

# **Assessing Data Justice in Uganda:**

A Study Towards Advancing Data Justice Research and Practice



**Assessing Data Justice in Uganda: A Study Towards Advancing Data Justice Research and Practice**

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## Abbreviations

ADJR	Advancing Data Justice Research and Practice
ICTs	Information and Communication Technologies
AI	Artificial Intelligence
CSOs	Civil Society Organizations
NGOs	Non-Governmental Organizations
NIRA	National Identification and Registration Authority
UBOS	Uganda Bureau of Statistics
UCC	Uganda Communications Commission
URA	Uganda Revenue Authority
LGBTIQ	Lesbian, Gay, Bisexual, Transgender, Intersex, Queer / Questioning
PWDs	Persons with Disabilities
NDP	The National Development Plan

## Table of contents

- i. Acknowledgments
- ii. Abbreviations
- iii. Table of Contents
- iv. Executive Summary
- v. Methodology

### **CHAPTER I: INTRODUCTION**

- 1.1 Introduction
- 1.2 Literature Review

### **CHAPTER II: RESEARCH FINDINGS AND ANALYSIS**

- 2.1. Introduction
- 2.2. Social demographic characteristics of the respondents
- 2.3. Level of understanding of data justice
  - 2.3.1. *Intersections with social justice*
  - 2.3.2. *The exploration of datafication and experiences of data collection and use*
- 2.4. The level of understanding of the six pillars of data justice
  - 2.4.1 *The power pillar*
  - 2.4.2 *The equity pillar*
  - 2.4.3 *The access pillar*
  - 2.4.4 *The identity pillar*
  - 2.4.5 *The participation pillar*
  - 2.4.6 *The knowledge pillar*
- 2.5. Data justice and the Sustainable Development Goals (SDGs)

### **CHAPTER III: CONCLUSION AND RECOMMENDATIONS**

- 3.1. Conclusion
- 3.2. Recommendations

## Executive Summary

This report presents the results of a study entitled “Advancing Data Justice Research and Practice (ADJRP)”. The study was conducted between November 2021 and March 2022. The aim of the study was to address the need for a multidimensional broadening of data justice and the undertaking of data justice practice along the six pillars namely power, equity, access, identity, participation and knowledge. Specifically, the study focused on the following objectives:

- To find out if the policymakers are equipped with analytical tools to engage in debates about global data governance and incorporate notions of data justice when making policies on data practices with a critical awareness of the six pillars of data justice;
- To find out if researchers, project managers, technologists, and others involved in the data innovation value chain have the practical and analytic tools needed according to the six pillars of data justice to safeguard the equity and trustworthiness of processes of designing, developing, procuring, and deploying data-intensive technologies and to ensure just and ethical outcomes in their real-world implementation; and
- To challenge and transform the socio-historically rooted patterns of discrimination, injustice, and inequality that can manifest in the production and use of data-intensive technologies and in wider processes of datafication.

The study employed a cross-sectional design, in which both quantitative and qualitative methods were used. A quantitative survey targeting 17 individuals comprised of 5 policymakers (4 males and 1 female), 6 developers (5 males and 1 female), as well as 6 respondents from the impacted community (4 females, 1 male and 1 transgender) was conducted. In addition, a two-member group interview of policymakers; a five-member FGD of policymakers (workshop setting); a nine-member FGD of impacted community respondents (workshop setting); as well as a six-member FGD of developers (workshop setting); were conducted. The study methodology also considered the intersectionality framework to assess aspects of discriminations and disadvantages faced by persons with disabilities, LGBTIQ community, women, refugees, and other minority groups. The methodology further considered the impact of the decolonial theory on data justice in Uganda.

Among the three respondent categories, it was the policymakers that had the bigger portion 60 percent of respondents that had never heard of (and probably did not know) data justice, compared to those that had heard of this term. No respondent listed all the six pillars of data justice.

The research findings indicate that there are significant gaps in literature on data justice in Uganda. Most of the publications focus on privacy rights, gender digital divide, and data governance.

The findings further reveal that while Uganda has a law on data protection, the law and the government agency mandated to oversee the implementation of the law are still at a nascent stage. Therefore, it remains to be seen how far the law will go in terms of enhancing data justice.

During the interviews, it was established that data subjects have strong fears that government agencies such as the National Identification and Registration Authority (NIRA) and the Uganda Bureau of Statistics (UBOS) share their data without their consent. These fears are not without basis. In March 2017, it was reported that NIRA and UCC had agreed to share the national ID database with private telecom companies to ascertain true sim card ownership.<sup>1</sup> This was the case despite that fact that the Registration of Persons Act, 2015 which established NIRA provides for strict restrictions on access to information in the NIRA database.

Findings revealed that there is a general lack of trained personnel to handle data security/privacy issues at the police stations e.g respondents noted that the police have limited knowledge about cyber-bullying and therefore cannot carry out their mandate as required under the law. It was also discovered that there is general inaccessibility to data (direct/indirect). For example, to access the news, you must buy a newspaper, buy a TV, Radios yet not everyone can afford it. So, in a nutshell, these developments show that there is social injustice and the commitment to the achievement of a society that is equitable, fair, and capable of confronting the root cause of injustice (as is required by the equity pillar) is not there.

During the study, most policy makers interviewed (60 percent) stated that they think that their policy-making fraternity does not have sufficient knowledge or awareness about data justice, in particular the six pillars that are necessary for the realization of data justice.

The pillar of power in analyzing data justice is shaped by three key elements of the levels at which power operates, the ability of people to challenge the said power, and whether people are empowered to democratically and collectively pursue social solidarity and liberation. However, in our findings, a proportion of 40 percent of the policy makers indicated that they don't have the pathways/avenues to question power at its sources, and mainly blamed it on lack of freedom of expression of power. The impacted communities expressed facing more impediments in enforcing the elements of the power pillar.

The research findings further indicate that in many instances, those involved in the data innovation value chain are not sticking to the values/ethics that data justice demands. For instance, respondents stated that: Data is in most cases collected fraudulently without people's consent, some terms and conditions in the transaction documents are not readable due to a number of

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<sup>1</sup> Unwanted Witness. *Sharing of the national identity card database with private telecoms is prone to abuse/misuse*, <https://www.unwantedwitness.org/sharing-of-the-national-identity-card-database-with-private-telecoms-is-prone-to-abuse/misuse/>

circumstances such as failure / ignoring to translate key provisions into local languages, and hospitals collect private information but they have often misused it.

The policymakers further noted that data is collected without telling people why it's being collected, what it will be used for, and how it will be stored and processed leaving the data subjects insecure, and if it gets in the wrong hands, it can be harmful. Incorrect data (rounding off figures) always leads to inappropriate information/research findings.

In a nutshell, these actions show you that the researchers, project managers, technologists, and others involved in the data innovation value chain do not have the practical and analytic tools needed according to the six pillars of data justice to safeguard the equity and trustworthiness of processes of designing, developing, procuring, and deploying data-intensive technologies and to ensure just and ethical outcomes in their real-world implementation.

In our findings, the respondents put forward a couple of social justice/injustice issues that are affecting them in their respective communities, and these included domestic violence, gender injustices, lack of basic needs, water, electricity, health care, physical assault, etc. On the other hand, the respondents from the impacted communities mentioned political issues, economic issues, and cultural issues.

Other actions which show the deep-rooted discrimination, injustice, and inequality present in society were also brought to the fore. For instance, it was established that the gender digital divide exacerbates data injustice by locking many women out of the data streams and conversations. Women therefore suffer from having a limited voice in data pools and the data injustices that affect all people.

Concerning the issue of challenging and transforming the socio-historically rooted discrimination, injustice, and inequality, 80 percent of impacted community respondents stated that they don't have the pathways/avenues to mobilize against power misuse related to their personal data. They said that this is mainly because of lack of technical capacity, financial resources, illiteracy of the community, closing civic space for the CSOs, stigma, and discrimination that prevents some impacted communities like LGBTIQ from engaging in the processes involved. This is because the legal environment is unfavorable for the LGBTIQ community and critical civil society voices to effectively carry out their work in Uganda.

The developer respondents unanimously noted that addressing the material/income inequalities (as is required by the access pillar) will lead to the development of their work by, for instance; increasing available financial resources to support the innovation and development, increasing the income levels of their customers, and it would lead to the growth of their existing businesses.



The issue of challenging and transforming the socio-historically rooted discrimination, injustice, and inequality, remains an uphill task. Many impacted community respondents stated that they don't have the pathways/avenues to mobilize against power misuse related to their personal data, due to lack of technical capacity, meager financial resources, closing civic space for the CSOs, fragile state of rule of law, among others etc.

## Methodology

This section outlines the methodology that was applied to execute the study. It comprises of research design, study population, sample size determination and sampling strategies, data collection methods, data collection instruments, data quality control, data collection procedures and the framework that was adopted for data analysis.

The study employed a cross-sectional descriptive research design employing both the quantitative and qualitative approaches. The quantitative method was employed during the interviews to gain more information on data justice about the three categories of stakeholders which included policymakers, impacted communities, and the developers of artificial intelligence and machine learning in Uganda. On the other hand, the qualitative method was employed during the workshop with these three categories of stakeholders to gain more information about their level of understanding of data and data justice in general and elicit feedback on the preliminary guides developed by The Alan Turing Institute and partners. This was followed by conducting comprehensive literature on the classification of data (including data sets), gaps and associated common harms, differential risks that accompany digital developments, and the underlying factors of structural and intersectional inequality that leads to the unequal distribution of benefits and harms with both a global and domestic lens.

The target population for this research included the policymakers, impacted communities and the developers in Uganda. The policymakers were selected to investigate whether they are equipped with analytical tools to engage in debates about global data governance with a critical awareness of the six pillars of data justice while the study involved developers to gather evidence if they have the practical and analytic tools needed according to the six pillars of data justice to safeguard the equity and trustworthiness of processes of designing, developing, procuring, and deploying AI and data-intensive technologies and to ensure just and ethical outcomes in their real-world implementation. On the other hand, the impacted communities were targeted for this study to collect information on their lived experiences and the strategies that can be adopted to empower women and persons with disabilities (indigenous communities especially those who are vulnerable, discriminated against, or marginalized) with the critical, analytical, and practical tools needed to challenge and transform the socio-historically rooted patterns of discrimination, injustice, and inequality that can manifest in the production and use of data-intensive technologies and in wider processes of datafication.

The sample size for the study was 18 respondents for the interviews and 36 participants for the workshops. All these respondents and participants were purposely selected within the 3 stakeholders' groups such as policymakers, impacted communities, and the developers. The policymakers who were engaged were from government ministries, agencies, and departments

while a few representatives of the civil society organizations that influence policy decisions in Uganda were engaged because they are responsible for formulating policies governing data justice, machine learning, and artificial intelligence. The impacted community's stakeholders engaged included women refugees, women, persons with disabilities, and the LGBTIQ individuals because the digital technologies and the laws and policies that are made directly affect their lives either positively or negatively. Finally, the developers were involved in this study because they are the designers of these technologies that are used to collect data from users.

The interview method of data collection involved the interactions between research assistants asking specific questions and respondents providing answers on the demographic characteristics, understanding of data justice and injustices, and the deeper discussions on the six pillars of data justice as put forward by the Advancing Data Justice Research Practice Team. On the other hand, the Focus Group Discussion method was employed during the workshop organized in February 2022 to enable data collection and eliciting feedback on the preliminary guide questions developed by the Advancing Data Justice Research and Practice.

Data quality control was established to ensure that if other persons conduct exactly the same research, under the same conditions, the same findings/results would be generated. The tools used to collect data were pre-tested and all the data collected was recorded, transcribed, and used to make inferences on the population studied.

The data analysis was guided by the intersectionality framework to guide on the experiences of target social categorization such as gender, class, disability, sexual orientation, and nationality status. This helped the researchers to identify the complexity of prejudices faced by each group. The decolonial theory was also adopted to provide a theoretical framework within which the researchers would take into consideration the systemic nature in which oppressive hegemonic policies, practices and narratives that affect the lives of people in Uganda.

In terms of data management under quantitative data, the three interview tools were designed and uploaded onto KoboCollect – a Software program for mobile devices. After data collection, the data was exported to SPSS (Statistical Program for Social Scientists) data analysis program for eventual analysis. Descriptive statistics were used to establish the pattern and relationships among variables. For the qualitative data, the Focus Group Discussions (workshop setting) and the group interview, were audio-recorded to capture the original views of the study participants verbatim. Afterwards, the audio recordings of the qualitative data were transcribed and typed into Microsoft Word. The transcribed data was analyzed manually following the principles of thematic content analysis (Silverman, 2007).

