REBUILD

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EXECUTIVE SUMMARY

The Co-Creation Workshop will be dedicated to present the participants the REBUILD use cases and scenarios in order to start focusing on both service providers and migrants daily life experience and situations. This activity will be inspired by storytelling and listening methodologies and will permit participants to share personal opinions and perspectives, by also focusing on personal life and situations.

Second scope of the Co-Creation workshop, together with the validation of REBUILD concept and scenarios, will be the design of how the modules of the REBUILD toolbox are expected to work and interact with real users. This activity will leverage upon the REBUILD prototypes and mockups.

As an output to this activity, the REBUILD team will evaluate the Use Cases developed by project partners and validate the REBUILD services, including feedback gathering and prioritization with participants of the 3 workshops services emerging as "needs" from the analysis being conducted with migrants/refugees users and with Local Service Providers.

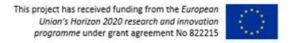




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ABSTRACT

The Co-Creation Workshop will leverage upon user research and use cases analysis carried out in T.2.1 as analysis of the existing service provision flow in the fields defined as in the scope of REBUILD project in section 1.3.2. The analysis has taken into consideration workflow definition, analyzing for each service, for each provider, for each country/region involved, how the service provision chain actually works. By mean of use cases validation all the knowledge of target users, their sociological and individual characteristics, their needs, their thoughts and believes, their lifestyle, values and, ethical perspectives will constitute the starting point for the Co-Creation activity.

The workshop will be dedicated to present the participants the REBUILD use cases and scenarios in order to start focusing on both service providers and migrants daily life experience and situations. This activity will be inspired by storytelling and listening methodologies and will permit participants to share personal opinions and perspectives, by also focusing on personal life and situations.

Second scope of the Co-Creation workshop, together with the validation of REBUILD concept and scenarios, will be the design of how the modules of the REBUILD toolbox are expected to work and interact with real users. This activity will leverage upon the REBUILD prototypes and mockups.

As an input to this activity, the REBUILD team will develop specific taskflows of the REBUILD prototypes and mockups interaction. Such interaction will be defined either in an experiental way, by mean of working prototypes, being them implementation, role or look&feel mockups. According to these different modalities, participants to the Workshop will be involved in evaluation sessions where specific aspects of the interaction will be tested and discussed.

1.INTRODUCTION

The project REBUILD aims at improving migrants and refugees' inclusion through the provision of a toolbox of ICT-based solutions aimed to enhance both the effectiveness of the services provided by local public administration and organizations, and the life quality of the migrants.

This project follows a user-centred and participated design approach, aiming at addressing properly real target users' needs, ethical and cross-cultural dimensions, and at monitoring and validating the socio-economic impact of the proposed solution. Both target groups (immigrants/refugees and local public services providers) will be part of a continuous design process; users and stakeholders' engagement is a key success factor addressed both in the Consortium composition and in its capacity to engage relevant stakeholders external to the project. Users will be engaged since the beginning of the project through interviews and focus groups; then will be part of the application design, participating in three Co-Creation Workshops organized in the three main piloting countries: Italy, Spain and Greece, chosen for their being the "access gates" to Europe for main immigration routes. Then again, in the 2nd and 3rd years of the project, users' engagement in Test and Piloting events in the three target countries, will help the Consortium fine-tuning the REBUILD ICT toolbox before the end of the project.

The key technology solutions proposed are:

- GDPR-compliant migrants' integration related background information gathering with user consent and anonymization of personal information;
- AI-based profile analysis to enable both personalized support and policy making on migration-related issues;
- AI-based needs matching tool, to match migrant needs and skills with services provided by local authorities in EU countries and labour market needs at local and regional level;
- a Digital Companion for migrants enabling personalized two-way communication using chatbots to provide
 them smart support for easy access to local services (training, health, employment, welfare, etc.) and
 assessment of the level of integration and understanding of the new society, while providing to local
 authorities data-driven, easy to use decision supporting tools for enhancing capacities and effectiveness
 in service provision.

The co-design workshops are a first moment of dialogue between the REBUILD partnership and end-user representatives. This will be followed by pilot validation workshops (task 6.4) which will have the objective of collecting qualified and qualifying feedback to validate all the components of the REBUILD socio-technical solution.

In this sense the co-design workshops are part of a process of stakeholder engagement (task 8.2) which will accompany the project throughout its duration. In fact, REBUILD provides for different engagement workshops and focus groups in order to ensure meaningful interaction with stakeholders and researchers outside the project. The results of these events will be reported in the deliverable D8.3

A first workshop of this type could be organized by the end of 2019 at national level in one or more of the three pilot countries. This event could also give interesting insights to the work of WP9, which aims to develop and apply a socio-economic and political impact analysis methodology and intends to do so by incorporating, as far as possible, the suggestions and expectations of project partners and of any external stakeholders

Finally, at the end of the second year there will be an event in Brussels to present the Policy report (D10.4). The report, in the form of a white paper, will report the results of the first two years of the project and could represent a further moment of confrontation with institutional stakeholders regarding the phenomenon in question.

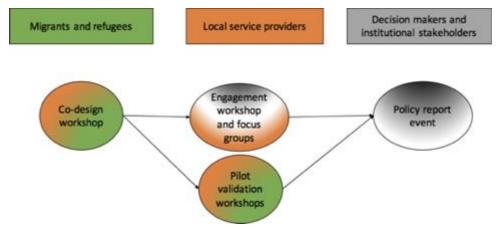


Fig. 1 Participation events and involvement of users, stakeholders and Policy makers

1.1. SCOPE AND OBJECTIVES

The scope of the Co-Creation Workshop is referred to three main domains:

- 1. Stakeholders and End-Users Involvement and Participation
- 2. Use Cases Validation
- 3. User Experience Design and Interaction Design

1. Stakeholders and End-Users Involvement and Participation as enabling condition

[Introduction / Warm up methods]

Co-Creation workshop will involve inter-disciplinary experts from the Consortium and all the relevant external actors covering technical and social/human scientific fields: cognitive and social psychologists, service designers, ICT system designers, developers and integrators, legal experts, social and political scientists; migrants and refugees involved through the NGOs in the consortium; and local and public authorities who already provided their availability and interest in being involved in designing and piloting the REBUILD toolbox.

