



## Final Report Advancing Data Justice Research and Practice<sup>1</sup>

### I. Internal Assessment of guidelines.

#### 1. Guidelines General Comments

We view the guidelines as a tool for reflection in order to support the surveyed groups (policymakers, developers, private entities or affected communities) in understanding the most important elements of **Data Justice** and to encourage the reader to have a different and more critical perspective on the practices of use and treatment of data through the understanding of certain pillars on which the questions are based. While the guidelines present an objective, they do not provide a result after that objective or a recommendation for practices to follow. Instead, they invite the reader to reflect on the topic. In general, one would expect guidelines, approaches, recommendations and best practices. As such, this document is not a guide. Rather, it is an internal exploration activity for organizations, individuals or groups that invites participants to critically question methods.

Concepts of data use in Chile are strongly individualist. Data processing is not considered a collective or community process in the way proposed in the guidelines. There is a lack of familiarity with the term 'data justice' in the disciplines that study the phenomenon of the massive use and treatment of data in the design of public policies or systems development in the private sector. The key concept, **Social Justice**, is associated at least in Chile, with a political progressive discourse on the Chilean Left, which has gradually become more mainstream. Without further exploring the adoption of the term, reflecting on what is just or unjust for someone, who will decide it and how they will do so outside of institutional spheres is always problematic, and in many cases abstract if one does not consider the specific forms of implementation and application of technology in each specific culture and context.

In formal terms, the guidelines have a high number of questions. In some cases, this is overwhelming and presents significant reflexive depth. In some cases, they are redundant, without a specific answer. These documents are written in an academic style that makes it hard to apply them in more practical terms and with practitioners.

In order to apply the guidelines more evenly, the authors should be careful regarding the premises or suppositions that are advanced, sometimes categorically, in the questions

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asked. These often tend to suggest that social, structural and institutional change would lead to a shift in beliefs or values.

## **2. Specific Comments for Policymaker Guidelines:**

The guidelines do not state which policymaker they focus on. It may be a regulator, his or her advisors, influential individuals from industry or the academy, civil society, interest groups, etc. or even judges who determine practical implications, some of them concrete, in their interpretation and application. This is key for understanding and better addressing the set of questions and objectives that are formulated for a type of policymaker who has a strong academic and research background for the purposes of designing certain policies, which is not common, at least in the Chilean context.

The various questions about data justice pillars assume a critical perspective on the practices of the use and treatment of data by public policy designers and makers. These take a different perspective based on each of the pillars, but they may be translated as a whole in order to question current practice and generate awareness of the risks that they can have for groups and not only from an individual perspective.

Notwithstanding the theoretical background of each of these questions and the academic interest that they may have, it is possible to affirm that their density makes this document less compatible, at least in the Chilean context, regarding the characteristics of this group of stakeholders, particularly those with a certain level of power.

**Power:** We believe that it is one of the pillars that is most oriented towards policymakers given that they must design the frameworks or rules under which other actors must move. The regulations are the basis for relationships between people and institutions, authorizing, prohibiting and allowing specific actions in their interaction. The pillar of power (level of power and influence, balances, benefits and risks, those who have influence) may be impacted by policymakers through the policies, rules and standards that they promote. Recognizing those who have influence over public policy processes is key for understanding power relations. We believe that this group of questions should be situated at the beginning of the document and not nearly at the end.

**Equity:** It is a pillar that we believe is oriented towards a policymaker who participates in specific decisions regarding the use of data in treatment systems, for example, a project manager in a public entity who executes it and can make decisions about specific roles and practices or can reflect on the representativeness of the people in the systems under



their domain. However, there is a set of questions (*Focus on the transformative power of data equity*) that become more coherent with the activity of regulatory policymakers.

**Accessibility:** This is a set of questions strongly based on the concepts of oppressor and oppressed, regarding which the reader accepts that data processing creates material inequities and privileges that are not distributed, and the oppressed is unjustly subordinate. Focusing on that, the pillar does not take up issues of accessibility that are important for balancing stakeholders as conditions for creating more innovation, competition and the role of policymakers in those processes in order to refrain from reproducing the inequities generated by the gaps in access to these technologies, without limiting innovation a priori. An open data logic is prioritized that seeks to become aware of and consider best practices regarding the gathering and use of data for the design of public policies by promoting knowledge and collective research, strengthening innovation and its reuse under minimum principles of affectation.

