D4.1 NEEDS ASSESSMENT REPORT

WP 4

24 July 2019

Report to identify, analyse and assess the needs of farmers and DIHs in relation to digital transformation.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement № 818182

DOCUMENT IDENTIFICATION

Project	SmartAgriHubs
Project Full Title	Connecting the dots to unleash the innovation potential for digital transformation of the European agri-food sector
Project Number	No. 818182
Starting Date	November 1st, 2018
Duration	4 years
H2020 Call ID & Topic	DT-RUR-12-2018: ICT Innovation for agriculture – Digital Innovation Hubs for Agriculture
Website	smartagrihubs.eu
File Name	D4.1 Needs Assessment Report – 2nd release
Date	24/07/2019
Version	2.0
Status	Final; second version
Dissemination level	Public
Author	Judit Anda Mª Ángeles Lora Noemí Molina Agustín Serrano Miguel Calero Frank Berkers Caroline Van der Weerdt Milou Derks Tineke Hof Stavros Tsitouras Ahmad Issa
Contact details of the coordinator	George Beers george.beers@wur.nl

LIST OF ABBREVIATIONS

Abbreviation	Explanation
CAPDER	Regional Ministry of Agriculture, Livestock, Fisheries and Sustainable Development. Andalusia.
CC	Competence Center
D4.1	Deliverable 4.1
DEI	Digitising European Industry
DIHs	Digital Innovation Hubs
DSM	Digital Single Market
EC	European Commission
EU	European Union
ICT	Information and Communications Technology
IT	Information Technology
IoT	Internet of Things
ICT	Information and Communications Technology
IT	Information Technology
IEs	Innovation Experiments
ISMM	Innovation Services Maturity Model
FIEs	Flagship Innovation Experiments
GDPR	General Data Protection Regulation
RIS3	Research and Innovation Strategy for Smart Specialisation
RCs	Regional Clusters
SAHs	SmartAgriHubs
SMEs	Small Medium Enterprises
SWOT	Strengths, Weaknesses, Opportunities and Threats
TNO	The Netherlands Organisation for applied scientific research
WP	Work Package
WUR	Wageningen University and Research

LIST OF FIGURES

LIST OF TABLES

TABLE OF CONTENTS

PROJECT SUMMARY

Digital technologies enable a transformation into data-driven, intelligent, agile and autonomous farm operations, and are generally considered as a key to address the grand challenges for agriculture. Recent initiatives showed the eagerness of the sector to seize the opportunities offered by ICT and in particular data-oriented technologies. However, current available applications are still fragmented and mainly used by a small group of early adopters. Against this background, SmartAgriHubs (SAH) has the potential to be a real game changer in the adoption of digital solutions by the farming sector.

SAH will leverage, strengthen and connect local DIHs and numerous Competence Centres (CCs) throughout Europe. The project already put together a large initial network of 140 DIHs by building on its existing projects and ecosystems such as Internet of Food and Farm (IoF2020). All DIHs are aligned with 9 regional clusters, which are led by organizations that are closely related to national or regional digitization initiatives and funds. DIHs will be empowered and supported in their development, to be able to carry out high-performance Innovation Experiments (IEs). SAH already identified 28 Flagship Innovation Experiments (FIEs), which are examples of outstanding, innovative and successful IEs, where ideas, concepts and prototypes are further developed and introduced into the market.

SAH uses a multi-actor approach based on a vast network of start-ups, SMEs, business and service providers, technology experts and end-users. End-users from the agri-food sector are at the heart of the project and the driving force of the digital transformation.

Led by the Wageningen University and Research (WUR), SAH consists of a pan-European consortium of over 160 Partners representing all EU Member States. SAH is part of Horizon2020 and is supported by the European Commission with a budget of €20 million.

EXECUTIVE SUMMARY

Digital Innovation Hubs (DIHs) are one of the EU key initiatives to support digital transformation in all sectors. SmartAgriHubs focuses on DIHs in the agrifood sector. However, DIHs are emerging in the regions without a clear strategy nor organized connections within a network or with the agrifood sector. This lack of contact with end users results in a gap between the farming sector needs and the services offered by DIHs.

The Needs Assessment conducted by SmartAgriHubs marks the starting point for the project's activities on improving the capabilities of Digital Innovation Hubs (DIHs). DIHs play an essential role in delivering relevant services as a 'one-stop-shopping-window' for parties working on digital innovations in agriculture. By means of the assessment, gaps were identified between what DIHs deliver and what the farming sector needs. This in turn provides the SmartAgriHubs community actual demand-driven guidance on capability building priorities.

Overall the results point towards a focus on productivity as the main driver of digital transformation in the farming sector. Less importance is ascribed to business model innovation and customer intimacy; yet these are key for ensuring the sustainability of the sector.

We analysed the following items: Ecosystem, Digitalisation Needs, Vision on digitalisation and DIH Innovation services:

Ecosystem

Most network connections of hubs are with University/Research Centres, local SMEs, Competence Centres, farmer associations and communities, local governments and education & training institutes. Connections with larger local businesses and start-up programmes are less usual. A starting point is for DIHs to familiarise more with the farming sector in their own ecosystem, as the data point towards a disconnect here.

Digitalisation needs

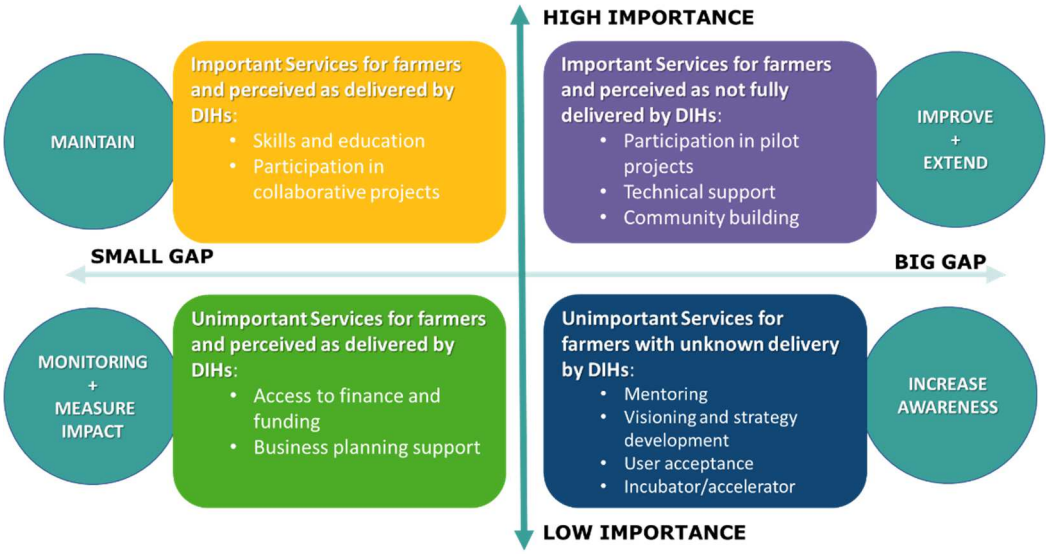
DIHs are aligned with farmers in their digitalisation needs: both state "optimise production" as most important need, and "change business models" amongst the least needed. This prioritisation of production-related issues is also observed in the digital solutions that are most popular amongst respondents: sensoring, predictive analysis and business intelligence.

Vision on digitalisation

"Data" and "mindset" are most prevalent associations with the concept of digitalisation. In turn, items relating to customers and marketing were seldomly selected when both farmers and DIHs were asked to share their vision. When asking about the mindset regarding innovation in general, we found that bigger farms give more priority to innovating than smaller farms, who are more focused on profitability.

Innovation services

By asking both the DIHs and the farming sector how important they consider a list of predefined services and whether they are, respectively, delivered or readily accessible, the gaps could be identified between the two respondent groups. Here you find a graphical representation of the findings:



For some services there is a solid and promising match between what the farming sector requires and what is offered by hubs (top left quadrant) and the strategy for these is to continue to ensure quality and availability.

For the services in the top right corner another view arises: "Community Building" (e.g. scouting for new partners and ecosystem building) for instance is much less covered in the current services of hubs - which is also reflected by the earlier mentioned analyses of the Ecosystem. Services can be improved here, e.g. through support on ecosystem mapping and co-creating with stakeholders such as the farmer community. There is a notable difference here between the Regional Clusters though, which supports the idea of recognising "champions" and exchanging best practices amongst participating hubs.

Below left we see another remarkable result: "Access to finance and funding" and "Business planning support" seem so-called "hygiene factors"; they are available but not regarded to be of great importance (but would probably be missed if not present).

Finally, the services in the bottom right quadrant are deemed relatively unimportant by both DIHs and the farming sector. These underline the findings that digitalisation is now mostly productivity-driven and less attention is given to potential strategic moves and/or starting-up new businesses. In due course these deserve more attention.

Recommendations going forward

There is an obvious focus on the operational benefits of digitalisation throughout the sector. This indicates that the services of the hubs should remain to evolve around the pragmatic consequences of digital innovations on the farm: how they are used, the impact on processes and balance sheets, how they can be tested, and so on. True transformation for ensuring a sustainable and thriving sector does however require more: an out-of-the box approach to business model innovation and a better connection to the customer. We need DIHs to plant and grow the seeds for change while supporting productivity improvements. Digital innovation services are still hard to grasp for the majority of actors in the agrifood sector, especially those more closely linked to changes in the sector's paradigm. DIHs have the opportunity but also the challenge to work on this. DIHs and Regional Clusters are strongly encouraged to interpret and prioritise these findings presented in this document.

1. INTRODUCTION

Policy framework

The agriculture sector and rural areas are capable of delivering sustainable solutions to current and future challenges such as assuring a safe and sustainable provision of quality food, fostering resource efficiency, developing the circular economy and combating climate change.

In this context, 'digital transformation' will play a crucial role for rural business and the farming sector. For instance, the adoption of modern farming technologies, including those based on robots, the Internet of Things (IoT) and Big Data, has great potential in leading to a more productive, sustainable and environmentally responsible food production. Smart farming systems can help farmers improve decision-making processes and develop more efficient operations and management.

Digitisation is one of the main pillars of the European Commission, as it is recognised by the Cork 2.0 declaration, the Digital Single Market (DSM) and the specific communication on "Digitising European Industry" (COM(2016)180).

One of the main elements of the Communication playing a key role in supporting the digital transformation in the agriculture sector is the development of **Digital Innovation Hubs** across Europe.

In addition, the European Commission's DG Agriculture and Rural Development (DG AGRI) organised the EIP-AGRI Seminar on 'Digital Innovation Hubs: mainstreaming digital agriculture' in 2017[1]. In this meeting, 150 delegates from 24 EU Member States and Serbia met in Kilkenny (Ireland) to share experiences, discuss needs and identify priority actions to develop Digital Innovation Hubs (DIHs) for agriculture. Thus, a large part of the EIP-AGRI Seminar was focused on understanding what a DIH is and what it can do for the farming sector. In an 'open space' format, they decided on the most relevant issues to work on and they listed priority actions to start building DIHs for agriculture in their regions. One of the seven priority actions for building DIHs for agriculture that the participants identified in this seminar was: "Identify the local/regional needs and specialisations in rural areas to develop a DIH model that can deliver integrated services adapted to the context." Another identified priority issue was "Map existing initiatives and identify which 'building blocks' are already available in the local/regional context as the basis to develop DIHs".

Regarding the inclusion of Digital Innovation Hubs in Smart Specialisation Strategies and its synergies, a recent report of the Joint Research Centre (JRC) has been published[2]. In this publication, it is highlighted how regional innovation ecosystems are able to meet the priorities included in regional Smart Specialisation Strategies and how can potentially contribute. Concretely, it is pointed out that a coherent RIS3 and DIHs interaction is critical to target the industry needs and to support the place-based ecosystem. DIHs in addition can be key partners for the strategy development processes by providing their expertise and helping to upgrade the local industry. In this sense, WP4 is working together with the JRC in order to create synergies.

DIHs main challenges to reach the agrifood sector

[1] *https://ec.europa.eu/eip/agriculture/sites/agri-eip/files/eip-agri_seminar_digital_innovation_hubs_final_report_2017_en.pdf*
[2] *http://publications.jrc.ec.europa.eu/repository/bitstream/JRC112111/digitalinnovationhubsinsmartspecialisationstrateigespdffinal.pdf*

Digital Innovation Hubs (DIHs) are one-stop-shops where companies –especially SMEs, startups and mid-caps– can get help to improve their business, production processes, products and services by means of digital technology. One of the key priorities of the Digitising European Industry Communication (DEI) is to support a strong network of DIHs to ensure that every company in Europe can take advantage of digital opportunities.

Digital technologies (or the interchangeable acronym, ICT) are one of the most important innovations for all actors in the agri-food value chain and especially advances in precision agriculture are already helping to address the global challenge of raising agricultural productivity in a more sustainable manner.

Despite the overwhelming interest of tech companies, investors and policymakers, the adoption rate of Digital Agriculture is still limited. In most EU member states, there is a consistent but small group of farmers that are frontrunners in this field, which are often seen as role models for other farmers. However, the majority of farmers does not yet adopt digital technologies or only invests in proven and tangible technologies such as auto-steering tractors or milking robots. The current impact of digitisation is way below its true potential. According to section 1.4.1 of the approved SAH proposal, broad digital transformation is hampered by the following:

1. There are still many technological barriers, farmers need advanced skills e.g. to transfer data manually from one system into the other. Improvements on interoperability accompanied with training and advice are required.
2. There are context-specific barriers meaning that a certain solution might work for a specific crop and/or region but cannot be one-on-one transferred to another crop or region.
3. The business case is still lacking for many solutions. Positive business cases indicate that precision agriculture or digital solutions only become beneficial if they are applied in an integrated manner throughout the whole farm operation and beyond in the whole value chain network around the farm business.
4. The high number of SMEs, around 11.3 million farmers and other agricultural companies, results in a lack of (financial) resources, technical expertise and management skills to invest successfully in digital solutions[3].
5. There are many user concerns among other about data ownership, privacy and security resulting in a lack of trust and a 'wait-and-see' attitude. As a result, end-users – in particular farmers – remain sceptical about these developments and are hard to convince of the benefits because a proof of concept relevant to their specific case is lacking and this vicious circle is hard to breakthrough.
6. This makes it very challenging for technology and solution developers to develop sustainable business models for their products and services.
7. New technology providers are often small start-ups that come and go delivering isolated solutions. Towards the bigger technology providers, farmers are still reluctant to adopt their technology, fearing that they will become too dependent on them and lose control of their data and farm business.

It is far beyond the scope of individual farmers or small technology providers to tackle these issues and even the big companies can only influence a small part of the system of systems. For this reason, innovation ecosystems have been established in all member states to

[3] European Union (2013): "Agriculture, forestry and fishery statistics", Eurostat pocketbooks, 2013 edition, ISBN 978-92-79-33005-6;
FoodDrink Europe (2012): "Data & Trends of the European Food and Drink Industry 2012", http://www.fooddrinkeurope.eu/S=0/publication/data-trends-of-the-european-food-and-drink-industry-2011/

stimulate the uptake of digital technologies in farming. These ecosystems often concentrate on a sub-part of DIHs, e.g. either networking, or technical experimentation and testing.

In the light of experts, forums and events related to this subject, it is evident that Digital Innovation Hubs are the main element of cohesion to boost the digitisation in all sectors but especially in the agri-food sector for their own characteristics: fragmentation of knowledge and technology expertise in the proximity of farms, the lack of promising business cases for farmers and business models for the technology providers, farming is more subject to sector- and region- specific conditions than other sectors, fragmentation and misalignment between the various types of public and private funding.

Nowadays, the fact is that too many DIHs are emerging in an uncoordinated way and with not so close connection with the agri-food sector as it would be desirable for a successful digital transformation process in this sector. Hence, the farmers need in terms of digitisation are not easy to detect for most of the existing DIHs which is one of the key existing gaps in order to enhance the digitisation in the sector.

Project framework

The main objective of the SmartAgriHubs project is to consolidate and foster a European wide network of Digital Innovation Hubs for Agriculture to enhance the Digital Transformation for Sustainable Farming and Food Production.

In this framework, WP4 objectives are:

WP4 aims to ensure that all DIHs have the capacity to develop and deliver an adequate portfolio of relevant, value-adding and applicable innovation services in a one-stop-shop formula for end-users.

Through capacity building WP4 contributes to the creation of pan-European added value of the project by building a strong and sustainable network of DIHs in the agri-food sector.

Work package 4 will contribute in many ways to achieve the overall SmartAgriHubs objectives. It will support the establishment of DIHs across Europe. It will help DIHs to become self-sustaining entities that support the digital transformation of the European agri-food sector. It will support the development of a pan-European network of DIHs. And it will create effective learning and knowledge exchange mechanisms between DIHs.

Although valuable results have been outlined, the local DIHs face several bottlenecks including:

1. Local DIHs are not able to keep pace with the high speed of technological innovation. They miss the critical mass and competences to link up with state-of-the-art digital expertise.
2. Local DIHs are too often reinventing the wheel and hardly learn from experiences in other European countries and sectors. There is still a very limited transfer of knowledge and expertise across DIHs in Europe. There is a large fragmentation of developments and projects. This is partly inherent to the agricultural sector: every crop, livestock, etc. is often served with specific solutions and different contexts in various regions require customized approaches.
3. There is a misalignment between public and private innovation support. Farmers and practitioners often complain that promising prototypes are developed with public funding, but then it is very difficult to bring them to the market because there is a lack of private investors or that technology providers do not know how to reach them (so-called 'valley of death'). Despite recent successful incubators and accelerators and despite the rise of

alternative finance such as equity crowdfunding and peer-to-peer lending, there is still a very low progress in comparison with other developed countries such as the United States.

For this reason, aiming to properly drive the rest Work Package 4, it is crucial to know what the main needs of the sector are, as well as to detect what the required services are and if the sector has access to them. In addition, it is important to analyse the impact of the implementation of these services to move towards a true digital transformation in farms and to improve the added value of the existing Digital Innovation Hubs.

The frame guiding this assessment is the digital transformation of the agri-food sector and the consequent potential methods of closing the existing gap between the farming community and the IT sector. The needs assessment has been undertaken in close cooperation with the Regional Clusters, existing hubs, Competence Centres and Flagship Innovation Experiments to obtain a detailed picture of the current state of-play and stakeholders of the ecosystem. To this end, we have identified, analysed and assessed the needs of farmers, the farming communities and DIHs in relation to digital transformation and what capabilities are consequently needed in the DIHs services portfolio.

The results obtained in this document provides useful insights for the other tasks included in Work Package 4 since this assessment has helped to identify the main services that the DIHs need to develop or improve for the following tasks within this project: tasks 4.2 "Capacity development for establishing a DIH"; task 4.3 "Capacity building for operating a DIH"; and, task 4.4 "Building networks of DIHs". All of them will focus especially in the weaknesses detected in this analysis.

In addition, there are other work packages within SmartAgriHubs with tasks connected with this document that will take advantage of the obtained results to improve their work, such as the one related to DIH ecosystem building in WP1, those in WP2 in charge of the network expansion by open calls and in WP5 focused on the Competence Centers.

Regarding the document structure, it comprises of four main sections:

- **Introduction**
- **Approach and Methodology**
- **Results**
- **Conclusions and Recommendations**

If the reader is not familiar with the SmartAgriHubs project, please start reading the Project summary and have a look at the list of abbreviations. Section 1 Introduction, provides details concerning this particular task and the digital innovation in the agrifood sector.

Section 2: Approach & methodology covers the four main methodological aspects used in this report: the digital innovation hubs catalogue of services and activities and innovation services maturity model; the process of updating the agrifood-related digital innovation hubs; the methodology used in designing the survey, including content, pilot and translations; the plan followed in distributing the survey; collecting and analysing the data.

Along with the methodology, the reader could look at Annex II: Farmers' Need Survey and III: Digital Innovation Hubs Services surveys that include links and copies for every language used.

Moreover, the reader could check the resources provided to the Regional Cluster to comply with the General Data Protection Regulation in Annex IV: GDPR consent. Some messages to reach a high number of representation actors in the sectors, examples of emails to help obtaining finalised surveys in each region can also be found in Annex V: Email to DIHs. Annex VI: Example email to reach partners, contains a copy of the emails sent to DIHs regarding the data collection plan.

Section 3: Results include analysis and discussion organized around ten main topics: Survey distribution and data collection results, including participation, regional distribution and additional information coming from the responses, DIHs ecosystem characterization, DIHs and farmers' digitalisation needs, DIHs innovation services portfolio vs expectations and availability for farmers, tools used and required to deliver innovation services by DIHs, definition of "Digital" for farmers and DIHs, Cloud services, Digital services, SWOT analysis and innovation capacity and entrepreneurial mindset. More detailed results tables are included as Annex I: Additional tables.

Conclusions and recommendations (see Chapter 4) are structured around five main clusters: the DIHs role in digital innovation, discussing their ecosystem and position about digitalisation needs, the vision of "digital", digital innovation and cloud services; how production is still in the foundation roots of European farmers, and this also reflects the approach to the digital transformation of the ecosystem; the different farmers and different needs about innovation services in the agrifood ecosystem, and how to address and manage diversity in terms of sectors and economic size; an actionable guide for innovation services, to help DIHs avoid bias when evaluating their portfolio of services from the farmer and farming ecosystem point of view; and a methodological reflection on the whole process of survey design and data collection, quite special considering the scope and target.

2. APPROACH & METHODOLOGY

The frame guiding the assessment is the digital transformation of the agri-food sector and the consequent promising ways of closing the existing gap between the farming community and the IT sector. To this end, there are different works we have carried out in order to identify, analyse and assess the needs of DIHs, farmers and the farming ecosystem in relation to digital transformation.

The methodology was based on the following main aspects:

1. Digital Innovation Hubs actions previously developed that support this Needs Assessment such as the Catalogue of Services and other state of art activities.
2. Updated catalogue of active Digital Innovation Hubs.
3. Surveys designed to collect information about Digital Innovation Hubs Services and Farmers' Needs. The surveys were translated into seven languages in order to improve the rate of responses and enhance respondents.
4. Plan to distribute the surveys and data collection.
5. Preparation of the survey responses in order to be analysed.
6. Analysis of the resulting data.

In the next chapters, more detailed information is presented.

2.1 DIGITAL INNOVATION HUBS

The European Commission in their working group 1 report *"Digital Innovation Hubs: Mainstreaming Digital Innovation Across All Sectors"*[4] define a **Digital Innovation Hub (DIH)** as a support facility that helps companies to become more competitive by improving their business/production processes as well as products and services by means of digital technology. DIHs act as a one-stop-shop, serving companies within their local region and beyond to digitalise their business. They help customers address their challenges in a business focused way and with a common service model, offering services that would not be readily accessible elsewhere. The services available through a DIH enable any business to access the latest knowledge, expertise and technology for testing and experimenting with digital innovations relevant to its products, processes or business models. DIHs also provide connections with investors, facilitate access to financing for digital transformations, help connect users and suppliers of digital innovations across the value chain, and foster synergies between digital and other key enabling technologies (such as biotech, advanced materials, etc.).

WP4 will ensure that all DIHs have the capacity to develop and deliver an adequate portfolio of relevant and applicable innovation services for end-users such as farmers, advisors, SMEs and start-ups in the scope of a portfolio of supported Innovation Experiments.

[4] *https://ec.europa.eu/futurium/en/content/report-wg1-digital-innovation-hubs-mainstreaming-digital-innovation-across-all-sectors-final*

	Service	Activities
Ecosystem	Community building	Scouting, brokerage, awareness creation, dissemination, ecosystem building
	Strategy development	Market intelligence, market assessments, roadmapping
	Ecosystem learning	Workshops, seminars to share knowledge and experience
	Project development	Identification of opportunities, creating consortia, development of proposals
	Lobbying	Representing interests during meetings & conferences, organizing (country) visits
Technology	Strategic RDI	Joint, pre-competitive R&D
	Contract research	Specific R&D, technology concept development, proof of concept
	Technical support on scale-up	Concept validation, prototyping, small series production
	Provision of technology infrastructure	Renting equipment, low rate commercial production, offering platform technology infrastructure
	Testing and validation	Certification, product demonstration, product qualification
Business	Incubator/accelerator support	Voice of customer, market assessment, business development, consortia building, offering location
	Access to finance	Financial engineering, connection to funding sources, investment plans
	Skills and education	Courses, workshops, offering technological infrastructure for educational purposes

Figure 1 - Categorised services and activities of a Digital Innovation Hub (source: I4MS initiative)

Within the project, a maturity model for DIHs is being developed. It generally identifies 5 distinct levels of maturity for a service.

WP4 aims to advance most DIHs from low to intermediate levels, using the experience of other DIHs in the network, specifically most advanced ones and also knowledge available from the RIS3 community. The higher levels are not expected to be achieved during the project but they can hereafter. The Innovation Services Maturity Model (ISMM) helps DIHs to identify areas of attention and it allows the community of DIHs to structure and share knowledge more efficiently. Tools will be made available through the SmartAgriHubs Innovation Portal. The list of capabilities is open to new ones if desired by the community. Hence, advancing maturity of services is not an individual Hub's objective, but a European matter.

All the information coming from these actions have been taken into account together with what is detailed in the following section to design the surveys.

2.2 DIGITAL INNOVATION HUBS CATALOGUE WITHIN THE SAH PROJECT

In order to distribute the surveys among the SmartAgriHubs DIHs network, the first step needed was to know the exact number of Digital Innovation Hubs per Regional Cluster, who they are, legal status, services offered, etc. For that reason, preliminary actions took place in order to verify that the information base provided during the proposal phase was correct, as well as to collect other relevant information or update the possible changes in the different Regional Clusters.

Thus, an excel file with the DIHs involved in each RC, their characterization and services portfolio was circulated. This first DIH Catalogue with the most updated information is included in the SAH SharePoint and will be available in the Innovation Portal.

In summary, the evolution in the amount of Digital Innovations Hubs belonging to each Regional Cluster is shown in this table.

Table 1 - Number of Digital Innovation Hubs per Regional Cluster included in the SAH Catalogue

Regional Clusters	Nº DIHs at the proposal stage	Nº DIHs at June 2019
North West Europe	37	40
Italy & Malta	15	21
Central Europe	10	10
British Isles	14	12
Scandinavia	4	4
Iberia	19	21
South East Europe	17	18
France	15	15
North East Europe	10	10

2.3 SURVEY DESIGN

This step focuses on discovering gaps between farmer needs in terms of digital transformation and innovation and the services provided by Digital Innovation Hubs. To that end two surveys were designed: one addressed to farmers and another one to DIHs

This section covers each survey design to collect primary information from farmers, their supporting ecosystem and DIHs.

The surveys have been carefully designed to detect gaps between farmer needs in terms of digital transformation and innovation, and the services provided by Digital Innovation Hubs.

The surveys were designed to obtain the following outcomes:

- An analysis of the differences between the ranked needs of farmers and DIHs.
- An analysis of the significance of the differences between the services to be provided and the digital maturity level in the DIHs.
- An analysis of the different DIHs services and their availability compared to farmers' expectations.
- An analysis of the gaps between innovation services at the DIHs and corresponding expectations from farmers.
- An inventory of the different tools used and required to deliver services by the DIHs.
- An analysis of the digital transformation and innovation areas awareness by the different participants of the surveys, including an analysis of the entrepreneurial mindset.
- A SWOT analysis of the ecosystem.

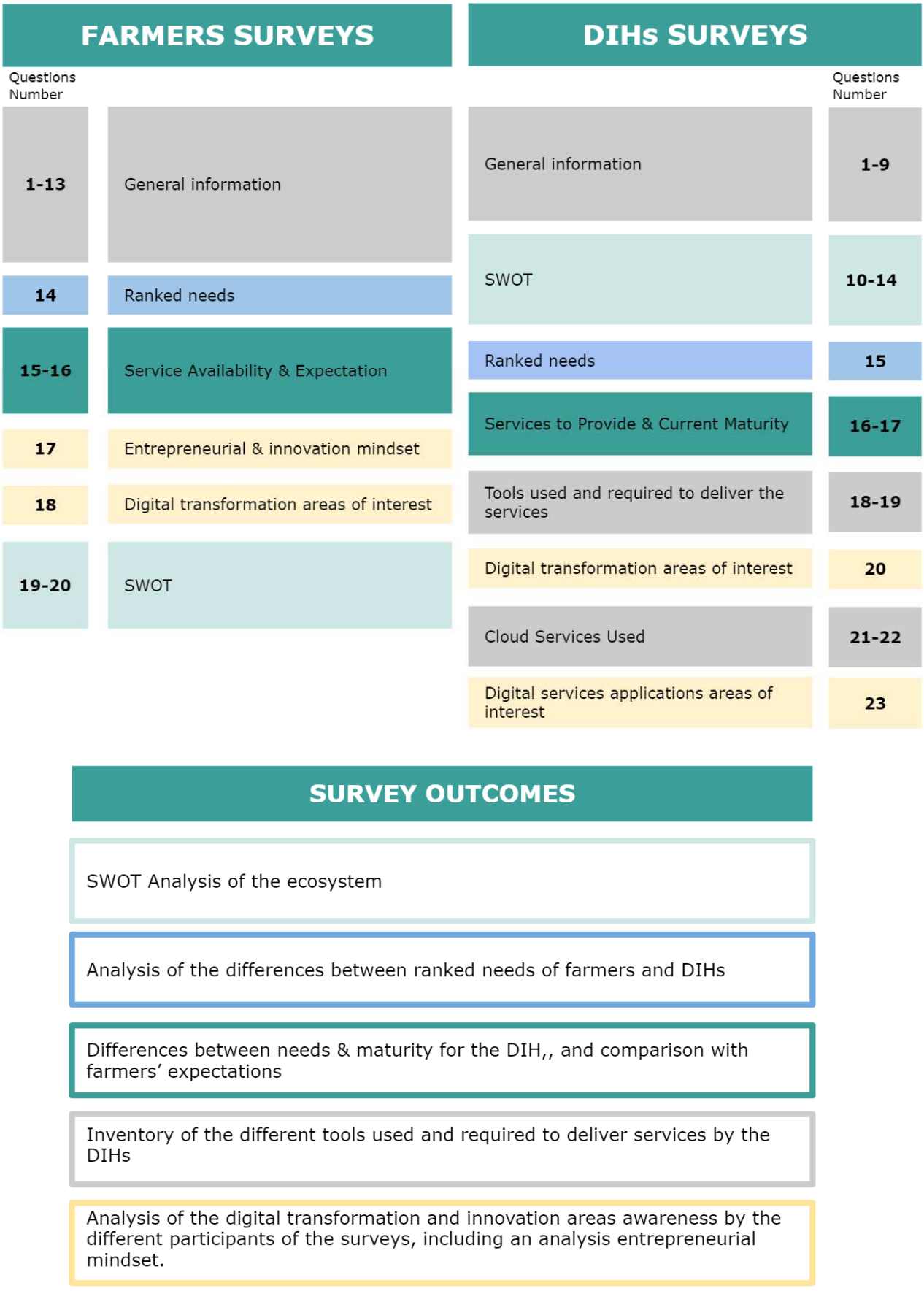


Figure 2 - Survey outcomes for farmers and Digital Innovation Hub surveys

Content Structure for The Digital Innovation Hubs Services Survey

The Digital Innovation Hubs Services survey is structured in eight sections: welcome, introduction, community, vision, DIH services, delivering services, digital capabilities and contact information.

Table 2 - Content structure for the Digital Innovation Hubs Survey

DIHs Survey sections	Brief description
Welcome	Show the framework and objective of this activity.
Introduction	Questions related to the basic information about the DIHs and the role of the respondents.
Community	This section deals with community building aspects.
Vision	Questions related with the vision for the future for each DIH.
DIH services	This section is focused on the digitalisation of farming, and includes topics of interest regarding digitalisation and services that are being delivered as a DIH.
Delivering services	Questions included in this section refer to the tools currently used to deliver services and tools needed by the DIHs.
Digital Capabilities	This section intends to collect the DIHs thoughts on digitalisation, such as how farmers use technology and how the DIHs provide services to them.
Contact Information	More detailed information regarding the participant's role in this survey and a black box to include any other comments, questions or concerns.

- The first section introduces the survey and the project to the respondent.
- The second section gathers basic data about the DIH, including name, main sector, regional cluster, location, date of establishment for the DIH, a question about the innovation focus of the DIH and the role of the respondent in the DIH. This section aims to discover what type of ecosystem we are analysing as well as to develop the geographical clustering and a comparison of the level of services versus the time they are running and/or operational.
- The Community section deals with the network of the DIH. Questions about connections with other partners, events organised and other actions in order to build a community are included here.
- The Vision section is oriented to get relevant information to perform a basic SWOT analysis and to discover any trends or recurring topic, if any.
- In the DIH services section, there are three questions: specific farmers and farming ecosystem needs related to digitalisation where the DIH wants to supply services, the importance the DIH ascribe to every service identified as relevant in the categorised services and activities of a digital innovation hub, and the services they are already implementing. The last two questions are needed to build a DIH Maturity Index.
- The Delivering services section aims to check what services are they using and which ones do they need.
- The Digital Capabilities Section gathers data to measure the level of digital transformation of the DIH.

Given the different ways of approaching digital transformation, it seems necessary to identify whether the DIH and the farming ecosystem are aligned in their digital transformation focus that is in mindset, customer-centric approach, data-based decisions, technology, infrastructure and innovation.

Cloud is the first entry technology to digital transformation, being mandatory to start using big data, IoT or any other exponential technology. Both questions will help to build a Digital Transformation Index.

The last question is about digital services from the DIH and farming ecosystem point of view, in order to check alignments.

In the Contact information section, we collect contact details from the participant.

The whole survey takes approximately 18 minutes to be completed, a duration we consider acceptable for the DIHs, organizations that have a certain level of commitment with the project.

Content Structure for The Farmers' Needs in Digital Innovation Survey

The survey for the farmers and farming ecosystem has been designed with the DIHs survey in mind, therefore there is a certain correlation between the structure and questions of both surveys.

The Farmers survey is structured in eight sections: welcome, introduction, farm structure, support ecosystem, access to digital innovation services, digital capabilities, vision and future and contact information.

Table 3 - Content structure for the Farmers´s needs in digital innovation Survey

Farmers Survey sections	Brief description
Welcome	Show the framework and objective of this activity.
Introduction	Questions related with the basic information and the general position in the farming sector of the respondents.
Farm structure	In case of farmers, landlord or workers in a farming company, it is shown this section in order to have an idea about the dimensions of the farm.
Support ecosystem	This section is accessible for other stakeholders related to the farming community. It is focused on knowing the main related sector and some characterisation of the farms around the agri-cooperative, service or product provider, or farmers' association, organisation or institution.
Access to digital innovation services	Questions related to the digitalisation of farming: with this part of the questionnaire it is possible to know the main topics of interest regarding digitalisation for farmers and the access to specific available services.
Digital Capabilities	This section intends to collect the farmers and farming community´s thoughts on digitalisation, and how they use technology.
Vision and Future	Questions related to the vision for the future for farmers and the farming community.
Contact Information	More detailed information regarding the role of the participants of this survey and a black box to include any other comments, questions or concerns.

- The first section introduces the survey and the project to the respondent.
- The second section gathers basic data about the respondent, including location, main sector, position in the industry, age, Regional Cluster and Digital Innovation Hub or organisation provider of the survey. We tested in the pilot that the last two questions answers are usually unknown for a majority of respondents, so we used open-ended questions that need further work to get some valid data.
- The Farm structure section is only accessible to those respondents whose position in the industry is dedicated or part-time farmer, landlord or worker in a farming company. It is related to the size of the agribusiness.
- The Support ecosystem section is accessible for other stakeholders related to the farming community. It is focused on knowing the main related sector and some characterisation of the farms around the agri-cooperative, service or product provider, or farmers' association, organisation or institution.
- In the Access to digital services section, there are three questions related to the DIH services section in the DIH services survey: specific farmers and farming ecosystem needs related to digitalisation where the DIH wants to supply services, the importance farmers ascribe to every service thought to foster digital innovation for their business, and the services available for them. There is also a last question designed to build an entrepreneurial and innovative mindset index for the farmer or farmer ecosystem respondent.
- The Digital Capabilities Section gathers data to measure the level of digital transformation of the farmer or farming ecosystem respondent. As in the DIH services survey, due to the wide range of the digital transformation approach, it seems necessary to identify whether the DIH and the farming ecosystem are aligned in their digital transformation focus, that is in mindset, customer-centric approach, data-based decisions, technology, infrastructure and innovation.
- The Vision and future section are oriented to get relevant information to perform a basic SWOT analysis and to discover any trends or recurring topic, if any.
- In the Contact information section, we collect contact details from the participant.

The whole survey takes approximately 14 minutes to be completed.

Sample

There are two types of subjects analysed in this survey: Digital Innovation Hubs and farmers and farming ecosystem.

Sampling for the DIHs is not relevant as we have full coverage with the survey.

Regarding farmers' survey, non - probability techniques as *quota* and *snowball* were used to select subjects for the sample in this analysis.

The sample included the whole farming ecosystem, including farmers, both full-time and part-time, landlords, workers in farming companies, but also services and products external providers, Agri-cooperative representatives, farmers associations and agriculture institutions.

We asked for 19 representative farmers' needs surveys to be completed from every DIH and one DIH survey per DIH. Then, taking into account that there were 140 DIH in the project proposal, 140 DIHs surveys and more than 2,000 farmer surveys were expected.

Type of Questions

We include four types of questions in the surveys:

- *Likert-type scales*, where respondents are asked whether they agree or disagree with a statement.
- *Multiple-choice questions*, where respondents are asked to choose out of two or more answers.
- *Open-ended questions*, where respondents are asked to supply their own answer.
- *Closed-ended questions* were respondents are asked to answer with a free text.

This diversity of type of questions allows the farmers, farming ecosystem and DIHs to see different perspectives of their needs and to make some reflections about the digitalisation of the sector.

Pilot

A first version of both surveys was launched prior to the definitive deployment in order to test usability and content. The testers were selected by all WP4 members amongst experts in different locations and typology within the agrotech sector to ensure a good representation of the whole consortium of this project.

This process took two weeks and conclusions were incorporated in the final version of the surveys.

The main outcomes from the pilot were: i) the need to adapt the technological vocabulary to the farmers and farming sector "language" to fully identify their needs, ii) the requirement to translate the farmers' need survey to maximize the number of surveys coming from non-English speaking countries and iii) the need to correctly discriminate between technologies and needs in order to avoid duplication or different criteria between the work packages responsibilities within the project.

Translation

The Farmers' Needs Survey was then translated into Spanish, German, French, Italian, Polish, Portuguese, Romanian, Greek and Serbian, as a consequence of the pilot phase. Surveys were only translated into the languages Regional Clusters and DIHs asked for as interactions with farmers were up to DIHs.

The translation process involved members from WP4 and Regional Clusters with technical and field agri-food knowledge and fluent in both English and the translation language.

An analysis of the impact of the translations in the number of survey respondents is included as part of the results.

Beyond time and dedication, the translation itself did not affect the data reliability. Most type of questions are not affected at all and, for open-ended questions, they just had to be translated, categorized and labelled in order to do all the data analysis and mining.

GDPR Compliance

In order to comply with GDPR during the whole data collection process the following actions were carried out:

- a previous GDPR consent (see Annex III) was sent to each DIHs belonging to the Regional Clusters of the project.
- a 3rd-party tool compliant with GDPR was used to collect data from both DIHs and farming ecosystem.

2.4 DATA COLLECTION PLAN

The surveys were developed, distributed and pre-processed with a 3rd-party tool called SurveyMonkey, allowing multi-language, customized links, web embedding, and manual data entry. As surveys are meant to be completed online, results were immediately available to the partner responsible for this task, not requiring the survey teams to take any further action.

Digital Innovation Hubs Services Survey

The survey for the Digital Innovation Hub was meant to be filled by the executive responsible for the DIH, the highest-ranking person ultimately responsible for managerial decisions.

The survey was available online in different languages:
English: https://es.surveymonkey.com/r/smartagrihubs_DIHs

Spanish: https://es.surveymonkey.com/r/smartagrihubs_DIHs?lang=es

Greek: https://es.surveymonkey.com/r/smartagrihubs_DIHs?lang=el

Serbian: https://es.surveymonkey.com/r/smartagrihubs_DIHs?lang=sr

Farmers Needs Survey

The second survey was meant to be filled by farmers or landlords (no matter their commitment to farming) and the support ecosystem (meaning agri-cooperatives, service and product providers, farmers' associations, organizations and institutions).

The interaction and communication with farmers and the farming ecosystem was up to each DIH, then, every DIH was compelled to get a minimum of 19 surveys completed with this distribution:

- 13 surveys at least filled by farmers, either full-time, part-time or landlords, including surveys with farm sizes and sectors that represents their region
- 2 surveys at least filled by a worker in a farming company
- 2 surveys at least filled by service or product external providers
- 2 surveys at least filled by agri-cooperatives, farmers association, or agriculture institution

DIHs were strongly recommended to ask for help within their ecosystem, specifically key partners with a day to day relationship with farmers, specifically agri-cooperatives, but also associations and institutions (see Survey distribution and Annex V).

The survey was available online in different languages:

English: https://www.surveymonkey.com/r/smartagrihubs_farmers

German: https://es.surveymonkey.com/r/smartagrihubs_farmers?lang=de

Spanish: https://es.surveymonkey.com/r/smartagrihubs_farmers?lang=es

French: https://es.surveymonkey.com/r/smartagrihubs_farmers?lang=fr

Greek: https://es.surveymonkey.com/r/smartagrihubs_farmers?lang=el

Italian: https://es.surveymonkey.com/r/smartagrihubs_farmers?lang=it

Polish: https://es.surveymonkey.com/r/smartagrihubs_farmers?lang=pl

Serbian: https://es.surveymonkey.com/r/smartagrihubs_farmers?lang=sr

Distribution Means

The main channel of distribution was Regional Clusters and Digital Innovation Hubs, according to data included in the project, but also agri-cooperatives and farmers' associations. WP4 contacted Regional Clusters, leaders and co-leaders, with:

- Instructions for DIHs in order to:
  - Be able to fill in the DIH survey.
  - Be able to reach their farmers and farming ecosystem, distribute the farmers' survey and provide instructions on how to fill in the farmers' survey.
- An e-mail example to be sent to DIHs with the content mentioned above and the link to the DIH survey.
- An e-mail example to be sent by DIHs to their farmers and farming ecosystem and the link to the farmers' survey in English and to the suitable translated survey (if that was the case).
- An updated list of the DIHs within the RC in order to contact them. In order to provide this, and as it was mentioned at the beginning of this section of methodology, an update on the Digital Innovation Hubs Catalogue of the project was necessary.
- A GDPR consent document from the partner in charge of this task (CAPDER) for each DIH to fill it and send it back.

Follow Up and Feedback

A two-week period was initially planned for the collection of answers. However, many Regional Clusters and DIHs decided during that period that translation into their languages was needed in order to reach their farmers. Because of that, that deadline was extended two weeks more.

There were sent tailor-made communications with updated reports on the number of surveys collected to every Regional Cluster during the data collection phase to increase the engagement of stakeholders.

In addition to the tailor-made e-mails, communication tools were suggested to Regional Clusters and DIHs to disseminate the surveys and reach a higher number of respondents to ensure the representativeness of the results. These tools were the following:

- WhatsApp's: sending landing messages with a link embedded to Whatsapp groups and contacts.
- Websites: embedded links in different websites managed by the organisation and their partners.
- Social media: publishing landing messages with a link embedded in the different social media accounts (Twitter, LinkedIn, Instagram, Facebook, etc.) managed by the organisations or their partners, such as the SmatrAgriHubs Project and Regional Cluster´s twitter accounts.

2.5 DATA PREPARATION AND ANALYSIS

After data collection, data was pre-processed and prepared to ensure consistency and readiness for the ulterior analysis. This operation included: discarding incomplete and inadequate responses according to a criteria we needed to set up; and correcting minor data on responses to ensure integrity and representativeness. A detailed description of data preparation is included in section 3.

As for the analysis, there were different type of questions that needed a different treatment in order to be analysed. This is the methodology used for each type:

- Regarding likert-type scales, where respondents were asked whether they agree or disagree with a statement, each option is given a score which can be used to analyse

results quantitatively, calculating mean and variance and comparing them amongst segments in the sample.

- Concerning multiple-choice questions, where respondents were asked to choose out of two or more answers, results could be analysed quantitatively, showing a ranking of most chosen questions and comparing segments.
- With Open-ended questions, where respondents were asked to supply their own answer, results have been processed identifying main response categories, then addressing every response to one or more categories and getting a ranking of most addressed categories.
- In the case of closed-ended questions, respondents were asked to give data to be analysed, normalized and processed at a later stage.

3. RESULTS

The main results obtained from this processed information are included throughout this chapter in 11 sections.

In section **3.1 Survey Distribution and Data Collection**, the data preparation process, an overview of participation figures, the regional distribution and additional information coming from the DIHs and farmers' responses are presented. Regarding DIHs responses, overall participation, distribution of surveys per regional cluster, sectors served by the DIHs and DIHs survey respondent role are analysed. Regarding farmers survey, participation, the regional cluster of origin, sectors, position in the industry, age, the language of completion of the survey, DIHs assignation, farm structure and farmers ecosystem characterisation are also included.

In section **3.2 Digital Innovation Hubs Ecosystem**, results about the connections of the DIHs with other entities in their ecosystem are analysed.

In section **3.3 Digital Innovation Hubs and Farmers' Digitalisation Needs** results regarding the questions about most perceived digital needs and the perceived importance of some digital services are presented.

In section **3.4 DIHs Innovation Services Portfolio Versus Expectations and Availability for Farmers.,** innovation services importance and availability for both farmers and DIHs are analysed.

In section **3.5 Tools Used and Required to Deliver Innovation Services by DIHs ,** results regarding tools coming from the DIHs survey are analysed.

In section **3.6 Definition of "Digital" For Farmers and DIHs** the vision of what "digital" means for both farmers and DIHs is presented.

Section **3.7 Cloud Services** includes the analyse of the usage and importance of cloud services by farmers as perceived by DIHs.

The **3.8 Digital Services** section shows results about DIHs evaluating the most important digital services application areas and if they are assessing farmers' needs in these areas.

In section **3.9 SWOT Analysis**, results coming from the farmers SWOT analysis are presented.

In section **3.10 Innovation Capacity And Entrepreneurial Mindset**, the index reflecting the innovation capacity and entrepreneurial mindset (InnovaIndex) is analysed.

Lastly, the section **3.11 Flagship innovation experiments** deals with the analysis in terms of digitalisation needs and innovation services that has been elaborated for the FIEs involved in this SAH project.

3.1 SURVEY DISTRIBUTION AND DATA COLLECTION

In the frame of this task 4.1 Needs Assessment, two surveys, one for Digital Innovation Hubs and other for farmers and farming community – as explained in previous section 2 methodology – were launched to the Regional Clusters involved in this project for a period of 4 weeks.

In this section we will cover the process of data preparation to obtain data ready to be analysed, the overall participation, and the characterization of the surveys analysed coming from DIHs and farmers.

Data Preparation

After the data collection phase that started on 8/3/2019 and lasted until 5/4/2019, data was prepared for the analysis according to the following:

i) Surveys that completed until question 18 for farmers' survey and question 19 for DIHs survey were considered as valid and used for analysis. Also surveys that only lacked answers to the open-ended question about vision were included in the analysis.

ii) Responses were considered "inadequate" when data were a consequence of testing the survey platform, incoherent, inconsistent or duplicated (easily identifiable as answers were "ajaja", "dbsw", etc.).

iii) Farmers' responses where the Regional Cluster was obviously not related to the city and country of the respondent were corrected to have a representative Regional Cluster based analysis. Some respondents from the Iberia Regional Cluster marked, for instance, South-East Europe Regional Cluster. 47 farmers' responses showed an incorrect correlation between city, country and regional cluster.

iv) Answers to Open–ended questions in languages not natively spoken by the survey team were automatically translated with Google services to extract meaning.

A total number of 817 farmer's and 112 DIHs responses were collected. However, after going through the process mentioned before (i) and (ii), as it is shown in the table 4, the resulting number of surveys selected for further analysis is 570 farmers' needs surveys and 79 DIHs services surveys. Therefore, finally, 649 complete and consistent surveys have been obtained for their subsequent treatment.

Table 4 - Number of surveys discarded in each data preparation phase

Data preparation phases	Number of surveys		
	Farmers	**DIHs**	**Total**
Initially received	817	112	929
Incomplete surveys (i)	216	24	240
Surveys after phase (i)	601	88	689
Inadequate surveys (ii)	31	9	40
Surveys valid for the analysis	570	79	649

Participation Overview

In terms of participation, the first remarkable thing is the level of participation in general in both surveys. The total amount of surveys reaches almost 1000. Out of which tests/fake attempts and those surveys considered as incomplete were rejected according to the previous mentioned data preparation procedure.

The global participation rate was calculated making the comparison of the number of complete surveys with the sample established per DIH and per farmers. Thus, each Regional Cluster should reach 1 DIH survey per each DIH involved in their region. In the case of the farmer surveys, the goal number of completed surveys was 19 per each DIH belonging to each RC, with the following strongly suggested distribution:

- 13 from farmers.
- 2 from cooperatives, organizations and organisations.
- 2 from external/services providers.
- 2 from workers in farming company.

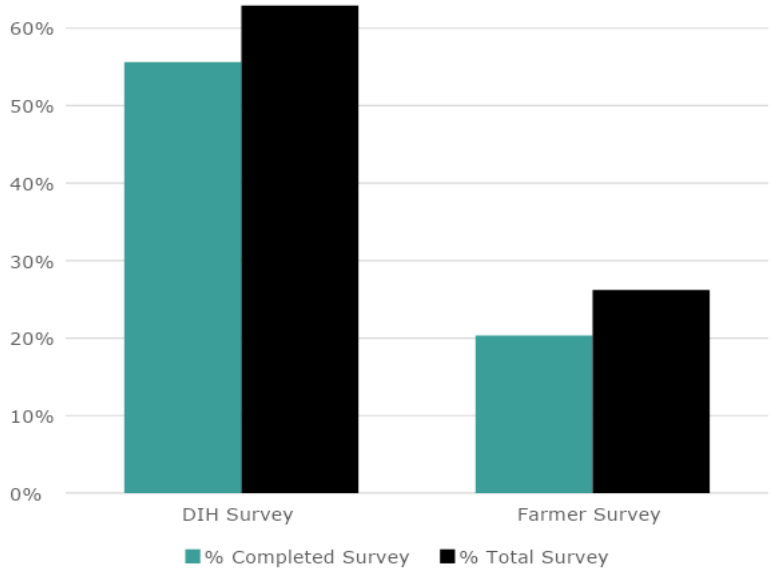


Figure 3 - Global participation

As can be seen in the graph above (Figure 3), DIHs participation rate has been really high overpassing 60%.

In the case of farmers, participation rate has been significantly lower but considering that our target was really ambitious and the problems Regional Clusters and DIHs have encountered during these 4 weeks, almost reaching the 30% is clearly a success.

DIHs participation rate has been really high overpassing 60%

In the case of farmers, participation rate has been significantly lower but considering that our target was really ambitious almost reaching the 30% is clearly a success.

