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SENIOR-TV

PROVIDING ICT-BASED FORMAL AND INFORMAL CARE AT HOME

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Final Business Plan

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Executive Summary

This document is the final business entry document for SENIOR-TV. The document reflects the vision of the consortium for a future exit of SENIOR-TV into the real market. Aim of the document is to define the initial business scenarios, nailed down into specific targeted customers and markets segments. The final product presentation takes place in the beginning of this document as well as the USP of SENIOR-TV. The current status of the market is revised and lessons learned, recommendations and pitfalls to avoid are considered also in this section.

1. Updated Consortium's vision

Towards the project execution and after many f2f meetings and also virtual meetings the SENIOR-TV consortium members still we have the common understanding and communication during the project execution about the project's future. The whole consortium has a vision for SENIOR-TV to scale and become, from an AAL Project, into a real product. However, during these years of working we did not manage to find a common commercial vehicle, including all the partners, in order to use and exit into the market. After discussions, GLUK will take over the role to exploit the full product or sub products of the project into the real life's market. The way that SENIOR-TV will be introduced will still be through an STB (Set Top Box) and through Android TV.

2. SENIOR-TV as a product

SENIOR-TV is a Smart TV software platform for providing formal and informal caregiving services to older adults that live alone in their own homes, at an affordable price, aiming to foster a high-quality, long, and healthy life.

SENIOR-TV aims to provide a TV-based platform to run third-party applications, with social, medical and entertainment purposes, which may be combined with other equipment such as smartphones and tablets. Specifically, it aims at designing and implementing a multichannel intelligent platform for offering formal and informal caregiving services to older adults that live at their own homes, with special attention being paid at active prevention, and fostering a high-quality, long, and healthy life. SENIOR TV will be distributed with a set of built-in applications that will render the product functional out-of-the-box.

The people through a simplified interface can interact with the SENIOR-TV. The hardware part of the product it is foreseen to be sold using an existing commercial STB (Set Top Box). In that way the buyer will have just to connect the STB into the TV set and then the TV becomes a smart Senior TV. An image of the current view of the SENIOR-TV is presented below. (In this picture we are using Xiaomi Mi but we have used also other hardware devices during the project execution).



Figure 1: SENIOR-TV in an STB

The SENIOR-TV platform will be open to developers to add their content (after control). During the AAL Project execution a set of applications and services (informal and formal) are available through SENIOR-TV such as:

- Virtual Center 2.0
- Agenda 2.0
- Events 3.0
- News 3.0
- Tracker 2.0
- Wikipedia 2.0
- Weather 3.0
- Audiovisual Channels 1.0
- Audiovisual Channels TV
- Audiovisual Channels Web
- Video chat 1.0
- Social Nets 1.0
- Rehabilitation Games
- Leisure games
- Out-home leisure recommender 1.0
- Health 2.0

Some indicative screenshots of selected apps are presented below. More detailed info about the final apps, services, their view and functionality can be found in the deliverable 2.3 SENIOR-TV v3. NOTE: The following screenshots are indicative, and here are not presented all the apps and services. The designed appeared here is the final design. The scope of this section is to give to the reader an indicative view of the SENIOR-TV final interface.

