



H2020-SC1-DTH-2018-2020

Type of Action: RIA Research and Innovation action

Topic: **Adaptive smart working and living environments supporting active and healthy ageing**

Grant Agreement no: 826266

Deliverable

D7.5 Recommendations & feedback



Start date of the project: December 1, 2018

Duration: 42 months

Project funded by the European Commission within the Horizon 2020 programme for research, technological development and demonstration		
Dissemination Level		
PU	Public, fully open	X
CO	Confidential, restricted under conditions set out in Model Grant Agreement	.
CL	Classified	.

Notices

For information, please contact the project coordinator, Prof Giulio Jacucci, e-mail giulio.jacucci@helsinki.fi

This document is intended to fulfil the contractual obligations of the CO-ADAPT project, which has received funding from the European Union's Horizon 2020 Programme, concerning deliverable D7.5 described in contract 826266.

All intellectual property rights are owned by CO-ADAPT consortium and are protected by the applicable laws. Except where otherwise specified, all document contents are: "©CO-ADAPT Project - All rights reserved".

Table of Revisions

Version	Date	Description and reason	Author	Affected sections
v0.1	2020-11-30	Draft TOC and content	Konstantina Kostopoulou (iSPRINT)	
V1.0	2021-01-07	Final editing after partner review	Konstantina Kostopoulou (iSPRINT)	

Partners

- 1 HELSINGIN YLIOPISTO (UH)
- 2 TYÖTERVEISLAITOS (FIOH)
- 3 INNOVATION SPRINT (INNO)
- 4 UNIVERSITA DEGLI STUDI DI TRENTO (UNITN)
- 5 UNIVERSITA DEGLI STUDI DI PADOVA (UNIPD)
- 6 IDEGO SRL (IDEGO)
- 7 BNP SRL (BNP)
- 8 AALTO KORKEAKOULUSAATIO SR (AALTO)
- 9 ETSIMO HEALTHCARE OY (ETSH)
- 10 ELECTROLUX ITALIA SPA (ELUX)

Authors

- Konstantina Kostopoulou, Innovation Sprint
- Irida Manika, Innovation Sprint

Reviewer

- Giulio Jacucci, UH

List of Abbreviations

CO-ADAPT – Adaptive Environments and Conversational Agent Based approaches for Healthy Ageing and Work Ability

AIOTI – Alliance for the Internet of Things Innovation

CDB – Common Dissemination Booster

DoA – Description of Action

EC - European Commission

EU - European Union

FB - Facebook

ICT - Information Communication Technologies

IT - Information Technologies

SEM - Search Engine Marketing

SEO – Search engine Optimization

SME - Small Medium Enterprise

TG – Target Groups

URL - Unique Resource Link

WHO - World Health Organization

Table of Contents

Table of Revisions	3
Partners	3
Author(s)	3
Reviewer(s)	3
List of Abbreviations	4
Table of Contents	5
1 Executive Summary	6
2 Feedback collection methodology	7
3 Feedback collection Sources	7
3.1 Events Participation	7
3.2 Social Media & Website	7
3.3 Discussion with stakeholders (SMEs)	8
3.4 Research	8
3.5 European Commission (Yearly Reviews)	8
3.6 Advisory Board	9
3.7 Interviews and Focus groups	9
4 Response management and methodology	10
5 Conclusions	16

1 Executive Summary

This report provides the overall plan for the project to manage the feedback and recommendations received throughout the years of the project.

The Recommendation and feedback deliverable describes the methodology and tools required to collect and act upon recommendations and feedback received from different sources, throughout the years, in the project. It is used as a monitoring tool by partners to brainstorm on the concerns raised for the different use cases or for the project as a whole, and suggest solutions together.

As recommendations and feedback come from multiple sources within the project, the consortium partners use a table shown as Annex to monitor the status of each point recommended.

2 Feedback collection methodology

The feedback collection methodology that we are using is categorizing the recommendations based on the incoming source, time and context. An incoming source may be from a Dissemination channel like an Event or a social media post, to a European Commission review or a use case Internal process.

