TechCare Business Models

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Literature Review and Preliminary Data Collection

- Data was collected from open sources regarding the selected technologies in both local and European markets.
- Questionnaires were designed to gather insights from key stakeholders across the value chain.
- Interviews with farmers and hardware suppliers in local and visits to agriculture sites in France, Sardinia, Scotland, and Norway.
- Visits and observations in factories, slaughterhouses and transportation routes across Europe.

Literature Review and Preliminary Data Collection

- Approximately 50 models were initially reviewed.
- Following further evaluation, this number was narrowed down to a few key models that were assessed for their suitability to our project goals.
- **Thanks to all participants and everyone who contributed and collaborated.**

Most common types of business models

- Subscription model
- Bundling model
- Freemium model
- Razor blades model
- Product to service model
- Leasing model
- Crowdsourcing model
- One-for-one model
- Franchise model
- Distribution model
- Manufacturer model
- Retailer model
- Regulator assisted model

SWOT

No.	Subject	Strengths	Weaknesses	Solution
1	COVID 19			
2	Multinational project	Exact definition for all market segments		
3	Management	Very good R&D capabilities	Less experience in commercialization of R&D results.	**External experts consulting.**
4	Employees	Agronomical R&D, technology use.	Temporal crew (students)	**External technical training. Tight development procedure and collaboration inspection.**
5	Intellectual property	Protected by clear rules	Parts are published in the academic sphere	**Control of publication process by the partners. Academic R&D and not application description.**
6	Work methods	High standard R&D criteria	Academic driven, mostly not applicative for the commercial market	**Project management workshops. Staff completion for task execution**
7	Reputation	+++		
8	Financial status	Full coverage for R&D	No coverage for commercialization	**Commercialization will be made by external partners.**
9	Experience	R&D – Very good	Commercial application – restricted, new market	**Use of project's partners to gain the missing data**

SWOT

No.	Subject	Opportunities	Threats	Solution
1	Collaboration with leading commercial partners	Access to leading companies in the EU market	The need to gamble on few partners	**Thorough tests of the potential partners. Delay the chosen partners vote**
2	Competition	Non developed market – limited use of similar services	Development of similar services by possible competitors	**Hide of the "how it done" – publication of "what it gives"**
3	Regulation	Non exist	Will arise before the project technology will be proven	**Use of project status as EU leader to direct the regulation (EU and local) to use the project service as the ruler of welfare criteria**
4	Market trends	Growing demand for hi-tech solutions in early adopter's clients	Conservative, non-hi-tech market	**Use of the project pilots to show its value to potential clients**