For Farmers, we requested to collect a minimum of 19 surveys from each DIH or Regional Cluster. To have a representative sample, we requested that at least 12 of them came from Producers and at least 6 of them came from the Ecosystem, leaving them some margin to include surveys from Producers or Ecosystems, as they were able to collect, from those minimum figures and up. **The proportion of responses was close to 74% Producers 25% Ecosystem Surveys, with no differences across Regional Clusters.**

It is important to mention in this report the main problems, worries and concerns that Regional Clusters have experienced during this period:

- Digital Innovation Hubs, in SmartAgriHubs, are meant to serve the farming ecosystem and their customers but the results of the survey participation show that there is a lack of connection between many DIHs and their farming sector. This is probably because these DIHs are mainly driven by technology providers.

  Digital Innovation Hubs are key to consolidate, activate and extend the current ecosystem, then improving these connections should be one of the main challenges of this project. Then, it would be important to increase awareness within the farming sector regarding the possibilities the DIHs are able to offer. To this end, extra attempts should be made to connect farmers to the DIHs concerned within this project. As for example; Regional Clusters could organise workshops to bring together DIHs and the farming sector.

Also, DIHs are recommended to develop community-based customer-centric strategies, with clear objectives and key results, real time monitoring and co-creation and knowledge-sharing sessions both within local ecosystems and Regional Clusters at European level.

- There is a lack of interest or response from some DIHs included during the proposal phase of the project. This is something that has happened in the majority of Regional Clusters, then, this is a big issue to debate in the heart of the project. Why these DIHs are not participating in the project (maybe because they are no longer interested, maybe because they are not real DIHs, maybe because they are immature DIHs and their level of involvement cannot be higher), what to do with them and what we could do to engage them again or if we ever should do so.

It can be concluded that there are still farmers very unaware of their DIH and the possibilities they offer.

DIHs

In addition to participation this chapter outlines the main aggregated data by Regional Cluster for that complete surveys and their characterisation.

The number of surveys aggregated by RC has been analysed to show the ecosystem reached in terms of distribution and characterization.

PARTICIPATION

Focusing on the number of DIHs, exclusively, there were 112 records, out of which 79 can be considered valid. The rest were fake or incomplete surveys.

You can see below the graphic of DIH participation per Regional Cluster (Figure 4). It is important to highlight a really low participation rate in two Regional Clusters: Central Europe and South East Europe, compared to the average participation rate achieved in the rest.

On the other hand, the graphic shows a strange result for Scandinavia, since it is more than 100%. That is because one of their DIHs filled in the survey 3 times but by different roles inside the same DIH. We have maintained the 3 registers as it could show interesting insights.

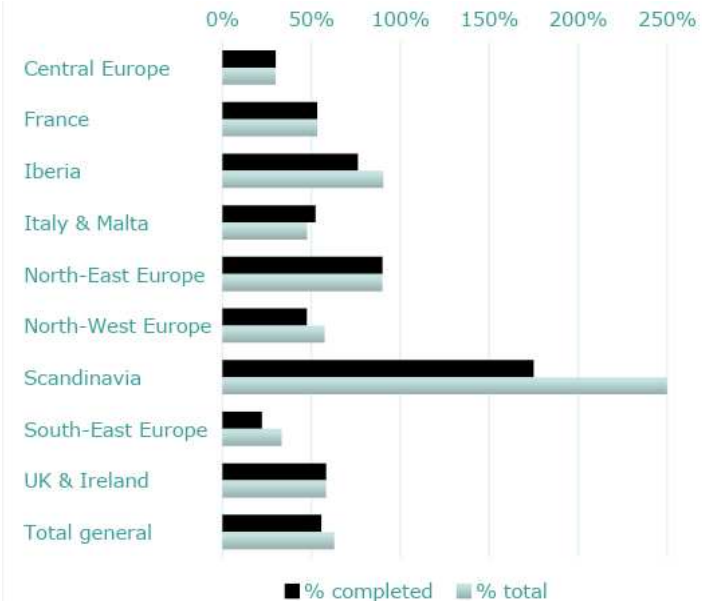


Figure 4 - DIHs participation per Regional Cluster

DISTRIBUTION OF SURVEYS PER REGIONAL CLUSTER

When looking at the geographical distribution of DIHs (Figure 5 - Distribution of surveys per regional cluster) that had completed the surveys, there was a predominance of DIHs belonging to the RC North-West Europe and Iberia.

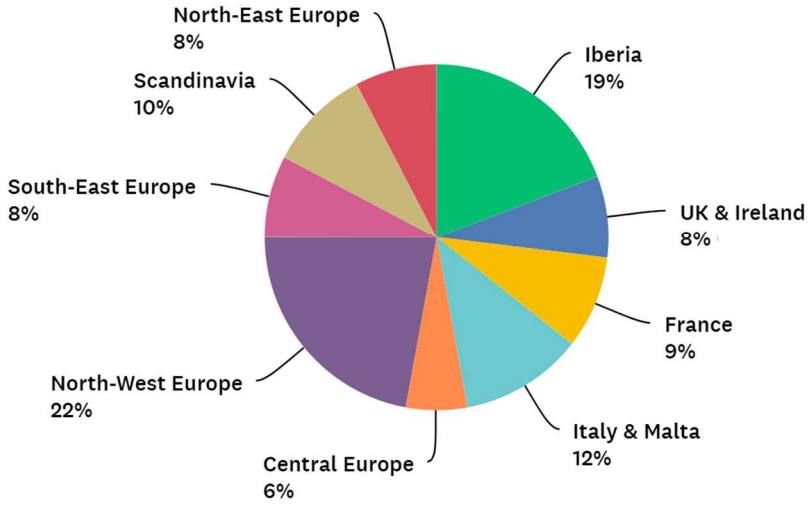


Figure 5 - Distribution of surveys per regional cluster

DIHs that participated in the survey are based mostly in North-West Europe (18), Iberia (15) and Italy & Malta (10). The Regional Clusters with the least representation are Central Europe (4), South-East Europe (4) and UK & Ireland (6).

Table 5 - Number of participating DIHs per Regional Cluster

REGIONAL CLUSTER	Number
Central Europe	4
France	7
Iberia	15
Italy & Malta	10
North-East Europe	8
North-West Europe	18
Scandinavia	7
South-East Europe	4
UK & Ireland	6
Grand Total	79

DIHs that participated in the survey are based mostly in North-West Europe, Iberia and Italy & Malta.

SECTORS

Almost all the main sectors related to agriculture and food have been featured in this analysis. Nevertheless, the majority of DIHs provide services to the arable farming sector.

DIHs consulted indicated the following main sectors served: Arable farming (46), Dairy (35) and Fruits (33). The least sectors served are Agroforestry Ecosystems (5), Olive trees (13) and Poultry (22).

Table 6 - Sectors where DIHs provide services

Sector	Number of surveys	Percentage
Arable farming	46	16.79%
Fruits	33	12.04%
Poultry	22	8.03%
Greenhouses	25	9.12%
Dairy	35	12.77%
Vegetables	31	11.31%
Piggery	22	8.03%
Organic	20	7.30%
Olive trees	13	4.74%
Animal husbandry (ie. cattle, sheep, goat)	22	8.03%
Agroforestry ecosystems, like dehesa.	5	1.82%
Total	274	100.00%

DIHS SURVEY RESPONDENT ROLE

In relation to the role of the respondents that have completed the DIHs surveys (Table 7), the most surveys have been filled in by DIH managers (almost 55%).

Indeed, some of the respondents that marked the "other category" option also perform manager positions or similar though they have used different expressions.

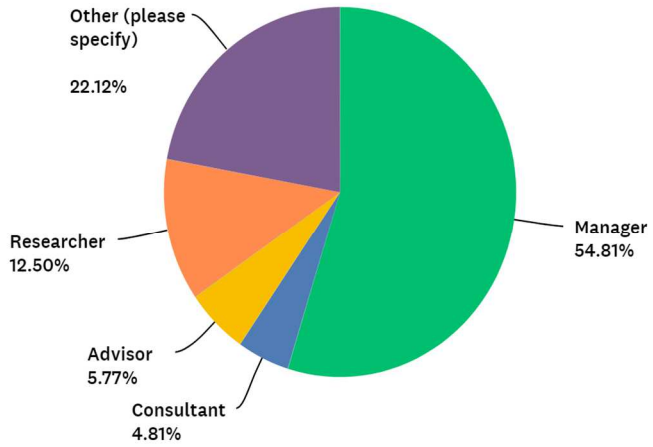


Figure 6 - Distribution of surveys per role in the DIH

Respondents representing the DIH self-reported working on the following roles: Manager (53), Researcher (10), Consultant (10) and Advisor (7).

Table 7 - Number of surveys completed according to the role in the DIH

Role	Number of surveys
Manager	53
Researcher	10
Consultant	9
Advisor	7
Total	79

Farmers

PARTICIPATION

The bar chart below represents (Figure 7) the real participation in green colour -called total- versus surveys completed and valid for analysis - called completed-. Both percentages, on its turn, have been compared with the target established per each Regional Cluster. This was explained in the previous section - global -.

Let's see the example of Italy & Malta. There are 14 DIHs within this Regional Cluster, then the target concerning farmers was 14 times 19 (14 DIHs and 19 surveys from farming sector and farmers per each DIH), that is 266 surveys. That would be the 100%.

The green bar shows the percentage of farmers that initially filled in the survey against the target. Then, this RC could not reach the 266 surveys foreseen but almost 40% of its target. This percentage includes all surveys from this RC, valid and not valid ones.

Valid ones, in the case of Italy & Malta represent almost 30%, that is the black bar (number of valid surveys against the RC target).

Figure 7 - Farmers participation on the survey per Regional Cluster

The distribution of surveys is quite uneven across Regional Clusters, with Iberia and Italy very significantly standing out.

On the other hand, RC Central-Europe, France, North-East Europe and Scandinavia had less than 20 surveys answered. For that reason, a segmentation by RC in these cases do not have statistical significance.

In relation to the translation of the surveys to different languages, action taken to increase the number of reached stakeholders within the sector, it is important to mention the following results: the number of surveys answered in English represents 16.67% of the total, while the translated surveys represent the rest of the 585. In particular, there are some RCs where there is no survey answered in English (Central Europe, France, Italy & Malta), or these represent a very small percentage (Iberia, 3 of 108, South East Europe, 3 of 26). There are enough indications to think that translating the survey has had a high impact on the number of responses obtained and their representativeness.

REGIONAL CLUSTER OF ORIGIN

The geographical distribution of the surveys according to the Regional Cluster is shown in the below Figure 8 and Table 8.

Iberia, Italia & Malta and South-East Europe are the Regional Clusters where there were more responses. According to the data collection plan, every DIH was asked to obtain at least 19 completed responses from the farming ecosystem. Scandinavia, Central Europe and France did not reach that minimum.

Iberia, Italia & Malta and South-East Europe are the Regional Clusters where there were more responses from farmers and farming ecosystem.

There is a huge difference between the first region and the second and third ones. And there is still another big gap from 2nd and 3rd position to the following one.

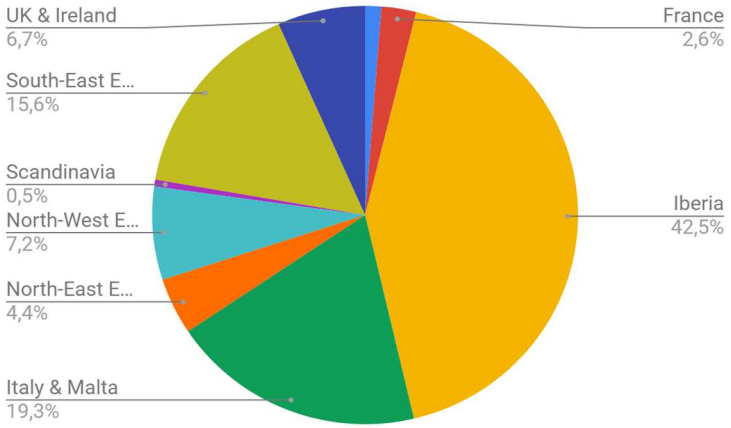


Figure 8 - Distribution of far's surveys per Regional Cluster

Regional Clusters have encountered many difficulties to reach all DIHs and contacted DIHs were not always able to reach farmers or to have surveys filled in. There are some reasons for this last issue to happen which may be the following[5]:

- DIHs were technological DIH, willing to work with the agrifood sector but not know the sector yet.

[5] *This list of reasons are just conjectures based on the Regional Clusters' feedback.*

- DIHs may not reach the level of maturity enough to contact the sector.
- Farmers were not willing to participate.
- Farmers were willing to participate but they did not have a translated version of the survey in their mother tongue.

Table 8 - Number of valid farmers's surveys per Regional Cluster

Regional Cluster	Number of surveys
Central Europe	7
France	15
Iberia	242
Italy & Malta	110
North-East Europe	25
North-West Europe	41
Scandinavia	3
South-East Europe	89
UK & Ireland	38
Total	570

SECTORS

The chart below shows (Figure 9) the main sectors represented by the respondents. Arable farming is the most important one, followed by "Other", composed mainly by vineyard and Olive trees.

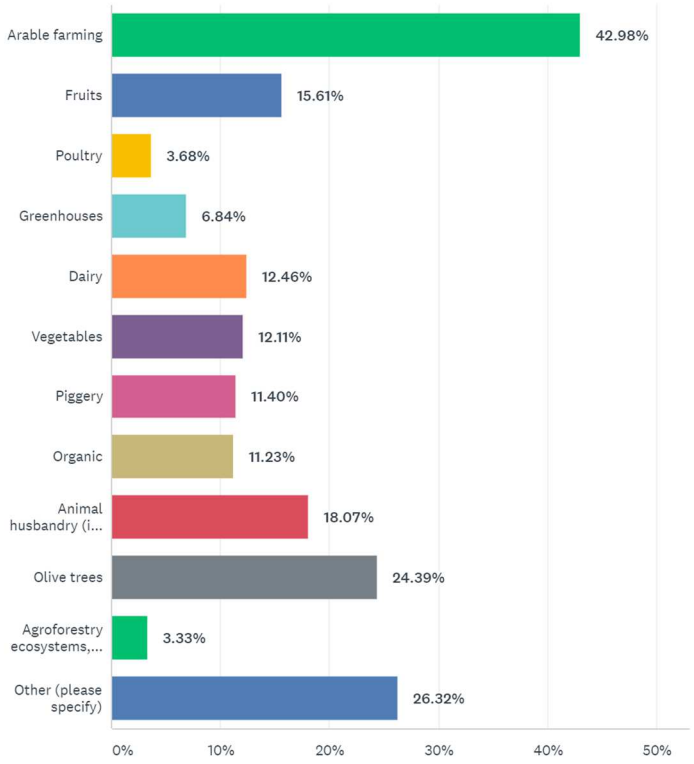


Figure 9 - Main sectors represented by respondents (farmers and farming ecosystem)

These results are quite influenced by the geographical location of respondents, as sectors are not equally represented across Regional Clusters (especially Iberia, Italy&Malta and South-East Europe).

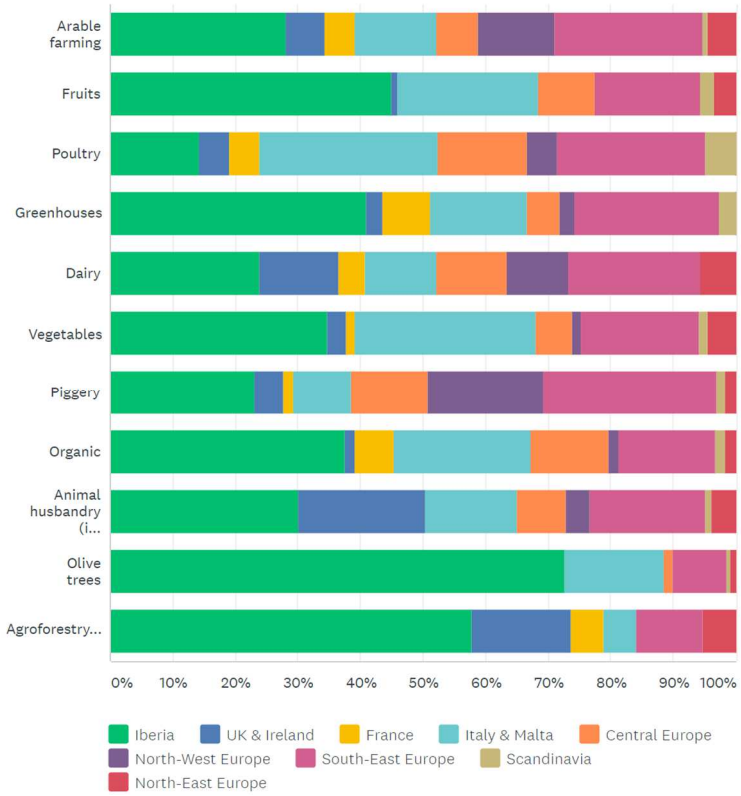


Figure 10 - Distribution of respondents by Regional Cluster within each sector

As we mentioned before, a large number of farmers marked the "Other category" (116) and wrote Vineyard (41). Due to this huge number, we considered creating Vineyard as a category/sector such as Arable farming, etc. during the analysis.

Table 9 - Number of respondents by sector

Sector	Number
Arable farming	199
Fruits	62
Poultry	19
Greenhouses	24
Dairy	49
Vegetables	44
Piggery	55
Organic	42
Animal husbandry (ie. cattle, sheep, goat…)	84
Olive trees	103
Agroforestry ecosystems, like dehesa	15
Vineyard	41
Other (including vineyard)	116

When looking at the number of sectors indicated per respondent, most were dedicated to one sector (255) or two sectors (101), representing a total of 62% of the farmers surveys analysed.

We asked respondents such as cooperatives, agricultural organisations, etc. (farmers ecosystem) to define the sector they serve. The largest proportion reported serving the Arable Farming sector (40), followed by Olive trees (36). The smallest subsets are Poultry (3), Agroforestry ecosystems (4), and Piggery (8). Most respondents indicated they serve just one sector (63), followed by no sector (24) and two sectors (20).

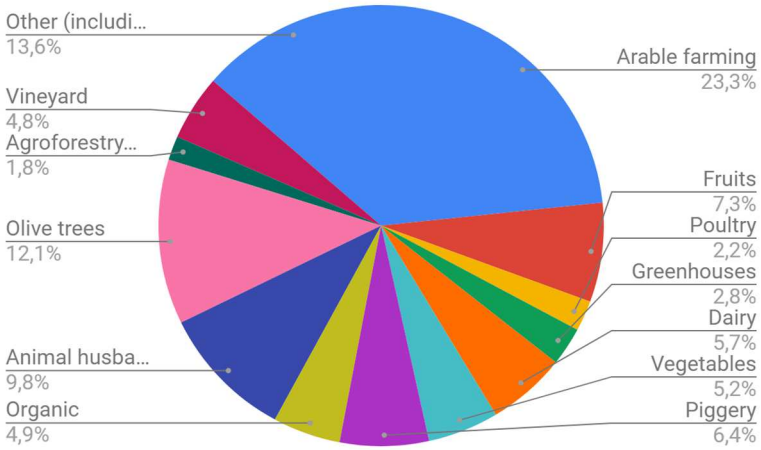


Figure 11 - Distribution of the main sectors represented

POSITION IN THE INDUSTRY

We considered different typologies of respondents within the farmers' survey and grouped them into two large categories: Producers (435) and Ecosystem (135) (see the table below). The sum of the total of Producers (435) is 75.7%.

Table 10 - Number of surveys according to the typology of respondent

Position (producers)	Number
Dedicated farmer	291
Landlord, not farmer	11
Part-time farmer	82
Work for a farming company	51
Total	435
Position (Ecosystem)	**Number**
Farmers' agri-cooperative	56
Farmers' association, organization or institution	35
Service/product external provider	44
Total	135
Grand Total	570

As we can see in Figure 12 and Figure 13, the main respondents of the survey were "Farmers full-time dedicates (291) ", representing approximately 50%, followed by Part-time Farmer (82), Workers of Farming Companies (51), and a small subset of Landlords that don't farm (11).

Within the Ecosystem category representing a total of 24.3%, the largest group is that of Farmers Agri-Cooperatives (56), followed by Service/Product External Providers (44) and Farmers Associations (35).

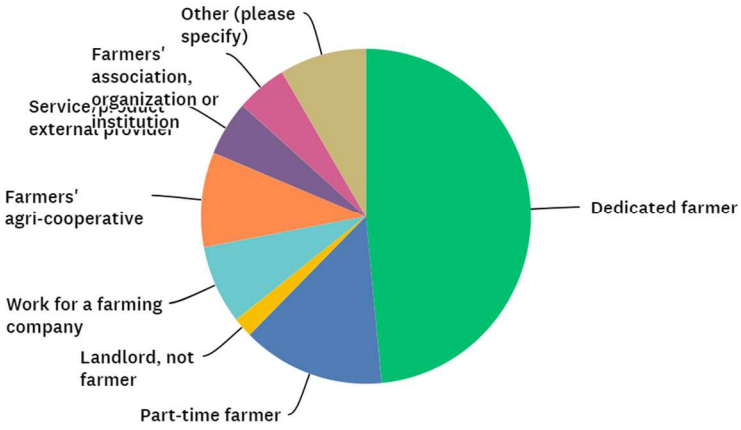


Figure 12 - Farmers position in the industry

AGE

In the age classification the highest number of answers came from Farmers that are 40-49 years old, very closely followed by the age range 50-64.

As you can see in the figure below (Figure 13), most surveys were completed by farmers aged between 40-49. Although it is to remark the high participation of people aged under 40.

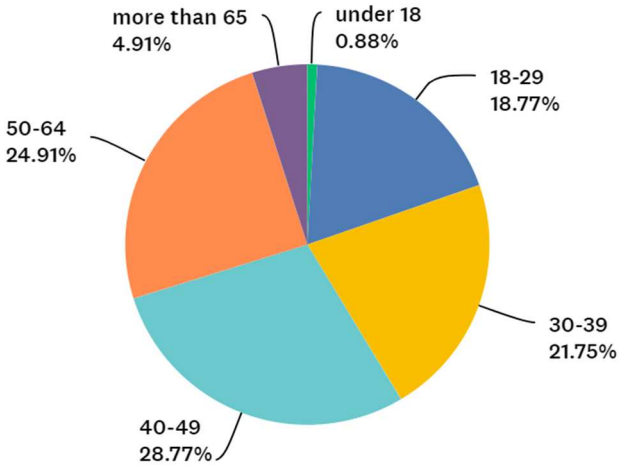


Figure 13 - Age of the farmers

Looking at the data by Regional Cluster it is to be said that several Regional Cluster does not have sufficient representation.

Only data from the following regions could be taken into account: Iberia, Italy & Malta, North - West Europe, South-East Europe and UK & Ireland. The graphic shows (*Figure 14*) that in UK & Ireland and Italy & Malta the number of young people is higher than in the rest. In the case of Iberia and North-East Europe the number of young people under 30 is very low.

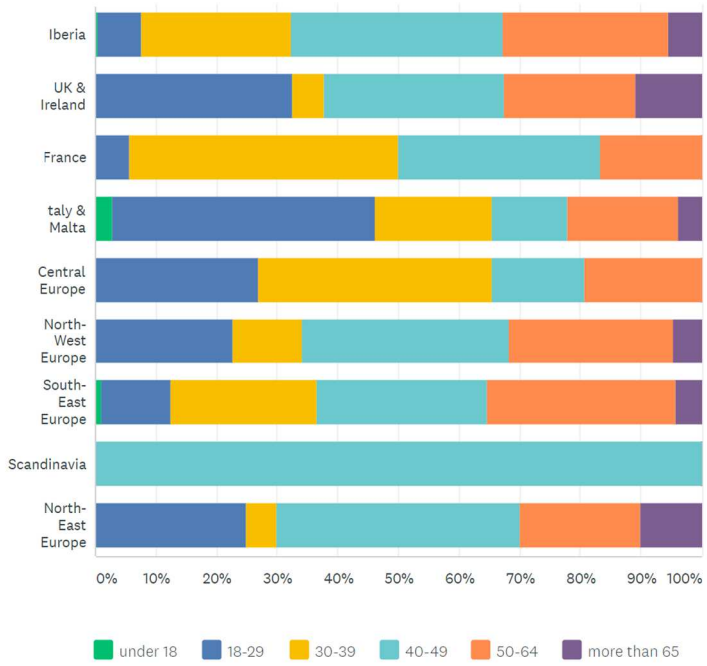


Figure 14 - Distribution of respondents according to their age per Regional Cluster

LANGUAGE OF COMPLETION

Most surveys (210) were answered in Spanish, followed by Italian (110) and English (92). The least used languages were Dutch (1), Polish (14) and German (23).

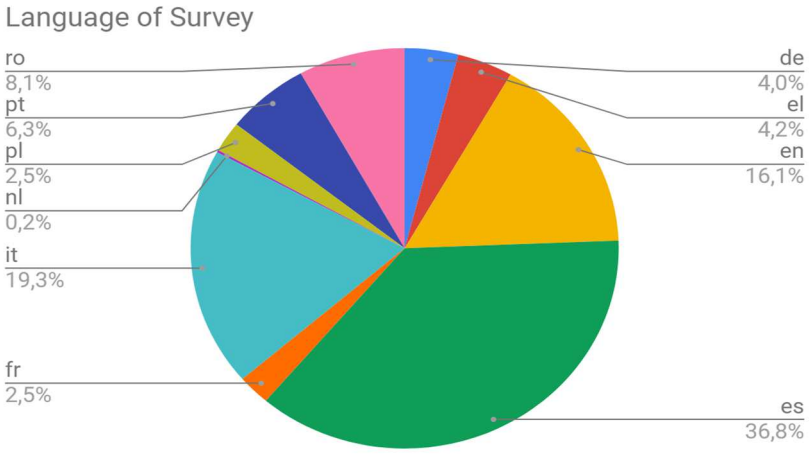


Figure 15 - Languages used by respondents

DIHS ASSIGNATION

In this section, farmers have been grouped according to the specific question number 6: *"What is the name of the organisation or Digital Innovation Hub ("DIH) that has provided you this survey?"*. With this request we wanted to know if farmers and farming ecosystem support were aware of this information and their perception of belonging to this community. The most numerous groups of farmers are associated to the Andalucía Agrotech DIH (106), followed by Coldiretti (53) and DIHGAS (31).

This association of each respondent with a DIH was not possible for a considerable number of Farmers (70+25) that answered with a name which is not really a DIH or at least it does not belong to the DIH Catalogue of this project. It is important to keep in mind this fact since it reveals the need of promotion for the DIHs.

Table 11 - Number of surveys per entity providers

Entity providers	Number of surveys
Digital Innovation Hub	
Andalucía Agrotech DIH	106
DIHGAS: Digital Innovation Hub for Galician Sector.	31
RIOHUB	22
PSNC	13
ADVID - Associação para o Desenvolvimento da Viticultura Duriense	12
ΕΛΓΟ-ΔΗΜΗΤΡΑ	11
mAgro	11
T4E DIH Extremadura	10
Organisations	
COLDIRETTI	53
UE COOP	24
Other	
Unknown	70
SmartAgriHubs	25
Others (under 10 responses)	182
Total	**570**

FARM STRUCTURE

If we analyse the **number of workers by farm**, more than half of the farmers reported being part of companies with 2 to 10 workers (53%), followed by farmers from companies with less than 2 workers (26%). The smallest group of farmers (21%) reported working in companies with more than 10 workers.

Table 12 - Number of surveys according to the farm category

Farm category	Percentage	Number of answers
1- Less than 2 people	25.98%	113
2- Between 2 and 10 people	52.87%	230
3- More than 10 people	21.15%	92
Total	100.00%	435

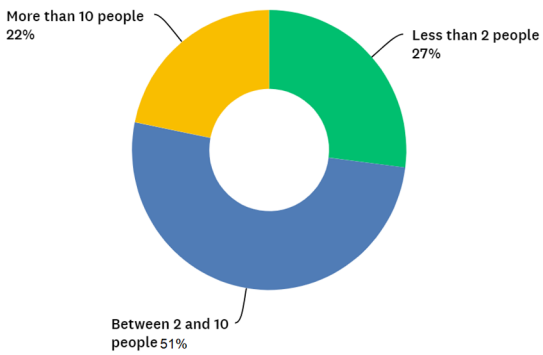


Figure 16 - Distribution amongst farm categories

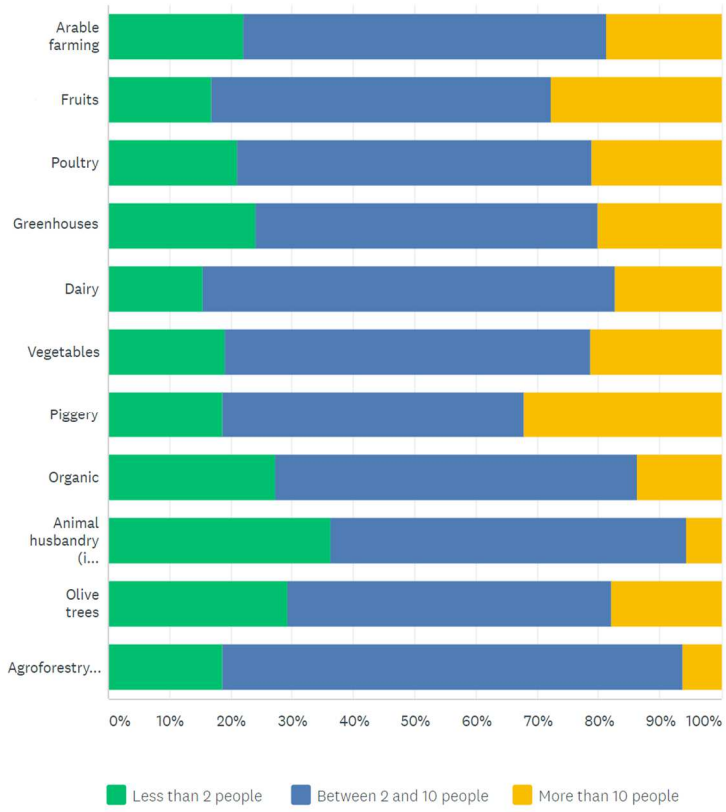


Figure 17 - Distribution of farm categories according to the sector

In relation to the farm **dimensions**, the most common size of farms (Figure 18) amongst respondents is the farm bigger than 30Has, which represents the option marked by the 45% of farmers.

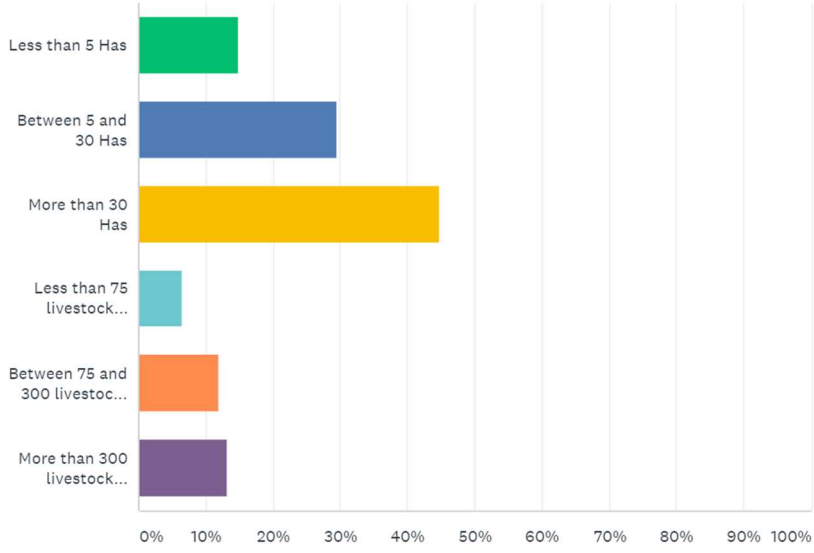


Figure 18 - Size of farms

Farmers working on farms that are 5 to 30 Has (139) and less than 5 Has (59) are less numerous. A total of 37 Farmers did not indicate a farm size, which could be related to livestock farms.

We analysed sizing in terms of livestock as well, although only 30% of the respondents contributed this information. Large farms, with over 300 livestock animals, represent 13%

of the responses (58) followed by medium farms with 75 to 300 animals (47) and small farms with less than 75 animals (27).

Table 13 - Number of surveys according to the size of the farms.

Farm size in HAs	Percentage	Number of answers
1- Less than 5 Has	13.56%	59
2- Between 5 and 30 Has	31.95%	139
3- More than 30 Has	45.98%	200
Total	100.00%	435
Livestock farm size	**Percentage**	**Number of answers**
1- Less than 75 livestock animals	6.21%	27
2- Between 75 and 300 livestock animals	10.80%	47
3- More than 300 livestock animals	13.33%	58
Total	100.00%	435

On top of sizing the Farms according to their extension in Has, the number of workers and the number of Livestock we asked Farmers to **self-assess their size** from 1 (very small) to 5 (very large). Around 40% of respondents (Table 14) perceive their farms as medium compared to the size of other farms near them. If farmers do not consider medium their farm, they tend to consider them as small or small/medium.

Table 14 - Respondents' perception of their farm in terms of size

Range	Percentage	Number of answers
1	22.53%	98
2	16.32%	71
3	**40.00%**	**174**
4	9.43%	41
5	11.72%	51
Total	**100.00%**	**435**

FARMERS ECOSYSTEM CHARACTERISATION

We asked respondents that belong to the Farmers Ecosystem group to define the sector they serve. The largest proportion reported serving the Arable Farming sector (40), followed by Olive trees (36). The smallest subsets are Poultry (3), Agroforestry ecosystems (4), and Piggery (8). Most respondents indicated they serve just one sector (63), followed by no sector (24) and two sectors (20).

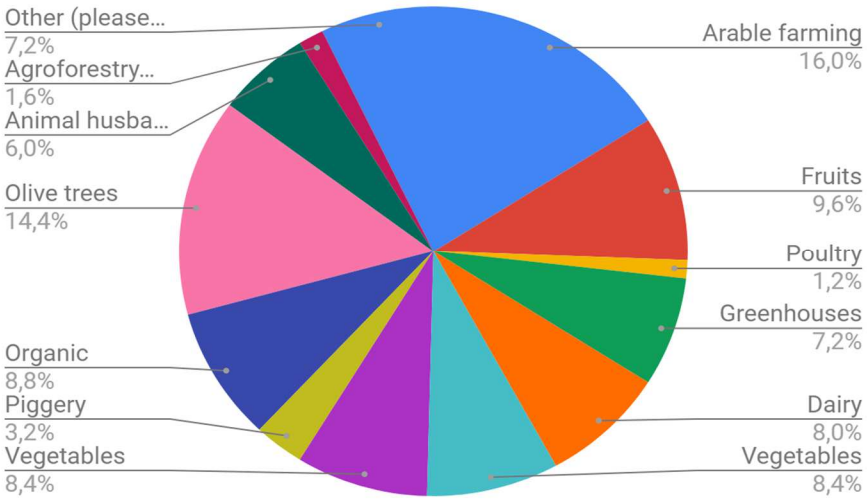


Figure 19 - Sectors served by the farmers ecosystem

Table 15 - Number of respondents serving sectors

Served Sector	Number
Arable farming	40
Fruits	24
Poultry	3
Greenhouses	18
Dairy	20
Vegetables	21
Vegetables	21
Piggery	8
Organic	22
Olive trees	36
Animal husbandry (i.e. cattle, sheep, goat…)	15
Agroforestry ecosystems, like dehesa	4
Other (please specify)	18

Surveys Contacts

This section includes the percentage of farmers and DIHs that wanted to be contacted for further information with regards to their surveys. As it is shown in the graph (Figure 20), in the case of farmers the percentage is over 50% and in DIHs surveys this percentage is higher, being approximately 70%.

It is to draw your attention to the fact that on the contrary we would think, not all DIH that participated in completing the survey were interested in being contacted later on, even though we were talking about a survey to assess their farmers' needs and also the way they approach them. These surveys could represent very useful tools providing them quite valuable information but the 30% of participating DIHs was not interested in.

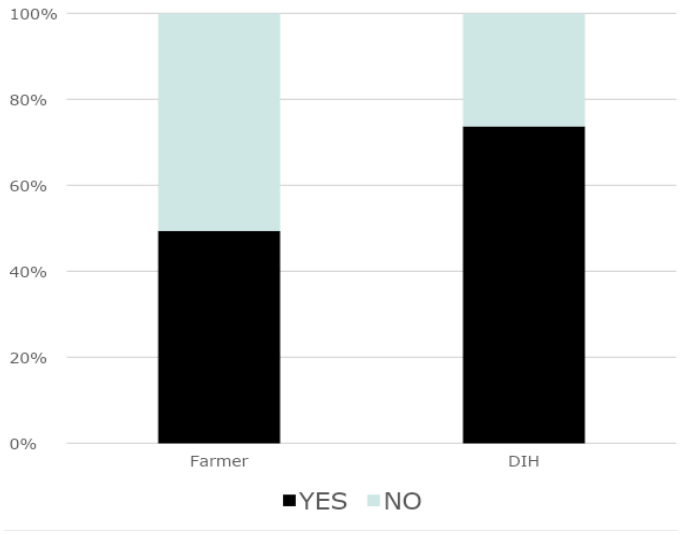


Figure 20 - Participants willing to collaborate in the future

To conclude section **3.1 Survey Distribution and Data Collection**, it is remarkable the high level of participation, the lack of connections with the farming ecosystem of most DIHs, the non-awareness of belonging to a DIHs or RC for the majority of farmers, and the determinant influence of multilingual surveys in the results.

3.2 DIGITAL INNOVATION HUBS ECOSYSTEM

The objective of this question was to have a clear insight of the different entities DIHs are connected with. As can be seen in (Figure 21) and (Figure 22), Universities and Research Centers are in first position (with almost 90% of DIHs connected to them), closely followed by SMEs (73%). The lowest percentage is for Orchestrator (with only 11%).

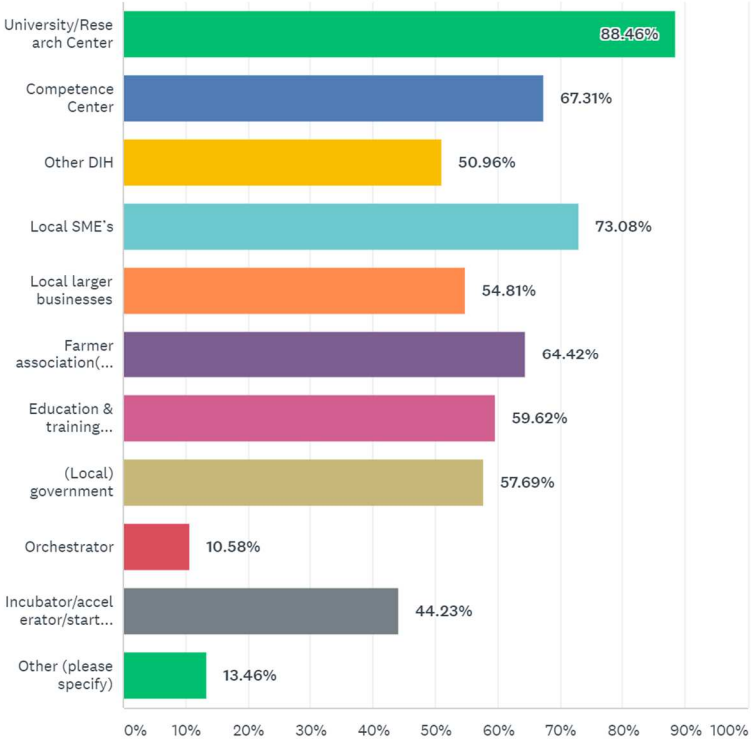


Figure 21 - Composition of the DIH ecosystem

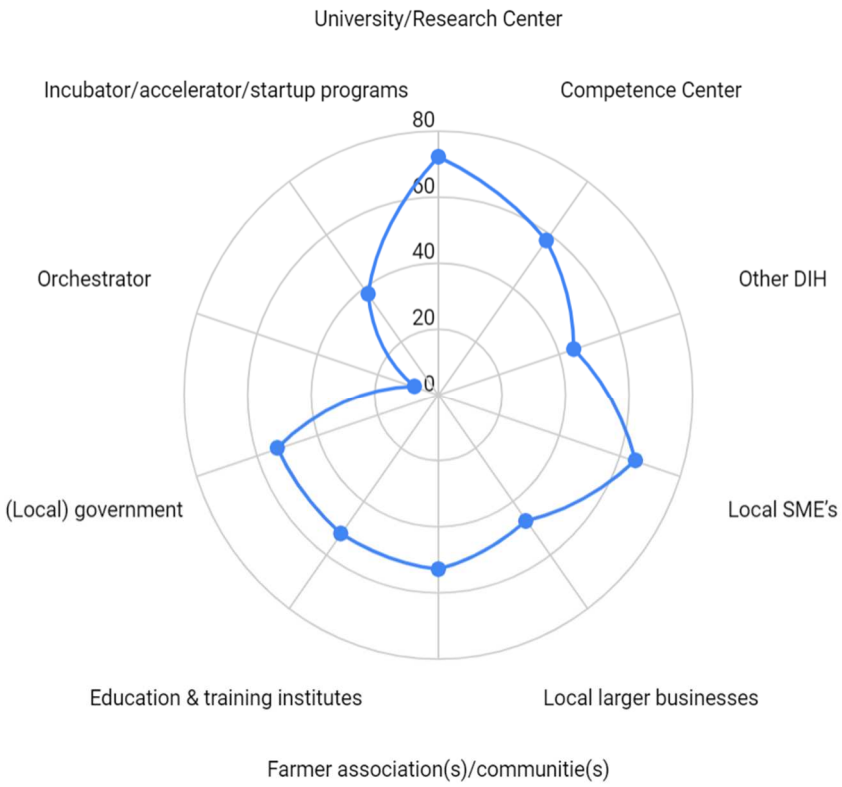


Figure 22 - Composition of the DIH ecosystem shown as a net

Table 16 - Number of DIHs connected with each type of entity

Entities connected	Number
University/Research Centre	72
Local SMEs	65
Competence Centre	58
Farmer association(s)/community(ies)	53
(Local) government	53
Education & training institutes	52
Local larger businesses	47
Other DIH	45
Incubator/accelerator/startup programs	38
Orchestrator	8

Most DIHs network connections are with University/Research Centres, Local SMEs, Competence Centres, Farmer associations and communities, local governments and education & training institutes, while connections with larger local businesses and start-up programmes are less common.

Connecting with the precedent section, generally speaking DIHs have more connections to research and education organizations and institutions than with businesses and startups. These connections and networks could influence in their perception of innovation and digital transformation, as well as in the innovation services they are providing.

3.3 DIGITAL INNOVATION HUBS AND FARMERS' DIGITALISATION NEEDS

This section includes the results related to specific digitalisation needs detected by farmers, whether these needs are identified by the DIHs or the DIHs provide services that cover those identified needs.

Firstly, it was asked to DIHs and farmers to rate their digitisation needs using a scale from 1 to 5 in the following topics:

- **The need to "Track and Trace" quality products from farm-to-fork** (i.e. improving traceability systems so consumers know where the product comes from or how it was processed or improving traceability systems so consumers know where the product comes from or how it was processed)
- **The need to optimise farm operations** (such as improving irrigation, fertilisation, disease treatment, harvesting, livestock management and administration)
- **The need for changing the way to do business** (e.g. the way you sell your products or with a specific focus on adaptable and flexible digital solutions to address the business needs of farms)
- **The need to utilise data to make better decisions/ The need to combine and exchange data to create value** (such as developing standards, knowledge and infrastructures for collecting data from the field with sensors, satellite or drone imagery to make better decisions)
- **The need for environmentally-sustainable production** (e.g. making use of ICT to improve the environmental performance of food production and agrifood value chains)

The aim was to identify the needs of farmers and the farming ecosystem within the agri-food sector and which farmers needs the European DIHs were interested in supplying services in order to assess the preferences of these ecosystems involved in this project.

Table 17 - Digitalisation needs detected by farmers and identified by DIHs

NEEDS ASSESSMENT	Farmers	DIHs	Difference
The need to "Track and Trace" quality products from farm-to-fork	3.12	3.28	-0.16
The need to optimise farm operations	3.51	3.52	-0.01
The need for changing the way to do business	3.15	3.18	-0.03
The need to combine and exchange data to create value/ The need to utilise data to make better decisions	3.33	3.48	-0.15
The need for environmentally-sustainable production	3.31	3.51	-0.20
Average Digitalisation Needs	**3.28**	**3.36**	**-0.08**

We asked **Farmers** for their digitalisation needs, using a 1 to 5 scale. We have made this analysis independently for Producers and Ecosystem. In both groups all needs scored over 3, with slight variations on the preferences for each group.

For both groups the most important need is "The need to optimize farm operations (such as improving irrigation, disease treatment, harvesting, livestock management and administration)" with a score of 3.51. The second most relevant with 3.33 is: "The need to utilize data to make better decisions".

We can also extract from this, not only the importance of the need, but also that many of them are already trying to deal with some issues or, even more, already dealing with.

Then, mainly, respondents are already interested, trying to address or already addressing all the 5 topics given in the survey. On the contrary of the "The need to optimise farm operators", that was the most important need, the less interesting topic is "the need for new business models" which is also the least addressed by farmers.

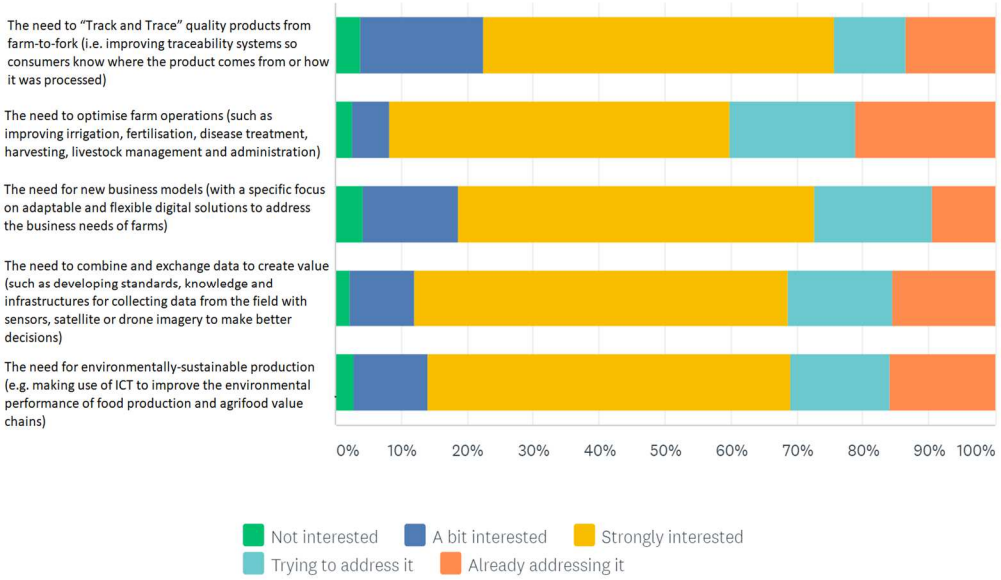


Figure 23 - Farmers perception of digitalisation needs

Focusing specifically on farmers, we have crossed the needs of digitisation with the sector, the size of the farm and the number of workers.

In relation to the sectors (Table 49) reported by Farmers, we can say there are no trends but we did find some interesting insights. The most important need is "to optimize farm operations", except for Vineyards. Farmers in this sector consider that the most important is "the need for environmentally-sustainable production", which contrasts the absence of interest in sustainability found in the Poultry, Fruits, Piggery and Vegetables sectors. Greenhouses and Dairy Producers do not perceive "Track and Trace" as a need, although Dairy Producers have a big need for the use of data for decision making.

Concerning the farm size, having in mind the difference between farms and livestock farms and giving each digitalisation need a score in relation to the size as well as an average, we observed (Table 50, Table 51 and Table 52) that the perceived needs to optimise farm operations and to utilise data to make better decisions increase significantly as we look at larger farms.

It's interesting to note that the perceived need to "track and trace" and "the need for environmentally–sustainable production" are lower in bigger farms.

Finally, in relation to the number of workers (Table 53), all needs proposed were perceived of more importance in larger teams, except for "the need for environmentally-sustainable production" which was generally less important in bigger farms. In fact, the latter decreased in importance as the size of teams increases. The need to utilise data is directly proportional to the number of workers.

For farmers the most important need is "The need to optimize farm operations, such as improving irrigation, disease treatment, harvesting, livestock management and administration".

Paying attention to **DIHs,** digitisation needs scored a bit more than 3. The aim of this question was to identify which farmer's needs the European DIHs (*Table 17)* were interested in supplying services in order to assess the preferences of these ecosystems involved in this project.

The highest ranked is "The need to optimize farm operations" (3.52) closely followed by "The need for environmentally-sustainable production (e.g. making use of ICT to improve the environmental performance of food production and agrifood value chains)" (3.51). Besides, a high percentage of DIHs are already addressing "the need to optimise farm operations, such as improving irrigation, fertilisation, disease treatment, harvesting, livestock management and administration".

Another main need detected is "the need to combine and exchange data to create value" which includes issues such as developing standards, knowledge and infrastructures for collecting data from the field with sensors, satellite or drone imagery to make better decisions.

On the one hand, the fact that all needs are at a medium level stands out. It is relevant that there is an interest above 2.5 (the average value between possible scores: 1 and 5) in all of them, since it shows the interest in those needs. None of them reaches the highest values in the scale (which would be 4 and 5) letting us think that digitisation would not be a top priority in the European agri-food sector.

But on the other hand, it is positive to know that the needs of DIHs and farmers are aligned. Since there is an interest to provide services by DIHs in line with the detected needs of the farmers.

There are no significant differences in the ranking of needs done by farmers and by DIHs. Both the sorting of their priorities and theirs scores are similar.

In conclusion, there are **no significant differences** in the ranking of **needs** done by **farmers and by DIHs** and **both focus on production** - related needs versus business or customer related needs. Both the sorting of their **priorities** and theirs scores are **similar**. "The need to optimize farm operations" is the most important digitalisation need, while "The need for changing the way to do business" is the least important for both again. This hint in the innovation and digitalisation point of view for farmers and DIHs will be analysed in the following sections.

3.4 DIHS INNOVATION SERVICES PORTFOLIO VERSUS EXPECTATIONS AND AVAILABILITY FOR FARMERS.

This section contains an analysis of the level of importance of the main services provided by DIHs according to their consideration as well as their level of availability. Also, farmers and the farming sector were asked for the importance they give to digital services and the available services, then, an analysis is also provided. And, finally, this section tries to clarify the correlation between both analyses, in order to assess if the services that are being implemented are also the services that the farmers need most.

Importance and Availability of Innovation Services for the DIHs

Based on a portfolio of services frequently provided by DIHs, respondents were asked to score the **importance** of those services using a scale from 1 to 5. Generally speaking, all services are ranked over 3. Although 91,25% considered Research and Development services as most important (for instance: technology concept development, realising proof of concepts), closely followed by services related to Community building (e.g. scouting for partners, marketing communication, ecosystem building)" and Visioning and strategy development (e.g. market intelligence, innovation strategy development), with a percentage of 84% and 83% respectively, as it is shown in Figure 24 and Table 18.

