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IOANNA

Integration Of All stores Network & Navigation Assistant

D5.3 First version of exploitation plans and strategies

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Abstract (for dissemination)	Based on D5.2 Market analysis & socio-economic impact and potential and on D3.3 Functionalities design and development, D5.3 aims to start the analysis and adequate the exploitation strategy of the IOANNA project outcomes, define measures and methodologies for managing exploitation activities, including management of Intellectual Property and risk assessment. The project has already identified different exploitation models which need to attract B2B and/or B2A partners to become successful. Therefore, the focus of the exploitation plan should be to attract potential B2B and B2A partners delivering proof of concept for the attractiveness and acceptance of the services offered by IOANNA project to potential end-users. With this deliverable the consortium aims to give an insight into necessary alignments to achieve the exploitation strategy based on the business plans. It should give a good perspective on the necessary concepts, activities and potential investments to go to market with IOANNA results.

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Table of Content

1. Introduction

1.1 Background

IOANNA (Integration of All stores Network & Navigation Assistant) is a project that develops the integrated solution IOANNA, which is a multiplatform solution consisting of a web application and mobile application suitable to facilitate mobility and social engagement of older people (seniors).

IOANNA is a user-centered project. The involvement of end-users and local businesses is an important factor in order to achieve the scope of the project and the commercial exploitation of its results, increasing quality of life as well as to help users (mainly seniors) feel safe to walk around the city, to look for the best commercial offers, to plan destination routes and to stay active in their community and contribute to the local economies.

Deliverable 5.3 "First version of exploitation plans and strategies" is part of WP5 "Dissemination and exploitation", in which the consortia start the analysis and adequacy of the exploitation strategy for IOANNA project outcomes, define measures and methodologies for managing exploitation activities, including management of Intellectual Property and risk assessment.

1.2 Scope of the Deliverable

Deliverable 5.3 "First version of exploitation plans and strategies" is part of Task 5.3 "Individual and joint exploitation plans and strategies", aiming to ensure adequate and most effective exploitation of the project results across Europe, appropriate measures and methodologies for managing exploitation activities as Intellectual Property and risk assessment.

With this deliverable the consortium aims to give an insight into necessary alignments to achieve the exploitation strategy based on the business plans. It should give a good perspective on the necessary concepts, activities and potential investments to go to market with IOANNA results.

The project has already identified different exploitation models which need to attract B2B and/or B2A partners to become successful. Therefore, the focus of the exploitation plan should be to attract potential B2B and B2A partners delivering proof of concept for the attractiveness and acceptance of the services offered by IOANNA project to potential end-users.

Furthermore, D5.3, together with D5.2 "Market analysis & socio economic impact and potential", will provide the bases for D5.4 "Intermediate business models".

2. Exploitation strategy

This chapter outlines the key drivers and paradigms that are necessary to develop a first suitable market approach and a viable exploitation strategy for IOANNA project.

2.1 Key paradigms of exploitation for IOANNA

In order to ensure a real world exploitation approach all development activities are user-centered, involving senior adults (primary end-users), caregivers (secondary end-users) and other stakeholders like local stores, companies and municipalities (tertiary end-users) in different stages of the project. End-user involvement is a reliable means to ensure that wishes and needs of end-user are respected in every stage of the project, guiding the consortium towards the creation of a product which is useful, easy to use, with a high acceptability and meeting the needs of end-users. Therefore, all development activities are focused on a potential and successful go-to market with IOANNA project.

The project follows therefore four key paradigms which are fostered throughout all work packages by the dissemination and exploitations work stream:

− Results from market analysis will be used to help shape a truly innovative solution positioned in a silver economy scenario
− End-user value propositions will be tested and met to make the results of marketable IOANNA.
− Tangible results will be produced at all stages of the project that can be used to perform dissemination
− User trials will be used as superior marketing instruments

2.2. Positioning of IOANNA

Based on the result of the market analysis performed in D5.2, IOANNA will be positioned as a multiplatform ICT-based solution for seniors for everyday facilitation in shopping management and navigations, focusing on social engagement, assistive mobility and promotion of autonomy and independence in the elderly. Therefore, IOANNA applications (mobile and web) need to be able to do content sourcing and management of relevant content.

IOANNA should be clearly positioned as a competing and innovative service to not only promote autonomy and independence in elderly but to also promote local economy supporting local stores and businesses

Key driver for the design of IOANNA needs to be always a superior end-to-end user experience; therefore technology must be used to hide complexity from the user.

Simple and easy access to relevant content through different play-out channels must be key driver for development and is key for market success and attracting potential B2B partners.

