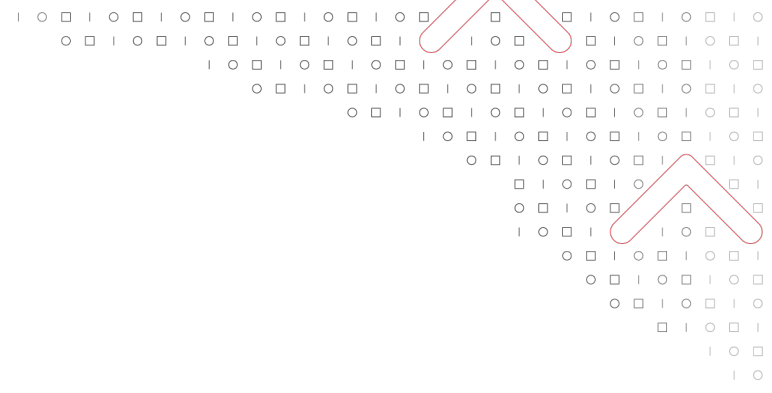**EngageMedia**

The Techno-politics of Data Justice in Indonesia and the Philippines

March 2022

EngageMedia is a nonprofit that promotes digital rights, open and secure technology, and social issue documentary. Combining video, technology, knowledge, and networks, we support Asia-Pacific and global changemakers advocating for human rights, democracy, and the environment. In collaboration with diverse networks and communities, we defend and advance digital rights.
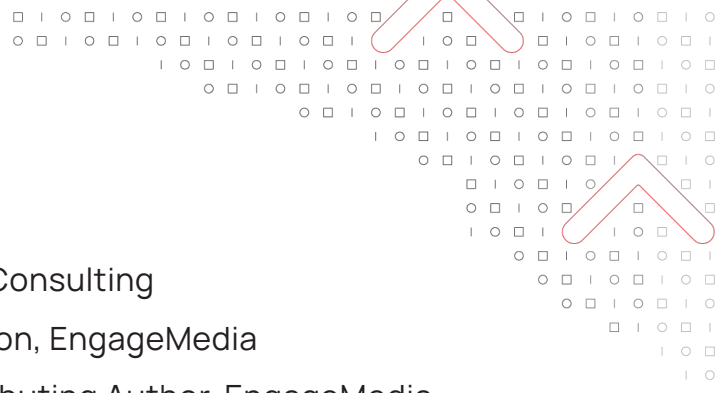
We envision a world where human rights, democracy, and the environment are respected by Asia-Pacific businesses and governments — where civil society meaningfully participates in meeting social and environmental challenges.

EngageMedia was founded in 2005 to develop an Asia-Pacific open source social issue film platform. In the following 17 years, it has evolved to lead and support advocacy on various issues, convening and collaborating with changemakers across the region.

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I.
INTRODUCTION

This report provides a preliminary review of current orientations to data justice in Indonesia and the Philippines by considering stakeholder techno-politics. Political scientist Timothy Mitchell describes techno-politics as "an amalgam of both human and nonhuman things and ideas," a combination of open-ended interactions, both intentional and unintended.[1] Accordingly, interviews and observations focus on understanding the variety of ways different groups imagine and experience the growing digital landscape. The six pillars of data justice developed by the Global Partnership on Artificial Intelligence (GPAI) provide an organising framework for our findings:

1. Power
2. Equity
3. Access
4. Identity
5. Participation
6. Knowledge

The EngageMedia research team conducted three engagement activities to unpack how data justice is understood by stakeholders in Indonesia and the Philippines. The six

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1   Mitchell, *Rule of Experts: Egypt, Techno-Politics, Modernity.*

pillars of data justice were used as an organising framework in guiding discussions in the following activities:

- An internal workshop among EngageMedia staff to discuss team members' understanding of data justice and how it relates to the organisation's work in the Asia-Pacific;
- Semi-structured interviews with informants from Indonesia; and
- A workshop with participants from tech groups and members of affected communities and civil society networks in the Philippines.

The broad context is increasing datafication in the Global South, as more aspects in social and political life—from banking to passport applications and driver's licence renewal—are mediated by digitalisation, pushed by both the government and private companies. The two countries highlighted in this research, Indonesia and the Philippines, are both only decades removed from dictatorship; the project of information decentralisation—a move away from the close control of the previous era—is an important part of a democratisation process that remains in its infancy.

In Indonesia, President Jokowi (Joko Widodo) intends to make Indonesia Southeast Asia's largest digital economy[2] under *transformasi digital*, the government's umbrella term signalling digital transformation.[3] Jokowi seeks to use digital technology to solve a range of national problems[4] , a strategy that began with raising US$130 billion in digital economy income by cooperating with some of the world's tech giants.[5] His administration has launched several initiatives to encourage "technopreneurs" by providing financial support for digital-based media and small businesses designed to take advantage of digital capabilities.[6] Since 2015, the government has also moved to bring many aspects of daily life online, some private such as banking[7] , others governmental such as passport application[8] and driver's licence renewal.[9]

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2   Fitra, "Jokowi: Ekonomi Digital RI akan Jadi yang Terbesar di Asia Tenggara."
3   "Presiden Jokowi: Transformasi Digital Wujudkan Kedaulatan dan Kemandirian Digital."
4   Ramadhan, "Jokowi Berharap Programer Ciptakan Aplikasi untuk Atasi Masalah Bangsa."
5   Antara and Prihadi, "Jokowi Minta Facebook Dukung Ekonomi Digital."
6   Soepardi, "Presiden Jokowi Ajak Facebook Dukung Ekonomi Digital."
7   Panji, "TV Digital Harus Jalan demi Dua Rencana Besar."
8   Haryadi, "Pemohon Paspor Kini Bisa Ambil Nomor Antrean via Online, Seperti Ini Caranya."
9   Laily, "Syarat dan Tata Cara Perpanjangan SIM Online, Tidak Perlu Antre."

