

European Knowledge Repository for Best Agricultural Practices

D2.3. Report on end-user archetypes, end-user journeys and validation workshops



Task 2.3 - Conclusions & mapping ideal user journeys

Summary

This deliverable report presents the results from validation workshops which were conducted with potential end-users of the "FarmBook" knowledge platform. The objective of Task 2.3 was 'to make the end-user archetypes (personas) 'come alive' and provide input for the design (WP3) and actual build (WP4) of the interface development'. This work was carried out in the period November 2020 to January 2021 and builds on the work carried out in T2.1, 'Review of end-users into archetypes to identify information needs and barriers', the deliverable D2.1 report (EUREKA end-user categorisation and Segmentation), T2.2, 'Develop detailed understanding of the end-user information needs and barriers (through end-user journeys) per archetype' and D2.2, 'Report (and visualisations) on end-user archetypes and end-user journeys.'

A total of 6 validation workshops were conducted with end-users from four macro-regions across Europe, in which the drafts of 16 archetypes and user-journeys were presented, and feedback was given by participants. Additionally, 2 archetypes were presented during the EUREKA Winter Consortium meeting (January 12-14, 2021) to collect initial feedback from within EUREKA.

The archetypes and user-journeys in this report have been updated taking into account the important feedback provided by participants in response to the drafts presented to them during the validation workshops. This has helped to ensure that the final archetypes and user-journeys presented in this report accurately reflect typical users across EU macro-regions.

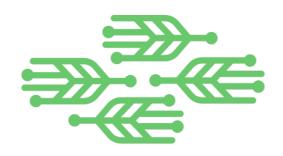
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Content

| List of fig | ures |
|----------------------|---|
| List of ta | oles |
| List of ab | breviations and acronyms |
| 1. Intro | oduction |
| 2. Met | hodology |
| 2.1. | Validation workshops |
| 2.2. | Consortium meeting |
| 3. Vali | dation workshop results |
| 3.1. | Information of validation workshops |
| 3.2. | Feedback collected during validation workshops |
| 3.3. | Feedback collected during the consortium meeting |
| | l archetypes and user journeys |
| | Output from Mentimeter from validation workshops |
| | Output from Mentimeter from the consortium meeting |
| Annex C | Final archetypes and user journeys |
| | igures EUREKA's concept and methodology Map of Europe showing the four macro-regions defined for this study |
| List of t | ables |
| EUREKA Table 2: (| Overview of workshop participants per workshop and their affiliation with the project |
| EIP-Agri | Agricultural European Innovation Partnership |
| EU | European Union |
| H2020 | Horizon 2020 |
| KIP | Knowledge Innovation Panel |
| MA(A) | Multi-actor (approach) |
| MAP | Multi-actor project |



| Т | Task |
|----|------------------|
| TN | Thematic Network |
| WP | Work Package |

1. Introduction

EUREKA is an EU-funded research and innovation action that aims to help ensure the longer-term accessibility and wider use of the practical knowledge and innovative solutions that are generated by Horizon 2020 multi-actor projects by the end-users: farmers, foresters, advisors, and other actors within agriculture and forestry. Partners from 16 EU member states and 48 supporting organizations have been brought together to co-create an EU-wide agricultural knowledge base in the form of an open-source e-platform, which we are calling the "FarmBook." This interactive knowledge platform will address the needs and improve the connections between two main user groups: MA project partners and end-users (farmers, foresters, advisors, scientists, policy makers...).

To realise this, the EUREKA project will analyse the knowledge supply from multi-actor projects in Work Package (WP) 1, as well as the knowledge demand through profiling the needs of the users of this knowledge (WP2), to make recommendations for the better sharing of Horizon 2020 research outputs (Figure 1). This analysis feeds into the knowledge evaluation, the selection of data and features, and FarmBook blueprint development (WP3) to build the open-source online platform and optimize it together with input from the target users (WP4). EUREKA's ultimate aim is to build a FarmBook e-platform to present this knowledge and innovation in an accessible, easily searchable, and open-source way that is available long-term to a broad range of relevant users. Throughout the project, there is active engagement with the multi-actor project community (WP5) to select the most relevant, high-impact knowledge and innovations for meeting the practical needs of farmers, foresters, and other actors from agriculture and forestry sectors.

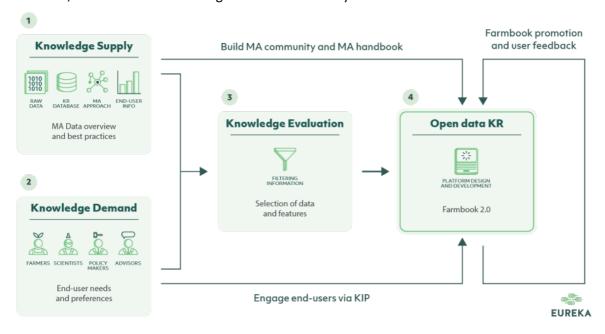


Figure 1: EUREKA's concept and methodology

A good understanding of end-user information needs is essential to the design of the FarmBook. These needs include preferred channels of communication, as well as challenges faced in finding the most useful knowledge or data. Such understanding will inform the actual design of the FarmBook and allow selection of the most effective communication and dissemination channels to promote EUREKA outputs. Work Package 2, 'Get to know the FarmBook end-user,' focusses on identification of this knowledge demand through the development of profiles of potential end-users and different user 'archetypes' defined by several underlying key variables such as sector, region, education level, access to infrastructure, gender and age. The resulting archetypes and their 'user journeys' taken when



searching for desired information are used to inform the design of FarmBook. Special attention is given to regional differences between European geographic regions. Four macro-regions are defined to ensure geographical coverage in WP2. This clustering of countries aims to capture the sociocultural and economic differences (and commonalities) between the regions. Figure 2 shows the four macro-regions defined for the purposes of this project: Nordic-Baltic, Danube/Balkan, Mediterranean, and Atlantic/North Sea.

The first task in WP2, Task 2.1, was the categorisation of endusers into archetypes to identify information needs and barriers, see deliverable report D2.1. This Task included a general segmentation exercise to identify the main end-user categories: advisors, farmers, foresters, researchers and policy makers.

Based on this segmentation, in T2.2 user archetypes with associated user journeys were developed with input from endusers via one-on-one (online) interviews (10 per regions, 40 interviews in total) and surveys (500 to 1000 per region, total 3000 to 4000 respondents). These regional interviews contributed to a better understanding of the end-user's needs, preferred channels, and challenges. The interviews also provided key inputs for the design of the end-user "validation" survey" (also part of T2.2). Through the survey, further insights were gained related to the end-user's online knowledge culture, information sources and preferred features of online tools. Finally, the information from the interviews and survey was analysed to develop at least 14 end-user archetypes in total: Six farmer archetypes, six advisor archetypes, one scientist archetype and one policy maker archetype. This level of differentiation is key to ensuring that the platform meets the



Figure 2: Map showing the country-level breakdown for the four macro-regions (different colours) defined for the purposes of this study.

needs of a broad, diverse user base from across Europe. D2.2 presented a summary of regional interviews and the survey followed by the initial (draft) end-user archetypes and the 'journey' they typically take when interacting with a (digital) service in seeking information (see D2.2).

The objective of T2.3 was to validate the draft archetypes and user journeys created in D2.2. This final deliverable report for T2 will present the validated visual archetypes and their associated user journeys. The methodology employed for the validation workshops is described in section two, followed by a summary of the feedback from validation workshop participants in section three. The final archetype and user journey visuals can be found in section four.



2. Methodology

2.1. Validation workshops

The output presented in D2.2 was transformed into 16 visual archetypes and user journeys by a visual designer and presented during validation workshops (excluding researcher and policy maker archetypes; see next section). Due to the number of archetypes and journeys developed, each workshop looked in detail at 3 archetypes and their associated journeys. Each participant received the 3 archetypes and associated user journeys prior to the workshop so that they could familiarise themselves with the layout and identify any questions for the facilitators prior to the workshop. During the validation workshop, the participants received an introduction of the EUREKA H2020 project, an overview of the work previously performed in WP2, and explanation of the purpose of the archetypes and user journeys. Subsequently, each archetype and related user journey was presented, and feedback on how to improve both was collected through Mentimeter and discussed as a group with the participants. Each validation workshop was closed by giving participants a chance to provide general feedback and inform them of the next steps within the EUREKA H2020 project. The feedback received from validation workshops was processed by members of WP2 and suggestions on how to improve the archetypes and user journeys were implemented in order to achieve the final archetypes and user journeys described in this report.

2.2. Consortium meeting

The output presented in D2.2 (specifically the researcher and policy maker, the only two personas not presented during the validation workshops; see section above) was transformed into visual archetypes by a visual designer and presented during the EUREKA H2020 Winter Consortium meeting. During the consortium meeting the members received an update on the work performed in WP2 and the purpose of the archetypes and user journeys. Subsequently, each archetype was presented, feedback on how to improve the archetype was collected through Mentimeter and discussed as a group with the members. The feedback received from consortium meeting was processed by members of WP2 and suggestions to improve the archetypes were implemented in order to achieve the final archetypes described in this report.



3. Validation workshop results

3.1. Information of validation workshops

The six validation workshops were held on 19-20 January 2021. Each workshop took about two hours and was attended by both invited end users and consortium members (Table 1). Invited users included those involved previously in T2.1 workshops and T2.2 interviews as well as through promoting the event on Twitter and through email distribution to members of the EUREKA Knowledge Innovation Panel (KIP).