It would be important to include the relevance of access to data by the State for the purposes of research and design of public policies on topics of public interest in this pillar, allowing innovation and the improvement of the democratic system in line with data justice principles. Chile is studying the institutional implementation of an integrated data infrastructure (IDI) due to its successful implementation in New Zealand, Canada, the UK and the Nordic countries along with the reform of the personal data protection law. IDI are designed to centralize the different types of data gathered by State agencies so the data can be crossed and made available (once anonymized) to universities, research centers and State agencies for research or public policy design purposes. Administrative data are currently spread out among various State agencies in silos, and there are multiple gaps in access and a lack of personal data protection standards. These aspects stand as obstacles to the use of data in the terms proposed by the pillar. In spite of this, some studies show that data intersections generate valuable information for public policies, such as social reinsertion of youth offenders<sup>2</sup>. A clear integrated data access policy facilitates this type of research, which contributes to data justice.

**Identity:** We believe that this pillar is directly associated with policymakers who design or execute public policies through the gathering and processing of data in very specific concepts, which may have adverse effects under a lens of intersectional discrimination (e.g., poor and indigenous woman) or regarding individuals or groups that cannot be

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<sup>2</sup> Cortés, T., Grau, N. y Rivera, Cayupi (2019). Juvenile incarceration and adult recidivism, Universidad de Chile, Facultad de Economía y Negocios, Serie de Documentos de Trabajo N° 482. Available at: <https://repositorio.uchile.cl/bitstream/handle/2250/168222/Juvenile-incarceration.pdf?sequence=1>





included under a category of strict and determined belonging (e.g., the LGBTQ +) population.

**Participation:** It is an ambitious and undoubtedly novel pillar for the Chilean context. However, under the current national legal system, it is not possible to have a robust agenda for designing public policies in terms of the participation of individuals and groups or communities that are impacted regarding the design and implementation of data-based public policies. In this sense, the current Constitution does not include a government model based on decision-making with a horizontal perspective and comprehensive and joint policymaking. Rather, it advances one that is vertical and focused on certain public entities, mainly the Executive Branch. Although Law No. 20.500<sup>3</sup> seeks to strengthen and increase the levels of citizen participation in public management, its regulation and implementation still include public policy design concepts based on the vertical and present a marginal or very low level of impact in regard to citizen participation. This is because the most important mechanisms that they address are non-binding public consultations and the creation of Civil Society Councils (COSOC) in public agencies, which have a legal mandate to design and implement citizen participation in the discussion of public policies and policymaking. However, its implementation is uneven regarding the latter and depends almost exclusively on the entity in question. For example, one study found that 40.9% of municipalities do not have a COSOC, and only 34% use them regularly,<sup>4</sup> which has a significant impact on their role in policymaking.

**Knowledge:** The pillar of knowledge in the policymaking sphere is developed under the guiding thread of democratization of knowledge in regard to the design and execution of data-based public policies. In this sense, the guide presents a set of questions that seek to clarify concepts, purposes and practices so that all affected individuals and communities can effectively understand the motives and reasons of why certain decisions have been made.

Furthermore, the questions invite us to question knowledge generated under dogmatic structures or arguments based on the concept of authority in an effort to question scientific and political technical, professional or expert knowledge and to democratically build the same processes that favor public communication among policymakers and those impacted. On the other hand, they encourage the construction of knowledge from interdisciplinary and intercultural approaches.

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<sup>3</sup> Sobre Asociaciones y Participación Ciudadana en la Gestión Pública.

<sup>4</sup> Fundación Multitudes (2020). *¿Hay COSOC? 3.0*. See: [https://fundacionmultitudes.org/wp-content/uploads/2021/02/Hay-COSOC\\_-3.0-2020.pdf](https://fundacionmultitudes.org/wp-content/uploads/2021/02/Hay-COSOC_-3.0-2020.pdf)



### **3. Specific Comments on Developer Guidelines:**

The guidelines do not distinguish between the types of developers to whom each one of the questions can be oriented. In this sense, it seems that many questions are perceived as questioning the practices of developers that could have significant effects and social impact. However, it is hard to predict this type of effects or even the capacity to understand the effects of those practices on developers that move in markets that are not very relevant or regarding companies that are just launching enterprises and the development of their economic activities. It would be more useful for us to talk about a “technical community” without limiting it to a type of activity related to data.

