

**Interreg**  
**Sudoe**



EUROPEAN UNION

**ICT4SILVER**

European Regional Development Fund

## Sessions Report

ICT4SILVER



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## I. Introduction

The SUDOE territorial space will have, by 2050, the oldest population of Europe. The ageing of our population represents a challenge for our public policies but also an asset for our companies. Considering the ageing society on one side, and a digital ecosystem rapidly expanding of the other one, how make so that the challenges of one could be the opportunities of the other?

Here is the stake in ICT4SILVER, European project carried by the Agency of Development and in Innovation of the Region Nouvelle-Aquitaine, Tecnalía, GAIA, KIMbcn, Home Care Lab, TICE.PT, IPCA, Autonom' Lab and Cluster TIC Santé. This project has for ambition to support the market launch of digital products or services from SME of our territories, answering the needs of Silver Economy actors.

To capture the needs of SE actors, the ICT4SILVER partners organized local round tables (RTs) sessions joining the different types of players to share their experience, challenges and difficulties.

From those RTs, we collected data concerning the nature of the needs and the sectors affected by the need.

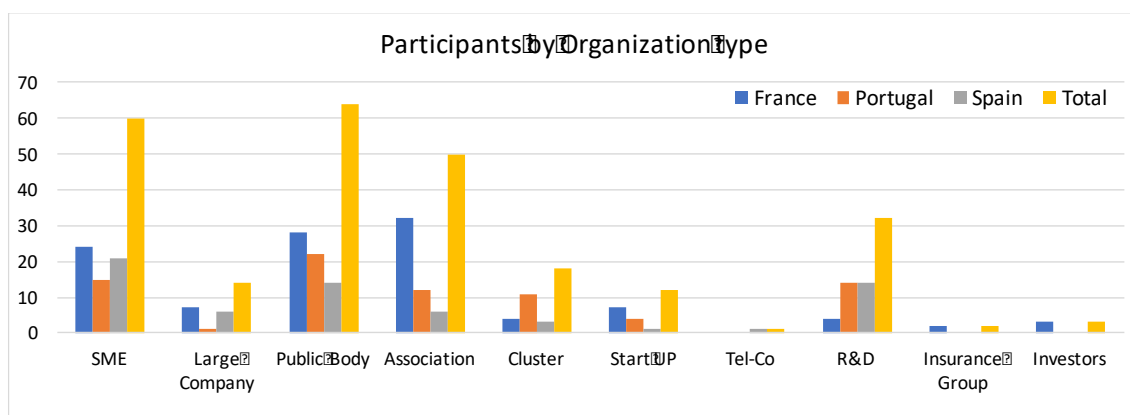
The present document summarizes the data SE scenario expressed by the SE players.

## II. Session participation of the Silver Economy actors

The ICT4SILVER partners held 11 sessions of round tables to promote the meeting of 256 attendees from different types of SE actors in their territory.

The following charts summarize that participation by country.

Country	Sessions	Attendees	SME	Large Company	Public Body	Association	Cluster	Start UP	Tel-Co	R&D	Insurance Group	Investors
France	4	111	24	7	28	32	4	7	0	4	2	3
Portugal	4	79	15	1	22	12	11	4	0	14	0	0
Spain	3	66	21	6	14	6	3	1	1	14	0	0
<b>Total Global</b>	<b>11</b>	<b>256</b>	<b>60</b>	<b>14</b>	<b>64</b>	<b>50</b>	<b>18</b>	<b>12</b>	<b>1</b>	<b>32</b>	<b>2</b>	<b>3</b>



We notice the prominent participation of the SMEs, public body organizations and associations in the RTs. Portuguese and Spanish R&D organizations have also shown a significant representation.

### III. Data captured from the Round Tables

In the RTs, each team collected data for each topic addressed by the attendees, concerning:

- the nature of the identified need;
- the sector affected by the need;

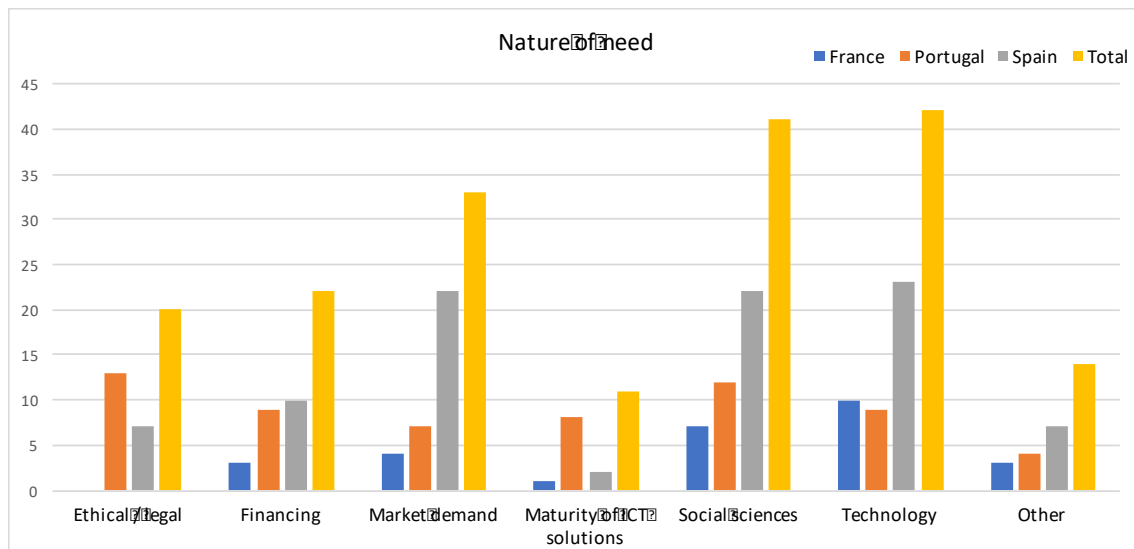
The number of topics related with each need and sector affected, are summarized in the following pages.

#### a) Nature of need

The next table expresses the number of topics that addressed each Nature of need.

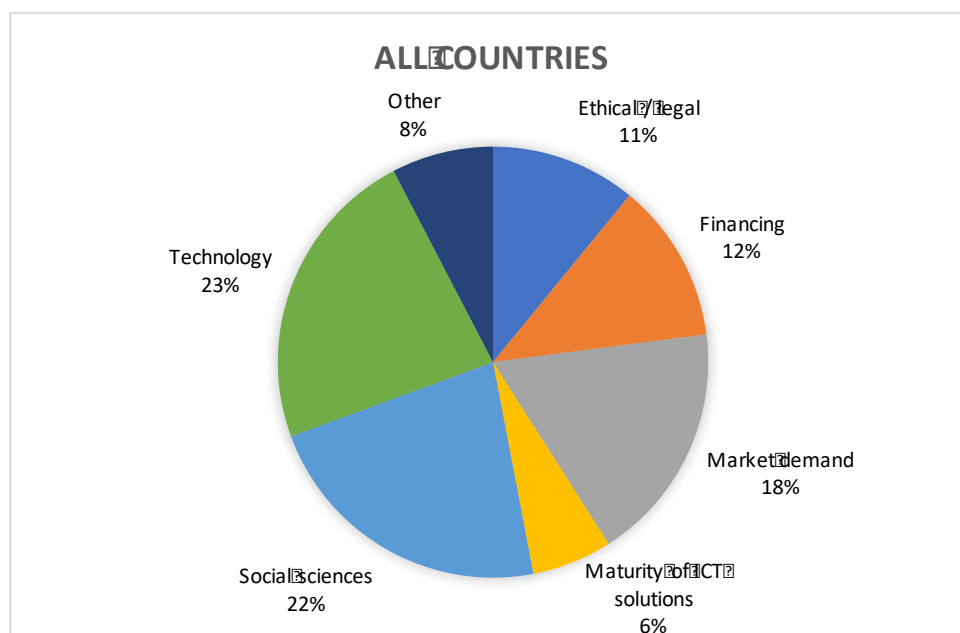
Country	Ethical / legal	Financing	Market demand	Maturity of ICT solutions	Social sciences	Technology	Other
France	0	3	4	1	7	10	3
Portugal	13	9	7	8	12	9	4
Spain	7	10	22	2	22	23	7
<b>Total</b>	<b>20</b>	<b>22</b>	<b>33</b>	<b>11</b>	<b>41</b>	<b>42</b>	<b>14</b>

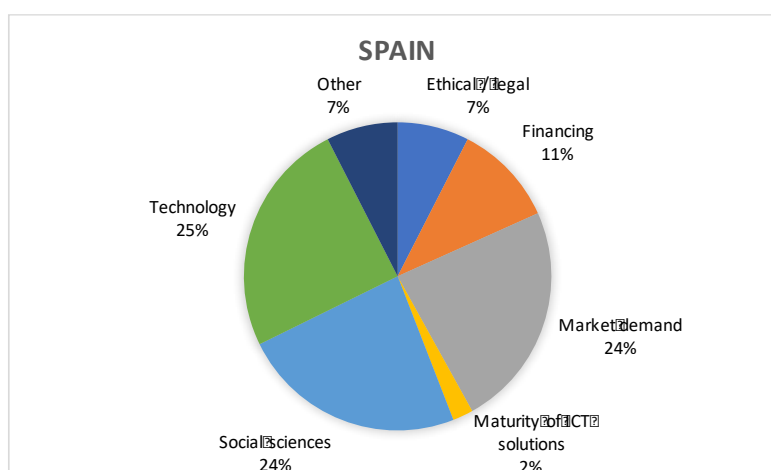
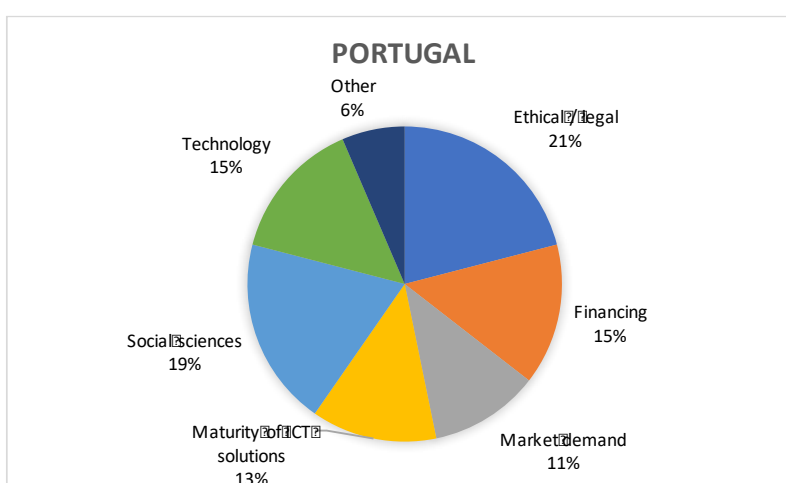
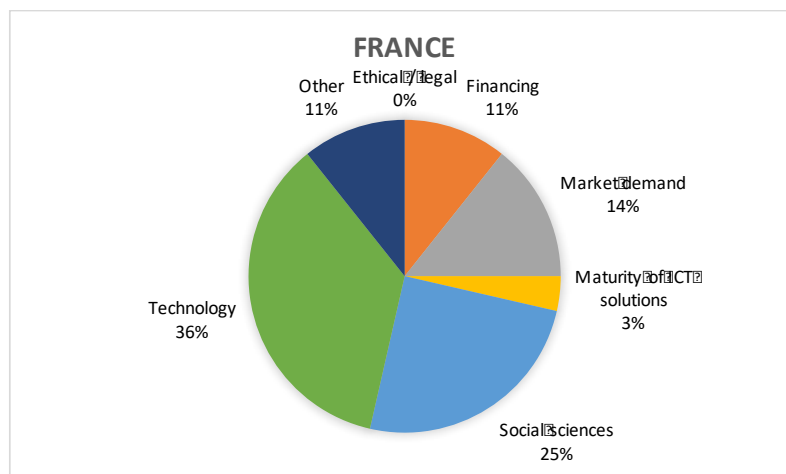
In the following charts, we record the proportion of discussed topics that identified each nature of the need, globally and detailed for each country.



Globally, technology, social sciences and market demand were identified as the main needs felt by the actors.

As shown on the following charts, in Portugal, the Maturity of ICT solutions challenges and ethical / legal constraints are equal concerns.

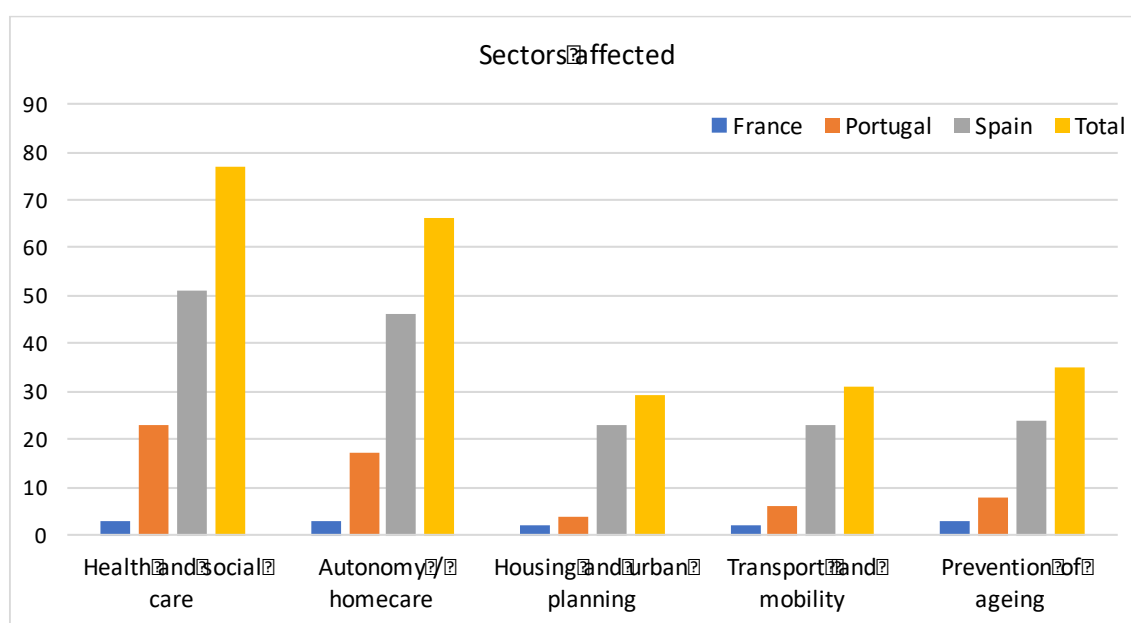




b) Sectors affected

“Sectors affected” are the number of topics that addressed needs in each sector.

	Health and social care	Autonomy / homecare	Housing and urban planning	Transport and mobility	Prevention of ageing
France	3	3	2	2	3
Portugal	23	17	4	6	8
Spain	51	46	23	23	24
Total	77	66	29	31	35



Sectors related to health, care and autonomy are the focus of the RTs participants.

#### IV. Photographs of the round tables

a) France





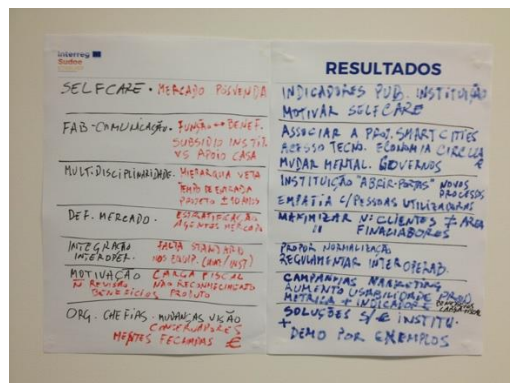


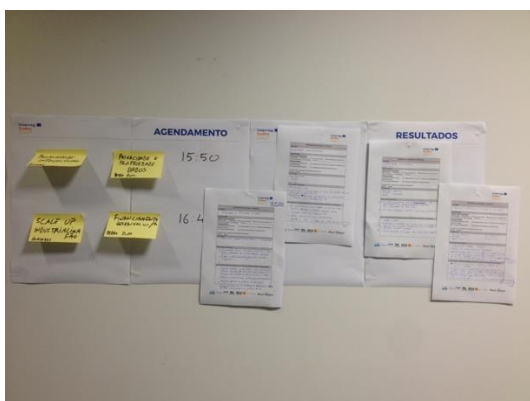






b) Portugal









c) Spain



## V. Global Reports

France

GT1: Intersectoral and transnational cross-fertilization for better exploitation of ICT key enabling technologies to meet the challenges of the silver economy

### NEEDS COLLECTION: ROUND-TABLES (RTs)

Global reporting template

#### GENERAL INFORMATION

Total number of RTs	Period of execution	Total number of attendees
4	05/12/2016 to 12/01/2017	111
Number of RTs and attendees per region	Total number of attendees per represented organizations	
Aquitaine: <i>RTs/attendees</i>	SME: 24	Start up:7
Limoges: <i>RTs/attendees</i>	Large company: 7	Tel-Co:
Basque Country: <i>RTs/attendees</i>	Public body: 28	R&D entity: 4
Catalunya: <i>RTs/attendees</i>	Association: 32	Insurance Group:2
Portugal: <i>RTs/attendees</i>	Cluster: 4	Investors:3

#### PROPOSED TOPICS FOR DISCUSSION

List of proposed topics (all RTs)

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#### SUMMARY OF NEEDS AND ACTION PLANS

Total number of needs identified	Number of needs per nature
	Ethical/legal:  Financing:  Market demand:  Maturity of ICT solutions:

<b>NEED 1: Facilitate coordination between social workers and health workers at home</b>
Nature
Social sciences, Technology, Other
Region where it was collected
Nouvelle-Aquitaine
Realistic ICT-based solution available
<input type="checkbox"/> YES <input type="checkbox"/> NO
Sector(s) affected
Health and social care
Brief description
<p>Elderly people suffering of chronic illness or in loss of autonomy often need care from different health and social care workers: nurses, doctors, home workers.</p> <p>These workers meet elderlies at different moment of the day and they could recognize and react to signs of frailty or more acute troubles in order to prevent them. However, evidence shows a lack of coordination between health and social care workers that results in a bad quality of care and in reduced patient safety or, much worse, it can lead to hospital admissions or readmissions.</p>
Suggested action plans
<p>Guarantee a more complete and accurate transfer of information among health and social care workers in every day life, but also, for example, during holidays period when system is under pressure because there is a higher demand for health and social services.</p>

<b>NEED 2: Improve work conditions of social, health and home care workers</b>
Nature
Market demand, Social sciences, Technology, Other
Region where it was collected
Nouvelle-Aquitaine
Realistic ICT-based solution available
<input type="checkbox"/> YES <input type="checkbox"/> NO
Sector(s) affected



Health and social care
Brief description
<p>The social, health and home care workers face every day problems in terms of:</p> <ul style="list-style-type: none"> <li>- Manipulation of patients;</li> <li>- Risks of musculoskeletal disorders;</li> <li>- Management of the workload.</li> </ul>
Suggested action plans
<p>Ensure a better qualification/training of the workers;</p> <p>Focus on ways to optimize the workload: planning, geolocalisation etc.</p>

<b>NEED 3: Enhance/make more attractive social and home care jobs in order to meet recruitment needs</b>
Nature
Other
Region where it was collected
Nouvelle-Aquitaine
Realistic ICT-based solution available
<input type="checkbox"/> YES <input type="checkbox"/> NO
Sector(s) affected
Health and social care
Brief description
<p>As many studies show, elderly people and their families would stay at home as long as possible and governments are under pressure facing many problems trying to fulfill their wish. As elderly people age and they face loss of autonomy, it's important to give them the opportunity to choose to stay at home delivering adapted and efficient services at their homes. A major role is played in this context by social and home care workers who have to be well trained and well prepared in order to provide the best care and support to older people and their families.</p>
Suggested action plans
<p>Better inform people interested in getting this jobs about potential problems and risks they could meet working in this sector. How could technology help them?</p>

<b>NEED4: assess the determining factors of frailty and prevent the loss of autonomy</b>
Nature
Social sciences, Technology
Region where it was collected
Nouvelle-Aquitaine
Realistic ICT-based solution available
<input type="checkbox"/> YES <input type="checkbox"/> NO
Sector(s) affected
Autonomy / homecare
Brief description
<p>Assess and prevent at home or in retirements homes and as soon as possible:</p> <ul style="list-style-type: none"> <li>- The undernutrition and the malnutrition</li> <li>- Associated cognitive and/or behavioral Deficiencies</li> <li>- Risk of fall</li> <li>- Loss of mobility</li> <li>- Etc.</li> </ul> <p>The prevention and evaluation lay mostly on human interaction.</p>
Suggested action plans
How to optimize/improve the operational efficiency?

<b>NEED 5: promote intervention of informal carers in every day life</b>
Nature
Technology
Region where it was collected
Nouvelle-Aquitaine
Realistic ICT-based solution available
<input type="checkbox"/> YES <input type="checkbox"/> NO
Sector(s) affected

Autonomy / homecare
Brief description
<ul style="list-style-type: none"> <li>- Help informal caregivers to better communicate with elderlies whose sensory or cognitive deficiencies slow down the capacity to speak, to understand, to hear.</li> <li>- Prevent exhaustion: Several reasons can explain the underuse of technology solutions which could prevent distress: <ul style="list-style-type: none"> <li>o bad communication channels and tools to promote these devices/solutions. In most of case caregivers do not recognize themselves as such. They are not then susceptible to hear the message concerning them.</li> <li>o An error of semantics in the spread message which can increase the sense of guilt of the helper.</li> <li>o An error of adaptation of the available offer of technology solutions. There should be as much offer as demands of help. Every situation is particular and the offer has to adapt itself to the helper and not the opposite (group of word vs group of support)</li> <li>o Finally, it is important that healthcare professionals are trained not to intervene only with older people but also with caregivers in order to prevent conflicts.</li> </ul> </li> </ul>
Suggested action plans
<ul style="list-style-type: none"> <li>- If we want to promote a broader use of technology, it is important: <ul style="list-style-type: none"> <li>o To offer a solution to take care about the older people during the absence of the helper. It must be also envisaged a dematerialization of the offer, allow informal caregivers to have access to a service on-line without the obligation to move and let the elderly alone.</li> <li>o The proposed technology solutions have to focus on autonomy of the senior so that the helper could be more independent. What tasks/activities of the everyday life and the senior is not able to do anymore can be replaced by one digital technology so that the helper has not to take care of?</li> </ul> </li> <li>- Facilitate the access to the information and resources present on the territory: the offer to informal care givers is not well known and promoted and disseminated. How and where to find 360° of information's? From transport to health, from housing to tourism?</li> <li>- Develop an assessment tool to detect and prevent frailty among informal caregivers and improve their support.</li> </ul>

<b>NEED 6: adapt robots in order to allow them to be useful and proper functioning in all buildings</b>
Nature
Financing,Market demand,Maturity of ICT solutions,Social sciences,Technology
Region where it was collected
Nouvelle-Aquitaine
Realistic ICT-based solution available
<input type="checkbox"/> YES <input type="checkbox"/> NO
Sector(s) affected
Autonomy / homecare
Brief description
Today an assistance robot can intervene only in certain environment according to the architecture of the place. The constraints it encounter when it moves are numerous.
Suggested action plans
What technologies could be associated with this type of robot to assure its functioning and its utility in any place? For example, a sensor on the floor which would send a signal to the robot in the ground floor announcing him a fall.

<b>NEED 7: adapt houses and buildings from a structural point of view</b>
Nature
Financing,Social sciences,Technology
Region where it was collected
Nouvelle-Aquitaine
Realistic ICT-based solution available
<input type="checkbox"/> YES <input type="checkbox"/> NO
Sector(s) affected
Housing and urban planning

Brief description
<ul style="list-style-type: none"> <li>- Adaptation of the home after a hospitalization → urgent situation, how to prepare the return home. Many problems the patient has to take care of: <ul style="list-style-type: none"> <li>o Anxiety of the change;</li> <li>o Support and advice to make the relevant technical and material changes in the bedroom;</li> <li>o Need to adapt the home according to new health conditions but especially to avoid a potential hospital readmission.</li> <li>o Preventive but not curative approach</li> </ul> </li> <li>- Need to secure the home or any other living place</li> <li>- Renovate the houses in rural environment <ul style="list-style-type: none"> <li>o Individual homes dating from the 80s, in good condition but to renovate, to adapt to new standards and according to the changing needs of the population <ul style="list-style-type: none"> <li>▪ Energy efficiency</li> <li>▪ Intelligent re design + digital technology (connected devices,</li> </ul> </li> </ul> </li> <li>- Facilitate elderly mobility and their moves <ul style="list-style-type: none"> <li>o Possibility to find the most suitable way of moving from one point to another, depending on the level of mobility and the means of transport available in the area. Current applications do not specify if there are stairs, steps on the way.</li> <li>o Possibility to know before leaving a place, if there will be an available spot to park the car where someone is heading;</li> <li>o How to facilitate the elderly mobility for long trips and carry weight when they go on vacation;</li> </ul> </li> <li>- Develop a diagnosis of the house and the environment to measure the adaptability of the home to an elderly and his autonomy <ul style="list-style-type: none"> <li>o If an owner want to rent an apartment or a house to elderly, how to evaluate if the home is suitable?</li> <li>o How to evaluate if the neighborhood offers services, professionals health care suitable to elderly and chronic diseases</li> </ul> </li> </ul>
Suggested action plans
<p>For each point, there is a suggested action plan above.</p>

<b>NEED 8: in project design of houses or buildings for elderly always make sure to take into account some values as autonomy, diversity, active inclusion and share</b>
Nature
Financing, Social sciences, Technology
Region where it was collected
Nouvelle-Aquitaine
Realistic ICT-based solution available
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Sector(s) affected
Housing and urban planning
Brief description
<p>If you want to deploy products or services in housing project for elderly you should respect some values identified by users: autonomy, diversity, active inclusion, sharing and security. That means that housing projects should be able to evolve over time as people's needs change (this idea includes interiors and exteriors spaces) ; the same for services or devices/equipments deployed, they should be defined by criteria which change over time depending on the desired level of achievement. This allow also to avoid "shortage/rupture" in frail elderlies life due to housing changes.</p>
Suggested action plans
<p>Suggestions could be:</p> <p>Encourage the deployment of associated products services and pooling services. This will promote links between home and neighborhood (for example stores close to home) and keep elderly active.</p> <p>Promote relationships and links inside the adapted collective housing and outside (intergenerational relations avoiding isolation)</p> <p>Improve coordination of people/workers intervening at home</p> <p>Guarantee sustainability and longevity of equipment's as well as their modularity.</p>

<b>NEED 9: Secure travels and transfers for frail people</b>
Nature
Technology
Region where it was collected
Nouvelle-Aquitaine
Realistic ICT-based solution available
X YES <input type="checkbox"/> NO
Sector(s) affected
Transport and mobility,
Brief description
Need to feel safe when travelling in order to reassure elderly people and their careers. Carry baggage's, find your way in a railway station, well understand information's displayed on a monitor: these could be so many obstacles to a safe travel for older people.
Suggested action plans
Apps showing people available to guide frail elderly for example

<b>NEED 10: opportunity to identify adapted transports and paths according to needs and capacities/capabilities</b>
Nature
Maturity of ICT solutions
Region where it was collected
Nouvelle-Aquitaine
Realistic ICT-based solution available
X YES <input type="checkbox"/> NO
Sector(s) affected
Transport and mobility,
Brief description
Being able to choose and assess a planned trip/tour according to places accessibility and physical capabilities of frail people and better identify parking lots for disabled people.



<ul style="list-style-type: none"> <li>○ Possibility to find the most suitable way of moving from one point to another, depending on the level of mobility and the means of transport available in the area.</li> <li>○ Possibility to know before leaving a place, if there will be an available spot to park the car where someone is heading;</li> <li>○ How to facilitate the elderly mobility for long trips and carry weight when they go on vacation;</li> </ul>
Suggested action plans
To develop more accurate and adapted Mobile applications. Current applications do not specify if there are stairs, steps on the way.