Table 1: Overview of workshop participants per workshop and their affiliation with the EUREKA project

| WORKSHOP | DATE | NUMBER OF END USERS | NUMBER OF CONSORTIUM MEMBERS |
|-------------|------------|------------------------|------------------------------------|
| FARMERS 1 | 19/01/2021 | 6 | 6 |
| FARMERS 2 | 20/01/2021 | 8 | 7 |
| FORESTERS 1 | 19/01/2021 | 6 | 5 |
| FORESTERS 2 | 20/01/2021 | 8 | 5 |
| ADVISORS 1 | 19/01/2021 | 6 | 5 |
| ADVISORS 2 | 20/01/2021 | 8 | 6 |

The selection of which archetype to present during which validation workshop (Table 2) depended on the profiles of the invited end users and attempted to match these profiles to the presented archetypes as much as possible. For example, the archetype of the older farmer was presented to both farmers and advisors given the increased dependency of the older farmer on the advisor. Additionally, the public forestry advisor was also presented twice to foresters and forestry advisors as this was an archetype for which the WP2 members felt more feedback was required.

Table 2: Overview archetypes and user journeys presented per workshop

| WORKSHOP | DATE | ARCHETYPE & USER JOURNEY 1 | ARCHETYPE & USER JOURNEY 2 | ARCHETYPE & USER JOURNEY 3 |
|-------------|------------|----------------------------|----------------------------|----------------------------|
| FARMERS 1 | 19/01/2021 | Older farmer | Organic farmer | Precision farmer |
| FARMERS 2 | 20/01/2021 | New entrant | Livestock farmer | Student farmer |
| FORESTERS 1 | 19/01/2021 | Young forester | Middle-aged forester | Public forestry advisor |
| FORESTERS 2 | 20/01/2021 | Office forester | Public forestry advisor | Private forestry advisor |
| ADVISORS 1 | 19/01/2021 | Young male farm advisor | Young female farm advisor | Public farm advisor |
| ADVISORS 2 | 20/01/2021 | Private farm advisor | Livestock advisor | Older farmer |



3.2. Feedback collected during validation workshops

The feedback collected through Mentimeter is available in Annex A.

3.3. Feedback collected during the consortium meeting

The feedback collected through Mentimeter is available in Annex B.





4. Final archetypes and user journeys

The final archetypes and user journeys are available in Annex C.





Annex A. Output from Mentimeter from validation workshops

New Entrant

How can we improve this persona and journey?



She is maybe a bit too perfect:)

The size of the problem is not quite clear as the farm size has not been mentioned - is this the only plot? The solution seems a bit too easy.

I prefer more information about the farm..

wery good but too idealistic "persona"

Fence would be a more productive solution than discussing with the neighbour

wery good. Real Young student farmer





Organic farmer

How can we improve this persona and journey?



consumers/clients collective: how to make optimal use of their knwoledge?

certification (EKO) scheme: practical implementation of the new technique, so that others see it in the 'acceptance menue'

I don't understand how brown mustard is a touchpoint? How should I understand the touchpoints?

she has a healthy lifestyle

Realistic good profile and journey

Maybe I missed this; is there anything on the size of her farm and if she is the only one working there? Since there was mention of her family.

Farming activities Journal

she gets her knowledge about organic farming from social media (Facebook groups)

Usually that kind of person - frequent Internet users. She is reading a lot, watching videos a lot. In addition she is active in social media as well, being active subscriber in many Organic production groups (as it is go



How can we improve this persona and journey?



If she is comfortable with using the internet, she could also benefit from searching and sharing on related organic farming groups or forms. Maybe present this as an opportunity? Main problem seems to be in accordance w regulations and finding

Access to land is also a key challenge

Have more information about the farming business as part of the persona? Organic is quite broad. Overall, it could be good to maybe also have an indication about farm scale/size?

She strongly beleive that what she do is right

In comparison to Edgars she is promoting healthy kind of living among family members and friends.

when presenting journeys: maybe pose also a time frame? or overall assessment based on the complexity of the problem or related costs? it can be difficult to achieve, but may play important role depending on the nature of issue and choosing solution





Student farmer

How can we improve this persona and journey?



Time frame is missing, how much time was this

Good realistic persona, really important for young farmers to spend time away from their home farm to see how other farmers operate

very good . Real young farmer/student persona.



Livestock farmer

How can we improve this persona and journey?



role of husband not clear

Can't beleive she uses a desktop computer

'livestock farmer' is maybe a bit general as a description for the persona

I agree, we don't know enough about the role of her husband and is he also a farmer.

maybe some written protocols should be available on farm to cope with emergencies

Good example of the type of problem livestock farmers have

It can be a real situation, mostly when you are not a farmer for a long time

Did she grow up on the farm? Then she migth have been confronted with this kind of situation or know the animals very well?





Older farmer

How can we improve this persona and journey?



| 75 is bit too old, end 60s (68) is better | I think he is too old, and not active anymore, he will not use the new system. | Old to experienced farmer . Change low education level to other |
|---|---|---|
| I personally know at least 3 persons like Edgars) | he do not like innovations | it is not likely that he will ever be a user of the platform? |
| Highlight how much respect and tact the advisor will need for dealing with this persona | such a farm is maybe not for a single successor, it looks like a starting point for a farming community | Very common persona - well done for capturing |

How can we improve this persona and journey?



They are surfing a lot in internet to be honest. Mostly Youtube, In Slovenia there are also many farmers like that, but they do average farm age in EU 55 years These people probably still socialising and have social networks As a knowledgeable farmer he could also contibute whether there is a related network system. Problem is being reserved or not social enough, but surely there is some collaboration or sharing between neighboring farms and such, so he can find support. an environment assessment / organic use, would be a good interaction with an advisor: how to make his farm attractive for getting information (ie not social media!!) co-operative They collect information in the pub:) What is the profile of the mentor? Another farmer, advisor? How can you find such a mentor?



How can we improve this persona and journey?



| very practical: I find the scale on innovation profile not clear to understand (because of full green bars) | meetings of the farmers association | family: the children did not take over, we could address them |
|---|--|---|
| meetings of the farmeers association? find the mentor there? | The Shepherd's Life Book | cousins instead of children |
| Usually they are extremelly less informed concerning changes in regulations, new subcidies etc | It is realistic, good profile and journey! | I find it difficult to see brown mustard as a touchpoint? |

31

How can we improve this persona and journey?



Realistic, good profile and journey!

I just want to say I really like the graphics, design of your presentation:)

That kind of person usually is frequent Internet users. Reading, watching a lot. Quite active in social media as well. Being active followers in various Organic producers groups etc

Overall, it might be good to have some more details about the farming business (organic can cover all sectors). Also for the other personas: have info on farm size/scale?





How can we improve this persona and journey?



He is a bit too old. There should be a family member around.

too many details for the persona_maybe the persona should be more summarized in order not to lose focus

This category is prevalent in many EU countries so the issue of generational renewal is a relevant topic. Other possible solutions? Relatives? Cooperation with other farmers?

The intern isn't mentioned in the user journey

The intern isn't mentioned in the user journey

There should be more summarized in order not to lose focus

Realistic problem that older farmers has relatives (son or unckle) and there is a will to continue tha farm but there are communication, missunderstanding problems

There should be more than one successor presented. And problems have more solutions?

subsidies + keeping him as consultant





Precision farmer

How can we improve this persona and journey?



| Trust and privacy issues of the system based on FAIR principles | Trust and privacy issues of the system based on FAIR principles | German language is very popular in Hungary too |
|--|---|---|
| mix of pioneer (taking lots of time to solve issues) and early adopter (getting information from demonstrations) | Why cabbage? | Finding a relevant TN is not that easy in Hungary |
| I would expect this person to be more likely to speak english than the earlier persona based on his interest in technology and researchers touchpoint. | i know a pioneer: he finds solutions by tilooking at google, via images = less rubbish 2) fincing contacts in the linked websites 3) contect the technicians in the industry. Advisors don't help on this | take potato |



How can we improve this persona and journey?



| FarmDemo network instead of TN (there is apparently one on crop sensing) | Fully agree with Vago. | sugar beet is quite straightforward, wheat and corn use precision in lagre scale |
|--|--|--|
| technology oriented | technology oriented | Cabbage production is less cost effective than other cultures. Especially in terms of quick investments into the new |
| | He has enough time for conferences, fairsespecially during | technologies. |
| this is a realistic persona | winter period | IoF2020 and SmartAgriHubs work on precision farming and the digital transformation of the European agri-food sector. |





Young male farm advisor

How can we improve this persona and journey?



Maybe to many indicators - reduce them on the most general ones

A bit strange that an advisor was not pleased growing up in the farm, but then becomes an agricultural advisor. I believe you propose him as an introvert person, but I believe advisors are very social, are successful in organising meetings.

To benefit from EIP FG reports related to the topic

I have to say Tobias seems a bit too good to be true. Have not met too many like him (Sigur Ros etc)

Is he generalist or he is specialised?

To benefit from EIP FG reports related to the topic

I have to say Tobias seems a bit too good to be true. Have not met too many like him (Sigur Ros etc)

How we handle difference beetwen public and private advisers?

As a young, savvy and smart adviser, maybe stress his use of social media (Whatsapp) a bit more





How can we improve this persona and journey?



to balance online communication and field visits

Credibility is important regarding a persona maybe instead or personal interests would be more useful some references or connection points to local communities Seems like Camille did the right thing already

to explore/assess farmer's behaviour and be flexible

Why is this social story insightful for the development of a it platform. Isn't that more a question of personal development?

