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Abstract

The main objective of this report is to support the LLM partners in elaborating effective and sustainable exploitation plans for the developed products / solutions / services, to provide them with useful information on the specific market segment including a competitive analysis and to drive their activities towards solutions able to meet the acceptance of the market and therefore with a high level of exploitability.

Keywords:

Business Plan, Marketing Analysis, Competitors, Financial Plan, Market information; Users expectations and requirements.



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be issued. Draft: Work is being done on the contents. Final: All chapters have been completed.



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Introduction

Besides the General Business Plan developed (D5.3 sent on 14/03/2011), the Consortium agreed that that instead of obliging all partners to accept a unique Business Plan with terms in what relates to modules to sell, prices, channels, etc. equal for All, it was more realistic and feasible to developed individual Business Plan taken into account each country, and overall each partner, situation. The reflection was that it was better to have less ambitious Business Plans but more able to reach the market.

Thus, following this strategy that was corroborated by all the partners, a Business Plan has been developed by each partner pilot/country. This strategy has allowed that even partners that initially felt out of the Business because of their profile (academic and/or non-profit) could rethink their situation and find out how to make business out of the project outcomes.

What follows next are the different business possibilities that each partner envisions for LLM in their country and according each one peculiarities.

SUMMARY

Social policies at European level take place mainly at regional and local level and a general trend is that delivery of services is more and more locally organized, close to where older people lead their daily lives. The challenges determining the development, adoption and diffusion of new technologies are different national patterns, regulations and policies, a heterogeneous industrial situation, a set of various payment systems and social approaches. It is recognized that market forces alone have been and are likely to remain insufficient to ensure the realization of the potential in this field. Public policy efforts are therefore also required.

In the field of ICT & Ageing, the engagement of key stakeholders (especially health and social care providers) is one of the biggest barriers to wider implementation and mainstreaming at present. The "ICT & Ageing" market represents a complex public-private mix of players, from device manufacturers to health and social care service providers that interact and have roles to play in ensuring the deployment and use of technologies.

This is why, after presenting in D5.3 as a general Business Plan (without figures, since they could not be agreed in the same way for all), we decided to produce separate "Local" Business Plan in order to be more flexible and better adapt to each partner (and country) needs. However, when compiling the information presented by separate it is easy to see there are many points in common:

- The ageing of the population as a global fact affecting all the countries, especially in Europe.
- The fact that a big percentage of elders prefer to remain at home rather than being in a Residence or similar type of Centre (independently of the country and cultural background).
- That Elders themselves are not ready to pay for services that have yet to be discovered to them.



- That the product is possibly more appealing for those "getting" older than for already very old people themselves
- That those wishing to exploit this market segment have to rely in Public Administrations and/or other bodies as NGOs or Insurances in order to get paid for such services.
- Than the initial prices foreseen need, in most of the cases, to be lowered, because an outcome of D5.1 is that we cannot go out with prices higher than those accepted by the market.
- That the situation of telecommunications in each country (Internet penetration) and the level of acquaintance with ICTs are very important and this is the main element that highly differentiates one country of the other among the Consortium partners.
- That the "full" solution even if in it resides the "uniqueness" of LLM is rather difficult to introduce at present in countries where still Internet does not arrive to many elders homes.
- That "strategic" Alliances are a very important factor for entering the market.

Besides these "common" points, there is to have into account that one of the partners and one of the providers are already engaged into business (INTRAS, Spain; PositScience, USA).

In what refers to the selling of the solution, the experience of Intras in the Spanish market has been considered. IDI EIKON in agreement with INTRAS has proposed a Business Model that could be feasible in practical terms (at least in Spain) and this has been the model that has serve as basis to the other partners to construct their own. Now all the Business Plans show a more or less near business reality according to each situation.

The business models envisaged for the sustainability of LLM are not all exclusively related to the use of the totally of the components, since the situation of countries and elders, as already mentioned, may differ widely across Europe.

As it can be seen in the different Business Plans detailed in this deliverable, several business models are envisaged, some of them promising, some of them already proven to be valid. Either a collaboration agreement for selling across a country with already settled providers (case of Spain) and/or the creation of spin-offs coming out of the University (Austria, Greece, Germany, Cyprus) and one more independent company (France case), are the result of these "Local" Business Plans.

Another very positive point in terms of sustainability of LLM is the fact that, clearly, since the beginning of the project, the awareness about having a more active part physically and cognitively has became a hot topic, both with public administrations and with private providers in part thanks to the wide spread of the *exergaming* phenomena that together with the gaming consoles have popularized what until now was a closed "professional" niche.

For a detail view on each partner's status, see next Business Plans, provided together in one document but clearly separated from each other.



Business Plan for SPAIN				
Name:	"LLM-ES"			
Туре:	Joint Venture (IDI EIKON – INTRAS)			
Version	1.0			
Date:	April 2011			



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1. EXECUTIVE SUMMARY

1.1 Mission:

<u>Mission:</u> to deploy an *integrated* service addressed (mainly) to Elder people and its environment offering at the same time a physical (PTC) and a cognitive (CTC) training system. In the case of INTRAS - IDI EIKON LLM services will be amid other services of our portfolio to which "LLM-ES" will contribute to enrich and add value making them more attractive.

Our vision is to that our solutions will excite, inspire and empower people to improve the quality of their lives and to be the best they can be. We are determined to continually innovate and develop new experiences that are accessible to everyone, everywhere regardless of their age, gender or ability and to make these solutions last a lifetime, this is, sustainable.

Flexibility to market demands is always behind the common strategy of both INTRAS - IDI EIKON Organizations. It is our idea to adapt and provide the most effective and efficient way to benefit the most people in the shortest amount of time with the most reliable and proven solutions available

1.2 One year onwards vision:

<u>One year ahead vision:</u> "LLM-ES" services is being deployed in Spain amid INTRAS - IDI EIKON portfolio of services addressed to Elder people, starting with the offer, at the same time, a physical (PTC) and a cognitive (CTC) training system. Currently, there is not yet room for the Independent Living Components of LLM in the Spanish market, due to the combination of non-existent infrastructure in the "at home" scenarios (Internet access, hardware) and also to the End-User motivation to access and use these services from home. Market opportunities are placed in the Health sector (public or private) and in the Public Administration (especially in those Public Administrations managing public infrastructures as Day Care Centres).

1.3 Strategic Objectives:

Strategic Objectives:

- To set a "joint venture" (JV) in the Spanish market between INTRAS and IDI EIKON. If this point is not achieved IDI EIKON, as a pure tech partner, will not be able to deploy adequately the "LLM-ES" services in the market. INTRAS will act in this JV as partner and as "provider" of "Gradior" (CTC: Cognitive Training Component).
- To deploy the exploitation and marketing strategy for "LLM-ES" relying on the scientific expertise and already proven market experience of INTRAS and empowering IDI EIKON knowledge and access to the Public Administration market.
 - Directly: by creating an effective commercial and distribution network
 - Indirectly: by setting up the appropriate alliances with public administrations and stakeholders already acting in the market.
- To reach the break-even point that ensures long term sustainability
- To achieve customers recognition in terms of easiness of use and quickness of implementation of "LLM-ES" Services.



• To start deploying "LLM-ES" services in synergic markets such as Real Estate Markets, Insurances Markets, Medical Markets... once the sustainability has been demonstrated in the Health Sector and Public Administration market niches.

1.4 Promoters Personal Objectives:

Promoters Personal Objectives:

- Manuel Franco: to ensure that in I+D research and practical work followed the priority lines of the European Union Commission. To contribute to continually innovation and develop of new accessible solutions to improve quality of life of elderly population.
- Pablo Gomez: To ensure the effectively apply and transfer of technology and R&D work to market and clinical settings.
- Miguel Alborg Domínguez: to ensure that R&D in ICT area is focused to the main targets set by the European Commission and to effectively apply R&D to improve elder citizenship quality of life.
- Miguel Alborg Farinós: to contribute to demonstrate that R&D can effectively reach the market; to deploy European-wide services built over Valencian R&D efforts.

1.5 Five years onwards vision:

Five years ahead vision: the service will be deployed successfully in all Spain. We do not discard the rest of Member States as target markets (directly or via alliances) for "LLM-ES" services. A network of allies to sell and implement services is running across all Spain. Sales are close to 0.5 EUR million (only in Spain). The JV is ready to deploy its service to all Europe from Spain relying on "cloud computing" infrastructure providers. Customer Support, Marketing and Alliances and Administration are the core areas of the JV exploiting "LLM-ES" services.



2. Holder of the Project

2.1 Name of the Joint Venture (JV):

• Name of the JV: "LLM-ES"

2.2 Location:

- Location:
 - Valladolid Castilla y León Region Spain
 - Paterna Technological Park Valencia Region Spain

2.3 Profile of the company / joint venture

INTRAS Profile

INTRAS is a non-profit organisation founded in August 1994 whose main aim is to improve the quality of life of people suffering from mental disorders, disabled people, the elderly, and those working in the field, following the principle of equal opportunities. The main fields of work of the Foundation are research, development and innovation as well as social and healthcare assistance.

Nowadays, INTRAS is composed of 8 centres in 4 different provinces in Spain and of 80 professionals, mainly from psychiatric, psychological, social and economic fields who combine research, training and healthcare. The different facilities managed by the Foundation offering different resources for people with mental illness are: a Psychosocial Rehabilitation Centre, a Residential Centre, two Labour Rehabilitation Centres, two Educational Centres, two Day Centres, 13 supervised flats, and two clinical units for cognitive rehabilitation of the elderly. Besides, there is a Communitarian Support Team composed of one psychologist and 2 social educators, located in the community and offering treatment in the close context of the person suffering of mental illness.

INTRAS has solid experience both in the field of European projects and in the development of new technologies and programmes for the cognitive rehabilitation of people suffering of mental illness. It has coordinated and participated as member in a large number of European and national R&D projects in brain sciences, HEALTH Programme, IV and VI Framework Programme, Competitiveness and Innovation Programme, and cooperation projects with Latin America. INTRAS also has an extensive experience running projects at the educational and social level in European programmes such as Equal, Interreg, Socrates, Lifelong Learning, Daphne and Youth.

Furthermore, INTRAS is permanently collaborating with national and international research centres as well as universities, having common research lines with the University of Valladolid, the University of Valencia and the University of Salamanca in Spain.

INTRAS main activity areas are:

- Projects' management area
- National projects
- International projects
 - Consulting services



- Socio-sanitary assistance area.
- Psycho-social rehabilitation area
- Social, labour and learning attendance area
- Disability assistance area.
- Training and Labour integration area.
- Labour integration and orientation services
- Labour workshops / non formal labour learning
- Research and development area
- Gradior software and cognitive intervention area
- Socio-sanitary technological developments area

IDI EIKON Profile

- History: born in 1981 it has been always dedicated to software production. Promoter and founder Miguel Alborg has been the CEO of the company since its foundation. Huge expertise in detecting business opportunities relying on European Commission policies, strategies and directives (and in providing technological solutions for them).
- Main activities:
 - Management Software Area: deals with the maintenance, evolution, marketing and support of a complete ERP fully developed by IDI EIKON
 - e-Preventions Area: deals with the adaptation of e-Preventions technological platform to specific market niches
 - "LLM-ES" Environment: can perfectly be offered successfully to IDI EIKON's customers and "network of interest" partners inside the PA niche, whenever the needed support of a health expert organization is placed to support this activity.

2.4 Human Resources allocated (to the project):

- INTRAS Resources allocated to the project
 - Manuel Franco Martín
 - R&D Director of Intras Foundation. Head of Psychiatric Department of Zamora Hospital. Professor associate of Salamanca University (Psychology School).
 - Psychiatrist MD. Phd. Psychogeriatrician and Psychologist Diplomate
 - Wide experience in the promotion of activities concerning assistance, research, evaluation and dissemination of mental health development and in the use and development of new technology systems for rehabilitation.
 - From 2000 to 2003 head of mental health framework of Castilla y León;
 - Member of assessment team of Health Ministry in Spain (FISS) for research projects and Head of research programmes in INTRAS Foundation
 - Collaborative professor in several master programmes in the Universities of Oviedo, Valencia, Salamanca, Barcelona;
 - Author of several publications (articles and books) about research of mental health and Computer Assisted Cognitive Rehabilitation.
 - Wide experience in European Affairs as leader, creator and coordinator of several projects for the European Commission. Member of experts group of Spanish psycho-geriatrics society for Spanish dementia guide; Coordinator of European INTERDEM network in Spain with three European projects running at the moment; Member of International Scientific Committee of Psycho-Geriatrics
 - Pablo Gomez:



- Managing Director of Intras Foundation
- Degree in International Business Administration from The University of Newcastle (UK), MA in Technology Management from The Open University;
- 7 years experience in R&D&I both at the National and International level;
- Leader of several projects, and founder of two technology based enterprises operating in Latin American markets;
- Author of several articles in the public health sector;
- Co-founder of HUSCIE International Network and member of several European and the Latin America Networks
- Expertise in Business, Management and Technology issues
- Yolanda Bueno:
 - Degree in Psychology from the University of Salamanca (1988), PHD student in Clinical Neuropsychology.
 - Head of Cognitive Rehabilitation and Memory Training Department at INTRAS Foundation.
 - Wide experience in research activities in the field of Neuropsychology and author of several publications (articles and books) about Computer Assisted Cognitive Rehabilitation.
 - Participation in a number of European and national projects as well as clinical trials on Alzheimer Disease.
 - Director of the course "Neuropsychological Rehabilitation of Cognitive Deterioration and New Applied Technologies"

• IDI EIKON Resources allocated to the project

- Miguel Alborg Domínguez General Manager 64 years
 - Founder and General Manager of IDI EIKON for more than 25 years
 - Humanistic and Technological Background
 - Excellent vision of the Business and Technology Long-Term Evolution
 - Wide experience in European Affairs as promoter, coordinator, evaluator and reviewer of projects for the European Commission.
- Miguel Alborg Farinós Marketing Responsible 31 years
 - With a superior degree in Business Management and Administration
 - Until now in charge of all IDI EIKON deployment activities in the Spanish Market
 - Wide experience participating in several programmes of the European Commission
- Josefa Farinós Folgado Responsable Administración 56 years
 - 25 years of enterpreneurial experience in IDI EIKON (as founder member)
 - Expertise in Administrative issues and Human Resource management
 - Coordinator of European Projects area in IDI EIKON. Acts as Evaluator for the European Commission.



3. The Idea

3.1 The idea objective:

• Nature of the idea: to deploy, using a "joint venture" between INTRAS and IDI EIKON, an integrated service addressed (mainly) to Elder people and its environment offering at the same time a physical and a cognitive training system via Health Sector and Public Administration customers. In the case of IDI EIKON, "LLM-ES" services will be amid other services of our portfolio to which "LLM-ES" will contribute to enrich and add value making them more attractive.

3.2 Strengths / Weaknesses

5.2 Stitlights / Weakhesses				
STRENGTHS	WEAKNESSES			
 INTRAS is an "already in the market" player for CTC; success stories, reputation and network of commercial contacts already exist. IDI EIKON is already a provider of services for "at risk of e-exclusion audiences" for the Public Administration; this includes Elders and its empowerment of independent living, ensuring an access to this market niche in Spain. The Joint Venture resulting from INTRAS (mental health experts) and IDI EIKON (tech provider) results in a very good mix of capabilities to tackle the market. The unique integration of CTC+PTC is not being offered in the Spanish market at this moment. Capability of adaptation to local market: multi-lingual, multi-channel. Ethical implications. We are able to manage every issue related to personal data and mental health information 	 "At home" deployment scenarios are not realistic to be deployed at the moment in the Spanish market due to lack of infrastructure (HW, Internet) and end users motivation Much dependencies on a public-driven market could result in a delayed or long time (and resources) consuming deployment Dependence on third parties (in the case of Cognitive Training) and existing infrastructure. Time needed to get visibility and brand recognition, especially when dealing with public-driven markets Commercial Net to be constructed based on alliances and, when possible, PPP Prices to be definitively confirmed by the market; Dependencies on IPRs (Intras, Raltec, Auth). 			
OPPORTUNITIES	THREATS			
 The increase in aging of the Spanish population and the subsequent expected increase in the cognitive and physical decline. Public Administration duty in Spain to take care of social and health services and pay for them in name of end users. There are budgets and policies to be further developed. Increased emphasis on brain maintenance in 	 Many competitors are found in the market with very fragmented offers and approaches that can confuse customers in their elections. General crisis situation with a severe impact on Public Administration budgets Technological obsolescence (same for all competitors) Users distrust: technological scepticism; lack of motivation, need for an adequate environment to access and use these kind of 			



locations ranging from retirement	services
communities to gyms.	
 Broad government initiatives to increase the 	
 public awareness of the need for brain fitness. More public investments. Especially important in what relates to the deployment of public infrastructure as "Public Day Care Centres" providing a place and an environment to deploy services like LLM Low tech options will play an increasing role in the brain fitness field, such as meditation and cognitive therapy. Doctors, nurses and pharmacists will help patients navigate through the overwhelming range of available products and interpret the results of cognitive assessments. Insurance companies will introduce incentives for members to encourage healthy aging. Brain training will be added to corporate wellness and leadership initiatives, building new motivations among end users 	• IDI EIKON need to be supported by an expert partner in order to deploy the LLM services: if the "joint venture" with INTRAS is not successful IDI EIKON is not able to sell LLM services in Spain.

3.3 State of the project (until now achievements)

3.3.1 Funds obtained:

• <u>Funds obtained:</u> all activity until in the Spanish market now has been supported on INTRAS' and IDI EIKON's own financial resources, coming from both initial market actions and from other business units of their organizations (running until now in a separate way). It should be highlighted that INTRAS is a very well known and valuated actor in the CTC field in Spain.

3.3.2 First commercial contacts:

First commercial contacts: A very important point is that INTRAS is an "already in the market" player for CTC in the Spanish market, with more than 350 centres paying for their service offer, 5250 users and 700 professionals involved in the use of the Intras new technology system for rehabilitation. "LLM-ES" can boost INTRAS reputation and access to new market niches.

Also we can say that the **T-Seniority** project (addressed to offer more inclusive set of services to elders and their environment, mainly through TV channels) recently finished and that IDI EIKON has coordinated, in some cases dealt with coaching rehabilitation offered to end users via Public Administration budgets to deploy socio-sanitary services. "LLM-ES" services can empower this approach and also benefit from the access and contacts that IDI EIKON owns as an ICT provider of the Local and Regional Public Administrations of Spain.

"LLM-ES" services will be addressed to the following target end-users: elder



population - Active Retirees (60-70 years old), seniors (70-80 years old) and Elders 80+ years old that are: living in assisted environments (like residences, nursing houses, etc.) and those visiting Care Centres (included Clinics and Hospitals –short or long-term stay). A set of success stories in place is key for dissemination and marketing purposes (we are relying on those achieved by INTRAS in their in-the-market experience). But we believe that the market of "LLM-ES" is far wider than the seniors market.

3.3.3 First orders:

<u>First commands:</u> Currently, 350 centres for elderly people and people with mental diseases (public and private) are using and paying for it in Spain. 5350 End Users and 700 proffesionals are making use of INTRAS services in the domain of CTC. We are expecting those customers to expand the set of services used to the new approach of CTC+PTC that "LLM-ES" is offering. Also, as a result of IDI EIKON commercial activity with the Public Sector, agreements for a massive implementation of "LLM-ES" will be arranged as with the rest of services IDI EIKON is selling to Valencia Regional Government and Valencia Region "Diputaciones", representing up to 542 Local Public Administration in Spain (close to 7% of the total Spanish Local PA market). Use

3.3.4 Contracts with technology providers:

• <u>Contracts with technology providers</u>: IDI EIKON in the case of "LLM-ES" does not own any technology (or counts with specific mental health expertise), what, as a research base enterprise, makes it very difficult to sell these products type alone. This is the main reason for the existence of a "joint venture" with an already established expert in the field (and IPRs owner) like INTRAS. Without this alliance IDI EIKON considers that going alone will not be able to tackle appropriately the market in Spain. In addition, all IPRs related issues have been agreed with the LLM consortium and are included as costs for the deployment of the "LLM-ES" business in Spain.

3.3.5 Dissemination:

 <u>Dissemination</u>: Dissemination activities are regularly conducted to inform the market about our services among which we already count with "LLM-ES" services. Success stories on the direct use of the "LLM-ES" by our customers are relying on INTRAS inthe-market experience previously detailed.

3.3.6 Technical expertise:

<u>Technical expertise</u>: Technology is, currently, not a problem for our INTRAS – IDI EIKON "joint venture". We have people qualified enough to manage early implementation processes, support activities and detect future needs to provide improvements and new features, with the perfect complement added by (Mental) Health Sector experts and professionals working in INTRAS. Of course, specific expertise dealing with CTC+PTC areas is widely available in our Joint Venture.

3.3.7 Origin of the project:

• **History of the project:** INTRAS is an already in the market CTC provider in Spain focusing on the deployment of services in the (Mental) Health Sector (public and private) since 1994 and IDI EIKON is a services provider in the Public Administration Sector addressing "audiences at risk of e-Exclusion" since 2001. This combination represents a very good opportunity to join efforts towards a much ambitious exploitation of services in



the scope of (Mental) Health Services especially among Public Actors. The resulting approach of "LLM-ES" providing a unique CTC+PTC set of services fits the will of both organizations to boost their commercial activities on this field.

3.3.8 Strategic reason (why the JV decides to go into such a business)

- INTRAS: empowerment of their expertise and market activity in the field of CTC. INTRAS is expecting customers to expand the set of services used to the new approach of CTC+PTC that "LLM-ES" is offering. Support of IDI EIKON commercial experience and activities is essential for reaching this aims.
- IDI EIKON: empowerment of their market deployment activities among Public Sector, as end-users' audiences and main decision makers are the same already buying those services from IDI EIKON portfolio. In any case, IDI EIKON understands that for a proper exploitation of LLM needs the support of an expert in the CTC+PTC fields to deploy such exploitation activity.
- If synergies among INTRAS and IDI EIKON were, at any point, impossible to achieve, IDI EIKON considers that LLM services exploitation will not be feasible to undertake on its own.

3.3.9 Links with other activities of the company

- **INTRAS -** GRADIOR Area: "LLM-ES" links directly with the activity of INTRAS, as a non-for-profit organization working in the field of research and intervention with people suffering from social exclusion due to mental health problems.
- **IDI EIKON e-Preventions Area:** aggregates the set of services that IDI EIKON is deploying among the Public Administration niche in Spain related to "audiences at risk of e-exclusion", where Elders are a very important target group.

3.3.10 What are the goals you aim to achieve in this project?

INTRAS: Goals are to develop and promote activities concerning assistance, research, evaluation and dissemination of mental health and other disabilities actions as well as to promote programmes of psycho-social and professional integration for disadvantaged people. **IDI EIKON:** Goals of IDI EIKON in following ahead with the results of this project are:

- Empowering the deployment efforts spent in parallel markets in the Public Administration niche, especially those inside the e-Inclusion area.
- Demonstrating that European R&D is worth enough to build long term sustainable business with the support of European financial actors.

