

Ethical Issues and Concerns in Digital Innovation

ISM-E2002

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Session 1 - Foundations of ethics and technology

Technology as neutral?

- Value neutrality thesis: “Technological artifacts do not have, have embedded in them, or contain values” (Pitt 2014)
 - “even if we could make sense of the idea that technological artifacts embody human values, there are so many that would be involved the claim says nothing significant”
 - “we don’t know whether or not values are embedded in technological artifacts because we don’t know what values look like.”
- Focus on people, not the technology
 - “Guns don’t kill, people kill”

Do technologies have politics?

- Artifacts containing political qualities
 - Embody specific forms of power and authority
- Two ways this can be seen (Winner 1979):
 - Through design: a device or system “becomes a way of settling an issue in a particular community”
 - The designer’s values are embedded into the designed artifact
 - Through governance/maintenance: a device or system calls for particular kinds of political relationships:
 - Either its operation requires certain social and material conditions, a specific type of operating environment with particular power structures...
 - ...or a technology is strongly compatible with, but does not strictly require, social and political relationships of a particular stripe



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Implications of digital technologies to the social

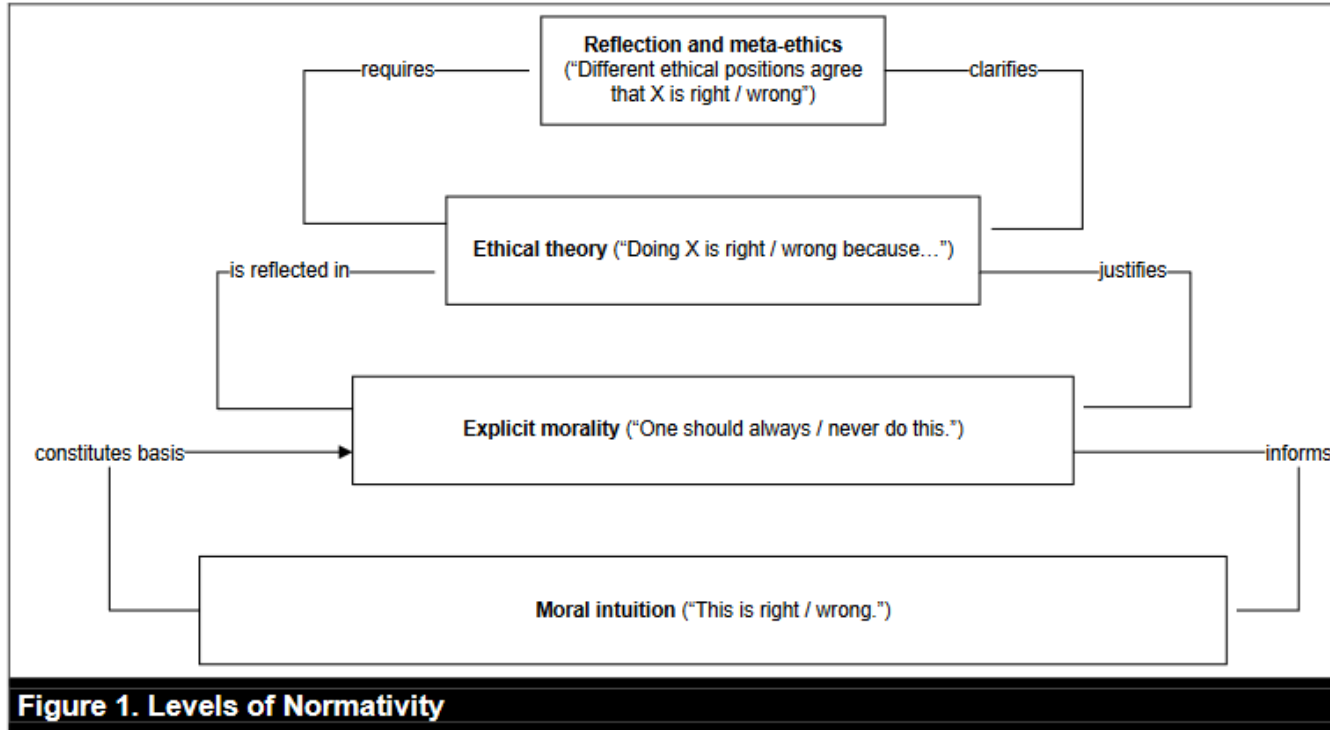
- “Code is law” (Lessig 2006)
 - In cyberspace, code as the most significant form of law
 - “Lawyers, policymakers, and citizens to decide what values that code embodies“
- The world is becoming increasingly digital: Digital first (Baskerville et al., 2020)
 - Digital precedes real
 - E.g., digital twins in design and maintenance
- How we design digital technologies, govern and use them are subject to ethical evaluations
 - How to evaluate and what guidelines, norms, and principles to follow?
 - Hume’s guillotine, i.e. the is – ought problem

