



DEFINING THE ETHICAL BOUNDARIES OF TECHNOLOGY

Krzysztof Jajuga

**Wrocław University of Economics and Business
CFA Society Poland**

ELEMENTS OF VALUE CHAIN IN DATA DRIVEN BUSINESS

Acquisition of data

Data analytics

Insights applied in business

ETHICS IN VALUE CHAIN

Compliance with ethical principles in the development of artificial intelligence is a fundamental condition for the protection of social values

MAIN INNOVATIONS IN TECHNOLOGY SUBJECT TO ETHICAL DILEMMAS

Big Data acquisition

Machine learning methods

Robo advisory

RISK RELATED TO ETHICAL ISSUES IN USING TECHNOLOGY

Risk as a threat:

Unethical behavior leads to losing reputation

Risk as an opportunity:

Ethical behavior leads (in longer term) to gaining competitive advantage

EXAMPLES OF UNETHICAL ISSUES

Example 1: Data acquisition: social rating

Bias and discrimination (e.g. social rating)

Invasions of privacy

EXAMPLES OF UNETHICAL ISSUES

Example 2: Machine learning methods

**Non-transparent, unexplainable or unjustifiable
outcomes**

Operation against intended purpose

EXAMPLES OF UNETHICAL ISSUES

Example 3: Robo advisory

Unexplainable or unjustifiable outcomes

Lack of accountability

SOME PRINCIPLES

AI systems should benefit individuals, society and the environment

AI systems should respect human rights, diversity, and the autonomy of individuals

AI systems should be inclusive and accessible and should not involve or result in unfair discrimination against individuals, communities or groups

AI systems should respect and uphold privacy rights and data protection and ensure the security of data

SOME PRINCIPLES

AI systems should reliably operate in accordance with their intended purpose

There should be transparency and responsible disclosure so people can understand when they are being significantly impacted by AI and can find out when an AI system is engaging with them

SOME PRINCIPLES

When an AI system significantly impacts a person, community, group or environment, there should be a timely process to allow people to challenge the use or outcomes of the AI system

People responsible for the different phases of the AI system lifecycle should be identifiable and accountable for the outcomes of the AI systems, and human oversight of AI systems should be enabled

WHAT CAN WE DO?

Education – making AI more transparent and more user friendly

Code of Ethics – adoption:

- **By AI creator**
- **On the level of company**



THANK YOU !!!!!!!

krzysztof.jajuga@ue.wroc.pl