

Different for everyone

Traditional guideline for practice

Comes with consciousness or mindsets being formed

Maybe some ethical principles can be adopted as law?

Informal in nature

Ethics is learned by socialisation

What a person should do

Influence Mindset

Behavioural change

laws aren't all about protection, e.g. I pay a fine if I overstay in a parking lot. It's about order and structure for society more.

Defined by government

Law

Must do

Law is defined by institutions or government

Rules

compliance is not an option. stiff consequences for non compliance

Laws are mostly laid down by Governments

Need to be adhered too even if it does not make sense to some

Ethics also has a cultural overtone to it.

Subjective

May not have adequate redressal for grievances, unlike what's lawful.

Nuance

Prescribed obligation

Violence induces formal punishment

Universally accepted

ethics is more concerned with morals & protection from harm- not necessarily something you have to do (unless it's encompassed in a law)

A result of societal influence

needs an institution to monitor it

Will always have exceptions to the application of ethics.

Consistent (mostly)

What is right/not

Morals

self driven

can sometimes be seen as guiding principles

Could be flexible on how it can be used as per the local context

Cultural influence is strong

Incentives and deterrents.

May be implemented by an interested group with self-interest rather than for the good of the whole

Can be changed (sometimes quickly)

enforcable

enforced by external measures

can be used to prosecute those who don't adhere

The cases

Case 1: A not-for-profit organisation would like to use generative AI to increase productivity and help with external communications including blog posts and advertisements. The AI tool is commercially available and has been trained on 'the internet' and 'chat protocols' – though more specific information is not available; the cut-off date for training data is within the last calendar year.

Case 2: A not-for-profit organisation is working in a developing country with an authoritarian government which is currently a stable regime. The agriculture sector is under pressure from climate change so the government is streamlining subsidies to boost productivity and ensure stable food supplies. All organisations working with farmers have been asked to submit data on every smallholder to a national database. The organisation is considering which data to gather on farmers and what data could be shared openly or with the government.

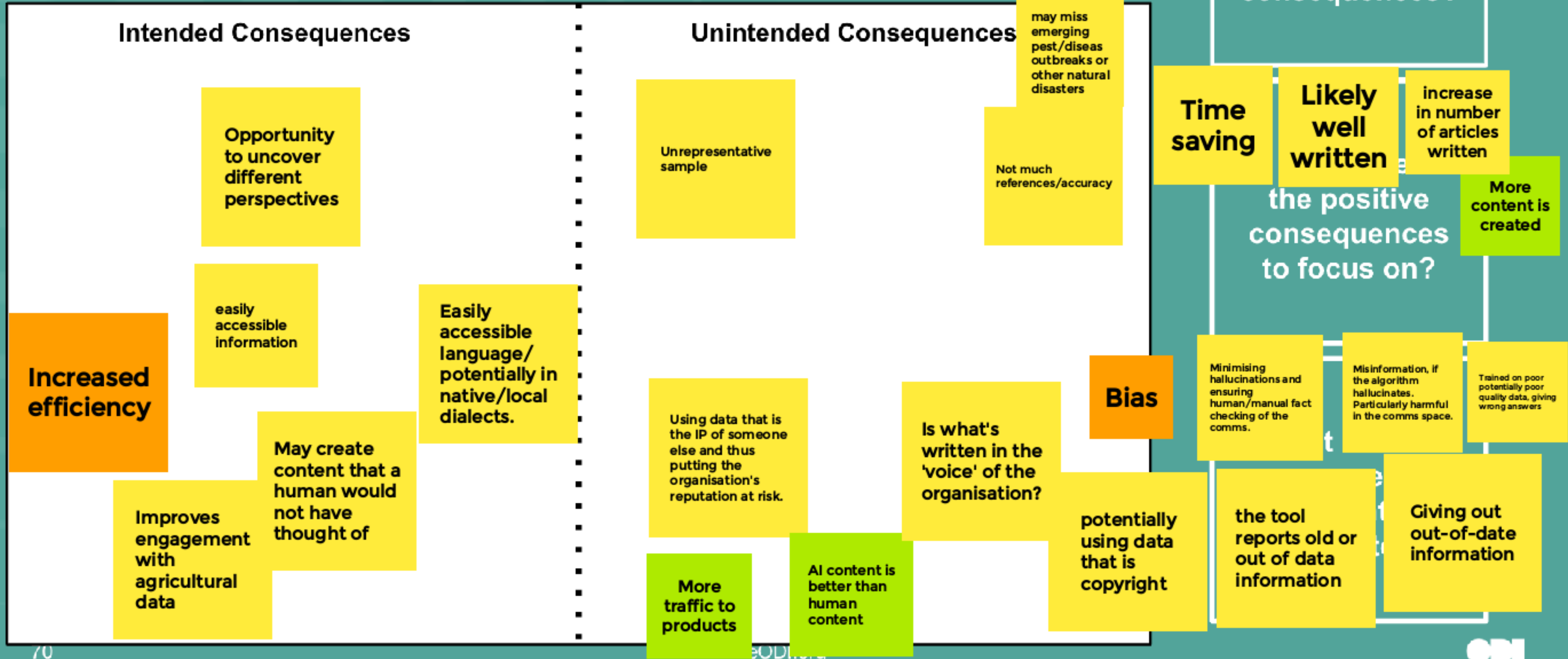
Case 3: A not-for-profit organisation wants to establish a database of rare plant types. The purpose is to ensure the genetic variability of crops is safeguarded, boosting resilience of global food supplies in the face of climate change and other challenges. Farmers are asked to submit seeds to the database; the genomes of the plants will then be sequenced and shared openly.

