

ANNUAL REPORT FROM STAKEHOLDER MANAGEMENT

MARCH 2015



DELIVERABLE

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D2.1.2 ANNUAL REPORT FROM STAKEHOLDER MANAGEMENT - Y2

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EXECUTIVE SUMMARY

SDI4Apps aims to bridge the gap between the top-down managed world of INSPIRE, Copernicus and GEOSS and the bottom-up mobile world of voluntary initiatives and thousands of micro SMEs and individuals developing applications based on GI, by adapting and integrating experience from previous projects and initiatives to build a cloud based framework with open API for data integration, easy access and provision for further reuse.

The solution is being validated through six pilot applications focused on easy access to data, tourism, open sensor networks, land use mapping, education and ecosystem services evaluation:

- Easy data access
- Open Smart Tourist Data
- Open Sensors Network
- Open Land Use Map
- Open INSPIRE 4 Youth
- Ecosystem Services Evaluation

The project is strongly based on cooperation on data sharing and technological developments with other initiatives funded by the European Union. The purpose is to increase the exploitation opportunities for open geographic information, facilitate market entry for new companies and to develop innovative services based on open geographic data.

In January 2016 a new Memorandum of Understanding (MoU) was signed among FOODIE, OTN, SDI4Apps and ECIM in order to link three spatial data themes with related technologies for data management: transport network, land use and point of interests.

Indeed, data management represents a majority of all the effort spent in the project. The purpose of the new MoU is to set a cooperation management of the transport network, land use and points of interest datasets as shared open data resources for the benefit of all the projects.

At the end of the second year from the project start-up, this report provides the second SDI4Apps Stakeholder management assessment, which is focused on the transition from the SDI4Apps local Stakeholders community to the SDI4Apps Community space.

An updated overview of the project evolution according to the stakeholder management perspective (i.e. the evolution of stakeholders roles, competences, interactions and level of actual and future commitment) is provided in the first part of the report. The second part will deal with Y2 Stakeholder Management assessment and SDI4Apps community building.

How to manage the transition towards the SDI4Apps community space?

Pilot scenarios: users, customers and partners involved

Keywords: Stakeholder Management, Communities, Commitment, Dissemination, Scenarios

1 INTRODUCTION

SDI4Apps is by definition a multi-stakeholder project.

The “technical” evolution of the SDI4Apps pilots/platform development during the three years of activity will bring a “social” corresponding transition towards changing configurations of involved stakeholders (SDI4Apps Communities).

Stakeholders Management reports deal with the three main steps of the SDI4Apps project’s evolution:

- *Year 1.* Data integration and infrastructure development- focus on Local Stakeholders Community. This will be the focus of this report.
- *Year 2.* Definition of the Open SDI4Apps Platform- focus on SDI4Apps Stakeholders Community Space
- *Year 3.* Dissemination/support for external developers - focus on SDI4Apps on-line and off-line Stakeholders Communities

At the end of Y1 the first SDI4Apps Stakeholder Management Assessment (D2.1.1), was referred to internal or “core” Stakeholders Community, by gathering information mainly from the Consortium members.

SDI4Apps Community Building activity is progressively involving external communities (users, groups of users, external stakeholders) in order to gain critical mass and foster the development of the initiative.

SDI4Apps Stakeholder Management Assessment (D2.1.2) provides an overview of the SDI4Apps project evolution according to the stakeholder management perspective of changing configurations of involved stakeholders, or SDI4Apps communities.

In particular, the second annual report from Stakeholder Management monitors the transition from the SDI4Apps local Stakeholders Community to the SDI4Apps Community Space, according to the technical transition from data integration and infrastructure development to the definition of the open SDI4Apps platform.

This task is strictly connected to social validation methodology (T2.2), internal validation (T2.3), external validation (T2.4) tasks and, outside WP2, to business modeling task (T8.6). D2.1.2. provides baseline information about perception of possible SDI4Apps business model cases, from the perspectives of internal and external communities, thus creating a social validation framework for D8.5.1. Initial version of business model.

All of these documents enable SDI4Apps managers and reviewers to gather complementary and valuable information about the whole project evolution.

In Y3 Stakeholder Management assessment (D2.1.3) will go further in external users involvement in order to set coherent scenarios for platform reliability and sustainability.

2 SDI4APPS STAKEHOLDER MANAGEMENT ASSESSMENT

2.1 Methodology

Stakeholder Management refers to a permanent monitoring activity of SDI4Apps Communities throughout the evolution of the project's configuration, in order to map the main set of Stakeholders involved in each phase and to provide the project management with relevant information about the project evolution plan and the possible future scenarios.

We developed an original methodology for SDI4Apps Stakeholders monitoring activity based on periodical CAWI surveys through the use of dedicated software platform¹. The consistency of the methodology across the years allow us to study the evolution of the collaboration from Y1 to Y2.

This activity had two main objectives;

- Draw attention to the evolution of SDI4Apps Stakeholders configurations as a result of the project technical evolution, and highlight critical issues in the community building activity
- Provide relevant feedback inside WP2 and outside WP2 for project management, risk management and business model planning

We surveyed the local Stakeholders through a total of 17 questions referring to 6 topics:

- Internal stakeholders maps
- Networking and collaboration
- Stakeholders commitment in the SDI4Apps project
- Consensus among partners on SDI4Apps exploitation opportunities
- Partners involvement in the Business model definition
- The SDI4Apps community space

Moreover we divided the survey in 2 macro-section, the first 11 question are common to all the respondents, the last 6 are specific for each pilot developer.

We provided descriptive statistics for responses as follows:

- Dichotomous questions - frequencies of responses;
- Likert questions - frequencies of responses, mean and mode values, mean centered results, synthesis indexes based on weighted means;
- Open-ended responses - synthesis, listing, frequencies of responses (if applicable)

¹ www.surveymonkey.com

2.2 The SDI4Apps local Stakeholders Map

During the second year of the project the technical evolution of SDI4Apps moved from data integration and infrastructure development to the definition of the open SDI4Apps platform. As a result, the stakeholders configuration has changed, from the implementation of a “core” internal community to the SDI4Apps community space, involving external groups of stakeholders for each pilot in the platform, as users/customers/partners.

Stakeholder Management assessment in Y2 was designed around main partners’ roles, according to the SDI4Apps Stakeholders map provided in Y1.²

All data were made comparable in order to provide complete and valuable information on the evolution of Stakeholders configurations, roles, degree of commitment and consensus across the topics.

Figure 1 represents the actual SDI4Apps Local Community map.