TechCare – Shortlisted Business models

Subscription

Product to service

Leasing

Bundling

Freemium

vodafone

Phones & devices

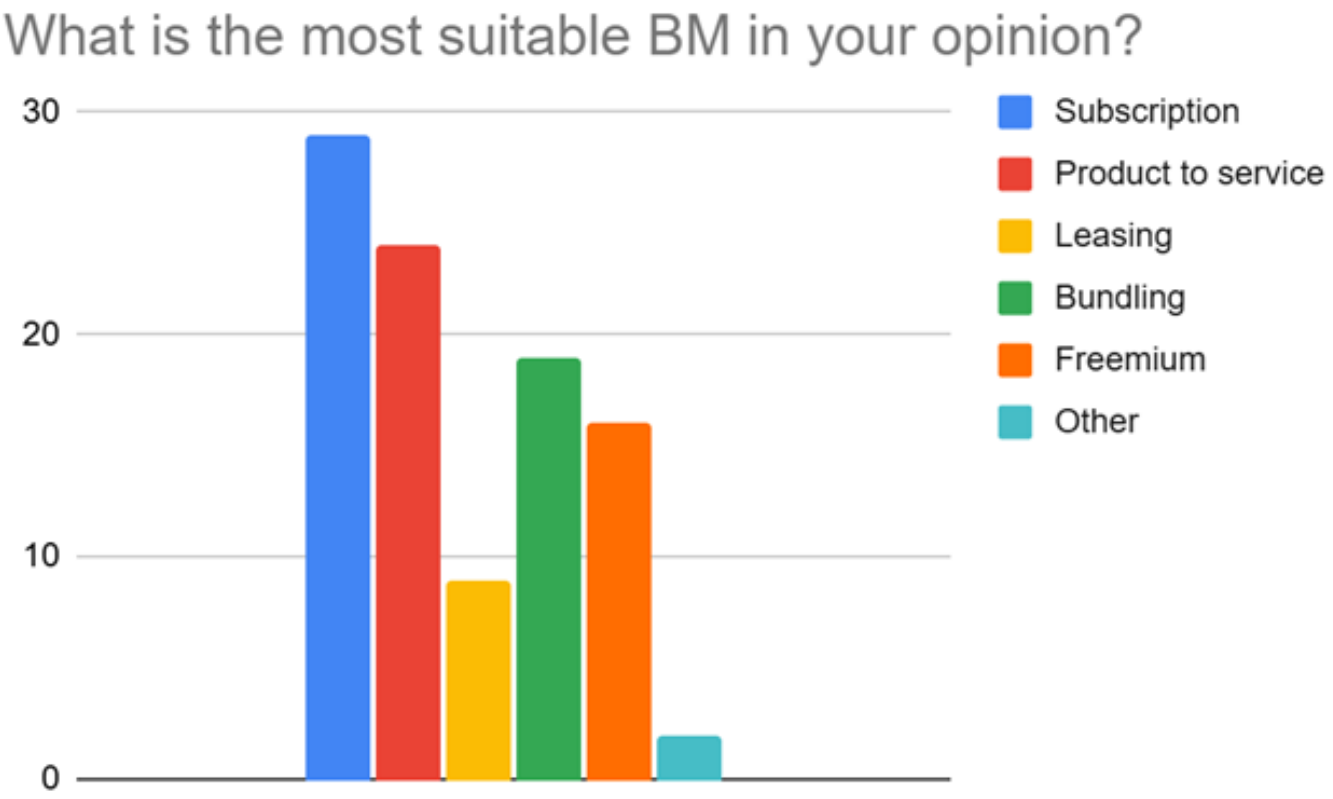
Wireless

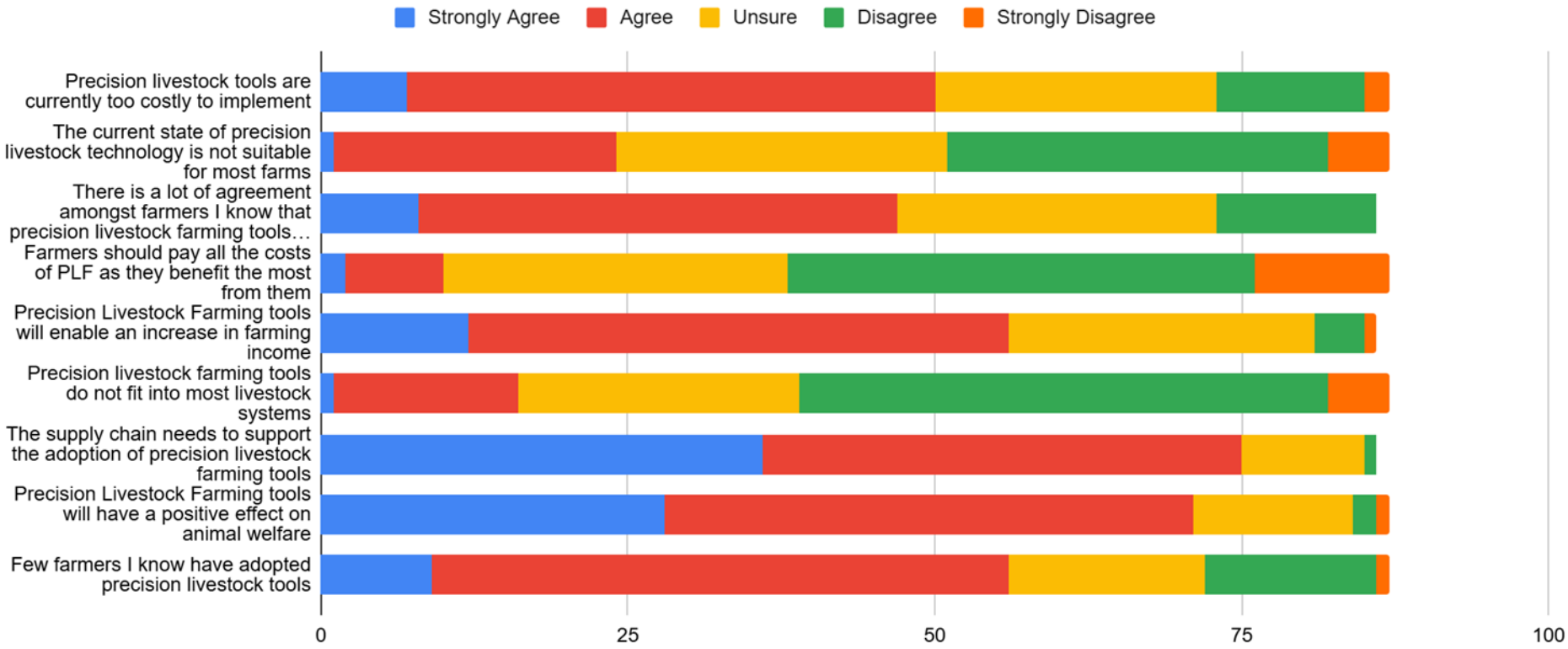
Phone plans

Dropbox

Spotify

Stakeholders Results → Why we chose Freemium Model

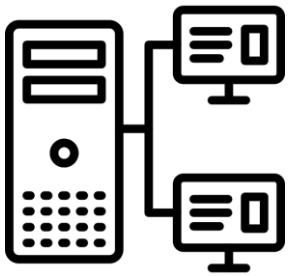



Strongly Agree
Agree
Unsure
Disagree
Strongly Disagree
Precision livestock tools are currently too costly to implement
The current state of precision livestock technology is not suitable for most farms
There is a lot of agreement amongst farmers I know that precision livestock farming tools…
Farmers should pay all the costs of PLF as they benefit the most from them
Precision Livestock Farming tools will enable an increase in farming income
Precision livestock farming tools do not fit into most livestock systems
The supply chain needs to support the adoption of precision livestock farming tools
Precision Livestock Farming tools will have a positive effect on animal welfare
Few farmers I know have adopted precision livestock tools
0
25
50
75
100

Data Collection – Multiple Information Sources

Weather stations
https://novalynx.com/store/pc/110-WS-25-Modular-Weather-Stations-p1073.htm

ID Tag
https://www.premier1supplies.com/p/q-flex-rfid-ear-tags



W-0 Weigh Scale, Load bar & Platform Bundle
https://electricfencecanada.ca/product-category/livestock-weighing-eid/

Milk meter
http://www.technomond.in/milk-weighing-scale-system.html

Real-time data collected from multiple sources is securely transmitted to a central processing system.

Examples of what data can we get from each PLF tool?

Weigh Scale, Load bar & Platform Bundle

- Weight Measurements (Total and Individual)
- Inventory Management
- Yield Calculations
- Demand Forecasting

ID Tag

- Individual Animal Tracking
- Behaviour Monitoring
- Nutritional Management
- Emergency Management

