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Project Title: Virtual Collaborative Social Living Community for Elderly **Co-Living** Contract no. 60-61700-98-009	Responsible partner: Inovamais, S.A
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Abstract:

This document presents the Co-Living outcomes that are likely to be exploited and an initial market analysis for their future commercialization. To present potential business models to be adopted for the uptake of the Co-Living system the Canvas model was selected. Particular attention has been given to Intellectual Property and Access Rights on the project results, as essential aspect for further exploitation of those results.

Keywords: Business Model, Exploitation, Market Analysis

Document History

Issue Date	Version	Change Made / Reason for this Issue
26-09-2013	0.1	First version of the deliverable

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1 Introduction

1.1 Summary

The world is experiencing an important demographic transformation: the unprecedented ageing of the population of almost all developed and developing countries. A moderate projection of ageing in the EU for the period between 2004 and 2050 shows that the population aged 65+ will increase by 58 million or 77% and that, at the same time, the working-age population will drop by 48 million or 16%. In the EU, this might mean that the ratio of people of working age would be two for every older citizen, instead of four working people at the present time.

These demographic challenges are discussed as a serious problem for social support systems. They are seen fairly negatively, implying a cost explosion, which is one way to discuss this topic. The other way is to discuss the opportunities offered by ageing societies like, for instance, new markets for innovative applications and products/services for older people. It is widely accepted that older persons have a combination of social and healthcare needs to which ICT solutions could provide an innovative and integrated answer.

With these opportunities in mind, **the Co-Living project aimed at developing an *ICT-based Virtual Collaborative Social Living Community for Elderly***. The central aim of this project was to stimulate and prolong their independent and active living in an outward environment through an advancement in elderly people social interaction, contributing thus positively to their wellbeing.

1.2 Role of this deliverable

The second, and final, version of this deliverable aims at defining, in commercial terms, the Co-Living results and illustrates how they will be brought into the market. An analysis of the targeted market is made, focusing on potential clients and existent competitors, which will allow understanding the market opportunities for the Co-Living results. The Business Model Canvas has been selected by the project partners as the basis for structuring and defining the business strategy of the consortium, after the ending of the project implementation.

This document should be understood as a suggestion on a possible business model for the further exploitation of the Co-Living solution, and does not constitute a set framework adopted by the members of the consortium. Moreover, this document is not a pre-agreement between partners on how to proceed on the exploitation of the Co-Living solution and any of its components.

1.3 Relationships with other deliverables and work packages

The content of this deliverable benefits from the conclusions of WP6 - Pilot Trials and Evaluation which focus on the testing and evaluation of the acceptance of the system by users, namely from the conclusions included in the deliverable D6.4 – Pilot acceptance evaluation results (first version).

Also, the elaboration of this document had into consideration the deliverables already produced under WP7 – Dissemination, Exploitation Strategy and Standardization, namely:

- D7.2 – Dissemination Strategy and Plan: identification of target-groups for dissemination activities, which might be also interested in the Co-Living results in terms of commercial exploi-

tation. Also, the projects listed for generating synergies with the Co-Living project, can be useful to understand other solutions that might compete with the Co-Living, and thereby potential competitors.

- D7.3 – Exploitation Strategy and Plan: it includes a description of the Co-Living exploitable results and of their value proposition, which will be detailed in this deliverable. Besides, the initial vision of the partners towards the Co-Living results is presented in the Exploitation Strategy and Plan which will be also relevant for the preparation of this deliverable, namely concerning the establishment of the market segments to be approached in the Business Strategy.
- D7.4 – Business Strategy (first version): the initial version of this document which has been produced in M24 of the project implementation.
- D7.5 – Standardization Strategy and Plan: this plan presents the Co-Living functionalities which might be standardised and that can therefore enhance the exploitability and commercial opportunities of the Co-Living results.
- D7.6 – IPR Directory (first version): presents the IPR rules accepted by all partners at the beginning of the project and that can influence the options for future exploitation and commercialization of the Co-Living results.

1.4 Structure of this document

Firstly, the Business Concept behind the Co-Living results is presented, highlighting their benefits and added value. Then, the potential market for future exploitation and commercialization of the Co-Living results is described, identifying possible client segments and competitors. Finally, a business model for the Co-Living solution is presented using the Canvas model.

1.5 Contributors

Table 1 - Deliverable Contributors

Partner name	Contributor name
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2 The Co-Living Solution

The main goal of Co-Living was the development of an *ICT-based Virtual Collaborative Social Living Community for Elderly* to stimulate and prolong their independent and active living in an outward environment through an advancement in elderly people social interaction, contributing thus positively to their wellbeing.

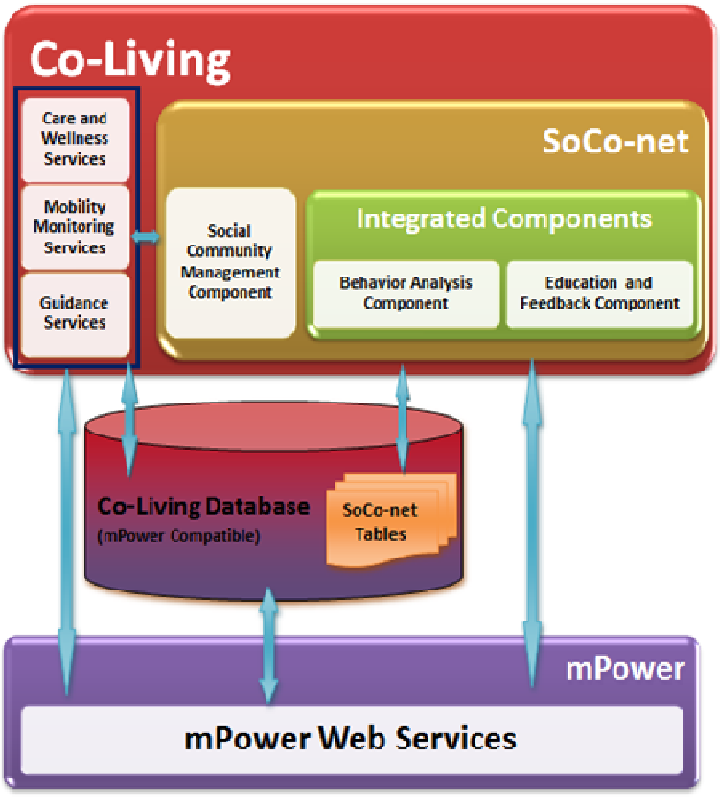

Figure 1 – Co-Living Solution

The present section describes the three main project's outcomes to be exploited by the Co-Living project partners:

- An innovative elderly centric web based network, the **Social Community Network** (SoCo-net) enabling effective management and collaboration of virtual social care teams around the elderly for continuous care provision;
- An integrated set of interoperable **ICT based services** making use of SoCo-net and addressing the elderly social interaction context categories of Care & Wellness, Mobility Monitoring, and Guidance;
- **Applied knowledge** on the targeted user group acquired during the pilot development phases, but also through the specification of use case scenarios.

Furthermore, this section describes the value proposition the project aims to offer to the Co-Living target group through the exploitation of the project's outcomes.

2.1 The Co-Living Outcomes

As mentioned above, the Co-Living solution has three main results that might be exploited after the project closure. Each one of these results will be presented in detail next.

2.1.1 SoCo-net - Virtual Collaborative Social Community Network

The Virtual Collaborative Social Community Network, known as SoCo-net, constitutes a core component of the Co-Living solution. It is an elderly centric web based network that enables the effective management of social care teams that can assist, collaborate and actively communicate with the elders improving their daily life through the use of assistive mobile wireless technologies (Figure 2). In this sense, SoCo-net enables the effective management and collaboration of virtual social care teams around the elder.

