D3.7 – REPORT ON MAXIMIZATION OF IES MARKET TAKE-UP – V2

This is the public version of the deliverable.

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WP 3

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Author	Jovana Vlaškalin (BIOS), Trajković Milica (BIOS), Ksenija Mirč (BIOS), Branko Šikoparija (BIOS), Željen Trpovski (BIOS), Ella Deroo (ILVO), Jurgen Vangeyte (ILVO), Anneleen De Visscher (ILVO)
Contact details of the coordinator	George Beers george.beers@wur.nl

LIST OF ABBREVIATIONS

Abbreviation	Explanation
CCs	Competence Centres
DIHs	Digital Innovation Hubs
DAP	Demonstration Activity Procedure
EP	Execution Plan
Expand OC	EXPAND the SmartAgriHubs Community Network
FIEs	Flagship Innovation Experiments
IEs	Innovation Experiments
IP	Innovation Portal
ICT	Information and Communication Technology
IoF2020	Internet of Food and Farm 2020
KPIs	Key Performance Indicators
LXP	Learning and Exchange Platform
OCs	Open Calls
RCs	Regional Clusters
Respond OC	RESPOND to the Covid-19 crisis
Restart OC	RESTART the European Agri-Food Economy after the COVID-19 Crisis
SAHs	Smart Agri Hubs
UAT	User Acceptance Testing
WPs	Work Packages
WUR	Wageningen University and Research

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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

Report on the maximization of the market take-up is the first iteration of such a report, delivered in M36 of the project, while the second iteration of the report is planned for M48. This is an extensive report, presenting activities implemented under Task 3.4 Demonstration of IEs outputs and Market Take-up maximization. The task is implemented by WP3 in collaboration with WP4.

The report elaborates on several actions aiming to maximize FIEs market potentials, each in a different way. The report will in more detail elaborate implemented activities related to:

Implemented demonstration activities by FIEs, IEs and RC events

Organization and realization of demonstration activities is an important segment of FIE product/service development. Feedback received is one of the outcomes of demo events and it is perceived as an important element towards product/service further development, based on received feedback. Farmers, SMEs, DIHs, universities, other projects, or organizations are key target audiences of these events. In addition to putting presentation skills in practice, which is an important element when presenting to potential customers, FIEs are also in direct contact with their target groups, expanding their network which is also opening the doors to new collaborations.

Demonstration activities presented within this report are implemented on an ongoing basis, from the beginning of the project until M36, while more events will be conducted within the third reporting period. As reported during the first and the second reporting period, approximately 66 demo events were organized by FIEs and OC IEs. When merged with the events attended or organized by RCs from both reporting periods, it is approximately 234 individual events. If we look at the current reporting period only, RCs, FIEs, and IEs have reported about 99 events in total, 73 events were conducted in a virtual environment, while 26 were held as live (face-to-face) demonstrations. An overview of demonstration events organized and conducted by FIEs and IEs, provides the reader with better insight into the type of demonstrations that were conducted, collected feedback from the audience, types of audiences, materials used for communication and dissemination purposes, lessons learned, etc. While the organization of demonstration events was envisaged under FIE Execution Plans (EP), OC IEs have also organized several events, which were not a mandatory element within their EPs.

To both types of IEs, the Demonstration Activity Procedure (DAP) was introduced during the second reporting period with the aim to present a mechanism when planning, organizing, and reporting on demonstration events. At the same time, aligning project expectations regarding the demo events allowed the creation of a standardized approach towards all FIEs. The procedure for face-to-face and online events allowed collection of information such as promotional material used, tools used to collect feedback, feedback analysis, and feedback from FIEs in regard to the event implementation, allowing improvements of future events.

While not initially anticipated by the project, the Event Procedure was created and applied by Regional Clusters, in cases when they are organizing an event, or attending an event and presenting SAHs and its achievements. As with the FIE DAP, the RC event procedure provides guidelines on how to organize an event, how to report

to the project, and collect feedback but also allows the provision of feedback from an event organizer.

Analysis of the feedback received from farmers through the User Acceptance Testing questionnaire

In order to ensure better market accessibility, WP3 developed a User Acceptance Test (UAT), as a tool to increase user acceptance of digital products and solutions, offered by FIEs. Analysis of collected users feedback provides an interesting insight that will be helpful for the identification of potential acceptance problems during the product development cycle. After the testing period, 11 FIEs introduced 28 respondents within an online questionnaire, which included a set of general questions, regarding the respondents' and farms' general information, and a set of specific questions, related to usability, technical quality, cost-efficiency, and user-friendliness of the tested solution. In depth analysis of all answers, which is provided in Chapter 2 of this document, showcases some of the most interesting and useful features developed by FIEs and presents the overall acceptance of digital solutions in different agri-food sectors.

The final results of conducted user acceptance tests are more than satisfying, as they clearly demonstrate a positive experience within their end-users. Implementation of the UAT survey will be continued in the next reporting period as well, while overall results will be presented within the final version of D3.7-2.

Activities implemented under FIE business support for FIEs

Building a set of skills for the market maximization take up is another activity that aims to provide FIEs with a sufficient set of skills and knowledge when positioning their products/services on the market. Training planned within this subtask will be implemented by DIHs, allowing capacity building not only for FIEs but for DIHs also, in line with their services. The implementation modality of this activity was modified based on the knowledge gained within the project during the first 36 months while working with FIEs and DIHs. At the same time, strengthening of DIHs capacities and expanding their services is one of the priorities of the project within the third reporting period. Methodology of task implementation is provided within the business program section, while business training will take place during the third reporting period. Networking activities

Last, but not least, this subtask presents several networking opportunities implemented within the current reporting period. WP3 lasses with WP1 to boost networking potential for FIEs by exploiting networks of stakeholders attracted through the project for the purpose of developing synergies across the value chain. FIE achievements are promoted via the IP, allowing the presentation of these results to the IP community. As an ongoing activity, new actions will take place during the third reporting period as well.

This is the public version of the deliverable.

INTRODUCTION

The focus of the SAH project is on developing and supporting Agricultural DIHs. DIHs are supporting digitizing farmers and agricultural communities at local level by offering a variety of services (technical, business, funding, ecosystem). In the SAH project the Innovation Experiments have a specific function related to develop the DIH's. In each IE at least one DIH is involved to provide one or more services. Apart from the IE objectives in terms of developing innovative digital applications, the most important SAH objective is to develop, test and apply DIH services.

One of the DIH services is to support FIEs in maximization of the market take up. At the project level DIHs involved in the FIEs, were stimulated via meetings organized by Regional Clusters, to work specifically on this service and provided the DIHs with the webinars, tools and instruments that could be used for that service. In the FIE monitor we expected to see the results of this DIH service on maximizing market take up. The actions that were taken for this are reported in this Deliverable 3.7.

In this report we were not able identify the more qualitative outcome of these actions and final result in terms of impact. DIHs involved were not able to collect this type information. We have to consider that as observed in a broader perspective, most of the DIHs are in early stage of development and are starting to develop and apply services. In this respect the actions that were taken are already impressive and we can conclude that many DIH made good progress in developing a service on market take-up support but there still is a way to go.

COLLABORATION WITH OTHER WPs

Within the implementation of Task 3.4, close collaboration was established with WP1 (DIH Ecosystem building) and WP4 (DIH Capacity building and monitoring).

Collaboration with WP1

One of the overall tasks of WP1 is to assist DIHs in enhancing their communication and dissemination capabilities, as well as in expanding their network so that they can support and develop an increasing number of Innovation Experiments. Primarily, WP1 has set a cohesive strategy and tools to facilitate communication and information exchange among project partners and relevant stakeholders. All supporting materials that were used prior, during, and after each organized event, such as presentations (shown in figures below), questioners, event promotion ads, etc. were designed according to visual identity pack, and pre-defined templates provided by WP1, within D1.1 (SAH Visual Identity).

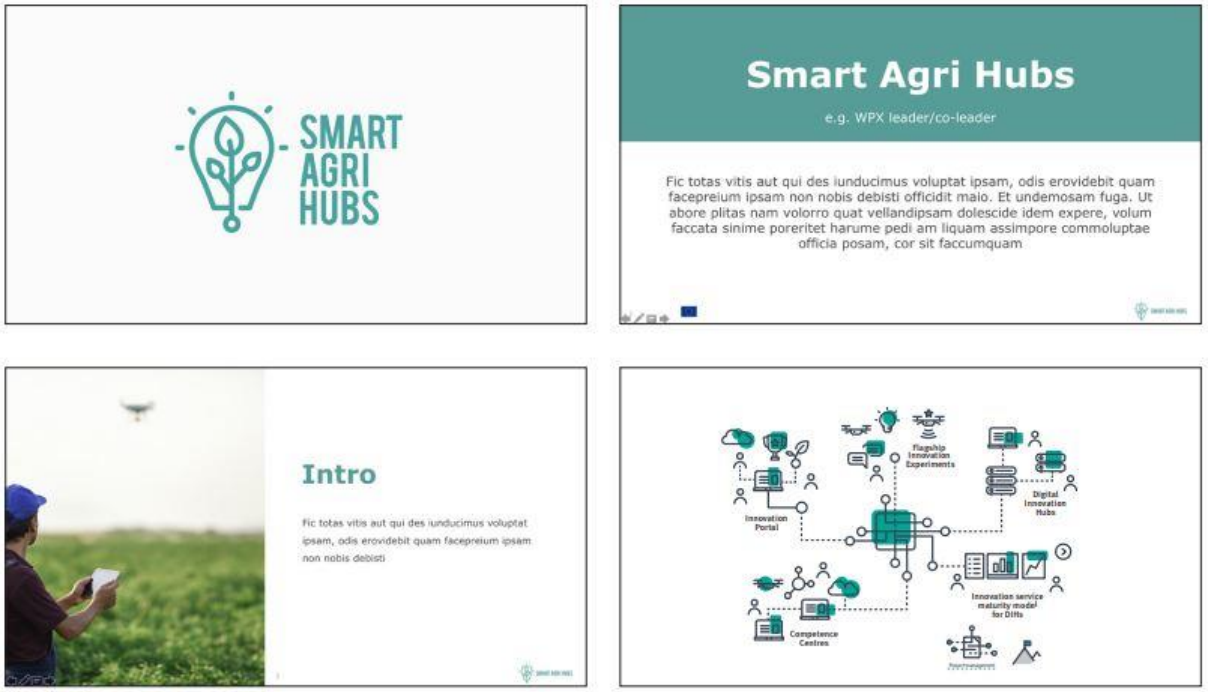

Figure 1 - Presentation template for FIEs

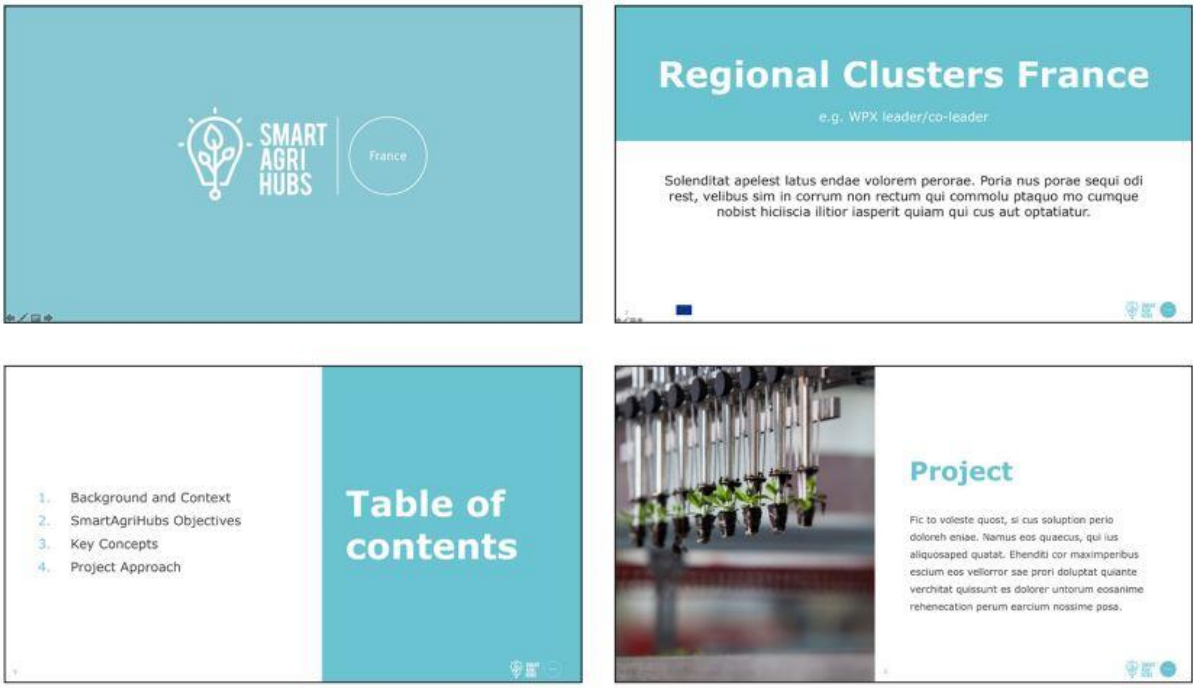

Figure 2 - Presentation template for Regional Clusters

Another important objective of WP1 is the two levels of dissemination and communication: on the project level and the regional/national level. The main objective is to raise awareness about DIHs services, attract innovators, mainstream the knowledge developed, and disseminate the results from Innovation Experiments to key stakeholders and interested parties. WP3 has a key role in this objective since Task 3.4 (*Demonstration of IEs outputs and Market Take-up maximization*) aims to exploit broad networks of stakeholders attracted through the project to engage users, develop synergies across the value chain and mobilize risk capital for the market

expansion of IEs outputs, which will help WP1 in the dissemination of the demonstration activities and the experiment outputs. Collaboration between these two WPs is still ongoing under the task and is primarily related to disseminating information on demo events, promotion of FIE achievements through the Innovation Portal and social media networks. Jointly the two PS have prepared and conducted match-making activity regarding FIE reusable components that could be put in place by DIHs.

Collaboration with WP4

In close collaboration with WP4, Task 3.4, guidelines and framework of the mechanisms for setting up demonstration activities for FIEs, IEs, and RCs were established. Further to this, the two WPs will work jointly in supporting DIHs to implement a so-called Business program for FIEs, by the creation of relevant business modules that will be attended by DIHs with the aim to equip them with knowledge and tools prior to passing this knowledge to FIEs. Identified topics of these modules are related to the Business plan development, Mission, Vision, Strategy, Creating and managing startups (e.g., Lean Startup Methodology), Pitching, Financial Plan – funding ops, investors, Marketing Plan and Market Analysis, Ecosystem, collaboration and competition, Regional Embedding, Governance and organizational structure.

In this manner, both types of IEs will be able to develop a business program that will foster the exploitation of results and sustainable growth in order to boost the market potential of the outputs. Furthermore, WP3 will again liaise with WP4 to coordinate the provision of these services, as well as collect end-users' feedback.

CHAPTER 1: DEMONSTRATION EVENTS WITHIN SAH

1.1 APPROACH & METHODOLOGY

Within SAHs, demonstration of achievements is an important element, not only for the purpose of showcasing these achievements but also for establishing contacts with potential end-users, collecting their feedback, and finally incorporating this feedback into the future product/service development. When we refer to demonstration activities, we mean demo events that have been organized and conducted by FIEs and IEs, but also events that have been organized or attended by RCs. Even though, demonstration activities of FIEs and RCs have different outcomes, establishing a standardized approach within the project was an important element towards defining steps and roles in the context of demonstration activities set-up, during the implementation of the demo activity and the reporting once the event is finalized. The purpose of this procedure is to provide FIEs and RCs with a set of guidelines and templates guiding them tough the process. For this reason, within the second reporting period, WP3 in collaboration with WP4 has created the guidelines and framework of the mechanisms for setting up demonstration activities:

- **FIE Demonstration Activities Procedure for online and face-to-face events**, defining all necessary steps and roles in the context of demonstration activity set-up. The purpose of this procedure is to provide guidelines when preparing, conducting, and reporting on demonstration events.

- **RC Event procedure for both online and face-to-face events**, guiding RC through the process of event organization and realization and the reporting procedure. The procedure is applied in cases when RC is organizing and/or attending an event and presenting the project.

Key elements of each procedure are described in more detail on the following pages, while procedures are presented in Annex 1 of this deliverable.

1.1.1 FIE Demonstration activity procedure for FACE-TO-FACE events

As mentioned above, the purpose of this procedure is to provide guidelines for organizing, conducting, and reporting on the face-to-face demonstration events, within the course of the project. Since the success of FIEs demonstration activity closely relies on the proper event promotion, attraction of targeted audiences and the event attendance rate, proper preparation for the event is of crucial importance. For that purpose, DAP foresees a strong involvement of WP1 (DIH Ecosystem Building).

The term *demonstration activity* refers to activity complementing the work of FIEs by taking their supported solutions closer to the full realization of their market potential. Demonstration activities are aiming at presenting work done within each FIE, including knowledge/experience exchange on three levels – among SAH partners, with other relevant H2020 projects, and with external participants interested in the topic of the demonstration. The common characteristics of demo activities are:

- Knowledge/ experience exchange,
- Involvement of different stakeholder groups (farmers, IT community, researchers, policy makers, etc.),
- Broad promotion of the event (both as an announcement, prior to the event
- as well as after),
- Lessons Learned (LL) collection, which could be used in later a phase of the project.

Demonstration activities can be hosted on farms/laboratories/facilities, wherever the solutions are being developed. Alternatively, the solution demonstration can be conducted during fairs, demo shows, or other similar events, that can bring added value to the demonstration of SAH successes.

In addition, demonstration activity should present the impact of the developed solutions to a wide range of stakeholders from the public and private sector, including farmers, large organizations, SMEs, government officials, etc. This shall be done through the scale-up demonstration activities that will include the primarily on-site demonstration of developed solution, but also FIE demonstrations within relevant fairs, forums, conferences, printed articles in journals and magazines, etc.

In order to have a clear overview of each step and action, the Demonstration Activities Procedure has three envisaged phases:

- Planning phase,
- Executing phase, and
- Performance monitoring (closing) phase.

- Roles and responsibilities of all actors included within demonstration activities are defined, for every phase separately:

Planning phase: WP3 is responsible for the preparation of the dissemination package for demonstration events, which includes SAHs logos and templates, Invitation letter template, Questionnaire for participants, and other relevant promotional materials previously developed by WP1. WP3 is also responsible for providing reporting templates (as included within DAP): Annex 1 (General information about the event) (Figure 1), which should give the overview of the whole demonstration activity setup and provide the answers to the who, when, what, where and how questions. Annex 2 (proposed questionnaires for the audiences) (Figure 2), and Annex 3 (Lesson learned report) (Figure 3).
It is the responsibility of the FIE coordinator to announce the event within the Innovation Portal and send Annex 1 to WP3 prior to the event.

Topic: **FIE:**	*Your answer*
Event overview	*Please, indicate:* • *Event title* • *Date and time* • *Location* • *Main technologies that will be presented*
Constraints	*Are there any restrictions in the number of people that can/might be invited (if it's a closed demonstration, open to external participants, members of some organizations, etc.)*
Planned stakeholders' groups	*Please indicate the main stakeholders groups that you intend to invite (e.g. Farmers association – XYZ; Advisory…)*
Planned number of attendees	*Please indicate a targeted number of visitors at the event*
What do you want to achieve with this particular demonstration	*Inform the general public, come in the local press, represent my organization, arouse the interest of private capital bodies, …, or actually attract customers for my products, present the solution to a specific target group, etc.*
Dissemination channels envisioned	*Please, indicate through which channels you plan to inform stakeholders about the event (e.g. newsletters of the organization; social media – please indicate accounts; local media, targeted mailing …)*
Potential collaboration with other H2020 projects	*Please indicate main components of your demonstration that can act at as a link to other H2020 projects and initiatives (e.g. Place: vineyard in Austria; Specific audience: young farmers…). We will use this information to select appropriate H2020 project/initiative and to invite representatives to attend.*
Roles and responsibilities	*Please, indicate the organizational team (name and email) – contact points for following topics:* • *Demonstration Activity Main responsible – FIE coordinator* • *Facilitator* • *Presenter/s* • *Communication responsible – for local stakeholders and EU/H2020 stakeholders* *Please, have in mind that one person can be in charge for more than one topic*
Feedback from participants	*Please, indicate topics you would like to be covered by feedback questionnaire. E.g.:* – *Usefulness of presented technologies* – *The functionalities are easy to understand.* – *Suggest solution adjustments to address your needs*

*In case of more than one event, please copy-paste the table as many times as events planned.

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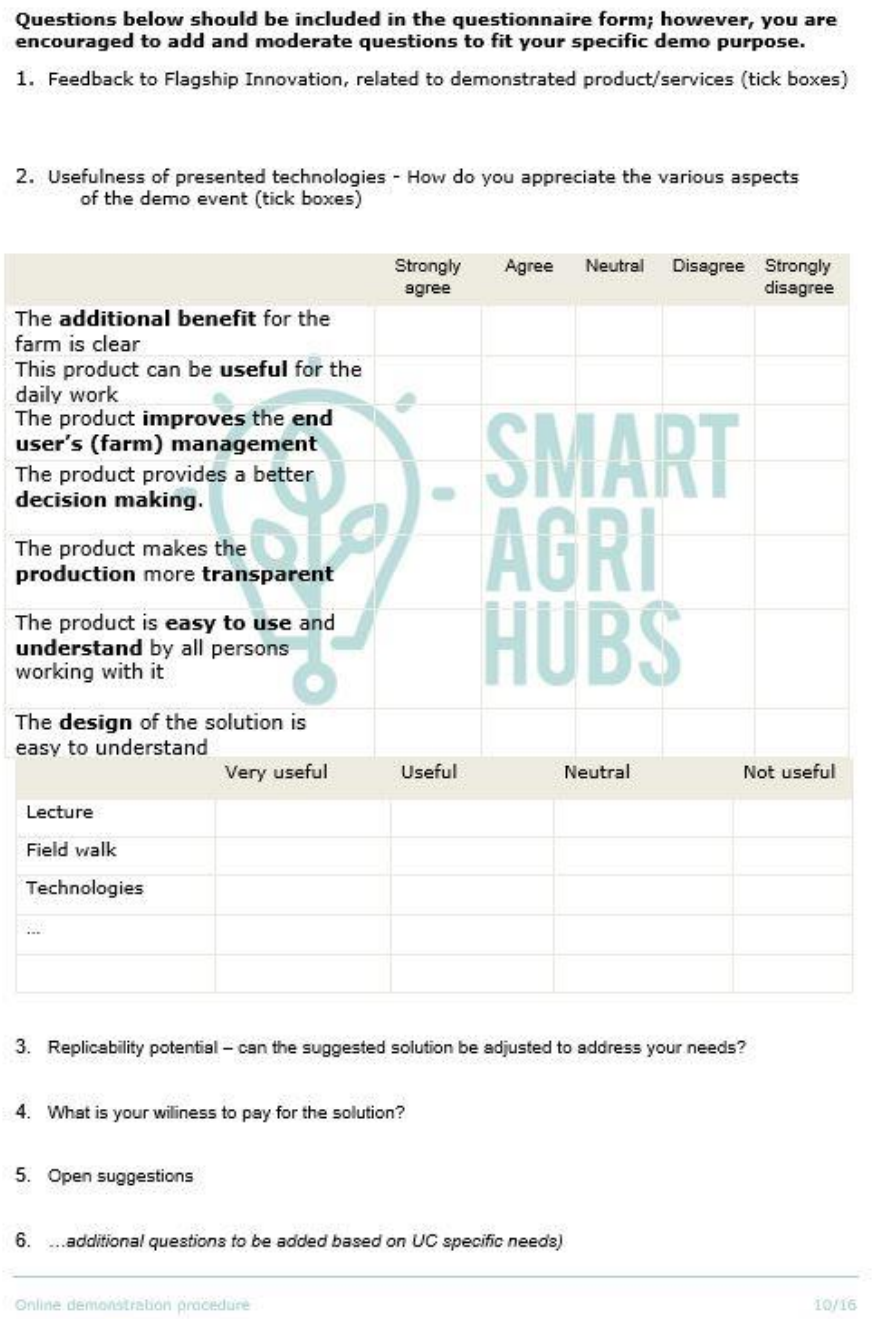
Figure 3 – FIE Annex 1: Demonstration Activity Plan Template – General information about the even

Execution phase: The FIE coordinator is fully responsible for organizational aspect of the event. The Executing phase is supposed to be organized in accordance with the provided Demonstration activity plan.

During the execution phase, the coordinating team distributes the questionnaire to event attendees to collect their feedback on the presented technology (Figure 2). Modifications of the questionnaire are welcomed to fit the specific demo purpose.



Questions below should be included in the questionnaire form; however, you are encouraged to add and moderate questions to fit your specific demo purpose.

1. Feedback to Flagship Innovation, related to demonstrated product/services (tick boxes)

2. Usefulness of presented technologies - How do you appreciate the various aspects of the demo event (tick boxes)

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
The **additional benefit** for the farm is clear					
This product can be **useful** for the daily work					
The product **improves** the **end user's (farm) management**					
The product provides a better **decision making**.					
The product makes the **production** more **transparent**					
The product is **easy to use** and **understand** by all persons working with it					
The **design** of the solution is easy to understand					

	Very useful	Useful	Neutral	Not useful
Lecture				
Field walk				
Technologies				
...				

3. Replicability potential – can the suggested solution be adjusted to address your needs?

4. What is your wiliness to pay for the solution?

5. Open suggestions

6. *...additional questions to be added based on UC specific needs)*

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Figure 4 – FIE Annex 2: Proposed questionnaire for attendees

Performance monitoring (closing) phase: FIE coordinator ensures that event attendees are providing feedback within the Feedback form and delivering its analysis to WP3 after the event. Also, the FIE coordinator is responsible for filling in the Lessons Learned Report (Annex 3 of DAP), (Figure 2), and returning the feedback form to WP3, no later than one month after the event. Pictures and/or screenshots from the event are highly recommended.

Lessons Learnt report		
DA field	**Highlights**	**Attention points**
Presented solution features – observation (based on interaction with attendees)		
Solution presentation (how, what additional material was used, structure of demonstration, etc.)		
Communication with stakeholders		
Target audience and feedback		
Total number of participants (from all target groups):		

Below, please provide a total number of participants per each target group (feel free to add any other relevant target group)

Scientific	Industry	Civil Society	General Public	Policy makers	Media	Investors	Customers	Others

How will you implement feedback you have received form the participants?	

Please include pictures/screenshots from the event – provide a link to Basecamp FIE dedicated folder.

Figure 5 – FIE Annex 3: Lessons Learnt Report

1.1.2 FIE Demonstration activity procedure for ONLINE events

With the outbreak of Covid19 in the first quarter of 2020, a separate procedure and guidelines for organizing and conducting **online demo events** were prepared by WP3 and delivered to the FIEs. During 2020 and 2021, due to Covid19, most European countries were closed for traveling or had strict restrictions on movement, and all of them had numerous bans related to gatherings. These circumstances inhibited the organization of some face-to-face demo events, so WP3 developed a document that provide a step-by-step guide for setting up demonstration webinars.

Demonstration activity procedure for online events defines the role of the **event facilitator** – whose responsibility is to promote the event, arrange and launch the online platform, open the webinar, accommodate the technical support, and ensure a proper follow-up, and the role of the **event presenter** - usually an expert on the subject's matter, who forms and presents the demonstration content of the webinar, and engages the participants through interaction. Every event can have more than one presenter, and in some cases, a single person can be both the facilitator and the

presenter. A list of reliable online facilitation platforms is provided within the document, together with technical and practical recommendations for every phase of the event. Like face-to-face events, webinar organization also have three phases:

- **Preparation phase** – which foresees the selection of the most suitable online platform, creation of adequate timeline, drafting the event's agenda, announcing the event to different stakeholder groups, and, finally, practicing the presentation.
- **Execution phase** – which foresees the testing of the equipment, starting the online event in time (15 minutes ahead), presenting the content clearly, making enough time for Q&A session and interactions with the attendees, recording the event, and closing the session.
- **Follow up** - Thank the stakeholders via email and make an assessment after the webinar as soon as possible - distribute the *Questionnaire for attendees (Annex 2)* and provide links to presentations, recordings, and other relevant reference materials.

Within the execution phase, the presentation of the prepared content is of high significance. DAP also provides guidelines on how to conduct a successful presentation.

Responsibilities regarding the activities within the planning, executing and closing phase are the same as for the face-to-face events.

For planning the demo webinar, the first step is to fill in the Online Demonstration activity plan template (Annex1) and share it with WP3. During the webinar, attendees are expected to fill in the Annex 2 – Questionnaire for attendees, which can be shared via email or as an online form. After the event is conducted, the FIE coordinator fills in Annex 3 – Lessons Learnt report, and sends it to WP3, together with the participant's feedback.

1.1.3 RC procedure for face-to-face and online events

In addition to FIE demo activities, nine Regional Cluster of SAHs project (North East Europe, North West Europe, Central Europe, South East Europe, France, Iberia, Ireland & UK, Italy & Malta, and Scandinavia) are actively involved in presenting SAHs project, RC activities, and FIE results to its network. To facilitate the process and collect valuable feedback from the target groups, **Guidelines for Organization of RC Events** was prepared and customized to RC specific needs (Presented within Annex 1 of this report).

This document provides guidelines for organizing, conducting, participating at, and reporting online and face-to-face events within the course of the project. Taking into account the ongoing COVID-19 pandemic and diverse measures in force in Europe, including bans or limitations for gatherings (events and demonstrations), some RCs were unable to organize face-to-face events, so they needed to switch to online modalities.

The first part of the document includes information on how to present and organize an event - step by step guide, while the second part of the document includes mandatory elements to be tackled before, during, and after the event.

Different steps are required when RCs are invited to attend an event as presenters and in the case when they are event organizers. A detailed guide is provided within the RC Event procedure document - Chapter 2. RCs should prepare the presentation

material before the event, and make sure they included all proper logos in the presentation (SAH logo, RC logo, the EU flag, the notice that SAH is funded by EU). All communication-related materials, such as templates, basic elements, movies, postcards, leaflets, etc. are available in Basecamp's dedicated folder, and Innovation Portal Library section. RCs are strongly advised to take pictures or screenshots of the presentation during the event.

Reporting on the event is slightly different for RCs, and it includes:

- Annual reporting – the table (Figure 4), that is the part of the RC Annual report template, should be filled out for each event to which RC have been invited or have organized;
- Continuous reporting to WP3 – the event shall be announced on the Innovation Portal (IP), and Annex 1 distributed to the WP3 representative. Also, Annex 2 (Figure 5) is to be distributed to the WP3 representative no later than one month after the event, together with the analysis of the questionnaires collected from the attendees, in case the questionnaire is facilitated.

