



INTERNET OF FOOD & FARM

D7.2 LANDSCAPE OF ETHICAL QUESTIONS RELATED TO USE- CASES

WP 7

23 December, 2019



IoF2020 has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement no. 731884. Visit iof2020.eu for more information about the project.

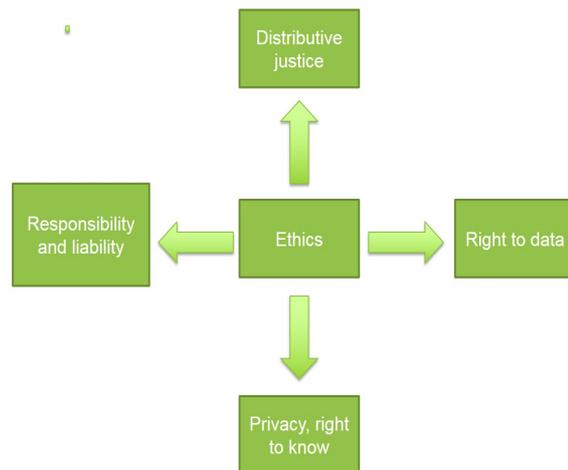
DOCUMENT IDENTIFICATION

Project Acronym	IoF2020
Project Full Title	Internet of Food and Farm 2020
Project Number	731884
Starting Date	January 1st, 2017
Duration	4 years
H2020 Call ID & Topic	IOT-01-2016 (Large Scale Pilots)
Date of the DoA	2017
Website	www.iof2020.eu
File Name	D7.2 List of ethical questions related to use-cases
Date	23 rd of December, 2019
Version	1.0
Status	Final
Dissemination level	CO
Author of the document	Simone van der Burg, Elsje Oosterkamp, Marc-Jeroen Bogaardt
Contact details of the coordinator	George Beers (george.beers@wur.nl)

EXECUTIVE SUMMARY

Deliverable 7.2 is an overview over ethical questions that come forwards in the use cases of IoF2020. We shaped this overview with the purpose to help future innovators in the area of digital farming to become aware of the ethical questions that may come forwards in their work, which may demand their attention. As many innovators have a background in ICT, or in farming or a farming-related business, it is not always easy for them to become aware of the ethical questions that come forwards and deal with them appropriately.

On the basis of our analysis of use case descriptions and progress reports, conversations with participants in the use cases and their input during webinars and workshops, we shaped a 'landscape' with four different themes: distributive justice, right to data, privacy/right to know and responsibility/liability (Figure 1).



We have noted questions that we encountered in the use cases, related to each of these themes. While the questions (see below) we noted do not exhaust the questions that participants in the use cases could encounter, we believe the scheme will help them to recognize the questions that are there.

Questions that belong to the theme distributive justice/fairness

- What are conditions that a just/fair distribution of benefits of digital farming should satisfy?
- Should digital tools be accessible to every farmer? (digital divide)
- Should everyone be empowered to benefit equally from data? (big data divide)
- What is the best way to deal with power imbalances in society between those who possess digital knowledge and expertise and those who don't?
- What counts as misuse of power by digital experts? Who risks to be harmed by that misuse? And how should this misuse be prevented?

Questions that belong to the theme right to data

- What data are we talking about: raw data or processed/interpreted data?
- Who has the right to access these (raw/processed) data? Are there disagreements about who does and who does not have that right?
- What are the risks of data sharing for different stakeholders? What data are considered 'risky' to share and in whose hands do they become 'risky'?
- What protective measures can be taken to diminish these risks?
- Is there an obligation to data philanthropy?
- Are there (public, private, business) purposes for which data should be shared?

- What are preconditions for trust in sharing data for these (various) purposes?
- For what period can data be kept, re-analysed and re-used?
- Who is the 'owner' of (raw or interpreted) farm data and is entitled to benefit from them?
- Who is the owner of the data about the farm machinery?
- Who is entitled to decide about who has a right to data, for what purposes and under what conditions?

Questions that belong to the theme privacy and right to know

- What does respect for privacy require in digital farming?
- Does a farmer's business or trade secret belong in the private sphere that deserves protection?
- What information about (activities on) his farm is a farmer allowed to keep for him/herself?
- Is there a right to know at stake?
 - Does the farmer has a right to know what an agribusiness does with his raw/processed data?
 - Does the government have a right to know certain information about farms? Or other stakeholders, such as retailers, consumers, citizens?
- What information about (activities on) a farm are or should be public? And what does 'public' mean? To what others should 'non-private' data be available?
- How much transparency about farm activities is due to the government/retailers/consumers/citizens? (And about what?) Who is allowed to decide about this level of transparency? (Who is, for example, entitled to decide what information about food production is shared with consumers?)
- What risks are involved in making a particular piece of information transparent to particular other stakeholders (farmers, the government, retailers, consumers, citizens)? And what protective measures should be taken to diminish the risk?
- Incidental or secondary findings are findings you are not looking for, but which you find 'by accident' in the course of looking for something else. What incidental or secondary findings can be expected? What is an appropriate way to respond to these different incidental or secondary findings?

Questions that belong to the theme responsibility, autonomy and paternalism

- Are farmers who use digital (advisory) technologies still the primary responsible decision makers on their farm? Or should we speak about 'shared responsibility' for decisions taken by farmers based on inputs from digital tools?
- When is it acceptable to steer the actions of others (like farmers)? Is this steering paternalistic, or is it like nudging? And what does this entail for the responsibilities of farmers?
- Who is responsible/liable for damage that occurs after a farmer acted on the (wrong) advice of a tool? Or when the tool missed information? Who should compensate for damage/harms?
- If farmers choose to ignore the advice of digital tools, are they to blame for results?
- Does it still make sense to speak about 'bad luck'? Is it fair to make someone responsible for the effects of bad luck?
- Does it make sense to speak about shared responsibility of stakeholders on a digital farm? And what does this mean in case of an accident?