



Engaging Content
Engaging People

The Ethics Canvas

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Introduction

- **Integration of Ethics in Research & Innovation (R&I) settings is underdeveloped** and often restricted to:
 - Academia: ethics clearance
 - Industry: meet legal requirements
- Growing impacts that technological innovations have on our society bring along increasing importance to reflect on **ethical implications**
- Increasing need for research and innovation teams to articulate and reflect their ethical values during the **design of applications**
- **Reputational concerns** are rising at an organisational level



- **Ethic Canvas** is a **new methodology** for identifying, evaluating and resolving **ethical impacts** during **R&I** stages:
 - Formation of knowledge and concepts
 - Design of the technology
 - Prototyping and testing
 - Integration of R&I outcomes into society
- **Foster ethically informed technology design** by engaging R&I teams with the ethical impacts
- **Collaborative brainstorming tool** with two aims:
 - Help teams identify, discuss and articulate possible ethical impacts
 - Bring about *pivots* in the design



Why Should we be Concerned with Ethics?

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- Because new technologies have a **profound impact** on the way we live, on the **relations we have**, on the **political processes we engage in**.
- For your application innovation?
 - First: because it is good for the image of your business (instrumental goal)
 - Second: because it actually improves the service you provide (substantive goal)
 - Third: because it is the *good* thing to do, it contributes to your idea of a better society and being a good person (normative goal)



- The neutrality thesis: technologies are *instruments* that we can use to attain our own goals.
 - “People kill people”
- The determinism thesis: technologies *dictate* everything we do, they determine who we are.
 - “Guns kill people”
- The co-shaping thesis: technologies and humans together “construct” our social world.
 - “Gun-men kill people”



- Changes in individual **behaviour**
- Relationships between **individuals**
- Relationships between **collective actors**
- **Relationships** *between* individuals and collectives
- Impact in the **public worldview**
- Impact of technology **failure**
- Impacts on **resource consumption** and the **environment**