RELEVANT EVENTS				
Event title				
Date and place (if online event- platform used)				
Event organizer				
Description				
Number and names of internal (SAH) participants/presenters				
Target audiences	Please indicate the structure of the target audience at the event			
Please provide web link to the event				
Promotional materials used	Please indicate promo materials used during the event/presentation			
Please provide supporting materials	DAP (Annex 1)	(Please insert links to dedicated Basecamp folder)	Lessons learned report (Annex2)	(Please insert links to dedicated Basecamp folder)
Pictures, screenshots, etc.	(Please insert links to dedicated Basecamp folder)			

Figure 6 – Demonstration section from RCs annual progress report template

Lessons Learned report, presented within Annex 2 of the RC event procedure (Figure 6) is a highly important document, since it contains some key elements that can help RCs when analyzing conducted events, thus allowing further improvements. This document is to be delivered to the WP3 representative no later than one month after the event, together with the analysis of the questionnaires collected from the attendees, in case the questionnaire is facilitated.

Topic: **RC:**	*Your answer*
Event overview	*Please, indicate:* • *Event title* • *Date and time* • *Platform* • *Main technologies that will be presented*
Constraints	*Are there any restrictions in the number of people that can/might be invited (if it is a closed online event, open to external participants, members of some organizations, etc.)*
Planned stakeholders' groups	*Please indicate the main stakeholders groups that you intend to invite*
Planned number of attendees	*Please indicate a targeted number of visitors at the event*
What do you want to achieve with this particular demonstration	*Inform the general public, come in the local press, represent RC, represent the project, etc.*
Dissemination channels envisioned	*Please, indicate through which channels you plan to inform stakeholders about the event (e.g. newsletters of the organization; social media – please indicate accounts; local media, targeted mailing, SAH portal …)*
Feedback from participants	*Please, indicate topics you would like to be covered by feedback questionnaire.*

*In case of more than one event, please copy-paste the table as many times as events are planned.

Figure 7 – RC Event procedure Annex 1: General information about the event

Lessons Learnt report		
	Highlights	**Attention points**
Outcome and conclusions form the presentation		
What additional material was used, structure of presentation, etc.		
Target audience and feedback		
Total number of external participants (from all target groups):		
Below, please provide a total number of participants per each target group (feel free to add any other relevant target group)		

Scientific	**Industry**	**Civil Society**	**General Public**	**Policy makers**	**Media**	**Investors**	**Customers**	**Others**

Main observations/ from the communication with target audiences. Opinions form the participants	
Feel free to add any other observations and information	

Figure 8 - RC Event procedure Annex 2: RC Lesson Learned Report

1.2 RESULTS

1.2.1 Demonstration events organised by initial FIEs

This chapter provides an overview of FIE demonstration events conducted between M3-M36 of the project. According to FIEs EP, each FIE is obligated to organize and conduct at least one demonstration event during its lifetime.

1.2.1.1. Conducted demonstration and dissemination activities within the first reporting period (M3-M16)

Within the first reporting period, 17 FIEs have organized 22 demonstration events, while OC FIEs were not the subject of the first reporting period. As DAP was introduced during the second reporting period, between M3 and M16 reporting about conducted demo events was part of the FIE progress report template. Table 1 provides an overview of all demonstration events conducted prior to M17. As COVID-19 outbreaks have happened at the end of the first reporting period, all but one demo event was organized in a face-to-face environment. Events took place mostly on the farms, a couple of demonstrations took place during the fairs and within FIE facilities. Solutions/services were presented to farmers as the primary target group, but also to researchers, technicians, SMEs, the agriculture food industry, etc.

During the first reporting period, 68% or 109 (out of 160) **dissemination and exploitation activities** were performed as live events, including presentations, workshops, seminars, trade fairs, and meetings. Besides farmers, as the predominant presented target group, events were also presented by representatives of media, industry, science institutions, and citizens. In general statistics, one-half of all visitors were potential customers and the other half were previously mentioned representatives.

Online dissemination and exploitation activities take around 36% of all activities implemented, which includes published material in electronic and paper forms like leaflets, posters, brochures, and booklets. Printed promotional material was distributed during live events, while electronic forms were used for social networks, websites, and electronic distribution. Facebook, Twitter, and LinkedIn are the most common social media channels used for dissemination purposes as well as organizations' and partners' websites.

1.2.1.2 Conducted demonstration and dissemination activities within the current reporting period (M17-M36)

As expected, the Covid19 pandemic had a strong impact on the demonstration plans of each FIE. Strict measures and lockdowns in Europe during 2020 completely changed the approach of demonstrating FIE products/solutions and their interaction with the interested audiences. The majority of reported demonstration events were conducted virtually, and those which were conducted as face-to-face events had constraints regarding the number of participants.

Within the current reporting period (March 2020 - October 2021), 42 demonstrations were conducted by 21 FIE, both as online and face-to-face events. This number includes all events during which the FIEs' specific results were presented and specific FIE solutions were demonstrated in front of the various target audiences. Out of 39 events, 23 were conducted in an online environment, and 19 were conducted as face-to-face events. Demonstrations were supported by local DIHs, such as Teagasc, Digifermes, DATAlife DIH, Clust-ER Agrifood, Gaiasense DIH, and different organizations, such as Farmers Parliament of Latvia, Danish technological Institute, The Agriculture Chamber of Pays de la Loire, etc. Both online and offline events were organized as interactive, with different interactivity aspects, such as Q&A sessions, experience exchange sessions with experts in the field, live testing of the application

features, field tours, demonstration of the real-time visualization of drone filming on a projector screen, live presentation of spraying machine spraying the field, etc. The interactivity aspect of the event largely depends on the environment and available tools; online events used presentations and video material to demonstrate the solution and provide topics for discussion sessions afterward, while face-to-face events were mostly conducted on fields and in farms, which allowed participants to be more engaged.

FIE7 and FIE8 established good cooperation with Horizon2020 project **NEFERTITI**, whose main objective is to establish an EU-wide, highly connected network of demonstration and pilot farms, designed to enhance knowledge exchanges, cross-fertilization among actors, and efficient innovation uptake in the farming sector. They participated in the Les Culturales event together, demonstrating the innovations and presenting both SmartAgriHubs and NEFERTITI projects at the Arvalis European projects booth.

Out of eight FIEs that did not conduct demo events within the current reporting period, six have reported that they are planning demonstrations during the third reporting period, within Task 3 of the FIE execution plan (From November 2021). FIE8 did participate at Les Culturales, together with FIE7, but haven't organized or conduced any events within the current reporting period. FIE6 is structured in a way that is providing support to SMEs, while FIE itself is not a demo event organizer. By the time of this deliverable, FIE10 did not provide any inputs regarding demonstration events.

Within the second reporting period, Covid-19 restrictions had an overall impact on conducted **dissemination and exploitation activities**. This is the main reason why approximately 65,5% of workshops, presentations and meetings were held online. More precisely 120 out of 183 events were organised as online events. A significant part of promo and marketing activities are performed via social media networks (Twitter, Facebook, and LinkedIn). In most cases, organizational websites are also used as means of communication towards interested target groups regarding new achievements. Due to Covid-19, this period was not characterised by many opportunities for open discussions with citizens and other interested groups. Printed and promo material was also reduced to a minimum, the main communication was in an online form. Less than 35% of all activities were performed in the face-to-face environment. Within these several face-to-face events, the main target groups were farmers but also researchers and the industry.

1.2.1.2 Target audiences

In general, target audiences reached during demo events, were scientists, engineers and researchers in the agri-food domain, agro-technology companies, farmers and farm managers, beekeepers, agricultural suppliers, dairy professionals, advisors, value chain stakeholders, and policymakers.

It was expected that online events would attract more audiences, given that such events could be attended from anywhere on the planet. **About 1200 individuals attended reported online events**, including media representatives, national experts in the field of agri-food and IT, students, government representatives and the general public.

On the other hand, **face-to-face demonstrations involved more than 400 people**, despite all Covid-19 restrictions. All on-farm or on-field demos were conducted with a high level of respect for the declared protection measures. Participants were farmers and people working in the cereals sector, dairy farmers and farm advisors, students and researchers in environmental technologies, beekeepers, legislators and decision makers, representatives firm public institutions, members of the Farmers Parliament of Latvia, representatives of the irrigation community, aquaculture operators (technicians, students), NEFERTITI partners.

Finally, physical, and online demonstration events (including open days, co-organized webinars, and different online trainings) organized by all initial FIEs, **have gathered more than 1600 people**, interested in presented solutions.

1.2.1.3 Promotional channels

To attract as many participants as possible, and reach all relevant stakeholders, FIEs used different channels to announce and promote planned events. Besides the event announcement within the events section of SAHs IP, usually one or two months in advance, the most frequently used channel for inviting participants was via direct email communication – email invitations in a form of a newsletter were sent to different stakeholders and organizations of special interest. To a wider audience, both online and offline events were promoted through different online channels, such as social networks (Twitter, Facebook groups, and LinkedIn were heavily used for posting and reposting relevant news and announcements), news portals dedicated to agriculture and rural development (Ypaithros), promo banners on home pages of the relevant institution (Chamber of Agriculture of Lower Saxony). Some FIEs would also include promotional banners as part of their electronic (email) signature.

Different promotional materials were used during events, in order to attract the attention of the attendees, such as posters and roll-up banners. Pens, keychains, and notebooks, branded with the SAH project logo, were distributed to the attendees of some face-to-face events, as tokens of gratitude for the participation.

1.2.1.4 Lessons learned (M3-36)

From the project beginning until M36, valuable lessons were learned regarding FIE **solutions' market readiness status**, or the solution/service already on the market but which required further improvement. FIEs 1 and 4 reported that more data, which is flowing into the project, needs to be validated and linked to the final production results, and that clearer economic analysis has to be done before taking the new technology out in the market. FIE14 learned about their prototype attention points, such as the lateral movement mechanism of the mower and automatic turning manoeuvres, and will make improvements based on the feedback from the participants.

The majority of FIEs reported important lessons learned regarding **farmers' behavior** and readiness to use innovative technologies. In most cases, end-users (farmers) show interest in new technology and are looking for solutions to help them with decision-making processes (by estimating field losses, giving irrigation recommen-

dations, etc), in order to increase profit and improve production. However, FIE4 reported that many farmers who already have machinery with GPS features, don't use it simply because they don't know-how. This means that education of farmers on new technologies, both the benefits and how it is used, is necessary. Once farmers are familiar with the innovation and are not afraid of it, they will be more than happy to implement it. FIE25 learned that this period of social distancing helped to unlock farmers' use of computers, email and web meetings. This is a very important factor that will surely help not only the dissemination of results in the future but will also ensure an easier approach to technologies such as those of precision agriculture. FIE28 learned that blockchain-enabled solutions, like the automated dairy payments application, are very interesting for the dairy sector, but it takes a lot of exploration and research before companies are ready to implement them.

Many lessons were learned about the **difference between live and virtual demonstrations**, and the participants' interest during both. FIE16 learned about the importance of live presentation, as the equipment itself (drones) attracts the attention of the participants, much more than watching drones fly in an online video. For FIE23 it was difficult to conduct an online workshop for a group of people with different backgrounds and different levels of familiarity of the subject topic and expertise with ICT solutions. FIE26 reported that attendees' interest and engagement were much stronger during the practical demonstration of the tool, rather than the general presentation of the system. Therefore, practical-focused demonstrations of the solutions seem to be more efficient when engaging direct end-user / target groups such as farmers and cooperative managers. In the case of live (on-field) demonstrations, it is important to consider open field climate conditions while planning the event. Also, many FIEs learned that direct invitations are the best way to ensure the target audience at the event, rather than viral invitations and announcements.

1.2.1.5 Participant's feedback (M3-36)

The collection of participants' feedback is one of the aims of the demonstration event, as it presents a useful overview of potential improvements of the solution. The majority of FIEs reported that participants perceived a demonstration event as an opportunity to be in direct communication with development companies while being able to explain in more detail their concrete needs and issues they are facing. FIE1 reported that **participants expressed great interest** in including animal body condition score and lameness detection as additional measures of on-farm sustainability. The farmers were very positive and looking forward to seeing the results of the project and ways for each of them to individually improve the sustainability of their farms. FIE6 however reported interesting feedback that farmers finally felt included in what they usually perceive as the "innovation world of agriculture", something they usually tend to perceive as a distant world disconnected from their needs. The possibility to contribute to the construction of future digital solutions was seen as a great opportunity. FIE16 received very positive feedback and farmers showed great interest in the services presented since the live show draws the attention of the audience who asked many practical questions. Most of the participants agreed that demonstrated solution provided them with additional benefits, useful within their food production work. Attenders also reported that the solution is easy to use and easy to understand. Collected feedback helped FIE6 understand that there is a

lot of work to be done in order to improve the knowledge of farmers and their understanding of benefits by using services with drones. For example, farmers don't see that there is a correlation between the damage caused by the European grouse and the occurrence of fungal diseases on the flasks and the solution can provide pest control with the use of drones. For FIE19, participants' feedback was highly valuable in terms of assessing:

- data editing: most users are satisfied, but there is a need to work on detail improvements in data editing interfaces,
- data representation: table layout is significantly more popular than box table layout,
- map composition content: availability of forest data and visibility of nearby apiary locations to be included,
- data sharing: most users are not ready to share their apiary location in public, but would share it with other users who shares their locations,
- problems in system usage: login and access - which puts a priority on solving these issues in the next development iteration,

It is reported that most users would like to see native mobile apps and if possible mobile apps with online-offline data synchronization functionality. Also, beekeepers, in this particular case, stated that they prefer e-mail communication or direct call to support, and Q&A in the system is less interesting for them.

FIE20 noted that the explanatory materials (such as video tutorials, descriptions, etc.) are of high importance, considering that the level of new ICT usage in farms is not very extensive. Many attendees have stated that the way information is presented within the solution, is not convenient nor transparent and suggested adding explanations, representing data with bigger letters, in a different order, changing the names and removing unnecessary sensors, fixing the problem with timestamp data, making sensor data to work daily or remove if it's not possible, and showing the mean, maximum, and minimum values of the data. In addition, feedback indicated that the least interesting analysis type is crop climate risk monitoring and forecast, but most likely one of the reasons is the resulting graph which is not simple and requires some time to go into this analysis to understand the result and be able to apply this knowledge and data. It was also reported by FIE20 that farmers were rather sceptical of the solution offered by FIE at the beginning of the project while finding framers to test the solution was rather a challenge. However, with the success of FIE20 within the "FAO-ITU Call for Good practices in the field of digital agriculture in Europe and Central Asia" this has changed. In mid-March 2021 the solution was selected as one of 360 projects to the WSIS Prizes 2021 from the total of 1270 submitted proposals, farmers and organisations became much more interested in the solution, which lead to new contacts and business opportunities for FIE20.

FIE24 reported that all participants were very satisfied with the demonstration of activities. In particular, at the end of the FIEs demo event, they were able to operate the technology. As for data interpretation and understanding, different levels of learning, depending on the age of attendees (easier for younger people) were noted. All feedback received by participants, in particular those regarding the use of the app, were taken into consideration to improve the app itself. As an example, app charts (where data are presented) were simplified with the introduction of more specific information, e.g., on the meaning of the title of axes in the charts, etc. The developed system could be implemented by adding more information on environmental water quality parameters to sensitize fish farmers to the protection of the

marine and coastal environment. During the FIE25's demonstration event, more precisely - during the Q&A session, many farmers pointed out how difficult it is today to adopt precision farming techniques when using over-complex technologies. For this reason, the ECS sensor was received with good interest for its simplicity. FIE26 collected very valuable feedback from the participants who were unanimous in their opinion that it would be very useful to organize a face-to-face demonstration case, live in the field, in order to see practically how the smart farming system works. The project's result, which is to grow farm yield while improving resource efficiency, was considered as important and valuable, especially when taking into consideration the rapid advancements of technology in combination with the new Common Agricultural Policy directives that are climate protection and "producing more using less". Finally, this FIE reported that the feedback will help them to:

1. Improve the Smart Farming Solution services in order to be able to address the individual needs of the potential end-user.

2. Better disseminate and communicate our results in order to effectively inform the general public about Smart Farming Solution services" potential in the agri-food/tech sector.

1.2.2 Open call IEs

This chapter will showcase the results of demo activities from RESPOND, RESTART and EXPAND Open Calls, conducted within the current reporting period.

1.2.2.1 RESPOND Conducted demonstrations

Due to the specific structure of the **RESPOND1 - DIHs** OC, which focus was on the organisation and realisation of hackathon type of activities, none of the 13 DIHs have conducted demonstration event. Subject of this OC were hackathons, focused challenges, and datathons.
Beneficiaries of the **RESPOND2 - SME** Open Call are eight SMEs, proposing solutions that will respond to the effects of the COVID-19 crisis.
During the current reporting period, each DIH participating in the RESPOND1 - DIH OC have organized and conducted hackathons and challenges, which lasted for several days, or even weeks. The following table will present all **13 hackathon type activities**, implemented by participating DIHs, within this reporting period. Projects from the both Respond OCs are presented within D3.2-2, while their results are presented within D3.4-2.

Event name	Event organizer
HACK4FOOD | TO FEED THE FUTURE [H4F]	DIH - Innovacoop

StrengthAgriChain	DIH CONSORTIUM: DIH-ITK Andalucia Agrotech DIH Polo of Digital contents of Malaga
AgrIsland Hackathon	CIDIHUB – Canary Islands Digital Innovation Hub
LL2FRESH	COTHN-CC – DIH INESTEC - CC
HACK'20	AgriFood Lithuania DIH
COVID-19 INSPIRE Hackathon 2020 - Plan4All	Plan4all (NGO) Czech Centre for Science and Society (an independent, non-profit association of legal entities)
Food Log Proximity	Agri Sud-Ouest Innovation (DIH) Digital 113 We4log
RADAR - Resilience through automation and digital acceleration in response to Covid 19	Agri-EPI Centre, DIH
FARM2FORK HACK	ITC – Innovation Technology Cluster DIH Agrifood
Hack72h - The cre'active marathon to find solutions to local food chain problems emerging from the COVID-19 crisis	CRAPDL – DIH and CC, public body
RO AgriFood Hacking – HAR 2020	DIH - Asociatia Pentru Promovarea Alimentului Romanesc – APAR
FarmHack: F:IGHT against Corona	Innovate GmbH

3F: The Future of Farm to Fork – digital solutions for short food chains	Innovate GmbH

Table 1 - Conducted events: RESPOND OC

1.2.2.2 RESTART Conducted demonstrations

RESTART open call is focused on hackathon type of activities as well, but on ones that will RESTART the economy around the agri-food related sectors and affected food systems. Its objective is to generate ideas for potential IEs that can be realised by related teams and that go beyond initial conceptual implementations. At the time of the deliverable submission, one IE is finalised, and its only type of demo event is presented below. The subject of the remaining four IEs that are currently being implemented are hackathon-type events, that are yet to be conducted.

1.2.2.3 EXPAND Conducted demonstrations

EXPAND open call is focused on the implementation of programs by DIHs to support the realization of IEs. This call specifically contributes to the expansion of the network of DIHs and Competence Centres (CCs) as well as making new knowledge and results from digital innovation activities available. **Only one out of three** IEs resulting from this open call conducted a live demonstration event, while others are expected to organize such events in the upcoming period. Additional two FIEs under this OC are implemented at the time of the deliverable submission but are in the early stage of implementation. Both IEs will conduct a demo event in the upcoming period. More details can be found in the following table:

Within the current reporting period, Covid-19 restrictions had an overall impact on conducted **dissemination and exploitation activities**. All IEs, resulting from Open Calls, implemented about 25 disseminations activities, mostly performed via social media networks (Twitter, Facebook, and LinkedIn). In most cases, organizational websites are also used as means of communication towards interested target groups regarding new achievements.

1.2.2.4 Target audience

Due to the different structure of conducted events within all open call experiments, different audiences were targeted and attracted. Hackathons and challenges, organized and implemented by RESPOND OC experiments were mainly targeting solution providers, such as technology students and companies, and experts in the field, in order to gather relevant actors to share knowledge and brainstorm together. RESTART OC experiment "ON:E Agrar" conducted a dedicated event, involving only shareholders of the German AgriFood Society, while EXPAND OC experiment "WIN-WIN-WIN" demonstrated AVR harvester to the actual end-users: farmers and different industry representatives.

1.2.2.5 Promotional channels

In order to announce and promote planned events, OC IEs heavily used digital channels, such as SAH IP, projects' social networks and other relevant industry news portals. After the events are implemented, the same channels were used to disseminate events results, which was of great value for hackathon winners, as their winning solutions received a lot of online attention.

1.2.2.6 Lessons learned

IEs which resulted from the RESPOND open call reported important lessons learned during the hackathon and challenge events organization and implementation, which are related to the communication flow between project partners and event participants. They all highlighted the importance of continuous communication with all stakeholders, flexibility and willingness to assist in different situations, as the first condition that must be met for the event to be successful. Another common lesson is related to the importance of planning and preparatory activities, which will ensure the smooth implementation of the event. Unforeseen risks and obstacles can create major issues in the predicted timeline, so it is very important to think ahead. Also, it was learned that the dissemination phase must start long before the challenge begins, as people need some time to comprehend the information and prepare their presentations. An important lesson learned by all experiments is that DIH plays a key facilitation role in IE, and that different community building sessions and Peer Exchanges, organised by SAH, are key for the exchange of knowledge.

IE "ON:E Agrar" reported a valuable lesson related to a strategic approach, resulting in a quick increment of viewers. Namely, they have learned that well-known interview partners are a crucial element to increasing the number of viewers, as their popularity will result in further mobilization of new followers. This experiment highlighted the fact that one registration for all events is a very handy option since attendees will not be requested to go through the registration process every time they want to participate in an event.

1.2.2.7 Participant's feedback

In general, feedback collected from the participants of all conducted events was more than satisfying. The majority of attendees were impressed by the ideas and technological solutions which were presented and demonstrated.

During the demonstration event of "ON:E Agrar" platform, board members stated that they are happy to be able to bundle their event activities on the platform, and thus have a long-term relationship with their attendees. They also recognized the synergy effects and synergy potential of the platform as soon as a critical mass of viewers is reached. The majority of attendees agreed that the design of the solution is easy to understand, and the added benefit for society is clear. Also, most of the participants strongly agreed that the presented solution can be very useful for the daily work, that improves the end societies management, and that it is easy to use and understand by all persons working with it. However, the majority of participants were neutral when it comes to the question if the solution is providing better decision-making or more transparent production.

1.2.3 Regional Clusters

Each RC represents a group of agricultural Digital Innovation Hubs, Competence Centres and Innovation Experiments. RC are led by organisations that are closely related to national or regional digitisation initiatives and funds. SmartAgriHubs has nine RC spread across Europe.

1.2.3.1 Conducted and attended events

Information on attended and organized events within the first reporting period is provided within D3.4-1, so this information will not be repeated here. In comparison to the first reporting period during which RCs have reported on approximately 113 events, the second reporting period is characterized by much fewer events. RCs have reported on **55 different types of events**, with the uprose to promote and demonstrate projects' results. 48 events were held online, while seven were organised as face-to-face events. The main reason behind this drop in numbers can be assigned to the Covid-19 effect, since large gatherings and fairs within which RCs have mostly promoted the project, during the first reporting period, were cancelled.

1.2.3.2 Target audience

All 55 events, presented in the previous chapter, gathered over 1500 individuals from different fields. CCs, DIHs, StartUps, SMEs, Research Facilities, Accelerators were present at the majority of events, together with policymakers, industry representatives, and scientists. In more detail, participants were European scientific researchers, farmers, AgTech private companies, stakeholders from local agrifood hubs, operators from the fishing sector, stakeholders of the viticulture sector, IT experts, machine and farm equipment manufacturers, and educators.

1.2.3.3 Promotional channels

In order to promote events, RC used SAH IP as the main communication channel. All events were promoted through the social networks of the SAHs project, reaching a wider audience. Many RCs used direct communication channels, such as emails and direct messages, to promote organized events and invite participants, as individual invitations are more efficient than general ones.

1.2.3.4 Lessons learned

During the events, interaction with the audience had an educational impact on event organizers, so many important lessons were learned by RC. RC France reported that the Region may pursue AgriFarmLab, supporting it financially, which shows that the whole process, and frequent updates to the public and the elected officials were convincing. Cluster learned that a better way to communicate on events must be implemented, in order to attract more people from more different regions. RC Central Europe learned that different speakers at the event ensure variety, and video presentations of the robotic challenge, site-specific maize seeding and site-specific fawn saving, are good attention attractors. Also, targeted invitations (direct mailing, database of addresses - SMEs, farms, agro companies, universities, etc), are highly recommended, as the general audience is difficult to attract. RC North West Europe

reported a valuable lesson related to DIHs and CCs reputation. Namely, presenting success stories from DIHs and CCs is helpful to convince other stakeholders, as several companies registered as DIH and CC after the event. RC North East Europe reported that conducted events will "help" or "advise" to shape the priorities for distribution of national subsidies and funding, particularly for the national recovery plan. There were some interesting discussions about ways to strengthen the agricultural innovation ecosystem in Poland, where the deputy director of PSNC (RC-co leader) was a panellist together with the director of PIMR (FIE18). RC South East Europe learned that the demonstration in an online format, using videos and real-time demonstration of tools is more efficient than just presenting the solutions. Discussions focused on the priorities of participants, regarding the usefulness, practicality, capacity for scale-up and affordability of presented solutions. The Innovation Portal and social media of SAH prove to be very effective means for communication of events. Additionally, the creation of social media events is very helpful for promotion. RC Iberia reported that European DIHs are not really interested in getting to know nor meeting other DIHs, at least the Iberian ones. It is really difficult to get European DIHs. It has to be done through RCs or as an event or post in the forum in the Innovation portal. It would be very useful to have an automatic distribution of new events in the portal to target groups, such as DIHs. RC Ireland & UK learned that supply chain issues are topical at present because of Brexit, but it’s a perfect opportunity to run some experiments around supply chain tech to solve issues. RC is now experimenting with a lightweight 6-week accelerator that could help to connect the SAH community with similar organizations in other jurisdictions, to help our collective ecosystem scale. RC Italy & Malta reported an important lesson about Q&A sessions at the events and highlighted them as essential for successful communication. It is important to leave sufficient time for Q&A, above all when presenting practical solutions, as the audience is more engaged and more likely to ask questions.

1.2.3.5 Participant’s feedback

Feedback from the participants is the most reliable indicator of the success of an event. RC Central Europe gathered some valuable feedback on how to improve the event itself, and participants stated that they would make the program better by explaining in more detail what are the differences between Agri hub / agro innovation lab, describing one use case in detail instead of presenting several use cases, giving more concrete examples, and most importantly, by sharing the presentation slides after the meeting. Also, many participants would appreciate the networking session after the webinar. Still, the majority of participants stated that events were highly helpful in terms of introducing cooperation and funding options, such as SAH open calls, and a better understanding of how the innovation farms are organized. Additionally, participants were pleased with the information about GDPR applied to AgriData that was presented. RC North-East Europe received useful feedback from the participants, mainly related to the role of drones and other IoT technologies in modern agriculture. Farmers, of small/medium farms, are willing to start adopting and testing innovations, e.g., drones from FIE16, especially if they are provided for free/low cost in a service mode, instead of needing to invest in buying the equipment and expertise themselves. Many participants stated that agriculture-focused cloud infrastructure, work with drones, and nutrient management are the technologies they would be interested in testing. Also, further support from DIH Agro Poland/DIH Agro Polska (Poland) is more than welcome for all attendees. Some participants suggested it would be great to provide some event leading to collective testing, taking soil samples, introducing innovations for organic farmers, training sessions. RC Ireland & UK prepared a good overview of the open calls, with a focus on the PREPARE

call. Excellent examples of benefits of the Agricultural Technology Navigator (ATN) tool were part of the presentation, but participants highlighted that there should have been more examples of the ATN tool itself (different examples – e.g. system, competence and company). In addition, a live demo of the first wave of the DIH exchange program would be helpful for attendees.

In general, all conducted events were rated as very helpful and informative, covering highly interesting topics. Participants are satisfied if they can learn from experts during the events and feel more comfortable with innovative technologies if they are presented and demonstrated in detail, preferably through different practical examples (use cases).

CHAPTER 2: USER ACCEPTANCE TESTING

2.1 INTRODUCTION

To ensure better market accessibility, WP3 developed a User Acceptance Test, as a tool to increase user acceptance of digital products and solutions, offered by FIEs. In most cases, UAT is one of the last steps before the product or solution enters the market, but within the SAH project, the test was also used for technology users' feedback collection and identification of potential acceptance problems during the product development cycle.

A separate UAT was prepared for participating farms and companies. By the time of the deliverable submission, 28 farms and eight companies from 16 FIEs have provided their answers. Two online Google Forms have been used as a collecting tool. Unfortunately, the reliability of this software has been called into question. Namely, eight responses received from SMEs were permanently lost. Google support was contacted, but until the time of the report submission, it failed to identify the problem and recover the data. These eight responses were assigned to five FIEs.

FIEs that did not provide feedback to the UAT will be presented at the end of the third reporting period. Collected feedback is presented in the next chapter.

The survey was created by WP3 and sent to FIE partners testing the solution/service by FIE coordinators in the form of an online questionnaire. The questionnaires, presented within Annex 3, included a set of fill-in and multiple-choice questions, including:

- General information about the respondent, including the name of the SAH FIE it refers to, name of the solution,
- Specifics of the respondent farm, including the name of the test farm, name of the respondent, city and the country of the farm, email address and job position,
- Personal information, including age, gender, and education level of the respondent,
- Farm specifics, such as farm focus (i.e., arable, dairy, aquaculture, fruit, vegetables, etc.), farmed area, number of employees, and if the farm already uses or is planning to use the proposed solution,

- The usefulness of the product section includes different statements regarding the solution, with boxes for checking if the respondent agrees or disagrees with the proposed statements, such as if the additional benefit of the product/solution of our FIE for the farm is clear if the product/solution can reduce working time if the product/solution clearly provides a more accurate decision making if the application of the product/solution contributes to realizing societal goals,
- Naming three most important features of the product/solution, the three least interesting features of the product/solution, assessment of the product's ease of use (i.e., is it easy to install and understand, if the workflow of the solution is logical, etc), naming three most important reasons for using and not the product/solution,
- Information about technical quality and infrastructure – if the farm has all necessary infrastructure to install the product/solution, if the product/solution is interoperable with all existing digital solutions and machines on the farm if the farm struggles with an internet connection, GSM network availability, mobile coverage, etc.,
- Assessment of digital solution in general – if the respondent can repair and maintain digital solutions without external support, if the product/solution seems reliable, if the respondent understands which data is being collected by the digital solution and who has access to it, how much would the respondent pay for the product/solution,
- Assessment of cost-efficiency and feasibility include statements about increasing farms productivity and profits, reducing costs, recommending the solution to colleagues, which should be marked as strongly agree, agree, neutral, disagree, or strongly disagree. This section also includes fill-in questions, such as: Why does the product/solution of our FIE increase your farm productivity? Why DOESN'T the product/solution of our FIE increase your farm productivity? Why does the product/solution of our FIE increase your profit? Why DOESN'T the product/solution of our FIE increase your profit? Why does the product/solution of our FIE reduce your costs? Why DOESN'T the product/solution of our FIE reduce your costs? Why is the price/quality ratio of the product/solution of our FIE fair? Why ISN'T the price/quality ratio of the product/solution of our FIE fair? Why would you recommend the product/solution of our FIE to your neighbours and fellow farmers? Why WOULDN'T you recommend the product/solution of our FIE to your neighbours and fellow farmers?