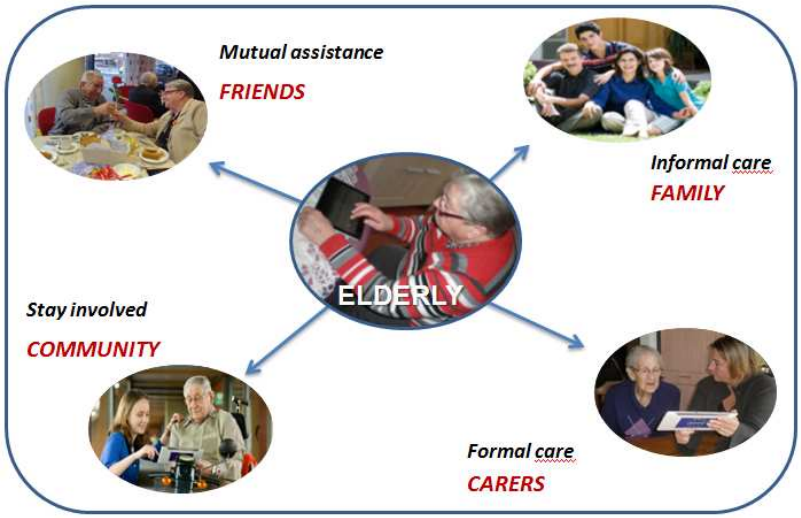

Figure 2 - Virtual Care Teams build around the elderly

SoCo-net is made up of three major components integrated together into a coherent module (Figure 3):

- The **Social Community Management component**, which enables the effective administration and management of the users' profiles and social care teams around the elderly.
- The **Behavior Analysis component**, which adapts social relationships and contexts of the elderly people as they age. Historical data regarding user behavior can be used for the identification of changes in the elderly daily activities as he/she ages and trigger actions and related adaptation of the elderly provided services.
- The **Education and Feedback component**, which stimulates the elderly to retain interest in making use of the Co-Living services by the provision of remote training, through intelligent explanation interfaces.

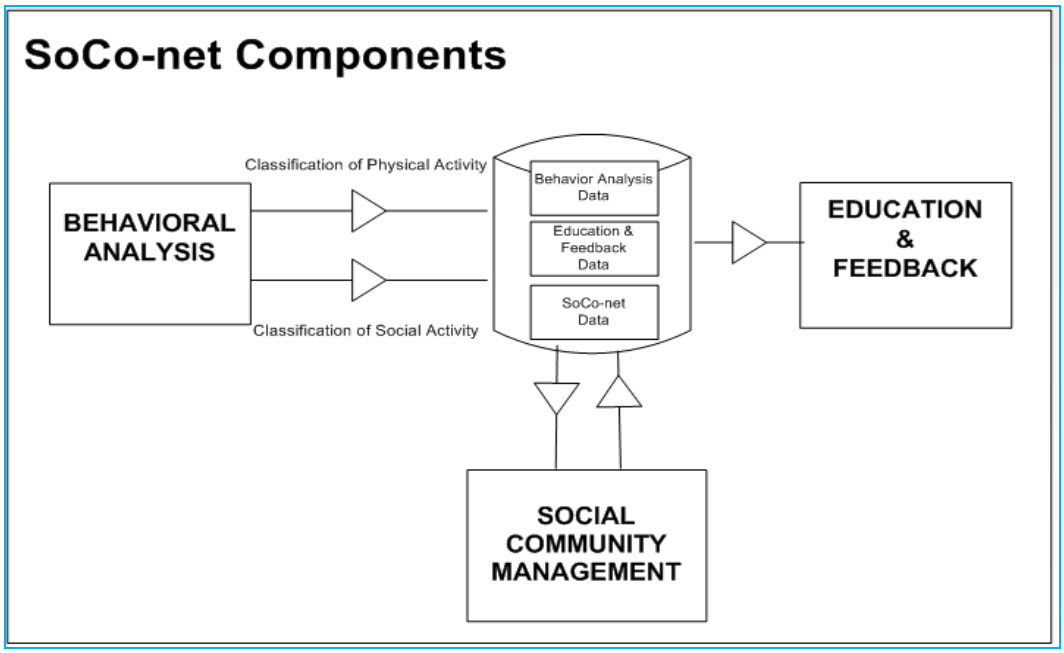

Figure 3 - SoCo-net Components

SoCo-net, through the Social Community Management component, builds Virtual Care Teams (VCTs) around the elderly person consisting of people (members) of different ages (young and old) and roles (relatives, friends, neighbours, care professionals, etc.). Thus, as mentioned before, the members of the VCT will then can assist, collaborate and actively communicate with elders to improve their daily life in an *ad hoc* and informal way through the use of assistive mobile wireless technologies. Also, SoCo-net, through the Social Community Management component, ensures that the elders have a unique personalized profile of disabilities and abilities, special needs and preferences promoting thus personalized care provision. Furthermore, SoCo-net supports, through the web services implemented in this component, different mobile wireless ICTbased services, to address the elderly social interaction context categories of Care & Wellness, Guidance and Mobility Monitoring, by providing information related to the elder's profile and VCTs.

Moreover, SoCo-net gives emphasis on the provision of mechanisms for adapting to changes in user context in a distributed, mobile environment supporting various user contexts. More specifically, in the Behaviour Analysis component, adaptive user profiling techniques and intelligent adaptive interfaces, considering user feedback and historical data (regarding the user behaviour), are used for the identification of changes in the elderly daily activities as he/she ages. By considering these changes, occurring in the elders' behaviour, their profile and preferences are adapted in order to reflect their new habits and way of life.

Also, based on their profile and preferences, incentives and challenges will be developed, in the Education and Feedback component, to stimulate the elders to retain interest in making use of the Co-Living services. This uses intelligent decision making techniques on current context and past activities, but also provisioning of remote training through intelligent explanation generation systems. These explanation systems apply intuitive user interfaces specialized in helping elders to make use of the Co-Living services.

2.1.2 ICT-based services

Co-Living system aims at the development of different ICT-based services, which make use of the virtual social care team management and organization tool provided by SoCo-net, to stimulate the elderly to live independently and actively for longer.

In Co-Living, ICT-based services are a category of components which support rapid, low-cost composition of applications offering all the functionality needed by the system, directly or indirectly, and allowing users to interact with it without focusing on underlying technicalities.

In accordance to the user needs, the Co-Living ICT-based services address the three main areas of the elderly social interaction context:

- Care & Wellness;
- Guidance;
- Mobility Monitoring.

2.1.2.1 Care & Wellness Services

Two types of services are provided contributing to the care and wellness of the elders:

- The **physical activity service** investigates how information on the individual's actual physical and psychological status can be optimally combined to define a challenging yet realistic physical activity schedule. Instead of adapting the physical activity schedule only based on the physical status or progress in performance, the person's psychological status is also included. For example when the person gets less motivated, the system may invite the user to select and do other exercises (targeted towards the same physical goal), or to slightly increase (or decrease) the intensity or duration of the exercises.
- The **group leisure activities service** uses SoCo-net to create groups to share activities with the elderly, by taking into consideration the members' preferences and capabilities. The elders create an invitation for a specific activity and share it with the members of their Social Community Network.

2.1.2.2 Guidance Services

By using SoCo-net, the main objective of guidance services consists on assisting the elders in their daily tasks.

- **Daily tasks** assistance provide to the elders direction indications, explanations on how to perform different tasks, or even instructions on how to call for human assistance by making use of SoCo-net.
- **Cognitive failure** assistance provides memory help reminders i.e., accessories such as stick, eye-glasses, medication, planned activities or appointments, directions indications to a place, etc. The services are designed not to offer a blind guide, providing all the instructions, but rather to offer assistance with increasing levels of social elderly care provision.

2.1.2.3 Mobility Monitoring Services

The mobility and monitoring services aim at the early detection of limitations in mobility and physical fitness and on the elderly daily activity follow up based on predefined plans.

- Services for the **early detection of limitations** are based both on wireless sensors providing real time monitoring of mobility and activity of the elders, like GPS and accelerometer sensors and on physical status information entered through developed questionnaires. All information is analyzed and services are developed as regards to the provision of care to the elders by providing direct feedback to them or by informing their care givers. Additionally localization based monitoring services not only identify the position of the users in real time, but also obtain and correlate information regarding their surrounding environment.
- Services for **Daily activity follow up** enable the elders to set up their daily schedule with various activities. The time, place and group members that may be involved in each activity are defined. The daily timetable is transmitted to the group member that is responsible for the follow up of the activities. At any time during the day the group member may contact the elderly and enquire variations in the schedule (i.e., delay or absence from a meeting).