The research team adhered to all the ethical principles of research such as respect for persons who were engaged during the data collection process and the do no harm principle. Similarly, there was

respect for all the beneficence, non-maleficence, and justice for all respondents and participants as required by the Uganda National Council of Science and Technology. Further to this, The Alan Turing Institute Delegate Code of Conduct Policy was adhered to and all stakeholders who engaged in the study signed a consent form to seek for their consent to participate in the study and allow their information to be used purposely for this research study.

All respondents were informed of the purpose of the interviews, the voluntary nature, and the ways in which the information would be used. They were further advised that they could decline to participate at any time without any negative consequence. The respondents were not provided with compensation in exchange for an interview, save for compensation for expenses properly incurred in travel to and from the venue.

# CHAPTER I: INTRODUCTION

## 1.1. Introduction

Women of Uganda Network (WOUGNET) in partnership with The Alan Turing Institute and International Centre of Expertise in Montreal on Artificial Intelligence, between November 2021 to March 2022, conducted a research study on data justice in Uganda. The goal of the study was to assess understanding of the concept of data justice and enhance the capacity of policy makers, civil society organizations, developers, and the citizens – especially impacted communities – to move beyond governance of data and understand the clear relationship between compliance, privacy rights and ethical designs to enable them to prioritize the key pillars of data justice in the development of Artificial Intelligence (AI) systems in Uganda and globally.

This research study is divided into two parts, namely, the internal assessment of legal and regulatory frameworks and practices and secondly, the external strategic engagement with stakeholders. The internal assessment involved a review on literature on data justice within the lens of the six pillars of data justice. This second part focuses on findings from engagements with stakeholders using the guide developed to understand adherence to data justice.

The concept of data has been defined variously by different scholars and institutions. The UN Statistical Commission and Economic Commission for Europe defines data as “the physical representation of information in a manner suitable for communication, interpretation, or processing by human beings or by automatic means.”<sup>2</sup> On the other hand, Kitchin (2014) defines data as “raw material produced by abstracting the world into categories, measures and other representational forms numbers, characters, symbols, images, sounds, electromagnetic waves, bits – that constitute the building blocks from which information and knowledge are created.”<sup>3</sup> Under Section 2 of Uganda’s Data Protection and Privacy Act, 2019, data is defined as ‘information’ which is processed by means of equipment operating automatically in response to instructions given for the purpose; is recorded with the intention that it should be processed by means of such equipment; is recorded as part of a relevant filing system; or forms part of an accessible record.<sup>4</sup>

The notion of data justice refers to fairness in the way people are made visible, represented and treated as a result of their production of digital data. As pointed out by Dencik, Jansen & Metcalfe

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<sup>2</sup> UN Statistical Commission and Economic Commission for Europe, 2000

<sup>3</sup> Kitchin, R. (2014). *The Data Revolution: Big data, open data justice infrastructures & their consequences*. SAGE Publications Ltd, <https://dx.doi.org/10.4135/9781473909472>

<sup>4</sup> The Data Protection and Privacy Act, 2019 [Laws of Uganda], <https://ict.go.ug/wp-content/uploads/2019/03/Data-Protection-and-Privacy-Act-2019.pdf>

(2018), data justice is a lens through which we can understand the relationship between data and social justice, to critique agenda that governs datafication and allows us to understand how data contributes to structural conditions that continue or create new injustices. Therefore, previous theories of justice continue to be relevant and must be applied so as to better identify and understand the continuation and furthering of existing injustices through datafication.<sup>5</sup> Social justice refers to commitment to the achievement of a society that is equitable, fair, and capable of confronting the root cause of injustice.<sup>6</sup> Taylor (2019) notes that the work on data justice came about because of a tension that emerged between the fields of development studies and surveillance studies.<sup>7</sup>

The analysis in this research study is guided by the ADJRP provisional six pillars of data justice which include: power, access, equity, participation, knowledge, and identity with a focus on the Sustainable Development Goals (SDGs).

## 1.2. Literature Review

In what has been described as the ‘datafication’ of society, turning vast amounts of human activity and behavior into data points that can be collected, stored, analyzed, and used has become part of our contemporary social life. The presence and use of such huge volumes of data have led to contests on data justice in the context of data governance and the data innovation value chain.

Drawing on key literature, this section reviews aspects of classification of data (including data sets), gaps and associated to common harms, differential risks that accompany digital developments, and the underlying factors of structural and intersectional inequality that leads to the unequal distribution of benefits and harms with both a global and domestic lens based on the six pillars of data justice. From the onset, it is important to note that literature on this subject in Uganda’s context is very scanty. It is therefore hoped that this review will contribute to the discussion and understanding of the relationship between data and social justice and how it can be applied to improve data justice in Uganda.

Data classification is broadly defined as the process of organizing data by relevant categories so that it may be used and protected more efficiently. The three main types of data classification include content-based classification, context-based classification, and user-based classification.

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<sup>5</sup> Dencik, L., Jansen, F., & Metcalfe, P. (2018). *A conceptual framework for approaching social justice in an age of datafication*, <https://datajusticeproject.net/2018/08/30/a-conceptual-framework-for-approaching-social-justice-in-an-age-of-datafication/>

<sup>6</sup> Dencik, L., Hintz, A., & Cable, J. (2016). *Towards data justice? The ambiguity of anti-surveillance resistance in political activism*. *Big Data & Society*, 3(2), 1–12. <https://doi.org/10.1177/2053951716679678>

<sup>7</sup> Taylor, L., Richterich, A., & Abend, P., (2019). *Global Data Justice: Linnet Taylor in conversation with Annika Richterich and Pablo Abend*, <https://doi.org/10.25969/mediarep/15783>

This classification process is of particular importance when it comes to data security and data justice.<sup>8</sup>

Over the years, several milestones have been documented on the origin and development of data justice as we know it today. Notably, Johnson (2014) argued in favour of “information justice” as a framework to address power asymmetries which emerge in the context of open data. In 2015, world leaders at the UN Summit adopted the Sustainable Development Goals (SDGs) which provided for an important framing for the responsible adoption and use of artificial intelligence. Heeks & Renken (2016)<sup>9</sup> proposed a need for a framework of data justice to ensure accountability of local and global variation in how datafication impacts individuals and communities. Taylor (2017) suggested an approach based on the three pillars of visibility, digital (dis)engagement and countering data-driven discrimination. The pillars were developed to provide an organizing, conceptual framework which help to define freedoms and rights in relation to datafication.<sup>10</sup> Before the advent of data justice, prevailing approaches to data ethics and governance often framed issues related to the impacts of datafication and data intensive technologies almost exclusively in terms of data protection, individual rights, privacy, efficiency and security (Dencik, Hintz & Cable 2016).<sup>11</sup> It is observed that the evolution of the concept of data justice has been shaped by scholars from the West and therefore presents implications on conceptualization of data justice on the African continent.

In an effort to widen the lens of the current thinking around data justice, the *Advancing Data Justice Research and Practice (ADJRP)*<sup>12</sup> project sought to provide actionable resources that can help policymakers, practitioners and impacted communities to gain a broader understanding of what equitable, freedom-promoting and rights-sustaining data collection, governance and use should look like. The ADJRP team organised literature review on data justice around six pillars of data justice namely power, equity, access, identity, participation and knowledge.<sup>13</sup>

### 1.2.1 Power

The pillar of power in analyzing data justice is shaped by three key elements of the levels at which power operates, the ability of people to challenge the said power, and whether people are empowered to democratically and collectively pursue social solidarity, and liberation.

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<sup>8</sup> Digital Guardian. *What is data classification? A data classification definition*,

<https://digitalguardian.com/blog/what-data-classification-data-classification-definition>

<sup>9</sup> Heeks, R., & Renken, J., (2016). *Data justice for development: What would it mean?*

[https://www.researchgate.net/publication/309959191\\_Data\\_justice\\_for\\_development\\_What\\_would\\_it\\_mean](https://www.researchgate.net/publication/309959191_Data_justice_for_development_What_would_it_mean)

<sup>10</sup> The Alan Turing Institute, *Preparatory Material for Global Partners*.

<sup>11</sup> Dencik, L., Hintz, A., & Cable, J. (2016). *Towards data justice? The ambiguity of anti-surveillance resistance in political activism*. *Big Data & Society*, 3(2), 1–12. <https://doi.org/10.1177/2053951716679678>

<sup>12</sup> For more about the project here: <https://advancingdatajustice.turing.ac.uk/?locale=en>

<sup>13</sup> The Alan Turing Institute, *supra*.

On the first element of interrogating and critiquing power, there is a need to understand the levels at which power operates in data innovation ecosystems including the factors related to geopolitical, infrastructure, socio-economic, legal, regulatory, organizational, political, cultural, psychic, among others.<sup>14</sup> As a mode of boosting data infrastructure, Uganda's sector policy on data infrastructure has gone through a number of progressive steps. Some of the key policy developments in Uganda include the launch of the National Data Transmission Backbone Infrastructure (NBI) Optic Fiber Network aimed at boosting the usage of the internet among citizens and government departments, the Third National Development Plan III (NDP III) which acknowledges the role of ICT in national development, the National ICT Policy (2014) which sought to address the gaps through depending utilization of ICT services, Open Data Policy (2017) which looks at making all public sector data open by default with exception to personal identifiable information and data with security or commercial or intellectual property rights or environmental restrictions,<sup>15</sup> and the National Broadband Policy (2018) which built on the objectives of Vision 2014 and NDP I, NDP II and NDP III by highlighting the role of broadband internet as an enabler for socio-economic development. Data infrastructure growth and improvements in mobile infrastructure have also contributed to growth in the number of handheld computing devices. By 2018, Uganda had 3,517 mobile towers thereby leaving a gap of at least 3,500 additional towers required to cater for full connectivity.<sup>16</sup>

Data justice requires that people should be able to understand how power in relation to data justice manifests and materializes in the collection and use of data and that that understanding is used to question power at its sources and to raise critical awareness of its presence and influence. People must also be able to mobilize to push back against socially and historically entrenched power structures and to work towards a more just and equitable future. Further to the above, people must be empowered to marshal democratic agency and collective will to pursue social solidarity, political equity, and liberation.<sup>17</sup> Uganda's Data Protection and Privacy Act, 2019, in addition to establishing a definite definition of data, the law establishes principles of data protection, regulates the collection and processing of personal data, provides for the rights of the persons whose data is collected and the obligations of data collectors, data processors and data controllers. The law further regulates the use or disclosure of personal information.<sup>18</sup>

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<sup>14</sup> The Alan Turing Institute *in collaboration with* GPAI (2021). *Advancing Data Justice Research and Practice: An interim report for the 2021 GPAI Paris Summit*. <https://gpai.ai/projects/data-governance/data-justice/advancing-data-justice-research-and-practice-interim-report.pdf>

<sup>15</sup> Open Data Policy. First Draft 2017, <http://www.ict.go.ug/wp-content/uploads/2018/06/Open-Data-Policy-First-Draft-vX.pdf>

<sup>16</sup> Bowmans, *Uganda: Overview of Data Infrastructure in East Africa*, <https://www.bowmanslaw.com/insights/technology-media-and-telecommunications/overview-of-data-infrastructure-in-east-africa-uganda/>

<sup>17</sup> The Alan Turing Institute *in collaboration with* GPAI (2021). *Supra*

<sup>18</sup> The Data Protection and Privacy Act, 2019 [Laws of Uganda], <https://ict.go.ug/wp-content/uploads/2019/03/Data-Protection-and-Privacy-Act-2019.pdf>



Despite the enactment of the progressive law, unregulated data processing activities in Uganda by public and private entities are still ongoing. For instance, naked or sexually explicit images and videos of many women such as Judith Heard, Fabiola Anita, Martha Kay, Cindy Sanyu, Sanyu Robina Mweruka, Desire Luzida, Zari Hassan, and Maama Fina have been distributed online by private individuals in intentional non-consensual pornography attacks and limited action was taken against the perpetrators.<sup>19</sup>

The government has also intensified the mandatory collection of sensitive personal data as seen with the National ID system, National ID data, and immigration, CCTV forensic surveillance systems, among others. In March 2020, National Identification & Registration Authority (NIRA) had received 29.3 million applications for the Identification Register, representing roughly 68% of all Ugandans.<sup>20</sup> Appreciation of the law is low and therefore people as data subjects are not using the law to question power in favor of data justice.<sup>21</sup>

The Personal Data Protection Office (PDPO), a statutory data authority established as an independent office to oversee the implementation of and the enforcement of the Data Protection and Privacy Act, 2019, was set up in mid-2021.<sup>22</sup> The success of this office in the execution of its mandate in relation to this pillar of power is central to the realization of data justice in Uganda.