<b>NEED 11: Promote adapted physical activity</b>
Nature
Financing, Maturity of ICT solutions, Social sciences
Region where it was collected
Nouvelle-Aquitaine
Realistic ICT-based solution available
X YES <input type="checkbox"/> NO
Sector(s) affected
, Prevention of ageing
Brief description
The benefits of adapted physical activity are recognized with seniors with or without pathologies. The practice of a physical activity adapted must be also prescribed by doctors to encourage it. In parallel, a senior needs an individualized and personalized follow-up according to its health.
Suggested action plans
<p>Need to overcome some obstacles:</p> <ul style="list-style-type: none"> <li>- Need to train people to technology and the use of devices</li> <li>- Need to adapt technology and devices to people and their pathologies. Today, the set of the mobile applications is not calibrated for a senior and do not allow follow-up in the time demonstrating the positive effects on the health. They do not allow either the definition of a "training" personalized according to the need.</li> </ul> <p>Design and conceive stimulant activities, both physical and intellectual, working with frail people and their careers.</p>

<b>NEED 12: Inform and train tourism sector professionals</b>
Nature
Technology
Region where it was collected
Nouvelle-Aquitaine
Realistic ICT-based solution available
<input type="checkbox"/> YES <input type="checkbox"/> NO
Sector(s) affected
Prevention of ageing
Brief description
There is not enough adapted trip/travel offers for elderly people because of professionals are not informed and trained about opportunities to develop this costumers segment.
Suggested action plans
Need to avoid stigmatization in setting up travel/trip offers.

<b>NEED 13: Facilitate access to cultural offers/participation to cultural experiences for people aging at home</b>
Nature
Social sciences and technology
Region where it was collected
Nouvelle-Aquitaine
Realistic ICT-based solution available
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
Sector(s) affected
Prevention of ageing
Brief description
When people age, they can have difficulties in getting access to cultural activities existing in their district area, such as library, museums, theater, artistic workshops. Many American studies show how a daily practice of an artistic activity can have a very positive impact on frail people: slowing down aging process and first signs of dementia.
Suggested action plans

## Portugal

**GT1: Intersectorial and transnational cross-fertilization for better exploitation of ICT key enabling technologies to meet the challenges of the silver economy**

### NEEDS COLLECTION: ROUND-TABLES (RTs)

#### Global reporting template

#### GENERAL INFORMATION

Total number of RTs	Period of execution	Total number of attendees
16	2016-12-12 / 2017-01-18	79
Number of RTs and attendees per region		Total number of attendees per represented organizations
Aquitaine:	SME: 15	Start up:4
Limoges:	Large company:1	Tel-Co:0
Basque Country:	Public body:22	R&D entity:14
Catalunya:	Association:12	Insurance Group:0
Portugal: 16/79	Cluster:11	Investors:0

#### PROPOSED TOPICS FOR DISCUSSION

List of proposed topics (all RTs)
Selfcare
FAB (Features Advantages and Benefits) – Communication
Multi-diciplinariry
Integration – interoperability
Market definition
Customer/user Motivation
Organizational change – Vision
Intellectual Property
Data Property and Privacy constraints
Scale-up, industrialization and productizing
Financing and development

Lack (or underuse) of Standard Data Models

Data Property and Privacy constraints

Stay at home

Reduced support for innovative social care projects

Change resistance

## SUMMARY OF NEEDS AND ACTION PLANS

Total number of needs identified	Number of needs per nature
37	<p>Ethical/legal: 13</p> <p>Financing: 9</p> <p>Market demand: 7</p> <p>Maturity of ICT solutions: 8</p> <p>Social sciences: 12</p> <p>Technology: 9</p> <p>Other: 4</p>

<b>NEED 1: Selfcare</b>
<b>Nature</b>
<input type="checkbox"/> Ethical/legal <input type="checkbox"/> Financing <input checked="" type="checkbox"/> Market demand <input type="checkbox"/> Maturity of ICT solutions <input checked="" type="checkbox"/> Social sciences <input type="checkbox"/> Technology <input type="checkbox"/> Other: _____
<b>Region where it was collected</b>
<input type="checkbox"/> Aquitaine <input type="checkbox"/> Limoges <input type="checkbox"/> Basque Country <input type="checkbox"/> Catalunya <input checked="" type="checkbox"/> Portugal
<b>Realistic ICT-based solution available</b>
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
<b>Brief description</b>
<p>Poor penetration in the marketplace, mainly social care institutions;</p> <p>Poor After-sales service;</p>
<b>Suggested action plans</b>

Implement public performance indicators for social institutions, stimulating innovation;  
Motivate selfcare among community.

## NEED 2: FAB (Features Advantages and Benefits) – Communication

### Nature

☐ Ethical/legal    ☒ Financing    ☒ Market demand    ☐ Maturity of ICT solutions  
☒ Social sciences    ☐ Technology    ☐ Other: \_\_\_\_\_

### Region where it was collected

☐ Aquitaine    ☐ Limoges    ☐ Basque Country    ☐ Catalunya    ☒ Portugal

### Realistic ICT-based solution available

☐ YES    ☐ NO

### Brief description

Difficult matching between solutions features and the user benefits;  
Insufficient funding for home assistance versus more easy funds capture at institutional level.  
Difficult access to equipments.

### Suggested action plans

Association to Smartcities community projects;  
To promote Circular economy for equipment sharing;  
Promote mentality changes at the legislator level.

## NEED 3: Multi-diciplinarity

### Nature

☐ Ethical/legal    ☒ Financing    ☐ Market demand    ☐ Maturity of ICT solutions  
☒ Social sciences    ☐ Technology    ☐ Other: \_\_\_\_\_

### Region where it was collected

☐ Aquitaine    ☐ Limoges    ☐ Basque Country    ☐ Catalunya    ☒ Portugal

### Realistic ICT-based solution available

☐ YES    ☐ NO

Brief description
<p>Leaders resistance to new projects;</p> <p>Poor financial support;</p> <p>Personal relations influence over institutional relations.</p>
Suggested action plans
<p>Motivate institutions to welcome new processes;</p> <p>Motivate persons to product tests program challenges;</p> <p>Reduce to less than 10 years the solution implementation timing.</p>

<b>NEED 4: Integration – interoperability</b>
Nature
<input checked="" type="checkbox"/> Ethical/legal <input type="checkbox"/> Financing <input type="checkbox"/> Market demand <input checked="" type="checkbox"/> Maturity of ICT solutions <input checked="" type="checkbox"/> Social sciences <input checked="" type="checkbox"/> Technology <input type="checkbox"/> Other: _____
Region where it was collected
<input type="checkbox"/> Aquitaine <input type="checkbox"/> Limoges <input type="checkbox"/> Basque Country <input type="checkbox"/> Catalunya <input checked="" type="checkbox"/> Portugal
Realistic ICT-based solution available
<input type="checkbox"/> YES <input type="checkbox"/> NO
Brief description
<p>Lack of interface standardization between equipments;</p> <p>Ambiguity on legislation about Information privacy and intellectual property constraints;</p> <p>Poor motivation on sharing products specification – Lobbies;</p> <p>Difficult interpretation of the interfaces or information provided by devices.</p>
Suggested action plans
<p>Demand product and protocol certifications to the stakeholders;</p> <p>Demand the implementation of interface standards on the applications to integration.</p>

<b>NEED 5: Market definition</b>
Nature
<input checked="" type="checkbox"/> Ethical/legal <input type="checkbox"/> Financing <input checked="" type="checkbox"/> Market demand <input type="checkbox"/> Maturity of ICT solutions <input checked="" type="checkbox"/> Social sciences <input type="checkbox"/> Technology <input type="checkbox"/> Other: _____
Region where it was collected
<input type="checkbox"/> Aquitaine <input type="checkbox"/> Limoges <input type="checkbox"/> Basque Country <input type="checkbox"/> Catalunya <input checked="" type="checkbox"/> Portugal
Realistic ICT-based solution available
<input type="checkbox"/> YES <input type="checkbox"/> NO
Brief description
Stratification of the market agents: user and final consumer; intermediate facilitator; financial support and institutions;  Market penetration difficulties on new products;  Government's central administration inefficiency.
Suggested action plans
Maximization of the number of customers and geographical distribution;  Maximization of the financial sponsors and intermediat agents.

<b>NEED 6: Customer/user Motivation</b>
Nature
<input checked="" type="checkbox"/> Ethical/legal <input checked="" type="checkbox"/> Financing <input checked="" type="checkbox"/> Market demand <input type="checkbox"/> Maturity of ICT solutions <input checked="" type="checkbox"/> Social sciences <input type="checkbox"/> Technology <input type="checkbox"/> Other: _____
Region where it was collected
<input type="checkbox"/> Aquitaine <input type="checkbox"/> Limoges <input type="checkbox"/> Basque Country <input type="checkbox"/> Catalunya <input checked="" type="checkbox"/> Portugal
Realistic ICT-based solution available
<input type="checkbox"/> YES <input type="checkbox"/> NO
Brief description
Fiscal impact in products and services prices;  Poor public recognition of the brand and the national brand;



Non-identification of product benefits.
Suggested action plans
<p>Intensify better marketing promotion;</p> <p>Implement a set of key indicators for metrics on the marketing and further studies;</p> <p>Improve product interface and usability;</p> <p>Make pressure to get a lower fiscal impact on the price.</p>

<b>NEED 7: Organizational change – Vision</b>
Nature
<input checked="" type="checkbox"/> Ethical/legal <input checked="" type="checkbox"/> Financing <input type="checkbox"/> Market demand <input type="checkbox"/> Maturity of ICT solutions <input checked="" type="checkbox"/> Social sciences <input type="checkbox"/> Technology <input type="checkbox"/> Other: _____
Region where it was collected
<input type="checkbox"/> Aquitaine <input type="checkbox"/> Limoges <input type="checkbox"/> Basque Country <input type="checkbox"/> Catalunya <input checked="" type="checkbox"/> Portugal
Realistic ICT-based solution available
<input type="checkbox"/> YES <input type="checkbox"/> NO
Brief description
<p>Closed organizations – top concentration of decision making;</p> <p>Limited mentality and low literacy level;</p> <p>Financial matters overheated practical decisions;</p> <p>Commitment of volunteers compromises professional performance.</p>
Suggested action plans
<p>Promote diversity in financial providers;</p> <p>Demonstrate efficiently the importance of the implementation of Organizational Changes.</p>

<b>NEED 8: Intellectual Property</b>
Nature
<input checked="" type="checkbox"/> Ethical/legal <input type="checkbox"/> Financing <input type="checkbox"/> Market demand <input type="checkbox"/> Maturity of ICT solutions <input type="checkbox"/> Social sciences <input type="checkbox"/> Technology <input type="checkbox"/> Other: _____
Region where it was collected
<input type="checkbox"/> Aquitaine <input type="checkbox"/> Limoges <input type="checkbox"/> Basque Country <input type="checkbox"/> Catalunya <input checked="" type="checkbox"/> Portugal
Realistic ICT-based solution available
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Brief description
<p>In a scenario of R&amp;D of a product in cooperation between a Lab and a trader, how to keep intellectual property ownership in the Lab if the trader quits;</p> <p>Management of scientific publication and patent registration;</p>
Suggested action plans
<p>Include contract clauses avoiding the loss of the ownership of the intellectual property rights;</p> <p>The R&amp;D Labs should consider expert labors checking items on scientific papers potentially patentable prior to publication.</p>

<b>NEED 9: Data Property and Privacy constraints</b>
Nature
<input checked="" type="checkbox"/> Ethical/legal <input type="checkbox"/> Financing <input type="checkbox"/> Market demand <input type="checkbox"/> Maturity of ICT solutions <input type="checkbox"/> Social sciences <input type="checkbox"/> Technology <input type="checkbox"/> Other: _____
Region where it was collected
<input type="checkbox"/> Aquitaine <input type="checkbox"/> Limoges <input type="checkbox"/> Basque Country <input type="checkbox"/> Catalunya <input checked="" type="checkbox"/> Portugal
Realistic ICT-based solution available
<input type="checkbox"/> YES <input type="checkbox"/> NO
Brief description
<p>A unique ID is a must for clinical information addressing, as well the “fight” against the illicit use of information;</p> <p>The access to “anonymised” data may not be sufficient and compromises data privacy.</p>

Suggested action plans
<p>The industry should create a mechanism to improve the veracity in the relation between the doctor that certifies a clinical report, the patient and the authorized relatives that support the patient.</p> <p>“BitData” with “national” values and metrics for further evaluation.</p> <p>“Private platform” for private data publication.</p> <p>The creation of mechanisms for authorized individual clinical data publication (PBS), e. g. in CD media.</p>

NEED 10: Scale-up, industrialization and productizing
Nature
<input type="checkbox"/> Ethical/legal <input checked="" type="checkbox"/> Financing <input type="checkbox"/> Market demand <input checked="" type="checkbox"/> Maturity of ICT solutions <input type="checkbox"/> Social sciences <input checked="" type="checkbox"/> Technology <input type="checkbox"/> Other: _____
Region where it was collected
<input type="checkbox"/> Aquitaine <input type="checkbox"/> Limoges <input type="checkbox"/> Basque Country <input type="checkbox"/> Catalunya <input checked="" type="checkbox"/> Portugal
Realistic ICT-based solution available
<input type="checkbox"/> YES <input type="checkbox"/> NO
Brief description
<p>Difficult certification by product regulators, namely by INFARMED in medicines industry;</p> <p>Fallibility on the methodologies for evaluation and categorization of products;</p> <p>Lack on collecting usability evidences of products;</p> <p>Low standard’s fitting of the products compromises the project’s success, mainly in the small ones;</p> <p>Low visibility of the projects to the big players in the market.</p>
Suggested action plans
<p>Adopt as rule to contact the regulators, like INFARMED, in the beginning of the project.</p> <p>Make the developer aware of the need to fit the established standards, the total cost monitoring and the knowledge of the full process.</p> <p>Engage sooner the medical contributions in the R&amp;D projects.</p>

To know the environment; be up-to-date regarding the big company's practices, following the web portals in the mater as well idea and solution submission projects.

### NEED 11: Financing and development

#### Nature

- ☐ Ethical/legal    ☒ Financing    ☐ Market demand    ☐ Maturity of ICT solutions  
☐ Social sciences    ☐ Technology    ☐ Other: \_\_\_\_\_

#### Region where it was collected

- ☐ Aquitaine    ☐ Limoges    ☐ Basque Country    ☐ Catalunya    ☒ Portugal

#### Realistic ICT-based solution available

- ☐ YES    ☐ NO

#### Brief description

Many funding opportunities in the Portugal 2020 and Horizon 2020 programs are not applied by the SME.

There are calls, especially in the "Ageing Well" area, not explored by the SMEs.

#### Suggested action plans

Organizations should create networking with ICT and SE clusters, industrial and enterprise associations, as well with the banking and credit institutions.

Produce relevant innovation compared with the stat of the art, to capture the investor enthusiasm.

Allocate resources to search and prepare application to SE program calls.

To fulfil all the call's requirements.

### NEED 12: Lack (or underuse) of Standard Data Models

#### Nature

- ☒ Ethical/legal    ☐ Financing    ☐ Market demand    ☐ Maturity of ICT solutions  
☐ Social sciences    ☒ Technology    ☐ Other: \_\_\_\_\_

#### Region where it was collected

- ☐ Aquitaine    ☐ Limoges    ☐ Basque Country    ☐ Catalunya    ☒ Portugal

Realistic ICT-based solution available
<input type="checkbox"/> YES <input type="checkbox"/> NO
Brief description
Despite health and social entities have some regulatory frameworks (that include required statistical information), each of them uses different data collection forms and formats.
Suggested action plans
<ol style="list-style-type: none"> <li>1. Cooperate with the Social Welfare Ministry to design a standard users' data collection form (and format) as well as a standard based individual process documentation. This standard forms (and formats) should be considered (and mandatory) during facilities and services licensing, grant agreements or others;</li> <li>2. Adapt the existing information systems (including those that use paper artefacts) to widely accepted standards like HL7 v3.0, DICOM, ICD, ICPC, Open HA, Continua Health, among others;</li> <li>3. Promote the usage of ICT tools to support process digitalization;</li> <li>4. Develop new forms of interaction to better support procedures (including medical);</li> </ol> <p>There was a suggestion raised about the usage of dedicated social networks among patients to stimulate cooperation and reinforce communication among people with similar problems. Despite it arised in this group, is not directly related with the topic.</p>

<b>NEED 13: Data Property and Privacy constraints</b>
Nature
<input checked="" type="checkbox"/> Ethical/legal <input type="checkbox"/> Financing <input type="checkbox"/> Market demand <input checked="" type="checkbox"/> Maturity of ICT solutions <input type="checkbox"/> Social sciences <input checked="" type="checkbox"/> Technology <input type="checkbox"/> Other: _____
Region where it was collected
<input type="checkbox"/> Aquitaine <input type="checkbox"/> Limoges <input type="checkbox"/> Basque Country <input type="checkbox"/> Catalunya <input checked="" type="checkbox"/> Portugal
Realistic ICT-based solution available
<input type="checkbox"/> YES <input type="checkbox"/> NO
Brief description
Despite health and social entities have some regulatory frameworks (that include required statistical information), each of them uses different data collection forms and formats.

Suggested action plans
<ol style="list-style-type: none"> <li>1. Cooperate with the Social Welfare Ministry to design a standard users' data collection form (and format) as well as a standard based individual process documentation. This standard forms (and formats) should be considered (and mandatory) during facilities and services licensing, grant agreements or others;</li> <li>2. Adapt the existing information systems (including those that use paper artefacts) to widely accepted standards like HL7 v3.0, DICOM, ICD, ICPC, Open HA, Continua Health, among others.</li> <li>3. Promote the usage of ICT tools to support process digitalization.</li> <li>4. Develop new forms of interaction to better support procedures (including medical).</li> </ol> <p>There was a suggestion raised about the usage of dedicated social networks among patients to stimulate cooperation and reinforce communication among people with similar problems. Despite, it arised in this group, is not directly related with the topic.</p>

NEED 14: Stay at home
Nature
<input checked="" type="checkbox"/> Ethical/legal <input checked="" type="checkbox"/> Financing <input checked="" type="checkbox"/> Market demand <input checked="" type="checkbox"/> Maturity of ICT solutions <input checked="" type="checkbox"/> Social sciences <input checked="" type="checkbox"/> Technology <input type="checkbox"/> Other: _____
Region where it was collected
<input type="checkbox"/> Aquitaine <input type="checkbox"/> Limoges <input type="checkbox"/> Basque Country <input type="checkbox"/> Catalunya <input checked="" type="checkbox"/> Portugal
Realistic ICT-based solution available
<input type="checkbox"/> YES <input type="checkbox"/> NO
Brief description
<p>There is an opportunity to maintain elderly people at their homes, especially in earlier ages but there are numerous constraints to make it effectively happen.</p>
Suggested action plans
<ol style="list-style-type: none"> <li>1. For instance, labour regulations should consider schedule flexibility for informal carers;</li> <li>2. Test different care models and support pilot actions using R&amp;D results;</li> <li>3. Include different types of users in product design as soon as possible;</li> <li>4. Design support networks and training for informal carers;</li> <li>5. Mobilise construction/housing related clusters to the topic;</li> </ol> <p>Work together with existing funding entities (Social Welfare and Health) as well as with the private sector (insurance, banks, mutualists, ...) to create business cases for ICT solutions, e.g., engaging them in pilot evaluation.</p>

<b>NEED 15: Reduced support for innovative social care project</b>
Nature
<input checked="" type="checkbox"/> Ethical/legal <input checked="" type="checkbox"/> Financing <input type="checkbox"/> Market demand <input checked="" type="checkbox"/> Maturity of ICT solutions <input checked="" type="checkbox"/> Social sciences <input type="checkbox"/> Technology <input type="checkbox"/> Other: _____
Region where it was collected
<input type="checkbox"/> Aquitaine <input type="checkbox"/> Limoges <input type="checkbox"/> Basque Country <input type="checkbox"/> Catalunya <input checked="" type="checkbox"/> Portugal
Realistic ICT-based solution available
<input type="checkbox"/> YES <input type="checkbox"/> NO
Brief description
Companies and public entities aren't enough motivated to work with social entities in innovative projects.
Suggested action plans
<b>NEED 16: Change Resistance</b>
Nature
<input checked="" type="checkbox"/> Ethical/legal <input checked="" type="checkbox"/> Financing <input checked="" type="checkbox"/> Market demand <input checked="" type="checkbox"/> Maturity of ICT solutions <input checked="" type="checkbox"/> Social sciences <input checked="" type="checkbox"/> Technology <input type="checkbox"/> Other: _____
Region where it was collected
<input type="checkbox"/> Aquitaine <input type="checkbox"/> Limoges <input type="checkbox"/> Basque Country <input type="checkbox"/> Catalunya <input checked="" type="checkbox"/> Portugal
Realistic ICT-based solution available
<input type="checkbox"/> YES <input type="checkbox"/> NO
Brief description
Companies and public entities aren't enough motivated to work with social entities in innovative projects.
Suggested action plans



<b>NEED 17: Poor design</b>
Nature
<input type="checkbox"/> Ethical/legal <input type="checkbox"/> Financing <input type="checkbox"/> Market demand <input type="checkbox"/> Maturity of ICT solutions <input type="checkbox"/> Social sciences <input checked="" type="checkbox"/> Technology <input type="checkbox"/> Other: _____
Region where it was collected
<input type="checkbox"/> Aquitaine <input type="checkbox"/> Limoges <input type="checkbox"/> Basque Country <input type="checkbox"/> Catalunya <input checked="" type="checkbox"/> Portugal
Realistic ICT-based solution available
<input type="checkbox"/> YES <input type="checkbox"/> NO
Brief description
Devices aren't designed with extensive cooperation of end-users and carers and that can lead to design flaws and deficient material selection.
Suggested action plans
<ol style="list-style-type: none"> <li>1. Promote enlarge cooperation among product development companies (and R&amp;D) with carers;</li> <li>2. Develop and test new materials;</li> <li>3. Assess usability in different scenarios;</li> </ol>

<b>NEED 18: Lack of Qualified Human Resources</b>
Nature
<input type="checkbox"/> Ethical/legal <input type="checkbox"/> Financing <input type="checkbox"/> Market demand <input type="checkbox"/> Maturity of ICT solutions <input checked="" type="checkbox"/> Social sciences <input type="checkbox"/> Technology <input type="checkbox"/> Other: _____
Region where it was collected
<input type="checkbox"/> Aquitaine <input type="checkbox"/> Limoges <input type="checkbox"/> Basque Country <input type="checkbox"/> Catalunya <input checked="" type="checkbox"/> Portugal
Realistic ICT-based solution available
<input type="checkbox"/> YES <input type="checkbox"/> NO
Brief description
It's hard to find Human Resources with adequate training for elderly care.
Suggested action plans
<ol style="list-style-type: none"> <li>1. Work in close cooperation with Universities and Professional Schools;</li> <li>2. Reinforce internship programs;</li> </ol> <p>Launch re-qualification initiatives (tackles unemployment and ensures new people to work)</p>

<b>NEED 19: R&amp;D results don't get to the market</b>
<b>Nature</b>
<input type="checkbox"/> Ethical/legal <input type="checkbox"/> Financing <input checked="" type="checkbox"/> Market demand <input checked="" type="checkbox"/> Maturity of ICT solutions <input type="checkbox"/> Social sciences <input type="checkbox"/> Technology <input type="checkbox"/> Other: _____
<b>Region where it was collected</b>
<input type="checkbox"/> Aquitaine <input type="checkbox"/> Limoges <input type="checkbox"/> Basque Country <input type="checkbox"/> Catalunya <input checked="" type="checkbox"/> Portugal
<b>Realistic ICT-based solution available</b>
<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>Brief description</b>
<p>There were relevant investments in ICT medical devices (especially in EU funded projects) but solutions/products/prototypes – in many situations – don't attain a relevant commercial exploitation.</p>
<b>Suggested action plans</b>
<ol style="list-style-type: none"> <li>1. Reinforce cooperation among different actors, including joint labs based at R&amp;D centres, product development companies and elderly care institutions;</li> <li>2. Field validation;</li> <li>3. Including elderly care financing entities in product development;</li> </ol>

<b>NEED 20: Lack of Post-Sale Services and Support to ICT-based products</b>
<b>Nature</b>
<input type="checkbox"/> Ethical/legal <input type="checkbox"/> Financing <input checked="" type="checkbox"/> Market demand <input checked="" type="checkbox"/> Maturity of ICT solutions <input type="checkbox"/> Social sciences <input type="checkbox"/> Technology <input type="checkbox"/> Other: _____
<b>Region where it was collected</b>
<input type="checkbox"/> Aquitaine <input type="checkbox"/> Limoges <input type="checkbox"/> Basque Country <input type="checkbox"/> Catalunya <input checked="" type="checkbox"/> Portugal
<b>Realistic ICT-based solution available</b>
<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>Brief description</b>
<p>There were relevant investments in ICT medical devices (especially in EU funded projects) but solutions/products/prototypes – in many situations – don't attain a relevant commercial exploitation.</p>

Suggested action plans
<ol style="list-style-type: none"> <li>1. Reinforce support to innovative companies, especially on the definition of the full value chain of their products and services, finding adequate market channels and partners;</li> <li>2. Reinforce the importance of maintenance and post-sale support.</li> </ol>

NEED 21: Elderly profile diversification
Nature
<input checked="" type="checkbox"/> Ethical/legal <input type="checkbox"/> Financing <input type="checkbox"/> Market demand <input type="checkbox"/> Maturity of ICT solutions <input checked="" type="checkbox"/> Social sciences <input type="checkbox"/> Technology <input type="checkbox"/> Other: _____
Region where it was collected
<input type="checkbox"/> Aquitaine <input type="checkbox"/> Limoges <input type="checkbox"/> Basque Country <input type="checkbox"/> Catalunya <input checked="" type="checkbox"/> Portugal
Realistic ICT-based solution available
<input type="checkbox"/> YES <input type="checkbox"/> NO
Brief description
<p>The actual elderly profile is heterogeneous and very different from recent years' perspectives.</p>
Suggested action plans
<ol style="list-style-type: none"> <li>1. Senior Residences services should consider this new challenges and opportunities;</li> <li>2. Reinforce support to leisure autonomous activities;</li> <li>3. Work with Public entities (licensing) to easier check-in of pre-retirement age people.</li> </ol>

NEED 22: Caregivers need to introduce innovation on their services
Nature
<input checked="" type="checkbox"/> Ethical/legal <input type="checkbox"/> Financing <input type="checkbox"/> Market demand <input type="checkbox"/> Maturity of ICT solutions <input type="checkbox"/> Social sciences <input type="checkbox"/> Technology <input type="checkbox"/> Other: _____
Region where it was collected
<input type="checkbox"/> Aquitaine <input type="checkbox"/> Limoges <input type="checkbox"/> Basque Country <input type="checkbox"/> Catalunya <input checked="" type="checkbox"/> Portugal
Realistic ICT-based solution available
<input type="checkbox"/> YES <input type="checkbox"/> NO

Brief description
There is a relevant demand for senior residences but also an increasing offer..
Suggested action plans
Work closely with financing and licensing public authorities.

<b>NEED 23: Senior tourism obstacle</b>
Nature
<input checked="" type="checkbox"/> Ethical/legal <input type="checkbox"/> Financing <input type="checkbox"/> Market demand <input type="checkbox"/> Maturity of ICT solutions <input type="checkbox"/> Social sciences <input checked="" type="checkbox"/> Technology <input type="checkbox"/> Other: _____
Region where it was collected
<input type="checkbox"/> Aquitaine <input type="checkbox"/> Limoges <input type="checkbox"/> Basque Country <input type="checkbox"/> Catalunya <input checked="" type="checkbox"/> Portugal
Realistic ICT-based solution available
<input type="checkbox"/> YES <input type="checkbox"/> NO
Brief description
When foreigners want to move to Portugal after retirement (permanently) usually when they use public health system services (e.g. hospital) they face difficulties once they aren't considered as tourists (European Health Insurance Card is not applicable when they move permanently)
Suggested action plans
1. Present the barriers to Health/Social Welfare public authorities; 2. Work with regional touristic entities to design integrated programs (including hotels, SPA, thermal entities, ...)