The guidelines would seem to be oriented towards developers whose activities have a substantial impact on society, individuals and collectives based on the enormous and incalculable amount of data gathered and processed, as is the case of Facebook and related companies or Google. An effort could be made to redirect these questions to the contexts and characteristics of each developer, but it is hard to show how the practices of small enterprises could perpetuate inequities in power relations.

Furthermore, these questions point to interesting topics from an academic perspective. However, based on the group of stakeholders, there is still no real questioning in the industry, which makes their discussion more complex from a strictly ethical and data justice perspective. On the other hand, the analytical density of the questions, the use of complex terms and topics addressed make it difficult for this group to understand them and cause the guidelines to be overwhelming. There is a need for concrete examples or cases that could be used to ground the understanding of these questions in the terms presented.

Some of the pillars of data justice seem to be closer to developers’ knowledge and understanding, such as equity and access, as they align directly with the daily experience of their work. By contrast, it is difficult to see a direct connection between the pillars of power and identity and how they impact developers’ work. In a medium-term in regard to a level of proximity to developers, the pillars of participation and knowledge may be of interest, but not without difficulty and at times forced to demonstrate the industry’s impact on people or groups.

Examining the opportunity to apply the pillars of data justice to this group of stakeholders, we find that, although there are tools that developers can use in some of these pillars





-such as that of equity<sup>5</sup> or that of accessibility<sup>6</sup>-, these are not being implemented in Chile right now, which makes it hard to engage in specific reflections on them. The guidelines do not propose a concrete tool for this group, and according to our experience, members of this group value tools the most, due to their training.

Finally, the questions do not point to specific solutions or guidelines regarding best practices for developers in their daily activities under the premises of data justice. In this sense, these are questions that point to ethical questioning but regarding which there is no type of feedback that contributes to content generation. Rather, it is an exploratory guide that does not seek to address practical implementation but could invite us to be more open-minded when considering the topics that emerge.

**Power:** In general, this pillar addresses a set of complex questions and concerns for developers. They are concepts and perspectives that are not familiar to teams in the industry, which could pose a greater challenge for their implementation and reflection. Concepts such as “power imbalance” could be better understood through examples or the presentation of specific situations, criteria for comparison, etc. On the other hand, in order for this type of question to be understood in its full breadth, it must encourage graduated reflection regarding the types of developers involved and their position in the market. Major differences appear in the role that they play regarding this pillar in regard to activities such as the implementation of data-based systems depending on the developer involved. It is not important to treat digital platforms like Facebook the same as developers who are just entering the market and act in spheres that are not of great public importance or interest.

**Equity:** This pillar can have a greater practical approach in regard to developers given that it provides incentives to consider, reflect upon and rethink the practices used in the design and development of data-based systems that do not consider social injustices or inequities or even violations of individual or collective rights. The approaches of this pillar in regard to developers also tend to be aspects with which they are more familiar and regarding which there is a higher level of general dissemination between the scientific community and

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<sup>5</sup> The tool *Aequitas. Bias and Fairness Audit*, which is designed to measure different types of inequities based on the results obtained by a predictive model, could be a useful tool for the practical implementation of this pillar from the data justice perspective. The same occurs with the AI Fairness# tool, which measures this type of inequity and allows experts to test and design mitigation techniques. However, these tools have not been implemented in Chile because they were only recently created. This makes it difficult for developers to reflect on this pillar in relation to possible connections to their daily activities.

<sup>6</sup> The tool What-If, which is designed to analyze results based on a predictive model and to visually understand the behavior of the same, allowing for counterfactuals to be found in the model's decision, could be a useful tool for the practical implementation of this pillar from a data justice perspective. However, this tool has not been implemented in Chile because they were only recently created. This makes it difficult for developers to reflect on this pillar in relation to possible connections to their daily activities.





industry, as they tend to address traditional aspects linked to disciplines of personal data protection, digital rights or data ethics.

**Accessibility:** This pillar generally is relevant to and compatible with developers given that they are more familiar with the topics discussed. Aspects of open data, transparency and proper use of data would therefore make sense for most developers except for topics related to the research. It would be useful to have examples of situations presented or definitions of concepts introduced in order to facilitate proper understanding and explain the usefulness of the exercise.

