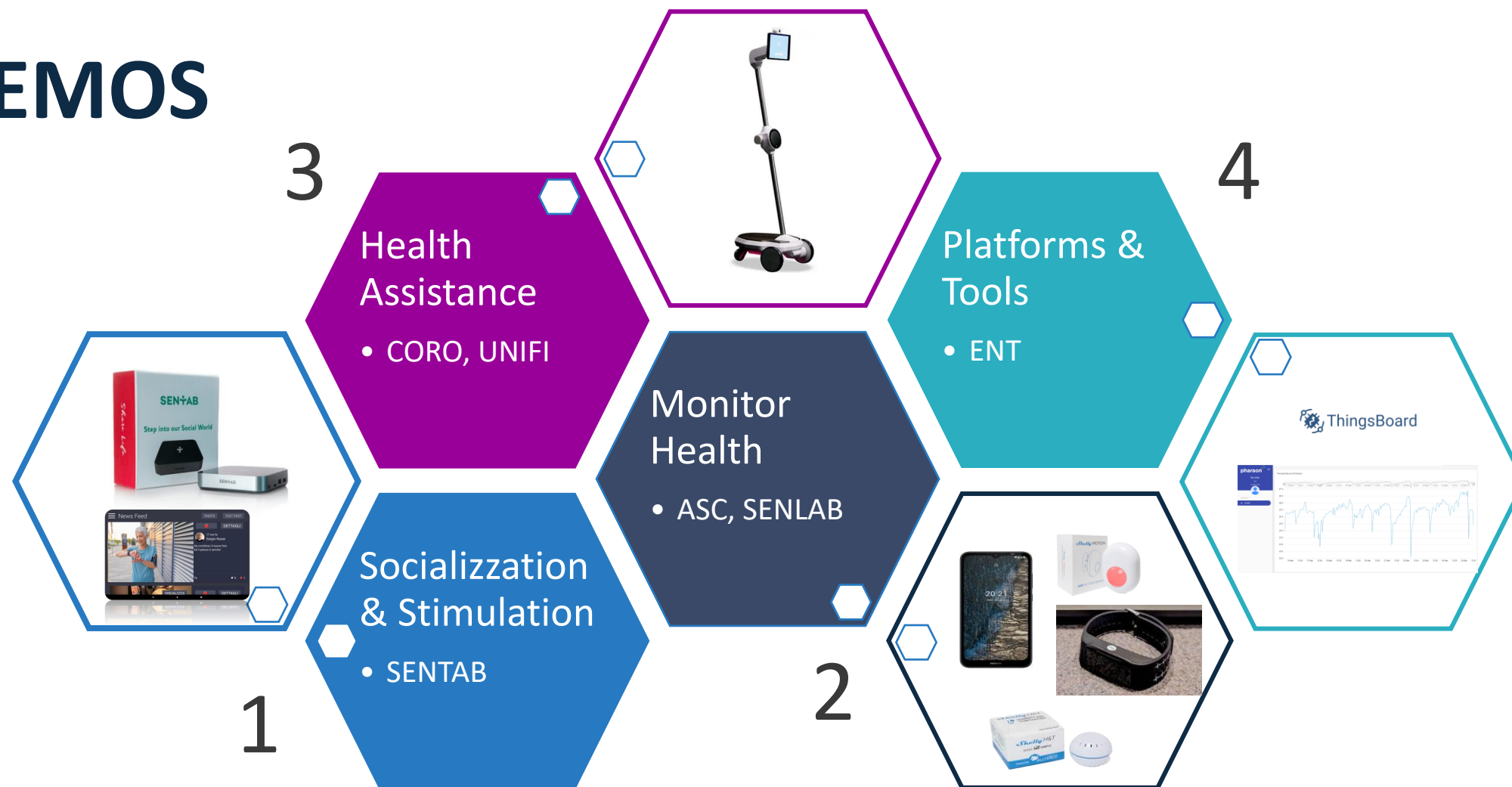Presenter: Miran Mosmondor - Technical Manager of Italian Pilot

MS2: System Requirements and Architectures

Technical Deployment Plan

- Release plan

- Alignment between the WP7 and WP5 at italian pilot level.