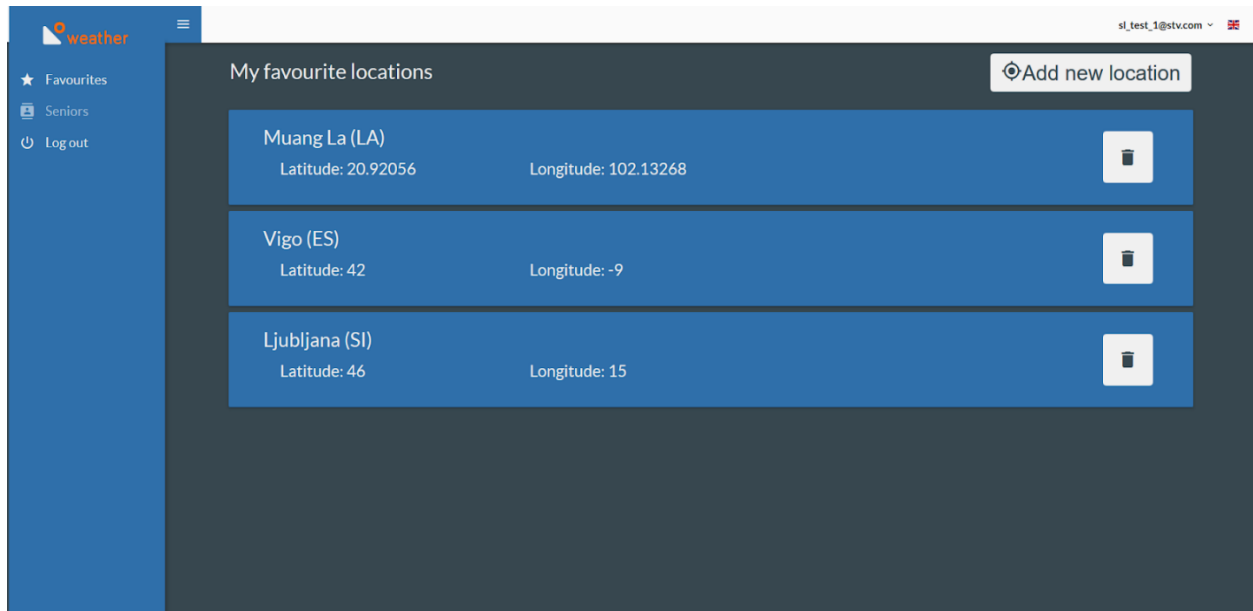


Figure 2: Weather 3.0 Web

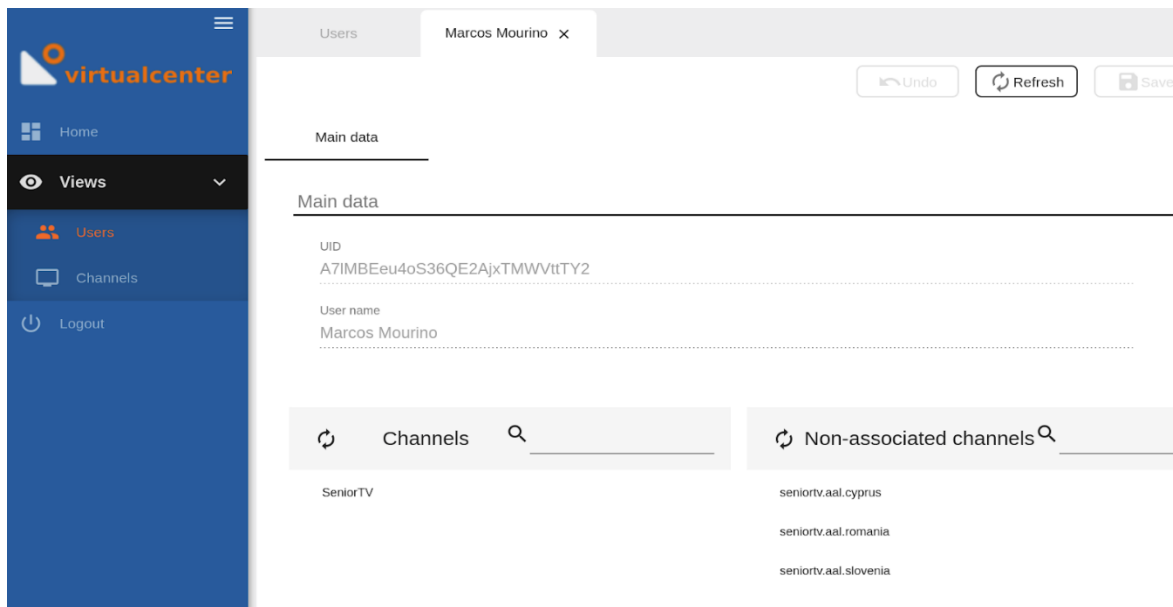


Figure 3: Virtual Center 2.0 Web

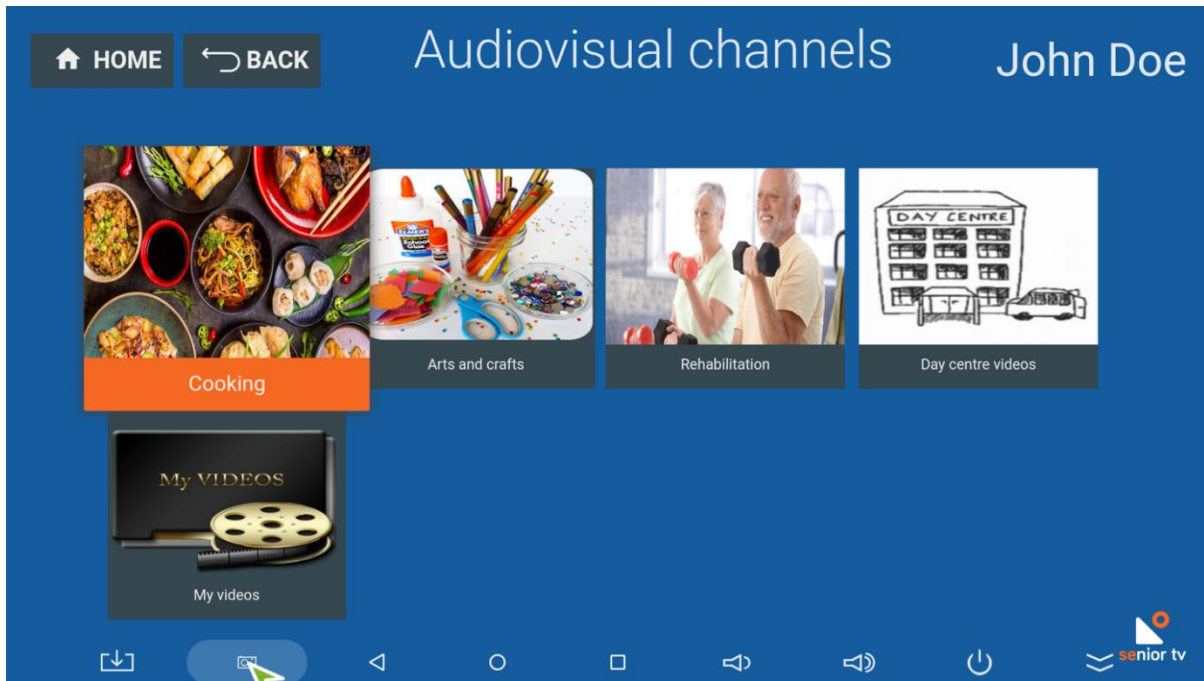


Figure 4: Audiovisual Channels

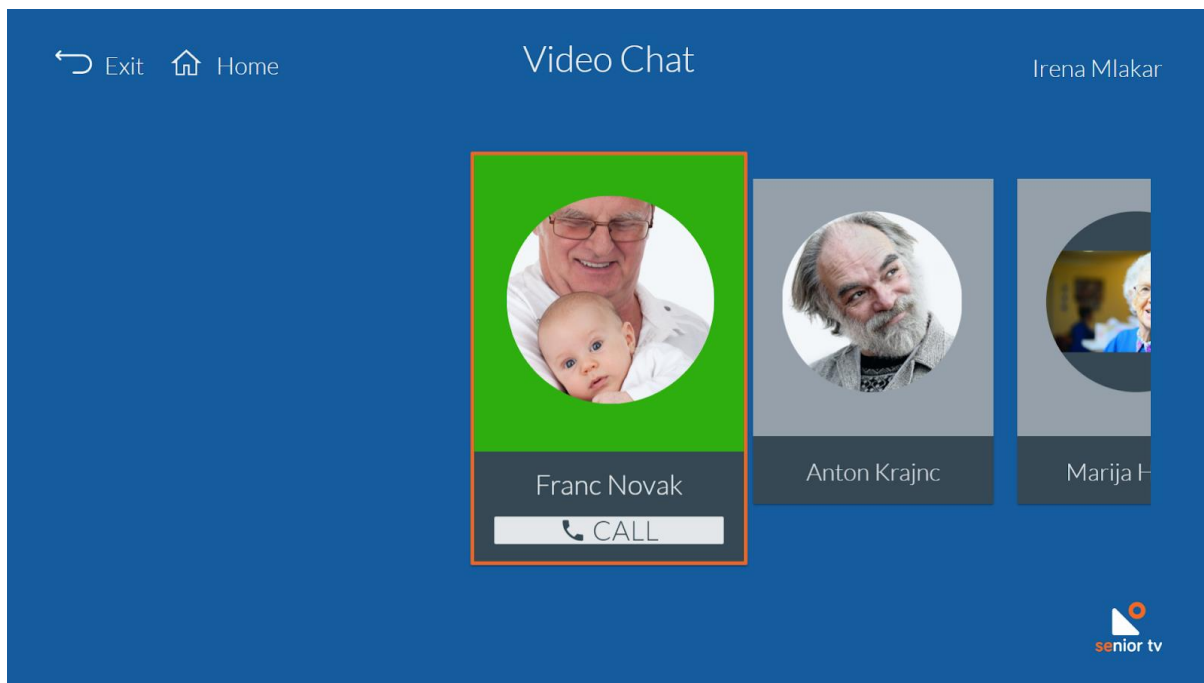


Figure 5: Video Chat

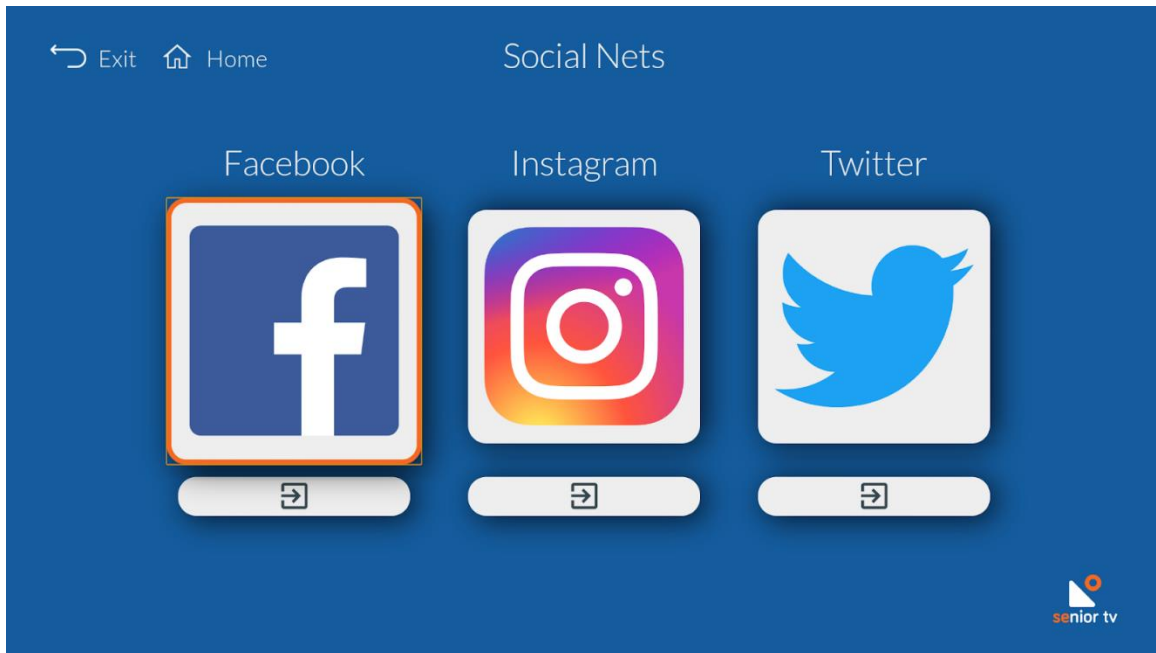


Figure 6: Social Networks

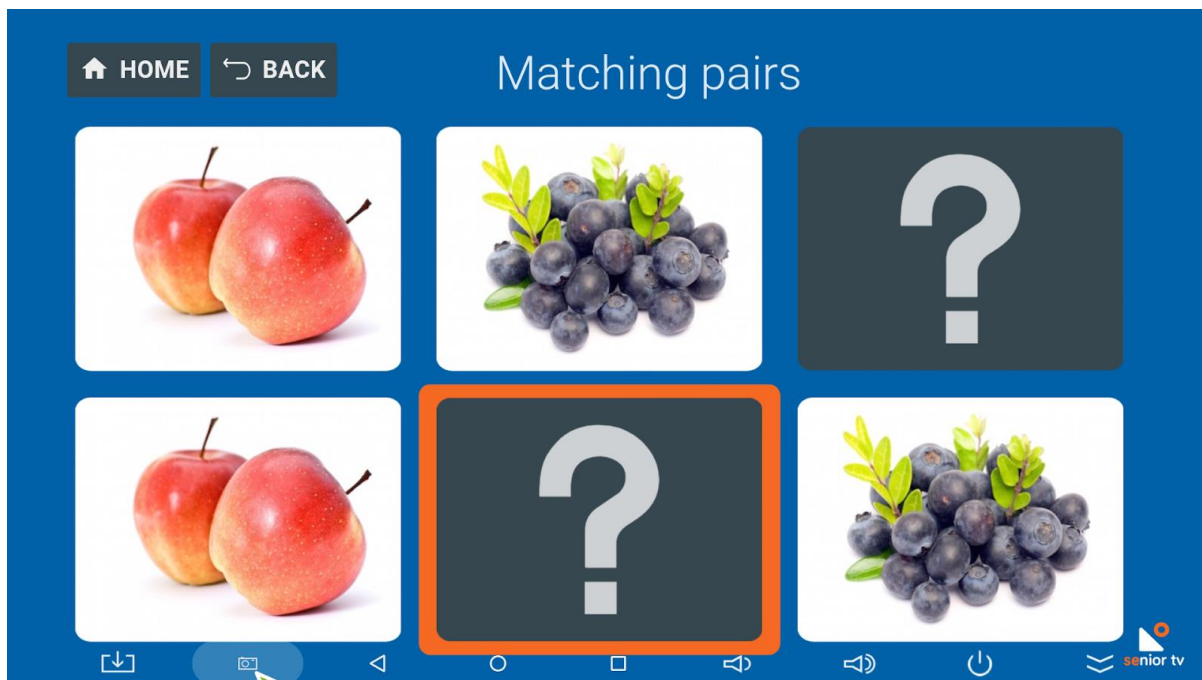


Figure 7: Games

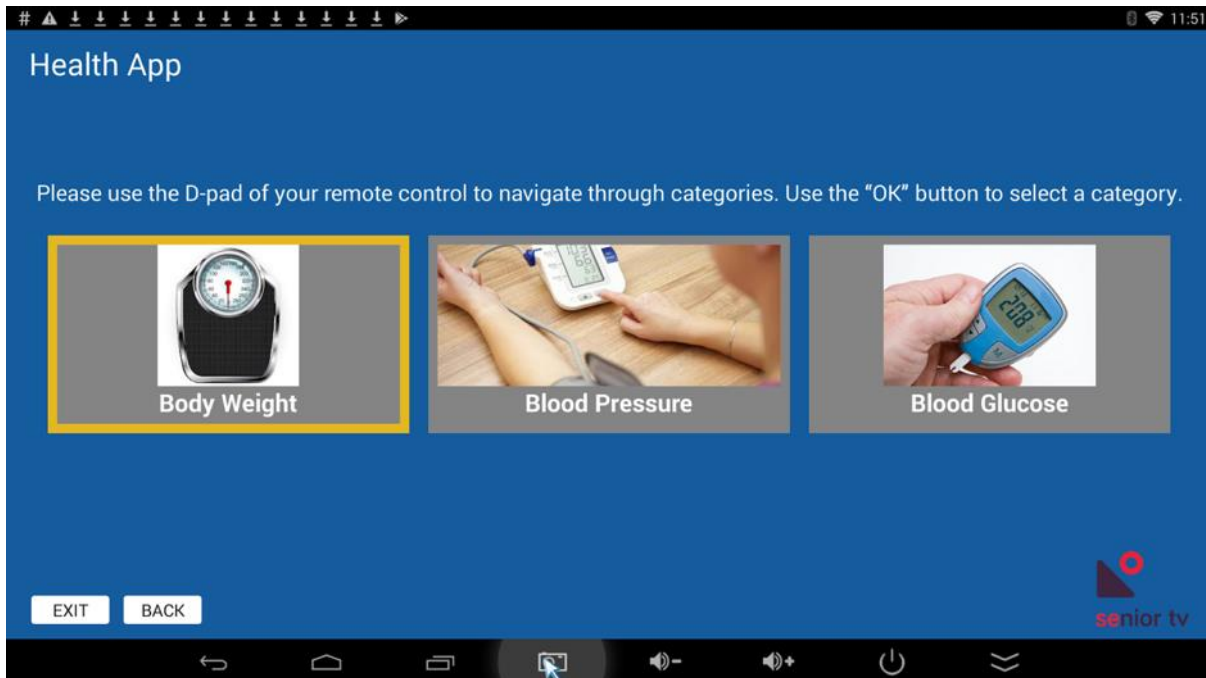


Figure 8: Health

3. The Business Model

During the project pilots and workshops with the end users, in the second half of the project, we had involved in the process a lot of business development questions and relative activities. Throughout this process 2 main findings came up: There is a group of potential buyers' classified as:

- elderly that they are independent and decide by their own selves for the services/products that they want to purchase. This group is not a potential “buyer” of SENIOR-TV. The outcome of the research resulted as that they found interesting the idea but never would spent a dime to have it.
- elderly that are somehow dependent and third parties decide for them (e.g. care centres, family, doctors, nurses, carers, etc.). In this group the care centers expressed their interest of buying SENIOR-TV for their clients.

Taking account this classification during the exit of SENIOR-TV in the market **we will target the decision makers for elderly.**

The market we initially target is the B2B market in Europe, and more specifically the **elderly care organizations biotope** (elderly care centers, elderly housing companies, hospitals, etc.). **The business model** is that we will sell them the SENIOR-TV service as an in one-time purchase. For every case there will be a unique price depending the services they will desire to have, number of users, duration of the contract, etc. In case that they need extra support, this will be **under negotiation for every specific case.** At this stage we are not yet ready to offer full back office or on-site support and we can not define a pricing strategy and policy for the support.

In order to increase the market size, we will also offer the SENIOR-TV as a “Rehab-TV”. Still the target clients remain the same, so we will not have to make any extra efforts to change the business model. Also, the model here it will be B2B, at least in the first stage of the exit of SENIOR-TV.

3.1 The Story

John, 64 years old, who lives in a “5star hotel” elderly care center after he wakes up in the morning goes for his morning swimming in the residence’s pool. After he got energized and had his breakfast he would love to read the new content delivered by the center administration in the smart environment of his TV in his room. John is absolutely active and healthy and he wants to remain active in body and brain after his retirement. Using the “easy to use” SENIOR-TV remote control he chooses to have a video call, through his TV set, fist with his grandchildren and afterwards with Sam, a friend of him and ex-colleague. In the notification center John had seen that the series of photography lessons that he had ordered is available and he can start following them. In the meantime, Maria, his personal assistant and carer, visited him in the room and using a Bluetooth device got his blood pressure parameters which automatically, through the SENIOR-TV interface have been transmitted to the personal folder of John, in the center’s CRM. Now, John can start following the online photography lessons that he always loved to have.

