Ethics Canvas Manual

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The Ethics Canvas

Contents of This Manual

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4 <u>Introduction</u> to the Ethics Canvas?

> **Today:** Currently, "ethics" in research and innovation is a very top-down process that relies on compliance. Researchers apply for ethics clearance, which is a bureaucratic process.

> **Problem:** This model fits badly in the rapidly changing context of technological innovation. Ethics requirements differ greatly between jurisdictions and institutions, while our technological infrastructure is increasingly global and connected. Moreover, ethics is not simply about compliance, but requires active reflection during the design process.

> **Technological change:** Technological innovations are changing the world faster than ever. At the same time, people are increasingly concerned about the ethical impacts of technologies. This has led to a damaged image of the tech-sector and rising concerns for policy makers.

> **Solution:** The Ethics Canvas provides a tool that can be part of the solution to the problems that ethics in research and innovation faces. It allows researchers to reflect on the ethical impacts of their work.

The Ethics Canvas

The **Ethics Canvas** is an intuitive tool, that helps you to:

> Brainstorm about the ethical implications of a project and represent them in a canvas

> Analyse the ethical concerns of a project and find suitable solutions

> Join the Ethics Canvas community, learn from similar use cases and share your experienceset

Use Context of the Ethics Canvas Manual:

> This handbook can be used to better understand the different aspects of the Ethics Canvas

> It explains how the Canvas can be used, what the different boxes represent and it presents an Ethics Canvas use-case

> Moreover, it can be used as a valuable tool for organising training in ethics of Research and Innovation

The Ethics Canvas

<u>Who</u> can use the Ethics Canvas?

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> **Teachers:**
For teaching engineering and business students about ethics

> **Researchers:**
For discussing ethical impact of their research and innovation projects

> **Policy makers:**
For better understanding-ethical impacts and finding policies to solve them

> **Entrepreneurs:**
For creating new products and services in an ethical and responsible way

<u>Core values</u> of the Ethics Canvas:

> Driven by **conviction**
> **Community** based
> **Not** for **profit**
> **Inclusive** by **design,**
all should benefit

> **Open** source
> **Transparent**
> **Participatory** design
> **Ethical** data handling

[Background]{.underline} of the Ethics Canvas: why should we talk about ethics?

> **>** Increase of ethical impacts of technological innovations:
> > Technologies are becoming inseperable parts of our everyday lives. We use them to communicate, work, travel and support our health. Even though technologies make our lives better in many respects, they can also raise ethical concerns, for instance for our privacy or safety.

> **>** Why should you do ethics?

As a designer or user of technologies, there are **three** main reasons to engage with ethics:
> > To show others that you act responsibly and that your work can be trusted.
> > To make sure the quality of your activities will improve and that you will create better products and services
> > To make sure to do the right thing, paying attention to the common good and the good life.

> **>** What kind of ethical impacts can technologies have?

The Ethics Canvas distinguishes 6 main types:

I.   Impacts on individual **behaviour** (changing habits, patterns)
II.   Impacts on **relations** (friends, family, professional life)
III.   Impacts on **worldviews** (political, religious, scientific)
IV.   Impacts on **social conflicts** (inequality, lack of justice)
V.   Impacts through **resource use** (climate change, toxics)
VI.   Impacts through **product or service failure** (fallout, safety)

The Ethics Canvas

<u>Basics</u> of the Ethics Canvas:

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> Definition of the Ethics Canvas:

> The Ethics Canvas captures potential ethical impacts of technologies. It is an easy to use collaborative tool that assists in the identification of ethical impacts of research and innovation projects and incentivises actions towards tackling these impacts. It is both suitable for offline use, as a paper canvas, and for online use, as an online collaborative tool.

> In a **nutshell,** it is:

> A pragmatic approach to integrate ethics in research and innovation

> Related to approaches in applied ethics: a form of value sensitive design

> Mainly inspired by the Business Model Canvas, used for collaborative business model creation

> Transformed into a brainstorm tool for discussion ethical impacts

> Central terms:

> **Ethical impact:** interplay between a technology and human beings that raises normative, value-laden, concerns.