Her story a little bit negative. If I were an adviser never highlighting my negativ feelings, negative sides, and my fears. There are some irrelevant infos (bought a house).

how can make Cami herself credible with elderly farmers who are experienced and sceptic with digital tools?

She is young. Could she really play such role at early career?

if she could show a modern technical solution which handles the farmer's HR problem this could be convincing for the farmer and then this farmer will reccomend her to the others



How can we improve this persona and journey?



He is quite realistic, but I would say he is more a private than a

What does it mean that he relays on consultant?





Young female farm advisor

How can we improve this persona and journey?

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Job security is probably higher than expected

What this journey have to do with the EUREKA knowledge platform? She did not refer to the internet or social media?

well done Persona - sounds quite realistic! congratulations!

Hard to suggest any improvements. In contrast to Tobias Camille seems very realistic. Strange that there are no digital skills/tools used in the journey.

I would say: she is probably well-experienced in digital skills like social media but ther's a lack of skills related in higher skills like statistics or data sciences

mportant to assess/explore farmer's communication attitude

She is young. Could she really play such role so early in career?

as a young person need to build trust

How is a platform better than a colleague who knows the exact farmer she is confronted with? Though she could have gone back to the farmer without him

11

How can we improve this persona and journey?



My experience is that farmers trust peers more than advisors or academics

Well done! For me this is the more likeable and realistic character.





Livestock advisor

How can we improve this persona and journey?



How can she whatch Netflix series with a 2 year old child, running a farm and a full time job?

I am convinced by this persona

If she will have enough money from the farm, she would leave advisory as a full time job?

Journey: it might be usefull to add some possible funding solution, e.g. RDP Measure 4

Nothing to add. It could be an example of an advisor.

I think that this category of farmer is the prevalent in many UE countries. So the generational renewal is a big issue. Other possible solutions could be relatives or cooperation with other farmers.

8

Public farm advisor

How can we improve this persona and journey?



...defintely the hardest one to judge up to now

| Very credible persona. This persona could be a female if you want to swap gender with Austria and France.

| I cannot relate to that journey. Is the farmer obliged to take advisors "help"? Joao himself dos not sound as an advisor at all

| João is fine I think. Well thought through. Journey is not very interesting TBH

| Should Joao consult FarmBook ♥?

| Well done! For me this is the best likeable and realistic character. I was working 17 years long as a public servant. I absolutly understand his struggle.





Private farm advisor

How can we improve this persona and journey?



a bit information about what kind of information the farmers need on this group meetings, how he could motivate them

| Actually he is representing very narrow group of next generation of advisors. Normally Andres is very busy, doing at the same time research at university, running a small business and partly acting as advisor.

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| We should emphasys what makes him credible and how he can get a kind of income from the more viable farmer's activity





How can we improve this persona and journey?



| There is nothing about collecting information, only personal contacts mentioned | It would be nice to have a focus on the solution. E.g. how it was able to engage more farmers? What tool did he use? | Maybe if very well-prepared people are included there are a lot of people who really do not feel they are represented. Example: how many farmers do you think that manage 4 languages? |
|---|--|--|
| I do not see the motivation of the adviser to facilitate this groups | I like this persona | Say something about the time frame. Weeks, Months? |
| Journey: it can be useful to add possible funding solution to the problem, e.g. RDP Measure 4 | Nothing to add. It could represent an advisor. | I find her realistic |

24

How can we improve this persona and journey?



| too many details about the personasI feel like losing the main focus about this persona | A lot of farmers wont invest without funding | I real she has to be able to make cost-benefit analyses, she won't find anybody to do this |
|---|--|--|
| Nothing to add. Real person. | what does he think about cooperatives | subsidies could convince him |





Office forester

How can we improve this persona and journey?



From what I understand she would not be an office forester but a forest owner.

Is Tereza really an 'office forester? She sounds more like an inherited forester.In the UK this type of persona would often own/manage small woodlands

she could search for information about cooperatives (if it exist

Very detailed...she seems real!

It would offer extra income to the owner to offer ecotourism services on her property. Hire guides and interpreters and promote forest ecosystem services

Ask for courses to be professional entrepreneur. Usually this are funded by ESF. In this courses She Can meet other persone with sane problem and share soluzione via trainer providing best practices

She could meet private forest owners group (such groups and network) existin France - try to arrange some meetings and visits with other forest owners to get an idea on what is advised by the forest adviser

she may have limited knowledge of Forestry that is either well or ill-informed

The forest size is also important. If its too small, it's no use





How can we improve this persona and journey?



It would help her to join groups of volunteers in other countries to gain experience, such as wwoof.

Question of size is dependant on how commercially orientated she is. she sounds like she wants more of a "special" woodland with a few special trees, somewhere nice to relax, etc. in which case small wooded area is fine for her needs

she maybe able to utilise smaller timber sizes that are not commercial in developing hobby uses eg, turnery or furniture makers, hurdles etc.

The problem here is thet she seems more worried about the "romantic" concept of the forest than making it profitable and manage it

The side is relatively important. She gas not ro consider only wood buy also non wood products, services (as tours and promoting ie, forest bath) to integrate the business and the income originatesi by farm

Hans will also be frustrated by the lack of innovation by older (often more practically skilled) colleagues in the forestry sector.

Maybe it's kind of strange being almost a risky innovator but she doesn't want to manage her forest in an innovative way

A few % of forest owners keep the forest without management, innovation - this right belongs to the onwership right

It's important to check the legislation in case of each concrete



How can we improve this persona and journey?



Hans should follow a courses on comunication to overcome his timidity and ti provide in a polite form the alternatives

He gas to work in a more systemic way considering all the

It seems that Hans has not economical background. With old people sometimes you have ti use this argument to show that the ongoing business could be profitable animore and new regulation Will come in force

through social media create special community dealing with littering to get a more varied public





Middle aged forester

How can we improve this persona and journey?



JOURNEY: in each of EVENTS stages, it might be useful to highlight anadditional "graphic row" with resources required, problems found, support required...

If the only solution is "video call" - can the Knowledge reservoir

Working for the government it could possibly be interesting to know a bit more on his involvement on civil groups working on forestry as a source of knowledge, also and specially for this issue. Contact with university as social knowledge-driver

Don't ask stupid questions, the journey hasn't begun.

Strange that he was fully unexperinced in UAVs, and got such a task. I should be a lot of time to dig deep into this field.

Innovation states he is more safe but skills are more of a risk taker?

use of social media? - try to find more than 1 company -

Do not only outsource the services (UAV) to that enterprise, but train with them the forest administration staff "down" to beat foresters in the use of that information \Rightarrow backloops of the implementation process.

Try and bring the knowledge of sustainable forestry and its benefits for environment- to farming departments and farming organizations





Young forester

How can we improve this persona and journey?

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Foresters association & activities

The short descriptions on the left/below - the explanation did not correspond to the first impression of the words on the slide.

The GIS program can be included, scripts that can help his job as well

Use Forest Health Department/Minstries of his countryUse network of colleagues and other forests specialistsUse EU app dedicated to diagnose forest heath issues and advice on what to doInternational conference and EU project restitution

I bit more on what kind of information he looks for, and

Acknowledgement or expertise on national /EU green policies...

Struggling with public authorities, bureocracy

Use of ortho photography to view the forest from year to year

More opportunities - practitioners journals, website,

10

How can we improve this persona and journey?



maybe some input on expected dates to gain access to some resources or person might be interesting, meaning that when you are involved on some event usually you are tight to some time schedule, __





Private forestry advisor

How can we improve this persona and journey?



I feel Malthe is really realistic.

Perhaps incentives could be offered to encourage people joining his cause

Malthe's biggest challenge is convincing landowners of the value of planting, growing and managing woodlands

I think many in Malthe's persona will not be so digitally native as him

Sales and added value could be an important topic form him also

Target Education at a young age that may help widen interest indirectly to the older generation to that of the benefits of forests

As general remark for all personas. The skills digital native could be rephrased as digital pro or expert. Malthe is older than Hans but more digital native, which sounds confusing

9

Public forestry advisor

How can we improve this persona and journey?



The opportunities always relate to 'access to db on agricultural knowledge'. What about access to best practices or access to

Giving him information on agroforestry, it could be a good

Hans will be keen to look at problems and opportunities at a landscape/integrated landuse scale rather than in a 'silo' and will look to other industries for solutions Information availability of alternatives to high usage of High nitrogen containing products

It's important to check the legislation in case of concrete

Hans should consider site visits with the farmer and perhaps the woodland owner to sites that demonstrate alternative

Hans will also be challenged and frustrated by the lack of innovation/willingness to change by older (often more practical) colleagues in the forestry sector

The woodland owner could consider planting nitrogen fixing tree species as a buffer to reduce impact this would probably be a short term solution until the farmer can get on board with alternative methods.

A general remark for all personas. In the skills digital native could be rephrased into digital pro or expert. Malthe is older than Hans but more digital 'native', that sounds confusing. Otherwise Malthe is very realistic.





How can we improve this persona and journey?



Great story! Even if the problem could not be solved at least on short run. $% \label{eq:condition}%$

maybe BRANCHING in the event flow would be of interest, meaning that the are actually not one journey but more running in parallel. This way Hans might be trying two or three different problem-solving paths.

Maybe find some colleagues in the farming department to help him address the farmer and its issues - try to get a kind of round table - use more the support of colleagues from other departments - use a more experienced colleague to help him

Test hello

The problem is at landscape scale (groundwater contamination - imply administrations (waterworks6water quality control), farmers association -> there are a lot of examples of regional ad-hoc associations about that issue.