We will see in this chapter in detail the incoming sources and some examples of recommendations and how we have dealt with them as a consortium and/or as separately the partners responsible for a use case, to which the recommendation was referring to.

3 Feedback collection Sources

3.1 Events Participation

An important dissemination channel for such projects are events like conferences and workshops happening around the world where researchers can present the innovation of the project and receive comments and feedback.

Unfortunately, due to the pandemic of Covid19, event presentations were stopped and the dissemination of the project's vision and developments was restricted to web tools and online participation. This has limited to some extent the impact of COADAPT in terms of increasing traction on our website or channels and the establishment of a strong brand identity for the project.

3.2 Social Media & Website

Each social media channel has different audiences and the content shared can even differ for the same information that you wish to disseminate in order to achieve the highest impact. The Social Media channels have all, their individual analytics tool and we use them for the assessment. By monitoring the analytics of post engagement like views, shares or clicks we collect valuable information on what works better and what doesn't and in which channel. We consider such information valuable feedback for our dissemination activities like if the content was interesting, if video or an image had better engagement than a plain content?

Our website also uses comments for the blog posts and it is a means of someone communicating with us regarding a blog post content. Important feedback is also collected from the Google analytic performance metrics where we can see which pages have better engagement or what demographic population and from which locations visit our website.

It is also important to mention that very early on we realized that due to the localized nature of the trials and use cases we were told that if Facebook was going to be used

to get trial participants, it should be in the native language i.e. Italian. We considered the feedback that we received regarding language barrier in the need of recruiting users and launched a Facebook page dedicated to the use case, the [Coadapt personal agent](#) and an Italian [Coadapt website page](#) again in the context of the use case.

Similarly trial recruitments were done in a localized way in Finland and also results of the swift scheduling were communicated a lot in Finnish.

As we received comments about a low impact of Dissemination from the reviewers although all tasks of the WP were complete regarding Social Media and website and content was very clear. We have explained the need for the localized dissemination actions and the different nature of the subprojects.

3.3 Discussion with stakeholders (SMEs)

In Coadapt we have several SME that are providing the industry feedback and market needs. In the different subprojects, SMEs like BNP, Idego, Innovation Sprint and Etsimo offer recommendations on the innovation projects that they work with academic partners. These discussions are always valuable to achieve innovation with greater impact.

3.4 Research

In Coadapt project all partners undergo literature reviews in order to gain knowledge on the state of the art regarding the innovation progress of each field. We have submitted a deliverable regarding the Knowledge base D.5.1 where 30 change programs were researched in terms of instructions in seven topics related to health and well-being: Eating Behavior, Physical Activity, Sleep Quality, Everyday Cognitive Functioning, Work-Related Stress, Confidence with ICT, Quality of Life and Wellbeing at Work. These program changes were utilized as recommendations to create the knowledge base.

Similarly, wearable sensors were examined and recommended for use in the subproject of the conversational agent for the vital sign monitoring. This literature and market review were aiming to compare devices as per the provision and quality of data collected.

This type of recommendations goes straight into deliverables and in the research of the subproject and are not monitored through the table.

3.5 European Commission (Yearly Reviews)

Most comments were collected of course at the 1st year review. As soon as we received the comments, at the first online meeting we tried to identify the ones that referred to the project as a whole and the ones that were more specific to one partner or one subproject.

We received recommendations regarding the whole project and how it is required to show a better synergy between the subprojects. Or comments regarding trial

recruitment age ranges that is referring to all the trials. The full list of the recommendations and our responses is listed in the table at section 4.

3.6 Advisory Board

In Coadapt we have in our Advisory Board Prof. David Kirsh, who visited the University of Helsinki campus and met with partners from the University of Trento, Padova and Helsinki regarding the proposed innovations of the project.

We were advised to keep the research actions grounded in the actual practices of aging workers. It was suggested that we do extensive interviews and observations in the field to gain appropriate knowledge and suggested that the questions and requests should be clearly linked to everyday behaviors, habits and plans, rather than abstract inquiries.

These recommendations were very important for us as we were about to start the period of focus groups and interviews and therefore the importance of the outcomes was clear, in the following section we will describe some examples.