3.3.11 Size of the JV (what size do you foreseen your JV will reach)

- Exploitation will be conducted in parallel from the existing structures and organizations of INTRAS and IDI EIKON using a "joint venture" approach that will not require the set up of a new company and that will rely on the current set of actives and resources of both organizations. Starting from this point, both organizations will adapt their structures to the evolution of the exploitation.
- INTRAS: Having developed his own software and being owner of infrastructure for it, INTRAS will focus in same target groups. These groups include professionals of hospitals, day care centers, residence facilities and memory clinics. In Spain they involved: 804 Hospitals, 5091 Residences for elderly population, 2258 Day Care Centres and 56 Health Insurances.



- Personnel currently working for Gradior software will participate in LLM-ES: Department of CRM development (Support centre on-line), Department of cognitive intervention and I+D+I Area.
- 2 persons will be incorporated for the coordination of the commercial activities for "LLM-ES" cognitive intervention department. This structure will support 1) Knowledge of the product at clinical level, by experts 2) management of incidences and future Gradior development 3) Commercialization.
- Reaching the figure of 300 new clients is the estimation of five years project
 - IDI EIKON:
 - Since "LLM-ES" services will be part of our Public Administration Services portfolio, the marketing strategies for them are not any different for IDI EIKON. In 5 years the e-Preventions business unit where "LLM-ES" will belong should have a 15 persons team (4 commercial and administrative and 11 technicians); sells of this business unit should be close to 2 EUR Million; Market share for PA niche in Spain should be close to 1% (80 Local PA).
 - Currently, IDI EIKON has started up its commercial activity in its e-Preventions business unit among Public Administration niche with a 10 person team inside the e-Preventions business unit. This size is the minimum required to handle adequately the technical and customer support activities providing the required non-failure guarantees and quality of services expected by customers. 8 persons are part of the technical and support team. Each of this tech people is able to support up to 7 average size customers with no overloading at all. It allows a reasonable planning of resources needed to follow the growth needs of the company. In any case, IDI EIKON will charge to the "LLM-ES" business only the costs of the human and technical resources involved in the marketing and support activities that would be much lower than those corresponding to the whole e-Preventions business unit.

3.3.12 The project in ten years:

• The service will be deployed successfully in all Spain. A network of allies to sell and implement services is running across all Spain. Sales are close to 2 EUR million (only in Spain). The "joint venture" is ready to deploy its service also to other Member States from Spain and to expand its commercial branches to Latin America. Customer Support, Marketing and Alliances and Administration are the core areas of the new business unit.



4. The Service

The "LLM-ES" service distinguishes itself with characteristics, of **usability**, **accessibility**, **affordability** by end users. Moreover, it takes into consideration all the e-accessibility barriers senior citizens face, such as ability restrictions concerning **cognition**, **vision**, **hearing** and **mobility** dexterities.

Initially addressed at elder people, "LLM-ES" public could much more than that, even if seniors are probably the most benefited from its use.

Cognitive rehabilitation and training have been around for a century as examinations taken with paper and pencil. In the 1970s and '80s the tests shifted to computers. One of the key highlights from SharpBrains market report 2009 was that "Large-scale, fully automated cognitive assessments are being used in a growing number of clinical trials. This opens the way for the development of inexpensive consumer-facing, baseline cognitive assessments."

Thanks to the rise in popularity of Nintendo's Wii and the continued success of franchises like Konami's Dance Dance Revolution³ and EA Sports Active⁴, **one-sixth of all games sold are health games**, according to John Lumpkin, MD, senior vice president of the Robert Wood Johnson Foundation, the largest philanthropic organization focused on health care.

Last year alone, health games, including blockbuster hits like Ubisoft's Your Shape and Nintendo's Wii Fit Plus, generated more than \$1 billion in revenue, according to Ben Sawyer, co-founder of the Games for Health Conference. That annual convention in Boston has grown from a small afternoon gathering six years ago to a two-day conference with more than 450 attendees. With the recent focus on health care, the U.S. government is shelling out millions of dollars in grants and research focused on how games can help people stay fit both mentally and physically, how games can help combat diseases, and how games can help patients rehabilitate.

Currently, "LLM-ES" Cognitive Training Component (CTC) is designed to support cognitive exercises provided by specialised software. However, a variety of software can be used for this process. Due to obvious reasons, being INTRAS the main owner, deployer and technical responsible of GRADIOR platform, CTC services in the Spanish market will rely on this component and IPRs will be paid for its usage.

³⁾ http://www.whattheyplay.com/products/dance-dance-revolution-universe-3-for-xbox-360/

⁴⁾ http://www.whattheyplay.com/products/ea-sports-active-for-wii/



5. The Market

The "ICT & Ageing" market represents a complex public-private mix of players, from device manufacturers to health and social care service providers that interact and have roles to play in ensuring the deployment and use of technologies.

It is recognised that market forces alone have been and are likely to remain insufficient to ensure the realisation of the potential in this field. Public policy efforts are therefore also required.

From the supply side perspective, in particular, the market for ICT-based supports for homecare and independent living present some core issues that warrant attention from a policy point of view:

- need for well-functioning supply chains (devices, systems, services, installation..)
- achieving critical mass / commercial viability
- standards / interoperability
- functioning of internal market.

Older people have widely varying needs and circumstances and across Europe there are widely varying health, social care and housing systems. To address this "LLM-ES" will offer a relatively standardised solution to include mass markets, but also an individually-tailored / customised solution.

Since 2009 a significant transformation in the brain health and fitness marketplace, was driven by a growing number of innovative professional (vs. consumer) applications. This is an indication of an evolution to a more rational, structured manner than has been the norm in the last couple of years and hopefully will drive away current confusion in the consumer segment. LLM active aging is today its main value proposition (for a better quality of life among older adults and clinical populations). However, there are other contexts (for enhancing brain health and performance at any age) where "LLM-ES" could also make a stake in.

5.1 **Profile of the demand:**

ICTs are seen to present an opportunity for a "win-win-win" outcome, whereby needs of older people are met in a high quality manner, the costs of providing care and support are maintained at manageable levels for society, and new market opportunities open up for ICT-based products and services.

"LLM-ES" can be counted among existing and emerging ICT-based products and services that have relevance for meeting these various needs and objectives.

However, in practice, mainstreaming of ICT-enabled solutions within real world service settings has to a large extent yet to occur. Many are the challenges and barrier to overcome.

Although needs of older people for an independent living and homecare are very heterogeneous, three main market segments structure typically the service delivery landscape in Europe: **social care, health care and housing**.



The basic needs covered by "LLM-ES" are related with empowering the elderly to improve their mental ability, while at the same time boosting their physical being, thus touching at the same time the 2 first areas mentioned above.

"LLM-ES" offer fits and should approach the following market segments in Spain:

Public administrations:

- Hospitals
- Day Care Centres
- Residential facilities
- Social services
- Reference Centres for aging, dementia, Alzheimer, etc.
- **Private organizations**
 - Hospitals
 - Day Care Centres
 - Residential facilities
 - Insurance Companies
 - Disabled Associations and non-profit organizations, that provide social-health services for elderly people
 - Gyms

Thus, the state's role as the main provider of benefits to various groups and individuals becomes paramount for those aspiring to make a business in the realm of social and/or health-social care sectors, as "LLM-ES" is.

Some part of the private sector as insurance companies and banks, are together with public administrations, the other alternative central to "LLM-ES" business.

In "LLM-ES", actions will be especially taken at regional level, where it is more viable to reach massive agreements with public authorities, private companies, local banks, technical providers and foundations. In our understanding, this level of actions is a key factor for the rollout of "LLM-ES".

ICTS or digital technology can be used to present specific task demands to individuals in a form that is intensive, repeatable, adaptive, and highly targeted. This can enable consumers and institutions serving them to assess, enhance, and treat cognition in ways that can easily scale, opening up a wealth of new information to inform preventive physical and cognitive deterioration.

In INTRAS – IDI EIKON view, only informed demand will ensure the development of a rational and structured marketplace. The CTC+PTC market presents significant opportunities for innovation, investment, business development and, ultimately, enhanced brain health and fitness of an aging society. Innovative partnerships will be required to channel the growing amount of interest and research tools, into a better structured and sustainable marketplace.

Thus, we have found that Public Administrations in Care of Services as Day Care Centres and especially Public Health Services (of course also Private ones) are the ones with the duty of ensuring that Elders have access to this kind of services and the ones that should pay for those services in their behalf.



So, the target audiences groups identified in Spain regarding the weight of the potential stakeholders are the following:

- Private and non-profit making entities
- Public entities:
 - Memory clinics, Geriatric units,
 - Hospitals, Psychiatric Departments, etc.)
- Social Care Centres providing services to the community
- End-users: Elderly people (staying in residences or health facilities like those mentioned above or visiting Public Day Care Centres while living independently)
 - ► 60-70
 - ▶ 70-80
 - ▶ 80+

Specifically about PA needs in terms of better attending Elders we can say that:

- They have the duty (legally supported) to provide solution for the needs of Elders (information, services, interaction, communication, isolation, socio-sanitary...)... and they are the ones to pay for services to its End Users citizens. Until now, the services offered were (and still are) hugely based on personnel efforts to provide some punctual help to elders (meals, housing and health, basically). But it is very often lately that PA starts to manage and offer more specific and professional health-related services as they are building and managing their own public infrastructure to attend elder citizens: public day centres or residences.
- They have low resources (lack of enough budgets but also a lack of trained human resources) to achieve this. When possible, they need technology to build services that effectively demonstrate there are progressing towards reaching this goal and in any case they need tools to measure that the services deployed are achieving results.
- They need to start up models able to demonstrate to their citizenry their engagement at a global level without losing the required personal focus related to health issues.

What is the size of the public market we are aiming: Local PA in Spain (8.015) + Regional PA in Spain (17), they have yearly budgets to be spent (recurrently) on better attending Elder needs. This demand is partially fulfilled by the market providing human resources based services (social workers, nurses, formal carers) supporting Elders' independent life. In any case, this kind of services is very expensive and very difficult to empower to cover wide areas (only few Elders benefit from them). Nowadays, PA in Spain manages more than 2.200 Public Day Care Centres (and this figure is growing up).

While IDI EIKON sees as its nearest customer PA, the other Spanish partner, INTRAS, a nonprofit Foundation specifically dedicated to people suffering from social exclusion due to mental health problems they see their target mainly in Social health professionals at care organizations, where they already have their market niche with their Gradior solution.

5.1.1 Market Size

SPAIN

|--|



 Assisted Living Hospital/Clinic/Rehabilitation Centre 	Private	CTC PTC	Market	share % foreseen	share in total numbers
Residences	Pu/Pr	CTC/PTC	~ 5.000	1%	50
Day Care Centres (PA)	Pu	CTC/PTC	2.200	4,5%	100
Insurance Companies (and/or other private stakeholders)	Pu/Pr	CTC/PTC	50	0% (initially)	0

5.1.2 Evolution of the demand

- Profiling the demand:
 - Volume and evolution:
 - <u>Market Size:</u>
 - PA Niche: More than 8.000 Local PA in Spain supported by 17 Regional Governments and 50 "Diputaciones". Those PA are currently managing more than 2.200 Public Day Care Centres, the key place in Spain to place and develop CTC and PTC services.
 - Medical Organizations:
 - <u>Demand Evolution</u>: The figure of potential customers is a closed number. No more than these customers will exist in the Spanish market. On the other hand, they are incredibly loyal customers with a strong basis of "traditional suppliers or providers". Regarding the number of Public Day Care Centres and Residences this is a growing figure and this trend seems to remain stable during next years, even when the economical crisis can slow down partially the process.

5.1.3 Market Trends

The flood of recent news coverage on brain fitness and brain training reflects a growing interest in natural, non drug-based interventions to keep our brains sharp as we age. This interest is very timely, given an aging population, increasing life span, increasing prevalence of Alzeimer's rates, a complex changing environment that places more lifelong cognitive demands on our brains than ever and soaring health costs everywhere that place emphasis on prevention and lifestyle changes.

However and despite the globalization phenomena affecting worldwide, the US brain fitness market is by far much more developed than the European one, more conservative and fragmented, due to its highly diversity.

In INTRAS - IDI EIKON view, only informed demand will ensure the development of a rational and structured marketplace. And that low tech options will play an increasing role in the brain fitness field.

<u>Market Trend</u>: All PA in Spain spent in attending Elders needs more than an 8% of country Gross Added Value (close to 90.000 EUR millions). Separating the purely sanitary costs and focusing on the funds directly handled by Local PA we can



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highlight that more than 900 EUR millions were spent in better attending elders in 2009, according to IMSERSO's (Spanish National Institute of Social Services, depending of Socio-Sanitary Affairs Ministry) 2009 Yearly Report provisional data. This figure represents a 0,5% more than the previous year, even in a severe financial crisis scenario. So we can say that Protecting Elder's and attending their needs is a strong and well-established market (even growing) among Local PA policies and expenses.

5.1.4 Expected Evolution

• <u>Expected Growing Rate:</u> due to the huge financial crisis that all PA and governments are facing, no accurate data on how this growing trend will evolve in following years is right now available. In any case, due to the demographic trends and the social protection that a general crisis situation requires it is expected to have growing percentages for this kind of policies. This fact is also strengthen with the duty of Spanish Local PAs to cover (with services and economic resources) the support and empowerment of Elder's Independent Life.

5.1.5 Customers Profile

• **Customers profile**:

- Local PA: with a small average size (around 2.000 citizens); with lots of economic constraints to attend a huge base of Elders; tending to manage public infrastructure related to Day Care Centres; not much aware of technologies and how to use them; willing to start up services that allows them to demonstrate its duties compliance jointly with citizenship well accepted services (political benefits are expected); long decision making times; need support to implement and maintain the service structure; willing to find service partners to support its costs (sponsors, private providers of services). Summarizing we can conclude that it is a very homogeneous, easy to measure and very stable group.
- <u>Expected evolution in the future</u>: developing a public infrastructure to attend citizenship health needs; growing attention towards ICT services; they perceived a potential added value to their currently running public ICT infrastructure deployment efforts; potential growth of economic constraints so savings and massive impact projects are to be positively evaluated.

5.1.5 Customers Needs

• Customers needs: when talking about PA as customers (public medical organizations, residences or Day Care Centres) they have the duty (legally enforced) to provide solution for the needs of Elders (information, services, interaction, communication, isolation, socio-sanitary...)... and they pay for services to its End Users; They have low resources (lack of economical but also human) to achieve this; They need technology to build services that effectively demonstrate progress on this achievement; They need to start up massive models that demonstrates to citizenship their engagement (and that produce related political benefits).

5.1.5.1 Usual buying behaviour:

• <u>Usual buying behaviour</u>: quite passive, normally suppliers have the initiative; they are really loyal and long term customers. Buying process is conducted via tenders that can be avoided when quantities are below 60.000 Euros per year.



5.1.5.2 Number of expected customers in this target

 <u>Number of expected customers in this target:</u> high, in any case over 50 to ensure long term viability. Normally the bigger Local PA will enter the services in first place, but experience has shown us that small Local PA are quite active in adopting innovative ICT services.

5.1.5.3 Access to this target:

- <u>Access to PA target:</u> IDI EIKON previous activity in other lines guarantees a good access to this niche in Valencia Region (7% of the total Spanish market), using direct contact with Local PA and very good contacts at Regional Government and "Diputaciones" Level. Alliances or partners are needed to cover the rest of the country.
- Access to Medical Organizations target: INTRAS' experience of 15 years in the national market cognitive training and intervention solutions, with a solid contact network in Spain, will ensure the access to organizations target. The effective commercialization and distribution strategy will be focused on professionals in order to have a greater access to primary and secondary final user (respectively, elderly people and informal care-givers). Based on INTRAS' experience in marketing its Gradior platform, it has been found that elderly people, when it comes to acquiring highly-specialized products for cognitive training intervention, count on the advice or recommendation of social-health professionals (doctors, psychologists, social workers, etc.). This will be complemented targeting also the representatives of health and social care organizations and the caretakers. Moreover, it will be followed a strategy of diffusion through activities offered for professionals specialization and publication in congress and scientific channels. Intras is also member of several international networks, essential in the exchange experiences and good practices in the socio-health field, and in the access to international market.

5.1.6 Marketing channels

• **Marketing channels**: as mentioned before, contact should be done directly or via existing suppliers ("traditional providers") already inside their house. Even when no seasonality of sales is clearly identified annual budgets are built year to year (they are outlined in autumn to start running in January).

5.2 Competitors

- "LLM-ES" can be three things: i) a service, ii) a system or iii) a product and can really be adapted to the local market and the end user needs.
- "LLM-ES" unique selling proposition (can be an integrated system providing entertainment and mind and body training) are its main advantage, while in the market there are many products focusing mainly in one side of the problem (usually brain fitness). Market offer is full of standalone components.

5.2.1 Main Existing similar offers and/or alternatives

- Structure of the existing similar offers :
 - Still very focused in medical and healthcare aspects, the care continuum does not yet exist
 - A fragmented offer of Services (service providers usually have to be contacted individually to access services): End Users approaches the service provider



- Elder people need services that support independence not undermine it
- Services could be improved with better co-ordination between service providers in 'packaging' services or integrated offers.
- Care packages are often too inflexible to meet individual needs or even intermediary providers needs (as Public Administrations) adequately.
- Better quality information in accessible formats and co-ordination between information providers is required.
- Very small and big partners share the market.
- No room for "friendly channels to elders" as TV have representative presence in the market when talking about integrated offers (CTC+PTC)
- Almost all services for attending Elders needs are based on human resources and almost no one deals with technology, especially when PA is involved.
- **Competitors**: Social policies at Spanish level take place mainly at regional and local level and a general trend is that delivery of services is more and more locally organized, close to where older people lead their daily lives. The challenges determining the development, adoption and diffusion of new technologies are different national patterns, regulations and policies, a heterogeneous industrial situation, a set of various payment systems and social approaches. It is recognized that market forces alone have been and are likely to remain insufficient to ensure the realization of the potential in this field. Public policy efforts are therefore also required. In the field of ICT & Ageing, the engagement of key stakeholders (especially health and social care providers) is one of the biggest barriers to wider implementation and mainstreaming at present. The "ICT & Ageing" market represents a complex public-private mix of players, from device manufacturers to health and social care service providers that interact and have roles to play in ensuring the deployment and use of technologies.
 - Internal markets: "LLM-ES" has to deal with the complexity of the processes whereby new products and service innovations come to be included within the standard portfolios of the mainstream social care and health care services, on 'lists' of reimbursable products and services, and so on.
 - Although needs of older people for an independent living and homecare are very heterogeneous, three main market segments structure typically the service delivery landscape in Europe: social care, health care and housing. Providers are very different among them and also their offers and services are really difficult (when not impossible to compare)
 - The physical and cognitive fitness is a worldwide phenomenon and the same applications can be found (more or less) in all the countries.
 The following Competitors Matrix provides an easy-to-read portrait of the competitive landscape and our position in the marketplace, while allowing us to keep track of the competition.



	COMPETITORS MATRIX																	
Product	1. Security at Home	2. Direct data transmission to Central Server	3. Web-based	4. Web delivery	5. CD-ROM Format	6. Web downloable	7. Unlimited Nº Users	8. Unlimited Nº Exercise	9. Online Support	10. Continuous Maintenance	11. Bi-annual updates	12. Multilingual	13. System Openess	14. Scientific evidence	15. Friendly User Interface	16. Professional Platform for professional experts	17. Includes hardware pre-loaded for just this purpose	18. Commitment
Dakim	-		-	-	Х	-	-	-	-	-	-				X		X	?
Cognifit	-		-	-	Х	×	-	-	Х	Х	-			X	X		-	daily/weekly
Lumos Lab	-		Х	Х	-	-	-	-	Х	Х	-			Х	Х		-	daily/weekly
Mind Sparke					Х										Х			daily/weekly
Happy Neuron			Х	Х	Х		-	-	Х	Х	-			X	Х		-	daily/weekly
Brain Training Pro			Х	Х	Х	-	-	-	Х	Х	-			Х	X	X	-	?
Neuroactive					Х										X			daily/weekly
Neuroactive Bike															X		X	
Nintendo Brain Trainer														Not*	Х			?
LLM:ILC	Х	х	х	Х	Х	х	х	-	Х	Х	Х	Х	Х	-	Х	х	Х	daily
LLM: FitForAll		х	х	Х	х	х	х	х	х	х	х	Х	х	-	х	-	-	?
LLM: BrainFitness		х	-	х	х	х	х		х	х	х	х	х	х	х	-	-	daily/weekly
LLM: Gradior		х	-	Х	Х	х	Х	Х	Х	Х	Х	Х	Х	Х	Х	х	-	?

*Not considered scientific programmes; just games

5.3 Selling Strategy

- "LLM-ES" will offer an integrative ICT service to joint all stakeholders (including users, customers, relatives and caregivers). So we can say that "LLM-ES" will only compete partially with other market players. In any case, we have identified these factors as key for successfully deploying services into the market:
 - **Independence**: to provide user needs, preferences and rights observation is basic for service acceptance, jointly with the observance of the needs of main customers (PA) requirements for integration and control
 - **Control**: to provide effective information, communication and prevention tools for caregivers and public administration ensures its acceptance of the service
 - **Ease of Use**: to provide an intuitive service for demanding whatever a user can need is vital, even when Elders are able to learn in order to be better attended
 - **Integration**: to create a universal framework where any need can be added, attended and solved ensures the acceptance of all potential customers (and from most of services providers, mainly the public ones).

It must be said that Social Care Services are quite linked to its deployment in a Local Area, so arranging some kind of Social Care Network of Services can provide impressive opportunities and almost indestructible barriers to competitors. Content is critical to succeed in this market. The role of a "CTC+PTC Content Manager" is needed to deploy effectively the service. This service can be offered by INTRAS - IDI EIKON customer support team or it can be deployed by our allies (current providers of the Public Administration, experts in specific areas such as ICT training and dissemination, Health or Socio-Sanitary services).



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Of course, to act in the market by the hand of an expert player (public administration, service provider) improves enormously the chances of having success. So Strategic Alliances are probably the MOST IMPORTANT FACTOR for entering, or in any case speed up the entrance, effectively the market. Additionally, they create important entry barriers to potential competitors. "LLM-ES" has not forgotten this issue, and the core of its Marketing and Business Deployment Area will work on this direction.

The main target is to quickly obtain 50 references in the Spain PA niche. To do so we can rely on the existing success stories and the alliances with Regional Government and "Diputaciones" provided by IDI EIKON. The wide end user acceptance and its massive impact in the citizenship are key commercial factors for the Local PAs. Also, the *SaaS* flexibility of "LLM-ES" is very valuable to make real-time demonstrations on how the service works and how are their usage statistics among similar Local PAs (providing ideas for new contents, identifying end user profiles...).

INTRAS provided success stories will remain open for customers to intensively test them. A specific Informative Web Site using "LLM-ES" features will be built to provide all relevant marketing, dissemination and commercial information to potential customers.



6. **REVENUES**

6.1 Market Objectives

Market Objectives and Potential Affairs:

"*LLM-ES*" has set up an objective of achieving 50 customers out of the more than 8.000 than exist in the Spanish Public Administration Social Care Services for Elder people market in its first 2 years and to reach the 150 PA customers by year 5. This is quite a conservative figure, but we have tried to set up realistic objectives in order to be able to reach them.

In fact, and as a result of the first market and dissemination activities that "*LLM-ES*" is deploying, some important opportunities are arising (local council associations, trans-border alliances of councils and so on). If they can be finally closed, figures forecasted for year 5 could be probably reached by no further than year 3.

