Toward trusted farm data sharing practices

What role can a Code of Ethics play?

Simone van der Burg & Mark Ryan

EU Data space for farm data

- Foster development of a common data space to foster knowledge, innovation & strengthen market activity; and a set of sub-data *spaces*

- Overarching data space will be regulated: GDPR, for example, which protects personal data, which concerns '*any information which is related to an identified or identifiable natural person*'

- Governance framework for agricultural data space is to build on experiences with the Code of Conduct; self-regulation

EU Code: Shape trust by means of a contract

- Recognizes the right of the 'data originator' to control the use of the data and determine who can have access to it
- Contract should be stated in a clear language, which specifies
  - terms and definitions,
  - the purpose of collecting, sharing and processing data,
  - rights and obligations that parties have related to data,
  - information on how data are stored,
  - verification mechanisms for the data originator,
  - transparent mechanisms for adding new/future uses

Five principles

- Data ownership
- Data access/control/portability
- Data protection and transparency
- Privacy and security
- Liability and intellectual property rights
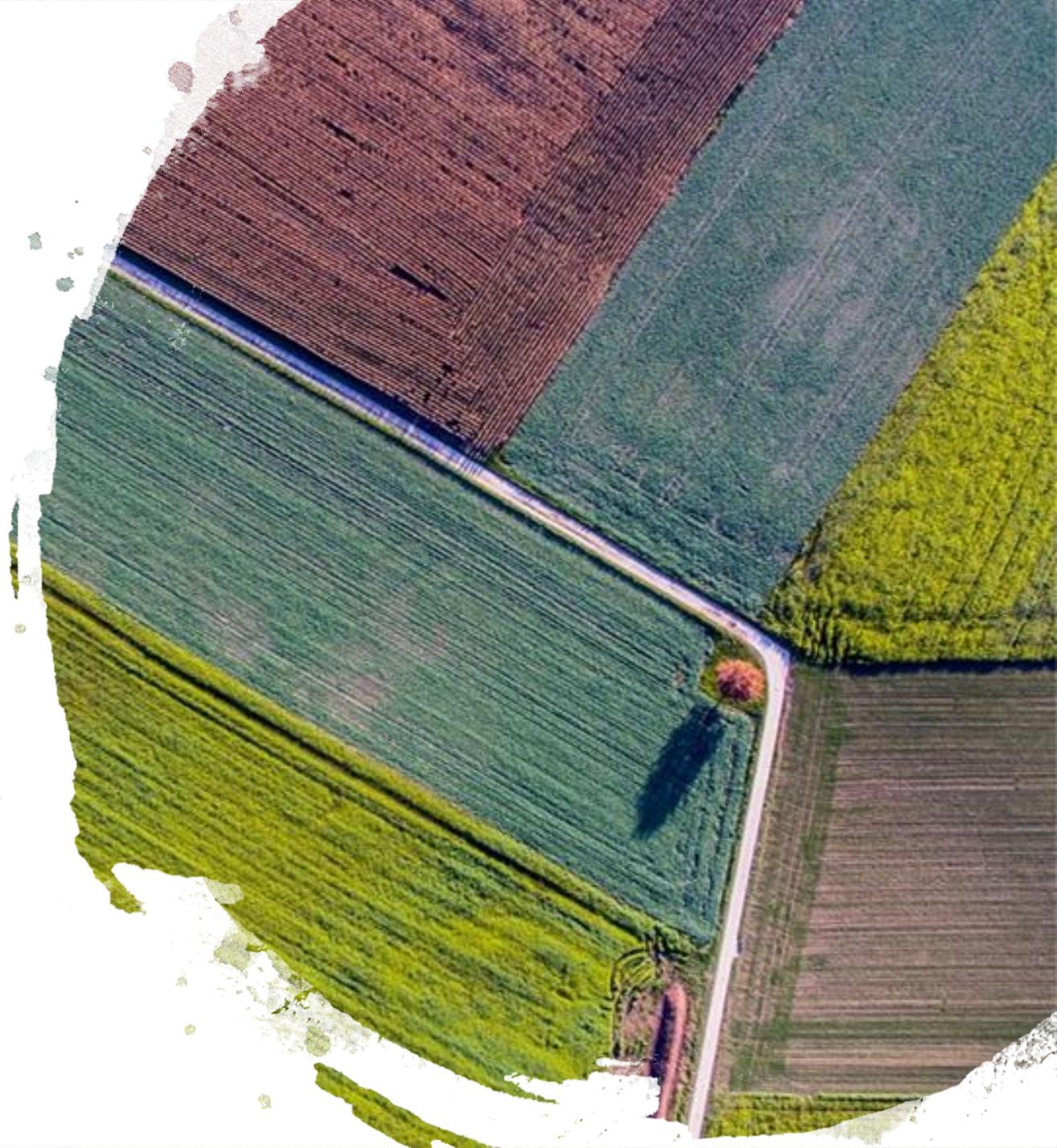
Strengths