Stakeholders and End-Users involvement and participation in the Workshop activity is the enabling condition for the accomplishment of T2.2 technical objectives: all the participants are motivated to collaborate in idea generation by providing their own perspectives on facts and their wishes and needs. Whether the user research and listening activity has been mainly based on individual analysis of migrants/refugees needs and local service providers needs, the interaction design concept generation process will be managed with a group perspective in order to solicit the evolution of ideas through sharing, discussion and negotiation processes.

The participatory and collaborative approach of the workshop will prevent not having only "individual ideas", since not efficient in integrated research and design activities and causing the risk of conflicts and the risk to have strong ideas presented by weak people or weak ideas presented by strong people. In the Co-Creation workshop novel concepts belong to the group and are shared among all participants, not at the aim to select the best one but at the aim to define and enrich the REBUILD interaction design concept.

The objective of the introductory and warming up activities proposed in the Workshop Agenda is to get all participants engaged in the process.

2. Use Cases Validation as first scope

[Storytelling / Validation methods]

The Co-Creation Workshop will leverage upon user research and use cases analysis carried out in T.2.1 as analysis of the existing service provision flow in the fields defined as in the scope of REBUILD project in section 1.3.2. The

analysis has taken into consideration workflow definition, analyzing for each service, for each provider, for each country/region involved, how the service provision chain actually works. By mean of use cases validation all the knowledge of target users, their sociological and individual characteristics, their needs, their thoughts and believes, their lifestyle, values and, ethical perspectives will constitute the starting point for the Co-Creation activity.

In this sense the first step of the workshop will be dedicated to present the participants the REBUILD use cases and scenarios in order to start focusing on both service providers and migrants daily life experience and situations. This activity will be inspired by storytelling and listening methodologies and will permit participants to share personal opinions and perspectives, by also focusing on personal life and situations. The objective of the activities under this domain is to foster a clusterization and elaboration of results in order to provide an organized level of input for the design activities.

The Use cases selected to be discussed in each pilot country are listed below:

Italy

Job Seeking Scenario

After taking charge during the first assistance, Sahid accesses an evaluation service of his skills, knowledge and qualifications. The evaluation service is aimed at creating a "balance of competences" of migrants that can be permanently associated with the identity profile of the person. The Sahid budget is also included in your personal profile in the REBUILD app.

Sahid has now established itself in Emilia Romagna through the allocation of accommodation. In order to integrate into the territory of which it has become a citizen and to provide for its autonomy, Sahid accesses the job search service from the REBUILD app. Among the job positions available in your area there are some for couriers that provide for the possession of a driving license and could be suitable for Sahid. The one selected by Sahid because it is more easily reachable from your accommodation, as verified by the REBUILD service map, requires knowledge of the Italian language.

The REBUILD app notifies Sahid of the possibility of filling this gap by accessing the "Italian language training" course, one of the options displayed since it is in Italy. Sahid is really interested in learning the basics of Italian. By accessing that service, you consent to provide certain personal information and to make a quick initial test on your Italian language skills. He knows some basics of the language (the alphabet, the verb "to be" at the present time).

The REBUILD app suggests he enroll in the UNINETTUNO portal "University for Refugee" to access language training; and to download the free "I Learn Italian" app available on its online smartphone store.

After 3 weeks, REBUILD chatbot asks him how it goes with the Italian language course. Sahid replies that he continues to attend the online course. REBUILD chatbot challenges Sahid: do you want me to switch to the Italian language to chat? Sahid is happy: he can try some basic written conversation in Italian.

After other 4 weeks, while Sahid uses the chatbot for other purposes, before ending the conversation, REBUILD chatbot asks if Sahid has advanced in the course. Sahid replies that, yes, he has now completed over 75% of the course and things are improving with Italian. The REBUILD chatbots propose to look for an examination center to be certified at the Italian level. Sahid: it would be fantastic, since a linguistic certification would allow him to apply for the courier position he had selected.

Health System

Mamadou lives in Bologna, he's registered with the national health system and he goes to his general doctor because he is not feeling well, and the doctor discovers that he has a serious condition.

He then prescribes a specialist examination, provides to Mamadou with a demanding and tells him to go to the CUP to book it.

But Mamadou doesn't know how to do it, so he opens the REBUILD app and registers.

The chatbox tells him which CUP is closest to him and which documents he must carry (health card, valid permit of stay and the demanding provided by the doctor).

The chatbot realizes that the permit of stay of Mamadou and therefore also his health card are expiring, so it indicates him the need to renew them.

In order to that, the chatbox suggest him to go to the Social Counters ("Sportelli Sociali") of the City of Bologna or to the "Street Lawyers" Onlus ("Avvocati di Strada") to renew the documents and be able to access again to the national and local health service.

He goes to the onlus and then he can go to the CUP to reserve his specialist visit.

Greece

Unemployment card

Mohamad downloads the REBUILD App, and surfs through the free content provided by the APP. He wants to issue an Unemployment Card and to do this the APP asks him to register and provide some personal information in order to be profiled and offer a better service. Mohamad accepts to register and then he logs in the App. Mohamad uses the Chabot to ask some information regarding the requirements in order to issue an Unemployment Card. The Chatbot informs him about the requirements in order to issue an Unemployment Card.