2.2 RESULTS

This chapter provides summary and analysis of gathered responses, per FIE. Personal data of the individuals that participated in the survey, such as names, email and physical addresses will not be revealed in this document. 11 FIEs conducted UAT survey, providing valuable feedback on tested solutions, from 28 farms in total.

User Acceptance Test for farms

This is the public version of the deliverable. The confidential version contains more details regarding the User Acceptance Tests for farms.

FIE13

Within FIE 13, two respondents provided their feedback regarding the tested solution. Both farms are located in Belgium and have conducted testing activities for sensor networks.

Since both respondents are already using the solution within their daily work, they provided feedback on usefulness, and both agreed that the additional benefit of the solution for the farm is clear, that the solution clearly provides a more accurate decision making, and that it offers more benefits than the current practice. Both respondents believe that applying the solution fosters public acceptance of farming, as it helps to inform consumers about the production process of their food, and both strongly agree on the statement that the solution contributes to realizing societal goals, such as making farming more environmentally friendly. However, they were both neutral about the solution reducing overall working time. (Figure 9).

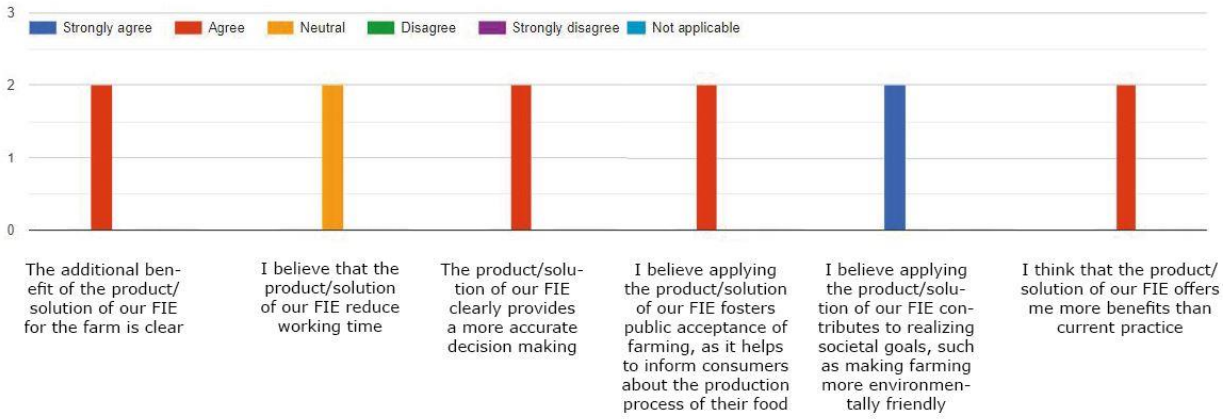


Figure 9 - FIE13: Usefulness of the product/solution

The animal production farm found the amount and accuracy of the acquirable information, plug-and-play functionality and data accessibility as the three most important features of the solution, and ILVOs dairy farm researcher found indications of hot spots with insufficient air renewal rate, better control of wind screens, and historical data showing the long-term effect of certain management choices as most valuable features for their daily work. As the least interesting features of the solution, both researchers reported none.

When it comes to assessing the ease of the solution's use, respondents have different experiences, since ILVO disagreed with the statement that the solution is easy to install, while Varkenscampus farm had no difficulties with the installation. Also, ILVO reported difficulties with accessing the solution on a mobile device and was neutral if the solution is easy to use and understand by all persons working with it. Both respondents agreed that the design of the solution is easy to understand, that the workflow of the solution is logical and delivers the result with few clicks and that support service and guarantees are provided in case of malfunction. One respondent

agreed that the use of the solution requires special (ICT) expertise, and the other one was neutral in this case (Figure 10).

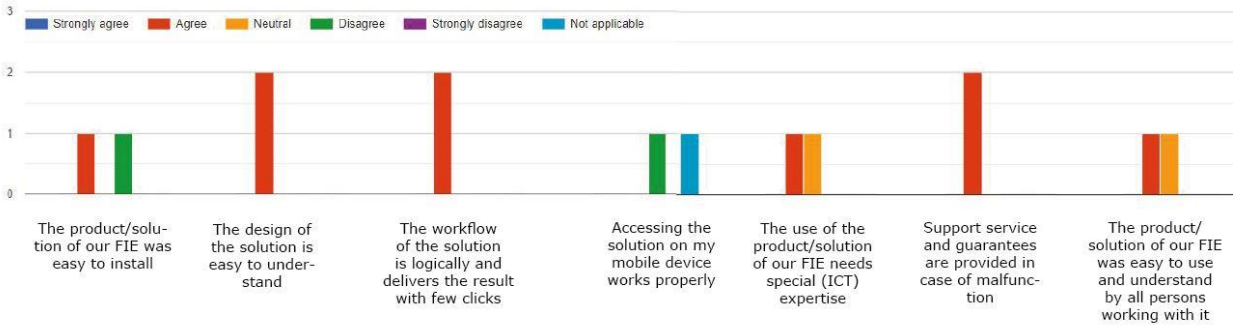


Figure 10 - FIE13: Ease of use

As complex features, (in-depth) adjustment of the sensor parameters was noted. As three most important reasons for using the solution, animal production farm mentioned keeping the barn environment healthy and safe, performing indoor-climate and emission related research, and the fact it is portable, while dairy farm named continuous climate monitoring, better climate control, and future proofing the barn in case of future emission legislation. On the other hand, as the three most important reasons for NOT using the solutions, both farms mentioned insufficient ability to determine absolute NH3 concentration, and cost, while animal farm added the insufficient waterproof rating as another reason.

When it comes to technical quality, both respondents agreed that their farms already have all the necessary infrastructure for implementing the solution but were neutral/disagreed that the solution is interoperable with all existing digital solutions and machines on the farm (Figure 11).

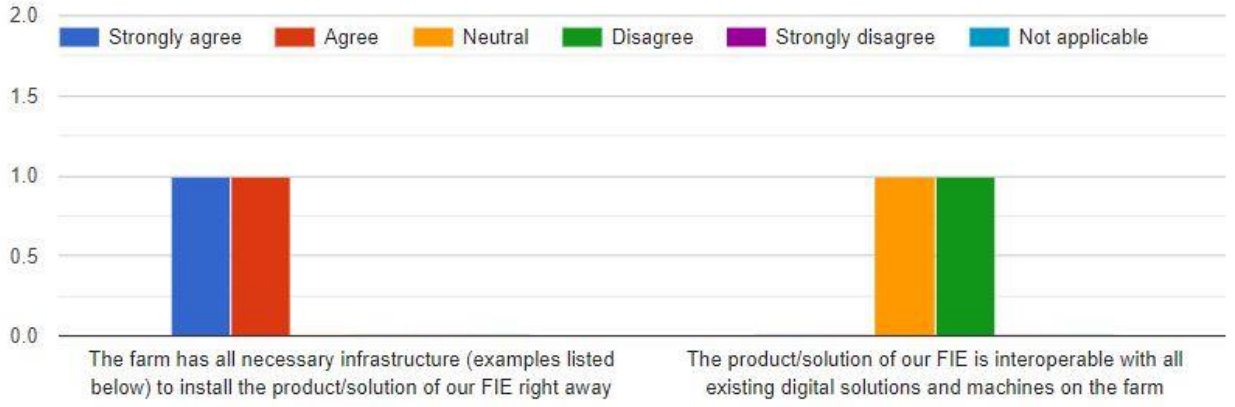


Figure 11 - FIE13: Technical quality and infrastructure

As the main obstacles in operating with the solution on the farm, both respondents mentioned the absence of connection between data receiver and data transmitter, weakness of product batteries, and the fact that WSN does not always automatically

recover after power or internet interruption. Also, some locations are difficult to reach in order to place sensor nodes (Figure 12).

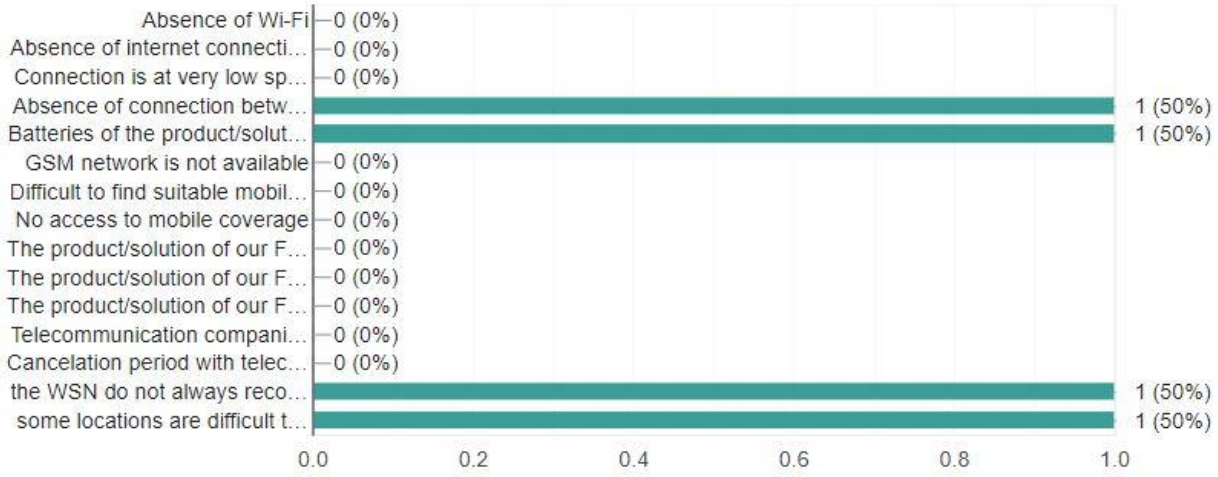


Figure 12 - FIE13: Issues which hinder the product/solution application in the farm

When assessing the general application of digital solutions, both respondents agreed that it is important to know the experience of fellow farmers about digital solutions, that are confident about using the digital solution, that it is clear which data is being collected by the digital solution and who has access to it, and that by using the digital solution, they still have the feeling that they are in charge of the farm operation (Figure 13).

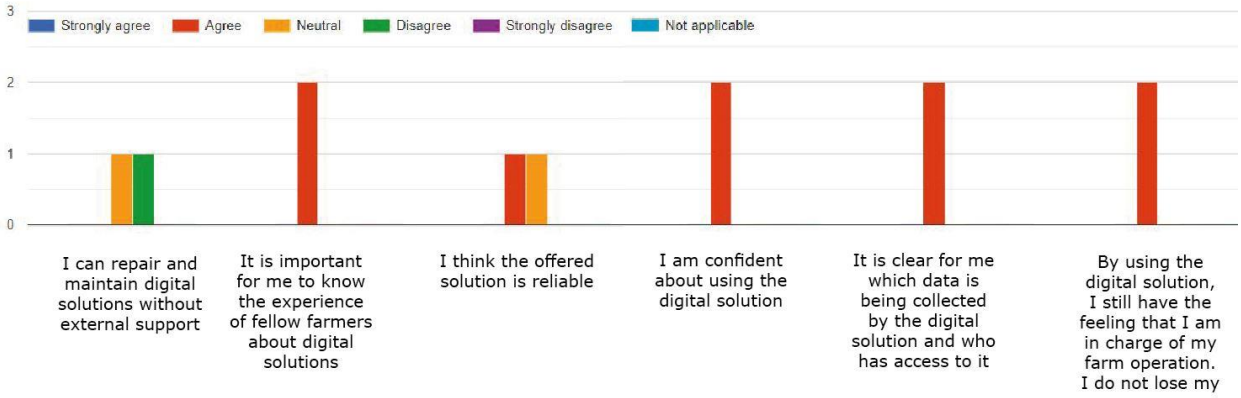


Figure 13 - FIE13: Application of digital solutions in general

Some interesting feedback was gained on the cost efficiency of the solution, namely one respondent disagreed with the statement that using the solution can increase farms productivity and profit, while recusing production costs, while the other respondent marked those statements as "not applicable". However, they both agreed that they would recommend the solution to neighbours and fellow farmers (Figure 14).

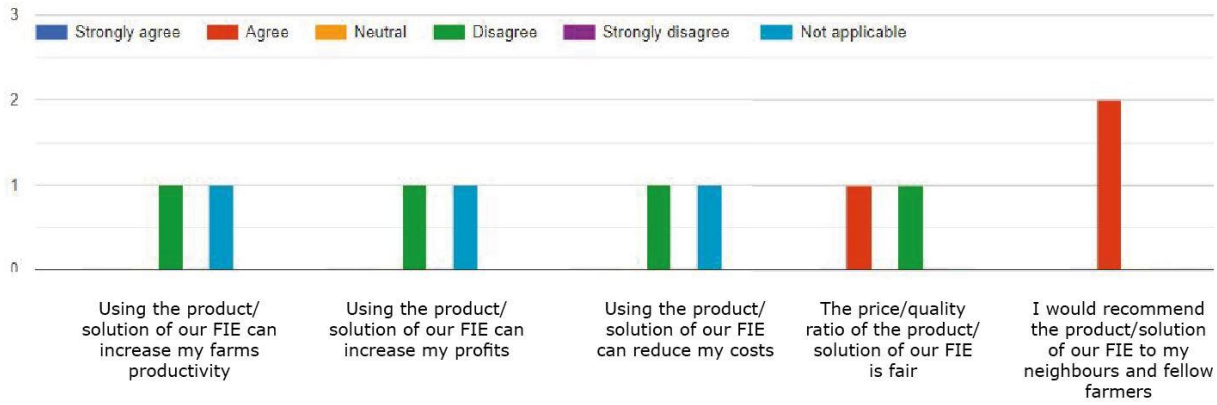


Figure 14 - FIE13: Cost-efficiency and feasibility

Animal farm stated that the effect of the solution is unknown in regard to increasing the farm productivity and profit, as well as the reduction of costs, while dairy farm stated better barn climate can affect the productivity in terms of more better-quality milk, but since the climate in dairy barns is already good in most cases, not much improvement is made with sensor nodes. The price of the solution is rated as fair, since similar products on the market are at the same price range, but the return of the investment must be clear. Both farms would recommend the solution, because it's a handy tool to have a first glance at the barn climate, which may be useful for decisions about renovation and changing management style.

FIE14

When it comes to the usefulness of the solution, respondent agreed that the additional benefit for the farm is clear, believes that applying the solution contributes to realizing societal goals, such as making farming more environmentally friendly, and thinks that the solution offers me more benefits than current practice. Respondent strongly believes that the solution can reduce working time but was neutral about providing a more accurate decision making. The statement "I believe applying the product/solution of our FIE fosters public acceptance of farming, as it helps to inform consumers about the production process of their food" was marked as "not applicable".

As features which are found beneficial for the farm, respondent mentioned working time savings, and possibility to reduce ground pressure.

Respondent agreed that the workflow of the solution is logical and delivers the result with few clicks and that the use of the solution requires special (ICT) expertise. However, the respondent was neutral about the statement that the solution was easy to install and that the design of the solution is easy to understand by all persons who are working with it, which tells us that FIE14's solution is not very easy to use.

Working time reduction, soil pressure reduction and digitization in general are perceived as most important features of the solution, by the respondent, who also stated that the farm already has all necessary infrastructure to install the solution right away and have no difficulties with internet connection or network coverage.

While assessing the application of digital solutions in general, respondent agreed that it's important to know the experience of fellow farmers about digital solutions, and that is confident about using different digital solutions. He strongly agreed that the solution FIE14 is offering is reliable, that it is clear which data is being collected by the digital solution and who has access to it, and that using the digital solution don't affect the feeling of being in charge for all farm operations. However, he stated that he can't repair and maintain digital solutions without external support.

When it comes to pricing, respondent strongly agrees that the price/quality ratio of the solution is fair. He also agrees that using the solution can increase farms productivity and would recommend it to neighbours and fellow farmers. On the other hand, respondent is neutral about the solutions' ability to increase farms' profit and believes that the solution can't reduce production cost, because of the robots' cost. The reason why the respondent would recommend the FIE14 solution is the cost for a robot (which is lower than usual) and working time reduction, but still thinks that the conventional farming is less expensive.

FIE15

The respondent agreed that the additional benefit of the solution for the farm is clear, that the solution clearly provides a more accurate decision making, that applying the solution fosters public acceptance of farming, as it helps to inform consumers about the production process of their food, and that it offers more benefits than current practice. He strongly believes that applying the solution contributes to realizing societal goals, such as making farming more environmentally friendly, but gave neutral answer in the question if the solution is reducing working time on the farm.

As most important and beneficial features for the farm, respondent mentioned the possibility to reduce the amount of artificial fertilizer, sustainably use fertilizers, and increase resource efficiency. As the least interesting feature, documentation of the work was noted.

FIE15 solution was well rated concerning the ease of use, since the respondent strongly agreed that the solution was easy to install, that the design of the solution is easy to understand, that accessing the solution on mobile device works properly, and agreed that the workflow of the solution is logical and delivers the result with few clicks, that support service and guarantees are provided in case of malfunction, and that no special (ICT) expertise is required for using the solution. Most important reasons for using the solution are sustainability, safety of costs, and high efficiency, while monitoring of work, additional work, and lower possible yields are found as main reasons for NOT using the solution.

The respondent stated that the farm has all necessary infrastructure to install the solution right away, but that it is not interoperable with all existing digital solutions and machines on the farm. Periodic absence of internet connection, low speed connection, no GSM network and mobile coverage are the main issues which hinder the solution application on the farm.

When it comes to the application of digital solutions in general, respondent strongly agreed that it is important to know the experience of fellow farmers about digital solutions, that the offered solution is reliable, and that by using the digital solution,

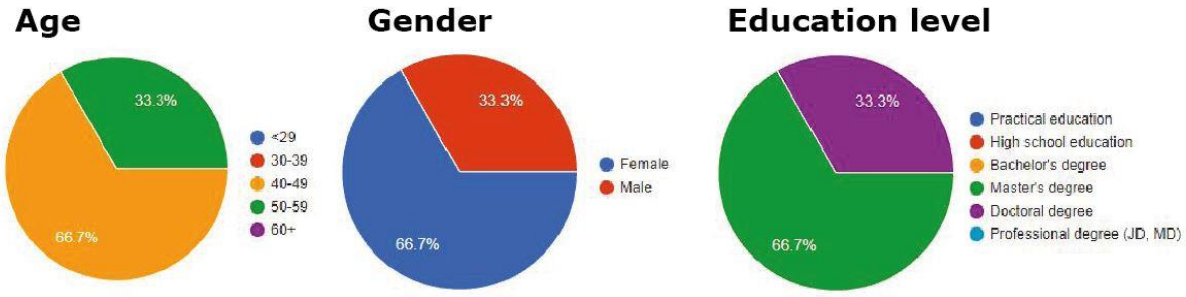
he still has the feeling that he is in charge of the farm operation. He stated that he is confident about using different digital solutions, that it is clear which data is being collected by the digital solution and who has access to it, and that he still needs external support for repairing and maintaining digital solutions.

The farm is not ready to pay for this type of solutions but believes that the price/quality ratio of the solution is fair, and that using the solution can increase farm productivity and profit. Respondent also agreed that using the solution can reduce farms' costs, and would recommend it to neighbours and fellow farmers, mainly because it is free for now, it is easy to use and increases farms' efficiency. As the main reason for increasing farm productivity, efficient use of fertilizers is mentioned, as well as for reducing costs.

FIE18

Three farms tested the FIE18 solution, the prototype of the system, which consists of a set of sensors for monitoring environmental aspects (humidity and air temperature, soil moisture and temperature, pH meter, etc.), a robotic tool to handle the processes required during plant growth (planting, watering, weeding, fertilization) and software controlling these processesRespondents from three farms are owners and researchers, between 40 and 59 years, with different genders and educational levels: one respondent has a doctoral degree, while two others have master's degrees (Figure 15).

Figure 15 - FIE18: Age, gender, and educational level of participants



Two farms are currently using the FIE18 solution in their farms, while only one is interested in using it in the future.

Regarding the usefulness of the product, all respondents agreed that the product offers more benefits than the current practice. Three out of four respondents agreed that the additional benefit of the product is clear, and that the tested solution can reduce working time, but was neutral when it comes to decision-making support. One respondent agreed that the solution clearly provides a more accurate decision making. Also, one respondent disagreed with the statement that the product fosters public acceptance of farming, while one respondent strongly agreed with it (Figure 16).

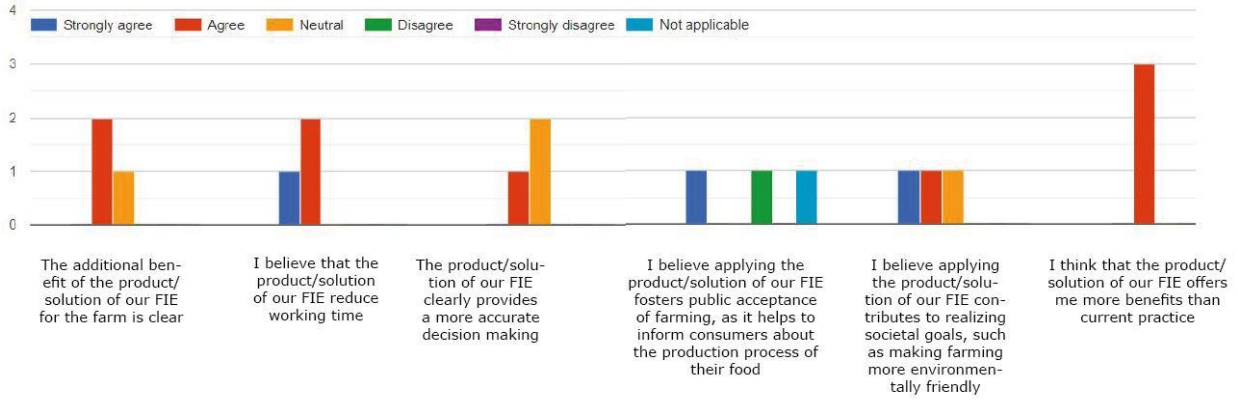


Figure 16 - FIE18: Usefulness of the product/solution

Fast and easy multi-point seeding, time and plant growth management, reduction of paperwork, automation, time efficiency, seed material reduction losses and irrigation efficiency (water usage reduction) are highlighted as the most important features that respondents found beneficial for their farms. As the least interesting features, weeding management is mentioned, as it should be upgraded, with more accurate dose calibration for watering, and together with the products' cost.

When it comes to ease of use, two respondents disagreed with the statement that the solution is easy to install. Still, all participants agreed that the design of the solution is easy to understand, that the workflow of the solution is logical and delivers quick results and confirmed that support service and guarantees are provided in case of malfunction. One respondent was neutral about solutions accessibility on mobile devices, while the other two reported that it works properly. The majority agreed that no special (ICT) expertise is required for using the solution, and that it can be understood by all persons working with it (Figure 17).

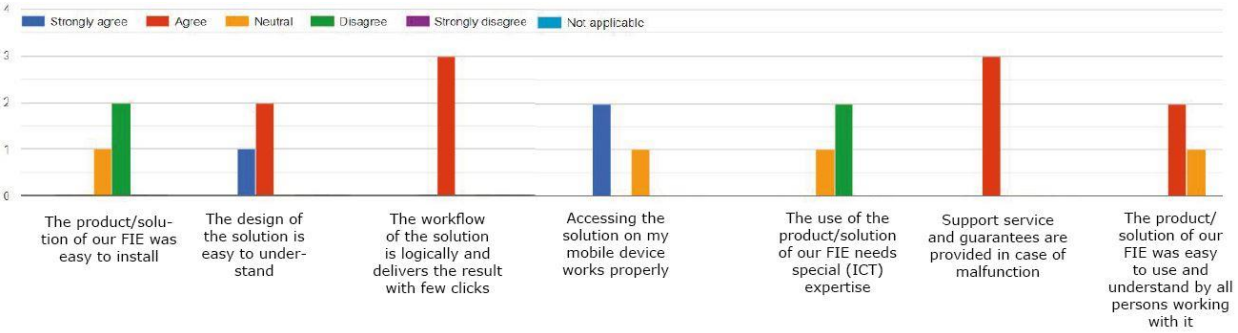


Figure 17 - FIE18: Ease of use

Preparation of seeding patterns is highlighted as the most complex feature in terms of understanding. Once prepared, patterns work very well, but the preparation is difficult. Positioning the tool when dirty causes problems. As the most important reasons for using the product, facilitation of repetitive sowing procedures, automation, and easy adaptation to different plant species were noted. As reasons for not using the solutions, the cost was reported by the majority.

Based on collected feedback, it is reported that all farms have all the necessary infrastructure to implement the product, but only one farm reported that the product is interoperable with all existing digital solutions and machines on the farm (Figure 18).

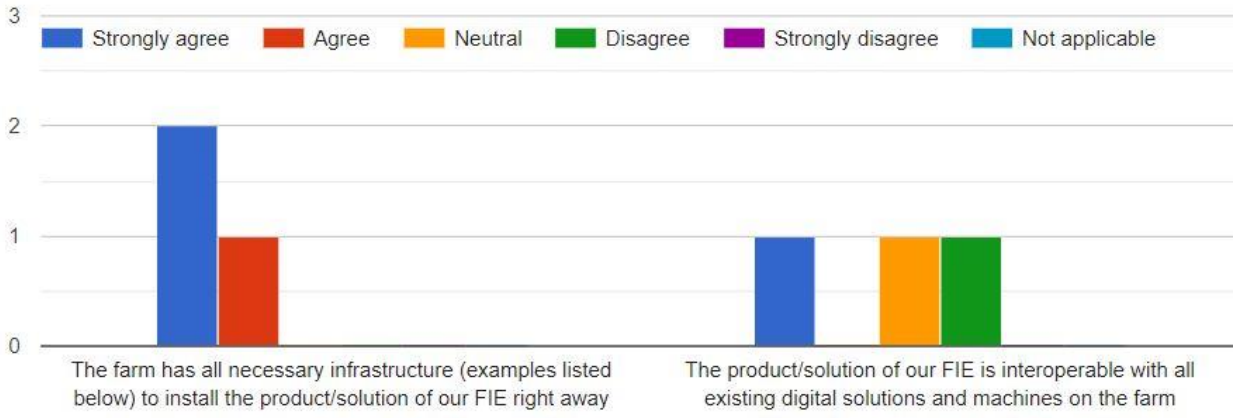


Figure 18 - FIE18: Technical quality and infrastructure

Occasional absence of Wi-Fi and slow-speed internet connections was reported as main issues which hinder the product application, and one farm hasn't experienced any difficulties while testing. Regarding the application of digital solutions in general, all respondents agreed that they can't repair or maintain tested digital solution without external support, but felt confident about using it, without losing the feeling of autonomy. Two out of three respondents think it is important to know the experience of fellow farmers about digital solutions but find tested solution reliable and have a clear picture about which data is being collected and who has the access to it (Figure 19).

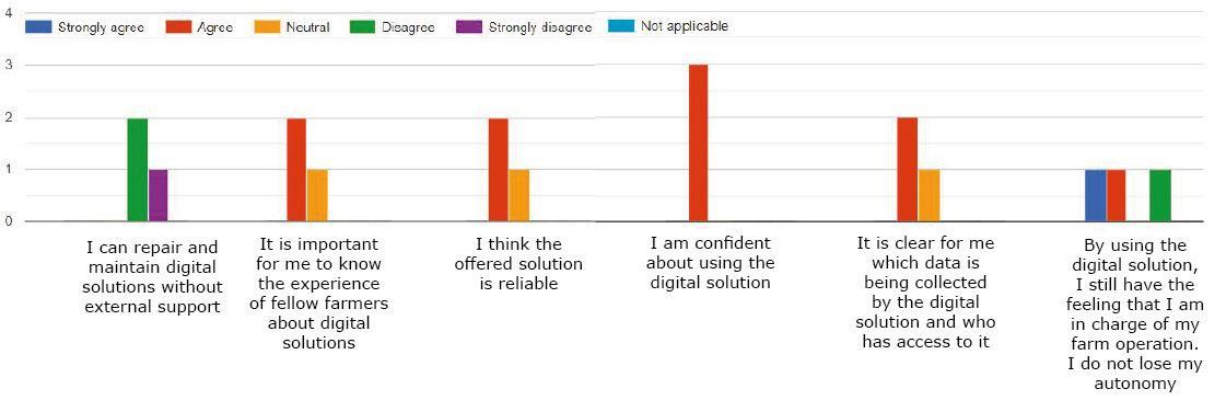


Figure 19 - FIE18: Application of digital solutions in general

It was difficult to assess the cost efficiency and feasibility since the final price of the solution is not yet known. Received feedback showed that only one respondent believes that the product can increase farms' profit, while other respondents were neutral. Two farms agreed that using the product can increase its profit and reduce costs, and would recommend it to neighbours and fellow farmers, while one farm

was neutral on both questions. Finally, the price/quality ratio of the product was not rated as fair, since the cost is yet to be determined. (Figure 20).

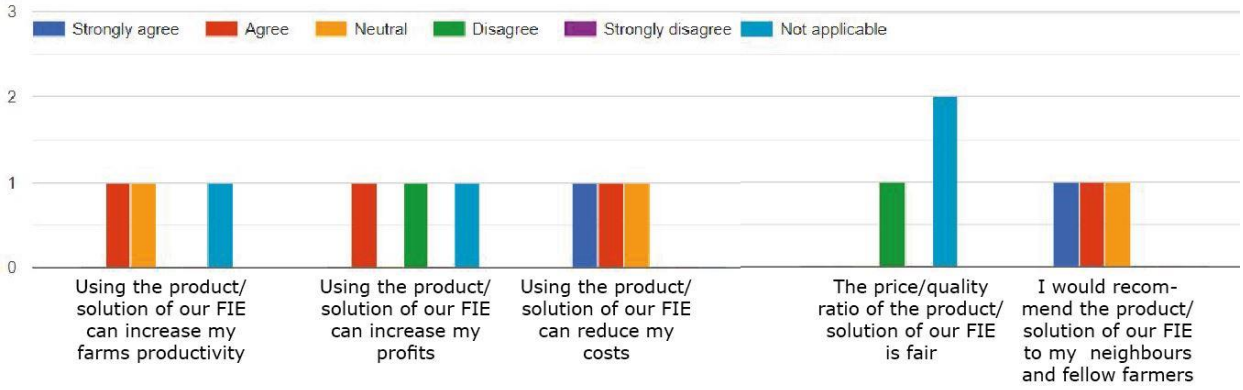


Figure 20 - FIE18: Cost-efficiency and feasibility

Farms stated that the product can increase farm productivity, by providing the acceleration of the seeding rate of large test groups, and saving time, by reducing time-consuming tasks. Respondents stated that obtaining a higher yield can be translated into profit, with less involvement of employees, and it is highlighted as the main reason why they feel the product could increase their profit. Participants would recommend the product as an interesting solution, which can improve the quality of work.

