



Euroopa Maaelu Arengu
Põllumajandusfond:
Euroopa investeringud
maapiirkondadesse

Estonian Chamber of Agriculture and Commerce: Project: Care4Growing

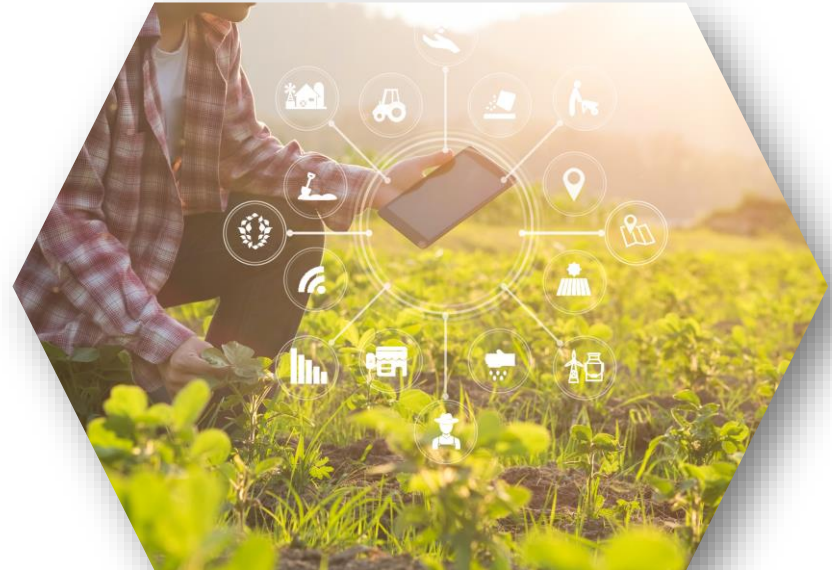
-

Association of Belgian Fruit & Vegetables Coöperatives



Care4Growing at a glance

- Founded in 2019 (Start Up company)
- Funded by the 3 largest Fruit & Vegetables Producer Organisations within Belgium:
 - BelOrta
 - Reo veiling
 - Coöperatie Hoogstraten
- Yearly turnover: 1,119 billion € (2021)
Yearly supply: 1.268.595 tons (fresh fruits & vegetables)
- Targeting the market of Agri&Horticulture
- Serving over 2000 Growers
- Belgium >> EU



Winner of the European Award for Cooperative Innovation (2020-2021)



A large, semi-transparent wireframe model of a leaf is overlaid on the left side of the slide. The wireframe is composed of numerous green lines forming a triangular mesh that follows the shape of a leaf. The background of the slide is a close-up photograph of a green leaf, with its veins clearly visible. The overall color palette is dominated by various shades of green.

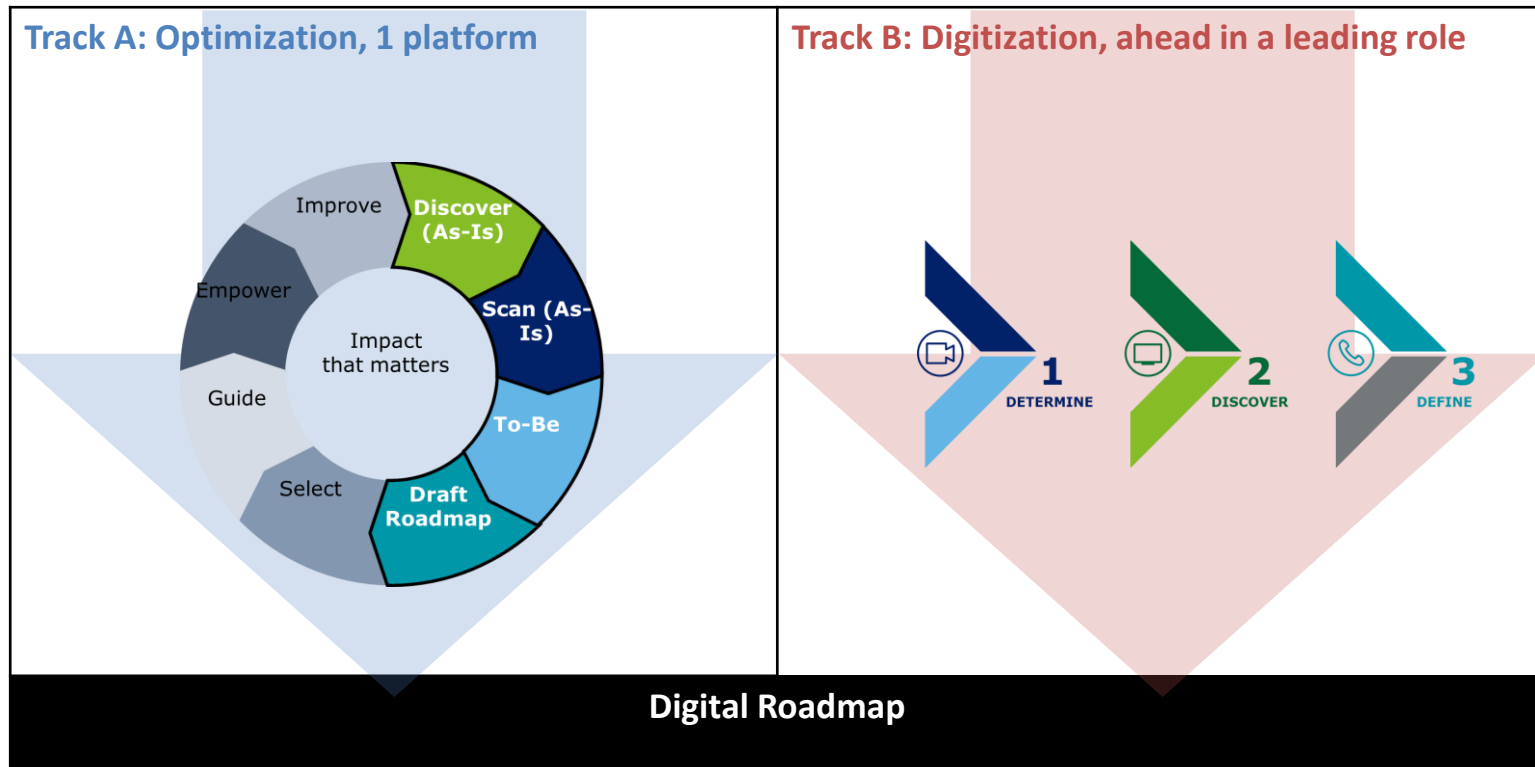
First Phase: Research to cooperate on Digitization

Research to Cooperate on Digitization

- Common purpose
- Open attitude towards research on existing systems within the producers' organizations
- Having the same vision: Digitization as key enabler for the future
- Stronger to act together
- Together, more power to invest
- Being flexible to respond to a rapid changing world. Being ready to tackle the future