- Management of technical deployment risks and plan.

Presenter: Miran Mosmondor, Italian Technical Manager

4 DEMOS

3

Health Assistance
• CORO, UNIFI

4

Platforms & Tools
• ENT

Monitor Health
• ASC, SENLAB

Socializzation & Stimulation
• SENTAB

1

2

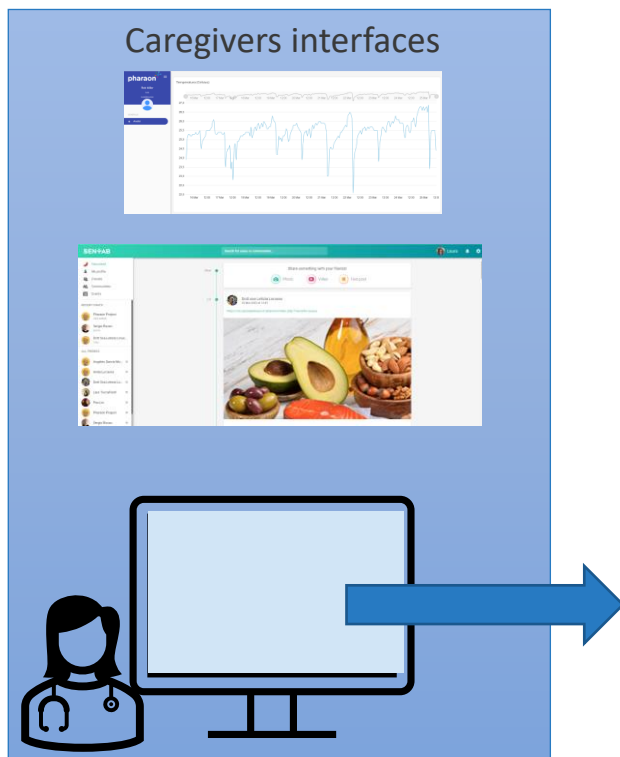# MS4: First integrated Pharaon ecosystem released

How it work, what will you see

Technology Leaders:
- ENT
- SENTAB
- SENLAB
- ASC
- CORO
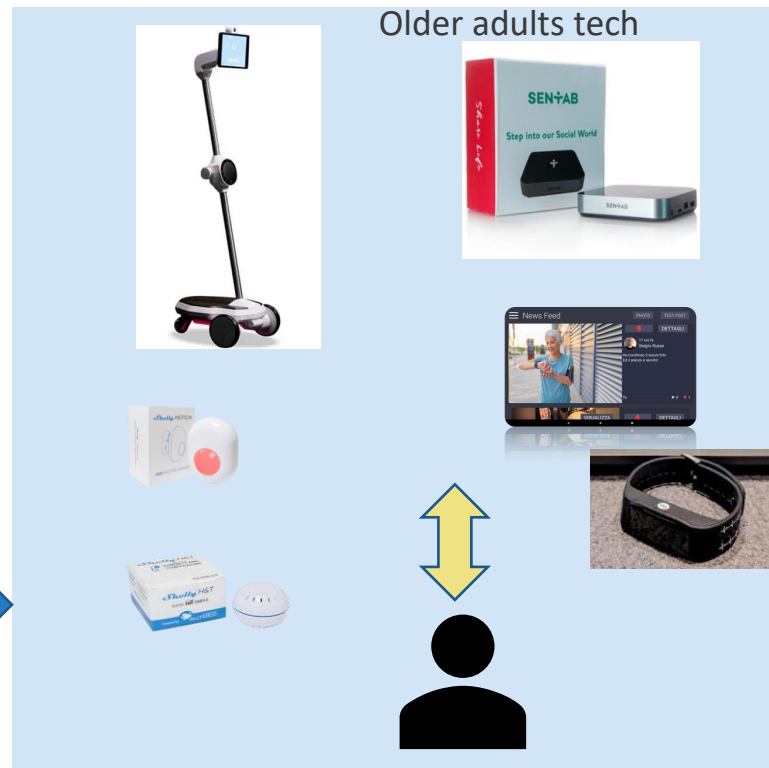
Facilitators:
- UP
- CSS
- UNIFI

