# Ethics and Social Innovation

IEB/IBICT 2019

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# Ethics

# Key elements of Ethics

- Philosophy of what is “right”/”wrong”
- Has a collective (social) dimension
- Can change over time
- Helps us express value judgements

# Ethics


— As a premise to today's class, we want to briefly discuss the topic of ethics. While very broad, we think that this is a key topics for computer scientists, and one that is getting increasing attention even from a policy standpoint (see here)
— Ethics refers to the philosophical study of what is "right" or "wrong". We cannot go into detail on how this unfurls in science in general, in computer science in particular, and how it interacts with its epistemology, but we just want to discuss with you one fundamental point:
    - Each technology (and innovation) implies some sort of ethical value judgement, which we cannot afford to forget...

# Ethical trade-offs


- Ethical trade-offs occur when a choice opportunity has some sort of moral impact in all directions
- The classical example is the so-called “trolley problem”, whereby taking action to save one life causes the death of multiple people, while not taking action causes the death of one
- Refer to the notekeepers’ notes for some perspectives on this problem, but the key element in this discussion is this:
  - If each technology implies some ethical choices, we as engineers need to be aware of where they lie and what their possible consequences might be
- We will now provide some examples, and then discuss Social Innovation as a way to keep our actions ethically acceptable


# Why Ethics?

# What is special about ICT ethics?

Suggested Reading: https://plato.stanford.edu/entries/ethics-computer/

# Examples of Ethical Problems

...and possible answers

# What makes an innovation “good”?

# Is technology neutral?


# Are there emotional machines?


# Designer’s Intent


# Biased Intents

# Removing biases

# “From Kant to ISO”

Suggested Reading: Analisi di alcune metaetiche nella progettazione e programmazione di veicoli autonomi — Operto 2018

# Trust the machine — do we have a choice?


# What can we do about this?

# Policymaking

# Social Innovation

Mandatory reading: Social Innovation — A Novel Policy Stream or a compromise? Bonifacio 2011

# “Social Innovation”?

— In the previous lectures we have discussed many issues related to business. As a common element, they all focused to the generation of value in terms of money. In this lecture, we will see how we can generate forms of non-monetary value
— A definition of Social Innovation can be found by combining the two elements that compose it:
  - Innovation: Ability to transform; generation of value (...)
  - Social: Not strictly economic (e.g., improvement of quality of life, wellbeing, social justice...)

# “Innovation” + “Social”

# Key Elements

- In the S.I. view, since we focus on generation of non-economic value, we change paradigm:
  - Focus is on the process (and not on the product/result)
  - This implies that a S.I. action, even if it “fails” in generating the expected result, might still be relevant if it created a new process, since the process can then be used for other actions
  - Impact is on society and policy (and not on the market)
  - This implies that the desirable goal is not that of acquiring new customers or shaping a new market segment, but generating new legislation and incentive schemes (policy) and enabling new ways in which we can live together (society)

# Ways to approach social innovation

We will now discuss the three main approaches to S.I. presented in the paper by Bonifacio (see references). These are:

- Narrow View
  - i.e., S.I. addressing a vulnerable segment of the population
- Societal Challenge
  - i.e., S.I. addressing problems of society as a whole
- Systemic Transformation
  - i.e., S.I. changing how society works as a system


# Narrow View

# Narrow View

- In the Narrow View, the focus is simply the one of the definition: generation of value beyond economic terms
- This is done by addressing socially vulnerable groups through charitable actions, aiming at providing access to resources to those in need
- In the notekeepers' notes, you will find some examples of "narrow view" actions

# Societal Challenges

# Societal Challenges

- In this case, the value generation addresses society as a whole, in its wider challenges
- Sometimes, these challenges are defined explicitly, such as in the case of the H2020 challenges
- But sometimes there could also be implicit challenges, those that society doesn't recognize (yet)
- Again, you can find examples in the notes

# Systemic Transformation

# Systemic Transformations

- As the last (and possibly hardest) approach to S.I., systemic transformations create a bottom-up empowerment of societal actors
- This requires setting up networks of actors that are initially sustained by the public sector, but then become self-sustaining (e.g., EU projects)
- Here, the feedback loop towards policy making is the strongest, and often an explicit goal


# Examples and Applications

# CSR — Corporate Social Responsibility

# What next?

- IEB
  - Battle 4 → Smart Cities vs Smart Countryside
  - Wednesday, Nov 27th in A208
- IBICT
  - Battle 4 → Amazon Good vs Bad
  - Wednesday, Nov 27th in A205

# References


— Empowering People, Driving Change: Social Innovation in the European Union (2011). Bureau of the European Policy Advisers, European Commission.
— Murray, R., Grice, J. C., Mulgan, G., Giordano, A., & Arvidsson, A. (2009). Il libro bianco sulla innovazione sociale.
— Bonifacio, M. (2014). Social innovation: A novel policy stream or a policy compromise? An EU perspective. European Review, 22(01), 145-169.

# Contacts

Milena: milena.stoycheva@unitn.it
Andrea: andrea.guarise@trentinoinnovation.eu
Francesca: francesca.fiore@unitn.it
Lorenzo: lorenzo.angeli@unitn.it
Chiara: chiara.grossi@studenti.unitn.it

All in one (and more!): i-and-e-team@list.disi.unitn.it