<b>NEED 24: Building environment</b>
Nature
<input type="checkbox"/> Ethical/legal <input type="checkbox"/> Financing <input type="checkbox"/> Market demand <input type="checkbox"/> Maturity of ICT solutions <input type="checkbox"/> Social sciences <input checked="" type="checkbox"/> Technology <input type="checkbox"/> Other: _____
Region where it was collected
<input type="checkbox"/> Aquitaine <input type="checkbox"/> Limoges <input type="checkbox"/> Basque Country <input type="checkbox"/> Catalunya <input checked="" type="checkbox"/> Portugal
Realistic ICT-based solution available

<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>Brief description</b>
Buildings aren't designed to support the requirements of elderly. For instance, in terms of ICT usage, they should favour an easy integration of IoT devices without creating people's disturbance. They should also consider sustainability and clean energies usage.
<b>Suggested action plans</b>
Work in close cooperation with construction/materials clusters

## GENERAL ASSESSMENT ABOUT SESSIONS AND METHODOLOGY

<b>General opinions and suggestions</b>
<p>We provided a relaxed, participated and productive environment, stimulating and allowing the participants to expose freely their insights.</p> <p>Not all topics were discussed in a table meeting because the enthusiasm was greater than the limited time for the session.</p> <p>All participants expressed gratitude for the learning and giving provided, but leted us know that there are more relevants items for a longer meeting.</p>

## CONCLUSIONS

<b>General conclusions</b>
<p>We can find some main common actions that participants defined to address their challenges:</p> <p>Promote better marketing studies and campaigns;</p> <p>Measure your market and your product;</p> <p>Influence organizations, agents and consumers to new practices and to welcome innovation;</p> <p>Search for standardization on products interfaces, usability and information exchange;</p> <p>Promote open relationship between institutions, official agents and legal support;</p> <p>Maximize diversity on customers and funding sources;</p> <p>Prevent the loss of Intellectual property in the clauses of the contracts. The R&amp;D Labs should assign special attention checking all in-house produced scientific papers for potentially patentable items prior to publication.</p> <p>Produce mechanisms to improve the veracity in the relationship between the doctor (clinical staff) the patient and the authorized caregivers.</p>

Implement the use of “BitData” with “national” values and metrics for further evaluation.

Promote the development of “Private platform” for private data publication.

The creation of mechanisms for authorized individual clinical data publication, e. g. in CD media.

Promote the contact between development teams, medical teams and regulation agencies in the beginning of projects.

Make the developer aware of the need to fit the established standards, the total cost monitorization and the knowledge of the full process.

Know the environment; be up-to-date regarding the ecosystem players.

Create networking with ICT and SE clusters, industrial and enterprise associations, as well with the banking and credit institutions.

Produce relevant innovation in the state of the art, to capture the investor enthusiasm.

Allocate resources devoted to SE program calls.

Fulfil all the Call’s requirements.

Spain

## ICT4SILVER PROJECT: KEY ICT TECHNOLOGIES TO RESPOND TO THE NEEDS OF THE SILVER ECONOMY IN THE SUDOE AREA

### NEEDS COLLECTION: WORKSHOPS EN EUSKADI

#### 1. Introduction

The Southwestern of Europe will have the oldest population in Europe by 2050. The ICT4SILVER project will try to find answers to this social challenge for the SUDOE territory.

This project is developed with the aim of facilitating 30 PYMES from Southwest Europe to launch innovative products and services based on Information and Communication Technologies to address the needs of the Silver Economy (SE) in this geographical area.

The 5 main areas of the Silver Economy are:

- Social and Health Care
- Independent living and permanence in the home
- Housing and urban planning
- Transportation and mobility
- Active and healthy aging

One of the actions of the project is to carry out 2 Workshops with the objective of identifying the needs, barriers or challenges of the ICT solution providers when dealing with the Silver Economy market in Euskadi.

These Workshops have taken place in Donostia and Bilbao during the months of December 2016 and January 2017. It has been claimed that these workshops were a space for reflection and meeting between people from very different perspectives, all of them related to the group of people that include the Silver Economy (people over 50).

Regarding the methodology used, an adaptation to the dynamic known as World Café has been carried out. The participants have been organized in 5 or 6 working groups (5 in Donostia, 6 in Bilbao), so that all of them have worked, in parallel, on the same question that has responded to the objective of the workshop.

Two rounds of conversations have been carried out.

- The first round has focused on the **NEEDS**, and to work on it, the question has been launched:

**"WHAT DIFFICULTIES ARE THE COMPANIES THAT SUPPLIED ICT SOLUTIONS FACE WITH THE TIME TO ADDRESS THE MARKET OF THE SILVER ECONOMY?"**

- In the second round, the participants have changed the table, and the discussion has focused on the **SOLUTIONS**, and to work on it, the question has been launched:

**"HOW COULD WE SATISFY THESE NEEDS? WHAT SOLUTIONS WOULD YOU RAISE FOR THESE NEEDS?"**



Each table has had a host person who has explained to the new guests what has been said in the previous round.

After these first two rounds, a third round of convergence is held to carry out a common exchange of what has been discussed at each table.

The results of each of the workshops as well as the results and global conclusions for Euskadi are described below.

## 2. WORKSHOP 1: DONOSTIA

Place	Date	Duration
Instalaciones Gaia en Donostia (Portuete Bidea, 14 Edificio IBAETA 1º )	19-12-2016	3 horas
Host and organizing entity	Dynamizer and entity to which it belongs	
Cristina Murillo-Cristina Urtiaga (Gaia)	Xabier Uriarte (Tecnalia)	
Total number of participants	Participating entities:	
27 (apuntados: 30)	PROJEKTA URBES APTES IKASTOLA ARIZMENDI AGIAC, Asociación de Anticoagulados Gipuzkoa IBERMATICA GUREAK UPV-EHU – Dpto. Fisiología ACEDE Cluster del Hogar HEnea Living Lab IDEABLE SETECO Ikor Ekide Tekniker Ayto. Donostia-Centro informático municipal Biodonostia Matia Instituto LOTURA	

	Diputacion Foral de Gipuzkoa Consejo Departamental de Pirineos-Atlánticos Quick HCL-Home Care Lab Tecnalia Gaia
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## CONTENT OF THE SESSION

The needs identified and the proposals that could contribute to cover those needs are listed below.

<b>NEED 1: Digital divide</b>
<b>Description</b>
Older people are not familiar with ICT
<b>Characteristics</b>
<p>Nature of the need:</p> <p> <input type="checkbox"/> Ethical / legal   <input type="checkbox"/> Financial   <input type="checkbox"/> Market Demand   <input type="checkbox"/> Maturity ICT solutions </p> <p> <input checked="" type="checkbox"/> Social Sciences   <input type="checkbox"/> Technology   <input type="checkbox"/> Others: _____ </p> <p>Affected sectors:</p> <p> <input checked="" type="checkbox"/> Social and health care   <input type="checkbox"/> Independent living and permanence in the home </p> <p> <input type="checkbox"/> Housing and urban planning   <input type="checkbox"/> Transport and mobility   <input type="checkbox"/> Active and healthy aging </p>
<b>Summary of interventions</b>
<p>Older people do not have the habit of using technology and find it difficult to get hold of it, which is why many of them reject it (it generates frustration, overwhelms and reduces self-esteem). There are also many people within the collective who are not attracted to technology and that generates inequality.</p> <p>The question arises whether the "older people of the future", who are currently 50-60 years old, have already made use of computers and mobile phones, they will have the same difficulties with technology when they are 80 years older. There is no consensus in this sense, there are those who believe that the digital divide will be reduced, and there are those who believe that this digital divide will always exist because the echnology is very changeable and what currently exists will have nothing to do with what will exist in the future.</p>

Anyway, what facilitates the entrance is that it is something that motivates them, something emotional (like seeing the photos of the grandchildren). And of course, the way of being of each person influences a lot, some simply do not have interest.

In addition, it is necessary that organizations (such as socio-health providers) are transformed to work with ICTs. The introduction of technology implies changes in the organizational culture, in the way of managing, in the processes, and the resistance to the change of the teams must be addressed and trained in the use of ICT.

#### Actions that could help solve or minimize these needs

- Creation of groups of elders-communities of practice of elders or families that can exchange experiences and encourage other people to consume ICT products
- School of caregivers: teach the environment how to act against the aging of the population, and technology that can help us in dealing with how to care.

### NEED 2: Lack of knowledge needs of older people

#### Description

The companies of products do not really know the needs of the elderly (eg ICT companies that want to introduce their products in this segment without really knowing it)

#### Characteristics

Nature of the need:

☐ Ethical / legal   ☐ Financial   ☐ Market Demand   ☐ Maturity ICT solutions

X Social Sciences   ☐ Technology   ☐ Others: \_\_\_\_\_

Affected sectors:

X Social and health care   ☐ Independent living and permanence in the home

☐ Housing and urban planning   ☐ Transport and mobility   ☐ Active and healthy aging

#### Summary of interventions

The problem that is observed is that many technological companies that are focusing on the SE are suppliers of ICT solutions that do not know the elderly, and therefore, do not know their needs either. Companies think that older people are rich, connected and live in an urban environment, but reality is not like that. In many cases, the people who develop this type of solution are young, which makes it difficult for them to develop solutions for the elderly, to put themselves in context and understand their needs.

At the table, it is asked if they really care about this to the elderly. Technology scares them, and a lot.

Another participant thinks that the acceptance of the technology depends on the utility that they find and the need that they solve. In an experience with the Autonomous University of Barcelona, it was identified that the needs that can best be solved with ICTs are the social ones (knowing how the family is) and the health issues.

On the other hand, it must be borne in mind that many times the client and the end user are different because there is a culture of public co-financing. Taking into account the diversity of agents involved, it is observed that the needs detected by the end user are different to the needs detected by family members, professionals, administration ... there is also no vision of "Country, nation ..." that carries to all the agents involved to common and coordinated objectives.

To make it easier for companies to meet older people, an initiative is discussed in Foix, where an incubator of companies is included in a nursing home that is being renovated. For the residence it is a form of financing, because it charges the rent of the space, and for the companies, an "easy" way to know at first hand the needs of the elderly. The initiative is giving very good results.

#### Actions that could help solve or minimize these needs

- Active participation of the target people in the design of ICT solutions. Real development of living-labs.
- Create shared spaces for seniors, professionals and technologists (spaces for companies in socio-health facilities).
- transversal forums in which users, public and private institutions are involved.
- the identification of needs must come from the end user, from different groups (some in Administration), in such a way that it is oriented to companies
- public-private partnership, to promote ideas, solutions, etc.

<b>NEED 3: Cost and complexity solutions</b>
<b>Description</b>
The solutions usually have a high cost and have functionalities that are not really needed, they should be limited to having only that which adds value.
<b>Characteristics</b>
<p>Nature of the need:</p> <p> <input type="checkbox"/> Ethical / legal   <input type="checkbox"/> Financial   <input type="checkbox"/> Market Demand   <input type="checkbox"/> Maturity ICT solutions  <input type="checkbox"/> Social Sciences   <input checked="" type="checkbox"/> Technology   <input type="checkbox"/> Others: _____         </p> <p>Affected sectors:</p> <p> <input checked="" type="checkbox"/> Social and health care   <input type="checkbox"/> Independent living and permanence in the home  <input type="checkbox"/> Housing and urban planning   <input type="checkbox"/> Transport and mobility   <input type="checkbox"/> Active and healthy aging         </p>
<b>Summary of interventions</b>
<p>In many cases the technological solutions developed are very ambitious when perhaps the solutions should be simpler. Many features are added that do not add much value but in turn make the solution more complex.</p> <p>To solve it, it is necessary to listen to the elderly and the professionals who work with them. It has to be based on necessity, not on technology. To do this, we could create the figure of a consultant with a global vision, which has a large multidisciplinary team, with a double mission: for the client, translating what is offered to the elderly, and for ICT companies, for translate the need for the service / product.</p> <p>In order to develop this type of ICT-based products for the health sector, it is often difficult to measure the return on their profitability. In the same way, sometimes, it is often complicated to have the specifications of these products that allow the development of them in a more agile and efficient way.</p> <p>To finance them, you have to experiment in different models. From now on, only public-private financing is understood. It is necessary to raise awareness about co-payment, create community solutions, and make collective purchases of goods for the community.</p> <p>We can not forget either that technology is a means, and that it must be accompanied by a service. In this sense, it is also necessary to create professional profiles that accompany older people in the use of ICT.</p>

Actions that could help solve or minimize these needs
<ul style="list-style-type: none"> <li>- bring the client closer to the one with the solution to know exactly what is needed and what contributes value.</li> <li>- greater multidisciplinary.</li> <li>- change the way technologists do, listen to the elderly / professionals and think of simple solutions, do not go "big time"</li> <li>- generate the figure of the advisor.</li> <li>- Go towards community models of use of technology, services or purchases that can be offered and used in a shared way among the inhabitants, for example, of a community of neighbors, of a neighborhood ...</li> <li>- crowdfunding, cooperativism in the third age (network of wheelchair users).</li> </ul>

NEED 4: Market Segmentation
Description
Within the 50+ there are very diverse needs, ranging from very dependent people to healthy and active people, their needs and the solutions to pose are very different.
Characteristics
<p>Nature of the need:</p> <p> <input type="checkbox"/> Ethical / legal   <input type="checkbox"/> Financial   <input type="checkbox"/> Market Demand   <input type="checkbox"/> Maturity ICT solutions         </p> <p> <input checked="" type="checkbox"/> Social Sciences   <input type="checkbox"/> Technology   <input type="checkbox"/> Others: _____         </p> <p>Affected sectors:</p> <p> <input checked="" type="checkbox"/> Social and health care   <input checked="" type="checkbox"/> Independent living and permanence in the home         </p> <p> <input checked="" type="checkbox"/> Housing and urban planning   <input checked="" type="checkbox"/> Transport and mobility   <input checked="" type="checkbox"/> Active and healthy aging         </p>
Summary of interventions
<p>In order to think about solutions for the elderly, it is important to define well the group to which we are going. The range of age that we are covering is very broad and the needs are very different (from autonomous and active people to very dependent people, with large healthcare needs and who go to the doctor practically every day, their needs have nothing to do and the solutions to develop, therefore, either).</p> <p>We could distinguish two large blocks, a greater one that accompanies the health, greater than the one that does not accompany the health. In the case of older people who do not have</p>

health, the deployment of technological solutions has to come from the hand of health professionals or the family, that is, people of confidence.

We must not forget either where the collective to which we are heading lives (rural / urban environment) and the gender perspective.

Actions that could help solve or minimize these needs

- Detect niches and specialize
- Segment properly: gender, place of residence rural-city

### NEED 5: Perception old age

#### Description

Need to change the perception of old age, marketing campaigns in positive to transform the idea that to consume certain products is related to prevention, which are a product of support, not a symptom of its decline.

#### Characteristics

Nature of the need:

☐ Ethical / legal   ☐ Financial   ☐ Market Demand   ☐ Maturity ICT solutions

X Social Sciences   ☐ Technology   ☐ Others: \_\_\_\_\_

Affected sectors:

X Social and health care   X Independent living and permanence in the home

X Housing and urban planning   X Transport and mobility   ☐ Active and healthy aging

#### Summary of interventions

It is necessary to make a change in the negative perception we have in the society of old age, as pure consumers of public resources. We must transform the idea that consuming certain products is synonymous with aging, illness or dependence, and linking it with prevention. Marketing is missing to identify referents of active seniors.

Actions that could help solve or minimize these needs

- Positive marketing campaigns towards aging
- search for "referents", examples of active seniors



<b>NEED 6: Current culture (beneficiaries vs. client)</b>
<b>Description</b>
How to go from having users / beneficiaries (in stages with a certain lack of autonomy) to consumers (prevention phase)
<b>Characteristics</b>
<p>Nature of the need:</p> <p><input type="checkbox"/> Ethical / legal   <input checked="" type="checkbox"/> Financial   <input checked="" type="checkbox"/> Market Demand   <input type="checkbox"/> Maturity ICT solutions</p> <p><input checked="" type="checkbox"/> Social Sciences   <input type="checkbox"/> Technology   <input type="checkbox"/> Others: _____</p> <p>Affected sectors:</p> <p><input checked="" type="checkbox"/> Social and health care   <input checked="" type="checkbox"/> Independent living and permanence in the home</p> <p><input checked="" type="checkbox"/> Housing and urban planning   <input checked="" type="checkbox"/> Transport and mobility   <input checked="" type="checkbox"/> Active and healthy aging</p>
<b>Summary of interventions</b>
<p>Currently there are no consumers or customers, but users or beneficiaries of services. The person expects to receive the services free of charge, or with a small co-payment. This implies that the person has no capacity to choose, but receives what the public administration gives him. Therefore, the offer is what the public administration decides it is, unless the person leaves the public circuit.</p> <p>We must think of the SE within a decade, not the one of today. You have to consider that there is no public money for everything, and that in a few years it will get worse.</p>
<b>Actions that could help solve or minimize these needs</b>
<ul style="list-style-type: none"> <li>- Promote a Gazte Txartela of over 50 with discounts in restaurants, shows, movies, which generates an increase in the economy and helps attract future market</li> <li>- Investment in marketing / social marketing</li> <li>- Make older people aware of their health and empower them, raising awareness of the responsibility of each one in maintaining their health</li> <li>- Promote products with less technological development, and more accessible for the current purchasing power</li> </ul>

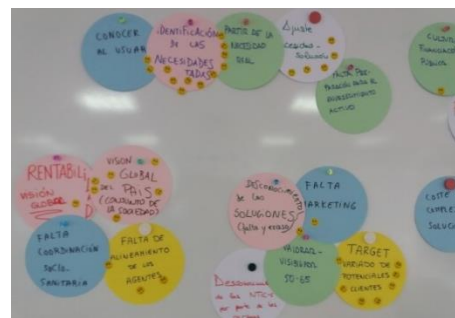
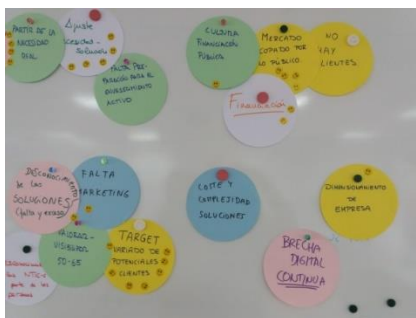
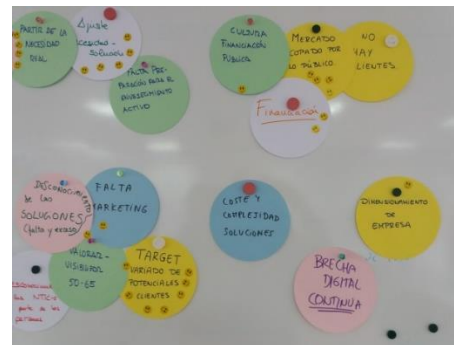
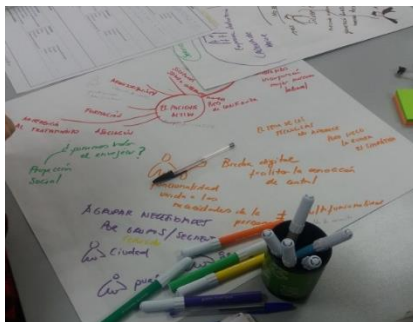
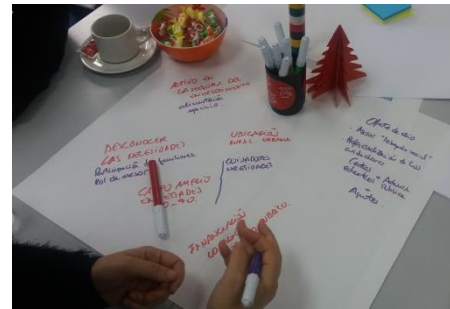
<b>NEED 7: Lack of socio-health coordination</b>
<b>Description</b>
Dispersion of information between the two systems and lack of political will to invest in ICTs tools.
<b>Characteristics</b>
<p>Nature of the need:</p> <p>X Ethical / legal   X Financial   <input type="checkbox"/> Market Demand   <input type="checkbox"/> Maturity ICT solutions</p> <p>X Social Sciences   <input type="checkbox"/> Technology   <input type="checkbox"/> Others: _____</p> <p>Affected sectors:</p> <p>X Social and health care   X Independent living and permanence in the home</p> <p><input type="checkbox"/> Housing and urban planning   <input type="checkbox"/> Transport and mobility   <input type="checkbox"/> Active and healthy aging</p>
<b>Summary of interventions</b>
<p>In the Basque Country, there is a lack of an ICT tool with which social and health services can share information. Nowadays a social worker has to put the same information in 4 different applications. The dispersion of information about a single patient is important.</p> <p>There is a lack of investment in important ICTs that could help solve this problem. There is a lack of political will to invest. The issue is that they only propose short-term strategies, and in this subject it is necessary to think in the long term, that the investment made will be beneficial (and profitable) now and in the future.</p> <p>It is also commented that all the agents involved in the subject should speak, not only health and social services, also urban planning with health, for example. We should leave the comfort areas.</p>
<b>Actions that could help solve or minimize these needs</b>
<ul style="list-style-type: none"> <li>- Development of the figure of case manager, who has all the information.</li> <li>- Have an ICT tool to share information between different agents.</li> <li>- Demand a strategic and longer term vision for the administration.</li> </ul>

<b>NEED 8: Unknown existing solutions</b>
<b>Description</b>
The existing technological solutions are unknown and they are also attributed a high cost by default.
<b>Characteristics</b>
<p>Nature of the need:</p> <p> <input type="checkbox"/> Ethical / legal   <input checked="" type="checkbox"/> Financial   <input type="checkbox"/> Market Demand   <input type="checkbox"/> Maturity ICT solutions  <input type="checkbox"/> Social Sciences   <input type="checkbox"/> Technology   <input type="checkbox"/> Others: _____         </p> <p>Affected sectors:</p> <p> <input checked="" type="checkbox"/> Social and health care   <input checked="" type="checkbox"/> Independent living and permanence in the home  <input checked="" type="checkbox"/> Housing and urban planning   <input checked="" type="checkbox"/> Transport and mobility   <input checked="" type="checkbox"/> Active and healthy aging         </p>
<b>Summary of interventions</b>
<p>Older people and their caregivers, even professionals, do not know what the market offers. You have a generic idea of support products (what you can see in orthopedics, or pharmacies), but the market is much wider. Even the tools that Osakidetza provides (like the Health Folder) are unknown to the vast majority. There is a lack of product visualization specialized in the final public.</p> <p>You have to do a teaching job of the solutions provided by the market, marketing.</p>
<b>Actions that could help solve or minimize these needs</b>
<ul style="list-style-type: none"> <li>- single, centralized repository of solutions</li> <li>- marketing / information in places frequented by the elderly</li> <li>- solutions showroom</li> </ul>

<b>NEED 9: sizing companies</b>
<b>Description</b>
SMEs could focus on the segment related to prevention but this market is more segmented and fragmented and investment in marketing to penetrate the market is important, for some (the majority) not acceptable.
<b>Characteristics</b>
<p>Nature of the need:</p> <p> <input type="checkbox"/> Ethical / legal   X   Financial   <input type="checkbox"/> Market Demand   <input type="checkbox"/> Maturity ICT solutions  <input type="checkbox"/> Social Sciences   <input type="checkbox"/> Technology   <input type="checkbox"/> Others: _____         </p> <p>Affected sectors:</p> <p>           X Social and health care      X Independent living and permanence in the home            X Housing and urban planning   X Transport and mobility      X Active and healthy aging         </p>
<b>Summary of interventions</b>
<p>Currently, at least locally, the only client of ICT companies is public administration. In this sense, the largest companies are the ones that have the most options to take control of the public tenders of the administration, what SME has the capacity to face a sheet of Osakidetza or the Bilbao City Council? One of the options is for SMEs to focus more on prevention issues, which is less focused. But being more fragmented, marketing efforts are greater, and the capabilities of companies to reach consumers are limited.</p> <p>In addition to this, for the development of health ICT products you must go through a series of certifications and approvals, which take time and money, and the company has to support it financially until you get benefits.</p>
<b>Actions that could help solve or minimize these needs</b>
<ul style="list-style-type: none"> <li>- alliances between SMEs</li> <li>- look for Integration-complementarity with solutions from larger companies</li> <li>- focus on prevention</li> </ul>

<b>NEED 10:</b> lack of investment in prevention
<b>Description</b>
Short-term vision of policy makers, actions in healthy life have a longer-term impact
<b>Characteristics</b>
<p>Nature of the need:</p> <p> <input type="checkbox"/> Ethical / legal   X   Financial   X   Market Demand   <input type="checkbox"/> Maturity ICT solutions  <input type="checkbox"/> Social Sciences   <input type="checkbox"/> Technology   <input type="checkbox"/> Others: _____         </p> <p>Affected sectors:</p> <p> <input type="checkbox"/> Social and health care   <input type="checkbox"/> Independent living and permanence in the home  <input type="checkbox"/> Housing and urban planning   <input type="checkbox"/> Transport and mobility   X   Active and healthy aging         </p>
<b>Summary of interventions</b>
<p>In terms of cost, the care of people with dependency and without dependence have nothing to do, paying for hospitalizations or meeting the healthcare needs is much more expensive. Therefore, we should go "downstream", investing public money in prevention.</p> <p>Much of the policies-offer are marked by the size of the municipality. There is a perception that there is not enough investment in prevention, in the promotion of healthy life. In principle, this is within the strategy of Osakidetza, but when it comes to implementing it, politicians have a short-term vision (we can not forget that elections are held every 4 years) and preventive actions have a more long-term impact .</p> <p>It should be the administration that leads the awareness towards preventive actions or giving advice (healthy cholesterol routes etc.). This would allow users to be encouraged in turn to spend on wearables or other technology. But that awareness, that training, is necessary.</p>
<b>Actions that could help solve or minimize these needs</b>
<p>- Awareness and education campaigns</p> <p>- Economic analysis of the return on investment. Global vision and joint analysis.</p>

Some photographs that illustrate the work done in the workshop:



## Conclusions:

There is an important consensus between what are the main needs or barriers of SMEs to access the Silver Economy market (digital divide, knowing the needs of the elderly, financing-public culture, dimension).

### 3. WORKSHOP 2: BILBO

Place	Date	Duration
Instalaciones Gaia en Bilbao (Paseo de Uribitarte, 3 3ª Planta, 48001 Bilbao)	16-01-2017	3 horas
People and organizing entity	Dynamizer and entity to which it belongs	
Itziar Álvarez-Inma Uzkudun (Home Care Lab. S.COOP)	Xabier Uriarte (Tecnalia)	
Total number of participants	Participating entities:	
34 (apuntados: 43)	ADOM ARARTEKO AURRERANTZ, S. Coop. (Grupo SSI) Ayto. ERMUA- ÁREA SOCIOCULTURAL Ayto de BILBAO – secretaría técnica asociaciones de mayores de Bilbao Ayto de BLBAO – Negociado de Dependencia y SAD BILBOMATICA BIOEF-KRONIKGUNE COORDINADOR SOCIOSANITARIO de EUSKADI DEUSTO BUSINESS SCHOOL HEALTH DIPUTACIÓN FORAL de BIZKAIA – Dirección General Promoción de la Autonomía Personal EUSKALTEL FAGOR HEALTH FESIA GFI HELDUAK ADI / Ex gerente de SSI HOSPITAL AITA MENNI IDEABLE INITHEALTH INNOBASQUE-Dirección de Innovación Social	



	<p>INSTITUTO BURMUIN</p> <p>PR4 TECNOLOGÍA SOCIAL</p> <p>SERVICIO PÚBLICO de TELEASISTENCIA de GV Beti on</p> <p>SSI</p> <p>TECNALIA</p> <p>TECNALIA - Dirección Área Tecnología y Sociedad</p> <p>UNIVERSIDAD de DEUSTO-Gestión del Conocimiento</p> <p>VIRTUALWARE</p> <p>ZUENTZAT SERVICIOS PSICogerontológicos</p> <p>GEROKON</p>
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## CONTENT OF THE SESSION

The needs identified and the proposals that could contribute to cover those needs are listed below.

NEEDD 1: Digital Divide
<p>Description</p> <p>Older people are not familiar with ICTs. The technological progress in recent years has been so rapid that it is difficult to keep up with digital skills, even for the youngest segment of the SE.</p> <p>The language of ICTs is not the natural language for much of the SE and we must overcome this barrier.</p> <p>There is a gap both in access to ICTs and in the use of the internet.</p>
<p>Characteristics</p> <p>Nature of the need:</p> <p><input type="checkbox"/> Ethical / legal   X Financial   X Market Demand   <input type="checkbox"/> Maturity ICT solutions</p> <p>X Social Sciences   <input type="checkbox"/> Technology   <input type="checkbox"/> Others: _____</p> <p>Affected sectors:</p> <p>X Social and health care   X Independent living and permanence in the home</p> <p>X Housing and urban planning   <input type="checkbox"/> Transport and mobility   X Active and healthy aging</p>

## Summary of interventions

For people who have grown up and lived with radio and television the use of technology is difficult, they are not used to it. The language of ICTs is not a natural language for this population, and therefore they do not have a culture of using technology, and even changing one mobile phone for another is complicated. This means that existing technologies and existing solutions are not known.

In addition, it must be borne in mind that as of a certain age, the ability to learn diminishes. And in the case of dementia, people are unable to use the technologies.