> **Stakeholder:** a certain type of individual (a demographic) or a collective (group or organisation) that has a "stake", - a normative concern -, in the ethical impacts of a technology.

> **Remedial action:** concrete practical interference in the research and innovation process in which a technology is designed, which has the purpose of mitigating ethical impacts.

The Ethics Canvas

[Design](#) of the Ethics Canvas: origins

> Two disciplines meet:

> The Ethics Canvas combines approaches in applied ethics and business model development. It provides an answer to the need in applied ethics for researcher involvement in "disclosing" ethical impacts or technological innovations. To address this, it draws from the "Business Model Canvas" approach, that was developed by Osterwalder and Pigneur.

> Design of the **Business Model Canvas:**

> Redesigning the Business Model Canvas:

> The Ethics Canvas tries to offer guidance for thinking about ethical impacts of a technology in a holistic way. For this purpose, it has revisited the 'building blocks' of the business model canvas by answering three basic quesitons: (1) Who might be affected by the technology? (2) What are the potential ethical impacts for these people and groups and (3) how can we address these ethical impacts?

[Design](#) of the Ethics Canvas: Version 1.9

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> Mosaic of the canvas:

The central canvas design consists of different building blocks that are related to each other according to three central stages: staging the narrative, discussing the potential ethical impacts and discussing ways to deal with these impacts.

Ethics Canvas

Project Title: D

Individuals affected

Who use your product or service?
Who are affected by it's use?
Are they men/women, of different ages, etc.?

1

Behaviour

How might people's behaviour change because of your product or service? Their habits, time-schedules, choice of activities, etc.?

3

Relations

How might relations between people and groups change because of your product or service? Between friends, family-members, co-workers, etc.?

4

What can we

What are the most i
impacts you found?
How can you address
changing your desig
or by proposing broa

Product or Service Failure

What are potential negative impact of your product or service failing to operate or to be used as intended?
What happens with technical errors, security failures, etc.?

7

The Ethics Canvas

Date:

Ethics Canvas v1.8 - ethicscanvas.org © ADAPT Centre & Trinity College Dublin & Dublin City University, 2017.

e do?

important ethical

these by
, organisation,
der changes?

Worldviews

How might people's worldviews be affected by your product or service? Their ideas about consumption, religion, work, etc.?

5

Groups affected

Which groups are involved in the design, production, distribution and use of your product or service? Which groups might be affected by it?
Are these work-related organisation, interest groups, etc.?

Group Conflicts

How might group conflict arise or be affected by your product or service? Could it discriminate between people, put them out of work, etc.?

9

6

2

Problematic Use of Resources

What are potential negative impacts of the consumption of resources relating to your project?
What happens with its use of energy, personal data, etc.?

8

> Stages of the canvas:

During the **first stage**, relevant stakeholders are identified.

