

EKITIA'S ETHICAL CHARTER FOR DATA USAGE

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INTRODUCTION

About us

Ekitia was created to facilitate the sharing and mutualisation of data between different actors, whether public or private, to give them the opportunity to develop new and relevant uses in a framework of ethical and sovereign trust. This framework is based on the present Charter, which is the result of collaborative work carried out under the supervision of a research laboratory and discussed with all Ekitia members.

The Charter applies to the activities carried out by Ekitia members, but is also designed to be used by all interested parties in the data economy, whether they work at national, European or international level.

Why this Charter?

The development of the data economy is full of promises. If these promises are to be fulfilled, an ethical framework must be established, without which infringements of privacy and of the interests of individuals and society could multiply, with the risk of a rejection by citizens of the technologies and services associated with data processing and communication.

This Charter defines useful ethical principles for all types of data use. On one hand, it concerns both uses of personal data and uses of non-personal data² and, on the other hand, its principles concern all activity areas.

² For example economic data, meteorological data, geographical data, mobility data, energy data, environmental data, infrastructure data, etc.



¹More precisely, by the BIOETHICS research team (CERPOP, UMR 1295 (Toulouse III University - INSERM))

While it applies primarily to data shared or mutualised between signatories, it can also apply to any data used in the context of a responsible innovation approach (hereafter, these two types of data will be grouped together under the term "the Data").

Released in April 2020, Ekitia's ambition was to involve experts from various sectors and citizens in the development of its final version. Since then, it has been the subject of co-construction workshops with sectoral experts (health, mobility, environment, energy, employment and training, agriculture) and will be the subject of citizen co-construction workshops.

The present version integrates the results of the consultation of the sectoral experts and a subsequent revision will aim to integrate the feedback from citizens. At the same time, a co-construction form is also available on our website (www. ekitia.fr) to allow anyone interested to send us their proposals. In general, the Charter will be updated regularly to adapt to technological, legal and social developments

This Charter has three goals:

- · To develop a responsible economy, offering innovative services and contributing to the general interest;
- \cdot To establish a framework of ethical and sovereign trust to govern data use;
- To support and organise the digital transition in a way that is compatible with the ecological transition.

Finally, this Charter is in accordance with the European Union's strategy on data and Al systems, i.e. to develop a single market within which these elements could circulate freely, provided that they comply with the European Union's fundamental rights and values.



Nature of the Charte

Due to its ethical nature, this Charter is not legally binding, it defines the conditions under which the Signatories agree to share their data.

Concerning the specific case of personal data, the framework of Regulation n°2016/679 on the protection of individuals with regard to the processing of personal data and on the free movement of such data, of 27 April 2016 (hereinafter "RGPD") and, in France, the framework laid down by the French Data Protection Act (hereinafter "LIL", adopted in 1978 and revised several times since then, the latest version of which came into force on 1 June 2019), are naturally binding on all Signatories. In addition, this Charter is intended to set out ethical principles to regulate the use of all types of data. In any case, the principles it sets out cannot be interpreted in such a way as to reduce the scope, or even cancel the application, of the legal provisions applicable to the Signatories.

The values embodied by the Charter

The ethical principles contained in this Charter reflect three core values:

- Trust, to ensure data usages that are respectful of people and society;
- Responsible Innovation, to promote the creation of innovative services in the interest of citizens and in compliance with the Sustainable Development Goals set by the United Nations ³;
- Development of an Equitable Data Economy, allowing an equitable distribution of value between each party having substantially contributed to the achievement of a shared-data project

³ Pour en savoir plus à propos des 17 Objectifs de Développement Durable définis par les Nations Unies à l'horizon 2030 : https://www.un.org/sustainabledevelopment/fr/objectifs-de-developpement-durable/)



The principles set out in the Charter are not ranked in order of importance: they form of a co-herent whole that should be interpreted in a comprehensive and constructive manner.