At this stage, a very important agreement with Valencia Regional Government and Valencia Region "Diputaciones" is to be closed soon to speed up the implementation of LLM among Valencian Local PAs as the service will be free of cost for the first 20 of them (subscribing the service) in the first year.

6.2 Assumptions (calculation methods)

Calculation Method:

As explained in past chapters, "*LLM-ES*" Service (CTC+PTC) will be deployed following an ASP Model, meaning that the End User access the Service from the Internet in exchange to a monthly fee paid by Customers (jointly with an initial Set Up Fee).

In order to be able to sell "LLM-ES" in our area of intervention prices have been fixed attending to two main considerations:

- How much INTRAS IDI EIKON resources will "LLM-ES" consume?
- How worth is the service for the customer (PA and then for its End Users)? How is the customer paying for similar services?
- How much are IPRs to be paid from every sale?

This Business Plan is using the figures answering these questions, and implementing the indications provided by technology owners in what relates to IPRs, to build the commercial and financial forecasts defining the business opportunity in Spain.

6.3 Sales Forecast

A conservative estimation had been made that prices will remain fixed during the five years period of the Business Plan. According to this pricing policy, the corresponding revenues for the period are shown in the tables below.

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
CUSTOMERS					
New Medical Org. Customers	10	10	10	10	10
Running Medical Org. Customers	0	10	20	30	40



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New PA Customers	10	15	20	25	30
Running PA Customers	0	10	25	45	70
Total Customers	20	45	75	110	150
PRICES					
Start and Set Up Fee	2.500,00 €	2.500,00 €	2.500,00 €	2.500,00 €	2.500,00 €
Yearly Maintenance Fee	2.400,00 €	2.400,00 €	2.400,00 €	2.400,00 €	2.400,00 €
INCOMES					
New deployment's incomes	50.000,00 €	62.500,00 €	75.000,00 €	87.500,00 €	100.000,00 €
Recurrent incomes	48.000,00 €	108.000,00 €	180.000,00 €	264.000,00 €	360.000,00 €
TOTAL INCOMES	98.000,00 €	170.500,00 €	255.000,00 €	351.500,00 €	460.000,00 €

7. MEANS (needed for selling)

7.1 SALES

7.1.1 **Product** (s) **Policy**

- Services will be marketed under the **GRADIOR**+ name in Spain. This name is currently quite well known by Local and Regional PAs and health organizations and professionals across Spain. It is being offered as a SaaS (Software as a Service) and as it is being accepted by customers.
- **GRADIOR**+ applies for the full set of CTC capabilities for empowering Elder's Independent Life. Now the PTC capabilities will be also offered to the market. The price of the service set up and maintenance is the same independently of the intensity of its usage.
- Some of the **most distinctive features vs competitors** include:
 - Unique focus towards CTC+PTC services
 - "already in the market" references
 - Empowered by a highly skilled health expert team
- Customers really appreciate the light cost structure of the service, providing a massive impact service at very reasonable costs (due to its *SaaS* approach). They are happy with providing public infrastructure (very visible among citizens) to use the services.

7.1.2 Pricing Policy

- Price of the Services (resulting from analysis of the Spanish Market)
 - START UP FEE: average of 2.500 Euros at the start up in order to set up and adapt the implementation of CTC+PTC services to customer needs.
 - MAINTENANCE FEE: yearly fee of 2.400 Euros as an average to cover all support, maintenance and updates in the service. In fact, all prices are quite "flat" as "LLM-ES" is selling as a "Software as a Service" and is offering the benefits of transforming investments in recurrent service fees.
- Those prices are quite cheap when comparing them to similar projects implemented by other providers. This is due to the re-utilization of a core technology already in place (speeding up implementation processes), to the flexibility that SaaS models provide and also to a psychological barrier that allows **GRADIOR**+ (due to its light infrastructure requirement) to set its prices under the thresholds that require a Public Tender to buy for



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this kind of services.

- IPRs payment to third parties providing technology to "LLM-ES" business has been also included. This will affect to the following parts:
 - INTRAS: providing its GRADIOR platform to deploy CTC services. As directly involved in the exploitation and benefits sharing, no IPRs recovering are placed in this Business Plan, as agreed with IDI EIKON inside the "LLM-ES" joint venture to be deployed.
 - AUTH: providing its "Fit for ALL" PTC component to "LLM-ES" business. As agreed with this provider a yearly fee consisting in 100€ per year / per customer will be paid to AUTH in exchange for the rights to sell and use their PTC services.
 - LLM Consortium: in order to benefit from the knowledge, logos, dissemination and horizontal marketing activities, "LLM-ES" will pay 50€ per each new customer to the LLM IPRs holding company.

7.1.3 Sales Channels

- As briefly explained before, Spanish Local PA niche requires, for being effective, from a direct access that should be done directly by the provider itself (IDI EIKON) with its own commercial personnel or by already "in the house" or "traditional suppliers" of the Local PA. These customers are really loyal and build strong confidence links with their providers. Those are the best way to reach the customer if no direct access is available. In fact, in most of the cases the offer should be "checked" by a confidence partner or provider of the Local PA, as known from past experiences. For Medical Organizations niches INTRAS will use its reputation and success stories already in the market, as marketing will rely mainly on networking and scientific dissemination.
- So we need to empower our sales network, not so heavy due to very local coverage and confidence links. And we will need to rely on in alliances with "traditional suppliers" in other regions in Spain.

7.1.4 Communication means

- Success stories and "living demonstrators" are the most useful selling tools in the Medical Organizations and PA niches. We are focusing strongly on that issue to empower our commercial network, mainly reusing INTRAS previous efforts.
- In any case, dissemination activities coordinated with PAs supportive and representatives (as Regional Governments and "Diputaciones") are really interesting. Based mainly on the organization of workshops they have big attraction for those ICT and Social Services responsible in the PA. Then it is easier to present success stories by their own colleagues, to exchange opinions and ideas and to start building confidence links with actors in this niche. This will be the core of the communication activities deployed by IDI EIKON to empower GRADIOR + presence in the PA market.
- We need validation and feed back of the pilots to boost our marketing activities, something that is still missing in LLM

7.2 **PRODUCTION** (resources needed for producing/selling the product-service)

7.2.1 Facilities

• It should be taken into account that our Joint Venture is based in the combination of two



important skills: CTC+PTC expertise (INTRAS) and selling / access to PA market niche (IDI EIKON). Tasks and duties inside the "LLM-ES" JV have been shared according to the balance of these skills and its direct relation to the costs they have in the structure of both members of the joint venture. As INTRAS is the CTC+PTC expert supporting the technology deployment, training, support and maintenance tasks (involving most of the cost inside the JV structure) they will also perceive the biggest part of the benefits resulting of the joint venture. Being IDI EIKON a commercial partner allowing the access to the PA niches its involvement in terms of costs (and obviously also in benefits) will be much lower. Also, this should be highlighted by the fact, previously remarked on this business plan, that IDI EIKON is not able to tackle this market by themselves without the support of the CTC+PTC expert partner. Initially, the balance of duties/benefits in our joint venture has been estimated to be 80-20%.

- Our Spanish "joint venture" will conduct its activities from the facilities that their partners currently have in Valencia and Castilla y León Regions.
- INTRAS is composed of 8 Centres in 4 different provinces in Spain and of 80 professionals. The different facilities managed by the Foundation will be offered to run LLM-ES activities and reach national level.
- Normal office-like facilities are needed to start and deploy the activity. And normal equipment in terms of furniture and computers is needed to start the sales activity with 1 vendor. Intras personnel currently working for Gradior software will participate in LLM-ES. Close contact to community of mental illness and the 350 centers using Intras software will facilitate and ensure the start up of the activity in Spanish market.
- IDI EIKON
 - Will deploy its activity from Valencia to all Spain from "the cloud". IDI EIKON will manage its "LLM-ES" activities from its headquarters, placed in Valencia Technological Park. It should be take into account that GRADIOR+ will deploy digital services, and sales should be done mainly by closing alliances in local markets. So in principle the service can be deployed from anywhere in the world.
 - Normal office-like facilities are needed to start and deploy the activity. And normal equipment in terms of furniture and computers is needed to start the sales activity with 1 vendor. Any equipment will be supplied by IDI EIKON to start up the activity.

7.2.2 Technical Equipment (hardware & software required)

• All equipment is in place to start providing services (both from the technical and support team and from the commercial structure). New hardware will be required when new persons join the team.

7.2.3 Human Resources costs for carrying out the project required activities

To start up the joint venture activity in the Spanish market we will rely on the following resources, taking into account that INTRAS role as CTC+PTC expert require from a higher involvement in terms of resources (in order to provide an adequate support to the deployment). Initially, the tech person will be provided by INTRAS and the Sales Team will be shared and



formed by IDI EIKON and INTRAS resources. The evolution of personnel costs has been considered to grow a 3% every year

PERSONNEL COSTS	YEAR1	YEAR2	YEAR3	YEAR4	YEAR5
Technical Team:					
 Persons 	1	1	1	1	1
 Yearly Cost 	36.000,00€	37.080,00€	38.192,49€	39.338,17€	40.518,32€
TOTAL COSTS	36.000,00€	37.080,00€	38.192,49€	39.338,17€	40.518,32€
Sales Team:					
 Persons 	2	2	2	2	2
 Yearly Cost 	36.000,00€	37.080,00€	38.192,49€	39.338,17€	40.518,32€
TOTAL COSTS	72.000,00€	74.160,00€	76.384,80€	78.676,34€	81.036,63€
TOTAL PERSONNEL COSTS	108.000,00€	111.240,00€	114.577,20€	118.014,52	121.554,95€

Being the main goal of this joint venture to strengthen the commercial activities to market "LLM-ES" services, also an additional "Other Costs" amount has been forecasted as a needed complement to perform the commercial tasks. This amount has been estimated as a 10% of the total expenses in Personnel, and will be used to support the sales team in the development of their daily duties (travel expenses, daily allowances, dissemination and complementary marketing activities...).

Those costs have been collected in the following table:

	YEAR1	YEAR2	YEAR3	YEAR4	YEAR5
OTHER COSTS	10.800,00€	11.124,00€	11.457,72€	11801,45€	12.155,50€
(10% on Personnel)					
 Marketing, Dissemination, 					
Allowance Expenses					



8. SYNTHESIS / PROFIT ANALYSIS

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
CUSTOMERS:					
New Medical Org. Customers	10	10	10	10	10
Running Medical Org. Customers	0	10	20	30	40
New PA Customers	10	15	20	25	30
Running PA Customers	0	10	25	45	70
Total Customers	20	45	75	110	150
PRICES:					
Start and Set Up Fee	2.500,00 €	2.500,00 €	2.500,00 €	2.500,00 €	2.500,00 €
Yearly Maintenance Fee	2.400,00 €	2.400,00 €	2.400,00 €	2.400,00 €	2.400,00 €
INCOMES					
New deployment's incomes	50.000,00 €	62.500,00 €	75.000,00 €	87.500,00 €	100.000,00€
Recurrent incomes	48.000,00 €	108.000,00 €	180.000,00 €	264.000,00 €	360.000,00 €
TOTAL INCOMES	98.000,00 €	170.500,00 €	255.000,00 €	351.500,00 €	460.000,00 €
IPRs COSTS:					
Gradior CTC IPRs	0,00 €	0,00 €	0,00 €	0,00 €	0,00 €
Auth PTC IPRs	0,00 €	4.500,00 €	7.500,00 €	11.000,00 €	15.000,00 €
LLM Non-Technical IPRs	0,00 €	2.250,00 €	3.750,00 €	5.500,00 €	7.500,00 €
TOTAL IPRs COSTS	0,00 €	6.750,00 €	11.250,00 €	16.500,00 €	22.500,00 €
PERSONNEL COSTS:					
Technical Team					
- Persons	1	1	1	1	1
- Yearly Cost	36.000,00 €	37.080,00 €	38.192,40 €	39.338,17 €	40.518,32 €
- TOTAL COST	36.000,00 €	37.080,00 €	38.192,40 €	39.338,17 €	40.518,32 €
Sales Team					
- Persons	2	2	2	2	2
- Yearly Cost	36.000,00 €	37.080,00 €	38.192,40 €	39.338,17 €	40.518,32 €
- TOTAL COST	72.000,00 €	74.160,00 €	76.384,80 €	78.676,34 €	81.036,63 €
TOTAL PERSONNEL COSTS	108.000,00 €	111.240,00 €	114.577,20 €	118.014,52 €	121.554,95 €
OTHER COSTS					
(10% of Personnel)	10.800,00 €	11.124,00 €	11.457,72 €	11.801,45 €	12.155,50 €
- Marketing, Dissemination, Allowance Expenses					
TOTAL COSTS (except IPRs)	118.800,00 €	122.364,00 €	126.034,92 €	129.815,97 €	133.710,45 €
NET PROFIT	-20.800,00 €	41.386,00 €	117.715,08€	205.184,03 €	303.789,55 €
CUMMULATED PROFIT	-20.800,00 €	20.586,00 €	138.301,08 €	343.485,11 €	<u>647.274,67</u> €



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D5.3 LLM Business Plan, Annex II Version 1.1

As can be seen, "*LLM-ES*" revenues forecasts are quite conservative (as explained in previous chapters) at the start of the activity. All efforts and expenses are basically used to deploy the Commercial activity, and in the first year this "commercial start up" results in minimal losses. It should also be reminded that *our joint venture* will be based on a very light asset structure, substituting (when possible) investments of any kind of assets by their rent. It should be also kept in mind that "LLM-ES" joint venture will be set up relying on INTRAS and IDI EIKON own resources and with a very practical focus for deploying a commercial activity. The leveraging of previously running enterprise structures and the absence of investments will allow (this is our guess) for a quick reach of the break even point, and the balance of duties and costs engaged in the proposed joint venture resulting in a fair share of benefits while at the same time ensuring the business long term viability.

It should be considered that no Dividends sharing has been planned for this 5 year period, so economic profitability could be considerably higher if dividend sharing policies are negotiated among "joint venture" members.



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9. **DECISION**

At this stage, INTRAS - IDI EIKON decision is to follow ahead with "LLM-ES" Services as a way of expanding their own portfolios, since "LLM-ES" possibilities have been always in the mind of IDI EIKON strategies and clearly empower INTRAS market position by reaching further audiences now not addressed but also by adding value to the current portfolio of services. In any case it should be highlighted that for IDI EIKON the feasibility of tackling such a market niche alone would be far from possible due to the required health expertise and professional support, aspects, both, that collaboration with INTRAS can provide.



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Business Plan for FRANCE		
Name:	SantÉxercice	
Туре:	New Company (eSeniors + Others)	
Version	1.0	
Date:	April 2011	



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0. FOREWORD

At the time of writing these lines, severe technical and user interface problems and, correlatively, drop outs are preventing the local trials to progress as initially planned. The proposed business plan is therefore more built on assumptions and suppositions than on hard pre-market evidence. In particular here neither direct end users nor potential prescribers –they are the key actors of LLM's future market place- have so far, had access to one totally satisfactory training station.

In spite of this lack of visibility, some observations have been made, suggestions have been heard, and are used to assemble the following plan, which, even if built with a maximum of care, should be considered as premature, relatively unreliable at this stage, and as an initial step towards a more accurate road map.

Today, the contribution to the business plan LLM's French partner -a non profit organisation- may have, is twofold:

- 1. defining its possible role in fostering and promoting LLM
- 2. trying to outline the local marketing company's possible business outlook

All this, once again, providing all the technical issues are properly resolved and a proper adaptation and extensions to the customer base needs have been made. Otherwise there is no possible business, this has to be understood.

The structures, organisations, figures and all other proposals made hereunder are based upon perceptions, so far, and not enough on broadly based facts and figures.

In any case no business will be possible unless the product/system/service is made acceptable by the local market, and substantial improvements are to be achieved to that end.



1. EXECUTIVE SUMMARY

1.1 Mission:

The local LLM company, which will carry a commercially attractive name remaining to be defined, has the mission of proposing to seniors, ie aged 45 onwards, and their environment, cognitive and physical gaming systems designed to maintain general fitness and postpone, as far as possible, the loss of autonomy, this via exergaming stations, associated to domotics for elderly people's safety.

1.2 One year onwards vision:

eSeniors can secure a few key strategic "show case" sites in several, if not each, of the potential target areas where LLM can be sold with a view to ascertain LLM scientific and technical leadership in the domain of services for seniors' fitness. Actual sales and service would actually be by a regular commercial company and not by a non profit organisation.

1.3 Strategic Objectives:

Ascertaining LLM's scientific and technical, and if possible, commercial leadership in the domain of exergaming stations and services designed for seniors' fitness.

Positioning LLM as the AFFORDABLE reference in the field of cognitive and physical fitness exergaming systems designed to maintain general fitness and postpone the loss of autonomy, this via training, associated to domotics for elderly people's safety.

Reaching a significant market share in volume in the said field would be the commercial company's strategic objective.

1.4 Promoters Personal Objectives:

With e-Seniors, a non profit NGO particularly dedicated to the use of ICTs by seniors for their general welfare, as one of the main partners, the new company will be able to focus on the positive aspects and effects of ICTs on health and ageing. Namely this is to be done placing "LLM-paradigm systems". It is the major part of e-Seniors' social objectives.

1.5 Five years onwards vision:

Establishing, ascertaining and developing LLM-type set-ups as the AFFORDABLE, FLEXIBLE and EVOLUTIVE ENTERTAINING product in the field of cognitive and physical fitness exergaming systems designed to maintain general fitness and postpone the loss of autonomy, this via training, associated to domotics for elderly people's safety



2. Holder of the Project

2.1 Name of the company:

SantÉxercice, this name is built as a collision between the two terms 'santé' (health) and 'exercices' (exercises), can concisely describe the marketing company's purpose: providing cognitive and physical fitness exergaming systems and support designed to maintain general fitness.

2.2 Location:

For the marketing and sales company, headquarters set in the Parisian region are initially envisaged; however a location closer to the barycentre of the initial significant installations may prove to be more convenient from several standpoints: i) proximity to the customer base, ii) relatively easy access to real life demonstration sites, iii) in the case of support by public authorities, possibility to obtain attractive installation incentives and facilities.

2.3 Profile of the companies

- As a non profit organisation, e-Seniors would keep its present status, a non profit NGO under the French law of 1901.
- To begin with, **SantExercice**'s profile could be that of a "société à responsabilité limitée", a French limited company.
- Together with the other European "sister companies", **SantExercice** and e-Seniors could form a Groupement Européen d'Intérêt Économique, with a view to mutualise a number of efforts and reduce costs. This GEIE could be different from the LLM "mother" company exploiting the IPR rights.

2.4 Human Resources allocated (to the project)

As regards the marketing company, with a fairly narrow scope (due to the factors exposed earlier) expected in the beginning, a small base of 3 to 3.5 man/years, possibly increasing to 4/4.5 man/years in the 4th to 5th year, would carry the commercial, technical and support tasks. This with the understanding that the "mother LLM company" would be in charge of supplying all the necessary software and technological knowledge elements, including a fast response desk (hot line ?) for resolving the day to day technical questions at the "product/system" level.



3. The Idea

3.1 The idea objective:

LLM is an exergaming training platform for all/It is not a medical device although it can be used in an environment where people need at the same time cognitive training, physical training and the safety surveillance provided by a domotic system.

E-Seniors show and promote it in their daily activities; they also formulate necessary fixes and changes as well as propose new developments as perceived from the potential user base.

SantExercice sell, supply, install, advise and maintain at the customer site. They also propose changes and new developments given their field position which allow first hand 'down-up' input in various aspects.

3.2 Strengths / Weaknesses

Strengths	Weaknesses
All the experience gained with the LLM project from inception to the creation of the company.	Insufficient capital base
Very good knowledge of the seniors' sociology and problems, very good attitude "vis à vis" ageing, personal ageing experience,	Potential difficulties with relatively younger official/institutional spokespersons or contacts
Scientific bases used for defining LLM's exergaming sessions.	A combination of several games, mental and physical, with an third party domotic sytem might play the same role as LLM
Strong trends in exergaming systems	No truly wild enthusiasm has been perceived so far by the end users;
The future company will be composed of seniors and mature staff.	



3.3 State of the project (until now achievements)

Initial creation stages: thought to start after the end of the project: January 2012

- **3.3.1 Funds obtained:** None until now
- 3.3.2 First commercial contacts: Not yet available
- 3.3.3 First orders: Not yet available
- 3.3.4 Contracts with technology providers: Not yet available
- 3.3.5 Dissemination: Ongoing
- **3.3.6** Technical expertise: eSeniors counts with enough people for supporting this, either at internal level or via external collaborations with third parties
- 3.3.7 Origin of the project: The LLM project

3.3.8 Strategic reason (why the company decides to go into such a business)

The strategic reasons can be read in the paragraphs above:

- E-Seniors are an NGO deeply involved in the use of ICTs by seniors for their general welfare
- E-seniors have a very good knowledge of the seniors' sociology and ageing problems, as well as very good dispositions "vis à vis" ageing, and personal ageing experience,
- Less and less public money is going to be spent into this sort of activity and it is time to find alternative affordable solutions for maintaining seniors' general fitness and postponing, as far as possible, the loss of autonomy

3.3.9 Links with other activities of the company

Without being a one-product-only-company, **SantÉxercice** will focalize on marketing and selling exergaming systems and their corollary developments and products. Exchanges with e-Seniors and support of its non-profit activities with a view to foster and promote exergaming.

3.3.10 What are the goals you aim to achieve in this project?

SantExercice goal is to market affordable fitness solutions for seniors and elderly people, and where possible, e-Seniors' goal is associating local policy makers and governments into a general scheme for a fitter society.

In more practical and commercial terms, one of the goals is maximizing the volume of installations in order to make the exercising systems available to the broadest possible



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ageing population.

3.3.11 Size of the company (what size do you foreseen your company will reach) Sizing parameters can cover several axes

3.3.12 The project in ten years:

A socially minded company driven towards the seniors and elderly people community, **SantÉxercice** would tend to become a model for social enterprise giving a broader access to fitness and safety facilities, and acting as a partner with public social organizations and territorial organizations aiming at keeping senior citizens and elderly people as long as possible in their homes.

4. The Service

As determined at the end of the test phase.

A specific exergaming requirement is formally made to develop a post cardiovascular cure module for senior patients.

5. The Market

5.0 Segmentation

5.0.1 Health state

Initial local pre-pilot tests conducted by competent crews have yielded the conclusion that only persons having kept a fair degree of autonomy and mobility are likely to use LLM. For example persons residing in an institution (EHPAD for dependent persons), having an MMSE (French consensus) around 25, slightly impaired physically, very often won't be able to exercise properly by themselves or even when helped.

It is therefore assumed here that a whole slice of the ageing population will not be concerned by the exergaming product/system/service, too demanding, physically wise in particular.



5.0.2 Purchasing power/Income/Amount spendable on exergaming

Healthy person	Healthy but poor	Healthy and rich
Sick person	Sick and poor	Sick but rich
	Low income person	High income person

Grossly and coarsely, the population remaining after the censoring the population of seniors/elderly people mentioned in 5.1.1, can be categorized as in the figure above. Unfortunately for equality, it is quite likely that the majority of persons in a position to afford –and use- the LLM might only be found in 3 boxes out of 4, this with an uneven repartition within the said boxes.

5.0.3 Geographic

WARNING: The following figures are to be considered with utmost care. They are assumed figures, based upon a virtually untested product/system/service supposed to be useful and resolving rehabilitation issues linked to home return after hospitalization and minimizing re-hospitalization.