Moral machine – making ethical decisions

- Based on trolley problem – thought experiment in ethics about a fictional scenario of an onlooker having the option to save X people by diverting the trolley and killing X
- Go to <https://www.moralmachine.net/> and click start judging
 - You will be presented 13 series of two scenarios out of which you have to choose one
- This exercise is optional and in case you feel anxious or anything about doing the exercise you do not have to take part

On ethics

Levels of normativity



Stahl, Bernd Carsten (2012) "Morality, Ethics, and Reflection: A Categorization of Normative IS Research," *Journal of the Association for Information Systems*, 13(8)

Ethics

- The term derived from an Ancient Greek word meaning "relating to one's character"
- Systematizing, defending, and recommending concepts of right and wrong conduct
 - "a set of concepts and principles that guide us in determining what behavior helps or harms sentient creatures"
 - rational justifications of moral judgments
 - "what is good or bad", "what is morally right or what is wrong", or "what is justice, well-being or equality" (but not how to behave in accordance with particular norms, beliefs or conventions)

Ethics (cont.)

- Science or system of morals
 - Difference to morality: particular norms or beliefs
- Ethics often divided into three categories:
 - **meta-ethics** - deals with the most general nature of ethical theories
 - the meaning of ethical concepts, the existence of ethical entities and the possibility of ethical knowledge
 - **normative ethics** - ways in which moral conclusions should be reached
 - practical means of determining a moral or ethically correct course of action
 - **applied ethics** - considers applications in particular contexts
 - what a moral agent is obligated or allowed to do in a specific situation

Values and norms

- Value can be seen as importance of an action or a thing, how much value something has?
 - Different kinds of values (economic, aesthetic), yet in ethics focus usually on moral value
 - Values as the basis for standards and ideals that can be used to evaluate actions, artefacts etc.
- Norms as value-based principles, commands and imperatives
 - What to do, what is expected, may encourage or discourage behaviour (moral norms)
 - Legal norms not necessarily moral

Normative theories of ethics

Consequentialism/teleology

- Consequences of an action are the standards of right and wrong, purposes matter, not causes (end justifies the means)
- Basis in utilitarianism (Bentham)
 - What counts are the consequences of an act -> An act can be ethically judged based on the level of goodness resulting from the act
 - Bentham's hedonic(/felicific) calculus (/algorithm)
- Mill distinguished between the lower (sensuous pleasures of the body) the higher pleasures (intellectuality, creativity, and spirituality)
 - Goodness does not necessarily equate pleasure (knowledge, moral maturity, and friendship)
 - Well-being, benefits
- Maximize the greatest good for the greatest number

Consequentialism/teleology – some challenges

- Difficulties in predicting outcomes or the rate of diminishing utility
 - Complexity of real-world situations
- What is the good or utility that should be maximized
 - subjective preferences, practical circumstances, personal and cultural factors
- How to measure it?
 - Quantifying pleasure, well-being, creativity not necessarily an easy task
- Harmful actions ok if they lead to maximum utility?
 - Role of e.g. minorities
 - Nozick's utility monster

Deontology

- From Greek meaning duty - actions morally right or wrong in themselves regardless of their consequences, duty to behave morally, motives(/causes) matter
- Kantian ethics: acts that intuitively known as right, apply without reservation - categorical imperative – (Kant 1785)
 - “Act only on that maxim through which you can at the same time will that it should become a universal law” (and “Act in such a way that you always treat humanity, whether in your own person or in the person of any other, never simply as a means, but always at the same time as an end”)
 - Rationality as the foundation of moral behaviour, good will as the only thing that is truly good that emerges from one’s duty
 - Challenges: what is the justification for rationality, what to do when duties conflict, problem of universality, approach individualistic/monological, “road to hell is paved with good intentions”?

Deontology – social contract

- Locke: People born with certain natural rights that all possess
 - Social contract between government and people
 - Government maintains and protects these rights and exists only by the consent of the people
 - E.g. Universal Declaration of Human Rights
 - Challenges: what can be seen as natural rights, universality of values, concept of consent?
- Rawls: Justice as fairness
 - Veil of ignorance: the answer to the question on “what principles of justice rational people would choose if they had no knowledge of their own personal characteristics or the position they would hold in such a society?” produces a universal agreement on the values of a fair society
 - Challenges: justice not about redistribution of resources, commonality of agreement across communities

Virtue ethics

- Theories that focus on person's character and virtue in contrast to results or duties
- Aristotle's idea of the virtuous life
 - People to behave that leads to well-being of the individual and the community (eudaimonia, happiness)
 - Development of the people so that virtuous behaviour becomes natural
 - Results in virtues such as honesty, friendliness, patience, modesty, and, as the basis, wisdom (phronesis)
 - Every virtue a golden mean, e.g. patience between anger and carelessness
 - Challenges: relativism, which virtues to include, order of importance, temporal nature of virtues, does not say anything actions themselves