After the login, Mohamad goes to the access to the social welfare/or the access to labour area. The App knowing his legal status and location, indicates the exact DOLE office he can visit and the required documents he should provide. The Chatbot tips Mohamad before proceed, that all public documents must be in good condition/readable. The Chatbot also informs him that he should have the asylum seeker applicant card or residence permit card as a recognized refugee, a Tax Registration Number, a Social Security Number and a document that proves his current residing address (telephone bill or rent contract or residing proof document signed provided by the NGO that hosts him). The Chabot informs him about the working hours of the DOLE office and that there is not an appointment system. The Chatbot informs Mohamad that his unemployment card will be issued during his visit. The Chatbot also informs him that after he issued his unemployment card, he should renew it every 3 months online by his own or through a visit to the Citizens Service Centre. Additionally, the Chatbot informs Mohamad that if he does not renew his Unemployment card upon the predetermined date, it will be canceled and he potentially will lose all possible benefits and he will have to repeat the same procedure in order to issue a new one.

Furthermore, the Chatbot informs him that after he obtain the Unemployment card, the DOLE officer will book him an appointment for a skills interview, in order to be registered in the DOLE system as a job seeker, so as to increase his chances of finding a job.

Medical Appointment

Fatima downloads the REBUILD App, and surfs through the free content provided by App. She wants to book an appointment to the public hospital and to do that the App asks her to register and provide some personal information in order to be profiled and offer a better service. Fatima accepts to register and then she logs in the APP. Fatima uses the Chabot to ask some information regarding the requirements and availability of medical specialists in order to book the appointment. The Chatbot informs her about the

requirements and the available medical specialists to the public hospital nearby her residing area in order to book the appointment.

After the login, Fatima goes to the access to health area of the Chatbot. The app knowing her location, indicates her the exact Health Unit she should visit and the required documents she should provide to the hospital. The Chatbot tips Fatima before proceed that there is not an e-appointments service available for the specific hospital, so she has to book it by visiting the appointments department, or through phone. Fatima who does not speak Greek, choose to visit the appointments department of the hospital. The Chatbot informs her that she should have a Social Security Number or her asylum seeker applicant card or her residence permit card as a recognized refugee, which she should hand in to the appointment department clerk in order to book the appointment. The Chatbot also informs Fatima that the Public Hospital of the area does provide Arabic interpretation. The Chatbot informs her that she should go to the appointments department building, that is accessible for people with disabilities, and provides the exact address. The Chabot informs her about the working hours of the appointments department. The Chatbot informs Fatima that the Appointments Officer will provide her with a ticket with the exact date and time of the appointment, and that Fatima should provide to the Hospital her personal data and a valid phone number. The Chatbot also informs her that the services of the Public Hospital are free of charge.

Spain

Social mentoring

Rashid spent one month living at UAB's residence and he now willing to know more about the country and start his integration process. Thus, he is assessed by CEAR personnel to take part in the mentoring process. He will use the REBUILD App to get some more information and see some testimonials from previous participants in the program where they explain their experience. Rashid feels more motivated in taking part. He has now to follow a process explained in the App, with the support of the chatbot. There he will introduce some profile data to help managers find a suitable matching mentor. After this, he will receive a message informing that the process finished properly and that he will be later contacted.

FV has been told about becoming part of the mentoring program with migrants at UAB. FV only needs to get into the App/platform and fill a form (GDPR compliant) to help creating a profile with his/her interests. After filling it, a message with thank her/him for participating. After a couple days, FV will receive an email inviting her/him to a meeting informing in-deep on what means becoming a volunteer and what the next steps are. After this, FV will be asked to take part in 2 training sessions through the App. FV will select the most suitable dates for him/her to attend. 1 day before, and the same day a couple hours in advance, FV will be reminded to attend the event. Once these steps are fulfilled, FV will finally be invited to a f2f interview to meet FAS & CEAR staff. The invitation will be send through the App via email (FAS will schedule meeting with all volunteers using the backend, with personalised messaging, or massive messaging to groups).

Now the App will suggest to FAS with potential matchmaking couples based on the info provided in the profiling form. FAS and other staff will meet to check it and organise f2f matchmaking events to create the mentor-mentee couples. Once couples are done, FAS will introduce this info in the backend.

Now, the App will merely be used tracking and reporting of activities performed by the couple. The mentor (FV) will be in charge of introducing this information and to provide the most relevant information to the FAS to assess that the whole process is correct.

The final aim of this session is to validate and enrich the services as designed so far. In other terms it aim to demonstrate how the REBUILD system can function in real life conditions and to evaluate if the platform determine

the appropriateness of the applicative scenarios with the required level of performances, security and operability (Ref. European Operational Concept Validation Methodology, E-OCVM).

3. User Experience Design and Interaction Design as second scope

[Prototyping / User evaluation / Validation methods]

Second scope of the Co-Creation workshop, together with the validation of REBUILD concept and scenarios, will be the design of how the modules of the REBUILD toolbox are expected to work and interact with real users. This activity will leverage upon the REBUILD prototypes and mockups.

As an input to this activity, the REBUILD team will develop specific taskflows of the REBUILD prototypes and mockups interaction. Such interaction will be defined either in an experiental way, by mean of working prototypes, being them implementation, role or look&feel mockups. According to these different modalities, participants to the Workshop will be involved in evaluation sessions where specific aspects of the interaction will be tested and discussed.

In case of specific features of the REBUILD toolbox not fully available, simulation techniques, like Wizard of Oz, will be adopted. This integrated approach to prototyping will allow to guide to end-users through the "navigation" of available solution prototypes and to collect their feedback and contribution.