Research to cooperate on Digitization





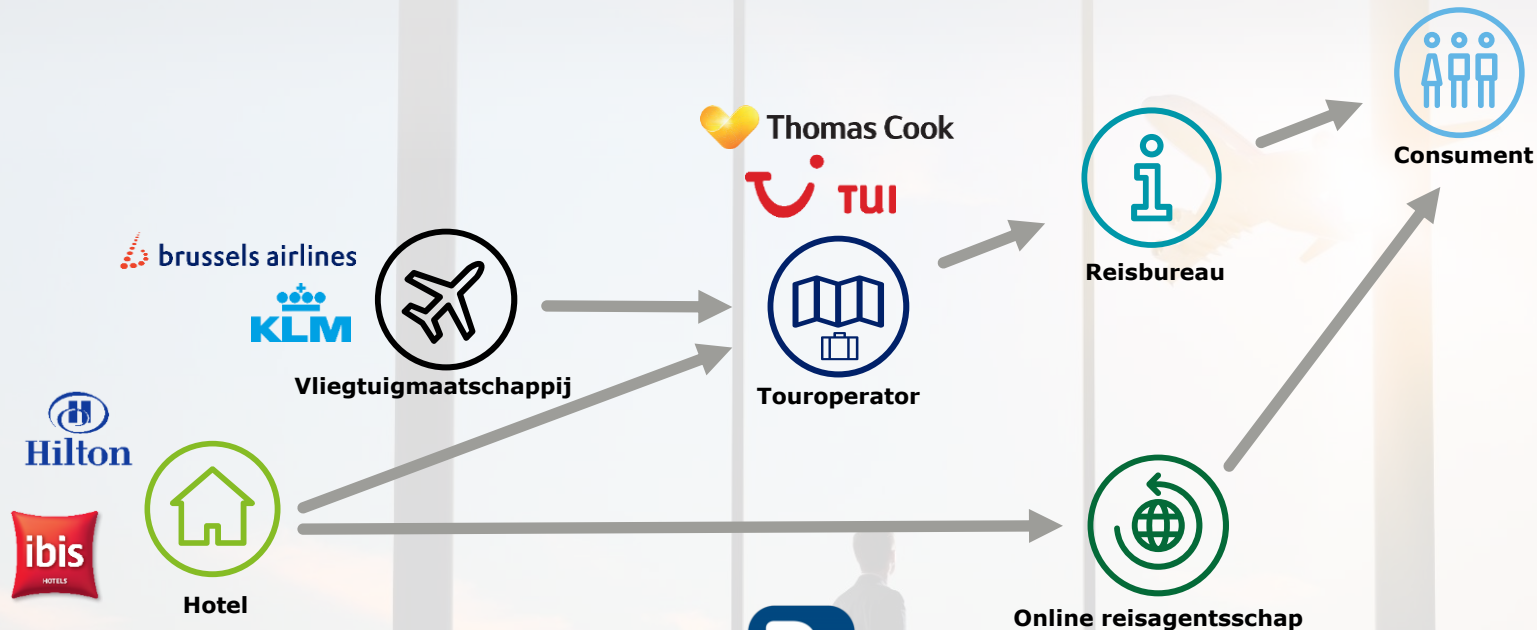
2 paradigms

-

A rapidly changing future

Impact digitization within the travel industry

Traditionele waarde stroom binnen de reisector



Move tot online travel agencies

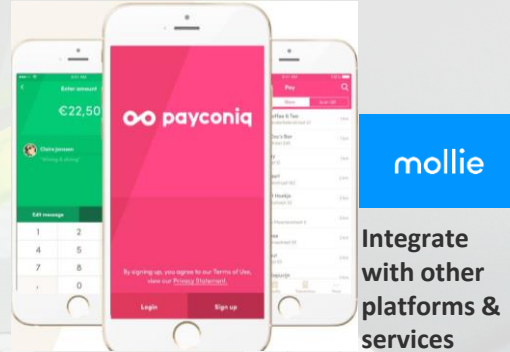


Impact digitization in the banking industry

Manners to communicate



Pay
Contactless



Integrate
with other
platforms &
services

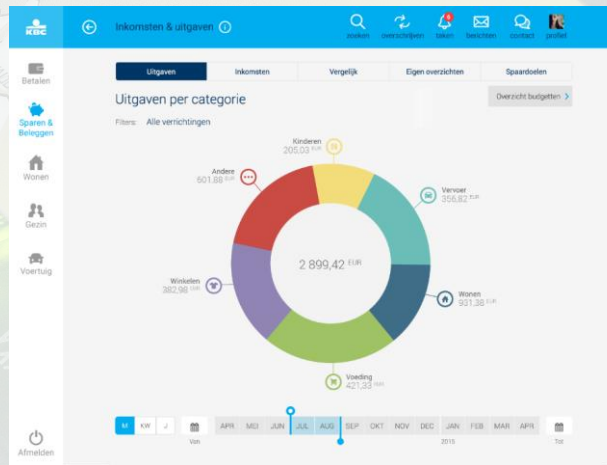


Fingerprint ID

Ease of use trough Tablets - smartphone



Dashboard



Face ID



The background of the slide is a vibrant green field of crops, overlaid with a semi-transparent wireframe mesh of a leaf. The wireframe is composed of numerous small green triangles and lines, creating a digital representation of the leaf's structure. The text is centered in white against this background.

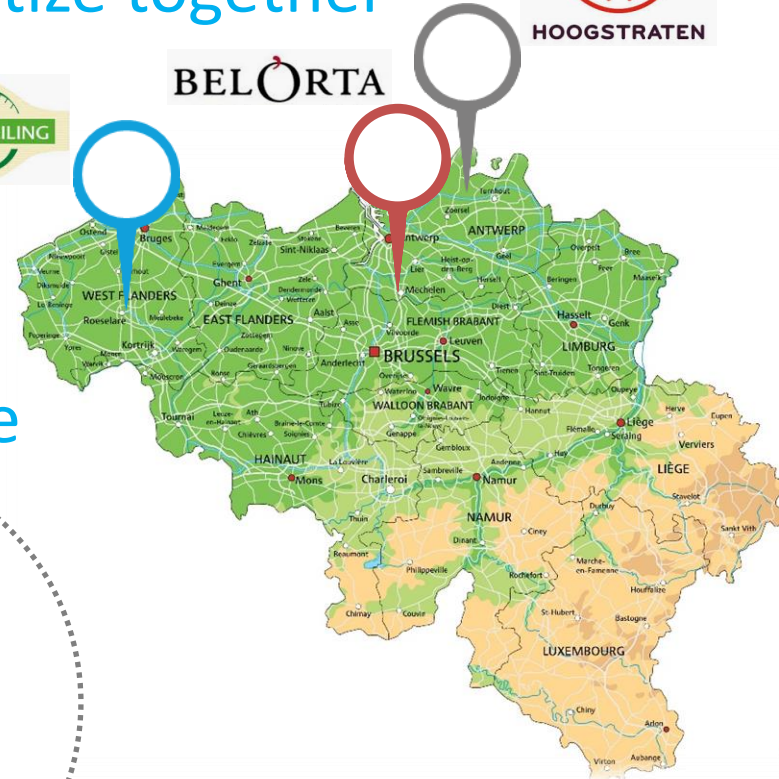
A journey: From Digitization to creating an eco-System