As is the case for policymakers, this pillar focuses on promoting proper use of data, its reuse and its role in innovation. It also allows for questions to be asked in the design of algorithms and data-based systems that are easy for the people or groups involved to understand and allows them to effectively scrutinize developers' practices.

**Identity:** This pillar may not be familiar to developers, particularly those linked to technical areas. This is not the case for those with training in the social sciences. As occurs for the group of decision-makers, this pillar presents and invites us to question the development of processes of gathering, categorizing and labeling data and whether they guarantee that the manner in which the members of affected communities self-identify is reflected precisely in the data. Furthermore, it helps us to identify certain deficiencies and reflect on solutions or mechanisms that could contribute to those objectives.

The examples presented in one of the sub-groups of questions that help us to better understand the challenges presented regarding processes of gathering, processing and use of data for certain categories are noteworthy. This would hide certain identity characteristics of individuals or impacted communities that require their recognition, thus avoiding biases that could produce intersectional discrimination.

**Participation:** These questions are not generally considered by developers who encourage the adoption of new perceptions and the understanding of their work. Efforts to better understand and reflect on this pillar would benefit from examples of questions or the explanation of technical terms.

**Knowledge:** The pillar of knowledge in the space of developers occurs under a main theme that points towards the pluralism of knowledge, promoting various approaches from the expert and non-expert communities. As occurs in the case of decision-makers, the questions invite us to question knowledge granted under dogmatic structures or arguments based on the argument of authority in an effort to question scientific, political, technical, professional or expert knowledge and to democratically build the same under processes that favor public communication between developers and the affected parties. On the other







hand, they encourage the construction of knowledge from interdisciplinary and intercultural approaches. In general, these are questions regarding which a developer could carry out a suitable exercise of reflection on these contents, but it would help to have concrete examples or cases for the purposes of their implementation and illustration.

## **II. Analysis of Interviews and Workshops**

### **2.1. Analysis of Interviews**

The interviews were carried out on a sample directed at the segment of developers and policymakers who worked in the public and private sectors. It was thus possible to bring together various professionals that participate in the governance and contribute to decision-making processes, in the case of developers, and who played an important role in the design of public policies and regulation regarding the use of personal data, in the case of policymakers.

#### **Introduction**

Data Justice is not a familiar term for professionals in the segments studied in its technical nor everyday sense. They prefer to establish links with definitions that could share similar characteristics, such as “Data Ethics” or “Algorithmic Justice” in the case of developers, or “Social Justice,” “Data Protection” and “Data Governance” in the case of policymakers. The latter focus on aspects of the protection of personal data in digital media, while the developers recognise elements related to the field of engineering, such as the enhancement of data of public interest that merits some recognition. However, both highlight common themes in the definition of the pillars associated with access to information or equity in their approach.

The interviewees see the impact of data-based technologies on society as ambivalent. On the one hand, they consider it important to attribute responsibility for models of artificial intelligence to decisions made by human beings. However, they also warn about the risks arising from the confusion between the nature of data and the information resulting from its processing. This misunderstanding of the techniques responsible for the operation of artificial intelligence models could, in the opinion of the developers, trigger discriminatory policies that are difficult to question as long as they continue to be attributed to the objectivity of predictive systems. Hence, one of its main negative consequences stems from the increase in the disparities in terms of access to information between users who do not have the necessary technical knowledge, which







means implementing procedures of accountability that guarantee transparency. However, the positive impact from the customisation of user needs offered by new technologies and the development of more effective social policies in terms of delivering benefits to the most vulnerable population were also highlighted.

## **Pillars**

### 1. Power

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There is a progressive process of becoming aware of the distribution of power associated with data-driven technologies in the segments studied. Specifically, a polarity stands out between the high capacity to collect information and the low capacity to process it on the part of the State; and the high-level processing capacity, but low-level collection capacity of private sector companies. There is also a significant dispersion of data in specialized organizations, which prevents a sufficient degree of integration for the development of effective public policies. Both types of stakeholders place citizenship in a subordinate stance. The interview participants believe that citizens have little interest in being part of the channels available to ensure the management of their data, being an initiative that comes more from the State. A possible explanation raised in the developer segment is mistrust about the manner in which their personal data may be used.