Pain reliefs:

- i. for John: Feeling of independence, stays mentally active, increases the self-confidence, increases the life quality, direct and easy access to content
- ii. for the center: easy to handle and distribute the content into multiple users, easy to collect medical data from the inhabitants and monitoring their health status through their CRM, rise of the quality of the offered services and new customers came in.

3.2 USPs

Following the business model in the beginning of this chapter we can highlight the following USPs of the product for the specific model:

- Tailored made content according to each organization needs, accessible by a TV device.

- SENIOR-TV is not competing the existing TV broadcast, CTV (Connected TV), VOD (Video on Demand) models. It offers specialized services/content on top of traditional content.
- Easy to be installed into existing infrastructure without any installation costs.
- Easy to be used both from people that are not familiar with computers/tablets interfaces and also from technological advanced people.
- Possibility for Integration with existing IT infrastructure of the organization (care center, hospital, etc.).

3.3 Highlights of our market exit

In this section we will summarize the key actions that we will perform during the exit of SENIOR-TV:

- We will follow the B2B approach, at least in the initial phase of the market exit of the product.
- As a starting point we will consider the market segments in which GLUK and the technical partners are currently involved and also the End Users organisations. This will also allow us to get to the market using the same channels and collaborations that the partners have already set up in their business and collaborative activities.
- The target customers will be reached directly (i.e. the solution will directly be sold).
 - Examples of direct customers are elderly people care and hospitals.
- The price tag of the product would be always close to the competition. We are not going to offer a super cheap product, no matter how cheap we can afford it.
- The price per client would be always negotiable and will be dependent on many parameters, (e.g. number of users, services requested, delivery time, etc.)
- As one realistic target to be achieved, is to sell the product at least into an elderly people care organisation. The reason is that because of the trials we already have made a pilot with elderly people and seems easier target, comparing to the other target markets, to fulfil.

- The plan is to create a successful case, on which we can stand on and further “advertise” the acceptability of the solution. Having a successful real life’s pilot, we can approach, with more chances, the next customers.
- The market approach would use various schemes and channels.
 - Firstly, we will consider direct sales to key target clients, with instruments like cold calling, cold emailing and in person visits and presentations.
 - Secondly, we will use inbound marketing techniques, such as digital marketing, social networks, paid advertisement.
 - And finally, we will set up collaborations with key players which can optimize our customer reach.

4. Consumer need and opportunity

4.1 Market opportunity – The ageing marketplace

Globally, the number of those aged 65 and over is growing at around twice the rate of the overall population. This age cohort is now the fastest-growing primary segment of the world’s population and its growth rate is outstripped only by that of an even older subgroup – those aged 80 plus¹.

In the UK today, *‘the majority of the UK’s personal wealth is now held by the over-55’s ... Unmortgaged home equity owned by older generations was estimated to be worth £1 trillion in 2006’*². The older consumer market is large and it is growing. When we compare this to the younger segment of the market, we see that the 18-59 year old group is only forecast to grow by 7% in comparison to the older market, which is forecast to grow by 81% from 2005 to 2030. By 2030 the over 65s will account for 25% of the

¹Economist Intelligence Unit, A Silver Opportunity? Rising longevity and its implications for business, A report from the Economist Intelligence Unit Sponsored by AXA, 2011

²McKinsey & Company, From Austerity to Prosperity: seven priorities for the long term, Nov 2010

total consumer market (people over 16 years old)³. As an example, today's over 50's already hold 60% of the UK's savings ... and are responsible for 40% of the consumer demand in the country, spending £200 billion per year⁴.

This reflects a significant opportunity for those companies willing to address the needs of people in later life. Opportunities not only exist for companies developing products and services for older consumers, but for those able to capitalize on the knowledge and skills of an ageing workforce. These are the two key areas that have been identified as being important for business by the Economist Intelligence Unit in their report 'A Silver Opportunity'.

4.1.1 Key Sectors likely to benefit

It is clear from researches that older people want good products and services in the same way anyone else does. Generally, there is more information on the opportunities for business in sectors such as health, ICT, nutrition and finance, which are commonly seen as the critical areas for business growth in the ageing market. The key sectors that have been identified as likely to benefit from the ageing demographic are those in which "companies are able to help consumers achieve more independent lifestyles"⁵. And more specifically, "healthcare and pharmaceuticals, leisure and tourism and financial services"⁶ have been singled out as being particularly attractive to older consumers alongside "consumer goods, food and beverages, retail and **technology**"⁷.

4.1.2 Examples of businesses adapting to the older marketplace

One does not have far to look for examples of companies evolving their product to suit the needs of the ageing consumer market.

³ David Sinclair, Head of Policy and Research – ILC UK, The Golden Economy: the consumer marketplace in an ageing society

⁴ The New Old Age: perspectives on innovating our way to the good life for all, Nesta, 2009

⁵ Economist Intelligence Unit, A Silver Opportunity? Rising longevity and its implications for business, A report from the Economist Intelligence Unit Sponsored by AXA, 2011

⁶ Economist Intelligence Unit, A Silver Opportunity

⁷ Economist Intelligence Unit, A Silver Opportunity

Intel Corporation, in a joint venture with General Electric, formed Care Innovations, a \$250million enterprise devoted to serving the needs of older people with health challenges. The explicit aim of Care Innovations is to tap into new market opportunities, such as tele-health and home monitoring. Eric Dishman, Intel's Director of Health Policy and Innovation, says the driver for this is the huge societal need and a huge business opportunity. Intel have clearly recognized something that many technology companies still can't

see - **seniors can learn new technologies to take care of their own health.**

But Intel is not alone among big technology companies recognizing this opportunity. Some of the biggest names in the US, Asia and Europe are also working in this market. Nintendo Wii provides an example of a product with broad appeal. Dick Stroud, MD of specialist marketing agency 20plus30 said of the Wii, "This is an example of extending a product line into a completely new market successfully. Usually the response from companies is that if you target one group you exclude another, but Nintendo has done it very smartly."

4.2 Market opportunity – Over the top players

The television sector all across the world is facing a deep restructuring. The connected TV's have gained traction over the past few years all over the world. It is basically a TV set that links to the internet. Connected TV's allows the consumer to access all forms of non-linear web content through a form of remote control. The connected TV's allow users to access social networking sites such as Google, Facebook and others through Wi-Fi connectivity and offer a facility to record TV programs. Due to effectiveness and efficiency, connected TV's have gained various features and has become affordable. With the change in technology, these TV's are becoming as suitable as personal computers when it comes to web browsing as well as internet and video browsing. Apart from this, connected TV's supports in Ethernet, USB, Wi-Fi, Bluetooth, and flash memory cards from digital cameras and HDMI and other video-audio connections. The global connected TV's market shipments and revenue have showcased substantial growth in 2014 and is projected to escalate at a rapid pace during the period 2015-2025.

Market studies prove that there is going to be a booming in the “over the top” TV market. Proclamations of doom by commentators about the future of television are easy to find. Every major technological advance, such as the Internet and tablets has prompted a flurry of misguided obituaries for traditional television. A first reality check concerns the motivations of consumers. At this moment the consumers can bring any content they want in their TV set in a single-digit fee per month; for example Netflix is priced at €8 per month in the Netherlands.

The “over the top” TV market, already showing huge consumer uptake via providers like Netflix, Hulu, and Amazon, is expected to increase fourfold by 2019, with connected TV subscription forecasted to generate \$31.6 billion in revenue. And it’s changing. The direct-to-consumer model, once the territory of only a few players, is becoming a more complex ecosystem with more options for viewers.

The *Prospects for Premium OTT in the USA* Report, *released by Ooyala and Vindicia*, found that the environment is perfect for the growth of “over the top” services. The infrastructure is already in place; there is greater availability of public WiFi; tablets, connected TVs, and streaming media players are becoming more popular among consumers; and device interoperability is improving. The report also indicates that consumer awareness, understanding and willingness to pay for premium “over the top” services are exceptionally high in the USA and secondly in Europe, as the success of services like Netflix demonstrates.