PREAMBLE

We, Signatories of this Charter

Deeply committed to the strict respect of the rights and fundamental freedoms of the citizen as set out in the Declaration of Human Rights of 1789, the Preamble of the Constitution of 1946, the Charter of the Environment of 2004, the European Convention on Human Rights, of 1950 and the Charter of Fundamental Rights of the European Union of 2000,

Determined to explore all the possibilities offered by the legal framework to carry out innova-tive projects in a trustworthy framework, like the re-use of personal data for archival purposes in the public interest, for scientific or historical research or for statistical purposes,

Aware that the current framework does not provide specific guarantees for data sharing actors, and that a thriving data economy can only prosper in an area of trust in which ethical principles are respected,

Inspired by the innovative method used to establish the « Montreal's Declaration for Responsi-ble AI", consisting in a citizens co-construction process that aims to take into consideration the individuals point of view regarding to the conditions that must be fulfilled to allow the ethical development of data economy,



Convinced,

- that data sharing is a powerful lever in order to achieve social progresses and to ensure a better quality of life, particularly in terms of health, ecology and culture,
- that the uses of shared-data have to serve the interests of humanity, for instance by developing useful innovative services, by satisfying its well-being aspirations and by addressing major global challenges such as climate change or epidemics,
- that ensuring a high level of data protection is an essential prerequisite for the use of shared-data,

Conscious,

- that citizens express serious concerns about the capacity of both public authorities and eco-nomic and social operators to manage data in an responsible way,
- that the processing and the sharing of data raises fundamental ethical questions and entails high social risks,
- that, to our knowledge, there is no ethical charter or declaration on data science with a similar scope to those that exist for Al, Animated by the ambition to remove all unjustified barriers to data sharing, in particular the lack of a trustworthy framework and of an appropriate business model's,

Resolved,

- to provide a legal and ethical framework that facilitates data sharing, pursuing the aim of de-veloping a data economy serving everyone's sake,
- to set the foundations for a social pact of trust between citizens and data science.

Proclaim the principles set out below as necessary for the growth of an ethical data economy:



THE CHARTER

PRINCIPLE DATA SCIENCE & SOCIETY

1.1. BENEFICENCE

The principle of beneficence and its corollary, the principle of do no harm, require Signatories to include objectives of collective welfare and of sustainability in the conduct of their activities.

That means that the activities of the Signatories must be oriented towards improving the quality of daily lives of both current and future generations.

Thus, Signatories should use the data in such a way to contribute to the achievement of the Sustainable Development Goals adopted by the 193 member states of the United Nations.

In addition, the Signatories undertake to evaluate the impact of their projects in accordance with their objectives (see principle 5.3).

Finally, the Signatories promote the availability of data for general interest purposes, under the conditions set out in this Charter and with respect for the fundamental rights and freedoms prac-tised in a democratic society.

1.2. SUSTAINABLE INNOVATION

The beneficial conduct of Signatories' activities leads them to develop sustainable innovations. Thus, any technological, social or organizational disruption project carried out by Signatories thanks to data is implemented using processes that respect both people and the environment. With this in mind, Signatories pay particular attention to their ecological footprint, with a view to reducing it.



To this end, they respect the principle of digital sobriety (which implies processing only the data strictly necessary and preferring the most sober algorithms to achieve the project's purpose), prefer environmentally friendly data centers to store data and are cautious about the rebound-effect of their innovations.

1.3. SOLIDARITY, DIVERSITY & NON-DISCRIMINATION

Signatories shall ensure that their projects based on data do not create or exacerbate social ine-qualities. In accordance with the principle of non-discrimination, they shall also ensure that such projects do not create, neither by purpose or by effect, a discrimination against an individual or a small group of individuals.

To this end, they shall be attentive to biases that may affect data (see principle 3.1) and, where appropriate, to biases that may affect algorithmic systems used to process such data.

At the same time, Signatories will progressively develop strategies to overcome this issue in a sustainable manner, in particular by promoting multidisciplinarity in their project teams.

Signatories are also vigilant on the « digital divide » issue: they seek to reduce as much as pos-sible the disparities regarding people's digital equipment and digital literacy. Also, they ensure that the most significant political and social digital devices are widely accessible.

1.4. HUMAN FACTOR

The Signatories take into account the fact that any project is part of a humanised system, composed of competent agents, in which technology is only a support for innovation.