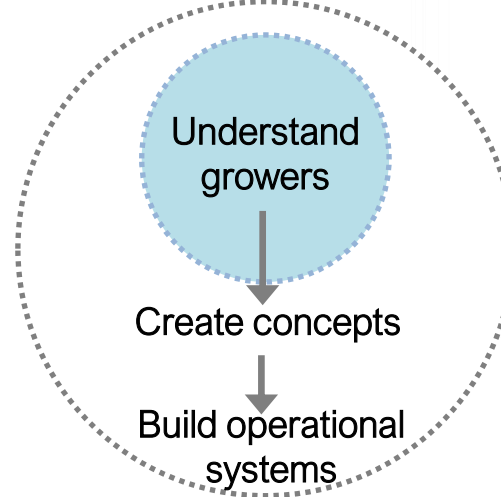
Digitize together

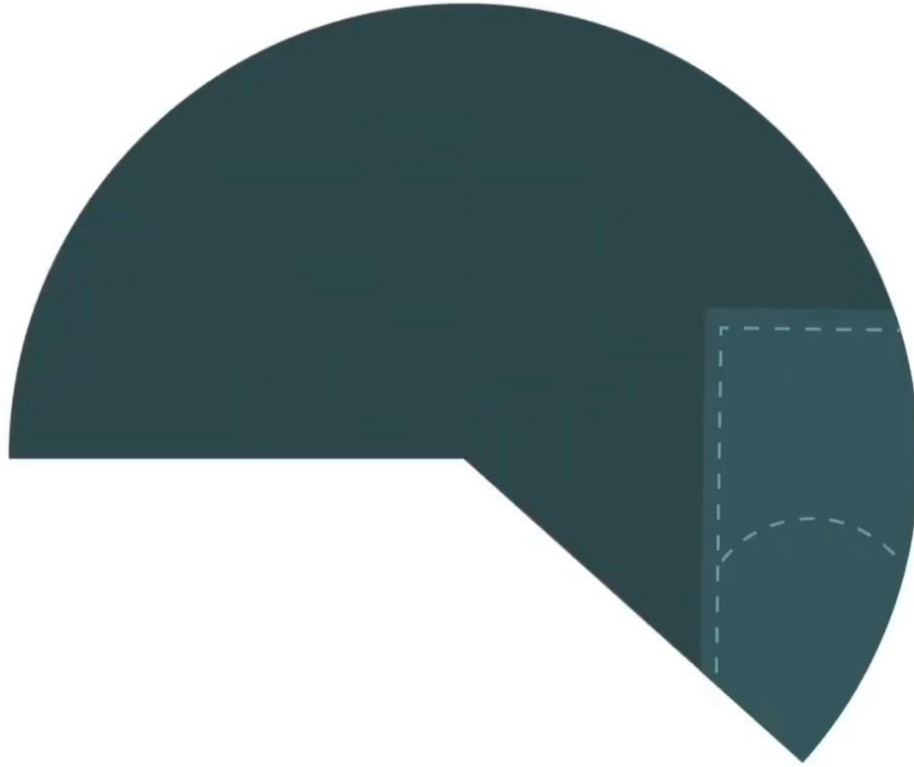


Grower
in the centre

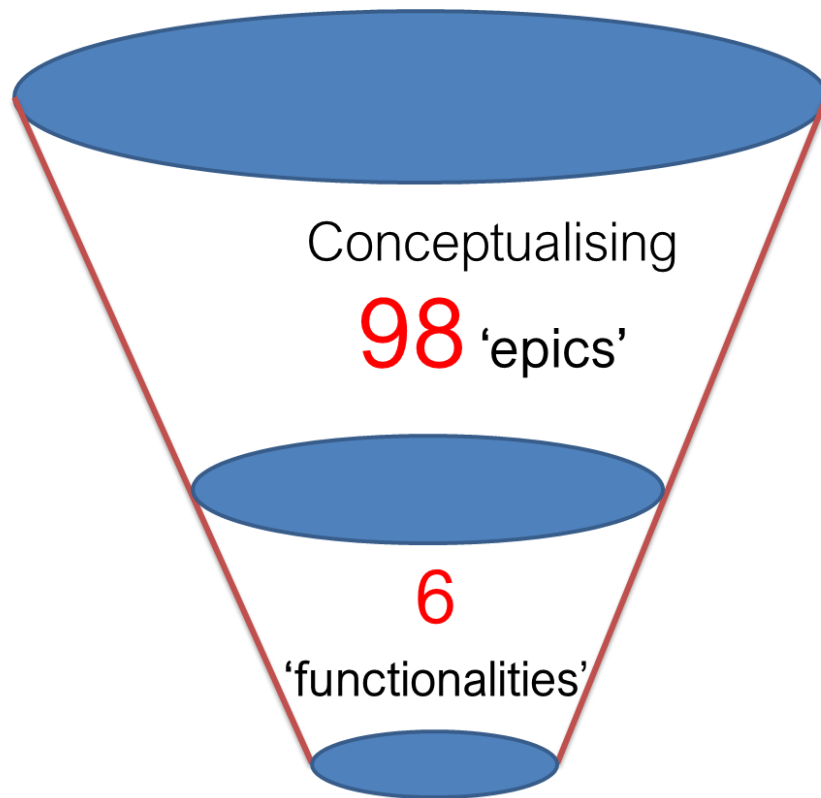


Agro Industry
as a whole

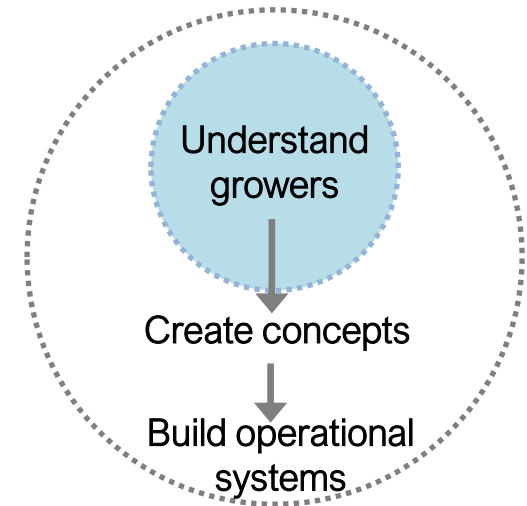




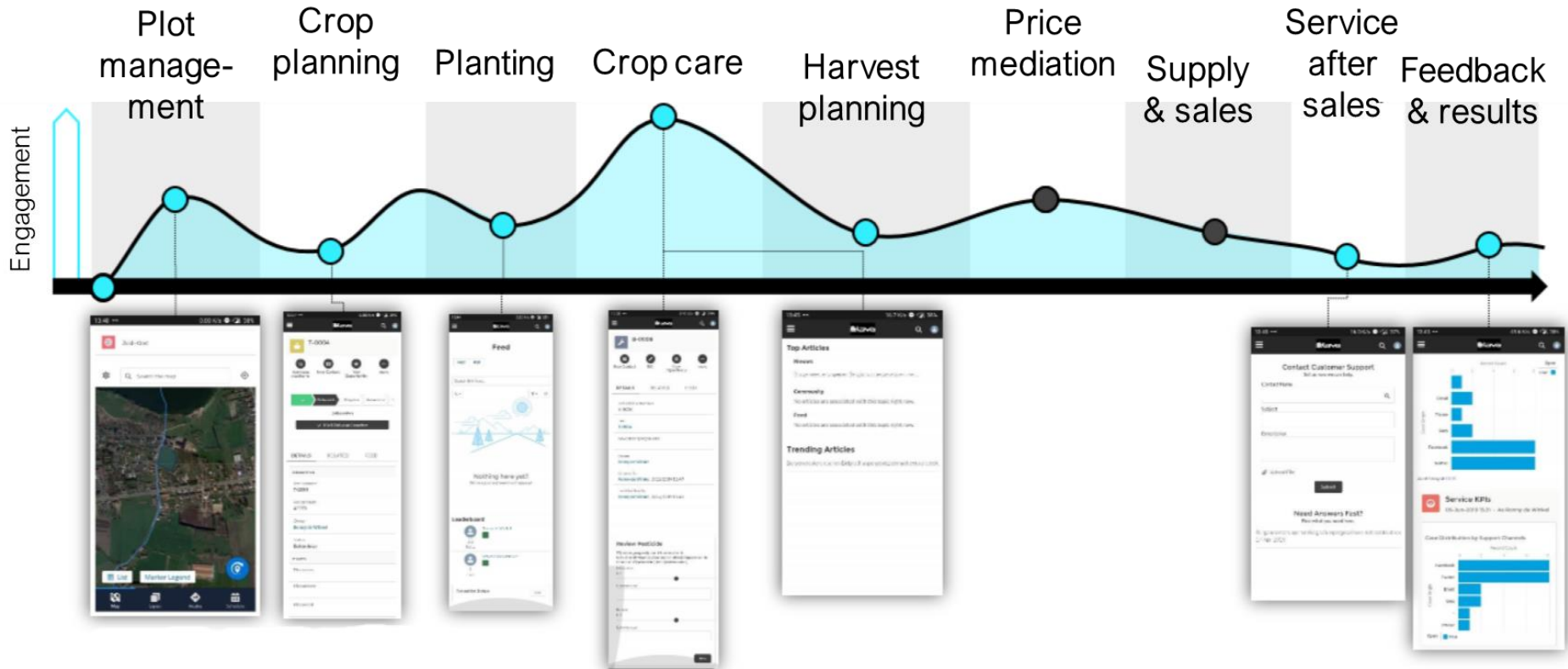
Agile Approach – Initial Plan – Build on a strong basis



translated into **232** 'user stories'



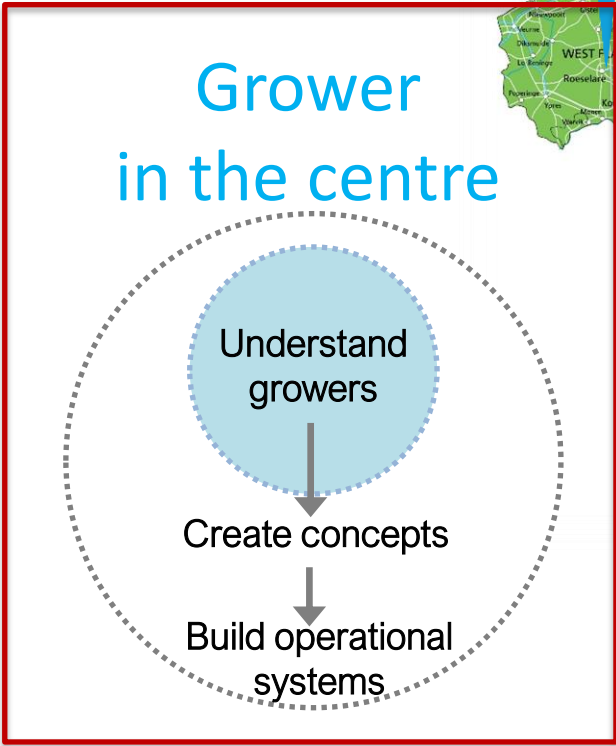
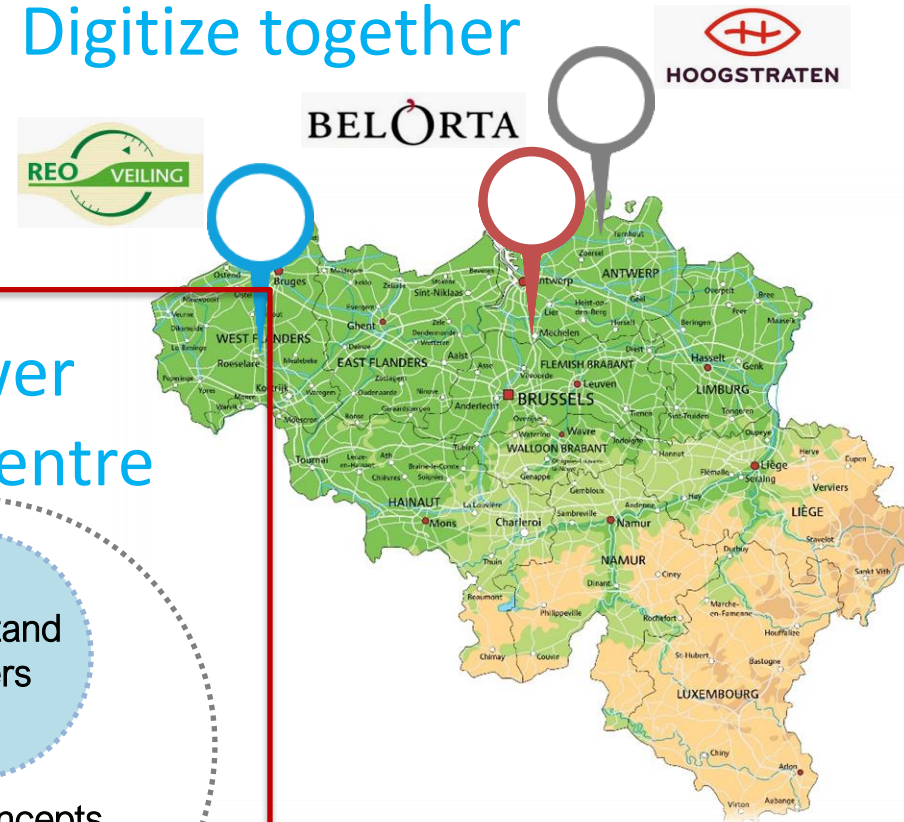
Grower Journey



Care4Growing Base Functionalities



Digitize together



Agro Industry as a whole





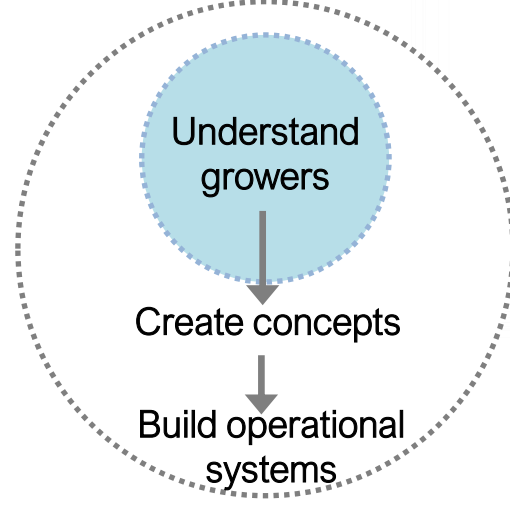
Journey – Knowledge & Advisory



Digitize together

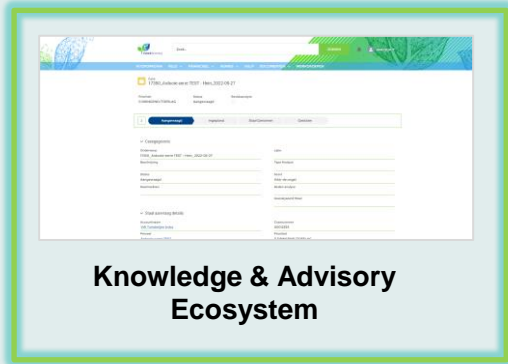


Grower
in the centre

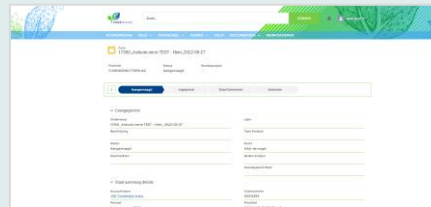


Growers Journey

5 Journeys of the grower to inspire

A screenshot of a web application interface. The page has a white background with a blue header and green accents. It features a search bar at the top, followed by a list of items with columns for 'Name', 'Status', and 'Action'. The entire screenshot is enclosed in a green rectangular border.