	Y1	Y2	¥3
Direct end-users / Homes	750	1000	1500
Institutions (*)	50	55	60

(*) Assumption: one unit only per institution

The assumptions for building this prevision are:

• Direct end users at home (ie possibly including a Raltec domotic system):



- Half of the French metropolitan 'départements' have an ageing rural population. In about half of them about 15 families are able to invest in one LLM subscription, the figure is rounded at 750 subscriptions for year one. The following years show an increase due to a good existing base, more families and more 'départements' joining.
- A similar approach is taken with non-EHPAD homes and centres, with only one subscription per institution, with a slow annual growth.

5.1 **Profile of the demand:**

Refer to 5.0 Segmentation

5.1.1 Target Size

WARNING: The following figures are to be considered with utmost care. They are assumed figures, based upon a virtually untested product/system/service supposed to be useful and resolving rehabilitation issues linked to home return after hospitalisation and minimising re-hospitalization.

	Y1	Y2	Y3
Direct end-users / Homes	750	1000	1500
Institutions (*)	50	55	60

(*) Assumption: one unit only per institution

The assumptions for building this prevision are:

- Direct end users at home (ie possibly including a Raltec domotic system):
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 - A similar approach is taken with non-EHPAD homes and centres, with only one subscription per institution, with a slow annual growth.

5.1.2 Evolution of the demand

Refer to 5.0 Segmentation

5.1.3 Market Trends

Market trends are obviously going in the exergaming/games for health direction. With a slow and steady but sure removal of governments from healthcare expenses, prevention



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is becoming a general concern, albeit slowly, and the 'prevention product consumer' category is growing in size and concern. Many healthy seniors potentially interested in LLM can be classified in that category. This is important to know for determining communications and advertising channels.

5.1.4 Expected Evolution

5.1.5 Customers Profile

... Private, including post cardiovascular cure ... Institutions, EHPAD excluded

5.1.6 Customers Needs

Interactive content adapted to users' needs: 1) for carrying out rehabilitation exercises without having to go out of home; 2) Brain exercising games, attractive enough for keeping them hooked to the system, able to adapt to end-users level, demanding up to the point and changing in order not to get users bored.

5.1.6.1 Usual buying behavior:

... Consumers of prevention products

5.1.6.2 Number of expected customers in this target

5.1.6.3 Access to this target:

... Specialized media and Internet

5.1.7 Marketing channels

Direct marketing via "modern *couponing*" (Internet, MDs waiting room, specific magazines for (healthy) retirees, friendly societies magazines and newsletters, etc.

5.2 Competitors

5.2.1 Main Existing similar offers and/or alternatives

Please refer to the annex, already published in February 2010. MS Word file named: "Couples-produits=marchés_LLM".

5.3 Selling Strategy



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The most feasible strategy foreseen is to sell through the new company (companies) envisioned en this BP. Also by creating an EEIG⁵ with the stakeholders chain involved and preferably cross-border, would equally be a good option for an organization as eSeniors.

6. **REVENUES**

6.1 Market Objectives

6.2 Assumptions (calculation methods)

Half of the French metropolitan 'départements' have an ageing rural population, in about half of them about 15 families are able to invest in one LLM subscription, the figure is rounded at 750 subscriptions for year one. The following years show an increase due to a good existing base, more families and more 'départements' joining. A similar approach is taken with non-EHPAD homes and centres, with only one subscription per institution, with a slow annual growth.

6.3 Sales Forecast

WARNING: The following figures are to be considered with utmost care. They are assumed figures, based upon a virtually untested product/system/service supposed to be useful and resolving rehabilitation issues linked to home return after hospitalization and minimizing re-hospitalization.

	Y1	Y2	Y3
Direct end users/Homes	750	1000	1500
Usersdays/year	273750	365000	547500
Low hypothesis: 10€d	2737500	3650000	5475000
High hypothesis: 16€d	4380000	5840000	8760000
Institutions (*)	50	55	60
Institutionsdays/year	18250	20075	21900
Low hypothesis: 30€d	547500	602250	657000
High hypothesis: 40€d	730000	803000	876000
Low hypothesis (T)	3285000	4252250	6132000
High hypothesis (T)	5110000	6643000	9636000
(*) Assumption: one unit only per institution			

⁵ A European Economic Interest Grouping



A few words about the pricing assumptions:

Direct end users/Homes {Low hypothesis: $10 \notin d$:; High hypothesis: $16 \notin d$ }. The $10.00 \notin$ to $16.00 \notin$ per day price for a full configuration including the e-Home (Raltec) device and all connection costs has been reckoned from the cost of one day of rehospitalization (about $350.00 \notin day^6$) and taking into account a full installation cost, hardware, software, service (installation & training) over two years, also considering possible financial help at the local authorities level. The higher price hypothesis, $16.00 \notin day$, is taken from basic Gym/Fitness club tariffs re-proportioned to a daily use.

As regards the low and high for institutions, the assumption is there will be more service to deploy given the multi-user character of the installations, and the absence of public or friendly societies (mutuelle complémentaire in France eg) funding.

⁶ We are referring in this case not to a regular hospital but to an "établissement de soins de suite et de réadaptation" (in French). A kind of specialized hospital linked to a main hospital where people is send (mainly after surgery) to carry on rehabilitation exercises before being send to their home.



7. MEANS (needed for selling)

7.1 SALES

7.1.1 **Product** (s) **Policy**

SantĖxercice

SantExercice should avoid having a one-product-only policy by differentiating its offer as much as possible, while keeping its core quality and competences. Any worthwhile effort to improve, innovate, simplify, diversify, the product/system/service will be considered, while placing safety, reliability and efficiency as top priorities. In particular adding new cognitive training games, new physical exercises and accessories, new equipment combinations and interactivity.

Obviously, before going into any new significant developments, the transition from pilot stations (and software) to proper commercial units should be smoothly operated: delivering 'mint' neat and tidy software interfaces having to be achieved before the first configurations actually begin their 'commercial life'.

Regarding the base components, LLM will have to be marketed with both *Gradior* (modulable, flexible, adaptable to various audiences, "visual", multi cognitive, +) **and** *Brain Fitness Programme* (auditive, action oriented, stories, +). Quickly other cognitive training software libraries will have to be made "interfaceable" for use within LLM. The same applies to FFA which should develop, including physical exergaming studied for a broader audiences and specific audiences, on an ongoing basis. These are conditions for reaching broader audiences and delivering true benefits to the users.

7.1.2 Pricing Policy

Please also refer to 6.3.

SantĖxercice

Taking into account all the warnings already formulated, the pricing model chosen is an all inclusive daily rate which includes equipment rent, insurance, etc. A consignment down payment (deposit for equipment) might also be considered site by site. The idea of a 'daily rent' has several advantages, combining in particular flexibility and steadiness of inflow. It is also a model understood by public bodies serving public help.

As regards other types of customers, institutions eg, likely to demand more service and more maintenance due to the number of direct end-users will be charged more than families or individuals.

e-Seniors

Will invoice consultancy fees on a negotiated basis, case by case.

7.1.3 Sales Channels

eSeniors aims to create a "relationship selling" built on a bedrock of guaranteed service, where excellence will become critical to locking-up key customers.

The sales channels we are thinking to of are a mix of strategies based on:

- An Internet distribution model
- Partnering with other companies whose customers may need our service
- Partnering with bigger software companies that have a critical mass of users

7.1.4 Communication means

We believe a thorough understanding of the audience's needs, emotions, interests and activities is essential to ensure the accuracy and relevance of any message.

eSeniors or the new **SantExercice** or EEIG will propitiate a framework for developing a plan to communicate effectively and efficiently based on what industry experts refer to as the "Communications Cycle": Messaging, targeting, distribution, monitoring and measuring, and assessment.

7.2 **PRODUCTION** (resources needed for producing/selling the product-service)

7.2.1 Facilities

A secured workshop/lab facility, including sufficient storage space, will be required. Different "show case" events will be organized by e-Seniors in the framework of a drive to popularize exergaming systems for seniors. Eventually a full 'residential' e-Home show case installation will be needed.

7.2.2 Technical Equipment (hardware & software required)

- A full configuration featuring all LLM hardware and software.
- ...
- A couple of portable demo units with small touch sensitive screens LLM-compatible.
- ...
- Spare paraphernalia for demonstrations and installations.
- ...

7.2.3 Providers (you will need to pay for being able to sell the product-service)



- Hardware Manufacturers
- Telecommunications providers
- ICTs professionals
- Health and/or Psychiatric /Psychologist professionals
- Marketing and Sales people
- People ready to serve people

7.2.4 Human Resources costs for carrying out the project required activities

Please refer to main financial chart (title: "Labour").



8. SYNTHESIS / PROFIT ANALYSIS

	Y1	Y2	Y2	
Labour	310 000,00 €	315 000,00 €	330 000,00 €	
Number of stations	800	1055	1560	
Equipment & LLM sw	2 800 000,00 €	3 692 500,00 €	5 460 000,00 €	
Overheads & MIC	62 000,00 €	63 000,00 €	66 000,00 €	
Establishment costs	25 000,00 €			
Costs (total)	3 197 000,00 €	4 070 500,00 €	5 856 000,00 €	
« Approximation »	3 300 000,00 €	4 300 000,00 €	6 100 000,00 €	
« Delta »	103 000,00 €	229 500,00 €	244 000,00 €	
MIC=Miscellaneous Items of Cost (including fees).				

Note: the "Approximation" line is an assumption constructed upon the following bases:

- The daily rate is slightly higher than the 'low hypothesis'.
- There is no major change and no *major innovation* or major addition (new sw, new physical exercises, etc.) introduced in the LLM product line/service offer from yr 1 to yr 3. This induces a light slowdown in sales.
- Efforts in market research are made during yr2 and yr3 to gain volume and value in the following years.

WARNING (bis repetita): These figures are to be considered with utmost care. They are assumed figures, based upon a virtually untested exergaming product/system/service supposed to be useful and resolving rehabilitation issues linked to home return after hospitalisation and minimising re-hospitalisation.

8.1 Investors

Investors can be of several types:

- 1. Non-profit institutions collecting enough money to invest in a exergaming for health systems designed for seniors and elderly and handicapped people
- 2. Networks of paramedical equipment resellers wishing to extend their range of services
- 3. Companies already selling exergaming systems and wishing to integrate LLM to their range
- 4. Companies already developing and assembling exergaming equipment and wishing to "blend" their terminals (dance carpets eg) with LLM
- 5. Institutional investors
- 6. Private investors
- 7. ...



9. DECISION

No decision can be taken in France unless sound configurations have been thoroughly tested and approved by direct senior end-users.

This has unfortunately not been the case so far due to adverse testing conditions (sw/hw mix, unusable screen displays, etc.).

A 6-month project period prolongation has been formally requested in order to achieve proper testing end define suitable product/system/service configurations for the French market. Any product/system/service configuration likely to conform to the conditions mentioned above should then be disseminated in other countries (Poland, Czech Republic, Hungary, etc.).



Business Plan for GREECE			
Name:	LLM-GR		
Туре:	Spin-Off (AUTH with the collaboration of ATHENA, TERO and NKUA)		
Version	1.0		
Date:	May 2011		



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1. EXECUTIVE SUMMARY

1.1 Mission

The local company LLMCARE will be a spin-off of the Aristotelio Panepistimio Thessalonikis / Medical School (AUTH), that will be established with the aim to deploy and offer the integrated LLM service to the Greek market, addressed to older people offering an integrated service to improve their cognitive and physical health and safety and quality of life of people and their relatives. LLMCARE spin-off, will also seek for innovative ways of improving its services by searching and developing new experiences with the aim to make the LLM service sustainable (adding new components and solutions in the future).

1.2 One year onwards vision

The LLMCARE company in a form of a spin-off is planned to be established after the first two years. For the immediate deployment of the LLM service in Greece, after the end of the project, it is planned that AUTH will use its institutional Framework named as Research Committee, where LLM service will run as a self-funded project, utilising the existing resources of AUTH Research Committee and the support of the Greek collaborative partners (ATHENA RC, TERO and NKUA). AUTH and NKUA are well connected with organisations that support elders with Alzheimer disease, and potentially will be the first customers of the first LLM service for the first year.

1.3 Strategic objectives

- Setting up a self-funded project, utilising the existing resources of AUTH Research Committee (AUTH RC). A low risk and safe approach (due to the economic crisis) for the first two years for generating profit, with a low cost.
- Establishing a collaboration agreements the following Greek partners for having a share from the sales of LLM Service in Greece:
 - Athena Research and Innovation Center in Information Communication & Knowledge Technologies/ Institute for Language and Speech Processing (ATHENA RC)
 - Tero Ltd (consulting company with experience in the market)
 - o National and Kapodistrian University of Athens (NKUA)

Two partners are located in Athens (ATHENA RC, NKUA) and two are located in Thessaloniki (AUTH, Tero) covering both more than 60% of the total Greek population which is important for the exploitation of the LLM service to the market.

- Utilising the existing resources and expertise of the AUTH RC, in Marketing, Financial Management, IT and legal support. Market strategy will be:
 - Directly: by creating an effective commercial and distribution network
 - Indirectly: by setting up the appropriate alliances with public administrations and stakeholders already acting in the market.
- Reaching the break-even point that ensures the generation of an LLMCARE spin-off for a long term sustainability.
- Achieving customers recognition in terms of easiness of use and benefit to the elders.
- To start deploying LLM services in a wider market such as insurances and medical markets.



1.4 Promoters Personal Objectives:

With AUTH/Medical School, as founder and owner of the spin-off, LLMCARE will be able to focus on services to improve the quality of life of elder people and their relatives. LLMCARE spin-off, will also seek for innovative ways of improving its services by searching and developing new experiences with the aim to make the LLM service sustainable (adding new components and solutions in the future).

1.5 Five years onwards vision:

LLMCARE will be a sustainable company in Greece, by deploying LLM service successfully in Greece, at homes and care centres. A network of allies to sell and implement services is running across Greece. Incomes from sales are around 200.000€ in Greece.



2. Holder of the Company

2.1 Name of company

LLMCARE

2.2 Location:

For the first two years, LLMCARE will be located in Thessaloniki and later on with the establishment of the spin-off a branch in Athens will be created, where LLMCARE will a have a good starting position for entering the market also of Central and South Greece.

The new company will, at least at the start up phase, use the premises of AUTH having the chance to share personnel and infrastructure resources.

2.3 **Profile of the company**

LLMCARE will be dedicating in developing, selling and supporting ICT based solutions, services and products to the senior market including the health & care market

2.4 Human Resources allocated:

• Panagiotis Bamidis – managing director

- Managing director of LLMCARE
- Assist. Professor in AUTH/Medical School
- ICT R&D and management background of more than 20 years
- o huge experience in managing IT projects

• Prof. Sokratis Papageorgioy – scientific head

- Technical and scientific advisor of LLMCARE
- Scientific head of NKUA since 2006
- Assist. Professor of Neurology at NKUA
- Scientific Advisor of Alzheimer's Hellas in Athens

• Apostolos Vontas - marketing mananger

- o Marketing and Business advisor of LLMCARE
- o superior degree in Business Management and Administration
- o 10 years experience in the Greek ICT market

• Evdokimos Konstantinidis- technical deveopment & support lead

- o Technical advisor of LLMCARE
- Head of Technical Support
- 5 years experience in ICT product development



3. The Idea

3.1 The idea objective:

LLMCARE spin-off will deploy LLM, as an integrated service addressed (mainly) to older people offering at the same time a physical and a cognitive training system in combination with optional scalable independent living smart home solution to the health sector and social care sector and to private end users. LLM services will be the startup service of a portfolio, which will be expanded by other ICT solutions for improving the quality of life of elder people and their relatives.

3.2 Strengths / Weaknesses

• AUTH and NKUA have a broad network of	WEAKNESSES				
 ACTIT and TAROA have a bload hetwork of governmental, non-governmental and commercial institutions supporting elders spread all over Greece. The LLMCARE spin-off from AUTH's R&D outcome results in a very good mix of capabilities to tackle the market. The unique integration of CTC, PTC + ILC is not being offered in the Greek market at this moment. Capability of adaptation to local market: multi-lingual, multi-channel. Ethical implications. We are able to manage every issue related to personal data and mental health information. 	 Much dependencies on a public-driven market could result in a delayed or long time (and resources) consuming deployment. Time needed to get visibility and brand recognition, especially when dealing with public-driven and private markets. Commercial net to be constructed based on alliances. Prices to be definitively confirmed by the market. Dependencies on third parties (IPRs and technology): PositScience (CTC), Intras (Gradior) and RALTEC (eHome) in the case of Cognitive Training) and existing infrastructure 				
OPPORTUNITIES	THREATS				
 The increase in aging of the Greek population and the subsequent expected increase in the cognitive and physical decline. Broad government initiatives to increase the public awareness of the need for brain fitness and physical fitness. More public investments. Low tech options will play an increasing role in the brain fitness field, such as meditation and cognitive therapy. Clinical Psychologists, Doctors, physiotherapists, nurses, gymnastics experts and pharmacists, already collaborating with AUTH and NKUA, will help patients navigate through the overwhelming range of available products and interpret the results of cognitive assessments. 	 Many competitors are found in the CTC and eHome market with very fragmented offers and approaches that can confuse customers in their selections. General crisis situation with a severe impact on Organisations budgets. Technological obsolescence (same for all competitors) Users distrust: technological scepticism; lack of motivation, need for an adequate environment to access and use these kind of services. Governmental policy in Greece to take care of social and health services and pay for them in name of end users. There are budgets and policies to be further developed. 				



-	Insurance	con	npanies	will	introduce
	incentives	for	members	to	encourage
	healthy agir	ıg.			

 Increased awareness of the economic need of the public area and the personal wishes of seniors to live an autonomous life at their own homes as long as possible; increasing costs of supporting seniors by care givers.

3.3 State of the project (until now achievements)

3.3.1 Funds obtained:

All activities until now in the Greek market have been supported on AUTH's, TERO, ATHENA RC and NKUA own financial resources, coming from their own capital resources. LLMCARE will claim financial resources for spin-off funding provided by Greek and EU support fund programmes, for innovative companies.

3.3.2 First commercial contacts:

- Greek Association of Alzheimer Disease and Relative Disorders (GAADRD).
- Open Care Centres for (the Protection of) the Elderly (KAPI)

3.3.4 First orders:

A first couple of customers are the Greek Association of Alzheimer Disease and Relative Disorders (GAADRD), which is acting as operator of the local Alzheimer centre in Thessaloniki and Athens, consisting of 8 care centres in Greece, and numerous Open Care Centres for (the Protection of) the Elderly (KAPI) in both Thessaloniki and Athens. The LLM system has already been trialed out in either of these, and therefore the efficacy of the approach is proven already, thereby offering a relatively easy market intrusion.

3.3.4 Contracts with technology providers:

All IPRs related issues have been agreed with the LLM consortium and are included as costs for the deployment of the LLM business in Greece.

3.3.5 Dissemination:

Dissemination activities are already ongoing since begin of the LLM project and will be regularly conducted to inform the market about LLM service among which we already count with LLMCARE services.

3.3.6 Technical expertise:

LLMCARE people are qualified enough to manage early implementation processes, support activities and detect future needs to provide improvements and new features.

3.3.7 Strategic reason (why LLMCARE decides to go into such a business)

AUTH/Medical School has a very good knowledge of the Greek market on existing and upcoming solutions in the wide area of health and medical care. As a research intensive organization, it always had a strong interest to participate in this upcoming market and generating incomes coming from spin-offs in order get additional finance resources for funding its R&D activities.



3.3.8 Links with other activities

LLMCARE will be linked with AUTH/Medical School activities especially related to research on new services and technologies in health and medical care sector, providing a vehicle for business exploitation of its results.

3.3.9 Size of the LLMCARE

In 5 years LLMCARE will have 10 persons team (5 commercial and administrative and 5 technicians/support); Sales should be ~ 1 EUR Million.

3.3.10 LLMCARE in ten years:

The service will be deployed successfully in all of Greece, with sales around 1 million EUR. The company is ready to deploy its services also to other Member States (especially in the Balkans) and Eastern Europe.



4. The Service

LLMCARE is offering an **integrated** LLM service to improve their cognitive and physical health and safety and quality of life of people and their relatives.

This service is based on a platform that is comprised of the Physical Training Component (Fit-For-All), the Cognitive Training Component (Brainfitness and Gradior) and the Independent Living Component (eHome).

Currently, LLM Cognitive Training Component (CTC) and physical training component is designed to support exercises provided by specialised software. But due to the modular concept of LLM a variety of software can be used for this process.

It is considered that other R&D outcomes of AUTH will be integrated into LLM service like the guidance/companion avatar system providing affective and empathetic user interactions.



5. The Greek Market

5.1 **Profile of the demand**

Senior people have widely varying needs and across Europe there are widely varying health, social care and housing systems. To address this LLMCARE will offer a relatively standardised solution to include mass markets, but also an individually-tailored / customised solution.

LLM service can be counted among existing and emerging ICT-based products and services that have relevance for meeting these various needs and objectives.

Although needs of older people for an independent living and homecare are very heterogeneous, three main market segments structure typically the service delivery landscape in Greece:

Elderly social and health care public authorities:

- The Open Care Centres for the Elderly (KAPI)
- Home Care for the Elderly
- DAY CARE Centres for Older people (KIFI)
- Residential Care Homes
- Reference centres for aging, dementia, Alzheimer
- Health Authorities and Social Service Departments
- Hospitals

Elderly social and health care Private Organisations:

- Residential Care Homes
- Insurance Companies
- Health care Insurance and Private Medical care in Greece
- Hospitals
- Private Residences Groups or Fitness Clubs,
- Social and health care professionals,

Private Elderly persons

Senior's living at their own homes and their relatives acting as their informal care takers.

The CTC+PTC and assistive smart home market presents significant opportunities for innovation, investment, business development. Innovative partnerships will be required to channel the growing amount of interest and research tools, into a better structured and sustainable marketplace. Thus, we believe that both public and private care -services are the ones with the duty of ensuring that older people have access to this kind of services and the ones that should pay for those services in their behalf.

The target audiences groups identified in Greece regarding the weight of the potential stakeholders are the following:

- Private and non-profit making entities
- Public entities:
 - Memory clinics, Geriatric units,
 - o Hospitals, Psychiatric Departments, etc.)
 - o Social care centres providing services to the community



- Elderly people
 - staying in residences or health facilities like those mentioned above or visiting day care centres while living independently
 - Older people living at their own homes and their relatives

5.1.1 Market size

The following table depicts the size of the LLM-GR market:

Stakeholder type	Public Private	Full Market
At Home	Private	2.122.000
Public Administration Centres		607
Elderly Assisted Living Centres	Public	36
	Private	92
Insurance Companies (and/or	Public	1
other private stakeholders)	Private	12

Stakeholder type:	Public / Private	Solution; CTC PTC	Full Market	Market share % foreseen	Market share in total numbers
Public administration with public care centers	Public	CTC/PTC/ILC	13	33%	4
Residences	Private	CTC/PTC/ILC	~ 900	10%	90
Home	Private	CTC/PTC/ILC	2.122.000	3%	43500
Insurance Companies (and/or other private stakeholders)	Private	CTC/PTC/ILC	~20	10%	2
Telcos	Private	CTC/PTC/ILC	13	33%	4

In order to reach out to the potential customers in Greece, LLMCARE will work jointly with the potential stakeholders identified to develop marketing relationships and communications that will serve the purpose of increasing awareness on LLM application for the e-inclusion sector and for the development of a partnership model for funding.