Serious attempt to protect personal interests, rights and freedoms

Shaped by actors in the ecosystem; is therefore supported by them

Helps to move towards a practical solution: a contract
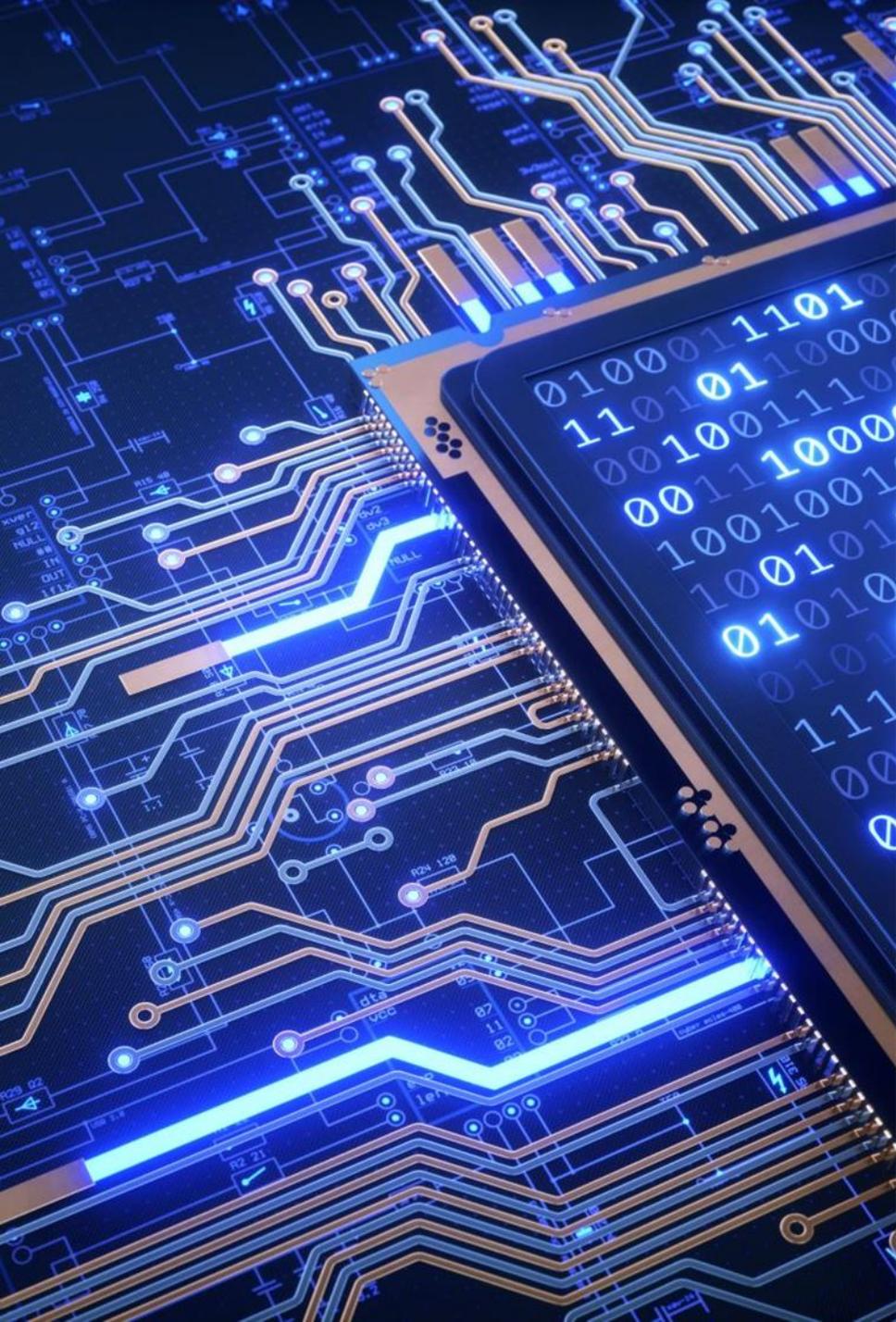
What role can a code play?