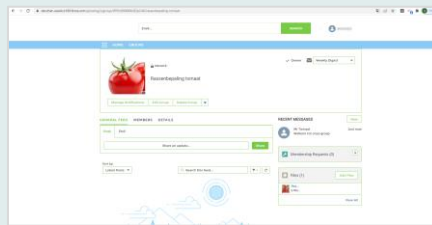
Knowledge & Advisory Ecosystem

A screenshot of a web application interface showing a form for data entry. The form has several sections with labels like 'Sample ID', 'Lab Test', and 'Results'. It includes input fields and dropdown menus. The interface is clean with a white background and blue/green accents.

Sample & Lab Test results Business Process EcoSystem

A screenshot of a web application interface displaying a list of items. At the top, there are tabs for 'Documents' and 'Notifications'. Below, there's a table with columns for 'Document ID', 'Status', and 'Action'. The interface uses a white background with blue and green accents.

Audit Documents & Notifications

A screenshot of a web application interface showing a community or sharing section. It features a red tomato icon, a search bar, and a list of items. There are also buttons for 'Add' and 'Share'. The interface is white with blue and green accents.

Communities & information Sharing

A screenshot of a web application interface showing a data visualization. It features a line graph with a blue line and a bar chart below it. The interface is white with blue and green accents.

Coöperation producer's organisation



Journey Map – Eco Systems

User journey : Knowledge & Advisory Eco Systems



Laura creates

Arables & cultivations

(= High Quality Grower, cultivating Tomatoes in a Greenhouse). She registers her arables and cultivations in Care4Growing.



Home

https://langst-care4cb31.force.com/growing/

Care4Growing

SEARCH

HOME FIELD FINANCIAL KNOWLEDGE HELP DOCUMENTS GROUPS

Welcome Laura Farmer, on the Care4Growing platform.

Registren van vang- en akkergewassen

HANDLEIDING registreren van vang- en akkergewassen

Watch on YouTube

Care4Growing

Quick Tips

Planning & confirming cultivation phase

Did you know that you plan/estimate a cultivation phase by entering the date at a certain step under the cultivation process? When you click on the block of the cultivation phase itself, it is confirmed.

Conversion of total product quantity to do...

Update cultivation

Change the name of the crop

Your Information

Account Name

Billing Address

Tomato Farm

Belgium

Your Arables

- ✓ Better insight in the total amount of production (Cultivations are planned). Better insights gives better decisions gives better prices
- ✓ Basic information to align processes and onboard the right actors at the right moment
- ✓ Possibility to manage crops pro-actively

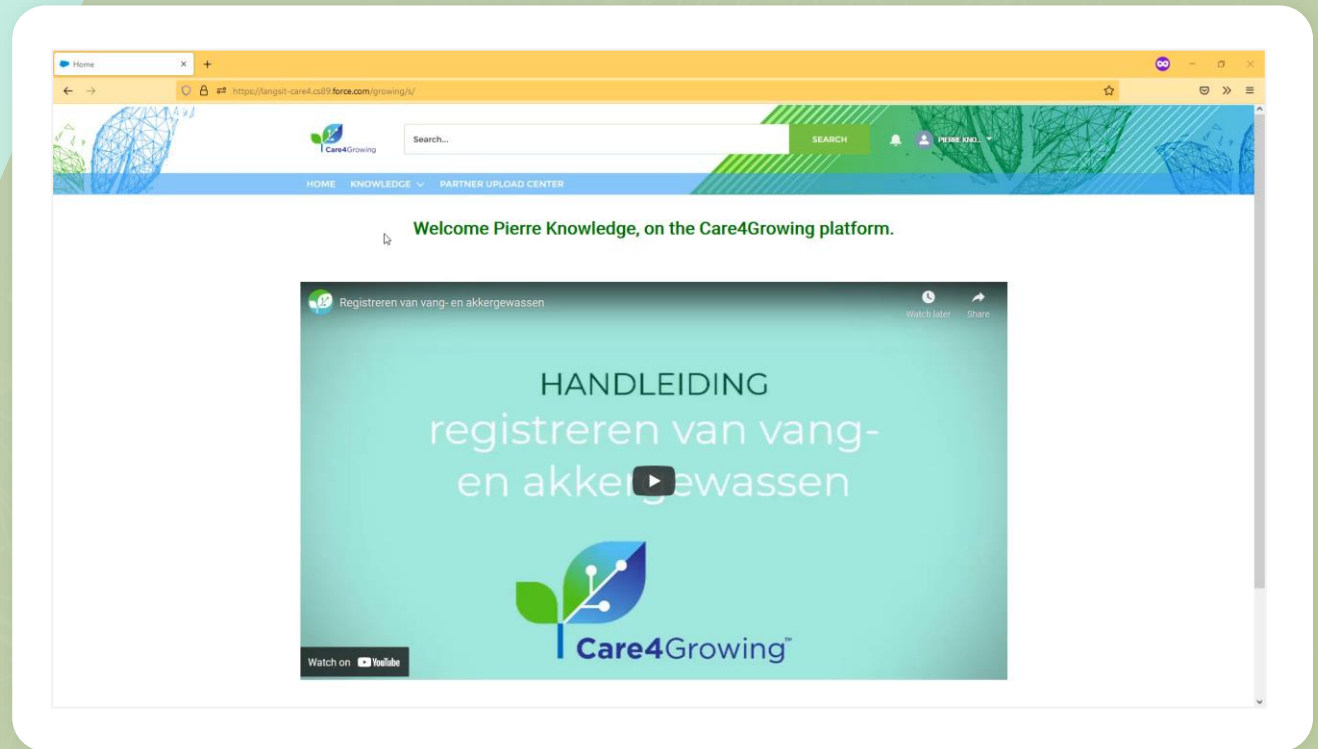
Pierre creates

Articles

(= Dedicated researcher). He is performing research on tomatoes. He adds an interesting article on his own partner portal to enrich the platform.



- ✓ Enrich platform by enabling partners to contribute on knowledge & intelligence
- ✓ Create involvement of partners to support growers together
- ✓ Inform growers on new important topics and best practices on the crops they cultivate



Pierre adds

Warnings

(= Dedicated researcher). He sends a warning to all tomato growers, because there's a risk the grower has to take care of.



- ✓ Enable possibilities to provide urgent information to growers
- ✓ Getting smarter by data to provide growers the best information

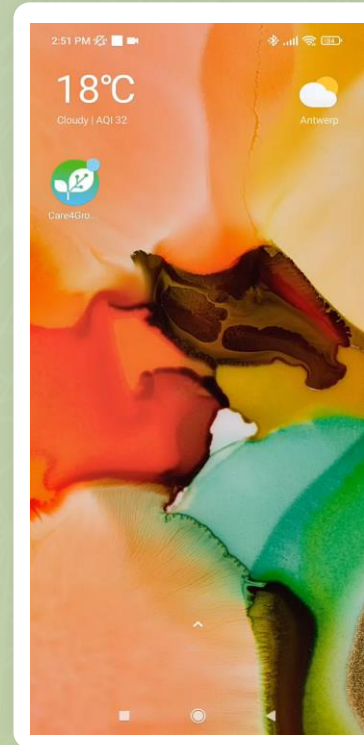
The image shows a smartphone screen with the 'Care4Growing' app. The app is in a configuration mode for creating a warning. At the top, there is a logo and navigation icons. The main content area is titled '* Notification Type' and has a dropdown menu set to 'Warning'. Below this is a section 'Select data categories' with two columns: 'Available' and 'Selected'. The 'Selected' column contains 'Tomatoes'. Underneath, there is a '* Title' field with the text 'Whitefly on tomato cultivations' and a '* Message' field with the text 'A high concentration of whiteflies have been spotted on tomato cultivations.' A green 'Next' button is located at the bottom right of the form.

Laura receives a
Notification

on her mobile phone.
She looks into the details
and searches for extra
information.



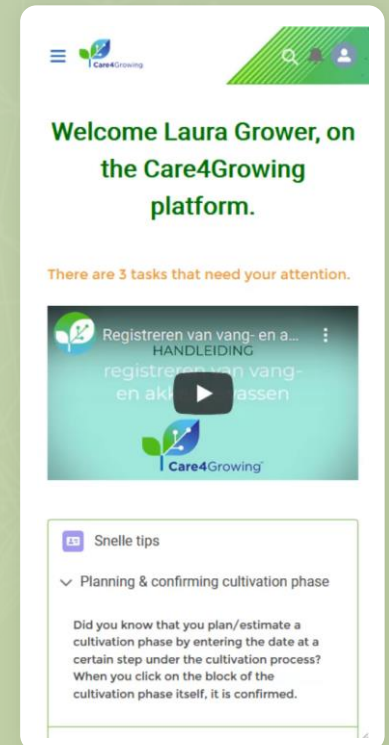
- ✓ Set up initiatives with partners to create a knowledge loop (get data, get smarter, give back information)
- ✓ Use AI possibilities to set-up initiatives with partners
- ✓ R&D phase



Laura receives a
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- ✓ Set up initiatives with partners to create a knowledge loop (get data, get smarter, give back information)
- ✓ Use AI possibilities to set-up initiatives with partners
- ✓ R&D phase



Laura wants some extra advice on the problem and consults an advisor. She signs the Terms and Conditions contract on this third party.



Agreements

Filters

Search in this list

8 Results

Services: My service agreements My general agreements

Advisor

Bio Advisor

Bioservice
By scouting for dangerous insects using our latest technology, we can determine whether additional biological predators should be used to keep the plague under control. [BIO Service](#)

Research Centre

Research Centre ABC
Weekly analysis on your crops to look for improvements in the growth of each individual crop. Feeding schedules, Software Climate Driver updates.