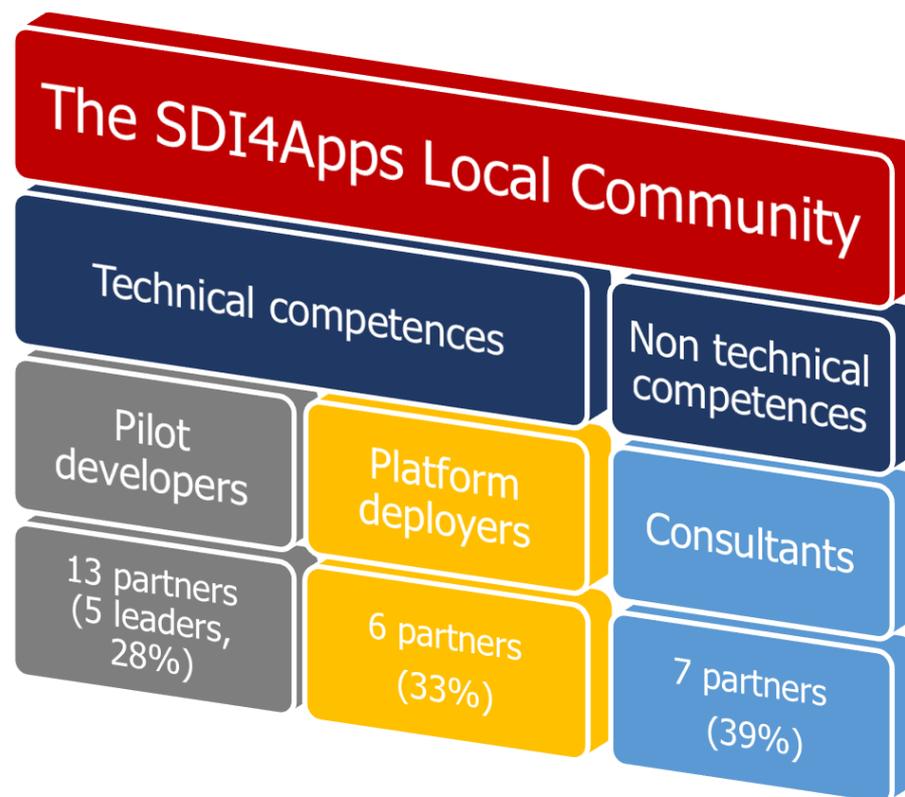


Figure 1: SDI4Apps internal stakeholders map

To the purpose of this report, we distinguish partners with technical competences (pilot developers and platform deployers), from partners with non-technical competences (acting as data providers and/or consultants).

18 partners were involved: SDI4Apps partners play transversal roles in the project, according to personal competencies and to the level of engagement in the project (e.g. consultants and non-technical partners).

² Di Minin *et al.* (2015) “D2.1.1. Annual Report from Stakeholder Management (Y1)” :10

actively participating in pilot development; pilot developers playing active roles in business model definition).

Moreover, partners' roles change during the project evolution as the result of the technical evolution of the project itself. For example, Stakeholder Management Assessment includes the former infrastructure providers as platform deployers in Y2, as a result of the transition from the technical phase of data integration and infrastructure development to the phase of definition of the open SDI4Apps platform.

3.1 Roles of partners

Figure 2 describes the evolution of SDI4Apps Stakeholders engagement across SDI4Apps formal tasks.

Each bar represents the share of partners performing activities in the eight WPs, regardless of their formal role in the project (e.g. as task leaders, partners or "collaborators" from other WPs).

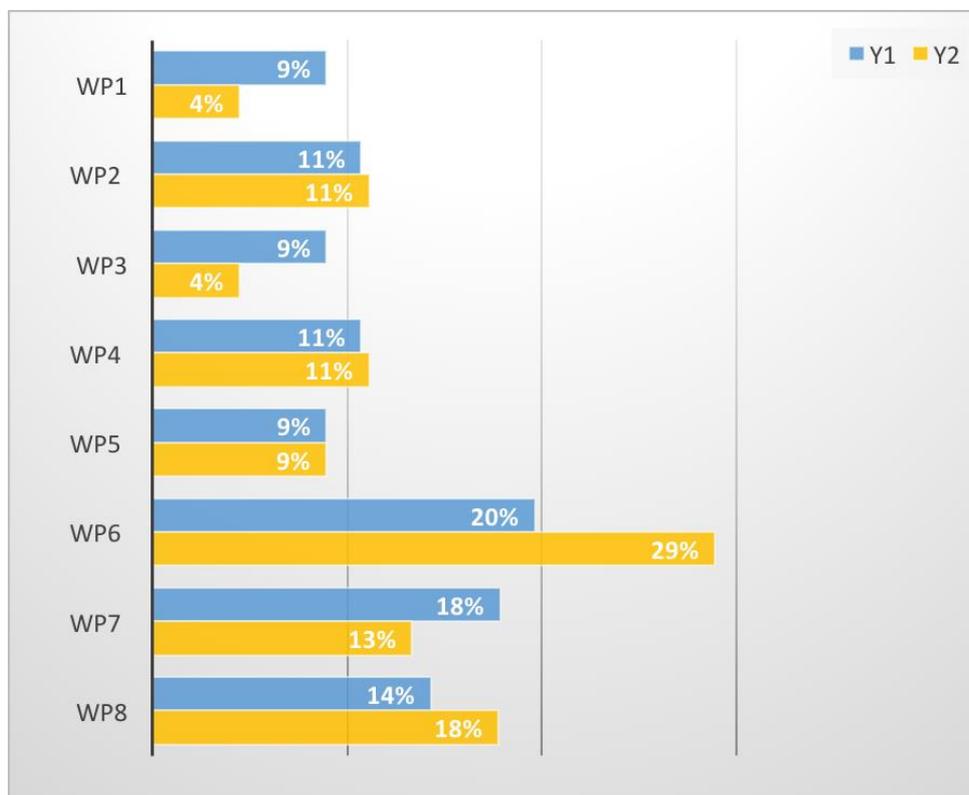


Figure 2: Evolution of partners' engagement across WPs
(% of partners involved in each WP)

As expected, the mix of activities across WPs changed from Y1 to Y2, with a shift from coordination activities and basic functionality development to an increasing engagement in Implementation of Internal Pilot Applications (WP6) and Dissemination Activities and Business Modeling (WP8).

The transition towards the SDI4Apps community space has been managed by progressively focusing on the involvement of external data providers and app developers through dissemination and direct external stakeholder engagement activities, such as hackatons and sprint codes. As a result of the increasingly

technical content of this kind of activities, a minor share of partners (mainly pilot developers) are actually strongly engaged in Support to External Developers (WP7).

Partners' roles across WPs are represented in Figure 3.

Non-significant differences are reported in terms of relative activities between pilot developers, platform deployers and non-technical partners across WPs.

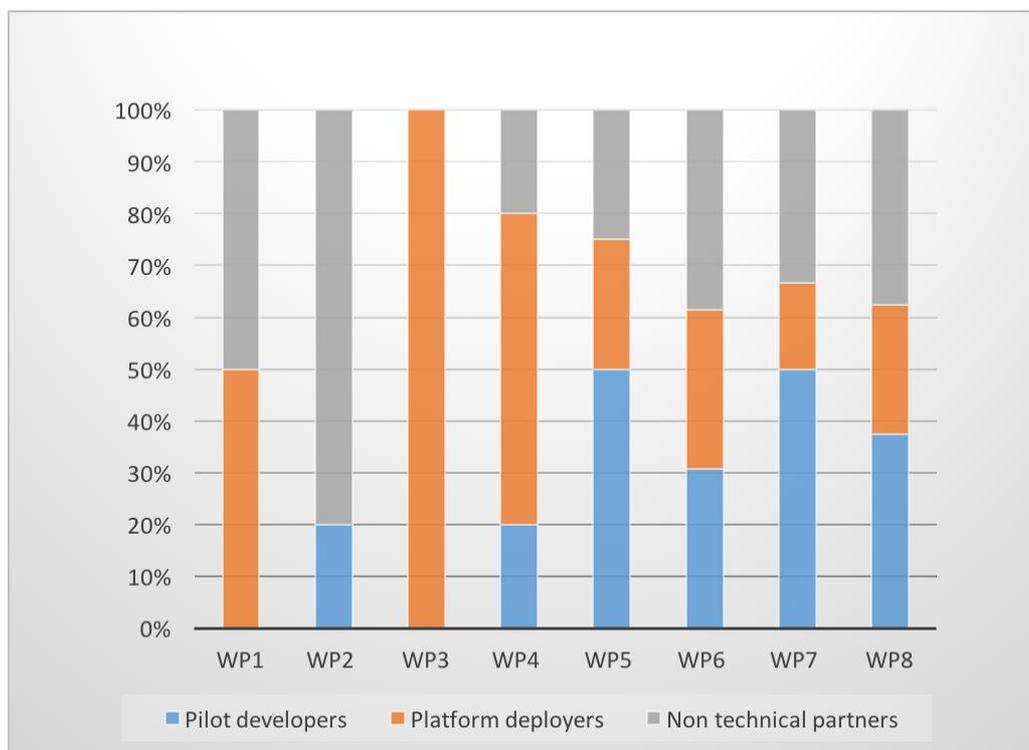


Figure 3: Roles of partners across WPs
(% of partners involved in each WP according to their role)

3.2 Collaboration and networking

We asked internal partners to evaluate the perceived intensity of collaboration (co-working) with the project coordinator, partners involved in the same WP and other partners working in different WPs respectively. Consistently with Y1, the evaluation was based on a Likert scale ranging from 1 (null collaboration) to 5 (very high collaboration).