Research and Development services were considered as the most important for DIHs. For instance: technology concept development, realising proof of concepts.

On the contrary, the less important services from the DIHs' point of view are Incubators and accelerators, followed by "Mentoring (in the network) (e.g. training of/by other hubs and competence centres)".

These data reveal the need to reinforce the collaboration between DIHs and between DIHs and Competence Centres – exchanging experiences-, taking advantage of the lessons learned from other DIHs with a higher level of maturity. This is noteworthy find to be taken into account by Task "Building networks of DIHs" within this project, revealing this task as an extremely important one in order to mitigate this weakness.

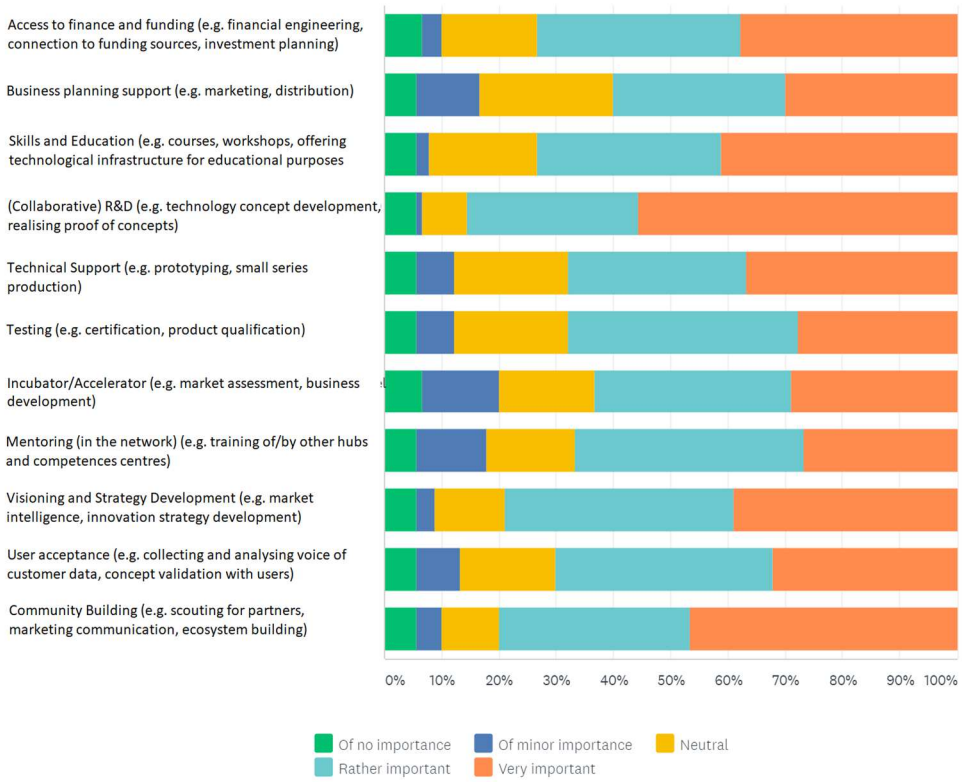


Figure 24 – Importance of services to operate as a DIH from their own point of view

Table 18 –Services scoring according to their importance

Importance of services	Value
Access to finance and funding	4.08
Business planning support	3.80
Skills and Education	4.15
(Collaborative) R&D	4.48
Technical Support	4.04
Product testing	3.91
Incubator/Accelerator	3.76
Mentoring (in the network)	3.81
Visioning and Strategy Development	4.18
User acceptance	3.97
Community Building	4.27

A further step in this analysis consisted in knowing which services out of those asked before are already being implemented by DIHs, showing a good maturity of these ecosystems. (Figure 25). Respondents had to use the same 1 to 5 scale. The idea was to have a clear concept of the gap between importance and availability, as well as to be able to compare with the farmers perception in a second stage.

Results show that services implemented are in line with the importance they are given. Then, services related to Research and Development are already in place in almost 70% of the surveyed DIHs, being the first service in both rankings. The second highest score is associated to the availability of "Community Building", which was also the second one in the importance ranking.

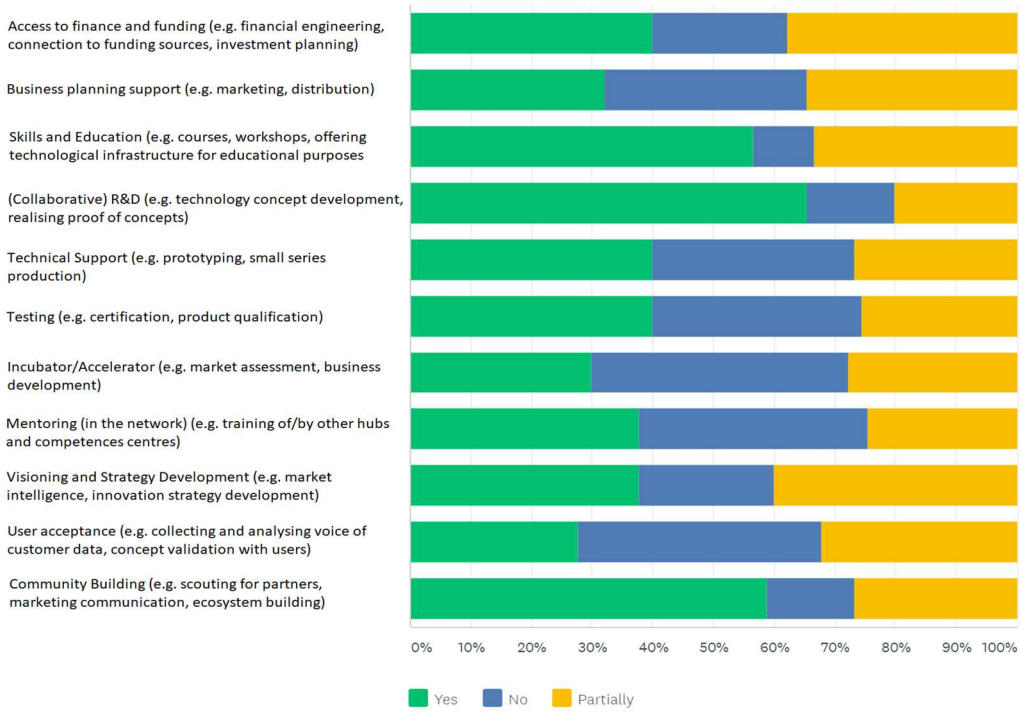


Figure 25 – Availability of services for DIHs

The lowest availability is reported for "Incubator/Accelerator (e.g. market assessment, business development)", slightly overpassed by "User acceptance (e.g. collecting and analysing voice of customer data, concept validation with users)".

In this last case, it is to remark that nor the concept of connected end-users nor the advantages of using information coming from consumers in the decision-making process have not taken root in the agrifood sector yet. There are numerous experiences and tools that are emerging across Europe in this sense and that could be part of the exchange of experiences between DIHs mentioned before. Also, as this quite new but also very beneficial for the agrifood sector and a wide field for technological companies, DIHs are advised to explore on the issue searching for opportunities for their ecosystems.

Table 19 – Available service scoring for DIHs

Availability of Services	Value
Access to finance and funding	3.25
Business planning support	2.90
Skills and Education	3.91
(Collaborative) R&D (e.g. technology concept development, realising proof of concepts)	4.01
Technical Support (e.g. prototyping, small series production)	3.08
Testing (e.g. certification, product qualification)	3.03
Incubator/Accelerator	2.62
Mentoring (in the network) (e.g. training of/by other hubs and competences centres)	2.90
Visioning and Strategy Development	3.33
User acceptance	2.67
Community Building	3.94

Analysing the gaps between the importance and the availability of services according to the DIHs results, it is visible that the smallest gaps are between the importance and the availability of Skills and education, community building and (Collaborative) R&D, and the largest gaps are in User acceptance, Incubator/Accelerator and Technical support.

In the case of small gaps, that means that services are being implemented according to the importance they have. Then, there is some sort of "problem" with those services with largest gaps. Recommendations for DIHs then would be to implement more incubators/accelerators and to explore more, as was before, on the opportunities of having consumers experiences, information and opinions into account.

Table 20 – Gaps between importance and availability of services for DIHs

Importance of Services X Availability of Services	Values
IMPORTANCE	3.97
AVAILABILITY	3.24
GAP	0.73
Access to finance and funding	0.82
Business planning support	0.90
Skills and Education	0.24
(Collaborative) R&D	0.47

Technical Support	0.96
Product testing	0.89
Incubator/Accelerator	1.14
Mentoring (in the network)	0.91
Visioning and Strategy Development	0.85
User acceptance	1.30
Community Building	0.33

Innovations Services Importance and Availability for Farmers

The same reflection as with DIHs was made with farmers, asking them to evaluate – in a 1 to 5 scale- the importance of the services to foster digital innovation for their business and the level of availability. Again, we observe that all scores are over 3 (see Figure 26).

The most relevant service is "Technical support to incorporate new technologies in their farming business" (4.12) followed by "Skills and Education (e.g. Courses, workshops, offering technological infrastructure for educational purposes)" with 4.03. Very close, there are also two important services: "access to finance and funding" and "participation in pilot projects, demo or testing actions of new products and services for the agrifood sector".

The least relevant services for Farmers are "Incubator / Accelerator" (3.47) and "User Acceptance" (3.58).

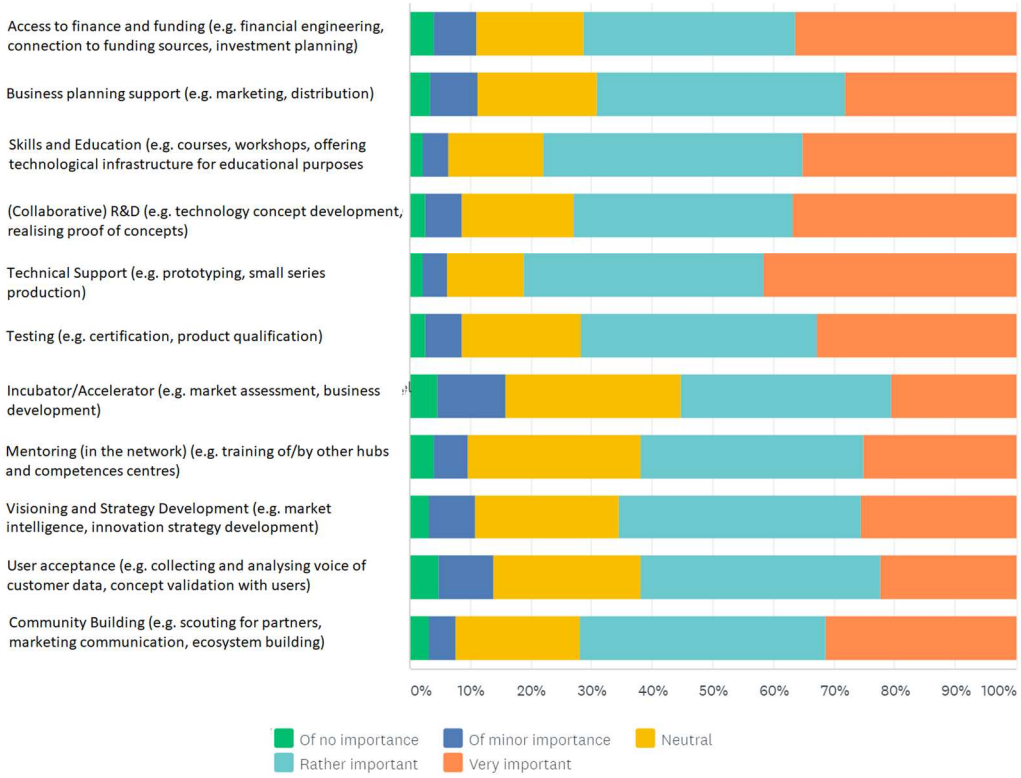


Figure 26 – Importance of services according to farmers

In relation to services offered by DIHs to farmers (Table 21 and Figure 27), these ones perceive the following as most available:

i) Skills and education

ii) Access to finance and funding

On the one hand, the service "Skills and education" that was in the top position of importance is being properly delivered to the farmers. Thus, this means that what they found most important is also the most available.

However, in spite of being so important "Technical support to incorporate new technologies in the farming business" and "Research and Development" when talking about the importance of services, these are perceived mainly as not provided or partially provided by DIHs.

In this case, promotion of figures such as demo-farms would be strongly recommended to DIH. This type of figures let farmers visit diverse experiences with different technologies implemented so as to check which of them would be of utility for them. Also, hackathons would be to foster or creating new specialised agrotech jobs.

The lowest score (1.84) corresponds to Incubator/Accelerator which was also the least important

Perhaps, it would be interesting for DIHs to explain the importance of the entrepreneurial character and of the creation of new businesses for the agrifood sector, using different communication tools.

The importance of most services increases together with the size of the farms but not in the case of "Incubators/Accelerators" and "User acceptance" (Table 54). While in the first one the scoring is higher in medium farms, still higher in smaller ones than bigger ones, in the second service, the trend is completely opposite. It decreases with the increasing of size.

This is not really difficult to understand, as small producers usually need to focus their commercial strategies in the quality of their products and in a strong positioning in front of consumers. They are based in a very close and reliable relationship with consumers in order to gain loyalty.

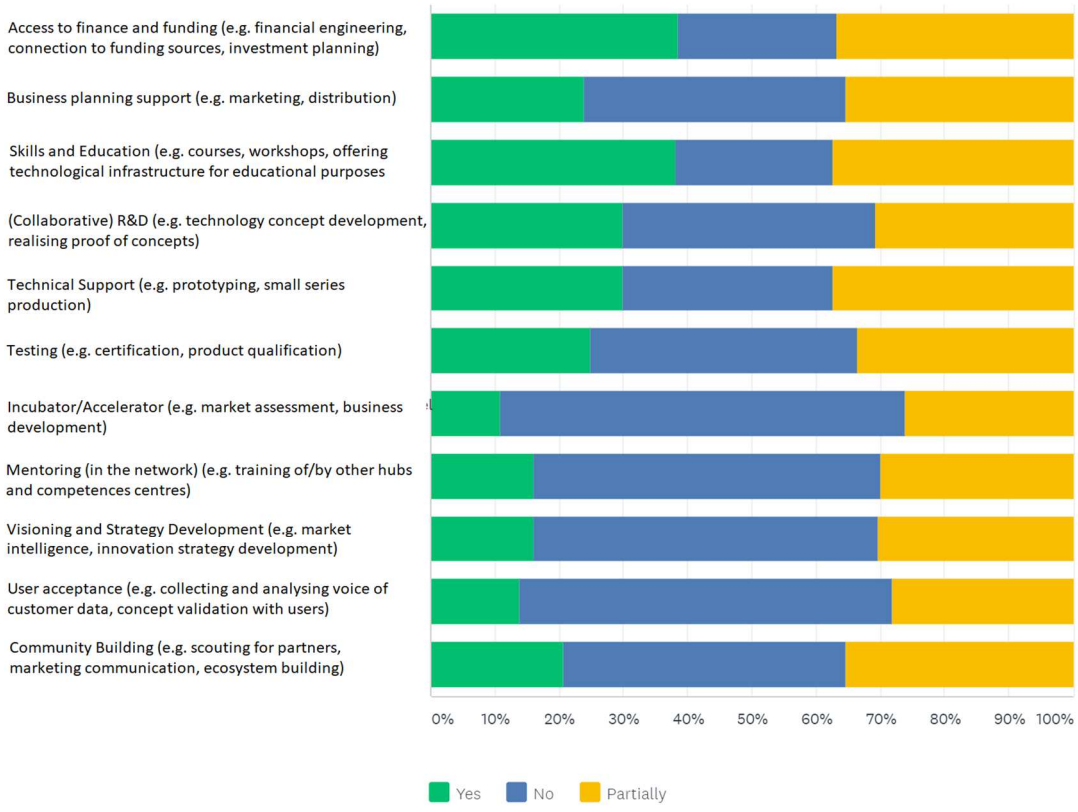


Figure 27 – Availability of services according to farmers

Analysing the gap between the importance of services and the availability according to farmers, we observe that the gap is significantly smaller for access to finance and funding and the needs for skills and education. The biggest gaps are reported for the needs for incubator/accelerator, mentoring, vision and strategy development, and user acceptance.

Table 21 - Gaps between importance and availability of services for farmers

GAPS *of services*	Importance	Availability	GAPS
Access to finance and funding	3.87	3.25	**0.62**
Business planning support	3.77	2.59	**1.18**
Skills and Education	4.03	3.29	**0.74**
Participation in collaborative projects with R&D companies, universities and other entities	3.91	2.63	**1.28**
Technical support to incorporate new technologies in your farming business	4.12	2.91	**1.21**
Participation in pilot projects, demo or testing actions of new products and services for the agrifood sector	3.87	2.55	**1.32**
Incubator/Accelerator	3.47	1.84	**1.63**
Mentoring	3.67	2.17	**1.5**
Visioning and Strategy Development	3.71	2.16	**1.55**
User acceptance	3.58	2.02	**1.56**
Community Building	3.88	2.51	**1.37**

As we did in the needs section, we have already done the analysis taking into account farm size, main sector and also having in mind the difference between farms and livestock farms. In these last two cases, data are not sound enough to draw conclusions. This is due to the fact that there were very few answers for some categories and values were too dispersed. All tables can be found in Annex I: Additional Tables.

Then, concerning the farm size, we ran an analysis of size in relation to the gap between importance and availability of services for the farmers that indicated a number of livestock.

In this case we found a relationship: the bigger the size of the livestock the highest the reported importance of most services, including access to finance and funding, skills and education, participation in collaborative projects with R&D companies, universities and other entities; technical support to incorporate new technologies in your farming business and participation in pilot projects, demo or testing actions of new products and services for the agrifood sector.

The availability of access to finance and funding is higher for larger farms, as does the perceived availability of services like "Participation in collaborative projects with R&D companies, universities and other entities" and "Participation in pilot projects, demo or testing actions of new products and services for the agrifood sector".

The gap between importance and availability is inversely proportional to size for "access for finance and funding" and "Participation in collaborative projects with R&D companies, universities and other entities".

The analysis of importance and availability of services when measured against size in terms of number of workers indicates that the importance of services grows as the team size grows except for the needs for Incubator/Accelerator, Mentoring, Visioning and Strategy Development, and User acceptance.

The availability of services is higher overall for farms with more than 10 workers, and the biggest gap between importance and availability of services is found in farms where 2 to 10 people work.

Analysis of the Gap in Innovation Services between DIHs and Farmers

We analysed the differences in gaps between the importance and availability of services as reported by Farmers and DIHs. In the tables below a positive gap is related to services that are more important or available for Farmers, and a negative gap is associated to services that are more important or available for DIHs.

If we compare how important services are for farmers to how they are for DIHs, see Table 22, Participation in collaborative projects and technical support are more relevant for Farmers than for DIHs, and DIHs consider Skills and Education, and Mentoring, more important than Farmers. Nevertheless, leaving apart "Skills and Education", "Mentoring", "User acceptance", "Visioning" and "Participation in pilot projects" where there is a higher difference of perception, farmers and DIHs have more or less the same perception of how important services are.

Table 22 - Gaps between farmers and DIHs in terms of importance of services

Importance Farmers Vs Importance DIHs	Value
Access to finance and funding	0.03
Business planning support	**-0.11**
Skills and Education	**-0.49**
Participation in collaborative projects with R&D companies, universities and other entities	0.10
Technical support to incorporate new technologies in your farming business	0.02
Participation in pilot projects, demo or testing actions of new products and services for the agrifood sector	**-0.21**
Incubator/Accelerator	**-0.08**
Mentoring	**-0.41**
Visioning and Strategy Development	**-0.32**
User acceptance	**-0.34**
Community Building	0.03

In terms of availability and implementation of services, there is a difference between farmers and DIHs points of view. In this case, both points of view should coincide as they are referred to services that really exist. However, DIHs says they are implementing more services than the services farmers know that are available. In many cases, this difference of perception is really high, such is the case of services like "Community Building", "Participation in collaborative projects with R&D companies, universities and other entities, and "Visioning and Strategy Development".

If we cross these results with the importance farmers give to services, we find out that in the case of "Participation in collaborative projects" and "Community Building", these services are also very important. Then, DIHs are already implementing them, these services are considered very important for farmers but farmers say these services are less available than they already are. Then, there is a problem of communication between both. Farmers do not have enough information from DIHs in relation to services.

The only service perceived similarly by DIHs and farmers is "Access to finance and funding".

Table 23 - Gaps between farmers and DIHs in terms of availability of services

Availability Farmers Vs Availability DIHs	Value
Access to finance and funding	0.03
Business planning support	**-0.23**
Skills and Education	**-0.63**
Participation in collaborative projects with R&D companies, universities and other entities	**-1.19**
Technical support to incorporate new technologies in your farming business	**-0.13**
Participation in pilot projects, demo or testing actions of new products and services for the agrifood sector	**-0.35**
Incubator/Accelerator	**-0.67**
Mentoring	**-0.67**
Visioning and Strategy Development	**-1.07**
User acceptance	**-0.54**
Community Building	**-1.40**

The most important conclusion we can draw is that the **DIHs are more optimistic than farmers about the importance and, especially, the availability of innovation services.**

Also, the economic size of the farms, measured as subjective size of the farms, are determinant in the perception of innovation services.

3.5 TOOLS USED AND REQUIRED TO DELIVER INNOVATION SERVICES BY DIHS

Answers to the questions referred to the tools currently used to deliver services and tools needed is analysed in this section.

A short list of tools to deliver services was offered to DIHs asking them to indicate whether they were used or not.

The results shows that workshops are the most often used tools by DIHs (Figure 28), followed by Live events and Connection to other hubs. Actions could be done to improve this last option in order to encourage a common learning amongst DIHs.

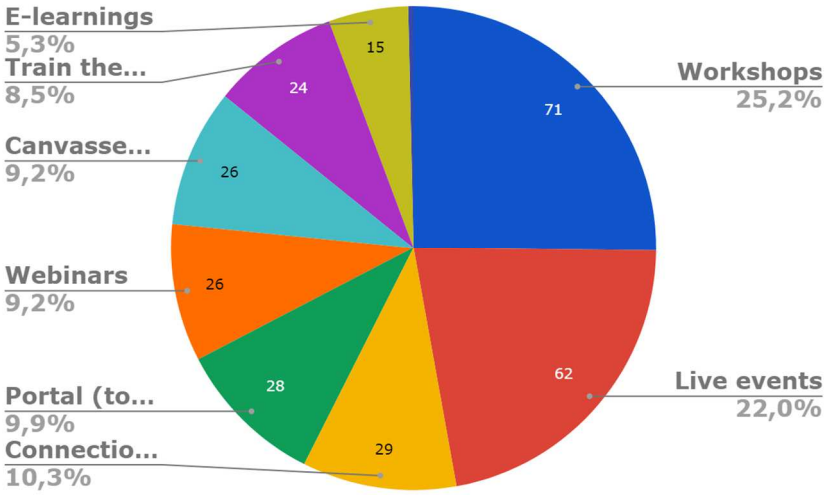


Figure 28 - Tools used by DIHs to deliver services

In addition to these options, we left the "other tools" option where respondents could add what they considered suitable. Amongst responses there were the following ones: collaborative projects, hackathons, DemoLab.

We also asked DIHs to say if there are any tools, they are not using in order to adequately deliver services. 46.7% of respondents said YES and 53.3% said NO. Then, half of the respondents think they have the right tools and the other half feel they should be using other tools. Respondents had the opportunity to say which tools they were not using and some of the answers are: E-learning platform, help guides, single portal with "good practices", DemoLab, one-stop-shop portal.

We can **conclude** that there is a **lack of innovation in the use of tools** and also that there is a **shortage of digital communication from the DIHs**.

3.6 DEFINITION OF "DIGITAL" FOR FARMERS AND DIHS

We wanted to know what "digital" means for both farmers and DIHs. For that, we asked respondents to say which of the statements provided in the survey are part of the definition of Digital or to provide their own definition. Statements provided to farmers and DIHs were the same.

Most farmers have a clear vision of what "digital" or digitalisation is, though they differ in their concept. There is a 7,37% of respondents that are unsure of the real meaning of it (see Figure 29).

Almost 60% of farmers usually perceive that digital goes beyond technologies and refers to a mindset.

Almost 60% of farmers usually perceive that digital goes beyond technologies and refers to a mindset.

In the option "Others" respondents gave different responses but mainly related to the use of screen instead of paper and the decision-making process based on data.

The concept of "digital" is understood by almost 64% of the DIHs (Figure 29) as something that goes beyond technology alone to reflect a mindset that embraces constant innovation, decision-making and the integration of technology into all phases of the business.

However, the most interesting insight that comes out of this section is that anyone has answered "unsure". That means that all DIHs have a very clear vision of what they think digital or digitalisation means though their understandings do not coincide. And a question arises out of this, in order to have homogenous services in all DIHs, and in order to have a real assessment of their maturity level, should not be important the establishment of a common (built by all) definition of "digital/digitalisation"?

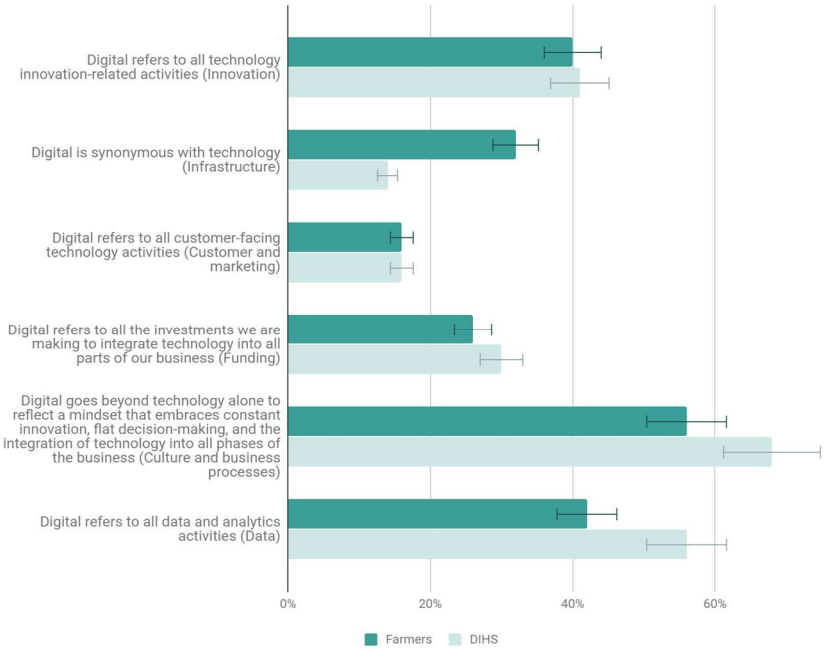


Figure 29 - Vision of Digital by Farmers and DIHs

Having a look to Table 24 Vision of Digital by Farmers and DIHs, we can see that farmers and DIHs have a very similar perception of what digital means.

Although all of the statements are indeed related to digital, in both cases Farmers and DIHs the highest score (0.56) and (0.68) is associated to the statement "Digital goes beyond technology alone to reflect a mindset that embraces constant innovation, flat decision-making, and the integration of technology into all phases of the business".

When talking about the lowest score they differ. For farmers the lowest is "all customer-facing technology activities" (0.16) and for DIHs (0.14) it corresponds to the definition "Digital is synonymous with technology".

Table 24 - Vision of Digital by Farmers and DIHs

Vision of digital	Farmers	DIHs	Difference
Digital refers to all technology innovation-related activities (Innovation)	0.40	0.41	-0.01
Digital is synonymous with technology (Infrastructure)	0.32	0.14	0.19
Digital refers to all customer-facing technology activities (Customer and marketing)	0.16	0.16	0.00

Digital refers to all the investments we are making to integrate technology into all parts of our business (Funding)	0.26	0.30	-0.04
Digital goes beyond technology alone to reflect a mindset that embraces constant innovation, flat decision-making, and the integration of technology into all phases of the business (Culture and business processes)	0.56	0.68	-0.12
Digital refers to all data and analytics activities (Data)	0.42	0.56	-0.14
Unsure	0.07	0.00	0.07
AVERAGE DIGITAL	**0.31**	**0.32**	**-0.01**

Thus, both **farmers and DIHs agree** in their **vision of "digital" as** a concept related to mindset and culture beyond, and related to **business processes**, followed by **data** and **analytics** activities and **innovation**. Customer and marketing are the least considered aspect of "digital" for both DIHs and farmers.

3.7 CLOUD SERVICES

Cloud is not just an infrastructure, it is also an enabler for digital transformation. According to the most recent communication of the European Commission regarding the cloud strategy, some of the benefits of adopting cloud technologies are:

- "as a result of the adoption of cloud computing 80% of organisations reduce costs by 10-20%."[6]
- "via the cloud, enterprises access relatively more advanced end customer software applications, e.g. for finances/accounting and managing information about their customers (customer relationship management – CRM) (38 % and 29 % respectively)"[7]
- "other benefits include enhanced mobile working (46%), productivity (41%), standardisation (35%), as well as new business opportunities (33%) and markets (32%)"[8]

We can assume that connectivity still has room for improvement in rural areas in the EU. But as overall broadband connectivity in rural areas is over 99%[9], including fixed DSL (94%) and mobile HSPA and LTE (98%), connectivity can't be considered an impediment for the access to cloud services.

Even when mobile internet use by degree of urbanisation shows that the use of mobile phones (or smartphones) to access the internet when away from home or work was greater amongst people in cities (61 %) in the EU-28 in 2016 than it was amongst people living in towns and suburbs (55 %) or those living in rural areas (47 %)[10], the overall internet usage shows that over 79% of the EU-27 population are internet users.

---

[6] Communication from the commission to the European Parliament, the Council, the European economic and social Committee and the Committee of the Regions - Unleashing the Potential of Cloud Computing in Europe (Text with EEA relevance) {SWD(2012) 271 final}
https://ec.europa.eu/info/sites/info/files/ec_cloud_strategy.pdf
[7] Eurostat - Cloud computing - statistics on the use by enterprises (https://ec.europa.eu/eurostat/statistics-explained/index.php/Cloud_computing_-_statistics_on_the_use_by_enterprises#Use_of_cloud_computing)
[8] IDC (2012) "Quantitative Estimates of the Demand for Cloud Computing in Europe and the Likely
[9] Broadband coverage in Europe (July 2017)
[10] Eurostat Regional Yearbook 2017 (https://ec.europa.eu/eurostat/documents/3217494/8222062/KS-HA-17-001-EN-N.pdf/eaebe7fa-0c80-45af-ab41-0f806c433763)

The lack of awareness about the importance of cloud, even more for DIHs than for farmers, is in line with the penetration of this technology in other sectors of the European Union.

Only 26 % of EU enterprises were using cloud computing in 2018, mostly for hosting their e-mail systems and storing files in electronic form.[11]

We asked DIHs to evaluate their perceived importance of Cloud Services for Farmers in a scale of 1 to 5. All services ranked over 3, being the highest ranked service "Farm management applications: any web or mobile app to manage the farm such as a field diary and livestock management" (4.08) and the lowest ranked service "Enterprise applications: Salesforce, SAP web, SAGE web or any other web based ERP/CRM" (3.25).

These services can be grouped according to their level of importance: The most important group includes services related to farm management services, the second group those of customer and business productivity services, and a third group with enterprise and infrastructure services, that are considered the least important for farmers.

Table 25 - Cloud Services importance for farmers according to DIHs

Cloud Services ranked by DIH	Rank 0-5
Customer applications: Gmail, Dropbox, WhatsApp, Telegram or similar	3.68
Business productivity: Office365, Google Apps, G-Suite, Skype or similar	3.68
Enterprise applications: Salesforce, SAP web, SAGE web or any other web-based ERP/CRM	3.25
Infrastructure/applications: FiWARE, OVH, IBM Bluemix, Amazon AWS, Google Cloud, Heroku or similar	3.42
Farm management applications: any web or mobile app to manage the farm such as a field diary and livestock management	4.08

According to respondents, (Figure 30) all cloud services are important for farmer´s business, highlighting especially those related to farm management applications which are considered as absolutely essential by more than 50% of DIHs. Customer applications and Business productivity are also quite important according to DIHs.

Services considered as less important out of the 5 categories are those that have to be with infrastructures and applications.

[11] Eurostat - Cloud computing - statistics on the use by enterprises (https://ec.europa.eu/eurostat/statistics-explained/index.php/Cloud_computing_-_statistics_on_the_use_by_enterprises#Use_of_cloud_computing)

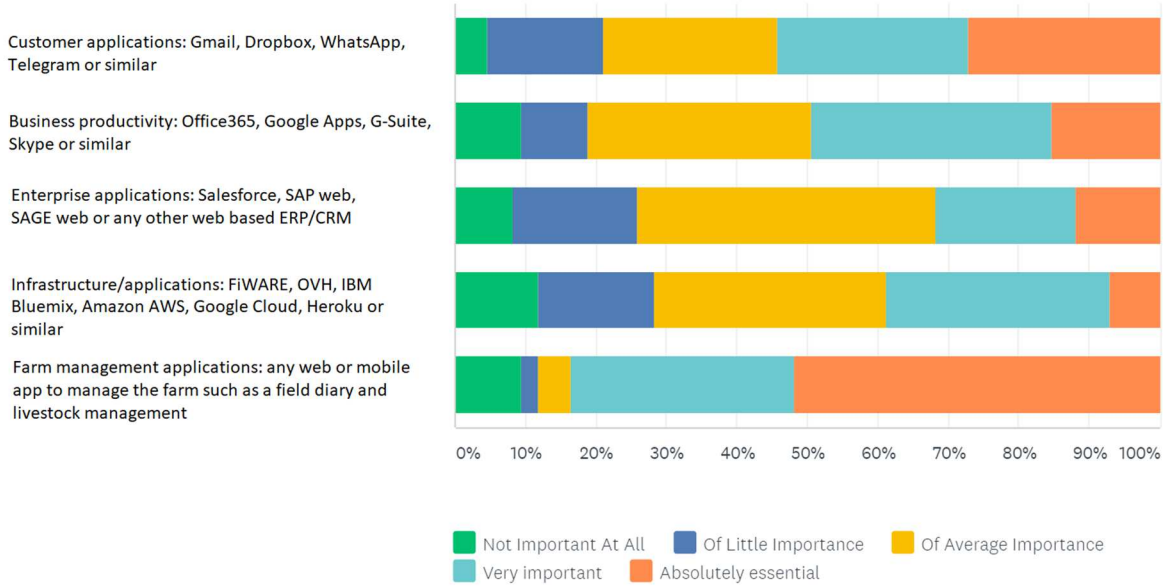


Figure 30 - Importance of Cloud Services ranked by DIH

In the same way, we asked them to rank their perception of the use of specific cloud services by Farmers. The highest score is associated to "Customer applications: Gmail, Dropbox, WhatsApp, Telegram or similar" (4.29) and the lowest score is for "Infrastructure/applications: FiWARE, OVH, IBM Bluemix, Amazon AWS, Google Cloud, Heroku or similar" (2.66). More than 60% of DIHs also agree on the wide use of Business productivity cloud services by farmers.

These services can be grouped attending to their usage: The most used group includes services related to customer cloud services, the second group that of business productivity and farm management services, and a third group with enterprise and infrastructure services, that are considered the least used by farmers.

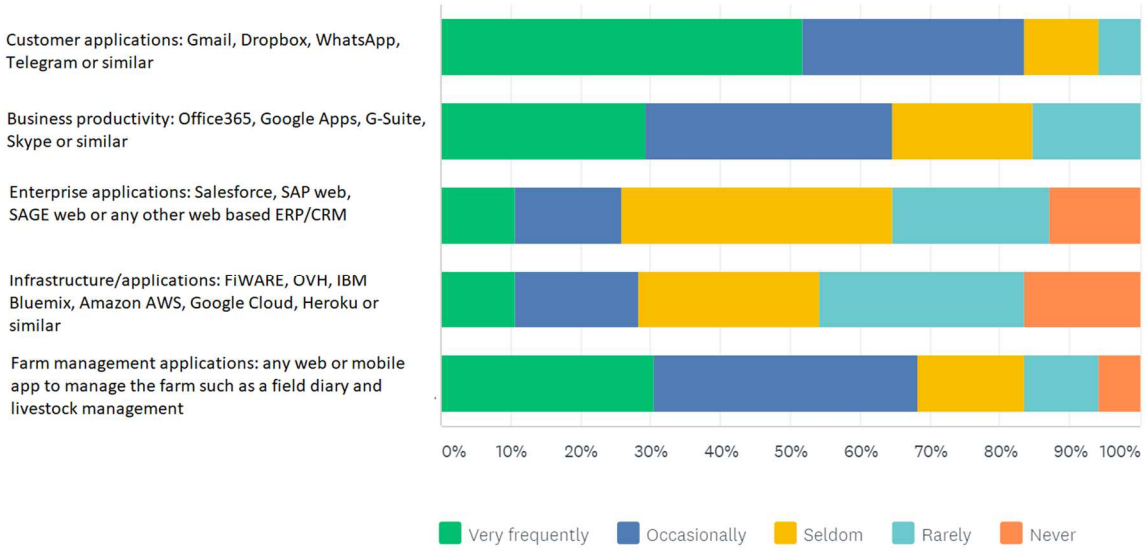


Figure 31 - Use of Cloud Services ranked by DIH

There is a difference between what DIHs think are important clouds services and what DIHs think farmers are using. Though DIHs think Farm management applications are the most important cloud services for farmers businesses, they also think that farmers use most Customer applications.

Nevertheless, all the 3 cloud services identified as more important cloud services are also the most used, according to DIHs, by farmers.

Also, in spite of considering Infrastructures/applications less important cloud services than Enterprise applications, farmers seem to use more the former than the latter.

Table 26 - Cloud Services used by Farmers according to DIHs.

Cloud Services used by Farmers	Rank 0-5
Customer applications: Gmail, Dropbox, WhatsApp, Telegram or similar	4.29
Business productivity: Office365, Google Apps, G-Suite, Skype or similar	3.75
Enterprise applications: Salesforce, SAP web, SAGE web or any other web-based ERP/CRM	2.77
Infrastructure/applications: FiWARE, OVH, IBM Bluemix, Amazon AWS, Google Cloud, Heroku or similar	2.66
Farm management applications: any web or mobile app to manage the farm such as a field diary and livestock management	3.72

As the transition to cloud is a relevant factor for successful digitalisation, we analysed the gap between the perceived importance and usage of these services by farmers, and the importance and usage reported by the DIHs.

Looking at the data we observed that Farmers use Customer Applications and Business Productivity Cloud Services more than what DIHs consider important, and that the opposite happens with more complex services like cloud enterprise applications, cloud infrastructure and farm management applications.

Table 27 - Cloud Services Importance for Farmers x Cloud Services Usage by Farmers

Cloud Services Importance for Farmers x Cloud Services Usage by Farmers	Importance	Usage	Gap
Customer applications: Gmail, Dropbox, WhatsApp, Telegram or similar	3.68	4.29	-0.61
Business productivity: Office365, Google Apps, G-Suite, Skype or similar	3.68	3.75	-0.06
Enterprise applications: Salesforce, SAP web, SAGE web or any other web-based ERP/CRM	3.25	2.77	0.48
Infrastructure/applications: FiWARE, OVH, IBM Bluemix, Amazon AWS, Google Cloud, Heroku or similar	3.42	2.66	0.76
Farm management applications: any web or mobile app to manage the farm such as a field diary and livestock management	4.08	3.72	0.35

Summarizing, the less advanced cloud services are perceived to be more used by farmers than DIHs consider important, while the most advanced cloud services are less used than DIHs perceive important. Considering that the cloud is considered an enabler for digital transformation and their use is still low, DIHs should be leading awareness actions on using cloud services.

3.8 DIGITAL SERVICES

It is important to know the importance of digital services for farmer's businesses according to DIHs and also the application areas they are assessing farmer needs. We also asked for the different tools and methods DIHs are using to assess that farmer needs.

Concerning the importance, DIHs reported it scoring digital services on a scale from 1 to 5. All services have a score higher than 3.

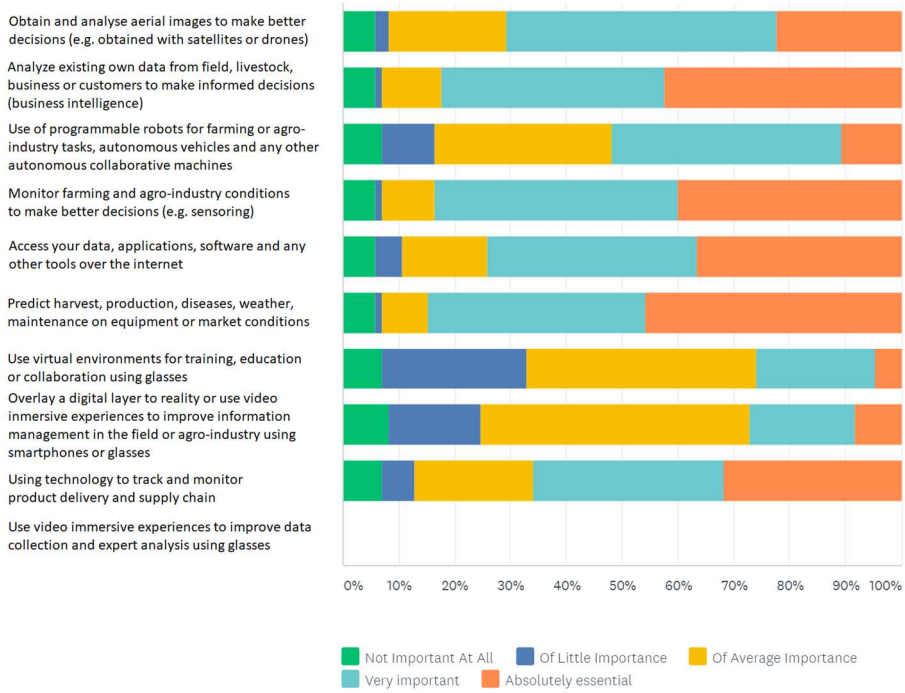


Figure 32 - Importance of digital services for farmers according to DIHs

The services with the highest importance are "Monitor farming and agro-industry conditions to make better decisions (e.g. sensoring)" (4.29), "Predict harvest, production, diseases, weather, maintenance on equipment or market conditions" (4.25) and "Analyse existing own data from field, livestock, business or customers to make informed decisions (business intelligence)" (4.24). The lowest score is for "Use virtual environments for training, education or collaboration using glasses" (3.14).

Table 28 - Importance of digital services for farmers' businesses according to DIHs

Digital Services	**Rank 0-5**
Obtain and analyse aerial images to make better decisions (e.g. obtained with satellites or drones)	4.19
Analyse existing own data from field, livestock, business or customers to make informed decisions (business intelligence)	4.24
Use of programmable robots for farming or agro-industry tasks, autonomous vehicles and any other autonomous collaborative machines	3.81
Monitor farming and agro-industry conditions to make better decisions (e.g. sensoring)	4.29
Access your data, applications, software and any other tools over the internet	4.10

predict harvest, production, diseases, weather, maintenance on equipment or market conditions	4.25
Use virtual environments for training, education or collaboration using glasses	3.14
Overlay a digital layer to reality or use video inmersive experiences to improve information management in the field or agro-industry using smartphones or glasses	3.23
Using technology to track and monitor product delivery and supply chain	3.92

We asked DIHs to indicate whether or not they are assessing farmers' needs in specific Digital Services. The most assessed application area is "Monitor farming and agro-industry conditions to make better decisions (e.g. sensoring)" (0.73), "Analyse existing own data from field, livestock, business or customers to make informed decisions (business intelligence)" (0.70) and "Access your data, applications, software and any other tools over the internet" (0.67)

Table 29 - Ranking of assessment of farmers' needs

Digital Services	**Rank 0-5**
Obtain and analyse aerial images to make better decisions (e.g. obtained with satellites or drones)	0.62
Analyse existing own data from field, livestock, business or customers to make informed decisions (business intelligence)	0.70
Use of programmable robots for farming or agro-industry tasks, autonomous vehicles and any other autonomous collaborative machines	0.46
Monitor farming and agro-industry conditions to make better decisions (e.g. sensoring)	0.73
Access your data, applications, software and any other tools over the internet	0.67
Predict harvest, production, diseases, weather, maintenance on equipment or market conditions	0.62
Use virtual environments for training, education or collaboration using glasses	0.24
Overlay a digital layer to reality or use video immersive experiences to improve information management in the field or agro-industry using smartphones or glasses	0.25
Using technology to track and monitor product delivery and supply chain	0.52

It is possible to dig more into the needs in order to know what services addressing those needs should be more important for farmers, according to the DIH point of view, and the services DIHs are already offering assessing farmers in concrete application areas. Let's see the latter first.

As we can see in the Figure 33, DIHs are assessing farmers' needs mainly in these application areas:

1. Monitor farming and agro-industry conditions (for example: sensoring).
2. Analyse existing own data from field, livestock, business or customers. That is business intelligence.
3. Access data, applications, software and any other tool over the internet.

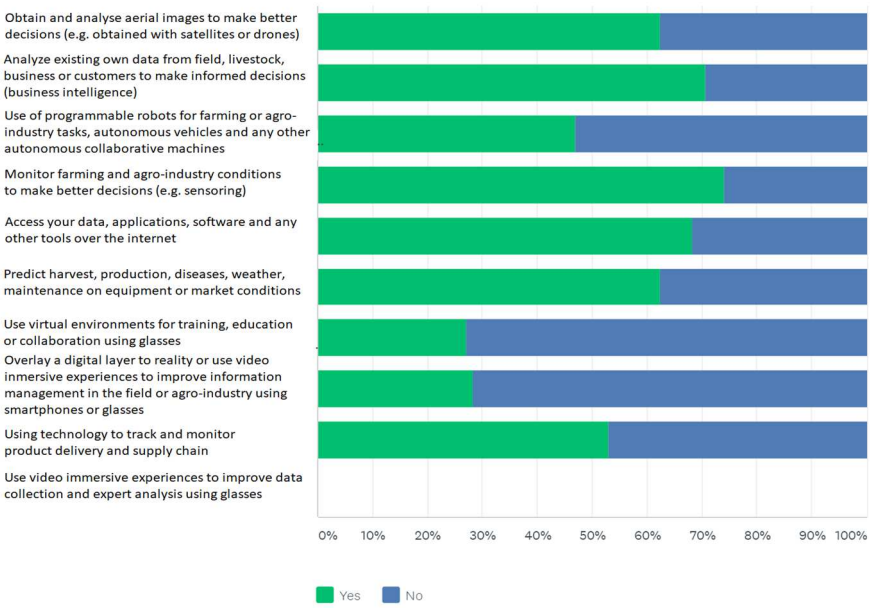


Figure 33 - Application areas assessed by DIHs

If we connect these results with the DIH perception on how important concrete digital services are for farmers, it is possible to see that there is some correlation between the applications areas DIHs are assessing and how important they see digital services.

These two application areas DIHs are assessing the most are two out of the three most important digital services.

We observed a close relationship between importance and ongoing assessments that would show that DIHs are putting efforts in what they consider relevant.

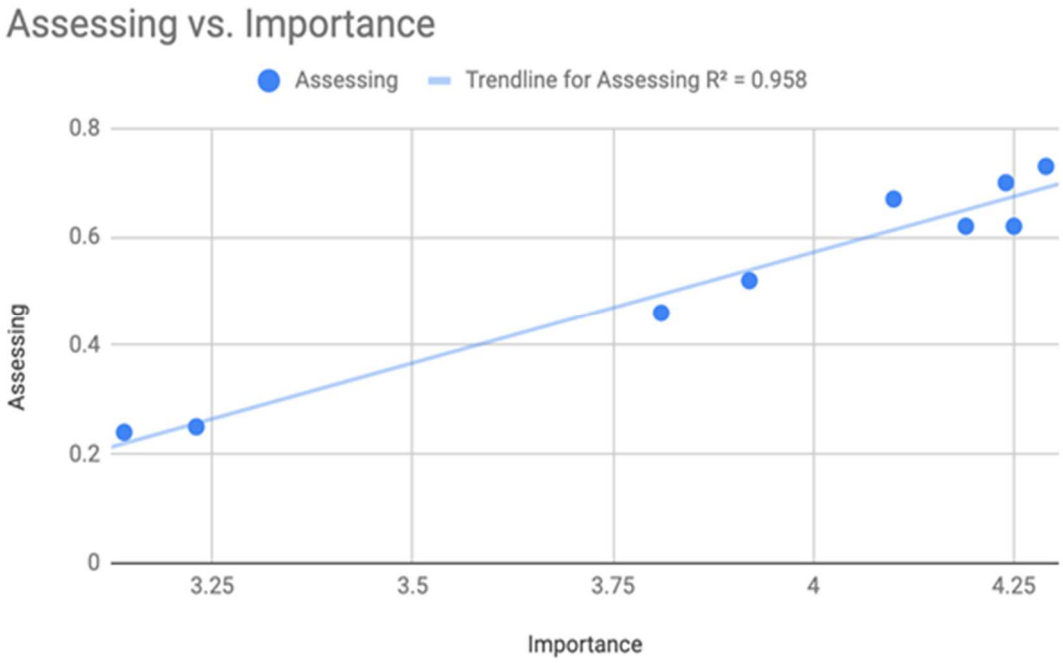


Figure 34 - Assessing versus importance

In view of these results, we can advance that the most important digital services are related to production, like sensoring and monitoring, business intelligence and predictive analysis.

3.9 SWOT ANALYSIS

In order to be able to have a very wide overview of what strengths, weaknesses, opportunities and threats farmers have we asked them to respond with a free text to some questions. Texts were translated into English for the analysis.

Farmers

Concerning farmers, the best outcomes come from the "Challenges" question, where profitability and business are perceived as the most challenging, followed up by innovation, work-life balance and succession. In the rest of the questions, production, business and price related words are always the most important.

Strengths are quite related to production and knowledge, also to experience. In fact, they are saying that they have a very good basis to work with, they are strong in the most basic part of the sector.

However, they are not good enough in costs and making the activity as profitable as they would desire.

Threats are just highlighting those weaknesses. They have pointed out competition and prices as the most important aspects they have to deal with. Also, climate is one of their main concerns.

According to that situation, opportunities they remark are just in line to continue improving their strengths, have a big impact in their weaknesses and reduce their threats. These opportunities are related to improving, production, use of data, decision-making and climate.

Detailed information and tables of this analysis can be found below.

Strengths are quite related to production and knowledge, also to experience.

Weaknesses: farmers consider they are not good enough in costs and making the activity as profitable as they would desire.

Threats: farmers have pointed out competition and prices as the most important aspects they have to deal with. Also, climate is one of their main concerns.

Opportunities are related to improving, production, use of data, decision-making and climate.

Strengths

Production (53), Knowledge (44) and Experience (37), innovation (36) and work (30) are the five most commonly mentioned strengths.