Technical partners will prepare mock-ups about the services reported in Par. 1.1; services will be tested in the pilot country in which they are actually delivered.

A specific methodology will be shared among the facilitators to support the validation process (see D2.4).

2.Introduction to Participatory and Collaborative Design

2.1. WHAT IS CO-CREATION?

The practice of collective creativity in design has been around for nearly 40 years, going under the name of participatory design. In the 1970s, the Collective Resource Approach, a Scandinavian approach to the design, was established to increase the value of industrial production by engaging workers in the development of new systems for the workplace. This approach brought the designers/researchers (experts of the systems) and the workers to work together and to build on the workers' own experiences and provided them with the resources to be able to act in their current situation (Bødker 1996)(Binder et al., 2011). The changing landscape of human-centred design research influenced this new design practice: the user-centred design approach, which began in the 1970s and became widespread by the 1990s, proved to be useful in several contexts (Sanders 1992). In parallel, new disciplines of design have begun to emerge. "Interaction design" was first introduced in the late 1980s by Bill Moggridge and Bill Verplank (Moggridge 2007) (Binder et al., 2011).

During the '80s "democratic design" became a way of allowing people on the workplace to take part in decision making in the design process. In the collaborative design research community the focus is on the problem of communication among different stakeholders. Communication is essential for all collaborative work, and when the participants in the design project have different backgrounds and come from different professional contexts it is necessary to develop ways to communicate. Researcher Pelle Ehn describes this bottom-up approach: in some circumstances the products' design decisions were made "bottom up," involving or sometimes driven by the people who will encounter these rules and policies in their day-to-day work. Therefore this "way of doing" can be described as a democratic process where the gap between designers and users is closed. He offers examples from Scandinavian software, system, and workplace design.

More recently Maarten Pieters and Stefanie Jansen introduced the term Complete co-creation in 2013: the "transparent process of value creation in ongoing, productive collaboration with, and supported by all relevant parties, with end-users playing a central role" (Jansen and Pieters, 2017, p. 15). It is regarded as a practical answer to the predominantly academic and holistic understanding of co-creation. Complete co-creation actively involves end-users and other relevant parties in a full development process, from the identification of a challenge to the implementation and tracking of its solution.

So co-creation is used to see how things could be different. To do this, designers work with different kinds of sketches, drawings, models and prototypes, and so on. The sketches do not only fill the role of presenting design suggestion, but function as experiments. Tim Brown, CEO of design consultancy IDEO, defines co-creation as "a human-centered approach to innovation that draws from the designer's toolkit to integrate the needs of people, the possibilities of technology, and the requirements for business success" (Brown, 2019). A participatory approach requires collaboration with people who have no training in design and may not even know (or care) what it is. The designers become a guide or facilitator, one helping apply a foreign creative process. To successfully act as a teacher and a guide, a designer needs to have an emotional connection to the people doing the work (Brown, 2019).

2.2. WHY WE DO PARTICIPATORY DESIGN AND CO-CREATION?

The co-creation design workshop can be used for assessing features and finding alternatives for current activities, seeking possible new directions against the outlined future possibilities (scenarios) or for collecting images of the futures without an immediate use for this information in mind (food for thought) (Finland Futures Research Centre & Turku School of Economics, 2014b). To create a common opinion on the desired future, the designers use the "future workshops": they are tools of proactive futures creation by collecting a group of stakeholders to examine



a specific problem. The group define the most important actions needed to achieve that future (Finland Futures Research Centre & Turku School of Economics, 2014b).

This view is aligned with the work of Pelle Ehn: the skills of design help us experience the world. Making things, and appreciating that things are made, gives us a way to manage the complexity that comes with new technology. Models and sketches are used not to bring innovations to life but rather to contextualize innovations that are emerging so we can participate in modern culture. Design in this context is a liberal art, because making things acts as a foundation for engaging with the world, just as reading literature or exploring science gives us the ability to contribute as a member of society (Brown, 2019) .

The co-creation practiced at the early front end of the design development process can have an impact with positive, long-range consequences. The application of participatory design practices (both at the moment of idea generation and continuing throughout the design process at all key moments of decision) to very large-scale problems will change design and may change the world (B Sanders & J Stappers, 2008).

The participatory design method has been chosen in lots of vulnerable contexts. European citizens are engaged in different activities: the elderly in healthcare projects such as the design of activities aimed at improve their motor or technological skills; marginalized young adults in education and citizen engagement projects such as various physical, educational and art driven activities; many small organizations aiming at giving support started to apply participatory design principles.

The first use cases in applying this methodology with marginalized populations were the Malmo Living Lab projects such as "The neighbourhood" and "The stage" (Björgvinsson, Ehn, & Hillgren, 2012): they designed participatory laboratories oriented toward social innovation and the creation of new services applying activities to real contexts, the collaboration among different actors such as users, researchers, technicians, private companies and other. The cultural knowledge of marginalized communities by the actors of the activities (designers, researchers, facilitators, other participants) is an important aspect to control. Geographically or culturally distant groups could present different dynamics among individuals and society and this could result in a different perception of participation, comparing to the one western researcher are used to.

When actors have to create a deep bond of trust and understanding among actors the language barriers could be a problem to manage and are also sometimes underestimated. Participatory design tools could also need relevant adaptations in certain kind of contexts, for example where knowledge is generated in a complete different way, as in oral cultures (Livieri, 2016).

Therefore, the benefits of following a co-design approach are many: it allow to gain access to tacit and differentiate knowledge, often far from the experiences of designers, engineers and developers, listen the voices of the future users in order to deliver a service/tool/policy that really addresses their needs and wishes; observe how they use/interact/understand the prototype of a service/tool/policy and improve it accordingly to the observation, develop a fruitful collaboration with future users that can act as ambassadors of the service/tool/policy in their communities and reduce the time needed for developing them.