A similar push for digital transformation is happening in the Philippines, with digitisation seen as a driving force for economic resiliency. The COVID-19 pandemic has accelerated digital adoption among Filipinos, particularly in e-commerce and e-payments.[10] However, the Philippines still trails behind its neighbours in the region despite having high internet and social media usage; bureaucratic restrictions and inadequate digital infrastructure present the main barriers in the country's adoption of digital technology.[11]

A challenging digital terrain

Access remains a challenge in Indonesia, a country with more than 16,000 islands and a diverse geography that complicates the implementation of new digital and telecommunications infrastructure. Approximately 73% of the population have very limited to zero internet access; only in the largest urban areas does internet penetration include more than 30% of the population.[12] The Philippines, also an archipelagic country, sees similar challenges to access and an urban-rural digital divide, as weak digital infrastructures for both mobile and broadband connections persist in remote areas of the country.[13]

This challenge to access is multiplied with the threats and challenges to fairness and equity in data, falling well along socio-economic and political hierarchies. The inequalities and abuses experienced in the physical spaces translate into digital spaces. In the Philippines, the people's demand to access public interest government data is often ignored. The country does not have national legislation on freedom of information, only an executive order limited to government offices under the executive branch. In Indonesia, the central government has been pushing for more centralised roles despite the decentralised efforts made in 1998. Military and police deployment towards zones designated as "conflict areas" has become increasingly frequent, usually accompanied with internet throttling and blackouts.[14] In lieu of developing accessible public facilities, the Indonesian government has turned to the private sector to fill in the gaps—such as relying on the digital-based ridesharing services of Gojek and Grab— exacerbating the inequalities already present in physical spaces.

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10   Hani, "The Philippines to Push Further on Digital Readiness and Accelerate Digital Transformation."
11   Regis, "Working towards Digital Transformation."
12   Kemp, "Digital 2021: Indonesia"; APJII, "Laporan Survei Internet APJII 2019 – 2020 (Q2)."
13   Araneta et al., "Mapping Digital Poverty in PH."
14   SAFEnet, "The Pandemic Might Be Under Control, But Digital Repression Continues."

II.
CONCEPTS AND METHODS

This report takes up methods from the emerging field of critical data studies, which grounds the study of data-driven environments and algorithmic processes in power relations, interpretive habits, ethics, and values.[15]

From December 23, 2021 until February 28, 2022, EngageMedia conducted semistructured interviews with fifteen informants from Indonesia ranging from technology professionals and users to public officials. During these interviews, informants reflected broadly on their experiences and sometimes speculatively on the larger implications of their digital commitments, allowing the research team to identify some themes that emerged from their observations. The interview also raised questions about individual paths to working with digital technology and data, the institutional settings of research, and some interviewees' perceptions of the balance of commercial, bureaucratic, and civic imperatives in everyday encounters.

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15   Iliadis and Russo, "Critical Data Studies: An Introduction"; "Critical Algorithm Studies: A Reading List."

Informants were selected using a snowball approach based on their degree and depth of interaction with Indonesia's rapid digitisation as well as their openness to discussing their civic and personal aspirations and their expectations of digital technology. All names below have been anonymised for privacy and security purposes.

1. Dr. Arya Susanto (anonymised) is a renowned scholar in Indonesia. He has taught at a university in Indonesia for more than 20 years and has worked in a variety of roles: as a journalist, a regulator, and a market analyst. Over the past five years, he has gained notoriety from online posts in support of Jokowi and very critical of conservative Islam.

2. Valentius USP (anonymised) is the founder and chief technology officer of several blockchain-based startups. He also plans, designs, and conducts data literacy vocational training courses and has worked in several digital rights/democracy non-government organisations (NGOs). He strives to identify the problems of various local groups and find tech-based solutions.

3. Dina Anjani (anonymised) is a 34-year-old transgender woman, activist, designer, and influencer. She runs and hosts a progressive YouTube talk show about sexuality. She deals with topics deemed too taboo to be spoken about in public, such as fetishes, LGBTQIA people, and people with HIV, for example.

4. Sindhu Ginanjar (anonymised) is a self-proclaimed anarchist. He used to work as an IT engineer for some private companies, but has become sceptical about digital technology, especially when it comes to cybersecurity. Ginanjar aspires to detach himself and other people from as many digital entanglements as he possibly can.

5. Ratih Y and Indra H (anonymised) are managers at Company T (anonymised), one of Indonesia's largest digital companies, who have hopes of using their digital expertise for societal betterment. The research team interviewed them together due to their similar social science education backgrounds and their past work for digital-related non-profits.

6. Emir & Aisha (anonymised) are siblings who had to move back into their mother's house during the COVID-19 pandemic. Emir is in the online job market, which has not been easy. Aisha graduated college and started her master's degree in engineering online. Financial difficulties have forced them to micromanage mobile data spending in order to continue to work toward their goals.