Examples

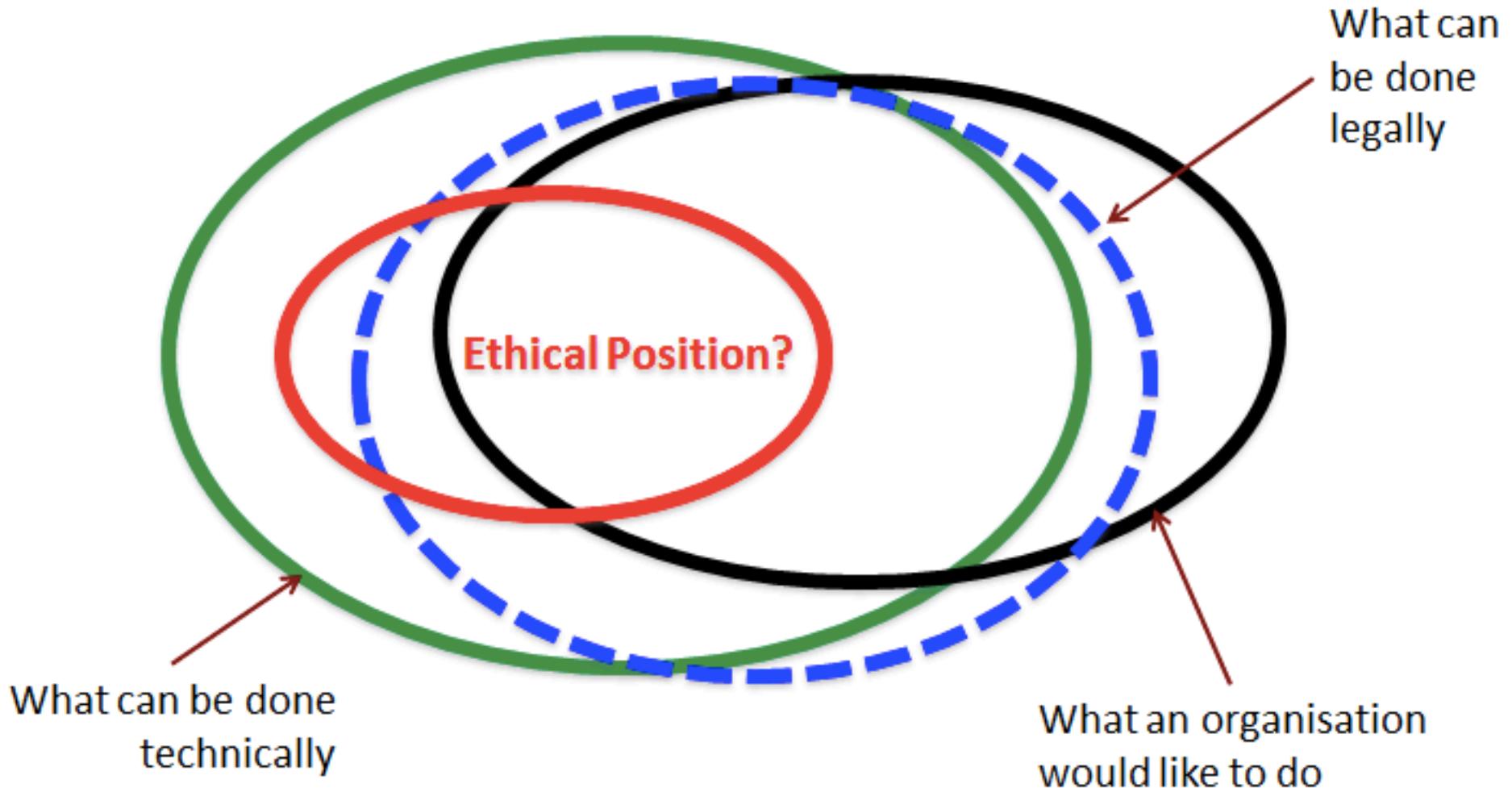


Examples



Ethics in Technology Research and Innovation

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- Levels of practising ethics on responsible R&I (Brey, 2000):
 - ***Disclosure:*** exploration and identification of ethical impacts
 - ***Theoretical:*** frameworks to evaluate the impacts
 - ***Application:*** moral deliberation to overcome negative impacts
- We aim to address the neglected ***disclosure*** level with a methodology:
 - Keep pace with **volume and speed** of innovation
 - **Accessible** to non-ethicist
 - R&I teams have an important perspective
 - R&I teams position to implement pivot to mitigate negative impact
 - Enabling a **collaborative** process



- Making ethics part of the process of research and innovation
- Reflective tool for “Value sensitive design”:
 - What kind of values do we want to inscribe in our application? (our vision of the Good Life)
 - How can we operationalise these values?
 - How can we “design” technologies and their applications accordingly?
- “Narrative” approach:
 - Involving the innovator (you!)
 - Assumption: we recognise ethical problems by talking about them in a creative way – “creating narratives”