### 2. Equity

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Problems related to fairness in data processing are defined by a set of tensions between the protection of personal data and its use for the development of public policies for citizens' benefit. In this sense, the challenge lies in striking a balance by establishing an institutional framework. This should be capable of providing infrastructure for the organization of data that transcends the efforts of individual governments and global agreements for the regulation of the cross-border flow of data, which in turn transcend the norms established by nation-states. However, the policymaker group was especially critical of the logic of data processing based on consumer capabilities. They proposed alternative logics guided by the production of knowledge that allow users to understand and generate evidence in relation to official databases in order to mitigate, for example, the crisis of confidence triggered by the proliferation of fake news on social media networks.





### 3. Access

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Interview participants identified limited access to fair treatment in terms of data use related to the communication of its contents. For policymakers, this involves the use of a clear language and the selection of visualization formats aimed at a non-expert public. Developers emphasized the need to foster technical capacities –such as investment in equipment and human capital– to make the result of complex analyses available to the public in a more comprehensible way. Regarding the levels of transparency within the local context, successful experiences were highlighted in the availability of databases for academic purposes, although lacking adequate legislation on access to public information to support them.

### 4. Identity

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The identification of the population is characterized by the recognition of a set of classification biases regarding certain minorities –related to aspects such as age, disability, native peoples, or gender– that they attribute to the use of secondary information or oversampling techniques. Developers highlighted registration biases related to demographics or the atomisation of information in organizations that do not usually have integrated databases (e.g. ministries, government agencies). However, more than a concern about the invisibility of certain sectors of the population, the interviewees mentioned the forced inclusion of people in information systems. Another cross-cutting source of concern was the lack of a criterion that allows them to resolve the adequate or inadequate representation beyond the usual technical guidelines, such as income per capita or algorithm capacity.

### 5. Participation

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In regard to variables that define citizen participation in data-based technologies, the interviewees focused on minimum democratic conditions, such as respect for fundamental rights or trust in institutions. They also demanded adequate channels for participation. In the case of developers, the query channels aimed at citizens are rather indirect and can be resolved through informed consent or techniques for consumer self-segmentation. Policymakers, for their part, made certain proposals to promote participation through a digital identity, in addition to warning of the importance of building a citizen culture guided towards the use of data.



## 6. Knowledge

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With regard to the incorporation of different forms of knowledge, the interviewees stated that they had collaborated on contributing knowledge from the scientific and humanistic disciplines to this work. They also stated that such contributions are desirable. This is crucial for understanding the implications associated with technological solutions in the rest of society. However, they recognised that one of the main obstacles to this type of exchange is the division of knowledge into specialized disciplines, which is typical of higher education institutions that are part of the local context. For this reason, said interviewees recommended the development of conditioned spaces that guarantee learning times and feedback between disciplines as a requirement for the development of successful experiences.

### **2.2. Workshop analysis**

The workshop was held in person and online with the purpose of learning about the respective experiences of policymakers and developers. The policymakers evaluated the pillar of power and the developers that of equity, insofar as they were related to the professional work of each of the segments studied.

#### **Evaluation of the pillar of Power (Policymakers Group)**

The group emphasized a series of observations regarding the approach to power contained in the proposal. First, they expected greater clarity in the definition of the concepts used. For example, they noted the authors referenced, which led to an operational definition of power. They stated that it is equally important to position this perspective in line with the worldviews of different regions beyond the Global North. Second, they also recognised that the guidelines are using a binary approach to power, which tends to reduce analysis to a division between winners and losers. This produces a morally negative impression that makes it impossible for stakeholders to legitimately exercise power.

The participants offered a different perspective on the *political, legal and regulatory* dimensions of the levels proposed for the pillar. Specifically, they stated that the contents failed to adequately problematise the State's negligence as compared to the focus on the power of business. Something similar occurs at the *cultural* level. There was a consensus about emphasizing the importance of analyzing power in terms of the voluntary decisions





of the population. This way of defining power, which is based on individual self-determination, could balance the excessive emphasis on its delegation to bureaucratic bodies. With respect to the *psychological* level, some participants perceived a maximalist narrative regarding the consequences of the use of technologies that prevented them from clearly distinguishing reciprocity in power relations. Similarly, the reference to “data ecologies” used at the *infrastructure* level was deemed strange given the existing development conditions in Chile. Other participants proposed placing greater relevance on the power generated by science and technology, as a level independent of the political conditions that make it possible. The inclusion of ideological power among the different expressions of power was seen as positive because it allows a distinction to be made between the specific effects and scope of the algorithm with regard to the perception that decision-makers subsequently formulate.