2.1.3 Applied knowledge on the targeted user group

The Co-Living project targeted the healthy elders or those with light physical or psychological health problems who are self-supporting, able to move around, and can still contribute actively. Therefore, in order to deliver a suitable and useful solution for this target-group, the consortium has planned several tasks devoted to obtaining knowledge on this group preferences and needs, such as:

- Task 1.1 “User socialization needs analysis and specification”: the project team studied the users’ socialization needs and defining requirements that contribute to the improvement of their wellbeing;
- Task 1.3 “Use case scenarios development”: to model the end user behaviour and expectations in order to define the different ICT-based services to be offered within the project. End-users are continuously involved in the identification of needs through focus groups, structured interviews and questionnaires to maximize meaningful innovation and impact.

The gathered knowledge during these tasks provided valuable information regarding the Co-Living’s target-group, which can be viewed also as an exploitable project result. Indeed, it is not far-fetched to believe that this knowledge can be applied in other areas besides the Co-Living project.

Also, this applied knowledge can be viewed as a commercially exploitable project result. Parties outside of the consortium can be approached in order to raise their interest in making use and/or integrate such knowledge in their elderly care related products and services development activities. Considering that some of the Co-Living partners have experience in providing consulting services, the commercialization of such services based on the knowledge on the user group, acquired during the project, can be regarded as an exploitation possibility.

In fact, several project partners are engaged in a new project, CAMELI – Care Me for Life, started in 2013 and funded by the AAL Joint Programme, which benefits from and works upon the knowledge generated within the Co-Living activities. One of the objectives of CAMELI project is *to stimulate*

and support social interactions of the elderly with informal and formal carers like the Co-Living system building an elderly-centric virtual social care community[1].

2.2 Co-Living Added Value

The Co-Living solution aims at developing an *ICT-based Virtual Collaborative Social Living Community for Elderly* to stimulate and prolong their independent and active living in an outward environment through an advancement in elderly people social interaction.

By using the Co-Living solution the elderly and care givers can contribute for promoting the following scenarios related with an ageing population:

- Maintenance and stimulation of social connections;
- Inclusion and companionship;
- Preservation of health and functional capabilities.

Besides improving the elders' wellbeing and active living, the Co-Living solution presents also benefits for their care givers. The following list highlights some of the benefits for each type of end-user:

- **For the elders:**
  - Remain independent for longer time;
  - Higher quality of life;
  - Fostering social relationships;
  - Communicate more easily with friends and care givers (remotely);
  - Remind planned activities and take the initiative of proposing new activities;
  - Having a mean for alerting care givers in case of needing emergency assistance;
  - Higher sense of security and support;
  - Delaying or preventing transfer to a care facility[2];
  - Lower care costs.
- **For the formal care givers:**
  - Organize more efficiently the care support;
  - Receive information on elders activity/inactivity;
  - Monitor and communicate more easily with elders (remotely);
  - Saving time in managing daily activities;
  - Increase on the quality of work and of the services provided.
- **For the informal care givers:**
  - Monitor elders activity;
  - Communicate more easily with formal care givers (remotely);
  - Receive information on elders activity/inactivity;

[1] CAMELI website: http://www.cameli.eu

[2] "Assistive Technology and Older Adults, The Journey Through Caregiving" (2003), North Dakota Family Caregiver Project, North Dakota State University, p.18

- Lower care costs related to caring of their elders.

The Co-Living solution is to be applicable to the elderly social community interaction field and it is expected to be available on the market by the year 2015. The potential customers of a commercial Co-Living solution are:

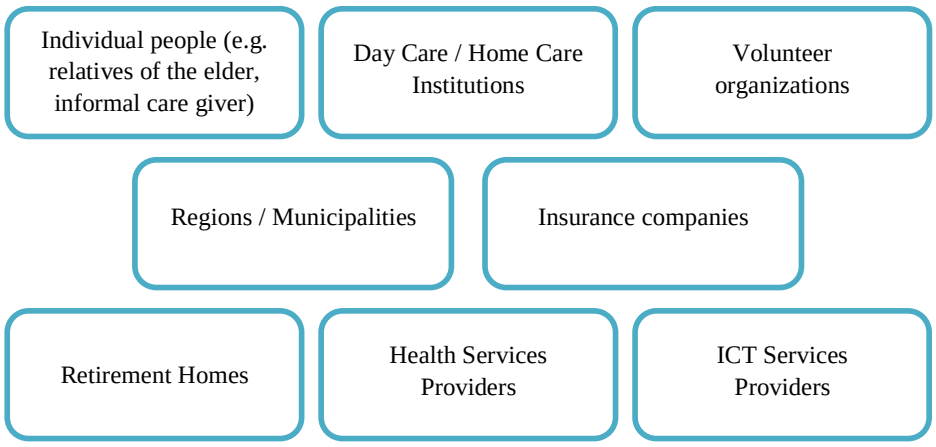

Figure 4 – Potential Customers of Co-Living outcomes

Considering the three main Co-Living project's outcomes described on section 2.1 and the potential customers listed above, the project team reached the following matrix representing the potential interest of customers on Co-Living outcomes:

Table 2 – Potential Interest of Customers on Co-Living outcomes

	SoCo-net	ICT based services	Applied knowledge
Individual people	X	X	
Day Care Institutions	X	X	X
Retirement Homes	X	X	X
Health Services Providers	X	X	X
ICT Services Providers		X	X
Universities / R&D Organisations			X

3 Co-Living Market analysis[3]

The main focus of the project team regarding the exploitation of Co-Living outcomes is on the European Market. In order to assess and understand the current conditions of this market that can influence the exploitability of the Co-Living results, a PEST analysis has been made. The findings of this analysis will support partners defining their business strategy.

3.1 Political Environment

With the Europe 2020 Strategy, the European Commission intends to contribute for a smarter, sustainable and inclusive economy delivering high levels of employment, productivity and social cohesion[4]. This strategy takes into consideration the changes occurring in European at all fields, including the increasing globalization and competitiveness of the markets, the demographic changes, the economic challenges, among others. Therefore, for the Co-Living project team, it is relevant to understand the political environment regarding the ICT and Health/Ageing sectors, as these may impact directly on the exploitability of the project outcomes.

Since some years, several policies are being undertaken for the successful implementation of this strategy, namely in the areas of Digital Economy and of Health and Active Ageing. Some of the main policies are highlighted next:

- **Digital Agenda for Europe:** *one of the seven flagship initiatives of the Europe 2020 Strategy, set out to define the key enabling role that the use of Information and Communication Technologies (ICT) will have to play if Europe wants to succeed in its ambitions for 2020*[5].
- **A Lead Market Initiative for Europe:** *the first comprehensive effort at EU level for a coordinated demand-side innovation policy approach. It uses a number of policy instruments to facilitate the uptake of new innovative products and services in the market*[6]. One of the markets approached by this initiative is the eHealth Market, for which a specific action plan[7] was defined.
- **European Technology Platforms (ETP)**: initiatives created for bringing together academia and industry into the definition of a strategic research agenda which would *mobilise a critical mass of national and European public and private resources*[8]. Eight ETP have been created till now on the domain of ICT.
- **European Innovation Partnership on Active and Healthy Ageing**: it has been launched by the Commission to *improving health and quality of life of older people, improving the sustain-*

[3] Due to the termination of Andago's participation in the project, the analysis of the Spanish reality has been removed. Since this partner is no longer active the future exploitation of the project in the Spanish market is no longer a priority.

[4] Commission Communications: "EUROPE 2020, A strategy for smart, sustainable and inclusive growth" COM(2010) 2020 of 3.3.2010

[5] Commission Communications: "A Digital Agenda for Europe" COM(2010) 245 final/2 of 26.8.2010

[6] Commission Communications: "Lead Market Initiative for Europe, Mid-term progress report" SEC (2009) 1198 final of 9.9.2009

[7] Commission Communications: "Lead Market Initiative for Europe - Action Plan for eHealth" SEC(2007) 1729 of 21.12.2007

[8] European Commission, "Overview of European Technology Platforms in ICT", 2nd Edition, November 2006

ability and efficiency of care systems and creating growth and market opportunities for businesses[9]. This partnership focuses its actions on three pillars: prevention, screening and early diagnosis; care and cure; and active ageing and independent living.

- **Action Plan on Information and Communication Technologies and Ageing**: *designed to create political and industrial momentum for a significant effort in developing and deploying user-friendly ICT tools and services, mainstreaming older users' needs and supporting other policy areas in addressing the challenges of ageing*[10].

It has to be stressed that the principles and concerns existent on these European level policies are promoted and embedded in national policies of the different member-states.