Discourse ethics

- Answering moral (universal) questions via discourse, process of argumentation
 - Procedural, does not describe 'correct' ethical and moral norms
 - Not possible for individuals alone but interacting with others crucial
- The discourse needs to fulfill certain presuppositions:
 - All potential speakers are allowed equal participation in a discourse
 - Everyone is allowed to:
 - Question any claims or assertions made by anyone
 - Introduce any assertion or claim into the discourse
 - Express their own attitudes, desires, or needs
 - No one should be prevented by internal or external, overt or covert coercion from exercising the above rights

Normative theories of business ethics

Normative theories of business ethics (NTBE)

- Example of a domain, in which ethics are a concurrent matter and subject to ethical evaluations
 - Normative theories of ethics yet for the business domain
 - “What ought” or “what should exist” in business
- Many “IS ethical quandaries are set in corporate business environments, in which the decision maker is forced to make an ethical decision not as a free agent but, instead, as an agent of a corporate body” (Smith & Hasnas 1999)
 - Difficult to apply normative ethics directly
 - Normative ethics theories expressed in a language that is easier to understand
 - NTBEs as guides for individual managers
- Three ‘leading’ theories: stockholder, stakeholder and social contract theory

Stockholder theory

- Stockholders provide capital to the managers - managers to spend corporate funds only in ways that have been authorized by the stockholders to maximise their profits
 - “There is one and only one social responsibility of business – to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game, which is to say, engages in open and free competition, without deception or fraud” (Friedman 1962)
- Ethical obligations under the theory: conform to laws and regulations, avoid fraud and deception, maximise profits
- Justification
 - Consequentialist: if individuals pursue profits, they also promote the interests of the society (yet monopolies, damaging externalities, and failures also occur in the market)
 - Deontologist: managers using stockholders’ money without their consent is wrong (yet it can be morally acceptable to spend other people’s money without their consent to promote public interest)

Stakeholder theory

- Managers have a duty not merely to the corporation's stockholders, but to the corporation's stakeholders
 - Anyone who has a stake in or claim on the firm (narrow interpretation) vs. any group or individual that affects or is affected by the corporation (broad interpretation)
 - Stockholders but also customers, employees, suppliers, local community..
- Managers need to consider the legitimate interests of all stakeholders in adopting policies to produce the optimal balance between stakeholders (in case conflicting views exist) without violating their rights
- Ethical obligations: determine relevant stakeholders and their rights, reject options that violate those rights and accept the option that best balances interests of stakeholders
- Justification: every human to be treated as an end and not as means, the stakeholders should have a say in decisions (yet should students have a say regarding the grade they get from a course?)

Social contract theory

- Derives the social responsibilities of corporate managers from what people would agree to in a society with no corporations
 - What conditions would have to be met for members of such a society to agree to allow corporations to be formed?
 - As members of the society grant corporations rights, they can expect to get something in return -> the benefits should outweigh the detriments
 - Corporations to adhere to requirements such as avoiding fraud etc.
- Ethical obligations: reject actions that are fraudulent/deceptive, dehumanize or discriminate employees, eliminate options that reduce welfare of society's members and from the remaining choose the option that maximizes financial success
- Justifications resting to consequentialism, deontology (even virtue ethics?)

Social Ethics

Social ethics

- Systematic reflection on the moral dimensions of social structures, systems, issues, and communities
- An area of applied ethics -> application to ethical reasoning to particular social issues and problems
 - E.g. distribution of economic goods, sensitive research data, abortion, war
- What social ethicists do (Welch 2012)?
 1. Study social conditions and determine which of them are problematic in light of existing norms on what is good and what is wrong
 2. Analyze actions that could change the social conditions that are found to be problematic
 3. Based on the above two steps, propose solutions for correcting the situation
 - All three steps value-laden

Subject matter of social ethics

- First approach:
 - Distinction between moral choices that each individual makes vs. the corporate decisions reached and actions taken by collective bodies
 - E.g. corporations, municipalities, and nations.
 - Social ethics to focus on the policies and practices that should govern social institutions
- Second approach:
 - All ethics social as they are socially constituted and embedded in a social matrix
 - Individual moralities shaped by social contexts and the way individual moral choices, in turn, shape social contexts - both need to be examined
- Are the responsible agents the collective institutions or the individuals responsible for institutional policy and behavior?

Form groups

15 mins

- Form groups of 4 people
- Get to know your teammates (exchange contact info)
- Fill the form

Bitcoin exercise

Bitcoin and ethical theories

- By utilizing a theory given to your group, discuss whether Bitcoin can be thought as ethical?
- How could you make it more ethical?