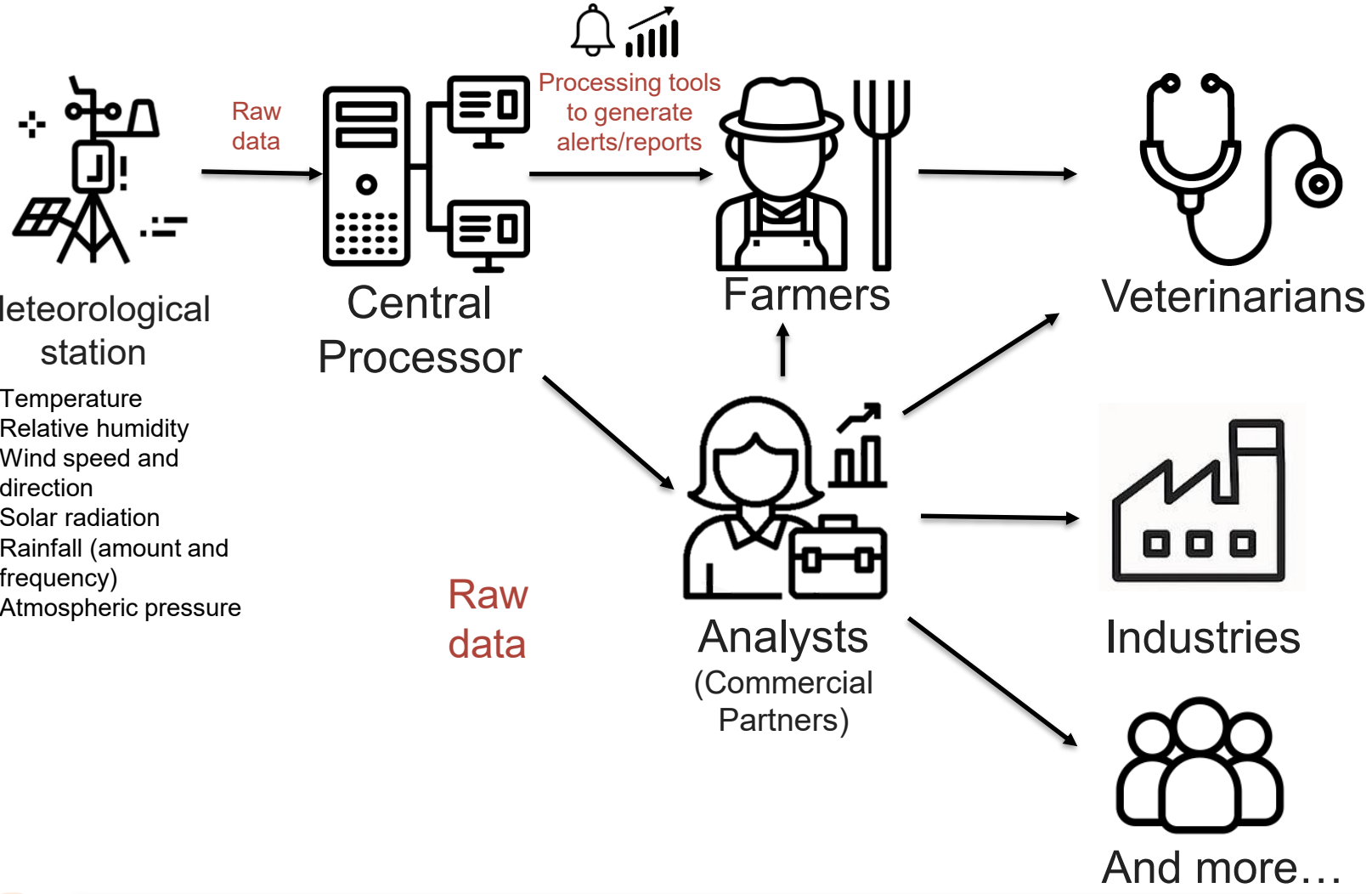
Weather stations

- Temperature Monitoring (Heat/Cold Stress Alerts)
- Flood Risks
- Wind Speed and Direction (Shelter Needs, Dust and Allergens)
- Behavioral Insights (Activity Patterns)