But it also says that those older people who already use technology are really "fans" of them and often use them in their day to day. That is, there are also people from the Silver Economy who already use them although it is agreed that this segment is a minority. On the other hand, people who are now 50/60 years old are already using technology and this may cause the digital divide to become smaller in the future. Technological advances in this area are so great and produce so quickly that even the youngest people of the Silver Economy, learning is an effort.

There is even resistance to the use of technology by professionals from different sectors. The Basque Government is aware of this problem and there is a "Digital Agenda of Euskadi", which includes the development of ICT professional profiles in all sectors.

Because of this we understand that when we talk about the digital divide we can be talking about a lack of digital culture at two levels:

1. One concerning the use of devices
2. Another related to the potential of the different applications: to know well what this application allows me to do and why I use it

It is also mentioned that the cost of internet in Spain is expensive and that for the users of the Silver Economy this can suppose an added barrier.

## **SOLUTIONS:** Actions that could help solve or minimize these needs

### 1. Awareness campaigns and workshops on:

- The importance of acquiring digital skills
- Added value that they offer us
- The consequences of not acquiring digital skills

### 2. Digital training (digital literacy), both users and professionals.

### 3. Education continues throughout life, as the advance of technology will continue to be given.

### 4. Official certifications regarding the development of ICT professionals in the different sectors, as has already been done by the Government.

5. Motivate and train. Create culture among older people about the advantages of using technology and thereby improve their quality of life.

6. Specific training for health professionals in the different solutions that are tried to be implemented in the system.

## NEED 2: CREATION OF A PRIVATE MARKET

### Description

In this need we focus mainly on the field of health and social.

The need to develop a private market, nonexistent at present, is mentioned in order to increase market demand.

Currently the market is characterized by a large activity of the public customer and little participation of the private client. The public client has a portfolio of services and a list of products financed almost 100%, there being some percentage of co-payment in some of the services but this being very residual and therefore unusual.

### Characteristics

Nature of the need:

☐ Ethical / legal ☐ Financial ☒ Market Demand ☐ Maturity ICT solutions

☒ Social Sciences ☐ Technology ☐ Others: \_\_\_\_\_

Affected sectors:

☒ Social and health care ☒ Independent living and permanence in the home

☐ Housing and urban planning ☐ Transport and mobility ☒ Active and healthy aging

### Summary of interventions

Currently, the market is almost exclusively filled by a single client, which is the public administration. There is also a great difficulty in incorporating new products / services in the administration catalog. And as a consequence of this operation, on the part of the users the culture persists that the public administration must guarantee all the services to me, making difficult the generation of a private market of the SE. This means that users do not have internalized the culture of payment for services and products. As soon as users have a need, their focus is on public administration and the option of buying the service / product in the private market does not enter into their mind.

And in addition to wanting to do so, they find high-cost solutions, which means that in order to access them, they must have an important economic status.

This situation assumes that any new service / product has to be offered to the public administration and it is this that decides which innovations are introduced in its catalog of services. In this way, the transfer of technology and the implementation of innovations will be easier or less easy depending on how innovative the administration is.

In the absence of a private market what exists are many projects, but little coordinated among themselves and sometimes there is the circumstance that there are initiatives that are repeated. There is also a lack of knowledge of the different entities that promote these initiatives.

Until now we have had a very guaranteed society. From now on we must define what kind of society we want to have: protectionist / liberal.

#### **SOLUTIONS** : Actions that could help solve or minimize these needs

1. Carry out a social debate on the model of care for the future: what we should do to better serve people and in a more efficient way.

1. 2. Think of public-private partnerships to carry out the development of this sector.
2. 3. Develop an innovative public purchase law that allows the real implementation of the innovations carried out by companies in the sector.
3. 4. Creation of an ecosystem that brings together the different agents working in the Silver Economy sector.
4. 5. Campaigns and workshops to raise awareness of the need for a paradigm shift, which implies a cultural and mental change, especially for users. This supposes an empowerment of the user.
5. 6. Create via marketing the culture of need for these services and therefore a culture of spending on them.
6. 7. Rethink many of the services taking into account the use of technology
7. 8. Create technological testing environments where the elderly can know and use the different solutions / products.
8. 9. Define a universal catalog of solutions, and that these are known by all agents working in the social-health field.
9. 10. Think of a useful technology, usable and accessible in price for the generation of this private market.
10. 11. Reduce the cost of Internet connection by telephone companies.

#### **NEED 3: KNOWING THE NEEDS OF USERS**

##### **Description**

There is a great heterogeneity of needs and situations in the users that make up the SE. We could carry out the following segmentation, where the user profiles and therefore their needs are different:

- People between 50-65 active years, active and autonomous persons

- People between 65 and 80 years of age, professional retirement period, and the person remains relatively active and autonomous

-Person with more than 80 years, the person already has more needs for attention

We need to know clearly the needs of each of these segments that are part of the Silver Economy.

### Characteristics

Nature of the need:

X Ethical / legal ☐ Financial X Market Demand ☐ Maturity ICT solutions

☐ Social Sciences ☐ Technology ☐ Others:

Affected sectors:

X Social and health care X Independent living and permanence in the home

X Housing and urban planning X Transport and mobility ☐ Active and healthy aging

### Summary of interventions

ICT companies work for multiple sectors and do not know the needs of these users. They need to focus on the sector in order to have a deeper knowledge of the needs of the users, in addition to involving both users and other stakeholders during the design phase of the different solutions.

In this process of creating new solutions and products based on the detected needs, it is important to ask the users what model of life they want for their future.

Sometimes the product developments are ahead of the needs and when the pilot projects are carried out, it is not adapted to the real need. In addition, technological developments often offer many more features than a specific group really needs. This can cause solutions to complicate to the detriment of usability, practicality, etc ...

### SOLUTIONS: Actions that could help solve or minimize these needs

- 1- 1- Carry out a diagnosis of needs by non-socio-demographic segmentation given the heterogeneity of needs.
- 2- 2- Organize events with the participation of users, through the creation of friendly environments in which older people are open to express their needs.
- 3- Once the social debate is launched, generate frequent meetings with the people of the Silver Economy, so that we can anticipate the needs of users.

NEED 4: R & D and TRANSFER OF TECHNOLOGY TO THE MARKET
Description
The cycles of innovation and development in SMEs are very long compared to large companies. This makes us less competitive.
Characteristics
<p>Nature of the need:</p> <p> <input type="checkbox"/> Ethical / legal   <input type="checkbox"/> Financial   <input checked="" type="checkbox"/> Market Demand   <input type="checkbox"/> Maturity ICT solutions  <input type="checkbox"/> Social Sciences   <input checked="" type="checkbox"/> Technology   <input type="checkbox"/> Others: _____         </p> <p>Affected sectors:</p> <p> <input checked="" type="checkbox"/> Social and health care   <input checked="" type="checkbox"/> Independent living and permanence in the home  <input checked="" type="checkbox"/> Housing and urban planning   <input checked="" type="checkbox"/> Transport and mobility   <input checked="" type="checkbox"/> Active and healthy aging         </p>
Summary of interventions
<p>Our innovation cycles should be shorter and we should be able to develop technology at a lower cost. Large companies have advantages in both fields and it is difficult to compete with them.</p> <p>Perhaps it is important to see that large companies have no interest in a niche market like the Silver Economy and are more interested in more horizontal markets.</p> <p>Companies can not think only of the local market, but must think globally. What is important is that companies can carry out pilot tests for the evaluation of technology at the local level. For this reason, collaboration with the public administration is important in order to launch pilots that can validate the technology and obtain market references.</p>
<b>SOLUTIONS:</b> Actions that could help solve or minimize these needs
<ol style="list-style-type: none"> <li>1. To value the existing experience of the Basque business sector in other sectors.</li> <li>2. Search for collaborative relationships with large companies</li> <li>3. Look for ways of collaboration among local companies, looking for synergies that add to the market.</li> <li>4. Continue to carry out pilot projects to prove the goodness of the technology.</li> <li>5. Search for coordination among the different agents that provide service, develop technology and develop knowledge in this sector. The creation of an ecosystem that allows collaborating on common initiatives facing the sector.</li> </ol>

NEED 5: INVESTMENT RETURN
Description
The efficiency of investing in ICT must be demonstrated, so that the different stakeholders are interested in carrying out its implementation.
Characteristics
<p>Nature of the need:</p> <p> <input type="checkbox"/> Ethical / legal    <input checked="" type="checkbox"/> Financial    <input checked="" type="checkbox"/> Market Demand    <input type="checkbox"/> Maturity ICT solutions  <input type="checkbox"/> Social Sciences    <input checked="" type="checkbox"/> Technology    <input type="checkbox"/> Others: _____         </p> <p>Affected sectors:</p> <p> <input checked="" type="checkbox"/> Social and health care    <input checked="" type="checkbox"/> Independent living and permanence in the home  <input type="checkbox"/> Housing and urban planning    <input type="checkbox"/> Transport and mobility    <input checked="" type="checkbox"/> Active and healthy aging         </p>
Summary of interventions
<p>In the short term, ICTs represent a large investment, demonstrating the efficiency and savings that they produce is a long-term process. That is, it takes time to demonstrate the return on investment. This makes it difficult for the client to be encouraged to implement them. Normally the public administration thinks in terms of 4 years and does not develop longer-term plans, which makes it very difficult to demonstrate that ICTs generate efficiencies.</p> <p>The administration understands that there has to be a substitution of the expense, either gains in efficiency or is spent the same with benefits of higher added value.</p> <p>Knowing that ICTs really achieve efficiencies, we must think about the business model approach in which this requirement is contemplated. It is usually possible to pilot test a new product, but when it comes time to scale that product / service the answer is that the return on investment is not clear. Thinking about new business models is fundamental</p>
<b>SOLUTIONS:</b> Actions that could help solve or minimize these needs
<ol style="list-style-type: none"> <li>1. Dissemination of the results of the pilots carried out</li> <li>2. Create new business models that contemplate how to break this barrier, how to share the risk, pay according to results, etc ...</li> <li>3. Work from the beginning with the client to determine what results are what you are looking for in order to implement the solution so that this result is achieved.</li> <li>4. Benchmarking with other markets where this problem is similar so that novel solutions can be known</li> </ol>



NEED 6: SOCIAL-SANITARY COORDINATION
<p>Description</p> <p>There is talk of putting the patient at the center of the ecosystem so that there is a continuum in the care of it. Socio-Health Care in Euskadi is a complex system that proposes the construction of a common space of confluence and coordination for all institutions that provide health and social services in a broad and inclusive sense. There is a socio-health coordination team, which works with both the health department and the social affairs department, two departments that are independent, with independent budgets, and a portfolio of independent services.</p>
<p>Characteristics</p> <p>Nature of the need:</p> <p>X Ethical / legal   X Financial   <input type="checkbox"/> Market Demand   <input type="checkbox"/> Maturity ICT solutions</p> <p>X Social Sciences   X Technology   <input type="checkbox"/> Others: _____</p> <p>Affected sectors:</p> <p>X Social and health care   X Independent living and permanence in the home</p> <p><input type="checkbox"/> Housing and urban planning   <input type="checkbox"/> Transport and mobility   X Active and healthy aging</p>
<p>Summary of interventions</p> <p>From the Government itself there is talk of the need to give continuous care to users, to provide integrated care and hence the existence of socio-health coordination. The sociosanitary collaboration is revealed, as one of the projects valued strategically, (chronicity, old age and dependence), as of greater importance by the Department of Health.</p> <p>The Basque Council for Health Care is the body that articulates, at the regional level, the cooperation and coordination between the Basque System of Social Services and the Health System of Euskadi. By relying on two different departments, with different budgets, information is dispersed, actions are independent, and purchasing decisions are also independent.</p> <p>The objectives to promote and facilitate socio-health coordination, entail common definitions and goals. Promoting collaboration among professionals from all sectors carrying out an Intersectoral Work. In the Basque Country, for the construction of the sociosanitary space, a coordination model has been chosen among all the competent institutions in the matter, based on the harmonization of the respective policies.</p> <p>The economic situation is also helping in this search for synergies and alignment of objectives between the Departments of Health and Employment and Social Policies with the consequent institutional deployment, as a priority area. In this sense, the existence of a Framework Document for the elaboration of guidelines in Socio-health Care is considered an important</p>

milestone.

Regarding the use of technology, the health system is more pointer, especially in surgery and diagnosis. In fact, one of the hallmarks of a hospital is the technology available. On the contrary, in the social system, the use of technology is not so common and it still has to travel to carry out the provision of services based on technology.

#### **SOLUTIONS: Actions that could help solve or minimize these needs**

1. Promote forums of joint work to continue with the development of this new space, from that mutual knowledge.
2. Sharing models, training, encouraging grassroots initiatives and incorporating tele-monitoring technologies such as the BETION model are also mentioned as elements that will promote the deployment of both strategic models, both health and social.
3. Promote joint R & D projects.
4. Impel the Clinical Socio Health Record
5. Develop valuation tools with valid fields for both areas
6. Carry out pilot projects that involve both the health and the social.

#### **NEED 7: LEGAL AND REGULATORY ISSUES**

##### **Description**

The health and social sectors are highly regulated sectors, with great legal requirements as well as homologations and certifications.

##### **Characteristics**

Nature of the need:

X Ethical / legal ☐ Financial ☐ Market Demand ☐ Maturity ICT solutions

X Social Sciences ☐ Technology ☐ Others: \_\_\_\_\_

Affected sectors:

X Social and health care X Independent living and permanence in the home

☐ Housing and urban planning ☐ Transport and mobility X Active and healthy aging

##### **Summary of interventions**

Product approvals and certifications are expensive in time and resources. For an SME this is an added barrier.

All the data contained in a health report, medical histories and HME are sensitive personal data. Everything is governed by the Data Protection Act (LOPD). Likewise, citizens are

increasingly aware of the use that is given to their data and are much more demanding with the protection that both public and private administrations make of their data.

The data protection law also implies limitations in being able to share information between the health and social sector. There are problems when applying confidentiality to the data.

**SOLUTIONS:** Actions that could help solve or minimize these needs

1. Try to lobby in European regulations
2. Try to lobby in Spanish regulations

## NEED 8: EMPOWERING ELDERLY PERSONS AND THEIR FAMILIES

### Description

A paradigm change must be made, so that people are responsible for their self-care.

### Characteristics

Nature of the need:

☐ Ethical / legal   ☐ Financial   ☐ Market Demand   ☐ Maturity ICT solutions

X Social Sciences   ☐ Technology   ☐ Others: \_\_\_\_\_

Affected sectors:

X Social and health care   ☐ Independent living and permanence in the home

☐ Housing and urban planning   ☐ Transport and mobility   ☐ Active and healthy aging

### Summary of interventions

We must bring changes in the collective consciousness, so that each one is responsible for their care. That the user be co-responsible and take part in the management of their health. Right now when a person has a problem look at the administration. In the social and health sector there is currently a lot of guarantees. For this it is important that the administration also change its discourse.

People are usually afraid of changes, you have to work hard on awareness and training.

Start talking more about the prevention and promotion of health and more in the younger part of the Silver Economy.

**SOLUTIONS:** Actions that could help solve or minimize these needs

1. The different agents have a lot of capacity to generate trust and from there to change the culture.
2. Make the model less paternalistic so that the patient can participate in it.

3. Measure the added value that empowerment can bring.
4. Campaigns of awareness.
5. Providing information and training to the user and their families.

## NEED 9: INTEROPERABILITY

### Description

We find a "tower of babel" in which the different systems speak different languages making communication and interaction between them difficult. It is difficult to share data and information, in order to achieve greater efficiencies.

### Characteristics

Nature of the need:

X Ethical / legal ☐ Financial ☐ Market Demand ☐ Maturity ICT solutions

☐ Social Sciences ☐ Technology ☐ Others: \_\_\_\_\_

Affected sectors:

X Social and health care ☒ Independent living and permanence in the home

☐ Housing and urban planning ☐ Transport and mobility ☒ Active and healthy aging

### Summary of interventions

The challenge of regional administration in the Basque Country makes it even more difficult. In addition, the organizational structure of the systems has led to a segregation of information systems, with the sharing of clinical information among them becoming increasingly important, due to the fact that there are many benefits to the quality of care to have the correct information at the right time.

In many organizations systems are either not communicated and work as independent silos or those that are, are integrated in isolation without taking into account the overall vision of the organization. And if we go further, we find ad-hoc integrations that do not follow integration standards, and therefore, do not allow re-use and communication with other systems.

We need to have different levels of interoperability: organizational, semantic, syntactic and technical.

### SOLUTIONS: Actions that could help solve or minimize these needs

1. Adopt standards on which the different health systems coincide.
2. Adopt standards that make the health and social sector communicate.

3. Share procedures, ways of working, technologies and information systems, in order to achieve standards.
4. Implement standards to generate evidence and make the system more efficient.
5. Name an actor that orchestrated the integration needs in line with the business processes of the organizations.

#### NEED 10: OFFER SERVICES

##### Description

It is important to offer services and not only technology. This requires defining a complete business model in which technology is a part of it.

##### Characteristics

Nature of the need:

☐ Ethical / legal ☐ Financial ☒ Market Demand ☐ Maturity ICT solutions

☐ Social Sciences ☐ Technology ☐ Others: \_\_\_\_\_

Affected sectors:

X Social and health care ☒ Independent living and permanence in the home

X Housing and urban planning ☒ Transport and mobility ☒ Active and healthy aging

##### Summary of interventions

Technology offers us efficiency, but for it to be integrated into the organizational process and therefore has to be adapted to it. Many times if we do not think about how this technology is integrated into the final client, how it interacts with its processes will be difficult to convince him to implement it.

We need to know our client's business very well to see how technology can impact your business, and thus make you see the possible results you can obtain.

The success of the Betion platform is mentioned, in which, in addition to technology, there is also a personalized attention service highly valued by users.

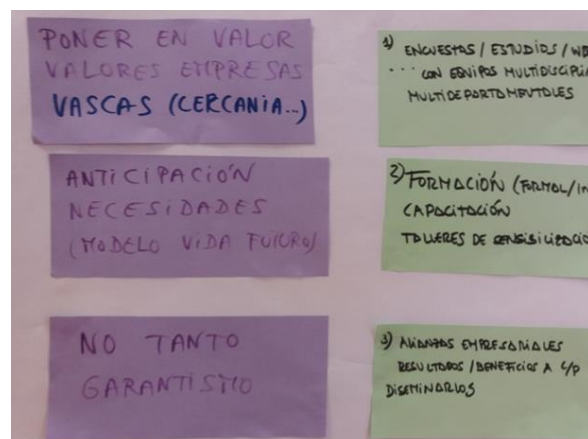
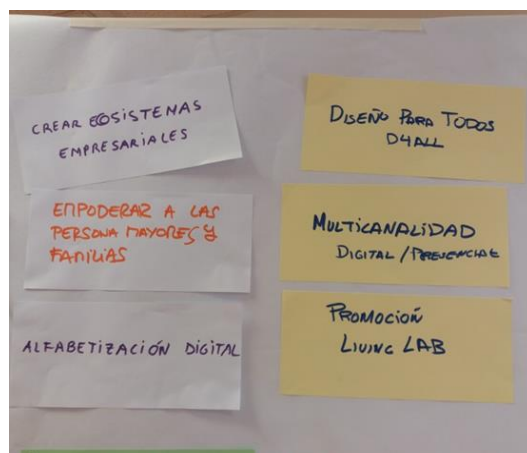
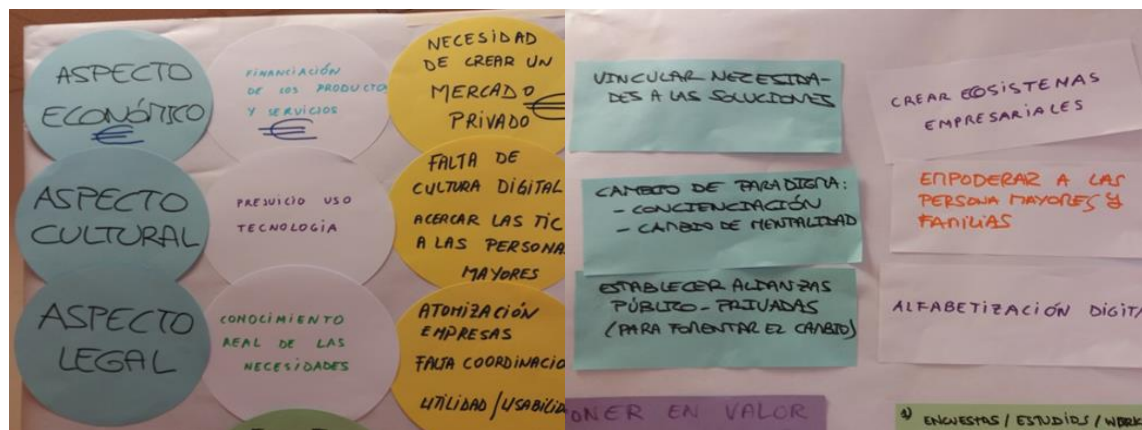
##### SOLUTIONS: Actions that could help solve or minimize these needs

1. Define possible services to be provided with the use of our technology
2. Define multichannel services: online presence but also human contact points such as the Betion platform (telephone contact center).

NEED 11: FUNCTIONALITIES
Description
The solutions that move to the market usually offer more features than the user really needs.
Characteristics
<p>Nature of the need:</p> <p><input type="checkbox"/> Ethical / legal   <input type="checkbox"/> Financial   <input checked="" type="checkbox"/> Market Demand   <input type="checkbox"/> Maturity ICT solutions</p> <p>X Social Sciences   X Technology   <input type="checkbox"/> Others: _____</p> <p>Affected sectors:</p> <p>X Social and health care   X Independent living and permanence in the home</p> <p><input type="checkbox"/> Housing and urban planning   <input type="checkbox"/> Transport and mobility   X Active and healthy aging</p>
Summary of interventions
<p>The aim is to make the solutions easy to use, useful for responding to specific needs and for the user to see a value in said functionalities / solutions.</p> <p>Many times we develop the products without sufficient knowledge of the needs of the user, without contrasting with the users the same etc ..., bringing to the market products of difficult use and manageability.</p> <p>We can say that the same happens when we develop technology for professionals.</p> <p>It seems that the technology is developed thinking only of young people, and the focus of the segment of the silver economy is not taken into account. Many of the developments that are made are designs that do not want to use the elderly because it is an indicative of their personal situation, and this may embarrass them.</p> <p>Existe una gran heterogeneidad de los usuarios dentro de la Silver Economy, lo cual es importante tenerlo en cuenta, para adaptar los desarrollos a cada uno de esos segmentos.</p>
<b>SOLUTIONS: Actions that could help solve or minimize these needs</b>
<ol style="list-style-type: none"> <li>1. Include final users in the design of the technology.</li> <li>2. Include professionals in the design of the technology.</li> <li>3. To perfectly identify the needs by user segments.</li> <li>4. Design products that go unnoticed (small, not attracting attention).</li> <li>5. Design products thinking of the different levels of digital literacy</li> </ol>

<b>NEED 12: SILVER ECONOMY</b>
<b>Description</b>
There is great surprise among many attendees to know that the silver economy includes people from 50 years. Therefore there is a lack of knowledge about the concept itself and what it encompasses.
<b>Characteristics</b>
<p>Nature of the need:</p> <p><input type="checkbox"/> Ethical / legal   <input type="checkbox"/> Financial   <input type="checkbox"/> Market Demand   <input type="checkbox"/> Maturity ICT solutions</p> <p>X Social Sciences   <input type="checkbox"/> Technology   <input type="checkbox"/> Others: _____</p> <p>Affected sectors:</p> <p>X Social and health care   X Independent living and permanence in the home</p> <p><input type="checkbox"/> Housing and urban planning   <input type="checkbox"/> Transport and mobility   X Active and healthy aging</p>
<b>Summary of interventions</b>
There is a widespread ignorance about the Silver Economy, which is exactly and what type of services products we can include in this sector.
<b>SOLUTIONS:</b> Actions that could help solve or minimize these needs
<p>1. Clearly define the Silver Economy concept.</p> <p>2. Define exactly what products / services are included in this term.</p>

Some images that illustrate the work carried out in the Bilbao workshop:



## Conclusions

It is considered that the workshop has been really interesting because it has achieved the participation of many of the agents who have something to say in this market, this participation being very diverse, likewise in terms of the type of agents. There is an interest on the part of all to continue working together in this field since everything that is to advance will help us all.

How it looks in many of the needs, these are related to issues other than technology but are very important in order to achieve the goal of implementing new technologies in the market.



## FINAL CONCLUSIONS

The main need that has been detected is to know well the concept "**Silver economy**" and what it encompasses, since there is some ignorance on this subject.

Another need that has been detected is that of the **digital divide**. Due to the rapid technological advance that has taken place in recent years and the digital skills that this requires, older people are not familiar with Tics. Carrying out awareness campaigns and workshops and the creation of caregiver schools or groups of elders have been some of the proposed actions to minimize this need.

**The lack of knowledge of the needs of the users** that make up the SE is also another issue to be highlighted. A **segmentation** of the different user profiles that exist in the SE has been carried out, since the level of activity and dependence of each of the segments varies a lot and therefore, the product manufacturing companies do not know their needs.

On the other hand, there has been **a lack of coordination** between the health and social sectors since, although there is a team that works both with the health department and with the social affairs department, there is a certain dispersion of information between the two systems and lack of will policy to invest in Tics tools. That the different systems speak different languages also makes communication between them difficult, making it even more complicated to share data and information. On the other hand, mention is made of the **need to develop a private market**, almost nonexistent at present, in order to increase market demand and thus prevent the market from being taken over by a single customer (the public).

**The solutions** that are transferred to the market usually have a **high cost** and usually offer more **features** than the user really needs, therefore they should be limited to having only that which adds value. There is also a lack of knowledge of the existing technological solutions, which is why we should try to demonstrate the efficiency of investing in Tics so that stakeholders are interested in its implementation.

As for **SMEs**, it is true that they have very long **innovation and development** cycles in a way that makes them less competitive. It is mentioned that they could focus on the segment related to prevention, but being more fragmented requires a significant investment in marketing, which for the majority is not acceptable. In addition, the health and social sector are highly regulated and bring with them great legal requirements as well as homologations and certifications, which is also an added barrier for SMEs.

Another of the perceptions has been the need to **offer services** and not only technology, thus defining a complete business model in which technology is a part of it.

The need for each person to be responsible for their **self-care** has also been mentioned. In addition, there must be a change in the negative **perception** that society has towards old age, linking the idea of consuming certain products with prevention. Likewise, there is a perception that not enough is invested in the promotion of healthy life. Because policy makers have a short-term vision and preventive actions have a more long-term impact, it is thought that the administration should be the one leading the awareness towards preventive actions.

Finally, mention that there is a need to move from having users or beneficiaries of services to having consumers since currently the latter do not exist.