Agree fix this problem needs to look at the bigger picture so I do not got the point on this journey since solution was not in the farmer but in planification





Annex B Output from Mentimeter from the consortium meeting

Researcher

| E |
|------------------|
| E |
| E but child ? |
| |





| What are his problems? | Langage speaking | Shoe size |
|--|--|--|
| active networking in the region | what network he has in family with farmers (even 3th line) | The focus is now on sharing his info with farmers, maybe also something on how he retrieves data for his own research? |
| Participation on international networks and background on this networking activities related to farming - climate issues | If not mentioned: what type of connections he looks for (for instance regional, multi national?) | does he have interaction with farmers, for example meeting to study their needs |
| | | |
| | | |
| s anything missir | ng in the research | er persona? |
| f he wants to help farmers with the solutions he designs those need to answer specific farmers needs. Maybe he can establish some connections with farmers while road tripping and running | ng in the research | er persona? important i that having a connection is not primarily on conte |
| f he wants to help farmers with the solutions he designs those need to answer specific farmers needs. Maybe he can establish | | |

32

Policy maker



Is anything missing in the policy maker persona?



| Where she works? Ministry? Consultant? Freelancer? | Too idealistic | Dressed like a farmer |
|--|--|---|
| no | the picture (clothes) does not match with a fromal policy maker | If not mentioned: what type of policies she is specialised in/deals with? |
| I believe she is a bit exceptional. | I do not know because I do not know so many policy makers. Maybe policy makers are very diverse | commonalities with other policy makers |



Is anything missing in the policy maker persona?



Experience or interests at "lower" regional and local levels

she is specific but I think there can have very different profiles.

policy maker could be farmers representative or employee of a ministery or a policy advisor.

Should be told a specific field she engaged with as an example.

a policy maker in government has lot of connection with research: depending heavily on them

Policy-makers are very diverse - Mihaela is a bit too generalised (and idealised?)

What kinf of interest this people would have with a knowledge platform?

Employer. Her position. Her working post.

i'd mention a regional government policy maker, which i think is biggest target group (I expect they are bigger users than lobbyist, national/EU government)





Is anything missing in the policy maker persona?



| she needs statistics | | |
|----------------------|--|--|



Annex C Final archetypes and user journeys

New entrant





NEW ENTRANT FARMER

DESISLAVA (AKA DESI)

HER STORY

Desi trained as an engineer and could easily have a comfortable job, but she wanted a challenge and something that she could be passionate about. She thinks organic agriculture is very important and has been growing her knowledge on it. She decided to start a farm with her Father after he retired from being an engineer. Neither of them knew much about farming when they started, but are eager to learn, especially Desi. The learning curve is very steep and they often feel like outsiders in the local farming community, but they persivere. In Bulgaria family is very important and decisions are made mutually between Desi and her Father.

CHALLENGES

No experience in argriculture to fall back on Bureaucracy

Natural pests and organic solutions

Climate change causing new problems

OPPORTUNITIES

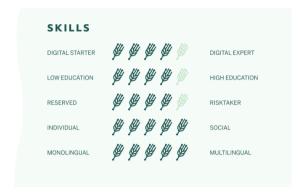












TOUCHPOINTS

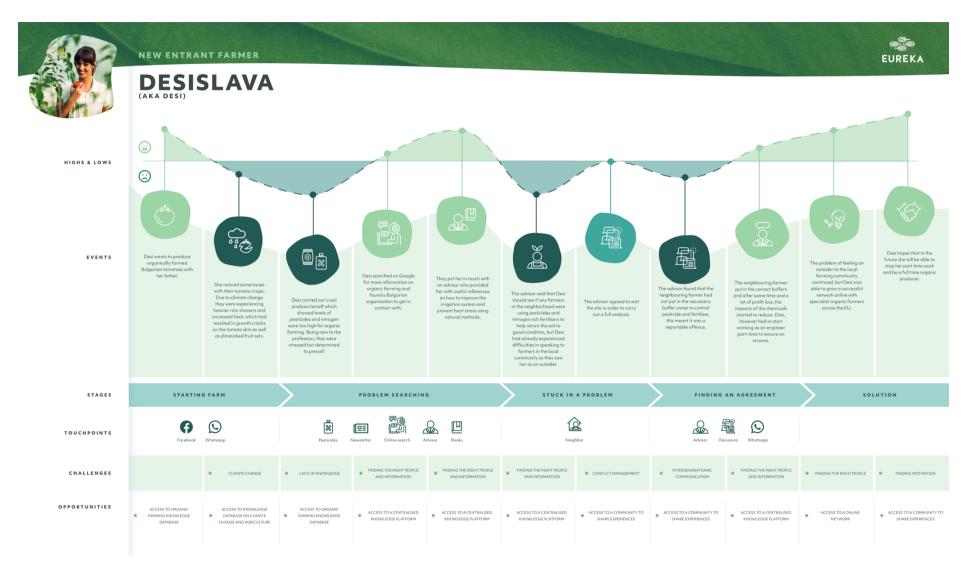


INTERESTS

Organic farming (Bulgarian tomatoes) Learning new things about agriculture Social events with friends and colleagues Mystery of the Bulgarian Voices choir The biodiversity of Bulgaria









Organic farmer



ORGANIC FARMER

MARTA

HER STORY

Marta started farming organically when she read about the importance of biodiversity and the added economical value of selling organic products. The journey hasn't been easy, but she is passionate about it. She likes the challenges that come with it and figuring out how she can make a more robust ecological environment, using new innovative methods. With climate change, new challenges have presented themselves which she can't always solve by herself so being part of a friendly online group of like-minded farmers is amazing.

CHALLENGES

Changing from traditional to organic farming
Finding organic solutions
Combining family life with the farm
Climate change

OPPORTUNITIES





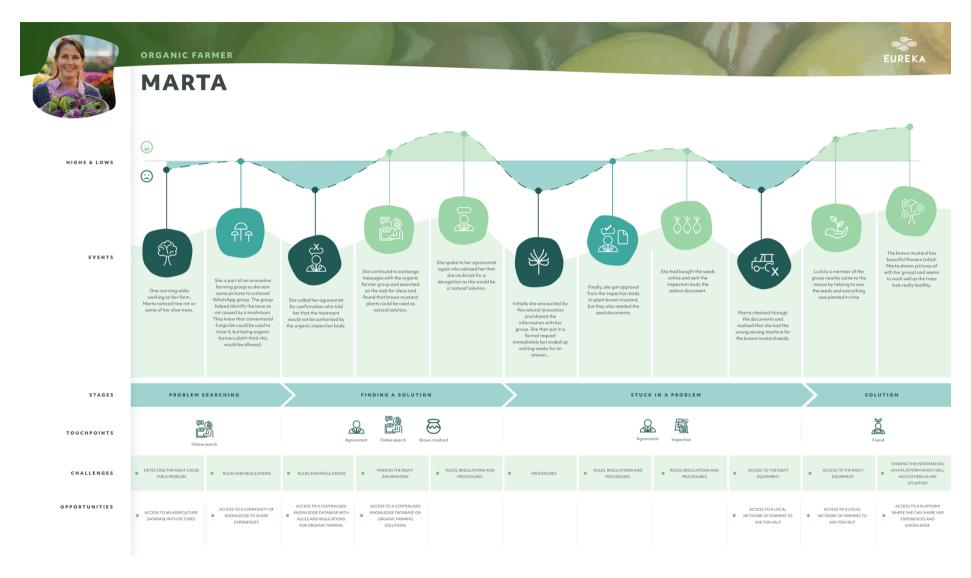














Student farmer



CLAUDIA

HER STORY

Claudia has been working on her parents' farm since the age of 14. She rarely socialised with friends because she was always needed for work. At university she's discovered a different life with more freedom. She still loves agriculture and her parents want her to take on the succesion of the farm, but she's not sure if that's what she wants especially because her parents seem to see her as a child still. Should she take over the farm? Can she turn it into her own project? Can she still have a life outside of farming? Maybe she should take an internship outside of Germany? So many questions!

CHALLENGES

Making the decision on what to do in the next 5 years
Intergenerational communication with her parents
Finding up-to-date information relevant to her
Finding the right place to do an internship

OPPORTUNITIES







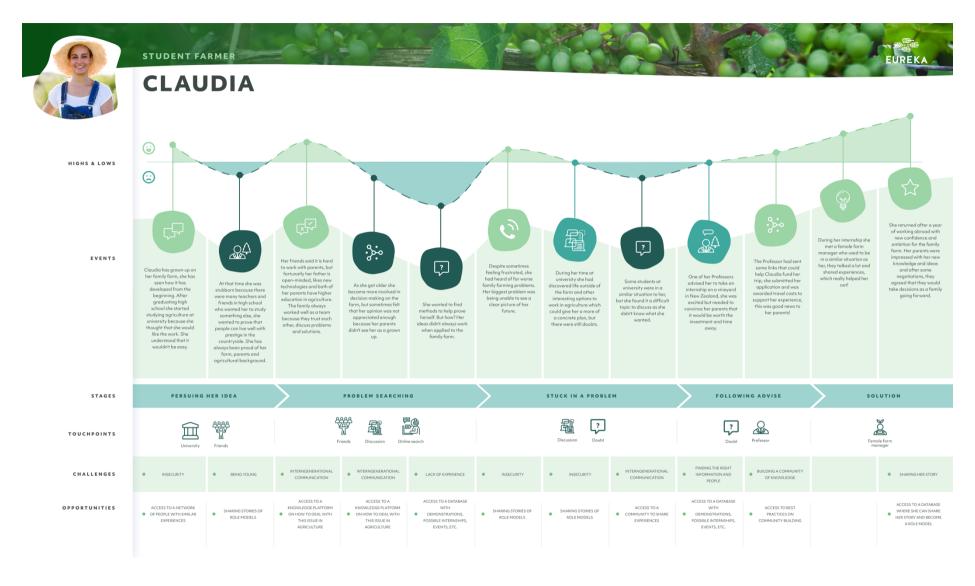
TOUCHPOINTS



INTERESTS Hiking through nature Having a drink with friends Travelling with friends Fusion festival









Livestock farmer



SANDRA

HER STORY

Sandra is a livestock farmer who eventually wants to take over her parents' farm. Her parents are first generation farmers and bought the farm when Sandra was a teenager, she already had ideas about studying law so didn't pay much attention to the farm but after meeting her husband, an arable farmer, as well as being fed up of city life she decided to return home and make a life for herself and her family at the farm that her parents worked so hard to build. New investments need to be made and she has some diversification ideas for the farm. There is also a troublesome relationship between her husband and her father because her husband does not want to farm livestock, Sandra wants to keep the cattle herd and is determined to learn so that this is possible but balancing this with young children is not easy. The whole experience has become very stressful.