The relevance of both areas is also visible on the priorities of several funding programmes promoted by the European Commission, such as:

- **7th Framework Programme (FP7)**: devoted to funding research it aims at strengthening the scientific and technological base of European industry and at encouraging the international competitiveness of European research[11]. Within its Cooperation programme, FP7 has Health and Information and Communication Technologies (ICT) as thematic areas, which stresses the relevance of these domains for Europe. From 2007 to 2009, 437 projects in Health thematic area and 1.077 projects in ICT thematic area have been granted[12].

- **Competitiveness and Innovation Framework Programme (CIP)**: running from 2007 to 2013, this programme supports innovation activities, provides better access to finance and delivers business support services in the regions. It has three operational programmes: Entrepreneurship and Innovation Programme (EIP), Information Communication Technologies Policy Support Programme (ICT-PSP), and Intelligent Energy Europe Programme (IEE)[13]. Innovative ICT based services are funded through the ICT-PSP programme, addressing relevant areas such as ICT for health, ageing and inclusion. From 2007 to 2010, this programme funded 128 projects from which 12 were in eHealth area[14].

- **Ambient Assisted Living Joint Programme (AAL)**: this programme *aims to create better condition of life for the older adults and to strengthen the industrial opportunities in Europe through the use of information and communication technology*[15]. Launched in 2008, the AAL programme has funded, so far, more than 100 projects carried out by consortia build up of different types of organizations, including SME which represented over 40% of total organisations involved[16].

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[9] Commission Communications: "Taking forward the Strategic Implementation Plan of the European Innovation Partnership on Active and Healthy Ageing" COM(2012) 83 final of 29.2.2012

[10] Commission Communications: "Ageing well in the Information Society. An i2010 Initiative - Action Plan on Information and Communication Technologies and Ageing" COM (2007) 332 final of 14.06.2007

[11] What is FP7? The basics http://ec.europa.eu/research/fp7/understanding/fp7inbrief/what-is_en.html (consulted on 25.10.2012)

[12] Interim Evaluation of the Seventh Framework Programme, Report of the Expert Group. Final Report 12 November 2010, p. 27

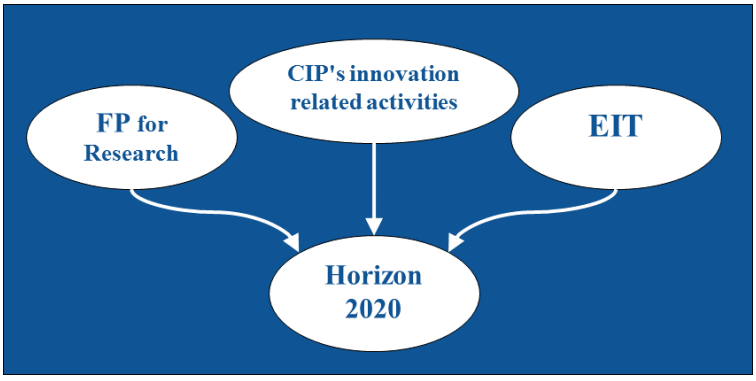
[13] http://ec.europa.eu/cip/

[14] CIP ICT PSP Final (Second Interim) Evaluation, Final report. 20.07.2011, pp. 9-10.

[15] Retrieved from http://www.aal-europe.eu/about/objectives/ (consulted on 25.10.2012)

[16] Eindhoven Declaration, AAL Forum: 24-27 September 2012. (http://www.aal-europe.eu/wp-content/uploads/2012/10/AALA-Eindhoven-Declaration.pdf)

For the upcoming years, 2014 to 2020, the **Horizon 2020** is planned a single funding programme for research and innovation that will merge all the existent ones, such as the Framework Programme for Research, the Competitiveness and Innovation Framework Programme and the European Institute of Innovation and Technology.



Horizon 2020 will focus on three priorities: Excellent Science, Industrial Leadership (including investment in key industrial technologies with support, among other, for ICT), and Societal Challenges (namely Health, demographic change and wellbeing)[17]. Horizon 2020 will stresses the relevance of ICT for ageing in the future Europe.

3.2 Economic Environment

For Co-Living partners it is relevant to understand the economic environment related to the European Market, in general, and the ICT and Health sectors, in particular.

The European economical context has been changing significantly in the past few years, which main outcome resulted in a financial crisis that have been influencing the market conditions and the competitiveness of companies and organizations. In fact, according to the European Economic Forecast, Spring 2012, *most Member States have entered or are moving into recession in 2011/12*[18]. This situation will require from economic actors new answers and strategies for maintaining themselves active on the market.

According to 2010 data, the *ICT sector is directly responsible for 5% of European GDP, with a market value of € 660 billion annually*[19]. The development of this sector in Europe is reinforced by the policies implemented and promoted, such as the Digital Agenda. This sector is of crucial importance for the future of the European society, not only as an industrial sector *per si*, but also due to its usefulness and relevance for the competitiveness of other economic sectors. In fact, *more efficient modular software and ICT services that are **customised** for companies and private individuals will be increasingly in demand throughout Europe and worldwide, with growth of at least 6 %. In addition, there will be greater emphasis on targeting specific user groups, such as women or **senior citizens***[20].

Regarding the Health sector, *in 2008, European Union countries devoted 8.3% of their GDP on average to health spending*[21]. It is expected that the expenditure on *health and long-term care as a*

[17] Commission Communications: "Horizon 2020 - The Framework Programme for Research and Innovation" COM(2011) 808 final of 30.11.2011
[18] European Economic Forecast, Spring 2012
[19] Commission Communications: "A Digital Agenda for Europe" COM(2010) 245 final/2 of 26.8.2010
[20] German Federal Ministry of Education and Research, ICT 2020 – Research for Innovations, 2007
[21] OECD (2010), Health at a Glance: Europe 2010, OECD Publishing.

share of GDP could almost double between 2005 and 2050 on average across OECD countries[22]. Having into consideration the ageing population of Europe, it is expected that this expenditure increases in the future[23].

Therefore, solutions that can help tackling this situation or contribute for reducing the public health costs can been seen as of added-value by the market. This can be reached through the use of ICT solutions for health and ageing, as *ICT also has considerable potential to improve the delivery of long term care services, for example, by allowing the remote monitoring of older people in their homes*[24].

3.3 Social Environment

The main reality concerning social environment, is that Europe in ageing. The Commissioner for Employment, Social Affairs and Inclusion, László Andor, claims that "*the ageing of Europe's population and shrinking of our working-age population is a major challenge for the decades ahead*"[25]. In fact, life expectancy at birth has been increasing the past years and recent forecasts reveal that this tendency will go on in the future. On the other hand, birth rates have been reducing. These factors, are contributing for a significant modification in the age structure of European population, as elder people will become a larger share of the existent population[26] (Figure 5).

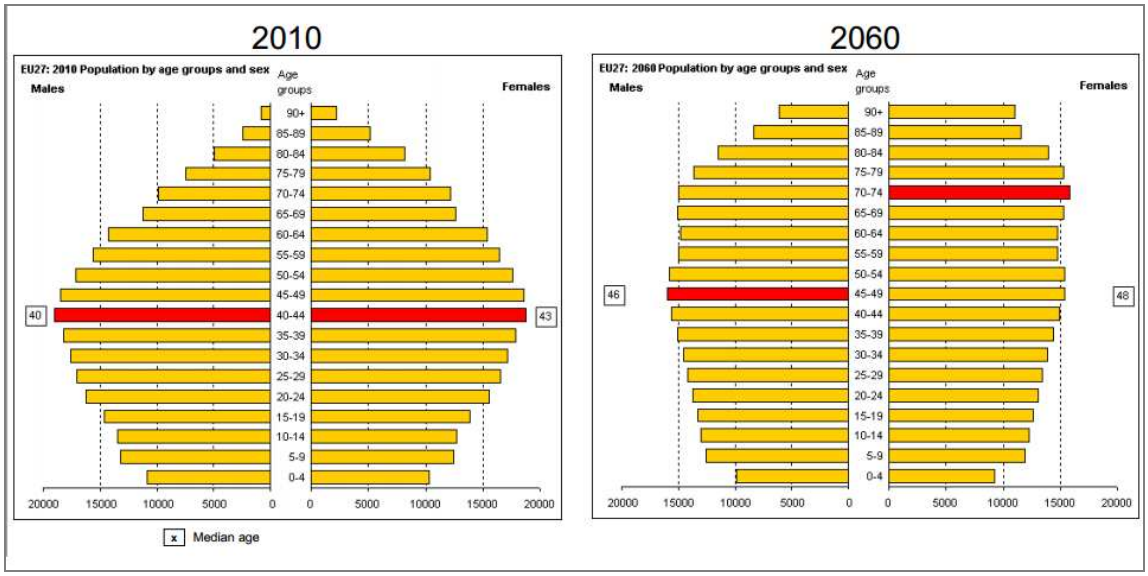


Figure 5 – European Population - Age Structure Past and Future[27]