In order to position IOANNA through the exploitation process two main elements have been designed and are being developed in order to include two platforms in IOANNA application: a web application and a mobile application:

- The web application: will be the part of IOANNA's application where users with administrator and business role will access, allowing businesses to manage the main entities of IOANNA from a web browser.
- The mobile application will not only receive push notifications, but will make also use of the programming interfaces offered by the Chat Platform to allow chat communication between seniors (mobile application) and businesses (web application). The mobile application will also use the GPS of the mobile device to interact with the Route Planner's software module.

2.3 Exploitation models

The project has been identifying different variations for potential exploitation and commercial go-to-market models:

1. Indirect end-user go to market model
   Either a B2B or a B2A approach, providing rights of use and access to content at a monthly or annually cost to the local store, company or municipality.

2. Wholesale model
   Providing the IOANNA application to a B2B partner, who markets, sells and operates the service towards its end-users recuperating license fees from the B2B partner

3. Advertisement and market space model
   B2B partner providing access to the content for end-users at no cost generating revenues through advertising and marketing space sales

The different exploitation models will be validated in the course of the project with potential partners and end users in terms of manageability, deployment complexity and costs as well as willingness to pay.

2.4 B2B partners for successful exploitation

Local stores, merchants' associations and companies are a must for a successful exploitation of the service, no matter which exploitation model will be used.

These stakeholders (tertiary end-users) will benefit with the possibility to promote their offers, products and services to help primary end-users find the promotions and nearby locations, promoting their local economy:

– **Local stores and merchant's associations**: main stakeholder group for IOANNA project to whom the project platform is oriented to, together with the senior adults. This group will be offered the possibility to promote their offers, products and services to help end users find the promotions and nearby locations.
– **Companies**: other businesses offering services and products to seniors. Being also able to benefit from the silvers' know how or experience through voluntary work in case of need posted in IOANNA platform.

2.5 B2A strategy for successful exploitation

Local municipalities represent also a key stakeholder group for IOANNA as the project represents a tool to, not only contribute to the seniors' independency and help in case of fall detection (improving therefore communication to emergency contacts), but a tool to also support local commerce and local economy, being therefore a potential valuable asset to the local economy. In fact, our initial intention, based on the experience of Merkatari, is to consider municipalities as the first potential clients of the resulting solution with 2 goals:

– Create a new market for the local shops & professionals.
– Offer adapted products and services for the increasing older population to increment their autonomy.

Therefore, administrations are also a must for a successful exploitation of the service, being potential prescribers of IOANNA app.

2.6 Approach to attract partners and end-users

In order to make IOANNA attractive to partners B2B and B2A, as well as to primary end-users, value propositions need to be developed and tested. In order to attract B2B partners the B2B value proposition must be driven by strategic fit with an existing service portfolio, furthermore it should offer the opportunity to businesses to advertise if the tool is finally successful. Ideally it will offer a new way to increase local commerce revenue by focusing in the silver market.

The B2A value proposition needs to focus on (1) new ways to support and energize local economy and (2) provide added value for the new European models of governance with the elderly.

For primary end-users IOANNA needs to offer simple access to content across all specific and user relevant content: new promotions, new order, rating of local shops

and businesses, chat and emergency contacts. Furthermore it needs to offer access to route planning and to new opportunities for voluntary work.

In order to design and validate IOANNA value propositions that proof the value of the solution to potential stakeholders, prototypes of IOANNA will be tested with primary end-users, secondary end-users (formal and non-formal caregivers) and tertiary end-users (local shops). Some municipalities will also be addressed in order to validate also their interest and willingness to implement the solution in their local ecosystems.

3. Risk Assessment Plan

Risks' evaluation

Risks are evaluated in terms of probability of occurrence and consequence if the risk occurs, and the importance of a risk is typically calculated as the product of the probability and the consequence.

The approach we follow for IOANNA's risk assessment is to differentiate between Low, Medium and High probability of occurrence, and Low, Medium and High Consequence. Typical interpretations of these are presented in Table 2.

Category	Probability	Consequence
Low	Typically below 25%	Easily recoverable
Medium	Between 25% and 75%	Significant impact and cost, schedule and quality
High	Typically above 75%	Threatens the exploitation plan of IOANNA

Table 1. Interpretation of Low, Medium and High probabilities and consequences of risks.

A classification scheme for risks based on assessment of probability of occurrence and consequence is presented in Figure 1.
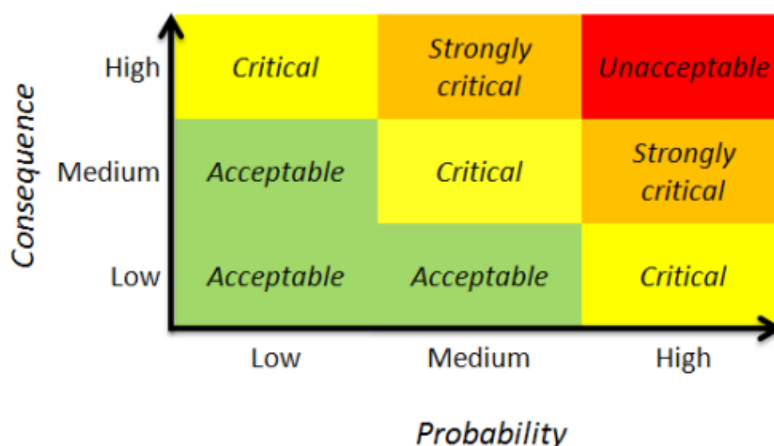

Figure 1. Classification of risks according to their probability of occurrence and consequence if they occur.