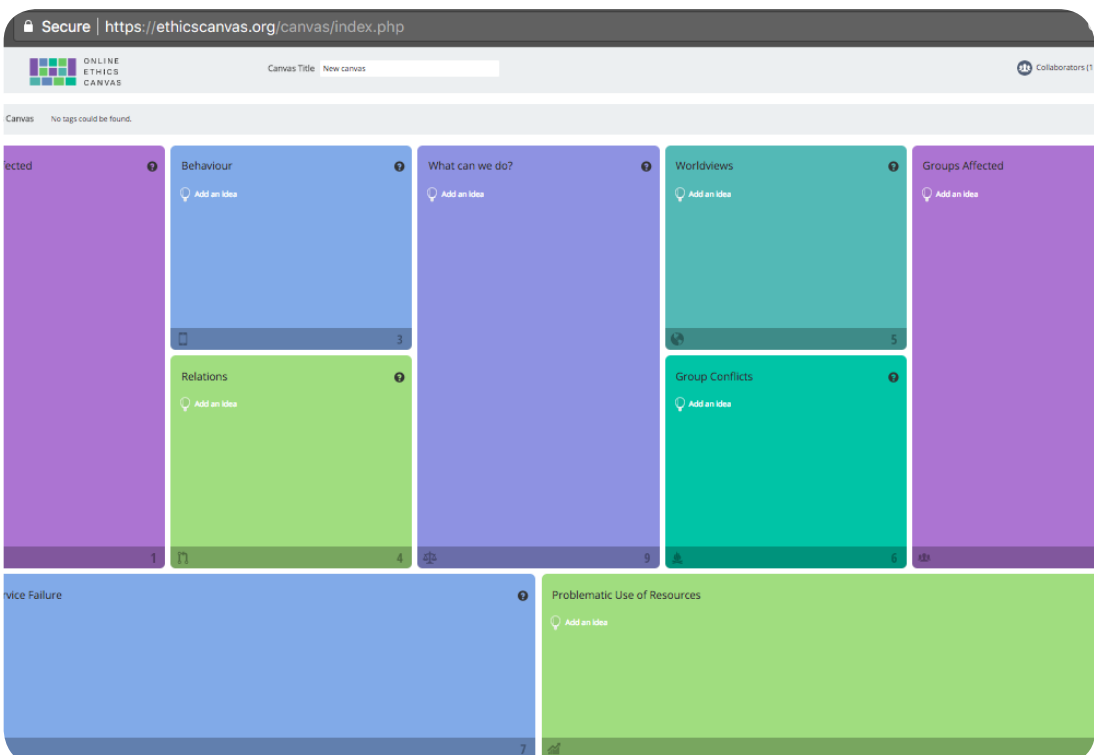During the **second stage**, ethical impacts are identified.

During the **third stage**, remedial actions are discussed.

The Ethics Canvas

12 The Ethics Canvas Online:
on www.ethicscanvas.org

> Online **Features:**
> Create a personal account and collaborate with other users
> Save canvasses and export them in .pdf format
> Tag terms, create a shared knowledge-base

🔒 Secure | https://ethicscanvas.org/canvas/index.php

ONLINE ETHICS CANVAS

Canvas Title New canvas

Collaborators (1

Canvas   No tags could be found.

ected	Behaviour ❓	What can we do? ❓	Worldviews ❓	Groups Affected ❓
	💡 Add an idea	💡 Add an idea	💡 Add an idea	💡 Add an idea
	3		5	
	Relations ❓		Group Conflicts ❓	
	💡 Add an idea		💡 Add an idea	
1	4	9	6	

vice Failure ❓	Problematic Use of Resources
	💡 Add an idea
7	

The Ethics Canvas

First stage: Identifying the relevant stakeholders:

Individuals Affected ❓

💡 Add an idea

Introduction:
> The first thing to discuss is the question of *who* might be affected by the technology in question. The questions below offer you some guidance in doing this. Try to be **inclusive** in your thinking: it's not just about users, but about many kinds of people that can be affected.

Individuals:
> Who use your product or service? Who are affected by it's use?

> Are they of different genders, of different ages, etc.?

Groups Affected ❓

💡 Add an idea

Groups:
> Which groups are involved in the design, production, distribution and use of your product or service?

> Which groups might be affected by it? Are these work-related organisation, interest groups, etc.?

The Ethics Canvas

14 <u>Second stage:</u> Identifying ethical impacts

Introduction:
> Secondly, the potential ethical impacts for the different stakeholders need to be discussed. First, **'micro'** impacts are captured by the canvas. These impacts occur in the everyday lives of people designing using and living with the product or service you work on.
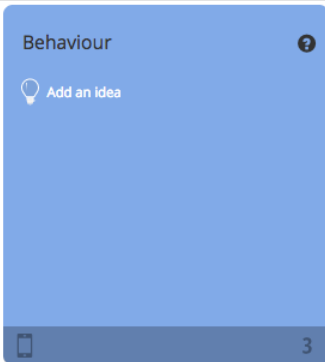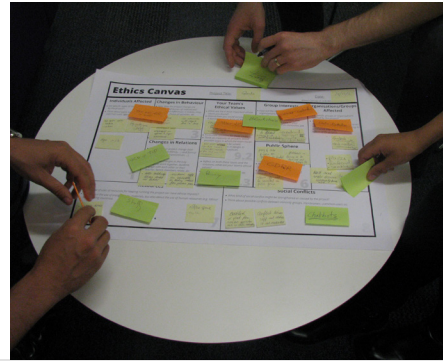
Behaviour:
> How might people's behaviour change because of your product or service? Their habits, time-schedules, choice of activities, etc.?