For reporting purposes we defined:

- **Internal collaboration** as the intensity of information flows and networking among partners working in the same WP;
- **Collaboration with PC** as the intensity of information flows to/from the Project Coordinator;

- **External collaboration** as the intensity of information flows and networking among partners and other members of the Consortium working in different WPs.

Figure 4 reports the evolution of partners' collaboration in the first two years of the SDI4Apps project.

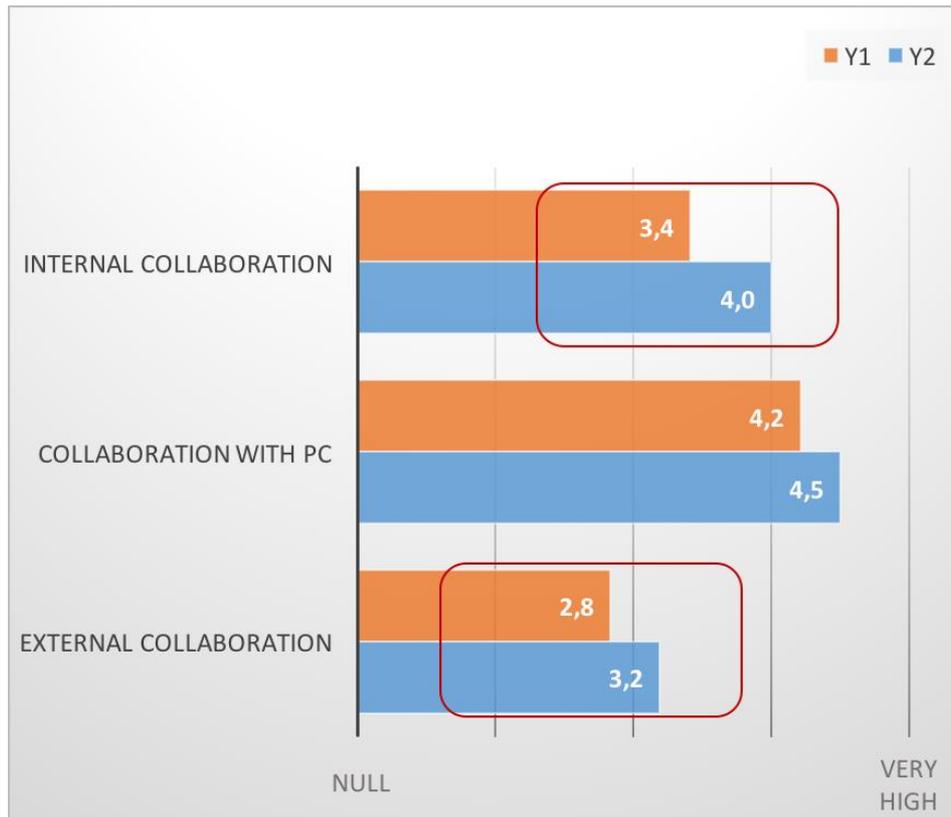


Figure 4: Evolution of partners' collaboration in the first two years of the SDI4Apps project
(mean values)

As expected, collaboration paths in the project strictly follow formal role distribution. However, the overall degree of collaboration, as proxied by information flows inside and outside the project WPs has increased.

The level of external collaboration (i.e. collaboration among partners and other members of the consortium working in different WPs) increased from Y1 to Y2 but still stands on a mean value of 3,2. We expect a further increase in this value from 2 aspects:

- Data integration and testing activities, will be the result of increasing collaboration between pilot developers and platform deployers.
- Business modelling will increasingly benefit from the contribution of technical partners (in particular, pilot developers and the project coordinator).

Increased collaboration among partners has also led to closer integration between the technical and non-technical partners and competences in the consortium, than reported after Y1.

In Figure 5 we represent the perceived intensity of external collaboration according to partner's roles.

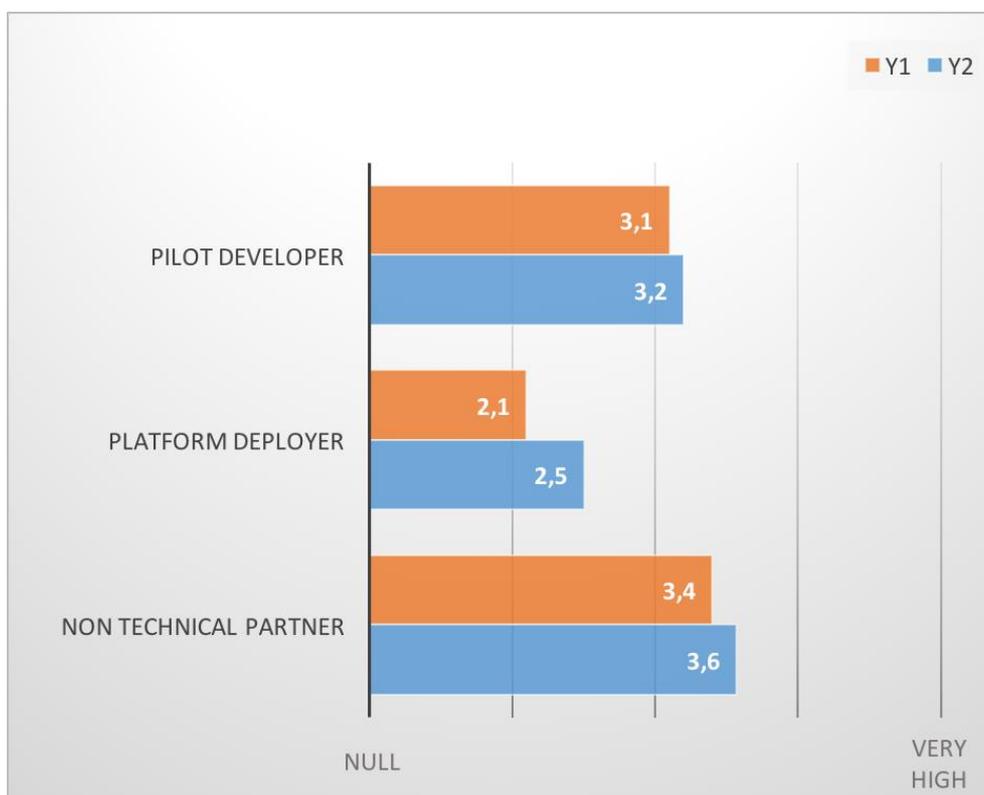


Figure 5: Perceived intensity of collaboration across WPs according to partners' role
(mean values)

The general increase in external collaboration is visible across all partners' roles.

With respect to Y1 pilot developers and platform deployers are gaining increasing centrality, signifying the central and increasing role of the pilot applications, as validators for the SDI4Apps platform. However, platform deployers still perceive a very low intensity of collaboration with partners from other WPs in the project and we expect that this value will increase next year.

Figure 6 shows the result of a network analysis performed consistently with Y1 on the intensity of partners' interaction and networking. To this purpose, partners were grouped by roles, and mean values of ties according to direction and intensity are reported.

Y2 results show:

- Very strong ties among pilot developers
- Very strong ties among non-technical partners
- Very strong ties between pilot developers and non-technical partners
- Medium/Weak ties among platform deployers and pilot developers/non-technical partners respectively
- Also, weak collaboration is perceived among platform deployers

With respect to Y1 we report a consistent growth in the strength of ties linking non-technical partners and pilot developers, as a result of the transition from exploration activities (Y1) to technology exploitation activities (Y2) involving external communities and requiring a mix of different competences (technological and market competences). For this reason, in the transition from Y2 to Y3 we expect this value to increase for platform deployers as well.