FIE19

Within FIE19, seven farms provided their feedback in the UAT survey. in Latvia, and have tested a beehive monitoring solution, provided by the FIE. Farms are mainly focused on bees, but some of them also have fruit and vegetables production, with farmed areas between 10 and 250 hectares, and three to four employees. Four respondents are beekeepers and four are farm owners, all between 20 and 60 years, with different educational backgrounds: practical education, high school education, both bachelor's and master's degrees are present (Figure 21).

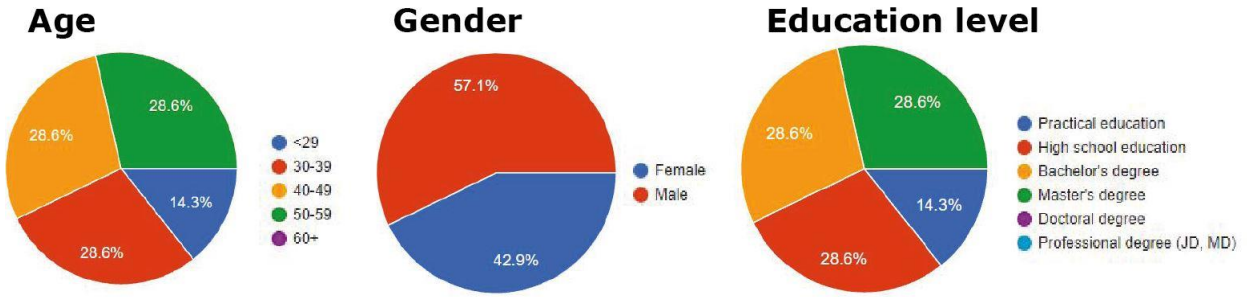


Figure 21 - FIE19: Age, gender, and education level

Five farms already have the solution applied, while two are planning to apply it, within the next year.

All respondents agreed that the additional benefit of the solution for the farm is clear, that solution is reducing working time, that it provides more accurate decision making, that it contributes to realizing societal goals, such as making farming more environmentally friendly, and that it offers more benefits than the current practice. Not all respondents believe that applying the FIEs solution fosters public acceptance of farming, as one disagreed with the statement, and four were neutral (Figure 22).

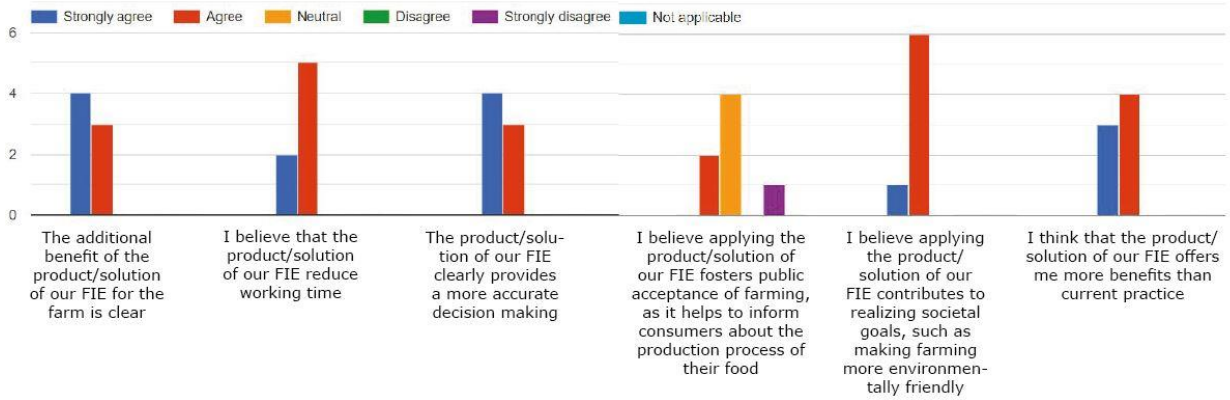


Figure 22 - FIE19: Usefulness of the product/solution

The most important features that farms find very beneficial are: easy to use, easy data entry, remotely monitor and instruct other employees, you can see information regarding the activities performed by the beekeeper in the bee colonies in the view of the switching table, help to save bees and improve bee breeding, reduce disturbance of bees, reduce the time for checking the hives, registry of resources, registry of activities, spatial allocation of apiaries with contextual data. When it comes to ease of use, five respondents agreed that the solution is easy to install and easily accessible on mobile devices. They all agreed that no special (ICT) expertise is needed in order to use the solution, and that any person who works with it can understand it without difficulties (Figure 23).

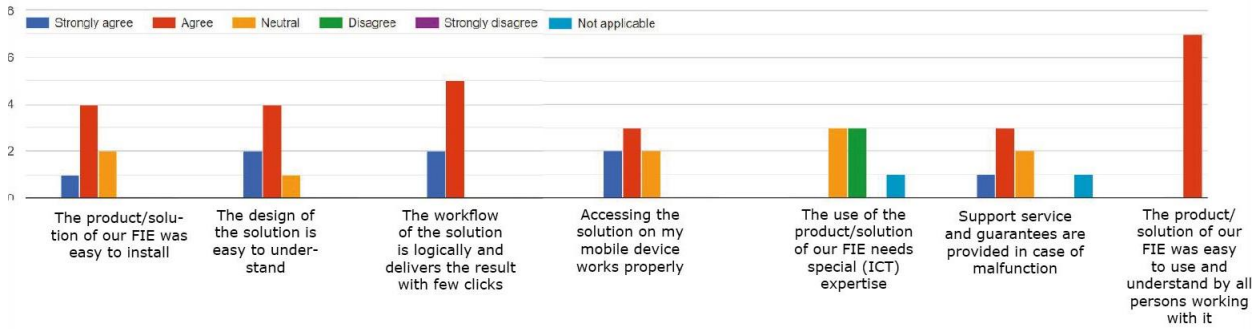


Figure 23 - FIE19: Ease of use

The most complex feature is related to sensor usage, their installation and deployment. The most important reasons for using the solution are saves on transport, history of all activities in the apiary in one place, immediate selection of the information from all the beehives by filters, remote usage - obtaining monitoring data without being at the farm. Reasons for NOT using the solution are related to difficult

access to the Internet in apiaries, cost of equipment, complex sensor install, missing mobile offline app. Two farms reported that they don't possess all necessary infrastructure to install the solution, and five of them reported that the solution is interoperable with existing farm equipment (Figure 24).

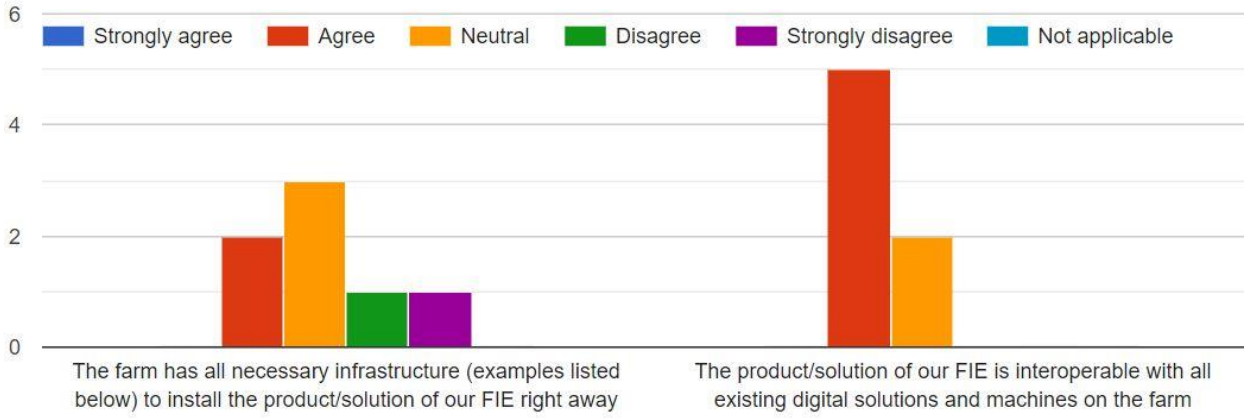


Figure 24 - FIE19: Technical quality and infrastructure

Since apiaries are usually far in the fields, many technical difficulties are reported while testing the app, like poor or non-existing internet connection, no mobile coverage, the solutions batteries are short-lasting, and telecommunication companies require long-term contracts which is not attractive for beekeepers.

In general, respondents agreed that they are confident about using digital solutions, it's clear which data is collected, autonomy is preserved, and all of them think that the offered solution is reliable. Only one respondent can repair and maintain digital solution without any external support, while others are neutral or can't do it by themselves. To the majority, knowing the experience of fellow farmers about digital solutions is important (Figure 25).

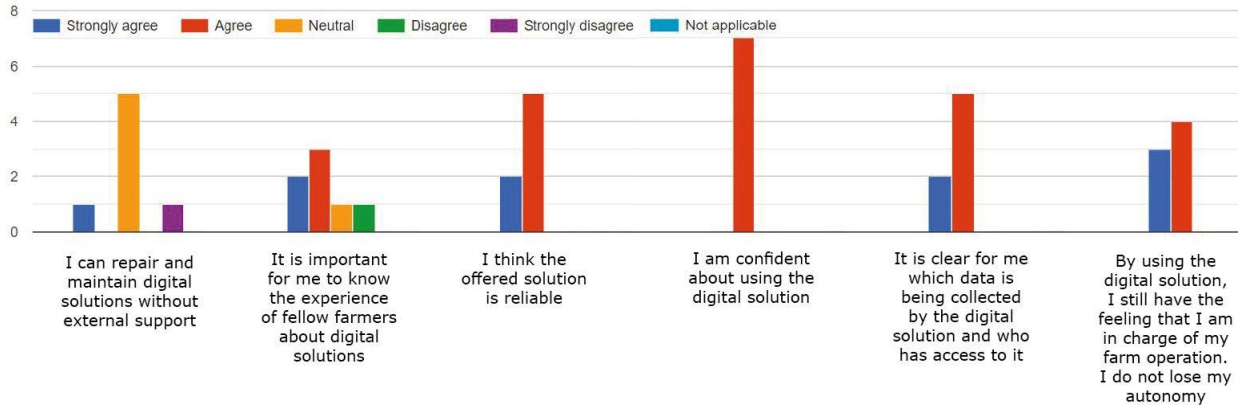


Figure 25 - FIE19: Application of digital solutions in general

Participants stated that they are willing to pay for the solution, between 200 and 300 euros, or 50-60 euros per year. Since the price is not determined, most of the respondents were neutral on the solutions' price/quality ratio. Also, beekeepers were

insecure when it comes to increasing farm productivity and profit, but all agreed that the solution can reduce costs (Figure 26).

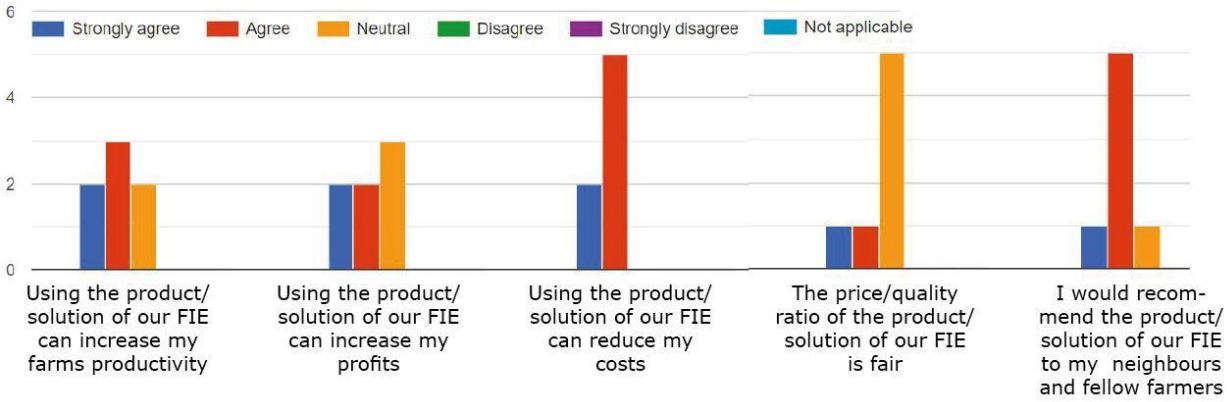


Figure 26 - FIE19: Cost-efficiency and feasibility

The solution can increase farm productivity as it saves time, may help to escape losing bee families in winter, show the history of bee colonies, hives, and activity records, but it doesn't solve human resource and other factors. Respondents also think that the solution can increase their profit and reduce costs in similar ways, by providing the chance to farmers to better understand their resources and reduce their usage.

Most beekeepers agreed that they would recommend the solution to fellow farmers, because there is time optimization and you can take a holiday even in season, the product facilitates daily work in beekeeping, giving the possibility of saving bee families by receiving warnings of swarming.

FIE20

Within FIE 20, four farms have provided their feedback through the UAT survey.

Participant's age is between 30 and 60 years, and both genders are equally represented, with different levels of education – two out of four participants have practical education, one has a high school education, and one person has a master's degree. Two out of four people are owners of the farms, one is the managing director, and one is the gardener (Figure 27).

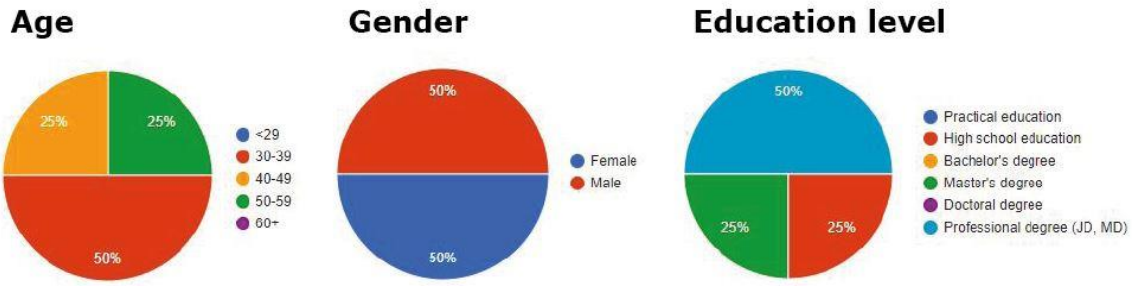


Figure 27 – FIE20: Age, gender, and educational level of participants

Two out of four participating farms expressed the interest to use the presented solution in the future, one is not interested at the moment, but will consider it in the future, and one farm is not interested at all (Figure 28).

Figure 28 – FIE20: Plans about using the product/solution

All participants agreed that the solution will clearly bring additional benefits to the farm, since it provides more accurate decision making, and reduces working time. Three out of four participants have a neutral opinion if the solution can reduce their working time, and two participants disagreed with the statement that the product/solution fosters public acceptance of farming, as it helps to inform consumers about the production process of their food. Three out of four participants believe that applying the solution contributes to realizing societal goals, such as environmentally friendly farming, and 50% thinks that the product/solution can offer more benefits than current practice (Figure 29).

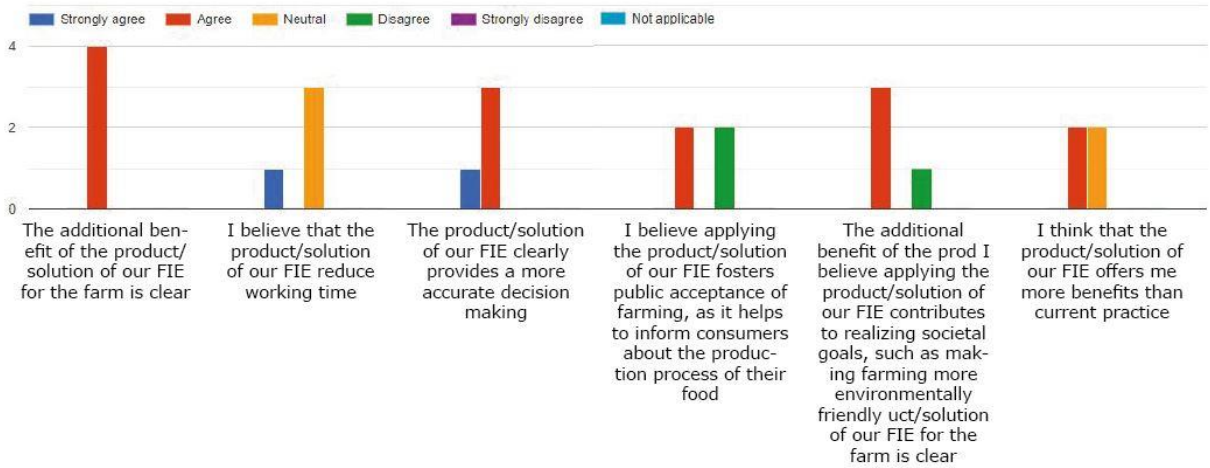


Figure 29 - FIE20: Usefulness of the product/solution

After testing the solution, participants found weather forecast, field blocks, NVDI and fertilization maps as the most beneficial features, and infra-red maps, msavi index maps and social networks are the least interesting features in the current version. Participants found the solution easy to install and very mobile friendly but understanding the solution itself is not easy for all, due to its complex design. Two out of four participants are neutral when it comes to the ease of installations, if the workflow of the solution is logical and delivers the result with few clicks and if it can be understood by all persons working with it. Three out of four participants think that

accessing the solution on the mobile device works properly and that using the solution requires some special ICT expertise. All participants were neutral about the support service and guarantees in case of malfunction (Figure 30).

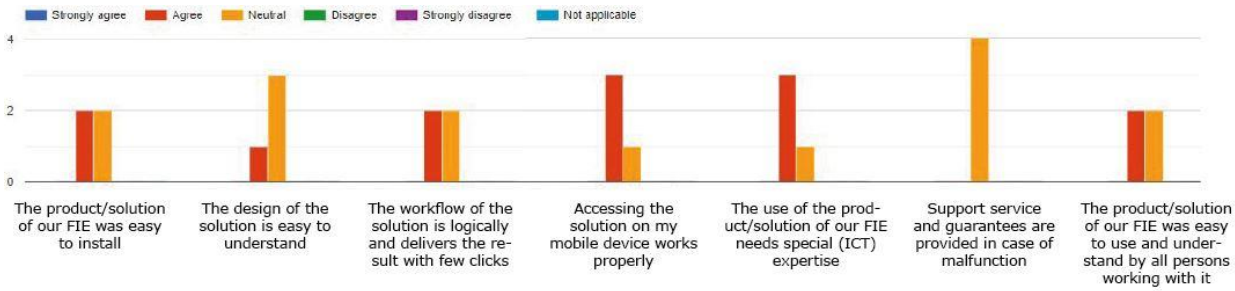


Figure 30 – FIE20: Ease of use

As the most important reason for using this solution, the introduction of innovations in farms and additional assistance for decision making are highlighted, together with increased efficiency, supported by different planning tools available in the app. Reasons for not using the solution are related to the internet connection issues in rural areas, but all other required infrastructure for implementation is already present on the farm, in most cases. Based on collected feedback, it is reported that three farms have all the necessary infrastructure to install the solution right away, while only one doesn't have. Also, one farm has noted that the solution is interoperable with the existing digital solutions and machines on the farm, one farm reported that the solution is not interoperable, while two farms reported as neutral to this question (Figure 31).

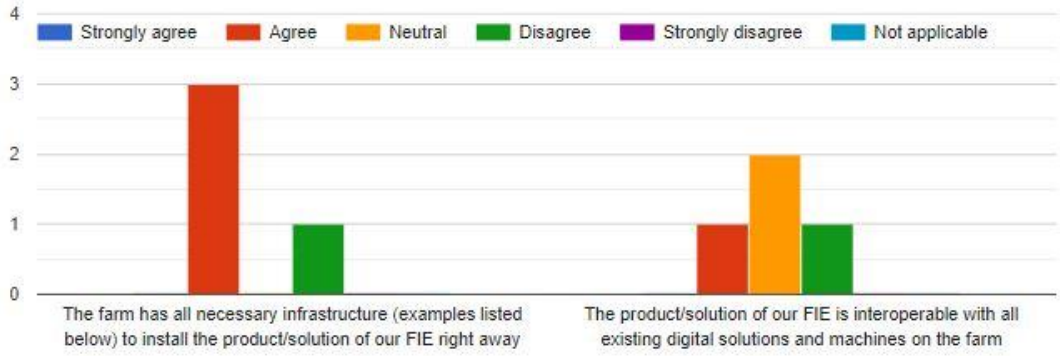


Figure 31 – FIE20: Technical quality and infrastructure

Low speed connection is reported as the main issue by two participating farms, while the absence of connection between data receiver and data transmitter, and complete absence of GSM coverage, due to the difficulty to find a suitable mobile connectivity provider, are reported as main hinders of the solution applicability. One participant stated that FIEs solution is not secure enough, and that the batteries of the solution are weak. Only one participant stated that there are no technical obstacles to applying the solution on the farm.

Two out of four participants still need external help for fixing and maintaining digital solutions, but they found the presented FIEs solution reliable and they feel confident using it. Two out of four participants stated that it is very important for them to know the experience of fellow farmers about digital solutions. The accessibility of collected

data is still unclear for three out of four users, as well as the type of collected data. Two participants agree and two of them are neutral when it comes to the feeling of autonomy while using digital solutions, as it may affect the feeling of being in charge of overall farm operation (Figure 32).

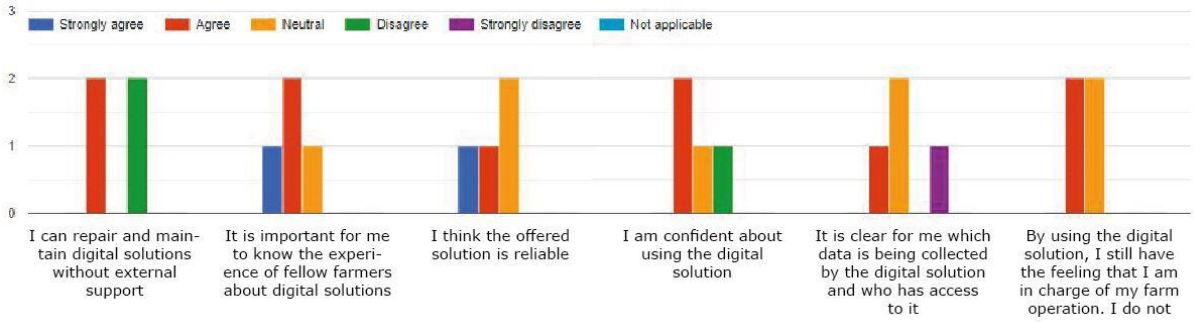


Figure 32 - FIE20: Application of digital solutions in general

.

Most users don't have a clear figure regarding the expected cost of the solution, but 50-100€ per year is considered optimal. Only two participants agreed that FIEs product/solution can increase farm productivity, while one participant is neutral, and one disagrees with the statement. Three out of four participants are neutral when it comes to increasing farms profit with proposed digital solutions, while one participant disagrees that it is possible. Three out of four participants believe that using the FIE solution can help them reduce costs but are unsure if it can help them increase profit. 50% of participants thinks that the price/quality ratio of the FIEs solution is fair and would recommend it to neighbours and fellow farmers (Figure 33).

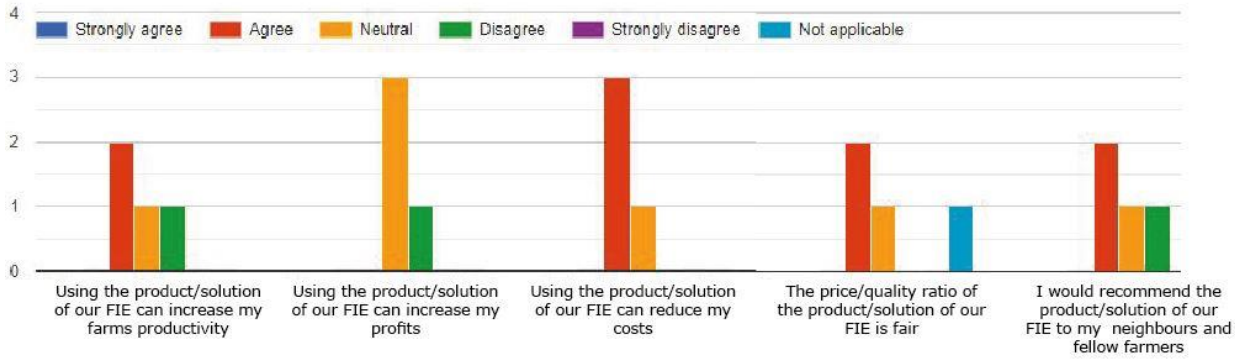


Figure 33 - FIE20: Cost-efficiency and feasibility

Participants stated that they can see the FIEs solution as a tool to increase farm productivity by helping in the decision-making process and cost reduction by better planning of the resources. The price-quality ratio of the solution is reported as fair. They would recommend the solution to fellow farmers, as an innovative digital solution, but understandably only after they have the chance to use by themselves.

FIE21

Two farms participated in the survey, both from Portugal. Both farms are focused on fruit production, and both are already using the FIEs solution, which is a Predictive

pest modelling solution, for pest control in the olive, wine and cork sectors. Respondents are both 50-59 years old, with doctoral degrees, and with the Chief Technology Officer title.

Both respondents agree with all of the following statements: the additional benefit of the product for the farm is clear, I believe that the solution reduces working time, the solution clearly provides a more accurate decision making, I believe applying the solution fosters public acceptance of farming, as it helps to inform consumers about the production process of their food, I believe applying the solution contributes to realizing societal goals, such as making farming more environmentally friendly, I think that the solution offers me more benefits than current practice.

As the most important beneficial features for the farms, the following were reported - pest control, pesticides usage reduction, staff time dedicated to monitoring is reduced and applying pesticides just in time. As the least interesting feature is the need to scout traps.

When it comes to ease of use, respondents agreed that the product can be easily installed and that the workflow of the solution is logical and delivers quick results, so it can be easily understood by all the people who operate it. One respondent disagreed with the statement that support service is provided in case of malfunctions and stated that accessing the solution on mobile devices is not working properly (Figure 34).

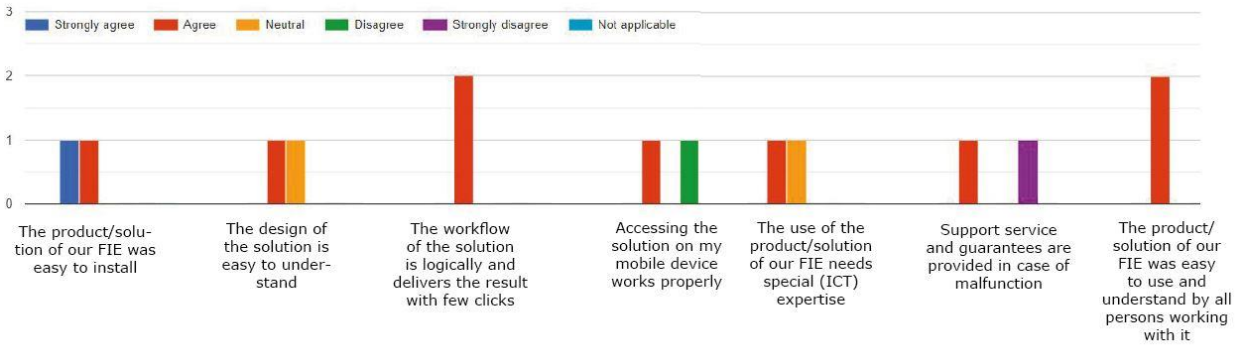


Figure 34 - FIE21: Ease of use

As the main fault of the solution, the non-existence of the mobile app is stated, but productivity, oil quality and improvement of the pest control capacity are the main reasons why the solution should be used. The only obstacle in solution implementation can be poor mobile coverage, since both respondents stated that their farms have all necessary infrastructure to install solution right away and that the solution is interoperable with all existing digital solutions and machines on the farm (Figure 39).

Both participants still need external help for fixing and maintaining digital solutions, but they found the presented FIEs solution reliable and they feel confident while using it. One participant stated that it is very important for them to know the experience of fellow farmers about digital solutions, while the other is neutral. The accessibility of collected data is clear for users, as well as the type of collected data. When it comes to the feeling of autonomy while using digital solutions, both respondents have the feeling that they are in charge of the farm (Figure 35).

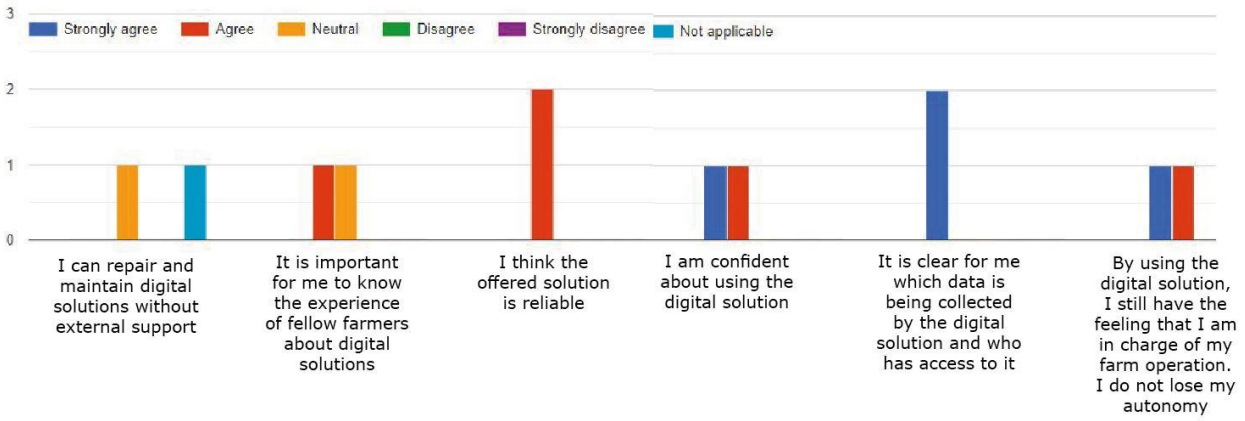


Figure 35 - FIE21: Application of digital solutions in general

Respondents stated that 5 euros per hectare would be the reasonable price for the solution, and both agreed that FIEs solution can increase farm productivity and profit. Also, both believe that using the FIE solution can help them reduce costs but are unsure if it can help them increase profit and would recommend it to neighbours and fellow farmers (Figure 36).

