



Club of Bologna

Study group 3 - Ethics of the future agricultural mechanization development^{*)}

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Club of Bologna
Strategies for the Development of Agricultural
Mechanisation

Study Group 3 „Ethics“

Start and how it worked

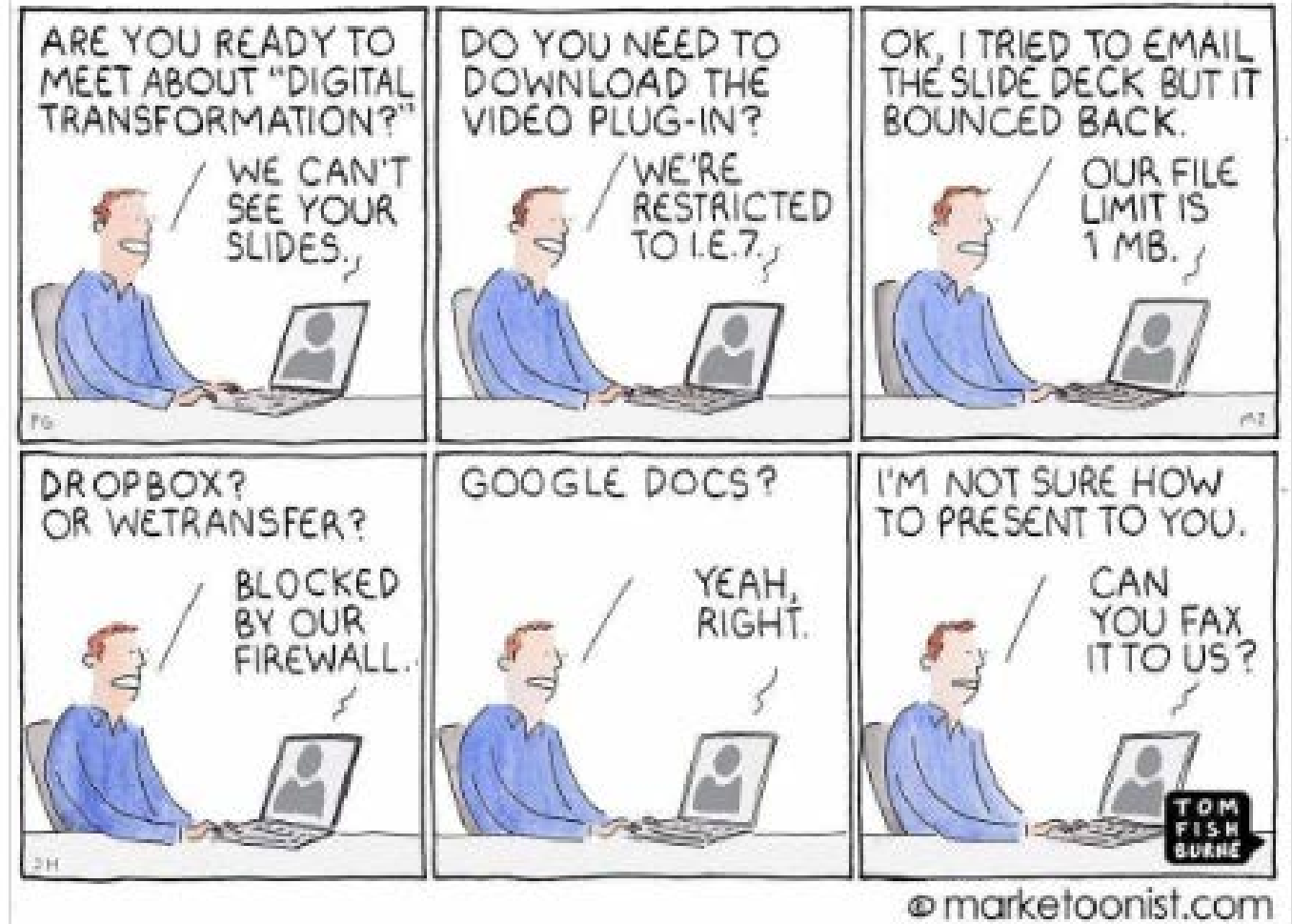
- Initiated on decision of management board of CoB (2017)
- Background:
 - Digital transformation in ag
 - New ethic standards needed?

- Ethics is the philosophic fundament for any activity of human beings.
- It establishes rules to distinguish between good and bad.
- Ethical consideration and evaluation is becoming more complicated today because human actions and decision making are being more and more replaced by technological or artificial systems. Action and decisions generated by artificial systems must be subject to ethical principles.