From design stage, their projects must be organised in the most multidisciplinary way possible, in other words, by mobilising all the skills needed to exploit the data and analyse the issues linked to it, at both human and technological levels.

The projects developed on the basis of shared-data are part of a logic of responsibility, of human control of innovation and of guaranteeing that any decision-making based on the use of technology is carried out by human beings who master the technological tools and their risks.

In this sense, innovation must contribute to preserving the autonomy of human action and must not annihilate the possibility of interacting with a competent human.



2.1. RESPECT & REINFORCEMENT OF INDIVIDUAL AUTONOMY

When processing personal data, Signatories consider the respect of individual autonomy as a central element.

In this regard, when personal data is processed on the basis of the consent of the data subject concerned, Signatories shall implement best practices to provide an information that truly enables these persons to exercise their free will, in a clear, specific and unambiguous manner.

They pay particular attention to the modalities of collecting consent from vulnerable persons, in particular minors, elderly persons and dependent persons.



The Signatories promote innovations that facilitate the exercise of the individual rights of persons whose data is processed. This concerns, in particular, the right to object to the processing of their data, the right to have their data erased, the right to access their data and the right to data portability.

When doing so, they shall take into account the particularities related to the diversity of users, their constraints and capacities, as well as their opinions.

2.2. PROTECTION OF PERSONAL DATA & PRIVACY

Signatories shall comply with the applicable rules on privacy and personal data protection. In addition, concerning personal data process for archival purposes in the public interest, for scien-tific or historical research or for statistical purposes, all Charter's principles set out the appro-priate guarantees for the respect of the rights of individuals.

Also, the results of such data pro-cessing shall not provide any information enabling to retrieve data related to an individual or a small group of individuals.

Signatories shall pay particular attention to ensuring that the privacy of individuals is protected during the all "life cycle" of data, in particular through the careful application of the following principles: data minimization, data protection by design and data protection by default.

Signatories are aware that data sharing (even the sharing of anonymized data) considerably in-creases the risk of reidentification of individuals at the end of their processing. In this regard, they undertake to apply, on a case-by-case basis, the anonymization techniques they consider most appropriate to optimize the protection of their privacy.



3.1. DATA QUALITY

Data quality is essential because it directly affects the quality of the data processing and its results.

Therefore, Signatories will take all measures they deem necessary to optimize shared-data quality; for instance, by ensuring that the data provided are relevant for the intended use and are representative of the project target.

Therefore, data quality requires Signatories to investigate and eliminate, as much as possible, bias affecting the data sets they intend to share. In addition, they endeavour to share data in interoperable formats.

3.2. DATA & DATA CENTERS SECURITY

In order to protect data from physical or virtual attacks that could compromise their availability, integrity and confidentiality, the Signatories give preference to data centers located within the European Union and complying with the highest security standards. Their vigilance is increased when they process sensitive personal data⁴ or data related to national public security.

They shall take care to apply cybersecurity measures appropriate to the confidentiality of pro-cessed data within their infrastructure.

The use of third party service providers shall not diminish the capacity for confidential management of such data.

⁴ This includes data revealing racial or ethnic origin, political opinions, religious or philosophical beliefs or trade union membership, genetic data, biometric data, health data or data concerning sex life or sexual orientation.



3.3. ALGORITHMS ROBUSTNESS

Algorithm robustness depends on the reliability and reproducibility of its results. Thus, Signa-tories processing shared-data using an algorithmic system should choose the most robust. In this matter, when the uncertainty of processing results cannot be avoided, they take care to make this clear. As far as statistically possible, they specify the margin of error to be taken into considera-tion.

Concerning algorithmic systems based on machine learning, their robustness also relies on the quality of data sets used to training them. Signatories using these tools to process shared-data are particularly vigilant on this point.

When an algorithmic system is to be used in the context of a decision-making process, the Sig-natories guarantee that the decision will ultimately be taken by a human operator who is informed of the system's capabilities and limitations⁷ (see principle 1.4)



4.1. CLEAR & ACCESSIBLE INFORMATION

In order to build trust, Signatories shall provide clear and accessible information on the method of data collection, where it is stored, the methods used to analyze them and the purposes of such analysis. These informations are provided within the limits of industrial, business, defence and professional secrecy.