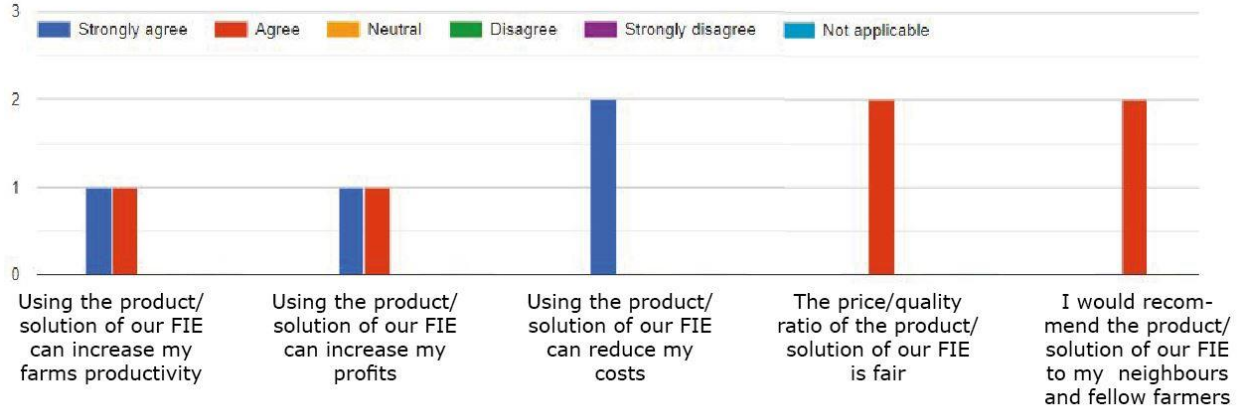


Figure 36 - GIE21: Cost-efficiency and feasibility

Participants stated that the product can increase farm productivity, by limiting losses due to pests. Larger and better production, with less inputs, and less losses is highlighted as the main reason why they feel the product could increase their profit and reduce costs at the same time. Participants would recommend the product to fellow farmers as a valuable solution, which will improve pest control in the region.

FIE23

Within FIE23, two farms provided their feedback on the tested solution. Both farms are located in Spain, with the focus on animal and dairy production. Both are small farms with two or three employees, and neither are using the FIEs solution at the moment but are interested in the future.

Both respondents agreed that the additional benefit of the solution for the farm is clear, that solution is reducing working time, and that it offers more benefits than the current practice. One of the respondents was neutral about the statement that applying the FIEs solution fosters public acceptance of farming and contributes to

realizing societal goals, such as making farming more environmentally friendly (Figure 37).

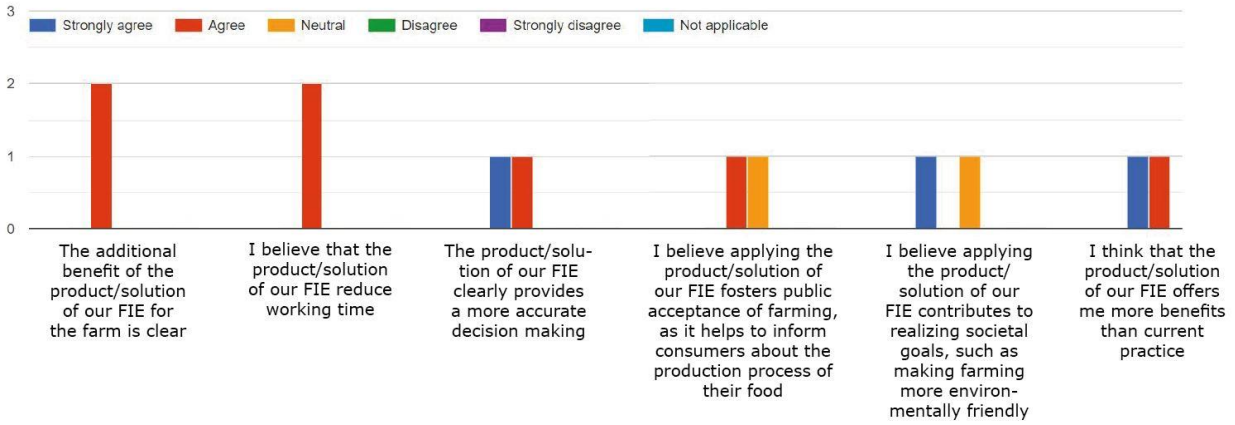


Figure 37 - FIE23: Usefulness of the product/solution

The possibility to monitor the farm 24/7 is highlighted as the most important feature that respondents found beneficial for their farms. As the least interesting features, price and registry of events were named.

When it comes to the ease of use, both respondents were neutral if the special (ICT) expertise is required for using the solution but agreed that support service and guarantees are provided in case of malfunction. One respondent agreed with the statement that the solution is easy to install, that the design of the solution is easy to understand, that the workflow of the solution is logical and delivers quick results and it cab accessed on mobile devices (Figure 38).

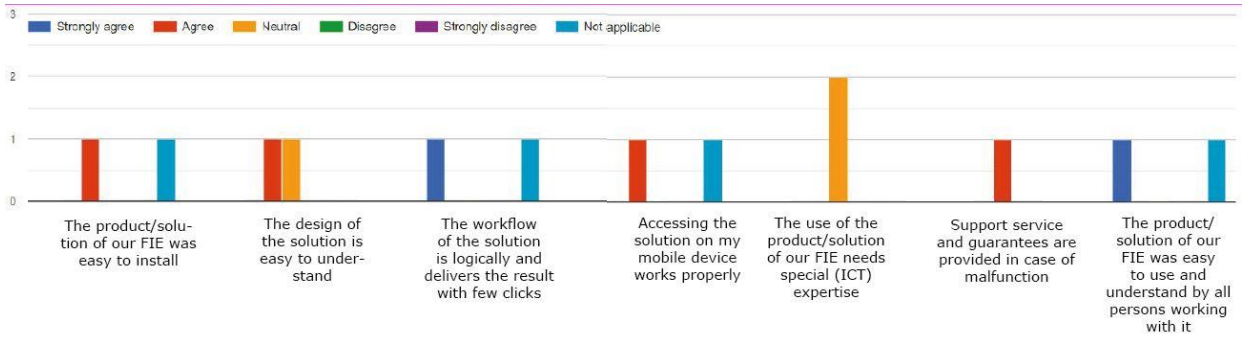


Figure 38 - FIE23: Ease of use

The most complex feature to understand is connecting the robot. As the most important reason for using this solution, constant surveillance of the stall is mentioned. Reasons for not using the solution are related to price and maintenance costs. Based on collected feedback, it is reported that only one farm has all the necessary infrastructure to install the solution right away, and both farms reported that the solution is not interoperable with the existing digital solutions and machines on the farm (Figure 39).

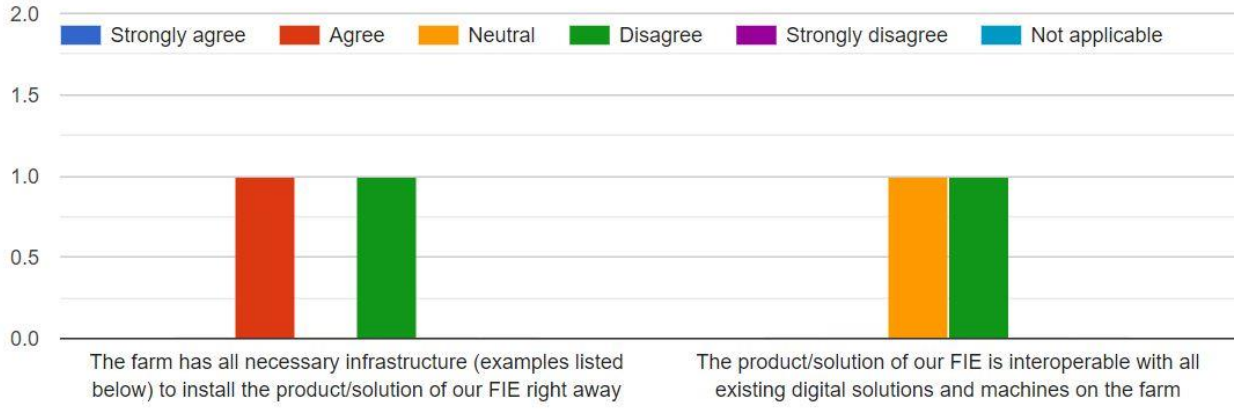


Figure 39 - FIE23: Technical quality and infrastructure

Occasional absence of Wi-Fi and slow-speed internet connections were reported as the main issues which hinder the product application, together with no Global System for Mobile communication (GSM) network coverage. Regarding the application of digital solutions in general, both respondents stated that they can't repair or maintain tested digital solution without external support. One respondent agreed that it is important to know the experience of fellow farmers about digital solutions, that tested solution is reliable and provides a clear picture about which data is being collected and who has the access, felt confident about using it, without losing the feeling of autonomy, but the other respondent was neutral in all cases (Figure 40).

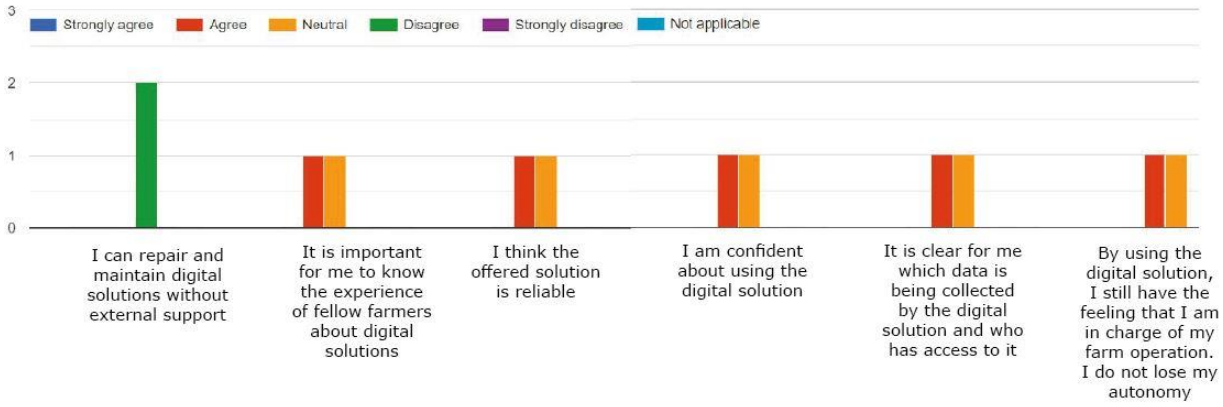


Figure 40 - FIE23: Application of digital solutions in general

Farmers still don't have a clear figure regarding the expected cost of the solution, but 50-100€ per year is considered optimal. Both participants agreed that the FIEs solution can increase farm productivity and help in reducing costs. One respondent agrees that increasing farms profit with a proposed digital solution is possible, and would recommend it to neighbours and fellow farmers, while the other one was neutral on both statements. Both respondents were neutral if the price/quality ratio of the FIEs solution is fair, since the final price is yet not determined (Figure 41).

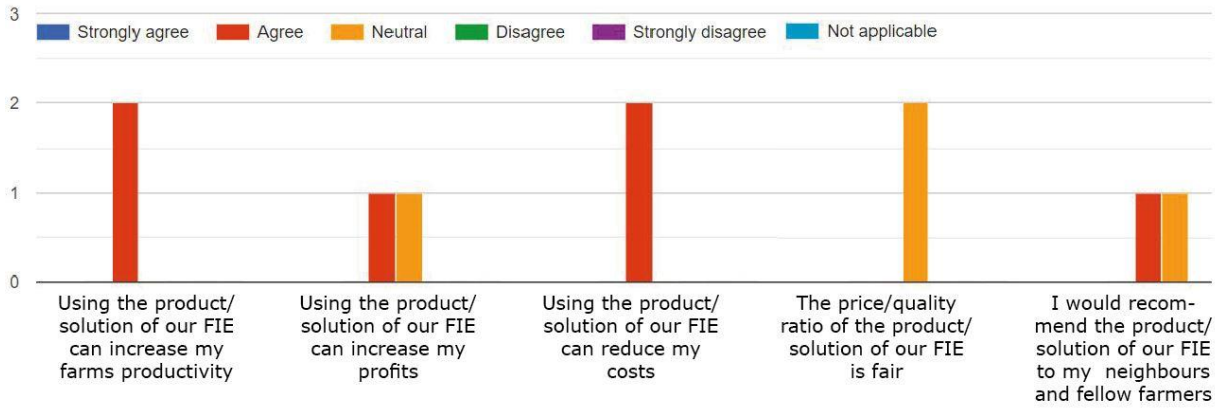


Figure 41 - FIE23: Cost-efficiency and feasibility

Both participants stated that the product can increase farm productivity, by providing more control of conditions of the cows, and increase profit by detecting problems and solving them in less time. In the same way, farms costs can be reduced. Both participants would recommend the product as it is interesting to have a robot to help in the control of cows and stalls.

FIE24

Within FIE24, three farms have provided their feedback through the UAT survey. Their focus is on aquaculture, their farmed areas are between 90 and 130 hectares, and they employ 2-5 workers. All farms are planning to apply the tested solution within the next year.

Participant's age is over 60 years, all males with high school education level and master's degrees. They are all responsible for decision-making.

All participants strongly agreed that the solution will clearly bring additional benefits to the farm, since it provides more accurate decision making, and reduces working time. They also agreed that the solution can offer more benefits than current practice. All respondents believe that the solution fosters public acceptance of farming, as it helps to inform consumers about the production process of their food. and contributes to realizing societal goals, such as environmentally friendly farming (Figure 42).

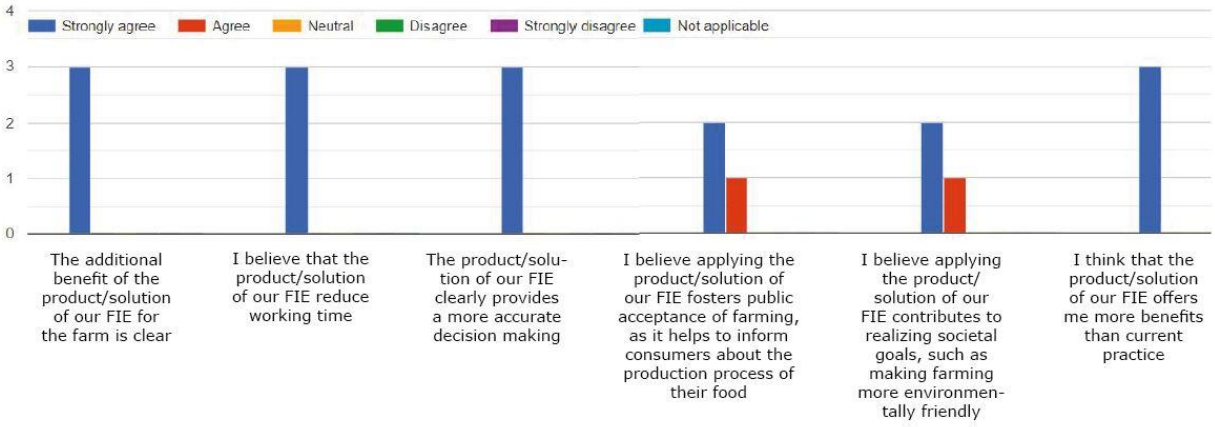


Figure 42 - FIE24: Usefulness of the product/solution

The most important features that farms found as very beneficial for them are related to saving time, increasing productivity and improving animal wellbeing. When it

comes to ease of use, all respondents agreed that the solution is easy to install and understand, is easily accessible on mobile devices and that the workflow is logical, and delivery of the results is really fast. They all agreed that no special (ICT) expertise is needed in order to use the solution, and that any person who works with it can understand it without difficulties. However, they were all neutral when it comes to support services and guarantees in case of malfunction (Figure 43).

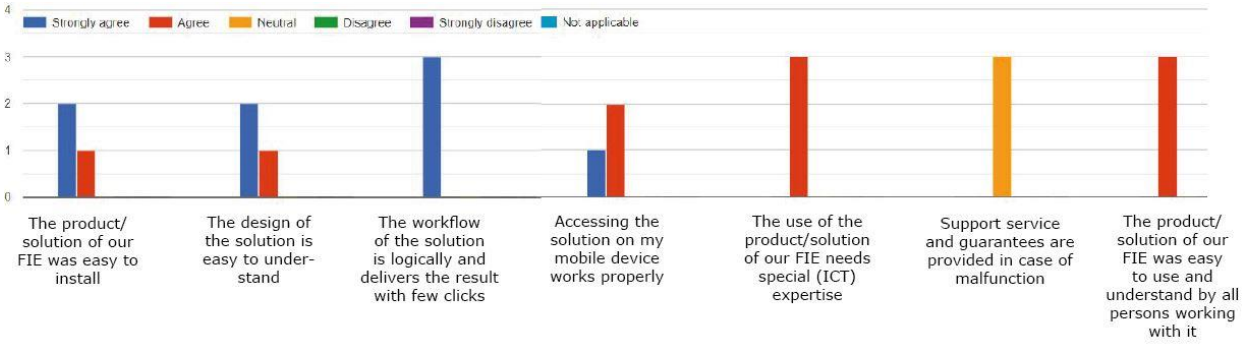


Figure 43 - FIE24: Ease of use

As three most important reasons for using the solution, save of time, increase in productivity, and improvement of animal wellbeing are noted. Periodic absence of internet connection at all, low speed connection, no GSM network and mobile coverage are the main issues that hinder the solution application on the farms. Only one farm stated that it has all the necessary infrastructure to install the solution of FIE24 right away, and none have reported solutions interoperability with other existing digital solutions and machines on the farm (Figure 44).

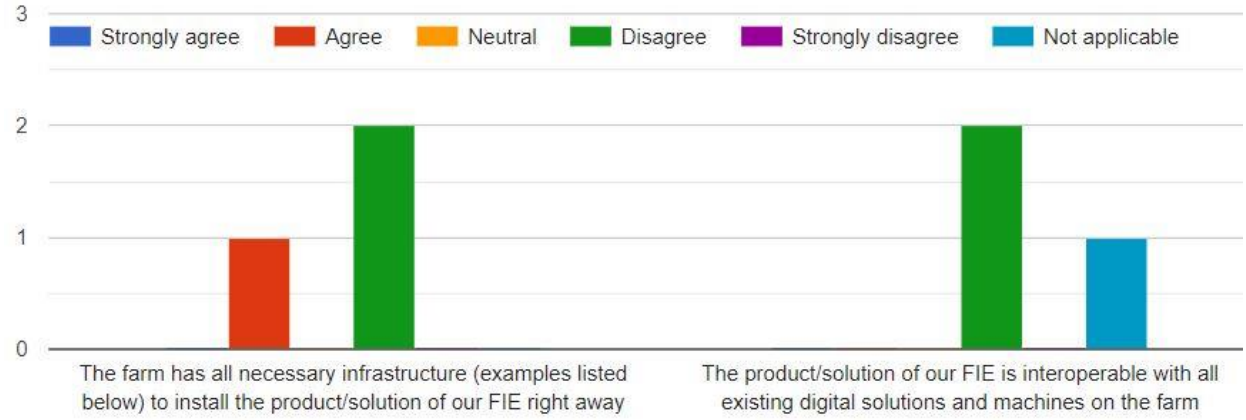


Figure 44 - FIE24: Technical quality and infrastructure

In general, all respondents agreed that they are confident about using digital solutions, it's clear which data is collected, autonomy is preserved, and all of them think that the offered solution is reliable. Only one respondent can repair and maintain digital solutions without any external support, while others are neutral. To all, knowing the experience of fellow farmers about digital solutions is important (Figure 45).

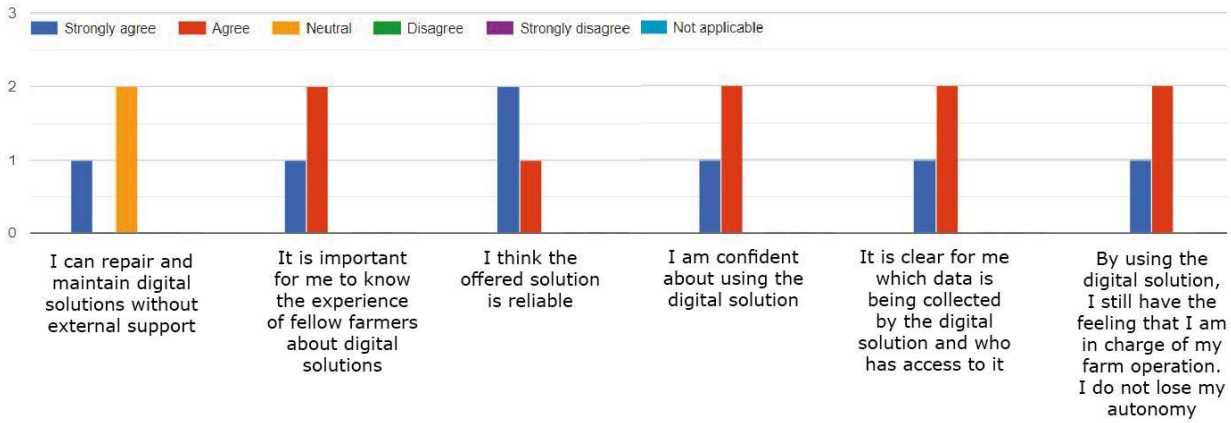


Figure 45 - FIE24: Application of digital solutions in general

All respondents strongly agreed that FIEs solution can increase farm productivity and profit. All respondents believe that using the FIE solution can help them reduce costs and would recommend it to neighbours and fellow farmers (Figure 46).

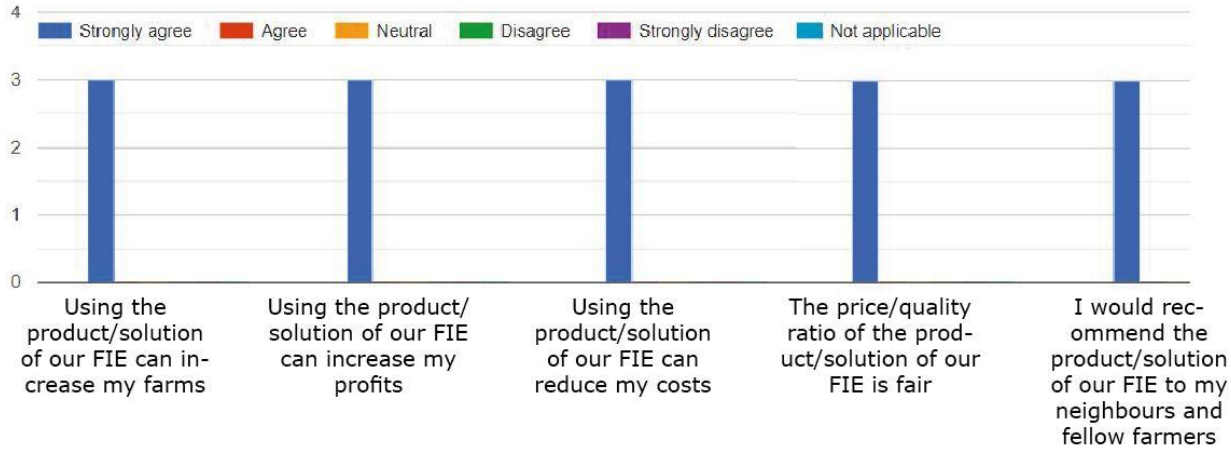


Figure 46 - FIE24: Cost-efficiency and feasibility

All participants stated that the solution can increase farm productivity by allowing for more precise control of very important parameters and favouring decision making at the same time. Respondents also think that the solution can increase their profit and reduce costs in similar ways, by preventing emergency situations and damages, thanks to better control of operational parameters. They also agreed that they would recommend the solution to fellow farmers, because the advantages are important in the industry, and it is easy to use.

FIE26

A male farmer tested the FIE26' solution at a farm in Greece, which is focused on vegetable production. He is between 40 and 49 years old, employed as a general farm manager and has a doctoral degree. The farm has 50 hectares of farmed area, 20 employees and is already using the FIEs solution.

When it comes to the usefulness of the solution, the respondent agreed that the additional benefit for the farm is clear, that the solution is providing a more accurate decision making, he believes that applying the solution fosters public acceptance of farming, as it helps to inform consumers about the production process of their food,

and that it offers me more benefits than current practice. The respondent was neutral about solutions possibility to reduce working time on the farm.

As features that are found beneficial for the farm, the respondent mentioned easily accessible historical records, together with the integration of multiple services in one platform, automated alerts and advice on agricultural practices. As one of the least interesting features, respondent named user friendly visualizations of the field data, which are available in the platform. They are definitely useful but not innovative or particularly interesting.

Respondent agreed the solution was easy to install and that the design of the solution is easy to understand by all persons who are working with it. The workflow of the solution is rated as logical, and the delivery of the result is quick. The use of the solution however does require a special (ICT) expertise, which tells us that FIE26's solution is demanding for inexperienced users.

Easily accessible data in the platform, but slightly time-consuming for someone with no major experience in ICT, is highlighted as the most complex feature of the solution. Input reduction, data-driven decision making, and higher quality final production are mentioned as the most important reasons for using the solution. Respondent stated that the farm already has all the necessary infrastructure to install the solution right away and have no difficulties with internet connection or network coverage. Also, the solution is interoperable with all existing digital solutions and machines on the farm.

While assessing the application of digital solutions in general, the respondent agreed that it's important to know the experience of fellow farmers about digital solutions, and that is confident about using different digital solutions. He strongly agreed that the solution FIE26 is offering is reliable, that it is clear which data is being collected by the digital solution and who has access to it, and that using the digital solution don't affect the feeling of being in charge for all farm operations. However, he stated that he can't repair and maintain digital solutions without external support.

When it comes to cost-efficiency and feasibility, the respondent stated that the solution was tested for free, since the farm is participating in the FIE, but he strongly agrees that the price/quality ratio of the solution is fair. He also agrees that using the solution can increase farms productivity and profit, as it increases the efficiency of high-value organic agricultural inputs and would recommend it to neighbours and fellow farmers. Respondent believes that the solution can reduce production cost, as it decreases the potential waste of agricultural inputs, thus reducing overall application and costs.

FIE27

Within FIE 27, two respondents provided their feedback regarding the tested solution. Both farms are located in Romania and have conducted testing of the electronic ear tags.

One of the respondents is between 30 and 39 years, and the other is over 60. Their gender and educational levels are different: one respondent has a master's degree, and the other one has a bachelor's degree.

The main focus of participating farms is on dairy production, with farmed areas between 100 and 850 hectares, and 3 - 20 employees. Both farms are planning to implement FIEs solution within the next year.

Both respondents agree with all of the following statements: the additional benefit of the product for the farm is clear, I believe that the solution reduces working time, the solution clearly provides a more accurate decision making, I believe applying the solution fosters public acceptance of farming, as it helps to inform consumers about the production process of their food, I believe applying the solution contributes to realizing societal goals, such as making farming more environmentally friendly, I think that the solution offers me more benefits than current practice.

The most important features that both farms find very beneficial are animals' evidence and the transport statements, which are easier and more acceptable. When it comes to ease of use, both respondents agreed that the solution is easy to install and is easily accessible on mobile devices. They also agreed that no special (ICT) expertise is needed in order to use the solution, and that any person who works with it can understand it without difficulties. The workflow of the solution is logical for both respondents, and support services are well excepted (Figure 47).

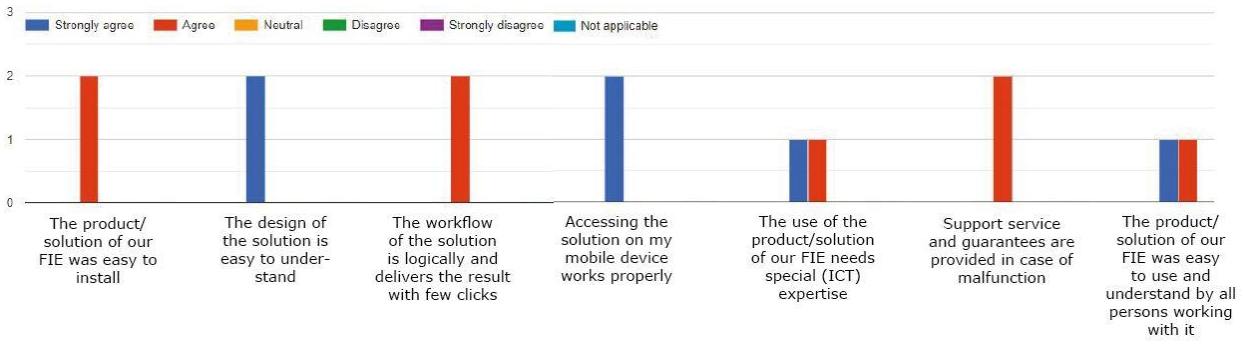


Figure 47 - FIE27: Ease of use

As the most important reasons for using the product, all documents for transporting animals being in only one ear tag is highlighted. Respondents don't see any reasons for not using the solution.

Based on collected feedback, it is reported that both farms have the all necessary infrastructure to implement the product, the product is reported interoperable with all existing digital solutions and machines on both farms.

The absence of Wi-Fi and internet connectivity is reported as the main issue which hinders the product application on both farms. Regarding the application of digital solutions in general, both respondents stated that they can repair or maintain tested digital solution without external support. Also, both agreed that it is important to know the experience of fellow farmers about digital solutions, that tested solution is reliable and provides a clear picture about which data is being collected and who has the access, felt confident about using it, without losing the feeling of autonomy (Figure 48).

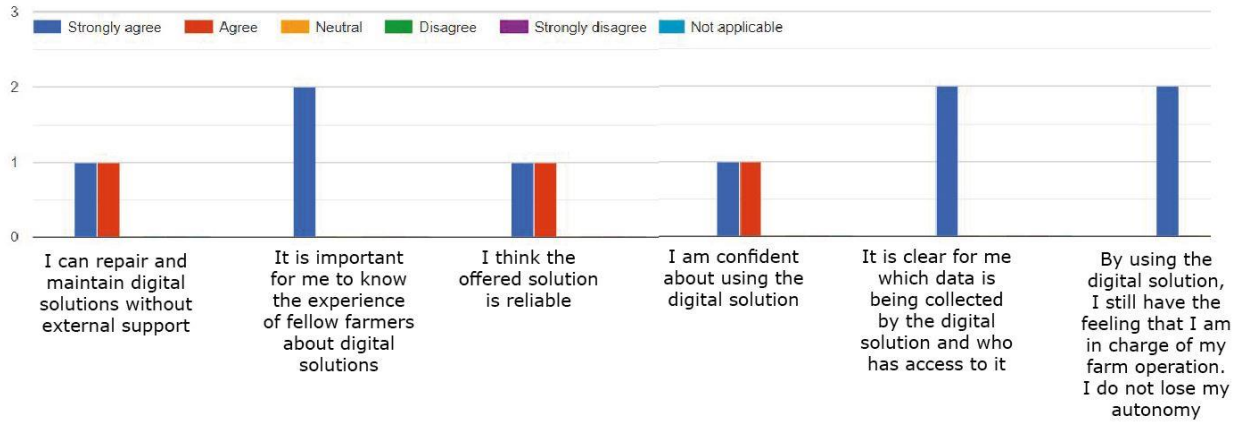


Figure 48 - FIE27: Application of digital solutions in general

Both respondents consider that 50€ per year is the optimal price for the solution. Both participants agreed that the FIEs solution can increase farm productivity and profit and believe that using the FIE solution can help them reduce costs and increase profit. Also, both respondents think that the price/quality ratio of the FIEs solution is fair and would recommend it to neighbours and fellow farmers (Figure 58).

Farms stated that the product can increase farm productivity, by reducing time for completing the documents. Respondents also stated that spending less money and time will consequently be translated into profit, and as the main reason why they feel the product could increase their profit, both respondents stated the fact of using only one ear tag to identify all the animals. Participants would recommend the product as a good and efficient solution, which saves money and time.