Relations:
> How might relations between people and groups change because of your product or service? Between friends, family members, co-workers, etc.?

The Ethics Canvas
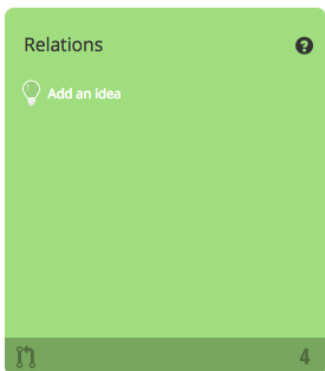
Introduction:

> Next to 'micro' impacts, potential **'macro'** impacts need to be considered. These impacts surpass the level of an individual's everyday life and pertain to collective, social structures instead. For instance, they can be related to political structures or cultural value-systems.

Worldviews

Add an idea

5

Worldviews:

> How might people's worldviews be affected by your product or service? Their ideas about consumption, religion, work, etc.?

Group Conflicts

Add an idea

6

Social conflicts:

> How might group conflict arise or be affected by your product or service? Could it disciminate between people, put them out of work, etc.?

The Ethics Canvas

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Introduction:

> Some ethical impacts are not directly related to the human world, but rather concern the non-human aspects of our world that indirectly impact our lives. These are generally negative side-effects of the design and production process of a product or service.

Product or Service Failure	❷
💡 Add an idea	
⚠	7

> What are potential negative impact of your product or service failing to operate or to be used as intended?

> What happens with technical errors, security failures, etc.?

Problematic Use of Resources	❷
💡 Add an idea	
📈	8
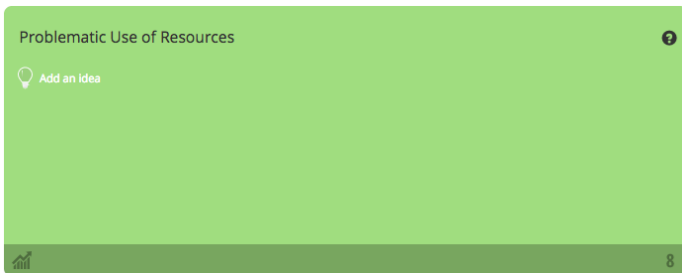
> What are potential negative impacts of the consumption of resources relating to your project?

> What happens with its use of energy, personal data, etc.?

The Ethics Canvas

<u>Third stage:</u> Discussing how to address ethical impacts

What can we do?   ❓

💡 Add an idea

⚖   9

Introduction:

> Thirdly, once the potential ethical impacts have been identified, it's time to discuss possible way to address them. To start, you are asked to make a selection of the most important ethical impacts, after which you can discuss how to deal with these by changing your product or service design, changing your organisational structure or propose policy changes

> What are the most important ethical impacts you found?

> How can you address these by changing your design, organisation, or by proposing broader changes?

Wrapping up:
You have finished your Ethics Canvas!

You will have gained a better understanding of the potential ethical impacts of your work and some first ways to address these.

This is only the first step in the process, so take the Ethics Canvas and start working!

The Ethics Canvas

Ethics Canvas
Manual

This booklet contains the Ethics Canvas manual. The Ethics Canvas is a collaborative tool for capturing ethical impacts of technologies in research and innovation settings. It can be used in brainstorm sessions as a printed canvas and as an online, collarobative tool on www.ethicscanvas.org.