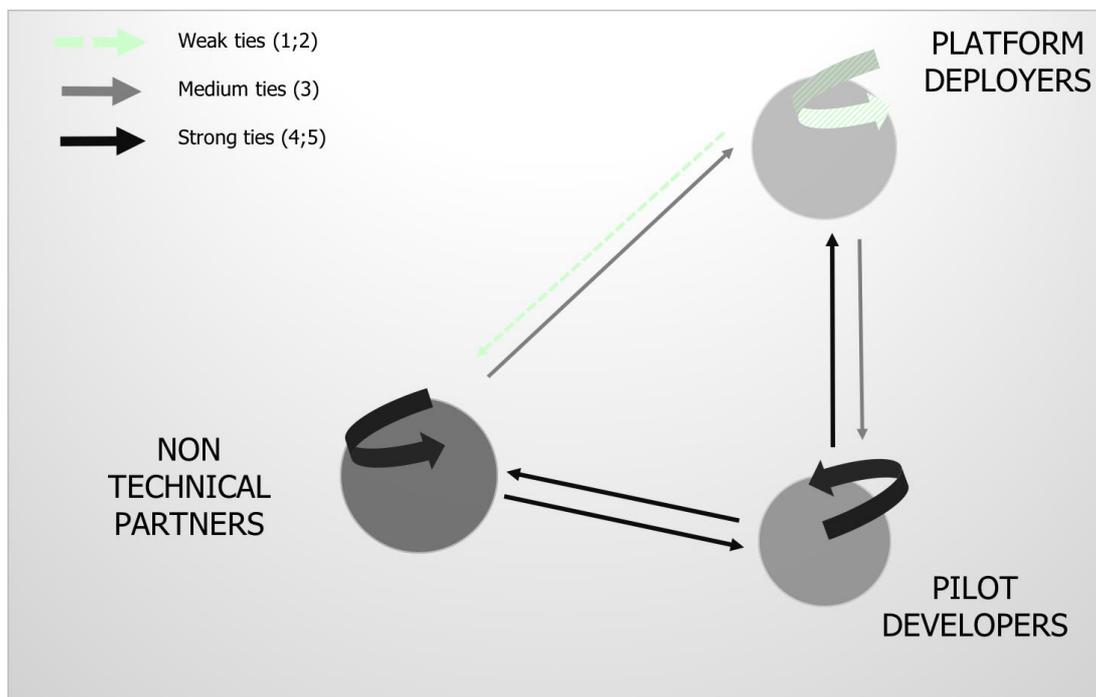


Figure 6: Interaction and networking according to partners' roles during the second year of the project
(mean values of ties according to direction)

3.3 Internal Stakeholders commitment

Internal Stakeholders commitment assessment follows the evolution of partners' involvement in the project and the degree of personal interest to guarantee the SDI4Apps open platform sustainability over time.

It provides very useful knowledge for project management in general, especially from the risk management perspective.

Partners were asked to evaluate their actual and future commitment to the SDI4Apps project and sustainability of its results according to a Likert Scale ranging from 1 (null) to 5 (very high).

For reporting purposes, we defined:

Actual commitment - the degree of actual involvement, measured in terms of time spent in doing activities, personal effort and general interest in the SDI4Apps project.

Future commitment - the degree of personal interest to guarantee the SDI4Apps platform success and sustainability after the end of the project.

Overall commitment - as the average value of actual and future commitment of the local community in the project.

Further, we compared results over time (Figure 7)

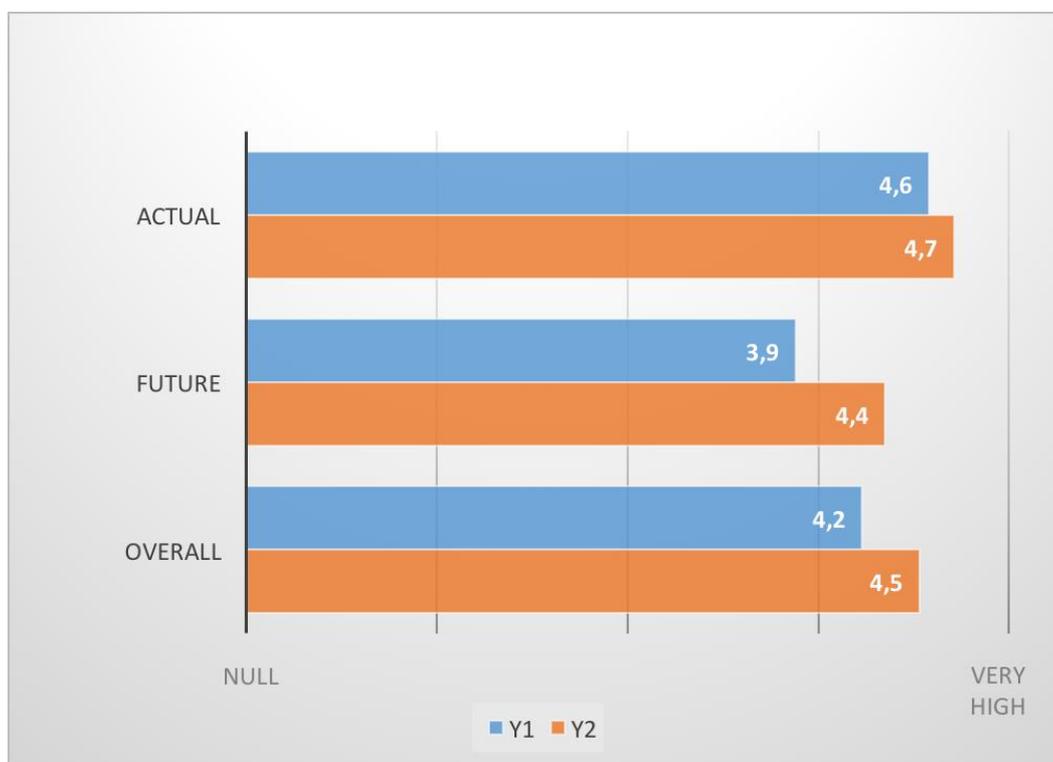


Figure 7: Evolution of Internal Stakeholders commitment in the SDI4Apps project
(mean values)

Results show a strong and increasing overall commitment of the local community in the SDI4Apps project. The mean of 18 partners' evaluation reaches the value of 4.5 over a maximum of 5 (in Y1 it was 4.2).

As expected, we observe a strong variability of commitment indicators over time.

The observed increment in the overall commitment is largely due to a rising interest in the future success of the project (reaching 4.4 over 5, while it was 3.9 at the end of Y1).

As expected, during Y2 the SDI4Apps local community is still deeply involved in activities related to the project execution, thus perceiving a high degree of actual commitment in the project.

At the same time, partners are actually tackling the first milestone of the SDI4Apps project evolution in terms of changing configurations of involved stakeholders (i.e. from local communities to external communities of stakeholders involved in each pilot)

In other words, partners are actually managing the transition to the SDI4Apps Community Space, according to the technical transition from data integration and infrastructure development to the definition and testing of the SDI4Apps platform.

In spite of the surge of the overall commitment in the project, the future commitment indicator is still lower on average with respect to the actual commitment indicator. We expect a sharp increase of this indicator in Y3, during the transition from the SDI4Apps Community Space to the SDI4Apps online and offline Stakeholders Communities (involved in the platform).