[22] *Idem.*

[23] Commission Communications: "Dealing with the impact of an ageing population in the EU (2009 Ageing Report)" COM(2009) 180/4

[24] DG Employment, Social Affairs and Inclusion. Demography, active ageing and pensions. Social Europe guide. Volume 3, May 2012

[25] *Idem*

[26] DG Economic and Financial Affairs, The 2012 Ageing Report: Underlying Assumptions and Projection Methodologies, Joint Report prepared by the European Commission (DG ECFIN) and the Economic Policy Committee (AWG), 2011

[27] Giuseppe Carone, Presentation made at FAD/EUO Joint Conference Public Health Care Reforms: Challenges and Lessons for Advanced and Emerging Europe, "Health care challenges in Europe", Paris, 21 June 2011

Projections on population development and growth show that the share of the population aged 65 years and over will rise from 17% in 2010 to 30% in 2060, and those aged 80 and over will rise from 5% to 12% over the same period[28]. The ageing of the population will brings new opportunities for products and services addressed to older people, whose needs and requirements will need to be met in order to keep this people active for longer.

In terms of access to the internet, according to recent EU statistics[29], *almost three quarters of households had access to the internet in the first quarter of 2011, compared with almost half in the first quarter of 2006.* Thus, European population is increasing in using internet, particularly for accessing public authorities' portals and ordering goods and services. This is an important factor, considering that many of the new technologies uses Internet for providing services and keep the users connected.

3.4 Technological Environment

As European population ages the need for new technologies for helping older people living a more active, participative and longer live is increasing. Within this frame, the Ambient Assisted Living (AAL) solutions play a key role as there are planned and developed according to specific needs of elders. In the field of health, *new telemedicine services such as online medical consultations, improved emergency care and portable devices allowing monitoring the health condition of people suffering from chronic disease and disabilities have the potential to offer a freedom of movement that patients have never previously enjoyed*[30].

[28] EUROSTAT, Population projections 2010-2060, News Release, 8 June 2011 (http://epp.eurostat.ec.europa.eu/cache/ITY_PUBLIC/3-08062011-BP/EN/3-08062011-BP-EN.PDF)

[29] EUROSTAT, Internet access and use in 2011, News Release, 14 December 2011 (http://europa.eu/rapid/press-release_STAT-11-188_en.htm)

[30] Commission Communications: "A Digital Agenda for Europe" COM(2010) 245 final/2 of 26.8.2010

Figure 6 – Spectrum of technologies for supporting support independent living and homecare[31]

The AAL Joint Programme (presented in section 3.1), through the financial support to various projects, has contributed for the development of several ICT-based products and services addressed to the challenges of an ageing society. However, there are still some barriers to overcome in order to deploy these products and services into the market, because *with some important exceptions such as social alarms and telecare, a European market for AAL products and services is not yet taking off*[32].

Additionally, communication devices are one of the technologies with higher penetration rates on the markets, with *a mobile penetration rate of 128% in Europe (versus 100% in Japan and 104% in the USA)*[33]. When analyzing the use of mobile devices by the population aged over 60, the rate is of 63%. The devices which use is growing more are smartphones (out of the 5 billion mobile phones in the world, 1.08 billion are smartphones[34]) and tablets. Also apps available are increasing, namely those related to health monitoring, which are of added value for older users[35].

3.5 Potential market size in participating countries

As mentioned in section 2.2 the potential customers of a commercial Co-Living solution involve individual people (e.g. relatives of the elder, informal care giver); day care / home care institutions; insurance companies, retirement homes, volunteer organizations, municipalities, health services providers; and ICT services providers.

An initial analysis on the potential size of the market for future deployment of the Co-Living solution has been made focusing on the realities of the countries of the Co-Living partners, and having into consideration the main players in health services provision:

- **Netherlands**[36]:

  In 2009 there were **93 hospital organizations**, with altogether 141 hospital locations and 52 outpatient clinics. In addition, there were **198 independent treatment centres** that provide selective non-acute treatments. In 2007, there were **960 retirement homes** and **534 home care institutions** (including nursing homes and residential homes) with 169 000 clients.

- **Norway**[37]:

  The country has **431 municipalities** that are responsible for the provision of primary health care and social services. Specialized care is under the responsibility of five regional health authorities, where there are **31 health enterprises** and at least **one university hospital**. With regard to nursing care, in 2000, approximately 90% of the **nursing homes** were owned by the municipalities, whereas only 3% were commercially run.

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[31] Retrieved from "ICT & Ageing. European Study on Users, Markets and Technologies". Report prepared by empirica and WRC. Final Report, 2010.

[32] Independent panel report, "Interim Evaluation of the Ambient Assisted Living Joint Programme, Unlocking innovation in ageing well", December 2010

[33] GSM Association, European Mobile Industry Observatory 2011

[34] Anson, Alexander, "Smartphone Usage Statistics 2012", retrieved from: http://ansonalex.com/infographics/smartphone-usage-statistics-2012-infographic/ (consulted on 25.10.2012)

[35] *Idem*.

[36] European Observatory on Health Systems and Policies, Schäfer W, Kroneman M, Boerma W, van den Berg M, Westert G, Devillé W and van Ginneken E. "The Netherlands: Health system review. Health Systems in Transition, 2010"; 12(1):1–229.

[37] Johnsen JR. "Health Systems in Transition: Norway". Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies, 2006.

- **Cyprus**[38]

  Primary/ambulatory care services are delivered by a mix of public and private providers. Public sector services are delivered by a network of **38 health centres**, 30 of which are rural and scattered all over the island, and 8 of which are urban and located in the Nicosia District. According to the Ministry of Health in 2011, **134 private health care group practice facilities** (hospitals, polyclinics and clinics) were operating. The country has **5 district general public hospitals** with a total capacity of 1026 beds of the nearly 3000 hospital beds available in 2008. Moreover, in 2010 there were **134 nursing homes**, of which 12 were public, 49 community based and 73 private.

- **Portugal**[39]:

  In 2004, Portugal had **171 hospitals**, 89 of which were public and 82 private. ***Misericórdias***[40] currently operate hospitals and facilities in the areas of rehabilitation, long-term care and residential care for older people, people with disabilities and people with chronic illness. Day centres, nursing homes and residences for the elderly provided 120 000 places, in 2005. Residential care is provided by nursing homes run by *Misericórdias* and other non-profit making institutions.

3.6 SWOT Analysis

According to the partners, one of the main value proposals Co-Living offers is its applied research into new practice-oriented socialization and care service provision concepts and models, such as SoCo-net, which have the potential to offer a differentiating feature or to remove an adoption barrier to AAL services. This applied research relies on the extensive knowledge of care organisations (public and private) acquired throughout the project.

The interoperability, modularity, flexibility and standardization of the Co-Living solution which easily facilitates the integration with different technologies, is also viewed as its main strength. The entire Co-Living software is designed to be a very flexible solution, with the interfaces compatible with various state of the art devices (i.e. smart device, tablet, etc.) with minimal hardware requirements. Its openness – acting as an interoperable ecosystem - offers the possibility to gradually integrate new customised services developed internally or by third parties, with a view to adjust to the specific needs of each individual end user, thus improving the elderly daily life in an ad-hoc and informal way. Additionally extra value is created in optimizations regarding simple and effective user interfaces, privacy, etc.

Moreover, the Co-Living products and services focus not only on technological research innovation but also gives great attention on the user's acceptance. This is achieved by developing and integrating in the Co-Living product a web based social community network (SoCo-net) which supports active communication, assistance and collaboration between the elderly and his/her social environment.

[38] European Observatory on Health Systems and Policies, Theodorou M, Charalambous C, Petrou C, Cylus J. "Cyprus: Health system review. Health Systems in Transition. 2012"; 14(6):1–128

[39] European Observatory on Health Systems and Policies, Barros P, de Almeida Simões J. "Portugal: Health system review. Health Systems in Transition, 2007"; 9(5): 1–140.