On the same report is referred that while Netflix, Hulu, and Amazon have primarily dominated the market, industry experts predict that this won’t be the case for much longer. Already, major broadcasters are introducing OTT options: CBS All Access, HBO Now, and DISH Sling TV are just a few examples. In this market all the niche services will proliferate. **The current status is an opportunity for SENIOR-TV to penetrate into the OTT market.**

4.2.1 Aggregating content and applications

Current dominant service aggregators have emerged from the PC ecosystem (Microsoft) the smartphone and tablet ecosystem (the App Store from Apple and Google Play from Google), and also from the Smart

TV ecosystem, with players such as Samsung, Sony, Google, Apple, Microsoft and Roku, to name just a few⁶⁸. As the Internet of Things expands, new platforms emerge, ranging from watches and wristbands to clothes, cars, homes, electrical grids and much more. Each of these new ‘platforms’ has the opportunity to function as an aggregator for new services running on top of the platform. This can be in combination with a smartphone. Fitbit and Jawbone wristbands, for example, do not have displays of their own.

The activities of players like Apple, Amazon, Google and Microsoft in home automation, transport and health show how digital service platforms are invading and embracing new domains. **This provides opportunities for digital services SMEs and startups that can benefit from the infrastructure, reach and marketing power of these large platform providers.** Depending on the level of interoperability and on the footprint of the new aggregation platforms, start-ups and SMEs may have to develop multiple versions of their applications to reach potential customers.

4.2.2 TV penetration in seniors’ life

Today’s Senior are more independently, proactively and live longer than before. Active participation in media consumption is an important part of the lives of the elderly. Recent studies showed that music, films and tv are key components to their well-being. (Chotiner, 2016) And most of the senior citizens rely on television for entertainment, access the weather, stay on top of the news and be alerted of any emergencies. (Waxman, 2017)

Slowly but surely, digital consumers are taking over the coveted media demographics. These means remain opportunities for adults (65+) are shifting to the digital generation.

In the report ‘Adults’ media use and attitudes’ by Ofcom⁸ asked elderly people to say, out of all the devices they use, which single device they would miss the most if it were taken away.

⁸ https://www.ofcom.org.uk/__data/assets/pdf_file/0026/80828/2016-adults-media-use-and-attitudes.pdf



A3 – Which one of these things you use would you miss the most if it got taken away?
 Base: All adults aged 16+ (1841 in 2015, 246 aged 16-24, 263 aged 25-34, 300 aged 35-44, 279 aged 45-54, 277 aged 55-64, 223 aged 65-74, 253 aged 75+) - NB Showing responses by >2% of all adults
 Arrows show significant differences (95% level) by age compared to all adults

Figure 9: Most-missed media device, by age

Currently, over 65+ people highly loved TV set compared to other media devices. Then, how about Smart TV? Based on the research, by 2019, more than 50% of TV households in Japan, the US, the UK, France and Germany will have Smart TVs, according to IHS⁹. (Correspondent, 2016)

⁹ <https://www.broadbandtvnews.com/2016/02/02/strong-smart-tv-growth-in-japan-us-and-europe/>

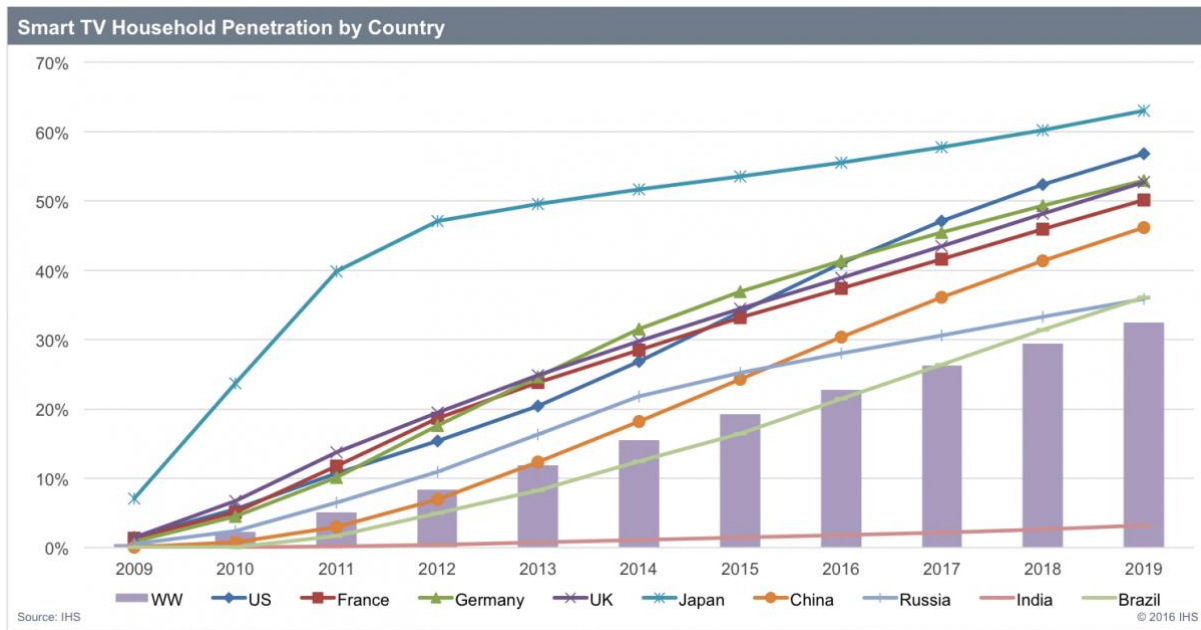


Figure 10: Smart TV Household penetration by Country

Also, the age group of Smart TV owners’ percentages is quite similar, and they take advantage of the internet connection of their TV. In a nutshell, the penetration of Smart TV is increasing, and also adults can use its features very well.

Here’s the strength of using Smart TV and therefore Senior TV for Home caring

1. Smart TV is easy to be connected with other digital devices such as Smartphone and Tablets. Also, other secondary peripherals like Play station, Wii and Kinect for certain services.
2. It can suggest an easy way of keeping in touch with their friends, family, caregivers and other people around them. (for non-smartphone users)
3. Smart TV can be remotely controlled by caregivers or family members.
4. Users don’t need to buy a new product, they can just install the system in the original TV.

4.2.3 Key findings

A summary of key findings about the future of the “over the top” market is presented below:

- In the coming 10 years next generation media technologies, devices, wearables and IoT-related platforms will create important new opportunities for content and application providers, including European firms to deliver highly innovative, in some cases disruptive, services over the Internet.
- Ubiquitous and ultra-fast mobile and satellite Internet connectivity such as those delivered through 5G and software-defined networks will enable advanced internet services that require stability and minimal lag such as communication between autonomous vehicles and advanced smart city applications.
- The costs of content and service creation will continue to decrease rapidly, especially in terms of software (with open source, modular building blocks and cloud storage and processing).
- Access to and control over data will become important strategic assets to create and capture value;
- Concerns over the 'privacy paradox' remain, but growing popularity of privacy enhancing technologies such as adblockers indicates that consumers are increasingly active in protecting privacy.

4.3 Barriers to market

Some of the barriers businesses face in entering the ageing marketplace are discussed below.

1. Not enough marketing is directed towards older people

One criticism made of businesses that have products and services suitable for older people is the lack of focused marketing relevant for this section of the population. TV advertising, in particular, is failing to make an impact on the over 50's. A recent study by research business fast. MAP, in association with mature market specialist consultancy Involve Millennium, reveals 63% of 50-64 year olds claim they don't relate to advertising they see on the television. The figure rises to 68% of 65 to 74 year olds and contrasts with 49% of 35 to 49 year olds¹⁰.