5.1.2 Evolution of the demand

Volume and evolution:

Nearly 1.000 senior residences / sheltered houses, operated by both public and private owners are one of the clay targets. During the next years the numbers of these residencies will continuously grow which will add additional opportunities for selling LLM.

The market of private homes is a huge market (more than 70 % of older persons are living at home).



5.1.3 Market Trends

Demographic ageing appears to affect Greece to a large extent. According to the ageing indicator, Greece occupies one of the highest positions of ratio between aged and young persons, with 114 older persons corresponding to 100 young persons 0-14 years old, followed by Italy. The EU average falls somewhere in the middle, 80-100 older persons corresponding for 100 young persons.

Furthermore, there is a growing interest in brain fitness and brain training in general, non drugbased interventions to keep our brains sharp as we age. This interest is very timely, given an aging population, increasing life span, increasing prevalence of Alzheimer's rates, a complex changing environment that places more lifelong cognitive demands on our brains than ever and soaring health costs everywhere that place emphasis on prevention and lifestyle changes.

Due to the huge financial crisis that all PA and governments are facing, no accurate data on how this growing trend will evolve in following years is right now available. In any case, due to the demographic trends and the social protection that a general crisis situation requires it is expected to have growing percentages for this kind of policies. This fact is also strengthen with the duty of Greek Local PAs to cover (with services and economic resources) the support and empowerment of Elder's Independent Life.

5.1.4 Expected Evolution

Due to the demographic trends and the growing demand on care and prevention for elderly it is expected to have growing market demand for this kind of solutions.

5.1.5 Customers Profile

<u>Residencies / Sheltered houses:</u> are facing a lot of economic constraints; they are currently not much aware of technologies and how to use them, but are willing to start up services that allows them to demonstrate their duties compliance and to save human resource costs for care and therapy; they have long decision making times and will need support to implement and maintain the service structure; most of them are willing to find service partners to support its costs (sponsors, private providers of services). Summarizing we can conclude that it is very stable group.

<u>Private at home end users</u>: this is the largest group having at high percentage the demand of getting old (and even finishing their life) at their own home. Currently the 60+ group is a high income group in Greece. They can be addressed best through their relatives who are worried about their health and care needs and by private insurances as potential funding partners.

5.1.6 Customers Needs

5.1.6.1 Usual buying behaviour:

<u>Usual buying behaviour:</u> quite passive in terms of technology based solutions, normally suppliers have the initiative; they are really loyal and long term customers.

5.1.6.2 Number of expected customers in this target

<u>Number of expected customers in this target</u> is high. Normally the bigger private and public owned care operators will enter the services in first place, but experience has shown that in some case small operators are quite active in adopting innovative ICT services.



5.1.6.3 Access to this target:

By using the network of the AUTH and the will have broad access especially to public owned residence and care operators and to other public stakeholders.

5.2 Competitors

LLM unique selling proposition (can be an integrated system providing entertainment, and mind and body training, and an assistive smart home solution supporting independent living) is its main advantage, while in the market there are many products focusing mainly in one side of the problem Market offer is full of standalone components.

5.3 Sales strategy

In Greece we distinguish two stakeholder categories: PAYERS and END-USERS. The first are the ones that sustain the service paying for it; the second ones are the final beneficiaries of the service.

The sales of the LLM service depends on the pressure and demands end users put over the first type. End users have to be aware of the service and they have to accept it, like it and use it. In Greece the acceptance of the LLM solution is not going to be easy and we have to bear in mind two important issues: time and money bearing also in mind the economic crisis.

A modular, optional solution seems much more feasible to be accepted. They can choose to go step by step and can adapt progressively to this new environment, is less demanding, is cheaper. This is why we chose to offer custom solution based on the customer needs.



6. **REVENUES**

6.1 Market Objectives Market Objectives and Potential Affairs:

LLMCARE has set up an objective of achieving 30 installations in the Greek market for senior's health & care in its first 2 years and to reach 340 total installations by year 5. This is quite a conservative figure, but we have tried to set up realistic objectives in order to be able to reach them.

At this stage, it can be said, that the first deployment of LLM is planned to be installed in the Greek Association of Alzheimer Disease and Relative Disorders (GAADRD), as well as the KAPI, where the Greek pilot takes place, which will be used as a pilot installation for further disseminating and exploiting the LLM service to the Greek market.

6.2 Assumptions (calculation methods)

Calculation Method:

As explained in past chapters, LLM Service (CTC+PTC+ILC) will be deployed following an ASP Model, meaning that the end users access the Service from the internet in exchange to a monthly fee paid by customers (jointly with an initial Set Up Fee). In order to be able to sell LLM in our area of intervention prices have been fixed attending to the main considerations below:

- How many resources will LLMCARE consume?
- How worth is the service for the customer (health/care organisations and end users)?
- How is the customer paying for similar services?
- How much are IPRs to be paid from every sale?

This Business Plan is using the figures answering these questions, and implementing the indications provided by technology owners in what relates to IPRs, to build the commercial and financial forecasts defining the business opportunity in Greece.

6.3 Sales Forecast

A conservative estimation has been made that prices will remain fixed during the five years period of the Business Plan.

As depicted in the table below there exist two different types of installations. Installations at home and installations at day care centres, hospitals etc. Different prices have been considered for these two installations. There is also a consideration for a licence fee of $100 \in$ for the first year per user and maintenance fee of $50 \in$ for the next years.

According to this pricing policy and to our conservative estimations the corresponding revenues for the period are shown in the table below.



CUSTOMERS					
Installations (hospitals, day care centres etc)	10	20	60	70	80
Home Installations	5	10	20	30	35
New User Licences	40	100	200	250	300
Lincences (maintenance)	0	40	140	340	590
PRICES					
Installation Fee (for hospitals, day care cenres etc)	1,300.00€	1,300.00€	1,300.00€	1,300.00€	1,300.00€
Installation Fee (home installations)	1,000.00€	1,000.00€	1,000.00€	1,000.00€	1,000.00€
Fee per licence	100.00€	100.00€	100.00€	100.00€	100.00€
Maintenance fee per licence	50.00€	50.00€	50.00€	50.00€	50.00€
PTC Fee (for hospitals, day care cenres etc)	300.00€	300.00€	300.00€	300.00€	300.00€
ILC Fee (for hospitals, day care cenres etc)	400.00€	400.00€	400.00€	400.00€	400.00€
Brainfitness Fee (for hospitals, day care cenres etc)	300.00€	300.00€	300.00€	300.00€	300.00€
Gradior Fee (for hospitals, day care cenres etc)	300.00€	300.00€	300.00€	300.00€	300.00€
PTC Fee (home installations)	230.00€	230.00€	230.00€	230.00€	230.00€
ILC Fee (home installations)	310.00€	310.00€	310.00€	310.00€	310.00€
Brainfitness Fee (home installations)	230.00€	230.00€	230.00€	230.00€	230.00€
Gradior Fee (home installations)	230.00€	230.00€	230.00€	230.00€	230.00€
INCOMES (from full LLM installations)					
Income from Installation at hospitals, day care centres etc	13,000.00€	26,000.00€	78,000.00€	91,000.00€	104,000.00€
Income from "At Home" Installations	5,000.00€	10,000.00€	20,000.00€	30,000.00€	35,000.00€
Income from Licences per user	4,000.00€	10,000.00€	20,000.00€	25,000.00€	30,000.00€
Income from maintenance	0.00€	2,000.00€	7,000.00€	17,000.00€	29,500.00€
TOTAL INCOMES	22,000.00€	48,000.00€	125,000.00€	163,000.00€	198,500.00€



7. MEANS (needed for selling)

7.1 SALES

7.1.1 Product (s) Policy

- Services will be marketed under the LLM name in Greece. It is being offered as a SaaS (Software as a Service) and as it is being accepted by customers.
- LLM applies for the full set of CTC, PTC and ILC capabilities for empowering Elder's Independent Life. The price of the service set up and maintenance is the same independently of the intensity of its usage. There is only the consideration that the "at home" installation will be cheaper that the installation at day care centres and hospitals etc.
- Some of the **most distinctive features vs competitors** include:
 - Unique focus towards CTC+PTC services combined with ILC service
 - "already in the market" references
 - Empowered by a highly skilled health expert team
- Customers really appreciate the light cost structure of the service, providing a massive impact service at very reasonable costs (due to its SaaS approach).

7.1.2 Pricing Policy

The following table depicts the pricing policy for the components that the LLMCARE company will offer. It is important to note that the installation fee includes training of the personnel.

Component	Price
Full LLM Service (for hospitals, day care centres etc)	1,300 €
per installation	
Full LLM Service (at Home) per installation	1,000 €
Plus Licence fee per user (only for the first year)	100 €
Maintenance fee per user (for the next years)	50€

LLMCARE can also sell LLM components separately. The prices of the components are:

Component	Price for installation at hospitals, day care centres etc
Fit-For-All (PTC)	300€
Brainfitness (CTC)	300 €
Gradior (CTC)	300€
ILC	400 €
Plus Licence fee per user (only for the first year)	50 €
Maintenance fee per user (for the next years)	30€

Component	Price for installation at home
Fit-For-All (PTC)	230 €
Brainfitness (CTC)	230 €



Gradior (CTC)	230€
ILC	310€
Plus Licence fee per user (only for the first year)	50 €
Maintenance fee per user (for the next years)	30 €

- Price of the Services (resulting from analysis of the Greek Market)
 - INSTALLATION FEE: 1.300€ (for hospitals, day care centres etc) and 1.000 € (at home installations) in order to set up and adapt the implementation of CTC, PTC and ILC services to customer needs. LLM components can also be sold separately.
 - LICENCE FEE (per user): 100€per user for the first year.
 - MAINTENANCE FEE: yearly fee of 50€ for the next years.
- Those prices are quite cheap when comparing them to similar projects implemented by other providers. This is due to the re-utilization of a core technology already in place (speeding up implementation processes), to the flexibility that SaaS models provide and also to a psychological barrier that allows (due to its light infrastructure requirement) to set its prices under the thresholds that require a public tender to buy for this kind of services.

IPR Costs for Installation

IPR payments to third parties providing technology to business have also been taken into consideration:

Component	Price
eHome ILC IPR	30% of the standalone ILC price
Brainfitness CTC IPR	20% of the standalone Brainfitness price
Gradior CTC IPR	30% of the standalone Gradior price
PTC IPR	30% of the standalone Fit-For-All price
LLM CMS IPR	2% of price of the full installation
AUTH LLM Webservice IPR	2% of price of the full installation
LLM Non-Technical IPR	2% of price of full installation

IPR Costs for Maintenance

Component	Price
eHome ILC IPRs	5% of the maintenance fee
Brainfitness CTC IPRs	5% of the maintenance fee
Gradior CTC IPRs	5% of the maintenance fee
PTC IPRs	5% of the maintenance fee
LLM CMS IPRs	1% of the maintenance fee
AUTH LLM Webservice IPRs	1% of the maintenance fee
LLM Non-Technical IPRs	1% of the maintenance fee

7.1.3 Sales Channels

• Greek market requires, for being effective, from a direct access that should be done directly by the provider itself with its own commercial personnel and supported by the AUTH/Medical School by using its network within public organisations, where as



mentioned before, the municipality as the first customer will contribute a signalling effect. For medical and care organizations niches LLMCARE will use reputation and success stories of AUTH, as marketing will rely mainly on networking and scientific dissemination.

• So we need to empower our sales network, not so heavy due to very local coverage and confidence links. And we will need to rely on in alliances with "traditional suppliers" in other regions in Greece.

7.1.4 Communication means

- Success stories and "living demonstrators" are the most useful selling tools in the medical and care organizations niches. We are focusing strongly on that issue to empower our commercial network.
- In any case, dissemination activities coordinated with governmental supportive and representatives are really interesting. They will be based mainly on workshops addressed to those ICT and social care services responsible. Representatives of the first installations will present the system, so it is easier to present success stories by their own colleagues, to exchange opinions and ideas and to start building confidence links with actors in this niche. This will be the core of the communication activities deployed by FALLCARE, supported by AUTH to empower LLM-service presence in the Greek market.

An additional channel to address seniors are the large number of senior's clubs and senior's organizations like "Seniorenbund", "Pensionistenverband" and "Seniorenrat"

• These activities will be based on the final validation results of the LLM project available by end of project.

7.2 **PRODUCTION** (resources needed for producing/selling the product-

service)

7.2.1 Facilities

Our Greek activities will be conducted from the facilities that AUTH has already. Normal office-like facilities are needed to start and deploy the activity. And normal equipment in terms of furniture and computers is needed to start the sales activities. Any equipment will be supplied by LLMCARE at the beginning to start up the activity.

7.2.2 Technical Equipment (hardware & software required)

All equipment is in place to start providing services (both from the technical and support team and from the commercial structure) based on the infrastructure of the Greek pilot during LLM project. New hardware will be required when new persons join the team.

7.2.3 Human Resources costs for carrying out the required activities

To start up the joint venture activity in the Greek market we will rely on the following resources. Initially, the technical personnel will be provided by AUTH and the Sales Team will be shared and formed by TERO resources. The evolution of personnel costs has been considered to grow a 3% every year.



TOTAL COSTS (except IPRs)	0.00 €	0.00€	99,000.00€	101,970.00€	105,029.10€
- Marketing, Travels					
OTHER COSTS (10% of Personnel)	0.00€	0.00€	9,000.00€	9,270.00€	9,548.10 €
TOTAL PERSONNEL COSTS	0.00€	0.00 €	90,000.00€	92,700.00€	95,481.00 (
- TOTAL COST	0.00€	0.00€	60,000.00€	61,800.00€	63,654.00 (
- Yearly Cost	0.00€	0.00€	30,000.00€	30,900.00€	31,827.00
- Persons	0	0	2	2	
Sales Team					
- TOTAL COST	0.00 €	0.00€	30,000.00€	30,900.00€	31,827.00 (
- Yearly Cost	0.00 €	0.00€	30,000.00€	30,900.00€	31,827.00
- Persons	0	0	1	1	:
Tech Team					
PERSONNEL COSTS					

Being the main goal of this joint venture to strengthen the commercial activities to market LLM services, also an additional "Other Costs" amount has been forecasted as a needed complement to perform the commercial tasks. This amount has been estimated as a 10% of the total expenses in Personnel, and will be used to support the sales team in the development of their daily duties (travel expenses, daily allowances, dissemination and complementary marketing activities).



8 Profit Analysis



Grant Agreement No. 238904

D5.3 LLM Business Plan, Annex II Version 1.1

CHETOMEDE	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
CUSTOMERS	10	20	60	70	
Installations (hospitals, day care centres etc)	10	20	60	70	80
Home Installations	5	10	20	30	35
New User Licenses	40	100	200	250	300
Lincenses (maintenance)	0	40	140	340	590
PRICES					
Installation Fee (for hospitals, day care cenres etc)	1,300.00€	1,300.00€	1,300.00€	1,300.00€	1,300.00€
Installation Fee (home installations)	1,000.00€	1,000.00€	1,000.00€	1,000.00€	1,000.00€
Fee per license	100.00€	100.00€	100.00€	100.00€	100.00€
Maintenance fee per license	50.00€	50.00€	50.00€	50.00€	50.00€
PTC Fee (for hospitals, day care cenres etc)	300.00€	300.00€	300.00€	300.00€	300.00€
ILC Fee (for hospitals, day care cenres etc)	400.00€	400.00€	400.00€	400.00€	400.00€
Brainfitness Fee (for hospitals, day care cenres etc)	300.00€	300.00€	300.00€	300.00€	300.00€
Gradior Fee (for hospitals, day care cenres etc)	300.00€	300.00€	300.00€	300.00€	300.00€
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INCOMES (from full LLM installations)					
Income from Installation at hospitals, day care centres etc	13,000.00€	26,000.00€	78,000.00€	91,000.00€	104,000.00€
Income from "At Home" Installations	5,000.00€	10,000.00€	20,000.00€	30,000.00€	35,000.00€
Income from Licenses per user	4,000.00€	10,000.00€	20,000.00€	25,000.00€	30,000.00€
Income from maintenance	0.00€	2,000.00€	7,000.00€	17,000.00€	29,500.00€
TOTAL INCOMES	22,000.00€	48,000.00€	125,000.00€	163,000.00€	198,500.00€
IPRs COSTS for installation					
eHome ILC IPRs (20% of ILC price per installation)	1,030.00€	2,060.00€	5,720.00€	6,980.00€	8,010.00€
Brainfitness CTC IPRs (20% of Brainfitness price per installation)	830.00€	1,660.00€	4,520.00€	5,580.00€	6,410.00€
Gradior CTC IPRs (20% of Gradior price per installation)	830.00€	1,660.00€	4,520.00€	5,580.00€	6,410.00€
PTC IPRs (20% of PTC price per installation)	830.00€	1,660.00€	4,520.00€	5,580.00€	6,410.00€
LLM CMS IPRs (2% of full installation)	260.00€	520.00€	1,560.00€	1,820.00€	2,080.00€
AUTH LLM Webservice IPRs (2% of full installation)	260.00€	520.00€	1,560.00€	1,820.00€	2,080.00€
LLM Non-Technical IPRs (2% of full installation)	260.00€	520.00€	1,560.00€	1,820.00€	2,080.00€
IPRs COSTS for maintenance	200.00.0	500.00.0	1 000 00 0	1 250 00 0	1 500 00 0
eHome ILC IPRs (5% of the maintenance fee + licensing fee)	200.00€	500.00€	1,000.00€	1,250.00€	1,500.00€
Brainfitness CTC IPRs (5% of the maintenance fee + licensing fee)	200.00€	500.00€	1,000.00€	1,250.00€	1,500.00€
Gradior CTC IPRs (5% of the maintenance fee + licensing fee)	200.00€	500.00€	1,000.00€	1,250.00€	1,500.00€
PTC IPRs (5% of the maintenance fee + licensing fee)	200.00€	500.00€	1,000.00€	1,250.00€	1,500.00€
LLM CMS IPRs (1% of the maintenance fee + licensing fee)	40.00€	100.00€	200.00€	250.00€	300.00€
AUTH LLM Webservice IPRs (1% of the maintenance fee + licensing	40.00€	100.00€	200.00€	250.00 €	300.00€
LLM Non-Technical IPRs (1% of the maintenance fee + licensing fee TOTAL IPRs COSTS	40.00 € 5,220.00 €	100.00 € 10,900.00 €	200.00 € 28,560.00 €	250.00 € 34,930.00 €	300.00 € 40,380.00 €
PERSONNEL COSTS					
Tech Team					-
- Persons	0	0	1	1	27.502.453
- Yearly Cost	0.00€	0.00€	26,000.00€	26,780.00 €	27,583.40 €
- TOTAL COST	0.00€	0.00€	26,000.00€	26,780.00€	27,583.40€
Sales Team			2		
- Persons	0	0	20,000,00,6	20,000,00,6	21 027 00 /
- Yearly Cost	0.00€	0.00€	30,000.00€	30,900.00 €	31,827.00€
- TOTAL COST TOTAL PERSONNEL COSTS	0.00€ 0.00€	0.00 € 0.00 €	60,000.00 € 86,000.00 €	61,800.00 € 88,580.00 €	63,654.00 (91,237.40 (
	0.00 €	0.00 €	00,000,000	00,000000	54,257,401
OTHER COSTS (10% of Personnel)	0.00€	0.00€	8,600.00€	8,858.00€	9,123.74
- Marketing, Travels					
	0.00.6	0.00.6	94 600 00 5	97 /128 00 F	100 361 1/14
- Marketing, Travels TOTAL COSTS (except IPRs)	0.00€	<mark>0.00</mark> €	94,600.00€	97,438.00€	100,361.14€

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Revenues forecasts are quite conservative at the start of the activity and don't consider any separate installations of the different components that will be made. The LLMCARE will be set up relying on AUTH own resources and with a very practical focus for deploying a commercial activity. Thus for the first two years there are no personnel costs for the LLMCARE company. The leveraging of previously running enterprise structures and the absence of investments will allow (this is our guess) for a quick reach of the break-even point, and the balance of duties and costs engaged in the proposed joint venture resulting in a fair share of benefits while at the same time ensuring the business long term viability.



Business Plan for AUSTRIA									
Name:	50+eServ								
Type:	Spin-Off								
	(CEIT RALTEC)								
Version	1.0								
Date:	May 2011								



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1. EXECUTIVE SUMMARY

1.1 Mission:

The new company "**50+eServ**", a spin off of the non profit limited company CEIT RALTEC, has the mission of bringing RALTEC's R&D outcomes to the market in a commercial way; as being a start-up enterprise its first marketable solution is the LLM service LLM-AT. LLM-AT will deploy an *integrated* ICT service addressed (mainly) to older people offering at the same time a physical (PTC) a cognitive (CTC) training component integrated into a system supporting independent living (ILC).

Our vision is to that our solutions will excite, inspire and empower people to improve the quality of their lives and to be the best they can be. We are determined to continually innovate and develop new experiences that are accessible to everyone, everywhere regardless of their age, gender or ability and to make these solutions last a lifetime, this is, sustainable.

1.2 One year onwards vision:

"LLM-AT" service is being deployed in Austria as a new integrated service addressed to older people, starting with the offer, at the same time, a physical (PTC) a cognitive (CTC) training system and an Independent Living Component, which is scalable on demand of the customer needs. Austrian Market opportunities are placed in the health and care sector (public or private), in the public administration (especially in those public administrations managing public infrastructures as day dare centres, sheltered homes) and in the private sector (older people living at their own homes).

1.3 Strategic Objectives:

- Setting up a new company 50+eServ acting as the deployer of the "LLM-AT"-service in the Austrian market. RALTEC as a non-profit RTD-institute will act as owner and the scientific and technical support partner.
- Deploying the exploitation and marketing strategy for "LLM-AT" relying on the scientific expertise of CEIT RALTEC supported and empowered by the knowledge and access to public administration networks by the municipality of Schwechat (SW).
 - Directly: by creating an effective commercial and distribution network
 - Indirectly: by setting up the appropriate alliances with public administrations and stakeholders already acting in the market.
- Reaching the break-even point that ensures long term sustainability
- Achieving customers' recognition in terms of easiness of use and quickness of implementation of "LLM-ATAT" Services.
- To start deploying "LLM-AT" services in synergic markets such as real estate markets, insurances markets, medical markets... once the sustainability has been demonstrated in the health & care sector, public administration market niches and private elders at home market.

1.4 Promoters Personal Objectives:



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With CEIT RALTEC, a non profit R&D institute for assistive technologies for older people and people with special needs owned by the municipality of Schwechat, as founder and owner of the new company, 50+eServwill be able to focus on ICT-based positive aspects on health and wellbeing ageing.

1.5 Five years onwards vision:

LLM-AT service will be deployed successfully in Austria. We do not discard the rest of Member States as target markets (directly or via alliances) for "LLM-AT" services. A network of allies to sell and implement services is running across all Austria. Sales are around 1 million EURO (only in Austria). 50+eServis ready to deploy its service to all Europe from Austria relying on "cloud computing" infrastructure providers. Customer Support, Marketing and Alliances and Administration are the core areas of RALTEC-LL exploiting "LLM-AT" services.