Bank and Insurances

Insurances

CBK Insurance
All insurances to protect you from unforeseen costs

Contractor

- ✓ Plug in services of third parties
- ✓ Create Care4Growing App-Store & consent management system
- ✓ Respect on data privacy & data ownership
- ✓ Create general set-up to on-board multiple partners

Laura asks for extra information of the advisor. She receives an answer of the advisor.



- ✓ Enable communication with third parties
- ✓ Keep track of history and insights provided

Cultivation
Greenhouse nr.1 - Delisher

CultivationOverview Cultivation updated Repeat cultivation Delete

Crop (full)	Area (m2)	Arable
Delisher (Tomaten / Lily)	6.000	Greenhouse nr.1

>

✓

✓ Ask a question

Contact Form

Select service provider

BioService

Select service of service provider

🔍 Bio Advisor

* Description

Hi Bio Service,

I'm concerned about the number of whiteflies in my greenhouse. I already applied two biological controllers (Macrolophus and Encarsia) but I cannot stop this plague. Do you have any advice for me to stop this plague from damaging my cultivation?

Many thanks in advance!
Laura

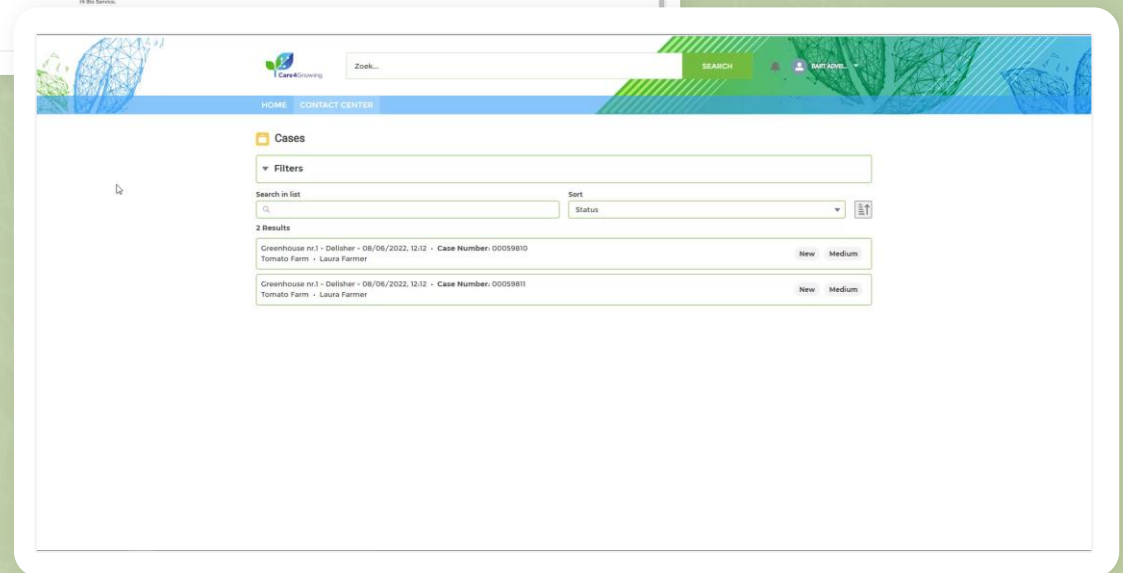
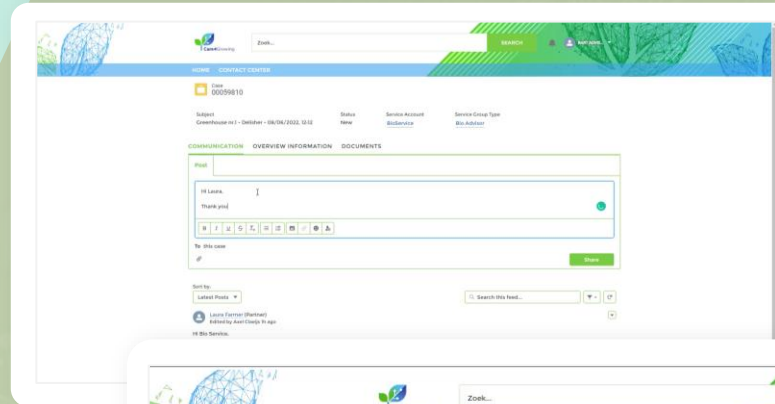
Yes, I grant access to the third party for seeing the information of this page.

Next

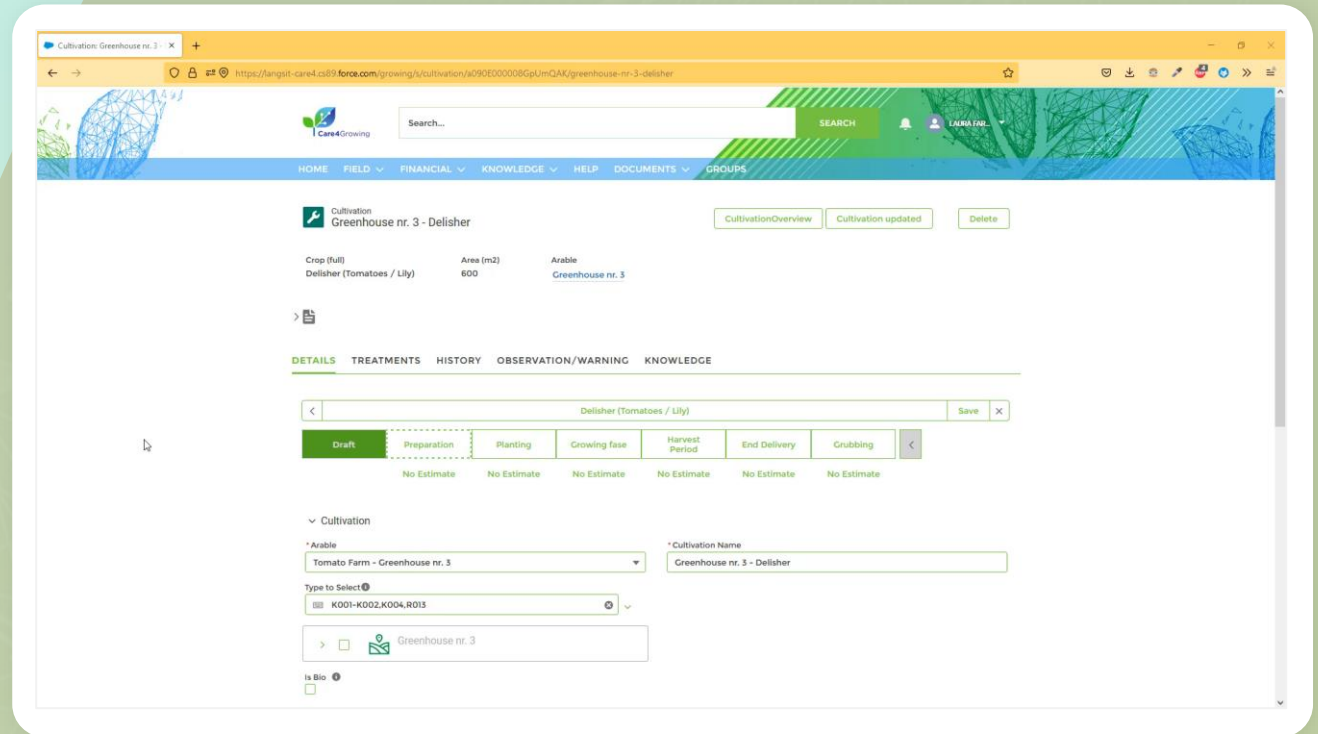
Bart (= Specialised Advisor)
answers the questions of Laura.



- ✓ Provide a multi-Grower approach for third parties
- ✓ Easy to handle overview & portal with respect for security and data protection

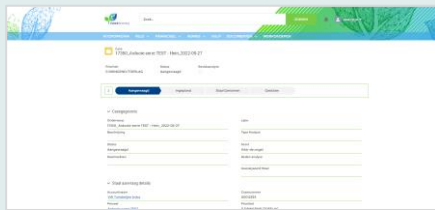


Laura registers the treatment in the system.

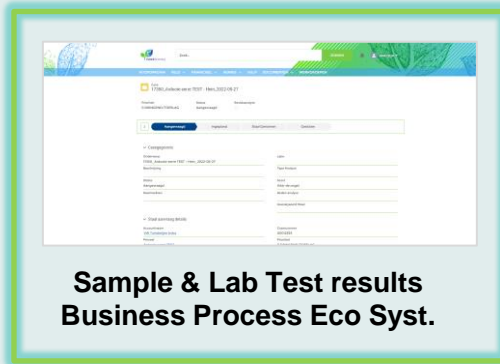


- ✓ Being guided during registration with respect for legislation
- ✓ Being able to adapt to a world with a growing complexity
- ✓ Ability to easily work together with colleagues on treatment

6 Journeys of the grower to inspire



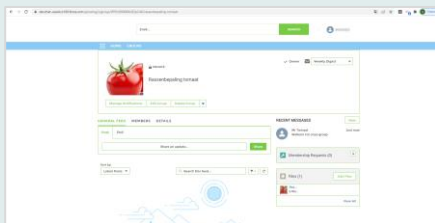
**Knowledge & Advisory
Eco System**



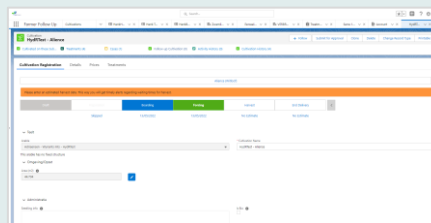
**Sample & Lab Test results
Business Process Eco Syst.**