## VI. Session Reports

Portugal

VI.I. IPCA Barcelos

**GT1: Intersectorial and transnational cross-fertilization for better exploitation of ICT key enabling technologies to meet the challenges of the silver economy**

### NEEDS COLLECTION: ROUND-TABLES (RTs)

Reporting template for each session

#### GENERAL INFORMATION

Region		
<input type="checkbox"/> Aquitaine <input type="checkbox"/> Limoges <input type="checkbox"/> Basque Country <input type="checkbox"/> Catalunya <input checked="" type="checkbox"/> Portugal		
Place	Date	Duration
IPCA - Barcelos	2016-12-13	3:30
Name of host and entity	Name of facilitator and entity	
Ricardo Simões - IPCA	João Pedro Silva – IPCA	
Total number of attendees	Number of attendees per represented organizations	
12	SME: 2                      Start up: Large company: 1                      Tel-Co: Public body: 1                      R&D entity: 5 Association: 1                      Insurance Group: Cluster: 2                      Investors:	

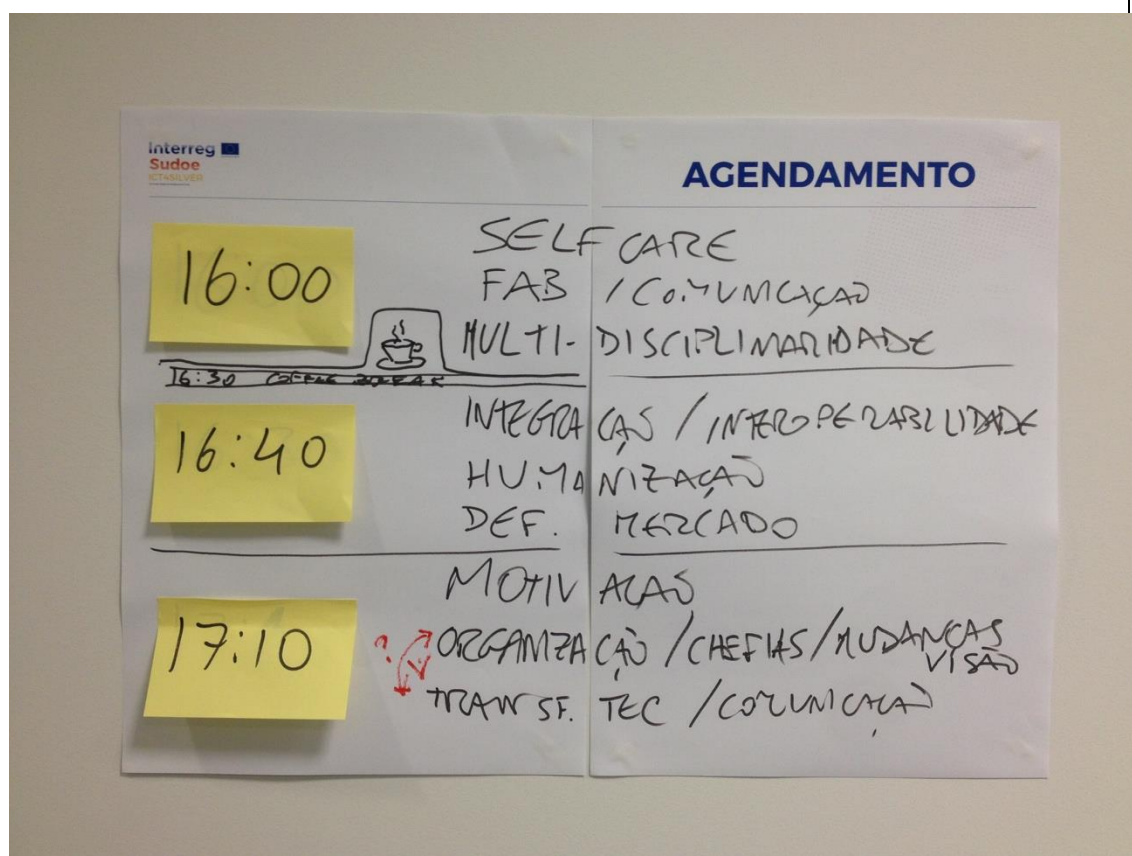
#### CONTENT OF THE SESSION

##### COLLECTION OF TOPICS FOR DISCUSSION

List of proposed topics
Self-care
FAB (Features Advantages and Benefits) – Communication

Multidisciplinary approach  
 Integration – interoperability  
 Market definition  
 Customer/user Motivation  
 Organizational change – Vision

Photo of topics collection board



## WORKSHOP 1: DISCUSSION

TABLE 1.1: Self-care
Description
Self-care – Paradigm change and the citizen's responsibility in self-care
Characterization
<p>Nature of need:</p> <p> <input type="checkbox"/> Ethical/legal    <input type="checkbox"/> Financing    <input checked="" type="checkbox"/> Market demand    <input type="checkbox"/> Maturity of ICT solutions  <input checked="" type="checkbox"/> Social sciences    <input type="checkbox"/> Technology    <input type="checkbox"/> Other: _____         </p> <p>Sectors affected:</p> <p> <input checked="" type="checkbox"/> Health and social care    <input type="checkbox"/> Autonomy/homecare    <input type="checkbox"/> Housing and urban planning  <input type="checkbox"/> Transport and mobility    <input type="checkbox"/> Prevention of ageing         </p> <p>Realistic ICT-based solutions available</p> <p> <input checked="" type="checkbox"/> YES    <input type="checkbox"/> NO         </p>
Summary of exchanges
<p>How to reach the marketplace, mainly social care institutions.</p> <p>Poor after-sales service.</p>
Action items that might contribute to solve or help minimizing the need
<p>Implement public performance indicators for social institutions, stimulating innovation;</p> <p>Motivate self-care among community (education, awareness campaigns, ...).</p>

**TABLE 1.2: FAB (Features Advantages and Benefits) – Communication**

Description

FAB (Features Advantages and Benefits) – Communication

Characterization

Nature of need:

- ☐ Ethical/legal    ☒ Financing    ☒ Market demand    ☐ Maturity of ICT solutions  
☒ Social sciences    ☐ Technology    ☐ Other: \_\_\_\_\_

Sectors affected:

- ☒ Health and social care    ☒ Autonomy/homecare    ☐ Housing and urban planning  
☐ Transport and mobility    ☐ Prevention of ageing

Realistic ICT-based solutions available

- ☐ YES    ☐ NO

Summary of exchanges

Difficult matching between solutions features and the user benefits;  
 Insufficient funding for home assistance versus more easy funds capture at institutional level;  
 Difficult access to equipment.

Action items that might contribute to solve or help minimizing the need

Association to *Smartcities* community projects;  
 To promote Circular economy for equipment sharing;  
 Promote mentality changes at the legislator level.

TABLE 1.3: Multidisciplinary approach
Description
The need for multidisciplinary approach in solutions implementation
Characterization
<p>Nature of need:</p> <p> <input type="checkbox"/> Ethical/legal    <input checked="" type="checkbox"/> Financing    <input type="checkbox"/> Market demand    <input type="checkbox"/> Maturity of ICT solutions  <input checked="" type="checkbox"/> Social sciences    <input type="checkbox"/> Technology    <input type="checkbox"/> Other: _____         </p> <p>Sectors affected:</p> <p> <input checked="" type="checkbox"/> Health and social care    <input type="checkbox"/> Autonomy/homecare    <input type="checkbox"/> Housing and urban planning  <input type="checkbox"/> Transport and mobility    <input type="checkbox"/> Prevention of ageing         </p> <p>Realistic ICT-based solutions available</p> <p> <input type="checkbox"/> YES    <input type="checkbox"/> NO         </p>
Summary of exchanges
<p>Veto of the Leaders to new projects;</p> <p>Poor financial support;</p> <p>Personal relations influence over institutional relations.</p>
Action items that might contribute to solve or help minimizing the need
<p>Motivate institutions to welcome new processes;</p> <p>Motivate people to become involved in product tests program challenges;</p> <p>Reduce to less than 10 years the solution implementation timing.</p>

## WORKSHOP 2: DISCUSSION

TABLE 2.1: Integration – interoperability
Description
Integration – interoperability constraints
Characterization
<p>Nature of need:</p> <p> <input checked="" type="checkbox"/> Ethical/legal    <input type="checkbox"/> Financing    <input type="checkbox"/> Market demand    <input checked="" type="checkbox"/> Maturity of ICT solutions  <input checked="" type="checkbox"/> Social sciences    <input checked="" type="checkbox"/> Technology    <input type="checkbox"/> Other: _____         </p> <p>Sectors affected:</p> <p> <input checked="" type="checkbox"/> Health and social care    <input checked="" type="checkbox"/> Autonomy/homecare    <input type="checkbox"/> Housing and urban planning  <input type="checkbox"/> Transport and mobility    <input type="checkbox"/> Prevention of ageing         </p> <p>Realistic ICT-based solutions available</p> <p> <input type="checkbox"/> YES    <input type="checkbox"/> NO         </p>
Summary of exchanges
<p>Lack of interface standardization between equipment;</p> <p>Ambiguity on legislation about Information privacy and intellectual property constraints;</p> <p>Poor motivation on sharing products specification – Lobbies;</p> <p>Difficult interpretation of the interfaces or information provided by devices.</p>
Action items that might contribute to solve or help minimizing the need
<p>Demand product and protocol certifications from the stakeholders;</p> <p>Demand the implementation of interface standards on the applications to integrate.</p>



TABLE 2.2: Market definition
Description
Market definition
Characterization
<p>Nature of need:</p> <p> <input checked="" type="checkbox"/> Ethical/legal    <input type="checkbox"/> Financing    <input checked="" type="checkbox"/> Market demand    <input type="checkbox"/> Maturity of ICT solutions  <input checked="" type="checkbox"/> Social sciences    <input type="checkbox"/> Technology    <input type="checkbox"/> Other: _____         </p> <p>Sectors affected:</p> <p> <input type="checkbox"/> Health and social care    <input type="checkbox"/> Autonomy/homecare    <input type="checkbox"/> Housing and urban planning  <input type="checkbox"/> Transport and mobility    <input type="checkbox"/> Prevention of ageing         </p> <p>Realistic ICT-based solutions available</p> <p> <input type="checkbox"/> YES    <input type="checkbox"/> NO         </p>
Summary of exchanges
<p>Stratification of the market agents: user and final consumer; intermediate facilitator; financial support and institutions;</p> <p>Market penetration difficulties on new products;</p> <p>Government's central administration inefficiency.</p>
Action items that might contribute to solve or help minimizing the need
<p>Maximization of the number of customers and geographical distribution;</p> <p>Maximization of the financial sponsors and intermediate agents.</p>

### WORKSHOP 3: DISCUSSION

TABLE 3.1: Customer/user Motivation
Description
Customer/user Motivation impact in the market
Characterization
<p>Nature of need:</p> <p> <input checked="" type="checkbox"/> Ethical/legal              <input checked="" type="checkbox"/> Financing              <input checked="" type="checkbox"/> Market demand              <input type="checkbox"/> Maturity of ICT solutions  <input checked="" type="checkbox"/> Social sciences    <input type="checkbox"/> Technology    <input type="checkbox"/> Other: _____         </p> <p>Sectors affected:</p> <p> <input type="checkbox"/> Health and social care    <input type="checkbox"/> Autonomy/homecare    <input type="checkbox"/> Housing and urban planning  <input type="checkbox"/> Transport and mobility    <input type="checkbox"/> Prevention of ageing         </p> <p>Realistic ICT-based solutions available</p> <p> <input type="checkbox"/> YES    <input type="checkbox"/> NO         </p>
Summary of exchanges
<p>Fiscal impact on products and services prices;</p> <p>Poor public recognition of the brand and the national brand;</p> <p>Non-identification of product benefits.</p>
Action items that might contribute to solve or help minimizing the need
<p>Intensify marketing promotion;</p> <p>Implement a set of key indicators for metrics on the marketing and further studies;</p> <p>Improve product interface and usability;</p> <p>Make pressure to get a lower fiscal impact on the price.</p>

TABLE 3.2: Organizational change – Vision
Description
Organizational change – Vision constraints
Characterization
<p>Nature of need:</p> <p> <input checked="" type="checkbox"/> Ethical/legal    <input checked="" type="checkbox"/> Financing    <input type="checkbox"/> Market demand    <input type="checkbox"/> Maturity of ICT solutions  <input checked="" type="checkbox"/> Social sciences    <input type="checkbox"/> Technology    <input type="checkbox"/> Other: _____         </p> <p>Sectors affected:</p> <p> <input checked="" type="checkbox"/> Health and social care    <input type="checkbox"/> Autonomy/homecare    <input type="checkbox"/> Housing and urban planning  <input type="checkbox"/> Transport and mobility    <input type="checkbox"/> Prevention of ageing         </p> <p>Realistic ICT-based solutions available</p> <p> <input type="checkbox"/> YES    <input type="checkbox"/> NO         </p>
Summary of exchanges
<p>Closed organizations – top concentration of decision making;</p> <p>Limited mentality and low literacy level;</p> <p>Financial matters supersede practical decisions;</p> <p>Commitment of volunteers compromises professional performance.</p>
Action items that might contribute to solve or help minimizing the need
<p>Promote diversity in financial providers;</p> <p>Demonstrate efficiently the importance of the implementation of Organizational Changes.</p>

## CONCLUSIONS

Summary of conclusions of the session
<p>We can find some main common actions that participants defined to address their challenges:</p> <p>Promote better marketing studies and campaigns;</p> <p>Measure your market and your product;</p> <p>Influence organizations, agents and consumers to new practices and to welcome innovation;</p> <p>Search for standardization on products interfaces, usability and information exchange;</p> <p>Promote open relationship between institutions, official agents and legal support;</p> <p>Maximize diversity on customers and funding sources;</p>

## OTHER COMMENTS AND REMARKS

Description of the session as a whole (opinion of organizers) (free text)
<p><i>How it went, how productive it was, suggestions for future ones</i></p> <p>We provided a relaxed, participated and productive environment, stimulating and allowing the participants to expose freely their insights.</p> <p>Not all topics initially identified could be discussed in a table meeting because the enthusiasm was greater than the limited time for the session.</p> <p>All participants expressed gratitude for the learning and giving provided, but indicated there are more relevant topics to be addressed in the near future in another (longer) session.</p>

## VI.II. IPCA Barcelos

GT1: Intersectorial and transnational cross-fertilization for better exploitation of ICT key enabling technologies to meet the challenges of the silver economy

### NEEDS COLLECTION: ROUND-TABLES (RTs)

Reporting template for each session

#### GENERAL INFORMATION

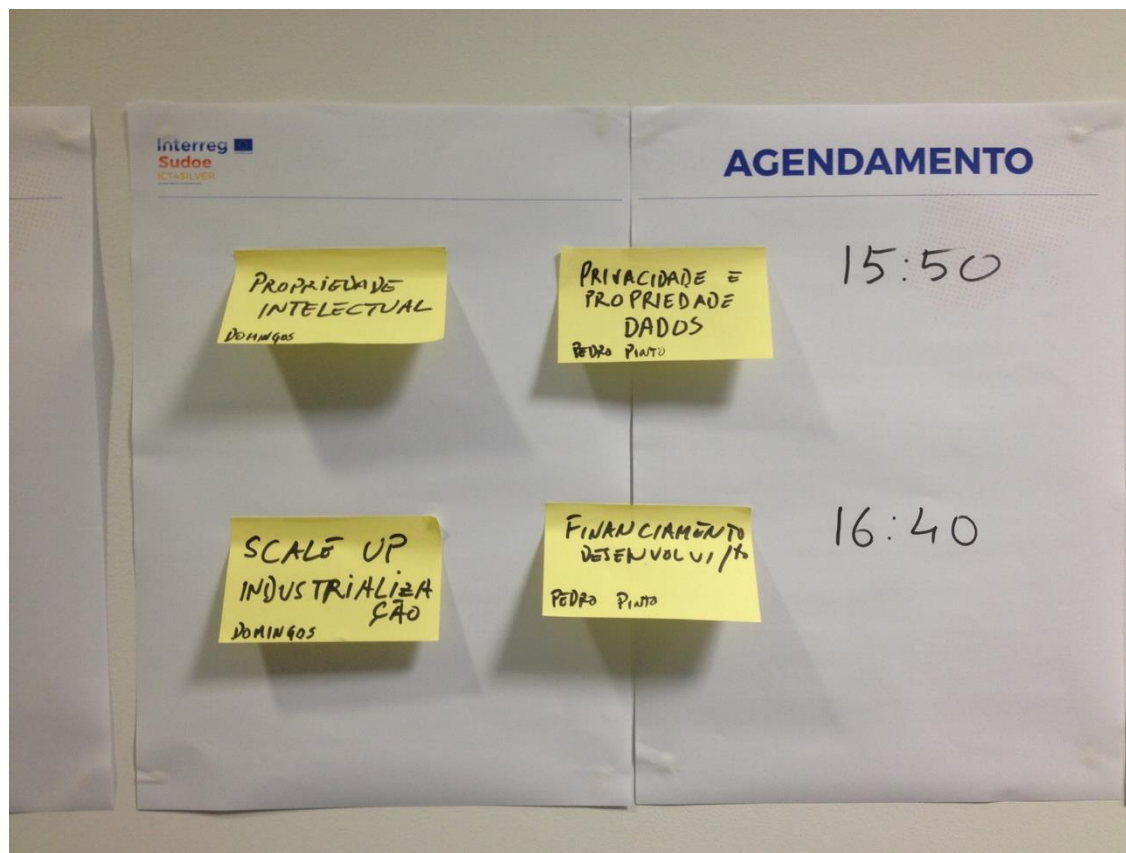
Region		
<input type="checkbox"/> Aquitaine <input type="checkbox"/> Limoges <input type="checkbox"/> Basque Country <input type="checkbox"/> Catalunya <input checked="" type="checkbox"/> Portugal		
Place	Date	Duration
IPCA - Barcelos	2017-01-13	3:30
Name of host and entity	Name of facilitator and entity	
Ricardo Simões - IPCA	João Pedro Silva – IPCA	
Total number of attendees	Number of attendees per represented organizations	
10	SME: 3                      Start up: Large company: 0                      Tel-Co: Public body: 0                      R&D entity: 5 Association: 1                      Insurance Group: Cluster: 1                      Investors:	

#### CONTENT OF THE SESSION

##### COLLECTION OF TOPICS FOR DISCUSSION

List of proposed topics
Intellectual Property Data Property and Privacy constraints Scale-up, industrialization and productizing Financing and development

Photo of topics collection board



## WORKSHOP 1: DISCUSSION

**TABLE 1.1:** Intellectual Property

### Description

The Intellectual Property and its ownership during the project development and commercialization.

### Characterization

Nature of need:

- ☒ Ethical/legal   
 ☐ Financing   
 ☐ Market demand   
 ☐ Maturity of ICT solutions  
☐ Social sciences   
☐ Technology   
☐ Other: \_\_\_\_\_

Sectors affected:

- ☒ Health and social care   
☒ Autonomy/homecare   
☐ Housing and urban planning

<input type="checkbox"/> Transport and mobility <input type="checkbox"/> Prevention of ageing  Realistic ICT-based solutions available  <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Summary of exchanges
(1) After the design of a product in a partnership between a Lab and a trading company, sharing the Intellectual Property (IP), how to retrieve the IP to the Lab if the trading company quits the project or loses the commercial interest in the product.  (2) How to manage/balance the scientific publication, the patents registration and the intellectual property, as the best practice recommends patent registration prior to scientific publication.
Action items that might contribute to solve or help minimizing the need
(1) Accept the possibility of do not have the ownership of the Intellectual rights while developing a product; Prevent the loss of Intellectual property by including contract clauses considering: - Intellectual rights ownership continuity; - transfer of the commercialization rights to a third entity;  (2) The R&D Labs should create a specialized department or expert person, checking all the scientific papers for potentially patentable items prior to publication.

<b>TABLE 1.2: Data Property and Privacy constraints</b>
Description
Data Property and Privacy constraints in the clinical information report, distribution and access.
Characterization
Nature of need:  <input checked="" type="checkbox"/> Ethical/legal <input type="checkbox"/> Financing <input type="checkbox"/> Market demand <input type="checkbox"/> Maturity of ICT solutions  <input type="checkbox"/> Social sciences <input type="checkbox"/> Technology <input type="checkbox"/> Other: _____  Sectors affected:  <input checked="" type="checkbox"/> Health and social care <input type="checkbox"/> Autonomy/homecare <input type="checkbox"/> Housing and urban planning  <input type="checkbox"/> Transport and mobility <input type="checkbox"/> Prevention of ageing

<p>Realistic ICT-based solutions available</p> <p><input type="checkbox"/> YES    <input type="checkbox"/> NO</p>
Summary of exchanges
<p>It is obvious that a unique ID is a must for clinical information addressing, as well the “fight” against the “ghost” of the illicitly use of information;</p> <p>The access to “anonymised” data may not be sufficient and compromises data privacy.</p>
Action items that might contribute to solve or help minimizing the need
<p>The industry should create a mechanism to improve the veracity in the relation between the doctor that certifies a clinical report, the patient and the authorized relatives that support the patient.</p> <p>“BitData” with “national” values and metrics for further evaluation.</p> <p>“Private platform” for private data publication.</p> <p>The creation of mechanisms for authorized individual clinical data publication (PBS), e. g. in CD media.</p>

## WORKSHOP 2: DISCUSSION

<b>TABLE 2.1:</b> Scale-up, industrialization and productizing
Description
The Scale-up, industrialization and productizing processes challenges
Characterization
<p>Nature of need:</p> <p> <input type="checkbox"/> Ethical/legal    <input checked="" type="checkbox"/> Financing    <input type="checkbox"/> Market demand    <input checked="" type="checkbox"/> Maturity of ICT solutions  <input type="checkbox"/> Social sciences    <input checked="" type="checkbox"/> Technology    <input type="checkbox"/> Other: _____         </p> <p>Sectors affected:</p> <p> <input checked="" type="checkbox"/> Health and social care    <input checked="" type="checkbox"/> Autonomy/homecare    <input checked="" type="checkbox"/> Housing and urban planning  <input checked="" type="checkbox"/> Transport and mobility    <input checked="" type="checkbox"/> Prevention of ageing         </p>



Realistic ICT-based solutions available

☐ YES ☐ NO

#### Summary of exchanges

- Certification by INFARMED – Classification
- Methodology of the evaluation and categorization of the products
- Need to collect usability evidences (by clinical or other trials). Difficulty to guarantee those trials in the typical R&D financial budgets.
- The weight that the standard's matching has in the product development, selective in the small projects.
- How to position the project in the radar's radius of vision of the big players that have the potential to deliver the solution to the market.

#### Action items that might contribute to solve or help minimizing the need

- Adopt as rule to contact the INFARMED in the beginning of the project.
- Make the developer aware of the need to fit the established standards, the total cost monitoring and the knowledge of the full process.
- Engage sooner the medical contributions in the R&D projects.
- To know the environment; be up-to-date regarding the big company's practices, following the web portals in the mater as well idea and solution submission projects.

**TABLE 2.2:** Financing and development

#### Description

Financing and development: loss of opportunities.

#### Characterization

Nature of need:

☐ Ethical/legal ☒ Financing ☐ Market demand ☐ Maturity of ICT solutions  
☐ Social sciences ☐ Technology ☐ Other: \_\_\_\_\_

Sectors affected:

☒ Health and social care ☒ Autonomy/homecare ☒ Housing and urban planning  
☒ Transport and mobility ☒ Prevention of ageing

Realistic ICT-based solutions available

☐ YES ☐ NO

#### Summary of exchanges

Many funding opportunities in the Portugal 2020 and Horizon 2020 programs are not applied by the SME.

There are calls, specially in the “Ageing Well” area, not explored by the SMEs.

#### Action items that might contribute to solve or help minimizing the need

Organizations should create networking with ICT and SE clusters, industrial and enterprise associations, as well with the banking and credit institutions.

Produce relevant innovation compared with the stat of the art, to capture the investor enthusiasm.

Allocate resources to search and prepare application to SE program calls.

To fulfil all the call’s requirements.

## CONCLUSIONS

#### Summary of conclusions of the session

In this session, the participant’s insights mainly focused on the ethic/legal and financial natures.

The main common actions that participants defined to address their challenges are:

Prevent the loss of Intellectual property in the clauses of the contracts.  
The R&D Labs should assign special attention checking all in-house produced scientific papers for potentially patentable items prior to publication.

Produce mechanisms to improve the veracity in the relationship between the doctor (clinical staff) the patient and the authorized caregivers.

“BitData” with “national” values and metrics for further evaluation.

“Private platform” for private data publication.

The creation of mechanisms for authorized individual clinical data publication (PBS), e. g. in CD media.

Promote the contact between development teams, medical teams and regulation agencies in the beginning of projects.

Make the developer aware of the need to fit the established standards, the total cost monitoring and the knowledge of the full process.

Know the environment; be up-to-date regarding the ecosystem players.

Create networking with ICT and SE clusters, industrial and enterprise associations, as well with the banking and credit institutions.

Produce relevant innovation in the state of the art, to capture the investor enthusiasm.

Allocate resources devoted to SE program calls.

Fulfil all the call's requirements.

## OTHER COMMENTS AND REMARKS

Description of the session as a whole (opinion of organizers) (free text)

*How it went, how productive it was, suggestions for future ones*

We provided a relaxed, participated and productive environment, stimulating and allowing the participants to expose freely their insights.

All topics identified could be discussed in a table meeting.

### VI.III. HDA Aveiro

GT1: Intersectorial and transnational cross-fertilization for better exploitation of ICT key enabling technologies to meet the challenges of the silver economy

#### NEEDS COLLECTION: ROUND-TABLES (RTs)

Reporting template for each session

#### GENERAL INFORMATION

Region		
<input type="checkbox"/> Aquitaine <input type="checkbox"/> Limoges <input type="checkbox"/> Basque Country <input type="checkbox"/> Catalunya <input checked="" type="checkbox"/> Portugal		
Place	Date	Duration
Centro Hospitalar do Baixo-Vouga – Hospital Infante D. Pedro	2016-12-12	3:00
Name of host and entity	Name of facilitator and entity	
Pedro Roseiro – TICE.PT	Vasco Lagarto – TICE.PT	
Total number of attendees	Number of attendees per represented organizations	
46	SME: 9                      Start up: 4 Large company:              Tel-Co: Public body: 15              R&D entity: 4 Association: 4              Insurance Group: Cluster: 5                      Investors: Social / Care: 5	

#### CONTENT OF THE SESSION

#### COLLECTION OF TOPICS FOR DISCUSSION

List of proposed topics
Lack (or underuse) of Standard Data Models Data Property and Privacy constraints Stay at home Reduced support for innovative social care projects

## Change resistance

### Photo of topics collection board



## WORKSHOP 1: DISCUSSION

TABLE 1.1: Lack (or underuse) of Standard Data Models
<b>Description</b>
Despite health and social entities have some regulatory frameworks (that include required statistical information), each of them uses different data collection forms and formats.
<b>Characterization</b>
<p>Nature of need:</p> <p> <input checked="" type="checkbox"/> Ethical/legal    <input type="checkbox"/> Financing    <input type="checkbox"/> Market demand    <input type="checkbox"/> Maturity of ICT solutions  <input type="checkbox"/> Social sciences    <input checked="" type="checkbox"/> Technology    <input type="checkbox"/> Other: _____ </p> <p>Sectors affected:</p> <p> <input checked="" type="checkbox"/> Health and social care    <input type="checkbox"/> Autonomy/homecare    <input type="checkbox"/> Housing and urban planning  <input type="checkbox"/> Transport and mobility    <input type="checkbox"/> Prevention of ageing </p> <p>Realistic ICT-based solutions available</p> <p> <input checked="" type="checkbox"/> YES    <input type="checkbox"/> NO </p>
<b>Summary of exchanges</b>
<ol style="list-style-type: none"> <li>1. Despite there is mandatory statistical information about elderly (in social care institutions), there isn't an adopted standard information model that complies the individual processes. Each institution, designs its own forms and most of them are paper based. This creates management problems both for carers and financers (social welfare, municipalities, ...). It also makes difficult to have a holistic perception of the usage and support;</li> <li>2. Lack of standard monitoring practices across the health sectors;</li> <li>3. Despite hospitals use DICOM standard, other actors in the field usually don't have resources to access the information (ex: X-Rays)</li> </ol>
<b>Action items that might contribute to solve or help minimizing the need</b>
<ol style="list-style-type: none"> <li>5. Cooperate with the Social Welfare Ministry to design a standard users' data collection form (and format) as well as a standard based individual process documentation. This standard forms (and formats) should be considered (and mandatory) during facilities and services licensing, grant agreements or others;</li> </ol>

6. Adapt the existing information systems (including those that use paper artefacts) to widely accepted standards like HL7 v3.0, DICOM, ICD, ICPC, Open HA, Continua Health, among others;
7. Promote the usage of ICT tools to support process digitalization;
8. Develop new forms of interaction to better support procedures (including medical);

There was a suggestion raised about the usage of dedicated social networks among patients to stimulate cooperation and reinforce communication among people with similar problems. Despite it arised in this group, is not directly related with the topic.

TABLE 2.1: Data Property and Privacy constraints
Description
The increasing number of ICT-based services progressively creates data privacy and data property problems.
Characterization
<p>Nature of need:</p> <p> <input checked="" type="checkbox"/> Ethical/legal    <input type="checkbox"/> Financing    <input type="checkbox"/> Market demand    <input checked="" type="checkbox"/> Maturity of ICT solutions  <input type="checkbox"/> Social sciences    <input checked="" type="checkbox"/> Technology    <input type="checkbox"/> Other: _____ </p> <p>Sectors affected:</p> <p> <input checked="" type="checkbox"/> Health and social care    <input checked="" type="checkbox"/> Autonomy/homecare    <input type="checkbox"/> Housing and urban planning  <input type="checkbox"/> Transport and mobility    <input type="checkbox"/> Prevention of ageing </p> <p>Realistic ICT-based solutions available</p> <p> <input checked="" type="checkbox"/> YES    <input type="checkbox"/> NO </p>
Summary of exchanges
<ol style="list-style-type: none"> <li>1. The increasing number of ICT-based services progressively creates data privacy and data property problems;</li> <li>2. Usually ICT-based solutions design, don't consider information security at design or, at least, don't use a systematic process to ensure and monitor privacy;</li> </ol>



3. In relevant sensor based solutions, even private (user) information - e.g. vital signals - aren't available to R&D (even in an anonymized format);
4. Who is the information owner? In fact, usually user is the information owner but there aren't established processes to make information (e.g. clinical) available. In some cases, it's mandatory if the user wants to access its data to make it mediated by a doctor. Formats aren't standards or require specific licenses/SW to access.