CHALLENGES

Intergenerational communication regarding farm take-over
Feeling self-secure about herself as a farmer
Easy access to information on innovation in her sector
Finding time to read up on innovative practices

OPPORTUNITIES









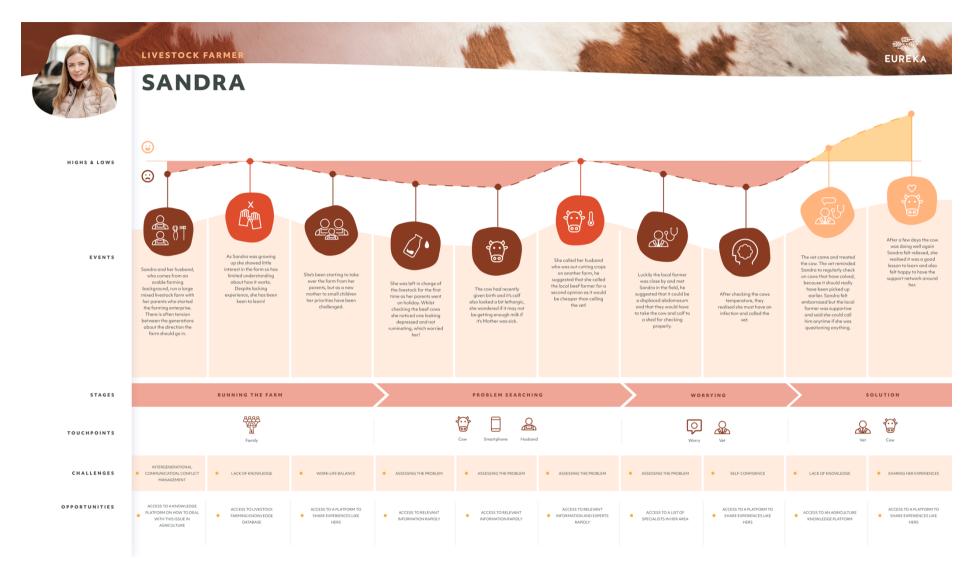
TOUCHPOINTS



Her family Midsommer murders and the Crown Becoming a better livestock farmer









Experienced farmer



EXPERIENCED FARMER

EDGARS

HIS STORY

Edgars is widowed and his two children both work in the city with no interest in farming. His farm is an extention of himself, it gives him meaning. Because his children aren't interested in farming he can't hand it over to them and he doesn't want to hand it over to just anyone, he had to fight for it, the younger generation doesn't seem to understand that, and he doesn't seem to be able to explain it to them, it's all very emotional to him. He doesn't make as much money as he'd like, but his farm is still interesting. He never had to interact much with customers and never really paid attention to that aspect. He wouldn't use the platform, but his advisor who he feels confident speaking to will. When it is time for a successor to take over they will use the platform for information on how to modernise the farm.

CHALLENGES

Letting go of his farm, his life's work
Intergenerational communication

Adapting to new policies

New technologies, has a computer but it's difficult to use

OPPORTUNITIES







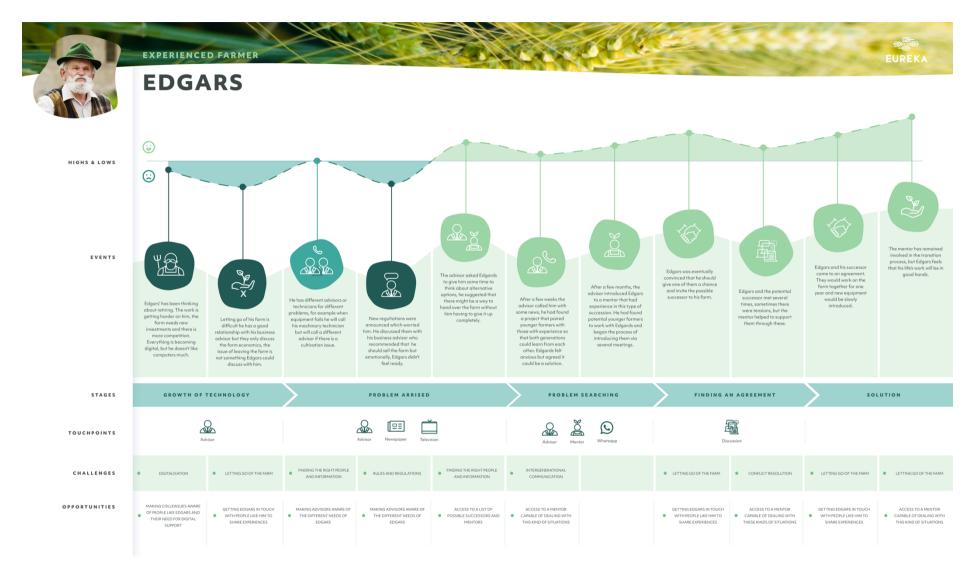
TOUCHPOINTS



His farm Making his own black Balsam (traditional Latvian liquor) Whatever is playing on television Going to town to do some shopping









Precision farmer



PRECISION CROP FARMER

GABOR

HIS STORY

Gabor has always been interested in technology. He took over the farm from his father and had to make some investments, this was the perfect opportunity to add new technological innovations to the farm. The innovations have paid off and Gabor didn't consider the extra work as an effort, more like a hobby. He's consistently worked on keeping the farm technology up-to-date and following the latest trends but he is wary of big tech companies who he thinks sell the products for too much and are often pushy. He enjoys meeting other farmers and researchers to share his knowledge and improve his skills. He's not afraid of the competition because he doesn't feel like it's a race he entered into.

CHALLENGES

Finding up-to-date information on innovation in his sector

Technical failures and interoperability with new technologies

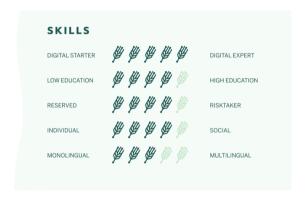
Finding the right people to help him innovate

Finding info on regulations and subsidies

OPPORTUNITIES







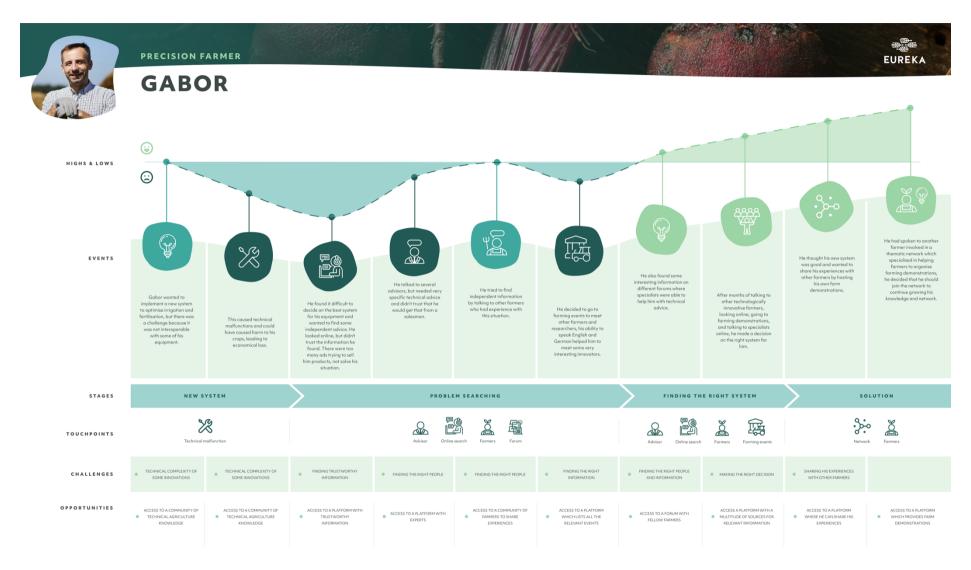
TOUCHPOINTS



Technological evolutions Running in the Hungarian nature Hungarian food culture Watching YouTube videos on farm technology from around the world









Young male farm advisor



YOUNG MALE FARM ADVISOR **TOBIAS**

HIS STORY

Tobias grew up on a farm but because he is the youngest of three brothers didn't see a future for himself working on the farm, he also really enjoyed studying and thinking about the more technical side of agriculture. His brothers often teased him because although he was clever, he wasn't always the most practical. After studying a masters in agronomy and getting a Phd, he was offered a position as an advisor for a private advisory service. He enjoys the job security, work-life-balance and connection with agriculture. He sometimes has difficulties transferring his knowledge to more practical contexts.