3. THE REBUILD CO-CREATION WORKSHOPS

3.1. TECHNICAL OBJECTIVES

The objective of the workshops is two fold: on the one hand discuss and validate the REBUILD use cases defined according to the user research and field analysis held in T.X.X. and, on the other hand, create a space for further explore the potentialities of REBUILD, in particular related to user experience and interaction with REBUILD application.

A Participatory design approach will be applied to the workshops aiming at fostering:

- Diverse participation, perspective taking and inclusive decision-making,
- Mutual learning, testing of premises, and generation of new concepts,
- Elaboration of user insights and feedback into further design of REBUILD interfaces and interaction.

The REBUILD application will develop three different kind of services:

- Support and aided access to already existing digital services, i.e. Uninettuno language courses as well as CIDAS services,
- Integration of third-party services, i.e. services provided by PA and ONG external to the consortium,
- Definition of services to be digitalised and integrated in REBUILD, i.e. CIDAS services currently not digitalised.

The variety of services to be possibly taken into account is already described in the REBUILD use cases and the Workshop will allow to present, discuss and validate a selected set of scenarios, also supporting prioritisation of UX statement and exploration of alternative ways of interaction.

The user experience co-design will allow to enter into details of how the REBUILD application would work, how people would interact with services in order to accomplish their personal objectives.

In order to accomplish these objectives three workshops will be organised: one for each of the pilot countries of the project (Italy, Spain and Greece). The overall structure of the workshops will be similar, but the strategic approach, as well as the topics under discussion and the services scenario presented to users will differ.

As better described in the next paragraphs, the Italian and Greece workshops will be centred on collaborative definition of ways of interaction with services (meaning interaction design) and validation of REBUILD scenarios in order to foster the enrichment and further development of service scenarios. The Spanish workshop will be focused on discussing REBUILD service scenarios as well as on envisioning future digitalised services.

Operative objectives are as follows.

For the Italian and Greek workshops:

- Present and discuss the service scenarios and related mockups
- Co-design a service able to map and navigate in a smart way the services available at local level for migrants and refugees
- gather feedback on the communication and accessibility features of the REBUILD App
- Prioritize the features of the Rebuild tools
- Develop a shared "to-do" and GANTT for the technological development activities

For the Spanish workshop will also co-design a tutoring service that, at the present stage, is fully analogic.

REBUILD partners will act both as experts and as facilitators, coordinating subgroups activities and tables, and adopting collaborative learning/design techniques such as scaffolding and fading.

3.2. WORKSHOP STRUCTURE

The structure of the Co-Creation Workshop does refer to three main domain areas described in Par. 1.1 Scope and Objectives

- 1. Stakeholders and End-Users Involvement and Participation
- 2. Use Cases Validation
- 3. User Experience Design and Interaction Design

Workshop organisation will be follow a modular approach that each pilot countries will adapt according to practical arrangement of agenda and availability of participants, scope of the workshop and background knowledge of the project.

In this paragraph several activities to be allocated in specific workshop time schedule are described with reference to the domain areas. Those modules will be selected and fine-tuned on purpose by Workshop organisers and facilitators as further described in D2.4.

1. Stakeholders and End-Users Involvement and Participation as enabling condition

[Introduction / Warm up methods]

MODULE 0 - Introduction

This module has the goals of: presenting the rebuild project, setting the rules of the workshop, getting to know each other and create a collaborative and informal atmosphere and gathering expectations about the workshop itself.

Presenting REBUILD and workshops rules

Project partners will briefly present REBUILD, its main goals and expected outcomes and the agenda of the day.

The main rules of the workshop will be hand written on a flipchart that will always be visible to the audience. Icon will - as much as possible - accompany the writing. Main rules may include:

- This is a safe place: privacy is protected and content is confidential
- Lissen with an open mind, avoid judging
- Let everyone participate
- Stay on point and consider time
- Contribute at you best

Facilitator will present the rules and ask the participants to agree on them and, if needed, add more on the list. The flipchart will be a point of reference for the group and the facilitator and if conflict or misbehaviours emerge all can refer to it.

Icebreaker exercise: getting to know each other and create a collaborative and informal atmosphere

Participants do not necessarily know each other and for sure they do not know the facilitators and REBUILD project partners. For some of the participants it will be the first co-design workshop and might not know what to expect. It is important in co-design workshop to acknowledge this and create a welcoming and warm atmosphere. This can be done since the beginning of the workshop by structuring the space in such a way to support communication and eye contact, by explaining in details the objectives and the scope of the workshop and by using a clear, empathetic and friendly language. For creating a common ground and support participants in knowing each other, ice breaker games are often used. They can make people start conversations, build a sense of community and set the tone for the upcoming session. Few examples are the following.

When working with heterogeneous groups, as it will happen in at least one of the REBUILD co-creation workshops in which migrants and refugees will be together with public servants and representatives of LSPs, the following activity could be useful. It asks participants to work in small groups of 4-5 persons (or even in peers depending

by the number of participants) and find 10 things they have in common. They should focus on things that are not related to the subject of the workshop and can decide to share more or less personal information. Here a full description of this activity: https://www.thebalancecareers.com/my-favorite-team-building-icebreaker-1918415

"Presenting yourself by using you keys" is another simple and quick way of opening a workshop. Facilitators will ask the participants to show their keys to others and say something about themselves starting from what the keys suggest them. It can be information about the area in which they leave or stories related to the keyholder or anything else they want to share. Considering the particular audience of the REBUILD workshop it is better to keep the assignment more open and ask participants to take one object they have with them, it can be their keys, pocket, a pen, a notebook, or any kind of thing they have with them at the beginning of the meeting. In order to reduce the pressure to present in front of the whole group, which can be demanding for some participants, the facilitator might divide the group into pairs or groups of 3-4 persons (depending on the number of participants) and have them work in small groups.