[40] *Misericórdias* are independent charitable organizations. There near 400 *misericórdias* at the present time in Portugal.

The initial SWOT analysis allows a clear picture on the main strengths, weaknesses, opportunities and threats of the Co-Living solution resulting from the work done so far by partners and from a preliminary analysis of the potential marketability/exploitation of the project' results.

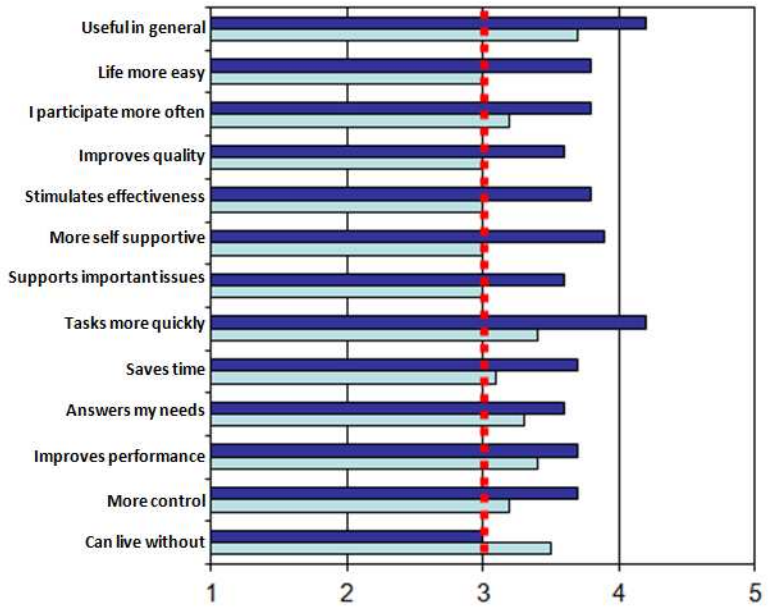
Strengths	Weaknesses
• Applied research into new practice-oriented socialization and care service provision concepts and models • Interoperability, modularity, flexibility and standardization which easily facilitates the integration with different technologies • Interface and services developed according to end-users needs • Possibility to include new and complementary services • Potential gains in time saving for carers daily work • Potential saving in care costs for the elder and relatives	• It requires Internet to connect • It is prepared for tablets and smartphones (which implies a cost for the acquisition of the devices) • It requires initial training and maintenance technical support • Limited to the Co-Living "community" (a user cannot invite another person freely, it needs technical support)
Opportunities	**Threats**
• Ageing population (which means more potential users) • Health and ICT promotion policies • Pressure in social and health cost reduction • New market niche addressing elders needs • Existent funding schemes for promoting innovation and R&D	• Existent competition and offer • Technological change • Risk of being copied • Potential new standards and certifications • Current economic crisis: less money available (which can lead to budget constraints)

Figure 7 – Co-Living SWOT Analysis

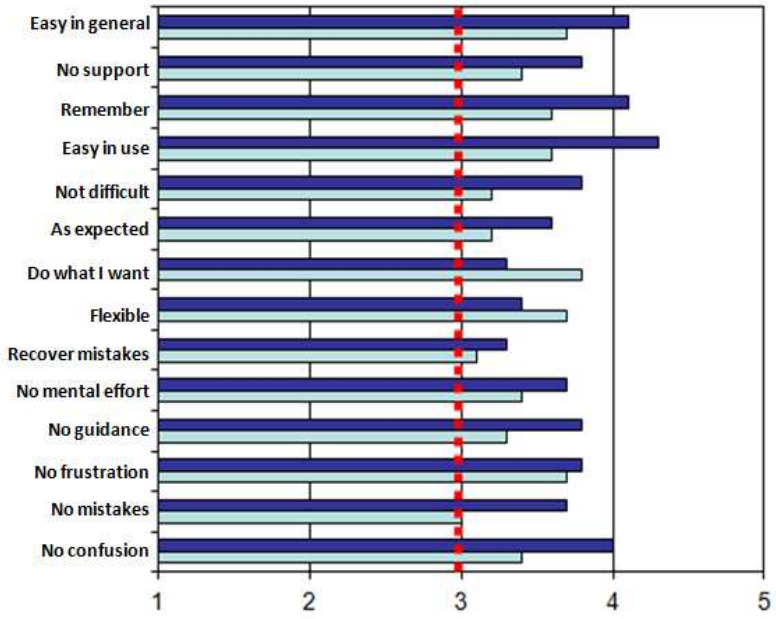
3.7 Assessment by the users

Two pilots, in the Netherlands and Norway, representing the two different use cases, were carried out to assess and validate the Co-Living solution in its social, economical and psychological dimensions. Users assessed the solution in two different periods, which allowed the consortium to confront the perception of users over time. The charts below present the results retrieved during the pre-trials (light blue) and the results at the end of the trials (dark blue).

PERCEIVED USEFULNESS



EASE TO USE



Participants, in both trial locations, considered the Co-Living solution as useful, easy to use, self-supportive tool. In fact, results show that the sense of perceived usefulness and ease of use increased over time.

4 Business Model for the Co-Living Solution

4.1 Future Plans

Having into consideration the exploitable outcomes of the projects the consortium of the Co-Living project has been discussing the future opportunities for those outcomes. Four areas for potential exploitation were defined (Figure 8).

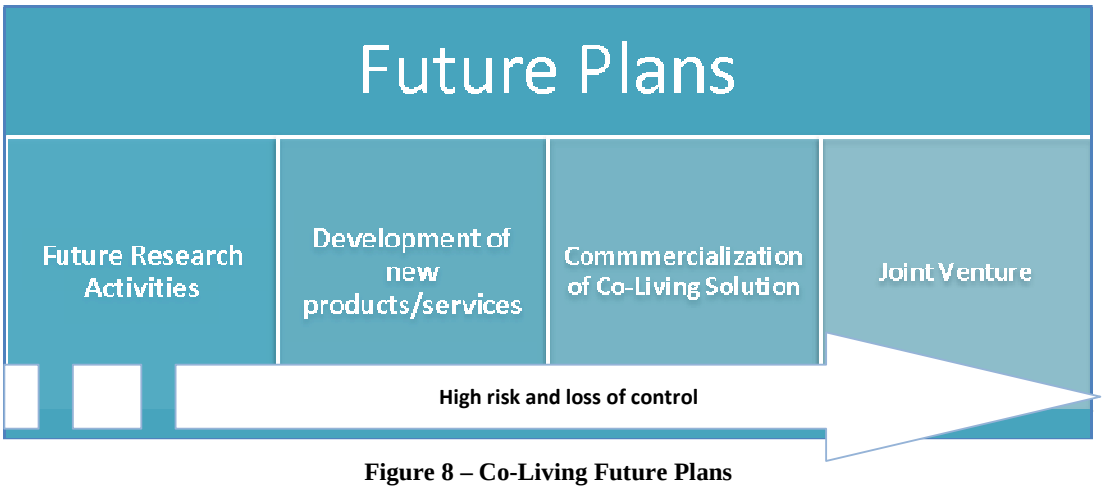


Figure 8 – Co-Living Future Plans

The results of the Co-Living project gathered valuable information on users' socialization needs, as well as, on case scenarios for the development of an assistive technology. Furthermore, technical knowledge on specifications and development of the Co-Living solution has been enhanced and generated. All the knowledge, competences and skills used or developed during the Co-Living project implementation can be further used in **new research and collaborative projects** (as in the new project CAMELI). Also, from the progresses made during the Co-Living project, some of the partners see an opportunity for **developing new products** or services in the future.

Concerning the possibility of **commercializing** the Co-Living Solution after the project completion, some partners showed interest in doing this, such as the project coordinator that intends to commercialize the solution to other centers within the Orbis Medical and Care Group and also other organizations operating in care sector.

Moreover, the consortium has thought about the possibility of carrying out a commercial joint-exploitation of the Co-Living to be undertaken through the creation of a **Joint Venture**. This kind of alliance could facilitate the market penetration of the Co-Living Solution in partner's countries, as well as in those in which they have good business networks, allowing the share of revenues and costs among the partners involved. However, the consortium has decided on the non-formalization (legal establishment) of the joint venture for the commercialization of the solution for the time being.