CHALLENGES

Building a network of experts he can easily consult Bridging his theoretical knowledge to practical contexts Finding the information he needs, and can trust Interacting with farmers

OPPORTUNITIES









EUREKA



TOUCHPOINTS







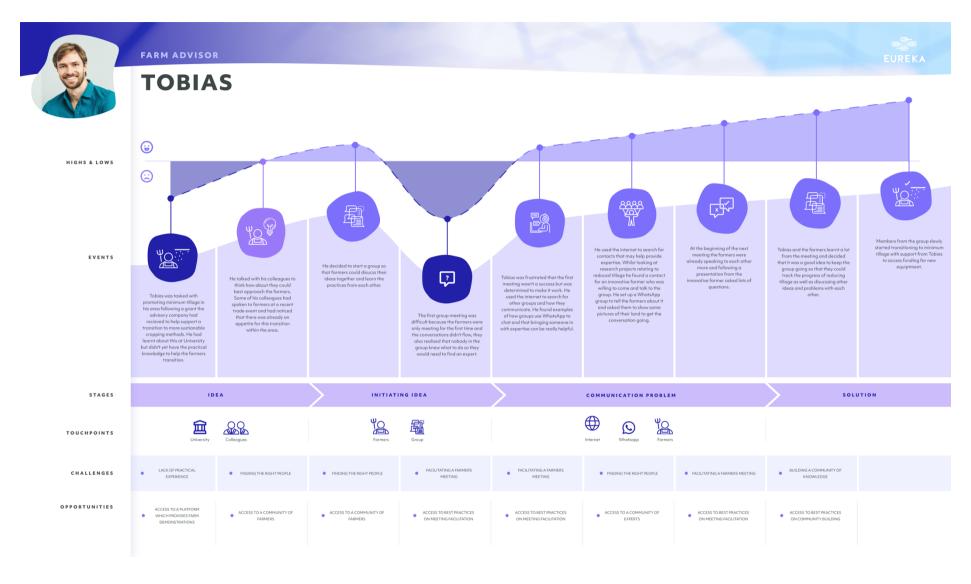


INTERESTS

Hiking through the mountains Sigur Ros Going to concerts Reading novels









Young female farm advisor



YOUNG FEMALE FARM ADVISOR

CAMILLE

HER STORY

Camille has a masters in agrology. She decided to become an advisor in her region as she identified that there was a need for a younger perspective. She enjoys the contact with farmers, but dreds the administrative workload. She experiences low self-confidence and thinks that she doesn't have enough experience to do her job and still relies a lot on the support of her older colleagues and online advisory groups on social media. She is aware that you can't know everything as a young person, but that doesn't mean she has nothing to contribute and she really cares for the farming community.

CHALLENGES

Building up a reputation as a trustworthy advisor

Growing more self-confident as an advisor

Giving long-term advice to farmers

Making sure she has more financial stability (she recently bought a house with her boyfriend)

OPPORTUNITIES









EUREKA



TOUCHPOINTS

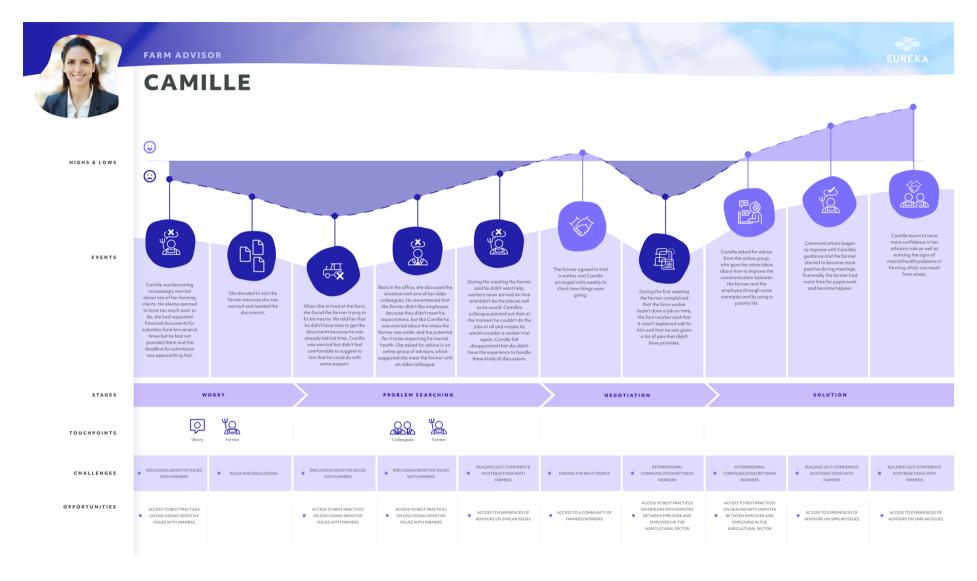




Renovating the house she just bought
A fun evening with friends and food
Christine and the queens
Psychology









Livestock advisor



AGNETHA

HER STORY

Agnetha's uncle had a livestock farm where she spent a lot of time as a child. She decided to pursue a career as a livestock advisor, studying an agricultural degree at university and getting a job with a livestock advisory service. She felt that she wanted to gain more practical knowledge and enjoyed working with livestock so with her husband, set up a smallholding. Her husband has a good job in the city but the travel is putting presure on their relationship as Agnetha has to do all the work on the smallholding as well as her 4/5 job, the income of the farm isn't enough and she had to keep a 4/5 time job to meet the mortgage repayments while her husband is working full time. It is a stressful situation but they both want it to be a success.

CHALLENGES

Building up a reputation as a trustworthy advisor

Not finding the latest information in livestock innovation easily

Convincing farmers about more sustainable livestock farming

Financial security, her and her husband have a mortage on the farm $\,$

OPPORTUNITIES













TOUCHPOINTS









INTERESTS

Her family (she has a 2 year old son)

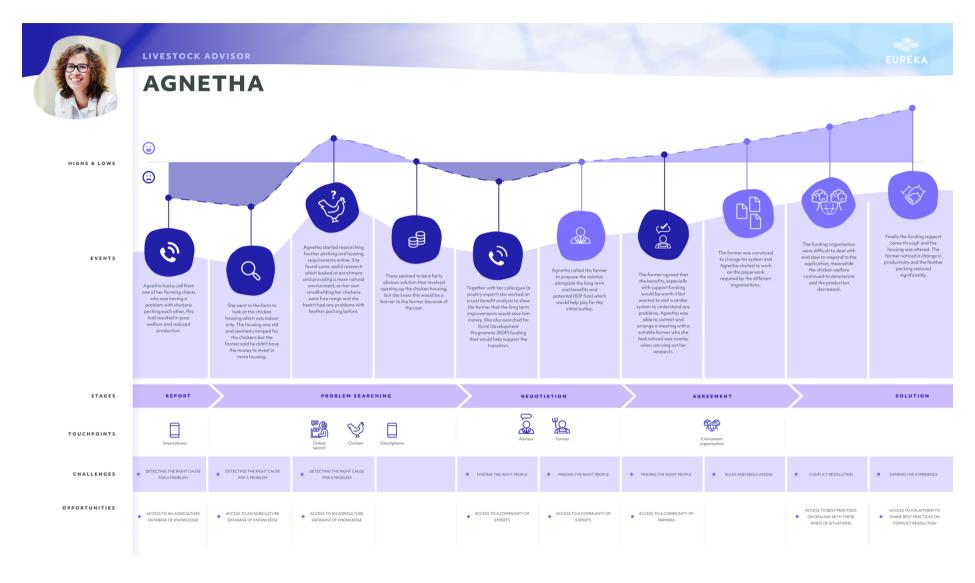
Her job

How to create a sustainable future

Falling asleep while watching a Netflix series









Public farm advisor



PUBLIC FARM ADVISOR JOAO

HIS STORY

Joao has a long career as a public advisor for arabel crops. At the start of his career, he had more interaction with farmers which he really enjoyed, now his work involves managing advisors, emails, calls and standardised forms. Bureaucracy and procedures have become more complicated and farmers often don't know what to do. He gets satisfaction from helping farmers but gets frustrated that the administrative systems and procedures remain so complex.