Throughout 1990s: proliferation of codes

Goal: avoid business malpractice and misconduct, by fostering development of a *moral culture*

Not always effective because:

- Confusion: codes are often not clearly formulated
- Codes are not always carefully implemented and administered
- Compliance depends on alignment with values that are recognized and supported by professionals/employees targeted by the code

Alignment with other codes of ethics? (Microsoft; code for ICT professionals)

ACM Code of Ethics and Professional Conduct

Preamble

Computing professionals' actions change the world. To act responsibly, they should reflect upon the wider impacts of their work, consistently supporting the public good. The ACM Code of Ethics and Professional Conduct ("the Code") expresses the conscience of the profession.

The Code is designed to inspire and guide the ethical conduct of all computing professionals, including ~~current~~ents, influencers, and anyone who uses computing ~~~~~~ ode serves as a basis for remediation when violations ~~~~~~ tatements of responsibility, based on the ~~~~~~ imary consideration. Each principle is supplemented by ~~~~~~ mputing professionals in understanding and applying

~~~~~~ at form the basis for the remainder of the Code. ~~~~~~ derations of professional responsibility. Section 3 ~~~~~~ ther in the workplace or in a volunteer professional ~~~~~~ d of every ACM member, and principles involving

~~~~~~ nental ethical principles apply to a computing ~~~~~~ m for solving ethical problems; rather it serves as a

On This Page

Preamble

1. GENERAL ETHICAL PRINCIPLES.

1.1 Contribute to society and to human well-being, acknowledging that all people are stakeholders in computing.

1.2 Avoid harm.

1.3 Be honest and trustworthy.

1.4 Be fair and take action not to discriminate.

1.5 Respect the work required to produce new ideas, inventions, creative works, and computing artifacts.

1.6 Respect privacy.

1.7 Honor confidentiality.

2. PROFESSIONAL RESPONSIBILITIES.

2.1 Strive to achieve high quality in both the processes and products of

---

STANDARDS OF BUSINESS CONDUCT

Achieve More

When we think about how we achieve our mission, it all depends on building trust with people and organizations around the globe. Our goals are only possible when people trust Microsoft and trust our technology.

How do we earn and build that trust? It starts by applying our culture and values to build lasting relationships inside and outside Microsoft. Our **values** are the enduring principles that we use to do business with integrity and win trust every day. Our **culture** is our operating framework—who we are and how we behave.

Microsoft's Standards of Business Conduct (the "Standards") will show you how we use our culture and values to build and preserve trust with our customers, governments, investors, partners, representatives, and each other, so we can achieve more together.

OUR CULTURE & VALUES

☆ **Our Values**

Respect
Integrity
Accountability

🌐 **Our Culture**

Growth Mindset
Customer Obsessed
One Microsoft
Diverse and Inclusive
Making a Difference

Alignment with values of stakeholders?

- Autonomy and transparency

- Fairness (data access/distribution of benefits)

- Care for the commons

- Inclusiveness

CORE VALU

Alignment with values of stakeholders?

Responsible research and innovation approach

22 focusgroups with 233 farmers, tech companies and researchers across the EU

Enhance reflection in three stages

I◦F
INTERNET OF FOOD & FARM
2020

Four vignettes

- The 'I choose' vignette
  - The farmer is at the steering wheel: he/she decides about data sharing
- The data library
  - Data are stored in libraries and policy is developed to govern all data that are part of it
- The laissez-faire or market vignette
  - Development of do's and don't of farm data sharing are governed by the market
- The value-chain vignette
  - Data are shared among partners who do business together in the value chain

Autonomy and transparency

- (..) Well I think the farmers are going to want to make the 'I choose' model the default because they just don't trust the system (..) (Young farmers, CEJA, North EU)

- (..) you've control -or I've control- you can choose to read the terms and conditions. If you don't agree with them then you know you don't have to go ahead. (Ireland, older Sheep farmers)