7. Guntur P (anonymised) works as a driver for Gojek, Indonesia's largest ride-hailing company. Based in Batam, bordering Singapore, Guntur prides himself on being a highly-rated driver of Gocar (a franchise of Gojek specialising on car-rides instead of motorbike) on the island and is a member of a community of Gocar drivers in the area.

8. Eric T (anonymised) is an engineering manager at Company C (anonymised), one of Indonesia's biggest fintech companies in a booming industry. He mostly works on software development for secure and proper data storage. The fintech industry appealed to Eric for the opportunity to participate in challenging work with engineering peers.

9. Muhammad Faisal Rumakat (anonymised) used to run a drop shipping business for Shopee on Geser Island, Maluku with his girlfriend, Nur Almaidah (anonymised). Shopee, a Singaporean e-commerce company, has a big presence in Indonesia. Their business was coordinating shipping for villagers in their area. When internet access on Geser improved significantly, the need for their service diminished. They abandoned the business and opened a cafe.

10. Hansel Yonathan (anonymised) is a 41-year-old blogger living in the city of Jayapura, Papua. He sees his blog, soldierofzion.wordpress.com (anonymised), as a mix of business card, branding tool, and path to expanding his social horizon beyond his local area. He has expressed much interest in politics and the military of both Indonesia and Israel, but seems reluctant to say that those are the topics his blog focuses on.

In pre-interview conversations with five policymakers, it was challenging to get them to take the conversation beyond their normative talking points, even when we offered them anonymity. Policymakers' viewpoints throughout this report are largely based on literature research. The main content of the report draws from perspectives shared by Indonesian informants; outputs from the internal workshop among EngageMedia staff; and viewpoints raised during the Philippines workshop with activists, members of affected communities, and civil society organisations (CSOs). The report reflects the perspectives of these different stakeholders, which allowed us to take a more interrogative approach to social structures, human choices, and socio-technical practices.

We encouraged our informants to ponder hopes, dreams, and possible consequences associated with digital technologies. This follows from Hirokazu Miyazaki's concept of temporal incongruity,[16] which seeks to understand the gaps between the hopeful futures we project onto technologies and the actual realities they deliver. Our interest in informants' own perceived present autonomy, past experience, and imagined futures led us to Arjun Appadurai's concept of the "capacity to aspire."[17] This capacity does not start from present experiences and end with future wants; it oscillates between present and future as people imagine and experience new vulnerabilities, speculations, and calculations across unequal terrains. Thus, we assume no linear path between present experiences of marginalisation/ poverty, for instance, and visions for a better future. There is constant oscillation between present and future as people encounter new vulnerabilities or rewards through experiences of technology's selective investments.

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16   Miyazaki, "The Temporalities of the Market."
17   Appadurai, "The Capacity to Aspire: Culture and the Terms of Recognition."

III.
THE CHALLENGE OF DEFINING DATA JUSTICE

Many of our informants and some of EngageMedia staff are unfamiliar with the term data justice. The unclarity of the concept makes the presence, nature, and depth of data justice difficult to measure. Most informants tended to speak about the topic by way of violations or injustices, namely obstacles to access, limits on content, infringement of user rights, and lack of data protection.[18] The Filipino activists in our workshop tended to see the societal impacts of datafication and the increasing pervasiveness of data-intensive technologies almost exclusively in terms of data protection, individual rights, privacy, efficiency, and security.[19]

As a starting point, we referred to data justice as dignified, fair, and consensual practices in production, distribution, consumption, interpretation, manipulation, and collection of data. In the midst of excitement about innovation and science, human dignity, especially of marginalised groups, often takes a back seat. Thus, that component involved asking whether a particular interaction or experience with data maintains the dignity of the subjects involved in it.

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18   EngageMedia, "EngageMedia Indonesia Internal Workshop: Data Justice."
19   EngageMedia, "ADJRP Workshop on Data Justice - Philippines."

IV.
FINDINGS AND ANALYSIS: THE GPAI PILLARS OF DATA JUSTICE

Power

Power is ever-present in all our informants' experience of an increasingly datafied society. Their observations, as well as publicly available information, touched upon two main themes: inevitability and data protection.

The sublime inevitability of digitisation

From interviews with stakeholders in Indonesia and the Philippines, digitisation seems to be readily accepted as important in society. In the Philippines, activists and civil society organisations see data as the catalyst for advocacy and research work. Respondents in the Philippines workshop employ data to engage government offices in policymaking and lobbying efforts. Data also serves as an important backbone in decision-making processes and to analyse information based on realities on the ground.[20] Digitisation gains an even

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20   EngageMedia, "ADJRP Workshop on Data Justice - Philippines."

more deterministic leaning in Indonesia, as media and politicians engage in the pervasive use of the term *keniscayaan*, which translates as inevitability.[21] In the preliminary phone conversations with five Indonesian policymakers, they repeatedly related *keniscayaan* to the country's digitisation efforts. Part of this word, *niscaya*, derives from a Sanskrit word meaning undoubtedly or definite. In the Indonesian language, it is most commonly used in translations of the Quran[22] to describe the will of Allah or of divine spirits. Thus, *keniscayaan* carries a sense of something spiritual, prophetic, and divine. The fact that people in public institutions and news outlets use the term *keniscayaan* in connection with Indonesian datafication resonates with David Nye's identification of "the technological sublime," wherein technology represents an overwhelming quality of greatness, whether physical, moral, intellectual, metaphysical, aesthetic, spiritual, or artistic.[23]