In the "One Word Exercise" organizers should pick a phrase that is central to the topic of the workshop and have everyone write down a word that comes to their mind in relation to it. Once everyone has shared their phrases, discuss the results. This game helps explore different viewpoints about a common challenge, before starting the meeting¹. In the case of REBUILD the phrase could be something like: "REBUILD is working towards inclusion" or "We are exploring solution for an open and welcoming society".

In all the ice breaker activities, usually the facilitator starts the activity so the participants get the feeling how it should be done.

After the ice breaker game participants will be asked to write their names on tags to be applied to their dresses.

Collect expectations

When working with groups, especially heterogeneous one, it is always important to make expectations explicits. Mapping expectations at the beginning of the workshop help organisers and facilitators to fine tune the tone and the interactive modalities of the workshop. Mapping expectations helps to make sure everyone feels comfortable participating and that their are active part of the process and their needs are listened. Mapping expectations also helps in re-direct them is case some expectation is totally out of the scope of the workshop: this reduces the eventual frustration of participants. Facilitator can collect expectations by asking each participant to write them on post it, then collect them and write in a dedicated flipchart. All the post it will be read by the facilitator so that participants will not need to speak in front of the other about potentially sensitive topics. The flipchart will be kept visible for the entire duration of the workshop and before closing the day it will be re-read in order to check if the expectations have been met and to what extent. This final step is a sort of evaluation of the day and helps to orient future activities and - at the same time - give back to the participants.

2. Use Cases Validation as scope 1

[Storytelling / Validation methods]

In research and design projects, problem formulation, story gathering and story making/building through Use Cases and Scenarios can help researchers, participants, clients and other stakeholders make sense of complex interconnected situations (IDEO, 2009). Working with stories is considered a generative tool for co-design that captures participants' self-expression (Sanders, 2000). Furthermore storytelling is often used within a research team to facilitate the sharing of research experiences and develop common ground among diverse team members (IDEO, 2009) and makes possible to develop empathy and engage users and other stakeholders in the process of exploring possible solutions, generating feedback and refining the solution (Gruen, 2000).

¹ MORE INFORMATION ON THE PROPOSED ICE BREAKERS AND OTHER OPTION CAN BE FUND HERE: HTTPS://www.sessionlab.com/blog/icebreaker-games/#ice-breaker-games-to-kick-off-meetings

In the Co-design workshop storytelling is particularly used for Use Cases Validation. Since a heterogeneous panel of stakeholders will attend the Workshop, including migrants/refugees, local service providers, and technical experts from the consortium, three high-level validation dimensions are proposed to be taken into account for the validation of Use Cases:

- user acceptability, including ease of use, suitability of the system for supporting cognitive task requirements, job satisfaction,
- domain suitability, i.e. the suitability of the content of information, the display representation and system functionalities for the selected applicative domain, its work-practices and internal procedures,
- technical usability, i.e. the property of a tool to be effectively used, understood and learnt by the people for which it has been designed, including look&feel, role and implementation aspects of the prototype as well as on the way the users will be requested to interact with it.

In the Co-design workshop storytelling takes on the forms of Story Building and Validation Scenarios.

Story Building is adopted by facilitators and project partners to prepare the materials for the workshop. Current formulation of Use cases have already been defined in a narrative text on the basis of personal stories shared by migrants and local service providers. Use cases have been refactored based on field knowledge (e.g., a literature review). In the preparation of the workshop the stories in Use cases will need to be further elaborated and mediated through graphics, journal, picture, etc. in order for all the participants to be able to understand and appreciate the narrative.

MODULE 1 - Storytelling and UX Statement

At the Workshop the Use cases will then be shown and the story will be told to participants in order for them to reflect on their own stories. Each story will be also disentangled in order to define UX statement to be used in the discussion with participants.

The Statement cards is an efficient tool to start discussions around experiential topics. By using Use cases inspired statements, the participants can discuss the statement freely. It aims to trigger participants to react, whether they agree or disagree, without being the "owner" of the statement. The discussion is meant to lead to the placing of the statement card as "true" or "false", and to foster validation of statements as acceptable and feasible.

The UX Statements will be prepared according to the Validation methodology proposed.

MODULE 2 - Alternative Futures

The analysis of the proposed Use cases and the placing of statement of Slot 1 would also enhance the development of further user experience by active participation of the workshop users. By using the What if method possible alternative experience and course of action will be explored. The What if method is used to examine the participants' thoughts towards improvement of the proposed UX statements by producing multiple post-its within a time limit, starting with "What if". The method is directed towards co-designing and problem solving.

The outcomes of this session will be elaborated by the REBUILD team into Affinity Diagrams summarising the inner experience and motivations of participants. The elaboration will be done by facilitators clustering all the postits created by participants into similar categories.

Both Module 1 and Module 2 will be organized as target-specific sessions with dedicated group of participants: two sessions, one for each target group (migrants&refugees and service providers&PAs representatives), will be held in parallel.

3. User Experience Design and Interaction Design as scope 2

[Prototyping / User evaluation / Validation methods]

MODULE 3 - Service-based User evaluation

The REBUILD prototypes and mockups will show specific interaction flows with relation to the services described in the Use Cases presented in Module 1 and will allow the users to navigate the service, i.e. access, fruition, get profit, evolution and abandon, through the user interface prototypes.

In this module the interaction flow will be prototyped allowing the users to make direct experience of services and applications. By mean of working prototypes, being them implementation, role or look&feel mockups, the user will interact with the REBUILD services and applications by mean of preliminary interfaces.