CHALLENGES

Finding the most up-to-date info on regulations and subsidies Finding relevant information in his language Adapting to the changing role of advisors

TOUCHPOINTS



OPPORTUNITIES

The complexities of bureaucracy













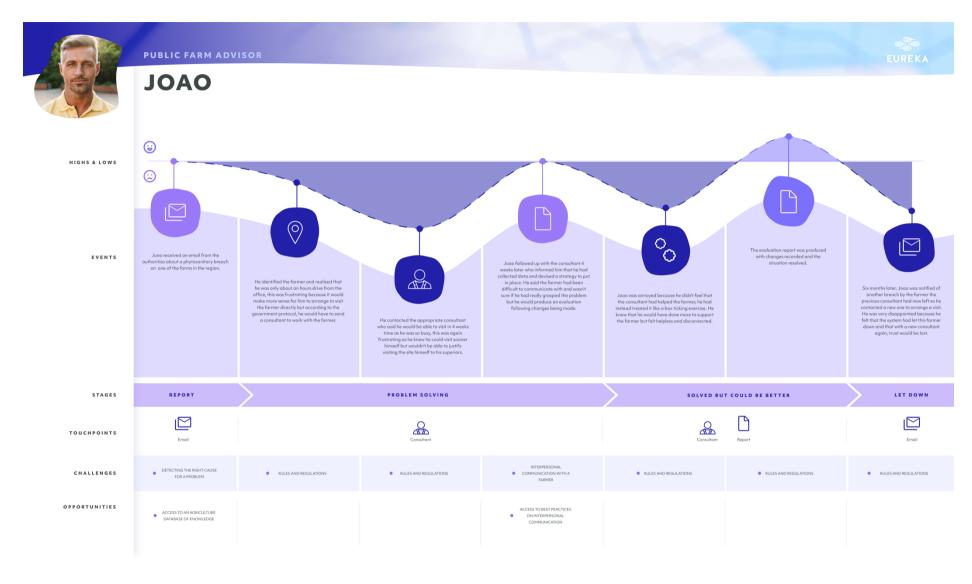


INTERESTS

Spending time with his family









Private farm advisor



ANDRES

HIS STORY

Andres is an agrologist by training and when the country started its digital revolution he joined the movement in trying to help farmers become more digitaly innovative and progress the level of agriculture in Estonia. Despite his enthusiasm for digital innovation, he is also a realist and knows that digitalisation won't solve everything. Aside from working as a private advisor he also works part time as a researcher at the Estonian University of life sciences. He's very motivated and always keen on helping farmers and policy makers, even at the cost of becoming overworked. One of the biggest challenges for him is setting up and running farmer groups where farmers share ideas about digital innovation and getting them to participate in research projects.

CHALLENGES

Finding the most up-to-date information on innovation
Finding the right people to team up with
Managing his time, he's very busy
Connecting farmers

OPPORTUNITIES









EUREKA



TOUCHPOINTS



INTERESTS

His job

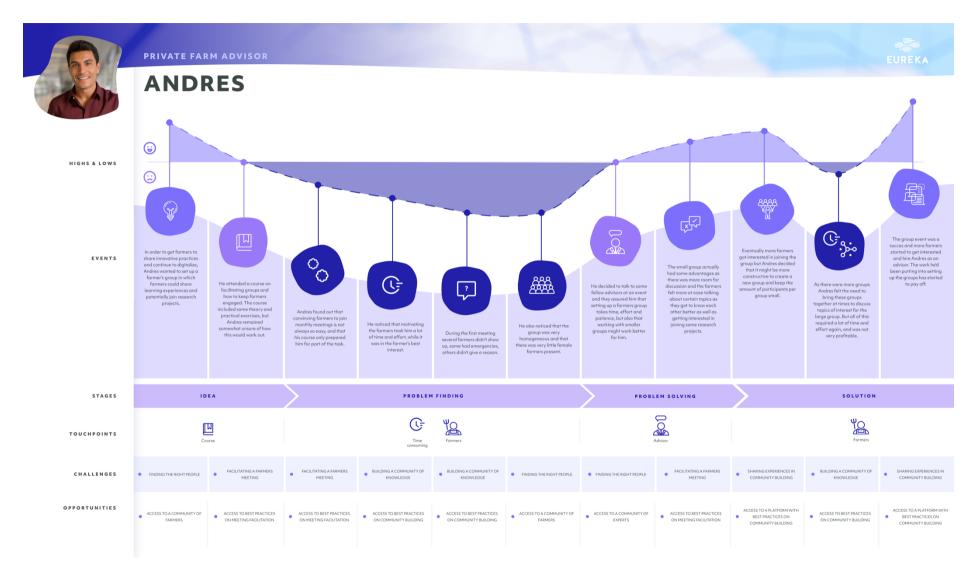
Digital innovation (Artificial Intelligence, Internet of Things, etc.)

Non-fiction literature (e.g. Sapiens by Harari)

Electric cars









Forest owner



FOREST OWNER

TEREZA

HER STORY

Tereza inherited her forest from her parents who passed away a few years ago. She loves her forest because it contains so many memories and was of great importance to her parents. She has somewhat of a romantic view of her forest and doesn't want to sell it, yet she has no real interest in managing the forest in an sustainable way. She has some forestry knowledge, but this is rather limited. When complicated issues occur she calls on a forestry advisor, but she's very skeptical towards forestry organisations as they'd like her to sell the forest. She allows some trees to be cut for wood, but she doesn't make much money of of it. Sustainable forestry is something she doesn't have much knowledge about and she considers it more like a trend.

CHALLENGES

Finding information on subsidies

Regenerating part of the forest after and infection of trees $% \left(t\right) =\left(t\right) \left(t\right)$

Finding relevant forestry information in her language

She doesn't have much knowledge on managing a forest

OPPORTUNITIES











DIGITAL STARTER DIGITAL STARTER DIGITAL EXPERT LOW EDUCATION RESERVED DIGITAL EXPERT HIGH EDUCATION RISKTAKER INDIVIDUAL DIGITAL EXPERT HIGH EDUCATION RISKTAKER SOCIAL MONOLINGUAL DIGITAL EXPERT MULTILINGUAL

TOUCHPOINTS



INTERESTS

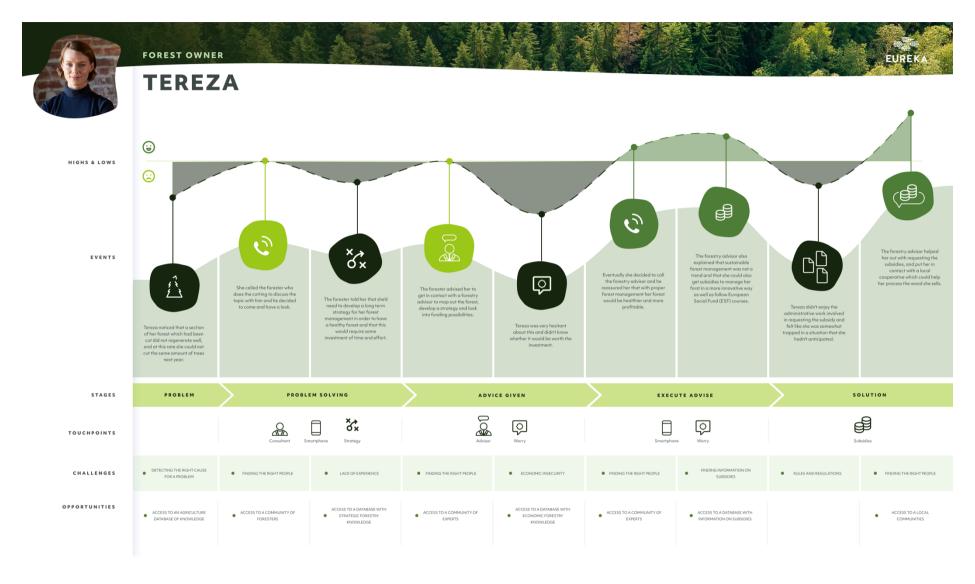
Her family (She has a 12 year old daughter)

The band 2cellos

Spending time in nature









Middle aged forester



MIDDLE AGED FORESTER

IGNACIO

HIS STORY

Ignacio is a forestry manager, employed by the government. He is truly passionate about his job and sometimes doesn't think of it as work at all. This means that he tends to work long hours and seek out information from a range of sources. Forest information is difficult to find because it is so niche which means that his work relies on building successful networks with people in the sector across the world. He is sometimes frustrated because forestry is often combined with agriculture but he thinks it is totally different, the economics, timeframes and biodiversity are totally different to traditional farming.

CHALLENGES

Finding the right information on forestry innovation

Building networks to share information

Adapting to new digital innovations (e.g. new software)

Complicated planning of forest management to protect ecosystems

OPPORTUNITIES





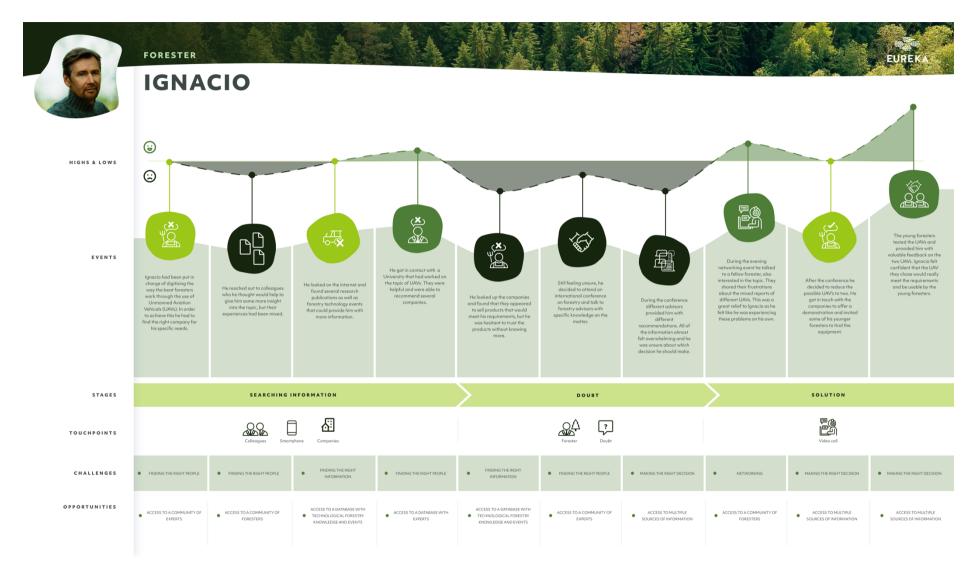














Young forester



YOUNG FORESTER IONNAS

HIS STORY

lonnas has always loved hanging around in forests, he enjoys being on his own and not being overstimulated. He could never live in a large city, he needs a daily connection with nature. This is his first job since he left university, he started a year ago so he doesn't have much practical experience yet. He heavily relies on his older colleagues as forestry involves a lot of knowledge specific to particular piece of forest one has to manage, but he's also very involved in online communities and knowledge reservoirs related to forestry.