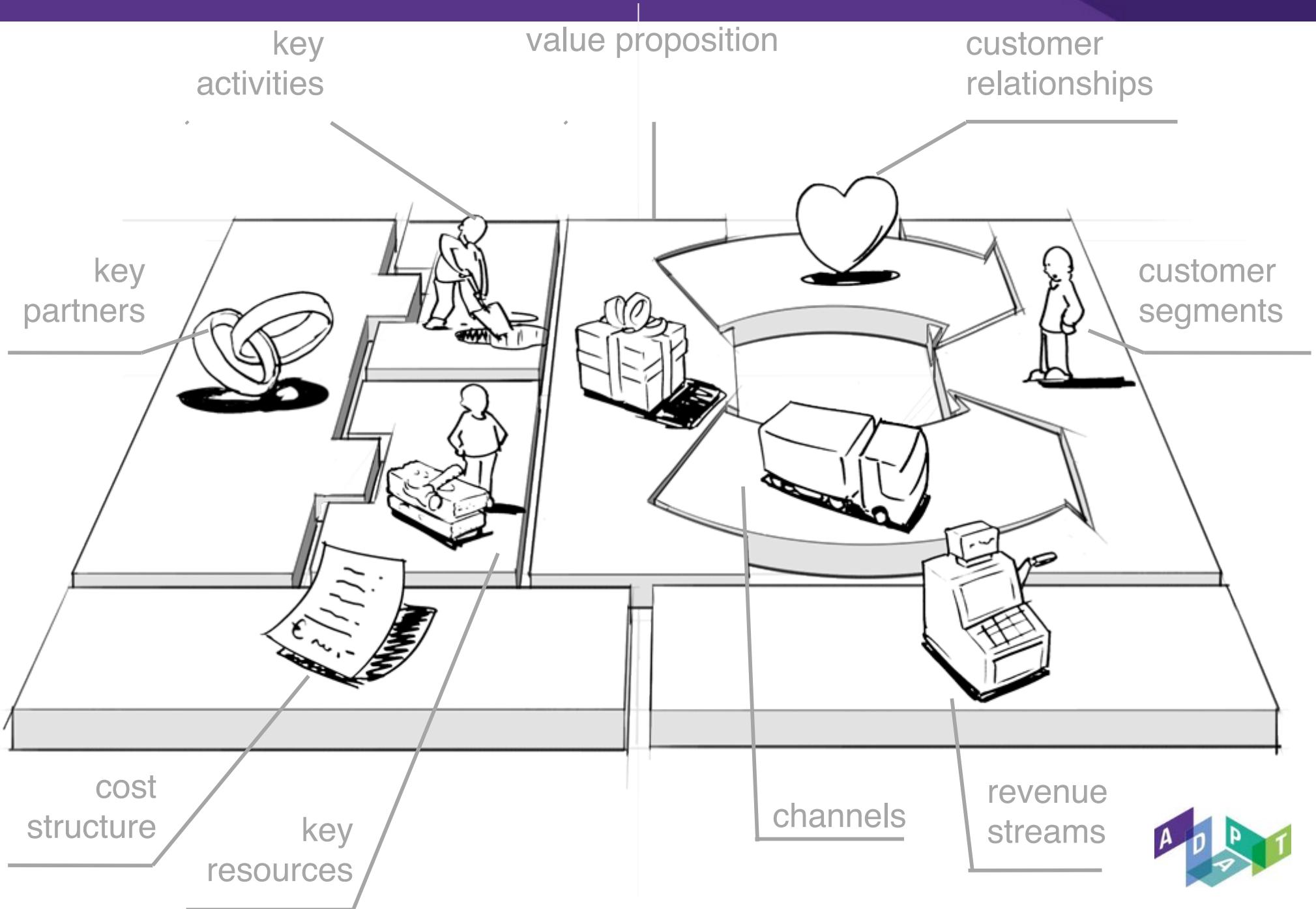


- ***Business Model Canvas*** (BMC) is a brainstorming tool that analyses how business value is created, delivered and captured
- Developed by Osterwalder & Pigneur, 2010.
- Open Source (Creative Commons) – strategyzer.com
- Nine building blocks describing business in a holistic manner
- Printed canvas and online versions available
- Fulfils our two aims:
 - Highly **accessible** to people without specialised knowledge
 - Allows participants to engage in **collaborative** reflection



Business Model Canvas

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BMC: Brainstorming Tool for Business Models

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Private Banking Model

a quick sample

PDCv3



Key Partners Who are our Key Partners other service providers	8 Key Activities What Key Activities do our Value Propositions require platform management marketing product R&D advise	7 Value Propositions What value do we deliver to the customer? transaction management financial products custom-tailored wealth management services	2 Customer Relationships What type of relationships do our Customer Segments expect? key account management intimate personal relationship	4 Customers Segments Who are we creating value for? independent financial advisors private banks Wealthy individual families
1	3	3	3	3

Cost Structure What are the important costs inherent in our business model? HR: private bankers platform management	9 Revenue Streams What value are our customers willing to pay for? transaction fees management & advisory fees	5
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The Ethics Canvas

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- Canvas current version: 1.8
- Web version:
<https://ethicscanvas.org>
- **License: Creative Commons Attribution Non-Commercial 3.0 Unported**



Web Version: Ethics Canvas of Ethics Canvas

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The screenshot shows the Ethics Canvas web interface with a 3x3 grid of colored boxes for adding ideas. Each box contains a placeholder text, an 'Add an idea' button, and a question mark icon.