Milk meter

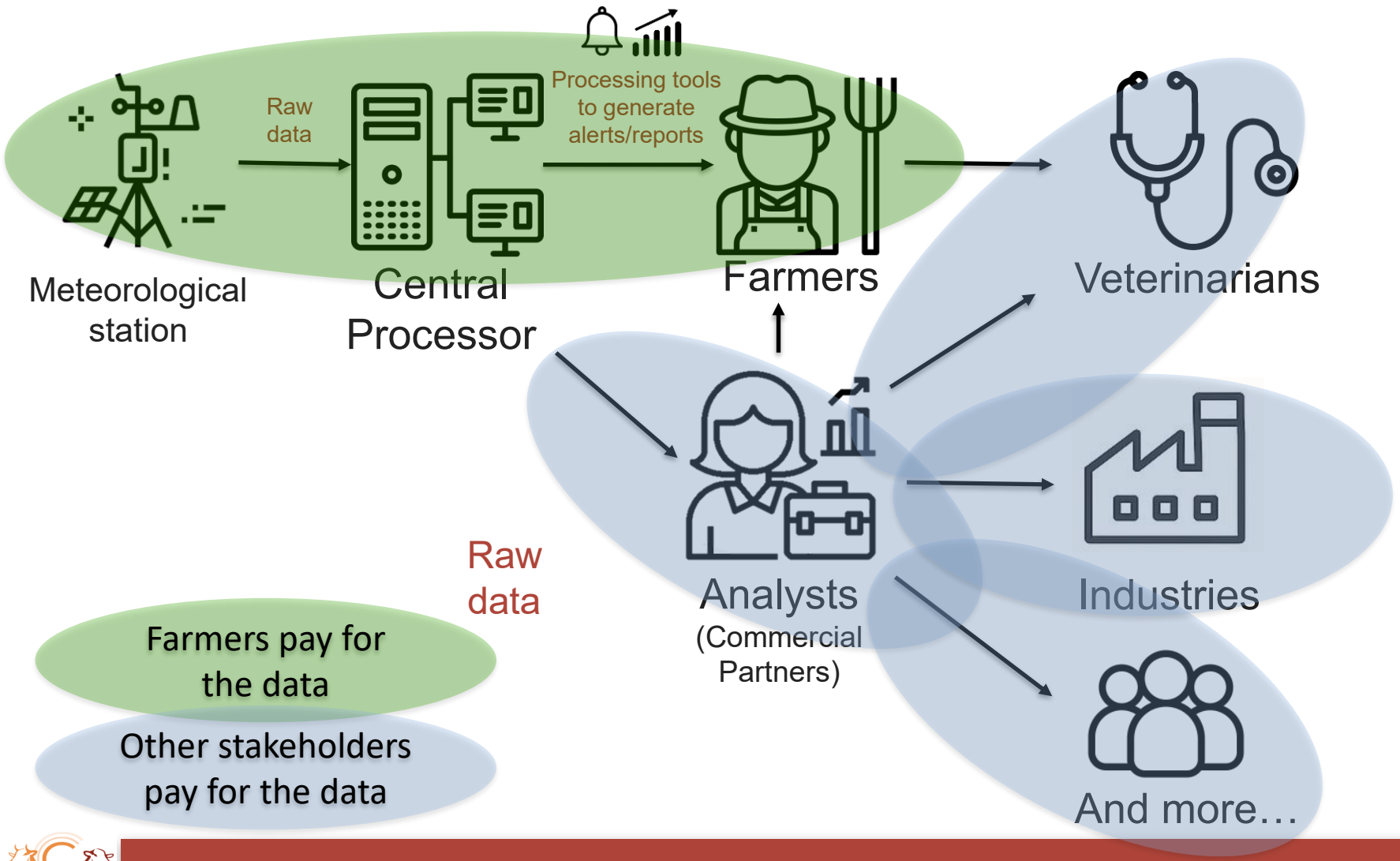
- Milk Production Monitoring
- Feed Efficiency
- Milking Routine Assessment (Frequency, Duration)