**Audit Documents &
Notification**



**Communities & information
Sharing**



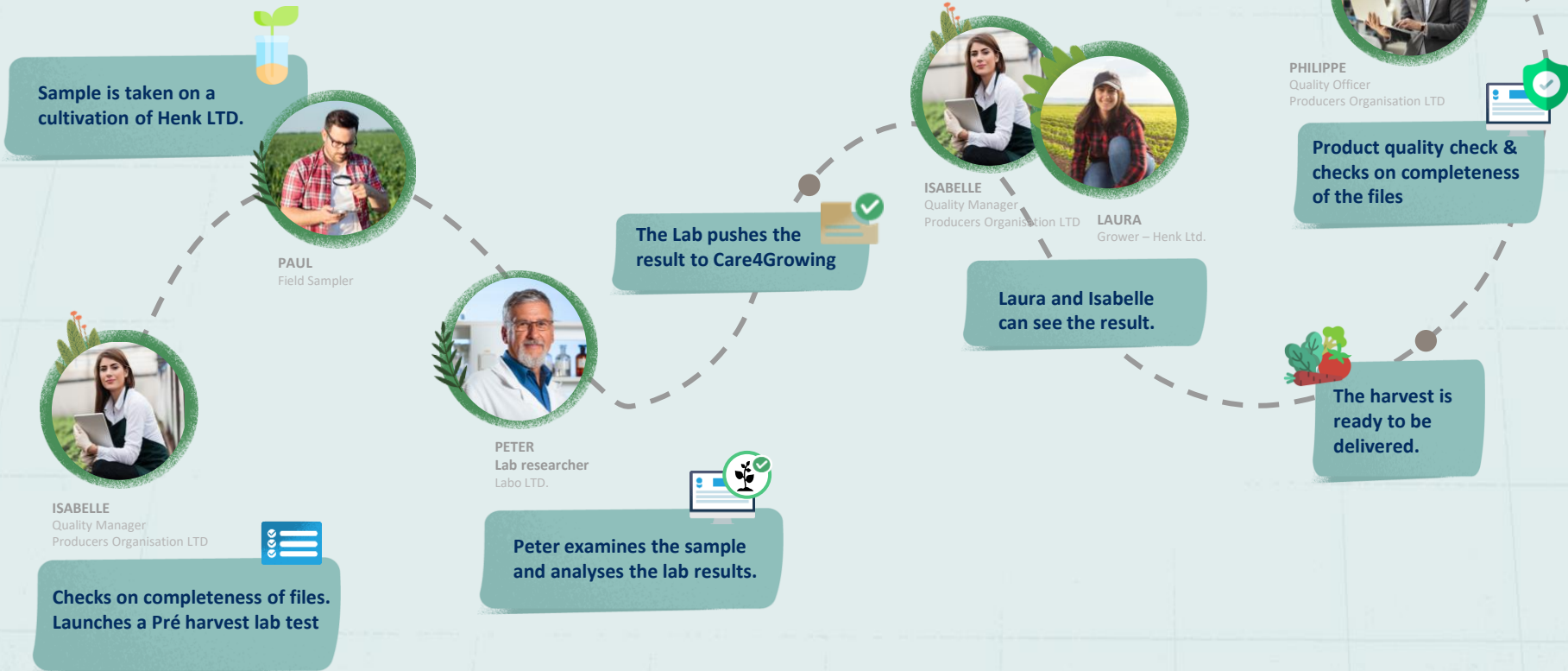
**Coöperation producer's
organisation**



Insight into Prices

Journey Map - Business Procces Service provider

User journey : Sample Request & Residu analysis



Greenhouse nr.1 - Delisher | Site X

https://avaadp...langst.lightning.force.com/lightning/r/Cultivation__c/a09ED000008GyV9QAG/view

Logged in as: Isabelle DM (isabelle@care4.be@hgro.langst) | Sandbox: LangstIT | Log out as: Isabelle DM

Farmer Follow Up

Cultivation: Greenhouse nr.1 - D...

Greenhouse nr.1 - Delisher

+ Follow New Sample Request Submit for Approval Clone Delete Change Record Type

Treatments (0) Harvests (0) Cases (1) Follow-up Cultivation (0) Cultivation History (1)

Cultivation Registration Details Prices Treatments

Crop (full) Delisher (Tomatoes / Lily) Owner Laura Farmer

Cultivation

Arable Greenhouse nr.1 Crop Delisher

Continuation of Cultivation Name Greenhouse nr.1 - Delisher

Original Sowing Date Producer Organisation

Is Bio

Fallow

Environment/Set-up

Area (m²) 6.000 Support Type Substrate

Cultivation size 0.60 Substrate soil Stone wool

Cultivation size UOM ha Protection type No protection

Planting Distance (m) 1.60 Lighting

Plant Height (m) 1.50 Treatment Protection type Beschermd

Planting Action New Planting/Sowing

Administration

Seeding info Technical Handling B12-2

Seeding/Plant Supplier Private Notes

Status info

Logged in as: Isabelle DM (isabelle@care4.be@hgro.langst) | Sandbox: LangstIT | Log out as: Isabelle DM

New Sample Request

*Crop Tomatoes

Sample Options -- none selected --

Please fill in the following information:

*Date Requested 10 Jun 2022

*Kind Pre-Harvest

*Priority 1 TWEE dagen (VOORRANG)

*Analysis Type

- RES42-Zearalenone
- RES43-Aflatoxin M1
- RES50-LC-MGMS
- RES51-Imidazoles
- RES51-LC-MGMS short

Select one cultivation from the list below:

Cultivation: Greenhouse nr.1 - Delisher

Next





Paul looks into the request & takes a sample



Residue Analysis

001638 001704 001719

3 items • Updated 9 minutes ago

Residue Analysis Name ↑

- 001638
- 001704
- 001719

Residue Analysis **001704** Edit Delete

Notes & Attachments (0)

Details

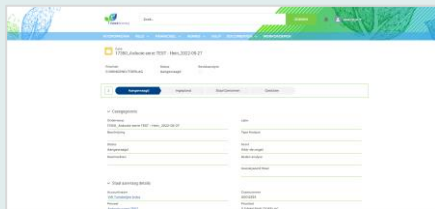
Residue Analysis Name	001704	Owner	Logic Apps Integration
Case	00032915	Residue Analysis	
CP Crop name	Tomaten	Tolerance	3,0000
Analysis Type	RESSO-LC-MSMS	Limit	0,0100
Analysis Result	0,0200 mg/kg	Substance	
Comment		Substance Lab Description	BOSCALID
UoM	mg/kg		

Notes & Attachments (0) Upload Files

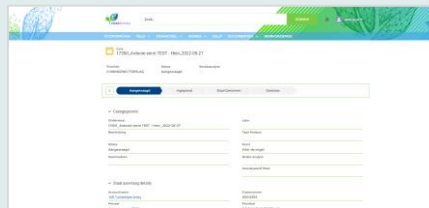
Upload Files

Or drop files

5 Journeys of the grower to inspire



**Knowledge & Advisory
Eco System**



**Sample & Lab Test results
Business Process Eco Syst.**



**Audit Documents &
Notification**



**Communities & information
Sharing**

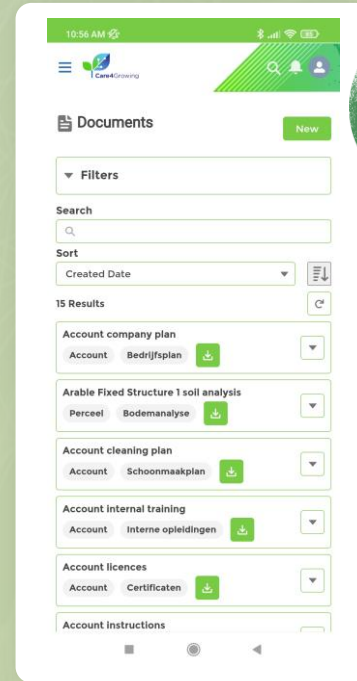
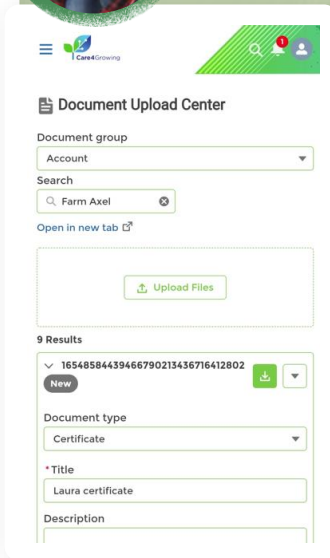
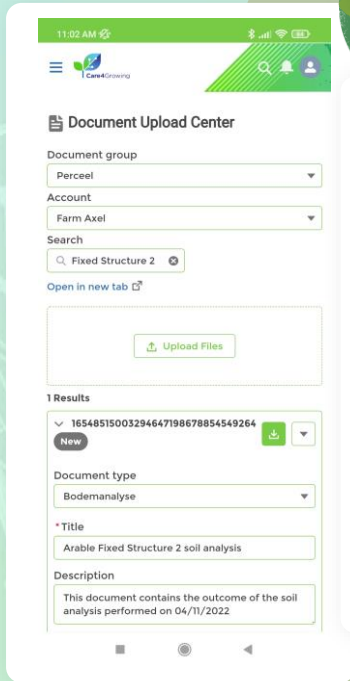