¹⁰ MarketingWeek, Tv spots paint false image of material girls, July 2011

“Marketers are missing the point with their campaigns... The over 50’s are the audience with the money and yet this audience doesn’t relate to the advertising that marketers are producing.”¹¹

2. Companies are uncertain how to communicate with older people

Understanding the best communication channels for targeting older people is another issue companies will face when entering the older market. The channel(s) companies use to market and sell to older people will often need to be different to those used to reach a younger generation of consumer. Part of the difficulty in identifying the right communication channel is due to the fact older people do not use the Internet to the same extent as younger generations and are less likely than other ages to shop around or keep an eye out for better deals.

“It’s not just about packaging and servicing, it’s also about communication

and how older people should be targeted and addressed.”¹²

3. The stigma of companies being associated with older people

This fear was partly born out of the fact they perceived there are no obvious or well-publicized companies who act as role models in the ageing sector.

A strong and consistent theme in SME feedback on the ability to capitalize on the ageing market is the need for role models i.e. successful businesses that sell and market to older consumers.

Small businesses want to understand how companies like Harley Davidson and Nintendo successfully market and sell to older people without putting off their existing, younger clientele.

¹¹ David Cole, fast.MAP, as quoted in MarketingWeek, Tv Spots paint false image of material girls, July 2011

¹² Mark Gettinby, AgeUK General Manager of group product development

5. SWOT Analysis

The section outlines the strengths and weaknesses of SENIOR-TV as well as key opportunities and potential threats to SENIOR-TV's business model.

Strengths	Weaknesses
<ul style="list-style-type: none"> • Easy to be installed • Easy to be integrated to existing infrastructure • No training needed (either to be installed or used) • Adjustable functionalities according to the buyers needs • TV as a device is in favour by seniors • Product designed with feedback from real life's users 	<ul style="list-style-type: none"> • Lack of brand recognition • Overlap between Smart TV and Digital TV services • No offline and on site support • Slow penetration to the market pace
Opportunities	Threats
<ul style="list-style-type: none"> • Can be used also as a "Rehab TV" • OTT and CTV industry is evolving and growing • There is not yet product for elderly from big players, Apple TV+, Netflix, etc. • New advertising formats (i.e Product Placement, third parties services) • Opportunity to develop a niche market 	<ul style="list-style-type: none"> • Big players can come faster to the market with a similar product when they decide to have it • Risk of disinterest and lack of investments in "stigmatized for companies" elderly people market • Personal Data Protection Issues • Local/national regulatory framework

6. Competition

In this section we will present two different types of competition, direct and indirect competitors. According to our findings there is not such a big landscape in direct competitors but the indirect competition is a threat.

6.1 Direct Competition

Through the review of the state of the art have been found some EU funded projects that serve quite similar or relevant scope to SENIOR-TV but not a comprehensive product. Quite close to SENIOR-TV and on the market products that could be considered as a direct competitor are:

- Comp (<https://www.noisolation.com/global/komp/>) KOMP requires no prior digital skills from the users, and allows digital children and grandchildren to share photos, messages and make video calls to their analogue grandparents. Price in NL is 990 Euros for the 17 inch model. (Currently is available for purchase only in Sweden, Norway, Denmark, The Netherlands, UK).
- GrandPad (<https://www.grandpad.net/>). GrandPad is designed with seniors in mind – the innovative device comes with features for connecting with loved ones, without the complicated features of other tablets. The large buttons and intuitive interface make the GrandPad a simple tablet for seniors who are ready to start video chatting and sharing memories with family and friends around the world. Price in NL is 299 Euros (including SimCoach).
- On the other side of the Atlantic, in the US, it has been identified an already market product, “Independa” (<http://www.independa.com>). This product, in principle, could be considered a strong competitor of SENIOR-TV but the fact that is being sold in the US only, at this moment, can make it as a market insertion guide for SENIOR-TV.

6.2 Indirect Competition

This is one of the biggest threats fro SENIOR-TV. With an increasing percentage of the households having broadband Internet, the popularity of TV-connected devices such as Roku (box and stick), Amazon Fire TV, Apple TV and Google Chromecast, as well as game consoles, is growing. The penetration of these

devices is increasing as is the time spent using them. This combination is having a meaningful impact on how people view and engage with content on the TV set, and is consequently changing the ways in which media companies provide services. Most of the ISPs now they are offering new types of services (cable TV, video on Demand, Internet, telephony, etc) everything in a single bundle. All these “boxes” are offering many and different types of content which is quite attractive for the end user. So, such distinguish for SENIOR-TV maybe could be difficult to be achieved and penetrate this market. As an example, to demonstrate this situation, we will present the “Ziggo Horizon box’ which is a bundle of connected TV offered by the telecom operator “Ziggo” in The Netherlands.

The subscriber through the telecom subscription (Internet, telephony and cable tv) is benefited by a series of other services such as, replay tv, video on demand, many apps (sports, lifestyle, news, games, etc), possibility to watch from any device in the house, huge selection of content (movies, tv series, internet channels, etc), everything in a single package.



De Horizon Mediabox
Programma's opnemen, terugkijken en meer
 Nooit meer thuisblijven voor je favoriete serie, want de Horizon Mediabox neemt tot wel 4 programma's tegelijkertijd op in HD. Dat betekent meer plezier op het moment dat het je uitkomt.
 Kom meer te weten over de [Horizon Mediabox](#) en wat je er allemaal mee kunt.



Multifunctioneel
 De Horizon Mediabox zit bomvol opties waarmee je nog meer lol uit je tv haalt. Opnemen, films en series bestellen, live-tv pauzeren en meer.



Kijken en opnemen
 Ruzie over de afstandsbediening is verleden tijd. Tijdens het opnemen van die ene film, kijken anderen gewoon naar hun favoriete serie.



Eigen media afspelen
 Met de software van Twonky op je pc deel je muziek en video's met de Horizon Mediabox. Zo speel je gemakkelijk je eigen media af op je tv.

Figure 11: Ziggo Horizon mediabox

In this sense the consumer buys the Internet connection, which is compulsory e.g. for SENIOR-TV, and the same time gets for “free” a huge amount of content. In such a case, SENIOR-TV, will have to be an “add-on” or “yet another box” in the house, fact that makes more difficult its position towards the competition.

7. Business model canvas

In today’s life of business, the business model canvas arises as the new tool for the development, visualization and refinement of commercialization plan and exploitation strategy.

7.1 Key Partners

This section comprises key partnerships that are needed to make SENIOR-TV business model work.

- ✓ **Video Subscription portals.** In the current status of the platform we are using external sources for video content to the users. This stream is very important for the sustainability of the platform.
- ✓ **Developers.** The people that will develop new apps, services and maintain the platform.
- ✓ **Scientists.** Necessary partners, since the platform contains specialized info tailored made to seniors requirements.
- ✓ **Hardware suppliers.** Since in the current status we are using 3rd parties h/w, they considered to be quite important for the sustainability of the product.
- ✓ **Resellers.** Quite important partner if we need to expand our sales activities.

7.2 Key Activities

The key activities in SENIOR-TV are:

- ✓ **Content acquisition.** In order to be always competitive and up to date we need fresh content. In some cases, and according to the client we will have to acquire also new content.
- ✓ **Content Development.** New apps and services developed for Seniors.

- ✓ **Software design.** Contentiously improvement and update of the interfaces, functionalities and general operability of the platform.
- ✓ **Platform development - update.** General maintenance of the platform.
- ✓ **Distribution.** Distribution of the sold items to the customers.
- ✓ **Ecosystem development.** The most ambitious part of Senior-TV. To create an app acosystem around it.
- ✓ **Marketing and promotion.**
- ✓ **Legal.**

7.3 Key resources

At this moment the key resources we have are:

- ✓ **Existed piloted platform.** Based on the existing platform we will start building our exit strategy.
- ✓ **HDMI compliance.** The hardware we use is compliant with HDMI port, fact that makes Senior-TV adaptable to any of the existing TV infrastructure.
- ✓ **Wi-Fi connectivity.** Network connectivity immediately gives access to many add-ons and extra functionalities.
- ✓ **SENIOR-TV remote control App.** This resource is an added value for people that are using Android smartphones or tablets and makes easier the control of the environment.
- ✓ **Real life's end users' feedback.** This fact guides us to design the product functionalities closer to their needs and not as we think that they would wish to have.
- ✓ **Existing network of care centers.** The existing network from our End Users partners could be a significant help in the sales procedure.