Data Flow

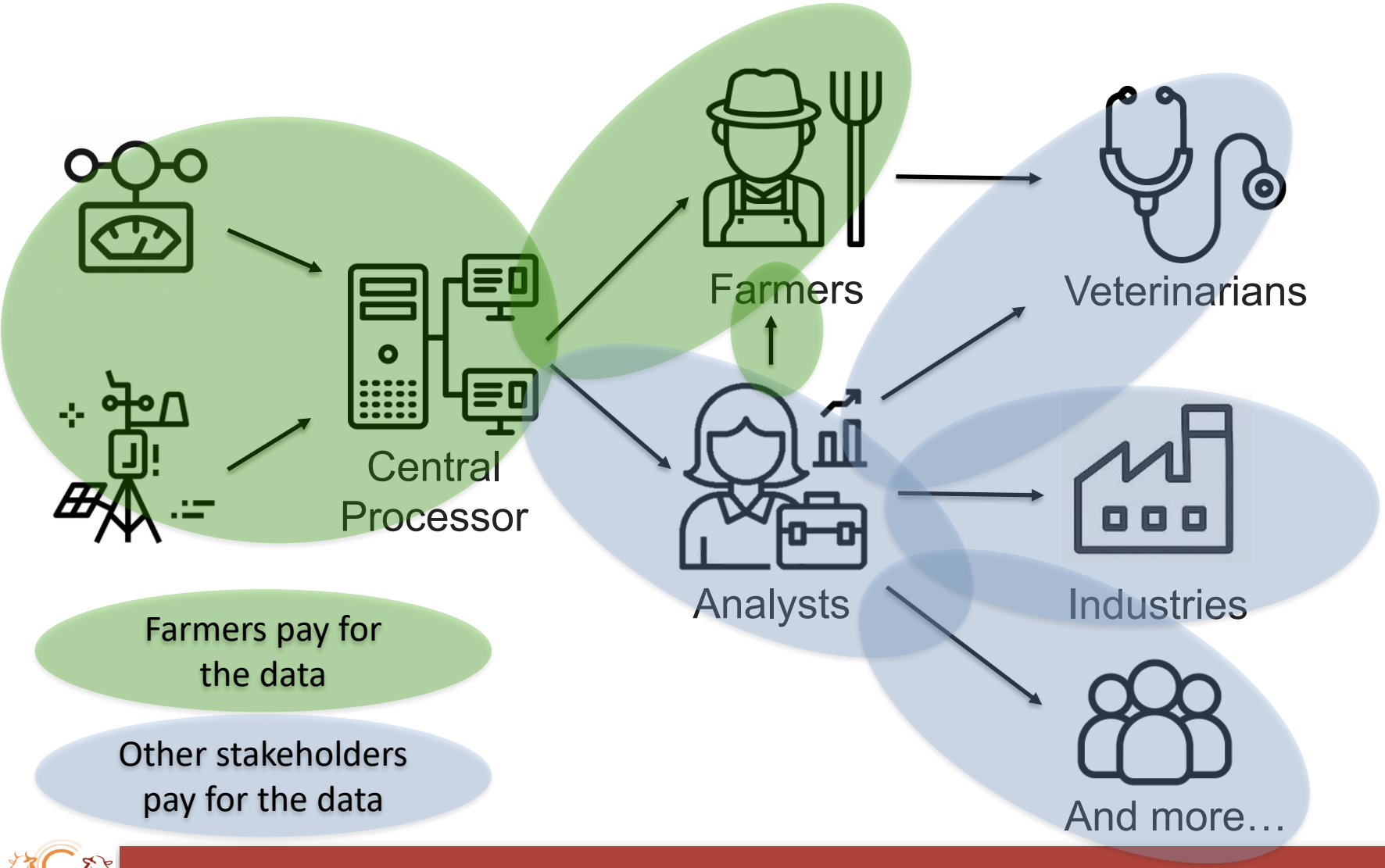


- Temperature
- Relative humidity
- Wind speed and direction
- Solar radiation
- Rainfall (amount and frequency)
- Atmospheric pressure

Data Flow


Raw data
Processing tools to generate alerts/reports
Meteorological station
Central Processor
Farmers
Veterinarians
Raw data
Analysts (Commercial Partners)
Industries
And more…
Farmers pay for the data
Other stakeholders pay for the data

Data Flow


Central Processor
Farmers
Veterinarians
Analysts
Industries
And more…
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Other stakeholders pay for the data

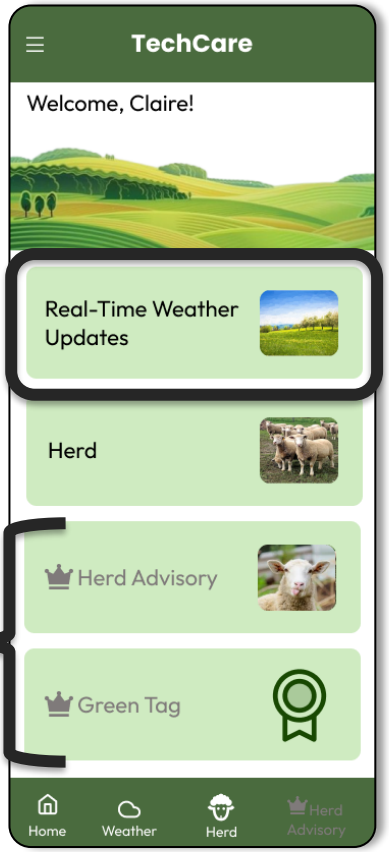
How does it improve animal welfare?