2. Holder of the Project

2.1 Name of company):

"RALTEC 50plus eServices (50+eServ)": this name shows on one side the target end-user group in euphemistic way (indeed 65plus people are addressed) in combination with eServices as the group of solutions offered. By using this branding the doors are kept open for bringing to the market any kind of ICT-based service, product and solution to the senior's market. 50+eServ will be established when the final results of the LLM market validation done within

50+eServ will be established when the final results of the LLM market validation done within the LLM-project is finally available.

2.2 Location:

LLM-AT will be located in Schwechat (Federal country of Lower Austria) which is located next to the boarder of Vienna such targeting in its nearby neighborhood about on third of Austria's population and based on its location within the so-called CENTROPE⁷ region (eastern Austria, western parts of Hungary and Slovakia, south-eastern part of Czech) having a good starting position for entering these markets outside Austria.

The new company will, during the start up phase, use the premises of RALTEC, having the chance for sharing personnel and infrastructure resources.

2.3 **Profile of the company**

• 50+eServProfile

The company will be dedicating in developing, selling and supporting ICT-based solutions, services and products to then senior market including the health & care market and the public administration area

• CEIT RALTEC Profile

Founded in 2006 as a daughter company of the Central European Institute of Technology by the municipality of Schwechat with the local innovation initiative "eSchwechat.at". RALTEC is acting as a research institute dedicated to ICT-based solutions for rehabilitation and assistive technologies

2.4 Human Resources allocated:

- Walter Hlauschek managing director, 59 years
 - Managing director of 50+eServ
 - Managing director of CEIT RALTEC since 2007
 - o Managing director of CEIT Central European Institute of Technology since 2008

⁷ **CENTROPE** (www.cenntrope.com): Roughly six and a half million people live in the eight federal provinces, regions and counties that make up the Central European Region. The position of the region at the intersection of four countries (Austria, Czech, Hungary, Slovakia) and four languages – the interface of the "new Europe" par excellence – is reflected in the great variety of CENTROPE partner regions and cities



- o ICT R&D and management background of more than 30 years
- huge experience in managing SW-projects
- Prof. Dr. Wolfgang L.Zagler scientific head, 60 years
 - Technical and scientific advisor of 50+ESERV
 - o Scientific head of CEIT RALTEC since 2006
 - Professor at Vienna Technology University (TUW)
 - o Head of Research Group on Rehabiliation Technologies at TUW

Hatice Gencer – marketing mananger, 43 years

- Head of central and international office at CEIT
- o superior degree in Business Management and Administration
- o 20 years experience in the Austrian ICT market



3. The Idea

3.1 The idea objective:

• Deploying LLM as an integrated service addressed (mainly) to older people offering at the same time a physical and a cognitive training system in combination with optional scalable independent living smart home solution to the health sector, care sector, public administration sector and to private end users. In the case of 50+ESERV, "LLM-AT" service will be the startup service of the portfolio, which will be expanded by other ICT solutions for a well-being aging in the future.

3.2 Strengths / Weaknesses

<u> </u>	5.2 Strengths / Weaknesses										
STRENGTHS	WEAKNESSES										
 CEIT RALTEC is an already well player for assistive AAL related technologies in Austria Its owner, the municipality of Schwechat owns a broad network including governmental, non governmental and commercial institutions spread over all of Austria. The spin-off 50+eServresulting from RALTEC's R&D outcome results in a very good mix of capabilities to tackle the market. The unique integration of CTC, PTC + ILC is not being offered in the Austrian market at this moment. Capability of adaptation to local market: multi-lingual, multi-channel. Ethical implications. We are able to manage every issue related to personal data and mental health information 	 Much dependencies on a public-driven market could result in a delayed or long time (and resources) consuming deployment Dependence on third parties (in the case of Cognitive Training) and existing infrastructure. Time needed to get visibility and brand recognition, especially when dealing with public-driven and private markets Commercial net to be constructed based on alliances and, when possible, PPP Prices to be definitively confirmed by the market; Dependencies on IPRs of PositScience and AUTH. 										
OPPORTUNITIES	THREATS										
 The increase in aging of the Austrian population and the subsequent expected increase in the cognitive and physical decline. Public Administration duty in Austria to take care of social and health services and pay for them in name of end users. There are budgets and policies to be further developed. Increased emphasis on brain maintenance in locations ranging from retirement communities to gyms. 	 Many competitors are found in the exergaming market with very fragmented offers and approaches that can confuse customers in their elections. General crisis situation with a severe impact on Public Administration budgets Technological obsolescence (same for all competitors) Users distrust: technological scepticism; lack of motivation, need for an adequate environment to access and use these kind of services 										



Broad government initiatives to increase the public awareness of the need for brain fitness And physical fitness. More public investments. Especially important in what relates to support infrastructure as for senior's care providing a place and an environment to deploy services like LLM • Low tech options will play an increasing role in the brain fitness field, such as meditation and cognitive therapy. Doctors, nurses and pharmacists will help patients navigate through the overwhelming range of available products and interpret the results of cognitive assessments. Insurance companies will introduce incentives for members to encourage healthy aging. • Brain training will be added to corporate wellness and leadership initiatives, building new motivations among end users Increased awareness of the economic need of the public area and the personal wishes of seniors to live an autonomous life at their own homes as long as possible; increasing costs of supporting seniors by care givers.

3.3 State of the project (until now achievements)

3.3.1 Funds obtained:

None until now, so all activities until now in the Austrian market have been supported on CEIT RALTEC's own financial resources, coming from its own capital resources. 50+eServwill claim financial resources for start-up funding provided by Austrian support activities for foundation of innovative companies (pre-seed and seed-financing of the AWS⁸)

3.3.2 First commercial contacts:

A very important point is that CEIT RALTEC already a well-know player for assistive technologies in Austria. "LLM-AT" service can empower that and also benefit from the access and contacts that CEIT RALTEC owns as an ICT-research institute in Austria The municipality as the owner of CEIT RALTEC has very good contacts to public administration in the areas of health and care and also to non-governmental non-profit actors in these areas and will support 50+eServ in this field.

Also we can say that the eHome project (which is integrated into LLM service as the Independent Living Component ILC) was successfully finished in 2010 as a national funded

⁸ AWS – Austrian Wirtschaftsservice (<u>www.awsg.at</u>) : a public owned bank supporting companies at financing and funding their projects, using e.g. ERP loans, One of AWS' task is to support especially innovative ICT start ups with pre-seed and seed financing.



project where CEIT RALTEC participated as a technology partner and executed pilot trials in Austria.

"LLM-AT" services will be addressed to the following target end-users: elder population - Active Retirees (60-70 years old), seniors (70-80 years old) and Elders 80+ years old that are: living in assisted environments (like residences, sheltered homes, nursing houses, etc.), visiting care centres (including clinics and hospitals –short or long-term stay) and living as singles in their own homes .

3.3.5 First orders:

As first customer, the municipality of Schwechat, which is acting as operator of the local senior's centre consisting of sheltered homes, a nursing station and a day care centre will Apply LLM-AT at these premises and is also willing to have LLM-AT at its premises to be used as a demo-installation for marketing purposes.

3.3.4 Contracts with technology providers:

All IPRs related issues have been agreed with the LLM consortium and are included as costs for the deployment of the "LLM-AT" business in Austria.

3.3.5 Dissemination:

Dissemination activities are already ongoing since begin of the LLM project and will be regularly conducted to inform the market about LLM-service among which we already count with "LLM-AT" services.

3.3.6 Technical expertise:

Technology is currently not a problem of 50+ESERV. We have people qualified enough to manage early implementation processes, support activities and detect future needs to provide improvements and new features.

3.3.7 Origin of the project:

eHome-project has been started as a feasibility study in 2006 as on of the first projects of RALTEC and was successfully completed by performing end user tests until third quarter of 2007. By 2008 eHome was continued as a national funded research and development project which was successfully finished by mid of 2010 after having performed 20 months of field testing in the homes of older people.

From RALTEC's point of view LLM is an expansion to the eHome system.

3.3.8 Strategic reason (why 50+eServdecides to go into such a business)

- CEIT RALTEC is an extra faculty RTD institute focusing on rehabilitation technologies and ICT based technologies for a wellbeing, safe and autonomous ageing
- RALTEC has a very good knowledge of existing and upcoming solutions in the wide area of Ambient Assisted Living
- RALTEC has a very good knowledge of these specific needs of the Austrian market
- Acting currently as a NPO organization RALTEC is strongly interested to participate in this upcoming market and generating incomes coming from spin-offs in order get additional finance resources for funding its R&D tasks.



3.3.9 Links with other activities of the company

Since 50+eServ will be a new company to be founded it does not have other activities.

3.3.10 What are the goals you aim to achieve in this project?

50+eServ goals are

- to develop, promote and sell solutions concerning assistive solutions for independent living of older people, support of f physical and mental health and other ICT-solutions for a well-being ageing.
- Empowering the deployment efforts spent in parallel markets in the public and private health and care niche, especially those inside the e-Inclusion area.
- Demonstrating that European R&D is worth enough to build long term sustainable business with the support of European financial actors.

3.3.11 Size of the 50+eServ

Exploitation will be conducted in parallel from the existing structures and organizations of CEIT RALTEC and the municipality of Schwechat by setting up a new company. Starting from this point, the new company will build up its structures to the evolution of the exploitation.

"LLM-AT" services will be part of the AAL Services portfolio. In 5 years 50+eServ will have a 7 persons team (5 commercial and administrative and 2 technicians); additionally technical support will be outsourced to CEIT RALTEC; sells of this business unit should be ~ 2 EUR Million.

3.3.12 The project in ten years:

The service will be deployed successfully in all of Austria. A network of allies to sell and implement services is running across all Austria. Sales are around 1 million EUR (in Austria). The company is ready to deploy its service also to other Member States (especially in the German speaking and the Centrope market) and to expand its commercial branches to the new EU members of Eastern European. Customer Support, Marketing and Alliances and Administration are the core areas of the new business unit.



4. The Service

The "LLM-AT" service distinguishes itself with characteristics, of usability, accessibility, affordability by end users. Moreover, it takes into consideration all the e-accessibility barriers senior citizens face, such as ability restrictions concerning cognition, vision, hearing, mobility dexterities support for independent living such as recognition of dangerous situations and alarming, home control and easy use of communication and information (such addressing e-inclusion objectives).

Initially targeted to older people, "LLM-AT" could much more than that, even if seniors are probably the most benefited from its use.

Currently, "LLM-AT" Cognitive Training Component (CTC) and physical training component is designed to support exercises provided by specialised software. But due to the modular concept of LLM a variety of software can be used for this process. It is considered that other R&D outcomes of RALTEC will be integrated into LLM-AT, e.g. physical training games using the eShoe⁹, which is a intelligent shoe-sole equipped with sensors developed by RALTEC. And also Austrian and other European companies will be acquired as future optional partners to supply components CTC services dedicated specifically to Austrian market.

⁹ Johannes Oberzaucher, Harald Jagos, Christian Zödl, Walter Hlauschek, Wolfgang L. Zagler (2010): **Using a Wearable Insole Gait Analyzing System for Automated Mobility Assessment for Older People**, in: proceedings of ICCHP (2) 2010: Springer 2010, ISBN 978-3-642-14099-0



5. The Market

It is recognised that market forces alone have been and are likely to remain insufficient to ensure the realisation of the potential in this field. Public policy efforts are therefore also required.

From the supply side perspective, in particular, the market for ICT-based supports for homecare and independent living present some core issues that warrant attention from a policy point of view:

- need for well-functioning supply chains (devices, systems, services, installation..)
- achieving critical mass / commercial viability
- standards / interoperability
- functioning of internal market.

Older people have widely varying needs and circumstances and across Europe there are widely varying health, social care and housing systems. To address this "LLM-AT" will offer a relatively standardised solution to include mass markets, but also an individually-tailored / customised solution.

5.1 **Profile of the demand:**

ICTs are seen to present an opportunity for a "win-win" outcome, whereby needs of older people are met in a high quality manner, the costs of providing care and support are maintained at manageable levels for society, and new market opportunities open up for ICT-based products and services.

"LLM-AT" can be counted among existing and emerging ICT-based products and services that have relevance for meeting these various needs and objectives.

However, in practice, mainstreaming of ICT-enabled solutions within real world service settings has to a large extent yet to occur. Many are the challenges and barrier to overcome.

Although needs of older people for an independent living and homecare are very heterogeneous, three main market segments structure typically the service delivery landscape in Europe: social care, health care and housing.

The basic needs covered by "LLM-AT" are related with empowering the elderly to improve their physical and mental ability, combining this with an optional scalable solution for support of independent and safe living thus touching at the same time all of the 3 areas mentioned above.

"LLM-AT" offers fits and should approach the following market segments in Austria:

Administrations:

- Hospitals
- Day Care Centres
- Residential facilities and sheltered housing



- Social services
- Reference centres for aging, dementia, Alzheimer, etc.

Private organizations

- Hospitals
- Day care centres
- Residential facilities and sheltered housing
- Insurance Companies
- (non)-profit organizations, that provide social-health and care services for older people living at their homes on their own
- Gyms

Private persons

• Senior's living at their own homes and their relatives as their informal care takers and their relatives

Thus, the role of public organizations as the main provider of benefits to various groups and individuals becomes of paramount importance for those aspiring to make a business in the realm of social and/or health-social care sectors, as "LLM-AT" is.

Some part of the private sector as insurance companies, banks, and large operator of senior residences are the other alternative central to "LLM-AT" business.

As a third target group to be addressed as early customers are financial well situated seniors and/or their relatives who are interested in sustaining their health and getting support for independent living.

In CEIT RALETC's view, only informed demand will ensure the development of a rational and structured marketplace. The CTC+PTC and assistive smart home market presents significant opportunities for innovation, investment, business development and, ultimately, enhanced brain health and fitness of an aging society. Innovative partnerships will be required to channel the growing amount of interest and research tools, into a better structured and sustainable marketplace.

Thus, we believe that both public and private care -services are the ones with the duty of ensuring that older people have access to this kind of services and the ones that should pay for those services in their behalf.

So, the target audiences groups identified in Austria regarding the weight of the potential stakeholders are the following:

- Private and non-profit making entities
- Public entities:
 - Memory clinics, Geriatric units,
 - Hospitals, Psychiatric Departments, etc.)
- Social care centres providing services to the community
- End-users: Elderly people (staying in residences or health facilities like those mentioned above or visiting day care centres while living independently)
 - ▶ 60-70
 - ▶ 70-80
 - ▶ 80+
- Older people living at their own homes and their relatives'



5.1.1 Market Size - AUSTRIA

 Stakeholder type: Assisted Living Hospital/Clinic/Rehabilit ation Centre 	Public / Private	Solution; CTC PTC	Full Market	Market share % foreseen	Market share in total numbers
Residences	Pu/Pr	CTC/PTC/ILC	~ 900	10%	90
at Home	Pr	CTC/PTC/ILC	1.450.000	3%	43500
Insurance Companies (and/or other private stakeholders)	Pr	CTC/PTC/ILC	~20	10%	2
Telcos	Pr	CTC/PTC/ILC	13	33%	4

5.1.2 Evolution of the demand

Volume and evolution:

Nearly 1.000 senior residences / sheltered houses, operated by both public and private owners are one of the key targets for LLM-AT. During the next years the numbers of these residencies will continuously grow which will add additional opportunities for selling LLM-AT.

The market of private homes is a huge market (more than 80 % of older persons are living at home).

5.1.3 Market Trends

Market trends are obviously going in the serious games directions for physical and mental health. With increasing costs of health and care systems accompanied by a steadily drawback of government from health and social expenses the market for prevention and care taking products supporting independent living is continuously growing. On the other side many younger seniors and relatives of older seniors are aware of these facts which are important to determine communication, dissemination and advertising channels.

5.1.4 Expected Evolution

Due to the demographic trends and the growing demand on care and prevention for elderly it is expected to have growing market for this kind of solutions. This fact is also strengthening with the objectives of Austrian government to cover (with services and economic resources) the support and empowerment of elder's independent life.

5.1.5 Customers Profile

<u>Residencies / Sheltered houses:</u> are facing a lot of economic constraints; they are currently not



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much aware of technologies and how to use them, but are willing to start up services that allows them to demonstrate their duties compliance and to save human resource costs for care and therapy; they have long decision making times and will need support to implement and maintain the service structure; most of them are willing to find service partners to support its costs (sponsors, private providers of services). Summarizing we can conclude that it is very stable group.

<u>Private at home end users</u>: this is the largest group having at high percentage the demand of getting old (and even finishing their life) at their own home. Currently the 60+ group is a high income group in Austria. They can be addressed best through their relatives who are worried about their health and care needs and by private insurances as potential funding partners.

5.1.5 Customers Needs

when talking about residencies as customers they have the needs to provide solution for the needs of elders (information, services, interaction, communication, isolation, socio-sanitary...)... and they pay for services to their end users; they suffer from low resources (both economical and also human) to achieve these targets; They need technology to build services that effectively demonstrate progress on this achievement; They need to start up massive models that demonstrates to citizenship their engagement

5.1.5.1 Usual buying behavior:

<u>Usual buying behaviour</u>: quite passive in terms of technology based solutions, normally suppliers have the initiative; they are really loyal and long term customers.

5.1.5.2 Number of expected customers in this target

<u>Number of expected customers in this target</u> is high. Normally the bigger private and public owned care operators will enter the services in first place, but experience has shown that in some case small operators are quite active in adopting innovative ICT services.

5.1.5.3 Access to this target:

By using the network of the municipality of Schwechat 50+eServ will have broad access especially to public owned residence and care operators and to other public stakeholders.

5.1.6 Marketing channels

Contact should be done directly or via existing suppliers ("traditional providers") already inside their house. Even when no seasonality of sales is clearly identified annual budgets are built year to year (they are outlined in late summer to start running by begin of a new year).

5.2 Competitors

- "LLM-AT" can be three things: i) a service, ii) a system or iii) a product and can really be adapted to the local market and the end-user needs.
- "LLM-AT" unique selling proposition (can be an integrated system providing entertainment, and mind and body training, and an assistive smart home solution supporting independent living) is its main advantage, while in the market there are many products focusing mainly in one side of the problem Market offer is full of standalone components.



5.2.1 Main Existing similar offers and/or alternatives

The following table gives an overview of the most important competitors in the market:

COMPETITORS MATRIX																		
Product	1. Security at Home	2. Direct data transmission to Central Server	3. Web-based	4. Web delivery	5. CD-ROM Format	6. Web downloable	7. Unlimited Nº Users	8. Unlimited Nº Exercise	9. Online Support	10. Continuous Maintenance	11. Bi-annual updates	12. Multilingual	13. System Openess	14. Scientific evidence	15. Friendly User Interface	16. Professional Platform for professional experts	17. Includes hardware pre-loaded for just this purpose	18. Commitment
Dakim	-		-	-	Х	-	-	-	-	-	-				Х		X	?
Cognifit	-		-	-	Х	×	-	-	Х	Х	-			Х	Х		-	daily/weekly
Lumos Lab	-		Х	Х	-	-	-	-	Х	Х	-			Х	Х		-	daily/weekly
Mind Sparke					Х										Х			daily/weekly
Happy Neuron			Х	Х	Х		-	-	Х	Х	-			X	X		-	daily/weekly
Brain Training Pro			Х	Х	Х	-	-	-	Х	Х	-			Х	Х	X	-	?
Neuroactive					Х										X			daily/weekly
Neuroactive Bike															X		X	
Nintendo Brain Trainer														Not*	Х			?
LLM:ILC	Х	х	Х	Х	Х	Х	Х	-	Х	Х	Х	Х	Х	-	х	х	х	daily
LLM: FitForAll		х	х	х	Х	Х	х	х	Х	х	х	х	х	-	х	-	-	?
LLM: BrainFitness		х	-	х	х	Х	х		х	х	х	х	х	х	х	-	-	daily/weekly
LLM: Gradior		х	-	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	х	х	-	?

*Not considered scientific programmes; just games

5.3 Selling Strategy

"LLM-AT" will offer an integrative ICT service to joint all stakeholders (including users, customers, relatives and caregivers). So we can say that "LLM-AT" will only compete partially with other market players.

The main target is to quickly obtain 20 references in the Austria market-. To do so we can rely on the existing network of the municipality of Schwechat. The SaaS flexibility of "LLM-AT" is very valuable to make real-time demonstrations on how the service works and how are their usage statistics.

A specific Informative Web Site using "LLM-AT" features will be built to provide all relevant marketing, dissemination and commercial information to potential customers.



6. **REVENUES**

6.1 Market Objectives

Market Objectives and Potential Affairs:

"*LLM-AT*" has set up an objective of achieving 50 customers in the Austrian market for senior's health & care in its first 2 years and to reach 500 customers by year 5. This is quite a conservative figure, but we have tried to set up realistic objectives in order to be able to reach them.

In fact, and as a result of the first market and dissemination activities that "*LLM-AT*" is deploying, some important opportunities are arising (local council associations, trans-border alliances of councils and so on). If they can be finally closed, figures forecasted for year 5 could be probably reached by no further than year 3.

At this stage, it can be said, that the first deployment of LLM is planned to be installed in the senior's centre of Schwechat (where the Austrian pilot takes place) which will be used as a pilot installation for further disseminating and exploiting the LLM service to the Austrian market

6.2 Assumptions (calculation methods)

Calculation Method:

As explained in past chapters, "*LLM-AT*" Service (CTC+PTC+ILC) will be deployed following an ASP Model, meaning that the end users access the Service from the internet in exchange to a monthly fee paid by customers (jointly with an initial Set Up Fee).

In order to be able to sell "LLM-AT" in our area of intervention prices have been fixed attending to two main considerations:

- How much 50+eServresources will "LLM-AT" consume?
- How worth is the service for the customer (health/care organisations and end users)? How is the customer paying for similar services?
- How much are IPRs to be paid from every sale?

This Business Plan is using the figures answering these questions, and implementing the indications provided by technology owners in what relates to IPRs, to build the commercial and financial forecasts defining the business opportunity in Austria.



6.3 Sales Forecast

A conservative estimation had been made that prices will remain fixed during the five years period of the Business Plan. According to this pricing policy, the corresponding revenues for the period are shown in the tables below.

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
CUSTOMERS					
New Medical & Care Org.					
Customers	3	5	10	10	10
Running Medical & Care					
Org. Customers	0	3	8	18	28
New PA Customers	3	8	15	15	15
Running PA Customers	0	3	11	26	41
Total Customers	6	16	44 69		94
PRICES					
Start and Set Up Fee	2.500,00 €	2.500,00 €	2.500,00 €	2.500,00 €	2.500,00 €
Yearly Maintenance Fee	2.400,00 €	2.400,00 €	2.400,00 €	2.400,00 €	2.400,00 €
INCOMES					
New deployment's	50.000,00 €	62.500,00 €	75.000,00 €	87.500,00 €	100.000,00 €
incomes					
Recurrent incomes	48.000,00 €	108.000,00 €	180.000,00 €	264.000,00 €	360.000,00 €
TOTAL INCOMES	98.000,00 €	170.500,00 €	255.000,00 €	351.500,00 €	460.000,00 €

7. MEANS (needed for selling)

7.2 SALES

7.1.1 Product (s) Policy

- Services will be marketed under the **<TBD-NAME>** name in Austria.. It is being offered as a SaaS (Software as a Service) and as it is being accepted by customers.
- **<TBD-NAME>** applies for the full set of CTC, PTC and ILC capabilities for empowering Elder's Independent Life.. The price of the service set up and maintenance is the same independently of the intensity of its usage.
- Some of the most distinctive features vs competitors include:
 - Unique focus towards CTC+PTC services combined with ILC service
 - "already in the market" references
 - Empowered by a highly skilled health expert team
- Customers really appreciate the light cost structure of the service, providing a massive impact service at very reasonable costs (due to its SaaS approach).