Detailed intentions of each partner concerning the four areas for future plans can be consulted in the first version of this document, which was produced in Month 24.

4.2 Canvas Model

Developed by Alexander Osterwalder[41], the Business Model Canvas is a tool for supporting the definition and management of a business model. It comprises a visual grid composed by nine blocks in which main information about the business is identified in a simple manner, highlighting the most important aspects of the businesses.

The Business Model Canvas has been increasing its importance as a reference template model for presenting business models. In this sense, partners have agreed on using this template to describe the potential business model to be adopted for the Co-Living solution.

Next a short description of each one of the nine blocks is presented and the visual description of the business model can be seen in Figure 9.

4.2.1 Key Partners

In order to deploy the Co-Living solution in the market there are four types of key partners to consider: technical / ICT solutions providers; developers of the system; activity organizers and; volunteers/students. The technical/ICT solution providers will act as main interface with those that will be adopting/using the Co-Living solution and those responsible for ensuring a proper function of the devices through which the system can be accessed. On the other hand, the developers of the system are considered as key partners, as it is important to guarantee the continuous improvement and enhancement of the Co-Living solution, either to overcome existing bugs and malfunctions, as well as to introduce news features and functionalities to better address the needs of the users.

Other relevant partners are the activity organizers, which can comprise the care givers (informal and formal), the regions/municipalities and the elders. The insertion and management of activities in the Co-Living system is crucial for the reaching of the objectives of using this system, which is to improve the social interaction between elders and to promote their daily activity and independent living. Thus, a close relation to these key partners is needed to ensure an optimization of the system.

Finally, volunteers/students are also considered as key partners due to their undeniable contribution for the training of the elders in how to deal with the solution and benefit from it. Establishing a durable relationship with universities and volunteering associations is therefore important to ensure this liaison between elders and youth in the training process, as well as it fosters the social aspect of the overall concept of Co-Living.

4.2.2 Key Activities

The main activities for the deployment of the Co-Living solution are related to the preparation of the system to work properly, as well as to its continuous maintenance. As such, installation and customization activities are primordial as it prepares the system to be operational within the framework of a given client, considering the devices (e.g. tablets) and the social context in which it will be implemented. Aligned to this activity, is of course the technical support / maintenance activity for ensuring an efficient running of the system to all users.

[41] Osterwalder, Pigneur & al. (2010) Business Model Canvas: nine business model building blocks. Retrieved from: http://en.wikipedia.org/wiki/Business_Model_Canvas

In addition, besides the technical activities, it is important to have into consideration also the execution of other activities that will contribute for motivating final users adopting the system. Thus, the training activity is very important to allow elders to feel comfortable and curious about the system, willing to use it daily as a tool for communicating with others and enhance social interaction. At the same time, it is important to focus on the network community creation and development, which may be implemented by the carers through the insertion of new activities in the system and their promotion among the elders so they join and can remain active.

4.2.3 Key resources

The Co-Living system constitutes the main resource within this business model, as it constitutes the main outcome of the project to be exploited further. In order to be able to use/benefit from the Co-Living system it is important that the end-users owns some kind of a mobile device (e.g. tablets, smartphones) through which they can access the Co-Living solution and make use of it. As such, an important resource is an Internet connection, which will allow the transmission and update of the information by the users.

4.2.4 Value proposition

The value proposition offered by the Co-Living solution, by target-group, is detailed in section 2.2 of this document.

4.2.5 Customer relationship

For a proper deployment of the Co-Living solution it will be important to ensure customers/users with technical support / maintenance. The duration of this specific relationship has to be determined case by case, according to the needs and commercial agreement established. Nevertheless, it is important to guarantee assistance to the adopters of the Co-Living solution, so they can benefit from the overall features of the system without any constraint.

In addition, it will be important to nurture a co-creation relationship with potential users of the Co-Living solution, as a way of enhancing the performance of the system and overall functionalities. By this type of relationship, the solution can be continuous improved and further developed to better meet the user's needs and expectations.

4.2.6 Channels

To reach the desired customer segments, there are various channels that can be used. Within the Co-Living framework, it has been consensual that to reach most of the potential adopters of the solution, business partners networks and collaboration with Living labs would be the preferential channels to use. Partners have large business networks that include various entities that might be interested in the Co-Living solution. As such, partners can promote the system among their contacts within the various organisations and foster their interest in the product and associated services. Furthermore, living labs brings together various institutions that can be interest in the Co-Living solution, and therefore can act as an interface to reach potential users.

On the other hand, to reach the elderly population it will be important the active role of the organizations delivering/offering the care service based on the Co-Living solution. These organisations have easy contact with the elders and are in a better position to let them know about the advantages of the system and to motivate them to adopt it.

As for promotional purposes, the project website can be referenced as a source of further information about the solution. In this page, interested customers can also find information about the tests made during the project implementation, including the results from the evaluation carried out, which can contribute for validating the relevance of the Co-Living solution in promoting an active ageing through social interaction.

4.2.7 Customer segments

The customer segments, this is the main targets to which the Co-Living can be addressed, is detailed in section 2.2 of this document.

4.2.8 Cost Structure

Considering the cost structure for the business model for the Co-Living, two main headings should be taken into consideration. The first is related to staff costs, namely salaries, for human resources involved in the development / maintenance / technical support of the system. The second heading concerns the acquisition of hardware needed for using the solution. These costs can vary according to the country of the customer and of the ICT solution provider that will perform the installation, customization and maintenance of the system.

4.2.9 Revenue Streams

As for the revenue streams, the consortium have discussed different possibilities, which can be negotiated with potential customers according to their needs and financial capabilities. In this sense, customers can opt for the payment of a subscription fee (e.g. X€/inhabitant +65/insured) which would relate the final revenue with the number of users of the solution; or choose on the payment of a fee for each time an activity is entered in the system. The first option might lead to an easier financial management as the variations might be less.

Finally, as the solution is to be accessed by end-users to mobile devices, the entity responsible for granting access to it can try to negotiate some advertisement cooperation agreements that would act as a source of revenue. Similar to what happens in some social media platforms, the Co-Living provider could allow the inclusion of advertisements in the system that would be presented to all users when they accessed a certain activity or service. However, this option seems hard to implement in the short-run, but can be considered as an interesting strategy for the long-term.

<table>
<tr>
<td rowspan="2">Key Partners

• Technical / ICT solutions providers
• Developers of the system
• Activity organisers
• Volunteers/students</td>
<td>Key Activities

• Installation and Customization;
• Training of users;
• Network community creation and development;
• Technical Support / Maintenance;</td>
<td rowspan="2">Value Proposition

For the elders:
• Remain independent for longer time;
• Higher quality of life;
• Fostering social relationships;
• Communicate more easily with friends and care givers (remotely);
• Remind planned activities and take the initiative of proposing new activities;
• Having a mean for alerting care givers in case of needing emergency assistance;
• Higher sense of security and support;
• Delaying or preventing transfer to a care facility ;
• Lower care costs.
For the formal care givers:
• Organize more efficiently the care support;
• Receive information on elders activity/inactivity;
• Monitor and communicate more easily with elders (remotely);
• Saving time in managing daily activities;</td>
<td>Customer Relationships

• Technical Support / Maintenance
• Co-creation.</td>
<td rowspan="2">Customer Segments

• Day Care Institutions;
• Health Services providers;
• ICT Services/Solutions providers;
• Individual people (elders);
• Insurance companies;
• Regions/municipalities;
• Retirement Homes.</td>
</tr>
<tr>
<td>Key Resources

• Co-Living system;
• Internet Connection;
• Mobile devices (tablets and smartphones).</td>
<td>Channels

• Business partners / Living labs
• The organizations delivering/offering the care service based on the Co-Living solution.
• Project website</td>
</tr>
</table>

		• Increase on the quality of work and of the services provided. **For the informal care givers**: • Monitor elders activity; • Communicate more easily with formal care givers (remotely); • Receive information on elders activity/inactivity; • Lower care costs related to caring of their elders.		

Cost Structure	**Revenue Streams**
• Development / Maintenance / Technical Support (human resources) • Hardware	• Subscription fee (e.g. X€/inhabitant +65/insured) • Fee for entering activities in the system. • Advertisement

Figure 9 – Co-Living Business Model Canvas

4.3 Intellectual Property and Access Rights

From the very beginning of the project, in the consortium agreement, partners defined the basic principles for protecting Intellectual Property Rights (IPR) deriving from project activities. This framework allows an effective collaboration among partners for reaching the research objectives, as partners know that their IPR are protected.