Even Indonesian senior scholar Arya Susanto sees social media, including YouTube, as a godsend and founders of these platforms as prophets.[24] Explained Arya: "It's like god descended and said, 'Here, this is the public sphere that you wanted for so long. I hand it to you through Mark Zuckerberg, through Google. It couldn't reach you before, but now you have it. So, use it!" The linguistic and cultural implication is that the internet and its various platforms possess power beyond calculation, which individual or collective human beings cannot and should not resist. The aura of the sublime divine further implies an objective, external perspective presence such that users should be grateful for the new affordances of digital media and ungrateful should they criticise.[25] Scholars, users, and activists saw in them a ticket to the future; in this awe and excitement, questions of expense and necessity largely eluded scrutiny.[26]A fear of isolation from the inherent power of an inevitable techno future certainly has influence on civic priorities.[27] This rhetoric of inevitability tends to obscure policy choices and conflicting interests that shape the processes of new technology

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21   Girsang, "Menteri Johnny Sebut Keniscayaan Transformasi Digital Ubah Banyak Hal"; Susilo, "Pemanfaatan Teknologi Digital Telah Menjadi Keniscayaan."
22   In the Quran, niscaya commonly describes the inevitability of god's will. One of the most famous examples is the passage in Al Mu'min 60, which states: "And pray to me, I will answer! ('Mintalah kepada-Ku, niscaya akan Aku kabulkan').
23   Nye, American Technological Sublime.
24   Susanto, Anonymous interview.
25   Nye, American Technological Sublime.
26   Susanto, Anonymous interview; Valentius USP, Anonymous interview; Lubabah, "Ahok: Tak Bisa Tutup Taksi Online, Mau Kembali Ke Zaman Batu?"
27   Citra, "Engineering Inevitability: How Digital Television Is Colonizing Indonesia"; Susanto, Anonymous interview; Valentius USP, Anonymous interview.

adoption and hide the reality that digital transformation is not only a technological issue, but a social one as well.[28]

Protection from surveillance

Digital life on the internet entails surveillance, which harvests, circulates, and reorganises bits of data about individuals, aggregating them to predict people's preferences and actions. Some scholars call this system surveillance capitalism to emphasise how central the act of watching and recording people has become to the digital economy.[29] Rarely does a contemporary digital tech product come without an intention to track and collect personal data. The imbalance of power is not lost on our informant Eric T, who notes what users sacrifice in privacy in order to get access to certain services or products. Eric explains that services such as PayLater, which he is involved in developing, could be damaging to people in middle-lower income brackets, "because they want to buy these things that they don't have the money for now" without realising its trappings.[30]

Few accountability measures are in place for companies or state institutions that use and monetise this massive data extracting capability.[31] In Indonesia and the Philippines, the state is often the perpetrator of extreme surveillance and breaches of cybersecurity. Our findings show activist and journalist concern about this issue of power. Both Indonesia and the Philippines have seen a significant rise in attacks towards journalists and activists online in the last five years, mostly conducted through online troll campaigns. During the COVID-19 pandemic, such campaigns have also been employed against those who try to use data and factual information to exact accountability and promote transparency in the government's pandemic-related programs.[32]

Due to the authoritarian histories of both Indonesia and the Philippines, it is no surprise that CSOs such as EngageMedia, ICT Watch, or UP Internet Freedom Network consider data protection as one of their highest priorities as they seek to address data justice. For instance,

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28   Citra, "Engineering Inevitability: How Digital Television Is Colonizing Indonesia."
29   Zuboff, "Big Other: Surveillance Capitalism and the Prospects of an Information Civilization."
30   Nye, American Technological Sublime.
31   EngageMedia, "ADJRP Workshop on Data Justice - Philippines."
32   Rasidi and Wijayanto, "Normalising the New Normal"; Lucero, "Fast Tech to Silence Dissent, Slow Tech for Public Health Crisis."

the Philippines' Anti-Terrorism Act of 2020 increased concern among Philippine activists and journalists because it gives state actors broader grounds for surveillance.

Even before the COVID-19 pandemic, the average Indonesian internet user spent around eight hours a day online.[33] With the pandemic deepening reliance on the internet in many aspects of life, especially financial transactions,[34] maintaining data protection and security should be a paramount concern. Data leaks and hacking cases have become increasingly common, with at least seven high-profile cases of data privacy violations reported in Indonesia in 2020 alone.[35] In 2019, a data breach leaked personal data of 91 million users of the e-commerce site Tokopedia. In the Philippines, there are concerns that data collected for COVID-19 pandemic actions, such as contact tracing, may be repurposed by data custodians to help certain candidates reach voters digitally when there is limited in-person campaigning for the May 2022 elections.[36]

Although companies have asserted that breaches did not compromise users' personal data, the cases have highlighted the need for a more stringent approach to personal data protection by both corporations and relevant government entities that can regulate them.[37] In the Philippines, state and non-state actors responsible for data leaks involving millions of Filipinos' personal information remain largely unscathed, despite clear penalties and accountability measures indicated in the country's Data Privacy Act of 2012.[38]

Despite the high level of importance ascribed by Indonesian and Filipino activists and journalists on data privacy and protection from surveillance, the rest of our informants from Indonesia seem to be resigned to the situation. Acknowledging the country's history with authoritarianism and militarism, some informants see the situation as irreparable, leaving them to simply try and salvage what they can—as we will discuss in the section on Participation.