Study Group 3 „Ethics“

Start and how it worked

- Initiated on decision of management board of CoB (2017)
- Background:
 - Digital transformation in ag
 - New ethic standards needed?
- Skype-Conversations
- Email-Conversations



Study Group 3 „Ethics“ – basic questions

1. What is the objective Study Group?

a. Create a compact code of conduct or a document with guiding principles

b. Reference to

- COBs Code of Ehtics from 2001
- „EU Code of conduct on agricultural data sharing by contractual agreement“ by COPA AND COGECA, CEMA, CEETTAR, ESA, FEFAC, Fertilizers Europe, ECPA, EFFAB , CEJA

CoB Code of Ethics (2001) refers to Ag manufacturers. Rules need to be extended to ag engineers were relevant. How is ag engineering /science to be carried from a global prospective

Refers to

- Integrity
- Compliance
- Fair competition
- Conservation of natural ressources, ecological standards
- Fair and equal treatment of employees
- Health and safety, labor standards
- Social justice
- High quality of products
- Documentation

CEMA(COPA-C. et al. focus on „agricultural data sharing by contractual agreement“)
Refers to

- Gives wonderful definitions of data types
- Attributes data ownership and all primary rights to the „operator“ (no open data)

Kick-Off of Study Group 3 „Ethics“ – July 24th 2018

Agenda 1/3

2. Scope of work

- Focus on agriculture (mentioning importance of ag for food production, food safety, food security)?
- Our work seen as amendment to afore mentioned documents (agreement and addition)
- Focus on aspects regarding digital transformation, information / data handling or automation inclusive AI, machinery development, robotics etc.

3. Proposal of an extended Code of Conduct: Definition of goals or basic commitments and ethic values (chapter 1)

- Support of sustainability objectives (generate economic benefit for all stakeholders and advance socially and ecologically compatible food production)
- Food safety and security
- Fair distribution of food / mechanisation in developing countries

Giuseppe:

We should try to describe that there are ethical principles which are sound, global, long lasting, respecting local nature, sustainable, and respect the right for access to food

Other discussion points

4. Principles of ethical acting in data handling

- Principle of voluntariness / obligation to provide data
- Respect value and ownership of data/information
- Keep highest standard for safety and security
- Principle of confidentiality, availability, integrity and trustworthiness of data and services
- If focus not only data/Information: , job security, quality of life, humanizing work, ... (social aspect)

5. Important definitions

- Data protection / information privacy – legal and political aspects
- Data safety – technological aspects
- ...

The report

1. Chapter – general or basic commitment
 - a. Genral commitment to sustainability: economical, social, ecological*)
 - b. Specifics:
 - a. Mitigate climate change
 - b. Mitigate global social unbalance
 - c. Right for access to food for everybody
 - c. Referencing CEMA's „Producing more with less“
 - a. Need for automation, autonomy, smart farming technologies
 - b. Extensions:
 - a. Producing more with less work force
 - b. Vision of circular economy / circular farming
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*) Remark: social sustainability in principle includes aspects of health, food safety, food security and others

The report

2. Chapter – identified (potentially critical) technologies
 - a. information and communication technologies (ICT),
 - b. new sensing and monitoring technologies
 - c. New levels of IT based intelligence (AI), big data (BD), 5G, internet of things (IoT) ...
3. Chapter – Concerns and recommendations
 - a. General reference to CoB's Code of Ethics (2001) and extension to natural persons
 - b. Data, information, system
 - a. Privacy
 - b. Integrity
 - c. Safety / Security-> reference to Code of Copa-C-/ CEMA et al.
4. Chapter: ...

Basic principle referring to AI et al. (final statement)

Any technology is and must stay an instrument of (human) spirit which itself must not be overruled by the spirit of the instrument.

Adopted from a quotation of Max Eyth about language as the tool of human spirit, 1904



Max-Eyth, 1836 - 1906
Picture/Photo: DLG e.V.

Die Sprache hat nämlich in den Tagen ihres wachsenden Triumphs den ungebührlichen Anspruch erhoben, das einzige Werkzeug des Geistes zu sein, und weil sie immer wieder dasselbe sagte, begann ihr die Menschheit zu glauben. Sie glaubt es im allgemeinen heute noch. Sie vergißt über dem Werkzeug des Geistes den Geist des Werkzeugs. Aber beide, Wort und Werkzeug, sind ein Erzeugnis derselben geistigen Urkraft, die das Tier „homo“ zum Menschen „homo sapiens“ gemacht hat, wie ihn die Gelehrten nennen, die natürlich auch hier wieder allein auf sein Wissen anspielen und sein Können, das all dieses Wissen ermöglichte, vergessen.

Next steps?

- Major gaps?
 - Identify gaps and rework report in 2019
- Job completed?
 - Review needed in xy years?
- Just on the way?
 - Create a consolidated, integrated, comprehensive code of conduct

Will the group stay as is?

How to discuss in the larger CoB?

Shall we treat the report (or a follow-up document) as a living document? If yes: What would be the process?



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