In case of specific features of the REBUILD toolbox not fully available, simulation techniques, like Wizard of Oz, will be adopted to allow the users interacting with the REBUILD interface whilst the feature of the application are emulated. In fact the Wizard of Oz technique involves the user interacting with the system under evaluation, whilst a hidden operator processes input from the user and simulates the system output accordingly. This technique is very useful to evaluate the user experience beyond the level of preparedness of working prototypes.

According to these different modalities, participants to the Workshop will be involved in evaluation sessions where specific aspects of the interaction will be tested and discussed.

One common session involving migrants and the stakeholders will be organized in order to foster perspective taking and the gathering of the overall picture of the service encompassing service providers and end-users journeys.

In Spain this module will be oriented in a different way. There will be three groups of users: Migrants, LSPs and mentors (volunteers). Mentors and migrants will have a separate sessions in which, based on mock-ups, they will discuss to define the UI, features, navigation, and the overall user experience. LSPs will have a different approach starting from scratch the design of a web-based UI. A prototype will be created, first identifying features and services available. Guided by the facilitators they will draw it together on a large sheet of paper. The last part of the module will be dedicated to co-design how LSPs would like to access the interface, what information is necessary, so the back end of the mentor services. Facilitators will collect the requirements so that they are integrated within the app.

MODULE 4 - Service map

This module aims to co-design a georeferenced maps of services available in a given territory (Barcellona, Bologna and thessaloniki) including selecting which services to be included, what information for each service, which sort of user interaction (service search, proximity recommendation, other characteristics useful to be included in this map), which level of interactivity (possibility to leave comments and reviewers, etc). The co-design activity will be differentiated for the two main stakeholders groups considered: migrants and refugees on one hand and LSPs on the other hand.

Activity to be carried out with migrants and refugees

The group will be divided in 2 or 3 subgroups of 4-5 persons maximum. Each group will work on a dedicated table, on each table there will be:

- a large map of the city under discussion (as big as the table if possible)
- a set of printed out icons representing different typologies of services (health, administrative, cultural, educational, etc)
- a set of white cards
- pencils and markers
- a flipchart

Ideally, one representative of the REBUILD consortium will sit at each table, if this is not possible, each group will report in plenary the result of their work.

Participants will be requested to write down on their flipchart which georeferenced information they find so far in their city, how they access them (which App of website they use/visit), how satisfied they are with them. Then they will discuss the proposed icon and talk about the specific services they would like to access for each category. So, for example, about health service they might say they already have the info about hospitals location but that

lack the information about vaccination offices. Then, they will select 3 to 5 service they agree on being the most needed and for each of them will write a card listing the information they would like to see for each service (for example, time of opening and closure, how to reach the location with public services, eventual documents needed for accessing the service, etc.). At the end of the activity the maps with the related icons, flipcharts and cards will be hung in the room and briefly discussed all together.

Activity to be carried out with LSPs

In working with LSPs the goal of the activity is partially different as we want to map the service they provide, but also enhance the collaboration among them. In order to reach this goal the group will consider already existing gereferentiated services available in their city. With the help of a computer and a projector facilitators will showcase examples of interactive maps providing georeferentiated information about services (possible referring to migrant-related service). An open discussion will follow exploring: participants' opinions on the information provided about the services, the form in which they are provided and its appropriateness for the migrants/refugee target audience, navigation options and look and feel. Then the group will be requested to start imagining an interactive map visualising the service each of them is offering to migrants and refugees. Guided by the facilitators they will draw it together on a large sheet of paper. The last part of the module will be dedicated to co-design how LSPs would like to make its services available on the map, so the back end of the interactive map. Facilitators will collect requirements on this.

MODULE 5 - Animation and Pictogram User test

This module has two parts: the first part focusing on the evaluation of pictorial communication; the second on the video animations. While the end-users of these two elements of the app will be the migrants; the input from LSP on these two areas will also be valuable as experts who can provide feedback from their experience with end-users.

The first part will consist of an evaluation test to assess the comprehensibility of the pictograms that will be used within the app. Participants will take a test which will contain several concepts and "sentences" depicted only with pictograms. They will be asked to define what these images mean to them and whether the sentences are intelligible for them. The tests will be done individually.

The second part aims at gathering feedback from end-users about the video animations. Video animations will be used within the app to explain rather complex but routine procedures that end-users of the app might not be familiar with. To that end, participants will view three different videos and rate, review and provide feedback about the content, graphics, speed, language and other visual elements concerning the video animations. The group will be requested to watch the videos on their own device and rate the videos individually. Then, there will be a round table discussion guided by the facilitators that will expand on the feedback provided individually and allow participants to share their views on other aspects of the videos.

MODULE 6 - Wrap up

Workshop organizers together with migrants and local service providers will discuss the outcomes of the activity and will iterate on the materials been produced. This session will support perspective taking and exchange of viewpoint.

It will consist of a roundtable discussion thought to finalize the results and create a common knowledge base created at the workshop: the results from Module 1, 3, 4, 5 will be elaborated into a coherent knowledge base for user requirements and user experience design.

3.3. TARGET PARTICIPANTS' PROFILES

To produce and collect useful information for the future development of REBUILD it is useful to work with a diverse group of persons who have wide knowledge on various issues relating to the subject at hand.

The quality of the results that the workshop may produce depends, indeed, greatly on the input of the participants. So it is very important to select relevant participants.

Regarding the project and the direct users of the platform, we can identify two major macro-categories:

- recognized refugees (considered asylum seekers until the applications are not confirmed), and migrants.
- and Local service providers, i.e. organisation that are entitled to provide integration services to migrants and refugees (which can be Public administration, NGOs, associations, cooperatives and similar).