What are the intended and unintended consequences?

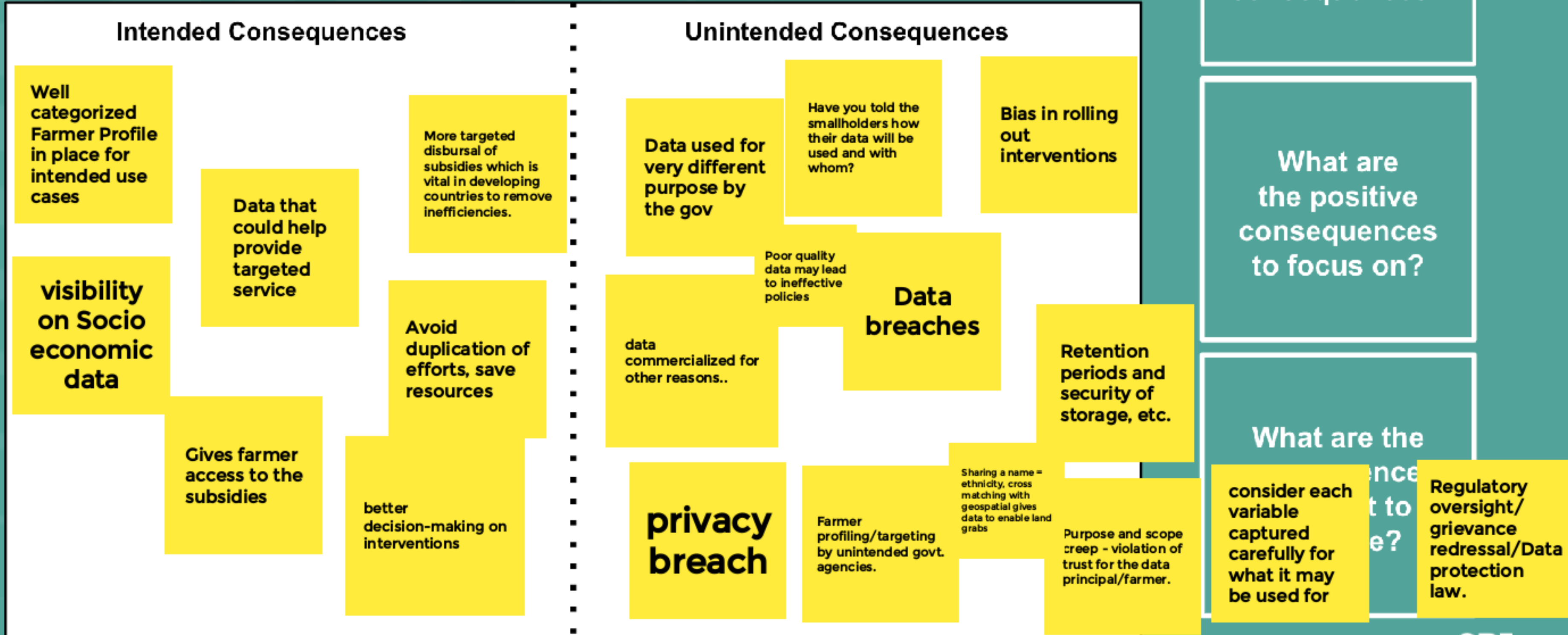
What are the positive consequences to focus on?

What are the consequences we want to mitigate?

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Intended Consequences	Unintended Consequences

What are the intended and unintended consequences?

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Data

Data Sources

Remember: describe your project's key data sources, whether you're collecting data yourself or accessing via third parties.

Is any personal data involved, or data that is otherwise sensitive?

Rights around data sources

Where did you get the data from? Is it produced by an organisation or collected directly from individuals?

Was the data collected for this project or for another purpose? Do you have permission to use this data or another basis on which you're allowed to use it? What ongoing rights will the data source have?

Limitations in data sources

Are there limitations that could influence your project's outcomes?

Consider:

- > bias in data collection, inclusion/exclusion, analysis, algorithms
- > gaps or omissions in data
- > provenance and data quality
- > other issues affecting decisions, such as team composition

Ethical and legislative context

What existing ethical codes apply to your sector or project? What regulations, policies, or other requirements shape how you use data? What requirements do they introduce?

Consider the role of law, human rights, data protection, IP and database rights, and discrimination laws, and data sharing, policies, regulation and ethics codes/frameworks specific to sectors (eg health, employment, location).