Participants highlighted the pillar’s focus on a specific purpose: promoting access to decision-making, empowering the population, and supervising the exercise of power for the benefit of citizens with critical capacities. They also praised the existence of a multidisciplinary focus beyond legal approaches or those that restrict power to State cohesion. With respect to weaknesses, these were deemed related to the terminology used, which is unfamiliar and confusing: “it is a language for experts and not for citizens.” From the perspective of citizens, this makes it difficult to visualize a plan of action. A second weakness noted is the range of the levels considered by the pillar, which, and although they may be illuminating, also lead to problems when fully addressing, for example, the geopolitical and psychological level of power at the same time.

The specific actions that could be adopted on the basis of the pillar of power would represent a constant concern within its evaluation, and a more proactive document is anticipated. In terms of public policies, the participants proposed influencing decision-making in this area and promoting awareness of the public resources necessary to accommodate effective governance of data. This awareness should be accompanied by capacity-building efforts among parliamentarians, State officials and the general public. Some proposals in this line are to generate a measurement instrument capable of accounting for the impact of the levels contemplated, or to socialize some of the problems identified by the academic community, through visualization techniques to facilitate communication with citizens. In order to ensure the participation of citizens, it was also deemed necessary to make consultation channels available, taking into consideration their ethnic, cultural and gender variability, and thus establish the bases for a virtuous feedback between the knowledge acquired and the development of legal norms in terms of a data





justice approach. Or, as they put it, “to understand so as to regulate and regulate so as to understand.”

### **Evaluation of the equity pillar (Developers Group)**

In the evaluation of the pillar of equity, the focus was placed on the strengths and weaknesses that were identified in the proposal. Among the former, participants positively valued the scope of their approach, especially as they favored the inclusion of the population over a technical understanding of the data. Secondly, the proposal to deal with current and relevant problems in terms of the local context was considered pertinent. However, some weaknesses were perceived in the lack of precision when proposing clear rules for participation in digital platforms, or rather, a certain degree of ambiguity in the definition of concepts and statements that are not clearly understood, such as the 'transforming potential' of technology or criteria to establish identity attributions without violating people's respective rights. While developers appreciated the challenge of reducing discrimination in data processing, they feel that they cannot take action on this issue as they lack a framework to justify their decisions.

### **Case Studies**

Workshop participants were divided into groups to discuss the implications and their understanding of data justice. The cases discussed were listed in the ATI preparatory material: the *Independent Māori Statutory Board* (IMSB) of New Zealand; the workers of the *Rappi* (R) application developed in Colombia; and the implementation of the *Homeland Card* (HC) in Venezuela.

The relationships established in these empirical cases with the notion of data justice in the segment of policymakers are aimed at identifying asymmetric power relations between stakeholders. As part of the discussion about working conditions in apps such as (R), participants noted that such platforms tend to obscure power relations. The specificity of this particular case would rest in the illusion of autonomy that it generates among workers. These problems are largely related to the growing inability to question biases from the resolutions adopted by automatic learning algorithms. In the case of (IMSB), similar asymmetries were recognised, although as part of a tension between collective interests and data control. One way to deal with this “non-assumed subordination” as some participants call it, is precisely to “transfer power to the people.” However, the empowerment of (IMSB) translates into the “recognition of values” oriented to collective interests. While in the case of (R) it was considered that the interests of the citizenry would





be bypassed in the face of a dispute between the accelerated advances of the innovation processes, and the always tardy reaction of the legislative branch. In the case of developers, the relationship established with the notion of data justice was considered normative. It is specifically related to the protection of personal data (HC) or the development of practices that are not contemplated in current law, but nevertheless can be qualified as unfair (R). The latter can be attributed, on the one hand, to a set of asymmetries between the technical reality and the associated regulations; and on the other, the effective knowledge of users with respect to said qualified situation as unfair, particularly with regards to their willingness to change courses of action accordingly.

Among the main challenges in terms of the local context, we can mention those problems related to the recognition of identities in certain communities excluded from the population (e.g., indigenous peoples). The policymakers recommended moving towards an approach oriented towards the values that define well-being, thus improving consultation and informed consent procedures. A second challenge is the need to promote knowledge about the power relations that support the use of data by citizens. Nevertheless, the challenges highlighted among developers based on the case studies are related to regulatory deficiencies in terms of the definition and application of justice in line with technological progress. They thus suggested taking into account that regulations do not always adapt to the accelerated pace of innovation.