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33   Wong, "How Indonesians Embrace the Digital World."
34   Djailani, "Menkeu Sri Mulyani: Transaksi Ekonomi Digital Naik 25 Persen Akibat Pandemi."
35   Stephanie, "7 Kasus Kebocoran Data yang Terjadi Sepanjang 2020."
36   EngageMedia, "ADJRP Workshop on Data Justice - Philippines.
37   EngageMedia, "EngageMedia Indonesia Internal Workshop: Data Justice."
38   EngageMedia, "ADJRP Workshop on Data Justice - Philippines."

Equity

A digital divide applies across the Indonesian archipelago: innovation and entrepreneurship activities in the cities, digital inclusion efforts in the rest of the nation. For technopreneurs like Valentius USP, connectivity now means more than digital transmission. "Authority over data for myself," as Valentius puts it, is understood as connections engineered and manipulated into revenue.[39] "Which data could I monetise and which ones should I control? When should I view data as assets, and when as a commodity? Which assets could we share or sell, and which assets should we preserve?" Valentius explained. "So, if we do not discuss or debate on how to monetise this, it will forever be the case that discourse on data literacy down to data justice would remain only as a utopian perspective." His sense of civic engagement involves viewing most local problems through a technological lens and naturalises an entrepreneurial disposition as the background condition of civic life. Boundaries between private interests and civic concerns are rarely distinguishable. Young, middle-class, urban tech enthusiasts embrace the datafication of the nation with the goal of turning Indonesia's social and political problems into economic opportunities. Developers Eric and Indra, for example, find opportunity in a datafied society as "cracking way more interesting problems than what we're doing here today."[40]

Meanwhile, it is hard to demonstrate how growth might be translated into benefits for some already disadvantaged residents.[41] Participants in the Philippines workshop noted that the distribution of data, and the power to decide what can be done with it—through data law and policies—is largely controlled by a select group of people such as the political elite and big tech companies, and not by ordinary people. In Indonesia, economic status appears to determine quality of life mediated by data.[42] Even when one is able to get access to a service or a device, service quality (signal, cost, storage, etc.) is much lower than what more privileged Indonesians have.[43] Few Indonesian homes have WiFi with a stable, fast internet connection.[44] Most people from middle to lower economic backgrounds rely on pre-paid mobile phones only.[45] Unlike wired internet, the more they use the mobile internet, the bigger

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39   Valentius USP, Anonymous interview
40   Eric T, Anonymous interview; Ratih Y and Indra H, Anonymous interview.
41   Emir and Aisha, Anonymous interview; Rumakat, Anonymous interview; Ginanjar, Anonymous interview; Ratih Y and Indra H, Anonymous interview.
42   Emir and Aisha, Anonymous interview.
43   Emir and Aisha, Anonymous interview; Rumakat, Anonymous interview; Guntur P, Anonymous interview.
44   Emir and Aisha, Anonymous interview; Rumakat, Anonymous interview.
45   Emir and Aisha, Anonymous interview; Rumakat, Anonymous interview; Guntur P, Anonymous interview.

their monthly cost.[46] This, too, limits the quality of internet experience. People often access Facebook or WhatsApp on their mobile phones via 2G and 3G satellite technology. Given the low speeds and unstable connection, they are unable to use Google or Wikipedia effectively, let alone seize the opportunity to become one of Indonesia's "1,000 technopreneurs."[47] Reliable access to the internet is a prerequisite for equitable opportunities offered by information and communications technologies (ICTs).[48]

Access

In the discussions on access, common themes mentioned in interviews involve looking at digital technology access as a basic human right (and along with it, addressing factors that impede this access) and state censorship.

Digital rights

According to a 2011 report by the special rapporteur for the UN Human Rights Council, internet freedom and access to online information should be acknowledged as a human right.[49] Freedom of access is not consistently upheld in many countries, including Indonesia and the Philippines, owing to both the prevalent digital divide noted above and state-led restrictions on internet access. The divide signals a gap not only for individuals and households, but also businesses and larger geographic areas with good or poor access to information and communications technology due to socio-economic, demographic, and geographic differences, among other factors. Lack of infrastructure is a significant barrier to access. Indonesian service providers are often reluctant to establish comprehensive last mile service in areas with lower population densities and less sophisticated infrastructures, which results in more expensive service for Indonesians in eastern zones like Papua and Maluku.[50]

In the era of the Internet of Things, there is a loss of distinction between companies in the data collection or predictive analytics business and those providing the material infrastructure on which the digital world relies.[51] In Indonesia and many Global South nations,

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46   Emir and Aisha, Anonymous interview; Rumakat, Anonymous interview.
47   Soepardi, "Presiden Jokowi Ajak Facebook Dukung Ekonomi Digital."
48   EngageMedia, "EngageMedia Indonesia Internal Workshop: Data Justice."
49   La Rue, "Report of the Special Rapporteur on the Promotion and Protection of the Right to Freedom of Opinion and Expression."
50   Citra and Saptaningrum, "The State of Digital Rights in Indonesia: Digital Rights Report 2021."
51   Ren et al., "Google-Wide Profiling: A Continuous Profiling Infrastructure for Data Centers."

the state often shifts its responsibility to provide basic access to infrastructural public goods to private corporations. For example, the rideshare company Gojek is considered a substitute for public transportation.[52] With such provider shifts, the government also shifts the matter of rights of access to private providers for whom economic interests rule.