3.7 Interviews and Focus groups

As mentioned above interviews and focus groups were done in all subprojects, where we involved users in the process of participatory design. We received comments on user friendliness and ease and mostly practicality.

For example in one focus group, Participants reported an increased effort due to the switch of attention required by the use of two screens (1) the main device screen, (2) recommender user interface on a separate screen. University of Helsinki took this into consideration and now runs on a single device screen and made the recommender interface is small and positioned at the bottom of the screen.

Another valuable information received on the smart scheduling software was the need of training and that in a workspace context it is convenient to implement technological innovation remotely (via mobile app).

Last after also the recommendations of our Advisory Board, we interviewed workers for the design of the adaptive workstation. A valuable recommendation was that the Use of physiological sensing wearables is appreciated only if a visual feedback is continuously returned to the user in terms of results and benefits.

4 Response management and methodology

As mentioned above, the recommendations and feedback were all collected on a table and it has been used to record responses and actions within the partners. Some recommendations require changes in all user trials regarding the age of participants across all use cases while others require changes in a specific use case technology outcome and should be dealt by one partner.

Plenary and biweekly meetings were used to collectively decide on the response strategy and the collaboration between partners needed in order to decide on the actions and process required.

Most recommendations and feedback are considered and are addressed either in deliverable updates or incorporated in upcoming ones. Many though have just been taken into account in the innovation process and have helped the consortium linked the subprojects together more effectively.

ID	Source		Timing	Recommendation & Feedback	Partners to review	Lead partner	Response	Action if needed
1	EC	1st Year Review	31/01/2020	Integration of conversational agent, co-bot , recommender system	All partners		Discussions for potential synergies in virtual plenary meeting in October 2020	Motivate subprojects with conceptual framework links to workability and wellbeing. Provide in framework research questions. Clarify Synergies, research questions
2	EC	1st Year Review	31/01/2020	Links between individual components of the project	All partners		Discussions for potential synergies in virtual plenary meeting in October 2020	Motivate subprojects with conceptual framework links to workability and wellbeing. Provide in framework research questions. Clarify Synergies, research questions
3	EC	1st Year Review	31/01/2020	IPR and exploitation assets identification should start as soon as possible	All partners	Innovation Sprint	Workshop on exploitation asset identification in virtual plenary meeting in October 2020	Exploitation Matrix monitoring
4	EC	1st Year Review	31/01/2020	Recruiting ageing vs elderly	All partners			We have in all Trials at least 50% of participants over 50 (or 55?). "Ageing" can not be identified by a single criteria, and is depending on different aspects that need to be included in the definition of ageing workers, for example working age is a relevant aspect and it is not obviously related to person age. But as a general guideline in the project, we aim at considering at least 50% of subjects will be over 50.
5	EC	1st Year Review	31/01/2020	User recruitment in 4 pilots should be balanced in terms of age distribution, sex, social and skill background and IT literacy to get comparable results across all domains	All partners			
6	EC	1st Year Review	31/01/2020	How to measure the 2 digit improvements	All partners		Responded separately per project	
7	EC	1st Year Review	31/01/2020	CA architecture and technical description	All partners		D5.3 and D5.4	

8	EC	1st Year Review	31/01/2020	Dissemination shows low impact	All partners	Innovation Sprint		Explanations were given about the Italian versions of Social Media channel and website that is now added to the total followers and brand impact. Also some new content series was planned for the next year.
9	EC	1st Year Review	31/01/2020	Justification of sensor device selection or type of participants	UT, UH			
10	EC	1st Year Review	31/01/2020	Proactive Recommender: user interface is obtrusive and is demanding for elderly users	UH		Responses were given in resubmission of D3.1	follow the guidelines for elderly-friendly design
11	EC	1st Year Review	31/01/2020	Proactive Recommender: Due to privacy issues, consider adding functionality allowing users to exclude certain activities, websites from analysis	UH		Responses were given in resubmission of D3.1	implemented the functionality to exclude certain applications that users can select themselves from the monitoring
12	Research	D 1.3		Knowledge base content: a list of recommendations in different domains directly extracted from scientific search.	UNIPD			
13	Focus group interviews	1st focus group	11/2019	Overall, participants reported a positive experience with the system	UH		-	-
14	Focus group interviews	1st focus group	11/2019	Participants mentioned that the recommender system helped them recall specific entities useful for their task	UH		-	-
15	Focus group interviews	1st focus group	11/2019	increased effort of switching between screens	UH		Responses were given in resubmission of D3.1	we changed the implementation of the recommender interface