### 1.2.2 Equity

The pillar of equity entails the two key elements. Under the first element of the choice to engage, it is observed that data equity is only partially served by seeking to improve data and data practices, such as by pursuing data quality or increasing its representativeness and accuracy. While errors and incompleteness are obstacles to data equity, the choice to acquire and use data can itself be a question of justice, particularly where the purpose of data practice is to target and intervene in the lives of historically marginalized populations. In societies where the government or commercial interests are governed by oppressive regimes, oppression will be amplified regardless of how perfect the data system is.<sup>23</sup>

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<sup>19</sup>The Women of Uganda Network (WOUGNET). *Bridging the Digital Gender Gap in Uganda*, <https://wougnet.org/website/publications/publicationsingle/14>

<sup>20</sup> Unwanted Witness Uganda. *Uganda's Digital Identification Systems and Processes in a Protracted Crisis: What can be done?* <https://www.unwantedwitness.org/download/uploads/Ugandas-Digital-Identification-Systems-and-Processes-in-a-protracted-crisis.pdf>

<sup>21</sup> Privacy International (PI). *One year on, what has Uganda's Data Protection Law changed?*, <https://privacyinternational.org/news-analysis/3385/one-year-what-has-ugandas-data-protection-law-changed>

<sup>22</sup> PC Tech Magazine. *The Personal Data Protection Office celebrates 100 days of operation*, <https://pctechmag.com/2021/11/100-days-of-personal-data-protection-office/>

<sup>23</sup> The Alan Turing Institute in collaboration with GPAI (2021). *Supra*

There is no publicly available literature on the assessment and realization of this pillar in Uganda. However, there are reported incidents that raise concerns on how the Ugandan government is deploying the data systems. For instance, in July 2019, the Ugandan government contracted the Chinese tech giant, Huawei, to supply and install CCTV cameras along major highways across the country. The details of the contract remain a secret, raising concerns on how the data collected on the surveillance system will be used. This could lead to significant human rights implications.<sup>24</sup>

On July 23, 2021, the Ugandan government awarded a controversial 10-year surveillance contract to a Russian company, Joint Stock Company Global Security, to implement an “intelligent transport monitoring system” on vehicles, motorcycles, and vessels by installing digital trackers. The details of this contract have not been made public, raising serious concerns on data justice.<sup>25</sup>

On the second element, data equity demands the transformation of historically rooted patterns of domination and entrenched power credentials. In this regard, those with power and privilege must be compelled to respond to and accommodate the claims of people and communities who have been marginalized by existing socio-economic structures.<sup>26</sup> There is a shortage of researched literature on this element as well. However, incidents of abuse of power and privilege to target some women and LGBT communities have been reported. For instance, Dr. Stella Nyanzi was arrested and charged for her social media posts that challenged President of the Republic of Uganda, Yoweri Kaguta Museveni to fulfill his pledge of providing free sanitary towels to girls in schools. Similarly, LGBTIQ individuals and communities in Uganda often face hate and homophobia on social media platforms for posting about their identity or exercising their freedom of peaceful assembly online among other rights.

### 1.2.3 Access

One of the key elements of this pillar is the need to prioritize the material pre-conditions of data justice and challenge formalist and ideal approaches. This requires that all attempts to protect the interests of the vulnerable in data innovation should be anchored in reflection on the concrete, bottom-up circumstances of justice in its historical, economic, political, and material pre-conditions. Beyond the demand to advance ‘access to representation’, data justice thinking must focus on equitably opening access to data through responsible data sharing, equitably advancing access to research and innovation capacity, equitably advancing access to the benefits of data work, and equitably advancing access to capabilities to flourish.<sup>27</sup> The pillar further requires the

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<sup>24</sup> Privacy International (PI). *Huawei infiltration in Uganda*, <https://privacyinternational.org/case-study/3969/huawei-infiltration-uganda>

<sup>25</sup> Quartz Africa. *Uganda’s popular boda-bodas are now part of the government’s surveillance system*, <https://qz.com/africa/2043622/ugandas-controversial-surveillance-contract-with-a-russian-firm/>

<sup>26</sup> The Alan Turing Institute in collaboration with GPAI (2021). *Supra*

<sup>27</sup> The Alan Turing Institute in collaboration with GPAI (2021). *Supra*

promotion of airing and sharing of data injustices across communities through transparency and data witnessing for greater visibility of everyday social experience.

The visibility should be harnessed in positive ways to promote emancipatory transformation by exposing lived injustices, historical abuses, and moral harms. The role of transparency in the airing and sharing of potentially unjust data practices must also be centred.<sup>28</sup> Ugandans have restricted access to contracts signed between the Ugandan government and multinationals to conduct major data collection systems in nationwide surveillance projects of public CCTV surveillance, vehicle and motorcycle digital trackers, among others. This facilitates practices of collecting, processing, and use of data without sufficient transparency which is central to the ability of the impacted communities to understand and challenge data injustices that have been widely reported by the media.<sup>29</sup> Further to this, the high costs of accessing digital technologies and the high illiteracy levels hinder impacted communities from accessing digital technologies. This has kept the majority of women offline, infringing on their right to access information and a platform to express themselves.<sup>30</sup>

#### 1.2.4. Identity

The ADJRP research team structures this pillar into two key elements of interrogating, understanding, and critiquing modes of othering; challenge reification and erasure; and focus on how struggles for recognition can combat harms of representation.

On the first element of interrogating, understanding, and critiquing modes of othering, it is required that data justice examines, exposes, and critiques histories of racialization and discriminatory systems of categorization reflected in data and the social contexts that produce it. The second key element requires that data justice focuses on how struggles for recognition can combat the harms of representation. This includes the struggle for the rectification of moral injuries to identify claims that are suffered at the hands of discriminatory data practices – struggles to establish equal dignity and autonomy, and the equal moral status of every person through the affirmation of reciprocal moral, political, legal, and cultural regard.<sup>31</sup> The ability for data to offer oppressed and marginalized communities the opportunity to visualize their exclusion facilitating greater

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<sup>28</sup> Dencik, L., Jansen, F., & Metcalfe, P. (2018). *A conceptual framework for approaching social justice in an age of datafication*, <https://datajusticeproject.net/2018/08/30/a-conceptual-framework-for-approaching-social-justice-in-an-age-of-datafication/>

<sup>29</sup> The Wall Street Journal. *Huawei technologies helped African governments spy on political opponents*. <https://www.wsj.com/articles/huawei-technicians-helped-african-governments-spy-on-political-opponents-11565793017>

<sup>30</sup> Sci Dev Net. *Illiteracy and high cost widen gender gap in ICT access*, <https://www.scidev.net/sub-saharan-africa/news/gender-gap-in-ict/>

<sup>31</sup> The Alan Turing Institute in collaboration with GPAI (2021). *Supra*

accountability is key. Although, the data economy has been developed in an extremely unequal world based on patriarchal, classist, sexist, colonial, and imperial subjugation.<sup>32</sup>

Discriminatory practices exist in Uganda's data system. Some communities in Uganda such as refugees, rural populations, and LGBTIQ communities face numerous challenges in identity systems. For example, research shows that refugees<sup>33</sup> that Uganda currently hosts from wars and conflicts in South Sudan, Democratic Republic of the Congo, Somalia, and other neighboring countries have little to no knowledge of the institutional systems and processes through which their personal data are managed and used. Furthermore, the communities are typically not able to exercise agency with regard to data that is collected about them.<sup>34</sup>

### 1.2.5. Participation

This pillar of data justice focuses on three key elements. The first is a requirement for the democratization of data and data work through prioritization of meaningful and representative stakeholder participation, engagement, and involvement from the earliest stages of the data innovation lifecycle to ensure social license, public consent, and justified public trust.<sup>35</sup>

Under Uganda's Data Protection and Privacy Act, 2019, data collectors, data controllers, and processors are defined to include persons or institutions that collect, control, processes data in accordance with the law. The law establishes several data justice principles and parameters to protect interests, including the rights of data subjects. However, the law does not provide for strict requirements for data collectors, processors, and controllers to ensure public participation from the earliest stages of the data innovation lifecycle. It only requires that they ensure safeguards in line with the specific industry or professional standards.<sup>36</sup> Therefore, impacted communities and other relevant stakeholders are often not included in meaningful consultations on the design and development of data systems. They are often only engaged at the advanced stages of pre-testing or deployment of the data collection tool.

The second element is the need to challenge existing, domination-preserving modes of participation that seek to normalize or hegemonize harmful data practices and the exploitation of the vulnerability.<sup>37</sup>

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<sup>32</sup> A Feminist Perspective on the Data Economy, <https://researchictafrica.net/2021/05/06/a-feminist-perspective-on-the-data-economy/>

<sup>33</sup> Uganda currently has a total refugee population of 1,582,892 as at January 31, 2022. For more: <https://data2.unhcr.org/en/country/uga>

<sup>34</sup> Emrys S., Dina B., Bryan P., & Nicola D., (2020). *Identity at the margins: Data justice and refugee experiences with digital identity systems in Lebanon, Jordan, and Uganda*, <https://doi.org/10.1080/02681102.2020.1785826>

<sup>35</sup> The Alan Turing Institute in collaboration with GPAI (2021). *Supra*

<sup>36</sup> For more, see Sections 2, 3, 20 and 21 of the Data Protection and Privacy Act, 2019 [Laws of Uganda]. <https://ict.go.ug/wp-content/uploads/2019/03/Data-Protection-and-Privacy-Act-2019.pdf>

<sup>37</sup> The Alan Turing Institute in collaboration with GPAI (2021). *Supra*

The third element focuses on the need to ensure transformational inclusiveness rather than power-preserving inclusion. Transformative inclusiveness demands participatory parity so that the terms of engagement, modes of involvement, and communicative relationships between the includers and the included are equitable, symmetrical, egalitarian, and reciprocal.<sup>38</sup>

Due to the deeply rooted patriarchal norms and homophobia, transformative inclusive engagement continues to face impediments, especially in regard to the realization of the rights of women and the LGBTIQ community. For instance, whereas the number of women engaging and being involved online is increasing, they face significant incidents of online gender-based violence. According to a 2020 study by Women of Uganda Network (WOUGNET), it was established that 49% of the targeted respondents had experienced various forms of online violence on the basis of their gender.<sup>39</sup> In terms of gender digital divide, women continue to face impediments in having access to and use of ICTs at an equal level with men. This, therefore, is disadvantaging women on the basis of their gender and they, especially rural women, are being left behind in the AI-driven circular economy due to lack of the necessary tools and skills to fully participate.<sup>40</sup>

### 1.2.6. Knowledge

This pillar focuses on five key elements of data justice. The first element requires that data justice includes embracing the pluralism of knowledge, recognizing that diverse forms of knowledge and ways of knowing and understanding can add valuable insights to the aspirations, purposes, and justifications of data use.<sup>41</sup> In Uganda, the practice varies. While some data collectors carry out baseline surveys to appreciate understanding and experiences of a diverse section of the impact communities and stakeholders, others do not. There is however no publicly available study on this to assess the level of adherence to this element.

The second element focuses on the need to interrogate, understand and critique the ways in which certain forms of knowledge are prioritized within decision-making relating to data. The objective here is to expose the social, cultural, and political factors that shape the ways in which claims to knowledge are constructed.<sup>42</sup> There is no publicly available study on the assessment of this element in Uganda. However, anecdotal evidence suggests that forms of knowledge are often prioritized on the basis of perceptions of how widely accepted the knowledge is.