Table 30 - Strengths of Farmers

STRENGTHS	number
production	53
knowledge	44
experience	37

innovation	36
work	30
quality	27
technology	25
adaptability	16
perseverance	16

Figure 35 - Strengths of farmers word cloud

Challenges

There are 5 main categories of answers. Profitability, cost and business (231) is the most common challenge, followed by Innovation (138).

Table 31 - Challenges of Farmers

Challenges	Number
profitability, cost, business	231
innovation	138
work-life balance	88
succession	48
environment&health	48

Figure 36 - Challenges of farmers word cloud

Opportunities

Production (51), Improvements (47), Data (42), Decision Making (40) and Climate (40) are the five most common opportunities perceived.

Table 32 - Opportunities of Farmers

Opportunities	Number
production	51
improvements	47
data	42
decision-making	40
time	32
costs	31
control	27
efficiency	27
management	26

Figure 37 - Opportunities of farmers word cloud

Threats

In this case, Price (57), Climate (40) and Competition (27) are the most common threads perceived.

Table 33 - Threats of Farmers

Threats	Number
price	57
climate	40
competition	27
change	25
costs	24
products	23
production	19
farmers	17
market	14

Figure 38 - Threats of farmers word cloud

Ambitions

Business (51), production (27), and quality (24) are most scored categories.

Table 34 - Ambitions of Farmers

Ambitions	Number
business	56
production	27
quality	24

Figure 39 - Ambitions of farmers word cloud

Needs to Fulfil Ambitions

In the case of needs to fulfil ambitions, farmers marked as most important issues funding (46), support (40) and technology (36).

Table 35 - Needs of Farmers to fulfil ambitions

Needs	Number
funding	46
support	40
technology	36
prices	31
knowledge	27
innovation	13
products	12

Figure 40 - Main needs to fulfil ambitions mentioned by farmers

Having a look at the most important farmers' needs from section 3.4, we can see that there is a coincidence:

1. The need to optimise farm operations
2. The need to combine and exchange data to create value/ The need to utilise data to make better decisions
3. The need for environmentally-sustainable production

Having in mind that they gave a score of more than 3 in a 1 to 5 scale when talking about the importance of digital services, these opportunities addressed by digitalisation.

We also asked farmers for their ambitions and needs to fulfil them. In relation to the farmer, they mark as more important: business, growth and production. Concerning the latter, they believe they need funding, support and technologies. All this is also in line with the most important services pointed out by farmers, which are the following:

1. Technical support to incorporate new technologies in their farming business
2. Skills and Education
3. Access to finance and funding
4. Participation in pilot projects, demo or testing actions of new products and services for the agrifood sector

DIHs

Regarding DIHs, similar questions were included in the survey. As every DIH responded in English there was no need to cope with translations.

Generally speaking, DIHs SWOT analysis is very aligned with the rest of the results.

They mention as strengths the words network, innovation and research. This is connected with the results in the sections 3.1 (survey distribution and data collection) and 3.2 (digital innovation hubs ecosystem) where shortcomings of connections from DIHs with farmers and the farming ecosystem are pointed out. However, they have developed more connections between DIHs and research and education centres. On the other hand, DIHs have considered R&D as the most important innovation service from their own point of view.

We also asked them for their main contributions to the sector, then they mention research, innovation and digital; and concerning their ambitions, they mention innovation, and technologies.

Again, research is their main contribution, supporting the previous statement about the importance of R&D for DIHs.

According to their challenges, they are about digital, innovation and funding while their needs to fulfil ambitions are funding, support, network, knowledge and digital technologies.

It is also noticeable that DIHs mention network both as a strength and as a need to fulfil their ambitions.

Regarding technology, it is remarkable that is considered both as an ambition and as a need to fulfil their ambitions.

Also, funding is mentioned as a challenge and as a need to fulfil their ambitions. These is strongly disconnected to farmers and the farming ecosystem, and it is reflected in section 3.4 (table 23), where access to finance and funding is the only innovation service that DIHs perceive less available than farmers.

We can imagine DIHs as research-focused institutions, considering they have a strong network but probably not the right one to connect with farmers and the farming ecosystem, without a clear business model nor customer – centric approach and with a high dependency on public funding.

More details regarding this SWOT analysis can be found below.

Strengths: network, innovation and research.

Ambitions: innovation and technologies.

Challenges: innovation and funding.

Needs: funding, support, network, knowledge and digital technologies.

Strengths

DIHs mention network, innovation and research as their main strengths, although network has been identified as a key weakness.

Considering innovation and research as strengths is aligned with their connections and ecosystem.

Table 36 - Strengths of DIHs

Strengths	Number
network	17
farmers	16
DIH	11
sector	9
innovation	7
research	7

Figure 41 - Strengths of DIHs

Challenges

DIHs mention digital, innovation and funding as challenges.

Table 37 - Challenges of DIHs

Challenges	Number
sector	13
farmers	11
digital	8
farm	7
innovation	7
funding	7

Figure 42 - Challenges of DIHs

Contribution

When asked about their biggest contributions to the sector, besides common words, DIHs mention research, innovation and digital.

Table 38 - Biggest contributions of DIHs

Contributions	Number
sector	11
agriculture	10
research	10
innovation	8
farmers	7
digital	6

Figure 43 - Biggest contributions of DIHs

Ambitions

Regarding their ambitions, DIHs mention innovation and technologies.

Table 39 - Ambitions of DIHs

Ambitions	Number
sector	11
farming	10
innovation	9
agriculture	9
farmers	8
technologies	7

Figure 44 - Ambitions of DIHs

Needs to Fulfil Ambitions

It is noticeable that DIHs mention funding as their main need to fulfil their ambitions, followed by support, network, knowledge and digital technologies.

Table 40 - Needs to fulfil ambitions of DIHs

Needs	number
funding	12
support	10
network	9
need	7
knowledge	7
digital technologies	5

Figure 45 - Needs to fulfil ambitions of DIHs

As final conclusion, best outcomes comes from the "Challenges" question, where profitability and business are perceived as the most challenging, followed up by innovation, work-life balance and succession. In the rest of the questions production, business and price related words are always the most important.

3.10 INNOVATION CAPACITY AND ENTREPRENEURIAL MINDSET

We obtain an indicator for the innovation capacity and entrepreneurial mindset of the farmers based on a list of statements that were provided in the farmers' survey. Farmers were asked to agree with them using a range of responses from "not at all" to "very much", moving through "very little" and "somewhat".

In most cases "Not at all" has been given a score of 1 and "Very Much" a score of 4, except for the statement "Experience and technical knowledge is the primary driver to make decisions about farm and business" where "Not at all" scores 4 (as it is a false statement) and "Very Much" scores 1.

The average of these numeric scores is the ***INNOVAINDEX: Innovation and Entrepreneurship Mindset Indicator.***

INNOVAINDEX: This is an indicator defined as part of the survey methodology. INNOVAINDEX measures the innovation capacity and entrepreneurship mindset of farmers based on their answers to that series of statements. Statements are, with one exception, positive factors to innovation maturity.

This is an indicator defined as part of the survey methodology. InnovaIndex measures the innovation capacity and entrepreneurship mindset of farmers based on their answers to that series of statements. Statements are, with one exception, positive factors to innovation maturity.

A higher InnovaIndex indicates a higher capacity of innovation and entrepreneurship mindset.

InnovaIndex Relationship to Sector and Subjective Size of The Farm

An analysis of the variations in InnovaIndex across the different groups of subjective farm size indicates a direct link, with the largest the subjective size of the farm, the higher the capacity of the farm to innovate.

Table 41 - InnovaIndex according to the relative size of farms

Size	INNOVAINDEX	VARIANCE of INNOVAINDEX
Small	2.54	0.12
Small/Medium	2.68	0.26
Medium	2.65	0.16
Medium/Big	2.97	0.11
Big	2.98	0.15
Grand Total	**2.70**	**0.19**

InnovaIndex is also strongly linked to the main sector assigned to the farmer, as stated in Table 42. Olive trees, vegetables, fruits and vineyard are the least innovative sectors, while piggery, dairy, poultry and greenhouses are the most innovative ones.

It is noticeable that sample variance is higher for poultry and agroforestry sectors, so these data should be treated with care.

Table 42 - InnovaIndex in relation to main sectors

Main sectors	INNOVAINDEX	VAR of INNOVAINDEX	COUNT of INNOVAINDEX
Olive trees	2.59	0.153	94
Vegetables	2.60	0.094	16
Fruits	2.65	0.155	43
Vineyard	2.67	0.174	23
Arable farming	2.67	0.217	78
Mixed	2.68	0.152	25
Animal husbandry (i.e. cattle, sheep, goat…)	2.70	0.145	58
Agroforestry	2.71	0.308	17
Greenhouses	2.79	0.155	20
Poultry	2.80	0.572	6
Dairy	2.89	0.241	31
Piggery	3.03	0.087	27
Grand Total	**2.70**	**0.184**	**438**

In line with the previous results, InnovaIndex is linked to the subjective size of the farm in every sector.

Table 43 - InnovaIndex according to main sector and subjective size of farms

InnovaIndex by Size Sector	Subjective size of the farm				
Sector	1 Smallest	2 Small	3 Medium	4 Big	5 Biggest
Olive trees	2.50	2.57	2.53	3.12	2.91
Vegetables	2.30	2.93	2.80	2.73	2.47
Fruits	2.62	2.81	2.43	3.00	2.69
Vineyard	2.43	2.87	2.53	3.00	2.69
Arable farming	2.47	2.41	2.59	2.88	3.08
Mixed	2.48	2.94	2.66		
Animal husbandry (i.e. cattle, sheep, goat, please give us more detail below)	2.66	2.56	2.68	3.17	3.36
Agroforestry	2.59	2.73	2.80	3.00	2.47
Greenhouses	2.74	2.87	2.70	2.93	3.20
Poultry			2.73	3.03	3.30
Dairy	2.52	2.87	2.87	2.92	3.28
Piggery	2.73	3.02	3.10	2.92	3.06

InnovaIndex and Challenges

Innovation and entrepreneurship mindset are closely related to a decrease in challenges such as profitability, cost and business, and an increase in challenges such as innovation. InnovaIndex is not related to any other challenges reported by Farmers.

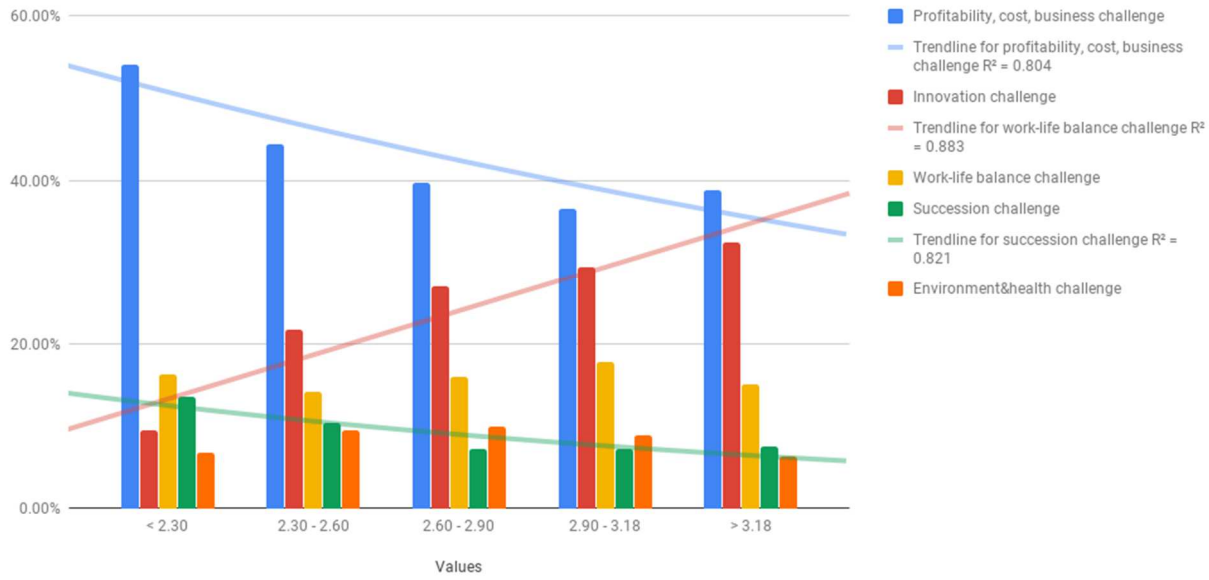


Figure 46 - InnovaIndex and challenges

Table 44 - InnovaIndex in farmers according to challenges

InnovaIndex in farmers x challenges	Grouped INNOVAINDEX					
	< 2.30	**2.30 - 2.60**	**2.60 - 2.90**	**2.90 - 3.18**	**> 3.18**	**Total**
Profitability, cost, business	40	47	72	41	31	231
Innovation	7	23	49	33	26	138
Work-life balance	12	15	29	20	12	88
Succession	10	11	13	8	6	48
Environment & health	5	10	18	10	5	48
Mean InnovaIndex	2.02	2.44	2.73	3.01	3.37	2.72
Total of surveys	**90**	**111**	**170**	**110**	**89**	**570**

Regional Cluster Results and Differences

We analysed the changes in InnovaIndex across the different regions and did not find any significant relationships or differences.

Most relevant outcome from this data is that there is no correlation between InnovaIndex and the Regional Cluster.

Table 45 - InnovaIndex across the different Regional Cluster

Regional Cluster	mean of INNOVAINDEX	variance of INNOVAINDEX	Number of INNOVAINDEX
Iberia	2.64	0.18	242
Italy & Malta	2.65	0.13	110
North-East Europe	2.69	0.30	25
UK & Ireland	2.82	0.19	38
South-East Europe	2.83	0.19	89
North-West Europe	3.04	0.15	41
Grand Total	**2.72**	**0.19**	**545**

DIH Results and Differences

We analysed the changes in InnovaIndex across the different DIHs that obtained the minimum of 19 completed farmers surveys trying to see if there were any significant trend, pattern, difference, etc. but we did not find any.

Table 46 - InnovaIndex across the different Digital Innovation Hubs

Digital Innovation Hubs	mean of INNOVAINDEX	variance of INNOVAINDEX	Number of INNOVAINDEX
Andalucía Aggrotech DIH	2.63	0.14	106
COLDIRETTI	2.64	0.15	53
DIHGAS: Digital Innovation Hub for Galician Sector.	2.62	0.19	31
RIOHUB	2.63	0.19	22
UE COOP	2.66	0.12	24
Grand Total	**2.63**	**0.15**	**236**

Once the analysis was developed assessing the variation in the InnovaIndex across the different groups of farms categories (farm size, sectors, farm subjective size, etc.), the following main insights were extracted:

- Bigger farms show an overall higher innovation capacity and entrepreneurship mindset in all sectors (InnovaIndex).
- A higher InnovaIndex is usually associated with farmers that perceive innovation as more challenging than profitability. Small and Medium farms give more priority to profitability. This indicates bigger farms are more aware of the importance of digital innovation, being one step ahead of medium and smaller farms.
- InnovaIndex is also closely linked to sectors (so there are sectors that are more innovative than others) and challenges (more innovative farms declare innovation as more challenging than profitability and business) but not to RC nor DIHs.

3.11 FLAGSHIP INNOVATION EXPERIMENTS

We analysed Flagship Innovation Experiments (FIEs) catalogued in SmartAgriHubs[12] in terms of digitalisation needs covered and innovation services provided.

Regarding the digitalisation needs, a score of 1 was assigned if the need was specifically covered by the FIE, or zero if it was not. Same scoring was applied to innovation services being delivered by FIEs to farmers, assigning 1 if it was explicitly delivered, and a 0 if it was not.

It is noticeable that scoring is assigned considering farmers as target beneficiaries of FIEs, while the agri-food industry and consumers and the whole society are users (regarding user acceptance). In case of considering the service providers as beneficiaries results may show remarkable differences.

Table 47 - Needs covered by FIEs

[12] *Deliverable 3.2 IE Execution Plan and Flagship Innovation Experiments section in SmartAgriHubs website: https://smartagrihubs.eu/flagship-innovation-experiments*

Needs Covered by FIEs	Value
The need to "Track and Trace" quality products from farm-to-fork	0.21
The need to optimise farm operations	**0.75**
The need for changing the way to do business	0.21
The need to combine and exchange data to create value/ The need to utilise data to make better decisions	**0.86**
The need for environmentally-sustainable production	0.50

Source table: Own elaboration based on Deliverable 3.2 IE Execution Plan and Flagship Innovation Experiments section in SmartAgriHubs website.

The needs covered in FIEs are aligned with surveys for both farmers and DIHs. The first in the classification is "The need to utilise data to make better decisions" followed by "The need to optimise farm operations"

Flagship Innovation Experiments most delivered innovation services are product testing, R&D, skills and education and technical support. These four innovation services are also the most important for farmers.

For DIHs, these four innovation services are also considered important, along with Community Building, Visioning and Strategy Development, Access to finance and funding and User acceptance.

Table 48 - Innovation services delivered by FIEs

Innovation services delivered by FIEs	Value
Access to finance and funding	0.04
Business planning support	0.29
Skills and Education	**0.43**
(Collaborative) R&D	**0.68**
Technical Support	**0.43**
Product testing	**0.75**
Incubator/Accelerator	0.18
Mentoring (in the network)	0.11
Visioning and Strategy Development	0.18
User acceptance	0.18
Community Building	0.11

Source table: Own elaboration based on Deliverable 3.2 IE Execution Plan and Flagship Innovation Experiments section in SmartAgriHubs website.

Flagship Innovation Experiments are focused in bringing technology to farmers, covering opportunities related to the improvement of production and the creation of value with data. Helping in the long term to the digital and innovation challenges.

Results are aligned with surveys for both farmers and DIHs, the digitalisation needs most covered are **data** ("The need to combine and exchange data to create value/The need to

utilise data to make better decisions") and **optimization of farm operations** ("The need to optimise farm operations"), followed up by "The need for environmentally-sustainable production".

The least covered digitalisation needs are **traceability** ("The need to "Track and Trace" quality products from farm-to-fork") and **business model innovation** ("The need for changing the way to do business"), also aligned with farmers and DIHs.

In terms of digitalisation needs, Flagship Innovation Experiments are closely aligned to farmers and DIHs priorities and perception.

As a suggestion, the SAH project should promote (with open calls and other methods) those experiments that help to provide services less represented in the actual Flagship Innovation Experiments within the project. Thus, experiments that deliver services in community building, mentoring trough networks and access to finance and funding.

4. CONCLUSIONS AND RECOMMENDATIONS

This chapter aims at connecting the results obtained to deliver actionable conclusions in order to help DIHs and RCs to unleash the innovation potential for digital transformation in the agrifood sector by boosting the uptake of digital solutions by the farming sector.

Five main transversal topics were extracted from the cross - analysis of the results:

- The role of the Digital Innovation Hubs in the digital innovation of the agrifood sector, that refers to general conclusions about the DIHs ecosystem and network connections, digitalisation needs, digitalisation services, innovation services and cloud service. How farmers are still focused on optimizing production opposed to changing business model with a customer - centric approach, as initially suggested by the results about digitalisation needs of farmers and DIHs and supported by the overall results.
- The key differences between farmers regarding digital needs and innovation services, as identified in the results regarding InnovaIndex.
- Actionable analysis of the innovation services to be provided by DIHs, coming from the farmers perspective on innovation services and the evidence that DIHs need a tool to incorporate that perspective and take action.
- Lessons learned about methodology, with specific topics considered useful to further projects in the agrifood sector.

Every topic includes conclusions and general recommendations to be taken into consideration by Digital Innovation Hubs and adapted to their local ecosystems.

In addition, it has also been tried to extract the key trends on which it is necessary to reinforce the DIH capacity building tasks throughout the project, in order to be a successful approaching with the agrifood sector.

4.1 DIHS ROLE IN DIGITAL INNOVATION

We identified six main issues about DIHs that are worth a more thoughtful analysis: Ecosystem, digitalisation Needs, Vision of "Digital", Cloud Services, Digital Services and Innovation Services.

- **Ecosystem:** Most DIHs network connections are with University/Research Centres, Local SMEs, Competence Centres, Farmer associations and communities, local governments and education & training institutes. **Connections with larger local businesses and start-up programmes are less common.**

  Digital Innovation Hubs, in SmartAgriHubs, are meant to serve the farming ecosystem and their customers but the results of the survey participation show a lack of connection with them. The focus on education, government and institutions also influences the vision of innovation services provided by the DIHs.

  DIHs need to start mapping their agrifood innovation ecosystem, including the connections mentioned in the survey (University and research centres, local innovative SMEs, competence centres, farmer associations and communities, local governments, education and training institutes, local larger businesses and incubator, accelerator and any other start-up programs), but also any other relevant organisations, people, services and resources related to agrifood innovation[13].

[13] *https://www.startupcommons.org/blog/mapping-startup-ecosystems*

Then, connections with the farming ecosystem need to be fostered by developing community-based customer-centric strategies, with clear objectives and key results[14], real time monitoring and co-creation and knowledge-sharing sessions both within local ecosystems and Regional Clusters at European level.

- **Digitalisation Needs:** DIHs are aligned with farmers in their perception of the digitalisation needs of the farming ecosystem, both detecting as most needed "optimize production" and least needed "track and trace" and "change business models".

  On the one hand, this alignment is a good starting point, showing that DIHS and farmers are both incumbents in the farming ecosystem with shared perspectives.

  On the other hand, business model innovation, transformation and disruption are fundamental in digital innovation. Then, communication and awareness of these issues will be key to allow DIHs to lead the digital innovation.

  Good examples about communicating innovation are: curating existing content and distributing it via periodic newsletter, web and social media; organising live events for innovators in agrifood to show their own approach, or hosting informal and experiential education events like business hackathons and innovation design workshops.

- **Vision of "digital":** The **DIHs vision of the concept of "digital" is more focused on data and culture, mindset or business processes** than in technology and customer-centric activities. Again, raising awareness on technology and customer-centric approaches will be fundamental to give the DIHs tools to lead the farming ecosystem digital shift.

- **Digital services:** As observed in the Farmers surveys, the **digital services considered more relevant by respondents from the DIHs point of view are those associated to production (monitoring, sensoring, descriptive and predictive analysis)**. We extend the recommendation of raising awareness about digital services with deeper impact on business models and customer relationship.

- **Innovation services:** Participation in R&D collaborative projects, Community building, Visioning and Strategy Development and Skills and Education are the innovation services that DIHs consider more important while Incubator/Accelerator is the least important.

  Priorities in terms of innovation services are consistent with the influence of the network previously analysed in this subchapter.

  Although community building is considered important for most DIHs the ecosystem analysis and lack of connections resulting from the scarcity of surveys, shows that improvement is needed in this respect.

  This report shows the differences between the perception of innovation of DIHs and farmers ecosystem. Communication and monitor the perspective of farmers to DIHs periodically in a structured manner, like this report, will be fundamental for them to gain perspective and alignment on farmer's needs.

- **Cloud services:** When we analyse cloud services, DIHs consider that the cloud services more commonly used by Farmers are actually the least important ones for a successful digitalisation of the sector, with the exception of Farms Management Applications.

[14] *https://rework.withgoogle.com/guides/set-goals-with-okrs/steps/introduction/*

Although cloud is considered to be the entry point to digital transformation and businesses in Europe are using these services very little, DIHs seems to understand that suffice.

DIHs should develop a strategy in order to create awareness on cloud services as well as providing skills and education.

4.2 PRODUCTION IS STILL IN THE FOUNDATION ROOTS OF EUROPEAN FARMERS

Farmers put the need to optimize farm operations as their main need in relation to digital transformation. Most concepts indicated in the SWOT analysis-related questions of the survey are somehow tied to production: Strengths mentioned include production, knowledge and experience; Threads include price, climate and competition; Ambitions include business growth, continuation and production. **What they need to fulfil their ambitions is funding, support, technology and prices.**

This Farmers focus on production is matched by the DIHs. The optimization of farm operations is also in the top of the list of needs for both of them, at the same level as the utilization of data and the need for environmentally-sustainable production.

It is interesting to observe that for both farmers and DIHs the needs "to change the way they do business" and "to track and trace" are less interesting. This pattern is consistent and uniform for all sectors and there are only slight differences in Organic, Agroforestry and Fruits and Vegetables, where the relative interest in the utilization of data is slightly lower than in the rest of the group. The interest in environmentally-sustainable production is slightly higher. The lowest interest across all sectors, sizes and Regional Clusters is the "need to change the way they do business".

These priorities are aligned with the definition of "digital" reported by Farmers and DIHs. According to their answers, in **both groups "digital" is considered in its relation to culture and business processes** (constant innovation, flat decision-making, and the integration of technology into all phases of the business as stated in the survey)**.** This option was indicated significantly more often than the other options presented in the survey. Data and analytics activities as well as innovation-related activities, followed in popularity.

It is worth mentioning that definitions of "digital" in relation to customers and marketing were seldom selected by both Farmers and DIHs. This is aligned with the prioritisation of production and the traditional agrifood distribution funnel composition in Europe[15], which show a deep disconnection between producers and customers.

This prioritisation of production-related issues is also observed in the answers to questions related to digital services. **The most important digital services indicated by DIHs are those related to productivity: sensoring, predictive analysis and business intelligence.**

While the focus on productivity is understandable and positive, it is important to ensure that Farmers and DIHs go beyond "digital" as an incremental innovation on means of production and pay attention to changes in business models and customer-centric approaches too. Production-related interventions are easily accepted by the sector as they have a direct impact in sales, productivity, etc., but other aspects of

[15] The supply funnel in Europe (https://www.weltagrarbericht.de/reports/NAE/images/NAE_2_2-22.psd.jpg)

digital such as business model innovation, transformation and disruption, customer-centric approach and digital culture can't be neglected[16].

Strategies to reinforce the innovation related to production are well needed, mainly starting with a set of ecosystem building tools and skills to the DIHs, communication strategies and curated content to keep on leading innovation in their local agrifood ecosystem.

Thinking out-of-the-box is difficult for the incumbents in every sector, and that is also reflected for DIHs and the agrifood sector in terms of business model innovation, transformation and disruption and customer-centric approach.

Identifying the innovators, helping them to explore different approaches like the customer-centric and business model innovation ones will be needed to make a more significant impact. Trying different approaches like business innovation factories, where the change is designed by an entrant or disruptor; or partnership between the agrifood ecosystem and startups and pure digital companies needs to be evaluated in order to foster the cultural changes needed to take advantage of the vibrant European agrifood sector.

Overall, DIHs need to start having and sharing experiences about innovating in the agrifood sector.

4.3 DIFFERENT FARMERS, DIFFERENT NEEDS

Most of the aspects analysed in this report are related to the size of farms: digitalisation needs, innovation services importance and availability, innovation and entrepreneurship mindset, innovation and profitability challenges. Subjective size impacts the perceived necessity for these interventions more than any other characteristic of the farms, such as the sector or the Regional Cluster.

Considering the variety of sectors included in the analysis, subjective size reflects better the economic dimension of the farm, an indicator widely used in EU agriculture analysis as ESU[17] (economic size units). This way, having in mind all the indicators of size provided in the survey, including size in number of workers, size in Has and number of livestock, it is the subjective size classification the one that throws more interesting results in the analysis.

Size measured in number of livestock shows also some consistency, as it does for size in terms of number of workers. Two indicators closely related to the economic dimension of the farm. Also, the size measured in number of Has shows no relationship at all with every other aspect of the farm, considering that greenhouses and agroforestry could be both considered small with a huge difference in terms of Has.

We extracted the following insights based on that subjective size classification (five categories from small to big):

- **Bigger farms in every sector show an overall higher innovation capacity and entrepreneurial mindset, reflected in the report as InnovaIndex.** InnovaIndex is an indicator defined as part of the survey methodology that measures the innovation capacity and entrepreneurship mindset of farmers based on their answers to a series of statements that shows a consistent behaviour explaining differences between farmers.
- A higher InnovaIndex is usually associated with farmers that perceive innovation as more challenging than profitability. **Small and Medium farms give more priority to**

[16] Why digital strategies fail , MacKinsey (https://www.mckinsey.com/business-functions/digital-mckinsey/our-insights/why-digital-strategies-fail)
[17] https://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:European_size_unit_(ESU)

profitability. This indicates bigger farms are more aware of the importance of digital innovation, being one step ahead of medium and smaller farms.

- **Bigger farms give more importance to their digital needs. While sharing priorities, the need to optimize their farm operations and to utilize data to make better decisions are considered even more relevant than in smaller farms, that give more relative importance to the need "to track and trace" and "environmentally-sustainable production".**
- Some services are clearly more relevant in **larger farms** than in smaller farms, such as **Participation in collaborative projects, Technical support to incorporate new technologies and Participation in pilot projects, demo or testing action**
- For these **large units, the gap between the availability and the importance is negative for the innovation service access to finance and funding. So, bigger farms perceive more availability of finance and funding than the importance they give to this service.**

  This is an interesting behaviour that is not found in other innovation services or in smaller farms. This should lead to monitor and evaluate the impact of the finance and funding services for bigger farms in terms of digital transformation.
- A higher innovation capacity and entrepreneurship mindset is also strongly linked to more industrialised sectors like piggery, dairy, poultry and greenhouses. On the other hand, olive trees, vegetables, fruits and vineyard are the least innovative sectors. But the **location of the farm in terms of Regional Cluster doesn't explain differences in terms of innovation capacity or entrepreneurship mindset**. Innovators are everywhere and they appear to choose some specific sectors to thrive.

These points confirm that there is an alignment and successful performance of innovation services in larger farms and specific sectors. These farms are aware of the need to innovate and the importance of innovation services and services provided by DIHs are aligned with their needs. We can deduce that the impact is being positive and they want more of it: They report being more challenged by innovation than by profitability.

The biggest challenge now is to improve awareness and the provision of services and support to smaller farms and less innovative sectors.

4.4 AN ACTIONABLE GUIDE FOR INNOVATION SERVICES

We found four different relationships between perceived importance and availability (expressed as the gap between the importance and the availability) of the innovation services from the farmers' point of view:

- (Hi-Imp/Sm-Gap) high importance, small gap: this reflects the situation in which innovation services that farmers consider important are also perceived by the farmers to be delivered by DIHs.
- (Hi-Imp/Bi-Gap) high importance, big gap: this describes the situation in which innovation services that farmers consider important, are perceived not yet to be fully delivered by DIHs.
- (Lo-Imp/Sm-Gap) low importance, small gap: this pinpoints the situation in which innovation services that farmers consider unimportant are perceived to be delivered by DIHs.
- (Lo-Imp/Bi-Gap) low importance, big gap: this is about the situation in which farmers do not know whether innovation services that farmers consider unimportant are delivered by DIHs or not.

  Although specific strategies need to be defined for each of the services, this preliminary classification in quadrants enables us to give initial recommendations for each of the four categories studied.

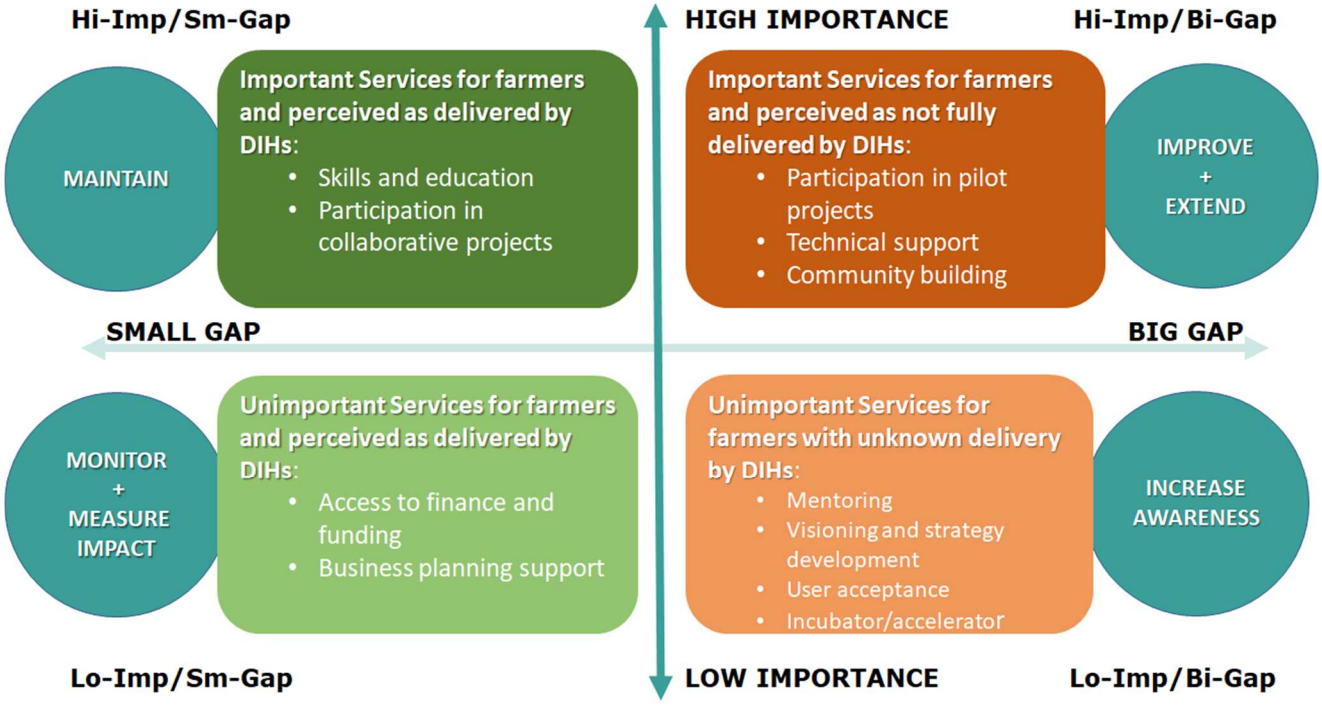


Figure 47 - Innovation services quadrant according to importance and gap between importance and availability

Services that are important and are properly delivered **(Hi-Imp/Sm-Gap)** include skills and education, and participation in collaborative projects. The interventions in relation to these services should be maintained.

Services that are important but are not properly delivered (Hi-Imp/Bi-Gap) include the technical support, participation in pilot projects and community building. The delivering entities should make a reflection and analyse the way these services have been traditionally delivered as well as what corrective actions could improve the delivery of these services to farmers across Regional Clusters. The general recommendation for services in this quadrant is to improve & extend.

Moving on to the analysis of services that have lower priorities and for which delivery expectations are met **(Lo-Imp/Sm-Gap)**, this quadrant includes the access to finance and funding and business planning support. These services are required to ensure the viability of projects and are dependencies for many of the remaining services so they shall not be overlooked. Thus, we recommend to **continuously monitor them and measure their impact**, but there are no immediate interventions required.

Lastly, services that are reported as relevant and for which there are demands of improvement **(Lo-Imp/Bi-Gap)** are mentoring, visioning and strategy development, user acceptance and incubator/accelerator. Once **(Hi-Imp/Bi-Gap)** services are satisfied, the focus on improvements could move to these services. Increasing the overall awareness of initiatives covering these services could be a quick win for this category.

It is noticeable that DIHs perception about the importance and availability of innovation services is more optimistic than farmers', except for the access to finance and finance. Considering this bias, it is even more relevant that DIHs contrast their perception with data about the farmers' point of view.

Besides general recommendations for innovation services stated in this subchapter, providing this methodology as a self-assessment tool for DIHs, including survey design, distribution, collection and analysis tools could lead to a better understanding of the perception of

innovation services for their local ecosystem. Global and specific actions for every aspect of the innovation services would surely increase the impact on digital innovation in the agrifood sector all over Europe.

4.5 METHODOLOGICAL REFLECTION

This subchapter includes the lessons learned along the survey design and data collection and analysis that served as the main basis for this deliverable. Connecting with an incipient network of hubs and farmers **all over Europe and collecting more than a thousand of surveys in a few weeks by digital means in the agrifood sector** is as challenging as satisfactory.

The first remarkable thing is the level of participation in general in both surveys. The total amount of surveys analysed reaches almost 1000. DIHs participation rate has been really high overpassing 60% and almost reaching 30% in the case of farmers and farming community. Both figures are clearly a success, although during the survey collection **many of the DIHs had no access to farmers**, as they are mainly driven by technology providers. Bringing closer these DIHs to farmers and the farming sector is one of the main challenges of this project. For that reason, we have tried to provide throughout this document some keys to be able to face it.

It is also important to highlight that a high number of respondents did not indicate the DIH and/or Regional Clusters they belong to, meaning that most respondents are not aware of the existence of this structure, at least in their territories.

The recommendation given in the data collection plan about a minimum number of surveys per DIH and Regional Cluster was validated in the analysis stage, as we observed only Regional Clusters with more than 20 surveys throw consistent analysis. **Although Regional Clusters that met this requirement have been considered for Regional Cluster based analysis, it is not possible to develop full Regional Cluster based analysis. This shortlist of Regional Clusters includes Iberia, Italy & Malta, North-West Europe, South-East Europe, and UK & Ireland.**

We observed that **surveys responded in mother tongues had significantly higher completion rates,** being a key factor of success the support of RC and DIHs in this multilingual approach. Most respondents preferred surveys in their mother tongues.

During the analysis of farmers surveys, we observed that the quantitative data coming from the Ecosystem respondents was considerably different from that provided by Producers. (74% producers vs 25% ecosystem)

The list of proposed sectors for Farmer Classification seems suited for this analysis. After extracting the vineyard category out of "Other", only 10% of respondents were not associated with at least one of the sectors listed. This extraction of the Vineyard sector validates the recommendation made to add Other as an option in lists and allowing respondents to personalize their answer.

The distribution of sectors is affected by the origin of the answers. For example, the most popular sectors overall are Arable Farming and Olive Trees, two very popular sectors in Iberia and Italy & Malta, the two regions with the largest number of responses.

5. ANNEX I: ADDITIONAL TABLES

Table 49 - Digitalisation needs farmers x main sector

Digitalisation needs farmers x main sector	The need to "Track and Trace" quality products from farm-to-fork	The need to optimise farm operations	The need for changing the way to do business	The need to utilise data to make better decisions	The need for environmentally - sustainable production	AVERAGE NEEDS
Poultry	2.67	3.17	3.00	3.17	2.83	2.97
Arable farming	2.71	3.37	3.03	3.19	2.99	3.06
Dairy	2.81	3.48	2.94	3.65	3.16	3.21
Animal husbandry (ie. cattle, sheep, goat)	3.34	3.48	3.16	3.19	3.24	3.28
Greenhouses	2.80	3.65	3.20	3.35	3.50	3.30
Olive trees	3.11	3.51	3.21	3.31	3.36	3.30
Fruits	3.26	3.70	3.05	3.33	3.19	3.30
Vineyard	3.00	3.61	2.74	3.43	3.78	3.31
Agroforestry	3.29	3.57	3.43	3.07	3.29	3.33
Piggery	3.30	3.67	3.19	3.33	3.22	3.34
Mixed	3.44	3.52	3.20	3.24	3.64	3.41
Vegetables	3.63	3.56	3.56	3.19	3.25	3.44
AVERAGE	**3.09**	**3.52**	**3.12**	**3.29**	**3.27**	**3.26**

Table 50 - Digitalisation needs farmers producers x size Has

Digitalisation needs farmers producers	Size in Has			
	1- Less than 5 Has	2- Between 5 and 30 Has	3- More than 30 Has	Grand Total
The need to "Track and Trace" quality products from farm-to-fork	2.85	3.07	3.13	3.06
The need to optimise farm operations	3.32	3.39	3.62	3.50
The need for changing the way to do business	3.11	3.12	3.14	3.13
The need to utilise data to make better decisions	3.22	3.13	3.36	3.26

The need for environmentally-sustainable production	3.23	3.17	3.32	3.26
Average Digitalization Needs	**3.14**	**3.18**	**3.32**	**3.24**

Table 51 - Digitalisation needs farmers producers x size livestock

Digitalisation Needs Farmers Producers	Size Livestock			
	1- Less than 75 livestock animals	**2- Between 75 and 300 livestock animals**	**3- More than 300 livestock animals**	**Grand Total**
The need to "Track and Trace" quality products from farm-to-fork	2.82	3.02	3.18	3.05
The need to optimise farm operations	3.36	3.41	3.69	3.53
The need for changing the way to do business	3.07	3.16	3.19	3.16
The need to utilise data to make better decisions	2.93	3.31	3.47	3.30
The need for environmentally-sustainable production	3.00	3.12	3.27	3.17
Average Digitalization Needs	**3.04**	**3.20**	**3.36**	**3.24**

Table 52 - Digitalisation needs farmers producers x relative size

Digitalisation Needs Farmers Producers	RELATIVE SIZE					
	1	**2**	**3**	**4**	**5**	**Grand Total**
The need to "Track and Trace" quality products from farm-to-fork	3.01	3.14	3.12	3.07	3.08	3.09
The need to optimise farm operations	3.39	3.45	3.49	3.78	3.76	3.52
The need for changing the way to do business	3.04	3.14	3.09	3.24	3.27	3.12
The need to utilise data to make better decisions	3.17	3.28	3.24	3.59	3.47	3.29
The need for environmentally-sustainable production	3.22	3.35	3.21	3.37	3.35	3.27
Average Digitalization Needs	**3.17**	**3.27**	**3.23**	**3.41**	**3.39**	**3.26**

Table 53 - Digitalisation needs farmers producers x number of workers

Digitalisation needs farmers producers X number of workers	NUMBER OF WORKERS			
	1- Less than 2 people	2- Between 2 and 10 people	3- More than 10 people	Grand Total
The need to "Track and Trace" quality products from farm-to-fork	2.88	3.18	3.13	3.09
The need to optimise farm operations	3.35	3.56	3.63	3.52
The need for changing the way to do business	2.93	3.22	3.12	3.12
The need to utilise data to make better decisions	3.07	3.33	3.45	3.29
The need for environmentally-sustainable production	3.18	3.32	3.25	3.27
Average Digitalization Needs	**3.08**	**3.32**	**3.32**	**3.26**

Table 54 - Subjective size of the farm x importance of services, availability of services

Subjective size of the farm x importance of services, availability of services	Relative Size					
	Small 1	Small /Medium 2	Medium 3	Medium /Big 4	Big 5	Grand Total
IMPORTANCE						
Access to finance and funding	3.58	3.91	3.99	4.02	3.90	3.87
Business planning support	3.63	3.72	3.87	3.86	3.73	3.77
Skills and Education	4.00	3.95	4.06	4.14	4.02	**4.03**
Participation in collaborative projects with R&D companies, universities and other entities	3.79	3.80	3.88	4.17	4.23	**3.91**
Technical support to incorporate new technologies in your farming business	3.89	4.13	4.13	4.33	4.35	**4.12**
Participation in pilot projects, demo or testing actions of new products and services for the agrifood sector	3.62	3.88	3.84	4.10	4.31	3.87
Incubator/Accelerator	3.43	3.47	3.51	3.36	3.46	3.47
Mentoring	3.63	3.71	3.66	3.69	3.67	3.67
Visioning and Strategy Development	3.57	3.75	3.73	3.64	3.88	3.71
User acceptance	3.63	3.61	3.54	3.48	3.65	3.58
Community Building	3.81	3.96	3.85	4.00	3.87	3.88
AVAILABILITY						

Access to finance and funding	2.74	3.50	3.17	3.52	3.96	**3.25**
Business planning support	2.21	2.66	2.55	3.19	2.96	2.59
Skills and Education	3.32	3.45	3.15	3.33	3.42	**3.29**
Participation in collaborative projects with R&D companies, universities and other entities	2.20	2.74	2.48	3.24	3.42	2.63
Technical support to incorporate new technologies in your farming business	2.51	2.89	2.95	3.43	3.19	**2.91**
Participation in pilot projects, demo or testing actions of new products and services for the agrifood sector	2.14	2.32	2.64	2.95	3.04	2.55
Incubator/Accelerator	1.67	1.87	1.86	1.95	2.00	1.84
Mentoring	2.27	1.97	2.11	2.52	2.19	2.17
Visioning and Strategy Development	2.01	2.24	2.09	2.43	2.35	2.16
User acceptance	2.03	1.97	1.95	2.10	2.23	2.02
Community Building	2.33	2.63	2.44	3.24	2.38	2.51
IMPORTANCE	**3.69**	**3.81**	**3.82**	**3.89**	**3.92**	**3.81**
AVAILABILITY	**2.31**	**2.57**	**2.49**	**2.90**	**2.83**	**2.54**
GAP	**1.38**	**1.24**	**1.33**	**0.99**	**1.08**	**1.27**
Access to finance and funding	0.84	0.41	0.82	0.50	-0.06	0.63
Business planning support	1.41	1.07	1.32	0.67	0.77	1.18
Skills and Education	0.68	0.50	0.91	0.81	0.60	**0.74**
Participation in collaborative projects with R&D companies, universities and other entities	1.60	1.07	1.39	0.93	0.81	**1.28**
Technical support to incorporate new technologies in your farming business	1.37	1.24	1.18	0.90	1.15	**1.21**
Participation in pilot projects, demo or testing actions of new products and services for the agrifood sector	1.48	1.57	1.20	1.14	1.27	1.33
Incubator/Accelerator	1.76	1.61	1.65	1.40	1.46	1.62
Mentoring	1.36	1.74	1.55	1.17	1.48	1.49
Visioning and Strategy Development	1.56	1.51	1.64	1.21	1.54	1.55
User acceptance	1.60	1.63	1.59	1.38	1.42	1.56
Community Building	1.49	1.33	1.42	0.76	1.48	1.37

Table 55 - Main sector x importance of services, availability of services (1)

MAIN SECTOR X IMPORTANCE OF SERVICES, AVAILABILITY OF SERVICES	Main Sector					
	Agroforestry	**Animal husbandry**	**Arable farming**	**Dairy**	**Fruits**	**Greenhouses**
IMPORTANCE						
Access to finance and funding	3.57	3.66	3.90	4.13	3.88	4.10
Business planning support	3.50	3.76	3.79	3.77	3.77	3.95
Skills and Education	3.36	4.17	3.86	4.13	3.93	4.45
Participation in collaborative projects with R&D companies, universities and other entities	3.79	3.88	3.91	3.55	3.93	3.90
Technical support to incorporate new technologies in your farming business	3.64	4.00	4.27	4.16	4.14	4.55
Participation in pilot projects, demo or testing actions of new products and services for the agrifood sector	3.79	3.60	4.15	3.48	3.93	4.00
Incubator/Accelerator	3.21	3.24	3.46	3.10	3.65	3.75
Mentoring	3.50	3.90	3.78	3.55	3.58	3.70
Visioning and Strategy Development	3.36	3.53	3.64	3.45	3.67	3.80
User acceptance	3.07	3.31	3.45	3.45	3.70	3.90
Community Building	3.71	3.95	3.76	3.97	3.86	4.10
AVAILABILITY						
Access to finance and funding	3.00	3.55	3.13	3.32	3.14	3.50
Business planning support	2.43	2.62	2.67	2.81	2.81	2.20
Skills and Education	3.71	3.41	2.95	3.58	3.28	3.20
Participation in collaborative projects with R&D companies, universities and other entities	2.43	2.31	2.51	2.48	2.67	2.70
Technical support to incorporate new technologies in your farming business	2.57	2.72	3.23	3.65	2.67	3.00
Participation in pilot projects, demo or testing actions of new products and services for the agrifood sector	2.14	2.28	2.79	2.87	2.40	3.00
Incubator/Accelerator	2.14	1.66	1.90	1.90	1.84	2.40
Mentoring	2.29	2.48	2.21	2.55	2.02	2.00

Visioning and Strategy Development	2.00	2.14	2.15	2.16	2.30	2.30
User acceptance	2.14	1.83	2.05	2.61	1.88	1.80
Community Building	2.57	2.79	2.62	2.87	2.16	2.30
IMPORTANCE	**3.50**	**3.73**	**3.82**	**3.70**	**3.82**	**4.02**
AVAILABILITY	**2.49**	**2.53**	**2.56**	**2.80**	**2.47**	**2.58**
GAP	**1.01**	**1.20**	**1.25**	**0.90**	**1.35**	**1.44**
Access to finance and funding	0.57	0.10	0.77	0.81	0.74	0.60
Business planning support	1.07	1.14	1.13	0.97	0.95	1.75
Skills and Education	-0.36	0.76	0.91	0.55	0.65	1.25
Participation in collaborative projects with R&D companies, universities and other entities	1.36	1.57	1.40	1.06	1.26	1.20
Technical support to incorporate new technologies in your farming business	1.07	1.28	1.04	0.52	1.47	1.55
Participation in pilot projects, demo or testing actions of new products and services for the agrifood sector	1.64	1.33	1.36	0.61	1.53	1.00
Incubator/Accelerator	1.07	1.59	1.56	1.19	1.81	1.35
Mentoring	1.21	1.41	1.58	1.00	1.56	1.70
Visioning and Strategy Development	1.36	1.40	1.49	1.29	1.37	1.50
User acceptance	0.93	1.48	1.40	0.84	1.81	2.10
Community Building	1.14	1.16	1.14	1.10	1.70	1.80

Table 56 - Main sector x importance of services, availability of services (2)

Specific *Sector X Importance of Services, Availability of Ser-Vices*	**Specific Sector**					
	Mixed	**Olive trees**	**Piggery**	**Poultry**	**Vegetables**	**Vineyard**
IMPORTANCE						
Access to finance and funding	4.04	3.84	3.81	3.33	3.94	4.39
Business planning support	3.96	3.77	4.07	3.17	3.31	3.70
Skills and Education	3.88	4.13	4.15	3.67	4.06	4.09
Participation in collaborative projects with R&D companies, universities and other entities	4.04	3.99	4.07	3.33	3.75	4.13

Technical support to incorporate new technologies in your farming business	3.92	4.04	4.19	3.33	4.38	4.04
Participation in pilot projects, demo or testing actions of new products and services for the agrifood sector	3.80	3.85	4.04	3.83	4.06	3.96
Incubator/Accelerator	3.52	3.66	3.63	2.83	3.06	3.43
Mentoring	3.60	3.62	3.67	2.83	3.75	3.57
Visioning and Strategy Development	3.84	3.90	4.00	3.17	3.38	3.83
User acceptance	3.68	3.74	3.59	3.33	3.44	3.70
Community Building	3.96	3.89	3.74	3.17	4.06	3.87
AVAILABILITY						
Access to finance and funding	3.16	2.91	4.04	4.33	2.38	3.52
Business planning support	2.52	1.98	3.30	3.33	2.50	2.83
Skills and Education	3.56	3.17	2.78	4.67	3.38	3.52
Participation in collaborative projects with R&D companies, universities and other entities	3.48	2.30	3.22	3.33	2.75	3.17
Technical support to incorporate new technologies in your farming business	3.16	2.49	3.22	3.33	2.38	2.83
Participation in pilot projects, demo or testing actions of new products and services for the agrifood sector	2.68	2.28	2.85	3.67	2.50	2.39
Incubator/Accelerator	1.80	1.66	1.67	2.67	1.63	1.87
Mentoring	2.44	1.79	1.89	1.67	2.50	2.04
Visioning and Strategy Development	2.20	2.04	1.89	2.00	1.88	2.04
User acceptance	1.96	1.87	1.81	2.67	1.88	1.96
Community Building	2.28	2.28	2.63	3.00	2.88	2.13
IMPORTANCE	**3.84**	**3.86**	**3.91**	**3.27**	**3.74**	**3.88**
AVAILABILITY	**2.66**	**2.25**	**2.66**	**3.15**	**2.42**	**2.57**
GAP	**1.18**	**1.61**	**1.24**	**0.12**	**1.32**	**1.31**
Access to finance and funding	0.88	0.93	-0.22	-1.00	1.56	0.87
Business planning support	1.44	1.79	0.78	-0.17	0.81	0.87