16	Focus group interviews	1st focus group	11/2019	some tasks were easy and didn't require much support from the recommender	UH	-	-
17	Focus group interviews	1st focus group	11/2019	Participants reported an increased effort due to the switch of attention required by the two screens (1) the main device screen, (2) recommender user interface on a separate screen	UH		we changed the implementation of the recommender interface 1) the recommender interface now can run on a single device screen and 2) recommender interface is small and positioned at the bottom of the screen
18	Advisory Board	Prof. David Kirsh visit	8/2019	keep the research actions grounded in the actual practices of aging workers. Extensive interviews and observations in the field will help gain appropriate knowledge. Questions and requests should be clearly linked to everyday behaviors, habits and plans, rather than abstract inquiries	UH, UNIPD		
19	Focus group interviews	Nurse managers		Organized project management (including pre-use communication) supports the introduction of technological innovation (smart shift scheduling software) in workplaces	FIOH		
20	Focus group interviews	Nurses		Peer-to-peer introduction enhances both introduction and distribution of technological innovations at	FIOH		

				workplace				
21	Focus group interviews	Main users		Service / software providers should offer detailed training to main users. Main users provide targeted training to other operatives at workplace.	FIOH			
22	Focus group interviews	Nurses		Piloting phase for technological innovations at workplace should be implemented in voluntary basis.	FIOH			
23	Focus group interviews	Nurses, Main users		Peer-to-peer support enhances the use of technological innovation in workplace.	FIOH			
24	Focus group interviews	Nurses		The possibility to use technological innovation remotely (via mobile app) would make it even more convenient in workplace context.	FIOH			
25	Interviews	Workers	2/2020	Workers ask for easy solutions, which would not slow down their job. Future documentation in Italian	BNP			Taken into consideration in the design of the adaptive work station
26	Interviews	Workers	10/2020	For future tests they ask easy-to-use and not invasive technologies, which could affect the job performance.	BNP			Taken into consideration in the design of the adaptive work station
27	Interviews	Workers	10/2020	Workers ask for avoiding any person recognition and to be sure that they won't be	BNP			Taken into consideration in the design of the adaptive work station

				filmed or photographed in a recognizable way.				
28	Focus group interviews	1st focus group	1/2020	Use of physiological sensing wearables is appreciated only if a visual feedback is continuously returned to the user in terms of results and benefits	UNITN			Taken into consideration for the 2nd focus group of interviews
29	Focus group interviews	1st focus group	1/2020	Use of wearables can lead to technical difficulties due to the variety of possible devices the wearable should connect with	UNITN			Taken into consideration for the 2nd focus group of interviews
30	Focus group interviews	1st focus group	1/2020	User interactions with an app, even if requested by a therapist, seems to be not efficient without some form of engagement	UNITN			Taken into consideration for the 2nd focus group of interviews
31	Focus group interviews	1st focus group	6/2019	To recruit trial participants Facebook is a good source but it needs to be localized in the Italian language and specific to the use case of the Coadapt Personal agent, the use case of University of Trento and Idego.	IDEGO			a Facebook page dedicated to the use case, the Coadapt personal agent and an italian Coadapt website page again in the context of the use case.

5 Conclusions

The consortium of the COADAPT project recognizes that the activity of listening, accepting feedback and incorporating recommendations into the project's life is crucial.

We have concluded that this process of collecting and monitoring recommendations is valuable to be open and shared between the partners as there are similarities and in particular in this project with different subprojects, focus group outcomes of one subproject could help another and vice versa.

The consortium will keep updating along the continuation of the project this table and it will be a very valuable asset at the end.