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<sup>38</sup> The Alan Turing Institute *in collaboration with* GPAI (2021). *Supra*

<sup>39</sup> Women of Uganda Network (WOUGNET). *Not Just a Trend: Assessing the types, spread and the impact of online gender-based violence in Uganda*. <https://bit.ly/3vBagFx>

<sup>40</sup> Gender justice: *Artificial Intelligence and the Circular Economy*, <https://researchictafrica.net/2022/02/28/gender-justice-artificial-intelligence-and-the-circular-economy/>

<sup>41</sup> The Alan Turing Institute *in collaboration with* GPAI (2021). *Supra*

<sup>42</sup> The Alan Turing Institute *in collaboration with* GPAI (2021). *Supra*

The third element requires data justice to challenge the presumptive authority of technical, professional, or ‘expert’ knowledge across scientific and political structures. The key aspects of this element include the need to scrutinize wider public engagement to hold ‘expertise’ to account and to ensure that science and technology progress in ways that align with wider societal values. The fourth element of this pillar calls for prioritization of interdisciplinary aspects in data justice. This requires any pursuit of understanding of data innovation environments to be done through a holistically informed methodological pluralism.<sup>43</sup>

Finally, this pillar requires the need to pursue ‘strong objectivity’ by amplifying the voices of the marginalized, vulnerable, and oppressed as a way to overcome claims of objectivity, impartiality, and neutrality that mask unquestioned privilege; and the need to cultivate intercultural sharing, learning, and wisdom.<sup>44</sup>

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<sup>43</sup> The Alan Turing Institute *in collaboration with* GPAI (2021). *Supra*

<sup>44</sup> The Alan Turing Institute *in collaboration with* GPAI (2021). *Supra*

## CHAPTER II: RESEARCH FINDINGS AND ANALYSIS

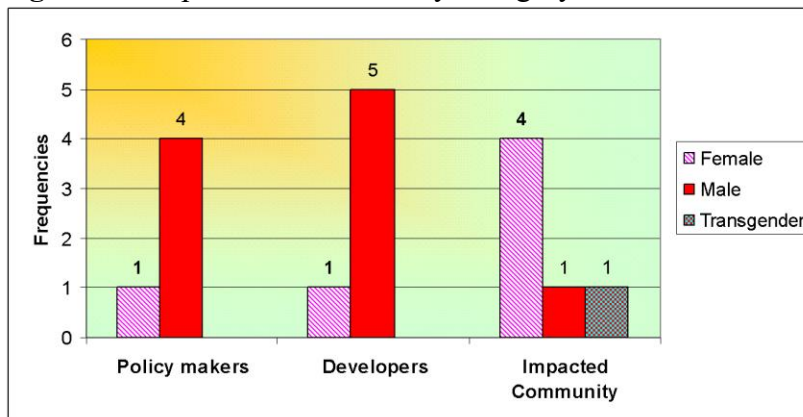
### 2.1. Introduction

This chapter presents the findings of the study from the interview that was conducted involving the policymakers, developers, and the impacted communities. A sneak peek into the socio-demographic characteristics of the respondents is followed by the presentation and analysis on the understanding of data justice. The chapter also discusses some of the institutions responsible for data collection in Uganda and assess the level of awareness and knowledge about data justice among the respondents. The chapter further provides a presentation and analysis on the intersection with social justice and exploration of the datafication and experience on data collection and data justice. Lastly, the chapter explores the pillars of data justice and their relationship with the Sustainable Development Goals (SDGs).

### 2.2. Social Demographic Characteristics of the Respondents

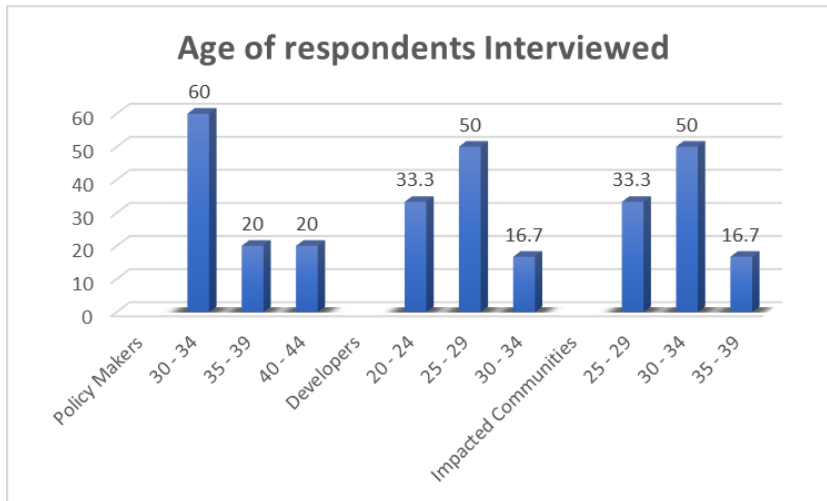
A total of 17 respondents participated in the study as shown in Figure 1 below. These were comprised of 5 policy makers (4 males and 1 female), 6 developers (5 males and 1 female), as well as 6 respondents from the impacted community (4 females, 1 male, and 1 transgender).

**Figure 1:** Respondents' Gender by Category



Source: (WOUGNET, *Advancing data justice research and practice*, 2022)

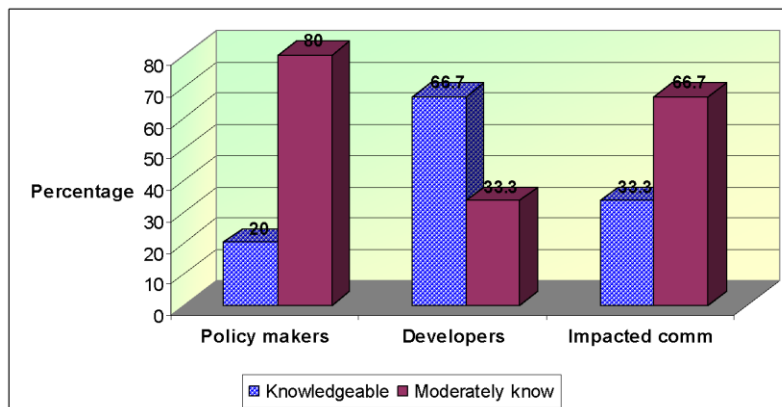
Figure 2: Respondents' age by categories



**Source:** (WOUGNET, *Advancing data justice research and practice*, 2022)

As far as the age of the respondents were concerned, the policymakers ranged between 30 to 44 years of age. Compared to the former category, the developers ranged between 20 to 34 years. For the respondents in the impacted communities' category, they ranged between 25 to 39 years. It is also worth noting that all the 17 respondents that were interviewed in the three categories indicated to have attained a university degree level of education.

**Figure 2:** Level of Knowledge on Data and Algorithm-related Technologies



**Source:**(WOUGNET, *Advancing Data Justice Research and Practice*, 2022)

For each interview tool for the three different categories of participants, there was a question that was intended to gauge the participants' level of knowledge on data and algorithm-related technologies (formal or informal background/training/education in this area, and experience or interactions with data-driven systems).

According to Figure 2, the study revealed that developers were knowledgeable about data and algorithm-related technologies represented by 66.7 percent followed by the impact communities represented by 33.3 percent while only 20 percent of the policymakers were knowledgeable about

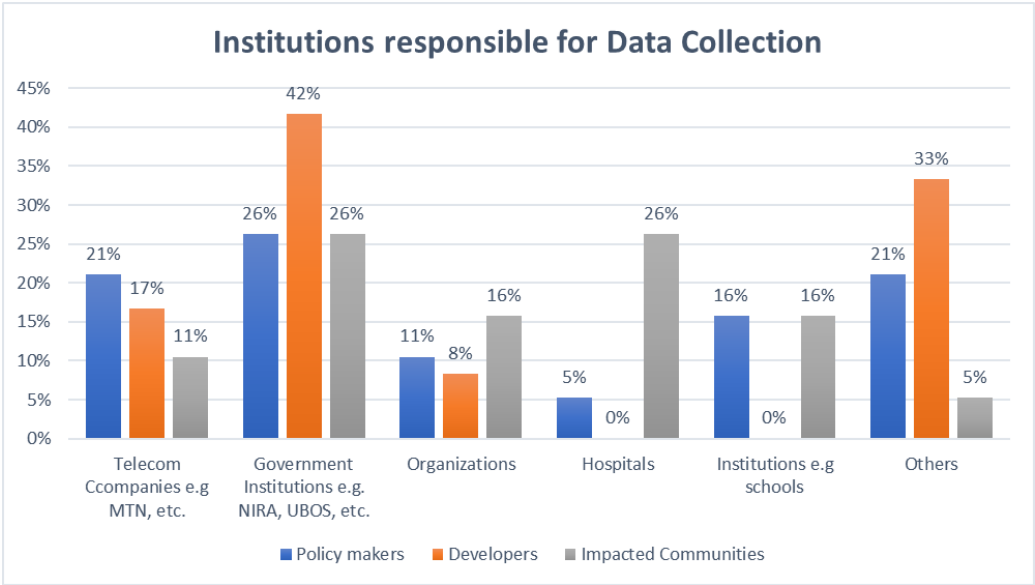


the data and algorithm-related technologies. This state of affairs is what we would, ideally, expect under normal circumstances from the developers, since interactions with data-driven systems is their daily major pre-occupation. Otherwise, for the policymakers and impacted communities, bigger proportions are of those with moderate knowledge of algorithm-related technologies. The respondents were, in addition, asked to state their level of access to the internet, digital applications, and computing resources on a daily basis, and it came out that almost 100% of all the respondents indicated to have daily unlimited access.

### 2.3. The Level of Understanding of Data Justice

At the beginning of this section, the respondents were asked if they had ever heard of the term data/information and almost everyone answered in the affirmative. So, they were requested to go ahead and explain/mention some of the institutions/people responsible for data/information collection and their responses in that regard are contained in Table 2, below.

**Table 2:** Institutions/people Responsible for Data/Information Collection



*Source: (WOUGNET, Advancing Data Justice Research and Practice, 2022)*

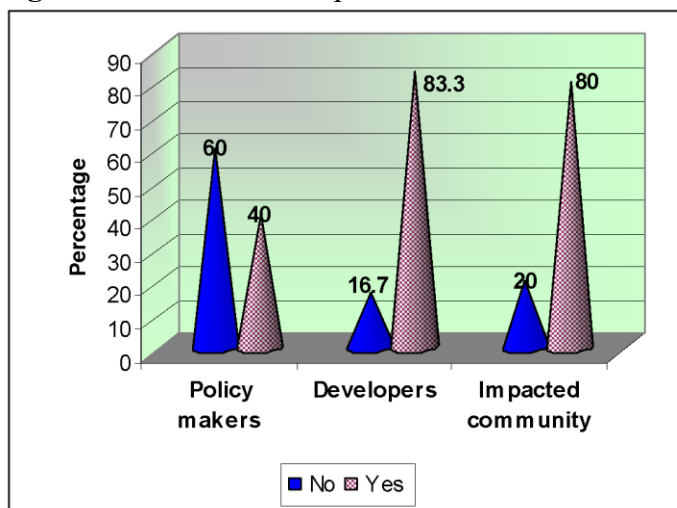
A look at the information in the table shows that there was unanimous agreement from the three categories of respondents that government institutions like NIRA, UBOS, etc are among the main data/information collectors. Out of the total 19 responses generated from the policymakers, telecom companies like MTN, Airtel, etc obtained 21.1 percent responses in the second/third position. The respondents from the impacted communities think that hospitals are also a major force in as far as collection of peoples’ data is concerned since this answer also accounted for 26.3 percent of the total responses. According to the table, the “Others” category for both the policymakers and the developers has a big number of responses. When this category was responded to, some answers came to the fore. These included the Ministry of ICT and National

Guidance, Uganda Communications Commission (UCC), National Information Technology Authority (NITA) Uganda, Ministry of Internal Affairs, and the Uganda Revenue Authority (URA).

On this issue of types of people or organizations that collect data, the FGD participants under the policymaker category identified the following:

- Schools and educational institutions collect data from parents and students.
- Hospitals and other medical institutions collect data from patients.
- Private sectors – Telecom companies collect data from network users during the Sim Card registration process.
- Mobile Application service providers such as SafeBoda, Uber, Glovo, and Jumia collect user data during signing up and placing orders.
- Hotels collect data from guests.
- Research firms scraping data from the internet, and public.
- NGOs implementing community services often collect data from beneficiaries.
- Police and security organizations collect data about crimes in the community.
- Call centers managed by private sector and government agencies also collect data from clients who call in to seek support services.

**Figure 3:** Whether the respondents had ever heard of the concept of “data justice”



From Figure 3, it is only the policy makers that had the bigger proportion 60 percent of respondents that have never heard of data justice, compared to those that have heard about it. Otherwise, for the other two categories of respondents, 80 percent of the respondents have heard about “data justice”.