Being on the digital grid is not simply beneficial but also essential to fully participate in social life. Applying for jobs or welfare, or even performing business tasks, is much more difficult without connectivity, computers, and digital literacy. As basic services such as education, employment, and health-related resources migrate online, how people are connected significantly influences opportunities they have for stability and well-being. The cost and complexity of connectivity have plummeted over the last decade. Connectivity, on a very basic level, is a laudable social goal with possibilities for broadly positive economic outcomes. Elevating digital connectivity alone as the one inevitable and direct path to prosperity exclusive of all other socio-economic factors, however, is misleading.[53]

State Censorship

Beyond the digital divide and inadequate infrastructure, data justice in Indonesia also concerns limitations of access imposed by the state. The internet has created digital civic spaces where individuals can express themselves socially and politically. Groups such as LGBTQ communities and Papua independence activists have gone online to circumvent restrictions of their political rights.[54] The internet has also allowed CSOs as well as individual activists to directly engage the general public in discussions likely to be neglected by the traditional news and media outlets.[55]

A 2020 SAFEnet report on digital authoritarianism noted that the Indonesian government has pursued increasingly hostile tactics to rein in speech it does not authorise.[56] The methods, which include criminal prosecution, have had a chilling effect on political discourse in Indonesia. Ministry of Communication and Information regulations on negative content, as classified by the state, lead to blocking or removal. The law, intended to protect individuals in electronic financial transactions, has given the state more general power to

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52   al-Hikam, "Kemenhub Dukung Ojol Jadi Transportasi Umum, Tapi…"
53   Yonathan, Anonymous interview.
54   Yonathan, Anonymous interview.
55   Susanto, Anonymous interview.
56   SAFEnet, "The Rise of Digital Authoritarian."

limit access to information. There have been reports of restrictions on internet access in parts of the country, most prominently in Papua.[57] In the past two years, internet access has been disrupted in Papua multiple times,[58] most recently in April 2021. Precarity is the condition of internet connection in this eastern part of Indonesia.

A corollary of this control is that in Indonesia and the Philippines, it has become harder and more expensive to access public-interest data from government agencies during the COVID-19 pandemic. Those who try to use data and factual information to demand accountability and promote transparency in government on pandemic-related programs are attacked online.

Identity

Our findings suggest that dominant practices for collecting and understanding demographic data—such as research surveys or government censuses—are insufficient in accounting for contemporary lives. For instance, traditional approaches to collecting demographic data do not allow for the fluidity and multiplicity of gender and sexual identities that characterise the experiences of many LGBTQ people and other marginalised communities, and the nuances of the lives they live. These traditions are simply replicated in aggregate datafication.

For Dina Anjani, host of sexuality talk on YouTube, data justice "has to provide as many truths as possible in data collecting and processing."[59] Similarly, Hansel, a Papuan blogger living in the city of Jayapura, feels Papuans tend to be misrepresented as a "singular block, with identical sets of people and problems." With data collection processes and authorities mostly based in the central government in Jakarta, Hansel feels Papua tends to be seen as the 'other' lumped together in one block. Indonesia's history of centralised authoritarian government, and the continuing military deployment in Papua, has made Hansel feel that people in the centre are oblivious when it comes to acknowledging Papua. He argues for the need to acknowledge Papuan diversity: "There are many districts, ethnicities, and languages, as well as people with different ways of thinking. It's very difficult to just take one part and

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57   Yonathan, Anonymous interview.
58   Yonathan, Anonymous interview.
59   Anjani, Anonymous interview.

consider it representative of the rest." More complex data collection is seen as somewhat better than minimal data collection—a perspective at odds with those of most practitioners and activists, who strive to collect as minimal data as possible to avoid misuse.

Information, especially as digital data, compacts one's identity into data sets. That compactness can feel reductionist and dehumanising. Dina's observation is that in-person interaction helps bypass the limits of non-comprehensive data collection. Outside of Indonesian bureaucratic forms, which largely employ binary gender categorisation, Dina asserts that offline interaction provides her with more space to explain her identity. She finds that, when appealed to personally, most Indonesians are capable of more understanding than digital technologies can afford them. During her driver's licence renewal appointment, the officer asked her informally if she wanted her gender entry to be "woman." He offered to change the digital entry that apparently had been determined by Dina's birth certificate.

Partha Chatterjee has suggested that the space of negotiation for marginalised groups takes place not through the procedures of civil society or formal bureaucracies, but in the spaces of political society. The claims of LGBTQ identities in political society are a matter of constant negotiation and the results are never secure or permanent. "Their entitlements, even when recognised, never quite become rights."[60] Digitisation, in a lot of ways, hinders the negotiation process even more.

Participation

Our findings show the pillar of participation raises issues of dignity and public-private partnership.

