

Part I: Planning and designing a model that serves the public good

Purpose and Context

- After considering the purpose and context of this work, the chosen approach is appropriate and warranted.

Ethical considerations

- The provenance of data is known (how it was collected, why, where, when and from whom).
- Data and model bias are known and have been communicated sufficiently for others to understand them as well.
- A diverse group of individuals have been included in the design and creation of the model.
- The use of the model has clear benefits for users and serves the public good.
- For models using personal data. The data subject's identity (whether person or organisation) is protected, information is kept confidential and secure, and the issue of consent is considered appropriately. No data subject should be unfairly disadvantaged by the model.
- The risks and limits of changes are considered and there is sufficient human oversight so that methods employed are consistent with recognised standards of integrity and quality.
- The model and data used in the model are consistent with legal requirements such as Data Protection Legislation, the Human Rights Act 1998, the Statistics Registration and Service Act 2007 and the common law duty of confidence.

Professional capability

- If the model is to be developed by the team, the team has the knowledge and skills needed to develop the model.
- Regardless of who develops the model, the team has the knowledge and skills needed to manage and maintain the model.
- The team has the knowledge and skills needed to successfully communicate the model and its outputs.

Innovation and Improvement

- The benefits of building capability beyond the current work have been considered.
- The team has access to continuous development and continuous learning.

Transparent processes and management

- The amount of resource required to implement the chosen techniques has been estimated.
- The required resource can be allocated to meet the project aims.
- Any reprioritization required to meet this resource has been communicated.

Efficiency and proportionality

- The benefit of the model outweighs the investment in resources to set it up.
- The impact of this change in methodology on other statistics that rely on this model has been assessed and communicated.

Independent decision making and leadership (model accountability)

- A clear chain of model accountability has been established with clear roles and responsibilities
 - The chosen responsible, senior leader knows that they are accountable for the development and outcome of the model. This includes any harms caused by the decisions made by the model.
 - The team has sufficient skills to manage the ongoing monitoring and development of the model.
- or**
- The team has access to the necessary training to ensure they can manage and maintain the model once it is handed over from an external partner.

Part II: Developing and using a model that serves the public good

Relevance to users

- A range of users have been engaged with and the model output meets the requirements of their use case.
- How parameters in the model were chosen have been explained to users so that they understand their relevance.
- Any developments which have been paused because of introducing changes have been communicated to users.

Accessibility

- The model code, data (where possible), and documentation have been made open and accessible to all.

Clarity and insight

- Ongoing engagement with users has been planned to ensure the model remains fit for purpose.
- The documentation is sufficient to allow users to understand the model and statistics or data produced.

Explanation and interpretation

- It is known how the model is reaching its outcome or decision, and this result is reproducible.
- The users' need for model explainability are known.
- I understand that failure to explain the model may lead to misuse or misinterpretation of the model.
- If the model cannot be fully explained, it has been explained as much as possible and the reasons why it cannot be entirely explained have been communicated.
- The model is interpretable by all.
- The users can understand the model sufficiently so that they know what changes to inputs might make on outputs.