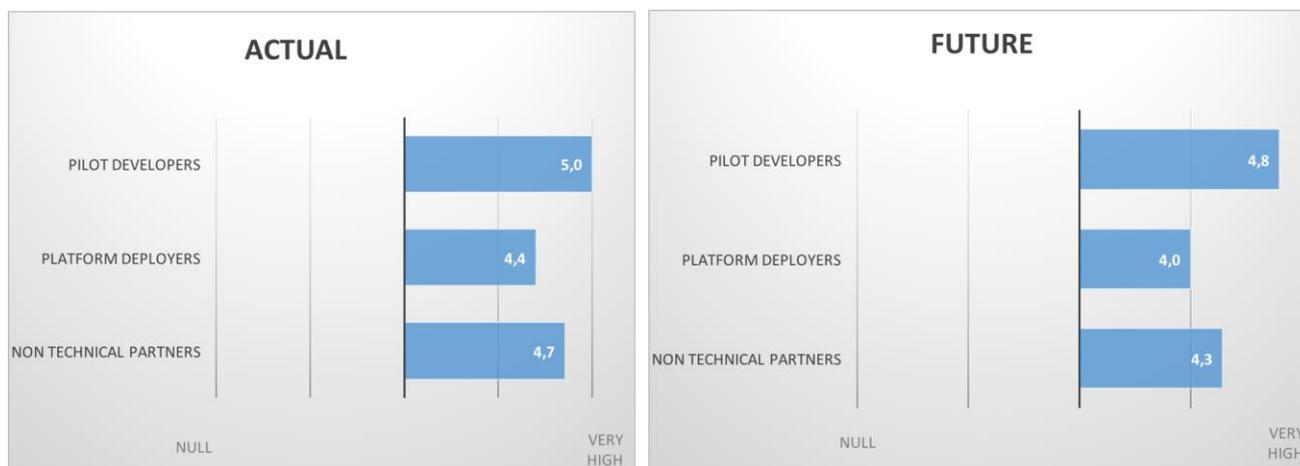


Figure 8: Internal Stakeholders commitment in the SDI4Apps project
(mean values)

Internal stakeholders’ commitment in the SDI4Apps project shows a high variability over time if examined according to partners’ roles.

While in year one platform developers claimed the highest effort in current project activities, mainly due to the technical test methodology development (D3.5) running at the time, pilot developers and non-technical partners appear as the most involved groups in year two (the average scores are 5 and 4.7 respectively). Besides the strong commitment towards actual and future collaboration by pilot developers and non-technical partners we observe a questionable commitment by platform deployers both towards actual and future collaboration.

We estimate to observe further variability in the commitment index over time, since the measurement reflects partners’ current effort according to the role played.

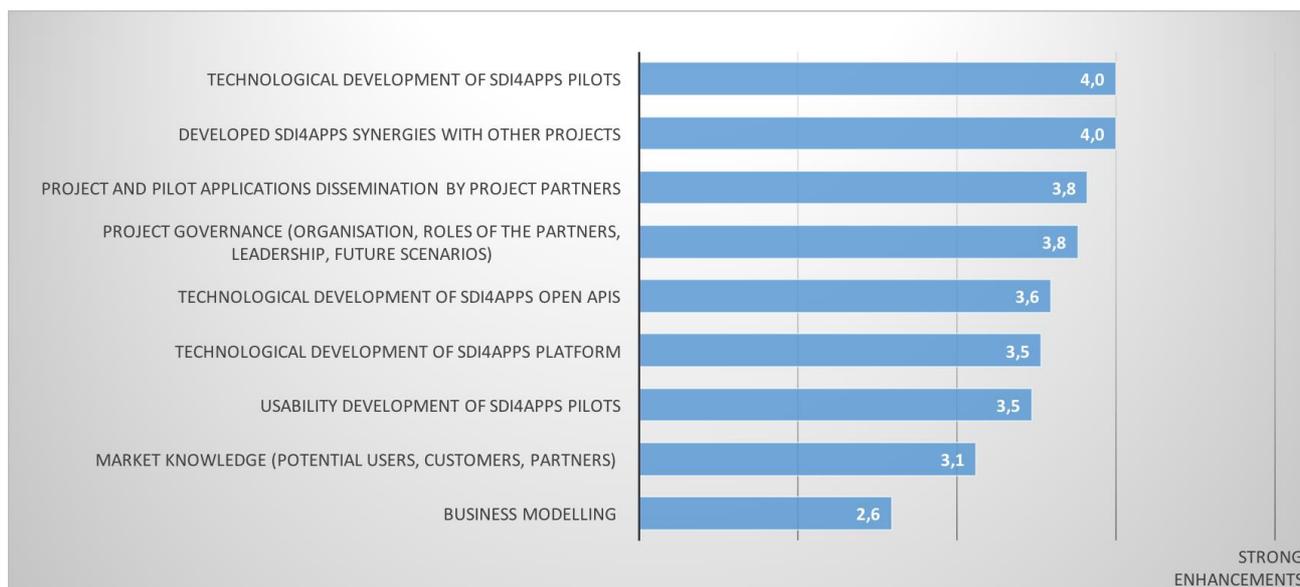


Figure 9: Partners' perception of the project evolution from year 1 to year 2
(mean values)

We furthermore asked partners to report their perception of the project evolution from year 1 to year 2 in a scale ranging from 1 (no enhancements) to 5 (strong enhancements).

Partners report activities related to technological development of SDI4Apps pilots and synergies with other projects at the first positions, followed by dissemination activities and community building, important to reach the critical mass necessary to scale up the technology at the end of Y3.

In fact, at the time of the survey (February 2016) current prominent technical activities are related to pilot development and testing,, to dissemination activities, and community building, through the development of synergies with other projects.

3.4 Business model definition

While partners reached consent on the evolution of project governance (with respect to organization, role of partners, leadership and future scenarios), market knowledge and business modeling (BM) are still perceived as less addressed activities.

Figure 10 clearly shows that partners' perception about their involvement in the definition of the SDI4Apps BM shows a low score. Still its position falls below the threshold of a medium degree of collaboration (2.3).

This is a strong signal of the fact that local stakeholders do not feel sufficiently involved in the definition of the SDI4Apps BM. At the same time, increased involvement of external stakeholders and closer internal collaboration among technical and non-technical partners, have provided more solid ground for business model exploration and modelling than in Y1, and is expected to be strongly addressed in Y3, based on the initial business model D8.5.

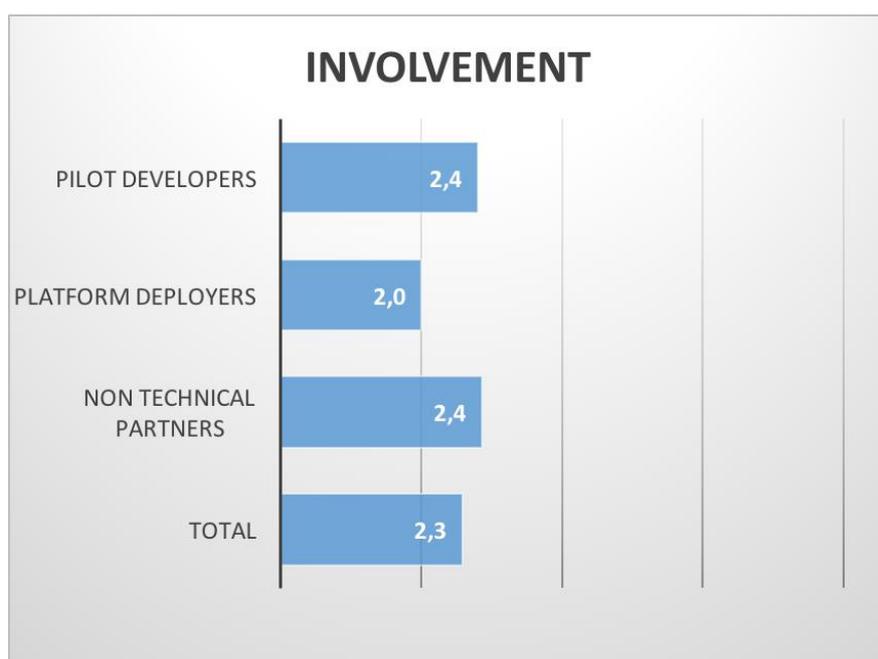


Figure 10: Partners' involvement in the SDI4Apps BM definition
(mean values)

With respect to partners' roles, the actual degree of involvement is higher for pilot developers and non-technical partners than for platform deployers. However, partners' commitment in performing activities related to the definition and development of the SDI4Apps BM remains high (Figure 11).