**Coöperation producer's
organisation**

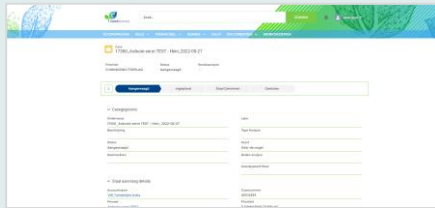
Journey Map - Documents

User journey : Audit & Notifications

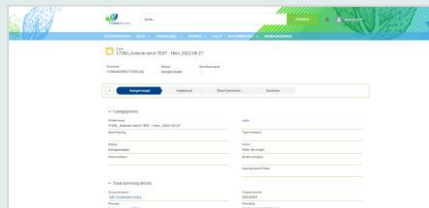




5 Journeys of the grower to inspire



**Knowledge & Advisory
Eco System**



**Sample & Lab Test results
Business Process Eco Syst.**



**Audit Documents &
Notification**



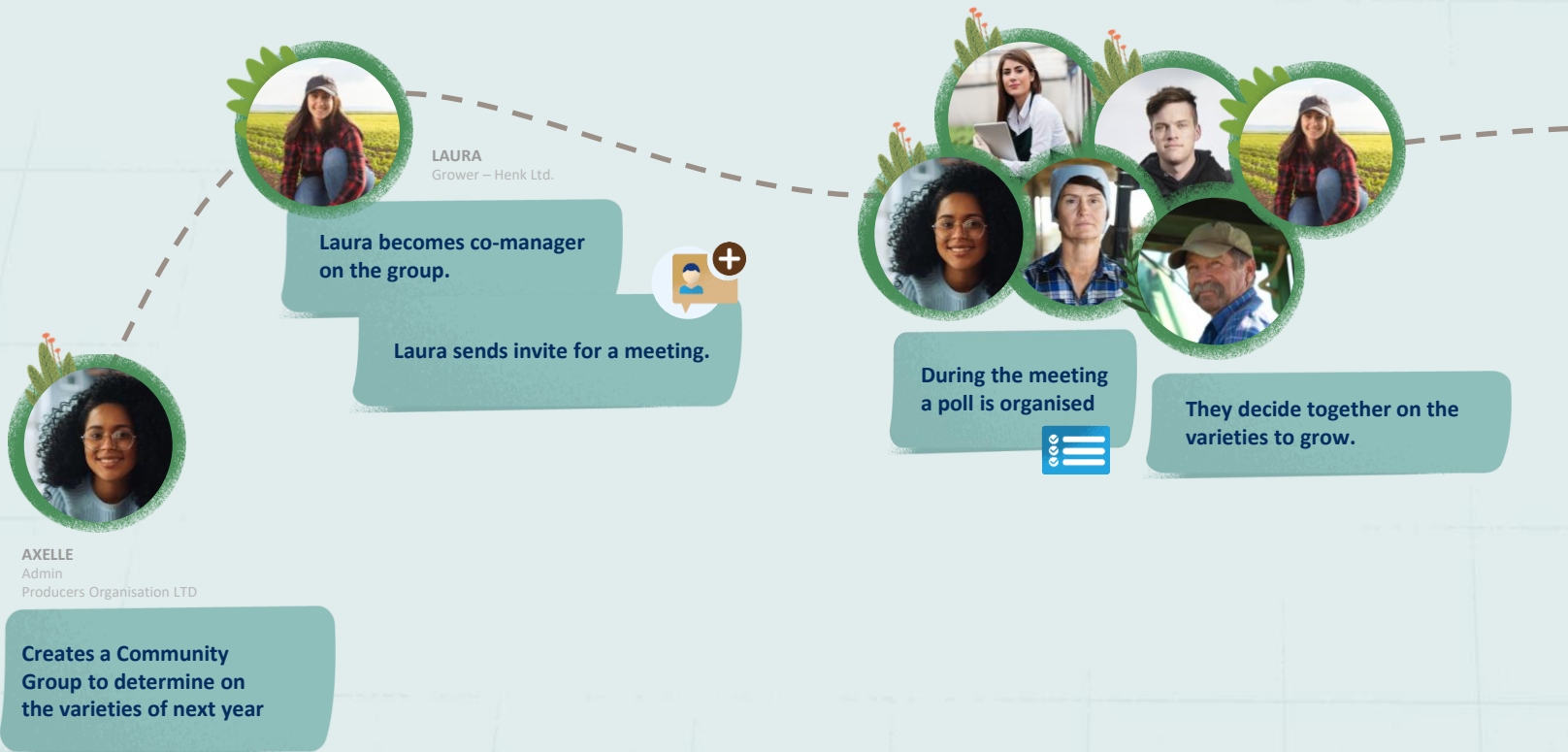
**Communities & information
Sharing**



**Coöperation producer's
organisation**

Journey Map - Communities

User journey : Communication & Information sharing





Welcome! You are now a member of **Tomatoes variety decision**.

reo CHO BelOrta

Weergeven

You will receive e-mail messages from Care4Growing.
To change or disable e-mail for Care4Growing, [log in as aclaeijs@lava.be](mailto:aclaeijs@lava.be).
Tiensevest 136, B-3000 Leuven



PUBLIC

Tomatoes variety decision

Manage Notifications

GENERAL FEED MEMBERS DETAILS

RECENT MESSAGES

New

Post Poll

Share an update...

Share

Files (0)

Upload Files

Upload Files

Or drop files

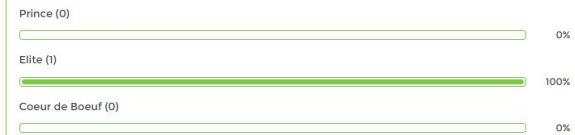
Sort by:

Most Recent Activity

Search this feed...

Axelle Admin (Employee)
2m ago

What is your most produced variety in the past 5 years?