CHALLENGES

Learning the technical landscaping software he only saw briefly at University

Gaining practical knowledge about his piece of forest

Networking to gain more knowledge from other foresters

Climate change and forest fires

OPPORTUNITIES









EUREKA



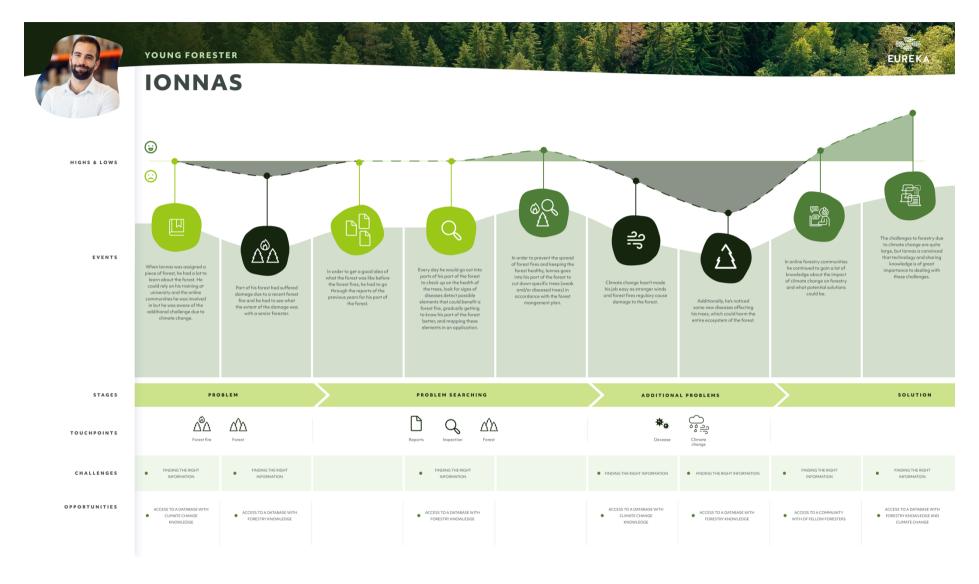
TOUCHPOINTS



Rock climbing Greek food Reading fiction and Greek mythology Going to the theater









Private forestry advisor



PRIVATE FORESTRY ADVISOR

MALTHE

HIS STORY

Malthe claims he was born in a forest, that's how much forests are part of him. While attaining a master degree in Forestry, he did an internship in Canada. This has fascinated him with regard to how forests are managed around the world and how forestry innovation is crucial to preserving our fragile eco-system. He has gained additional working experience in Estonia, Bulgaria, Ghana and Australia. He's convinced that forests are essential to good health and therefore wants to develop sustainable forestry tourism. In order to achieve this he also attained a bachelor in international marketing and offers tours in Danish forests.

CHALLENGES

Providing institutional and economic analyses

Convincing clients of forest marketing and forestry tourism

Combining sustainable forestry and agriculture

Climate change and its impact on forests around the world

OPPORTUNITIES







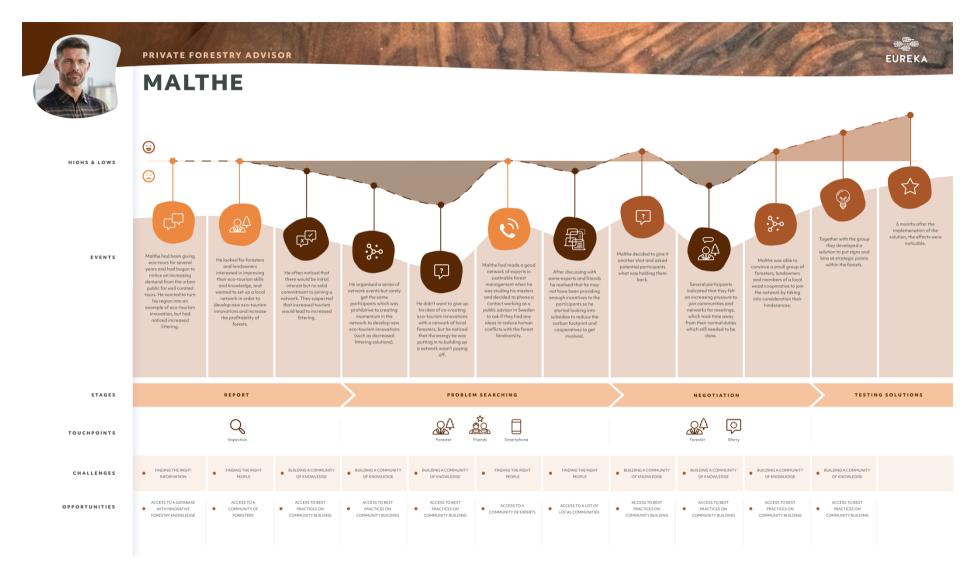
TOUCHPOINTS



INTERESTS Travelling and discovering local customs Reading non-fiction Giving tours Biking









Public forestry advisor



PUBLIC FORESTRY ADVISOR

HANS

HIS STORY

Hans has always been fascinated by nature and the way eco-systems work. As a young boy he enjoyed going on forest visits when at school. This led him to persue a degree in forestry followed by a Phd within the field of sustainable forest management. Following the completion of his Phd, Hans started a job working for the State Forest Service as he felt that it reflected his desire to give more attention to nature conservation as opposed to timber production for revenue. Hans is passionate about leaving a sustainable world for future generations and thinks that conservation based forestry holds an important key to unlocking this goal. Due to his passion he can get frustrated at challanges to his ideal such as the conflict with intensive agricultural systems.

CHALLENGES

Climate change and sustainable forest management
Intensive agriculture conflict with forestry
Stakeholder management
High administrative workload

OPPORTUNITIES









EUREKA

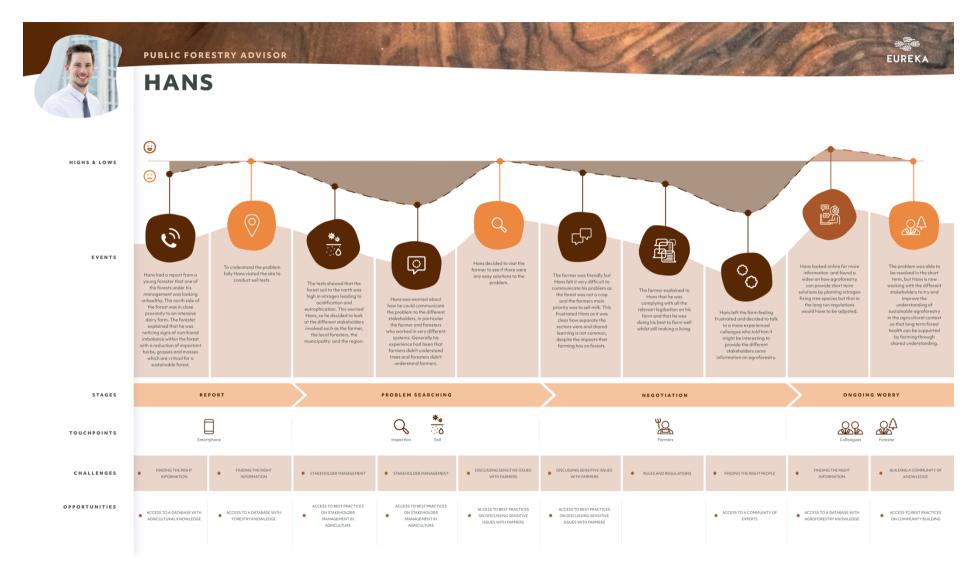














Researcher



RESEARCHER

ALEKSANDER

HIS STORY

Aleks' grandfather was a hard-working farmer with little education options, but his father was able to attend university and became an engineer. Aleks always felt a connection to agriculture and decided to study bio-engineering. He managed to get an assistant professorship and runs a small lab on planning and organization of breeding of cattle. The pressure to publish sometimes makes him worry whether his research is relevant and of practical use to farmers. His work is sometimes too theoretical to easily translate to farmers which makes the relationship with farmers and advisors often more difficult. His ambition is to perform research which will be of more practical use to farmers and get more involved in EU-projects.

CHALLENGES

Translating solutions into practical contexts

Conducting relevant research

Finding research funding

Convincing farmers of his solutions

OPPORTUNITIES









EUREKA



TOUCHPOINTS



Running in nature Visiting historical museums Travelling, roadtrips in particular Craft beers





Policy maker



POLICY MAKER MIHAELA

HER STORY

After finishing her PhD as an agrologist she worked as a public advisor for several years before moving to the position of national policy maker. She has some experience working with farmers, but she finds it difficult to communicate with them about the importance of new policies, especially the EU-policies which are sometimes difficult to apply on a regional level. Combining a career as a policy maker while raising two childeren often leaves little time to stay up-to-date on the latest developments in agriculture.

CHALLENGES

Finding out what farmers need

Translating EU guidelines to the regional situation

Defending Regional interests at a national level

Dealing with hierarchy as a policy maker

OPPORTUNITIES









EUREKA