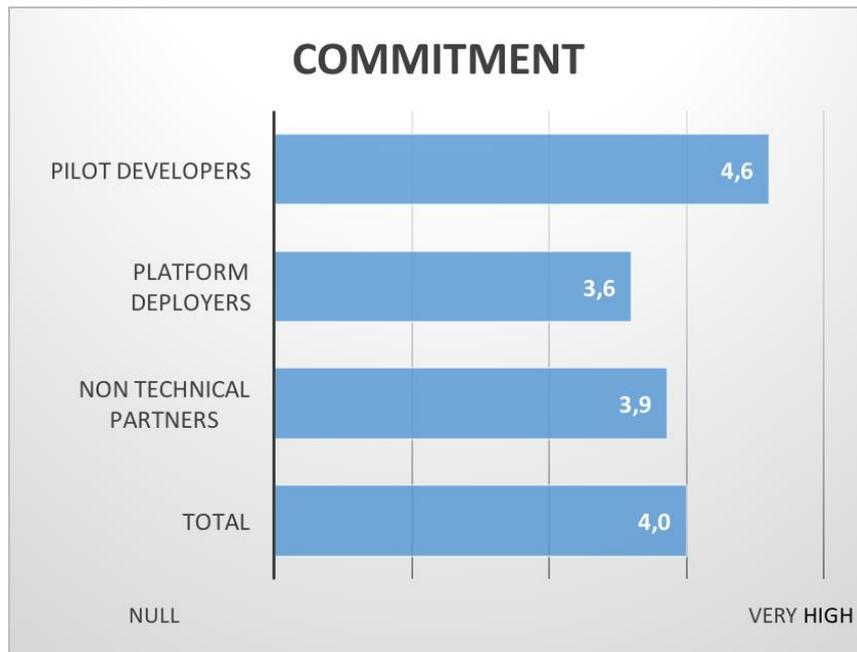


Figure11: Partners' commitment in the SDI4Apps BM definition
(mean values)

As a result, all partners (and, in particular, pilot developers feel ready to get involved in the definition of the BM). In other terms, partners agree that one of the short term goals of SDI4Apps is the clear definition of a BM: up to this point, we expect high and increasing levels of partners' involvement in this task since the end of Y2.

Further, partners' consensus on SDI4Apps exploitation opportunities and BM orientation was explored, and the main results are reported in Figure 12.

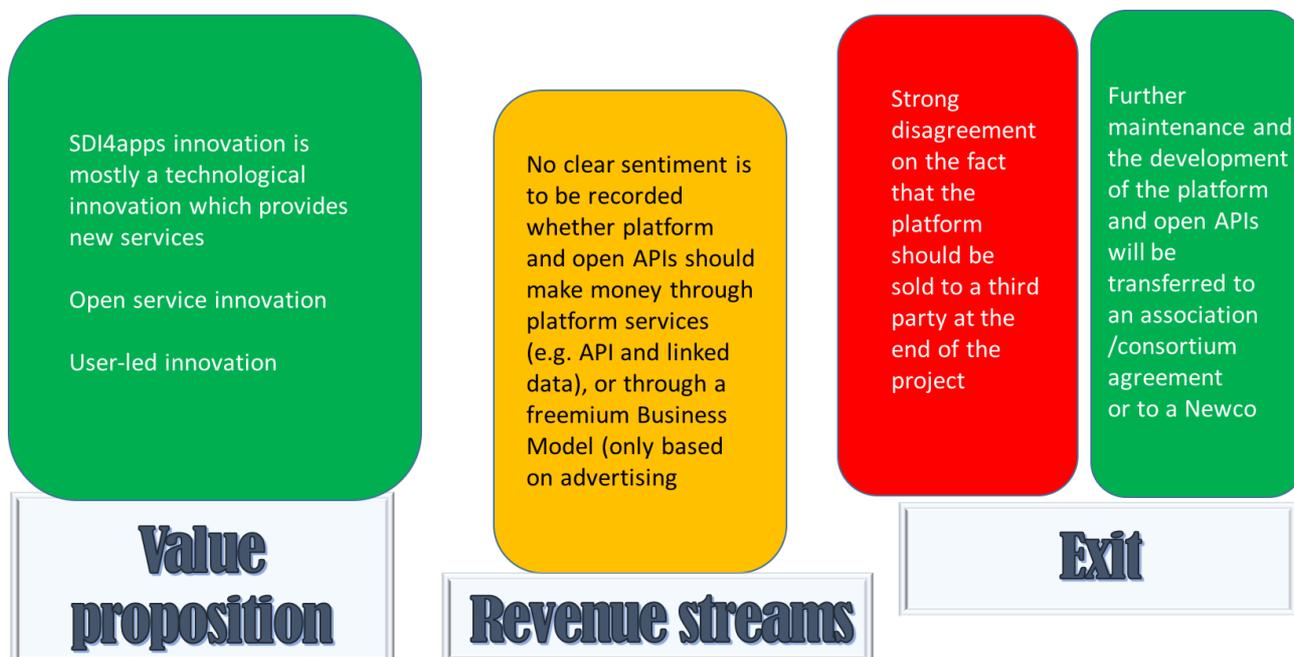


Figure 12: Consensus among partners on SDI4Apps BM orientation

Partners agree with most items related to the definition of the SDI4Apps value proposition.

The highest degree of consensus is reached around the nature of SDI4Apps innovation³.

In Y2, and consistently with Y1, platform deployers converge on the technological option (the ultimate end of the project will be to provide a leading-edge platform for open APIs), while pilot developers give increasing importance to the services content of SDI4Apps pilots and platform (building a learning network for developers and public stakeholders).

As a result, general consensus is reached on the following: SDI4apps innovation is the result of a technology exploitation (rather than exploration) project, and it will be strongly focused on a service dimension (data sharing, data access and further reuse).

Further, the transition towards external online and offline communities (Y3) will be encouraged by explicit shared value that the SDI4Apps platform and pilots will provide to users, customers and partners in a variety of knowledge domains.

Up to this point, partners agree that the exploitation of SDI4Apps technology will require a strong level of user engagement.

As a consequence, support activities to external communities of app developers and key users will be increasingly important.

In contrast, no clear sentiment is to be recorded yet about the SDI4Apps BM revenue streams.

³ CNCT Innovation Questionnaire (Innovation Radar) Year 1.

Partners disagree on the possibility of commercializing both the platform and the open APIs through a new company, while consensus is reached on an open service business model, based on API and linked data.

Further, weak consensus is reached upon two alternative options concerning revenue streams:

- The SDI4Apps BM will be based on revenues coming from platform services (API and linked data). In this revenue model, tool boxes (i.e. bundles of personalised services) may be sold to external app developers
- Platform services will not be included as a source of revenues. SDI4Apps will be exploited through a freemium BM with revenues based only on advertising.

With respect to exit at the end of the project funding, partners strongly disagree with the fact that the platform should be sold to a third party. They rather agree that further maintenance and the development of the platform and open APIs will be transferred to an association/consortium agreement. This also shows a strong and increased partners commitment and invested interest in the sustainability of the project results, platform and pilot applications.

4 FROM LOCAL TO EXTERNAL STAKEHOLDERS

The transition from SDI4Apps local stakeholders community (Y1) to the SDI4Apps community space (Y2) in the Stakeholder Management perspective implies a shift from mapping local stakeholders and their interactions to mapping internal/external stakeholders involved in each pilot.