7.1.2 Pricing Policy

- Price of the Services (resulting from analysis of the Austrian Market)
 - START UP FEE: average of 3.000 Euros at the start up in order to set up and adapt the



implementation of CTC, PTC and a scalable ILC (where we assume average costs) services to customer needs.

- MAINTENANCE FEE: yearly fee of 2.400 Euros as an average to cover all support, maintenance and updates in the service. In fact, all prices are quite "flat" as "LLM-AT" is selling as a "Software as a Service" and is offering the benefits of transforming investments in recurrent service fees.
- Those prices are quite cheap when comparing them to similar projects implemented by other providers. This is due to the re-utilization of a core technology already in place (speeding up implementation processes), to the flexibility that SaaS models provide and also to a psychological barrier that allows **<TBD-NAME>** (due to its light infrastructure requirement) to set its prices under the thresholds that require a public tender to buy for this kind of services.
- IPRs payment to third parties providing technology to "LLM-AT" business has been also included. This will affect to the following parts:
 - RALTEC: providing LLM-CMS and its eHome platform to deploy ILC service. As directly involved in the exploitation and benefits sharing, no IPRs recovering are placed in this Business Plan.
 - AUTH: providing its "Fit for ALL" PTC component to "LLM-AT" business. As agreed with this provider a yearly fee consisting in 100€per year / per customer will be paid to AUTH in exchange for the rights to sell and use their PTC services. AUTH also provides the LLM-Webservice, it's yearly fee is included in the above described fee for FitForAll
 - POSITSCIENCE: providing BrainFitness CTC platform. As agreed with this provider a yearly fee of 1.800 € for multiuser settings (institutions) and 216 € for single user settings (at-home installations) will be paid to this provider to sell and use their CTC.
 - LLM Consortium: in order to benefit from the knowledge, logos, dissemination and horizontal marketing activities, "LLM-AT" will pay 50€ per each new customer to the LLM IPRs holding company.

7.1.3 Sales Channels

- Austrian market requires, for being effective, from a direct access that should be done directly by the provider itself (50+ESERV) with its own commercial personnel and supported by the municipality of Schwechat by using its network within public organisations, where as mentioned before, the municipality as the first customer will contribute a signaling effect. For medical and care organizations niches 50+eServ will use reputation and success stories of RALTEC, as marketing will rely mainly on networking and scientific dissemination.
- So we need to empower our sales network, not so heavy due to very local coverage and confidence links. And we will need to rely on in alliances with "traditional suppliers" in other regions in Austria.

7.1.4 Communication means

- Success stories and "living demonstrators" are the most useful selling tools in the medical and care organizations niches. We are focusing strongly on that issue to empower our commercial network.
- In any case, dissemination activities coordinated with governmental supportive and representatives (as regional governments and the Austrian network of cities "Staedtebund") are really interesting. They will be based mainly on workshops adressed to those ICT and social care services responsible. Representatives of the first



installations (like the senior's centre in Schwechat and others) will present the system, so it is easier to present success stories by their own colleagues, to exchange opinions and ideas and to start building confidence links with actors in this niche. This will be the core of the communication activities deployed by 50+ESERV, supported by RALTEC and the municipality of Schwechat to empower LLM-service presence in the Austrian market.

 Seniors and their relatives as end users and customers will be addressed by using different senior magazines and online platforms as communication channels like the monthly magazine "GoldenAge" or the website "Seniorkom.at".

An additional channel to address seniors are the large number of senior's clubs and senior's organizations like "Seniorenbund", "Pensionistenverband" and "Seniorenrat"

• These activities will be based on the final validation results of the LLM project available by end of project.

7.2 **PRODUCTION** (resources needed for producing/selling the product-service)

7.2.2 Facilities

Our Austrian activities will be conducted from the facilities that RALTEC has already in the Vienna region (Concorde Business Park Schwechat).

Normal office-like facilities are needed to start and deploy the activity. And normal equipment in terms of furniture and computers is needed to start the sales activities. Any equipment will be supplied by 50+eServ at the beginning to start up the activity.

7.2.2 Technical Equipment (hardware & software required)

All equipment is in place to start providing services (both from the technical and support team and from the commercial structure) based on the infrastructure of the Austrian pilot during LLM project. New hardware will be required when new persons join the team.

7.2.3 Human Resources costs for carrying out the project required activities

To start up the joint venture activity in the Austrian market we will rely on the following resources:

Initially, the tech personal and sales team to be acting for RALTEC_LLM will be shared with already existing RALTEC resources. The evolution of personnel costs has been considered to grow a 3% every year. Additional personal is considered to be hired by year 2 and afterwards.



PERSONNEL COSTS	YEAR1	YEAR2	YEAR3	YEAR4	YEAR5
Technical Team:					
Persons	1	2	2	2	2
Yearly Cost	37.000	38.110	39.253	40.431	41.644
TOTAL COSTS	37.000	76.220	78.507	80.862	83.288
Sales Team:					
Persons	2	3	4	4	5
Yearly Cost	37.000	38.110	39.253	40.431	41.644
TOTAL COSTS	74.000	114.330	157.013	161.724	208.219
TOTAL PERSONNEL COSTS	111.000	190.550	235.520	242.585	291.507

Being the main goal of this project to strengthen the commercial activities to market "LLM-AT" services, also an additional "Other Costs" amount has been forecasted as a needed complement to perform the commercial tasks. This amount has been estimated as a 10% of the total expenses in Personnel, and will be used to support the sales team in the development of their daily duties (travel expenses, daily allowances, dissemination and complementary marketing activities...). Those costs have been collected in the following table:

	YEAR1	YEAR2	YEAR3	YEAR4	YEAR5
OTHER COSTS ((10% on Personnel))	11.100	19.055	23.552	24.259	29.151
(Marketing, Dissemination, Allowance Expenses)					



8. SYNTHESIS / PROFIT ANALYSIS

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
CUSTOMERS:					
Running residencies					
customers	10	20	25	25	25
new residencies					
customers	0	10	30	55	80
new private customers	5	20	75	150	150
running private					
customers	0	5	25	100	250
Total Customers	15	55	155	330	505
PRICES					
Start and Set Up Fee	3.000	3.000	3.000	3.000	3.000
Yearly Maintenance Fee	2.400	2.400	2.400	2.400	2.400
INCOMES					
new deployment incomes	45.000	120.000	300.000	525.000	525.000
Recurrent incomes	0	36.000	132.000	372.000	792.000
TOTAL INCOMES	45.000	156.000	432.000	897.000	1.317.000
IPRs COSTS:					
eHome ILC IPRs	0	0	0	0	0
LLM CMS IPRs	0	0	0	0	0
Brainfitness CTC IPRs –					
multi- user installations	0	54.000	99.000	144.000	189.000
Brainfitness CTC IPRs - at Home installations		5 400	21,000	54.000	96 400
		5.400	21.600	54.000	86.400
Auth PTC IPRs	0	4.500	7.500	11.000	15.000
AUTH LLM Webservice IPRs	0	0	0	0	0
LLM Non-Technical	0	0	0	0	0
IPRs	0	2.250	3.750	5.500	7.500
TOTAL IPRs COSTS	0	66.150	131.850	214.500	297.900



	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
PERSONNEL COSTS:					
Technical Team					
- Persons	1	2	2	2	2
- Yearly Cost	37.000	38.110	39.253	40.431	41.644
- TOTAL COST	37.000	76.220	78.507	80.862	83.288
Sales Team	0	0	0	0	0
- Persons	2	3	4	4	5
- Yearly Cost	37.000	38.110	39.253	40.431	41.644
- TOTAL COST	74.000	114.330	157.013	161.724	208.219
TOTAL PERSONNEL COSTS	111.000	190.550	235.520	242.585	291.507
OTHER COSTS (10% of Personnel) - Marketing, Dissemination, Allowance Expenses	11.100	11.124	11.458	11.801	12.156
TOTAL COSTS (except IPRs)	122.100	122.364	126.035	129.816	133.710
NET PROFIT	-77.100	33.636	305.965	767.184	1.183.290
CUMMULATED PROFIT	-77.100	-43.464	262.501	1.029.685	2.212.975

As can be seen, "LLM-AT" revenues forecasts are quite conservative (as explained in previous chapters) at the start of the activity. All efforts and expenses are basically used to deploy the Commercial activity, and in the first two years this "commercial start up" results in losses which will be compensated by the already described financial start up support. It should also be reminded that our spin off company will be based on a very light asset structure, substituting (when possible) investments of any kind of assets by their rent. It should be also kept in mind that 50+eServ will be set up relying on RALTEC's own resources and with a very practical focus for deploying a commercial activity. The leveraging of previously running enterprise structures and the absence of investments will allow (this is our guess) for a quick reach of the break even point, and the balance of duties and costs engaged in the proposed joint venture resulting in a fair share of benefits while at the same time ensuring the business long term viability.

It should be considered that no dividends sharing has been planned for this 5 year period, so economic profitability could be considerably higher if dividend sharing policies are negotiated among "joint venture" members.



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9. **DECISION**

At this stage, RALTEC's decision is to follow ahead with "LLM-AT" Services as a way of starting business by founding a spin-off company and to jump at the chance for expanding non-profit R&D activities with market oriented business.



Business Plan for GERMANY				
Name:	LLM-GE			
Type:	Spin-Off			
	(ULM University)			
Version	1.0			
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1. EXECUTIVE SUMMARY

1.1 Mission:

To deploy an *integrated* service addressed to elderly people offering at the same time a physical (PTC) and a cognitive (CTC) training system. Our vision is that our solutions will excite, inspire and empower people to improve the quality of their lives and to be the best they can be. We are determined to continually innovate and develop new experiences that are accessible to everyone, everywhere regardless of their age, gender or ability and to make these solutions last a lifetime, this is, sustainable.

Flexibility to market demands is always behind the common strategy of LLM-GE. It is our idea to adapt and provide the most effective and efficient way to benefit the most people in the shortest amount of time with the most reliable and proven solutions available

1.2 One year onwards vision:

"LLM-GE" service is being deployed in Germany as a new integrated service addressed to older people, starting with the offer, at the same time, a physical (PTC) a cognitive (CTC) training system and an Independent Living Component, which is scalable on demand of the customer needs. German Market opportunities are placed in the health and care sector (public or private), in the public administration (especially in those public administrations managing public infrastructures as day dare centres, sheltered homes) and in the private sector (elderly people living at their own homes).

1.3 Strategic Objectives:

- To put the LLM-service on the German Market as a service provided by the ULM UNIVERSITY.
- Deploying the exploitation and marketing strategy for "LLM-GE" relying on the scientific and administrative expertise of the ULM UNIVERSITY.
 - Directly: by creating an effective commercial and distribution network
 - Indirectly: by setting up the appropriate alliances with public administrations and stakeholders already acting in the market.
- Reaching the break-even point that ensures long term sustainability. Once, this point is reached, setting up a new company acting as the deployer of the "LLM-GE"-service in the German market.
- Achieving customers' recognition in terms of easiness of use and quickness of implementation of "LLM-GE" Services.
- To start deploying "LLM-GE" services in synergic markets such as real estate markets, insurances markets, medical market.

1.4 Promoters Personal Objectives:

With the ULM UNIVERSITY and the Ageing Research Group around Prof. Dr. Kolassa, Dr. Winfried Schlee, and Franka Glöckner, the deployer of LLM-GE already benefit from a large network to specialists in the health & care sector for elderly people in Germany and are well-known in the respective public and private sectors.



Grant Agreement No. 238904

With the group around Martin Schulz, the ULM UNIVERSITY provides an experienced group specialized to bring results from R&D-projects to the German market.

1.5 Five years onwards vision:

LLM-GE service will be deployed successfully in Germany. We do not discard the rest of Member States as target markets (directly or via alliances) for "LLM-GE" services. A network of allies to sell and implement services is running across all Germany. Sales are around 0.5 million EURO (only in Germany).



2. Holder of the Project

2.1 Name of project holder:

ULM UNIVERSITY

2.2 Location:

LLM-GE will be located in Ulm.

2.3 Profile

The ULM UNIVERSITY, Germany, was founded as a University of Medicine and Natural Sciences in 1967. It is the newest university in Baden-Wuerttemberg, Germany, and an important link to the research-oriented Science City of Ulm. Right from the beginning, the University of Ulm asserted its claim as a research university. Thanks to its interdisciplinary and cooperative working methods, the University has been able to establish numerous research concentrations and Collaborative Research Centres both in basic and applied research, achieving successful results.

2.4 Human Resources allocated:

- Prof. Dr. Iris Kolassa
 - o Professor for Clinical and Biological Psychology
- Dr. Winfried Schlee
 Coordinator of the Ageing Research Group at the Ulm University
- Franka Glöckner, MSc
 Strong experience in the cognitive and physical training of elderly people
- Dr. Martin Schulz,
 Strong experience in the deployment of R&D-projects



3. The Idea

3.1 The idea objective:

• Deploying LLM as an integrated service addressed (mainly) to older people offering at the same time a physical and a cognitive training system in combination with optional scalable independent living smart home solution to the health sector, care sector, public administration sector and to private end users.

3.2 Strengths / Weaknesses

STRENGTHS	WEAKNESSES
 The team around Prof. Kolassa is an already well known one for the effective training of elderly people ULM UNIVERSITY is very experienced with bringing R&D projects to the market and starting companies based on scientific results The unique integration of CTC+PTC + ILC is not being offered in the German market at this moment. We have a strong network of specialists in the private and public sector of health care for elderly people Ethical implications. We are able to manage every issue related to personal data and mental health information 	 Much dependencies on a public-driven market could result in a delayed or long time (and resources) consuming deployment Dependence on third parties (in the case of Cognitive Training) and existing infrastructure. Time needed to get visibility and brand recognition, especially when dealing with public-driven and private markets Commercial net to be constructed based on alliances and, when possible, PPP Prices to be definitively confirmed by the market; Dependencies on IPRs of PositScience and AUTH.
OPPORTUNITIES	THREATS
 The increase in aging of the German population and the subsequent expected increase in the cognitive and physical decline. Public Administration duty in Germany to take care of social and health services and pay for them in name of end users. There are budgets and policies to be further developed. Increased emphasis on brain maintenance in locations ranging from retirement communities to gyms. Broad government initiatives to increase the public awareness of the need for brain fitness And physical fitness. More public investments. Especially important in what relates to support infrastructure as for senior's care providing a place and an 	 Many competitors are found in the <i>exergaming</i> market with very fragmented offers and approaches that can confuse customers in their elections. General crisis situation with a severe impact on Public Administration budgets Technological obsolescence (same for all competitors) Users distrust: technological scepticism; lack of motivation, need for an adequate environment to access and use these kind of services



	environment to deploy services like LLM
	Low tech options will play an increasing
	role in the brain fitness field, such as
	meditation and cognitive therapy.
_	e i
•	Doctors, nurses and pharmacists will help
	patients navigate through the overwhelming
	range of available products and interpret the
	results of cognitive assessments.
-	Insurance companies will introduce
	incentives for members to encourage
	healthy aging.
	Brain training will be added to corporate
	wellness and leadership initiatives, building
	new motivations among end users
_	C
-	Increased awareness of the economic need
	of the public area and the personal wishes of
	seniors to live an autonomous life at their
	own homes as long as possible; increasing
	costs of supporting seniors by care givers.

3.3 State of the project (until now achievements)

3.3.1 Funds obtained:

None until now, so all activities until now in the German market have been supported on own financial resources of the ULM UNIVERSITY.

3.3.2 First commercial contacts:

A very important point is that the team is already well-known in the field of ageing research in Germany. "LLM-GE" service can empower that and benefit from the access and contacts in Germany.

"LLM-GE" services will be addressed to the following target end-users: elder population - Active Retirees (60-70 years old), seniors (70-80 years old) and Elders 80+ years old that are: living in assisted environments (like residences, sheltered homes, nursing houses, etc.), visiting care centres (including clinics and hospitals –short or long-term stay) and living as singles in their own homes.

3.3.3 First orders:

As first customer, we will approach the senior centres that already collaborate with us in our research projects.

3.3.4 Contracts with technology providers:

All IPRs related issues have been agreed with the LLM Consortium and are included as costs for the deployment of the "LLM-GE" business in Germany.

3.3.5 Dissemination:

Dissemination activities are already ongoing since the beginning of the LLM project and will be regularly conducted to inform the market about LLM-service among which we



already count with "LLM-GE" services.

3.3.6 Technical expertise:

Technology is currently not a problem for the team at the ULM UNIVERSITY which is already experienced with the current version of the equipment and all potential technical problems. Also, there are two informatics engineers giving the LLM-GE team the technical support.

3.3.7 Origin of the project:

ULM UNIVERSITY is a partner of the Long Lasting Memories (LLM) project.

3.3.8 Strategic reason

- Since its foundation in 1967, ULM UNIVERSITY has been interested in the commercial exploitation of its scientific results.
- The team has a very good knowledge of existing and upcoming solutions in the wide area of cognitive and physical training for elderly people
- The team has a very good knowledge of these specific needs of the elderly population in Germany

3.3.9 Links with other activities of the University

The two main research topics at the chair for Clinical and Biological Psychology focus on healthy ageing and post-traumatic stress disorder. Therefore, about 50% of the work of this group is dedicated to research projects and teaching classes on healthy aging.

3.3.10 What are the goals you aim to achieve in this project?

The goals of the team are

- To understand the basic mechanism for cognitive decline in the elderly.
- Development and Exploitation of effective treatment strategies to prevent cognitive decline in the older age as long as possible

3.3.11 Size of the team

Currently, the chair of Clinical and Biological Psychology employs 17 people. Exploitation will be conducted in parallel to the existing structures and organizations at the ULM UNIVERSITY. Once break-even point ensures long term sustainability, a company will be founded to develop the exploitation further.

3.3.12 The project in ten years:

The service will be deployed successfully in all of Germany. A company is in place to sell and implement LLM-GE services across all Germany. Sales are around 1 million EUR (in Germany alone). Further research and development of the team has improved the efficacy of the training. Services have improved and training physically and cognitively has become during the last years rather the norm than the exception



4. The Service

The "LLM-GE" service distinguishes itself with characteristics, of **usability**, **accessibility**, **affordability** by end users. Initially targeted to older people, "LLM-GE" could be much more than that, even if seniors are probably the most benefited from its use.

Currently, "LLM-GE" Cognitive Training Component (CTC) and physical training component is designed to support exercises provided by specialised software. But due to the modular concept of LLM a variety of software can be used for this process. It is considered that other R&D outcomes of ULM UNIVERSITY will be integrated into LLM-GE.



5. The Market

It is recognised that market forces alone have been and are likely to remain insufficient to ensure the realisation of the potential in this field. Public policy efforts are therefore also required.

From the supply side perspective, in particular, the market for ICT-based supports for homecare and independent living present some core issues that warrant attention from a policy point of view:

- Need for well-functioning supply chains (devices, systems, services, installation..)
- Achieving critical mass / commercial viability
- Standards / interoperability
- Functioning of internal market.

Older people have widely varying needs and circumstances and across Europe there are widely varying health, social care and housing systems. To address this "LLM-GE" will offer a relatively standardised solution to include mass markets, but also an individually-tailored / customised solution.

5.1 **Profile of the demand:**

ICTs are seen to present an opportunity for a "win-win" outcome, whereby needs of older people are met in a high quality manner, the costs of providing care and support are maintained at manageable levels for society, and new market opportunities open up for ICT-based products and services.

"LLM-GE" can be counted among existing and emerging ICT-based products and services that have relevance for meeting these various needs and objectives.

However, in practice, mainstreaming of ICT-enabled solutions within real world service settings has to a large extent yet to occur. Many are the challenges and barrier to overcome.

Although needs of older people for an independent living and homecare are very heterogeneous, three main market segments structure typically the service delivery landscape in Europe: social care, health care and housing.

The basic needs covered by "LLM-GE" are related with empowering the elderly to improve their physical and mental ability, combining this with an optional scalable solution for support of independent and safe living, thus touching at the same time all of the 3 areas mentioned above.

"LLM-GE" offer fits and should approach the following market segments in Germany:

Administrations:

- Hospitals
- Day Care Centres
- Residential facilities and sheltered housing



- Social services
- Reference Centres for aging, dementia, Alzheimer, etc.

Private organizations

- Hospitals
- Day Care Centres
- Residential facilities and sheltered housing
- Insurance Companies
- (non)-profit organizations, that provide social-health and care services for older people living at their homes on their own
- Gyms

Private persons

• Senior's living at their own homes and their relatives as their informal care takers and their relatives

Thus, the role of public organizations as the main provider of benefits to various groups and individuals becomes of paramount importance for those aspiring to make a business in the realm of social and/or health-social care sectors, as "LLM-GE" is.

Some part of the private sector as insurance companies, banks, and large operator of senior residences are the other alternative central to "LLM-GE" business.

As a third target group to be addressed as early customers are financial well situated seniors and/or their relatives who are interested in sustaining their health and getting support for independent living.

We believe that both public and private care -services are the ones with the duty of ensuring that older people have access to this kind of services and the ones that should pay for those services in their behalf.

So, the target audiences groups identified in Germany regarding the weight of the potential stakeholders are the following:

- Private and non-profit making entities
- Public entities:
 - Memory clinics, Geriatric units,
 - Hospitals, Psychiatric Departments, etc.)
- Social Care Centres providing services to the community
- End-users: Elderly people (staying in residences or health facilities like those mentioned above or visiting Day Care Centres while living independently)
 - ▶ 60-70
 - ▶ 70-80
 - ► 80+
- Older people living at their own homes and their relatives



5.1.1 Market Size - GERMANY

Stakeholder type: Assisted Living Hospital/Clinic/Rehabilitation Centre	Public / Private	Solution; CTC PTC	Full Market	Market share % foreseen	Market share in total numbers
Residences	Pu/Pr	CTC/PTC/ILC	~ 900	10%	90
At Home	Pr	CTC/PTC/ILC	1.450.000	3%	43500
Insurance Companies (and/or other private stakeholders)	Pr	CTC/PTC/ILC	~20	10%	2
Telcos	Pr	CTC/PTC/ILC	13	33%	4

5.1.2 Evolution of the demand

Volume and evolution:

Nearly 1.000 senior residences / sheltered houses, operated by both public and private owners are one of the key targets for LLM-GE. During the next years the numbers of these residencies will continuously grow which will add additional opportunities for selling LLM-GE.

Also the market of private homes is a huge one (more than 80 % of older persons are living at home).

5.1.3 Market Trends

Market trends are obviously going in the serious games directions for physical and mental health. With increasing costs of health and care systems accompanied by a steadily drawback of Government from health and social expenses the market for prevention and care taking products supporting independent living is continuously growing. On the other side many younger seniors and relatives of older seniors are aware of these facts which are important to determine communication, dissemination and advertising channels.