By monitoring and preparing according to forecasts, it is possible to improve sheep welfare in various aspects, such as:

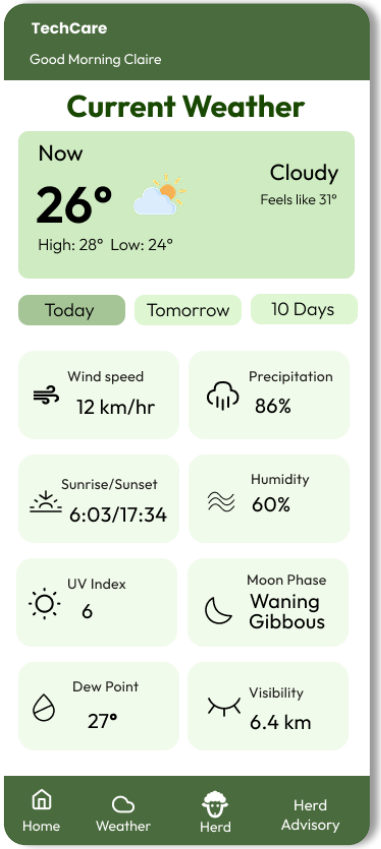
- Detecting heat stress
- Preventing diseases
- Optimizing grazing
- Reducing stress