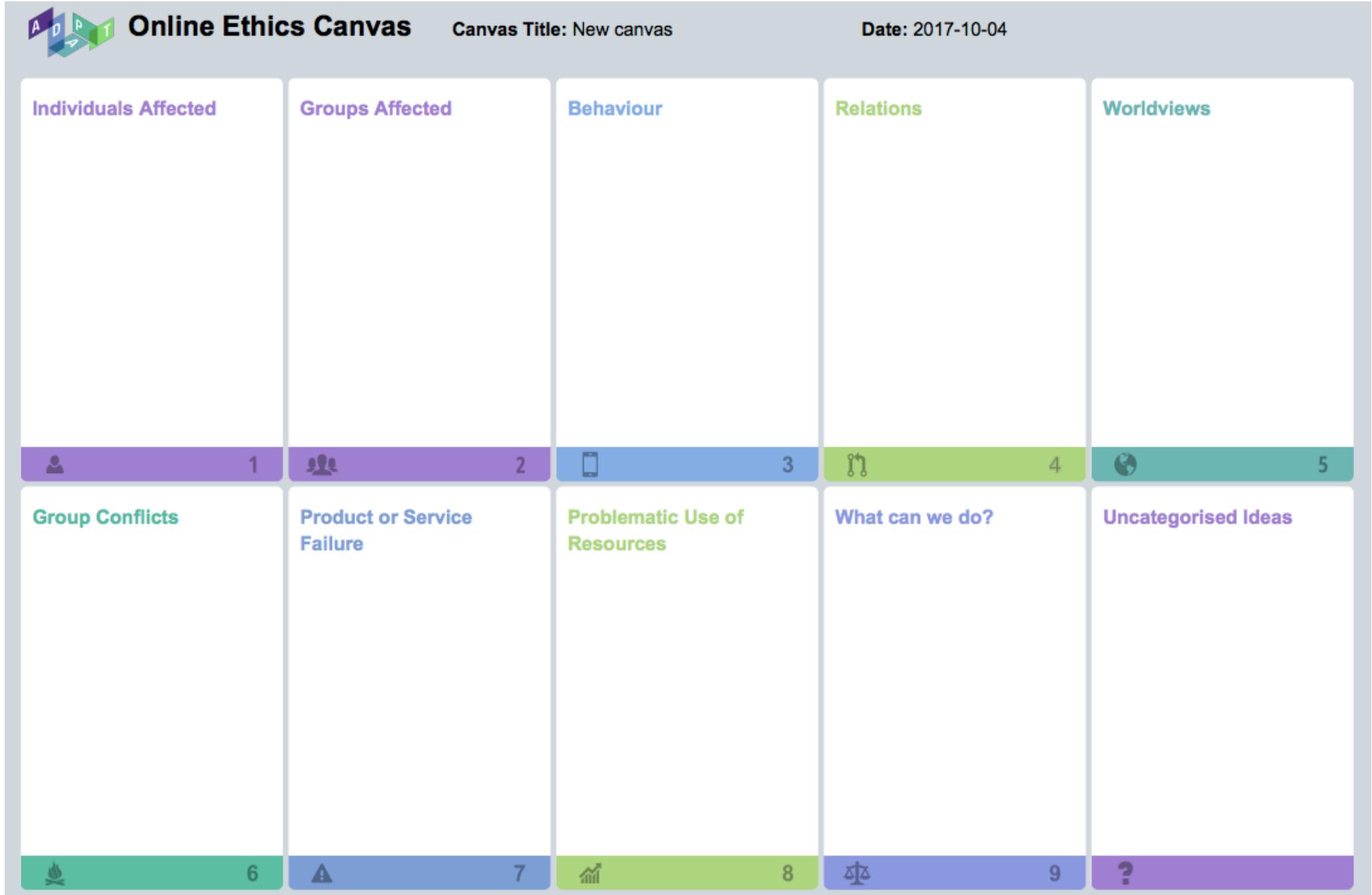
Individuals Affected	Behaviour	What can we do?	Worldviews	Groups Affected
1	3	9	5	6
Product or Service Failure	Relations	Problematic Use of Resources	7	8

Below the grid, there are two additional sections:

- Product or Service Failure**: A blue section with a warning icon (triangle) at the bottom left.
- Problematic Use of Resources**: A green section with a chart icon at the bottom left.