The Consortium Agreement (CA) establish the rules for the collaborative work to be undertaken in the project and at the same time defined the boundaries to protect the IPR of partners. Section 4 of the CA establishes the rules regarding IPR and Access Rights. Next, the main rules are presented as stated in the CA.

4.3.1 Intellectual Property Rights

Ownership of Foreground: general principle (Section 4.1.1)

- Foreground shall be owned by the Party who carried out the work generating the Foreground, or on whose behalf such work was carried out.

Jointly generated Foreground (Section 4.1.2)

- Unless otherwise agreed in writing between the Contributors (as defined below), Section 4.12.2 below shall apply. However, the Contributors shall nevertheless be at liberty to agree in writing something different to Section 4.12.2., so long as such different agreement does not adversely affect the Access Rights or other rights of the Parties under this CA.
- Subject to any different agreement between the Contributors as referred to in Section 4.12.1 above, the following shall apply:

  a) If the work generating particular Foreground is carried out by or on behalf of more than one Party (each such Party being a "**Contributor**" and such Parties together being the "**Contributors**"), and if the contributions to or features of such Foreground form an indivisible part thereof, such that under applicable law it is not possible to separate them for the purpose of applying for, obtaining and/or maintaining and/or owning a patent or any other IPR protecting or available to protect such Foreground, the Contributors agree that, subject as expressly provided to the contrary in this Section 4.1.2.2, all patents and other registered IPSs issued thereon, and any other IPRs protection such Foreground, shall be jointly owned by the Contributors.

  b) Except as explicitly provided otherwise in this Section 4.1.2.2, each Contributor shall have the perpetual and irrevocable right, without territorial or other restriction, to Use the joint Foreground and resulting patents, patent applications and other IPRs protecting such Foreground, and to grant non-exclusive licences to third parties under the jointly owned Foreground and under any IPRs protecting such Foreground, without obtaining any consent from, paying compensation to, or otherwise accounting to any other Contributor.

  c) Within a reasonable period following creation of any jointly owned Foreground, the Contributors shall enter into good faith discussions in order to agree on an appropriate course of action for filling applications for patent pro-

tection or other protection, including the decision as to which Contributor is to be entrusted with the preparation, filling and prosecution of such applications and in which countries or territories such applications are to be filled. Except for any priority applications, the filling of any applications for patents or other IPRs on joint Foreground shall require mutual agreement between the Contributors (but excluding any Contributors who choose pursuant to paragraph (d) below not to contribute to the cost of such application). All external costs related to applications for patent protection or other protection resulting from such applications and the fees for maintaining such protection shall be shared equally between Contributors, subject to paragraph (d) below.

d) If an when a Contributor decides not to contribute, or not to continue its contribution, as the case may be, to the costs of application for or maintenance of patent or other IPR protection for the jointly owned Foreground, for one or more countries or territories, it shall be entitled not to contribute, or to discontinue its contribution, provided that:

   i. it shall promptly notify the other Contributor(s) in writing of its decision;

   ii. it shall forthwith relinquish all its title to and interest in such jointly owned patents, patents applications or other registered IPRs protecting such Foreground for the countries and territories concerned to the other owner(s) who contribute or continue their contribution, as the case may be, to such costs in accordance with paragraph (c) above; and

   iii. shall lose its rights under paragraph (b) above with respect to such jointly owned patents, patents applications or other registered IPRs for the countries and territories concerned as of the moment of notification, but subject, however, to the retention of a non-transferable, non-exclusive, royalty-free and fully paid-up licence, without the right to grant sub-licences, for the lifetime of such jointly owned patents, patents applications or other registered IPRs for the countries and territories concerned in favour of, and for the Use by, the relinquishing Contributor and its Affiliates.

e) Each joint owner of patents, patents applications or other registered IPRs protecting such jointly owned Foreground shall have the right to bring an action of infringement of any jointly owned IPRs only with the consent of the other owner(s). Such consent may only be withheld by another joint owner who demonstrates that the proposed infringement action would be prejudicial to its commercial interests.

Assigning ownership of Foreground (section 4.1.3)

4.1.3.1 Each Party may assign ownership of its own Foreground (including without limitation its share in Foreground that it owns jointly with another Party or Parties, and all rights and obligations attaching to it) to any of its Affiliates, to any assignee of the assignor's relevant business or a substantial part

thereof, or to another third party identified in Annex 6 to this CA, without prior notification to the other Parties.

However:

(a) any such assignment shall be made subject to the Access Rights, the rights to obtain Access Rights and the right to disseminate Foreground that are granted to the other Parties and their Affiliates in this CA. Therefore, each assignor shall ensure that such assignment does not prejudice such rights of the other Parties or their Affiliates. This may be done, for example, (i) by effecting such assignment subject to a licence back to the assigning Party that is sufficient for the assigning Party to grant to the other Parties and their Affiliates such Access Rights, or (ii) by the assigning Party obtaining from the assignee of the Foreground legally binding undertakings (that can be enforced by the other Parties and their Affiliates) to grant such Access Rights; and

(b) the assignor shall pass on its obligations regarding the assigned Foreground to the assignee, including the obligation to pass them on to any subsequent assignee; and

(c) if the assignment is made other than to a third party identified in Annex 6 to this CA or an Affiliate, the assigning Party shall, either before or within a reasonable period following assignment of any rights in any Foreground, notify the other Parties of the assignment, including details of the Foreground assigned and the identity and contact details of the assignee.

4.1.3.2 Each Party hereby waives any right to object to any assignment that is made in compliance with this Section 4.1.3.

4.3.2 Access Rights

General principles (Section 4.2.1)

- All Access Rights needed for the execution of the Project and for Use are granted on a non-exclusive basis and are worldwide.
- Other than in exceptional circumstances, no transfer costs shall be charged for the grating of Access Rights.
- Acting in good faith, when a Party believes that for carrying out the Project or Use of Foreground of the Project:
  a) it might require Access Rights to another Party's Background, or
  b) another Party might need Access Rights to that Party's Background, it will promptly notify such other Party of the Background Needed, and in particular, to the extent possible, it shall do so before submission of the Proposal to the AALA. However, failure so to notify another Party shall not be a breach of this CA unless such failure is due to an action in bad faith.
- Any Party choosing to rely on any deemed grant of Access Rights pursuant to this CA does so at his own risk as nothing in this CA prohibits a Party or any other party seek-

ing by whatever means it chooses to enforce its IPRs or contract or other rights if such Party or other party considers such right is not subject to such deemed grant.

- The obligation to grant and the right to receive Access Rights other than those deemed granted under this CA, unless terminated earlier or agreed otherwise by the Parties, expires 2 years after the end of the Project.

General Principles on Special provisions concerning Access Rights to Software (Section 4.2.7.1)

- All the provisions in this CA concerning Access Rights apply to Software that is Background, Sideground or Foreground as they apply to any other Background, Sideground or Foreground.
- Access Rights to Software do not include any right to require creation and delivery of Object of Code or Source Code ported to any particular hardware platform or any right to require creation and delivery of any API or Software documentation in any particular form of detail, but only as the item is available from the Party granting the Access Rights. For the avoidance of doubt, such Access Rights do not imply any obligation by the Granting Party to provide any support or maintenance for the Software, nor bear any responsibility for any claims for defects in the Software. Transfer costs shall only be charged in exceptional circumstances.
- Save as expressly otherwise provided in this Section 4.2.7, no Party shall be obliged to grant Access Rights to Source Code. All Access Rights to Software that is Foreground, whether for execution of the Project or for Use, shall be in form of Source Code Access. All Access Rights to Software that is Background, whether for execution of the Project or for Use of own Foreground, shall be in form of Limited Source Code Access, save that no Party shall be obliged to grant for Use any Access Rights to Source Code that is Background. All Access Rights to Software that is Sideground, whether for execution of the Project or for Use of own Foreground, shall be in form of Limited Source Code Access, save that no Party shall be obliged to grant for Use any Access Rights to Source Code that is Sideground.

The second version of the IPR Directory (D7.6) includes detailed information on the IP and Access Rights regarding the final version of the Co-Living Solution, determining the rules partners shall follow for exploiting the projects outcomes and results, according to their intentions.

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