Lastly, the contributions to the concept of data justice from the perspective of policymakers included the need to obtain a holistic understanding of the problems generated by data-based technologies and the participation of communities, these as part of suitable approaches to deal with such problems. The participants reflected on the cross-cutting tensions that arose during the discussion and stated that an effort must be made to balance the disputes between the needs of access to information and the right to data protection, on the one hand, and the competition between the objectives of management versus individual rights, on the other (IMSB). In the case of the developers, the selection of the case corresponding to (HC) caused a sense of unease in one of the participants, to the point of withdrawing from the workshop. In the opinion of said participant, this was an example motivated by a political bias leading to stigmatization of the management of the region's governments from the perspective of countries in the Global North. For their part, others questioned the veracity of the information presented. In short, political sensitivity to certain case studies that could be controversial should be considered when applying the instrument.

### **Evaluation of the Guide**





Regarding the evaluation of the questions shared with the workshop participants, some general modifications were suggested regarding different aspects of the guide. In the first place, the group of policymakers considered that the segmentation categories are confusing, given that they share characteristics in more than one of the options presented. Some even claimed that they had not been able to find a category that could be identified with their work as a policymaker. For this reason, the inclusion of subcategories capable of accounting for different levels of hierarchy and authority, in terms of making decisions, was suggested. Another problematic element identified was the lack of clarity and breadth of the categories. For example, some participants considered the proposed notion 'decision-making domains' too confusing, while 'governance' or 'digital infrastructure' was deemed too broad. With the aim of reversing this situation, they recommended introducing examples to facilitate the choice of one category over another.

Secondly, a series of observations were made regarding the contents that provide orientation for the guide. For some policymakers, the premises that support the guide's diagnosis should justify the thesis related to an imbalance in the conditions of today's society, which could lead to systematically unfair situations. The participants' opinions of this matter were divided between those who felt that the budget threatens the value impartiality of the questions and those who argued that this premise is a basic condition for researching data fairness. One possible approach is to delegate responsibility to the stakeholders, who could then decide on the justice or injustice involved in said imbalances with respect to power relations.

In formal terms, both groups identified a need to provide greater clarity, focus and objectivity with respect to the concepts used. Policymakers warned that certain definitions are occasionally presented as equivalent, although without providing any justification in this regard (e.g. power/influence, control/influence). For their part, the developers considered it desirable to indicate their specific impact on people's lives. At the same time, it was suggested that there is a need to reduce the indeterminacy of the concepts, as well as the margin for subjective interpretation by the recipients of the guide. This can lead to misunderstandings, particularly when considering that the interpretation of the definitions obeys different rationales depending on the readers' education, thus attempting to obtain coherent or unified information. A concrete example are the terms "social benefit," "imbalance" and "social interest". Others argued that the concepts must be carefully validated given that some terms have no meaning in the local context and are transliterations of foreign terms (e.g., governance regimes in the data innovation ecosystem). They also cautioned against using language that is too "complex, technical and difficult to understand" for recipients who work outside of academia. They found the questions to be too long and require more focus. Specifically, the questions tend to be







vague or ambiguous due to the large number of factors that could be considered for a possible answer.

There are also functional aspects that must be elaborated more precisely. These are related to a clear definition of the profile corresponding to the recipient of the material. For this purpose, it was suggested to focus the material on the role played by its recipients. Nevertheless, although the questions are addressed to a subject in the first person (e.g., "how does my decision-making currently work"), many of them can only be answered by appealing to the institutional entity in which such recipients operate (that is, in the third person). In the policymakers' opinion, this contradicts the focus on the data holder that the participants recognise as part of the materials intended to describe the concept of justice. Additionally, many of the questions tend to induce a dichotomous response (e.g., does it facilitate or confront?), which does not allow relevant information to be gathered about the problems that are intended to be identified in an exploratory sense.

In general, both sides saw the questions in the guide as a first step to changing course in the local context. However, they highlighted the need to introduce an adequate level of contextualisation in order to respond to endogenous issues (e.g. imbalances). Although the general impression attributes a clear comparative disadvantage in the state of the discussion compared to other countries, the guide could contribute to identifying responsibilities in society or laying the foundations for changes based on the discussion of how to understand data justice.