Action items that might contribute to solve or help minimizing the need

1. Medical devices' development companies should consider security as a relevant issue at design time, once it can only be attained using an end-to-end approach;
2. Service Providers must be alerted to relevant changes (and their impacts) of the new EU Data Protection Regulation;
3. Implement data anonymization practices (and identity federation) in relevant repositories and control access even for R&D purposes;
4. Work with professionals to better define who and how data can be accessed by the user, respecting professionals.

**TABLE 3.1: Stay at home**

Description

There is an opportunity to maintain elderly people at their homes, especially in earlier ages but there are numerous constraints to make it effectively happen.

Characterization

Nature of need:

- ☒ Ethical/legal   
 ☒ Financing   
 ☒ Market demand   
 ☒ Maturity of ICT solutions  
☒ Social sciences   
☒ Technology   
☐ Other: \_\_\_\_\_

Sectors affected:

- ☒ Health and social care   
 ☒ Autonomy/homecare   
 ☒ Housing and urban planning  
☒ Transport and mobility   
☒ Prevention of ageing

Realistic ICT-based solutions available

- ☒ YES   
☐ NO



Summary of exchanges
<p>To keep elderly at home, there are numerous constraints to overcome:</p> <ol style="list-style-type: none"> <li>1. Legal Barriers;</li> <li>2. Lack of public policies support;</li> <li>3. Usability, equipment and software poor design;</li> <li>4. Informal carers need training (and support);</li> <li>5. Inadequate financing model doesn't contribute to market adoption;</li> <li>6. ICT-based solutions are scarce and expensive;</li> <li>7. Houses poor/inadequate design.</li> </ol>
Action items that might contribute to solve or help minimizing the need
<ol style="list-style-type: none"> <li>1. For instance, labour regulations should consider schedule flexibility for informal carers;</li> <li>2. Test different care models and support pilot actions using R&amp;D results;</li> <li>3. Include different types of users in product design as soon as possible;</li> <li>4. Design support networks and training for informal carers;</li> <li>5. Mobilise construction/housing related clusters to the topic;</li> <li>6. Work together with existing funding entities (Social Welfare and Health) as well as with the private sector (insurance, banks, mutualists, ...) to create business cases for ICT solutions, e.g., engaging them in pilot evaluation.</li> </ol>

TABLE 4.1: Reduced support for innovative social care projects
<b>Description</b>
Companies and public entities aren't enough motivated to work with social entities in innovative projects.
<b>Characterization</b>
<p>Nature of need:</p> <p> <input checked="" type="checkbox"/> Ethical/legal              <input checked="" type="checkbox"/> Financing              <input type="checkbox"/> Market demand              <input checked="" type="checkbox"/> Maturity of ICT solutions  <input checked="" type="checkbox"/> Social sciences    <input type="checkbox"/> Technology    <input type="checkbox"/> Other: _____         </p> <p>Sectors affected:</p> <p> <input checked="" type="checkbox"/> Health and social care    <input checked="" type="checkbox"/> Autonomy/homecare    <input type="checkbox"/> Housing and urban planning  <input type="checkbox"/> Transport and mobility    <input checked="" type="checkbox"/> Prevention of ageing         </p> <p>Realistic ICT-based solutions available</p> <p> <input type="checkbox"/> YES    <input checked="" type="checkbox"/> NO         </p>

Summary of exchanges
1. Lack of ICT-based companies' engagement in social care projects; 2. Deficient public support for prevention models (financing models are designed usually to act too late); 3. Lack of support for innovative projects.
Action items that might contribute to solve or help minimizing the need

TABLE 5.1: Change Resistance
Description
Companies and public entities aren't enough motivated to work with social entities in innovative projects.
Characterization
Nature of need: <input checked="" type="checkbox"/> Ethical/legal <input checked="" type="checkbox"/> Financing <input checked="" type="checkbox"/> Market demand <input checked="" type="checkbox"/> Maturity of ICT solutions <input checked="" type="checkbox"/> Social sciences <input checked="" type="checkbox"/> Technology <input type="checkbox"/> Other: _____
Sectors affected: <input checked="" type="checkbox"/> Health and social care <input checked="" type="checkbox"/> Autonomy/homecare <input type="checkbox"/> Housing and urban planning <input type="checkbox"/> Transport and mobility <input checked="" type="checkbox"/> Prevention of ageing
Realistic ICT-based solutions available <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
Summary of exchanges
1. Lack of Benefit/Value perception of ICT-based solutions; 2. Rigid financing model where disease treatment prevails over prevention; 3. Lack of multidisciplinary teams.

Action items that might contribute to solve or help minimizing the need

## CONCLUSIONS

Summary of conclusions of the session

We can find some main common actions that participants defined to address their challenges:

Promote better marketing studies and campaigns;

Measure your market and your product;

Influence organizations, agents and consumers to new practices and to welcome innovation;

Search for standardization on products interfaces, usability and information exchange;

Promote open relationship between institutions, official agents and legal support;

Maximize diversity on customers and funding sources.

## OTHER COMMENTS AND REMARKS

Description of the session as a whole (opinion of organizers) (free text)

*How it went, how productive it was, suggestions for future ones*

We found difficult to engage the participants in active and construction discussions, in the first moment, due to the enlarged participation and diversity of actors attending.

Nevertheless, it was possible to stimulate debates in the tables but only in a single round.

At the middle of the session, most of the groups weren't converging to needs/barriers and only after some support from the organizing team was possible to elaborate conclusions.

Probably, it would be important to further debate some of the topics with a subset of participants.

We provided a relaxed, participated and productive environment, stimulating and allowing the participants to expose freely their insights.

All participants found the initiative and the project relevant and are looking forward to future developments.

#### VI.IV. UBI Covilhã

GT1: Intersectorial and transnational cross-fertilization for better exploitation of ICT key enabling technologies to meet the challenges of the silver economy

### NEEDS COLLECTION: ROUND-TABLES (RTs)

Reporting template for each session

#### GENERAL INFORMATION

Region		
<input type="checkbox"/> Aquitaine <input type="checkbox"/> Limoges <input type="checkbox"/> Basque Country <input type="checkbox"/> Catalunya <input checked="" type="checkbox"/> Portugal		
Place	Date	Duration
Universidade da Beira Interior – Departamento de Informática	2016-12-18	3:00
Name of host and entity	Name of facilitator and entity	
Pedro Roseiro – TICE.PT	Vasco Lagarto – TICE.PT	
Total number of attendees	Number of attendees per represented organizations	
11	SME: 1                      Start up: Large company: Public body: 5              R&D entity: 1 Association: 1              Insurance Group: Cluster: 3                    Investors:	

#### CONTENT OF THE SESSION

##### COLLECTION OF TOPICS FOR DISCUSSION

List of proposed topics
<ul style="list-style-type: none"> <li>• Poor design;</li> <li>• Lack of Qualified Human Resources;</li> <li>• R&amp;D results don't get to the market;</li> <li>• Lack of Post-Sale Services and Support to ICT-based products;</li> </ul>

- Elderly profile diversity;
- Caregivers need to introduce innovation on their services;
- Senior tourism obstacles;
- Building Environment.

Photo of topics collection board



## WORKSHOP 1: DISCUSSION

TABLE 1.1: Poor design
Description
Devices aren't designed with extensive cooperation of end-users and carers and that can lead to design flaws and deficient material selection.
Characterization
<p>Nature of need:</p> <p> <input type="checkbox"/> Ethical/legal    <input type="checkbox"/> Financing    <input type="checkbox"/> Market demand    <input type="checkbox"/> Maturity of ICT solutions  <input type="checkbox"/> Social sciences    <input checked="" type="checkbox"/> Technology    <input type="checkbox"/> Other: _____         </p> <p>Sectors affected:</p> <p> <input checked="" type="checkbox"/> Health and social care    <input checked="" type="checkbox"/> Autonomy/homecare    <input type="checkbox"/> Housing and urban planning  <input type="checkbox"/> Transport and mobility    <input type="checkbox"/> Prevention of ageing         </p> <p>Realistic ICT-based solutions available</p> <p> <input type="checkbox"/> YES    <input checked="" type="checkbox"/> NO         </p>
Summary of exchanges
<p>Devices aren't designed with extensive cooperation of end-users and carers and that can lead to design flaws and deficient material selection.</p> <p>For instance, wheel chairs should be designed also to prevent falls (in most cases, balance is not sufficiently valued in design and situation like raising up generate a high number of falls) and to better support hygienization.</p>
Action items that might contribute to solve or help minimizing the need
<ol style="list-style-type: none"> <li>4. Promote enlarge cooperation among product development companies (and R&amp;D) with carers;</li> <li>5. Develop and test new materials;</li> <li>6. Assess usability in different scenarios;</li> </ol>

TABLE 2.1: Lack of Qualified Human Resources	
Description	
It's hard to find Human Resources with adequate training for elderly care.	
Characterization	
<p>Nature of need:</p> <p> <input type="checkbox"/> Ethical/legal    <input type="checkbox"/> Financing    <input type="checkbox"/> Market demand    <input type="checkbox"/> Maturity of ICT solutions  <input checked="" type="checkbox"/> Social sciences    <input type="checkbox"/> Technology    <input type="checkbox"/> Other: _____         </p> <p>Sectors affected:</p> <p> <input checked="" type="checkbox"/> Health and social care    <input checked="" type="checkbox"/> Autonomy/homecare    <input type="checkbox"/> Housing and urban planning  <input type="checkbox"/> Transport and mobility    <input type="checkbox"/> Prevention of ageing         </p> <p>Realistic ICT-based solutions available</p> <p> <input checked="" type="checkbox"/> YES    <input type="checkbox"/> NO         </p>	
Summary of exchanges	
It's hard to find skilled human resources for elderly care (multidisciplinary).	
Action items that might contribute to solve or help minimizing the need	
<ol style="list-style-type: none"> <li>1. Work in close cooperation with Universities and Professional Schools;</li> <li>2. Reinforce internship programs;</li> <li>3. Launch re-qualification initiatives (tackles unemployment and ensures new people to work)</li> </ol>	

TABLE 3.1: R&D results don't get to the market
Description
There were relevant investments in ICT medical devices (especially in EU funded projects) but solutions/products/prototypes – in many situations – don't attain a relevant commercial exploitation.
Characterization
<p>Nature of need:</p> <p> <input type="checkbox"/> Ethical/legal    <input type="checkbox"/> Financing    <input checked="" type="checkbox"/> Market demand    <input checked="" type="checkbox"/> Maturity of ICT solutions  <input type="checkbox"/> Social sciences    <input type="checkbox"/> Technology    <input type="checkbox"/> Other: _____         </p> <p>Sectors affected:</p> <p> <input checked="" type="checkbox"/> Health and social care    <input checked="" type="checkbox"/> Autonomy/homecare    <input type="checkbox"/> Housing and urban planning  <input type="checkbox"/> Transport and mobility    <input type="checkbox"/> Prevention of ageing         </p> <p>Realistic ICT-based solutions available</p> <p> <input type="checkbox"/> YES    <input checked="" type="checkbox"/> NO         </p>
Summary of exchanges
There isn't enough engagement among companies, R&D, Universities and elderly care entities during product development. Products usually aren't adapted to usage in real-life scenarios and lack effective business models.
Action items that might contribute to solve or help minimizing the need
<ol style="list-style-type: none"> <li>1. Reinforce cooperation among different actors, including joint labs based at R&amp;D centres, product development companies and elderly care institutions;</li> <li>2. Field validation;</li> <li>3. Including elderly care financing entities in product development;</li> </ol>



TABLE 4.1: Lack of Post-Sale Services and Support to ICT-based products
Description
There were relevant investments in ICT medical devices (especially in EU funded projects) but solutions/products/prototypes – in many situations – don't attain a relevant commercial exploitation.
Characterization
<p>Nature of need:</p> <p> <input type="checkbox"/> Ethical/legal    <input type="checkbox"/> Financing    <input checked="" type="checkbox"/> Market demand    <input checked="" type="checkbox"/> Maturity of ICT solutions  <input type="checkbox"/> Social sciences    <input type="checkbox"/> Technology    <input type="checkbox"/> Other: _____ </p> <p>Sectors affected:</p> <p> <input checked="" type="checkbox"/> Health and social care    <input checked="" type="checkbox"/> Autonomy/homecare    <input type="checkbox"/> Housing and urban planning  <input type="checkbox"/> Transport and mobility    <input type="checkbox"/> Prevention of ageing </p> <p>Realistic ICT-based solutions available</p> <p> <input type="checkbox"/> YES    <input checked="" type="checkbox"/> NO </p>
Summary of exchanges
<p>In many cases, companies don't establish an effective post-sale service. They don't present evolutions and don't offer technical assistance to their equipment.</p> <p>This creates trust problems even for other suppliers.</p>
Action items that might contribute to solve or help minimizing the need
<ol style="list-style-type: none"> <li>1. Reinforce support to innovative companies, especially on the definition of the full value chain of their products and services, finding adequate market channels and partners;</li> <li>2. Reinforce the importance of maintenance and post-sale support.</li> </ol>

TABLE 5.1: Elderly profile diversification
<b>Description</b>
The actual elderly profile is heterogeneous and very different from recent years' perspectives.
<b>Characterization</b>
<p>Nature of need:</p> <p> <input checked="" type="checkbox"/> Ethical/legal    <input type="checkbox"/> Financing    <input type="checkbox"/> Market demand    <input type="checkbox"/> Maturity of ICT solutions  <input checked="" type="checkbox"/> Social sciences    <input type="checkbox"/> Technology    <input type="checkbox"/> Other: _____ </p> <p>Sectors affected:</p> <p> <input checked="" type="checkbox"/> Health and social care    <input checked="" type="checkbox"/> Autonomy/homecare    <input type="checkbox"/> Housing and urban planning  <input type="checkbox"/> Transport and mobility    <input type="checkbox"/> Prevention of ageing </p> <p>Realistic ICT-based solutions available</p> <p> <input type="checkbox"/> YES    <input checked="" type="checkbox"/> NO </p>
<b>Summary of exchanges</b>
<ol style="list-style-type: none"> <li>1. Elderly people are each day more prone to use ICT products and services;</li> <li>2. Elderly people are looking for non-traditional activities and to live in a more autonomous way creating needs (mobility, tourism, ...);</li> <li>3. Some people to avoid loneliness seek for institutional support before retirement age.</li> </ol>
<b>Action items that might contribute to solve or help minimizing the need</b>
<ol style="list-style-type: none"> <li>1. Senior Residences services should consider this new challenges and opportunities;</li> <li>2. Reinforce support to leisure autonomous activities;</li> <li>3. Work with Public entities (licensing) to easier check-in of pre-retirement age people.</li> </ol>

TABLE 6.1: Caregivers need to introduce innovation on their services	
Description	
There is a relevant demand for senior residences but also an increasing offer.	
Characterization	
<p>Nature of need:</p> <p> <input checked="" type="checkbox"/> Ethical/legal              <input type="checkbox"/> Financing              <input type="checkbox"/> Market demand              <input type="checkbox"/> Maturity of ICT solutions  <input type="checkbox"/> Social sciences    <input type="checkbox"/> Technology    <input type="checkbox"/> Other: _____         </p> <p>Sectors affected:</p> <p> <input checked="" type="checkbox"/> Health and social care    <input checked="" type="checkbox"/> Autonomy/homecare    <input type="checkbox"/> Housing and urban planning  <input type="checkbox"/> Transport and mobility    <input type="checkbox"/> Prevention of ageing         </p> <p>Realistic ICT-based solutions available</p> <p> <input type="checkbox"/> YES    <input checked="" type="checkbox"/> NO         </p>	
Summary of exchanges	
<ol style="list-style-type: none"> <li>1. Legal and Regulatory Barriers (e.g. licensing);</li> <li>2. Outdated processes in public authorities (require paper forms and reject digital information exchange);</li> <li>3. Excessive regulatory burden (e.g. they are used to require institutions to own Vans and don't easily accept that people prefer to rent on a usage basis a car to transport individuals)</li> </ol>	
Action items that might contribute to solve or help minimizing the need	
Work closely with financing and licensing public authorities.	

TABLE 7.1: Senior tourism obstacles
<b>Description</b>
When foreigners want to move to Portugal after retirement (permanently) usually when they use public health system services (e.g. hospital) they face difficulties once they aren't considered as tourists (European Health Insurance Card is not applicable when they move permanently)
<b>Characterization</b>
<p>Nature of need:</p> <p> <input checked="" type="checkbox"/> Ethical/legal    <input type="checkbox"/> Financing    <input type="checkbox"/> Market demand    <input type="checkbox"/> Maturity of ICT solutions  <input type="checkbox"/> Social sciences    <input checked="" type="checkbox"/> Technology    <input type="checkbox"/> Other: _____         </p> <p>Sectors affected:</p> <p> <input checked="" type="checkbox"/> Health and social care    <input type="checkbox"/> Autonomy/homecare    <input type="checkbox"/> Housing and urban planning  <input type="checkbox"/> Transport and mobility    <input type="checkbox"/> Prevention of ageing         </p> <p>Realistic ICT-based solutions available</p> <p> <input type="checkbox"/> YES    <input checked="" type="checkbox"/> NO         </p>
<b>Summary of exchanges</b>
<ol style="list-style-type: none"> <li>1. Public health system access;</li> <li>2. Lack of integrated specific touristic offer for seniors;</li> <li>3. Human Resources need specialized training;</li> </ol>
<b>Action items that might contribute to solve or help minimizing the need</b>
<ol style="list-style-type: none"> <li>1. Present the barriers to Health/Social Welfare public authorities;</li> <li>2. Work with regional touristic entities to design integrated programs (including hotels, SPA, thermal entities, ...)</li> </ol>

TABLE 8.1: Building environment
Description
Characterization
<p>Nature of need:</p> <p> <input type="checkbox"/> Ethical/legal    <input type="checkbox"/> Financing    <input type="checkbox"/> Market demand    <input type="checkbox"/> Maturity of ICT solutions  <input type="checkbox"/> Social sciences    <input checked="" type="checkbox"/> Technology    <input type="checkbox"/> Other: _____         </p> <p>Sectors affected:</p> <p> <input checked="" type="checkbox"/> Health and social care    <input checked="" type="checkbox"/> Autonomy/homecare    <input checked="" type="checkbox"/> Housing and urban planning  <input type="checkbox"/> Transport and mobility    <input type="checkbox"/> Prevention of ageing         </p> <p>Realistic ICT-based solutions available</p> <p> <input checked="" type="checkbox"/> YES    <input type="checkbox"/> NO         </p>
Summary of exchanges
Buildings aren't designed to support the requirements of elderly. For instance, in terms of ICT usage, they should favour an easy integration of IoT devices without creating people's disturbance. They should also consider sustainability and clean energies usage.
Action items that might contribute to solve or help minimizing the need
Work in close cooperation with construction/materials clusters

## CONCLUSIONS

### Summary of conclusions of the session

Due to the limited number of SE actors present at the room, we were forced to change the approach slightly, creating a debate among all the participants (especially those that aren't related to TICE.PT and IPCA).

Nevertheless, it was possible to collect requirements and needs with emphasis in private sector business model for senior residences. One of the participants is used to work in close cooperation with R&D and innovative companies in product development and validation and presented his availability to cooperate in the project next phase.

We can find some relevant actions participants defined to address challenges:

1. Influence organizations, agents and consumers to new practices and to welcome innovation;
2. Search for standardization on products interfaces, usability and information exchange;
3. Promote open relationship between institutions, official agents and legal support;
4. Maximize diversity on customers and funding sources;
5. Promote human resources specialized training;
6. Works with public entities to simplify licensing (especially when dealing with different user populations and in making possible foreign citizens living in Portugal to access public health services).

## OTHER COMMENTS AND REMARKS

### Description of the session as a whole (opinion of organizers) (free text)

*How it went, how productive it was, suggestions for future ones*

We found difficult to engage the participants in active and construction discussions, in the first moment, due to reduced participation. Nevertheless, it was possible to debate several topics of the participants interest, mainly from a private sector perspective.

We provided a relaxed, participated and productive environment, stimulating and allowing the participants to expose freely their insights.

All participants found the initiative and the project relevant and are looking forward to future developments.

Spain

VI.V. Bilbao

GT1: Intersectorial and transnational cross-fertilization for better exploitation of ICT key enabling technologies to meet the challenges of the the Silver Economy

NEEDS COLLECTION: ROUND-TABLES (RT2)

Reporting template for each session

GENERAL INFORMATION

Region		
<input type="checkbox"/> Aquitaine <input type="checkbox"/> Limoges <input checked="" type="checkbox"/> Basque Country <input type="checkbox"/> Catalunya <input type="checkbox"/> Portugal		
Place	Date	Duration
BILBAO	16/01/2017	3 HOURS
Name of host and entity	Name of facilitator and entity	
HOME CARE LAB S.COOP – ITZIAR ALVAREZ	TECNALIA- XABIER	
Total number of attendees	Number of attendees per represented organizations	
34	SME: 16                      Start up: Large company: 1                      Tel-Co: 1 Public body: 8                      R&D entity: 7 (2 from University) Association: 1                      Insurance Group: Cluster:                      Investors:	



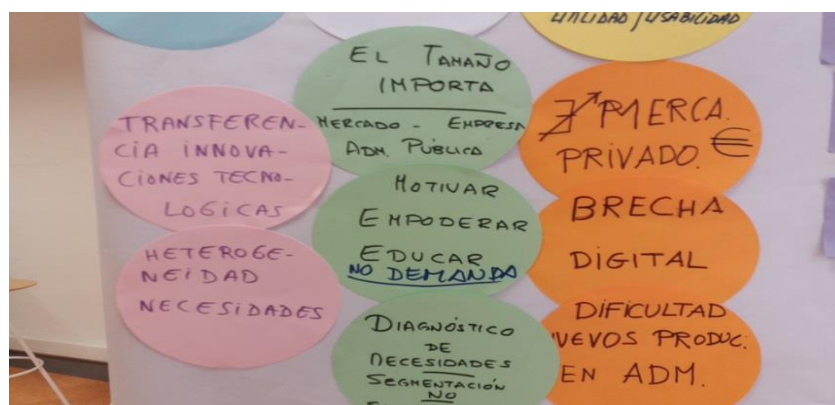
## CONTENT OF THE SESSION

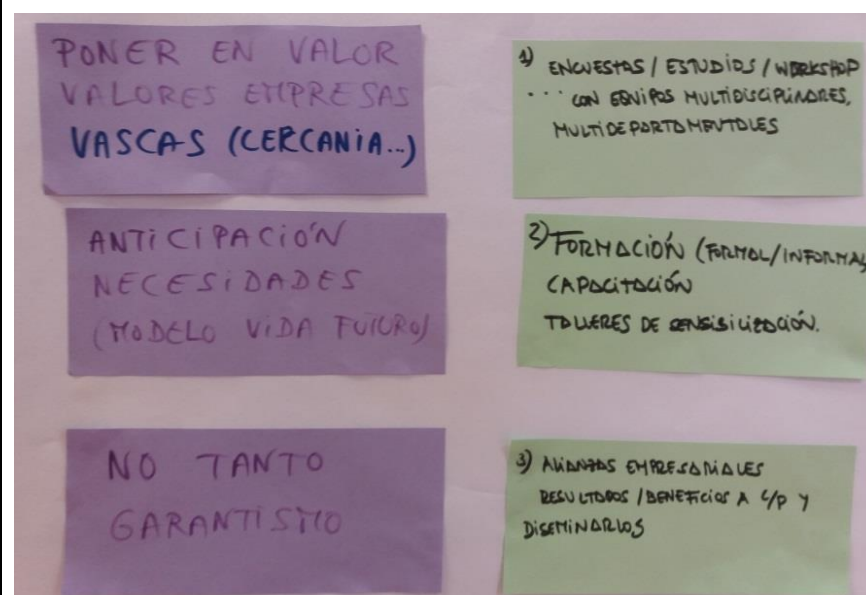
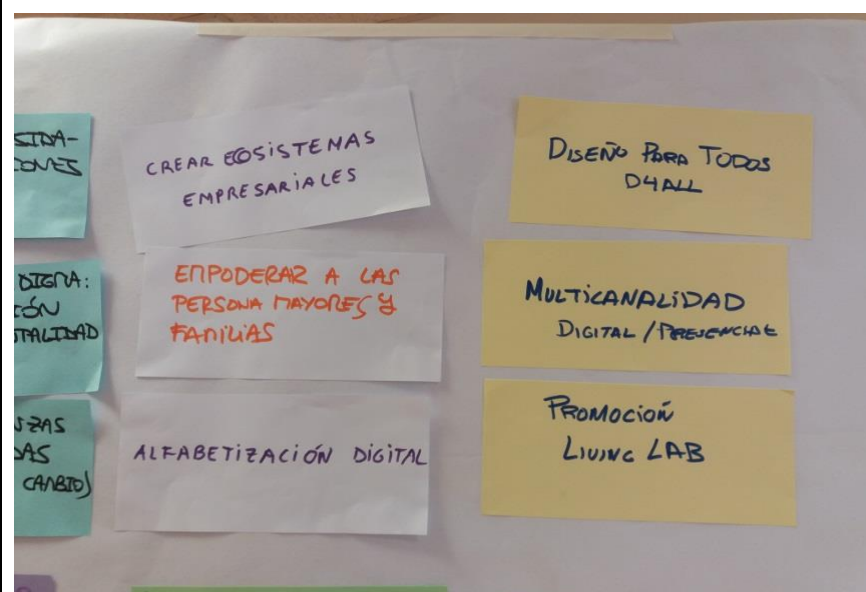
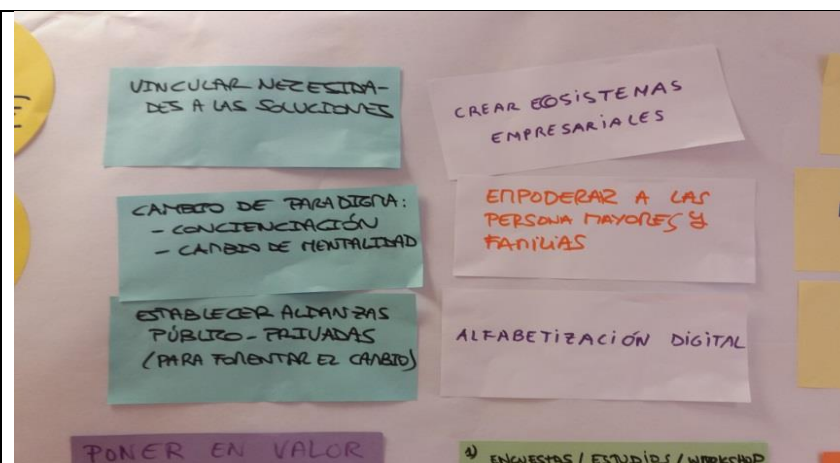
### COLLECTION OF TOPICS FOR DISCUSSION

List of proposed topics

DIGITAL DIVIDE, A PRIVATE MARKET CREATION , USER NEEDS AWARENESS, R&D & TECHNOLOGY TRANSFER TO MARKET, INVESTMENT RETURN, SOCIO-SANITARY COORDINATION, LEGAL & REGULATORY FRAMEWORKS, EMPOWERMENT OF THE ELDERLY AND THEIR FAMILIES, SERVICE OFFERS, FUNCTIONALITIES, THE SILVER ECONOMY

Photo of topics collection board,





## WORKSHOP 2: DISCUSSION

TABLE 2.1: DIGITAL GAP
<p>Description</p> <p>The technological growth of the ICTs has been so rapid within the last few years that it is becoming difficult to keep it in line. The ICT's language is not the natural language for the majority of the SE and we need to overcome this barrier. There is a discrepancy not only within the access to the ICT's but on the use of Internet as well. The use of the ICT's is complex from one side of the SE and demands a learning process.</p> <p>The ICT sector develops very rapidly and this makes being up to date in digital skills even more difficult.</p>
<p>Characterization</p> <p>Nature of need:</p> <p> <input type="checkbox"/> Ethical/legal    <input type="checkbox"/> Financing    <input type="checkbox"/> Market demand    <input type="checkbox"/> Maturity of ICT solutions  <input checked="" type="checkbox"/> Social sciences    <input type="checkbox"/> Technology    <input type="checkbox"/> Other: _____         </p> <p>Sectors affected:</p> <p> <input checked="" type="checkbox"/> Health and social care    <input checked="" type="checkbox"/> Autonomy/homecare    <input checked="" type="checkbox"/> Housing and urban planning  <input type="checkbox"/> Transport and mobility    <input checked="" type="checkbox"/> Prevention of ageing         </p> <p>Realistic ICT-based solutions available</p> <p> <input type="checkbox"/> YES    <input type="checkbox"/> NO         </p>
<p>Summary of exchanges</p> <p>Technology is difficult for people that have grown up and lived with TV and radio. The Ict's language is not a natural language for this population group and thus does not have a technology use culture and even the change from one mobile to another becomes a hassle. This hinders their knowledge of the existing technologies and solutions.</p>

But it is also said that the elderly people that already use technology are real fans and use them daily in their lives. That is to say, there are also the Silver Economy people that already use them, although the general consensus is that this segment is a minority

We also need to take into account that from a particular age on the learning capacity diminishes. Furthermore, in the case of dementia, people are incapable of using technology

The technological progress in this area is so enormous and occurs so often that even the youngest part of the Silver Economy struggle to keep up with its learning process

There is also a resistance to the use of technology by the professionals of certain sectors. The Basque Government is aware of this issue and has developed a “Basque Digital Diary” that includes the development of ICTs professional profiles across all sectors

What’s more, there is an opposition to the use of ICTs even from many companies and public entities. Due to this we understand that when we speak of digital divide, we are talking about a digital culture knowledge gap beyond 2 levels

1. One related to the use of devices
2. One related to the potential of different apps: have a good understanding of what each app allows me to do and what for

#### Action items that might contribute to solve or help minimizing the need

1. Different awareness campaigns and workshops about:

- The importance of acquiring digital competences
- Added value offering
- The consequences of not acquiring digital competences
- ...