7.4 Value Proposition

Value proposition can be defined as a positioning statement that enables to define the problem that we solve and the people benefiting from our solution.

- **It is a small network device that adapts easily to existing TV infrastructure that offers senior friendly interface and digital content adapted to their lifestyle and needs increasing their independency and life quality**
- **Open to 3rd parties applications/content**
- **Can sync or stream from the web**
- **Reduces the stress to the senior's family**

The following are best practice that support SENIOR-TV value proposition (already planned or implemented in the SENIOR-TV project):

- “Providing very specific, tailored messages for diverse audiences based on their specific knowledge-sharing needs.
- Highlighting different components within the body of knowledge being shared and increasing opportunities for collaborative thinking rather than just presenting information.
- Encouraging community members to connect in diverse ways.
- Increasing the likelihood that a message is heard and considered during decision-making by making the knowledge accessible at multiple times and in multiple ways.¹³”

7.5 Customer Relationships

- ✓ **Support.** Through our product support we want to ensure to the clients that everything is going to run smooth and eliminate any no-operation stress.

¹³ http://www.uws.edu.au/_data/assets/pdf_file/0018/405252/Knowledge_Sharing_Handbook.pdf

- ✓ **Quality.** During the business cycle we will try to ensure that every product is sent to our clients and the relative content comply with high quality standards.

7.6 Channels

The following channels of distribution have been defined:

- ✓ **Online**
- ✓ **Direct distribution**
- ✓ **Ressellers**

7.7 Customer Segments

Following, you can see the Customer Segments that we have defined.

- ✓ **Elderly care centers - caregivers.** One of the main target customers.
- ✓ **Hospitals.** Through our interaction with stakeholders, hospitals are been sought as one of the target clients, since among the others SENIOR-TV could be used during the rehabilitation time it the hospital, in order to keep the patient connected with the “outer” world.
- ✓ **Rehabilitation centers.**
- ✓ **Senior’s residences, houses, etc.** These centers could buy SENIOR-TV for their customers, as a part of the general deal they have with them.

7.8 Cost Structure

The main costs around the SENIOR-TV product realization had to do with:

- ✓ **Platform development and maintenance**
- ✓ **Content Development**

- ✓ **Content Acquisition**

- ✓ **Customer Service**

- ✓ **Royalties**

- ✓ **Employees**

- ✓ **Taxes**

7.9 Revenue Streams

At this stage our vision is to sell SENIOR-TV as:

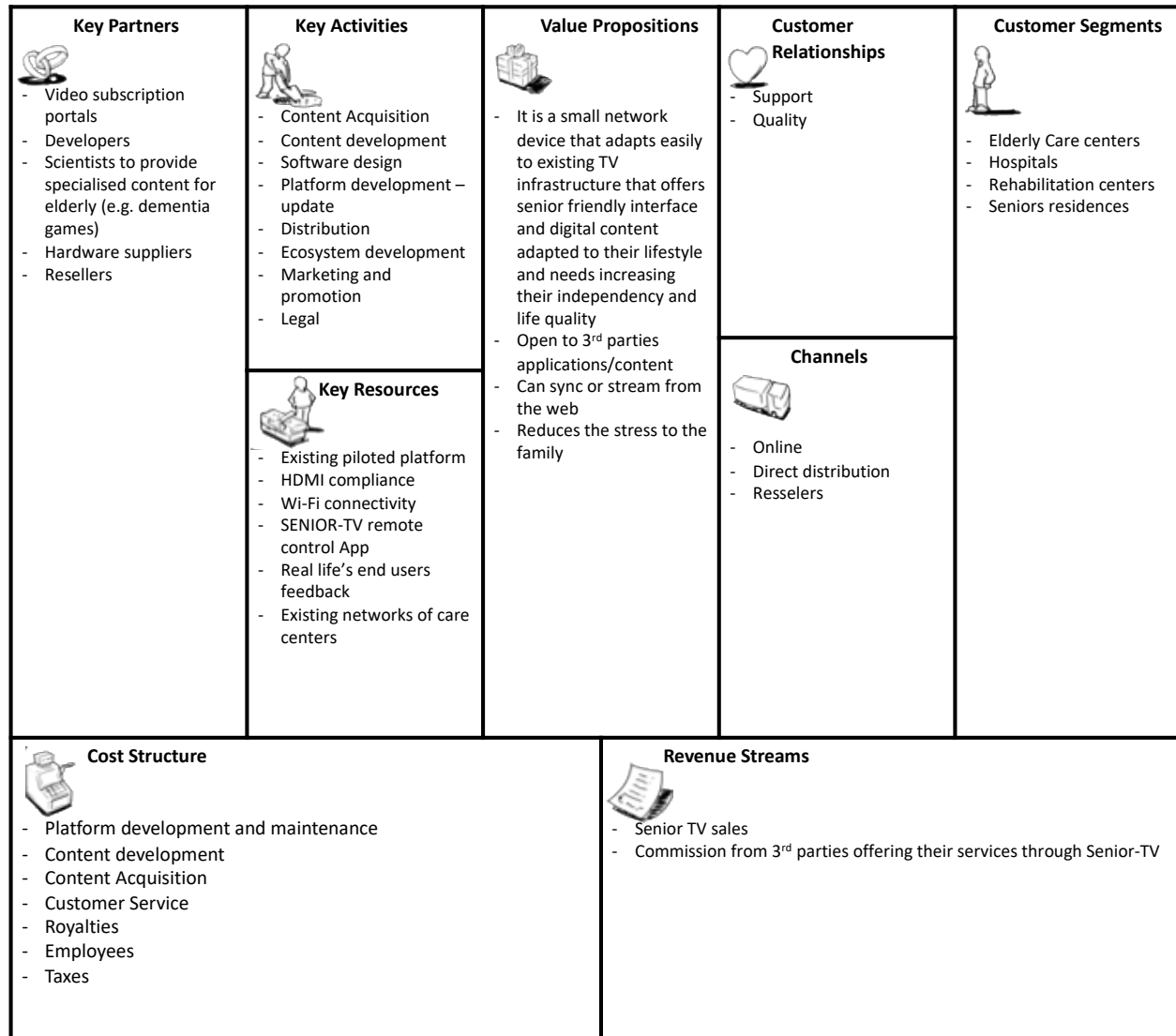
- ✓ **Sale of SENIOR-TV packages**

- ✓ **Commission from 3rd parties offering their services through Senior-TV**

Below are presented the options for selling SENIOR-TV:

- **ENTERPRISE:** Solution to be sold directly to an Elderly Care Center, Hospitals as a Rehab TV, Seniors Residences, etc. Pricing will be every time under negotiation. As a minimum starting price we'll set the amount of 2.000 Euros for the platform adapted, to the needs of each customer, plug n'play.
- **SERVICES:** Support services to Enterprise solutions and 3rd parties commissions.

7.10 Canvas at a glance



8. Financial Plan – 5 years

Based on the model above we have created a financial plan for the next 5 years, starting as from the end of the funding period from the AAL. We set as an exit point Q4 of 2018. Taking account these numbers it is coming as a result that we need a seed funding of 2MEuro in order to run the business before start generating profits. the expected return in the 5th year will be 4,9 MEuros EBITDA (Neutral case estimation).

In the next table you can see the financial numbers.