2.3 GENERAL CONCLUSIONS

The analysis of presented feedback, collected through the UAT survey, provided valuable insight regarding the overall usefulness, most and least useful features, user-friendliness, technical quality, and cost-efficiency of the solutions/prototypes, provided by SAH FIEs.

Participating farms are located across Europe, in Latvia, Belgium, Spain, Austria, Romania, Portugal, and Italy. In majority, they are focused of Animal production (including bees), arable, fruit and vegetables, while only four farms are focused on dairy, and three on aquaculture.

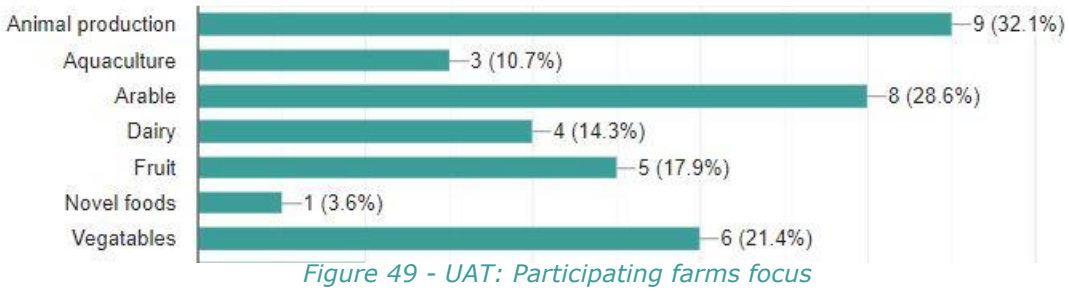


Figure 49 - UAT: Participating farms focus

The structure of the respondents (farm employees – owners, farmers, researchers, managers, beekeepers) is diverse in terms of age, gender, and educational level. The majority of respondents are between 30 and 60 years old, and only eight of them are women. Nine respondents have a practical or high school education, and 19 of them have higher educational levels: bachelor, master's, doctoral, or professional degrees (Figure 50).

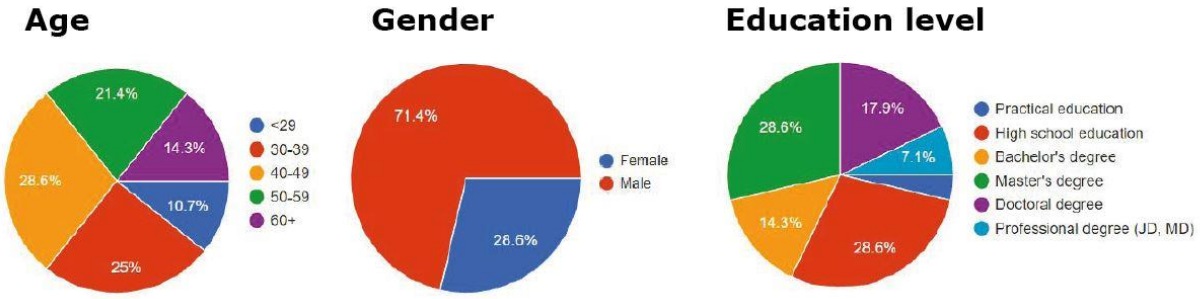


Figure 50 - UAT: Overall age, gender, and education level of respondents

Nearly half of the participating farms already use the proposed solution in their daily farm work, six farms are planning to implement it within a year, and six are very interested to do so in the future. Only three farms stated that they are not planning to apply the solution at the moment but will think about it in the future (Figure 51).

Figure 51 - UAT: Readiness for solution applicability

When it comes to the usefulness of the product/solution, only one farm was neutral about the additional benefits of the solution, while 27 respondents agreed that it is clear. Seven were neutral regarding the statement that offered a solution can reduce the amount of working time, while 21 farms agreed that the solution is helpful in this case. Also, the majority agrees that proposed solutions can provide more benefits than their current practices, that it can contribute to realizing societal goals, such as making farming more environmentally friendly, and fostering public acceptance of farming, as it helps to inform consumers about the production process of their food (Figure 52).

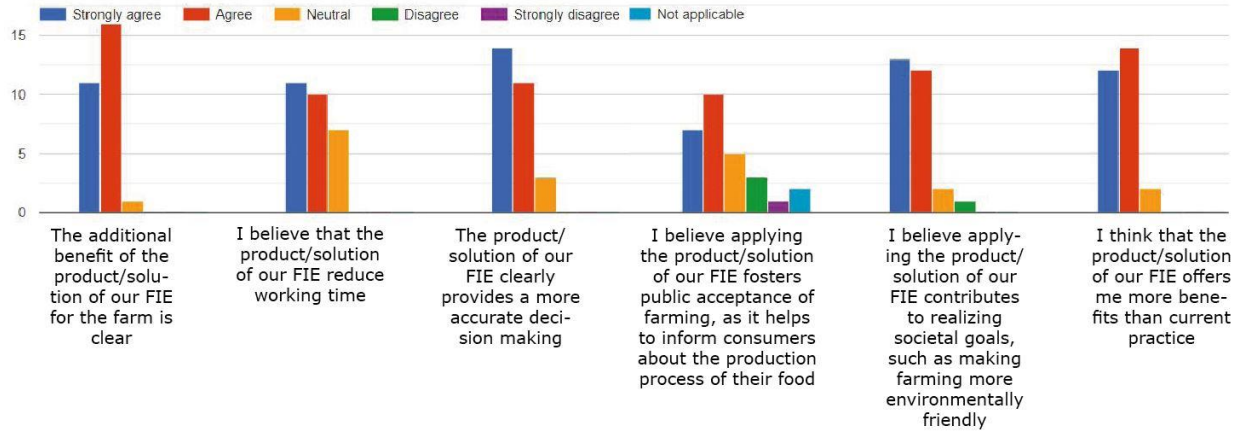


Figure 52 - UAT: Overall usefulness of the products/solutions

For each solution, respondents named some of the most important features which benefit their farms. All noted features are related to increasing production (by providing recommendations on different aspects of each production phase), reducing the amount of physical documentation, and supporting better decisions. The majority of respondents didn't report any useless features, but agreed that the solution is easy to install, that it can be easily understood by all persons working with it, and that it delivers valid results with only a few clicks, in a logical manner. Eleven out of 28 respondents thinks that a special (ICT) expertise is required for using the offered product/solution, and two reported difficulties with accessing the solution on a mobile devise. 15 out of 28 respondents are confident in support services and guarantees in cases of solutions' malfunction, while the rest were quite neutral on the subject (Figure 53).

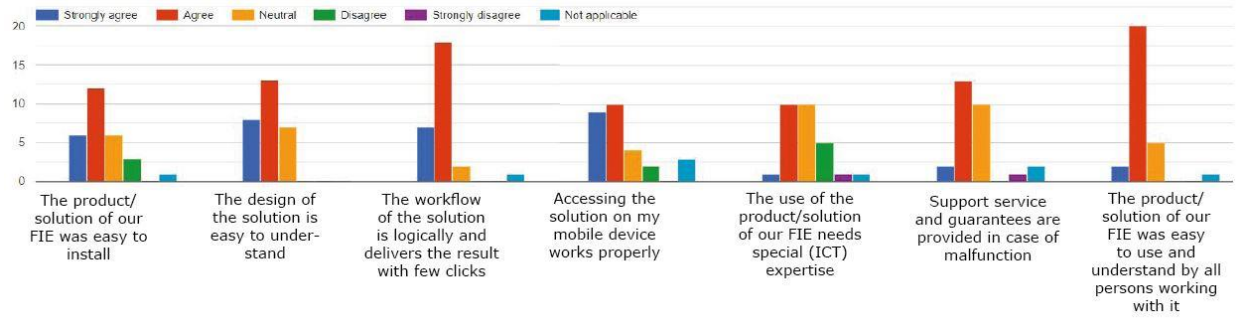


Figure 53 - UAT: Overall ease of use

Regarding the technical quality and infrastructure, 19 out of 28 farms reported that they already have all necessary infrastructure to install the product/solution of our FIE right away, but only 11 reported that the solution is interoperable with all existing digital solutions and machines on the farm (Figure 54).

Some of the issues, reported as hinders of the product/solution applications in the farm, are mainly related to none or slow-speed internet connection and lack of GSM coverage. Only one farm reported that there were no such problems during the testing period.

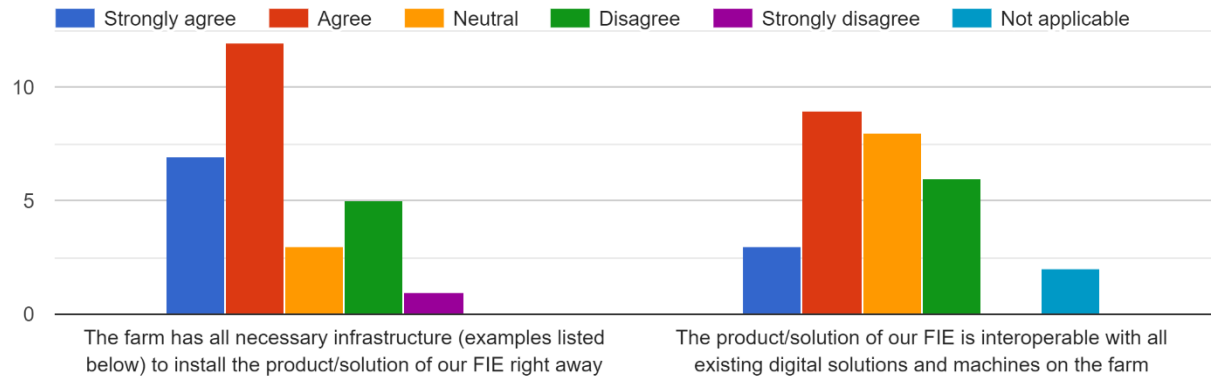


Figure 54 - UAT: Overall technical quality and infrastructure

Most respondents are already familiar with different digital technologies, which are helping them in their daily activities. Using the products/solutions proposed by SAH FIEs was not a completely new experience, and 25 out of 28 respondents felt confident about using the FIEs solution and think that provided solution is reliable. The majority of respondents is aware of the level of data collected by the solution and who can access it, they think it is important to know the experience of other users about digital solutions and that the tested solution is not decreasing the feeling of being in charge of production (Figure 55).

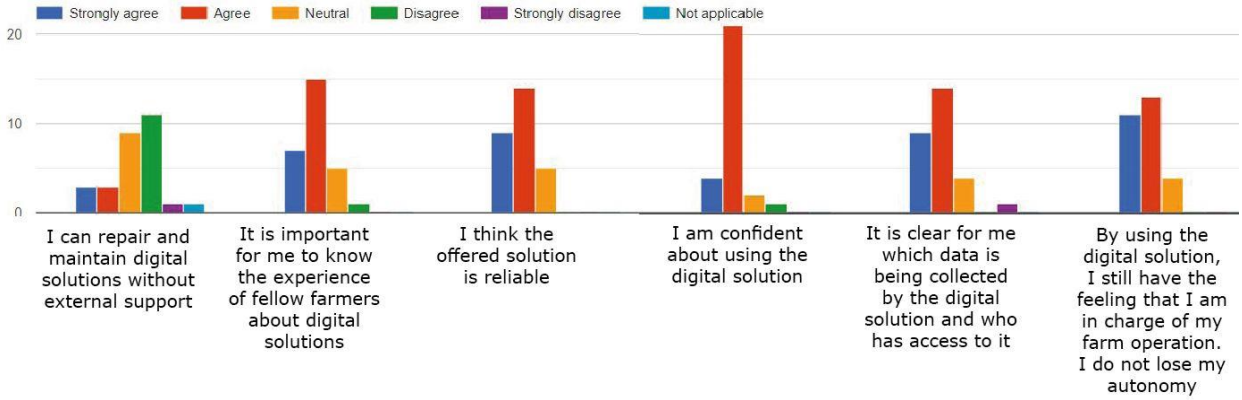


Figure 55 - UAT: Overall application of digital solutions

Finally, when it comes to the cost-efficiency of the solutions, a great majority of respondents saw clear benefits in terms of increasing farms profit and reducing production costs. 20 farms stated that tested solutions can increase productivity, by providing analysis of activities and resources, supporting better decisions, allowing more precise control of very important parameters, and, consequently, reducing working time. 15 respondents believe that the solution can increase their profit in the same way and that the price/quality ratio of the proposed solution is fair. The majority of respondents, 23 of them, believe that using the solution can help them

reduce production costs, by providing recommendations for better resource planning, and would recommend it to their neighbours and fellow farmers (Figure 56).

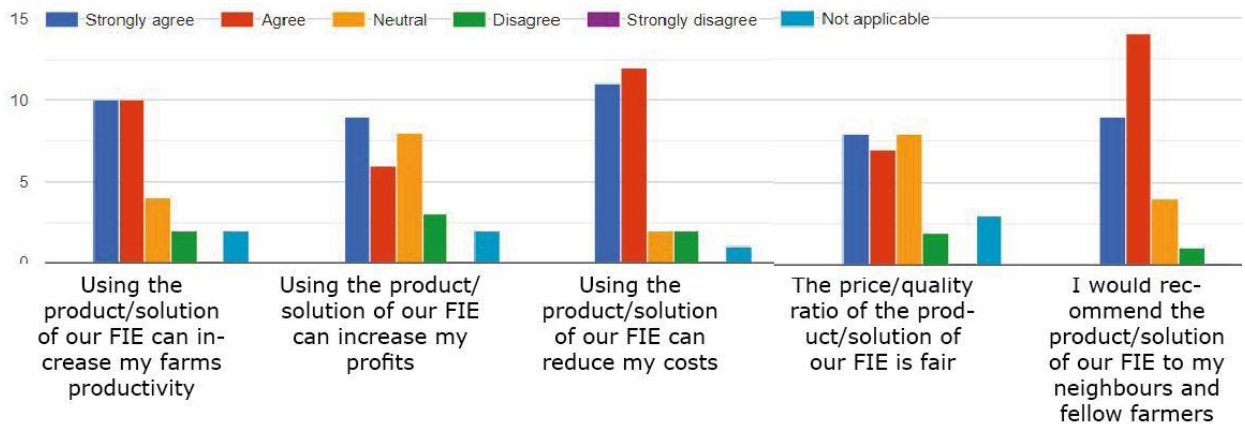


Figure 56 - UAT: Overall cost-efficiency and feasibility

The main conclusion, based on presented feedback, is that FIEs solutions are well accepted by end-users, and that are rated as greatly useful and cost-effective.

CHAPTER 3: BUSINESS SUPPORT TO FIES

Business support to FIEs

As mentioned previously, business support to FIEs is one of the outputs of Task 3.4. Within the second reporting period, several activities were conducted leading to the creation of such support. As envisaged within the task, this activity is implemented by WP3 in collaboration with WP4.

The first step within the process was to identify lacking skills and knowledge within FIEs, tightly related to the market expansion take up. The second step is related to the provision of soft skills and business support through a set of training and sector-specific consulting.

To identify FIE training needs within the scope of the task, a questionnaire, presented within Annex 2 of the report, was sent out for the purpose of assessing real needs for such support and to what extent. All 28 FIEs have addressed the questionnaire together with four projects from the Restart, Expand and Respond OC that were implemented at the time of the questionnaire circulation.

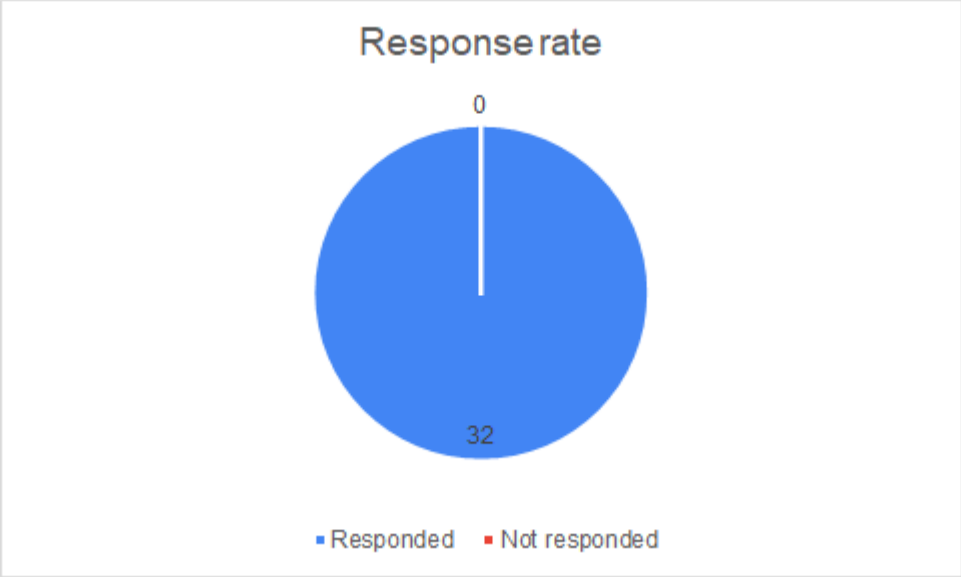


Figure 57 - FIE Response rate

The first question within the questionnaire was to identify whether such support is needed. 20/28 initial FIE have responded positively, while eight FIEs responded that they do not need such support due to the following reasons:

- Training support is not applicable for FIE at this stage,
- FIE has different needs related to regulatory standards, monitoring standards, and a decision by businesses,
- Already established cooperation with a DIH regarding the provision of business support,
- Market take-up is the responsibility of a company to which the solution is sold,
- The solution is already on the market,
- Marketing plan is already in place for the solution,
- Product is not ready to be marketed,
- Existing expertise within FIE, business courses already completed. It is a challenge to use the knowledge gained for the courses in practice due to a large gap between the project to the market.

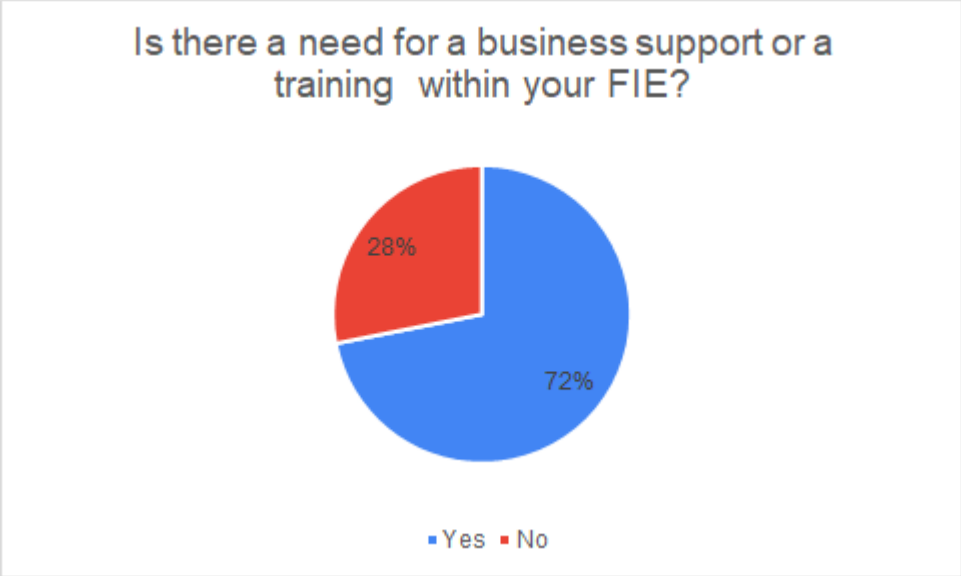


Figure 58 - Expressed need for business support

Surprisingly only three out of eight FIEs have responded that there is already sufficient knowledge within the team, while one FIE has mentioned a DIH as an established provider of the business support

Further, FIEs that have expressed a need for business training were asked to choose topics of their interest. The following ten business-related topics were offered including an option "Other" allowing them to propose other topics of their interest:

- Business plan development
- Mission, Vision, Strategy
- Creating and managing startups (e.g., Lean Startup Methodology)
- Pitching
- Financial Plan – funding ops, investors
- Marketing Plan and Market Analysis
- Ecosystem, collaboration and competition
- Regional Embedding
- Governance and organizational structure
- Other, please specify

The most requested training topic was Business plan development, followed by Ecosystem, collaboration and competition, Marketing plan and market analysis, financial plan – funding ops, investors, Mission, vision, strategy, Creating and managing startups, Governance and organisational structure, Pitching and Regional embedding with the least interest.

Two FIEs have proposed additional topics - Private-public cooperation, law aspects, public orders and Support for an expansion of market shares (national and international).

Following the training needs assessment, extensive consultations took place between WP3 and WP4 team members. The initial plan envisaged by the project was related to the training delivery by WP3 and WP4 team members. At the same time, the need for more proactive DIHs involvement within the SAHs project was becoming more evident, already steering several SAHs activities towards this. As an alternative to the training delivery by the project WPs, several additional options were considered among WP3 and WP4 members, including training delivery by DIHs. This approach would be contributing to further strengthening of DIHs skills and services toward FIEs, and at the same time assuring that the knowledge remains within DIHs allowing its transferability and replicability to the future customers.

Several options were considered by the Project Steering Committee (PSG) members, including risks, and added values for each option separately. As concluded by PSG, DIHs were proposed as training providers after attending a set of modules on business-related topics as identified above. These modules were to be prepared by WP3 and WP4 and facilitated through an existing Learning and Exchange Platform (LXP) in the ownership of WP4 partner.

Following the decision, WP3 reached out to 41 DIHs under 28 FIEs, separately. A list of contacted DIHs is presented below.

FIE 1	DIH Teagasc
	(DIH TGSC) DIH TSSG/WIT
FIE 2	DIH Teagasc
	DIH TSSG/WIT
FIE 3	DIH Food & Bio Cluster Denmark
	DIH Agroväst
	DIH SEGES
	DIH Agro Business Park
FIE 4	DIH Agroväst (LIvsmedel AB)
	DIH SEGES
FIE 5	DIH Luke DIS
	DIH AgroVäst
FIE 6	DIH Vegepolys-Valley
	DIH Chambre d'Agriculture Pays de la Loire
	DIH CEA Tech
	DIH Images & Réseaux
	DIH Inf'agri 85
FIE 7	DIH Digifermes
FIE 8	DIH Digifermes
	DIH Terrasolis
FIE 9	DIH Smart Digital Farming
	DIH Flanders' FOOD
	DIH IMEC
FIE 10	DIH Smart Digital Farming
	DIH JoinData
	DIH NPPL
	DIH E-Pieper
	DIH Praktijkcentrum voor precisielandbouw
	ZLTO
	FarmhackNL
FIE 11	DIH VzF GmbH Erfolg mit Schwein
FIE 12	DIH Smart Digital Farming (SDF)
FIE 13	DIH Smart Digital Farming (SDF)
	DIH IMEC
FIE 14	DIH Platform "Digitalization in Agriculture" of Federal Ministry of Agriculture
FIE 15	DIH Platform "Digitalisation in Agriculture" of Austrian Federal Ministry of Agriculture

FIE 16	Agriculture Digital Innovation Hub Poland
FIE 17	DIH Agro Poland
FIE 18	DIH Agro Poland
	DIH HUB4Agri
FIE 19	DIH Farmers Parliament Latvia
	DIH Wirelessinfo
FIE 20	DIH Farmers Parliament Latvia
	DIH Wirelessinfo
FIE 21	DIH FARM2030
	DATAlife DIH
	DIH COTR
	DIH Agrotech
FIE 22	DIH COTR
	DIH Agrotech
FIE23	DIH DATAlife
FIE 24	DIH Agrifood Clust-ER
FIE 25	DIH Agrifood Clust-ER
FIE 26	DIH Gaiasense
FIE 27	DIH mAgro
FIE 28	BioSense Institute

Table 2 - List of contacted DIHs belonging to each FIE

Out of 41 contacted DIHs, ten expressed interest to provide such support to FIEs while nine DIHs expressed no interest in the activity. Three DIHs asked for further elaboration on the activity but never contacted WP3 afterward. One DIH responded that although interested, they do not have the capacity for the training delivery. The remaining 18 DIHs never responded to the project proposal.

The response rate implies a lack of interest among DIHs, while the reasoning behind this might be that DIHs don't see the value of the offer. However, based on the experience within the project until now, the reasons could be also due to a lack of capacities within DIHs or lack of financial resources for such activity.
Once feedback from DIHs was collected, it was evident that some FIEs wouldn't have a dedicated DIH for the training delivery. The approach was slightly modified and relates to the engagement of those DIHs that have expressed interest previously in providing trainings. Trainings would be conducted by them, while FIEs would attend those sessions based on expressed interest but regardless of the region they belong to. This approach would ensure that each DIH that is interested in the activity is engaged, and each FIE that has expressed an interest in a particular topic would benefit from the knowledge gained.
In parallel to this, WP3 in collaboration with WP4 is in the process of preparing training material that will be uploaded to the LXP as modules and attended by DIHs,

equipping them with the needed knowledge to deliver specific business-related training.

Module content is being prepared in line with identified FIE needs. Already developed content that is part of LXP will be utilised, such as a module on business plan development including marketing plans and market analysis and the proposal writing course that will be developed by TNO in the upcoming period. These existing contents will be reassessed and adapted to task 3.4 needs, while the content for topics such as Mission, Vision, Strategy, Creating and managing start-ups (e.g., Lean Start-up Methodology), Pitching, Ecosystem, collaboration and competition, Regional Embedding, Governance and organizational structure the new content will be created.

All the activities presented above took place within the second reporting period, while the training delivery is envisaged within the third reporting period, according to the latest plan.
Timing of the Services OC is also in line with the plan, as the OC was launched on September 22nd and will close on June 29th, 2022. This OC is for DIHs that are developing and offering support services for agri-food stakeholders and related community networks for the digital innovation and transformation of their products, processes or business and governance models.
To ensure that trainings are delivered by DIHs to FIEs, WP3 will take a monitoring role within this process, including the preparation of evaluation materials and collecting the end-users' feedback.
Sector-specific consultations will take place once trainings are delivered. This activity will be done in cooperation with IoF2020 (Internet of Food and Farm 2020) Use Cases (UCs) whose solutions are already on the market and already possess a sector-specific knowledge. IoF2020 is H2020 project that is finalised in March 2021. The project was dedicated to the adoption of IoT technologies for securing sufficient, safe, and healthy food and to strengthening the competitiveness of farming and food chains in Europe. 33 UCs were developed under five trials - Arable, Fruit, Vegetables, Meat, Dairy, where solutions were developed, tested and some placed on the market within the project timeline. As Biosense Institute was a monitoring partner of 33 UC from IoF2020 in cooperation with ILVO, and these two organisations are monitoring the implementation of SAHs FIEs, a strong link is already established, allowing a transfer of knowledge from one project to another.

CHAPTER 4: NETWORKING

To bring FIEs closer to their potential customers, by expanding their network and opening the doors for new collaborations, WP3 has implemented several activities within the second reporting period aiming to engage users, develop synergies across the value chain and mobilize risk capital for the market expansion of IEs outputs.

As elaborated within D3.5-2, reusable components developed by FIEs, both technological and non-technological components are of a great potential value to other parties, primarily to DIHs considering the replication potential they have, but also to future FIEs. The networking potential is foreseen between current FIEs (reusable component owners) and DIHs interested in the component. Therefore, reusable components arising from the FIEs were collected and shared with DIHs of the SAHs, leading to further connections and exchange of information. The activity was implemented in collaboration with WP1.

Another activity related to reusability concerns the creation of a module on SAHs technological and non-technological reusable components within SAHs LXP, envisaged for the winners of the PREPARE OC. This is a useful opportunity for the PREPARE OC winners especially within their proposal preparation process. This activity is conducted by ILVO and is also elaborated in more detail within D3.5-2.

Envisaged business related networking opportunity, in collaboration with IoF2020 project, already elaborated under the Business support program tailored to FIEs, aiming to connect IoF2020 UCs with SAHs FIEs. These connections will be sector-specific and in addition to the knowledge transfer will enable further networking opportunities and collaborations between organisations from the two projects.
Within the scope of IoF2020 and SAHs collaboration, several organisations working on the development of solutions within the wine and grape sector were put together - FIEs 14, 21, and 25 from SAHs and other UCs from the IoF2020 project. The potential collaboration is envisaged also under organisation of mutual demo events as it was already proposed by one of the IoF2020 partners specialized in the wine sector from Italy.

As SAHs IP is already established channel for the exchange of best practices and success stories, the content arising from the D3.8 Best practices and success stories will be utilised in the upcoming period allowing further FIE specific promotion while unlocking visibility of various FIE achievements. To boost the visibility of the PREPARE OC projects, information regarding their final results will be shared via the Forum section of the IP, while the same modality was already applied to the RESPOND1 DIHs OC and its hackathon events in collaboration with WP2. Such online promotion allows better visibility of ongoing OC funded actions, in addition to ongoing social media usage and regular SAHs newsletter publications implemented under WP1.

Due to the Covid19 crisis, organisation of large face-to-face events was put on hold including the cancellation of the IoF2020 closing event to which all SAHs FIEs were invited. In addition, the annual event of the SAHs project is postponed due to the same reasons. Considering the current unfavourable situation resulting from Covid-19 all future networking activities will be shifted to an online format, which still tends to be less favourable for networking.

3. CONCLUSIONS

The report on maximisation of IEs market take up is the first iteration of such report, while the second version is due M48. This report describes demonstration activities implemented by FIEs and OC IEs. The report also presents the collected feedback from conducted demonstration events, including information on events attended and organised by RCs. Besides this, the report provided analysis of collected User Acceptance Testing questionnaires conducted by FIEs and their testing partners. While the above-mentioned elements are looking at the solutions demonstrated and tested, section on the business support and implemented modalities, in this regard, is providing an overview on requested business skills within FIEs bringing them closer to the market. Finally, the report looks at the conducted networking events initiated by WP3. Conclusion is therefore divided into these separate segments, providing a better overview of findings and recommendations.

Conducted events and demonstration activities

As reported during the first and the second reporting period, approximately 66 **demo events** were organised by FIEs and OC IEs (22 within the first and 44 within the second reporting period). When merged with the **events** attended or organised by **RCs** from both reporting periods (113 from the first and 55 from the second reporting period), it is approximately **234 individual events**.

If looking at the current reporting period only, RCs, FIEs, and IEs have reported about 99 events in total, 73 events were conducted in a virtual environment, while 26 were held as live (face-to-face) demonstrations. Events conducted within the second reporting period have gathered over 3500 individuals from different agriculture-related fields. **End users** - farmers, aquaculture and viticulture actors, policy-makers, Agri-food advisors, IT experts, technology providers, scientists, students and equipment dealers were present within these events. CCs, DIHs, StartUps & SMEs, Research Facilities and Accelerators were also involved or presented at the events organized by RCs. The most widely used **promotional channel**, for event announcements and promotion, was SAH IP, while events were also promoted on social media channels. The most efficient way to attract attendees was via individual email invitations.