5.1.4 Expected Evolution

Due to the demographic trends and the growing demand on care and prevention for elderly it is expected to have growing market for this kind of solutions. This fact is also strengthening with the objectives of German Government to cover (with services and economic resources) the support and empowerment of elder's independent life.

5.1.5 Customers Profile

Residencies / Sheltered houses: are facing a lot of economic constraints; they are currently not much aware of technologies and how to use them, but are willing to start up services that allows them to demonstrate their duties compliance and to save human resource costs for care and therapy; they have long decision making times and will need support to implement and maintain the service structure; most of them are willing to find service partners to support its



costs (sponsors, private providers of services). Summarizing we can conclude that it is very stable group.

Private at home end users: this is the largest group and a high percentage demand/want (as far as they would like) remain at home. Currently the 60+ group is a high income group in Germany. This group can be best addressed through their relatives who are worried about their health and care needs and by private insurances as potential funding partners.

5.1.5 Customers Needs

When talking about Residences as customers they have the duty to provide solutions for elders needs (information, services, interaction, communication, isolation, socio-sanitary) and thus they would probably be the ones to pay, on behalf of their end-users, for services as LLM, although they suffer from low resources (both economical and human) to achieve these targets. They need technology to build services that effectively demonstrate progress on their achievement. They need to start up massive models demonstrating to the public their engagement. In this sense their position can be similar to that of Public Administrations.

5.1.5.1 Usual buying behaviour:

<u>Usual buying behaviour</u>: quite passive in terms of technology based solutions, normally suppliers have the initiative; they are really loyal and long term customers.

5.1.5.2 Number of expected customers in this target

<u>Number of expected customers in this target</u> is high, Normally the bigger private and public owned care operators will enter the services in first place, but experience has shown that in some case small operators are quite active in adopting innovative ICT services.

5.1.5.3 Access to this target:

By using the network of the team we will have access especially to public owned Residence and Care operators and to other public stakeholders.

5.1.6 Marketing channels

Contact should be done directly or via existing suppliers ("traditional providers") already inside their house. Even when no seasonality of sales is clearly identified annual budgets are built year to year (they are outlined in late summer to start running by begin of a new year).

5.2 Competitors

- "LLM-GE" can be three things: i) a service, ii) a system or iii) a product and can really be adapted to the local market and the end user needs.
- "LLM-GE" unique selling proposition (can be an integrated system providing entertainment, and mind and body training, and an assistive smart home solution supporting independent living) is its main advantage, while in the market there are many products focusing mainly in one side of the problem Market offer is full of standalone components.

5.2.1 Main Existing similar offers and/or alternatives



The following table gives an overview of the most important competitors in the market:

		COMPETITORS MATRIX																	
Cognifit - - X X - - X X - daily/weekly Lumos Lab - X X - - - X X - daily/weekly Mind Sparke X X - - - X X - daily/weekly Happy Neuron X X X - - X X - daily/weekly Brain Training Pro X X - - - X - - daily/weekly Neuroactive X X - - - X - - daily/weekly Nintendo Brain Trainer X X - - - X - - ? Nintendo Brain Trainer X X X X - X X X - ? LLM:ILC X X X X X X X X X X X X X X A A<	Product	Ħ	2. Direct data transmission to Central Server		4. Web delivery		6. Web downloable	7. Unlimited Nº Users		Online		н.	12. Multilingual	3. System		5. Friendly	Professional professional	17. Includes hardware pre-loaded for just this purpose	18. Commitment
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Nintendo Brain Trainer V V V V V P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P P <td></td> <td></td> <td></td> <td></td> <td></td> <td>Х</td> <td></td> <td>daily/weekly</td>						Х													daily/weekly
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	LLM: FitForAll		х	X	Х	Х	х	Х	Х	Х	Х	Х	Х	Х	-	Х	-	-	?
LLM: Gradior X - X X X X X X X X				-	<u> </u>													-	daily/weekly
	LLM: Gradior		х	-	X	X	х	X	X	Х	Х	Х	Х	Х	Х	Х	х	-	?

*Not considered scientific programmes; just games

5.3 Selling Strategy

"LLM-GE" will offer an integrative ICT service to joint all stakeholders (including users, customers, relatives and caregivers). So we can say that "LLM-GE" will only compete partially with other market players.

The main target is to quickly obtain 20 references in the Germany market. To do so we can rely on the existing network of the team. The *SaaS* flexibility of "LLM-GE" is very valuable to make real-time demonstrations on how the service works and how are their usage statistics. A specific Informative Web Site using "LLM-GE" features will be built to provide all relevant marketing, dissemination and commercial information to potential customers.



6. **REVENUES**

6.1 Market Objectives

Market Objectives and Potential Affairs:

"*LLM-GE*" has set up an objective of achieving 50 customers in the German market for senior's health & care in its first 2 years and to reach 500 customers by year 5. This is quite a conservative figure, but we have tried to set up realistic objectives in order to be able to reach them.

In fact, and as a result of the first market and dissemination activities that "*LLM-GE*" is deploying, some important opportunities are arising (local council associations, trans-border alliances of councils and so on). If they can be finally closed, figures forecasted for year 5 could be probably reached by no further than year 3.

6.2 Assumptions (calculation methods)

Calculation Method:

As explained in past chapters, "*LLM-GE*" Service (CTC+PTC+ILC) will be deployed following an ASP Model, meaning that the end users access the Service from the internet in exchange to a monthly fee paid by customers (jointly with an initial Set Up Fee).

In order to be able to sell "LLM-GE" in our area of intervention prices have been fixed attending to two main considerations:

- How much seniors will **"LLM-GE"** consume?
- How worth is the service for the customer (health/care organisations and end users)? How is the customer paying for similar services?
- How much are IPRs to be paid from every sale?

This Business Plan is using the figures answering these questions, and implementing the indications provided by technology owners in what relates to IPRs, to build the commercial and financial forecasts defining the business opportunity in Germany.



6.3 Sales Forecast

A conservative estimation had been made that prices will remain fixed during the five years period of the Business Plan. According to this pricing policy, the corresponding revenues for the period are shown in the tables below.

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
CUSTOMERS					
New Medical & Care Org.					
Customers	3	5	10	10	10
Running Medical & Care Org.					
Customers	0	3	8	18	28
New PA Customers	3	8	15	15	15
Running PA Customers	0	3	11	26	41
Total Customers	6	16	44	69	94
PRICES					
Start and Set Up Fee	2.500,00 €	2.500,00 €	2.500,00 €	2.500,00 €	2.500,00 €
Yearly Maintenance Fee	2.400,00 €	2.400,00 €	2.400,00 €	2.400,00 €	2.400,00 €
INCOMES					
New deployment's incomes	50.000,00 €	62.500,00 €	75.000,00 €	87.500,00 €	100.000,00 €
Recurrent incomes	48.000,00 €	108.000,00 €	180.000,00 €	264.000,00 €	360.000,00 €
TOTAL INCOMES	98.000,00 €	170.500,00€	255.000,00 €	351.500,00 €	460.000,00 €

7. MEANS (needed for selling)

7.3 SALES

7.1.1 Product (s) Policy

- Services will be marketed under the LLM-GE in Germany. It is being offered as a *SaaS* (Software as a Service) and as it is being accepted by customers.
- **LLM-GE** applies for the full set of CTC, PTC and ILC capabilities for empowering Elder's Independent Life.. The price of the service set up and maintenance is the same independently of the intensity of its usage.
- Some of the most distinctive features vs competitors include:
 - Unique focus towards CTC+PTC services combined with ILC service
 - "already in the market" references
 - Empowered by a highly skilled health expert team
- Customers appreciate the light cost structure of the service, providing a massive impact service at very reasonable costs (due to its *SaaS* approach).

7.1.2 Pricing Policy

- Price of the Services (resulting from analysis of the German Market)
 - START UP FEE: average of 3.000 Euros at the start up in order to set up and adapt the implementation of CTC, PTC and a scalable ILC (where we assume average costs) services to customer needs.



- MAINTENANCE FEE: yearly fee of 2.400 Euros as an average to cover all support, maintenance and updates in the service. In fact, all prices are quite "flat" as "LLM-GE" is selling as a "Software as a Service" and is offering the benefits of transforming investments in recurrent service fees.
- Those prices are quite cheap when comparing them to similar projects implemented by other providers. This is due to the re-utilization of a core technology already in place (speeding up implementation processes), to the flexibility that *SaaS* models provide and also to a psychological barrier that allows LLM-GE (due to its light infrastructure requirement) to set its prices under the thresholds that require a public tender to buy for this kind of services.
- IPRs payment to third parties providing technology to "LLM-GE" business has been also included. This will affect to the following parts:
 - RALTEC: providing LLM-CMS and its eHome platform to deploy ILC service. As directly involved in the exploitation and benefits sharing, no IPRs recovering are placed in this Business Plan.
 - AUTH: providing its "Fit for ALL" PTC component to "LLM-GE" business. As agreed with this provider a yearly fee consisting in 100€per year / per customer will be paid to AUTH in exchange for the rights to sell and use their PTC services. AUTH also provides the LLM-Webservice, it's yearly fee is included in the above described fee for FitForAll
 - POSTISCIENCE: providing BrainFitness CTC platform. As agreed with this provider a yearly fee of 1.800 € for multiuser settings (institutions) and 216 € for single user settings (at-home installations) will be paid to this provider to sell and use their CTC.
 - LLM Consortium: in order to benefit from the knowledge, logos, dissemination and horizontal marketing activities, "LLM-GE" will pay 50€ per each new customer to the LLM IPRs holding company.

7.1.3 Sales Channels

- German market requires, for being effective, from a direct access that should be done directly by the provider itself with its own commercial personnel and supported by the ULM UNIVERSITY. For medical and care organizations niches we will use reputation and success stories of the team, as marketing will rely mainly on networking and scientific dissemination.
- So we need to empower our sales network, not so heavy due to very local coverage and confidence links. And we will need to rely on in alliances with "traditional suppliers" in other regions in Germany.

7.1.4 Communication means

- Success stories and "living demonstrators" are the most useful selling tools in the medical and care organizations niches. We are focusing strongly on that issue to empower our commercial network.
- In any case, dissemination activities coordinated with governmental supportive and representatives (as regional governments and the German network of cities "Staedtebund") are really interesting. They will be based mainly on workshops addressed to those ICT and social care services responsible. Representatives of the first installations will present the system, so it is easier to present success stories by their own colleagues, to exchange opinions and ideas and to start building confidence links with actors in this niche.
- · Seniors and their relatives as end users and customers will be addressed by using



different senior magazines and online platforms as communication channels

• These activities will be based on the final validation results of the LLM project available by end of project.

7.2 PRODUCTION (resources needed for producing/selling the product-service)

7.2.3 Facilities

Our German activities will be conducted from the facilities that ULM UNIVERSITY has already in Ulm.

7.2.2 Technical Equipment (hardware & software required)

All equipment is in place to start providing services.

7.2.3 Human Resources costs for carrying out the project required activities

To start up the activity in the German market we will rely on the following human resources:

- Prof. Dr. Iris Kolassa
- Dr. Winfried Schlee
- Franka Glöckner

PERSONNEL COSTS	YEAR1	YEAR2	YEAR3	YEAR4	YEAR5
Technical Team:					
Persons	1	2	2	2	2
Yearly Cost	37.000	38.110	39.253	40.431	41.644
TOTAL COSTS	37.000	76.220	78.507	80.862	83.288
Sales Team:					
Persons	2	3	4	4	5
Yearly Cost	37.000	38.110	39.253	40.431	41.644
TOTAL COSTS	74.000	114.330	157.013	161.724	208.219
TOTAL PERSONNEL COSTS	111.000	190.550	235.520	242.585	291.507

Being the main goal of this project to strengthen the commercial activities to market "LLM-GE" services, also an additional "Other Costs" amount has been forecasted as a needed complement to perform the commercial tasks. This amount has been estimated as a 10% of the total expenses in Personnel, and will be used to support the sales team in the development of their daily duties (travel expenses, daily allowances, dissemination and complementary marketing activities...). Those costs have been collected in the following table:

			YEAR1	YEAR2	YEAR3	YEAR4	YEAR5
OTHER COSTS Personnel))	((10%	on	11.100	19.055	23.552	24.259	29.151



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(Marketing, Dissemination, Allowance Expenses)			
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8. SYNTHESIS / PROFIT ANALYSIS

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
CUSTOMERS:					
Running residencies customers	10	20	25	25	25
new residencies customers	0	10	30	55	80
new private customers	5	20	75	150	150
running private customers	0	5	25	100	250
Total Customers	15	55	155	330	505
PRICES					
Start and Set Up Fee	3.000	3.000	3.000	3.000	3.000
Yearly Maintenance Fee	2.400	2.400	2.400	2.400	2.400
INCOMES					
new deployment incomes	45.000	120.000	300.000	525.000	525.000
Recurrent incomes	0	36.000	132.000	372.000	792.000
TOTAL INCOMES	45.000	156.000	432.000	897.000	1.317.000
IPRs COSTS:	101000	100000	1021000	0,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1.0171000
eHome ILC IPRs	0	0	0	0	0
LLM CMS IPRs	0	0	0	0	0
Brainfitness CTC IPRs - muti	Ū	Ű	Ŭ	0	0
user installations	0	54.000	99.000	144.000	189.000
Brainfitness CTC IPRs - at			,,,,,,,		
Home insallations		5.400	21.600	54.000	86.400
Auth PTC IPRs	0	4.500	7.500	11.000	15.000
AUTH LLM Webservice IPRs	0	0	0	0	0
LLM Non-Technical IPRs	0	2.250	3.750	5.500	7.500
TOTAL IPRs COSTS	0	66.150	131.850	214.500	297.900
	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
PERSONNEL COSTS:					
Technical Team					
- Persons	1	2	2	2	2
- Yearly Cost	37.000	38.110	39.253	40.431	41.644
- TOTAL COST	37.000	76.220	78.507	80.862	83.288
Sales Team	0	0	0	0	0
- Persons	2	3	4	4	5
- Yearly Cost	37.000	38.110	39.253	40.431	41.644
- TOTAL COST	74.000	114.330	157.013	161.724	208.219
TOTAL PERSONNEL					
COSTS	111.000	190.550	235.520	242.585	291.507
OTHER COSTS (10% of					
Personnel)	11.100	11.124	11.458	11.801	12.156
- Marketing, Dissemination,					
Allowance Expenses					
TOTAL COSTS (excent				Í	
TOTAL COSTS (except IPRs)	122.100	122.364	126.035	129.816	133.710
TOTAL COSTS (except IPRs)	122.100	122.364	126.035	129.816	133.710
	122.100 -77.100	<u>122.364</u> <u>33.636</u>	126.035 305.965	129.816 767.184	<u>133.710</u> 1.183.290

As can be seen, "LLM-GE" revenues forecasts are quite conservative (as explained in previous chapters) at the start of the activity. All efforts and expenses are basically used to deploy the Commercial activity, and in the first two years this "commercial start up" results in losses which will be compensated by the already described financial start up support. It should also be



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reminded that our spin off company will be based on a very light asset structure, substituting (when possible) investments of any kind of assets by their rent The leveraging of previously running enterprise structures and the absence of investments will allow (this is our guess) for a quick reach of the break even point, and the balance of duties and costs engaged in the proposed joint venture resulting in a fair share of benefits while at the same time ensuring the business long term viability.



9. **DECISION**

At this stage, our decision is to follow ahead with "LLM-GE" Services as a way of starting business by founding a spin-off company later on.



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Business Plan for CYPRUS								
Name:	LLM-CY							
Type:	Spin-Off							
	(Cyprus University)							
Version	1.0							
Date:	May 2011							



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1. EXECUTIVE SUMMARY

The University of Cyprus starts working with the LLM project during 2010. Its main target is to cooperate with two social centres in Pafos, Cyprus. These centers offered services to elder people. LLM-CY aim is the Elder people to leave in an environment where physical (PTC) and cognitive (CTC) training system is offered. Furthermore, this training system gives incentives to the elder people to improve the quality of their everyday life using the LLM system.

<u>Objective</u>: The results of this project will be promoted to other centres in Cyprus, public and private social centres, in order to apply the LLM system / service, to them. With the introduction of new technology and with the increase of the Elder people in Europe, the LLM system will be essential in all Social Centres.

2. Holder of the Project

Name of the project "LLM-CY"

Location of the Social Centers: Pafos – Cyprus

Profile of the University of Cyprus:

The University of Cyprus was established in 1989 and admitted its first students in 1992. It was founded in response to the growing intellectual needs of the Cypriot people, and is well placed to fulfill the numerous aspirations of the country. The University is a vigorous community of scholars engaged in the generation and diffusion of knowledge. Despite its brief history, the University of Cyprus has earned the respect of the international academic community and the appreciation of Cypriot society. Admission for the majority of undergraduate students is by entrance examinations organized by the Ministry of Education and Culture of the Republic of Cyprus, and the competition for places is approximately 10 to 1. A number of places are reserved for students with special needs or circumstances. Every effort is made to offer practical solutions to students facing specific problems, be it access to University facilities, or assistance on academic issues. When the University of Cyprus first opened its doors to students, the incoming class consisted of 486 undergraduate students. During the academic year 2008-2009, 4321 undergraduate students attended courses operating within the 31 undergraduate programs offered by the 21 departments of the six faculties. At the same time, there were 1285 postgraduate students.

There are six Faculties within the University:

- The Faculty of Humanities with three departments and the Language Centre
- The Faculty of Pure and Applied Sciences with five departments and the Oceanography Centre,
- The Faculty of Social Sciences and Education with four departments and the Centre for Gender Studies,
- The Faculty of Economics and Management with two departments, the Economic Research Centre and the Centre for Banking and Financial Research,
- The Faculty of Engineering with four departments, the Nanotechnology Research Centre and KIOS Research Centre for Intelligent Systems and Networks,
- The Faculty of Letters with three departments and the Archaeological Research Unit.



2.1 Human Resource of the Project

University of Cyprus

- Prof. Constantinos Pattichis
- Dr. Marios Neofytou
- Dr Efthyvoulos Kyriakou

Two Social Centers in Pafos:

- Pafos Social Center

- Mouttalos Social Center



3. The Idea

3.1 The idea objective

LLM-CY as an integrated service addressed to older people offering at the same time a physical and a cognitive training system in combination with optional scalable independent living smart home solution to the health sector and social care sector and to private end users.

3.2 The Service

LLM-CY is offering an **integrated** LLM service to improve their cognitive and physical health and safety and quality of life of people and their relatives.

This service is based on a platform that is comprised of the Physical Training Component (Fit-For-All), the Cognitive Training Component (Brainfitness) and the Independent Living Component (eHome).

Currently, LLM Cognitive Training Component (CTC) and physical training component is designed to support exercises provided by specialised software. But due to the modular concept of LLM a variety of software can be used for this process.

3.3 The Cypriot Market

Profile of the demand

Senior people have widely varying needs and across Europe there are widely varying health, social care and housing systems. To address this LLM-CY will offer a relatively standardised solution to include mass markets, but also an individually-tailored / customised solution.

LLM service can be counted among existing and emerging ICT-based products and services that have relevance for meeting these various needs and objectives.

Although needs of older people for an independent living and homecare are very heterogeneous, three main market segments structure typically the service delivery landscape in Cyprus:

Elderly social and health care public authorities:

- The Social Centres for the Elderly
- Home Care for the Elderly
- Residential Care Homes
- Health Authorities and Social Service Departments
- Hospitals

Elderly social and health care Private Organisations:

- Residential Care Homes
- Insurance Companies
- Health care Insurance and Private Medical care in Cyprus
- Hospitals
- Private Residences Groups or Fitness Clubs,
- Social and health care professionals,



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The small size of Cyprus facilitates the access of citizens to health services. In order to ensure access for all the inhabitants, apart from the private health services concentrated in urban centres, the Ministry of Health operates 6 urban hospitals, one for each district, and 24 rural health centres, as well as more than 230 sub-centres in an equal number of rural communities. In parallel to this, the extension of nursing care at home and the national network of mental health nursing provide support to chronic patients and the elderly

Private Elderly persons

Senior's living at their own homes and their relatives acting as their informal care takers. The target audiences groups identified in Cyprus regarding the weight of the potential stakeholders are the following:

- Private and non-profit making entities
- Public entities:
 - o Memory clinics, Geriatric units,
 - o Hospitals, Psychiatric Departments, etc.
 - o Social care centres providing services to the community
- Elderly people
 - staying in residences or health facilities like those mentioned above or visiting day care centres while living independently
 - Older people living at their own homes and their relatives

3.4 Market size

Services for Elderly and disable persons 31.12.2009									
	Number of Centers	Number of people							
Public Social Center		Residence	Spending the day						
Public Social Centers	6	222	4						
Public Day centers	40	627	0						
Private Social Centers	77	1254	1						
Total	123	2103	5						
Home Care		With Salary relief	With Salary relief						
Public	130	746	82						
Private	2736	3286	52						
Government Sponsored	324	1082	32						

3.5 SWOT ANALYSIS

STRENGTHS	WEAKNESSES	
 UCY have a broad network of 	• Some elder people does not know the use	
governmental, non-governmental and	of a computer	
commercial institutions supporting elders	• Time needed to get visibility and brand	
in all Cyprus towns.	recognition, especially when dealing with	
 Social Centers are happy to cooperate for 	public-driven and private markets	
this project	 Commercial net to be constructed based 	
 The system is friendly use 	on alliances	
 University of Cyprus cooperates with a 	 Prices to be definitively confirmed by the 	



	lot of social centers.		market
•	Capability of adaptation to local market:	•	Dependencies on third parties
	multi-lingual, multi-channel. Ethical implications: We have applied to		
_	the Cyprus Bioethical Comminute and the		
	answer was positive for follow up the		
	LLM users. Also we are able to manage		
	every issue related to personal data and		
	mental health information		
	OPPORTUNITIES		THREATS
•	Cyprus is a small island and it is easy to	•	Many competitors are found in the CTC
	promote a system/service		and eHome market with very fragmented
•	The increase in aging of the Cyprus		offers and approaches that can confuse
	population and the subsequent expected		customers in their selections.
	increase in the cognitive and physical decline	•	General ensis situation with a severe
_	Broad government initiatives to increase		impact on Organisations budgets Technological obsolescence (same for all
-	the public awareness of the need for brain	-	competitors)
	fitness and physical fitness. More public		Users distrust: technological scepticism;
	investments.		lack of motivation, need for an adequate
	Low tech options will play an increasing		environment to access and use these kind
	role in the brain fitness field, such as		of services
	meditation and cognitive therapy.	•	Governmental policy in Cyprus to take
•	Doctors, nurses and pharmacists, already		care of social and health services and pay
	collaborating with UCY		for them in name of end users. There are
•	Insurance companies will introduce		budgets and policies to be further
	incentives for members to encourage		developed.
	healthy aging.		

3.6 Strategy

In Cyprus we distinguish two stakeholder categories: PAYERS and END-USERS. The first are the ones that sustain the service paying for it; the second ones are the final beneficiaries of the service.

The sales of the LLM service depends on the pressure and demands end users put over the first type. End users have to be aware of the service and they have to accept it, like it and use it. In Cyprus the acceptance of the LLM solution is not going to be easy and we have to bear in mind two important issues: time and money bearing also in mind the economic crisis.

A modular, optional solution seems much more feasible to be accepted. They can choose to go step by step and can adapt progressively to this new environment, is less demanding, is cheaper. This is why we chose to offer custom solution based on the customer needs.