Figure 13 shows the list of applications being developed on top of SDI4Apps pilots, as a result of the exploitation phase of the project.

SDI4Apps Stakeholders Management Y2

How many Apps are being developed from each Pilot ?

Pilot number	Pilot name	Number	Categories
PILOT1	EASY DATA ACCESS	2	European Tourism Indicator System (ETIS) Ground-Truth Protected Heritage Sites
PILOT2	OPEN SMART TOURIST DATA	3	Open Smart Tourist Data Application Open Smart Tourist Crowdsourcing Open Smart Advertisement
PILOT3	OPEN SENSOR NETWORK	2	Sensors catalogue Sensor visualisation
PILOT4	OPEN LAND USE MAP	3	Data editor Searching and visualisation Apps Metadata catalogue
PILOT5	OPEN INSPIRE4YOUTH	2	Data editor Search and visualisation Apps
PILOT6	ECOSYSTEM SERVICES	2	Ecosystem services (ESS) portal App to support ESS projects (e.g. Tourism, city environment)

Figure 13: SDI4Apps pilot exploitation

Figure 14 reports the level of involvement and contribution of partners to each pilot, regardless of their role: the level is expressed in a scale from 1 to 5.

We find an higher-than-average degree of involvement of partners in Smart Tourist Data and Open land Use pilots, while other pilots (e.g. Easy data access, Open Sensors Network appear more “self contained” in their exploitation phase).

The indicator of partners’ involvement in pilots exploitation as members of SDI4Apps internal communities reflects the level of pilot stage of development.

Indeed, pilots in an advanced development phase appear more “self-contained”, while we find the highest degree of partners’ collaboration in pilots that still are in a lower stage of development⁴.

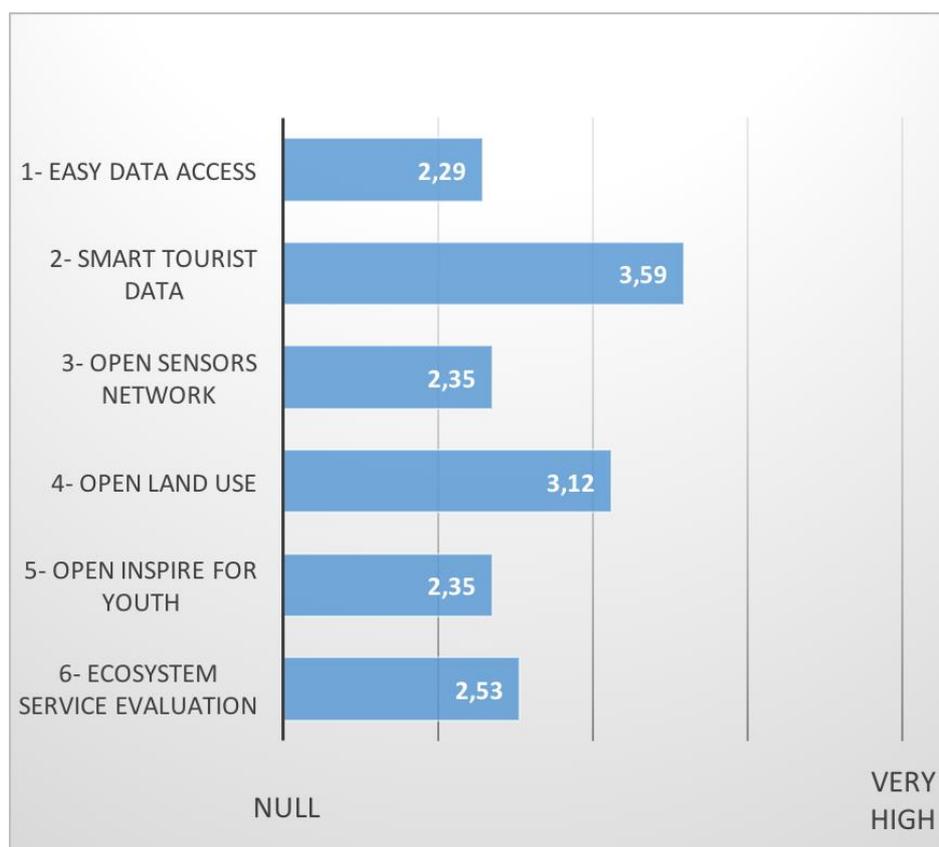


Figure 14: Level of involvement and contribution of partners to each individual pilot
(mean values)

Figure 15 reports the level of involvement and contribution of partners to each pilot, according to partners’ roles.

Pilot 2 (Smart Tourist Data) and Pilot 4 (Open land use) are benefiting from the “external” contribution of both platform deployers and non-technical partners. These pilots have also been more addressed by the external stakeholders during the hackatons and dissemination events.

The latter perceive a good degree of involvement in the development of Pilot 6 (Ecosystem service evaluation).

⁴ See *infra*, 4.1 “Pilot scenarios: external communities involvement”.

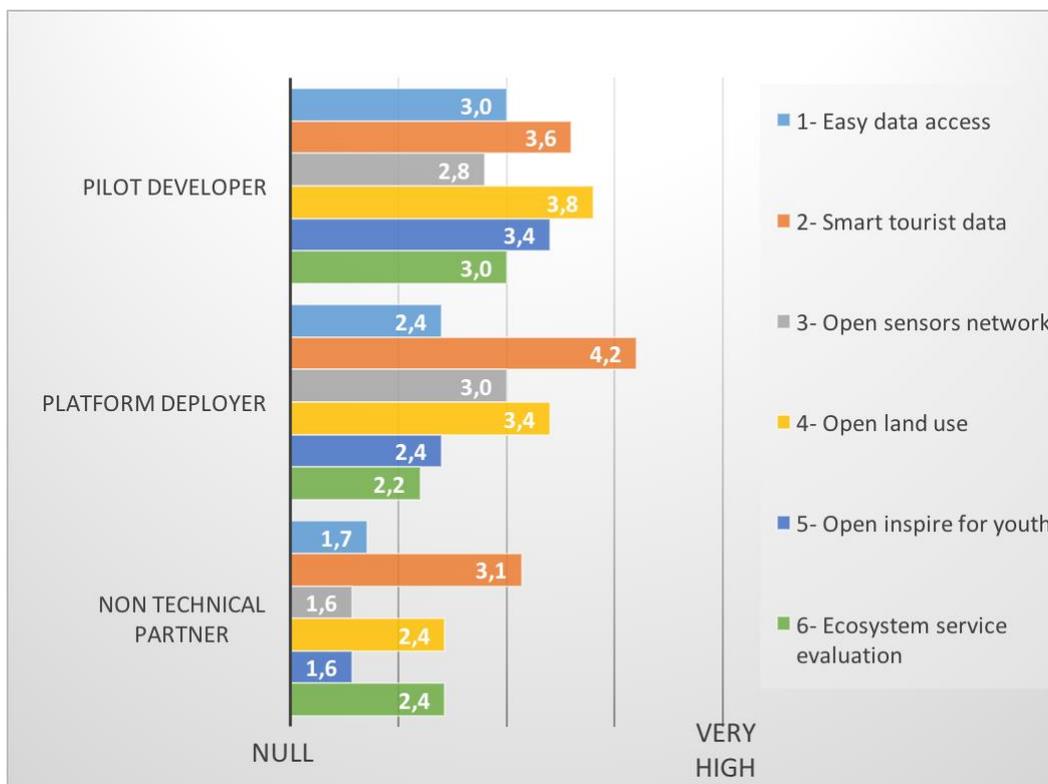


Figure 15: Level of involvement and contribution of partners to each individual pilot, according to roles
(mean values)

4.1 Pilot scenarios: external communities involvement

In order to manage the transition from SDI4Apps local stakeholders community to the SDI4Apps community space we provide a first map internal and external stakeholders involved in each pilot.