From the beginning of the SAH project, reporting on the demonstration activities confirmed that **on-farm demonstrations** are an effective way to foster innovation, disseminate research results and best farming practices or systems to a wider audience. Effective demonstrations foster knowledge exchange among farmers, but also between students/farmers/advisors/researchers/businesses joining the events. Valuable **inputs** were collected regarding the event organisation and the event topic/content. It is confirmed that **live events and physical demonstrations** are much more efficient and will raise more interest among participants compared to online presentations, even though online events gather more participants. Because of Covid-19 pandemics, many demonstration events had to be conducted online. However, most participants agreed that the same event should be organised in a physical environment, once the circumstances related to Covid19 are changed. Several positive aspects were reported regarding online events - they are more convenient for attending, they last shorter than all-day demonstrations and presentations. The disadvantage of such a modality relates to potentially fewer interactions between demonstrators and the target audience. On the contrary, the discussions and Q&A sessions at the end of each event were very constructive and many practical questions were answered. From here it can be concluded that this aspect can vary from one event to another, depending on the target audience and their willingness to interact. Nevertheless, FIEs are advised to put additional efforts that will result in enhanced interactions during the event.

Regardless of the pandemic, it can be concluded that sufficient number of demo events by FIEs were conducted within the second reporting period. This is again due to their more mature solutions and services at this stage of the project. At the same time, fewer events were attended and organised by RCs, as they previously have attended many large fairs and events which were all cancelled following the Covid-19 outbreak.

Importance of continuous communication with all stakeholders is perceived as an important element, including flexible approach when running demonstration. Another common lesson is related to the **importance of the event planning** to ensure the smooth implementation of the event. The majority of FIEs reported very im-

portant lessons learned about **farmers' behaviour and readiness to use innovative technologies.** In most cases, end-users (farmers) show an interest in new technology and are looking for solutions to help them with decision-making processes (by estimating field losses, giving irrigation recommendations, etc), in order to increase profit and improve production. Regarding the **feedback from the participants**, it is reported that attendees were highly satisfied with the topics discussed during events, since they find them interesting and important for the present moment. Another common feedback is related to the need to improve the knowledge of farmers and other end-users, relates to understanding of the benefits and needs for using innovative solutions and technologies.

Considering all findings presented above, it can be concluded that demonstrations bring additional benefits to their end users, as people are eager to learn about recent developments and technologies. Still, some reluctance is noticed among target audiences towards the use of these technologies and their benefits. This is well showed within FIE20, when much more interest for the solution within the farming community was reported following FIEs success within the FAO-ITU Call for "Good practices in the field of digital agriculture in Europe and Central Asia".

In the future, more demonstrations and practical trainings are needed to bring digital technologies closer to the potential end users. However, this is not a novelty nor a surprise, it is expected as that process of change requires several years and needs to be tackled strategically on all levels.

User Acceptance Testing

Findings from the UAT mostly support finding resulting from conducted FIE demonstrations. Farmers that have tested FIE specific solutions/services have shown interest and satisfaction with the solutions. 27 out of 28 farms have reported that the solution was **useful and brought additional benefits**, while one farm was neutral. Concerning the usefulness of the product/solution, only one farm was neutral about the additional benefits of the solution, while 27 respondents agreed that additional benefits for the farm are clear. Seven were neutral regarding the statement that offered solution can reduce the amount of working time, while 21 farms agreed that the solution is helpful in this case. Also, the majority agrees proposed solutions can provide more benefits than their current practices, that it can contribute to realizing societal goals, such as making farming more environmentally friendly, and fostering public acceptance of farming, as it helps to inform consumers about the production process of their food.

On the contrary, information gathered through implemented demonstration activities, shown to some extent reluctance in using novel technologies at the farm level. This shows that those users that have tested the solution have more specific experience and are well informed, while those that have only taken part in the demo events still potentially lack knowledge on the benefits that digital solutions promise to bring.

According to the respondents, some of the most important **features** which benefit their farms are related to increasing production (by providing recommendations on different aspects of each production phase), reducing the amount of physical documentation, and supporting better decisions. Eleven out of 28 respondents think that a special (ICT) expertise is required for using the offered product/solution, and two reported difficulties with accessing the solution on a mobile devise. 15 out of 28

respondents were confident of support services and guarantees in cases of solutions' malfunction, while the rest were quite neutral on the subject.

Some **issues**, reported as hinders of the product/solution applications at the farm, are mainly related to none or slow-speed internet connection and lack of GSM coverage. Only one farm reported that there were no such problems during the testing period.

Most respondents are already familiar with different digital technologies, which are helping them in their daily activities. Using the products/solutions proposed by SAH FIEs was not a completely new experience, and 25 out of 28 respondents felt confident about using the FIEs solution and think that provided solution is reliable. Most respondents are aware of the level of data collected by the solution and who can access it, they think it is important to know the experience of other users about digital solutions and that the tested solution is not decreasing the feeling of being in charge of production.

Finally, when it comes to the **cost-efficiency** of the solutions, a great majority of respondents saw obvious benefits to increase farms profit and reducing production costs. 20 farms stated that tested solutions can increase productivity, by analyzing activities and resources, supporting better decisions, allowing more precise control of very important parameters, and reducing working time. 15 respondents believe that the solution can increase their profit in the same way and that the price/quality ratio of the proposed solution is fair. Most respondents, 23 of them, believe that using the solution can help them reduce production costs by providing recommendations for better resource planning, and would recommend it to their neighbours and fellow farmers.

The main conclusion, based on presented feedback, is that FIEs solutions are well accepted by end-users, and are rated as useful and cost-effective. Several experiments that didn't take part in the activity during the second reporting period but will provide their feedback during 2022. We will integrate these results in the final version of D3.7.

Business support to FIEs

As envisaged by the project, support to FIEs within the business domain was recognised as a necessity towards bringing FIE specific solutions closer to the market. The most requested training topic was Business plan development, followed by Ecosystem, collaboration and competition, Marketing plan and market analysis, financial plan – funding ops, investors, Mission, vision, strategy, Creating and managing start-ups, Governance and organisational structure, Pitching and Regional embedding with the least interest. Two FIEs have proposed additional topics - Private-public cooperation, law aspects, public orders and Support for an expansion of market shares (national and international).

The approach within the project was changed, to allow DIHs to be actively engaged within the delivery of needed skills, instead of WP3 and WP4 partners. This process of communication with DIHs was coordinated by WP3. However out of 41 contacted DIHs, only ten expressed interest to provide such support to FIEs while nine DIHs expressed no interest in the activity and 18 DIHs never responded to the project proposal.

The response rate implies a lack of interest among DIHs, while the reasoning behind this might be that DIHs don't see the value of the offer or the lack the capacity to implement the training.

In the upcoming period, focus will be placed on those proactive DIHs as a training provider. WP3 and WP4 are working on the contend development and the topics will be offered to DIHs in a form of modules via LXP, to equip them with additional knowledge and content regarding each topic mentioned above. In addition, DIHs are encouraged to apply to the currently running SERVICE OC, funding DIHs that will develop, innovate, provide, validate and/or improve services provided.

Networking

Several networking activities were implemented within the second reporting period, allowing better visibility of the OC projects via the Innovation Portal and individually organised events (e.g. webinar presenting the RESPONS OC project). To allow better visibility of networking events, WP1 is providing support by promoting activities via the IP and social media channels and distributing messages to SAHs community. In the upcoming period, more emphasis will be placed on cooperation between IoF2020, as more mature solutions and FIEs. Also, actions toward improved visibility of FIE results via the SAHs website and social media will be enhanced, allowing better outreach and potential new cooperation's. The third reporting period will allow more FIE related promotions as the solutions are at this time of the project more mature, and therefore can offer more proven results.

The second reporting period was a fruitful period for SAHs and its FIEs, allowing better outreach to potential end users, better understanding of FIE specific needs and potentials and was an opportunity to learn and fine-tune project activities in line with the real requirements. These learnings will be integrated and put into action within the third reporting period, to maximise the potentials of the project and its impact within the sector.

REPORT ON MAXIMISATION OF FIES MARKET TAKE UP

ANNEXES

Content

ANNEX 1

FIE Demonstration Activity plan for online events, Demonstration activity plan for face-to-face events and the Event procedure for RCs

FACE TO FACE DEMONSTRATION PROCEDURE FOR FLAGSHIP INNOVATION EXPERIMENTS

WP 3

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

smartagrihubs.eu

TABLE OF CONTENTS

1. INTRODUCTION

The purpose of this document is to provide guidelines **for organizing, conducting and reporting about face-to-face demonstration event within the course of Smart Agri Hubs Project.**

The aim of the demonstration event is to present FIE latest advancements and product developments.

Demonstration events imply knowledge/experience exchange on three levels – among SAHs partners, with other relevant H2020 projects and with external participants (e.g., farmers, end users, etc.) interested in the topic of demonstration.

The common characteristics of all demonstration events are:

- Knowledge/experience exchange
- Involvement of different stakeholder groups (farmers, IT community, researchers, etc.)
- Broad promotion of the event (both as an announcement, prior to the event as well as after)
- Lessons Learned (LL) collection, which could be used in later a phase of the project.

Demo events can be hosted on farms (deployment sites) or in laboratories/facilities, where solutions are being developed. Alternatively, the solution demonstration can be conducted during fairs, demo-shows or other similar events, that can bring added value to the demonstration of SAH successes. Taking into account the COVID-19 pandemic, you should also be aware of the measures your country has taken into contaminating the pandemic and apply them at your event. A separate procedure is established when organizing or attending online demo events https://3.basecamp.com/4233534/buckets/12395087/vaults/3399583934

This document should be perceived as a guideline when organising and conducting demo events. The first part of the document includes information on how to organise an event - step by step process (Chapter 1 and 2), while the second part of the document includes mandatory elements to be tackled prior to the event – Annex1; during the event Annex 2; and after the event Annex 3. The document also includes other tools that may help you within the process e.g., draft invitation letter.

2. SETTING UP A DEMONSTRATION EVENT – STEP BY STEP PROCESS

Within this chapter you will find more detailed information on how to organize and prepare a demo event. The information is to help you within the process, if needed.

The subject and objectives are the basis for the preparation and execution of the demonstration event. When the subject and priorities are clearly defined, roles are divided between facilitator and presenter. Every demonstration event should have a facilitator and one or more presenters (in some cases a single person can be both the facilitator and the presenter). For events with smaller audiences a facilitator with proper content expertise can also act as a presenter. Depending on content scope, one or more presenters can be assigned.

The facilitator's responsibility is to promote the event, arrange the place where the event will be held, open the event, accommodate the technical support, and ensure a proper follow-up.

The presenter, usually an expert on the subject's matter, forms and presents the demonstration content of the webinar, and engages the participants through interaction.

2.1 FACILITATION

2.1.1 Preparation

1. **Understand the goals of SAHs demonstration event.** What are the main ideas and messages you want to impart? What knowledge do you want participants to come away with? What steps would they take after the webinar? What information do you need form the participants?

   Choose the place of the event. Find the best suitable space for the organization of the event considering the specificities and the subject of the demo event. Some events are more suitable to be organized on a farm while others should be done in more specialized facilities.

2. ***Formulate a draft agenda for the demonstration event with the presenter/s and give them specific guidance.***
   Pick a time for the event that is suitable for the majority of your target audience considering their usual daily activities.
   In respect to presenters, keep in mind how much time they'll have for the demo session. Be sure to remind the presenter/s to prepare for audience engagement (live responses, questionnaires). Ensure enough time for Q/A form the audience.

3. ***Announce the demonstration event to different stakeholder groups (farmers, IT community, researchers, SAHs portal, etc.).***
   The event should be ideally announced a month ahead to ensure satisfactory attendance rate.
   Write an invitation message that attracts attention and encourages people to get involved (**see Invitation Guidelines and the invitation template, chapter 7**). Include direct email/calendar invitations - a clickable calendar entry (.ics file) to make it easier for people to add the event to their calendar. As the attendees are registering to the event, create a unique registration list. Be sure to specify the required fields for

participant registration, in order to have a complete Attendee list (full name, organization, e-mail, occupation/sector, country).

- If your audience includes external persons, broaden the announcement via Facebook, LinkedIn, Twitter, and other relevant networks.
- Assure that stakeholders who sign up receive participation instructions, including **the location where the event will be organized, timeline, presenters, precaution and safety measure that will be taken due to COVID-19 pandemic.**

4. ***Practice the event sessions with presenter(s)***

Meet with the presenters before the event and give them time to familiarize themselves with the location and give them guidance on any technical tools which will be used during the event. You should also make sure all the tools work properly and are connected.

2.1.2 Execution

5. ***Preparation.*** Arrive 1h-30 minutes on the spot prior to the event, check that all technicalities, connections, and equipment is working properly. Ensure everybody understands and complies with the safety measures.

6. ***Ensure audience fills in attendee sheet previously prepared and distribute other relevant promotional materials.***

7. ***Make sure there are no distractions during the event.***

Ask the audience to put their phones in silent mode and make sure the location is peaceful enough for the event to be held there.

8. ***Let the audience know how the event will look like,*** particularly considering the Q&A sessions and remind them of the potential safety measures.

9. ***Make enough time for Q&A session and interaction, as outlined in the initial script.***

10. ***Close the demonstration session*** and Distribute **the Questionnaire for attendees (Annex 2).** Formulate any next steps or follow-up activities (this can also be done by the presenter).

2.1.3 Follow up

11. **Thank the stakeholders and make an assessment after the event as soon as possible.** If there are any recording of the event or pictures, you can distribute them to the attendees if they have left their emails and also on social media.

12. ***Reporting to WP3***. Based on the demonstration procedure, prepare analysis of the attendee questionnaires, lessons learned report, event pictures and demo materials used (all part of the Demonstration Activity Procedure).

3 APPROACH & METHODOLOGY- RESPONSIBILITES

3.1. PLANNING PHASE

Team/Person responsible	Action	Associated document
WP3	Prepares Dissemination package for Demonstration. This includes: • SAHs logos and templates • Invitation • Questionnaire for participants • Leaflet (email including agenda for advertisement and awareness creation) • Attendee list template • The latest SAHs pdf book-let/brochure	Folder with prepared material available on Basecamp: Smart Agri Hubs Folder - Doc and Files – Template and communication material And Smart Agri Hubs Folder - Doc and Files – Demonstration activity plan for demo events And Innovation portal Library section – Communication at the project level Communication at the project level
WP3	Prepare reporting templates: • Report on conducted activities • Lessons Learnt (annex 3)	Folder with prepared material available on Basecamp: Smart Agri Hubs Folder - Doc and Files – Demonstration activity plan for demo events
UC coordinator	To send to WP3 - DAP (Annex 1) once the event is scheduled.	

3.2 EXECUTION PHASE

Team/Person responsible	Action
FIE coordinator	Fully responsible for online demonstration organization
FIE team member/coordinator	Announces the event on SAHs Innovation Portal- Calendar page https://www.smartagrihubs.eu/portal/calendar?page=1
WP3	Based on received DAP, and reporting documents, monitors, evaluates and reports on FIE progress

3.3 PERFORMANCE MONITORING (CLOSING)

Team/Person responsible	Action	Associated document
FIE coordinator / DA main responsible person	Ensure that all attendees fill in the Feedback form, including the Attendee list	Annex 2 (Questionnaire for attendees). Attendee list to be kept in FIE records while the total number of participants needs to be provided in Annex 3
FIE coordinator / DA main responsible person	Fill in Lessons Learnt template	Annex 3
FIE coordinator / DA main responsible person	Return feedback forms to WP3 latest one month after the event. Lessons Learned report and questionnaire analysis together with pictures and or screenshots.	

4. ANNEX 1 - DEMONSTRATION ACTIVITIES PLAN TEMPLATE (DAP)

Topic: FIE:	Your answer
Event overview	*Please, indicate:* • *Event title* • *Date and time* • *Location* • *Main technologies that will be presented*
Constraints	*Are there any restrictions in the number of people that can/might be invited (if it's a closed demonstration, open to external participants, members of some organizations, etc.)*
Planned stakeholders' groups	*Please indicate the main stakeholders' groups that you intend to invite (e.g. Farmers association – XYZ; Advisory…)*
Planned number of attendees	*Please indicate a targeted number of visitors at the event*
What do you want to achieve with this particular demonstration	*Inform the general public, come in the local press, represent my organization, arouse the interest of private capital bodies, …, or actually attract customers for my products, present the solution to a specific target group, etc.*
Dissemination channels envisioned	*Please, indicate through which channels you plan to inform stakeholders about the event (e.g. newsletters of the organization; social media – please indicate accounts; local media, targeted mailing …)*
Potential collaboration with other H2020 projects	*Please indicate main components of your demonstration that can act at as a link to other H2020 projects and initiatives (e.g. Place: vineyard in Austria; Specific audience: young farmers…). We will use this information to select appropriate H2020 project/initiative and to invite representatives to attend.*
Roles and responsibilities	*Please, indicate the organizational team (name and email) – contact points for following topics:* • *Demonstration Activity Main responsible – FIE co-ordinator* • *Facilitator* • *Presenter/s* • *Communication responsible – for local stakeholders and EU/H2020 stakeholders* *Please, have in mind that one person can be in charge for more than one topic*

Feedback from participants	*Please, indicate topics you would like to be covered by feedback questionnaire. E.g.:* – *Usefulness of presented technologies* – *The functionalities are easy to understand.* – *Suggest solution adjustments to address your needs*

*In case of more than one event, please copy-paste the table as many times as events planned.

5. ANNEX 2 – QUESTIONNAIRE FOR ATTENDEES

Questions below should be included in the questionnaire ~~form,~~ however you are encouraged to add and moderate questions to fit your specific demo purpose.

1. Feedback to Flagship Innovation, related to demonstrated product/services (tick boxes)

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
The **additional benefit** for the farm is clear					
This product can be **useful** for the daily work					
The product **improves** the **end user's (farm) management**					
The product provides a better **decision making.**					
The product makes the **production** more **transparent**					
The product is **easy to use** and **understand** by all persons working with it					
The **design** of the solution is easy to understand					

2. Usefulness of presented technologies - How do you appreciate the various aspects of the demo event (tick boxes)

	Very useful	Useful	Neutral	Not useful
Lecture				
Field walk				
Technologies				
...				

3. Replicability potential – can the suggested solution be adjusted to address your needs?

4. What is your wiliness to pay for the solution?

5. Open suggestions

6. *…additional questions to be added based on UC specific needs)*

6. ANNEX 3 - LESSONS LEARNT REPORT

Lessons Learnt report		
DA field	**Highlights**	**Attention points**
Presented solution features – observation (based on interaction with attendees)		
Solution presentation (how, what additional material was used, structure of demonstration, etc.)		
Communication with stakeholders		
Target audience and feedback		
Total number of participants (from all target groups):		

Below, please provide a total number of participants per each target group (feel free to add any other relevant target group)

Scientific	Industry	Civil Society	General Public	Policy makers	Media	Investors	Customers	Others

How will you implement feedback you have received form the participants?	

Please include pictures/screenshots from the event – provide a link to Basecamp FIE dedicated folder.

7. INVITATION GUIDELINES AND THE INVITATION TEMPLATE

- Below you will find the text that should serve as the basis of your demonstration activity invitation. Some information has to be filled in individually, make sure to fill in all the brackets.
- Place the following picture on the top or use it under your name as part of the signature:

- Use the following subject line for your email:
  Smart Agri Hubs demonstration - [Insert title of demonstration]
- Fill in the demonstration information and the programme of the activity.

INVITATION EMAIL TEXT

To Whom it May Concern or [Insert name of recipient],

We cordially invite you to our upcoming Flagship Innovation Experiment (FIE) demonstration event "[Insert title of demonstration]" taking place on (Insert date, time and location).

This demonstration is part of the Smart Agri Hubs Project which aims to demonstrate the value of digital technologies for the European farming sectors.

Our FIE mainly focuses on [Insert short description of your work from]. The demonstration will inform you about (e.g., lessons learned, the faced challenges and the applied technologies to overcome them). We are going to showcase [Insert description of demonstration activity].

For further information please see the full programme enclosed (the programme includes all necessary links to register for the event).

Please register to join the demonstration no later than *(date)*.

Kind regards,

[Insert name]

8. DEMONSTRATION REPORTING WITHIN THE ANNUAL PROGRESS REPORT

The annual progress report Section 8 relates to reporting on each demo activity organised within a specific reporting period and therefore, for your convenience, please find the table on the next page (that is part of the annual progress report). Our advice is to fill in this table together with supporting annexes (Annex 2 and Annex 3) just after the event and paste it to the final progress report afterwards, in this way you will have everything ready at the time of final reporting and will make you report easier.

DEMONSTRATION ACTIVITIES	
Title of demo event	
Location of the demonstration	(If online event, place online event)
Demonstration date	
What is subjected to demonstration?	
Demonstration activity environment	
Used infrastructure for demonstration activity	(If the demo was face to face event)
Demonstration activity interactive aspect	

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Targeted audience group	
Involved DIHs in demonstration activity	
Promotional materials used	*[Please indicate concrete promotional materials used, tools to collect the feedback, etc.]*
Video recording of a demo event	*Please provide a link to a demo event recording. The recording can be used to showcase FIE results for SAHs community*
Participants feedback	*[Please provide a short resume on the general comments/feedback received after the demonstration*
Please provide analysis of DAP Annex 2 – Questionnaire for attendees	
Please provide annex 3 form the Demonstration Activity Plan – Lessons learned	

ONLINE DEMONSTRATION PROCEDURE

WP 3

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

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TABLE OF CONTENTS

1. INTRODUCTION

The purpose of this document is to provide guidelines **for organizing, conducting, and reporting about an online demonstration event (demonstration webinar) within the course of Smart Agri Hubs Project. Considering ongoing COVID-19[1] pandemic and diverse measures in force in Europe, including bans or limitations for gatherings (events and demonstrations), switching from face to face to online demonstrations for the purpose of project and product demonstration is encouraged both for SAHs Flagship Innovation Experiments (FIEs) and Regional Clusters (RCs).**

The aim of the demonstration event/webinar is to present FIE latest advancements and product developments using voice audio, slides, screen sharing and text chat.

Online demonstration events imply knowledge/experience exchange on three levels – among SAHs partners, with other relevant H2020 projects and with external participants (e.g., farmers, end users, etc.) interested in the topic of demonstration.

The common characteristics of all demonstration events are:

- Knowledge/experience exchange
- Involvement of different stakeholder groups (farmers, IT community, researchers, etc.)
- Broad promotion of the event (both as an announcement, prior to the event as well as after)
- Lessons Learned (LL) collection, which could be used in later a phase of the project.

Some of the benefits of the online demonstration events include cost effectiveness, quick organization and setting up, and an easy way to interact and exchange knowledge with stakeholders from different countries. Besides, online demonstration events can also be recorded and distributed after the event.

This document should be perceived as a guideline when organising and conducting demo events. The first part of the document includes information on how to organise an event - step by step process (Chapter 1 and 2), while the second part of the document includes mandatory elements to be tackled prior to the event – Annex1; during the event Annex 2; and after the event Annex 3. The document also includes other tools that may help you within the process e.g., draft invitation letter.

[1] https://www.who.int/emergencies/diseases/novel-coronavirus-2019

2. SETTING UP A DEMONSTRATION WEBINAR- STEP BY STEP PROCESS

Within this chapter you will find more detailed information on how to organize and prepare a demo event. The information is to help you within the process, if needed.

The subject and objectives are the basis for the preparation and execution of the demonstration webinar. When the subject and priorities are clearly defined, roles are divided between facilitator and presenter. Every online demonstration event should have a facilitator and one or more presenters (in some cases a single person can be both the facilitator and the presenter). For webinars with smaller audiences (less than 20 people) a facilitator with proper content expertise can also act as a presenter. Depending on content scope, one or more presenters can be assigned.

The facilitator's responsibility is to promote the event, arrange and launch the online platform, open the webinar, accommodate the technical support, and ensure a proper follow-up.

The presenter, usually an expert on the subject's matter, forms and presents the demonstration content of the webinar, and engages the participants through interaction.

2.1 FACILITATION

2.1.1 Preparation

1. ***Choose your platform.*** If you are not completely comfortable, undergo preparation, research, or practice. Be prepared to give participants fast technical guidance on all main functions of the platform during the webinar.

Below are some of the most reliable and popular online facilitation platforms, ideal for organizing online demonstration events:

- **Zoom** - free webinars for up to 100 people (max 40 minutes)
  https://zoom.us/

  On the link below please find a 60-minute session covering best practices, customization, and registration for your future Zoom webinars.
  Zoom Webinar Training

- **WebEx** - free webinars for up to 100 people (max 40 minutes)
  https://www.webex.com/

- **GoToWebinar** (starts at app. $100/mo for 100 participants)
  https://www.gotomeeting.com/webinar

- **Skype**
  www.skype.com

- **Google Hangouts (free)**
  https://hangouts.google.com/

When setting up the webinar be sure to specify the required fields for participant registration, in order to have a complete **Attendee list** (full name, organization, e-mail, occupation/sector, country) after the webinar.

2. ***Create a timeline, along with your presenters***. Ensure the presenter/s have enough time to arrange presentations and complete a script.
Pick a time for the webinar that is suitable and in accordance with the time zone for most of your target audience.

3. ***Formulate a draft agenda for the demonstration webinar with the presenter/s and give them specific guidance:*** How much time they'll have, propose on a variety of slides, suggest on the length of Q&A session. Be sure to remind the presenter/s to prepare for audience engagement (live responses, questionnaires, polls).
Tip: Don't use video if the bandwidth of the participants is limited; use only audio and slides.

4. ***Announce the online demonstration event to different stakeholder groups (farmers, IT community, researchers, SAHs portal, etc.)***. For online events with larger (100 or more people expected), the announcement should be done a **month** in advance. For the ones with smaller audiences, **a week** is enough.
   - Write an invitation message that attracts attention and encourages people to get involved (**see Invitation Guidelines and the invitation template, chapter 7**). Include direct email/calendar invitations - a clickable calendar entry (.ics file) to make it easier for people to add the event to their calendar.
   - If your audience includes external persons, broaden the announcement via Facebook, LinkedIn, Twitter, and other relevant networks.
   - Assure that stakeholders who sign up receive participation instructions, including **any technical requirements with links to quick start guides on how to use the dedicated platform**. Encourage users who are using the platform for the first time to study the manual and test the specific platform as soon as possible.

5. ***Practice the event sessions with presenter(s)***, especially if you are new to webinars or if the content is being presented for the first time.
Try out pre-loading all the material in order to enable quick content sharing with stakeholders when needed.
Practice giving different kinds of permissions to participants and getting it back from them (for example screen sharing control). Make sure all links are functioning and practice on different communication functionalities such as muting/unmuting yourself and the participants.

2.1.2 Execution

6. ***Make sure you are in a place with no distractions*** (noise, crowded offices, mobile phones). Prepare and test all your equipment (PC, headset, agenda, printouts).

7. ***Start the online event early (at least 15 minutes ahead) and see that your presenter/s do the same.***
Open the presentation(s) with the rest of webinar content, but keep it hidden from participant view – only display your first/welcome slide. It is a good idea to have a backup PC with all

the necessary material and specific platform installed in case of unstable connections and hardware failure.

8. ***In case you feel it would be helpful, explain briefly the webinar platform's main features,*** particularly those that you expect the participants to use, such as the chat functionality, raise your hand feature, microphones muting / unmuting etc.

9. ***Set all microphones to muted state, except the one/s from the presenter/s.***

10. ***Make enough time for Q&A session and interaction, as outlined in the initial script.***

11. ***Close the online demonstration event.*** Let the stakeholders know what information will be distributed following the webinar, such as recordings, poll results, webinar transcripts or other materials. Formulate any next steps or follow-up activities (this can also be done by the presenter).

Switch off recording at the end of the webinar but leave the PC linked and the platform program running until the recording is processed and ready to be saved/shared.

2.1.3 Follow up

12. **Thank the stakeholders via email and make an assessment after the webinar as soon as possible -** distribute **the Questionnaire for attendees (Annex 2)** and provide links to presentations, recordings, and other relevant reference materials.

2.2 PRESENTATION

1. **Understand the goals of SAHs online demonstration event.** What are the main ideas and messages you want to impart? What knowledge do you want participants to come away with? What steps would they take after the webinar? What information do you need form the participants?

2. **Acknowledge the roles of the facilitator and the presenter.** As presenter, within the time allocated, your job is to provide relevant content and opportunities for interaction. You can count on the facilitator to set up the dedicated platform and prepare the technical aspect of the webinar, publicize the event, provide technical support during the webinar, set up the polls, deal with participant requests and arrange a follow up evaluation.

3. **Together with other presenters and the facilitator establish a common timeline** for event preparation and dissemination (making enough time to prepare your content and draft the agenda).

4. **Join the event early,** ideally about 15 minutes before the scheduled start time. Load your presentation and other relevant material but keep it hidden from the rest of the participants until the right time to share it.

5. **Upon completion of your presentation, turn over to the facilitator but remain online** for possible Q&A and further discussion.

3 APPROACH & METHODOLOGY- RESPONSIBILITES

3.1. PLANNING PHASE

Team/Person responsible	Action	Associated document
WP3	Prepares Dissemination package for Online Demonstration. This includes: • SAHs logos and templates • Invitation • Questionnaire for participants • Leaflet (email including agenda for advertisement and awareness creation) • Attendee list template • The latest SAHs pdf booklet/brochure	Folder with prepared material available on Basecamp: Smart Agri Hubs Folder - Doc and Files – Template and communication material And Smart Agri Hubs Folder - Doc and Files – Demonstration activity plan for online events
WP3	Prepare reporting templates: • Report on conducted activities • Lessons Learnt (annex 3)	Folder with prepared material available on Basecamp: Smart Agri Hubs Folder - Doc and Files – Demonstration activity plan for online events
UC coordinator	To send to WP3 - DAP (Annex 1) once the event is scheduled.	

3.2 EXECUTION PHASE

Team/Person responsible	Action

FIE coordinator	Fully responsible for online demonstration organization
FIE team member/coordinator	Announces the event on SAHs Innovation Portal- Calendar page https://www.smartagrihubs.eu/portal/calendar?page=1
WP3	Based on received DAP, and reporting documents, monitors, evaluates and reports on FIE progress

3.3 PERFORMANCE MONITORING (CLOSING)

Team/Person responsible	Action	Associated document
FIE coordinator / DA main responsible person	Ensure that all attendees fill in the Feedback form, including the Attendee list	Annex 2 (Questionnaire for attendees). Attendee list to be kept in FIE records while the total number of participants needs to be provided in Annex 3
FIE coordinator / DA main responsible person	Fill in Lessons Learnt template	Annex 3
FIE coordinator / DA main responsible person	Return feedback forms to WP3 latest one month after the event. Lessons Learned report and questionnaire analysis together with pictures and or screenshots.	