2. Digital training (digital literacy). Users and professionals alike

3. Lifelong Continuing education, since technological progress will keep on happening.

4. Official certificates on ICT professionals’ development across the different sectors, as it has been implemented by the Government

5. Motivate, Train and create a culture within the elderly -in a nutshell- on the advantages of using technology and so improve their lifestyle

6. Health professionals tailored training on the different solutions being implemented in the system

**TABLE 2.2: THE CREATION OF A PRIVATE MARKET**

Description

Within this requirement we focus chiefly in the social-sanitary field

The need to develop a private market, currently inexistent, is mentioned so as to increase market demand

The market is currently characterised by a great activity of the public customer and little participation of the private customer

The public customer disposes of a service portfolio and a list of products financed almost by 100%. There is a small co-payment percentage in some of the services, although residual and of rare occurrence

Characterization

Nature of need:

- ☐ Ethical/legal    ☐ Financing    ☒ Market demand    ☐ Maturity of ICT solutions  
☒ Social sciences    ☐ Technology    ☐ Other: \_\_\_\_\_

Sectors affected:

- ☒ Health and social care    ☒ Autonomy/homecare    ☐ Housing and urban planning  
☐ Transport and mobility    ☒ Prevention of ageing

Realistic ICT-based solutions available

- ☐ YES    ☐ NO

Summary of exchanges

At present the market is fulfilled with nearly exclusively a single customer: the public administration. There is also a great difficulty in incorporating new products/services in the public catalogue. As a consequence of this behaviour, there is an inherent culture where users feel the Administration needs to deliver all the services, therefore hampering the creation of a private market in the SE. In this way, users do not have the products & services co-payment culture assimilated. As soon as users have the need, they focus on the public Administration and in their minds buying the service/product in the private market is not an option.

Furthermore, should they want to do it, they will encounter high cost solutions, which means that in order to access them you must have an important economic status

We must define what type of society we would like to have: protectionist/liberal

This situation implies that all new services/products must be offered to the public Administration and the latter then decides what novelties are included in their service catalogue. In so doing the technology transfer and innovation implementation becomes easier (or not) according to how pioneering that Administration is

Since no private market exists, there are a lot of ongoing projects, but badly coordinated with each other. We sometimes even come across initiatives that get repeated

There is also a strong lack of awareness of the existing bodies promoting these entities

The high cost of the Internet in Spain is also mentioned, thus maybe becoming a barrier for the users of The Silver Economy

Action items that might contribute to solve or help minimizing the need

11. Conduct a social debate about the future care model: what do we need to do to assist people better and more efficiently
12. Think about possible public-private alliances to reinforce the development of this sector
13. Develop an innovative public procurement law that will allow the implementation of the innovation achieved by companies within the sector
14. Creation of an ecosystem that embodies the different agents working in the Silver Economy sector
15. Change of paradigm necessity awareness campaigns & workshops, which will mean a cultural and mind set change especially across users. This implies mainly a user empowerment
16. Via Marketing create a culture of necessity of this particular product, thus also creating a spending culture on them
17. Rethink a lot of the services, taking into consideration the use of technology
18. Create testing technological environments where the elderly can use and learn about the different solutions/products
19. Define a universal catalogue of solutions known by all agents working in the socio-sanitary field

20. Think about a useful , affordable and user friendly technology which will help the creation of this private market
21. Reduce the Internet connection cost of the telecomm companies

**TABLE 2.3: USER NEEDS' AWARENESS**

**Description**

A heterogeneity of needs and situations can be found across the users that make up the SE.

The following segmentation could be carried out, where the profiles, and therefore their needs, are different:

- People aged between 50-65, self-sufficient and active
- People aged between 65-80, Professional retirement time. Kept relatively active and self-sufficient
- People over 80 years old. With more care needs

We must find out clearly what the needs from the SE people are

**Characterization**

Nature of need:

- ☒ Ethical/legal    ☐ Financing    ☒ Market demand    ☐ Maturity of ICT solutions  
☐ Social sciences    ☐ Technology    ☐ Other: \_\_\_\_\_

Sectors affected:

- ☒ Health and social care    ☒ Autonomy/homecare    ☒ Housing and urban planning  
☒ Transport and mobility    ☒ Prevention of ageing

Realistic ICT-based solutions available

- ☐ YES    ☐ NO

Summary of exchanges
<p>ICT companies work for multiple sectors and are unaware of the needs of these users. They have to focus on the sector in order to have a deeper knowledge of the users' requirements, as well as to include not only the users, but their stakeholders during the different solutions design stages</p> <p>Within this new products &amp; solutions - based on the detected needs- creation process, it is key to question the users about what life model they would like to see in their future</p> <p>Sometimes product development outpaces needs, and when pilot projects are carried out their inefficacy to cover real needs is evident. Furthermore, technological developments very often offer more functionalities than needed by the particular collective. This can make the solutions more difficult in terms of usability, practicality etc.</p>
Action items that might contribute to solve or help minimizing the need
<p>3- Complete a needs analysis by segmentation -not demographically- in light of the heterogeneity of necessities</p> <p>4- Organise Events involving users, by creating friendly environments where the elderly can open themselves and express their needs</p> <p>5- Once the social debate is launched, generate frequent meetings with people from the Silver Economy so as to foresee the users' needs</p>

TABLE 2.4: R+D AND TECHNOLOGICAL TRANSFER TO THE MARKET
Description
The companies innovation and development cycles are long compared to blue chip companies. This makes us less competitive
Characterization
<p>Nature of need:</p> <p> <input type="checkbox"/> Ethical/legal    <input type="checkbox"/> Financing    <input type="checkbox"/> Market demand    <input type="checkbox"/> Maturity of ICT solutions  <input type="checkbox"/> Social sciences    <input checked="" type="checkbox"/> Technology    <input type="checkbox"/> Other: _____         </p> <p>Sectors affected:</p> <p> <input checked="" type="checkbox"/> Health and social care    <input checked="" type="checkbox"/> Autonomy/homecare    <input checked="" type="checkbox"/> Housing and urban planning  <input checked="" type="checkbox"/> Transport and mobility    <input checked="" type="checkbox"/> Prevention of ageing         </p>



Realistic ICT-based solutions available

☒ YES ☐ NO

#### Summary of exchanges

Our innovation cycles should be shorter and we should be able to develop technology at a lower cost. Large companies have advantages in both fields and it is difficult to compete with them.

Perhaps it is important to understand that large companies are not interested in a niche market like The Silver Economy and are more interested in more horizontal markets.

Companies can not think in the local market only, but should think globally. What is imperative is that companies may conduct pilot testing for technology assessment at the local level. That is why it is important to collaborate with the public administration, to be able to launch pilots who can validate the technology and obtain market references.

#### Action items that might contribute to solve or help minimizing the need

1. To value the existing experience on the part of the Basque business material in other sectors.
2. Look for collaborative relationships with large companies
3. Look for ways to co-operate with local companies, looking for synergies that add up to the market.
4. Continue to carry out pilot projects to test the suitability of the technology.
5. Seek for coordination between the different agents that serve and develop technology and improve knowledge in this sector. Also, the creation of an ecosystem that allows collaborating on common initiatives for this sector.

**TABLE 2.5: RETURN OF INVESTMENT**

#### Description

The efficiency of investing in ICTs must be verified, so that the different stakeholders are interested in carrying out its implementation.

#### Characterization

Nature of need:

- ☐ Ethical/legal   ☒ Financing   ☐ Market demand   ☐ Maturity of ICT solutions  
☐ Social sciences   ☐ Technology   ☐ Other: \_\_\_\_\_

Sectors affected:

- ☒ Health and social care   ☐ Autonomy/homecare   ☐ Housing and urban planning  
☐ Transport and mobility   ☐ Prevention of ageing

Realistic ICT-based solutions available

- ☐ YES   ☐ NO

#### Summary of exchanges

It is not so clear that ICTs are made to economise, because in the short term ICTs are a large investment, but perhaps the savings they produce can be tested in the long term. This makes it difficult for the client to be motivated to implement them.

Usually, the public administration thinks in terms of four years and does not develop plans in the longer term, which makes it very difficult to prove that ICTs generate efficiencies.

The administration understands that there must be a substitution of the expenditure, either it gains in efficiency or the same amount is spent with benefits of greater added value

Knowing that ICTs actually achieve efficiencies, we must think about the business models approach that contemplates such requirement. It is usually possible to pilot a new product, but when it comes to scaling that product / service, the answer is that the return on investment is not clear.

#### Action items that might contribute to solve or help minimizing the need

1. Dissemination of the results of the trials carried out
2. Create new business models that contemplate how to break this barrier, such as risk sharing, payment according to results, etc.
3. Work with the client from the beginning, in determining what results are the ones they are looking for, in order to implement the solution that attains such result.

4. Benchmarking with other markets in which this problem is similar, so that it may be possible to identify new solutions

**TABLE 2.6: SOCIO-SANITARY COORDINATION**

**Description**

Putting the patient at the center of the ecosystem is discussed, in order to achieve a continuum in their care. However, the needs of health and social needs are addressed from two different government departments, each with different budgets, different service portfolios, etc.

**Characterization**

Nature of need:

☒ Ethical/legal    ☒ Financing    ☐ Market demand    ☐ Maturity of ICT solutions  
☒ Social sciences    ☐ Technology    ☐ Other: \_\_\_\_\_

Sectors affected:

☒ Health and social care    ☒ Autonomy/homecare    ☐ Housing and urban planning  
☐ Transport and mobility    ☐ Prevention of ageing

Realistic ICT-based solutions available

☐ YES    ☐ NO

**Summary of exchanges**

Even within the Government there is a discussion on whether there is a necessity to give continuous care to users, or to provide an integrated care and hence whether there is a need for a socio-sanitary coordination. Yet, the socio-sanitary collaboration reveals itself as one of the strategically valued projects (chronicity, old age and dependency), as highlighted by the Department of Health.

The Basque Council for Socio-Sanitary Care is the body that puts together, at the regional level, the cooperation and coordination between the Basque Social Services System and the Basque Health System.

Given that at the present time it depends on two different departments with different budgets, the information is scattered, the actions are independent, and also the purchasing decisions are independent.

The objectives to promote and to provide a socio-sanitary coordination include common definitions and goals, while encouraging the collaboration among professionals in all sectors by carrying out Intersectoral Working projects.

The Basque Country has chosen a model of coordination between all relevant institutions in that field, based on the harmonization of the respective policies.

The economic situation is also helping in the search for synergies and alignment of objectives between the Department of Health and Employment and the Department of Social Policies with the resulting institutional deployment as a priority. In this sense, the existence of a Framework Document for the making up of guidelines in Socio-sanitary Care is considered an important milestone.

The health system is more outstanding with regard to the use of technology, especially in matters of surgery and diagnosis. In fact, one of the hallmarks of a hospital is its technology level. On the contrary, in the welfare system the use of technology is not so common and it is still facing some degree of development to carry out the delivery of some services based on technology.

#### Action items that might contribute to solve or help minimizing the need

1. To promote discussion forums and knowledge sharing so as to develop cooperation in order to continue with the development of this new area.
2. To share models, training and to promote core initiatives incorporating tele-monitoring technologies such as BETION, are also mentioned as key elements that will drive the deployment of both the health and the social strategic models.
3. To promote joint R & D projects.
4. To boost Socio- sanitary medical records
5. To develop assessment tools with fields valid for both areas
6. To conduct model projects that involve both the health and the social fields.

TABLE 2.7: LEGAL AND REGULATORY ISSUES
Description
The health and social sectors are highly regulated, with countless legal and standardisation requirements and certifications.
Characterization
<p>Nature of need:</p> <p> <input checked="" type="checkbox"/> Ethical/legal    <input type="checkbox"/> Financing    <input type="checkbox"/> Market demand    <input type="checkbox"/> Maturity of ICT solutions  <input type="checkbox"/> Social sciences    <input type="checkbox"/> Technology    <input type="checkbox"/> Other: _____         </p> <p>Sectors affected:</p> <p> <input checked="" type="checkbox"/> Health and social care    <input checked="" type="checkbox"/> Autonomy/homecare    <input type="checkbox"/> Housing and urban planning  <input type="checkbox"/> Transport and mobility    <input checked="" type="checkbox"/> Prevention of ageing         </p> <p>Realistic ICT-based solutions available</p> <p> <input type="checkbox"/> YES    <input type="checkbox"/> NO         </p>
Summary of exchanges
<p>Standardisation and product certifications are costly, both in time and resources. For an SME this is an added barrier.</p> <p>All data contained in a health report, in medical records and EHR are sensitive personal data. This is governed by the Data Protection Act (LOPD). Likewise citizens are increasingly aware of the use that is given to their data and are much more demanding with the protection of their data by both the Public and the Private administrations.</p> <p>The data protection Act also involves limitations on information sharing between the health and the social sectors. Problems exist when applying confidentiality to some of the data.</p>
Action items that might contribute to solve or help minimizing the need
<p>1. Attempting to lobby European legislation</p> <p>2. Attempting to lobby Spanish legislation</p>

TABLE 2.8: EMPOWERING ELDERS AND THEIR FAMILIES
Description
A shift in paradigm must be made so that people are responsible for their self-care.
Characterization
<p>Nature of need:</p> <p> <input type="checkbox"/> Ethical/legal    <input type="checkbox"/> Financing    <input type="checkbox"/> Market demand    <input type="checkbox"/> Maturity of ICT solutions  <input checked="" type="checkbox"/> Social sciences    <input type="checkbox"/> Technology    <input type="checkbox"/> Other: _____         </p> <p>Sectors affected:</p> <p> <input checked="" type="checkbox"/> Health and social care    <input type="checkbox"/> Autonomy/homecare    <input type="checkbox"/> Housing and urban planning  <input type="checkbox"/> Transport and mobility    <input type="checkbox"/> Prevention of ageing         </p> <p>Realistic ICT-based solutions available</p> <p> <input type="checkbox"/> YES    <input type="checkbox"/> NO         </p>
Summary of exchanges
<p>It is necessary to bring about collective consciousness changes, so that each person is responsible for their care. It is necessary that the user will be responsible and will take part in the management of their health. Right now when a person has a problem he/she expects the administration to solve it. In the welfare and health sector a lot is taken for granted. But to attain this goal, it is also important for the administration to change its discourse.</p> <p>People are usually afraid of changes; we must work hard on awareness and training.</p> <p>Start to talk more about health promotion and also more on the younger fraction of the Silver Economy.</p>
Action items that might contribute to solve or help minimizing the need
<ol style="list-style-type: none"> <li>1. The different agents have a great capacity to generate confidence and from that point on , to gradually change the culture.</li> <li>2. Change to a less paternalistic model, so that the patient can participate in it.</li> <li>3. Measure the added value that empowerment can deliver.</li> <li>4. Awareness Campaigns.</li> <li>5. Provide information and training to the user and their families.</li> </ol>

TABLE 2.9: INTEROPERABILITY
<b>Description</b>
We are in a "Tower of Babel" in which different systems speak different languages, thus making communication and interaction difficult. It is difficult to share data and information in order to achieve greater efficiencies.
<b>Characterization</b>
<p>Nature of need:</p> <p> <input checked="" type="checkbox"/> Ethical/legal    <input type="checkbox"/> Financing    <input type="checkbox"/> Market demand    <input type="checkbox"/> Maturity of ICT solutions  <input type="checkbox"/> Social sciences    <input checked="" type="checkbox"/> Technology    <input type="checkbox"/> Other: _____ </p> <p>Sectors affected:</p> <p> <input checked="" type="checkbox"/> Health and social care    <input checked="" type="checkbox"/> Autonomy/homecare    <input type="checkbox"/> Housing and urban planning  <input type="checkbox"/> Transport and mobility    <input checked="" type="checkbox"/> Prevention of ageing </p> <p>Realistic ICT-based solutions available</p> <p> <input type="checkbox"/> YES    <input type="checkbox"/> NO </p>
<b>Summary of exchanges</b>
<p>The challenge of regional administration in the Basque Country makes it even more difficult. In addition, the organizational structure of the systems has led to a segregation of information systems, which makes increasingly important the sharing of clinical records between them. There are countless benefits to care quality when the right information at the right time is obtained.</p> <p>Many organizations have systems that either are not connected and work as independent silos or, if they are, are integrated in isolation, without taking into account the overall vision of the organization. Furthermore, we find ad-hoc integrations that do not follow integration standards, and therefore, do not allow their reuse and inter communication with other systems</p> <p>There must be different levels of inter-operability: organizational, semantic, syntactic and technical.</p>

Action items that might contribute to solve or help minimizing the need
<ol style="list-style-type: none"> <li>1. To adopt standards that enable communication between the different health systems.</li> <li>2. To adopt standards that enable the health and the welfare social sectors to link with each other.</li> <li>3. To share procedures, ways of working, technologies and information systems, in order to standardise.</li> <li>4. To implement standards that generate evidence and make the system more efficient.</li> <li>5. To create a position to orchestrate the integration needs, in line with the business processes of the different organizations.</li> </ol>

TABLE 2.10: OFFER SERVICES
<b>Description</b> <p>It is important to offer services and not just technology. This requires the definition of a complete business model in which technology is a part of it</p>
<b>Characterization</b> <p>Nature of need:</p> <p> <input type="checkbox"/> Ethical/legal              <input type="checkbox"/> Financing              <input type="checkbox"/> Market demand              <input type="checkbox"/> Maturity of ICT solutions  <input type="checkbox"/> Social sciences    <input type="checkbox"/> Technology    <input type="checkbox"/> Other: _____         </p> <p>Sectors affected:</p> <p> <input checked="" type="checkbox"/> Health and social care    <input type="checkbox"/> Autonomy/homecare    <input type="checkbox"/> Housing and urban planning  <input checked="" type="checkbox"/> Transport and mobility    <input type="checkbox"/> Prevention of ageing         </p> <p>Realistic ICT-based solutions available</p> <p> <input type="checkbox"/> YES    <input type="checkbox"/> NO         </p>



Summary of exchanges
<p>Technology grants efficiency, but only if it is integrated and adapted in the structural process. It is a fact that if we do not take into account how such technology blends with the end customer; how it interacts with its processes, it will be difficult to convince the customer to implement it.</p> <p>We need to know our client's business very well to see how technology can impact their business. This way we may be able to show them the potential results that could be obtained</p>
Action items that might contribute to solve or help minimizing the need
<p>1.To define possible services to be provided with the use of our technology</p> <p>2. To define multi-channel services: online presence but also human contact points such as the Betion platform (telephone contact center).</p>

TABLE 2.11: FEATURES
Description
Solutions that are transferred to the market usually offer more features than the user really needs.
Characterization
<p>Nature of need:</p> <p> <input type="checkbox"/> Ethical/legal    <input type="checkbox"/> Financing    <input type="checkbox"/> Market demand    <input type="checkbox"/> Maturity of ICT solutions  <input checked="" type="checkbox"/> Social sciences    <input type="checkbox"/> Technology    <input type="checkbox"/> Other: _____         </p> <p>Sectors affected:</p> <p> <input checked="" type="checkbox"/> Health and social care    <input type="checkbox"/> Autonomy/homecare    <input type="checkbox"/> Housing and urban planning  <input type="checkbox"/> Transport and mobility    <input type="checkbox"/> Prevention of ageing         </p> <p>Realistic ICT-based solutions available</p>

☐ YES ☐ NO

#### Summary of exchanges

It is about making user friendly solutions, useful for responding to specific needs, so that the user may see value in those functionalities / solutions.

Often, we develop products without sufficient knowledge on the needs of the user, or without cross-checking the functions with the users and we bring products to the market which are difficult to use and difficult to manage. We know that the same thing happens when we develop technology for professionals.

It would seem that technologies are developed with only young people in mind, and that the focus of the Silver Economy segment is not taken into account.

Many of the developments we make are designs that are not user friendly for older people. They put pressure on their personal situation, and this may embarrass them.

The heterogeneous nature of users within the Silver Economy is very wide.

#### Action items that might contribute to solve or help minimizing the need

1. To include end users in the technology design.
2. To include professional users in the technology design.
3. To correctly identify needs by user segments.
4. To design products that go unnoticed (small, do not draw attention).
5. To design products thinking about the different levels of digital literacy.

**TABLE 2.12: THE SILVER ECONOMY**

#### Description

There is great astonishment among many attendees when they know that the Silver Economy includes 50 year olds. Therefore there is a lack of knowledge about the concept itself and what it encompasses.

Characterization
<p>Nature of need:</p> <p> <input type="checkbox"/> Ethical/legal    <input type="checkbox"/> Financing    <input type="checkbox"/> Market demand    <input type="checkbox"/> Maturity of ICT solutions  <input checked="" type="checkbox"/> Social sciences    <input type="checkbox"/> Technology    <input type="checkbox"/> Other: _____         </p> <p>Sectors affected:</p> <p> <input checked="" type="checkbox"/> Health and social care    <input type="checkbox"/> Autonomy/homecare    <input type="checkbox"/> Housing and urban planning  <input type="checkbox"/> Transport and mobility    <input type="checkbox"/> Prevention of ageing         </p> <p>Realistic ICT-based solutions available</p> <p> <input type="checkbox"/> YES    <input type="checkbox"/> NO         </p>
Summary of exchanges
<p>There is widespread ignorance about the Silver Economy. What it is exactly and what kind of services or products we can include in this sector.</p>
Action items that might contribute to solve or help minimizing the need
<p>1. To clearly define the concept of Silver Economy.</p> <p>2. To define exactly what products / services are included in this expression.</p>

## CONCLUSIONS

Summary of conclusions of the session
<p>I think the Bilbao workshop has been really interesting as we have had the contribution of many remarkable agents that have a great deal to say in this market. There is great interest on the part of all to continue working together in this field. Any progress made will help us all.</p> <p>As seen in many of the needs above mentioned, various are related to topics other than technology. However, they are very important in order to achieve our goal: to help implement new technologies for this market.</p>

## OTHER COMMENTS AND REMARKS

Description of the session as a whole (opinion of organizers) (free text)

*How it went, how productive it was, suggestions for future ones*

The organization of the session was prepared well in advance. Deep thought was given to every aspect related to it and everything went smoothly. People with multidisciplinary vision - as expected - eagerly worked at the different tables and the result was extremely positive for all attendees.

## VI.VI. Donostia

GT1: Intersectorial and transnational cross-fertilization for better exploitation of ICT key enabling technologies to meet the challenges of the silver economy

### NEEDS COLLECTION: ROUND-TABLES (RTs)

Reporting template for each session

### GENERAL INFORMATION

Region		
<input type="checkbox"/> Aquitaine <input type="checkbox"/> Limoges <input checked="" type="checkbox"/> Basque Country <input type="checkbox"/> Catalunya <input type="checkbox"/> Portugal		
Place	Date	Duration
Gaia facilities in Donostia (Portuetxe Bidea, 14 Edificio IBAETA 1º )	19-12-2016	3 hours
Name of host and entity	Name of facilitator and entity	
Cristina Murillo-Cristina Urtiaga (Gaia)	Xabier Uriarte (Tecnalia)	
Total number of attendees	Number of attendees per represented organizations	
27 (signed up: 30)	SME: 4                      Start up: 1 Large company: 4                      Tel-Co: - Public body: 4                      R&D entity: 7 Association: 3                      Insurance Group: - Cluster: 3                      Investors: - Education: 1	

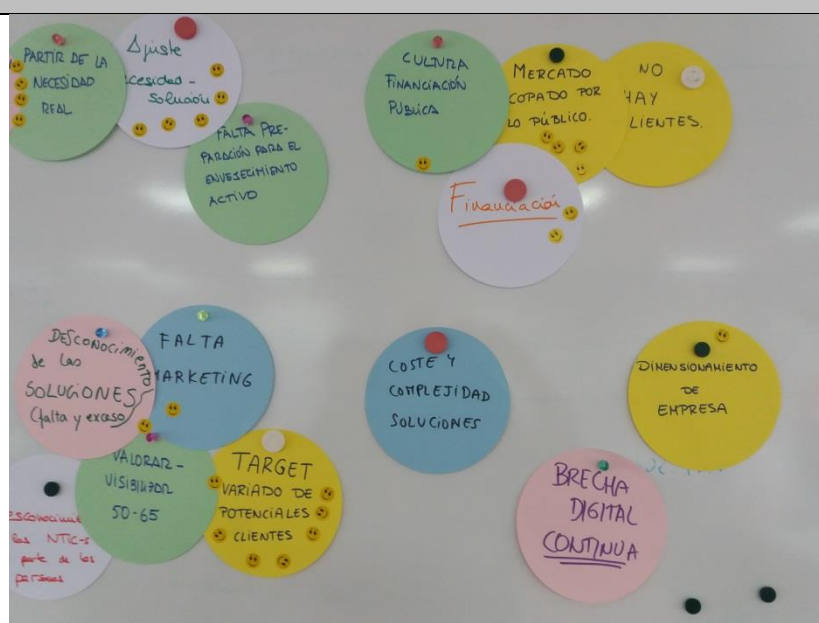
### CONTENT OF THE SESSION

#### COLLECTION OF TOPICS FOR DISCUSSION

List of proposed topics
- Digital divide - lack of knowledge regarding elderly needs

- Cost and complexity of solutions
- Market segmentation
- Old age perception
- Current culture (beneficiaries vs client)
- Lack of socio-sanitary coordination
- Unawareness of current solutions
- Business dimensioning
- Lack of investment in prevention

Photo of topics collection board



## WORKSHOP 1: DISCUSSION

TABLE 1.1: Brecha digital
Description
Elderly people are not familiarized with ICTs
Characterization
<p>Nature of need:</p> <p> <input type="checkbox"/> Ethical/legal    <input type="checkbox"/> Financing    <input type="checkbox"/> Market demand    <input type="checkbox"/> Maturity of ICT solutions         </p> <p> <input checked="" type="checkbox"/> Social sciences    <input type="checkbox"/> Technology    <input type="checkbox"/> Other: _____         </p> <p>Sectors affected:</p> <p> <input checked="" type="checkbox"/> Health and social care    <input type="checkbox"/> Autonomy/homecare    <input type="checkbox"/> Housing and urban planning         </p> <p> <input type="checkbox"/> Transport and mobility    <input type="checkbox"/> Prevention of ageing         </p> <p>Realistic ICT-based solutions available</p> <p> <input type="checkbox"/> YES    <input type="checkbox"/> NO         </p>
Summary of exchanges
<p>Elderly people are not used to using technology and it is difficult for them to access it, so many of them reject it (general frustration, overwhelming sensation, lower self-esteem)</p> <p>There are also many people within the collective that are not attracted to technology, and that causes inequality</p> <p>A question arises whether “the elders of the future” that are currently aged 50-60 and have already used PCs and mobile phones will have the same difficulties with technology when they are 80 years old or more. There is no consensus regarding this: some people believe that the digital divide will be reduced and some others feel that it will always exist, because technology is everchanging and what is in place now will have nothing to do with what will be there in the future</p>