Caregivers place

Older home

Caregivers interfaces

Older adults tech

- You will see as a caregiver what will happen in the older home.
- Demo will follow a precise script that will follow the scenarios
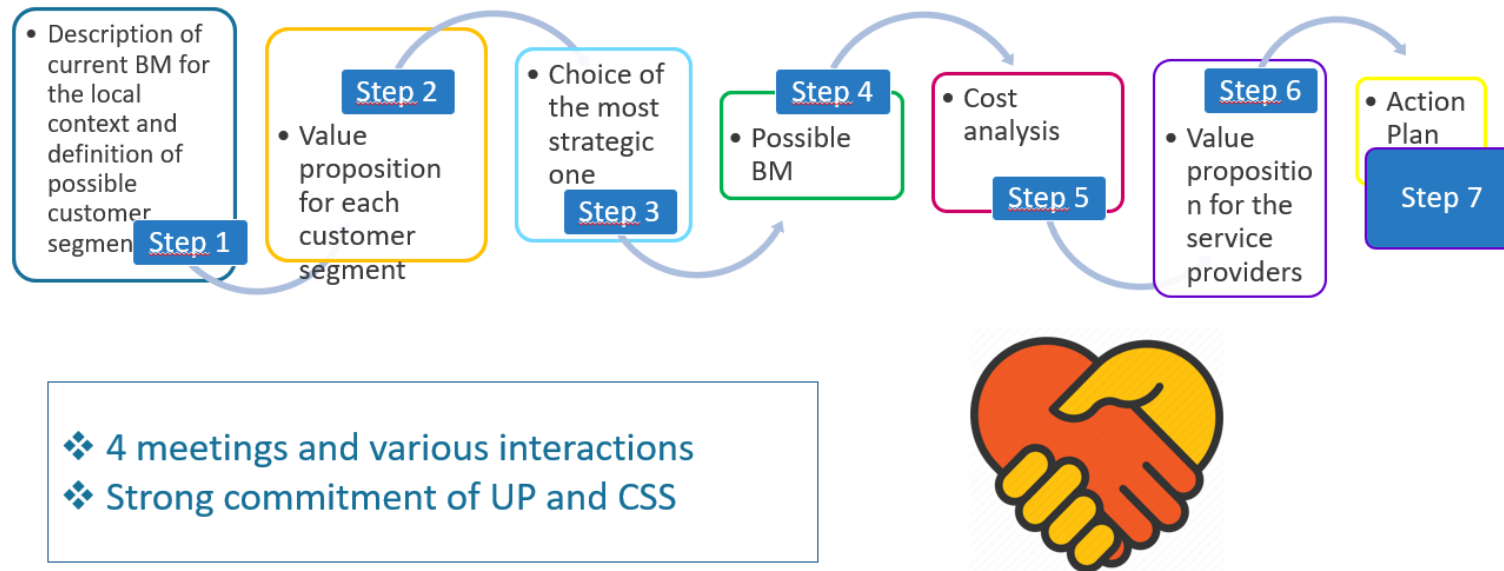- During the break you can go and see the technology

Disclaimer: for privacy reasons you want see real older adult data on the caregiver dashboard, but real data that are not acquired from older adults.

MS8: Strategy for Future Sustainability

Business Case

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Methodology for BC definition

7 steps process

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- Description of current BM for the local context and definition of possible customer segment — **Step 1**
- Value proposition for each customer segment — **Step 2**
- Choice of the most strategic one — **Step 3**
- Possible BM — **Step 4**
- Cost analysis — **Step 5**
- Value proposition for the service providers — **Step 6**
- Action Plan — **Step 7**