Suggested Ordering of Elements

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WhatsApp Example

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Online Ethics Canvas				
Canvas Title: Whatsapp example2 Date: 2017-10-04				
Individuals Affected	Groups Affected	Behaviour	Relations	Worldviews
<ul style="list-style-type: none">non usercompany employeesChildren	<ul style="list-style-type: none">Organisations with mobile/distributed workforcesTelecom firms facing loss of SMS incomeAdvertisers seeking access to users personal phone contact list	<ul style="list-style-type: none">More reliant on smart phone and data servicesMessaging morePerceive others as being more available 24/7	<ul style="list-style-type: none">users seek less face to face contactNon users excluded	<ul style="list-style-type: none">personal phone contacts no longer regarded as privateconcerns with loss of location privacy
 1	 2	 3	 4	 5
Group Conflicts	Product or Service Failure	Problematic Use of Resources	What can we do?	Uncategorised Ideas
<ul style="list-style-type: none">New channel for cyberbullyingconflict between employees and employers messages outside work hours	<ul style="list-style-type: none">loss of critical communication channel if service failsbreach of phone contact list data privacy	<ul style="list-style-type: none">loss of control over phone contact listindividual attention diverted from social surrounding to smartphone	<ul style="list-style-type: none">transparency and control over sharing and use of phone contact list	
 6	 7	 8	 9	

WhatsApp Example: Impact on Individuals

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The diagram illustrates the impact of WhatsApp on individuals through three main categories:

- Individuals Affected:** This category includes "non user", "company employees", and "Children".
- Relations:** This category includes "users seek less face to face contact" and "Non users excluded".
- Behaviour:** This category includes "More reliant on smart phone and data services", "Messaging more", and "Perceive others as being more available 24/7".

Each category has associated icons and navigation controls (e.g., speech bubble, list, arrows, close).

Bottom right corner: ADAPT logo.

Page number: 4

Whatsapp example: Impact on Group Behaviour

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Groups Affected

- Organisations with mobile/distributed workforces
- Telecom firms facing loss of SMS income
- Advertisers seeking access to users personal phone contact list

Group Conflicts

- New channel for cyberbullying
- conflict between employees and employers messages outside work hours

Worldviews

- personal phone contacts no longer regarded as private
- concerns with loss of location privacy

Icons for editing and managing ideas are present in each section.

Tag selected term Add an idea

Tag selected term Add an idea

5

WhatsApp Example: Service Failures & Use of Resources

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Product or Service Failure



loss of critical communication channel if service fails



breach of phone contact list data privacy



Tag selected term

Add an idea



Problematic Use of Resources

loss of control over phone contact list



individual attention diverted from social surrounding to smartphone

WhatApp Example: Input to Design Pivots

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What can we do? ?

transparency and control over sharing and use of phone contact list

Comment icon, List icon, Up arrow, Down arrow, Close icon

Tag selected term

Add an idea



- We can use the Ethics Canvas as tool for **capture and reflection of ethical implications** on R&I settings
- We promote a **reflective, unmediated, easy-to-use** and **self-service** approach to the analysis of ethical issues by researches / developers
- We applied an **iterative, usability-driven** approach to the design of the ethics canvas
- We tested it in classroom settings with **promising results**
- We made it **available to the community**: ethicscanvas.org



The Team

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A black and white portrait of a woman with long dark hair, wearing a textured top.

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A black and white portrait of a man with curly hair and a beard, wearing a white t-shirt.

Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin



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Thanks for your attention!

Any questions or feedback?

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ONLINE
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Brainstorm in a group about the ethical implications of your project and represent them in a canvas.



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