Mobile App – Lite Version vs Premium Version Example

Disable in the Lite Version

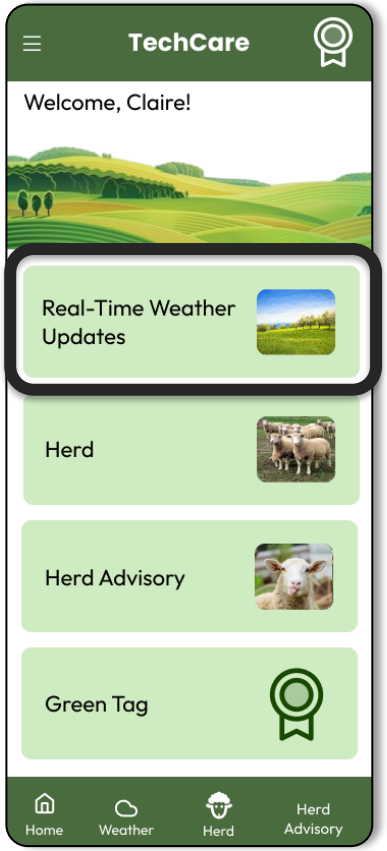


Lite Version

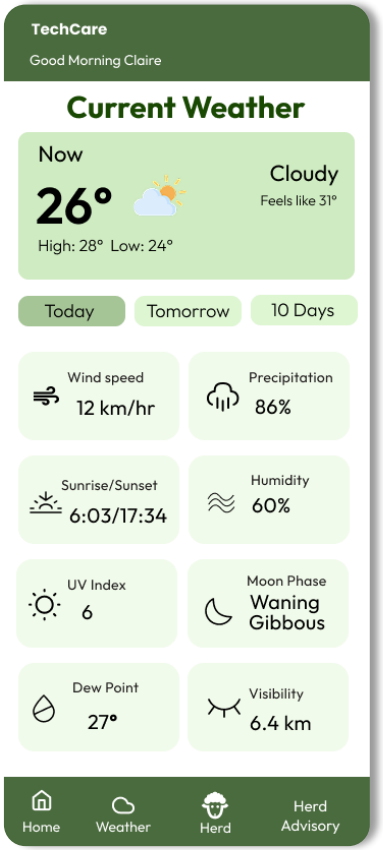


Weather dashboard

Mobile App – Premium Version Features



Premium Version



Weather dashboard

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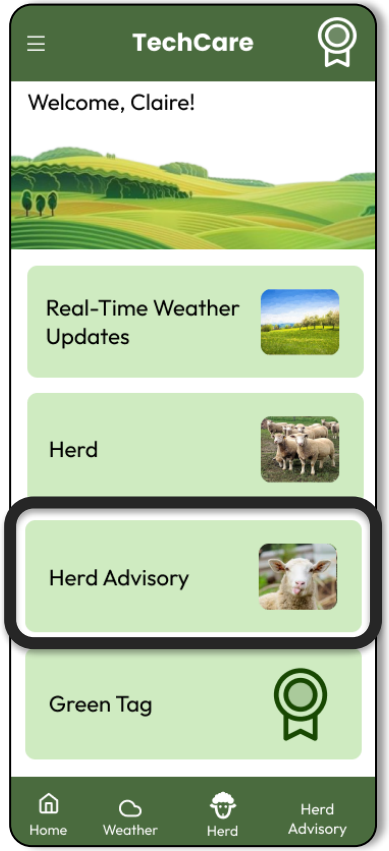
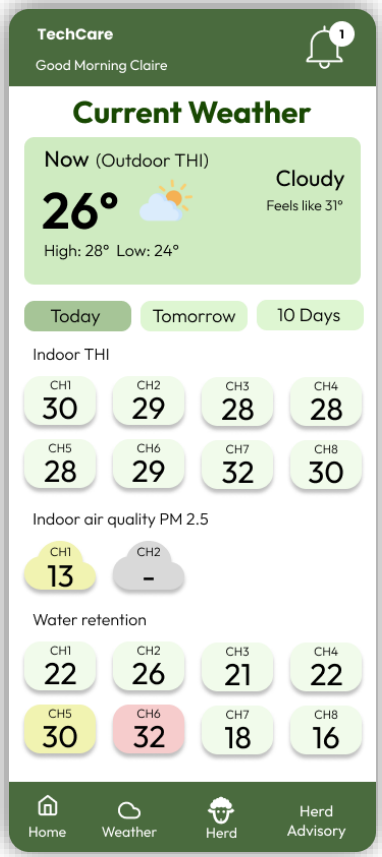
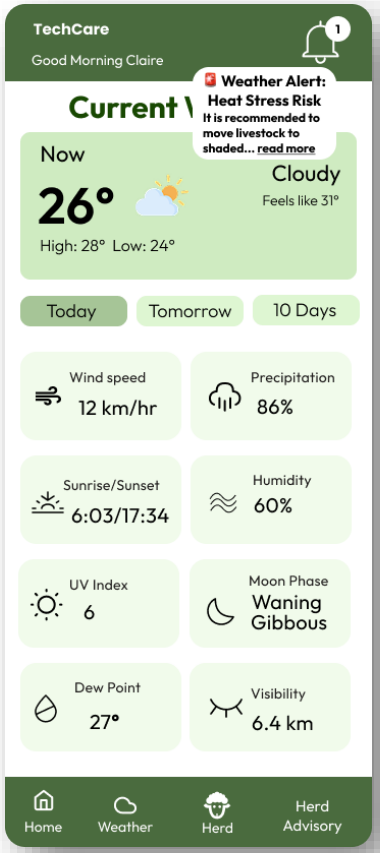


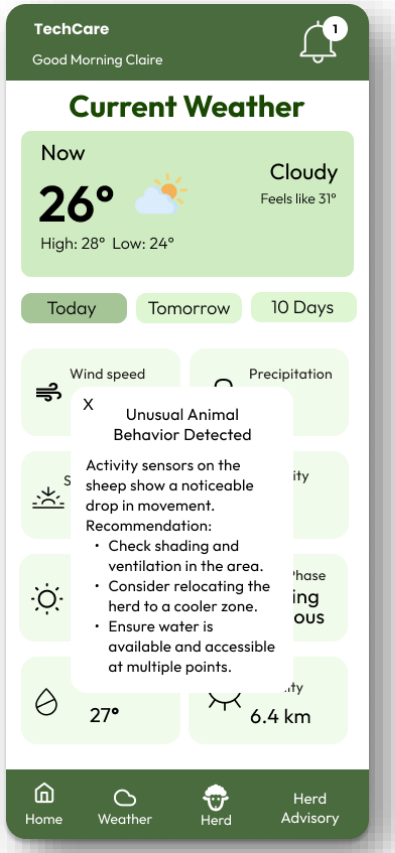
Premium Version



THIcare



Alerts



Pop-up alert

Thank you

Many thanks to everyone for your attention and collaboration

TechCare Partners

Thank you for your attention

www.techcare-project.eu

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