⁷ In this sense, a proposal for a European Regulation to regulate the use of Al requires a human guarantee for high-risk systems, while recommending that such a guarantee be put in place for less risky systems (see Europe-an Commission Communication COM(2021)206 of 21 April 2021).



⁵ Reliability assumes that from the same data set entered, the algorithm calculates correct predictions for differ-ent situations.

⁶ Reproducibility assumes that from the same batch of data entered, the algorithm calculates identical predic-tions for identical situations.

Whenever possible, they also provide end-users with the optimal context and the technical or or-ganisational requirements for the use of the tools they are marketing or commissioning

More broadly, the Signatories shall endeavour to provide to citizens, by the means they deem appropriate, clear and accessible information about both advances and risks that may be entailed by data science.

4.2. ALGORYTHMS EXPLAINABILITY

Signatories using algorithms to process data shall provide an intelligible explanation of the result obtained, in particular by pointing out the principles underlying and the criteria determining the « choices » made by these algorithms.

Signatories using classical algorithmic systems to analyze data shall take care to detail the way algorithms are implemented (i.e. detail the rules pre-set by a human operator and then embedded into the system). Signatories using algorithmic systems based on machine learning, which are currently difficult to explain, should at least explain the general logic of their functionalities. These explanations include for instance the data input, the purpose of the analysis of these data, and the data out-put.

To this end, the Signatories are inspired in particular by the transparency obligation to which public actors are subject in some countries when they use algorithmic systems to support indi-vidual decision making that may affect the rights of individuals⁸

Due to the opacity that affects algorithmic systems based on machine learning, and especially those based on deep learning, Signatories intending to use these tools will first have to demonstrate the significant advantage they provide in comparison with a more explainable method of data analysis.

⁸ Decree No. 2017-330 of 14 March 2017 on the rights of persons subject to individual decisions taken on the basis of algorithmic processing.



Finally, when an uncertainty cannot be avoided in the reading of the result, they are careful to indicate this and, as far as statistically possible, to indicate to the end-users the margin of error to be taken into account.

4.3. PROJECTS' AUDITABILITY

Signatories recognize the importance of facilitating the monitoring concerning the compliance of their data activities with the legal framework that applies to them and, as far as possible, with the rules they implement in order to apply this Charter.

In this regard, each step of a project they carry out thanks to data is documented in adequate terms, these documents being intended to provide information or to serve as a basis for control:

- Each project participant shall keep a description of its own data;
- Each participant shall ensure traceability of its data by mechanisms that make possible to list and detail all the transformations it carries out on them;
- If an algorithm system is used to process the shared-data, at least one participant shall keep a document that describes its functionalities;
- Each participant shall document the various impact and risk assessments carried out prior to project implementation (see principle 5.2) and, concerning projects with a high socie-tal impact, shall make these documents publicly available.

In the event that the Signatories decide to subject a project to evaluation, monitoring or audit, they shall favour independent experts.





5.1. EXTENSION OF THE CHARTER BY SPECIFIC RULES

This Charter contains a set of principles reflecting the conditions under which the Signatories agree to mutualise, share and use their data. In order to make them sustainable, these general principles are interpreted taking into account scientific, technological, social and environmental developments.

In order to provide a concrete framework for data processing operations, these principles are translated into a set of more specific rules, taking into account the regulatory particularities of the country or sector of activity concerned.

Finally, in the context of project support, these rules can be implemented organisationally and technologically to ensure that data processing operations comply with the rules and therefore with the ethical principles of the Charter.

In addition, an independent evaluation can also be carried out to verify the effectiveness of this Charter, in particular by using labels such as the FKITIA Label.

5.2. COLLECTIVE LEARNING

Signatories are up to date on data sharing best practices. They produce an annual report Char-ter's implementation, indicating in particular any difficulties encountered in implementing one or more principles.

The Signatories undertake to regularly exchange with EKITIA on the evolu-tion of these good practices and to report any difficulties encountered in the implementation of one or more of the principles of the present Charter.