Ongoing implementation

- Are you routinely building in thoughts, ideas and considerations of people affected by your project? How?
- What information or training might be needed to help people understand data issues?
- Are systems, processes and resources available for responding to data issues that arise in the long term?

Process

Impact

Your reasons for using data

What is your primary purpose for collecting and using data in this project?

What are your main use cases? What is your business model?

Are you making things better for society? How and for whom?

Are you replacing another product or service as a result of this project?

Positive effects on people

Which individuals, groups, demographics or organisations will be positively affected by this project? How?

How are you measuring and communicating positive impact? How could you increase it?

Negative effects on people

Who could be negatively affected by this project?

Could the way that data is collected, used or shared cause harm or expose individuals to risk of being re-identified?

Could it be used to target, profile or prejudice people, or unfairly restrict access (eg exclusive arrangements)?

How are limitations and risks communicated to people?

Minimising negative impact

What steps can you take to minimise harm?

How could you reduce any limitations in your data sources? How are you keeping personal and other sensitive information secure?

How are you measuring, reporting and acting on potential negative impacts of your project?

What benefits will these actions bring to your project?

Reviews and iterations

- How will ongoing data ethics issues be measured, monitored, discussed and acted on?
- How often will your responses to this canvas be reviewed or updated? When?

Engagement

Engaging with people

How can people engage with you about the project?

How can people correct information, appeal or request changes to the product/service? To what extent?

Are appeal mechanisms reasonable and well understood?

Communicating your purpose

Do people understand your purpose - especially people whom the data is about or who are impacted by its use?

How have you been communicating your purpose? Has this communication been clear?

How are you ensuring more vulnerable individuals or groups understand?

Openness and transparency

How open can you be about this project? Could you publish your methodology, metadata, datasets, code or impact measurements?

Can you ask peers for feedback on the project? How will you communicate it internally?

Will you publish your actions and answers to this canvas openly?

Sharing data with others

Are you going to be sharing data with other organisations? If so, who?

Are you planning to publish any of the data? Under what conditions?

Your actions

- What action will you take before moving forward with this project?
- Will you openly publish your actions and answers to this canvas?

The case

A major global agribusiness firm has developed an AI system designed to maximise the productivity of agricultural land. The system uses openly available datasets, including satellite data and weather and climate records; it also incorporates tests and data collected from locations on farms where the system is employed, such as soil test data and historical crop yields. Farmers who subscribe to the service can integrate feedback from the AI system with farm equipment to adjust seed-sowing density, irrigation and fertiliser applications.

What are the intended and unintended consequences?

What are the positive consequences to focus on?

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Data

- Data sources
- Rights around data
- Limitations in data
- Ethical/legislative context

What personal data is being collected and used? How will it be stored? Retention period?

How reliable/accurate is the data?

Could the data be used against farmers, etc?

Can people be identified from the location data?

Who has what data - inventoring the data

what are the licensing requirements for the open access data- often if these are used for commercial gain a fee needs to be paid

does a farmer become tied to that one agribusiness company, having to buy expensive machinery to maintain the access to data?

What bias might there be in the AI training data?

How accurate is farmer self-reported data?

Should farmers be paid for allowing their data to be used?

Interoperability between secondary data and primary data.

Do farmers have data autonomy? Can they withdraw from the programme and have their personal data deleted?

license attached to the data

how has the AI been trained- on what type of agricultural landscape? does it take into account different farming practices/sizes?

permission to access/reuse data

Impact

- Reasons for using data
- Positive effects
- Negative effects
- Minimising negative impact

Potential for data hoarding by a singular entity.

Farmers without access to modern equipment are left behind

what sort of data governance structures exist/should be put in place?

Quick advisory services for farmers, to improve productivity (assuming high accuracy in the recommendations of the AI system).

Could data be used against people?

Potential negative impact: Are there onward implications of advice given for surrounding landscapes/water catchments etc ie nitrogen use

leads to optimization of resource use for those in the training data area, but unfairly favors those in the training data area

Guidelines/licenses will need to be clearly stated

Potential for lock in to proprietary systems, machinery, seed accessions

Engagement

- Engaging with people (two-way?)
- Communicating your purpose
- Openness & transparency
- Sharing data with others



Process & Plan

- Ongoing implementation
- Reviews & iterations - monitoring/updating?
- Your actions before moving forward and during the project's lifetime

**Data
management
Plan**

**Data
Security
Policies**

**Data
Governance
Frameworks**

Monitoring of
uptake of system -
will we identify
inequalities? Plan to
redress these if
problems are
identified?

**Data Policies
influenced by inputs
from community
and data
management
principles**

The case

A private company has been commissioned to develop an AI tool that identifies illegal deforestation in the supply chain for a global chocolate brand. The tool relies on satellite imagery and data supplied by the customer, which includes information on individual farms such as location and reports by visiting agronomists. The aim is to comply with the UK's Environment Act, requiring due diligence from businesses to ensure their commodities are produced in line with relevant local deforestation laws.

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