To this purpose, and consistently with other tasks -social validation methodology (T2.2), internal validation (T2.3), external validation (T2.4) tasks and, outside WP2, business modeling (T8.6)- we defined and mapped for each of the 6 pilots the following SDI4apps external communities:



External Partners - Mainly data providers and non-technical partners interested in the platform: experts, enterprises, companies & SMEs, public bodies involved in pilot exploitation;



External Customers - Mainly communities of application developers; potential “clients” in the SDI4Apps BM (i.e. “willing to pay” for the use of platform services linked to open data)



External Users - Citizens, public bodies, other local communities involved as final users of the SDI4Apps platform applications

We hereby describe actual and potential partners, customers and users for each pilot application.

4.2.1 Easy data Access



Figure 16: Easy data access - Clients, Customers and Potential Users

Figure 16 shows the tagcloud of potential and actual clients customers and potential users of Pilot 1 (Easy data access). The most cited items are Burren Geopark, Irish National Monuments Service, common citizens, experts, the European Geoparks network and Irish Heritage Council. Experts, managers and the staff of Burren Geopark and Irish Monuments Field Officers are actual external partners for the pilot. The European Geoparks network and Burren tourism culture and craft companies are listed among the potential future customers.

Citizens, (e.g. people living and/or visiting the Burren National Parks), decision makers in the Irish National Parks Wildlife Service (NPWS), Irish Heritage Council, Irish National Monuments Service, Local Authorities, Irish Government Department of Arts, Heritage & the Gaeltacht, and other Government Departments are listed among the potential users.

4.2.2 Smart Tourist Data



Figure 17: Open Smart Tourist data - Clients, Customers and Potential Users

Figure 17 shows the tagcloud of potential and actual clients customers and potential users of Pilot 2 (Open Smart Tourist Data). Municipalities, Latvian ICT Cluster and Vidzeme Planning Region are listed as the main partners sustaining exploitation and further development of the pilot. Latvian ICT companies (communities of developers and travel agencies) are listed as potential customers for the pilot and the platform itself. Citizens, public bodies, creative industries, tourism companies, local and regional tourist information centres will be considered as external users of the pilot.

4.2.3 Open Sensor Network



Figure 18: Open Sensor Network - Clients, Customers and Potential Users

Pilot 3 (Open Sensor Network) is the one showing less variety of external communities that are/might be involved in pilot development and use. This is due to the fact that the pilot is in a different (earlier) stage of development with respect to Pilot 1 and Pilot 2. Actual partners for Open Sensor Network are WirelessInfo, IMCS and CCSS, while a great potential is found in involving MJM, Pessl, and the FOODIE consortium as potential new partners (mainly data providers).

4.2.4 Open Land Use



Figure 19: Open Land Use - Clients, Customers and Potential Users

The tagcloud for Pilot 4 (Open Land Use) shows a high variety in the answer as related to different groups of external stakeholders (partners, clients, users). The pilot is indeed suited for a large array of external communities of external stakeholders.

Open land use potential customers are companies from the Latvian ICT cluster and Latvian logistics cluster. Potential users are identified in municipalities of Vidzeme planning region and in common citizens.

4.2.5 Open Inspire4Youth



Figure 20. Open Inspire 4 Youth - Clients, Customers and Potential Users

Figure 20 shows the tagcloud of partners, customers and potential users for Pilot 5 (Open Inspire 4 Youth). The pilot appears still in its infant stage of development, and for this reason a precise list of potential partners, customers and users could not be provided at the moment. OSM are indicated as actual partner whereas SMEs, NGOs are potential customers.

4.2.6 Ecosystem Services Evaluation

Figure 21 shows the tagcloud of external communities for Pilot 6, (Ecosystem service evaluation). Actual partners are the Ministry of the environment of Slovak Republic and the University of Constantine the Philosopher. Pilot 6 shows a wide list of potential partners, ranging from Slovak Watermanagement Enterprises, the Ministry of Transport, Construction and Regional Development of the Slovak Republic the Slovak Hydrometeorological Institute, the Soil Science and Conservation Research Institute, the National Forest Centre, the State nature conservancy of the Slovak republic. Potential customers are CETIP and EEA, while one identified potential user at the moment is the Technical University of Zvolen.



Figure 21: Ecosystem Services Evaluation - Clients, Customers and Potential Users

5 THE SDI4APPS COMMUNITY SPACE: FIRST SCENARIOS

This final section reports first scenarios of the engagement of external institutions in the transition from the definition of the Open SDI4Apps platform / SDI4Apps Community Space (Y2) to dissemination and support to external developers / SDI4Apps external online and offline communities (Y3).

Figure 22 reports first scenarios of external actors forms of involvement according to the nature of the external community (partners, customers and users).

5.1 Partners involvement

Partners' role among the three interconnected SDI4Apps external communities will be crucial for successful technology exploitation, business modeling and project sustainability.

SDI4Apps platform and pilots scalability is the essential condition to provide shared value among internal and external stakeholders. One of the main objectives in Y2 is to reach a critical mass of partners involved in sharing data for further reuse in new apps development; dissemination activities like workshops, hackathons and code camps are identified as a priority way to reach this target.

5.2 Customers involvement

The involvement of customers is fundamental to rapidly reach a high scalability of the platform BM. The most cited way to involve customers is the organization of hackathons and code camps, and particularly relevant here is the direct contact with identified potential customers. Customers involvement in the SDI4Apps platform enable to start a data crowdsourcing process, and this could lead to new business opportunity through the improvement of the platform services.

5.3 Users involvement

Another important external SDI4Apps community is composed by users. Users are involved in different stages of the SDI4Apps platform development, from apps beta testing to the definition of the main features, until the end use.

Among the suggested ways to involve users in different stages of the technology development gaming/gamification strategies appear as the most relevant especially in the startup phase in order to reach a consistent users base.

PARTNERS



Workshops Hackathons , Code camps

Meetings, Conferences, social networks

SDI4Apps Platform's APIs fully defined and all of its Enablers operational.

All Apps running using the SDI4Apps Platform APIs and Enablers.

Communication events with potential partners - meetings, workshops, conferences, demonstrations

CUSTOMERS



Hackathons , Code camps

Direct contact with identified customers

All Apps running using the SDI4Apps Platform and Enablers.

USERS



Workshops, hackathons

Serious gaming, gamification strategies

All Apps running in a user-friendly way.

Figure 22: Partners, customers and users involvement scenarios

CONCLUSION

The goal of this second Stakeholder Management Report was to focus on the SDI4Apps platform definition through the transition from internal communities of SDI4Apps local stakeholders to external communities of partners, users and customers being involved in the definition of the SDI4Apps Community space.

In its first part, D2.1.2 traces the evolution of the local stakeholder community from Y1 to Y2 by describing the roles and the complex interactions among the partners, mapping their network and taking a snapshot on how the project is perceived from the inside.

The community of partners is extremely heterogeneous, with two distinct competencies groups (technical and non-technical) and different sub-roles (pilot developers, platform deployers, consultants and project coordinator). Moreover, some of the 18 consortium members can play two or more sub-roles at a time, tightening the complexity of the network. Nevertheless, the Y2 results show an ever increasing internal collaboration among partners with different competencies, compared to Y1.

In the second year, results are showing that the community collaborated increasingly and actively in pilot development activities, support to external developers and dissemination activities, with a pivotal role of pilot developers and UWB as project coordinator.

Pilot developers and non-technical partners were at the center of the communication channels: they were able to strengthen their networking ties in order to accomplish objectives related to community services.

Platform deployers are gaining centrality in the project, although their position in the network is still perceived as in an early phase. However, in the second year of the project, technical partners increasingly played non-technical roles, showing increasing commitment in community building and business planning activity.

Overall, the commitment of the local stakeholders' community is strong and increasing, and the focus on the sustainability of the project over time is particularly present among the members focused on developing the pilots and among non-technical partners, thus giving solid grounds for the development and deployment of a sustainable business model.

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