The matter of dignity

As stated in the preparatory materials for global partners, a critical refusal to participate is a form of critical participation. According to David Grewal's conception of power, an individual's decision to use digital services can be understood as neither entirely voluntary nor entirely coerced.[61] The frame of dignity allows us to articulate how a collective choice can be experienced as coercive. As an example, there is a certain dignity in remaining analog;

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60   Chatterjee, "Democracy and Economic Transformation in India."
61   Grewal, Network Power: The Social Dynamics of Globalization.

some people choose that. By conceiving of power as a networked phenomenon, we are able to glimpse how the rise of digitisation as a tacitly assumed normal standard of living can attract some while alienating others. Grewal argues that while forces that may actively coerce the adoption of new conventions remain diffuse and difficult to identify, the real and perceived consequences for those who fail to "share" the new conventions are becoming harsher.

We can ask: Can people who live outside the digital realm live with dignity? It is increasingly difficult to opt out, but it is no easy thing to assess what people gain or lose merely by remaining connected.[62] Ginanjar, a self-proclaimed anarchist, is one advocate of 'opting out' from datafied society. For example, he refused to use e-wallet services such as OVO and GoPay commonly required in urban areas in Indonesia. He also maintains a firm sense of data ownership: while trying to activate the public health insurance service, Ginanjar opted to travel back to his hometown and personally visit the local office to avoid having to send digital copies of his identification card. When he arrived at the office, he found that the requirements remained the same. "They told me that I had to send my data over WhatsApp. For me, this is absurd, you know?" He admitted that if he sent over a printout copy of his ID it could still be leaked, but noted that "they [would] have to scan that first, they can't just forward it here and there like they could through WhatsApp. In digital format, it's so easy to forward [my data]. There goes my data security."

Unsurprisingly, the Indonesian developers we interviewed view datafication as one step in the evolutionary ladder of society. However, the way they approach the issue differs. Echoing the *keniscayaan* belief in Indonesia, Indra said that "as a society rolls along, they [the Indonesian people] have to roll along because the concept of dignity and what it means to be human ultimately change." It does not make sense to him to 'opt out' from datafied society as Ginanjar tried to do, unless "you create your own society." Indra asks: "Do we, as a country or a society, have to accommodate these people? Again, it's a trade-off. Is it a trade-off that is worth it for us to make as a country, to accommodate and potentially have loopholes in our system?" On the other hand, Ratih said that while technological changes are inevitable, she also "wouldn't want to connect everything to technology." She talks about malice associated with datafication in moral terms: the problem lies not in the technology itself, but the humans

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62   Ginanjar, Anonymous interview.

behind it. "As long as society is driven by profit, money, and the interests of the top players of the society, then I think ultimately someone will be harmed," she explained. "So as long as you're [a] business, so long as you have investors, so long as you're in the interest of enriching somebody who invested in you, and you're not necessarily really seriously invested in uplifting or mobilising the social economy of our society, or even making the rich people more creative and thoughtful, I think you're still classified as evil."

But if activists such as Ginanjar and other CSO informants in the Philippines are deeply concerned with data collection, others in the grassroots do not seem to share the sentiment. Many people, especially those with limited socio-economic capital, have become accustomed to giving away their control over data collection in order to participate in new ways of meeting basic needs.[63] Hansel, who lives in the Papuan province of Indonesia, is resigned to accepting the government's attitude towards data collection. "For our government officials, if our surveillance level could be like China, they'd say it would be better for us to be on that level. As a country which has remained quite militaristic, I understand." Already accustomed to the experience of military deployment and frequent unexplained internet blackouts, he remains agnostic with the level of securitisation the state is taking. "What should I expect? If our data is collected by the government, oh well. If it could be put to good use or [be] well-protected, thank goodness, but if not, well, that's just the level of our government," he added.

Muhammad Faisal, who is already accustomed to the lack of access to electricity and clean water in his area, is indifferent towards the Indonesian central government's ambition of *transformasi digital* and the many problems that come with it. "We are already used to living without a network. When the network arrived here, we also started to get used to living with it. If there's mobile data, thank goodness, if there isn't… well, we're used to that too," he said.

Even those living in the centre too are willing to trade off their data for more pressing needs such as having a stable internet connection for use at work and on campus, as in the case of Emir and Aisha, who live in Indonesia's capital Jakarta. Despite reports of data leaks and surveillance in Indonesia, they have a firm belief in the state. "I wouldn't be in trouble as

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63   Ginanjar, Anonymous interview; Emir and Aisha, Anonymous interview; Ratih Y and Indra H, Anonymous interview.

long as I don't do anything negative. That's what I think. Unless I do something like treason or something, then I shouldn't be nervous," Emir explained. "As state institutions, they have the responsibility to safeguard people's personal data and it might go beyond the president's authority."

One informant, the scholar Arya Susanto, attempts to explain this as an "Indonesian psyche." According to him, Indonesians don't see the need to be anxious about the collection and surveillance of personal data, as he sees that Indonesians are already "so used to having things stolen from us". He expounded: "The issue would be different if the data being stolen were their ATM PIN or account numbers [or] the theft of data with negative economic implications." Being a pro-government social media influencer, Arya's indifference towards government surveillance is understandable, as Indonesian pro-government influencers have better access towards data safety than most.[64] However, his indifferent attitude extends to surveillance by social media platforms as well. "I will just choose to be grateful and thankful to Mark [Zuckerberg], Bill Gates, and friends," Arya said. He is willing to trade off data security for the feeling of power he gained through social media. "You could even steal our data, I don't care, and sell them, I don't care... I'm already quite happy with what you've provided for us."