Identification of risks

Several risks may threaten the IOANNA project exploitation viability:

- Risk that planned activities cannot be implemented as foreseen
- Exploitation risks, lack of uptake of project results
- Risks associated with the scientific level of the work

A set of risks that could threaten IOANNA's exploitation plan have been identified, these are presented in Table 2 below:

Description of risk	Category	Proposed risk-mitigation measures
Lack of relevance of the project developments	Medium	Piloting processes and implementations will be monitored tightly and evaluated regularly as part of learning and improvement processes such that corrective actions may be defined at an early stage. Second, the direct stakeholder involvement through the pilots will give direct feedback on each implementation and at several stages throughout the project.
Limited interest from stakeholders	Medium	Following a participatory design approach, the needs of end-users will be emphasised and ensured by activate participation from several stakeholder groups (beyond the consortium partners) in the pilot activities.
Inability to implement solutions that the proposal promises to study due to technical problems, lack of support from stakeholders, or business priorities	Low	Relevant stakeholders will participate in the prioritization of the requirements using the MoSCoW methodology, designed to stimulate cocreation processes involving multiple stakeholders. This is expected to increase the support from crucial actors, and also to contribute to a more solid foundation for the exploitation plan and future commercialization of IOANNA.

For risks that have already been identified, measures that reduce the risk area already planned. Nevertheless, these risks will remain threats throughout the project and we will therefore monitor their development and will be prepared for needed actions.

4. Plan for handling Intellectual Property Rights (IPRs)

According to "World Intellectual Property Organization (WIPO)", http://www.wipo.int/, Intellectual Property Rights (IPRs) are the legal rights which result from intellectual activity in the industrial, scientific, literary and artistic fields. IPRs cover two main areas:

- Industrial property (inventions: patents, utility models; trademarks; industrial designs and protected designations of origin), and

- Copyright (represented by literary, musical, artistic, photographic and audio-visual works).

In IOANNA, as in every other AAL project, there are two IPR issues that need to be handled. First of all the management of the pre-existing know-how (background IPRs) that exist in terms of commercialization of the final product and secondly how the knowledge generated within the project (foreground IPRs) should be protected by the IOANNA consortium after the end of the project. This section provides a first description of these terms whereas in the next version of this deliverable (D5.5 Final version of business models and exploitation plans) a detailed analysis of the IOANNA IPR issues will be provided.

4.1 Background IPRs

Background IPRs are Intellectual Property Rights that existed before the beginning of project and are important for the successful implementation of the IOANNA project. It is the knowledge held by participants prior to their accession to the Grand Agreement, as well as any IPRs which are needed for carrying out the project. In IOANNA, the following background IPR exists:

- Zocaalo is a platform to facilitate widespread uptake of certified, accessible and easy-to-use AAL applications. Zocaalo consists of an application marketplace, developer tools, and a certification steal for those looking for elderly-peopleo-oriented trusted applications.
- Kwido is an ITC platform developed by Ideable for caring for elderly people that includes different modules for cognitive stimulation, communication, health monitoring, etc. especially for service providers working with elderly patients.
- Merkatari is a commercial product developed by Ideable to facilitate communications between local shops and clients in small towns. As the use cases and market approach may be similar to IOANNA, Ideable has taken many ideas and experiences from this project to be integrated in IOANNA.

As a first attempt (a more detailed analysis will follow on D5.5 on month 28) to analyse the restrictions that the consortium might have for the use of background knowledge for the commercialisation of the IOANNA solution, we can come up with the following initial conclusions:

- The core components that are needed for the development and deployment of the IOANNA solution (Route planner and Market place) are released to be used for the consortium and for the IOANNA project with no limitations.
- IOANNA has no restrictions in using the core components needed for its development phase.

A more detailed analysis of the background IPRs will be presented in the next version of this deliverable (month 28) after such issues are thoroughly discussed and decisions are taken.

4.2 Foreground IPRs

Foreground IPRs are usually results, materials and knowledge generated in the project. They are IPRs that are produced within the project period and owned by the participant who generated them. When foreground is generated jointly, it is jointly owned, unless participants concerned agree on a different solution. In IOANNA foreground IPRs are divided in two categories:

- The ones that were generated within the project period and belong to the IOANNA Consortium.
- The ones that were generated within the project period and belong to one or more participants who generated them.