In any case, what would make things easier is that it should be something motivating, something emotional (like grandchildren's pictures). By all means, each individual's personality has a great influence, as some of them have virtually no interest in it

Moreover, it is necessary that the different organizations (such as socio-sanitary providers) make a change to work with the ICTs. The introduction of technology implies changes within the organizational culture, within the way it is managed and within process management. The resistance to change within the teams also needs to be addressed, as well as training in the use of ICTs

Action items that might contribute to solve or might help minimizing the need

- Creation of groups of elderly people- elderly communities of practice, or families that can exchange experiences and motivate other people to consume ICT products
- Caregivers' School: Train the social environment in how to act with the aging population, as well as training in the technology that can help us how to care

**TABLE 1.2:** Knowledge on needs of older people

Description

The manufacturers of these products do not really know what elderly people's needs really are (i.g ICT companies that want to introduce their products in this segment, without really knowing it)

Characterization

Nature of need:

- ☐ Ethical/legal    ☐ Financing    ☐ Market demand    ☐ Maturity of ICT solutions  
☒ Social sciences    ☐ Technology    ☐ Other: \_\_\_\_\_

Sectors affected:

- ☒ Health and social care    ☒ Autonomy/homecare    ☒ Housing and urban planning  
☒ Transport and mobility    ☒ Prevention of ageing

Realistic ICT-based solutions available



☐ YES ☐ NO

#### Summary of exchanges

The issue noted is that many technological companies that are targeting the SE are ICT solutions providers that do not know the elderly, and therefore, are unaware of their needs. Companies think that the elderly are rich, connected and live in an urban environment, but the reality is very different. In many cases the people that develop this type of solutions are young, so it is very hard for them to develop solutions for old age users, to place them in context and to understand their needs

The question in the roundtable is whether the elderly are interested in all this at all. Technology scares them a lot

Another participant believes that the acceptance of technology depends on its usefulness and the needs it covers. In an experience carried out by the Universidad Aut3noma de Barcelona, it was identified that the ICT's most covered needs are the social ones (find out how the family is) and health related topics

On the other hand, we need to take into account that the customer and the end user are very often different, due to public co-financing. Taking into consideration the diversity of the agents involved, it can be seen that the necessities detected by the end user differ from the ones detected by relatives, professionals, Administration, etc. Moreover, the vision of "Country, nation.." that could drive all the agents involved to shared and coordinated objectives does not exist

It is mentioned that an initiative in Foix allows the companies to get know the elderly. A business incubator has been included in a rest home recently refurbished. For the nursing home it is a financing option, because it charges rent for its space, and for the companies, and is also an easy way to get to know the needs of the elderly firsthand. The initiative is producing very good results

#### Action items that might contribute to solve or help minimizing the need

- Active participation of the targeted public in the ICT solutions design. Real development of living labs

- Create spaces shared by the elderly, professionals and technologists (a space for businesses in socio-sanitary installations)
- Cross-cutting forums involving users, public and private institutions
- The analysis of the needs must come from the end user and the different groups (some in Administration) so as to guide companies
- public-private partnership, to promote ideas, solutions etc

**TABLE 1.3:** Cost and complexity solutions

Description

Normally, solutions tend to have a high cost and include functionalities that are not really needed. They should be limited to what really adds value

Characterization

Nature of need:

- ☐ Ethical/legal    ☐ Financing    ☐ Market demand    ☒ Maturity of ICT solutions  
☐ Social sciences    ☒ Technology    ☐ Other: \_\_\_\_\_

Sectors affected:

- ☒ Health and social care    ☒ Autonomy/homecare    ☐ Housing and urban planning  
☐ Transport and mobility    ☒ Prevention of ageing

Realistic ICT-based solutions available

- ☐ YES    ☐ NO

Summary of exchanges

In many occasions the technological solutions developed are overly ambitious when they should maybe be more humble . They include functionalities that do not add too much value, but make the solution more complex than necessary

To solve this, there is a need to listen to the elderly and the professionals that work with them. We need to start from the necessity, not the technology. It could be helpful to create the figurehead of an advisor with a global vision, with a great multiskilled team and a double

mission: directed to the client -to translate what is offered to the elderly- and directed to the ICTs in order to convey the product/service requirements

There is a lack of profitability in the development of products. It is suggested that the specifications be based on a forum where the Administration could have more weight, but also using the contribution of other experts. To be able to fund them, there is a need to experiment with different elements

In the future, to fund technology, only the public-private financing will be taken into account. It is necessary to raise awareness on co-payment, to create community solutions and to carry out collective purchases of goods for the community.

Furthermore, we must not forget that technology is a means, and that it must be accompanied by a service. In this sense, it is necessary to create professional profiles that serve the elderly in the use of ICTs.

#### Action items that might contribute to solve or help minimizing the need

- To get the client closer to the solution owner in order to ascertain what is needed and what adds value
- Greater multidisciplinary skills
- To change the technologists way of doing things and listen to what the elderly/professionals have to say. Also, to think about simple solutions; do not go overboard
- To generate the idea of the advisory position
- To move towards community models of use of technology, services or purchases that can be offered and shared among citizens , for instance a community of neighbourhoods, a neighborhood ...
- Crowdfunding, old age cooperativism (wheelchair user network)

**TABLE 1.4: Market Segmentation**

#### Description

Within the 50+ range there are very different needs, from very dependent people to very healthy and active individuals. Their needs and the solutions to be reached are very different

#### Characterization

Nature of need:

☐ Ethical/legal    ☐ Financing    ☒ Market demand    ☐ Maturity of ICT solutions

☒ Social sciences    ☐ Technology    ☐ Other: \_\_\_\_\_

Sectors affected:

☒ Health and social care    ☒ Autonomy/homecare    ☒ Housing and urban planning

☒ Transport and mobility    ☒ Prevention of ageing

Realistic ICT-based solutions available

☐ YES    ☐ NO

#### Summary of exchanges

In order to find the appropriate solution for the elderly, it is important to define correctly the group we want to target. The age range we are covering is very wide and the needs very different (from self-sufficient people to very dependent ones, with great care needs and others that go to the doctor practically every day. Their necessities are uneven, and thus should be the solutions to be developed)

We could differentiate two large blocks: the elderly in greath health, and the elderly that are not healthy. In the case of the ones that are not in great health, the technological solutions portfolio must go hand in hand with health professionals or the family, that is, trustworthy people

Neither should we forget where lives the collective we are addressing (rural/urban areas) and the gender perspective

#### Action items that might contribute to solve or help minimizing the need

- To detect niche markets and to especialize
- Appropriate segmentation: gender, urban/rural place of residence

TABLE 1.5: Old age preception
Description
There is a need to change the perception of old age, with positive marketing campaigns so that the consumption of certain products is related to prevention. That is to say, that they are a support product not a symptom of decline
Characterization
<p>Nature of need:</p> <p> <input type="checkbox"/> Ethical/legal    <input type="checkbox"/> Financing    <input type="checkbox"/> Market demand    <input type="checkbox"/> Maturity of ICT solutions  <input checked="" type="checkbox"/> Social sciences    <input type="checkbox"/> Technology    <input type="checkbox"/> Other: _____         </p> <p>Sectors affected:</p> <p> <input checked="" type="checkbox"/> Health and social care    <input checked="" type="checkbox"/> Autonomy/homecare    <input checked="" type="checkbox"/> Housing and urban planning  <input checked="" type="checkbox"/> Transport and mobility    <input type="checkbox"/> Prevention of ageing         </p> <p>Realistic ICT-based solutions available</p> <p> <input type="checkbox"/> YES    <input type="checkbox"/> NO         </p>
Summary of exchanges
It is necessary to make a change with regard to the negative perception that we currently have of old age: as pure consumers of public resources. We need to change the mindset that consuming certain products is a synonym of old age, illness or dependency, and instead should link it to prevention. There is a lack of marketing campaigns to identify active elderly people referents
Action items that might contribute to solve or help minimizing the need
<p>- Old age positive view marketing campaigns</p> <p>- Look out for “referent” examples of active aged people</p>

## WORKSHOP 2: DISCUSSION

TABLE 2.1: Current culture (beneficiaries vs client)
Description
How to move from having users/beneficiaries (with a certain self-sufficiency) to consumers (prevention stage)
Characterization
<p>Nature of need:</p> <p> <input type="checkbox"/> Ethical/legal    <input checked="" type="checkbox"/> Financing    <input checked="" type="checkbox"/> Market demand    <input type="checkbox"/> Maturity of ICT solutions  <input type="checkbox"/> Social sciences    <input type="checkbox"/> Technology    <input type="checkbox"/> Other: _____ </p> <p>Sectors affected:</p> <p> <input checked="" type="checkbox"/> Health and social care    <input checked="" type="checkbox"/> Autonomy/homecare    <input checked="" type="checkbox"/> Housing and urban planning  <input checked="" type="checkbox"/> Transport and mobility    <input checked="" type="checkbox"/> Prevention of ageing </p> <p>Realistic ICT-based solutions available</p> <p> <input type="checkbox"/> YES    <input type="checkbox"/> NO </p>
Summary of exchanges
<p>Nowadays, the concept of consumer or client does no longer exist, instead, we have users or beneficiaries of services. Individuals expect to receive services for free, or just for a small co payment amount. This denotes that individuals do not have the capacity to choose, and that they get what the public Administration gives them. Hence, the offer is what the public Administration decides it should be, unless they decide to get out of the public sector</p> <p>We must think about next decade's SE, not the present one. The fact that there is no money for everything needs to be considered. Moreover, this will get worse in a few years</p> <p>That said, we should not try to completely substitute the doctor to patient relationship</p>
Action items that might contribute to solve or help minimizing the need
<p>- Instigate the creation of a youth card for over 50's with discounts in restaurants, shows, cinema. This will generate a boost in the economy and will help capture a future market</p>

- Investment in Marketing/Social Marketing
- Empower aged people and make them aware of their health situation, sensitizing them towards the responsibility of keeping healthy
- Boost products of a lower technological status, more in line with the current spending capacity.

**TABLE 2.2:** Lack of socio-sanitary coordination

Description

Information dispersal between both systems and lack of political willpower to invest on ICTs

Characterization

Nature of need:

☒ Ethical/legal    ☒ Financing    ☐ Market demand    ☐ Maturity of ICT solutions  
☐ Social sciences    ☐ Technology    ☐ Other: \_\_\_\_\_

Sectors affected:

☒ Health and social care    ☒ Autonomy/homecare    ☐ Housing and urban planning  
☐ Transport and mobility    ☐ Prevention of ageing

Realistic ICT-based solutions available

☒ YES    ☐ NO

Summary of exchanges

In the Basque Country the socio-sanitary services are in need of an ICT tool to share information. Nowadays a social worker has to introduce information in four different applications. Information dispersal related to every single individual patient is important

An important lack of investment on ICTs, which could actually resolve this particular problem, is noticeable. There is a lack of political willpower in investment. The issue is that they only

address strategies short term. Yet, in this matter it is important both to think long term, and that the investment will be beneficial (& profitable) now and in the future

All agents involved in the matter should talk to each other, not only within the socio-sanitary services, but also, for instance, urban planning with health etc. We should step out of our comfort zones

#### Action items that might contribute to solve or help minimizing the need

- Development of the Case Manager figure, who will own all the information
- Have an ICT tool in place that shares information between the different agents
- Demand a long term strategic vision from the Administration

**TABLE 2.3:** Unawareness of existing solutions

#### Description

There is a lack of awareness of the existing technological solutions. These are attributed, by default, a high cost

#### Characterization

Nature of need:

- ☐ Ethical/legal    ☐ Financing    ☐ Market demand    ☐ Maturity of ICT solutions  
☐ Social sciences    ☐ Technology    X Other: \_\_\_\_\_

Sectors affected:

- X Health and social care    X Autonomy/homecare    X Housing and urban planning  
 X Transport and mobility    X Prevention of ageing

Realistic ICT-based solutions available

- ☐ YES    ☐ NO



Summary of exchanges
<p>The elderly and their careers, including professionals, are unaware of what the market can offer them. There is a generic idea of the support products available ( what you can see at the chemists' and orthopaedist's), but there is a wider market out there. Even the tools provided by Osakidetza (like the Health File) are unknown by the majority of people. There is a lack of specialised product visualization from the end user</p> <p>There is a strong need of marketing training on the solutions offered by the market</p>
Action items that might contribute to solve or help minimizing the need
<ul style="list-style-type: none"> <li>- stand alone centralised solutions repository,</li> <li>- marketing/information available in places where the elderly go frequently</li> <li>- solutions showroom</li> </ul>

TABLE 2.4: Business dimensioning
Description
<p>SMEs could focus on the segment related to prevention. However, this market is more segmented and fragmented and the investment in marketing needed is important, and for some (the majority) is not even affordable</p>
Characterization
<p>Nature of need:</p> <p> <input type="checkbox"/> Ethical/legal    <input checked="" type="checkbox"/> Financing    <input type="checkbox"/> Market demand    <input type="checkbox"/> Maturity of ICT solutions  <input type="checkbox"/> Social sciences    <input type="checkbox"/> Technology    <input type="checkbox"/> Other: _____         </p> <p>Sectors affected:</p> <p> <input checked="" type="checkbox"/> Health and social care    <input checked="" type="checkbox"/> Autonomy/homecare    <input checked="" type="checkbox"/> Housing and urban planning  <input checked="" type="checkbox"/> Transport and mobility    <input checked="" type="checkbox"/> Prevention of ageing         </p> <p>Realistic ICT-based solutions available</p> <p> <input type="checkbox"/> YES    <input type="checkbox"/> NO         </p>

Summary of exchanges
<p>Nowadays, at least locally, the single customer of the ICTs is the public Administration. In this sense, the biggest companies are the ones that have more options to win tenders from the Administration. Which SME has the capacity to face the tenders' specifications from Osakidetza or Bilbao's city council? One of the options available is that SMEs focus further on the prevention area, which is less strained. But since it is more fragmented, the marketing effort has to be greater and the ability that companies have to reach consumers is limited</p> <p>In addition, in order to develop ICT products within the socio – sanitary field companies must obtain a series of certificates and required approvals that take time and money - which the company must economically endure until they get profits</p>
Action items that might contribute to solve or help minimizing the need
<ul style="list-style-type: none"> <li>- alliances between SMEs</li> <li>- Seek integration-complementarity with greater business solutions</li> <li>- Focus on prevention</li> </ul>

TABLE 2.5: Lack of investment in prevention	
Description	
Short term vision from political leadership. Healthy life actions have longterm repercussions	
Characterization	
Nature of need: <input type="checkbox"/> Ethical/legal <input checked="" type="checkbox"/> Financing <input checked="" type="checkbox"/> Market demand <input type="checkbox"/> Maturity of ICT solutions <input type="checkbox"/> Social sciences <input type="checkbox"/> Technology <input type="checkbox"/> Other: _____	
Sectors affected: <input type="checkbox"/> Health and social care <input type="checkbox"/> Autonomy/homecare <input type="checkbox"/> Housing and urban planning <input type="checkbox"/> Transport and mobility <input checked="" type="checkbox"/> Prevention of ageing	

<p>Realistic ICT-based solutions available</p> <p><input type="checkbox"/> YES    <input type="checkbox"/> NO</p>
<p>Summary of exchanges</p> <p>In terms of cost, the care of dependent and non-dependent individuals cannot be compared. It is obviously much more expensive to pay hospitalizations or cover care needs. This is why we should go downstream, by investing public money in prevention</p> <p>A big chunk of the political offer is defined by the size of the municipality. There is a feeling that not enough is invested in prevention, or in the promotion of a healthy lifestyle</p> <p>In theory, this has been included in Osakidetza's strategy, but when it comes to implementing it, politicians have a short term vision (we must not forget that elections are held every four years) and the prevention type actions have repercussions in the long term. It should be the Administration who should lead awareness campaigns towards preventive measures or should provide advice (healthy cholesterol routes etc). This would encourage users to spend money on wearables or other types of technology. But these awareness campaigns, this training, is necessary</p> <p>It is a must that the money dedicated to prevention is seen as an investment and not a expenditure.</p> <p>To invest in accessible housing reduces the risk of falling and the institutionalization of people. Hence, it would be positive to make a good financial analysis of the return on investment in prevention</p>
<p>Action items that might contribute to solve or help minimizing the need</p> <ul style="list-style-type: none"> <li>- Training and awareness campaigns</li> <li>- Financial analysis of investment return. Global vision and overall analysis.</li> </ul>

## CONCLUSIONS

<p>Summary of conclusions of the session</p> <p>There has been a strong consensus on the main needs or barriers SMEs have to face when accessing the SE market (digital divide, know what the needs of the elderly are, public financing culture, dimension)</p>
--

The participants have been very active and have always expressed a (very) positive opinion towards the participation in this type of events. This allows all the SE regional agents to start to know each other and to go forward on the creation of the SE market

## OTHER COMMENTS AND REMARKS

Description of the session as a whole (opinion of organizers) (free text)

It has been noted that the SE subject generates interest, since around 30 people have participated in the workshops. And this in spite of the dates (close to Christmas) being rather complicated for the attendance of many people. We have managed to have attendees from different sectors (socio-sanitary professionals, researchers, SE market providers, companies that want to diversify). This has culminated in an enriching debate.

## VI.VII. Barcelona

GT1: Intersectorial and transnational cross-fertilization for better exploitation of ICT key enabling technologies to meet the challenges of the silver economy

### NEEDS COLLECTION: ROUND-TABLES (RTs)

Reporting template for each session

#### GENERAL INFORMATION

Region		
<input type="checkbox"/> Aquitaine <input type="checkbox"/> Limoges <input type="checkbox"/> Basque Country <input checked="" type="checkbox"/> Catalunya <input type="checkbox"/> Portugal		
Place	Date	Duration
Barcelona	19/01/2017	
Name of host and entity	Name of facilitator and entity	
KIMbcn	KIMbcn	
Total number of attendees	Number of attendees per represented organizations	
4	SME: x                      Start up: Large company: Public body: x              R&D entity: Association: x              Insurance Group: Cluster:                      Investors:	

#### CONTENT OF THE SESSION

##### COLLECTION OF TOPICS FOR DISCUSSION

List of proposed topics
<ul style="list-style-type: none"> <li>- Difficulties in approaching the user</li> <li>- Need of support for the use of the product</li> <li>- Role of the user before launching the product to the market</li> <li>- Product test period</li> </ul>

<ul style="list-style-type: none"> <li>- Technological level of the ICT market for the elderly in the last 5 years</li> <li>- Forecast for the future in the ICT market for the elderly</li> <li>- Types of clients (national or international)</li> <li>- Collaboration with support services</li> <li>- Relationship with the user</li> <li>- Need for financial support (regional, national or European)</li> <li>- Difficulties in the use of technological products</li> <li>- Relationship between manufacturing companies and users (senior citizens)</li> <li>- Companies of assistance to the elderly and technological products</li> </ul>
Photo of topics collection board

## WORKSHOP 1: DISCUSSION

<b>TABLE 1.1:</b> identified need/obstacle
Description
Learning difficulties
Characterization
<p>Nature of need:</p> <p> <input type="checkbox"/> Ethical/legal    <input type="checkbox"/> Financing    <input type="checkbox"/> Market demand    <input type="checkbox"/> Maturity of ICT solutions  <input type="checkbox"/> Social sciences    <input checked="" type="checkbox"/> Technology    <input type="checkbox"/> Other: _____         </p> <p>Sectors affected:</p> <p> <input type="checkbox"/> Health and social care    X Autonomy/homecare    <input type="checkbox"/> Housing and urban planning  <input type="checkbox"/> Transport and mobility    X Prevention of ageing         </p> <p>Realistic ICT-based solutions available</p> <p> <input type="checkbox"/> YES    <input type="checkbox"/> NO         </p>
Summary of exchanges

M.O. comments that the main problem for the use of technological products by the elderly is the difficulty of learning, which mainly comes from the fear they have when they face new developments. Besides the little contact with technology they have had during their life.

M.M. agrees that one of the main obstacles is learning and coincides in the mistrust generated by technology.

M.V., on the other hand, agrees that learning is necessary and that it is a collective with barriers to technology.

T.E. also agrees on the difficulty for older people to adapt to technological products.

#### Action items that might contribute to solve or help minimizing the need

- Adaptation and personification of the product, to be able to adapt to the product to the needs of each person (stage, age, physical conditions, mental faculties...). In general, the technology focused has to be easy to use. All this through pilot testing before commercialization.
- Training, if it could be given by relatives or trusted people. It would require expert instruction to family members or trusted people and they would pass the guidelines.
- Allow the users to test periods before the definitive acquisition of the technology.
- Professionals who accompany people until they are able to incorporate the product in their day to day.

**TABLE 1.2:** identified need/obstacle

#### Description

Economic difficulties for access to technology

#### Characterization

Nature of need:

- ☐ Ethical/legal    ☒ Financing    ☐ Market demand    ☐ Maturity of ICT solutions  
☐ Social sciences    ☐ Technology    ☐ Other: \_\_\_\_\_

Sectors affected:

- ☒ Health and social care    ☐ Autonomy/homecare    ☐ Housing and urban planning  
☐ Transport and mobility    ☐ Prevention of ageing

Realistic ICT-based solutions available

☐ YES ☐ NO

#### Summary of exchanges

M.M. comments that in many cases this group has no economic resources. On the other hand, it is not often given importance to provide technology to seniors (perhaps because they think they are at the end of life) and believes that this is a collective thinking that should change, since technology can bring many benefits. He also explains that there are very few or no help at all for this, and that if at any time there have been, they have been regional.

M.V. agrees that there are many people to whom technology could improve their living conditions and they do not have access because of economic difficulties. It also confirms that there are no economic aids, neither regionals, state or European.

T.E. confirms the barriers of the economic issue, but says that it is not the only problem.

M.O. is in accordance with the opinion of M.M. adding that sometimes it is the users themselves who are reluctant to spend money on technology, because it costs them to spend and because they do not believe those are the products they need.

#### Action items that might contribute to solve or help minimizing the need

- More economic aid at regional, state and European level.
- Companies could adjust more the prices to people with economic difficulties, offering financing, etc. (as M.V. comments that they do in his company).
- Reuse technology from people who no longer needs it, adapt it and offer it to people without economic resources at a lower price or free (as they also do in Audiopacks, the company where M.V. works).
- Make more publicity about the benefits and improvements in the conditions of life that contribute the technologies to raise awareness to users and their relatives.

#### TABLE 1.3 N: identified need/obstacle

##### Description

Communication in SE: communication between manufacturing companies and technology commercialization companies and specialized centers for the elderly (residences, day centers,...)



Characterization
<p>Nature of need:</p> <p> <input type="checkbox"/> Ethical/legal    <input type="checkbox"/> Financing    <input type="checkbox"/> Market demand    <input type="checkbox"/> Maturity of ICT solutions  <input type="checkbox"/> Social sciences    <input type="checkbox"/> Technology    X Other: _____ Communication in SE _____ </p> <p>Sectors affected:</p> <p> x Health and social care    <input type="checkbox"/> Autonomy/homecare    <input type="checkbox"/> Housing and urban planning  <input type="checkbox"/> Transport and mobility    <input type="checkbox"/> Prevention of ageing </p> <p>Realistic ICT-based solutions available</p> <p> <input type="checkbox"/> YES    <input type="checkbox"/> NO </p>
Summary of exchanges
<p>T.E. thinks that there is not much communication between companies and direct care centers, although the service where she works is dedicated to this, to bring technical aids to users, through contact with centers specialized in elderly people and family.</p> <p>M.V. comments that in his company they do not maintain relations with specialized services in older people. Although they do collaborate with social services and offer facilities to people with no resources to acquire their technologies.</p> <p>M.M. comments that in their service they have contact with technological companies and that they are part of different pilot tests with different technologies.</p> <p>M.O. for his part, he tells us that in his company they have no contact with technology companies and believes that this would be a way to approach this group.</p>
Action items that might contribute to solve or help minimizing the need
<p>- Programming workshops given by companies in hospitals, day centers, residences, etc. where users and their families could make contact with the new technologies and their benefits.</p> <p>- Increase partnerships between associations and companies for the correct design of technologies. If the relationship between technology experts and senior experts increases, the product will adjust more to the needs.</p>

## WORKSHOP 2: DISCUSSION

TABLE 2.1: identified need/obstacle
Description
Technology offer in SE: adaptation of technological products for the elderly
Characterization
<p>Nature of need:</p> <p> <input type="checkbox"/> Ethical/legal    <input type="checkbox"/> Financing    <input checked="" type="checkbox"/> Market demand    <input type="checkbox"/> Maturity of ICT solutions  <input type="checkbox"/> Social sciences    <input type="checkbox"/> Technology    <input type="checkbox"/> Other: _____         </p> <p>Sectors affected:</p> <p> <input checked="" type="checkbox"/> Health and social care    <input checked="" type="checkbox"/> Autonomy/homecare    <input type="checkbox"/> Housing and urban planning  <input type="checkbox"/> Transport and mobility    <input type="checkbox"/> Prevention of ageing         </p> <p>Realistic ICT-based solutions available</p> <p> <input type="checkbox"/> YES    <input type="checkbox"/> NO         </p>
Summary of exchanges
<p>T.E. comments that there are few technological products adapted to the elderly. Their limitations are not taken into account and, for this reason, they are very difficult to use.</p> <p>M.V., on the contrary, it is of the opinion that in recent years there has been a significant increase in the supply of technological products adapted for the elderly.</p>
Action items that might contribute to solve or help minimizing the need
<p>- Do more pilot testing with seniors to see if the products are right for them or not. In the case of difficulty, adapt more technological products, taking into account the capabilities of this type of profile.</p> <p>- M.V. thinks that the limitations will be blurring in the near future, since the adults of today already are used to the technology. So when they reach the third age, they will not have as many difficulties as the people who are part of the collective of the elderly at present.</p>

TABLE 2.2: identified need/obstacle
Description
Use of technologies in social care: acquisition of technology by the companies of assistance to the elderly.
Characterization
<p>Nature of need:</p> <p> <input type="checkbox"/> Ethical/legal    <input type="checkbox"/> Financing    <input checked="" type="checkbox"/> Market demand    <input type="checkbox"/> Maturity of ICT solutions  <input type="checkbox"/> Social sciences    <input type="checkbox"/> Technology    <input type="checkbox"/> Other: _____         </p> <p>Sectors affected:</p> <p> <input checked="" type="checkbox"/> Health and social care    <input type="checkbox"/> Autonomy/homecare    <input type="checkbox"/> Housing and urban planning  <input type="checkbox"/> Transport and mobility    <input type="checkbox"/> Prevention of ageing         </p> <p>Realistic ICT-based solutions available</p> <p> <input type="checkbox"/> YES    <input type="checkbox"/> NO         </p>
Summary of exchanges
<p>M.O. comments that in the company where he works, technology is acquired when it is necessary to be able to perform the service correctly but does not contemplate the acquisition of technology if it is not absolutely necessary.</p> <p>M.M., for his part, explains that in the company where he works are part of different pilot tests in which different technological products are provided to users to see the evolution, how to use... but that at the time the pilot tests are finished, the company does not provide this technology to the user, nor does he acquire it, for the cost.</p>
Action items that might contribute to solve or help minimizing the need
<p>- They all agree that these pilot tests are a good way to put users in touch with technology.</p> <p>- They believe that a solution for the companies to have technology would be counting with aids / subsidies for the acquisition of it.</p>

## CONCLUSIONS

### Summary of conclusions of the session

More technological products adapted to the elderly are needed, they are a collective with differentiated capacities and if these characteristics were taken into account, it would facilitate the use and increase the interest.

On the other hand, there are no subsidies to facilitate the access to this type of product, there are people who would be interested in acquiring technologies and, because of their lack of economic resources, they are not possible.

There is also a need for more education to raise awareness of the benefits and usefulness of technology products for the elderly. This education is not only necessary for the elderly, but also for their families and direct care services to this group.

Training is one of the things that we should keep in mind when we talk about the collective of the elderly and technology. For the elderly, in general, it is a big obstacle to acquire new knowledges, and more when we refer it to something as far from their reality as technology. It would therefore be necessary to pay particular attention to this issue.

## OTHER COMMENTS AND REMARKS

### Description of the session as a whole (opinion of organizers) (free text)

*How it went, how productive it was, suggestions for future ones*