Skills and Education	0.32	0.96	1.37	-1.00	0.69	0.57
Participation in collaborative projects with R&D companies, universities and other entities	0.56	1.69	0.85	0.00	1.00	0.96
Technical support to incorporate new technologies in your farming business	0.76	1.55	0.96	0.00	2.00	1.22
Participation in pilot projects, demo or testing actions of new products and services for the agrifood sector	1.12	1.57	1.19	0.17	1.56	1.57
Incubator/Accelerator	1.72	2.00	1.96	0.17	1.44	1.57
Mentoring	1.16	1.83	1.78	1.17	1.25	1.52
Visioning and Strategy Development	1.64	1.86	2.11	1.17	1.50	1.78
User acceptance	1.72	1.87	1.78	0.67	1.56	1.74
Community Building	1.68	1.62	1.11	0.17	1.19	1.74

Table 57 - Size of the farm has x importance of services, availability of services

Size of the farm has x importance of services, availability of services.	**Size Has**			
	1- Less than 5 Has	**2- Between 5 and 30 Has**	**3- More than 30 Has**	**Grand Total**
IMPORTANCE				
Access to finance and funding	3.83	3.82	3.91	3.87
Business planning support	3.78	3.83	3.77	3.79
Skills and Education	3.97	3.98	4.07	4.02
Participation in collaborative projects with R&D companies, universities and other entities	3.95	3.84	3.94	3.91
Technical support to incorporate new technologies in your farming business	4.03	4.08	4.16	4.11
Participation in pilot projects, demo or testing actions of new products and services for the agrifood sector	3.88	3.78	3.92	3.87
Incubator/Accelerator	3.57	3.47	3.43	3.47
Mentoring	3.74	3.63	3.70	3.68
Visioning and Strategy Development	3.62	3.69	3.75	3.71
User acceptance	3.68	3.55	3.56	3.57

Community Building	3.94	3.95	3.79	3.87
AVAILABILITY				
Access to finance and funding	2.63	3.10	3.46	3.20
Business planning support	2.17	2.51	2.68	2.54
Skills and Education	2.97	3.25	3.37	3.27
Participation in collaborative projects with R&D companies, universities and other entities	2.35	2.51	2.74	2.60
Technical support to incorporate new technologies in your farming business	2.42	2.78	3.08	2.87
Participation in pilot projects, demo or testing actions of new products and services for the agrifood sector	2.26	2.36	2.66	2.49
Incubator/Accelerator	1.74	1.85	1.75	1.78
Mentoring	2.05	2.14	2.15	2.13
Visioning and Strategy Development	2.20	2.05	2.16	2.13
User acceptance	1.92	1.97	1.99	1.97
Community Building	2.38	2.44	2.48	2.45
IMPORTANCE	**3.82**	**3.78**	**3.82**	**3.81**
AVAILABILITY	**2.28**	**2.45**	**2.59**	**2.49**
GAP	**1.54**	**1.33**	**1.23**	**1.31**
Access to finance and funding	1.20	0.73	0.45	0.66
Business planning support	1.62	1.32	1.10	1.25
Skills and Education	1.00	0.73	0.70	0.76
Participation in collaborative projects with R&D companies, universities and other entities	1.60	1.34	1.20	1.31
Technical support to incorporate new technologies in your farming business	1.62	1.30	1.08	1.24
Participation in pilot projects, demo or testing actions of new products and services for the agrifood sector	1.62	1.42	1.27	1.38
Incubator/Accelerator	1.83	1.62	1.68	1.68
Mentoring	1.69	1.49	1.55	1.55
Visioning and Strategy Development	1.42	1.64	1.59	1.58
User acceptance	1.75	1.58	1.57	1.60
Community Building	1.55	1.51	1.31	1.42

Table 58 - Size of the farm livestock x importance of services, availability of services

SIZE OF THE FARM LIVESTOCK X IMPORTANCE OF SERVICES, AVAILABILITY OF SERVICES	SIZE LIVESTOCK			
	1- Less than 75 livestock animals	2- Between 75 and 300 livestock animals	3- More than 300 livestock animals	Grand Total
IMPORTANCE				
Access to finance and funding	3.71	3.76	3.97	3.84
Business planning support	3.61	3.55	3.74	3.65
Skills and Education	3.57	3.98	4.06	3.94
Participation in collaborative projects with R&D companies, universities and other entities	3.39	3.82	3.85	3.75
Technical support to incorporate new technologies in your farming business	3.86	3.94	4.23	4.05
Participation in pilot projects, demo or testing actions of new products and services for the agrifood sector	3.43	3.55	3.90	3.68
Incubator/Accelerator	3.39	3.18	3.47	3.35
Mentoring	3.46	3.73	3.61	3.63
Visioning and Strategy Development	3.75	3.41	3.79	3.65
User acceptance	3.57	3.27	3.47	3.42
Community Building	3.46	3.88	3.87	3.79
AVAILABILITY				
Access to finance and funding	3.07	3.45	3.94	3.59
Business planning support	2.71	2.63	3.26	2.93
Skills and Education	3.64	3.65	3.23	3.46
Participation in collaborative projects with R&D companies, universities and other entities	1.86	2.76	3.00	2.68
Technical support to incorporate new technologies in your farming business	2.71	3.33	3.19	3.14
Participation in pilot projects, demo or testing actions of new products and services for the agrifood sector	2.21	2.67	2.77	2.63
Incubator/Accelerator	1.79	2.10	1.77	1.89
Mentoring	1.93	2.76	2.13	2.31

Visioning and Strategy Development	2.14	2.10	2.10	2.11
User acceptance	2.00	2.10	2.10	2.08
Community Building	2.00	3.00	2.81	2.71
IMPORTANCE	**3.56**	**3.64**	**3.82**	**3.70**
AVAILABILITY	**2.37**	**2.78**	**2.75**	**2.68**
GAP	**1.19**	**0.86**	**1.06**	**1.02**
Access to finance and funding	0.64	0.31	0.03	0.25
Business planning support	0.89	0.92	0.48	0.72
Skills and Education	-0.07	0.33	0.84	0.47
Participation in collaborative projects with R&D companies, universities and other entities	1.54	1.06	0.85	1.06
Technical support to incorporate new technologies in your farming business	1.14	0.61	1.03	0.91
Participation in pilot projects, demo or testing actions of new products and services for the agrifood sector	1.21	0.88	1.13	1.06
Incubator/Accelerator	1.61	1.08	1.69	1.46
Mentoring	1.54	0.98	1.48	1.32
Visioning and Strategy Development	1.61	1.31	1.69	1.54
User acceptance	1.57	1.16	1.37	1.34
Community Building	1.46	0.88	1.06	1.08

Table 59 - Number of workers x importance of services, availability of services

NUMBER OF WORKERS X IMPORTANCE OF SERVICES, AVAILABILITY OF SERVICES	Number of workers			
	1- Less than 2 people	**2- Between 2 and 10 people**	**3- More than 10 people**	**Grand Total**
IMPORTANCE				
Access to finance and funding	3.53	3.95	4.09	3.87
Business planning support	3.53	3.90	3.87	3.79
Skills and Education	3.93	4.05	4.08	4.02

Participation in collaborative projects with R&D companies, universities and other entities	3.74	3.92	4.10	3.91
Technical support to incorporate new technologies in your farming business	3.85	4.14	4.37	4.11
Participation in pilot projects, demo or testing actions of new products and services for the agrifood sector	3.66	3.91	4.02	3.87
Incubator/Accelerator	3.25	3.59	3.43	3.47
Mentoring	3.60	3.78	3.55	3.68
Visioning and Strategy Development	3.50	3.80	3.74	3.71
User acceptance	3.40	3.68	3.53	3.57
Community Building	3.75	3.95	3.81	3.87
AVAILABILITY				
Access to finance and funding	3.04	3.13	3.63	3.20
Business planning support	2.26	2.45	3.14	2.54
Skills and Education	3.30	3.18	3.44	3.27
Participation in collaborative projects with R&D companies, universities and other entities	2.42	2.39	3.37	2.60
Technical support to incorporate new technologies in your farming business	2.89	2.84	2.93	2.87
Participation in pilot projects, demo or testing actions of new products and services for the agrifood sector	2.39	2.43	2.79	2.49
Incubator/Accelerator	1.72	1.68	2.14	1.78
Mentoring	2.19	2.04	2.28	2.13
Visioning and Strategy Development	2.07	2.10	2.30	2.13
User acceptance	1.74	1.99	2.26	1.97
Community Building	2.39	2.43	2.58	2.45
IMPORTANCE	**3.61**	**3.88**	**3.87**	**3.81**
AVAILABILITY	**2.40**	**2.42**	**2.81**	**2.49**
GAP	**1.21**	**1.46**	**1.07**	**1.31**
Access to finance and funding	0.49	0.83	0.47	0.66
Business planning support	1.26	1.45	0.73	1.25
Skills and Education	0.63	0.86	0.64	0.76
Participation in collaborative projects with R&D companies, universities and other entities	1.32	1.53	0.73	1.31
Technical support to incorporate new technologies in your farming business	0.96	1.31	1.44	1.24

Participation in pilot projects, demo or testing actions of new products and services for the agrifood sector	1.27	1.48	1.23	1.38
Incubator/Accelerator	1.54	1.91	1.29	1.68
Mentoring	1.40	1.74	1.27	1.55
Visioning and Strategy Development	1.43	1.71	1.44	1.58
User acceptance	1.67	1.69	1.28	1.60
Community Building	1.37	1.52	1.23	1.42

6. ANNEX II: FARMERS' NEEDS SURVEY

English: https://www.surveymonkey.com/r/smartagrihubs_farmers
German: https://es.surveymonkey.com/r/smartagrihubs_farmers?lang=de
Spanish: https://es.surveymonkey.com/r/smartagrihubs_farmers?lang=es
French: https://es.surveymonkey.com/r/smartagrihubs_farmers?lang=fr
Greek: https://es.surveymonkey.com/r/smartagrihubs_farmers?lang=el
Italian: https://es.surveymonkey.com/r/smartagrihubs_farmers?lang=it
Polish: https://es.surveymonkey.com/r/smartagrihubs_farmers?lang=pl
Serbian: https://es.surveymonkey.com/r/smartagrihubs_farmers?lang=sr

English

Welcome to the Farmers Digitising Needs Survey

This survey is part of the H2020 initiative **SmartAgriHubs**, aiming to accelerate the digital transformation of the European agrifood sector.
The goal of this survey is to identify the most important digitalisation needs of the farming sector. With your answers, the project can define and prioritise actions, therefore your input is of crucial importance. This survey takes approximately 12 minutes to complete. All answers you provide will be kept in the strictest confidentiality and will be used only for the SmartAgriHubs project.

Thank you for your time and cooperation,
the SmartAgriHubs team

Introduction

The following questions are related to your position in the farming sector

* 1. In which location (city, country) are you based?

* 2. Main agricultural sector (check ALL that apply)

- [ ] Arable farming
- [ ] Fruits
- [ ] Poultry
- [ ] Greenhouses
- [ ] Dairy
- [ ] Vegetables
- [ ] Piggery
- [ ] Organic
- [ ] Animal husbandry (ie. cattle, sheep, goat, please give us more detail below)
- [ ] Olive trees
- [ ] Agroforestry ecosystems, like dehesa (please give us more detail below)
- [ ] Other (please specify)

3. What's your position in the industry?

- ◯ Dedicated farmer
- ◯ Part-time farmer
- ◯ Landlord, not farmer
- ◯ Work for a farming company
- ◯ Other (please specify)
- ◯ Farmers' agri-cooperative
- ◯ Service/product external provider
- ◯ Farmers' association, organization or institution

* 4. Age

* 5. Which Regional Cluster are you related to?

6. What is the name of the organisation or Digital Innovation Hub ("DIH") that has provided you with this survey?

Farm structure

Different kinds of farms have different needs.
You told us that you are a farmer yourself; please give us an idea about the dimensions of your farm.

* 7. How many people work on the farm on average on a yearly basis? (please include seasonal workers and those earning benefits instead of salaries, too)

- ◯ Less than 2 people
- ◯ Between 2 and 10 people
- ◯ More than 10 people

* 8. What is the size of the farm?

- [ ] Less than 5 Has
- [ ] Between 5 and 30 Has
- [ ] More than 30 Has
- [ ] Less than 75 livestock animals
- [ ] Between 75 and 300 livestock animals
- [ ] More than 300 livestock animals

* 9. Please rank your farm size to other farms on a regional level

Small		Medium		Big
○	○	○	○	○

Support ecosystem

You are helping farmers to thrive and improve their own farms.
Your knowledge about the farms you are supporting is really valuable to us.

* 10. Name and describe your organization

* 11. What sectors do you serve mainly?

- [ ] Arable farming
- [ ] Fruits
- [ ] Poultry
- [ ] Greenhouses
- [ ] Dairy
- [ ] Vegetables
- [ ] Piggery
- [ ] Organic
- [ ] Olive trees
- [ ] Animal husbandry (ie. cattle, sheep, goat, please give us more detail below)
- [ ] Agroforestry ecosystems, like dehesa (please specify below)
- [ ] Other (please specify)

* 12. Describe every main typology of farming you are serving to (in terms of extension, main sector, irrigation system, number of employees, tasks developed, average income, lifestyle, and whatever information relevant)

* 13. What is your role in the organization?

Access to digital innovation services

The following questions are about digitalisation of farming: what are your topics of interest regarding digitalisation? And to which digitalisation services do you have access?

* 14. To what extent are you interested in the following topics?

	Not interested	A bit interested	Strongly interested	Trying to address it	Already addressing it
The need to "Track and Trace" quality products from farm-to-fork (i.e. improving traceability systems so consumers know where the product comes from or how it was processed)	○	○	○	○	○
The need to optimise farm operations (such as improving irrigation, fertilisation, disease treatment, harvesting, livestock management and administration)	○	○	○	○	○
The need for changing the way to do business (e.g. the way you sell your products)	○	○	○	○	○
The need to utilise data to make better decisions	○	○	○	○	○
The need for environmentally-sustainable production (e.g. making use of ICT to improve the environmental performance of food production and agrifood value chains)	○	○	○	○	○

Other (please specify)

* 15. Below you find a list of services. Could you please indicate how much **importance** you ascribe to these services to foster digital innovation for your business? (The following question will address whether you perceive these services to be available for you as a farmer).

	Of no importance	Of minor importance	Neutral	Rather important	Very important
Access to finance and funding (e.g. financial engineering, connection to funding sources, investment planning)	○	○	○	○	○
Business planning support (e.g. marketing, distribution)	○	○	○	○	○
Skills and Education (e.g. courses, workshops, offering technological infrastructure for educational purposes	○	○	○	○	○
Participation in collaborative projects with R&D companies, universities and other entities	○	○	○	○	○
Technical support to incorporate new technologies in your farming business	○	○	○	○	○
Participation in pilot projects, demo or testing actions of new products and services for the agrifood sector	○	○	○	○	○
Incubator/Accelerator (e.g. market assessment, business development)	○	○	○	○	○
Mentoring (between farmers or between agrotech end-users communities)	○	○	○	○	○
Visioning and Strategy Development (e.g. market intelligence, innovation strategy development)	○	○	○	○	○
User acceptance (e.g. collecting and analysing voice of customer data, concept validation with users)	○	○	○	○	○
Community Building (e.g. support to connect with others farmers with similar challenges or support to connect with companies that use to give your technological solutions)	○	○	○	○	○

* 16. Are these services **available** to your business?

	Yes	No	Partially
Access to finance and funding (e.g. financial engineering, connection to funding sources, investment planning)	○	○	○
Business planning support (e.g. marketing, distribution)	○	○	○
Skills and Education (e.g. courses, workshops, offering technological infrastructure for educational purposes	○	○	○
Participation in collaborative projects with R&D companies, universities and other entities	○	○	○
Technical support to incorporate new technologies in your farming business	○	○	○
Participation in pilot projects, demo or testing actions of new products and services for the agrifood sector	○	○	○
Incubator/Accelerator (e.g. market assessment, business development)	○	○	○
Mentoring (between farmers or between agrotech end-users communities)	○	○	○
Visioning and Strategy Development (e.g. market intelligence, innovation strategy development)	○	○	○
User acceptance (e.g. collecting and analysing voice of customer data, concept validation with users)	○	○	○
Community Building (e.g. support to connect with others farmers with similar challenges or support to connect with companies that use to give your technological solutions)	○	○	○

* 17. To what extent do you agree with the following statements?

	Not at all	Very Little	Somewhat	Very much
I often use my imagination for envisioning innovations on my farm	○	○	○	○
I feel I am part of a network that supports me to advance my farming business	○	○	○	○
I am flexible towards changes	○	○	○	○
I use ICT on a daily basis to support my business	○	○	○	○
I have enough access to finance and funding in order to address the digital transformation challenge in my farming business	○	○	○	○
I am an entrepreneur	○	○	○	○
Experience and technical knowledge is the primary driver to make decisions about farm and business	○	○	○	○
I take time to reflect on innovation for my business, specially regarding digital technologies	○	○	○	○
I often attend events and activities related to agrifood	○	○	○	○
I often try new technology and software for professional use	○	○	○	○
I have an external technology provider	○	○	○	○
I have a greater responsibility than just my farm	○	○	○	○
I am optimistic about the future of my farming business	○	○	○	○
I make decisions about my farm and business based on data	○	○	○	○
I am fully aware of the technology solutions available for my farm and business	○	○	○	○

Digital Capabilities

The following questions are about your thoughts on digitalisation and how you use technology.

* 18. You probably heard a lot about digitalisation, but your own vision about that interests us.

What does **digital** mean to you? (choose ALL that apply)

- [ ] Digital refers to all technology innovation-related activities
- [ ] Digital is synonymous with technology
- [ ] Digital refers to all customer-facing technology activities
- [ ] Digital refers to all the investments we are making to integrate technology into all parts of our business
- [ ] Digital goes beyond technology alone to reflect a mindset that embraces constant innovation, flat decision-making, and the integration of technology into all phases of the business
- [ ] Digital refers to all data and analytics activities
- [ ] Unsure
- [ ] Other (please specify)

Vision and future

The following questions are related to your vision for the future.
We are interested in what you find important; you can answer either high-level or detailed according to what you feel.

19. What are your strengths?

20. What do you feel is your biggest challenge for the future? (eg succession, profitability, work-life balance, staying innovative...)

21. What opportunities do you see in digitising your farming activity?

22. What do you perceive to be the biggest threat(s) to the sector?

23. What is your ambition for the future?

24. What do you need to fulfill this ambition?

Contact information

Thank you very much for your time and cooperation.
May we contact you in the future regarding this project? If yes, please share your contact information here.

25. Contact information

Name	
Company	
City/Town	
Country	
Email Address	
Phone Number	

26. Do you have any other comments, questions, or concerns?

* 27. We would like to eventually contact you about this survey

- ◯ Yes, please
- ◯ No, thanks

Spanish


Introducción

Las siguientes preguntas están relacionadas con tu posición en el sector agroalimentario

1. ¿En qué ciudad y país estás ubicado?

2. ¿En qué sector se encuadra tu actividad principalmente? (señala TODOS los que se correspondan)

- [ ] Tierra de cultivo
- [ ] Frutas
- [ ] Avícola
- [ ] Invernaderos
- [ ] Lácteo
- [ ] Verduras
- [ ] Porcino
- [ ] Orgánico/Ecológico
- [ ] Otra ganadería (p.ej. vacuno, ovino, caprino, por favor, indicalo más abajo)
- [ ] Olivar
- [ ] Defensa u otras externas agroforestales (indicarlo abajo)
- [ ] Otro (especifique)

3. ¿Cuál es tu posición dentro del sector?

- [ ] Agricultor a (título principal
- [ ] Agricultor como complemento
- [ ] Propietario, pero no agricultor
- [ ] Trabajador en una empresa agrícola
- [ ] Otro (especifique)
- [ ] Cooperativa
- [ ] Proveedor de servicios o productos
- [ ] Asociación, organización e institución agraria

4. Edad

5. ¿A qué Regional Cluster está vinculado?

6. ¿Cuál es el nombre de la organización o Centro de innovación digital ("DIH") que le proporcionó esta encuesta?


Estructura de la explotación

Diferentes tipos de explotaciones tienen diferentes necesidades.
Nos has dicho que eres un agricultor o ganadero, por favor, danos una idea de la dimensión de tu explotación.

7. ¿Cuantas personas trabajan en la explotación durante el año de media? (por favor, incluye también a trabajadores temporales y aquellos que ganen beneficios en lugar de sueldos)

- [ ] Menos de 2 personas
- [ ] Entre 2 y 10 personas
- [ ] Más de 10 personas

8. ¿Cual es el tamaño de la explotacion?

- [ ] Menos de 5 Has
- [ ] Entre 5 y 30 Has
- [ ] Más de 30 Has
- [ ] Menos de 75 cabezas de ganado
- [ ] Entre 75 y 300 cabezas de ganado
- [ ] Más de 300 cabezas de ganado

9. Por favor, compara el tamaño de tu explotación con otras a nivel regional

Pequeño Media Grande

Los siguientes preguntas tratan sobre la digitalización de las explotaciones: ¿cuáles son los temas que más te interesan relacionados con la digitalización?¿Y a qué servicios digitales tienes acceso?

10. ¿En qué medida te interesan los siguientes temas?

	No me interesa	Me interesa un poco	Estoy muy interesado	Estoy interesando ahora	Estoy probando
La necesidad de hacer Seguimiento y Trazabilidad a productos de calidad de la finca a la mesa (p.ej. mejorar los sistemas de trazabilidad de modo que los consumidores sepan de dónde provienen los productos o cómo fueron procesados)	○	○	○	○	○
La necesidad de optimizar las operaciones de la explotación (como mejorar el riego, la fertilización, el tratamiento de plagas, cosecha, gestión de ganado y la administración)	○	○	○	○	○
La necesidad de cambiar la forma de hacer negocios (p.ej. la forma en que vendes tus productos)	○	○	○	○	○
La necesidad de utilizar datos para tomar mejores decisiones	○	○	○	○	○
La necesidad de una producción potencialmente sostenible (p.ej. fomento uso de la tecnología para mejora el rendimiento ambiental de la cadena de valor agroalimentaria y de producción de alimentos)	○	○	○	○	○

Otro (especifique)

* 11. A continuación tienes una lista de servicios. ¿Podrías indicarnos cuanta **importancia** le das a esos servicios para impulsar la innovación digital en tu negocio? (Las siguientes preguntas están orientadas a conocer si percibes que estos servicios están disponibles para tí como agricultor o ganadero).

	Sin importancia	Poco importante	Neutral	Bastante importante	Muy importante
Acceso a financiación e inversión (p.ej. financiación de ingeniería, conexión a fuentes de inversión, planificación financiera)	●	○	○	○	○
Ayuda para el desarrollo del plan de negocio (p.ej. marketing, distribución...)	●	○	○	○	○
Habilidades y educación (p.ej. cursos, talleres, infraestructura tecnológica para aprender)	●	○	○	○	○
Participación en proyectos de colaboración con empresas de I+D, universidades y otras entidades	●	○	○	○	○
Soporte técnico para incorporar nuevas tecnologías a tu explotación agrogandera	●	○	○	○	○
Participación en proyectos piloto, demos o pruebas de nuevos productos y servicios para el sector agroalimentario	●	○	○	○	○
Incubación/aceleración (p.ej. asesoramiento de mercado, desarrollo de negocio)	●	○	○	○	○
Mentorización (entre agricultores o entre comunidades de usuarios de tecnología agroalimentaria)	●	○	○	○	○
Visión y desarrollo estratégico (p.ej. estudios de mercado, desarrollo de estrategia de innovación)	●	○	○	○	○
Pruebas de mercado (p.ej. recoger y analizar opiniones de usuarios, validación de conceptos con usuarios)	●	○	○	○	○
Construcción de comunidad (p.ej. ayuda para contactar con otros agrogandaderos con retos similares o ayuda para conectar con empresas proveedoras de servicios tecnológicos)	●	○	○	○	○

12. ¿Están estos servicios **disponibles** para tu negocio?

	Sí	No	En parte
Acceso a financiación e inversión (p.ej. financiación de ingeniería, conexión a fuentes de inversión, planificación financiera)	○	○	○
Ayuda para el desarrollo del plan de negocio (p.ej. marketing, distribución...)	○	○	○
Habilidades y educación (p.ej. cursos, talleres, infraestructura tecnológica para aprender)	○	○	○
Participación en proyectos de colaboración con empresas de I+D, universidades y otras entidades	○	○	○
Soporte técnico para incorporar nuevas tecnologías a tu explotación agrogandera	○	○	○
Participación en proyectos piloto, demos o pruebas de nuevos productos y servicios para el sector agroalimentario	○	○	○
Incubación/aceleración (p.ej. asesoramiento de mercado, desarrollo de negocio)	○	○	○
Mentorización (entre agricultores o entre comunidades de usuarios de tecnología agroalimentaria)	○	○	○
Visión y desarrollo estratégico (p.ej. estudios de mercado, desarrollo de estrategia de innovación)	○	○	○
Pruebas de mercado (p.ej. recoger y analizar opiniones de usuarios, validación de conceptos con usuarios)	○	○	○
Construcción de comunidad (p.ej. ayuda para contactar con otros agrogandaderos con retos similares o ayuda para conectar con empresas proveedoras de servicios tecnológicos)	○	○	○

13. En qué media te identificas con las siguientes frases?

	Nada	Poco	Bastante	Mucho
Habitualmente maquino como renovar en mi explotación agrícola				
Me siento parte de una red que me ayuda a mejorar mi explotación agrícola				
Soy flexible frente a los cambios				
Uso tecnología diariamente en mi negocio agrícola				
Tengo suficiente acceso a financiación e inversión para afrontar los retos de transformación digital de mi explotación agrícola				
Soy un emprendedor				
La experiencia y el conocimiento técnico es la principal motivación para tomar decisiones en mi explotación agrícola				
No tengo tiempo para reflexionar sobre la evolución de mi negocio, especialmente en relación con las tecnologías digitales				
Habitualmente asisto a eventos y actividades relacionadas con el sector agroalimentario				
Suelo probar nuevas tecnología y programas de uso profesional				
Tengo un proveedor externo de tecnología				
Tengo responsabilidades más allá de mi explotación agrícola				
Soy optimista sobre el futuro de mi negocio agrícola				
Tomo decisiones sobre mi explotación y mi negocio basadas en datos				
Conozco bien las soluciones tecnológicas disponibles para mi explotación y mi negocio				

Capacidades Digitales

Las siguientes preguntas tratan sobre lo que piensas de la digitalización y cómo usas la tecnología.

14. Probablemente has escuchado hablar de digitalización, pero es tu visión la que nos interesa.
¿Qué significa **digital** para ti? (elige TODAS las respuestas que correspondan)

- [ ] Digital se refiere a cualquier actividad relacionada con la innovación tecnológica
- [ ] Digital es sinónimo de tecnología
- [ ] Digital se refiere a actuaciones tecnológicas para conectar con clientes
- [ ] Digital se refiere a las inversiones que estamos haciendo para incorporar tecnología a todas las partes de nuestro negocio
- [ ] Otro (especifique)
- [ ] Digital va más allá de solamente tecnología, sino que refleja una mentalidad para la innovación constante, toma de decisiones horizontales y la integración de tecnología en cualquier área del negocio
- [ ] Digital se refiere a todas las actividades de datos y analítica
- [ ] No estoy seguro

Visión y futuro

Las siguientes preguntas están relacionadas con tus expectativas de futuro.
Estamos muy interesados en conocer qué es para ti importante, así que responde con el nivel de detalle que te parezca oportuno.

15. ¿Cuáles son tus fortalezas?

16. ¿Cuál crees que es tu mayor reto para el futuro? (p.ej. la sucesión, rentabilidad, balance vida-trabajo, seguir innovando...)

17. ¿Qué oportunidades percibes en la digitalización de tu actividad agrícola?

18. ¿Cuáles son las mayores amenazas que percibes para tu sector?

19. ¿Cuál es tu aspiración para el futuro?

20. ¿Qué necesitas para llegar a cumplir con esa aspiración?

Información de contacto

Español

Gracias por tu tiempo y cooperación.
¿Podemos contactar contigo en el futuro? Si la respuesta es sí, déjanos tus datos de contacto.

21. Información de contacto

Nombre

Empresa

Ciudad/Pueblo

País

Dirección de correo electrónico

N.º de teléfono

22. ¿Tienes algún comentario, pregunta o sugerencia?

23. Nos gustaría poder contactar contigo en relación con esta encuesta

- Sí, sin problema
- No, gracias

German

Einführung

Deutsch

Landwirtschaftsumfrage

1. An welchem Standort (Stadt, Land) sind Sie ansässig?

2. Hauptlandwirtschaft (alle zutreffenden ankreuzen)

- [ ] Ackerbau
- [ ] Obst
- [ ] Geflügel
- [ ] Gewächshäuser
- [ ] Milchviehhaltung
- [ ] Gemüse
- [ ] Schweinehaltung
- [ ] Bio
- [ ] Tierhaltung (z.B. Rinder, Schafe, Ziegen, bitte geben Sie uns unten mehr Details)
- [ ] Olivenbäume
- [ ] Agroforstwirtschaftliche Ökosysteme, wie Dehesa (bitte geben Sie uns unten mehr Details)
- [ ] Sonstiges (bitte angeben)

3. Wie ist Ihre Position in der Branche?

- ○ Landwirt
- ○ Nebenerwerbslandwirt
- ○ Verpächter, nicht Landwirt
- ○ Angestellter auf einem landwirtschaftlichen Betrieb
- ○ Agrargenossenschaft der Landwirte
- ○ Dienstleistung/Produkt externer Anbieter
- ○ Bauernverband, -organisation oder -einrichtung
- ○ Sonstiges (bitte angeben)

4. Alter

5. Zu welchem regionalen Cluster gehören Sie?

6. Wie heißt die Organisation oder der Digital Innovation Hub ("DIH"), der Sie mit dieser Umfrage versorgt hat?

Betriebsstruktur

Deutsch

Verschiedene Arten von Betrieben haben unterschiedliche Bedürfnisse. Sie haben uns gesagt, dass Sie selbst Landwirt sind; bitte geben Sie uns eine Vorstellung von der Größe Ihres Betriebs.

7. Wie viele Menschen arbeiten durchschnittlich pro Jahr auf dem Hof? (Bitte berücksichtigen Sie auch Saisonarbeiter und solche, die anstelle von Gehältern Leistungen beziehen).

- ○ Weniger als 2 Personen
- ○ Zwischen 2 und 10 Personen
- ○ Mehr als 10 Personen

8. Wie groß ist der Betrieb?

- [ ] Weniger als 5 Hektar
- [ ] Zwischen 5 und 30 Hektar
- [ ] Mehr als 30 Hektar Fläche
- [ ] Weniger als 75 Nutztiere
- [ ] Zwischen 75 und 300 Nutztiere
- [ ] Mehr als 300 Nutztiere

9. Bitte bewerten Sie Ihre Betriebsgröße im Vergleich zu anderen Betrieben auf regionaler Ebene.

Klein		Mittel		Groß
○	○	○	○	○

Zugang zu digitalen Innovationsdiensten

Deutsch

Zur Digitalisierung der Landwirtschaft gibt es folgende Fragen: Welche Themen interessieren Sie im Zusammenhang mit der Digitalisierung? Und auf welche Digitalisierungsdienste haben Sie Zugriff?

10. Inwieweit interessieren Sie sich für die folgenden Themen?

	Nicht interessiert	Ein bisschen interessiert	Stark interessiert	Thematisierung Versuch vorgenommen	Bereits thematisiert
Die Notwendigkeit, Qualitätsprodukte vom Erzeuger zum Verbraucher zu verfolgen (d.h. die Rückverfolgbarkeitssysteme zu verbessern, damit die Verbraucher wissen, woher das Produkt kommt oder wie es verarbeitet wurde).	○	○	○	○	○
Die Notwendigkeit der Optimierung der landwirtschaftlichen Betriebe (z.B. Verbesserung der Bewässerung, Düngung, Krankheitsbehandlung, Ernte, Tierhaltung und Verwaltung)	○	○	○	○	○
Die Notwendigkeit, die Art und Weise, wie Sie Geschäfte machen, zu ändern (z.B. wie Sie Ihre Produkte verkaufen).	○	○	○	○	○
Die Notwendigkeit, Daten zu nutzen, um bessere Entscheidungen zu treffen.	○	○	○	○	○
Die Notwendigkeit einer umweltverträglichen Produktion (z.B. Einsatz von IKT zur Verbesserung der Umweltleistung der Lebensmittelproduktion und der Wertschöpfungsketten der Agrarnahrung)	○	○	○	○	○

Sonstiges (bitte angeben)

* 11. Nachfolgend finden Sie eine Liste der Dienstleistungen. Könnten Sie uns bitte mitteilen, wie wichtig Ihnen diese Dienste sind, um die digitale Innovation für Ihr Unternehmen zu fördern? (Die folgende Frage wird sich darauf beziehen, ob Sie diese Dienstleistungen für Sie als Landwirt als verfügbar ansehen).

	Ohne Bedeutung	Von untergeordneter Bedeutung	Neutral	Ziemlich wichtig	Sehr wichtig
Zugang zu Finanzierung und Förderung (z.B. Financial Engineering, Antragung an Finanzierungsquellen, Investitionsplanung)	○	○	○	○	○
Unterstützung bei der Geschäftsplanung (z.B. Marketing, Vertrieb	○	○	○	○	○
Qualifikationen und Bildung (z.B. Kurse, Workshops, Bereitstellung technologischer Infrastruktur für Bildungszwecke)	○	○	○	○	○
Teilnahme an Kooperationsprojekten mit F&E-Unternehmen, Universitäten und anderen Einrichtungen	○	○	○	○	○
Technische Unterstützung bei der Integration neuer Technologien in Ihren landwirtschaftlichen Betrieb	○	○	○	○	○
Testmaßnahmen für neue Produkte und Dienstleistungen für den Agrar- und Ernährungssektor	○	○	○	○	○
Inkubation/Beschleunigen (z.B. Werkbesichtigung, Geschäftsentwicklung)	○	○	○	○	○
Matching (zwischen Landwirten oder zwischen agrarwirtschaftlichen Endverbrauchern Gemeinschaften)	○	○	○	○	○
Visions- und Strategieentwicklung (z.B. Market Intelligence, Innovative Strategieentwicklung)	○	○	○	○	○
Benutzerökosystem (z.B. Erfassung und Analyse der Sprachaussagen von Kundendaten, Konzeptvalidierung mit Behörden)	○	○	○	○	○
Community Building (z.B. Unterstützung bei der Kontaktaufnahme mit anderen Landwirten mit ähnlichen Herausforderungen oder Unterstützung bei der Kontaktaufnahme mit Unternehmen, die Ihre technologischen Lösungen anbieten)	○	○	○	○	○

12. Sind diese Dienstleistungen für Ihr Unternehmen verfügbar?

	Ja	Nein	Teilweise
Zugang zu Finanzierung und Förderung (z.B. Finanzbedarfsplanung, Anbindung an Finanzierungsquellen, Investitionsberatung)	○	○	○
Unterstützung bei der Geschäftsplanung (z.B. Marketing, Vertrieb)	○	○	○
Qualifikationen und Bildung (z.B. Kurse, Workshops, Bereitstellung technologischer Infrastruktur für Bildungszwecke)	○	○	○
Teilnahme an Kooperationsprojekten mit F&E-Unternehmen, Universitäten und anderen Einrichtungen	○	○	○
Technische Unterstützung bei der Integration neuer Technologien in Ihren landwirtschaftlichen Betrieb	○	○	○
Testmaßnahmen für neue Produkte und Dienstleistungen für den Agrar- und Ernährungssektor	○	○	○
Diskussion/Recherchen (z.B. Marktbeurteilung, Geschäftsentwicklung)	○	○	○
Mentoring (zwischen Landwirten oder zwischen agrartechnischen Produzenten/Verbraucher-Gemeinschaften)	○	○	○
Visions- und Strategieentwicklung (z.B. Market Intelligence, Innovation Strategieentwicklung)	○	○	○
Benutzerakzeptanz (z.B. Erfassung und Analyse der Kaufhauptgründe von Kundenkäufen, Konzeptvalidierung mit Benutzern)	○	○	○
Community Building (z.B. Unterstützung bei der Kontaktaufnahme mit anderen Landwirten mit ähnlichen Herausforderungen oder Unterstützung bei der Kontaktaufnahme mit Unternehmen, die Ihre technologischen Lösungen anbieten)	○	○	○

13. Inwieweit stimmen Sie den folgenden Aussagen zu?

	Überhaupt nicht	Eher wenig	Etwas	Sehr viel
Ich benutze oft meine eigene Vorstellungskraft, um mir Vorstellungen auf meinem Hof vorzustellen.	○	○	○	○
Ich fühle mich Teil eines Netzwerks, das mich bei der Weiterentwicklung meines landwirtschaftlichen Betriebes unterstützt.	○	○	○	○
Ich bin flexibel gegenüber Veränderungen.	○	○	○	○
Ich setze IKT täglich ein, um mein Geschäft zu unterstützen.	○	○	○	○
Ich habe genügend Zugang zu Förderung und Finanzierung, um die Herausforderung der digitalen Transformation in meinem landwirtschaftlichen Betrieb zu bewältigen.	○	○	○	○
Ich bin Unternehmer oder Unternehmer	○	○	○	○
Erfahrung und technisches Wissen sind die wichtigsten Faktoren, um Entscheidungen über landwirtschaftliche und wirtschaftliche Aspekte zu treffen.	○	○	○	○
Ich habe Zeit nehmen, um über Innovationen für mein Unternehmen nachzudenken, insbesondere über digitale Technologien.	○	○	○	○
Ich nehme oft an Veranstaltungen und Aktivitäten in Zusammenarbeit mit Agrifood teil.	○	○	○	○
Ich probiere oft neue Technologien und Software für den professionellen Einsatz aus.	○	○	○	○
Ich habe einen externen Technologieberater.	○	○	○	○
Ich habe eine größere Verantwortung als nur meine Farm.	○	○	○	○
Ich bin optimistisch für die Zukunft meines landwirtschaftlichen Betriebs.	○	○	○	○
Ich treffe Entscheidungen über meinen Betrieb und meinen Betrieb auf der Grundlage von Daten.	○	○	○	○
Ich bin mir der technologischen Lösungen bewusst, die für meinen Betrieb verfügbar sind.	○	○	○	○

Digitale Möglichkeiten

Deutsch

Die folgenden Fragen beziehen sich auf Ihre Gedanken zur Digitalisierung und wie Sie die Technologie einsetzen.

14. Sie haben wahrscheinlich viel über die Digitalisierung gehört, aber Ihre eigene Vision davon interessiert uns. Was bedeutet Digital für Sie? (wählen Sie ALLE, die zutreffen)

- ☐ Digital bezieht sich auf alle Aktivitäten im Zusammenhang mit technologischen Innovationen.
- ☐ Sonstiges (bitte angeben)
- ☐ Digital bezieht sich auf alle kundenorientierten Technologieaktivitäten.
- ☐ Digital bezieht sich auf alle Investitionen, die wir tätigen, um die Technologie in alle Bereiche unseres Geschäfts zu integrieren.
- ☐ Sonstiges (bitte angeben)
- ☐ Digital geht über die reine Technologie hinaus und umfasst eine Denkweise oder, die ständige Innovation, Fache Entscheidungsfindung und die Integration von Technologie in allen Phasen des Unternehmens umfasst.
- ☐ Digital bezieht sich auf alle Daten- und Analysetätigkeiten.
- ☐ Unsicher

Vision und Zukunft

Die folgenden Fragen beziehen sich auf Ihre Zukunftsvision. Wir sind an dem interessiert, was Ihnen wichtig erscheint; Sie können entweder allgemein oder detailliert antworten, je nachdem, was Sie für angebracht halten.

15. Was sind Ihre Stärken?

16. Was ist Ihrer Meinung nach Ihre größte Herausforderung für die Zukunft? (z.B. Nachfolge, Rentabilität, Work-Life-Balance, Innovationsfähigkeit...)

17. Welche Möglichkeiten sehen Sie in der Digitalisierung Ihrer landwirtschaftlichen Tätigkeit?

18. Was ist Ihrer Meinung nach die größte Bedrohung für den Sektor?

19. Was ist Ihr Ziel für die Zukunft?

20. Was brauchen Sie, um diesen Anspruch zu erfüllen?

Kontaktinformationen

Vielen Dank für Ihre Zeit und Zusammenarbeit. Dürfen wir Sie in Zukunft bezüglich dieses Projekts kontaktieren? Wenn ja, tragen Sie uns bitte Ihre Kontaktdaten ein.

21. Kontaktinformationen

Name
Unternehmen
Ort/Stadt
Land
E-Mail-Adresse
Telefonnummer

22. Haben Sie weitere Anmerkungen, Fragen oder Bedenken?

23. Wir möchten Sie eventuell über diese Umfrage kontaktieren.

- Ja, bitte
- Nein, danke

French

Introduction

Les questions suivantes concernent votre situation dans la filière agricole.

1. Où êtes-vous situé ? (ville, pays)

2. Secteur agricole principal (cochez TOUTES les réponses qui vous concernent)

- [ ] Grande culture
- [ ] Fruits
- [ ] Viticole
- [ ] Productions sous serres
- [ ] Produits laitiers
- [ ] Légumes - Maraîchage plein champ
- [ ] Porcs
- [ ] Agriculture bio
- [ ] Reproduction/sélection animale (précisez ci-dessous)
- [ ] Oléicole
- [ ] Agroforesterie (précisez ci-dessous)
- [ ] Autre (veuillez préciser)

3. Quel est votre activité dans le secteur ?

- [ ] Agriculteur à temps complet
- [ ] Agriculteur à temps partiel
- [ ] Propriétaire non exploitant
- [ ] Gérant agricole
- [ ] Autre (veuillez préciser)
- [ ] Agriculteur en coopérative
- [ ] Fournisseur de produit/service externe
- [ ] Association agricole, organisation de producteurs

4. Age

5. A quel cluster régional êtes-vous lié?

6. Quel est le nom de l'organisation ou du pôle d'innovation numérique ("DIH") qui vous a fourni ce sondage?

Votre exploitation agricole

Pour permettre d'identifier les besoins spécifiques selon les typologies d'exploitations, les questions suivantes concernent la taille de votre exploitation.

7. Combien de personnes travaillent en moyenne sur votre exploitation sur une année ? (y compris les travailleurs saisonniers et les personnes percevant des avantages plutôt que des salaires)

- [ ] Moins de 2 personnes
- [ ] Entre 3 et 10 personnes
- [ ] Plus de 10 personnes

8. Quelle est la taille de votre exploitation ?

- [ ] Moins de 5 hectares
- [ ] Entre 5 et 30 hectares
- [ ] Plus de 30 hectares
- [ ] Moins de 75 animaux
- [ ] Entre 75 et 300 animaux
- [ ] Plus de 300 animaux

9. Estimez le positionnement de la taille de votre exploitation à l'échelle régionale

Petite		Moyenne		Grande
○	○	○	○	○

Accès aux services d'innovation digitale

Les questions suivantes concernent la digitalisation de l'agriculture : quels sujets vous intéressent s'agissant de digitalisation ? Et à quels services numériques avez-vous accès ?

10. Dans quelle mesure les sujets suivants vous intéressent?

	Pas intéressé	Un peu intéressé	Fortement intéressé	Besoin d'y recourir	Besoin d'y recourir
Le besoin d'assurer une traçabilité des produits de qualité de la ferme à l'assiette (produire les systèmes de traçabilité pour que les consommateurs sachent d'où vient le produit)	○	○	○	○	○
Le besoin d'optimiser les opérations agricoles (améliorer l'irrigation, la fertilisation, le traitement des maladies, les récoltes, l'administratif...)	○	○	○	○	○
Le besoin de faire évoluer la commercialisation (par exemple, la manière dont vous vendez vos produits)	○	○	○	○	○
Le besoin d'utiliser des données pour prendre de meilleures décisions	○	○	○	○	○
Le besoin d'une production respectueuse de l'environnement (ex. utiliser les TIC pour améliorer la performance environnementale de la production alimentaire et des chaînes de valeur agro-alimentaires)	○	○	○	○	○

Autre (veuillez préciser)

* 11. Pourriez-vous indiquer l'importance que vous donnez aux services ci-dessous pour renforcer l'innovation digitale de votre activité ? (les questions suivantes nous permettront d'évaluer si vous considérez que ces services vous sont accessibles en tant qu'agriculteur).

	Aucune importance	Peu d'importance	Neutre	Plutôt importante	Très importante
Accès au financement (ex. ingénierie financière, connexion à des sources de financement, planification des investissements)	●	○	○	○	○
Soutien au plan de développement (ex. marketing, distribution)	●	○	○	○	○
Compétences et formation (ex. cours, ateliers, mise à disposition d'infrastructures technologiques à des fins d'enseignement)	●	○	○	○	○
Participation à des projets collaboratifs avec des entreprises de R&D, universités et d'autres acteurs	●	○	○	○	○
Soutien technique pour intégrer de nouvelles technologies dans votre activité agricole	●	○	○	○	○
Participation à des projets pilotes, actions de démonstration ou test de nouveaux produits et services pour le secteur agro-alimentaire	●	○	○	○	○
Incubateur/Accélérateur (ex. étude de marché, développement commercial)	●	○	○	○	○
Parrainage (entre agriculteurs ou communautés de bénéficiaires d'agrotech)	●	○	○	○	○
Conception de développement stratégique (ex. connaissance du marché, développement d'une stratégie d'innovation)	●	○	○	○	○
Acceptation des utilisateurs (ex. collecte et analyse des avis de consommateurs, validation de concept par les utilisateurs)	●	○	○	○	○
Conception de développement stratégique (ex. connaissance du marché, développement d'une stratégie d'innovation)	●	○	○	○	○

12. Avez-vous **accès** à ces services ?

	Oui	Non	Partiellement
Accès au financement (ex. ingénierie financière, connexion à des sources de financement, planification des investissements)	○	○	○
Soutien au plan de développement (ex. marketing, distribution)	○	○	○
Compétences et formation (ex. cours, ateliers, mise à disposition d'infrastructures technologiques à des fins d'enseignement)	○	○	○
Participation à des projets collaboratifs avec des entreprises de R&D, universités et d'autres acteurs	○	○	○
Soutien technique pour intégrer de nouvelles technologies dans votre activité agricole	○	○	○
Participation à des projets pilotes, actions de démonstration ou test de nouveaux produits et services pour le secteur agro-alimentaire	○	○	○
Incubateur/Accélérateur (ex. étude de marché, développement commercial)	○	○	○
Parrainage (entre agriculteurs ou communautés de bénéficiaires d'agrotech)	○	○	○
Conception de développement stratégique (ex. connaissance du marché, développement d'une stratégie d'innovation)	○	○	○
Acceptation des utilisateurs (ex. collecte et analyse des avis de consommateurs, validation de concept par les utilisateurs)	○	○	○
Conception de développement stratégique (ex. connaissance du marché, développement d'une stratégie d'innovation)	○	○	○

13. Dans quelle mesure êtes-vous d'accord avec les propositions suivantes ?

	Pas du tout	Très peu	Plutôt	Beaucoup
J'utilise souvent mon imagination pour visualiser des innovations pour mon exploitation	○	○	○	○
J'ai le sentiment d'appartenir à un réseau qui me soutient et m'aide à renforcer mon activité	○	○	○	○
Je suis ouvert au changement	○	○	○	○
J'utilise quotidiennement les TIC pour mon activité	○	○	○	○
J'ai suffisamment accès aux financements pour faire face aux défis de transformation numérique dans mon activité	○	○	○	○
Je suis un entrepreneur	○	○	○	○
Les connaissances techniques et l'expérience sont les principaux moteurs de décision pour mon activité agricole	○	○	○	○
Je m'efforce à l'innovation dans mon activité particulièrement aux technologies numériques	○	○	○	○
Je participe souvent à des événements et activités liés au secteur agro-alimentaire	○	○	○	○
J'essaie souvent des nouvelles technologies et logiciels à des fins professionnelles	○	○	○	○
J'ai un fournisseur externe de technologies	○	○	○	○
Mes responsabilités vont au-delà de ma seule exploitation agricole	○	○	○	○
Je suis optimiste quant à l'avenir de mon exploitation	○	○	○	○
Je prends des décisions pour mon activité en m'appuyant sur des données	○	○	○	○
Je connais les solutions technologiques disponibles pour mon activité/exploitation	○	○	○	○

Accès aux services d'innovation digitale

Français

Les questions suivantes concernent vos opinions sur la digitalisation et l'usage des technologies.

14. Vous avez probablement entendu beaucoup de choses sur la digitalisation, mais votre propre vision nous intéresse.
Qu'est-ce que **digital** signifie pour vous ? (cochez TOUTES les cases pertinentes)

- ☐ Toute activité liée à l'innovation technologique
- ☐ Digital est synonyme de technologie
- ☐ Toute activité liée à une technologie pour le contact au client
- ☐ Tous les investissements que nous faisons pour intégrer le numérique dans tous les aspects de notre activité
- ☐ Au-delà de la seule technologie, c'est un état d'esprit qui comprend l'innovation constante, une prise de décision transversale, et l'intégration de la technologie dans tous les champs de l'activité
- ☐ Toute activité liée aux données et à leur analyse
- ☐ Ne sait pas
- ☐ Autre (veuillez préciser)

Vision et futur

Français

Les questions suivantes concernent votre vision pour l'avenir.
Ce que vous considérez comme important nous intéresse, vous pouvez répondre à l'échelle stratégique ou sur des points de détails en fonction de votre perception.

15. Quelles sont vos forces ?

16. Quel est selon vous votre plus grand défi à venir ? (ex. succession, rentabilité, équilibre entre travail et vie personnelle, rester innovant...)

17. Quelles opportunités voyez-vous dans la digitalisation de votre activité?

18. Selon vous, quelle est (ou sont) la plus grande menace pour le secteur ?

19. Quelle est votre ambition pour l'avenir ?

20. De quoi avez-vous besoin pour l'accomplir ?

Coordonnées

Français

Merci beaucoup pour votre temps et votre contribution.
Si vous acceptez d'être à nouveau contacté à l'avenir dans le cadre de ce projet, merci de nous communiquer vos coordonnées ci-dessous.