At this particular project period, the first category is easier to define, while the second category will be appropriately covered in the next version of this deliverable (month 28). For the first category (IPRs belonging to the IOANNA Consortium) we identify the following:

- The project logo, the project acronym (IOANNA) and the project domain name (www.ioanna-project.eu) belong to the IOANNA consortium. After the end of the project, the logo, the acronym and the domain name will belong to the members of the consortium that are interested in the sustainability and commercialization of the project's results.

For the second category (Foreground IPRs belonging to one or more partners), we identify the following:

- The IOANNA apps, the IOANNA services (navigation, market place, chat, mobile app, fall detector, etc.) will be developed as property of the Consortium and for the commercial exploitation of the commercial partners that will be addressed before the end of the project.
- SLG is key implementer and integrator of the IOANNA platform. Having developed the backend & web-based environment of IOANNA, the associated source code consists intellectual property of SLG. The commercial exploitation of this part of IOANNA can be performed by SLG without further claims by the rest of the partners.

5. Sustainability planning

This section aims to present the plan on how the IOANNA consortium is willing to exploit the project's result. In the current document (D5.3), the CANVAS models (Annex I) of the first version of the IOANNA project that was distributed to all IOANNA partners are presented. It includes early ideas (gathered on month 10) on how each partner and the IOANNA consortium as a whole is planning to exploit the results during and after the end of the project.

5.1 Exploitation planning at each organisation's level

The exploitation planning at each organisation's level is divided into the following activities:

– **Research activities** that advance the state of the art in IOANNA research areas (marketplace and elderly autonomy) while in parallel increase the scientific and technical know-how of the consortium.
– **Collaboration activities** with a network of existing or new contacts that aim to exploit the results of the IOANNA project while in parallel enhance the network of research and business partners of the consortium.
– **Commercial exploitation** of the project outcomes, both in terms of specific products and services, but also as provision of state of the art know-how and services to existing customers.
– **Further funding** research and development opportunities by getting involved in research proposals taking advantage of the know-how generated during the course of the project.

All partners are willing to get involved in research and collaboration activities, five partners have mentioned further research funding as an opportunity to exploit the IOANNA results and four partners are initially interested in IOANNA commercialisation activities.

The table below summarises how the consortium envisions its participation to the IOANNA project and how it intends to exploit the results during and after the end of the project

. Partners	Research activities	Collaboration activities	Commercialisation	Further funding
IDEABLE	Enhance experience and expertise in accessible and friendly apps for the elderly users around	Extend the network of international contacts in the AAL domain European municipalities, EIP on AHA,	Ideable will assume the business role of commercialization of the resulting platform.	Explore new collaborating opportunities for future projects with other partners of the consortium.

	municipalities in Europe. Also in fall detection using smartphones.	etc.		Explore possible funding opportunities for the commercial launching of IOANNA across Europe.
SINGULAR LOGIC	SLG will further enhance its expertise in the field of assisted living, in terms of social inclusion and fall prevention.	SLG will pursue and establish stronger collaboration with its network of day care centers and similar units, by providing improved elderly-related services.	Apart from the cognitive training services that SLG provides to the elderly via its Sociable solution, SLG will enhance its bouquet of solutions with fall prevention, smart mobility planning and accessibility to marketplaces.	SLG will take advantage of the knowledge gained in IOANNA, along with the collaboration with the consortium partners, to pursue new funding opportunities under AAL and other similar calls.
GEOIMAGING	Continue advancing the improvement in the field of senior aid	Enhance the partner field for further participation in projects		
ANA ASLAN I.	Improvement of elderly-user experience evaluation (knowledge, methods, results, etc) Promote user research and development of innovative applications	Share ideas and work together within specialists' networks, with stakeholders and relevant communities (e.g. results dissemination, new proposals) Participate (in person or	ANA will support the commercial partners through promoting the solution in its collaborative network of senior's associations and social care organizations (both public and private)	Explore new collaborating opportunities for future projects with other partners of the consortium

	useful to aging well, elderly autonomy and independent living	virtually) in meetings and events organized by partners

Collaborative learning whithin different domains and topics (aging, eHealth, technologies, innovation etc) | | |
| MATERIA | Gather user perspective/feedback for improvement of platform. Ensure user needs are met – co-design | Collaboration with partners.

Continuous contact with our stakeholders for disseminating project and its results and for finding potential partners. | Contributing in the promotion of the platform in Cyprus through our existing contacts and collaboration with organisations and other stakeholders who can be potential buyers. | Explore further funding opportunities |
| ESKILARA | Enhance experience and expertise in robotics topics and on dissemination and exploitation activities as well as corporate image and international reputation | Extend the network of international contacts in the AAL domain. | | Explore new collaborating opportunities for future projects with other partners of the consortium. |