As for the recruitment of target participants, a profilation questionnaire will be administered by the responsible partners and external entities before the workshop. The questionnaire will allow the facilitators in getting a clear picture of who will participate to the activities, by asking them

- their cultural background,
- their language(s),
- if short-term or Long-term migrants, and through which countries,
- their current working position,
- their level of adoption and familiarisation with digital technologies.

In particular the last issue related to ITC technologies has been recognised in REBUILD as relevant since, as described on the deliverable D1.4 "Report Cultural markers", the migrant and refugee communities rely heavily on the use of phones in their own everyday lives but their eSkills can be, never the less, limited.

The technology adoption was widespread among participants regardless of age, gender or country of residence, but it was found that the most effective use of technology is linked with higher levels of literacy. All participants confirmed owning a mobile phone, many of them a smartphone. The principal use concerns communication with family and friends, both back home and in their current place of residence. As described in the D1.4, "other uses are entertainment, search for information, getting informed of news and events and looking for places and directions". They use apps like Whatsapp, Instagram, Facebook, Skype, Telegram, YouTube, etc. A few participants also mentioned Linkedin, Messenger, Maps, Amazon.

In order to assure a fruitful interaction among participants and the achievement of the expected objectives the workshops aim to engage an optimal number of

- 12-15 migrants, Participants should be representatives of different migration experiences (recognised refugees, asylum seekers, so called economic migrants, etc) and possibly with diversity in terms of length of stay
- 5-7 LSP/PAs, Participants should be personally engaged in the service area that will discussed in each workshop and should represent a mix of public and "private" service providers.

It will be useful to gather information about the participants before the workshops implementation; UNINETTUNO/DEN will share with partners two simple forms in order to receive background information from participants recruited for the workshops before the actual workshop implementation.

3.4. FACILITATORS

In co-design there are two roles: the "expert of his/her experience", plays a large role in knowledge development, idea generation and concept development, and who supports the "expert of his/her experience" by providing tools for ideation and expression (B Sanders & J Stappers, 2008). In the traditional design process, the researcher served as a translator between the 'users' and the designer. In co-designing, the researcher (who may be a designer) takes on the role of a facilitator (B Sanders & J Stappers, 2008).

In the Co-design workshops the team of researchers and designers responsible for T.2.2 will act as facilitators in the three pilot countries.

Facilitator's job is to ensure that the workshop produces the desired results. The roles are: encouraging the participants to be creative, encouraging the participants to work together, encouraging the participants to express

their opinions. It is important participants give suggestions and inputs (Finland Futures Research Centre & Turku School of Economics, 2014b) in a safe environment, free of judgment and welcoming.

In this sense facilitators should be emphatic with participants but, at the same time, be able to assure the full participation of all by moderating those participants who may tend to abuse of their speaking time and support those that have difficulties in speaking in front of others. Conflict management is also a required skill together with intercultural communication and gender-effective communication.

The facilitator shouldn't express opinions because his influence should be kept to minimum. This is easier if the facilitator shouldn't sit in the same table where the group work is done or take part in the discussion.

Facilitator should be available for the groups at all times so that he can help the groups in case there are some problems (Finland Futures Research Centre & Turku School of Economics, 2014b).

The most important task of the facilitator is to get people to be present (not just physically but also mentally) and discuss the topic of the day, i.e. ensuring that the day produces the result it was organised for.

In REBUILD Co-creation Workshop the following actors are foreseen:

- Technical partners: at least one for each workshop, to be selected according to the available prototypes which will be demonstrated)
- Two main facilitators, one for practical and relational management of the activities + one for the technical issues and for modules carrying out. There will be then at least other 1-2 supporting facilitators.

3.5. DURATION

Workshop activities are planned to be carried out in 2 days. Notwithstanding that the structure described in Par. 1.2 follows a modular approach that will allow the Workshop organizers and facilitators to assemble the 2-days time schedule according to practical issues, including availability of participants.

A possible solution will be to organize the workshop in 2 days, but actually involving users just in the afternoon of the first day, and in the morning of the second. The other option is to use evenings and/or Saturdays in order to make easy for them to participate.

3.6. CRITICAL ISSUES

One of the main potential critical issue for the workshops is the language. In order to overcome this issue the workshop will be run in the local languages. The possibility of involving cultural mediators speaking the mother tongue of the participants will be also taken into account on the basis of the answers to the profilation questionnaire.

Furthermore, language issues, if not managed, may bring to more severe trust issue: create trust towards the facilitators and empathy towards the users through planning an adequate period of mutual learning and relationship building provides a positive starting for the design project. Beyond mutual learning, to ensure a good level of involvement in design, with the possibility of visualize innovative solutions (co-realisation), prototyping become the most relevant technique (Livieri, 2016).

Another potential source of weaknesses in the workshop activities is time management. In this contest the facilitator should keep time of the planned activities and should finish in time. In the best possible case the facilitator doesn't influence the groups' work during the workshop in any other way but keeping the time and instructing what to do in various phases (Finland Futures Research Centre & Turku School of Economics, 2014b).

4. EXPECTED OUTCOMES

The main expected outcomes are:

- *User evaluation report*, by adoption of mock-ups based on a selection of the Use Cases developed by project partners;
- Validation report, including feedback gathering and prioritization with participants of the 3 workshops services emerging as "needs" from the analysis being conducted with migrants/refugees users (Task 1.2) and with Local Service Providers (Task 2.1)
- User experience report, including
 - the design guidelines for "smart information provision" services based on already available data that can be served to final users in a more usable way (i.e.: georeferenced maps of available services with service contact and description; maps of cultural events; etc.);
 - the interaction design guidelines for the REBUILD application and of specific modules of the application.

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