…doubts whether contracts (always) serve it

- Feeling pushed to make a choice

…a lot of times you have to tick yes. (laughing) you have no choice, for otherwise you cannot use the service. (Poland, older Potato farmers)

- Difficult to understand/provide information

- Unclarity about who is to decide about what data (raw, processed, combined, interpreted)

Fairness

- Discussion about fair access and fair distribution of benefits
  - Farmers complain they don't have access to their own data
  - Famers suspect others will benefit from their data

- I mean, if you find only big companies collect all the data maybe they will have all the information. But (..) the farmers cannot take advantage of this data because finally they only will be in the big companies' hands. (Young farmers, CEJA, South Europe, Group 2)

Care for the commons/ inclusiveness

Farmers/SME's/Researchers mention many public reasons to share data for:

- Foster food safety

- Enhance public acceptance of food production

- Support research and innovation

- Show compliance with the law

- Protect the environment

Store data in a 'library'!

Who should be in charge of the library?

Government, companies, farmers, a combination? Inclusiveness!!

Data space is abstract

___

- Who can you call to complain or get info?

- So, if (..) my data end up somewhere where I do not want them, what do I do? Who do I call? When there's a data library, at least there's a phone number I can call and there's someone who has to deal with my complaints or I will stop sharing my data. (Young farmers, CEJA, Mid-West EU)

Compliance depends on alignment with values of stakeholders.....?

EU Code of conduct
- Data ownership
- Data access/control/portability
- Data protection and transparency
- Privacy and security
- Liability and intellectual property rights

- ....contributes to trust

Stakeholders
- Autonomy and transparency
- Fairness (fair access; fair distribution of benefits)
- Care for the commons
- Inclusiveness

- .....contributes to trust

Conclusion

- Code of conduct needs enrichment (focus on more values; open up discussion about their content and correct application)
- Careful consideration should go into how the code is being implemented and administered
  - Management of organizations should support it; employees should receive training
  - Procedures should be adopted to deal with misconduct; whistle blowers should be protected
- Language of the code should be clear and concise

References

- Brandl, Patty, and Miles Maguire. 2002. 'Codes of Ethics: A Primer on Their Purpose, Development, and Use'. *The Journal for Quality and Participation* 25 (4): 8.

- Brien, Andrew. 1996. 'Regulating Virtue: Formulating, Engendering and Enforcing Corporate Ethical Codes'. *Business & Professional Ethics Journal*, 21–52.

- Griggs Jr, Francis E. 2009. 'New Look at the Code of Ethics'. *Journal of Professional Issues in Engineering Education and Practice* 135 (1): 40–46.

- Kaptein, Muel, and Mark S. Schwartz. 2008. 'The Effectiveness of Business Codes: A Critical Examination of Existing Studies and the Development of an Integrated Research Model'. *Journal of Business Ethics* 77 (2): 111–127.

- Kaptein, Muel, and Johan Wempe. 1998. 'Twelve Gordian Knots When Developing an Organizational Code of Ethics'. *Journal of Business Ethics* 17 (8): 853–869.

- Raiborn, Cecily A., and Dinah Payne. 1990. 'Corporate Codes of Conduct: A Collective Conscience and Continuum'. *Journal of Business Ethics* 9 (11): 879–889.

- Schwartz, Mark S. 2002. 'A Code of Ethics for Corporatecode of Ethics'. *Journal of Business Ethics* 41 (1–2): 27–43

- Van der Burg, Simone, Elsje Oosterkamp, Marc-Jeroen Bogaardt, Aine Regan, Eugen Octav Popa, Ewa Tabeau, Cor Wattel, Gianluca Brunori, Elena Favilli. 2020. ''Futures of farm data sharing practices; perspectives of European farmers, researchers and agri-tech businesses'.(Report IOF2020)', October. https://doi.org/10.13140/RG.2.2.21562.41924. Access: https://www.researchgate.net/publication/344516050_FUTURES_OF_FARM_DATA_SHARING_PRACTICES_PERSPECTIVES_OF_EUROPEAN_FARMERS_RESEARCHERS_AND_AGRI-TECH_BUSINESSES_Report_IOF2020

- Van der Burg, Simone, Leanne Wiseman, and Jovana Krkeljas. 2020. 'Trust in Farm Data Sharing: Reflections on the EU Code of Conduct for Agricultural Data Sharing'. *Ethics and Information Technology*, 1–14.