*Source: (WOUGNET, Advancing Data Justice Research and Practice, 2022)*

The respondents that indicated having heard of data justice were tasked to explain what comes to mind when they encounter that term. 44.4 percent of the responses from developers were in favour of “Knowledge” as well as “Access”. The developers also mentioned, albeit in minimal dimensions, the other meanings of data justice. They talked of “Power”; “Equity”; “Identity”; and “Participation”, as the other meanings of data justice. On the part of the respondents from the impacted communities, 30 percent of their responses were pointing to “Power” as the meaning of

data justice. Additionally, 60 percent of the responses from the impacted communities were in favor of a combination of “Equity”; “Identity”; and “Participation”, as the meaning of data justice.

During the study, the respondents were asked to list words that come to mind when they hear the term “data justice”. The policy makers listed words such as fairness, impartial, democracy, transparent and analyzing information. The developers on the other hand mentioned fairness, organized set of rules governing collection and dissemination of data, data collection security, among others. The groups among the impacted communities noted that data justice means proper use of raw information, appropriate use of information received, unbiased collection and analyzing of data received from marginalized groups, proper maintenance of data, privacy, among others.

### *2.3.1 Intersections with Social Justice*

A question was raised to the respondents to state the main social justice issues that are affecting them in their respective communities. The developers mentioned a series of issues including domestic violence, gender injustices, lack of basic needs, water, electricity, health care, physical assault, among others. On the other hand, the respondents from the impacted communities mentioned political, economic, and cultural issues.

On a similar issue, the policymaker group interview participants also gave their take on the two most social justice issues in their community, and they stated that:

- Data privacy and protection: Sometimes, government agencies like NIRA share our information without asking for consent of the data subjects.
- Lack of trained personnel to handle data/privacy issues e.g reporting cyber-bullying yet the police officers have not been trained about cyber-bullying.
- Illiteracy: The high level of illiteracy doesn’t allow people who should be handling social justice issues to pay attention to the critical aspects for appropriate attention.
- Inaccessibility to data (direct/indirect): For example, to access the news, you must buy a newspaper, buy a TV, Radios yet not everyone can afford it.
- Political plays: Politicians use their powers to accelerate the spread of harmful information in the media.

The FGD participants under the policymaker category, also came up with a list of issues in regard to the most social justice issues in their community, and they stated that:

- Unfair political participation and representation.
- Corruption: Ease at which people can find jobs irrespective of the level of their education because of the way in which corruption manifests.
- Arbitrary/Illegal detention and arrest of opposition leaders.
- Limited space for freedom of expression and assembly.
- Network disruption and internet shutdown affecting work.

Similarly, FGD participants under the impacted communities group also gave the various meanings that they attach to social justice issues in their community, and they stated that:

- Poverty, job inequalities, more job seekers than creators, poor education facilities, poor infrastructure.
- Gender-Based Violence, School dropouts, Discrimination and Stigma.
- Income gap, digital divide, racial injustice, voting rights, limited access to health care.
- Income inequality, discrimination, and illiteracy.
- Unequal distribution of the national cake, availability of infrastructure.
- Voting rights, Employment rights of PWDs, refugee crisis.
- Unfair criminalization of Key Populations.

A question was raised to the policymakers, impacted communities, and the developers if they knew of ways in which data-driven technologies might worsen those social justice issues. A proportion of 100 percent of the impacted community and a proportion of 80 percent of the policymakers and 83.3 percent of the developers answered in the affirmative. The three respondent categories were, once again, asked if they knew ways in which data-driven technologies might be used to improve these social justice issues. They answered in unison that they knew of such ways which included the following: (a) The women's rights activists can use data-driven technologies to advocate against the social injustices, (b) Inclusion: data driven technologies can be made to cater for the end-user requirements such Persons with Disabilities (PWDs), minors, and development of solutions of cloud computing, (c) Technology is used to create awareness in our communities, (d) One can use social media to report and let the responsible bodies intervene, etc.

On this same issue, the group participants under the policymaker category put forward their thoughts on what they think are the ways in which data-driven technologies might be used to improve these social justice issues. These included;

- Raising awareness to the users on the importance of their platforms and always reading and understanding the Terms and Conditions for using their platforms.
- Educate and raise awareness on how users can use their platforms and what information they should post and not post on social media.
- Digital platforms can use their platforms to emphasize awareness using content such as videos, ads to teach their users.

On this same issue, the FGD participants under the Policymaker group listed their views on the ways in which data-driven technologies might be used to improve these social justice issues. These included;

- Digital literacy in terms of online safety and security.
- Creating awareness through digital media and technologies.
- Capacity building through training in skills and knowledge to use digital technologies.

- Digital policy analysis and independent regulatory body to oversee the implementation of digital technologies.

Based on what the respondents have heard about social justice, below is a list of the most social justice issues each of the stakeholders identified during the study.

### **Policy Makers**

- Unfair political participation and representation.
- Corruption: Ease at which people can find jobs irrespective of the level of their education.
- Because of corruption that manifests.
- Arbitrary/Illegal detention and arrest of opposition leaders.
- Limited space for freedom of expression and assembly.
- Network disruption and internet shutdown affecting work.

### **Impacted Community**

- Poverty, job inequalities, more job seekers than creators, poor education facilities, poor infrastructure.
- Gender Based Violence, School dropouts, Discrimination, and Stigma.
- Income gap, digital divide, racial injustice, voting rights, limited access to health care.
- Income inequality, discrimination and illiteracy.
- Unequal distribution of the national cake, availability of infrastructure
- Voting rights, Employment rights of PWDs, refugee crisis.
- Unfair criminalization of Key Populations.

The respondents were also asked about how digital technologies influence the social justice issues they mentioned above. Below are some of their perceptions and thoughts.

### **Policy Makers**

- Speeding up the process of disseminating information e.g. political
- Enable marketing and selling creating a new form of employment
- Avenue for freedom of expression e.g. on social media
- Providing access to education and educational materials
- Spread of fake news/ disinformation / misinformation
- Blackmail causes anxiety and depression
- Online attacks
- Use of digital technologies by the government to carry out surveillance
- Data protection and privacy issues

### **Impacted Community**

- I want to supplement the employment gap, we have seen that technologies bridge the gap. For example, for us people with disabilities, people seem not to want to employ us because they want to eliminate the issues of accommodating a person with disabilities because it is a burden. So, I may need a guide, software to help me so they don't want to go through that burden. However, when we use technology, someone can be employed. But when we embrace technology, I can do my work from home and it also reduces the cost on me.
- I would say that for us the LGBTIQ community technology has helped in advocacy as well as creating awareness of our issues and positively impacting narratives.
- It helps with networking.
- I would like to talk about discrimination because when you use technology, you can share and learn without technology objecting to it. PWDs can use it so it does away with discrimination.

### *2.3.2. The Exploration of Datafication and Experiences of Data Collection and Use*

The respondents from the impacted communities (LGBTIQ, women, and PWDs) stated how they think data is collected and used. They elaborated and gave an account of how that is done, for instance, (a) Data is in most cases collected fraudulently without people's consent, (b) Some terms and conditions in the transaction documents are not readable especially in the banks and some are not in the local languages, (c) Hospitals collect private information but they have often misused, (d) Mere access to technology and internet makes it easy for someone to collect your data, (e) Information like peoples' names, contact details, type of work that people do, etc. is mostly collected in workshops/conferences, freely.

On the part of the qualitative data and specifically on this issue, the workshop interview participants under the policymaker category also commented on the way that data is being collected and used as follows:

- Data is collected without telling people why it's being collected, what it will be used for and how it will be stored and processed leaving the data owners insecure, and if it gets in the wrong hands, it can be harmful.
- Follow Up – Data is collected by the government, NGOs, companies, and organizations providing services, for example, when you are boarding a bus, your information is collected without explanations of where it's going to be stored, processed, or why it's going to be used.
- The tools for data collections and processing and analysis are expensive.
- Data use and interpretation. The same piece of information is interpreted differently by different people.
- Challenges in data usage and dissemination are not standardized on what format data should be and who should have access to it.

When the FGD participants under the policymaker category were asked to comment on this same issue of how data is collected and used, they had this to say:

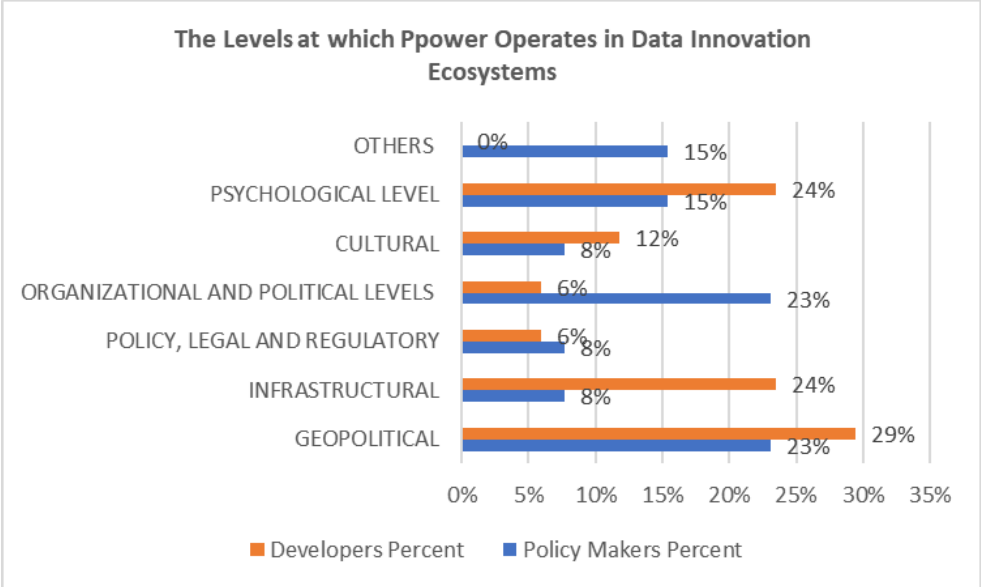
- People have the fatigue of being approached by different researchers yet they don't see the benefits of the data collected.
- Data duplication, for example, the same data is collected for National ID and processing the passport.
- Data protection issues by vendors collecting data and sharing it with third parties for commercial purposes.
- Some data might not be used for what it was intended for.
- Use of data for marketing and sometimes data is being sold to the third party without consent.
- Data surveillance/unregulated access to the citizen's data by government and other entities.
- Wrong data collected which informs the wrong decision.
- As a researcher, it's always hard to gain entry into the society because some community doesn't know how they will benefit from the research even if you try to explain, and hence this causes switching research areas from one place to another.
- Segregation in terms of areas of data collection as more urban places are selected as compared to rural areas for the reason of convenience.
- Incorrect data (rounding off figures) always leads to inappropriate information/research findings. For example, research about teenage pregnancy in Masaka district reported wrong figures because the researchers wanted to please the funders.

## 2.4. The level of understanding of the Six Pillars of Data Justice

### 2.4.1. The Power Pillar

At the start of this section on the power pillar, the three respondent categories were asked to give their opinion on what they think is the level of knowledge/awareness that the categories of stakeholders they represent generally, have on the power dynamics surrounding data collection and use. On this, 60 percent of the policymakers stated that they think that their policymaking fraternity is moderately aware. On the same inquiry, 66.7 percent of the developers that participated in the survey stated that they think that their colleagues (the developers) are fully aware of the power dynamics surrounding data collection and use. On the part of the impacted community, their response differed since the majority i.e. 60 percent stated that the impacted communities are not aware at all.