5.3. RISK ASSESMENT

Signatories shall apply the precautionary principle⁹ from the design stage and throughout the im-plementation of their projects based on data.

They endeavour to assess the risks, direct or indirect, that their projects may pose to their eco-system, i.e. to individuals, society and the environment. In this sense, the risk assessments con-ducted by the Signatories focus on the impact of their projects on the privacy of individuals, on society and on the ecology.

On the basis of the results of risk assessments, Signatories seek to maximize the beneficial ef-fects and minimize the adverse effects of their shared-data projects, at both individual and col-lective scales.

Finally, where possible and appropriate, Signatories test their innovations on a small scale before deploying them.

5.4. CITIZENS & FINAL USERS INCLUSION

Signatories provide citizens tools to develop their digital literacy. In a more targeted way, they involve the future users of the solutions developed in the design and implementation of their projects.

For instance by setting up specific, appropriate and effective means of communication, such as citizen consultations or citizen co-construction processes

5.5. INTEGRITY

Any person involved in a data project scrupulously respect the deontological rules that applies to him or her, and acts in a spirit of intellectual integrity and cooperation.

⁹ The precautionary principle implies that when human activities are likely to result in a morally unacceptable, scientifically plausible but uncertain danger, measures should be taken to avoid or at least reduce this danger



This covers both the aims of the work and the methods used, the management of human resources, including supervision of students, dissemination of knowledge and scientific communication. Above all, Signatories shall refrain from using data for purpose of falsification, plagiarism or unlawful retention of data.

Furthermore, the Signatories undertake to respect a principle of fairness with regard to the pur-pose of the data processing



6.1. ACKNOWLEDGEMENT

When a shared-data project involves the collaboration of several Signatories, each essential con-tribution to the achievement of this project is explicitly acknowledged and made public (within the limits of confidentiality and agreements between collaborators).

These essential contribu-tions include for instance the production and supply of data, the supply of algorithms or the supply of research work for the project (non-exhaustive list).

6.2. EQUITABLE DISTRIBUTION OF VALUE CREATION

Signatories recognize that value creation (economic, social or environmental), should not be captured by one or more dominant players.

They shall develop models, and in particular eco-nomic models, that allow a fair return to each Signatory who provided an essential contribution to a shared-data project.



PRINCIPLE ETHICS & EMERGENCIES

Data science can produce useful knowledge and tools in times of health, environmental or safe-ty crisis. In this context, Charter's principles should continue to apply: they constitute a frame of reference for the use of data in a democratic and accountable environment. Nevertheless, it is possible that emergency leads to a temporary adjustment of these principles. Under any circumstances, the following principles should continue to be fully applied:

- · Proportionality principle: the least intrusive method of processing data should always be preferred to achieve the desired purpose;
- Transparency principle: if personal data are processed without the consent of the indi-viduals, it stays necessary to provide them an accessible information about data processing characteristics (in particular the length of time of data retention and the purposes of the processing);
- · Preservation of privacy principle: if "anonymized" data, which are not covered by the GDPR, are processed in this context, particular attention should be paid to the application of adequate anonymization techniques to prevent any reidentification of individu-als after the end of the crisis period;
- · Principle of lawfulness and risk management: in any case, population monitoring solu-tions should be based on a prior assessment of the data processing impact on the fundamental rights of individuals (including social impact, in order to avoid discrimination) and, if possible, be pre-tested on a small scale before being deployed on a large scale;
- · Accountability principle: risk management decisions and their underlying logic should be documented;



- · Principle of exceptionality: concrete procedures allowing the return to "normal" data processing regimes must be foreseen, paying particular attention to databases containing health-related data and databases created for the purpose of tracking, tracing and profil-ing individuals.
- · Where appropriate, the modalities for reusing the data collected and the tools deployed in an emergency context should be specified.

PRINCIPLE REGULAR REVIEW OF THE CHARTER

This Charter is a dynamic tool: it is not intended to be immutable, but to be regularly updated to keep pace with scientific, technological, social and environmental advances and also with evolutions of the legal framework applicable to digital activities.





For further information or to contact us, please visit our website:



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