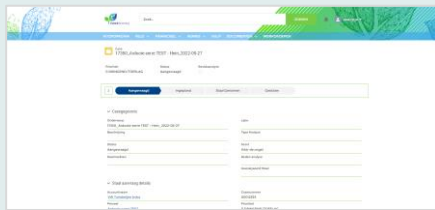


Change vote Refresh

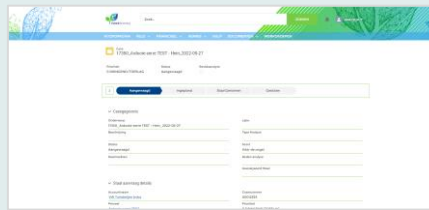
Liked Comment Share

1 view

5 Journeys of the grower to inspire



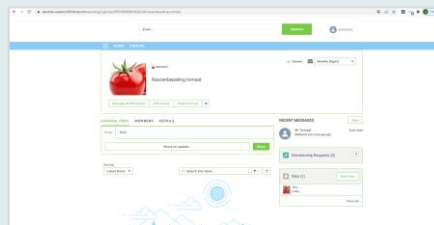
**Knowledge & Advisory
Eco System**



**Sample & Lab Test results
Business Process Eco Syst.**



**Audit Documents &
Notification**



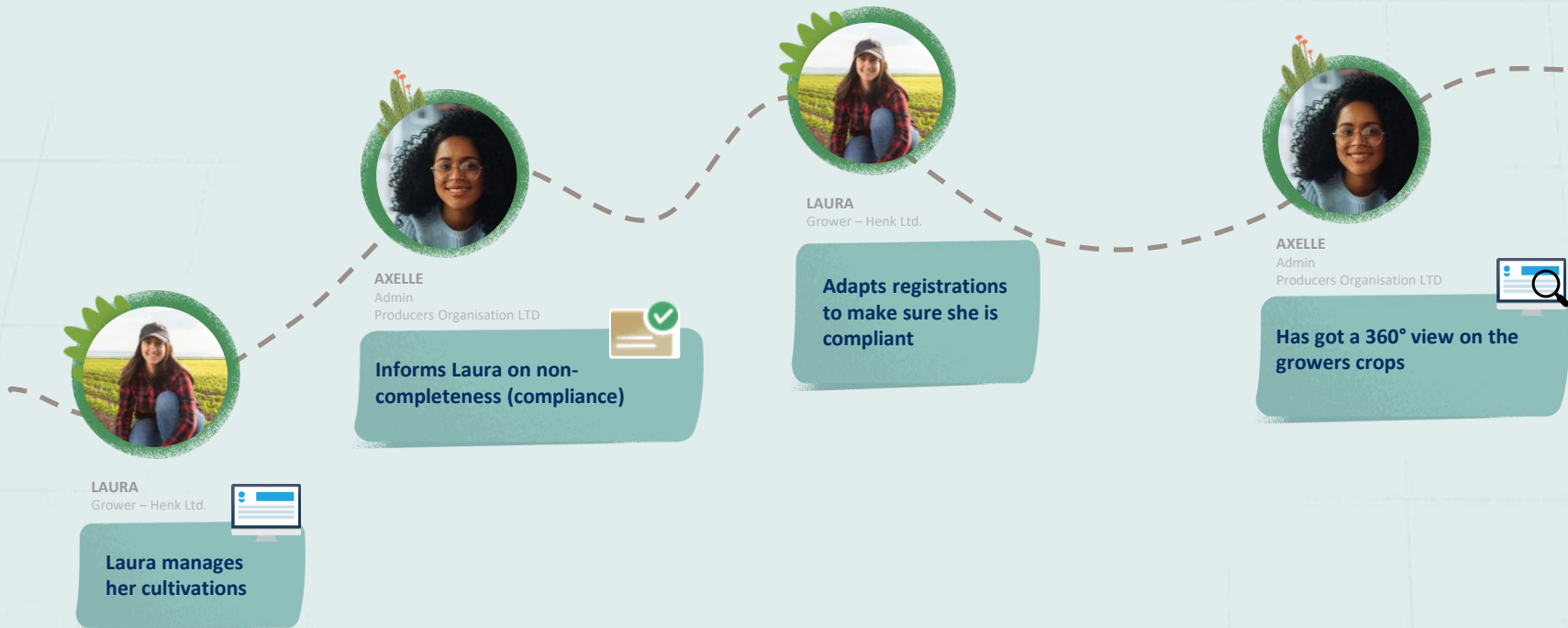
**Communities & information
Sharing**



**Coöperation producer's
organisation**

Journey Map - Cooperation Producers Organisation

User journey : 360° view on cultivations and crops

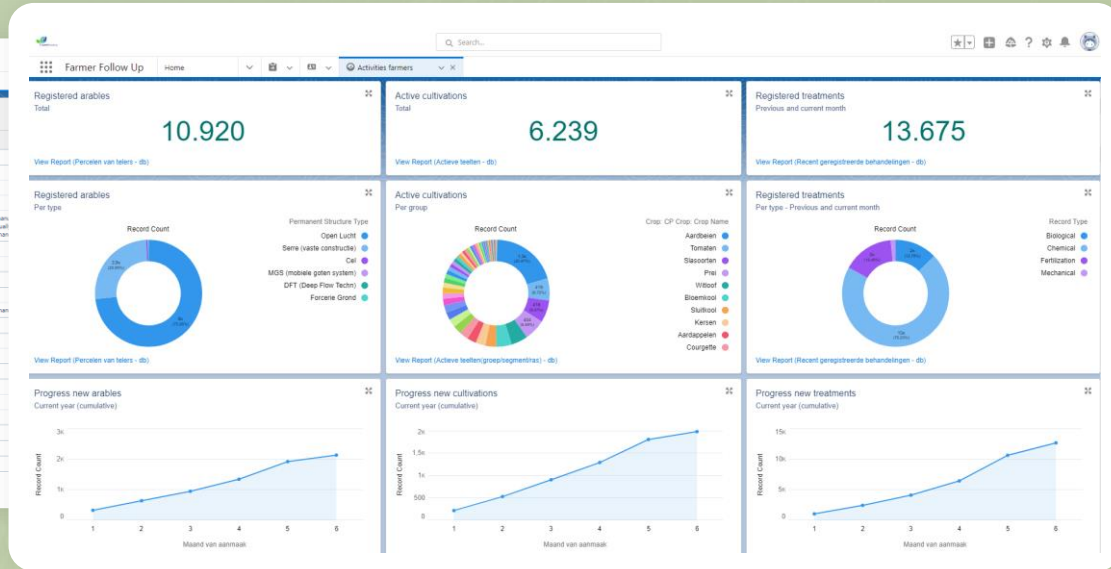


Farmer Follow Up

Report Arables/Cultivation/Treatment

Remarks on treatments

Cultivation Name	Treatment Calendar Date	Applied Treatment Product Name	Product Quantity	Product Quantity UOM	Treatment Allowed?	Allowance Reason
Veldje Grond 4 - Autava	16/05/2022	ADEFO	1.751	l	●	Extra remarks to be checked manually
	8/04/2022	DIREL DF	0.390	kg	●	
	1/05/2022	DIREL DF	0.390	kg	●	
Veldje Grond 4 - Appelen	8/05/2022	DIREL DF	0.175	kg	●	
	8/05/2022	DIREL DF	1.751	kg	●	
Veldje Grond 3 - N RW - Appelen	1/05/2022	DIREL DF	1.037	kg	●	
	3/05/2022	DIREL DF	10.372	kg	●	
Veldje Grond 2 - Diversen	13/02/2022	APC-ACD	7.232	kg	●	Minimum interval between treatments not respected
Veldje Grond 2 - Appelen	1/05/2022	DIREL DF	3.004	kg	●	
	3/05/2022	DIREL DF	3.004	g	●	Minimum interval between treatments to be checked manually
Veldje Grond 1 - Pui	24/03/2022	TORSIN M 70 WG	20.000	g	●	Extra remarks to be checked manually
Veldje Grond 1 - Graangressen	28/03/2022	ACCURATE	0.219	ampullen	●	Allowance to be checked manually
	28/03/2022	ACCURATE	0.022	ampullen	●	Allowance to be checked manually
TaatsiBESF - Arawak	30/05/2022	AMMOR	5.000	l	●	Allowance not allowed
Matskali - Margold	2/12/2021	AFIRM	155.966	kg	○	
	30/03/2022	AFIRM	155.966	kg	○	
Matskali - Margold	30/03/2022	AFIKTO	31.193	kg	●	
	11/05/2022	APOLO	160.046	l	●	Extra remarks to be checked manually
	11/05/2022	APOLO	12.311	l	●	Extra remarks to be checked manually
	11/05/2022	APOLO	224.064	l	●	Extra remarks to be checked manually



Farmer Follow Up

Cultivation: Greenhouse 1 - Tomato

Cultivation Registration

Angelle (Domaten / Engelen)

Start	Preparation	Planting	Growing Year	Harvest Period	Prepared Harvesting	Grubbing	Completed
08/12/2021	01/12/2021	01/12/2021	15/06/2022	2/12/2022	20/12/2022	01/12/2022	

End Delivery: 2/12/2022

Test

Arable: Greenhouse 1

Cultivation Name: Greenhouse 1 - Tomato

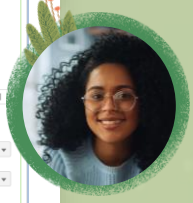
Support Type: Substraat

Substrate soil: Stereom

Area (m2): 13.707

Planting Distance (m): 1

Plant Height (m): 1



Journey Map - Cooperation Producers Organisation

User journey : insights on pricing



LAURA
Grower – Henk Ltd.

Delivers the fresh products
at the Producers Organisation

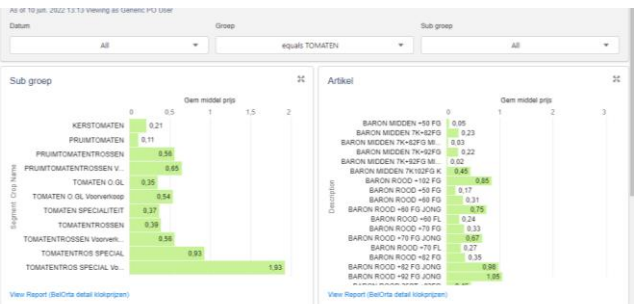


Laura gets notified on the prices of her
products on that same day



Laura checks on more details on the
Care4Growing platform, she get's a clear
insight on the evolution of the prices



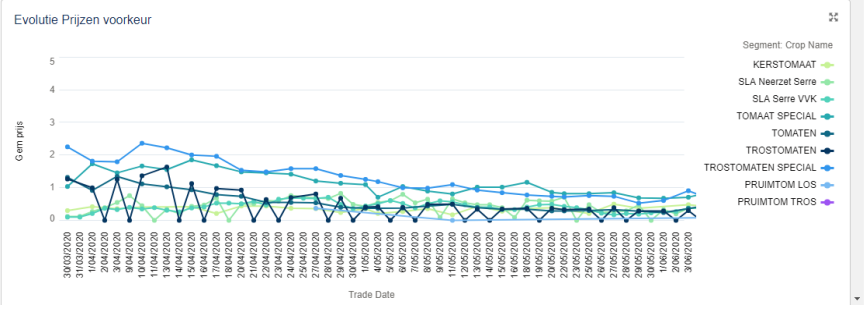
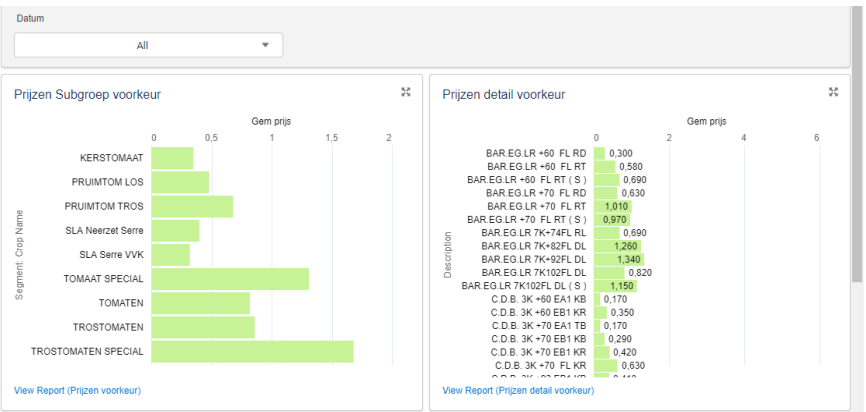
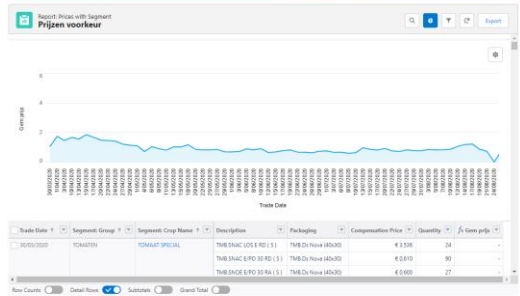


BelOrta klokrijzen

Trade Date	Segment	Group	Description	Quantity	Unit	Min. Price	Module Price	Max. Price
10/06/2022	TOMATEN		TOMATEN ROOD -82 EB1	1,644.00	Kg	60.00	60.39	60.00
10/06/2022	TOMATEN		TOMATEN ROOD -82 EB1	48.00	Kg	60.00	60.04	60.00
10/06/2022	TOMATEN		TOMATEN ROOD -82 B	1,614.00	Kg	60.00	60.23	60.00
10/06/2022	TOMATEN		TOMATEN ROOD -82 EB1	1,002.00	Kg	60.00	60.41	60.00
10/06/2022	TOMATEN		TOMATEN ROOD +102EB1	594.00	Kg	60.00	60.39	60.00
10/06/2022	TOMATEN		PRINCESS GROOF FG D	22,880.00	Kg	60.00	60.67	60.00
10/06/2022	TOMATEN		ELITE MIDDEL FG	700,921.00	Kg	60.00	60.67	60.00
10/06/2022	TOMATEN		ELITE MID.GR. FG	1,995.00	Kg	60.00	60.70	60.00



Search bar with 'Zoek...' and 'SEARCH' button. Navigation menu: HOME, FIELD, FINANCIAL, KNOWLEDGE, HELP, DOCUMENTS, ODSUB.



Future of Care4Growing

Now this is not the end.
It is not even the beginning of the end.
But it is, perhaps, the end of the beginning.

Winston Churchill

Thank you