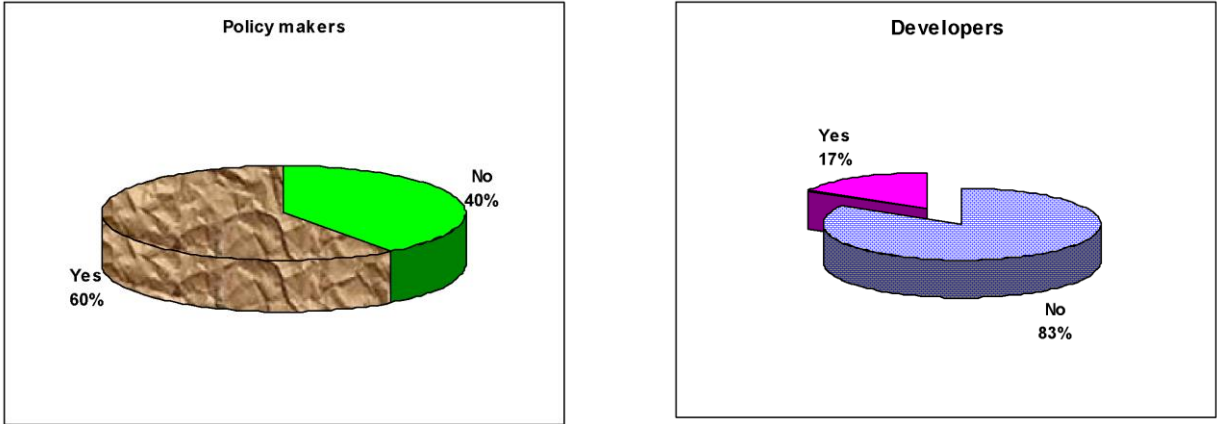
**Table 3:** The Levels at which Power Operates in Data Innovation Ecosystems



**Source:** (WOUGNET, *Advancing Data Justice Research and Practice*, 2022)

From the contents of Table 3, when the policymakers were asked to state the level at which they think power operates in data innovation ecosystems, most of their responses were aimed at two main levels i.e. the Geopolitical and Organizational, and Political levels. On the part of the developers, their responses differed from those of the policymakers since most of the responses of the latter category pointed to three major levels i.e. Geopolitical, Infrastructural, and Psychological levels.

**Figure 4:** Whether respondents feel they have the Power to Question Power



**Source:** (WOUGNET, *Advancing Data Justice Research and Practice*, 2022)

From the pie chart on the left, it can be seen that 60 percent of the policymaker respondents stated that they feel they have the pathways/avenues one needs to question power at its sources. The other 40 percent of the policymakers who felt that they don’t have the pathways/avenues to question power at its sources mainly blamed it on lack of freedom of expression of power. On that same



question of having the avenues to question power, the developers' stance (pie-chart on the right side) is completely different from that of the policymakers. For the latter category, it is only 17 percent who stated that they feel they have the pathways/avenues one needs to question power at its sources.

The majority i.e. 83 percent feels that they are toothless and they mentioned some of the impediments which included issues like (a) not being in the know of where the suggestion boxes are, (b) not being guaranteed freedom of speech, (c) threats from the people in power, (d) misuse of power/corruption, etc.

In a related development, the developer respondents were asked whether they think it is achievable and productive to map out the power relations and imbalances between developers, policymakers, and impacted communities who are impacted by these data systems and policies. There was a unanimous positive agreement in their response and they added that when those power relations and imbalances are mapped out, it would help to advance data justice in the following ways. Firstly, it would help by interrogating and critiquing power; it would help to empower the people, and it would help to challenge the power, etc.

The impacted community respondents were interviewed and asked to state whether; as an impacted community, they feel their community have the pathways/avenues to mobilize against power misuse related to their personal data. On this, 80 percent of them stated that they don't have that power, mainly because of; (a) Lack of technical capacity, financial resources, illiteracy of the community, shrinking civic space for the CSOs, (b) Stigma and discrimination that prevents some impacted communities like LGBTIQ from engaging in the processes involved. This is because the legal environment is unfavorable for some communities, especially the LGBTIQ community to work in Uganda and there is no room for them to sit and negotiate with the government and other actors, etc.

#### 2.4.2 The Equity Pillar

At the start of this section, the policymakers were told to consider the forms of data extraction, data processing, and data-driven automation that take place in their respective regions. Then, a question was asked if they think it is easy for them to access the information, they would need to assess how these three processes affect the different communities under their (policymakers)' policy remit. From this inquiry, 60 percent of the policymaker respondents stated that it is not easy to access the information they would need to assess how these three processes affect the different communities under their remit.

Additionally, the policymakers were told that “the equity pillar puts forward an idea of “measurement justice” where there is a focus on collecting data about marginalized communities in a way that draws on their strengths rather than perceived weaknesses”. And, they were asked if

they think that this seems like a productive idea that could be useful in their policymaking. On this inquiry, a proportion of 80 percent of them answered in support of that idea.

In a related development, the developer respondents were told that “the equity pillar asks developers to combat any discriminatory forms of data collection and use that center on disadvantage and negative characterization. It then puts forward an idea of “measurement justice” where there is a focus on collecting data about marginalized communities in a way that draws on their strengths rather than perceived weaknesses. Then, a question was asked to the developers if they could share examples from their professional experience where this discriminatory focus on disadvantage and negative characterization has occurred. Some of the reactions that stood out included: (i) Racialization (generalizing how the people leaving in Africa are poor) based on the data collected, (ii) NIRA is duty-bound to collect data, yet some data collection gadgets don't have thumbprints features or accessibility features for blind people on the phone.

When it came to the impacted community respondents, a question was posed to them to state how much knowledge they think their community (women, PWDs, LGBTQ persons) has about how they are considered/represented in the captured data. On this, 40 percent of the respondents stated that they think their community is fully knowledgeable, yet a similar proportion thinks that their community is moderately knowledgeable. It was only a proportion of 20 percent of them who stated that their community is not knowledgeable at all. When asked to give their opinion on whether the representation of (women, PWDs, LGBTQ persons) in data promotes equality among these communities, 60 percent of them nodded in agreement.

The impacted community respondents were further told that, “the data justice guidelines put forward an idea of “measurement justice” where there is a focus on collecting data about marginalized or vulnerable communities or social groups in a way that focuses on their strengths rather than perceived weaknesses. A question was then put forward if these respondents think that this seems like a productive idea which could be useful for advancing social justice in their community. On this inquiry, the majority i.e. 80 percent of them supported it.

### 2.4.3. The Access Pillar

Under the access pillar, the research assessed how existing material injustices influence access to the benefits of data processing. The pillar states that any attempts to address the needs of marginalized or vulnerable social groups through data collection and use should start from bottom-up social efforts that are informed by the real-world preconditions of justice (i.e. concerns with access to the material means needed to participate fully in work life, social life, and creative life). Along these lines, the pillar suggests that such efforts should be shaped by an understanding of justice that recognizes, prioritizes, and ultimately provides a remedy for the real-world problems behind the inequities suffered by these communities.

With the foregoing in mind, the policymaker respondents were asked if they think that this approach to accessing data justice is relevant for policy making. On this question, there was unanimity in agreement, but they went ahead to highlight some limitations to this approach to accessing data justice. For example, they stated that: (a) there is limited capital by the government because it is a new phenomenon so there have not been enough funding by the government to invest in data justice (b) despite the limited resources, there is corruption in society which will hamper any efforts, (c) there is lack of research, which forms the bedrock of any policy formulation, (d) if the society is not empowered with information, they won't be able to participate in data gathering process due to lack of necessary information.

For the developers, they were told that “the access pillar talks about income inequalities which influence access to the benefits of data processing. The pillar advocates for assisting the marginalized or vulnerable social groups materially through reduction of taxation on airtime/ data, extending internet services/infrastructure to remote areas, etc. to advance data justice. This would provide the remedy for the real-world problems behind the inequities suffered by these communities”.

So, the developer respondents unanimously agreed that addressing the material/income inequalities will lead to the development of their (developers)’ work by, for instance; increasing the income levels of their customers, it would lead to the growth of their existing businesses; it would lead to a general increase in the employment opportunities.

**Table 4:** Probable developers’ engagement level

Level	Policymakers	Developers
Agenda setting	38.5%	20.0%
Policy formulation	23.1%	20.0%
Implementation	15.4%	30.0%
Monitoring and evaluation	15.4%	10.0%
Others (specify)	7.7%	20.0%
Total	100.0%	100.0%

**Note:** Figures in this table are Responses NOT Frequencies. The table is from a multiple response question.

In the interview questionnaire tool of both the policymakers and the developers, there was a question that tasked the respondents to state the level at which they think developers should be involved in facilitating effective policy making. As per the contents of Table 4, out of a total of 13

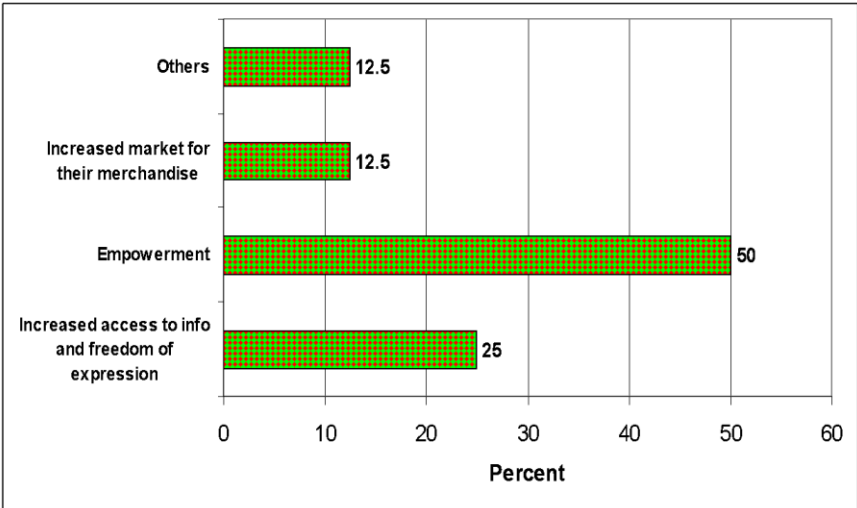
multiple responses from the policymakers, the majority of them i.e. 38.5) are in favour of the developers being brought on board at the agenda setting level. These were followed by 23.1 percent of the responses opting for policy formulation level, for effective policymaking.

On the part of the developers, they are of a slightly different view concerning the right level at which they think they should be incorporated or co-opted to facilitate effective policymaking. To them, out of a total of 10 multiple responses, the majority of them i.e. 30.0 percent are pointing to the Implementation level, followed by Agenda setting and Policy formulation, each with a share of 20 percent of the responses.

Similar to what was done to the developers; the impacted community respondents were told that “the access pillar talks about income inequalities which influence access to the benefits of data processing. The pillar advocates for assisting the marginalized or vulnerable social groups materially through reduction of taxation on airtime/data, extending internet services/infrastructure to remote areas, etc. to advance data justice. This will provide the remedy for the real-world problems behind the inequities suffered by these communities”.

So, there was unanimous agreement by all the impact community respondents that addressing the material/income inequalities (as seen above) is relevant to those (women, Persons with Disabilities, LGBTIQ persons) who may experience marginalization or vulnerability. This relevance is reflected in the contents of Figure 5, below, where 50% of the responses are pointing to the fact that addressing the income inequalities will result in the empowerment of the marginalized/vulnerable groups while 25% stated that it would increase access to information and freedom of expression while 12.5% reported that it would increase the market for the merchandise and other benefits respectively.

**Figure 5:** Relevance of Addressing the Material/Income Inequalities



**Note:** Figures in this chart are percentages of Responses NOT Frequencies. The chart is from multiple response questions.

#### 2.4.4. The Identity Pillar

The identity pillar discusses how the categorization of data is a social act informed by the histories and cultural contexts surrounding it, which can lead to racialized, misgendered, or otherwise discriminatory categories. The pillar calls for examining, exposing, and critiquing discriminatory systems of categorization reflected in data.

With the consideration of how the categorization of data is a social act informed by the histories and cultural contexts surrounding it, the policymaker respondents were asked if it is feasible for policymakers to interrogate how impacted communities, under their sector, are represented in data. In response, all the policymakers represented by 100 percent agreed that it is feasible for policymakers to interrogate how impacted communities under their sectors are represented in data. These respondents were further tasked to suggest the resources that the policymakers would require to be able to engage in interrogating this (plus what they may require from developers and impacted communities).

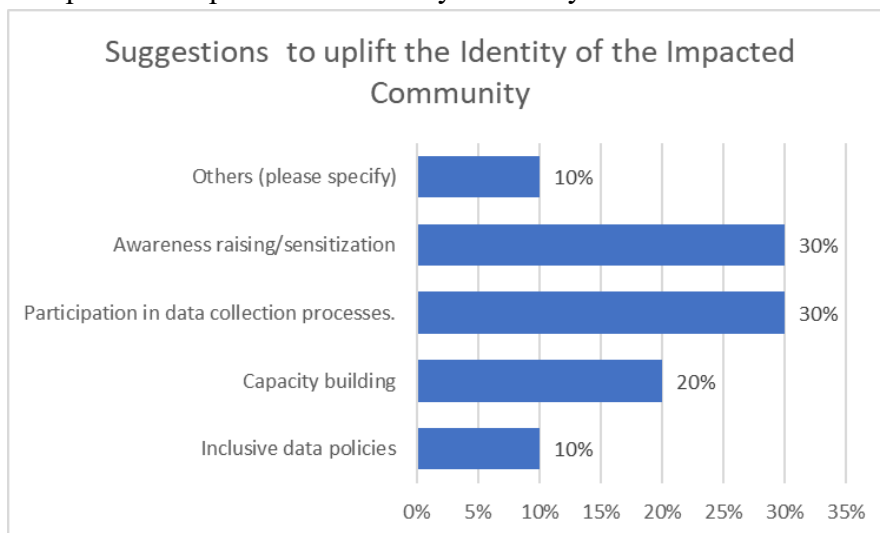
In reaction to this question, the policymaker respondents generated a total of 14 multiple responses and Human resources and Access to information each accounted for 21.4 percent of the total responses. These two were followed by financial support as well as Capacity building (e.g. up skilling), each accounting for 14.3 percent of the total responses.