4. ANNEX 1 - ONLINE DEMONSTRATION ACTIVITIES PLAN TEMPLATE (DAP)

Topic: FIE:	Your answer
Event overview	*Please, indicate:* • *Event title* • *Date and time* • *Platform* • *Main technologies that will be presented*
Constraints	*Are there any restrictions in the number of people that can/might be invited (if it's a closed online demonstration, open to external participants, members of some organizations, etc.)*
Planned stakeholders' groups	*Please indicate the main stakeholders' groups that you intend to invite (e.g. Farmers association – XYZ; Advisory…)*
Planned number of attendees	*Please indicate a targeted number of visitors at the event*
What do you want to achieve with this particular demonstration	*Inform the general public, come in the local press, represent my organization, arouse the interest of private capital bodies, …, or actually attract customers for my products, present the solution to a specific target group, etc.*
Dissemination channels envisioned	*Please, indicate through which channels you plan to inform stakeholders about the event (e.g. newsletters of the organization; social media – please indicate accounts; local media, targeted mailing …)*
Potential collaboration with other H2020 projects	*Please indicate main components of your demonstration that can act at as a link to other H2020 projects and initiatives (e.g. Place: vineyard in Austria; Specific audience: young farmers…). We will use this information to select appropriate H2020 project/initiative and to invite representatives to attend.*
Roles and responsibilities	*Please, indicate the organizational team (name and email) – contact points for following topics:* • *Online Demonstration Activity Main responsible – UC coordinator* • *Facilitator* • *Presenter/s* • *Communication responsible – for local stakeholders and EU/H2020 stakeholders* *Please, have in mind that one person can be in charge for more than one topic*

Feedback from participants	*Please, indicate topics you would like to be covered by feedback questionnaire. E.g.:* – *Usefulness of presented technologies* – *The functionalities are easy to understand.* – *Suggest solution adjustments to address your needs*

*In case of more than one event, please copy-paste the table as many times as events planned.

5. ANNEX 2 - QUESTIONNAIRE FOR ATTENDEES

Questions bellow should be included in the questionnaire ~~form,~~ however you are encouraged to add and moderate questions to fit your specific demo purpose.

1. Feedback to Flagship Innovation, related to demonstrated product/services (tick boxes)

	Strongly agree	Agree	Neutral	Disa-gree	Strongly disagree
The **additional benefit** for the farm is clear					
This product can be **useful** for the daily work					
The product **improves the end user's (farm) management**					
The product provides a better **decision making.**					
The product makes the **production** more **transparent**					
The product is **easy to use** and **understand** by all persons working with it					
The **design** of the solution is easy to understand					

2. Usefulness of presented technologies - How do you appreciate the various aspects of the demo event (tick boxes)

	Very useful	Useful	Neutral	Not useful
Lecture				
Field walk				
Technologies				
...				

3. Replicability potential – can the suggested solution be adjusted to address your needs?

4. What is your wiliness to pay for the solution?

5. Open suggestions

6. *…additional questions to be added based on UC specific needs)*

6. ANNEX 3 - LESSONS LEARNT REPORT

Lessons Learnt report		
DA field	**Highlights**	**Attention points**
Presented solution features – observation (based on interaction with attendees)		
Solution presentation (how, what additional material was used, structure of demonstration, etc.)		
Communication with stakeholders		
Target audience and feedback		
Total number of participants (from all target groups):		

Below, please provide a total number of participants per each target group (feel free to add any other relevant target group)

Scientific	Industry	Civil Society	General Public	Policy makers	Media	Investors	Customers	Others

How will you implement feedback you have received form the participants?	

Please include pictures/screenshots from the event.

7. INVITATION GUIDELINES AND THE INVITATION TEMPLATE

- Below you will find the text that should serve as the basis of your online demonstration activity invitation. Some information has to be filled in individually, make sure to fill in all the brackets.
- Place the following picture on the top or use it under your name as part of the signature:

- Use the following subject line for your email:
  Smart Agri Hubs Online demonstration - [Insert title of demonstration]
- Fill in the demonstration information and the program of the activity.

INVITATION EMAIL TEXT

To Whom it May Concern or [Insert name of recipient],

We cordially invite you to our upcoming Flagship Innovation Experiment (FIE) online demonstration event "[Insert title of demonstration]" taking place on (Insert date and time).

This demonstration is part of the Smart Agri Hubs Project which aims to demonstrate the value of digital technologies for the European farming sectors.

Our FIE mainly focuses on [Insert short description of your work from]. The demonstration will inform you about (e.g., lessons learned, the faced challenges and the applied technologies to overcome them). We are going to showcase [Insert description of demonstration activity].

For further information please see the full program enclosed (the program includes all necessary links to join).

Please register to join the demonstration and take part in the Q&A session.

Kind regards,

[Insert name]

8. REPORTING WITHIN THE ANNUAL PROGRESS REPORT

The annual progress report Section 8 relates to reporting on each demo activity organised within a specific reporting period and therefore, please find the table on the next page as part of the Progress report, for your convenience. Our advice is to fill in this table together with supporting annexes (Annex 2 and Annex 3) just after the event and paste it to the final progress report afterwards, in this way you will have everything ready at the time of final reporting and will make you report easier.

DEMONSTRATION ACTIVITIES	
Title of demo event	
Location of the demonstration	(If online event, place online event)
Demonstration date	
What is subjected to demonstration?	
Demonstration activity environment	
Used infrastructure for demonstration activity	(If the demo was face to face event)
Demonstration activity interactive aspect	
Targeted audience group	
Involved DIHs in demonstration activity	
Promotional materials used	*[Please indicate concrete promotional materials used, tools to collect the feedback, etc.]*
Participants feedback	*[Please provide a short resume on the general comments/feedback received after the demonstration*

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Please provide analysis of DAP Annex 2 – Questionnaire for attendees	
Please provide annex 3 form the Demonstration Activity Plan – Lessons learned	

GUIDELINES FOR ORGANIZATION OF RC EVENTS

SMART AGRI HUBS

WP 3

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1. INTRODUCTION

The purpose of this document is to provide guidelines **for organizing, conducting, participating at and reporting about online and face to face events within the course of the Smart Agri Hubs Project (SAH). Considering ongoing COVID-19[1] pandemic and diverse measures in force in Europe, including bans or limitations for gatherings (events and demonstrations), you might be unable to organize a face-to-face event, need to switch to online events for the purpose of the project demonstration promotion, etc.**

The aim of organizing and participating at the relevant events should be to introduce the wider or targeted audiences to the project and its objectives, RC activities or FIE achievements.

Organizing an event implies knowledge/experience exchange on three levels – among SAHs partners, with other relevant H2020 projects and with external participants (e.g., farmers, end users, etc.) interested in the activities of the RC.

The common characteristics of all events are:

- Knowledge/experience exchange
- Involvement of different stakeholder groups (farmers, IT community, researchers, etc.)
- Broad promotion of the event (both as an announcement, prior to the event as well as after)
- Lessons Learned (LL) collection.

If face to face meetings is banned in your area, the benefits of the online events include cost effectiveness, quick organization and setting up, and an easy way to interact and exchange knowledge with stakeholders from different countries. Besides, online events can also be recorded, and the videos can be shared after the event.

This document should be perceived as a guideline when organising and conducting events. The first part of the document includes information on how to present and organise an event - step by step process (Chapter 1, 2 and 3), while the second part of the document includes mandatory elements to be tackled prior, during and after the event (Chapters 4,5 and 6).

[1] https://www.who.int/emergencies/diseases/novel-coronavirus-2019

2. WHEN PRESENTING THE SMART AGRI HUB PROJECT, RC AND FIES AT THE EVENT

When you are invited to attend an event to present the SAH project, your RC, FIEs, other activities of the project, have in mind that you are the face of the project and that you are representing it in front of the other attendees of the event.

Before the event prepare the material and/or the presentation you will present during the event. Make sure you have the proper logos on it including, but not limited to the:

- SAH logo
- your RC logo
- the EU flag
- the disclaimer that SAH is funded by the EU

Communication related materials are available on:

- Basecamp – Templates and communication material (https://3.basecamp.com/4233534/buckets/12395087/vaults/1852936119)
- Innovation Portal Library section, the following folders:
  - Basic elements https://www.smartagrihubs.eu/portal/library?path=/basic-design-elements
  - Communication at RC level https://www.smartagrihubs.eu/portal/library?path=/communication-at-RC-level
  - FIEs https://www.smartagrihubs.eu/portal/library?path=/communication-at-RC-level/flagship-innovation-experiment
  - Movies https://www.smartagrihubs.eu/portal/library?path=/communication-at-RC-level/movies
  - Communication at the project level section (postcards, leaflets, etc) https://www.smartagrihubs.eu/portal/library?path=/communication-at-project-level

As for the material to be used, the **SAH brochure** is currently being prepared and you can decide whether you would also like to use a banner or similar visual element representing the project. If you are presenting the SAH project, you can consult with WP1 contact person on the most suitable material to be used for the presentation. Consolidate with your RC partners and/or FIEs for the information you will provide regarding the RC and/or FIEs. You can as well promote your attendance within the RC as it might garner more interest from other partners and FIEs.

During the event make sure you get some pictures of your presentation if the event is face-to-face or some screenshots if the event is online. Already have in mind the information you will provide after the event: about the event, what were the highlights and how did the audience react to your presentation.

After the event you can promote the event attendance and the presentation of the RC/FIEs/SAH within your RC and you can also consult with your WP1 representative on how to communicate this to the wider SAH community. Use the pictures/screenshots you have taken and give a short outline of the event as a whole but also your role in it. Do not forget to mention it in your annual reporting as well. When reporting on the event please use the Annex 1 and 2 accordingly as they are part of the SAHs reporting procedure.

3. WHEN RC IS ORGANISING THE EVENT

The subject and objectives are the basis for the preparation and execution of both an online and a face-to-face event. When the subject and priorities are clearly defined, roles are divided between facilitator and presenter. Every event should have a facilitator and one or more presenters (in some cases a single person can be both the facilitator and the presenter). For events with smaller audiences (less than 20 people) a facilitator with proper content expertise can also act as a presenter. Depending on content scope, one or more presenters can be assigned.

The facilitator's responsibility is to promote the event, arrange and launch the online platform or prepare the meeting space, open the event, accommodate the technical support, and ensure a proper follow-up.

The presenter, usually an expert on the subject's matter, forms and presents the content of the event, and engages the participants through interaction.

When organising an event, please prepare a questionnaire to be distributed to the audience for collecting additional information and feedback on your presentation.

As these days online meetings are more often organized, we have put a bigger emphasis on them below.

FACILITATION

Preparation

1. **Choose your platform/location/venue**. In case of an online event and if you are not completely comfortable, undergo preparation, research, or practice. Be prepared to give participants fast technical guidance on all main functions of the platform during the event.

Below are some of the most reliable and popular online facilitation platforms, ideal for organizing online demonstration events:

- **Zoom** - free webinars for up to 100 people (max 40 minutes)
  https://zoom.us/

  On the link below please find a 60-minute session covering best practices, customization, and registration for your future Zoom webinars.
  Zoom Webinar Training

- **WebEx** - free webinars for up to 100 people (max 40 minutes)
  https://www.webex.com/

- **GoToWebinar** (starts at ~~$49~~ $100/~~mo~~ for 100 participants)
  https://www.gotomeeting.com/webinar

- **Skype**
  www.skype.com

- **Google Hangouts (free)**
  https://hangouts.google.com/

When setting up the webinar be sure to specify the required fields for participant registration, in order to have a complete **Attendee list** (full name, organization, e-mail, occupation/sector, country) after the webinar.

2. ***Create a timeline, along with your presenters***. Ensure the presenter/s have enough time to arrange presentations and complete a script.
Pick a time for the webinar that is suitable and in accordance with the time zone for most of your target audience.

3. ***Formulate a draft agenda for the demonstration webinar with the presenter/s, and give them specific guidance:*** How much time they'll have, propose on a variety of slides, suggest on the length of Q&A session. Be sure to remind the presenter/s to prepare for audience engagement (live responses, questionnaires, polls).
Tip: Don't use video if the bandwidth of the participants is limited; use only audio and slides.

4. **Announce the event to different stakeholder groups (farmers, IT community, researchers, SAHs portal, etc.).** For online events with larger (100 or more people expected), the announcement should be done **a month** in advance. For the ones with smaller audiences, **two weeks** is enough. For the in-person meetings, this should be done a **couple of months** in advance mostly due to people's need to travel to the venue, venue's availability, etc.

- Write an invitation message that attracts attention and encourages people to get involved (**see Invitation Guidelines and the invitation template, chapter 7**). Include direct email/calendar invitations - a clickable calendar entry (.ics file) to make it easier for people to add the event to their calendar.
- If your audience includes external persons, broaden the announcement via Facebook, LinkedIn, Twitter, and other relevant networks.
- Assure that stakeholders who sign up receive participation instructions, including **any technical requirements with links to quick start guides on how to use the dedicated platform**. Encourage users who are using the platform for the first time to study the manual and test the specific platform as soon as possible.

5. ***Practice the event sessions with presenter(s)***, especially if you are new to webinars or if the content is being presented for the first time.
Try out pre-loading all the material in order to enable quick content sharing with stakeholders when needed.
For online events practice giving different kinds of permissions to participants and getting it back from them (for example screen sharing control). Make sure all links are functioning and practice on different communication functionalities such as muting/unmuting yourself and the participants.

Execution

6. **For online events make sure you are in a place with no distractions** (noise, crowded offices, mobile phones) and when organizing an in-person meeting, make sure all the **distractions are switched off** and kindly ask the participants to do the same. Prepare and test all your equipment (PC, headset, agenda, printouts).

7. ***Start the online event early (at least 15 minutes ahead) and see that your presenter/s do the same.***

Open the presentation(s) with the rest of webinar content, but keep it hidden from participant view – only display your first/welcome slide. It is a good idea to have a backup PC with all the necessary material and specific platform installed in case of unstable connections and hardware failure.

8. ***In case you feel it would be helpful, explain briefly the webinar platform's main features,*** particularly those that you expect the participants to use, such as the chat functionality, raise your hand feature, microphones muting / unmuting etc.

9. ***Set all microphones to muted state, except the one/s from the presenter/s.***

10. ***Make enough time for Q&A session and interaction, as outlined in the initial script.***

11. ***Close the online demonstration event.*** Let the stakeholders know what information will be distributed following the webinar, such as recordings, poll results, webinar transcripts or other materials. Formulate any next steps or follow-up activities (this can also be done by the presenter).

Switch off recording at the end of the webinar but leave the PC linked and the platform program running until the recording is processed and ready to be saved/shared.

Follow up

12. **Thank the stakeholders via email** and make an assessment after the event as soon as possible - distribute the Questionnaire for attendees either via email or right after the event for in-person meetings. For online meetings, provide links to presentations, recordings, and other relevant reference materials.

PRESENTATION

1. **Understand the goals of a SAHs RC event.** What are the main ideas and messages you want to impart? What knowledge do you want participants to come away with? What steps would they take after the webinar? What information do you need form the participants?

2. **Acknowledge the roles of the facilitator and the presenter.** As presenter, within the time allocated, your job is to provide relevant content and opportunities for interaction. You can count on the facilitator to set up the dedicated platform and prepare the technical aspect of the webinar, publicize the event, provide technical support during the webinar, set up the polls, deal with participant requests and arrange a follow up evaluation.

3. **Together with other presenters and the facilitator establish a common timeline** for event preparation and dissemination (making enough time to prepare your content and draft the agenda).

4. **Join the event early,** ideally about 15 minutes before the scheduled start time. Load your presentation and other relevant material but keep it hidden from the rest of the participants until the right time to share it.

5. **Upon completion of your presentation, turn over to the facilitator but remain online** for possible Q&A and further discussion.

4. REPORTING

4.1 ANNUAL REPORTING

The table below is to be filled for each event (to which you have been invited or organised) as part of the annual reporting procedure.

RELEVANT EVENTS				
Event title				
Date and place (if online event- platform used)				
Event organizer				
Description				
Number and names of internal (SAH) participants/presenters				
Target audiences	Please indicate the structure of the target audience at the event			
Please provide web link to the event				
Promotional materials used	Please indicate promo materials used during the event/presentation			
Please provide supporting materials	**DAP (Annex 1)**	(Please insert links to dedicated Basecamp folder)	**Lessons learned report (Annex2)**	(Please insert links to dedicated Basecamp folder)
Pictures, screenshots, etc.	(Please insert links to dedicated Basecamp folder)			

4.2 CONTINUOS REPORTING TO WP3

When organizing the event, three main elements which should be fulfilled are the following:

- Before the event, announce it on the portal
- Before the event distribute the Annex 1 to your WP3 representative
- No later than one month after the event distribute the Annex 2 to your WP3 representative (lessons learned)
- No later than one month after the event provide to WP3 the analysis of the questionnaires collected form the attendees, in case the questionnaire is facilitated.

5 ANNEX 1 – ONLINE DEMONSTRATION ACTIVITIES PLAN TEMPLATE (DAP)

Topic: **RC:**	*Your answer*
Event overview	*Please, indicate:* • *Event title* • *Date and time* • *Platform* • *Main technologies that will be presented*
Constraints	*Are there any restrictions in the number of people that can/might be invited (if it is a closed online event, open to external participants, members of some organizations, etc.)*
Planned stakeholders' groups	*Please indicate the main stakeholders' groups that you intend to invite*
Planned number of attendees	*Please indicate a targeted number of visitors at the event*
What do you want to achieve with this particular demonstration	*Inform the general public, come in the local press, represent RC, represent the project, etc.*
Dissemination channels envisioned	*Please, indicate through which channels you plan to inform stakeholders about the event (e.g., newsletters of the organization; social media – please indicate accounts; local media, targeted mailing, SAH portal …)*
Feedback from participants	*Please, indicate topics you would like to be covered by feedback questionnaire.*

*In case of more than one event, please copy-paste the table as many times as events are planned.

6 ANNEX 2 - LESSONS LEARNT REPORT

The lessons learned report contains some key elements that would help RCs in analyzing conducted events, improving upcoming events and will also pass important information to the project WPs in regard to the communication with target audiences. Please kindly add any additional element you consider to be useful as the content of the lessons learned report will depend on the even scope and content.

Lessons Learnt report		
	Highlights	**Attention points**
Outcome and conclusions form the presentation		
What additional material was used, structure of presentation, etc.		
Target audience and feedback		
Total number of external participants (from all target groups):		
Below, please provide a total number of participants per each target group (feel free to add any other relevant target group)		

Scientific	**Industry**	**Civil Society**	**General Public**	**Policy makers**	**Media**	**Investors**	**Customers**	**Others**

Main observations/ from the communication with target audiences. Opinions form the participants	
Feel free to add any other observations and information	

For all further questions, please contact your WP3 contact person.

ANNEX 2

User Acceptance Testing Questionnaires for companies and farms

User Acceptance Testing for COMPANIES

1. General information

1.1. What is the number and the name of the SAH FIE your responses refer to?

1.2. What is the product/solution? Please describe it in a bit more details

2. Information about the company

2.1. Name of the company

2.2. Name of the respondent

2.3. City of the company

2.4. Country of the company

2.5. Email

2.6. Job name (position)

3. Personal information

3.1. Age

- <29
- 30-39
- 40-49
- 50-59
- 60+

3.2. Gender

- Female
- Male

3.3. Education level

- Practical education

- High school education
- Bachelor's degree
- Master's degree
- Doctoral degree
- Professional degree (JD, MD)

4. Company specifics

4.1. Company's field of focus

- Animal production
- Aquaculture
- Arable
- Dairy
- Fruit
- Novel foods
- Vegatables
- Other_____

4.2. Number of employees/staffs *

4.3. Enterprise category *classification per EC (annual turnover threshold: micro ≤ EUR 2 million, small ≤ EUR 10 million, medium sized ≤ EUR 50 million)

- Micro
- Small
- Medium-sized

4.4. Do you already use the product/solution of your our FIE?

- Yes, already applied in my company
- We plan to apply within a year
- We are interested, but have no specific plans
- No, but maybe later
- Not at all

5. Usefulness of the product/solution

	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree	Not applicable
The additional benefit of the product/solution of our FIE for the company is clear						
I believe that the product/solution of our FIE reduce working time						

The product/solution of our FIE clearly provides a more accurate decision making						
I believe applying the product/solution of our FIE fosters public acceptance of farming, as it helps to inform consumers about the production process of their food						
I believe applying the product/solution of our FIE contributes to realizing societal goals, such as making farming more environmentally friendly						
I think that the product/solution of our FIE offers me more benefits than current practice						

6. Features

6.1 Please mention the three most important features that you find beneficial for your company of this product/solution, if there are any

6.2. Please mention the three least interesting features of the product/solution, if there are any

6.3 Ease of use

	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree	Not applicable
The product/solution of our FIE was easy to install						
The design of the solution is easy to understand						
The workflow of the solution is logically and delivers the result with few clicks						
Accessing the solution on my mobile device works properly						
The use of the product/solution of our FIE needs special (ICT) expertise						

Support service and guarantees are provided in case of malfunction						
The product/solution of our FIE was easy to use and understand by all persons working with it						

6.4 If the product/solution were not easy, which features were complex for your personnel to understand

6.5 Please mention the three most important reasons for using the product/solution

6.6 Please mention the three most important reasons for NOT using the product/solution

7. Technical quality and infrastructure

	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree	Not applicable
The company has all necessary infrastructure (examples listed below) to install the product/solution of our FIE right away						
The product/solution of our FIE is interoperable with all existing digital solutions and machines in the company						

7.1. Which of the following issues hinder the product/solution of our FIE applications in your company (more than one answer ~~is possible~~)

- Absence of Wi-Fi
- Absence of internet connection at all
- Connection is at very low speed
- Absence of connection between data receiver and data transmitter
- Batteries of the product/solution of our FIE devices are weak
- GSM network is not available

- Difficult to find suitable mobile connectivity provider
- No access to mobile coverage
- The product/solution of our FIE device (e.g. SIM card) uses only one of available – telecommunication networks
- The product/solution of our FIE are not secure
- The product/solution of our FIE cannot stand the (seasonal) hot or cold temperature at our region
- Telecommunication companies require long-term contracts which is not attractive (e.g. expensive)
- Cancelation period with telecommunication providers is very long
- Other:

8. Application of digital solutions in general

	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree	Not applicable
I can repair and maintain digital solutions without external support						
It is important for me to know the experience of companies about digital solutions						
I think the offered solution is reliable						
I am confident about using the digital solution						
It is clear for me which data is being collected by the digital solution and who has access to it						
By using the digital solution, I still have the feeling that I accomplish of my company operation. I do not lose my autonomy						

8.1. How much do you pay (planned to pay) for the product/solution of our FIE?

9. Cost-efficiency and feasibility

	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree	Not applicable
Using the product/solution of our FIE can increase my ~~companies~~ productivity						
Using the product/solution of our FIE can increase my profits						
Using the product/solution of our FIE can reduce my costs						
The price/quality ratio of the product/solution of our FIE is fair						
I would recommend the product/solution of our FIE to other companies						

9.1. Why does the product/solution of our FIE increase your company's productivity?
9.2. Why DOESN'T the product/solution of our FIE increase your company's productivity?
9.3. Why does the product/solution of our FIE increase your profit?
9.4. Why DOESN'T the product/solution of our FIE increase your profit?
9.5. Why does the product/solution of our FIE reduce your costs?
9.6. Why DOESN'T the product/solution of our FIE reduce your costs?
9.7. Why is the price/quality ratio of the the product/solution of our FIE fair?
9.8. Why ISN'T the price/quality ratio of the product/solution of our FIE fair?
9.9. Why would you recommend the product/solution of our FIE to other companies?
9.10. Why WOULDN'T you recommend the product/solution of our FIE to other companies?

Thank you!

User Acceptance Testing for FARMS

1. General information

1.1. What is the number and the name of the SAH FIE your responses refer to?

1.2. What is the product/solution? Please describe it in a bit more details

2. Information about test farm

2.1. Name of the test farm

2.2. Name of the respondent

2.3. City of the farm

2.4. Country of the farm

2.5. Email

2.6. Job name (position)

3. Personal information

3.1. Age

- <29
- 30-39
- 40-49
- 50-59
- 60+

3.2. Gender

- Female
- Male

3.3. Education level

- Practical education
- High school education

- Bachelor's degree
- Master's degree
- Doctoral degree
- Professional degree (JD, MD)

4. Farm specifics

4.1. Farm focus

- Animal production
- Aquaculture
- Arable
- Dairy
- Fruit
- Novel foods
- Vegetables
- Other_____

4.2 Farmed area (ha)

4.3. Number of employees/staffs

4.4. Do you already use the product/solution of your our ~~FIE~~

- Yes, already applied in my farm
- We plan to apply within a year
- We are interested, but have no specific plans
- No, but maybe later
- Not at all

5. Usefulness of the product

	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree	Not applicable
The additional benefit of the product/solution of our FIE for the farm is clear						
I believe that the product/solution of our FIE reduce working time						
The product/solution of our FIE clearly provides a more accurate decision making						
I believe applying the product/solution of our FIE fosters public acceptance of farming, as it helps to inform consumers about the production process of their food						
I believe applying the product/solution of our						

FIE contributes to realizing societal goals, such as making farming more environmentally friendly						
I think that the product/solution of our FIE offers me more benefits than current practice						

6. Features

6.1 Please mention the three most important features that you find beneficial for your farm of this product/solution, if there are any

6.2. Please mention the three least interesting features of the product/solution, if there are any

6.3 Ease of use

	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree	Not applicable
The product/solution of our FIE was easy to install						
The design of the solution is easy to understand						
The workflow of the solution is logically and delivers the result with few clicks						
Accessing the solution on my mobile device works properly						
The use of the product/solution of our FIE needs special (ICT) expertise						
Support service and guarantees are provided in case of malfunction						
The product/solution of our FIE was easy to use and understand by all persons working with it						

6.4 If the product/solution were not easy, which features were complex for your personnel to understand

6.5 Please mention the three most important reasons for using the product/solution

6.6 Please mention the three most important reasons for NOT using the product/solution

7. Technical quality and infrastructure

	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree	Not applicable
The farm has all necessary infrastructure (examples listed below) to install the product/solution of our FIE right away						
The product/solution of our FIE is interoperable with all existing digital solutions and machines on the farm						

7.1. Which of the following issues hinder the product/solution of our FIE applications in your farm (more than one answer ~~is possible~~)

- Absence of Wi-Fi
- Absence of internet connection at all
- Connection is at very low speed
- Absence of connection between data receiver and data transmitter
- Batteries of the product/solution of our FIE devices are weak
- GSM network is not available
- Difficult to find suitable mobile connectivity provider
- No access to mobile coverage
- The product/solution of our FIE device (~~e.g.~~ SIM card) uses only one of available – telecommunication networks
- The product/solution of our FIE are not secure
- The product/solution of our FIE cannot stand the (seasonal) hot or cold temperature at ~~our~~ region
- Telecommunication companies require long-term contracts which is not attractive (e.g. expensive)
- Cancelation period with telecommunication providers is very long
- Other:

8. Application of digital solutions in general

	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree	Not applicable
I can repair and maintain digital solutions						

without external support						
It is important for me to know the experience of fellow farmers about digital solutions						
I think the offered solution is reliable						
I am confident about using the digital solution						
It is clear for me which data is being collected by the digital solution and who has access to it						
By using the digital solution, I still have the feeling that I am in charge of my farm operation. I do not lose my autonomy						

8.1. How much do you pay (planned to pay) for the product/solution of our FIE?

9. Cost-efficiency and feasibility

	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree	Not applicable
Using the product/solution of our FIE can increase my farms productivity						
Using the product/solution of our FIE can increase my profits						
Using the product/solution of our FIE can reduce my costs						
The price/quality ratio of the						

product/solution of our FIE is fair						
I would recommend the product/solution of our FIE to my neighbours and fellow farmers						

9.1. Why does the product/solution of our FIE increase your farm productivity?
9.2. Why DOESN'T the product/solution of our FIE increase your farm productivity?
9.3. Why does the product/solution of our FIE increase your profit?
9.4. Why DOESN'T the product/solution of our FIE increase your profit?
9.5. Why does the product/solution of our FIE reduce your costs?
9.6. Why DOESN'T the product/solution of our FIE reduce your costs?
9.7. Why is the price/quality ratio of the the product/solution of our FIE fair?
9.8. Why ISN'T the price/quality ratio of the product/solution of our FIE fair?
9.9. Why would you recommend the product/solution of our FIE to your neighbours and fellow farmers?
9.10. Why WOULDN'T you recommend the product/solution of our FIE to your neighbours and fellow farmers?

Thank you!

ANNEX 3

Identification of FIE training needs questionnaire: Business support to FIEs and OC IEs- Questionnaire

Dear FIE coordinator,

As part of the project Task 3.4, WP3 in collaboration with WP4 is currently working on the **identification of FIE's business needs** further resulting in the execution of FIE go-to-market strategies. Once the feedback is collected the two WPs will work on the preparation of a **business program consisting of a soft skill and business support trainings, aiming to foster the exploitation of FIE results and boost the market potential.**

This questionnaire is the first step within this process. Please answer a couple of simple questions found below and help us in shaping the program based on your needs.

1. FIE number and name _____

2. Is thre a need for a business support or a training[1] within your FIE?

   ☐Yes
   ☐No

   If no, please explain why not_____

3. If yes, please choose the topic/s of your interest:

   ☐ Business plan development
   ☐ Mission, Vision, Strategy
   ☐ Creating and managing start-ups (e.g., Lean Start-up Methodology)
   ☐ Pitching
   ☐ Financial Plan – funding ops, investors
   ☐ Marketing Plan and Market Analysis
   ☐ Ecosystem, collaboration and competition
   ☐ Regional Embeddig
   ☐ Governance and organizational structure
   ☐Other, please specify _____

Thank you for your participation!

[1] *The business program, based on identified FIE needs, is aiming to provide a business support to FIEs throughout a set of trainings and help in up taking the current FIE status. The supporting mechanism shall guide FIEs when shaping the business plan, getting a market attraction, investments, more customers, and/or improving of the marketing strategy, etc.*

Dear Innovation Experiment coordinator,

As part of the project Task 3.4, Work Package (WP) 3 in collaboration with WP4 is currently working on the **identification of Innovation Experiment's (IE) business needs** further resulting in the execution of IE go-to-market strategies. Once the feedback is collected the two WPs will work on the preparation of a **business program consisting of a soft skill and business support trainings, aiming to foster the exploitation of FIE results and boost the market potential.**

This questionnaire is the first step within this process. Please answer a couple of simple questions found below and help us in shaping the program based on your needs.

1. Name of the Open Call:
   □Restart
   □Expand

2. IE title _____

3. Is thre a need for a business support or a training[1] within your IE?

   □Yes
   □No

   If no, please explain why not_____

4. If yes, please choose the topic/s of your interest:

   □ Business plan development
   □ Mission, Vision, Strategy
   □ Creating and managing startups (e.g., Lean Startup Methodology)
   □ Pitching
   □ Financial Plan – funding ops, investors
   □ Marketing Plan and Market Analysis
   □ Ecosystem, collaboration, and competition
   □ Regional Embeddig
   □ Governance and organizational structure
   □Other, please specify _____

Thank you for your participation!

[1] *The business program based on identified IE needs is aiming to provide a business support to IEs throughout a set of trainings and help in uptaking the current IE status. The supporting mechanism shall guide IEs when shaping the business plan, getting a market attraction, investments, more customers, and/or improving of the marketing strategy, etc.*