21. Coordonnées

Nom	
Entreprise	
Ville	
Pays	
Adresse e-mail	
Numéro de téléphone	

22. Avez-vous d'autres questions, idées ou inquiétudes ?

23. Acceptez-vous d'être contacté pour les suites de ce projet ?

- ○ Oui
- ○ Non merci

Italian

Introduzione

Le seguenti domande riguardano la sua posizione nel settore agricolo

1. In quale località (città, paese) ha sede?

2. Settore agricolo principale (anche tutti quelli indicati)

- [ ] Seminativi
- [ ] Frutta
- [ ] Pollame
- [ ] Serra
- [ ] Latticini - caseario
- [ ] Orticolo
- [ ] Suinicolo
- [ ] Bufalino
- [ ] Allevamento (es. Bovino, ovi-caprino, si prega di fornire maggiori dettagli di seguito)
- [ ] Olivicolo
- [ ] Agroforestale, come dehesa (si prega di fornire maggiori dettagli di seguito)
- [ ] Altro (prego specificare)

3. Qual è il suo ruolo nel settore?

- [ ] Agricoltore dedicato
- [ ] Agricoltore part-time
- [ ] Proprietario terriero, non agricoltore
- [ ] Operaio in un'azienda agricola
- [ ] Altro (prego specificare)
- [ ] Cooperativa Agricola
- [ ] Fornitore esterno di servizi/prodotti
- [ ] Organizzazione Agricola

4. Età

5. Di quale Regional Cluster fa parte?

6. Qual è il nome dell'organizzazione o Digital Innovation Hub ("DIH") che ti ha fornito questo sondaggio?

Struttura dell'azienda agricola

Azienda agricola diventa hanno risposte diverse.
Ci ha detto che lei stesso è un agricoltore; per favore, ci dia un'idea delle dimensioni della sua azienda.

7. Quante persone lavorano in media nella sua azienda annualmente? (Si prega di tenere in considerazione lavoratori stagionali e altro personale che riceve benefit anche di tipo non salariale)

- [ ] Meno di 3 persone
- [ ] Tra 3 e 10 persone
- [ ] Più di 10 persone

8. Qual è la dimensione della sua azienda?

- [ ] Meno di 5 ettari
- [ ] Tra i 5 e i 30 ettari
- [ ] Più di 30 ettari
- [ ] Meno di 75 capi di bestiame
- [ ] Tra i 75 e i 300 capi di bestiame
- [ ] Più di 300 capi di bestiame

9. Si prega di classificare la dimensione della sua azienda rispetto ad altre aziende nella Regione

Piccola		Media		Grande
○	○	○	○	○

Accesso ai servizi di innovazione digitale

Le seguenti domande riguardano la digitalizzazione dell'agricoltura: quali sono i suoi argomenti di interesse riguardo alla digitalizzazione? E a quali servizi di digitalizzazione ha accesso?

10. In che misura le interessano i seguenti argomenti?

	Non interessato	Poco interessato	Molto interessato	Ne presenta e lavorano	Lavorando
La necessità di "tracciare" prodotti di qualità dall'azienda agricola alla tavola (ossia migliorare i sistemi di tracciabilità ai modi che i consumatori vogliono da dove proviene il prodotto e in che modo è stato elaborato)	○	○	○	○	○
Il bisogno di ottimizzare le operazioni aziendali (come migliorare l'irrigazione, la fertilizzazione, il trattamento delle malattie, la raccolta, la gestione dell'allevamento e l'amministrazione)	○	○	○	○	○
La necessità di cambiare il modo di fare business (ad esempio il modo in cui vende i suoi prodotti)	○	○	○	○	○
La necessità di utilizzare i dati per prendere decisioni migliori	○	○	○	○	○
Il bisogno di produrre in modo sostenibile dal punto di vista ambientale (es. utilizzando TIC per migliorare le performance ambientali e di produzione della filiera agro- alimentare)	○	○	○	○	○

Altro (prego specificare)

* 11. Di seguito trova un elenco di servizi. Potrebbe indicare quanta **importanza** attribuisce a questi servizi per promuovere l'innovazione digitale per la sua azienda? (La seguente domanda riguarda la disponibilità di questi servizi per lei, in quanto agricoltore).

	Non importante	Di poca importanza	Neutrale	Piuttosto importante	Molto importante
Accesso ai finanziamenti (ad esempio ingegneria finanziaria, collegamento a fonti di finanziamento, pianificazione degli investimenti)	●	○	○	○	○
Supporto alla pianificazione aziendale (es. Commercializzazione, distribuzione)	●	○	○	○	○
Competenze e istruzione (ad esempio corsi, workshop, offerta di infrastrutture tecnologiche per scopi didattici)	●	○	○	○	○
Partecipazione a progetti di collaborazione con aziende di ricerca e sviluppo, università e altre entità	●	○	○	○	○
Supporto tecnico per incorporare nuove tecnologie nella sua azienda agricola	●	○	○	○	○
Partecipazione a progetti pilota, demo o azioni di collaudo di nuovi prodotti e servizi per il settore agroalimentare	●	○	○	○	○
Incubatore / acceleratore (ad esempio validazione del mercato, sviluppo del business)	●	○	○	○	○
Tutoraggio (tra agricoltori o tra comunità di utenti finali agricoli)	●	○	○	○	○
Visione e sviluppo della strategia (ad es. Market intelligence, sviluppo della strategia di innovazione)	●	○	○	○	○
Accettazione da parte dell'utente finale (es. Raccolta e analisi dei dati dei clienti, validazione del modello con gli utenti)	●	○	○	○	○
Community Building (ad esempio, supporto per connessioni con altri agricoltori con sfide simili o supporto per connettersi con le aziende che forniscono le proprie soluzioni tecnologiche)	●	○	○	○	○

12. Sono **disponibili** questi servizi nella sua attività?

	Sì	No	Parzialmente
Accesso ai finanziamenti (ad esempio ingegneria finanziaria, collegamento a fonti di finanziamento, pianificazione degli investimenti)	○	○	○
Supporto alla pianificazione aziendale (es. Commercializzazione, distribuzione)	○	○	○
Competenze e istruzione (ad esempio corsi, workshop, offerta di infrastrutture tecnologiche per scopi didattici)	○	○	○
Partecipazione a progetti di collaborazione con aziende di ricerca e sviluppo, università e altre entità	○	○	○
Supporto tecnico per incorporare nuove tecnologie nella sua azienda agricola	○	○	○
Partecipazione a progetti pilota, demo o azioni di collaudo di nuovi prodotti e servizi per il settore agroalimentare	○	○	○
Incubatore / acceleratore (ad esempio validazione del mercato, sviluppo del business)	○	○	○
Tutoraggio (tra agricoltori o tra comunità di utenti finali agricoli)	○	○	○
Visione e sviluppo della strategia (ad es. Market intelligence, sviluppo della strategia di innovazione)	○	○	○
Accettazione da parte dell'utente finale (es. Raccolta e analisi dei dati dei clienti, validazione del modello con gli utenti)	○	○	○
Community Building (ad esempio, supporto per connessioni con altri agricoltori con sfide simili o supporto per connettersi con le aziende che forniscono le proprie soluzioni tecnologiche)	○	○	○

13. In che misura è d'accordo con le seguenti affermazioni?

	Affatto	Molto poco	Piuttosto	Molto
Spesso uso la mia immaginazione per immaginare le innovazioni nella mia azienda	○	○	○	○
Sento di essere parte di una rete che mi supporta per migliorare la mia azienda	○	○	○	○
Sono flessibile nei confronti dei cambiamenti	○	○	○	○
Utilizzo tecnologie TIC giornalmente nella mia attività in azienda	○	○	○	○
Ho accesso a finanziamenti sufficienti per affrontare le sfide della trasformazione digitale nella mia azienda agricola	○	○	○	○
Sono un imprenditore	○	○	○	○
L'esperienza e la conoscenza tecnica sono il motore principale per prendere decisioni in merito all'azienda e la propria attività	○	○	○	○
Ho bisogno di tempo per riflettere su un'innovazione per la mia impresa, soprattutto per quel che riguarda le tecnologie digitali	○	○	○	○
Frequento spesso eventi e attività legate all'agritech	○	○	○	○
Provo spesso tecnologie e nuovi software per uso professionale	○	○	○	○
Ho un fornitore di tecnologia esterno	○	○	○	○
Ho responsabilità maggiori nella mia azienda agricola	○	○	○	○
Sono ottimista sul futuro della mia azienda agricola	○	○	○	○
Prendo decisioni sulla mia azienda e sulla mia attività in base ai dati	○	○	○	○
Sono pienamente consapevole delle soluzioni tecnologiche disponibili per la mia azienda e il mio business	○	○	○	○

Capacità digitali

Le domande seguenti si riferiscono alla sua opinione in merito alla digitalizzazione e a come utilizza la tecnologia.

14. Probabilmente ha sentito parlare molto di digitalizzazione, ma a noi interessa la sua visione sul tema.
Cosa significa digitale per lei (scegliere tutte le opzioni pertinenti)?

- [ ] Digitale si riferisce a tutte le attività connesse all'innovazione tecnologica
- [ ] Il digitale è sinonimo di tecnologia
- [ ] Il digitale si riferisce a tutte le attività tecnologiche rivolte al cliente
- [ ] Il digitale si riferisce a tutti gli investimenti che stiamo facendo per integrare la tecnologia in tutte le parti della nostra attività
- [ ] Altro (prego specificare)
- [ ] Il digitale va oltre la sola tecnologia per riflettere una mentalità che abbraccia un'innovazione costante, una presa della decisione consapevole, e l'integrazione della tecnologia in tutti gli aspetti dell'azienda
- [ ] Il digitale si riferisce a tutte le attività di dati e analisi
- [ ] Non sono sicuro

Visione e futuro

Le seguenti domande si riferiscono alla sua visione per il futuro.
Siamo interessati a ciò che lei ritiene importante; può rispondere in modo generico o dettagliato, a seconda di quello che sente.

15. Quali sono i suoi punti di forza?

16. Quale ritiene sia la sua più grande sfida per il futuro? (es. eredità, profitto, equilibrio vita-lavoro, essere innovativi...)

17. Quali opportunità vede nel digitalizzare la sua attività agricola?

18. Quali sono le maggiori minacce che percepisce verso il settore agricolo?

19. Quale è la sua ambizione per il futuro?

20. Di cosa ha bisogno per soddisfare tale ambizione?

Informazioni di contatto

Grazie per il suo tempo e la collaborazione.
Possiamo contattarla in futuro in merito a questo progetto? Se sì, per favore inserisca la sua informazioni di contatto.

21. Informazioni di contatto

Nome	
Azienda	
Città	
Paese	
E-mail	
Telefono	

22. Ha ulteriori commenti, domande o osservazioni?

23. Vorremmo contattarla occasionalmente su questo sondaggio

- ( ) Sì, grazie
- ( ) No, grazie

Polish

Wstęp

1. W jakiej lokalizacji (miejscowość, region) znajduje się Pana/Pani gospodarstwo?

2. Główna działalność (proszę zaznaczyć WSZYSTKIE pasujące)

- [ ] Uprawa roli
- [ ] Sadownictwo (dotyczy sadów)
- [ ] Hodowla drobiu
- [ ] Sołectwo
- [ ] Rolnik
- [ ] Warzywnictwo
- [ ] Hodowla trzody chlewnej
- [ ] Rolnictwo ekologiczne
- [ ] Hodowla zwierząt (np. bydło, owce, kozy, proszę podać szczegóły poniżej)
- [ ] Sadownictwo (dotyczy owoców)
- [ ] Ekosystemy agroleśnicze, jak dehesa (proszę podać szczegóły poniżej)
- [ ] Inne (proszę określić)

3. Jaka jest Pana/Pani pozycja w przemyśle?

- [ ] Rolnik (w pełnym wymiarze)
- [ ] Rolnik (w niepełnym wymiarze)
- [ ] Właściciel ziemski, nie rolnik
- [ ] Pracownik firmy rolniczej
- [ ] Inne (proszę określić)
- [ ] Rolnicza spółdzielnia produkcyjna
- [ ] Zawodowy dostawca usług/produktów
- [ ] Związek, organizacja lub instytucja techniczna

4. Wiek

5. Z którym Regionalnym Klastrem jest Pan/Pani związany/związana?

6. Jak nazywa się organizacja lub Digital Innovation Hub („DIH"), która dostarczyła Ci tę ankietę?

Struktura gospodarstwa

7. Ile osób pracuje średnio w gospodarstwie w cyklu rocznym? (proszę uwzględnić również pracowników sezonowych oraz otrzymujących inny rodzaj wynagrodzenia niż pensja)

- [ ] mniej niż 2 osoby
- [ ] od 2 do 10 osób
- [ ] więcej niż 10 osób

8. Jaki jest rozmiar gospodarstwa?

- [ ] mniej niż 5 ha
- [ ] od 5 do 10 ha
- [ ] więcej niż 10 ha
- [ ] mniej niż 75 zwierząt hodowlanych
- [ ] od 75 do 200 zwierząt hodowlanych
- [ ] więcej niż 300 zwierząt hodowlanych

9. Proszę ocenić rozmiar swojego gospodarstwa w porównaniu do innych gospodarstw w regionie

Małe		Średnie		Duże
○	○	○	○	○

10. W jakim stopniu jest Pan/Pani zainteresowany/zainteresowana następującymi tematami?

* 11. Poniżej znajduje się lista usług. Proszę określić **istotność** jaką Pan/Pani przypisuje tym usługom w celu wsparcia cyfrowej innowacji w Pana/Pani gospodarstwie (kolejne pytanie będzie dotyczyło dostępności tych usług w Pana/Pani gospodarstwie)

12. Czy te serwisy są **dostępne** w Pani/Pana gospodarstwie?

13. W jakim stopniu zgadza się Pan/Pani z następującymi stwierdzeniami?

	Nie zgadzam się	Słabo się zgadzam	Raczej się zgadzam	Zdecydowanie się zgadzam
Często używam mojej wyobraźni do wymyślania innowacji w moim gospodarstwie	○	○	○	○
Czuję, że jestem częścią sieci pomagającej mi rozwijać mój biznes	○	○	○	○
Jestem otwarty na zmiany	○	○	○	○
Codziennie używam systemów informatycznych, które wspierają mój biznes	○	○	○	○
Mam dostęp do wystarczających funduszy i finansowania by zrealizować transformację cyfrową w moim gospodarstwie	○	○	○	○
Jestem przedsiębiorcą	○	○	○	○
Doświadczenie i wiedza techniczna mają kluczowe znaczenie w podejmowaniu decyzji dotyczących gospodarstwa	○	○	○	○
Przeznaczam czas na przemyślenia dotyczące innowacji dla mojego biznesu, w szczególności w dziedzinie technologii cyfrowych	○	○	○	○
Często biorę udział w wydarzeniach związanych z sektorem rolno-spożywczym	○	○	○	○
Często wypróbowuję nowe technologie i oprogramowanie do celów zawodowych	○	○	○	○
Jestem optymistyczny jeśli chodzi o przyszłość mojego biznesu	○	○	○	○
Mam większe zobowiązania niż tylko moje gospodarstwo	○	○	○	○
Jestem optymistyczny jeśli chodzi o przyszłość mojego rolnictwa	○	○	○	○
Podejmuję decyzje związane z moim gospodarstwem bazując na zebranych danych	○	○	○	○
Jestem w pełni świadomy rozwiązań technologicznych dostępnych dla mojego gospodarstwa	○	○	○	○

Możliwości cyfrowe

Polski

Poniższe pytania dotyczą Pani/Pana podejścia do cyfryzacji i tego w jaki sposób używa Pan/Pani technologii.

14. Zapewne słyszał/słyszała Pan/Pani o cyfryzacji, jednak Pana/Pani wizja tego procesu jest dla nas istotna. Co oznacza dla Pana/Pani pojęcie „cyfrowy"? (proszę zaznaczyć wszystkie pasujące)

- ☐ „Cyfrowy" odnosi się do wszystkich czynności związanych z innowacją technologiczną
- ☐ „Cyfrowy" jest synonimem technologii
- ☐ „Cyfrowy" odnosi się do technologii skoncentrowanych na kliencie
- ☐ „Cyfrowy" odnosi się do wszystkich inwestycji, które czynimy by zintegrować technologię w każdej części naszego biznesu
- ☐ „Cyfrowy" wykracza poza samą technologię, odzwierciedla sposób myślenia zakładający ciągłą innowację, sprawne podejmowanie decyzji oraz integrację technologii w każdej fazie biznesu
- ☐ „Cyfrowy" odnosi się do wszystkich czynności związanych ze zbieraniem i analizowaniem danych
- ☐ Nie jestem pewny/pewna
- ☐ Inne (proszę określić)

Wizja przyszłości

Polski

Poniższe pytania dotyczą Pana/Pani wizji przyszłości. Zależy nam na tym by poznać co jest dla Pana/Pani ważne; odpowiadać można ogólnie lub szczegółowo.

15. Jakie są Pana/Pani silne strony?

16. Jakie jest Pana/Pani największe wyzwania na przyszłość? (np. sukcesja, rentowność, balans między życiem prywatnym i zawodowym, bycie innowacyjnym...)

17. Jakie możliwości widzi Pan/Pani w cyfryzacji Pana/Pani gospodarstwa?

18. Jakie są Pana/Pani zdaniem największe zagrożenia dla sektora rolniczego?

19. Jakie są Pana/Pani ambicje na przyszłość?

20. Co jest Panu/Pani potrzebne by spełnić te ambicje?

Dane kontaktowe

Polski

Bardzo dziękujemy za Pana/Pani czas i współpracę. Czy możemy skontaktować się z Panem/Panią odnośnie projektu? Jeśli tak, prosimy wypełnić poniższe dane kontaktowe.

21. Dane kontaktowe

Imię i nazwisko

Firma

Miejscowość

Kraj

Adres e-mail

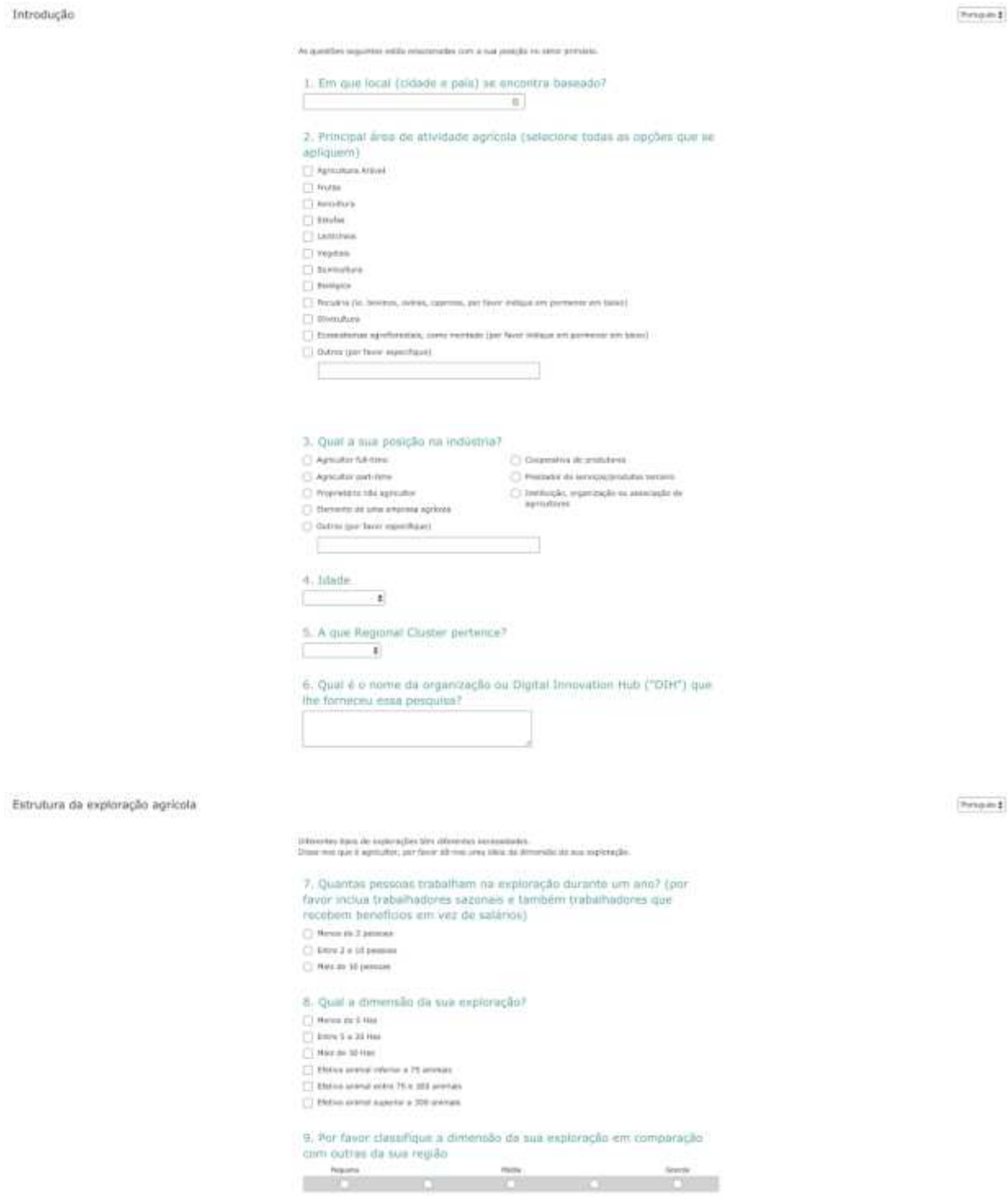
Numer telefonu

22. Czy ma Pan/Pani jeszcze jakieś komentarze, pytania, uwagi?

23. Czy możemy skontaktować się z Panem/Panią odnośnie tej ankiety?

- Tak, proszę
- Nie, dziękuję

Portuguese



Introdução

1. Em que local (cidade e país) se encontra baseado?

2. Principal área de atividade agrícola (selecione todas as opções que se apliquem)

- Agricultura Arável
- Frutas
- Aeroponia
- Estufas
- Leiteiras
- Vegetais
- Silvicultura
- Biológica
- Pecuária (ex. bovinos, ovinos, caprinos, por favor indique em pormenor em baixo)
- Olivicultura
- Explorações agroflorestais, como montado (por favor indique em pormenor em baixo)
- Outros (por favor especifique)

3. Qual a sua posição na indústria?

- Agricultor full-time
- Agricultor part-time
- Proprietário não agricultor
- Elemento de uma empresa agrícola
- Outros (por favor especifique)
- Cooperativa de produtores
- Prestador de serviços/produtos variados
- Instituição, organização ou associação de agricultores

4. Idade

5. A que Regional Cluster pertence?

6. Qual é o nome da organização ou Digital Innovation Hub ("DIH") que lhe forneceu essa pesquisa?

Estrutura da exploração agrícola

Diferentes tipos de explorações têm diferentes necessidades.
Diga-nos que é agricultor, por favor dê-nos uma ideia da dimensão da sua exploração.

7. Quantas pessoas trabalham na exploração durante um ano? (por favor inclua trabalhadores sazonais e também trabalhadores que recebem benefícios em vez de salários)

- Menos de 2 pessoas
- Entre 2 e 10 pessoas
- Mais de 10 pessoas

8. Qual a dimensão da sua exploração?

- Menos de 5 Has
- Entre 5 e 20 Has
- Mais de 50 Has
- Efetivo animal inferior a 75 animais
- Efetivo animal entre 75 e 300 animais
- Efetivo animal superior a 300 animais

9. Por favor classifique a dimensão da sua exploração em comparação com outras da sua região

Pequena | Média | Grande

As seguintes questões incidem sobre a digitalização da agricultura. Quais são os seus níveis de interesse sobre o tema da digitalização? E que serviços de digitalização tem acesso?

10. Quão interessado está nos seguintes tópicos?

	Não interessado	Um pouco interessado	Fortemente interessado	A tentar aprender	Atualmente a aprender
A necessidade de rastreio produtos da exploração ao prato (i.e. melhoramento de sistemas de controlabilidade de forma a permitir que os consumidores conheçam a origem e a forma de produção do produto)	○	○	○	○	○
A necessidade de otimizar as operações agrícolas (como o melhoramento da gestão de rega, fertilização, tratamento de doenças, colheita, tarefas administrativas)	○	○	○	○	○
A necessidade de mudança da forma como realiza negócios (i.e. a forma como comercializa produtos)	○	○	○	○	○
A necessidade de utilizar informação para a tomada de decisão	○	○	○	○	○
A necessidade de uma produção ambientalmente sustentável (i.e. Utilizar tecnologia de informação de forma a melhorar o desempenho ambiental da produção e da cadeia de valor)	○	○	○	○	○

Outros (por favor especifique)

* 11. Em baixo encontra uma lista de serviços. Por favor indique quão **importante** considera que estes serviços são para a inovação digital do seu negócio? (As seguintes questões avaliarão a sua perceção de disponibilidade destes serviços para si).

	Nenhuma importância	Sem muita importância	Neutro	Importante	Muito importante
Acesso a financiamento (e.g. Acesso a fundos de investimento, planeamento de financiamento)	●	○	○	○	○
Suporte do modelo de negócio (e.g. marketing, distribuição)	●	○	○	○	○
Formação (e.g. cursos, workshops, infraestrutura com oferta tecnológica para fins educacionais)	●	○	○	○	○
Participação em projetos colaborativos de I&D com empresas, universidades e outros	●	○	○	○	○
Suporte tecnológico p/ incorporação de tecnologias no seu negócio	●	○	○	○	○
Participação em projetos piloto ou testes de novos serviços e produtos para o setor agroalimentar	●	○	○	○	○
Incubadoras/Aceleradoras (e.g. Estudo de Mercado, desenvolvimento de empresas)	●	○	○	○	○
Mentoring (entre agricultores ou entre utilizadores finais de agro tecnologia)	●	○	○	○	○
Desenvolvimento de visão e de estratégia (e.g. indicadores de mercado, desenvolvimento de estratégias de inovação)	●	○	○	○	○
Aceitação do utilizador final (e.g. validação com utilizadores finais)	●	○	○	○	○
Construção de comunidade (e.g. apoio à ligação com outros agricultores com desafios semelhantes ou com empresas que oferecem soluções tecnológicas)	●	○	○	○	○

12. Estes serviços estão **disponíveis** para o seu negócio?

	Sim	Não	Parcialmente
Acesso a financiamento (e.g. Acesso a fundos de investimento, planeamento de financiamento)	○	○	○
Suporte do modelo de negócio (e.g. marketing, distribuição)	○	○	○
Formação (e.g. cursos, workshops, infraestrutura com oferta tecnológica para fins educacionais)	○	○	○
Participação em projetos colaborativos de I&D com empresas, universidades e outros	○	○	○
Suporte tecnológico p/ incorporação de tecnologias no seu negócio	○	○	○
Participação em projetos piloto ou testes de novos serviços e produtos para o setor agroalimentar	○	○	○
Incubadoras/Aceleradoras (e.g. Estudo de Mercado, desenvolvimento de empresas)	○	○	○
Mentoring (entre agricultores ou entre utilizadores finais de agro tecnologia)	○	○	○
Desenvolvimento de visão e de estratégia (e.g. indicadores de mercado, desenvolvimento de estratégias de inovação)	○	○	○
Aceitação do utilizador final (e.g. validação com utilizadores finais)	○	○	○
Construção de comunidade (e.g. apoio à ligação com outros agricultores com desafios semelhantes ou com empresas que oferecem soluções tecnológicas)	○	○	○

13. Quanto concorda com as afirmações abaixo?

	Não	Muito Pouco	Concordo	Concordo muito
Uso habitualmente a minha imaginação para criar inovações na minha exploração				
Sinto que faço parte de uma rede que me auxilia no desenvolvimento do meu negócio				
Sou flexível em relação a mudanças				
Utilizo diariamente tecnologia na minha exploração				
Tenho acesso suficiente a financiamento de forma a alavancar a transformação digital e os seus desafios				
Sou um empreendedor				
Experiência e conhecimento técnico são fatores principais para tomar decisões na exploração				
Tiro tempo para refletir em inovação para o meu negócio, especialmente em digitalização				
Participo regularmente em eventos relacionados com o setor agroalimentar				
Experimento novas tecnologias e software para utilização profissional				
Tenho um fornecedor tecnológico externo				
Tenho uma maior responsabilidade do que noventa e nenhuma exploração				
Estou otimista sobre o futuro do meu negócio agrícola				
Tomo decisões sobre a minha exploração baseadas em dados				
Estou totalmente ciente das soluções tecnológicas disponíveis para o meu negócio				

Capacidades digitais

Português

As questões seguintes abordam a sua opinião sobre digitalização e como utiliza a tecnologia.

14. Provavelmente já ouviu bastante sobre digitalização, no entanto a sua visão sobre este tema interessa-nos.
O que significa **digital** para si? (escolha TODAS as opções que se apliquem)

- ☐ Digital refere-se a todas as atividades de inovação tecnológica
- ☐ Digital é sinónimo de tecnologia
- ☐ Digital significa a todas as atividades tecnológicas para o consumidor
- ☐ Digital refere-se a todos os investimentos que estamos a realizar de forma a integrar tecnologia em todas as partes do nosso negócio
- ☐ Outros (por favor especifique)
- ☐ Digital vai além de tecnologia, uma vez que reflete uma mentalidade de constante inovação, tomada de decisão consciente, e integração de tecnologia em todas as fases do negócio
- ☐ Digital refere-se a todas as atividades de dados e analítica
- ☐ Incerto

Visão e futuro

Português

As seguintes questões estão relacionadas com a sua perspetiva de futuro.
Estamos interessados em conhecer o que considera importante; pode responder de forma detalhada ou mais abrangente, de acordo com o que considera relevante.

15. Quais são os seus pontos fortes?

16. O que considera ser o maior desafio para o futuro? (i.e. herdeiros, rentabilidade, equilíbrio pessoal e profissional, Inovação...)

17. Que oportunidades identifica na digitalização?

18. Qual considera ser a maior ameaça para o setor?

19. Qual é a sua ambição para o futuro?

20. O que necessita para realizar essa ambição?

Informação de contacto

Português

Muito obrigado pelo seu tempo e colaboração.
Poderemos contactá-lo no futuro no âmbito deste projeto? Se sim, preencha o formulário abaixo.

21. Informação de contacto

Nome
Empresa
Cidade
País
Email
Telemóvel

22. Tem alguma sugestão, comentário ou dúvida?

23. Gostaríamos de o contactar relativamente a este inquérito

- Sim
- Não, obrigado

Romanian

Introducere

1. Unde vă desfășurați activitatea (localitate, țară)?

2. Domeniul agricol principal (bifați TOATE variantele aplicabile)

- Cultură mare
- Pomicultură
- Creșterea păsărilor
- Stână
- Producția de lapte
- Legumicultură
- Creșterea porcilor
- Agricultură bio
- Creșterea animalelor (respectiv: vaci, oi, capre, vă rugăm să detaliați mai jos)
- Cultivarea rădăcinilor
- Ecosisteme agroforiere, de exemplu sistemul agrosilvopastoril (vă rugăm să detaliați mai jos)
- Altele (vă rugăm precizați)

3. Ce poziție ocupați în agroindustrie?

- Fermier, cu activitate principală
- Fermier, cu activitate secundară
- Proprietar teren, non fermier
- Angajat al unei companii din agricultură
- Altele (vă rugăm precizați)
- Cooperativă agricolă a fermierilor
- Furnizor extern/privat de servicii/produse
- Asociație, organizație sau instituție ale fermierilor

4. Vârstă

5. Din ce cluster regional faceți parte?

6. Care este numele organizației sau Digital Innovation Hub ("DIH") care ți-a furnizat acest sondaj?

Structura fermei

7. Câte persoane lucrează în medie pe an în ferma dumneavoastră? (vă rugăm să includeți muncitorii sezonieri precum și pe cei care primesc beneficii în loc de salarii)

- Mai puțin de 2 persoane
- Între 2 și 10 persoane
- Peste 10 persoane

8. Care este dimensiunea fermei?

- Mai puțin de 5 ha
- Între 5 și 30 ha
- Peste 30 ha
- Mai puțin de 75 capete de animale
- Între 75 și 300 capete de animale
- Peste 300 capete de animale

9. Vă rugăm să vă clasificați ferma în funcție de dimensiuni prin comparație cu alte ferme din regiune

Mică		Medie		Mare

Următoarele întrebări se referă la digitalizarea fermei. Care sunt subiectele dvs. de interes privind digitalizarea? Și la ce servicii de digitalizare aveți acces?

10. În ce măsură sunteți interesat de următoarele subiecte?

	Deloc interesat	Puțin interesat	Puțin interesat	În cea de moderat interesat	Deja implementat
Nevoia de "Monitorizare și trasabilitate" a calității produselor de la furnă la furculiță (capacitate îmbunătățirea siguranței de trasabilitate astfel încât consumatorii să știe de unde vine produsul și cum a fost procesat)	○	○	○	○	○
Nevoia de optimizare a operațiunilor din fermă (de ex. îmbunătățirea rigidelor, a administrării îngrășămintelor și a tratamentelor împotriva bolilor, a recoltării, a managementului și administrării agricolului)	○	○	○	○	○
Nevoia de achiziționare a modului în care se fac afacerile (de ex. felul în care vă vindeți produsele)	○	○	○	○	○
Nevoia de a folosi date informatice pentru a lua decizii mai bune	○	○	○	○	○
Nevoia de a obține producții sustenabile din punctul de vedere al mediului (de ex. utilizarea tehnologiilor informatice și de comunicații pentru a îmbunătăți protecția mediului în cazul producției agricole și pe filiera agroindustrială)	○	○	○	○	○

Altele (vă rugăm precizați)

* 11. Mai jos sunt enumerate o listă de servicii. Vă rugăm să indicați cât de **importante** considerați că sunt aceste servicii pentru dezvoltarea inovării digitale pentru afacerea dumneavoastră? (Următoarea întrebare se referă la felul în care ați percepe aceste servicii dacă le-ați avea la dispoziție ca fermier).

	Fără importanță	Importanță redusă	Importanță medie	Relativ importantă	Foarte importantă
Acces la finanțare (de ex. management financiar modern, familiarizare cu surse de finanțare, planificarea investițiilor)	●	○	○	○	○
Sprijin pentru planificarea afacerii (de ex. marketing, distribuție)	●	○	○	○	○
Calificare și instruire (de ex. cursuri, seminarii, oferă de infrastructură tehnologică în scop educațional	●	○	○	○	○
Participare la proiecte în colaborare cu companii de cercetare-dezvoltare, universități și alte entități	●	○	○	○	○
Suport tehnic pentru integrarea tehnologiilor noi în afacerea dumneavoastră în agricultură	●	○	○	○	○
Participare la proiecte pilot, demonstrații sau teste ale produselor și serviciilor noi pentru sectorul agroalimentar	●	○	○	○	○
Incubator/Accelerator (de ex. evaluarea ideii, dezvoltarea afacerii)	●	○	○	○	○
Mentoring (între fermieri sau între consultanți de utilizatori finali ai soluțiilor agricole)	●	○	○	○	○
Dezvoltarea viziunii și strategiei (de ex. inteligența pieței, dezvoltarea unei strategii de inovare)	●	○	○	○	○
Acceptarea utilizatorului (de ex. cercetarea și analiza datelor vocale ale clienților, validarea conceptelor cu utilizatorii)	●	○	○	○	○
Dezvoltarea comunității (de ex. spații pentru conectarea cu alți fermieri care se confruntă cu probleme similare sau spații pentru cercetarea cu companiile care vă furnizează soluții tehnologice	●	○	○	○	○

12. Aceste servicii sunt **disponibile** pentru afacerea dumneavoastră?

	Da	Nu	Parțial
Acces la finanțare (de ex. management financiar modern, familiarizare cu surse de finanțare, planificarea investițiilor)	○	○	○
Sprijin pentru planificarea afacerii (de ex. marketing, distribuție)	○	○	○
Calificare și instruire (de ex. cursuri, seminarii, oferă de infrastructură tehnologică în scop educațional	○	○	○
Participare la proiecte în colaborare cu companii de cercetare-dezvoltare, universități și alte entități	○	○	○
Suport tehnic pentru integrarea tehnologiilor noi în afacerea dumneavoastră în agricultură	○	○	○
Participare la proiecte pilot, demonstrații sau teste ale produselor și serviciilor noi pentru sectorul agroalimentar	○	○	○
Incubator/Accelerator (de ex. evaluarea ideii, dezvoltarea afacerii)	○	○	○
Mentoring (între fermieri sau între consultanți de utilizatori finali ai soluțiilor agricole)	○	○	○
Dezvoltarea viziunii și strategiei (de ex. inteligența pieței, dezvoltarea unei strategii de inovare)	○	○	○
Acceptarea utilizatorului (de ex. cercetarea și analiza datelor vocale ale clienților, validarea conceptelor cu utilizatorii)	○	○	○
Dezvoltarea comunității (de ex. spații pentru conectarea cu alți fermieri care se confruntă cu probleme similare sau spații pentru cercetarea cu companiile care vă furnizează soluții tehnologice	○	○	○

13. În ce măsură sunteți de acord cu următoarele afirmații?

	Deloc	Foarte puțin	Oarecum	Foarte mult
Încerc deseori lucruri noi în propria mea fermă	○	○	○	○
Simt că fac parte dintr-o rețea care mă sprijină să progresez cu afacerea mea în agricultură	○	○	○	○
Sunt ușor adaptabil la schimbări	○	○	○	○
Folosesc zilnic aplicații informatice în sprijinul afacerii mele	○	○	○	○
Am acces suficient la finanțare pentru a dezvolta procesul transformării digitale a afacerii mele în agricultură	○	○	○	○
Sunt antreprenor	○	○	○	○
Experiența și cunoștințele tehnice sunt principalul motor în luarea deciziilor privind ferma și afacerea	○	○	○	○
Îmi fac timp să reflectez asupra inovațiilor pentru afacere, în special în ce privește tehnologiile digitale	○	○	○	○
Particip deseori la evenimente și activități privind sectorul agroalimentar	○	○	○	○
Încerc deseori tehnologii și programe noi în scop profesional	○	○	○	○
Am un furnizor de tehnologie informațională	○	○	○	○
Am o responsabilitate mai mare, nu doar ferma mea	○	○	○	○
Sunt optimist în ce privește viitorul afacerii mele în agricultură	○	○	○	○
Iau decizii privind ferma și afacerea mea pe baza datelor	○	○	○	○
Cunosc soluțiile tehnologice disponibile pentru ferma și afacerea mea	○	○	○	○

Aptitudini digitale

Română

Următoarele întrebări se referă la părerea dumneavoastră despre digitalizare și cum folosiți tehnologiile digitale.

14. Probabil că ați auzit foarte multe lucruri despre digitalizare și din acest motiv ne interesează viziunea dumneavoastră despre acest subiect. Ce înseamnă **digital** pentru dumneavoastră? (bifați TOATE variantele aplicabile)

- ☐ Termenul „digital" se referă la toate activitățile de inovare tehnologică
- ☐ Termenul „digital" este sinonim cu termenul „tehnologie"
- ☐ Termenul „digital" se referă la toate aplicațiile tehnologice orientate către client
- ☐ Termenul „digital" se referă la toate investițiile pe care le fac pentru a integra tehnologia informatică în toate compartimentele afacerii mele
- ☐ Altele (vă rugăm precizați)
- ☐ Termenul „digital" este mult mai amplu decât termenul „tehnologie" și reflectă un mod de gândire orientat spre inovare continuă, luarea deciziilor în mod transparent și integrarea tehnologiilor informatice în toate etapele afacerii
- ☐ Termenul „digital" se referă la toate datele informatice și la toate activitățile analitice
- ☐ Nu sunt sigur

Viziune și viitor

Română

Următoarele întrebări se referă la viziunea dumneavoastră despre viitor.
Suntem interesați să aflăm ce considerați dumneavoastră ca fiind important; puteți răspunde în rezumat, fie detaliat în funcție de cum considerați necesar.

15. Care vă sunt punctele tari?

16. Care considerați că este cea mai mare provocare a dumneavoastră în viitor? (de ex. succesiunea, profitabilitatea, echilibrul între viața profesională și cea privată, a fi inovativ...)

17. Ce oportunități vedeți în digitalizarea activităților din ferma dumneavoastră?

18. Care considerați că este cea mai mare amenințare la adresa sectorului?

19. Care vă sunt ambițiile pentru viitor?

20. De ce aveți nevoie pentru a vă îndeplini aceste ambiții?

Informații de contact

Vă mulțumim foarte mult pentru timpul și cooperarea dumneavoastră.
Putem să vă contactăm în viitor privind acest proiect? Dacă da, vă rugăm să vă completați datele mai jos.

21. Informații de contact

Nume și prenume

Companie

Localitate

Țară

Adresă e-mail

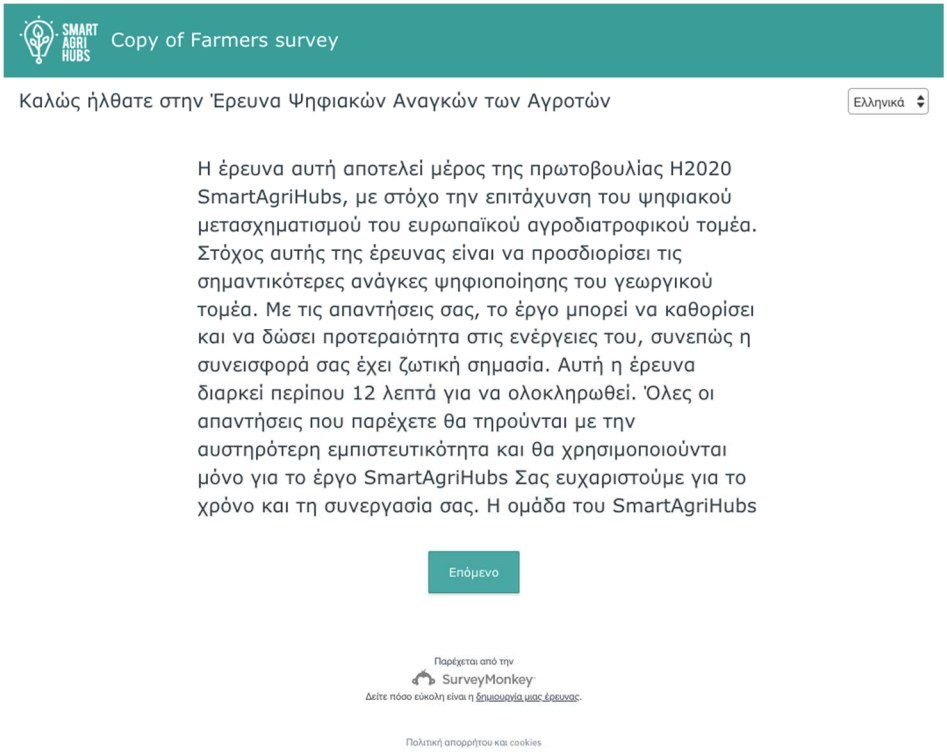
Telefon (inclusiv codul de țară)

22. 25. Aveți alte comentarii, întrebări sau preocupări?

23. Dorim să vă contactăm eventual în legătură cu acest sondaj

- Da
- Nu

Greek


Copy of Farmers survey
Καλώς ήλθατε στην Έρευνα Ψηφιακών Αναγκών των Αγροτών
Ελληνικά
Η έρευνα αυτή αποτελεί μέρος της πρωτοβουλίας H2020 SmartAgriHubs, με στόχο την επιτάχυνση του ψηφιακού μετασχηματισμού του ευρωπαϊκού αγροδιατροφικού τομέα. Στόχος αυτής της έρευνας είναι να προσδιορίσει τις σημαντικότερες ανάγκες ψηφιοποίησης του γεωργικού τομέα. Με τις απαντήσεις σας, το έργο μπορεί να καθορίσει και να δώσει προτεραιότητα στις ενέργειες του, συνεπώς η συνεισφορά σας έχει ζωτική σημασία. Αυτή η έρευνα διαρκεί περίπου 12 λεπτά για να ολοκληρωθεί. Όλες οι απαντήσεις που παρέχετε θα τηρούνται με την αυστηρότερη εμπιστευτικότητα και θα χρησιμοποιούνται μόνο για το έργο SmartAgriHubs Σας ευχαριστούμε για το χρόνο και τη συνεργασία σας. Η ομάδα του SmartAgriHubs
Επόμενο
Παρέχεται από την
SurveyMonkey
Δείτε πόσο εύκολη είναι η δημιουργία μιας έρευνας.
Πολιτική απορρήτου και cookies

Copy of Farmers survey

Εισαγωγή

Ελληνικά

Τα ακόλουθα ερωτήματα σχετίζονται με τη θέση σας στον αγροτικό τομέα

1. Σε ποια τοποθεσία (πόλη, χώρα) δραστηριοποιείστε?

2. Κύριος γεωργικός τομέας (σημειώστε ΟΛΑ όσα ισχύουν) Αγροτική καλλιέργεια

- [ ] Αγροτική καλλιέργεια
- [ ] Φρούτα
- [ ] Πουλερικά
- [ ] Θερμοκήπια
- [ ] Γαλακτοκομικά
- [ ] Λαχανικά
- [ ] Χοιροστάσιο
- [ ] Οργανικά
- [ ] Ζωοτεχνία (παρακαλούμε να μας δώσετε περισσότερες λεπτομέρειες παρακάτω: βοοειδή, πρόβατα, κατσίκια ...)
- [ ] Ελαιόδεντρα
- [ ] Οικοσυστήματα αγροδασοπονίας π.χ. βοσκοτόπι (παρακαλούμε να μας δώσετε περισσότερες λεπτομέρειες παρακάτω
- [ ] Άλλο (διευκρινίστε)

3. Ποιος είναι ο ρόλος σας?

- ○ Αγρότης αποκλειστικά
- ○ Γεωργός με μερική απασχόληση
- ○ Ιδιοκτήτης, όχι αγρότης
- ○ Εργάζομαι σε γεωργική εταιρεία
- ○ Αγρο-συνεταιριστική γεωργική εκμετάλλευση
- ○ Εξωτερικός πάροχος υπηρεσιών / προϊόντων
- ○ Ένωση αγροτών, οργάνωση ή ίδρυμα
- ○ Άλλο (διευκρινίστε)

4. Ηλικία

5. Σε ποια περιφερειακή ομάδα (Regional Cluster) ανήκετε?

6. Ποιο είναι το όνομα του οργανισμού ή του Ψηφιακού Κέντρου Καινοτομίας (DIH) που σας έδωσε αυτή την έρευνα;

Προηγούμενος Επόμενο

Copy of Farmers survey

Δομή αγροκτήματος

Ελληνικά

Τα διαφορετικά είδη εκμεταλλεύσεων έχουν διαφορετικές ανάγκες. Μας είπατε ότι είστε ο ίδιος ένας αγρότης, παρακαλούμε να μας δώσετε μια γενική εικόνα για το αγρόκτημά σας.

7. Πόσοι άνθρωποι εργάζονται στο αγρόκτημα για ολόκληρο το έτος κατά μέσο όρο; (παρακαλώ συμπεριλάβετε τους εποχιακούς εργαζόμενους και εκείνους που δεν κερδίζουν μισθό αλλά παροχές)

- ◯ Λιγότερο από 2 άτομα
- ◯ Μεταξύ 2 και 10 ατόμων
- ◯ Περισσότερα από 10 άτομα

8. Ποιο είναι το μέγεθος του αγροκτήματος?

- ☐ Λιγότερο από 5 εκτάρια
- ☐ Μεταξύ 5 και 30 εκτάρια
- ☐ Περισσότεροι από 30 εκτάρια
- ☐ Λιγότερο από 75 ζώα
- ☐ Μεταξύ 75 και 300 ζώων
- ☐ Περισσότερα από 300 ζώα

9. Ταξινομήστε το μέγεθος της φάρμας σας σε περιφερειακό επίπεδο

Μικρό		Μεσαίο		Μεγάλο
◯	◯	◯	◯	◯

Προηγούμενος | Επόμενο

Οι ακόλουθες ερωτήσεις αφορούν την ψηφιοποίηση της γεωργίας: ποια είναι τα θέματα που σας ενδιαφέρουν σχετικά με την ψηφιοποίηση; Και σε ποιες υπηρεσίες ψηφιοποίησης έχετε πρόσβαση?

10. Σε ποιο βαθμό ενδιαφέρεστε για τα ακόλουθα θέματα?