Concerning how the categorization of data is a social act informed by the histories and cultural contexts surrounding it, the developer respondents were asked whether there are communities impacted by the type of data systems that are developed by the developers' fraternity, and whose identities (e.g. race, disability status, gender, etc) have been erased, excluded, missed, grouped together with other identities); and whether there are any challenges that may arise from such omissions. In response, every developer respondent agreed that there are communities whose identities have been erased, excluded, missed, grouped together, etc. with far-reaching implications. The implications include the impacted communities being marginalized and missing out on a number of opportunities.

On behalf of the developers' fraternity, these respondents suggested some measures through which the developers could be made aware of the dangers of leaving out such groups. They suggested that market surveys/research be organized and conducted to obtain the public's input/suggestions. They also suggested that there should be sensitization within the developers' fraternity as well as capacity building and other community engagements.

On the part of the impacted community, they were asked to give their thoughts on what could be done to uplift their (PWDs, LGBTIQ persons, women) community's identity in terms of data representation, and Table 5 have their suggestions.

**Table 5:** How to uplift the Impacted Community’s Identity



**Note:** Figures in this table are percentages of Responses NOT Frequencies.

According to the contents of Table 5 above, the impacted community respondents have a belief that if they are given a chance to participate in the data collection processes, as well as create some awareness/sensitization, their community’s identity in terms of data representation will be uplifted.

### 2.4.5 The Participation Pillar

At the onset of this participation pillar, a question was posed to each of the three categories of the interviewed participants on whether they think it would be beneficial for members of impacted communities to be involved in data innovation practices and their governance (e.g. their involvement in agenda-setting and decision-making around the practices of data collection, processing, and use that impact them).

On this inquiry, 100 percent of both the policymaker respondents and impacted community respondents answered in the affirmative. On the part of the developers, the majority i.e. 83.3 percent answered in the affirmative, and 16.7 percent answered differently.

For those respondents who suggested that it would be beneficial for members of impacted communities to be involved in data innovation practices and their governance, there was a second part of the question, which required them to propose some factors that might impede impacted communities from participating in data governance.

**Table 6:** Factors that Might Hinder Communities from Participating in Data Collection Systems

POLICYMAKERS	

	Percentage of Responses	
Social Norms		10.0%
Bureaucratic Tendencies		10.0%
Limited Income		10.0%
Lack of Political will to Engage		10.0%
Limited evidence-based decision making around data practices		10.0%
Others		50.0%
Total percentage of responses		100.0%
<b>DEVELOPERS</b>		
Ownership of the data		16.7%
Bureaucratic tendencies		16.7%
Others		66.7%
Total percentage of responses		100.0%
<b>IMPACTED COMMUNITY</b>		
Social and cultural norms		13.3%
Digital literacy/technical know-how		13.3%
Limited knowledge on the interpretation of the learning analytics data		13.3%
Bureaucratic tendencies		6.7%
Limited income		6.7%
Access to learning resources		6.7%
Lack of political will to engage		6.7%
Limited evidence-based decision making around data practices		6.7%
They rarely/they don't consider us		6.7%
Others, specify		20.0%
Total percentage of responses		100.0%

**Note:** Figures in this table are Responses NOT Frequencies. The table is from a multiple response questions.

From the top portion of Table 6, it is evident that on the part of the policymakers, the major reasons or factors that they envisaged to impede the impacted communities from participating in data

collection, processing, and use; were of equal proportions. Apparently, in the “Others” category, there are more responses than the other sections. When this is split, some other responses come to the fore e.g. (i) Lack of access to information on part of community members (ii) Lack of transparency on the part of data collectors, managers, and manipulators (iii) Limited knowledge of data, power disparities between the data governance and data collectors, processors and users (iv) Rigidity of our leadership because people are used to top bottom approach of formulating policy at the national level to impact the community.

On the part of the developers, other than those responses that are explicitly indicated in the middle portion of the table, they added some responses in the “Others” category which include: - (a) The process is long and time consuming as well as users not knowing how to get what they want (b) Limited knowledge and lack of digital literacy.

On the part of the impacted community respondents, since they were the main victims of circumstance, their responses somehow differed from those of the policymakers and developers. To the impacted community, social and cultural norms; digital literacy/technical know-how; as well as limited knowledge on the interpretation of the learning analytics data are the major factors that stand in their way in as far as participating in data collection, processing, and use is concerned.

Since the impacted community is the basis of the subject in Table 6 and the paragraphs that follow thereafter, it is imperative that we get to hear what they had to say on the vitality of their involvement during the development, design and deployment of the data driven technologies. They suggested that their involvement would promote inclusion, it would promote transparency, it would lead to the development of tailor-made solutions, as well as the sustainability of the technology in the community.

### ***Power-preserving inclusion***

The participation pillar refers to “power-preserving inclusion” as instances where mechanisms of inclusion normalize or support existing power imbalances in ways that could perpetuate data injustices and fortify unequal relationships.

With the above paragraph in mind, the interview respondents were asked to interpret the term “power-preserving inclusion” as it relates to the policymaking area, and the area of data innovation. The policymakers interpreted it as; (i) including participation when they lack the power to influence the decisions, (ii) It is about excluding the public in policymaking processes which excludes the interest of the public, (iii) Where power is kept in the hands of those who are holding it, (iv) It is about power consolidation where those who have power want to retain it to protect others from getting it. This promotes relationship imbalances which lead to conflict or clash of interest because those in power enact laws and policies on power consolidation without serving the interest of the majority.



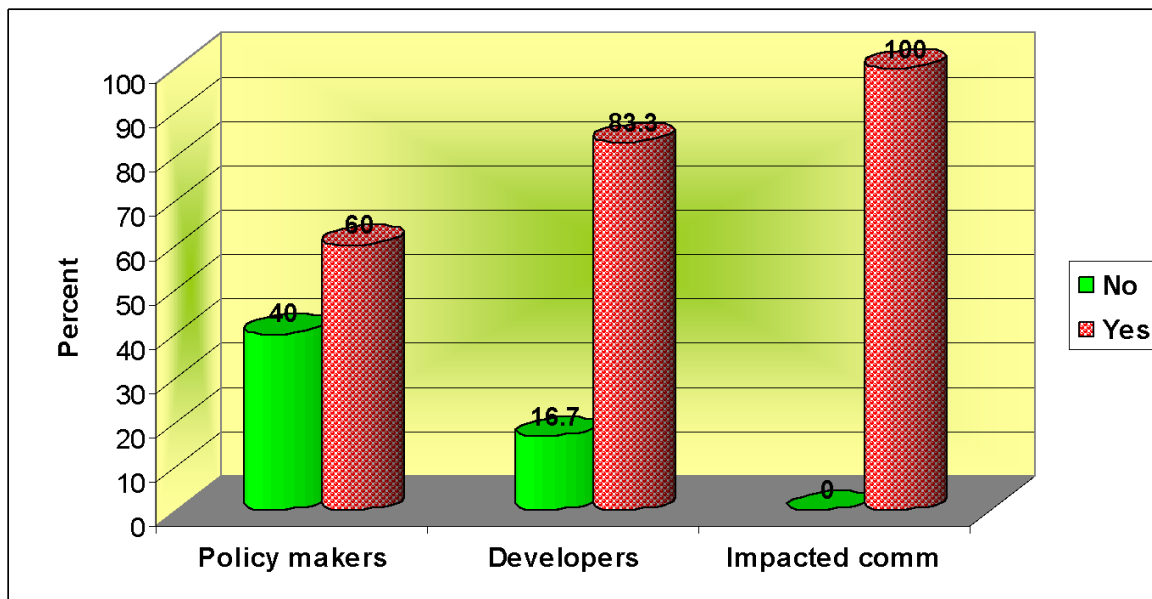
The developers interpreted it as; (i) Normalizing inclusion mechanism or promoting existing power imbalances, (ii) Putting in place a mechanism to increase data injustices, and (iii) Increasing unequal relationships.

The majority of impact community respondents did not know or could not interpret the term “power-preserving inclusion”. However, those that laboured to interpret stated that: (i) it can mean socially unbiased inclusion, (ii) Interpret it positively and not negatively, (iii) Promoting equality without fairness, and (iv) Safety is important here.

#### 2.4.6. The Knowledge Pillar

The interview tools for the three respondent categories had a question that sought respondents’ thoughts/views on whether it is important to have the cultural understandings and lived experiences of women, LGBTIQ persons, and persons with disabilities integrated into the knowledge which informs current data practices.

**Figure 6:** Whether to include Community Experiences into Data Practices Knowledge

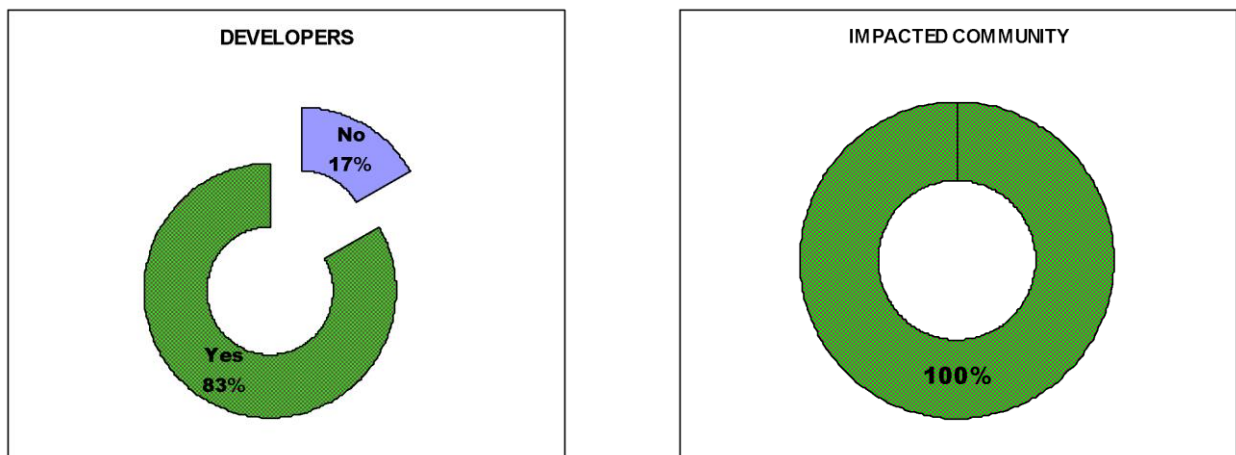


We can see from figure 6 above that since impacted communities are going to be the eventual beneficiaries of the intended inclusion, none of the impacted community respondents could have a divergent view, other than supporting the idea wholesomely. On the other hand, the majority of the other two respondent categories also supported it though the developers had more proponents of the inclusion than the policymaker respondents.

#### ***Strong objectivity***

The knowledge pillar gives an account of “strong objectivity”. Strong objectivity starts from a reflective recognition of how differential relations of power and social domination can skew the objectivity of deliberations by biasing the balance of voices that are represented in those deliberations. It then actively tries to include and amplify marginalized voices in the community of inquiry to transform situations of social disadvantage where important perspectives and insights are muted, silenced and excluded into situations that are scientifically richer and more advantaged. With strong objectivity explained in the foregoing paragraph, the developer and impact community respondents were each asked if they understood the term “objectivity” based on the above statement.

**Figure 7:** Whether the term “Objectivity” is understood



From the contents of the two pie charts of Figure 8, it is evident that all the interviewed impacted community respondents (refer to the chart on the right) comprehend the term ‘Objectivity’. This category of respondents went ahead to acknowledge that STRONG OBJECTIVITY is a helpful concept for PWDs, LGBT persons and women, in addressing data justice. This respondent category was, in addition, asked to state how “strong objectivity” might differ from their community’s current conception of objectivity, and they gave varying answers which, included the following: (a) Knowing what you want and knowing how to get it without any knowledge limitations, (b) LGBTIQ is still struggling because it is not legally acceptable, (c) PWDs perceive things in a different way and you need to explain to them what you mean, etc.