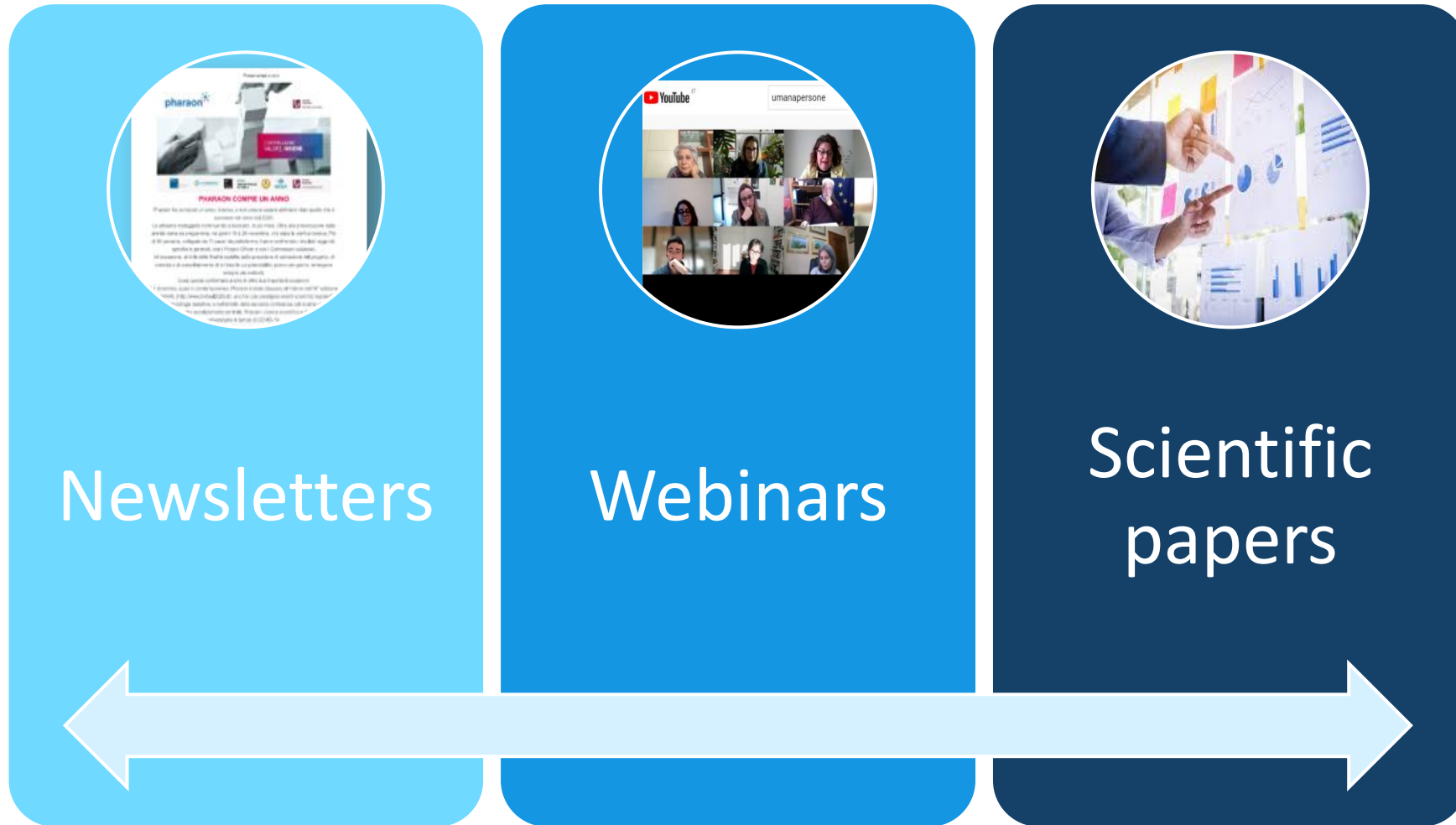❖ 4 meetings and various interactions
❖ Strong commitment of UP and CSS

PHArA-ON

4

- Kick off of the activity at Italian plenary meeting (Feb. 22)

- Definition of customer services

- Identification of value propositions

- Preliminary Cost Analysis

- Release of the action plan

Presenter: Simona Geli, Impact Assurance Manager

Newsletters

Webinars

Scientific papers

Presenter: Massimo Campedelli, Lara Toccafondi, Italian Dissemination Manager

Thank you for your attention

Questions?

laura.fiorini@unifi.it