	δεν ενδιαφέρομαι	ενδιαφέρομαι λίγο	ενδιαφέρομαι έντονα	προσπαθώ να το αντιμετωπίσω	ήδη το αντιμετωπίζω
Η ανάγκη να «παρακολουθούνται και να ιχνηλατούνται» προϊόντα ποιότητας από το αγρόκτημα στο πιρούνι (δηλ. Να βελτιώνονται τα συστήματα ανιχνευσιμότητας έτσι ώστε οι καταναλωτές να γνωρίζουν από πού προέρχεται το προϊόν ή πώς υποβλήθηκε σε επεξεργασία)	○	○	○	○	○
Η ανάγκη βελτιστοποίησης των γεωργικών δραστηριοτήτων (όπως η βελτίωση της άρδευσης, της γονιμοποίησης, της θεραπείας των ασθενειών, της συγκομιδής, της διαχείρισης και της παρακολούθησης του ζωικού κεφαλαίου)	○	○	○	○	○
Η ανάγκη για αλλαγή του τρόπου που πραγματοποιείται τις πωλήσεις σας (π.χ. άλλος τρόπος πώλησης προιόντων)	○	○	○	○	○
Η ανάγκη χρήσης δεδομένων για λήψη καλύτερων αποφάσεων)	○	○	○	○	○
Η ανάγκη για περιβαλλοντικά βιώσιμη παραγωγή (π.χ. αξιοποίηση των ΤΠΕ για τη βελτίωση των περιβαλλοντικών επιδόσεων της παραγωγής τροφίμων και των αλυσίδων αξίας των γεωργικών προϊόντων διατροφής)	○	○	○	○	○

Άλλο (διευκρινίστε)

* 11. Παρακάτω θα βρείτε μια λίστα με υπηρεσίες.. Θα μπορούσατε να υποδείξετε πόση σημασία αποδίδετε στις υπηρεσίες αυτές για την προώθηση της ψηφιακής καινοτομίας για την επιχείρησή σας; (Η παρακάτω ερώτηση θα εξετάσει εάν θεωρείτε ότι οι υπηρεσίες αυτές είναι διαθέσιμες για εσάς ως γεωργός)

	Δεν έχει σημασία	Έχει μικρή σημασια	Ουδέτερος	Μάλλον σημαντικό	Πολύ σημαντικό
Πρόσβαση σε χρηματοδότηση και κεφάλαιο (π.χ. χρηματοοικονομική τεχνική, σύνδεση με πηγές χρηματοδότησης, επενδυτικός προγραμματισμός)	○	○	○	○	○
Υποστήριξη επιχειρηματικού σχεδιασμού (π.χ. εμπορία, διανομή)	○	○	○	○	○
Δεξιότητες και Εκπαίδευση (π.χ. μαθήματα, εργαστήρια, προσφορά τεχνολογικής υποδομής για εκπαιδευτικούς σκοπούς	○	○	○	○	○
Συμμέτοχή σε Συνεργατική Έρευνα & Ανάπτυξη με εταιρίες, πανεπιστήμια και άλλους οργανισμούς	○	○	○	○	○
Τεχνική υποστήριξη για την ενσωμάτωση νέων τεχνολογιών στη γεωργική σας επιχείρηση	○	○	○	○	○
Συμμετοχή σε πιλοτικά έργα, έργα επίδειξης για νέα προϊόντα ή υπηρεσίες	○	○	○	○	○
Εκκολαπτήριο / Επιταχυντής επιχειρήσεων (π.χ. αξιολόγηση αγοράς, ανάπτυξη επιχειρήσεων)	○	○	○	○	○
Mentoring/Συμβουλευτική (μεταξύ αγροτών ή επιχειρήσεων και χρηστών)	○	○	○	○	○
Οραματισμό και Ανάπτυξη Στρατηγικής (π.χ. ανάλυση της αγοράς, ανάπτυξη στρατηγικής καινοτομίας)	○	○	○	○	○
Αποδοχή από τον χρήστη (π.χ. συλλογή και ανάλυση γνώμης δεδομένων πελατών, επικύρωση ιδεών με χρήστες)	○	○	○	○	○
Κτίσιμο Κοινοτήτων (π.χ. συνεργασίες με άλλους αγρότες μα παρόμοιες ανάγκες ή με επιχειρήσεις που σας δίνουν τεχνολογικές λύσεις)	○	○	○	○	○

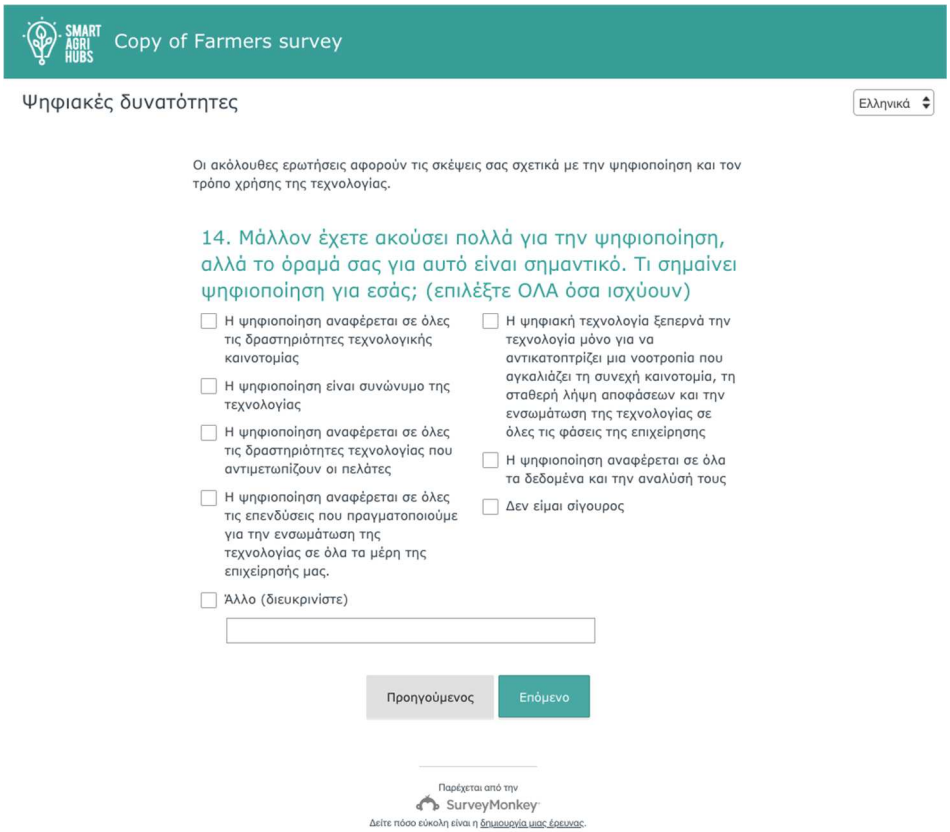
12. Οι υπηρεσίες αυτές είναι διαθέσιμες στην επιχείρησή σας?

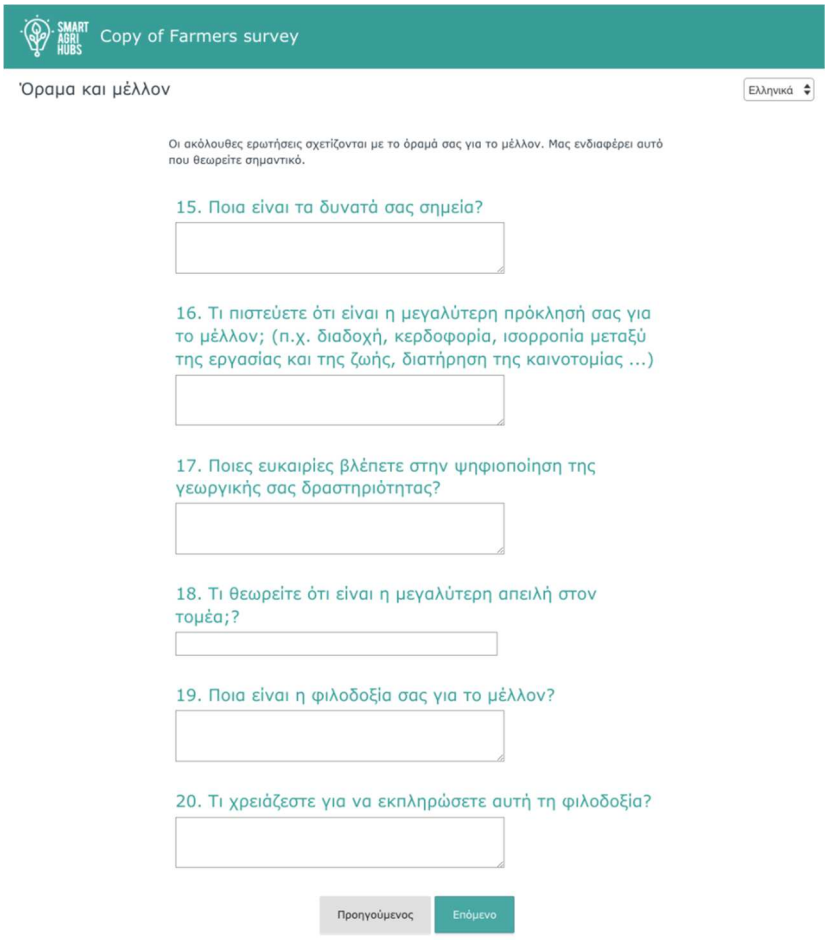
	Ναί	Οχι	Εν μέρει
Πρόσβαση σε χρηματοδότηση και κεφάλαιο (π.χ. χρηματοοικονομική τεχνική, σύνδεση με πηγές χρηματοδότησης, επενδυτικός προγραμματισμός)	○	○	○
Υποστήριξη επιχειρηματικού σχεδιασμού (π.χ. εμπορία, διανομή)	○	○	○
Δεξιότητες και Εκπαίδευση (π.χ. μαθήματα, εργαστήρια, προσφορά τεχνολογικής υποδομής για εκπαιδευτικούς σκοπούς	○	○	○
Συμμέτοχή σε Συνεργατική Έρευνα & Ανάπτυξη με εταιρίες, πανεπιστήμια και άλλους οργανισμούς	○	○	○
Τεχνική υποστήριξη για την ενσωμάτωση νέων τεχνολογιών στη γεωργική σας επιχείρηση	○	○	○
Συμμετοχή σε πιλοτικά έργα, έργα επίδειξης για νέα προϊόντα ή υπηρεσίες	○	○	○
Εκκολαπτήριο / Επιταχυντής επιχειρήσεων (π.χ. αξιολόγηση αγοράς, ανάπτυξη επιχειρήσεων)	○	○	○
Mentoring/Συμβουλευτική (μεταξύ αγροτών ή επιχειρήσεων και χρηστών)	○	○	○
Οραματισμό και Ανάπτυξη Στρατηγικής (π.χ. ανάλυση της αγοράς, ανάπτυξη στρατηγικής καινοτομίας)	○	○	○
Αποδοχή από τον χρήστη (π.χ. συλλογή και ανάλυση γνώμης δεδομένων πελατών, επικύρωση ιδεών με χρήστες)	○	○	○
Κτίσιμο Κοινοτήτων (π.χ. συνεργασίες με άλλους αγρότες μα παρόμοιες ανάγκες ή με επιχειρήσεις που σας δίνουν τεχνολογικές λύσεις)	○	○	○

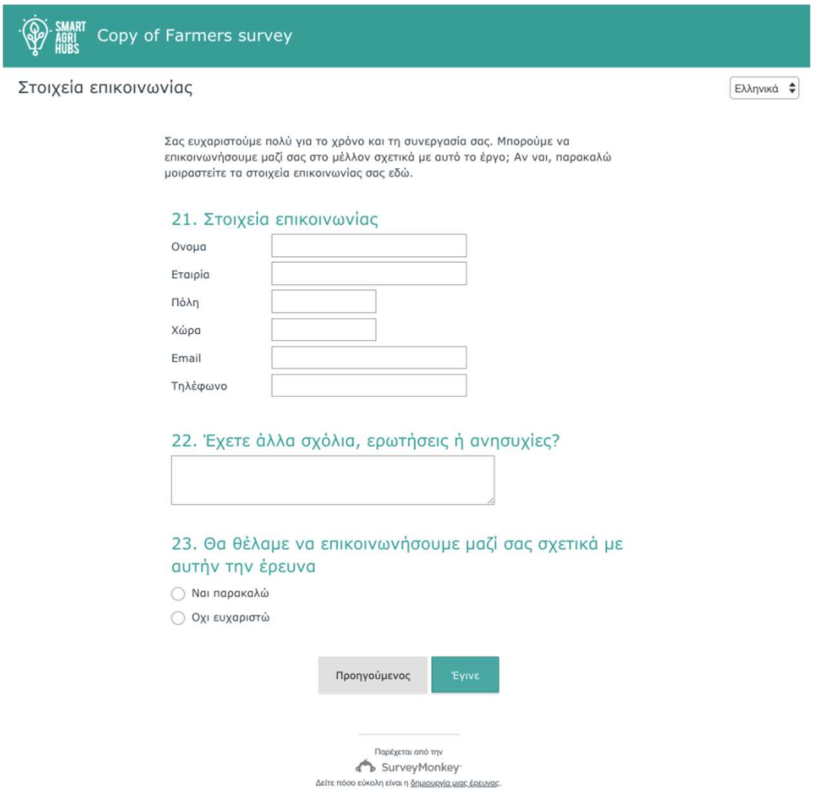
13. Σε ποιο βαθμό συμφωνείτε με τις ακόλουθες δηλώσεις?

	καθόλου	πολύ λίγο	κάπως	πάρα πολύ
Συχνά χρησιμοποιώ τη φαντασία μου για να βλέπω τις καινοτομίες στο αγρόκτημα μου	○	○	○	○
Αισθάνομαι ότι είμαι μέρος ενός δικτύου που με υποστηρίζει να προωθήσω τη γεωργική δραστηριότητα	○	○	○	○
Είμαι ευέλικτος στις αλλαγές	○	○	○	○
Χρησιμοποιώ τις ΤΠΕ σε καθημερινή βάση για να υποστηρίξω την επιχείρησή μου	○	○	○	○
Έχω επαρκή πρόσβαση σε χρηματοδότηση και κεφάλαιο ώστε να αντιμετωπίσω θέματα ψηφιοποίησης	○	○	○	○
Είμαι επιχειρηματίας	○	○	○	○
Η εμπειρία και οι τεχνικές γνώσεις είναι το κύριο κίνητρο για τη λήψη αποφάσεων για την επιχείρηση	○	○	○	○
Παίρνω χρόνο για να αναλογιστώ την καινοτομία για την επιχείρησή μου, ειδικά όσον αφορά τις ψηφιακές τεχνολογίες	○	○	○	○
Παρακολουθώ συχνά εκδηλώσεις και δραστηριότητες που σχετίζονται με τα γεωργικά προϊόντα διατροφής	○	○	○	○
Συχνά δοκιμάζω νέα τεχνολογία και λογισμικό για επαγγελματική χρήση	○	○	○	○
Έχω έναν εξωτερικό πάροχο τεχνολογίας	○	○	○	○
Έχω μεγαλύτερη ευθύνη απ 'ό, τι μόνο η φάρμα μου	○	○	○	○
Είμαι αισιόδοξος για το μέλλον της γεωργικής μου δραστηριότητας	○	○	○	○
Λαμβάνω αποφάσεις σχετικά με το αγρόκτημα με βάση δεδομένα	○	○	○	○
Έχω πλήρη επίγνωση σχετικά με τις τεχνολογίες για το αγρόκτημα και την επιχείρησή μου	○	○	○	○

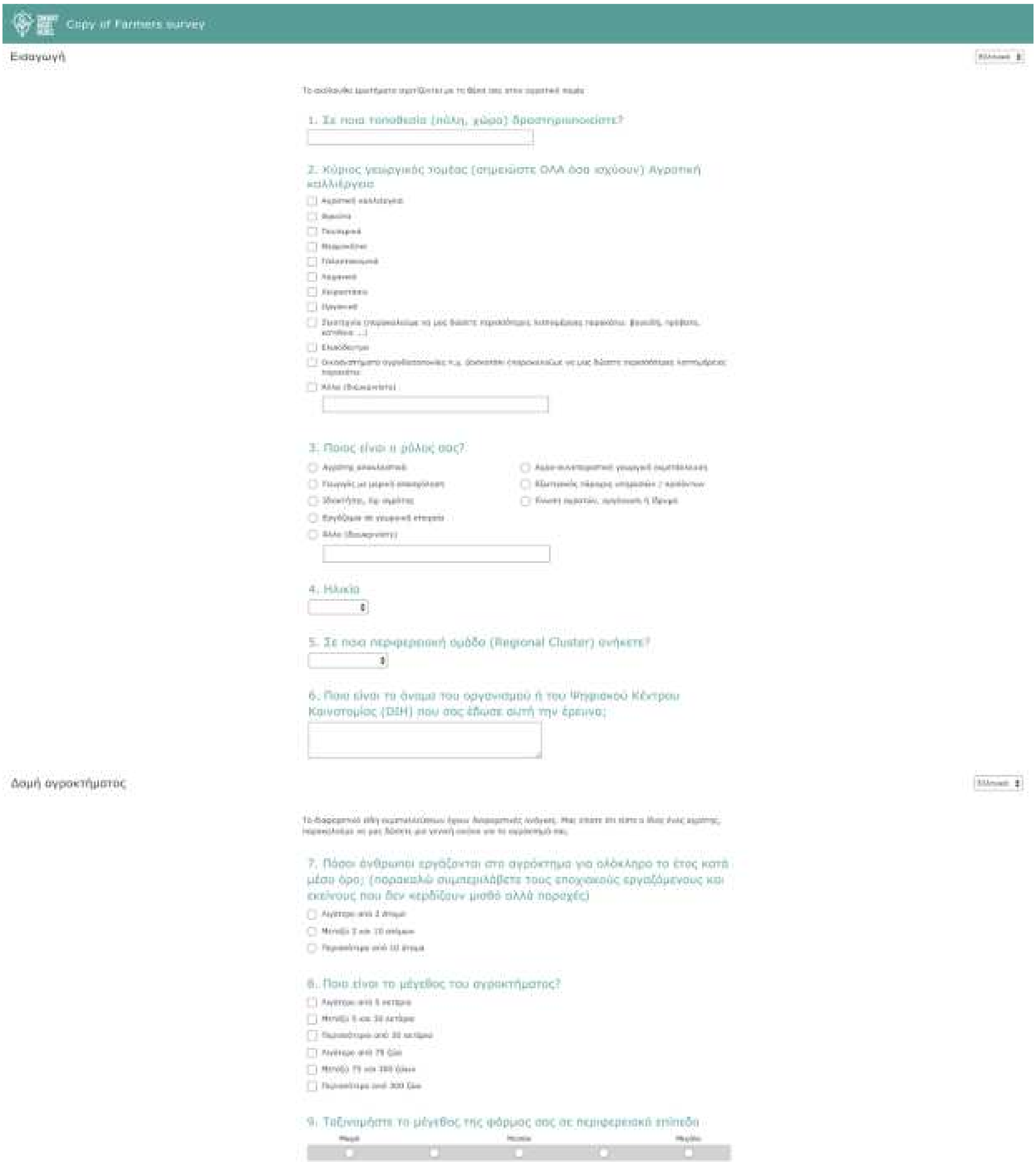
Προηγούμενος Επόμενο


Copy of Farmers survey
Ψηφιακές δυνατότητες
Ελληνικά
Οι ακόλουθες ερωτήσεις αφορούν τις σκέψεις σας σχετικά με την ψηφιοποίηση και τον τρόπο χρήσης της τεχνολογίας.
14. Μάλλον έχετε ακούσει πολλά για την ψηφιοποίηση, αλλά το όραμά σας για αυτό είναι σημαντικό. Τι σημαίνει ψηφιοποίηση για εσάς; (επιλέξτε ΟΛΑ όσα ισχύουν)
Η ψηφιοποίηση αναφέρεται σε όλες τις δραστηριότητες τεχνολογικής καινοτομίας
Η ψηφιοποίηση είναι συνώνυμο της τεχνολογίας
Η ψηφιοποίηση αναφέρεται σε όλες τις δραστηριότητες τεχνολογίας που αντιμετωπίζουν οι πελάτες
Η ψηφιοποίηση αναφέρεται σε όλες τις επενδύσεις που πραγματοποιούμε για την ενσωμάτωση της τεχνολογίας σε όλα τα μέρη της επιχείρησής μας.
Η ψηφιακή τεχνολογία ξεπερνά την τεχνολογία μόνο για να αντικατοπτρίζει μια νοοτροπία που αγκαλιάζει τη συνεχή καινοτομία, τη σταθερή λήψη αποφάσεων και την ενσωμάτωση της τεχνολογίας σε όλες τις φάσεις της επιχείρησης
Η ψηφιοποίηση αναφέρεται σε όλα τα δεδομένα και την αναλύσή τους
Δεν είμαι σίγουρος
Άλλο (διευκρινίστε)
Προηγούμενος
Επόμενο
Παρέχεται από την
SurveyMonkey
Δείτε πόσο εύκολη είναι η δημιουργία μιας έρευνας.


Copy of Farmers survey
Όραμα και μέλλον
Ελληνικά
Οι ακόλουθες ερωτήσεις σχετίζονται με το όραμά σας για το μέλλον. Μας ενδιαφέρει αυτό που θεωρείτε σημαντικό.
15. Ποια είναι τα δυνατά σας σημεία?
16. Τι πιστεύετε ότι είναι η μεγαλύτερη πρόκληση σας για το μέλλον; (π.χ. διαδοχή, κερδοφορία, ισορροπία μεταξύ της εργασίας και της ζωής, διατήρηση της καινοτομίας ...)
17. Ποιες ευκαιρίες βλέπετε στην ψηφιοποίηση της γεωργικής σας δραστηριότητας?
18. Τι θεωρείτε ότι είναι η μεγαλύτερη απειλή στον τομέα;?
19. Ποια είναι η φιλοδοξία σας για το μέλλον?
20. Τι χρειάζεστε για να εκπληρώσετε αυτή τη φιλοδοξία?
Προηγούμενος
Επόμενο


Copy of Farmers survey
Στοιχεία επικοινωνίας
Ελληνικά
Σας ευχαριστούμε πολύ για το χρόνο και τη συνεργασία σας. Μπορούμε να επικοινωνήσουμε μαζί σας στο μέλλον σχετικά με αυτό το έργο; Αν ναι, παρακαλώ μοιραστείτε τα στοιχεία επικοινωνίας σας εδώ.
21. Στοιχεία επικοινωνίας
Ονομα
Εταιρία
Πόλη
Χώρα
Email
Τηλέφωνο
22. Έχετε άλλα σχόλια, ερωτήσεις ή ανησυχίες?
23. Θα θέλαμε να επικοινωνήσουμε μαζί σας σχετικά με αυτήν την έρευνα
Ναι παρακαλώ
Οχι ευχαριστώ
Προηγούμενος
Έγινε
Παρέχεται από την
SurveyMonkey
Δείτε πόσο εύκολη είναι η δημιουργία μιας έρευνας.

Serbian



Copy of Farmers survey

Εισαγωγή

1. Σε ποια τοποθεσία (πόλη, χώρα) δραστηριοποιείστε?

2. Κύριος γεωργικός τομέας (σημειώστε ΟΛΑ όσα ισχύουν) Αγροτική καλλιέργεια

- Αγροτική καλλιέργεια
- Άλλο (διευκρινίστε)

3. Ποιος είναι ο ρόλος σας?

- Αγρότης αποκλειστικά
- Γεωργός με μερική απασχόληση
- Εργαζόμενος σε γεωργική εταιρεία
- Άλλο (διευκρινίστε)
- Εξωτερικός πάροχος υπηρεσιών / προϊόντων
- Ένωση αγροτών, οργάνωση ή ίδρυμα

4. Ηλικία

5. Σε ποια περιφερειακή ομάδα (Regional Cluster) ανήκετε?

6. Ποιο είναι το όνομα του οργανισμού ή του Ψηφιακού Κέντρου Καινοτομίας (DIH) που σας έδωσε αυτή την έρευνα;

Δομή αγροκτήματος

7. Πόσοι άνθρωποι εργάζονται στο αγρόκτημα για ολόκληρο το έτος κατά μέσο όρο; (παρακαλώ συμπεριλάβετε τους εποχιακούς εργαζόμενους και εκείνους που δεν κερδίζουν μισθό αλλά παροχές)

- Λιγότερο από 2 άτομα
- Μεταξύ 2 και 10 ατόμων
- Περισσότερο από 10 άτομα

8. Ποιο είναι το μέγεθος του αγροκτήματος?

- Λιγότερο από 5 εκτάρια
- Μεταξύ 5 και 30 εκτάρια
- Περισσότερο από 30 εκτάρια
- Λιγότερο από 75 ζώα
- Μεταξύ 75 και 300 ζώων
- Περισσότερο από 300 ζώα

9. Ταξινομήστε το μέγεθος της φάρμας σας σε περιφερειακό επίπεδο

Μικρό — Μεσαίο — Μεγάλο

[illegible]

10. Σε ποιο βαθμό ενδιαφέρεστε για τα ακόλουθα θέματα?

	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]					
[illegible]					
[illegible]					
[illegible]					
[illegible]					

Άλλο (Διευκρινίστε)

* 11. Παρακάτω θα βρείτε μια λίστα με υπηρεσίες.. Θα μπορούσατε να υποδείξετε πόση σημασία αποδίδετε στις υπηρεσίες αυτές για την προώθηση της ψηφιακής καινοτομίας για την επιχείρησή σας; (Η παρακάτω ερώτηση θα εξετάσει εάν θεωρείτε ότι οι υπηρεσίες αυτές είναι διαθέσιμες για εσάς ως γεωργός)

	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]					
[illegible]					
[illegible]					
[illegible]					
[illegible]					
[illegible]					
[illegible]					
[illegible]					
[illegible]					
[illegible]					
[illegible]					

12. Οι υπηρεσίες αυτές είναι διαθέσιμες στην επιχείρησή σας?

	[illegible]	[illegible]	[illegible]
[illegible]			
[illegible]			
[illegible]			
[illegible]			
[illegible]			
[illegible]			
[illegible]			
[illegible]			
[illegible]			
[illegible]			
[illegible]			

13. Σε ποιο βαθμό συμφωνείτε με τις ακόλουθες δηλώσεις?

	καθόλου	[illegible]	[illegible]	[illegible]
[illegible]	○	○	○	○
[illegible]	○	○	○	○
[illegible]	○	○	○	○
Χρησιμοποιώ τις ΤΠΕ σε καθημερινή βάση για να υποστηρίξω την επιχείρησή μου	○	○	○	○
[illegible]	○	○	○	○
Είμαι επιχειρηματίας	○	○	○	○
[illegible]	○	○	○	○
[illegible]	○	○	○	○
[illegible]	○	○	○	○
[illegible]	○	○	○	○
[illegible]	○	○	○	○
[illegible]	○	○	○	○
[illegible]	○	○	○	○
[illegible]	○	○	○	○
[illegible]	○	○	○	○

Ψηφιακές δυνατότητες

Ελληνικά

[illegible]

14. Μάλλον έχετε ακούσει πολλά για την ψηφιοποίηση, αλλά το όραμά σας για αυτό είναι σημαντικό. Τι σημαίνει ψηφιοποίηση για εσάς; (επιλέξτε ΟΛΑ όσα ισχύουν)

- ☐ Η ψηφιοποίηση αναφέρεται σε όλες τις δραστηριότητες τεχνολογικής καινοτομίας
- ☐ Η ψηφιοποίηση είναι συνώνυμο της τεχνολογίας
- ☐ [illegible]
- ☐ [illegible]
- ☐ [illegible]
- ☐ [illegible]
- ☐ Δεν είμαι σίγουρος
- ☐ Άλλο (διευκρινίστε)

Όραμα και μέλλον

Ελληνικά

[illegible]

15. Ποια είναι τα δυνατά σας σημεία?

16. Τι πιστεύετε ότι είναι η μεγαλύτερη πρόκλησή σας για το μέλλον; (π.χ. διαδοχή, κερδοφορία, ισορροπία μεταξύ της εργασίας και της ζωής, διατήρηση της καινοτομίας ...)

17. Ποιες ευκαιρίες βλέπετε στην ψηφιοποίηση της γεωργικής σας δραστηριότητας?

18. Τι θεωρείτε ότι είναι η μεγαλύτερη απειλή στον τομέα;?

19. Ποια είναι η φιλοδοξία σας για το μέλλον?

20. Τι χρειάζεστε για να εκπληρώσετε αυτή τη φιλοδοξία?

Στοιχεία επικοινωνίας

Ελληνικά

Σας ευχαριστούμε πολύ για το χρόνο και τη συνεργασία σας. Μπορούμε να επικοινωνήσουμε μαζί σας στο μέλλον σχετικά με αυτό το έργο; Αν ναι, παρακαλώ μοιραστείτε τα στοιχεία επικοινωνίας σας εδώ:

21. Στοιχεία επικοινωνίας

Ονομα

Επωνυμο

Πόλη

Χώρα

Email

Τηλέφωνο

22. Έχετε άλλα σχόλια, ερωτήσεις ή ανησυχίες?

23. Θα θέλαμε να επικοινωνήσουμε μαζί σας σχετικά με αυτήν την έρευνα

- Ναι παρακαλώ
- Όχι ευχαριστώ

7. ANNEX III: DIGITAL INNOVATION HUBS SERVICES SURVEY

You can find the survey here in different languages:

English: https://es.surveymonkey.com/r/smartagrihubs_DIHs

Spanish: https://es.surveymonkey.com/r/smartagrihubs_DIHs?lang=es

Greek: https://es.surveymonkey.com/r/smartagrihubs_DIHs?lang=el

Serbian: https://es.surveymonkey.com/r/smartagrihubs_DIHs?lang=sr

English

Welcome to the Digital Innovation Hubs Survey

This survey is part of the H2020 initiative **SmartAgriHubs**, aiming to accelerate the digital transformation of the European agrifood sector.
The goal of this survey is to identify the most important digitalisation needs of the farming sector, and the role of Digital Innovation Hubs to support innovations for digital transformation of the sector. With your answers, the project can define and prioritise actions, therefore your input is of crucial importance.
This survey takes approximately 12 minutes to complete. All answers you provide will be kept in the strictest confidentiality and will be used only for the SmartAgriHubs project.

Thank you for your time and cooperation,
the SmartAgriHubs team

Introduction

The following questions are related to your DIH

* 1. Which Digital Innovation Hub do you represent?

* 2. What sector do you serve mainly?

- [ ] Arable farming
- [ ] Fruits
- [ ] Poultry
- [ ] Greenhouses
- [ ] Dairy
- [ ] Vegetables
- [ ] Piggery
- [ ] Organic
- [ ] Olive trees
- [ ] Animal husbandry (ie. cattle, sheep, goat, please give us more detail below)
- [ ] Agroforestry ecosystems, like dehesa (please give us more detail below)
- [ ] Other (please specify)

* 3. Which Regional cluster are you related to?

* 4. In which location (city, country) is your DIH based?

* 5. When were you established? (MM-YYYY)

* 6. How would you describe the digital innovation you provide to the sector?

* 7. What is your role in the DIH?

- ◯ Manager
- ◯ Consultant
- ◯ Advisor
- ◯ Accountant
- ◯ Researcher
- ◯ Other (please specify)

Community

* 8. Could you indicate to which other entities your DIH is connected? (check ALL that apply)

- [ ] University/Research Center
- [ ] Competence Center
- [ ] Other DIH
- [ ] Local SME's
- [ ] Local larger businesses
- [ ] Farmer association(s)/communitie(s)
- [ ] Education & training institutes
- [ ] (Local) government
- [ ] Orchestrator
- [ ] Incubator/accelerator/startup programs
- [ ] Other (please specify)

9. Could you tell us what kind of events your DIH has organised in the last 12 months (please state the date, a short description of the topic, and number of attendees)?

Vision

The following questions are related to your vision for the future.
We are interested in what you find important; you can answer either high-level or detailed according to what you feel.

10. What are your strenghts?

11. What do you feel is your biggest challenge for the future?

12. What do you consider your greatest contribution to the sector?

13. What is your ambition for the future?

14. What do you need to fulfill this ambition?

DIH Services

The following questions are about digitalisation of farming: what are your topics of interest regarding digitalisation? And which digitalisation services are you delivering as a DIH?

* 15. Taking into account the farmers needs, please identify in which you are interested in supplying services

	Not interested	A bit interested	Strongly interested	Trying to address it	Already addresing it
The need to "Track and Trace" quality products from farm-to-fork (i.e. improving traceability systems so consumers know where the product comes from or how it was processed)	○	○	○	○	○
The need to optimise farm operations (such as improving irrigation, fertilisation, disease treatment, harvesting, livestock management and administration)	○	○	○	○	○
The need for new business models(with a specific focus on adaptable and flexible digital solutions to address the business needs of farms)	○	○	○	○	○
The need to combine and exchange data to create value (such as developing standards, knowledge and infrastructures for collecting data from the field with sensors, satellite or drone imagery to make better decisions)	○	○	○	○	○
The need for environmentally-sustainable production (e.g. making use of ICT to improve the environmental performance of food production and agrifood value chains)	○	○	○	○	○

* 16. Below you find a list of services that DIHs can deliver. Could you please indicate how much importance you ascribe to this service to operate as a hub?

	Of no importance	Of minor importance	Neutral	Rather important	Very important
Access to finance and funding (e.g. financial engineering, connection to funding sources, investment planning)	○	○	○	○	○
Business planning support (e.g. marketing, distribution)	○	○	○	○	○
Skills and Education (e.g. courses, workshops, offering technological infrastructure for educational purposes	○	○	○	○	○
(Collaborative) R&D (e.g. technology concept development, realising proof of concepts)	○	○	○	○	○
Technical Support (e.g. prototyping, small series production)	○	○	○	○	○
Testing (e.g. certification, product qualification)	○	○	○	○	○
Incubator/Accelerator (e.g. market assessment, business development)	○	○	○	○	○
Mentoring (in the network) (e.g. training of/by other hubs and competences centres)	○	○	○	○	○
Visioning and Strategy Development (e.g. market intelligence, innovation strategy development)	○	○	○	○	○
User acceptance (e.g. collecting and analysing voice of customer data, concept validation with users)	○	○	○	○	○
Community Building (e.g. scouting for partners, marketing communication, ecosystem building)	○	○	○	○	○

* 17. Are these services implemented in your DIH?

	Yes	No	Partially
Access to finance and funding (e.g. financial engineering, connection to funding sources, investment planning)	○	○	○
Business planning support (e.g. marketing, distribution)	○	○	○
Skills and Education (e.g. courses, workshops, offering technological infrastructure for educational purposes	○	○	○
(Collaborative) R&D (e.g. technology concept development, realising proof of concepts)	○	○	○
Technical Support (e.g. prototyping, small series production)	○	○	○
Testing (e.g. certification, product qualification)	○	○	○
Incubator/Accelerator (e.g. market assessment, business development)	○	○	○
Mentoring (in the network) (e.g. training of/by other hubs and competences centres)	○	○	○
Visioning and Strategy Development (e.g. market intelligence, innovation strategy development)	○	○	○
User acceptance (e.g. collecting and analysing voice of customer data, concept validation with users)	○	○	○
Community Building (e.g. scouting for partners, marketing communication, ecosystem building)	○	○	○

Delivering services

The following questions refer to the tools currently used to deliver services and tools needed.

* 18. What tools do you currently **use** to deliver services? (check ALL that apply)

- [ ] Webinars
- [ ] Live events
- [ ] Workshops
- [ ] Canvasses / templates
- [ ] Train the trainer events
- [ ] Connection to other (champion) hubs
- [ ] Portal (to deliver 1 or more of above mentioned services)
- [ ] E-learnings
- [ ] Documentation
- [ ] None of them
- [ ] Other (please specify)

* 19. Do you feel you are currently missing tools to adequately deliver services?

- ◯ Yes
- ◯ No

If yes, which ones?

Digital Capabilities

The following questions are about your thoughts on digitalisation, how farmers use technology and you provide services to them.

* 20. You probably heard a lot about digitalisation, but your own vision about that interests us.

What does **digital** mean to you? (check ALL that apply)

- [ ] Digital refers to all technology innovation-related activities
- [ ] Digital is synonymous with technology
- [ ] Digital refers to all customer-facing technology activities
- [ ] Digital refers to all the investments we are making to integrate technology into all parts of our business
- [ ] Digital goes beyond technology alone to reflect a mindset that embraces constant innovation, flat decision-making, and the integration of technology into all phases of the business
- [ ] Digital refers to all data and analytics activities
- [ ] Unsure.
- [ ] Other (please specify)

* 21. Cloud services are mainly accessed with an internet browser or your smartphone and may be used anywhere.

How important do you consider the following cloud services should be for a farmer's business?

	Not Important At All	Of Little Importance	Of Average Importance	Very important	Absolutely essential
Customer applications: Gmail, Dropbox, WhatsApp, Telegram or similar	○	○	○	○	○
Business productivity: Office365, Google Apps, G-Suite, Skype or similar	○	○	○	○	○
Enterprise applications: Salesforce, SAP web, SAGE web or any other web based ERP/CRM	○	○	○	○	○
Infrastructure/applications: FiWARE, OVH, IBM Bluemix, Amazon AWS, Google Cloud, Heroku or similar	○	○	○	○	○
Farm management applications: any web or mobile app to manage the farm such as a field diary and livestock management	○	○	○	○	○

* 22. To what extent do you see farmers actually making use of these cloud services to support their business?

	Very frequently	Occasionally	Seldom	Rarely	Never
Customer applications: Gmail, Dropbox, WhatsApp, Telegram or similar	○	○	○	○	○
Business productivity: Office365, Google Apps, G-Suite, Skype or similar	○	○	○	○	○
Enterprise applications: Salesforce, SAP web, SAGE web or any other web based ERP/CRM	○	○	○	○	○
Infrastructure/applications: FIWARE, OVH, IBM Bluemix, Amazon AWS, Google Cloud, Heroku or similar	○	○	○	○	○
Farm management applications: any web or mobile app to manage the farm such as a field diary and livestock management	○	○	○	○	○

* 23. How important do you consider the following digital services should be for a farmer's business?

	Not Important At All	Of Little Importance	Of Average Importance	Very important	Absolutely essential
Obtain and analyse aerial images to make better decisions (e.g. obtained with satellites or drones)	○	○	○	○	○
Analyze existing own data from field, livestock, business or customers to make informed decisions (business intelligence)	○	○	○	○	○
Use of programmable robots for farming or agro-industry tasks, autonomous vehicles and any other autonomous collaborative machines	○	○	○	○	○
Monitor farming and agro-industry conditions to make better decisions (e.g. sensoring)	○	○	○	○	○
Access your data, applications, software and any other tools over the internet	○	○	○	○	○
Predict harvest, production, diseases, weather, maintenance on equipment or market conditions	○	○	○	○	○
Use virtual environments for training, education or collaboration using glasses	○	○	○	○	○
Overlay a digital layer to reality or use video inmersive experiences to improve information management in the field or agro-industry using smartphones or glasses	○	○	○	○	○
Using technology to track and monitor product delivery and supply chain	○	○	○	○	○

Other (please specify)

* 24. Are you assessing farmer needs in these application areas?

	Yes	No
Obtain and analyse aerial images to make better decisions (e.g. obtained with satellites or drones)	○	○

How?

	Yes	No
Analyze existing own data from field, livestock, business or customers to make informed decisions (business intelligence)	○	○
How?		
Use of programmable robots for farming or agro-industry tasks, autonomous vehicles and any other autonomous collaborative machines	○	○
How?		
Monitor farming and agro-industry conditions to make better decisions (e.g. sensoring)	○	○
How?		
Access your data, applications, software and any other tools over the internet	○	○
How?		
Predict harvest, production, diseases, weather, maintenance on equipment or market conditions	○	○
How?		
Use virtual environments for training, education or collaboration using glasses	○	○
How?		
Overlay a digital layer to reality or use video inmersive experiences to improve information management in the field or agro-industry using smartphones or glasses	○	○
How?		
Using technology to track and monitor product delivery and supply chain	○	○
How?		

Contact information

Thank you very much for your time and cooperation.
May we contact you in the future regarding this project? If yes, please share your contact information here.

25. Contact information

Name	
Company	
City/Town	
Country	
Email Address	
Phone Number	

26. Do you have any other comments, questions, or concerns?

* 27. We would like to eventually contact you about this survey

- [ ] Yes, please
- [ ] No, thanks

Spanish


Copy of Digital Innovation Hubs services
Bienvenido a la Encuesta sobre Hubs de Innovación Digital (DIHs)
Español
Esta encuesta forma parte de la iniciativa H2020 **SmartAgriHubs** que tiene el objetivo de acelerar la transformación digital del sector agroalimentario europeo. El objetivo de la encuesta es identificar las necesidades de digitalización más importantes para el sector primario. Con tus respuestas, el proyecto puede definir y priorizar actuaciones, así que tus respuestas son relevantes. Esta encuesta no te llevará más de 12 minutos. Todas las respuestas que nos proporciones serán estrictamente confidenciales y serán usadas solo para el proyecto SmartAgriHubs.
Gracias por tu tiempo y tu cooperación, el equipo SmartAgriHubs.
Sig.
Desarrollado por SurveyMonkey
Ve lo fácil que es crear una encuesta.
Política de privacidad y cookies

Introducción

Español

The following questions are related to your DIH

1. ¿A qué Hub de Innovación Digital representas?

2. ¿Con qué sector trabajas principalmente?

- [ ] Tierra de cultivo
- [ ] Frutas
- [ ] Avícola
- [ ] Invernaderos
- [ ] Lácteo
- [ ] Verduras
- [ ] Porcino
- [ ] Orgánica/Ecológica
- [ ] Olivar
- [ ] Otra ganadería (p.ej. vacuno, ovino, caprino, por favor, indícalo más abajo)
- [ ] Dehesa u otros sistemas agroforestales (indícalo abajo)
- [ ] Otro (especifique)

3. ¿A qué Regional Cluster está vinculado?

4. ¿Dónde está el DIH (ciudad, país)?

5. ¿Cuándo se fundó el DIH? (MM-YYY)

6. ¿Cómo describirías la innovación digital que aportas al sector?

7. ¿Cuál es tu papel en el DIH?

- ( ) Gerente
- ( ) Consultor
- ( ) Consejero
- ( ) Administrativo
- ( ) Investigador
- ( ) Otro (especifique)

Ant. Sig.

8. ¿Podrías indicar con qué otras organizaciones está el DIH conectado? (selecciona TODAS las que correspondan)

- [ ] Centro de Investigación/Universidad
- [ ] Centro de Competencias
- [ ] Otros DIH
- [ ] Pymes locales
- [ ] Grandes empresas locales
- [ ] Comunidades/Asociaciones de agricultores
- [ ] Centro de enseñanza profesional
- [ ] Administraciones locales
- [ ] Orchestrator
- [ ] Programas de incubación, aceleración o para startups
- [ ] Otro (especifique)

9. ¿Podrías decirnos qué tipo de eventos ha organizado el DIH en los últimos 12 meses? (por favor, incluye la fecha, una breve descripción del tema y número de asistentes)

Ant. Sig.

Vision

Español

Las siguientes preguntas está relacionadas con tu visión sobre el futuro.
Nos interesa saber qué consideras importante; puedes contestar con el nivel de detalle que te parezca oportuno.

10. ¿Cuáles son tus fortalezas?

11. ¿Cuál crees que es tu mayor reto para el futuro?

12. ¿Cual consideras que ha sido vuestra principal contribución al sector?

13. ¿Cuál es tu aspiración para el futuro?

14. ¿Qué necesitas para llegar a cumplir con esa aspiración?

Ant. Sig.

Las siguientes preguntas tratan sobre digitalización en agroalimentación: ¿Cuáles son los temas de interés en relación a la digitalización? ¿Y que servicios de digitalización estás prestando como DIH?

15. Teniendo en cuenta las necesidades de los agricultores, por favor identifica en cuales tienes interés por prestar servicios.

	No me interesa	Me interesa un poco	Estoy muy interesado	Estoy intentando evaluarlo	Estoy evaluándolo
La necesidad de hacer Seguimiento y Trazabilidad a productos de calidad de la finca a la mesa(p.ej. mejorar los sistemas de trazabilidad de modo que los consumidores sepan de donde proceden los productos o como fueron procesados)	○	○	○	○	○
La necesidad de optimizar las operaciones de la explotación (como mejorar el riego, la fertilización, el tratamiento de plagas, cosecha, gestión de ganado y la administración)	○	○	○	○	○
La necesidad de nuevos modelos de negocio (con un enfoque específico en soluciones adaptables y flexibles para evaluar las necesidades de negocio de los agricultores)	○	○	○	○	○
La necesidad de combinar e intercambiar datos para crear valor añadido (como el desarrollo de estándares, conocimiento e infraestructura para recoger datos del campo con sensores, satélites o drones para una mejor toma de decisiones)	○	○	○	○	○
La necesidad de una producción ambientalmente sostenible (p.ej. haciendo uso de la tecnología para mejora el rendimiento ambiental de la cadena de valor agroalimentaria y de producción de alimentos)	○	○	○	○	○

16. Aquí tienes una lista de servicios que los DIH pueden prestar. ¿Podrías indicarnos cuanta importancia le das a cada servicio para operar como hub?

	Sin importancia	Poco importante	Neutral	Bastante importante	Muy importante
Acceso a financiación e inversión (p.ej. financiación de ingeniería, conexión a fuentes de inversión, planificación financiera)	○	○	○	○	○
Ayuda para el desarrollo del plan de negocios (p.ej. marketing, distribución…)	○	○	○	○	○
Habilidades y educación (p.ej. cursos, talleres, infraestructura tecnológica para aprender)	○	○	○	○	○
I+D colaborativa (p.ej desarrollo de tecnología, desarrollo de pruebas de concepto)	○	○	○	○	○
Soporte técnico (p.ej. prototipado, producción en series pequeñas)	○	○	○	○	○
Pruebas y tests (p.ej. certificación, calidad de producto)	○	○	○	○	○
Incubación/aceleración (p.ej. asesoramiento de mercado, desarrollo de negocio)	○	○	○	○	○
Mentorización (en la red) (p.ej. capacitación de/por otros hubs o centros de competencia)	○	○	○	○	○
Visión y desarrollo estratégico (p.ej. estudios de mercado, desarrollo de estrategia de innovación)	○	○	○	○	○
Pruebas de mercado (p.ej. recoger y analizar opiniones de usuarios, validación de conceptos con usuarios)	○	○	○	○	○
Desarrollo de comunidad (p.ej. búsqueda de socios, comunicación y marketing de la comunidad, construcción de ecosistema)	○	○	○	○	○

17. ¿Están estos servicios implementados en tu DIH?

	Sí	No	En parte
Acceso a financiación e inversión (p.ej. financiación de ingeniería, conexión a fuentes de inversión, planificación financiera)	○	○	○
Ayuda para el desarrollo del plan de negocios (p.ej. marketing, distribución…)	○	○	○
Habilidades y educación (p.ej. cursos, talleres, infraestructura tecnológica para aprender)	○	○	○
I+D colaborativa (p.ej desarrollo de tecnología, desarrollo de pruebas de concepto)	○	○	○
Soporte técnico (p.ej. prototipado, producción en series pequeñas)	○	○	○
Pruebas y tests (p.ej. certificación, calidad de producto)	○	○	○
Incubación/aceleración (p.ej. asesoramiento de mercado, desarrollo de negocio)	○	○	○
Mentorización (en la red) (p.ej. capacitación de/por otros hubs o centros de competencia)	○	○	○
Visión y desarrollo estratégico (p.ej. estudios de mercado, desarrollo de estrategia de innovación)	○	○	○
Pruebas de mercado (p.ej. recoger y analizar opiniones de usuarios, validación de conceptos con usuarios)	○	○	○
Desarrollo de comunidad (p.ej. búsqueda de socios, comunicación y marketing de la comunidad, construcción de ecosistema)	○	○	○

Ant. Sig.

Prestando servicios

Español

Las siguientes preguntas hacen referencia a las herramientas que actualmente se utilizan para prestar servicios y las que se necesitan.

18. ¿Qué herramientas **usas** actualmente para prestar servicios? (selecciona TODAS las que correspondan)

- [ ] Webinars
- [ ] Eventos
- [ ] Talleres
- [ ] Guías y modelos
- [ ] Formación de formadores
- [ ] Conexión a otros hubs (líderes)
- [ ] Portal (para dar 1 o más de los servicios anteriores)
- [ ] Formación online
- [ ] Documentación
- [ ] Ninguna de ellas
- [ ] Otro (especifique)

* 19. ¿Crees que te falta alguna herramienta para prestar adecuadamente los servicios?

- ◯ Sí
- ◯ No

Si has marcado sí, ¿cuáles?

Ant. Sig.

Capacidades Digitales

Español

Las siguientes preguntas tratan sobre lo que piensas de la digitalización, cómo los agricultores utilizan la tecnología y cómo se les prestan servicios.

20. Probablemente has escuchado hablar de digitalización, pero es tu visión la que nos interesa. ¿Qué significa **digital** para tí? (elige TODAS las respuestas que correspondan)

- [ ] Digital se refiere a cualquier actividad relacionada con la innovación tecnológica
- [ ] Digital es sinónimo de tecnología
- [ ] Digital se refiere a actuaciones tecnológicas para conectar con clientes
- [ ] Digital se referencia a las inversiones que estamos haciendo para incorporar tecnología a todas las partes de nuestro negocio
- [ ] Digital va más allá de solamente tecnología, sino que refleja una mentalidad para la innovación constante, toma de decisiones horizontales y la integración de tecnología en cualquier fase del negocio
- [ ] Digital se refiere a todos las actividades de datos y analítica
- [ ] No estoy seguro.
- [ ] Otro (especifique)

21. Se accede a servicios en la nube mediante un navegador web o un teléfono móvil, y se pueden utilizar en cualquier parte. ¿Cuanta importancia le das a los siguientes servicios en la nube para un negocio agroalimentario?

	No es importante	Es poco importante	De importancia media	Muy importante	Absolutamente esencial
Aplicaciones de usuario: Gmail, Dropbox, WhatsApp, Telegram or similar	○	○	○	○	○
Aplicaciones de oficina: Office365, Google Apps, G-Suite, Skype or similar	○	○	○	○	○
Aplicaciones empresariales: Salesforce, SAP web, SAGE web o cualquier otro ERP/CRM basado en web	○	○	○	○	○
Aplicaciones/infraestructura: FiWARE, OVH, IBM Bluemix, Amazon AWS, Google Cloud, Heroku o similar	○	○	○	○	○
Aplicaciones para la gestión agroganadera: cualquier aplicación web o móvil para el manejo de la explotación, como cuadernos de campo o gestión de registro ganadero	○	○	○	○	○

22. ¿En qué medida están los agricultores usando estos servicios en la nube en su negocio?

	Muy a menudo	Ocasionalmente	Pocas veces	Raramente	Nunca
Aplicaciones de usuario: Gmail, Dropbox, WhatsApp, Telegram or similar	○	○	○	○	○
Aplicaciones de oficina: Office365, Google Apps, G-Suite, Skype or similar	○	○	○	○	○
Aplicaciones empresariales: Salesforce, SAP web, SAGE web o cualquier otro ERP/CRM basado en web	○	○	○	○	○
Aplicaciones/infraestructura: FiWARE, OVH, IBM Bluemix, Amazon AWS, Google Cloud, Heroku o similar	○	○	○	○	○
Aplicaciones para la gestión agroganadera: cualquier aplicación web o móvil para el manejo de la explotación, como cuadernos de campo o gestión de registro ganadero	○	○	○	○	○

23. ¿Cuanta importancia consideras que deberían tener los siguientes servicios digitales para los negocios agroalimentarios?

	No es importante	Es poco importante	De importancia media	Muy importante	Absolutamente esencial
Obtener y analizar imágenes aéreas para tomar mejores decisiones (p.ej. obtenidas mediante satélites o drones)	○	○	○	○	○
Analizar datos recogidos del campo, ganado, negocio o clientes para tomar decisiones informadas (inteligencia de negocio)	○	○	○	○	○
Usar robots programables para tareas agroganaderas o agroindustriales, vehículos autónomos y cualquier otra máquina colaborativa autónoma	○	○	○	○	○
Monitorizar las condiciones de la explotación y la agroindustria para tomar mejores decisiones (p.ej. sensorización)	○	○	○	○	○
Acceder a tus datos, aplicaciones, software o cualquier otra herramienta por internet	○	○	○	○	○
Predecir cosecha, producción, enfermedades, clima, mantenimiento de equipos o condiciones del mercado	○	○	○	○	○
Usar entornos virtuales para capacitación, educación o colaboración utilizando gafas	○	○	○	○	○
Superponer una capa digital o usar experiencias de video inmersivas para mejorar la gestión de la información en el campo o la agroindustria usando teléfonos móviles o gafas	○	○	○	○	○
Usar tecnología para hacer seguimiento y monitorización productos y cadena de suministros	○	○	○	○	○

Otro (especifique)

24. ¿Está evaluando las necesidades de los agricultores en estas áreas de aplicación?

	Sí	No
Obtener y analizar imágenes aéreas para tomar mejores decisiones (p.ej. obtenidas mediante satélites o drones)	○	○
¿Cómo?		
Analizar datos recogidos del campo, ganado, negocio o clientes para tomar decisiones informadas (inteligencia de negocio)	○	○
¿Cómo?		
Usar robots programables para tareas agroganaderas o agroindustriales, vehículos autónomos y cualquier otra máquina colaborativa autónoma	○	○
¿Cómo?		
Monitorizar las condiciones de la explotación y la agroindustria para tomar mejores decisiones (p.ej. sensorización)	○	○
¿Cómo?		
Acceder a tus datos, aplicaciones, software o cualquier otra herramienta por internet	○	○
¿Cómo?		
Predecir cosecha, producción, enfermedades, clima, mantenimiento de equipos o condiciones del mercado	○	○
¿Cómo?		
Usar entornos virtuales para capacitación, educación o colaboración utilizando gafas	○	○
¿Cómo?		
Superponer una capa digital o usar experiencias de video inmersivas para mejorar la gestión de la información en el campo o la agroindustria usando teléfonos móviles o gafas	○	○
¿Cómo?		
Usar tecnología para hacer seguimiento y monitorización productos y cadena de suministros	○	○
¿Cómo?		