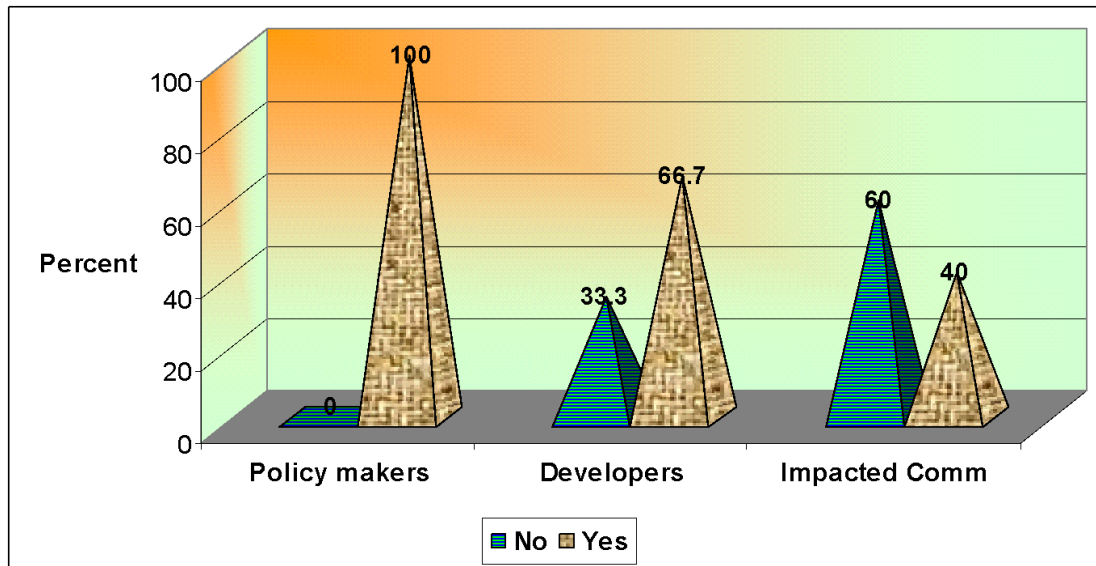
On the part of the Developers, the proportion that comprehends the term in question is 83 percent (refer to the chart on the left). This proportion of developers were asked to state if “strong objectivity” in data justice guidelines differs from their current conception of objectivity, and 80 percent of them stated that it does not, at all, differ. These developer respondents went ahead to acknowledge that strong objectivity is a helpful concept for integrating data justice in their development work.

The interview tool for policymakers had a question that tasked these respondents to state how “strong objectivity” might differ from the policymaking community’s current conception of objectivity. In response, they gave varying answers which, included the following: (a) Strong objectivity looks at issues in details that guides policymakers to have relevant policies, (b) Strong objectivity comes with the aspect of presenting end results that are beneficial to the community, (c) Strong objectivity might differ in a way that the different hierarchies are involved and influence decisions, while community perception might not be shaped due to lack of knowledge and understanding, (d) The current policy making understanding of objectivity, looks at the aspect of implementer which is neutral. Yet, strong objectivity looks at where the implementer lacks self-awareness of acknowledging the limitation each individual has and it can be cultural or historical, etc.

## 2.5. Data and the Sustainable Development Goals (SDGs)

In each of the three respondent categories’ interview tools, this section started with a question on whether the fraternity within each category is aware of the Sustainable Development Goals. The responses are contained in Figure 8, below.

Figure 7: Awareness of the Sustainable Development Goals



We can see that all the policy maker respondents were aware of the SDGs and the corresponding portion of the developers was 66.7 percent, yet that of the impacted community respondents was only 40 percent.

The interview questionnaire tool for each of the three respondent categories had a question that asked them to state which of the SDGs are of most relevance and/or urgency for their respective categories/sectors, and their responses are illustrated by the three following tables.

**Table 7a:** SDGs of Most Relevance and/or urgency for Policymakers

SDGs	Number of responses	Percent
No Poverty	3	8.3%
Zero Hunger	1	2.8%
Good Health and Well-being	2	5.6%
Quality Education	3	8.3%
Gender Equality	3	8.3%
Clean Water and Sanitation	1	2.8%
Affordable and Clean Energy	1	2.8%
Decent Work and Economic Growth	4	11.1%
Industry, Innovation and Infrastructure	4	11.1%
Reduced Inequality	3	8.3%
Sustainable Cities and Communities	1	2.8%
Responsible Consumption and Production	1	2.8%
Climate Action	3	8.3%
Life Below Water	1	2.8%
Life on Land	2	5.6%
Peace and Justice Strong Institutions	2	5.6%
Partnerships to achieve the Goal	1	2.8%
Total responses	36	100.0%

**Table 7b:** SDGs of Most Relevance and/or urgency for Developers

SDGs	Number of Responses	Percent
Good Health and Well-being	1	8.3%
Quality Education	2	16.7%
Gender Equality	1	8.3%
Industry, Innovation and Infrastructure	4	33.3%
Reduced Inequality	1	8.3%
Sustainable Cities and Communities	1	8.3%

Responsible Consumption and Production	1	8.3%
Peace and Justice Strong Institutions	1	8.3%
Total responses	12	100.0%

**Table 7c:** SDGs of Most relevance and/or urgency for Impacted communities

SDGs	Number of responses	Percent
No Poverty	4	18.2%
Zero Hunger	1	4.5%
Good Health and Well-being	3	13.6%
Quality Education	2	9.1%
Gender Equality	4	18.2%
Decent Work and Economic Growth	2	9.1%
Reduced Inequality	3	13.6%
Climate Action	1	4.5%
Peace and Justice Strong Institutions	1	4.5%
Partnerships to achieve the Goal	1	4.5%
Total responses	22	100.0%

Additionally, the three respondents' categories were, each asked to state which of the six pillars of data justice they do find particularly applicable to the Sustainable Development Goals, and their responses are contained in Table 8, below.

**Table 8:** Data Justice Pillars particularly applicable to the SDGs

	POLICY MAKERS		DEVELOPERS		IMPACTED COMMUNITIES	
	Number of responses	Percent	Number of responses	Percent	Number of responses	Percent
Power	1	6.3%	2	15.4%	4	23.5%
Equity	4	25.0%	2	15.4%	3	17.6%
Identity	0	0.0%	1	7.7%	1	5.9%

Participation	4	25.0%	2	15.4%	4	23.5%
Knowledge	2	12.5%	2	15.4%	1	5.9%
Access	5	31.3%	4	30.8%	4	23.5%
<b>Total</b>	<b>16</b>	<b>100.0%</b>	<b>13</b>	<b>100.0%</b>	<b>17</b>	<b>100.0%</b>

From the contents of Table 8, we can see that: on the part of the policy makers, they are of the view that “Equity” and “Participation” are particularly applicable to the SDGs. In response to the same question, the developers differed from the policymakers, since the latter opted for the “Access” to be particularly applicable to the SDGs. On the same inquiry, the respondents from the impacted community highlighted three pillars and these were “Power”, “Participation”, and “Access” to be particularly applicable to the SDGs.

The respondents were asked if there are ways in which digital technologies are being used to advance social justice. The respondents listed radios, television sets, smart phones, computers, mobile chat applications such as Facebook, assistive technologies for the blind, virtual private networks, biometric systems, CCTVs, and audio assistants such as Siri on iOS as key technologies that are being used to advance social justice.

### CHAPTER III:

## CONCLUSIONS AND RECOMMENDATIONS

### 3.1. Conclusion

Data justice is still a nascent concept in Uganda. While datafication is on the rise, there are significant gaps in the legislative, policy and practice arena. Several laws such as the Data Protection and Privacy Act, 2019 and the Registration of Persons Act, 2015 have been enacted to provide for the rights of data subjects and obligations of data collectors, controllers and processors. However, these laws are still new and implementation, especially for the Data Protection and Privacy Act, is still at its infancy. The Personal Data Protection Office, the office responsible for enforcement of the Act is less than a year old.

There is also a scarcity of literature on data justice in Uganda and Africa. Little has been written about the conceptualization of data justice in Uganda. This is supposed to be informed by lived experiences of stakeholders of data justice. This gap compelled the researchers of this report to borrow extensive literature from publications of scholars out of Uganda and Africa. Going forward, there is need to ramp up literature on data justice in Uganda's context to facilitate evidence-based policy reform and advocacy initiatives.

Overall, the urgency for data justice in Uganda and globally cannot be taken lightly. Every single day, data is being collected from data subjects to facilitate access and exercise of many other rights. The need to ensure that such data is collected, stored and used in a just way is central to a digital era where justice is upheld. Data justice is also an integral element of social justice. Without ensuring equal participation for all in the digital and data revolution, many groups risk being left behind. There is need to take all steps to challenge and transform the socio-historically rooted discrimination, injustice and inequality in datafication and other innovative technologies that are data intensive.

### 3.2. Recommendations

#### **To the Parliament of Uganda**

- a) Amend the Data Protection and Privacy Act, 2019 to introduce a legal framework for the realization of the six pillars of data justice.
- b) Repeal Section 25 of the Computer Misuse Act, 2011 to end use of insult laws to criminalize freedom of expression online.
- c) Ensure that all laws on data protection and privacy are in compliance with the six pillars of data justice as discussed in this report.

- d) Direct all government ministries and agencies that are in custody of contracts for the provision of CCTV surveillance, car and motorcycle tracking and any other massive data collection projects to release the contracts to the public for assessment of compliance with the six pillars of data justice.

#### **To the Personal Data Protection Office**

- a) Take further steps to effectively implement the Data Protection and Privacy Act, 2019 and promote the protection and observance of the six pillars of data justice.
- b) Effectively monitor, investigate and report on the observance of the six pillars of data justice.
- c) Expeditiously investigate and dispose all complaints received under the Data Protection and Privacy Act, 2019.
- d) Scale up public and community awareness campaigns to raise public awareness about the rights and obligations established under the Data Protection and Privacy Act, 2019 for the various data stakeholders.

#### **To the National Identification & Registration Authority (NIRA) and the Uganda Bureau of Statistics (UBOS)**

- a) Conduct a review of internal practices to ensure adherence to the six pillars of data justice and strictly deal with data in their custody in line with the law.

#### **To the Uganda Communications Commission**

- a) Provide sufficient oversight role to ensure that the communications sector, including telecommunications, postal communications and Internet Service Providers (ISPs) adhere to data justice standards.

#### **To the Uganda Human Rights Commission**

- a) Conduct awareness campaigns on the six pillars of data justice for data subjects, data collectors, data controllers and data processors.

#### **To the Uganda Police Force**



- a) Effectively and expeditiously investigate cases of breach of data justice as filed by complainants.
- b) End arbitrary arrests of people who express dissent and critical views in relation to demanding for data justice.

### **To the International Development Partners**

- a) Publicly speak out on the need for Uganda to ensure data justice is upheld.
- b) Increase funding opportunities for civil society projects that aim at advancing data justice research and practice in Uganda.

### **To the Civil Society Organizations**

- a) Conduct further research on data justice practice for various communities to facilitate evidence-based advocacy efforts.
- b) Conduct awareness campaigns on data justice for all data subjects particularly women, young people, refugees, LGBTIQ persons, persons with disabilities, policy makers, duty bearers, developers, journalists, and all data collectors, data controllers and data processors.
- c) Convene capacity building trainings for journalists, reporters, police officers, prosecutors and judicial officers.
- d) Develop and disseminate a Data justice Checklist for software developers to empower them with a tool to assess compliance of the new programs and applications.
- e) Conduct a study on data justice in crisis situations (during elections, public health emergencies, conflicts, wars and in post-conflict communities) and propose clear recommendations for policy reform and advocacy.

### **To the Media**

- a) Train journalists and reporters about data justice reporting to empower them to effectively report on data justice stories / news articles.
- b) Publish articles about data justice to report on the context and raise awareness about the relevant pillars.

**To the Telecoms / Internet Service Providers (ISPs)**

- a) Conduct a review of internal practices and products and implement necessary reforms to ensure adherence to the six pillars of data justice.

**To the Software Developers**

- a) Use a checklist for assessment of compliance of all software programs and applications with the six pillars of data justice before proceeding with development or deployment.