EUR		SENIOR-TV PROJECTIONS				
Product Categories		2020	2021	2022	2023	2024
	ENTERPRISE	€200.000,00	€500.000,00	€2.000.000,00	€3.000.000,00	€3.000.000,00
	SUPPORT	€30.000,00	€100.000,00	€150.000,00	€300.000,00	€500.000,00
TOTAL REVENUE		€230.000,00	€600.000,00	€2.150.000,00	€3.300.000,00	€3.500.000,00
Cost of Sales						
Salaries	Management	€100.000,00	€100.000,00	€100.000,00	€100.000,00	€100.000,00
	Engineers	€500.000,00	€300.000,00	€200.000,00	€200.000,00	€500.000,00
	Assistant	€30.000,00	€30.000,00	€30.000,00	€30.000,00	€30.000,00
	Sales/Marketing	€500.000,00	€500.000,00	€500.000,00	€300.000,00	€300.000,00
	Production Cost	€300.000,00	€200.000,00	€200.000,00	€100.000,00	€100.000,00
Office	Rent	€15.000,00	€15.000,00	€15.000,00	€15.000,00	€15.000,00
	Utilities	€3.000,00	€3.000,00	€3.000,00	€3.000,00	€3.000,00
	Telecom	€2.000,00	€2.000,00	€2.000,00	€2.000,00	€2.000,00
Marketing	General	€10.000,00	€10.000,00	€10.000,00	€10.000,00	€10.000,00
	Dinners, etc	€4.000,00	€4.000,00	€4.000,00	€4.000,00	€4.000,00
	Conferences	€15.000,00	€15.000,00	€15.000,00	€15.000,00	€15.000,00
Accomodation						
Travel	Travel	€5.000,00	€5.000,00	€10.000,00	€10.000,00	€10.000,00
Legal	Legal	€10.000,00	€50.000,00	€50.000,00	€50.000,00	€50.000,00
Accounting	Accounting	€5.000,00	€5.000,00	€5.000,00	€5.000,00	€5.000,00
Audit	Audit	€2.000,00	€2.000,00	€2.000,00	€2.000,00	€2.000,00
Research	Stage a	€0,00	€100.000,00	€100.000,00	€0,00	€0,00
	Stage b	€0,00		€200.000,00	€0,00	€0,00
	Stage c	€0,00			€300.000,00	€300.000,00
TOTAL EXPENSES		€1.501.000,00	€1.341.000,00	€1.446.000,00	€1.146.000,00	€1.446.000,00
EBITDA		-€1.271.000,00	-€741.000,00	€704.000,00	€2.154.000,00	€2.054.000,00

9. IPR

The consortium has agreed that one of the consortiums partners (GLUK) will lead the commercialization of the product. GLUK will be in constant collaboration with the SENIOR-TV consortium, in particular with the technical partners. GLUK intends to set up bilateral collaborations in order to get specific inputs on the various building blocks of the SENIOR-TV product. As for the IPR the collaborations will be set up on a royalty basis. Since at the moment we have not concluded into a final IPR framework a Memorandum of Understanding (MoU) has been put together between the consortium partners defining the collaboration efforts after the project end and ensuring the partners commitment to this collaboration.

10. Conclusions

The present document, SENIOR-TV deliverable D4.2, has is providing the final business model that the consortium has agreed for the further exploitation of the product. It is an entry level document for the partner that will take over in the future the market exploitation of SENIOR-TV.

The main recommendations that are arising from this almost 4-year process are:

- We always have to be careful and act proactively in a “stigmatized for business” elderly market. We should try to avoid to highlight the product as an “yet another elderly’s product”.
- We cannot compete big players such as Apple, ISPs, etc. but however we can create a niche market offering a specialized product for specialized clients.
- We need seed investment to continue being sustainable.
- We are quite agile, and the product itself, fact that gives as a lot of positive chances to sell it into individuals clients tailored into their needs.
- We should consider of creating a tablet version of Senior-TV since elderly find quite easy to interact with a tablet.
- We should emphasize even more in the simplicity of using it. Even improving the interface and the remote-control possibilities.
- The TV landscape in the future will be an “a la carte subscriptions” and Senior-TV should keep up on this side.

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SENIOR-TV

PROVIDING ICT-BASED FORMAL AND INFORMAL CARE AT HOME

Quality Checklist
Quality Control of D4.2

Peer Reviewer	
Reviewer	Partner
Aliki Economidou	CNTI

CRITERIA	VERIFIED
1) Conformity to Standards and Project templates	X
Logos (AAL, SENIOR-TV)	X
Project title, reference, author, version, revision, data	Minor corrections
Mandatory statements (disclaimer)	X
Conformance to the standard structure required by EACEA (ex. Disclaimer, Executive summary, Acknowledgement, Introduction, page numbers, etc.)	X
2) Language check (typing mistakes, grammar, etc.)	X

3) Coherence with objectives declared in the Technical Annex	X
Obj. 1: To elaborate the project's Quality Plan following well-accepted methodologies tailored to the learning domain and based on a detailed description of projects objectives, success indicators and work plan.	X
Obj. 2: To monitor all project activities and provide quality control of all project results as well as recommendations for improvements and identification of best practices.	X
4) Reliability of data	X
Information and sources well identified	X
Data and information are free from factual or logic errors	X
The analysis (if applicable) is reliable, i.e. previous studies have been sufficiently reviewed; qualitative information and quantitative data are balanced and appropriate	X
5) Credibility of findings	X
Findings supported by evidence based on data analysis	X
Replicability of findings	X
6) Validity of conclusions	X
Conclusions meet evaluation questions and information needs	X
Conclusions supported by proper evaluation findings	X
No conclusions missing according to the evidences presented	X
7) Please indicate any deviations from contractual conditions (WP objectives declared in the technical annex)	
None	
8) Comments/Suggestions for revision	
None	
9) Implementation of revisions/modifications suggested and explanation for eventual rejections (performed by the Responsible of the Deliverable)	
10) Deliverable accepted	
<input checked="" type="checkbox"/> YES	
<input type="checkbox"/> NO	
If NO, please state reasons:	

aal-2014-171

SENIOR-TV

PROVIDING ICT-BASED FORMAL AND INFORMAL CARE AT HOME

Quality Checklist
Quality Control of D4.2

Peer Reviewer	
Reviewer	Partner
Anna Philippou	SMMFF

CRITERIA	VERIFIED
1) Conformity to Standards and Project templates	
Logos (AAL, SENIOR-TV)	yes
Project title, reference, author, version, revision, data	yes
Mandatory statements (disclaimer)	yes
Conformance to the standard structure required by EACEA (ex. Disclaimer, Executive summary, Acknowledgement, Introduction, page numbers, etc.)	yes
2) Language check (typing mistakes, grammar, etc.)	yes
3) Coherence with objectives declared in the Technical Annex	

Obj. 1: To elaborate the project's Quality Plan following well-accepted methodologies tailored to the learning domain and based on a detailed description of projects objectives, success indicators and work plan.	yes
Obj. 2: To monitor all project activities and provide quality control of all project results as well as recommendations for improvements and identification of best practices.	yes
4) Reliability of data	
Information and sources well identified	yes
Data and information are free from factual or logic errors	yes
The analysis (if applicable) is reliable, i.e. previous studies have been sufficiently reviewed; qualitative information and quantitative data are balanced and appropriate	yes
5) Credibility of findings	
Findings supported by evidence based on data analysis	yes
Replicability of findings	yes
6) Validity of conclusions	
Conclusions meet evaluation questions and information needs	yes
Conclusions supported by proper evaluation findings	yes
No conclusions missing according to the evidences presented	yes
7) Please indicate any deviations from contractual conditions (WP objectives declared in the technical annex)	
No deviations	
8) Comments/Suggestions for revision	
9) Implementation of revisions/modifications suggested and explanation for eventual rejections (performed by the Responsible of the Deliverable)	
10) Deliverable accepted	
<input checked="" type="checkbox"/> YES	
<input type="checkbox"/> NO	
If NO, please state reasons:	