Ant. Sig.

Información de contacto

Español

Gracias por tu tiempo y cooperación.
¿Te importa que contactemos contigo en el futuro? Si la respuesta es sí, déjanos tus datos de contacto.

25. Información de contacto

Nombre	
Compañía	
Ciudad/Pueblo	
País	
Dirección de correo electrónico	
N.º de teléfono	

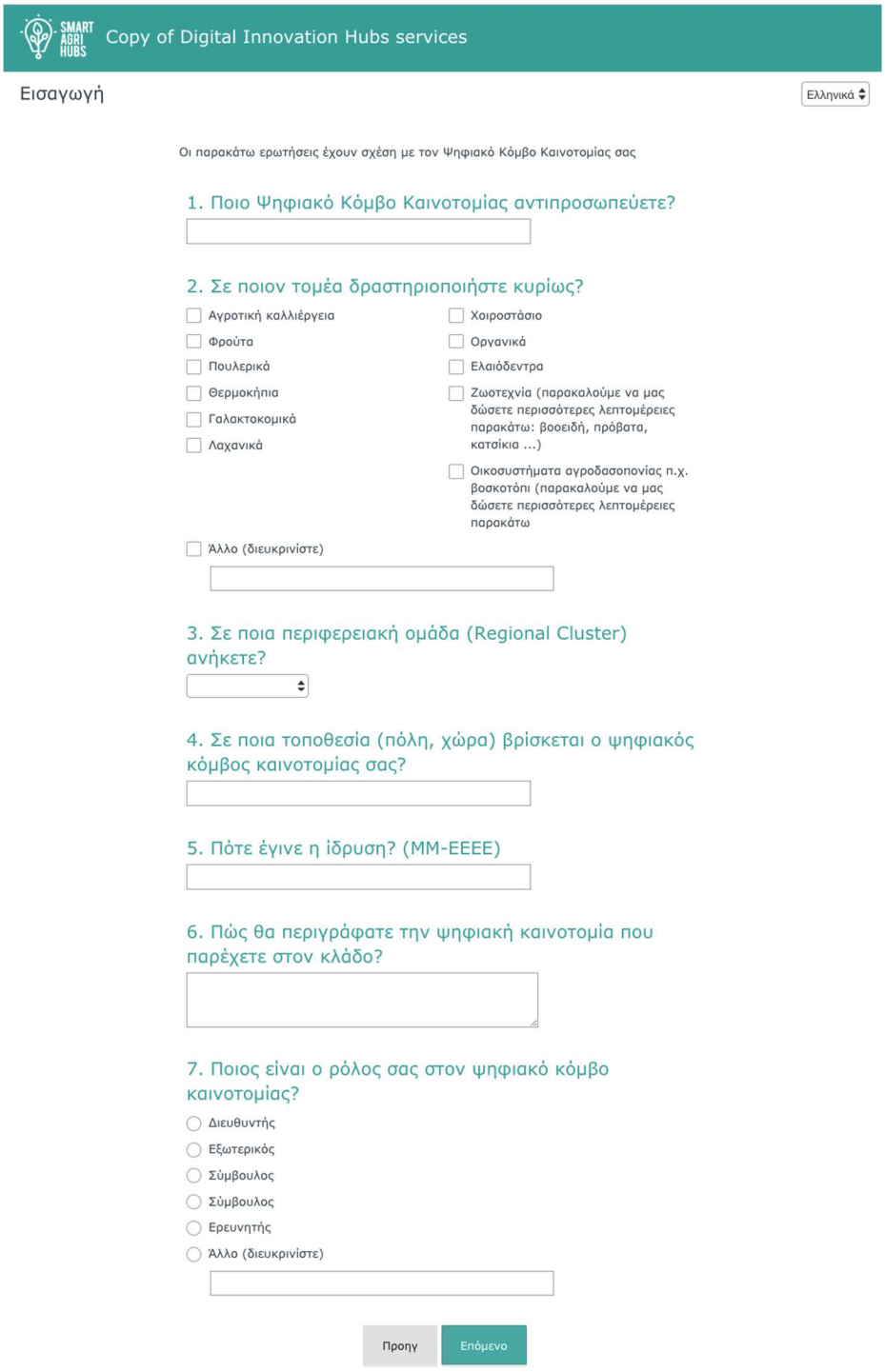
26. ¿Tienes algún comentario, pregunta o sugerencia?

27. Nos gustaría poder contactar contigo en relación con esta encuesta

- [ ] Sí, sin problema
- [ ] No, gracias

Ant. Listo

Greek


Copy of Digital Innovation Hubs services
Εισαγωγή
Ελληνικά
Οι παρακάτω ερωτήσεις έχουν σχέση με τον Ψηφιακό Κόμβο Καινοτομίας σας
1. Ποιο Ψηφιακό Κόμβο Καινοτομίας αντιπροσωπεύετε?
2. Σε ποιον τομέα δραστηριοποιήστε κυρίως?
Αγροτική καλλιέργεια
Φρούτα
Πουλερικά
Θερμοκήπια
Γαλακτοκομικά
Λαχανικά
Χοιροστάσιο
Οργανικά
Ελαιόδεντρα
Ζωοτεχνία (παρακαλούμε να μας δώσετε περισσότερες λεπτομέρειες παρακάτω: βοοειδή, πρόβατα, κατσίκια ...)
Οικοσυστήματα αγροδασοπονίας π.χ. βοσκοτόπι (παρακαλούμε να μας δώσετε περισσότερες λεπτομέρειες παρακάτω
Άλλο (διευκρινίστε)
3. Σε ποια περιφερειακή ομάδα (Regional Cluster) ανήκετε?
4. Σε ποια τοποθεσία (πόλη, χώρα) βρίσκεται ο ψηφιακός κόμβος καινοτομίας σας?
5. Πότε έγινε η ίδρυση? (MM-EEEE)
6. Πώς θα περιγράφατε την ψηφιακή καινοτομία που παρέχετε στον κλάδο?
7. Ποιος είναι ο ρόλος σας στον ψηφιακό κόμβο καινοτομίας?
Διευθυντής
Εξωτερικός
Σύμβουλος
Σύμβουλος
Ερευνητής
Άλλο (διευκρινίστε)
Προηγ
Επόμενο

8. Θα μπορούσατε να αναφέρετε με ποιους άλλους οργανισμούς συνδέεται ο ψηφιακός κόμβος καινοτομίας σας?

- [ ] Πανεπιστήμιο/Ερευνητικό Κέντρο
- [ ] Κέντρο ικανοτήτων
- [ ] Άλλος ψηφιακός κόμβος καινοτομίας
- [ ] Τοπικές ΜΜΕ
- [ ] Τοπικές μεγάλες επιχειρήσεις
- [ ] Αγροτική ένωση
- [ ] Οργανισμοί εκπαίδευσης
- [ ] Κυβερνητικός Οργανισμός
- [ ] Ενορχηστρωτής
- [ ] Θερμοκοιτίδα/επιταχυντής/πρόγραμμα για νεοφυείς επιχειρήσεις
- [ ] Άλλο (διευκρινίστε)

9. Μπορείτε να μας πείτε τι είδους εκδηλώσεις έχει διοργανώσει ο Κόμβος Καινοτομίας σας τον τελευταίο δωδεκάμηνο (παρακαλείστε να αναφέρετε την ημερομηνία, μια σύντομη περιγραφή του θέματος και τον αριθμό των συμμετεχόντων))?

Προηγ Επόμενο

Οι ακόλουθες ερωτήσεις σχετίζονται με το όραμά σας για το μέλλον. Μας ενδιαφέρει αυτό που θεωρείτε σημαντικό.

10. Ποια είναι τα δυνατά σας σημεία?

11. Ποια πιστεύετε ότι είναι η μεγαλύτερη πρόκλησή σας για το μέλλον?

12. Ποιο θεωρείτε το μεγαλύτερο επίτευγμα σας μέχρι τώρα?

13. Ποια είναι η φιλοδοξία σας για το μέλλον?

14. Τι χρειάζεστε για να εκπληρώσετε αυτή τη φιλοδοξία?

Προηγ Επόμενο

15. Με βάση τις ανάγκες των αγροτών, παρακαλώ δηλώστε για ποιες από τις παρακάτω ανάγκες ενδιαφέρεστε να παρέχετε υπηρεσίες?

	δεν ενδιαφέρομαι	ενδιαφέρομαι λίγο	ενδιαφέρομαι έντονα	προσπαθώ να το αντιμετωπίσω	ήδη το αντιμετωπίζω
Η ανάγκη να «παρακολουθούνται και να ιχνηλατούνται» προϊόντα ποιότητας από το αγρόκτημα στο πιρούνι (δηλ. Να βελτιώνονται τα συστήματα ανιχνευσιμότητας έτσι ώστε οι καταναλωτές να γνωρίζουν από πού προέρχεται το προϊόν ή πώς υποβλήθηκε σε επεξεργασία)	○	○	○	○	○
Η ανάγκη βελτιστοποίησης των γεωργικών δραστηριοτήτων (όπως η βελτίωση της άρδευσης, της γονιμοποίησης, της θεραπείας των ασθενειών, της συγκομιδής, της διαχείρισης και της διαχείρισης του ζωικού κεφαλαίου)	○	○	○	○	○
Η ανάγκη για νέα επιχειρηματικά μοντέλα (με ιδιαίτερη έμφαση σε προσαρμόσιμες και ευέλικτες ψηφιακές λύσεις για την αντιμετώπιση των επιχειρηματικών αναγκών των εκμεταλλεύσεων)	○	○	○	○	○
Η ανάγκη συνδυασμού και ανταλλαγής δεδομένων για τη δημιουργία αξιών ((όπως η ανάπτυξη προτύπων, γνώσεων και υποδομών για τη συλλογή δεδομένων από τον τομέα με αισθητήρες, δορυφορικές εικόνες ή απεικόνιση με χρήση drone για την λήψη καλύτερων αποφάσεων)	○	○	○	○	○
Η ανάγκη για περιβαλλοντικά βιώσιμη παραγωγή (π.χ. αξιοποίηση των ΤΠΕ για τη βελτίωση των περιβαλλοντικών επιδόσεων της παραγωγής τροφίμων και των αλυσίδων αξίας των γεωργικών προϊόντων διατροφής)	○	○	○	○	○

16. Παρακάτω θα βρείτε μια λίστα με τις υπηρεσίες που μπορούν να προσφέρουν οι ψηφιακοί κόμβοι καινοτομίας. Θα μπορούσατε να υποδείξετε πόσο σημαντικές είναι οι υπηρεσίες αυτές για εσάς?

	Δεν έχει σημασία	Έχει μικρή σημασια	Ουδέτερος	Μάλλον σημαντικό	Πολύ σημαντικό
Πρόσβαση σε χρηματοδότηση και κεφάλαιο (π.χ. χρηματοοικονομική τεχνική, σύνδεση με πηγές χρηματοδότησης, επενδυτικός προγραμματισμός)	○	○	○	○	○
Υποστήριξη επιχειρηματικού σχεδιασμού (π.χ. εμπορία, διανομή)	○	○	○	○	○
Δεξιότητες και Εκπαίδευση (π.χ. μαθήματα, εργαστήρια, προσφορά τεχνολογικής υποδομής για εκπαιδευτικούς σκοπούς	○	○	○	○	○
(Συνεργατική) Έρευνα & Ανάπτυξη (π.χ. ανάπτυξη τεχνολογικής αντίληψης)	○	○	○	○	○
Τεχνική υποστήριξη (π.χ. ανάπτυξη πρωτοτύπων)	○	○	○	○	○
Δοκιμές (π.χ. πιστοποίηση, κατάταξη προϊόντος)	○	○	○	○	○
Εκκολαπτήριο / Επιταχυντής επιχειρήσεων (π.χ. αξιολόγηση αγοράς, ανάπτυξη επιχειρήσεων)	○	○	○	○	○
Mentoring (στο δίκτυο) (π.χ. εκπαίδευση / από άλλους κόμβους και κέντρα δεξιοτήτων)	○	○	○	○	○
Οραματισμό και Ανάπτυξη Στρατηγικής (π.χ. ανάλυση της αγοράς, ανάπτυξη στρατηγικής καινοτομίας)	○	○	○	○	○
Αποδοχή από τον χρήστη (π.χ. συλλογή και ανάλυση γνώμης δεδομένων πελατών, επικύρωση ιδεών με χρήστες)	○	○	○	○	○
Κτίσιμο Κοινότητας (π.χ. αναζήτηση για συνεργάτες, επικοινωνία μάρκετινγκ, οικοδόμηση οικοσυστήματος)	○	○	○	○	○

17. Σε ποιο βαθμό υλοποιούνται αυτές οι υπηρεσίες στο ψηφιακό κόμβο καινοτομίας σας?

	Ναί	Οχι	Εν μέρει
Πρόσβαση σε χρηματοδότηση και κεφάλαιο (π.χ. χρηματοοικονομική τεχνική, σύνδεση με πηγές χρηματοδότησης, επενδυτικός προγραμματισμός)	○	○	○
Υποστήριξη επιχειρηματικού σχεδιασμού (π.χ. εμπορία, διανομή)	○	○	○
Δεξιότητες και Εκπαίδευση (π.χ. μαθήματα, εργαστήρια, προσφορά τεχνολογικής υποδομής για εκπαιδευτικούς σκοπούς	○	○	○
(Συνεργατική) Έρευνα & Ανάπτυξη (π.χ. ανάπτυξη τεχνολογικής αντίληψης)	○	○	○
Τεχνική υποστήριξη (π.χ. ανάπτυξη πρωτοτύπων)	○	○	○
Δοκιμές (π.χ. πιστοποίηση, κατάταξη προϊόντος)	○	○	○
Εκκολαπτήριο / Επιταχυντής επιχειρήσεων (π.χ. αξιολόγηση αγοράς, ανάπτυξη επιχειρήσεων)	○	○	○
Mentoring (στο δίκτυο) (π.χ. εκπαίδευση / από άλλους κόμβους και κέντρα δεξιοτήτων)	○	○	○
Οραματισμό και Ανάπτυξη Στρατηγικής (π.χ. ανάλυση της αγοράς, ανάπτυξη στρατηγικής καινοτομίας)	○	○	○
Αποδοχή από τον χρήστη (π.χ. συλλογή και ανάλυση γνώμης δεδομένων πελατών, επικύρωση ιδεών με χρήστες)	○	○	○
Κτίσιμο Κοινότητας (π.χ. αναζήτηση για συνεργάτες, επικοινωνία μάρκετινγκ, οικοδόμηση οικοσυστήματος)	○	○	○

Προηγ Επόμενο

Παροχή υπηρεσιών

Ελληνικά

Οι παρακάτω ερωτήσεις αφορούν τα εργαλεία τα οποία χρησιμοποιείτε για τη παροχή των υπηρεσιών σας

18. Ποια εργαλεία χρησιμοποιείτε επί του παρόντος για την παροχή υπηρεσιών (επιλέξτε ΟΛΑ όσα ισχύουν)

- [ ] Webinars
- [ ] Ζωντανές εκδηλώσεις
- [ ] Εργαστήρια
- [ ] Πρότυπα
- [ ] Εκπαίδευση εκπαιδευτών
- [ ] Άλλοι (πρότυποι) κόμβοι
- [ ] Μέσω ενός portal (για να παρέχετε μία από τις παραπάνω υπηρεσίες)
- [ ] E-learning
- [ ] Καταγραφή
- [ ] Κανένας από αυτούς
- [ ] Άλλο (διευκρινίστε)

19. Πιστεύετε ότι λείπουν εργαλεία για την επαρκή παροχή υπηρεσιών?

- ( ) Ναί
- ( ) Οχι

Εάν ναι, ποια;

Προηγ Επόμενο

Οι παρακάτω ερωτήσεις αφορούν τις σκέψεις σας σχετικά με τη ψηφιοποίηση, πως οι αγρότες χρησιμοποιούν τη τεχνολογία και πως εσείς τους παρέχετε υπηρεσίες.

20. Μάλλον έχετε ακούσει πολλά για την ψηφιοποίηση, αλλά το δικό σας όραμα για αυτό μας ενδιαφέρει Τι σημαίνει ψηφιακό για εσάς? Επιλέξτε όλα όσα ισχύουν.

- ☐ Η ψηφιοποίηση αναφέρεται σε όλες τις δραστηριότητες τεχνολογικής καινοτομίας
- ☐ Η ψηφιοποίηση είναι συνώνυμο της τεχνολογίας
- ☐ Η ψηφιοποίηση αναφέρεται σε όλες τις δραστηριότητες τεχνολογίας που αντιμετωπίζουν οι πελάτες
- ☐ Η ψηφιοποίηση αναφέρεται σε όλες τις επενδύσεις που πραγματοποιούμε για την ενσωμάτωση της τεχνολογίας σε όλα τα μέρη της επιχείρησής μας.
- ☐ Η ψηφιακή τεχνολογία ξεπερνά την τεχνολογία μόνο για να αντικατοπτρίζει μια νοοτροπία που αγκαλιάζει τη συνεχή καινοτομία, τη σταθερή λήψη αποφάσεων και την ενσωμάτωση της τεχνολογίας σε όλες τις φάσεις της επιχείρησης
- ☐ Η ψηφιοποίηση αναφέρεται σε όλα τα δεδομένα και την αναλύσή τους
- ☐ Δεν είμαι σίγουρος.
- ☐ Άλλο (διευκρινίστε)

21. Οι υπηρεσίες Cloud προσφέρονται κυρίως με πρόγραμμα περιήγησης στο διαδίκτυο ή με το smartphone σας και μπορούν να χρησιμοποιηθούν οπουδήποτε. Πόσο σημαντικές θεωρείτε τις ακόλουθες υπηρεσίες cloud για μια την επιχείρηση ενός αγρότη

	Καθόλου σημαντικό	μικρή σημασία	Μέσης Σημασίας	Πολύ σημαντικό	Απολύτως απαραίτητο
Εφαρμογές πελατών: Gmail, Dropbox, WhatsApp, Telegram ή παρόμοιο	○	○	○	○	○
Επιχειρησιακή παραγωγικότητα: Office365, Google Apps, G-Suite, Skype ή παρόμοιο	○	○	○	○	○
Επιχειρηματικές εφαρμογές: Salesforce, SAP web, SAGE web ή οποιοδήποτε άλλο web-based ERP / CRM	○	○	○	○	○
Υποδομή / εφαρμογές: FIWARE, OVH, IBM Bluemix, Amazon AWS, Google Cloud, Heroku ή παρόμοια	○	○	○	○	○
Εφαρμογές διαχείρισης αγροκτημάτων: οποιαδήποτε διαδικτυακή ή κινητή εφαρμογή για τη διαχείριση της εκμετάλλευσης, όπως ημερολόγιο πεδίου και διαχείριση κτηνοτροφικών εκμεταλλεύσεων	○	○	○	○	○

22. Σε ποιο βαθμό βλέπετε τους αγρότες να χρησιμοποιούν αυτές τις υπηρεσίες cloud για να στηρίξουν την επιχείρησή τους?

	Πολύ συχνά	Ενίοτε	Σπάνια	Πολύ Σπάνια	Ποτέ
Εφαρμογές πελατών: Gmail, Dropbox, WhatsApp, Telegram ή παρόμοιο	○	○	○	○	○
Επιχειρησιακή παραγωγικότητα: Office365, Google Apps, G-Suite, Skype ή παρόμοιο	○	○	○	○	○
Επιχειρηματικές εφαρμογές: Salesforce, SAP web, SAGE web ή οποιοδήποτε άλλο web-based ERP / CRM	○	○	○	○	○
Υποδομή / εφαρμογές: FIWARE, OVH, IBM Bluemix, Amazon AWS, Google Cloud, Heroku ή παρόμοια	○	○	○	○	○
Εφαρμογές διαχείρισης αγροκτημάτων: οποιαδήποτε διαδικτυακή ή κινητή εφαρμογή για τη διαχείριση της εκμετάλλευσης, όπως ημερολόγιο πεδίου και διαχείριση κτηνοτροφικών εκμεταλλεύσεων	○	○	○	○	○

23. Πόσο σημαντικές θεωρείτε τις ακόλουθες ψηφιακές υπηρεσίες για τις επιχειρηματικές δραστηριότητες ενός αγρότη?

	Καθόλου σημαντικό	μικρή σημασία	Μέσης Σημασίας	Πολύ σημαντικό	Απολύτως απαραίτητο
Απόκτηση και ανάλυση αεροφωτογραφιών για να λάβετε καλύτερες αποφάσεις (π.χ. με δορυφόρους ή drones)	○	○	○	○	○
Ανάλυση των υπάρχοντων δεδομένων από το πεδίο, το ζωικό κεφάλαιο, τις επιχειρήσεις ή τους πελάτες για να λάβετε τεκμηριωμένες αποφάσεις (business intelligence)	○	○	○	○	○
Χρήση προγραμματιζόμενων ρομπότ για εργασίες γεωργίας ή βιομηχανίας, αυτόνομα οχήματα και οποιεσδήποτε άλλες αυτόνομες συνεργατικές μηχανές	○	○	○	○	○
Παρακολούθηση των συνθηκών καλλιέργειας για λήψη καλύτερων αποφάσεων (αισθητήρες)	○	○	○	○	○
Πρόσβαση στα δεδομένα, τις εφαρμογές, το λογισμικό και άλλα εργαλεία μέσω του Διαδικτύου	○	○	○	○	○
Προβλέψτε τη συγκομιδή, την παραγωγή, τις ασθένειες, τις καιρικές συνθήκες, τη συντήρηση του εξοπλισμού, τις συνθήκες της αγοράς κ.λπ	○	○	○	○	○
Χρησιμοποιήστε εικονικά περιβάλλοντα για εκπαίδευση ή συνεργασία	○	○	○	○	○
Χρήση εικονικών πληροφοριών στην πραγματικότητα για τη βελτίωση των πληροφοριών στον τομέα ή τη βιομηχανία μέσω smartphones ή γυαλιών	○	○	○	○	○
Χρήση Τεχνολογιών για την ανίχνευση και παρακολούθηση της αλυσίδας εφοδιασμού/παράδοση προϊόντων	○	○	○	○	○

Άλλο (διευκρινίστε)

24. Αξιολογείτε τις ανάγκες των γεωργών στα παρακάτω?

	Ναί	Οχι
Απόκτηση και ανάλυση αεροφωτογραφιών για να λάβετε καλύτερες αποφάσεις (π.χ. με δορυφόρους ή drones)	○	○
Πως?		
Ανάλυση των υπάρχοντων δεδομένων από το πεδίο, το ζωικό κεφάλαιο, τις επιχειρήσεις ή τους πελάτες για να λάβετε τεκμηριωμένες αποφάσεις (business intelligence)	○	○
Πως?		
Χρήση προγραμματιζόμενων ρομπότ για εργασίες γεωργίας ή βιομηχανίας, αυτόνομα οχήματα και οποιεσδήποτε άλλες αυτόνομες συνεργατικές μηχανές	○	○
Πως?		
Παρακολούθηση των συνθηκών καλλιέργειας για λήψη καλύτερων αποφάσεων (αισθητήρες)	○	○
Πως?		
Πρόσβαση στα δεδομένα, τις εφαρμογές, το λογισμικό και άλλα εργαλεία μέσω του Διαδικτύου	○	○
Πως?		
Προβλέψτε τη συγκομιδή, την παραγωγή, τις ασθένειες, τις καιρικές συνθήκες, τη συντήρηση του εξοπλισμού, τις συνθήκες της αγοράς κ.λπ	○	○
Πως?		
Χρησιμοποιήστε εικονικά περιβάλλοντα για εκπαίδευση ή συνεργασία	○	○
Πως?		
Χρήση εικονικών πληροφοριών στην πραγματικότητα για τη βελτίωση των πληροφοριών στον τομέα ή τη βιομηχανία μέσω smartphones ή γυαλιών	○	○
Πως?		
Χρήση Τεχνολογιών για την ανίχνευση και παρακολούθηση της αλυσίδας εφοδιασμού/παράδοση προϊόντων	○	○
Πως?		

Προηγ Επόμενο

Στοιχεία επικοινωνίας

Ελληνικά

Σας ευχαριστούμε πολύ για το χρόνο και τη συνεργασία σας. Μπορούμε να επικοινωνήσουμε μαζί σας στο μέλλον σχετικά με αυτό το έργο; Αν ναι, παρακαλώ μοιραστείτε τα στοιχεία επικοινωνίας σας εδώ.

25. Στοιχεία επικοινωνίας

Ονομα

Εταιρία

Πόλη

Χώρα

Email

Τηλέφωνο

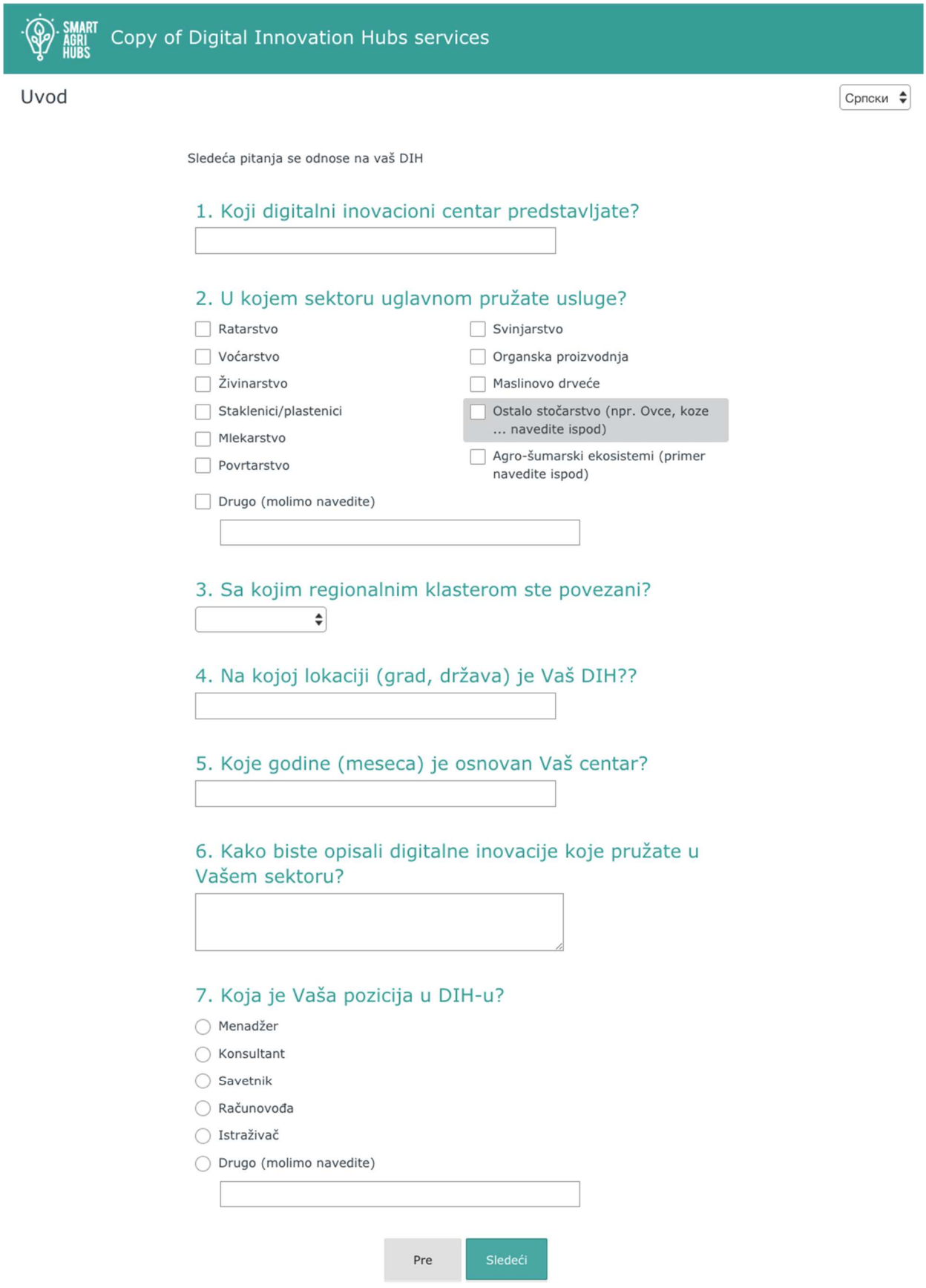
26. Έχετε άλλα σχόλια, ερωτήσεις ή ανησυχίες?

27. Θα θέλαμε να επικοινωνήσουμε μαζί σας σχετικά με αυτήν την έρευνα

- [ ] Ναι παρακαλώ
- [ ] Οχι ευχαριστώ

Προηγ Έγινε

Serbian


SMART AGRI HUBS
Copy of Digital Innovation Hubs services
Uvod
Српски
Sledeća pitanja se odnose na vaš DIH
1. Koji digitalni inovacioni centar predstavljate?
2. U kojem sektoru uglavnom pružate usluge?
Ratarstvo
Voćarstvo
Živinarstvo
Staklenici/plastenici
Mlekarstvo
Povrtarstvo
Svinjarstvo
Organska proizvodnja
Maslinovo drveće
Ostalo stočarstvo (npr. Ovce, koze ... navedite ispod)
Agro-šumarski ekosistemi (primer navedite ispod)
Drugo (molimo navedite)
3. Sa kojim regionalnim klasterom ste povezani?
4. Na kojoj lokaciji (grad, država) je Vaš DIH??
5. Koje godine (meseca) je osnovan Vaš centar?
6. Kako biste opisali digitalne inovacije koje pružate u Vašem sektoru?
7. Koja je Vaša pozicija u DIH-u?
Menadžer
Konsultant
Savetnik
Računovođa
Istraživač
Drugo (molimo navedite)
Pre
Sledeći

8. Možete li navesti sa kojim drugim entitetima je povezan vaš DIH?

- [ ] Univerzitet / Istraživački centar
- [ ] Centar kompetencija (Competence center)
- [ ] Drugi DIH-ovi
- [ ] Lokalna preduzeća (MSP sektor)
- [ ] Lokalna velika preduzeća
- [ ] Udruženja poljoprivrednika
- [ ] Obrazovne institucije
- [ ] Lokalna samouprava
- [ ] Upravljačko telo
- [ ] Inkubator/akselerator/startup programi
- [ ] Drugo (molimo navedite)

9. Možete li nam reći kakve je događaje Vaš DIH organizovao u poslednjih dvanaest meseci (datum, kratak opis tema, broj prisutnih)?

Pre Sledeći

Vizija

Српски

Sledeća pitanja su povezana sa Vašom vizijom za budućnost.
Mi smo zainteresovani za ono što smatrate važnim; možete odgovoriti ili na visokom nivou ili detaljno prema onome što osećate.

10. Koje su Vaše prednosti?

11. Koji je Vaš najveći izazov u budućnosti?

12. Šta smatrate svojim najvećim doprinosom sektoru?

13. Koja je Vaša ambicija?

14. Šta Vam je potrebno da ispunite ovu ambiciju?

Pre Sledeći

Naredna pitanja se tiču digitalizacije poljoprivrede: koje temesu Vam posebno interesantne kada je reč o digitalizaciji? Takođe, koje digitalne servise pružate kao DIH?

15. Uzimajući u obzir potrebe poljoprovrednika, u molimo Vas identifikujte one koje možete da podržite:

	Malo zainteresovano	Malo zainteresovano	Veoma zainteresovani	Pokušavamo da se bavimo tim potrebama	Već se bavimo tim potrebama
Potreba da se "prate" kvalitetni proizvodi od polja do trpeze (npr. poboljšanje sistema sledljivosti za kupce ili potrošače kako bi znali odakle proizvod dolazi ili kako je obrađivan)	○	○	○	○	○
Potreba da se optimizuju aktivnosti/ procesi na gazdinstvima (poput poboljšanje navodnjavanja, đubrenja, lečenja bolesti, žetve, upravljanje stočarstvom, administracije)	○	○	○	○	○
Potreba za novim poslovnim modelima (sa posebnim fokusom na prilagodljiva i fleksibilna digitalna rešenja za zadovoljavanje poslovnih potreba farmi)	○	○	○	○	○
Potreba za kombinovanjem i razmenom podataka u cilju stvaranja vrednosti (kao što su razvoj standarda, znanja i infrastrukture za prikupljanje podataka sa terena sa senzorima, satelitskim ili bespilotnim slikama i donošenje boljih odluka).	○	○	○	○	○
Potreba za ekološki održivom proizvodnjom (korišćenje ICT-a za poboljšanje ekološkog aspekta proizvodnje hrane i lanaca vrednosti za poljoprivredno-prehrambenu industriju)	○	○	○	○	○

16. Ispod možete naći listu usluga koje DIH mogu pružiti. Možete li, molim Vas, da nam kažete koliku važnosti imaju ove usluge za Vas?

	Nemaj značaj	Malog značaja	Neutralno	Važne	Veoma važne
Pristup finansijama i finansiranju (npr. Finansijski inženjering, veza sa izvorima finansiranja, planiranje investicija)	○	○	○	○	○
Podrška poslovnom planiranju (npr. Marketing, distribucija)	○	○	○	○	○
Veštine i obrazovanje (npr. kursevi, radionice, nudeći tehnološku infrastrukturu u obrazovne svrhe)	○	○	○	○	○
(Zajedničko) istraživanje i razvoj (npr. Razvoj koncepta tehnologije, prikupljanje dokaza o konceptima)	○	○	○	○	○
Tehnička podrška (npr. Izrada prototipa, proizvodnja male količine proizvoda)	○	○	○	○	○
Testiranje (pr. sertfikacija, kvalifikacija proizvoda)	○	○	○	○	○
Inkubator / akcelerator (npr. analiza tržišta, razvoj poslovanja)	○	○	○	○	○
Mentorstvo (u Vašoj profesionalnoj mreži) (npr. obuke namenjene hub-ovima i obuke koje sprovode hub-ovi i centri za razvoj kompetencija)	○	○	○	○	○
Vizija i razvoj strategije (npr. razvoj inovacijske strategije)	○	○	○	○	○
Prihvatanje od strane korisnika (npr. prikupljanje i analiza podataka o klijentima, provera koncepta)	○	○	○	○	○
Izgradnja zajednice (npr. Izviđanje za partnere, marketinške komunikacije, izgradnja ekosistema)	○	○	○	○	○

17. Da li pružate ove usluge u Vašem DIH-u?

	Da	Ne	Delimično
Pristup finansijama i finansiranju (npr. Finansijski inženjering, veza sa izvorima finansiranja, planiranje investicija)	○	○	○
Podrška poslovnom planiranju (npr. Marketing, distribucija)	○	○	○
Veštine i obrazovanje (npr. kursevi, radionice, nudeći tehnološku infrastrukturu u obrazovne svrhe)	○	○	○
(Zajedničko) istraživanje i razvoj (npr. Razvoj koncepta tehnologije, prikupljanje dokaza o konceptima)	○	○	○
Tehnička podrška (poput izrade prototipa, proizvodnje malih serija)	○	○	○
Testiranje (pr. sertfikacija, kvalifikacija proizvoda)	○	○	○
Inkubator / akcelerator (npr. analiza tržišta, razvoj poslovanja)	○	○	○
Mentorstvo (u Vašoj profesionalnoj mreži) (npr. obuke namenjene hub-ovima i obuke koje sprovode hub-ovi i centri za razvoj kompetencija)	○	○	○
Vizija i razvoj strategije (npr. razvoj inovacijske strategije)	○	○	○
Prihvatanje od strane korisnika (npr. prikupljanje i analiza podataka o klijentima, provera koncepta)	○	○	○
Izgradnja zajednice (npr. Izviđanje za partnere, marketinške komunikacije, izgradnja ekosistema)	○	○	○

Pre | Sledeći

Pružanje usluga

Српски

Naredna grupa pitanja se odnosi na alate koji su trenutno u upotrebi kako bi se pružila adekvatna usluga.

18. Koje alate trenutno koristite za pružanje usluga? (izaberite sve adekvatne odgovore)

- [ ] Vebinari
- [ ] Događaji
- [ ] Radionice
- [ ] Šabloni
- [ ] Obuka trenera
- [ ] Povezivanje sa drugim, uspešnijim, habovima
- [ ] Portal (za isporuku jedne ili više gore navedenih usluga)
- [ ] E-learning
- [ ] Dokumentacija
- [ ] Ni jedan od ponuđenih odgovora
- [ ] Drugo (molimo navedite)

19. Da li smatrate da Vam trenutno nedostaje alat za adekvatno pružanje usluga?

- ( ) Da
- ( ) Ne

Ako da, koje?

Pre | Sledeći

Prednosti digitalizacije

Српски

Naredna grupa pitanja se odnosi na Vaša razmišljanja o digitalizaciji, kako poljoprivrednici koriste tehnologiju i načina na koji im Vi pružate usluge,

20. Verovatno ste mnogo čuli o digitalizaciji, ali nama je važno Vaše viđenje. Šta za Vas znači pojam digitalno? (označite sve adekvatne odgovore)

- [ ] Digitalno se odnosi na sve aktivnosti vezane za inovacije u tehnologiji.
- [ ] Digitalo je sinonim za tehnologiju
- [ ] Digitalno se odnosi na sve tehnološke aktivnosti u cilju približavanja klijentima.
- [ ] Digitalno se odnosi na sve investicije koje ulažemo u integraciju tehnologije u sve delove našeg poslovanja.
- [ ] Termin digitalno prevazilazi samu tehnologiju i odražava način razmišljanja koji obuhvata stalne inovacije, donošenje odluka i integraciju tehnologije u sve faze poslovanja.
- [ ] Digitalno se odnosi na sve tipove analize podataka
- [ ] Nisam sigurna/an.
- [ ] Drugo (molimo navedite)

21. Cloud uslugama se uglavnom pristupa putem internet pretraživača ili pametnog telefona i mogu se koristiti bilo gde. Koliko važnim smatrate dole navedene Cloud usluge za poslovanje poljoprivrednika?

	Nemaju značaj	Malog značaja	Značajne	Veoma značajne	Apsolutno neophodne
Korisničke aplikacije: Gmail, Dropbox, WhatsApp, Telegram ili slično	○	○	○	○	○
Poslovna produktivnost: Office365, Google Apps, G-Suite, Skype ili slično	○	○	○	○	○
Poslovne aplikacije: Salesforce, SAP veb, SAGE veb ili bilo koji drugi program za planiranje resursa baziran na upotrebi interneta	○	○	○	○	○
Infrastruktura / aplikacije: FiWARE, OVH, IBM Bluemix, Amazon AVS, Google Cloud, Heroku ili slično	○	○	○	○	○
Aplikacije za upravljanje poljoprivrednim gazdinstvom: bilo koja veb ili mobilna aplikacija za upravljanje gazdinstvom, kao što je knjiga polja ili system za upravljanje stočnim fondom	○	○	○	○	○

22. U kojoj meri vidite da poljoprivrednici zaista koriste dole navedene Cloud usluge kako bi podržali svoje poslovanje?

	Vrlo često	Često	Ponekad	Retko	Nikad
Korisničke aplikacije: Gmail, Dropbox, WhatsApp, Telegram ili slično	○	○	○	○	○
Poslovna produktivnost: Office365, Google Apps, G-Suite, Skype ili slično	○	○	○	○	○
Poslovne aplikacije: Salesforce, SAP veb, SAGE veb ili bilo koji drugi program za planiranje resursa baziran na upotrebi interneta	○	○	○	○	○
Infrastruktura / aplikacije: FiWARE, OVH, IBM Bluemix, Amazon AVS, Google Cloud, Heroku ili slično	○	○	○	○	○
Aplikacije za upravljanje poljoprivrednim gazdinstvom: bilo koja veb ili mobilna aplikacija za upravljanje gazdinstvom, kao što je knjiga polja ili system za upravljanje stočnim fondom	○	○	○	○	○

23. Prema Vašem mišljenju, koliko bi naredne digitalne usluge trebalo da budu važne za posao poljoprivrednika?

	Nisu od značaja	Malog značaja	Značajne	Veoma značajne	Apsolutno neophodno
Pribavljanje i analiziranje snimaka iz vazduha kako bi se donele bolje odluke (npr. pribavljene pomoću satelita ili bespilotnih letelica)	○	○	○	○	○
Analiziranje postojećih sopstvenih podataka sa terena, o stanju stoke, iz poslovanja ili o klijentima da bi se donele valjane odluke	○	○	○	○	○
Upotreba programabilnih robota za poljoprivredne ili industrijske zadatke, autonomna vozila i bilo koje druge autonomne kolaborativne mašine	○	○	○	○	○
Pratiti poljoprivredne parametre da bi se donosile bolje odluke (poput senzora)	○	○	○	○	○
Pristupanje svojim podacima, aplikacijama, softveru i drugim alatima putem interneta	○	○	○	○	○
Predvidianje žetve, proizvodnje, bolesti, vremena, stanja opreme, uslova na tržištu, itd.	○	○	○	○	○
Korišćenje virtuelnog okruženja za obuku, obrazovanje ili saradnju	○	○	○	○	○
Preklapanje virtuelnih informacija u stvarnost da bi se poboljšale informacije na terenu ili industriji koristeći pametne telefone ili naočare	○	○	○	○	○
Praćenje i nadgledanje lanca snabdevanja	○	○	○	○	○

Drugo (molimo navedite)

24. Da li procenjujete potrebe farmera u ovim oblastima?

	Da	Ne
Pribavljanje i analiziranje snimaka iz vazduha kako bi se donele bolje odluke (npr. pribavljene pomoću satelita ili bespilotnih letelica Kako?	○	○
Analiziranje postojećih sopstvenih podataka sa terena, o stanju stoke, iz poslovanja ili o klijentima da bi se donele valjane odluke Kako?	○	○
Upotreba programabilnih robota za poljoprivredne ili industrijske zadatke, autonomna vozila i bilo koje druge autonomne kolaborativne mašine Kako?	○	○
Pratiti poljoprivredne parametre da bi se donosile bolje odluke (poput senzora) Kako?	○	○
Pristupanje svojim podacima, aplikacijama, softveru i drugim alatima putem interneta Kako?	○	○
Predvidianje žetve, proizvodnje, bolesti, vremena, stanja opreme, uslova na tržištu, itd. Kako?	○	○
Korišćenje virtuelnog okruženja za obuku, obrazovanje ili saradnju Kako?	○	○
Preklapanje virtuelnih informacija u stvarnost da bi se poboljšale informacije na terenu ili industriji koristeći pametne telefone ili naočare Kako?	○	○
Praćenje i nadgledanje lanca snabdevanja Kako?	○	○

Pre Sledeći

Kontakt Informacije

Српски

Hvala Vam na Vašem vremenu i saradnji.
Možemo li Vas u budućnosti kontaktirati u vezi sa ovim projektom?

25. Kontakt Informacije

Ime	
Firma	
Grad	
Država	
E-pošta	
Broj telefona	

26. Da li imate neke druge komentare, pitanja ili zapažanja?

27. Želeli bismo da Vas kontaktiramo o ovom istraživanju

- [ ] Da, molim Vas
- [ ] Ne, hvala

Pre | Gotovo

8. ANNEX IV: GDPR CONSENT

To	DIHs involved in SmartAgriHubs Project.
From	CAPDER
Date	
Concerning	GPDP consent

CONSENT FOR THE TRANSFER OF PERSONAL AND INFORMATION DATA OF INTEREST WITHIN THE FRAME OF THE SMARTAGRIHUBS EUROPEAN H2020 PROJECT.

The H2020 European project SmartAgriHubs, ""Connecting the dots to unleash the innovation potential for digital transformation of the European agrifood", is dedicated to accelerate the digital transformation of the European agri-food sector. It will consolidate, activate and extend the current ecosystem by building a network of Digital Innovation Hubs (DIHs) that will boost the uptake of digital solutions by the farming sector. This will be achieved by integrating technology and business support in a local onestop- shop approach involving all regions and all relevant players in Europe. The heart of the project is formed by 28 flagship innovation experiments demonstrating digital innovations in agriculture, facilitated by DIHs from 9 Regional Clusters including all European member states. Concurrently, SmartAgriHubs will improve the maturity of innovation services of DIHs so that digital innovations will be replicated across Europe and widely adopted by European farmers.

Within the frame of this project, lead by Wageningen Research, the Andalusian Ministry for Agriculture, Livestock, Fisheries and Sustainable Development of the Andalusian Regional Government is responsible for two tasks: Need assessment and Building networks of DIHs within the WP DIH Capacity Building and Monitoring, where there is a need to establish contacts with the persons in charge of the DIHs which belong to the mentioned project without being direct partners, with the aim to obtain information regarding both personal data and scope and activity of the DIHs, among others.

Therefore, as a DIH which collaborates with the SmartAgriHubs project, in compliance with the General Regulation for Data Protection, the Andalusian Ministry for Agriculture, Livestock, Fisheries and Sustainable Development requests your express consent for the communication of your personal data (name, surname and e-mail) to other partners of the consortium as well as to related external experts and initiatives. Moreover, these data can be published in the "Innovation Portal" of the project as a part of the DIHs catalogue, to be produced within the Observatory.

Consent

Mr/Mrs/Ms…….. with Identification Card /Passport No. …… declares that: I have read the clause about data protection and I give my consent so that the Andalusian Ministry for Agriculture, Livestock, Fisheries and Sustainable Development can make use of the information on personal data referred in the mentioned clause and in its specified terms.

In witness whereof I sign the authorisation in (PLACE) (DATE)

Signed: ……..

Data Protection Clause

DATA PROTECTION:

In compliance with the provisions of the General Data Protection Regulation we inform you that:

a) The controller of your personal data is the Viceconsejería of the Andalusian Ministry of Agriculture, Livestock, Fisheries and Sustainable Development, having its address in c/Tabladilla s/n - 41071 Seville - Spain.

b) You can contact the Data Protection Officer at dpd.capder@juntadeandalucia.es.

c) The personal data you provide us are necessary for the events, relationships and projects management of the Regional Ministry, whose legal basis is the consent that you have expressed.

d) You can exercise your rights of access, rectification, cancellation and opposition or object to this processing at http://www.juntadeandalucia.es/protecciondedatos

9. ANNEX V: EMAIL TO DIHS

SUBJECT: H2020 SmartAgriHubs: Needs Assessment survey

BODY:

Dear Madam / Sir,

You are receiving this email because you are part of a Digital Innovation Hub (DIH), dedicated to accelerate the digital transformation of the European agri-food sector as stated in the H2020 initiative "SmartAgriHubs".

SmartAgriHubs aims to connect the dots to unleash the innovation potential for digital transformation of the European agrifood sector. A first yet fundamental step in our project is to understand how DIHs are developing and delivering innovation services to address the digital needs of the farming sector. To this end, we have developed two surveys: one for Digital Innovation Hubs, and one for the farming sector. We would kindly like to ask you to complete the Digital Innovation Hub survey. Secondly, we would very much appreciate if you reach out to your network in the farming sector for collecting data on the farming sector survey.

Digital Innovation Hub survey

The survey for the Digital Innovation Hub should preferably be filled by the executive responsible for the DIH, the highest-ranking person ultimately responsible for managerial decisions.

You will find the survey here here in different languages:

English: https://es.surveymonkey.com/r/smartagrihubs_DIHs

Spanish: https://es.surveymonkey.com/r/smartagrihubs_DIHs?lang=es

Greek: https://es.surveymonkey.com/r/smartagrihubs_DIHs?lang=el

Serbian: https://es.surveymonkey.com/r/smartagrihubs_DIHs?lang=sr

Of course, you can forward these links.

Farmers and farming sector survey

A second survey is to be filled in by the farming sector: farmers themselves and their support ecosystem (e.g. farmers' agri-cooperatives, service and products providers and farmers' associations, organisations and institutions). In order to gain thorough insight and optimal representativeness, we would very much appreciate your help with obtaining at least 20 completed surveys according to the following division:

At least 13 surveys by farmers, either full-time, part-time or landlords, with a distribution in terms of farm size and main agricultural domains that represents your region.

At least 2 surveys by a worker in a farming company.

At least 2 surveys by an external service or product provider.

At least 2 surveys by an agri-cooperative, farmers association, or agricultural institution.

In order to accomplish this, we have a few tips and supporting tools:

Below you'll find an example e-mail you can use to reach respondents (farmers and support ecosystem partners that in turn can also help to reach farmers). Feel free to adapt the e-mail to your own situation. We strongly suggest to connect with agri-cooperatives, associations or institutions in your community to reach farmers.

One of the mandatory questions in the survey is to which Digital Innovation Hub the respondents are connected. Therefore, please make sure you give them the correct reference name of your Digital Innovation Hub.

You may of course use whatever additional means you think adequate to reach farmers. You can send the link via social media, or if you think that printing out the survey may improve the performance, feel free to do it and let us know so we can advise you on how to proceed.

We will inform you about the reach of the surveys corresponding to your Digital Innovation Hub.

You will find the Farming sector survey here in different languages:

English: https://www.surveymonkey.com/r/smartagrihubs_farmers

German: https://es.surveymonkey.com/r/smartagrihubs_farmers?lang=de

Spanish: https://es.surveymonkey.com/r/smartagrihubs_farmers?lang=es

French: https://es.surveymonkey.com/r/smartagrihubs_farmers?lang=fr

Greek: https://es.surveymonkey.com/r/smartagrihubs_farmers?lang=el

Italian: https://es.surveymonkey.com/r/smartagrihubs_farmers?lang=it

Polish: https://es.surveymonkey.com/r/smartagrihubs_farmers?lang=pl

Serbian: https://es.surveymonkey.com/r/smartagrihubs_farmers?lang=sr

Our aim is to have the surveys completed in two weeks from today. We are very much looking forward to the richness of insights we will get through this survey, in order to accelerate digital transformation in the sector. Furthermore, the project aims to directly support you as a Digital Innovation Hub, for which this survey will also lay the foundation.

Thanks in advance for your cooperation!

10. ANNEX VI: EXAMPLE EMAIL TO REACH PARTNERS

Subject: Improving digital transformation in our region

Body:

Dear partner,

We are [NAME], a Digital Innovation Hub dedicated to accelerate the digital transformation of the European agrifood sector. As such, we are involved in the H2020 initiative SmartAgriHubs.

We would kindly like to ask your help to improve our understanding of the farmers' and farming sector's digitalisation needs by completing this survey.

You will find the survey here in different languages:

English: https://www.surveymonkey.com/r/smartagrihubs_farmers

German: https://es.surveymonkey.com/r/smartagrihubs_farmers?lang=de

Spanish: https://es.surveymonkey.com/r/smartagrihubs_farmers?lang=es

French: https://es.surveymonkey.com/r/smartagrihubs_farmers?lang=fr

Greek: https://es.surveymonkey.com/r/smartagrihubs_farmers?lang=el

Italian: https://es.surveymonkey.com/r/smartagrihubs_farmers?lang=it

Polish: https://es.surveymonkey.com/r/smartagrihubs_farmers?lang=pl

Serbian: https://es.surveymonkey.com/r/smartagrihubs_farmers?lang=sr

It would also be great if you could help us spread the link so we can collect even more responses: the more representative the insights are, the better we will be able to meet the needs of the farming sector.

Thanks in advance for your support.