Growing up in an authoritarian state in Indonesia, Arya feels that social media platforms have given him a space that he could never afford. "Please understand the psychological condition of people like me, who in the past, were unable to speak," Arya said. "Now, there is a platform which allows me to speak and enlighten." Looking through our informants' assessments, perhaps a point can even be made that this disregard towards surveillance and data collection is not just an "Indonesian psyche" as Arya argued, but quite possibly a "post-authoritarian" one as well.

Public-Private Partnership

Our informants repeatedly mentioned public-private partnerships in open data as the solution to many data injustices. Despite private sector support, civic engagement, and a growing interest in the potential of big data, there is little consensus about how open

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64   Adjie, "Court Rejects Ravio Patra's Pretrial Motion despite Claims of Irregularities'"; Sastramidjaja et al., "The Threat of Cyber Troops."

data should work or what data offices of government agencies should do. The specifics are indistinct.

Part of the allure of digitisation, for public officials and tech companies alike, comes from what appears to be its capacity to improve the legibility of social life through so-called big data[65] and novel computational methods. Yet we know little about how public officials make sense of all the datasets they compile, in what ways different devices become useful in day-to-day work, and what kind of questions or answers might emerge from new socio-technical systems. Little attention has been paid to the day-to-day work of forging what Oscar Gandy Jr.[66] calls "actionable intelligence"; that is, in the deluge of data public officials receive, they need to discover the kinds of knowledge deemed to have practical value. The research team's limited communications with five public officials reveal very limited comprehension, if any, of what such actionable knowledge might be.

Public and private information about the citizens and their lives circulates with much greater ease across governments and companies than it used to before the internet. Despite the prevalence of algorithms in contouring social life and securing profits, their limitations and dangers are subject to debate, especially considering the cultural values embedded in them[67] or the social practices that support their development and operation.[68]

Knowledge

Under this data justice theme, we challenge the view that algorithms are essentially secret but are easily comprehensible when unveiled. On the contrary, even those who design and implement these systems work within an ample amount of ignorance about how algorithms operate what they do. Eric pointed out: "Usually grad researchers or PhD students have better understanding than regular software engineers, because software engineers only dabble [in it] if their premade tools fail [to operate] normally." Eric said that understanding the way algorithms work was personally important to him, but added: "Is it important to my day job? The answer is no."[69]

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65   al-Hikam, "Pemerintah Bisa Pakai Big Data buat Susun Kebijakan."
66   Gandy Jr., The Panoptic Sort: A Political Economy of Personal Information.
67   Forsythe, Studying Those Who Study Us: An Anthropologist in the World of Artificial Intelligence.
68   Suchman and Trigg, "Artificial Intelligence as Craftwork."
69   Eric T, Anonymous interview; Ratih Y and Indra H, Anonymous interview.

This ignorance, however, is not simply the absence of knowledge or expertise but a productive force in itself. According to Eve Sedgwick in 1988, ignorance "refers to 'a praxis, a method, a path to a certain sort of attitude.' Ignorance is powerful stuff that is as potent and multiple a thing as knowledge" (as quoted in Bishop and Phillips 2006).[70] As a praxis that takes effort and deliberateness, ignorance actively participates in the production of knowledge, power, and truth. Ignorance, therefore, is not so much a lack of knowledge as it is a form of not knowing that, like knowledge, participates in the production of meanings, materials, persons, and institutions.[71] In the case of digital technology, it organises public knowledge about the system, manages people's expectations, and determines regulatory trajectories.[72]

Even when they are armed with intellectual understanding of digital divides, techno enthusiasts may act in ignorance of how inequality operates on the ground.[73] Indra, for example, thinks that unfair work practices in ridesharing services like Gojek and Grab can be addressed by simply implementing systems better. In contrast, Guntur, who works as a Gojek driver, is left in the dark about how algorithms work while enduring the precarity of being a gig worker. Public officials, civic entrepreneurs, and tech companies make a persistent effort to ignore knowledge that they deem traditional or commonplace or, in fact, to actively unlearn or leave behind the underlying dynamics of perennial societal issues in the name of enabling the full potential of digital transformation.[74]

If knowledge about how the system works remains a black box even for engineers, the case is more severe for users.[75] For Guntur, Emir, and Aisha, the unpredictability of their interaction with digital technology and service are often chalked up to machine learning. Guntur, for example, uses the term "server" as a blanket reference to the unknowns, the inconceivable, and other digital experiences he feels powerless to understand, change, or appeal.[76] He explains that Gojek "is like a computer with their own calculations and algorithms", reliant on customers' ratings to assess drivers' performance. When a customer

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70   Bishop and Phillips, "Ignorance."
71   McGoey, "Strategic Unknowns: Towards a Sociology of Ignorance."
72   Guntur P, Anonymous interview; Emir and Aisha, Anonymous interview.
73   Ratih Y and Indra H, Anonymous interview; Eric T, Anonymous interview.
74   "Beyond Innovation, Driving Impact"; Ratih Y and Indra H, Anonymous interview; Ginanjar, Anonymous interview.
75   Eric T, Anonymous interview.
76   Emir and Aisha, Anonymous interview; Guntur P, Anonymous interview; Rumakat, Anonymous interview.

complaint is lodged, the system would "shoot down the driver's account right away." Guntur added: "If they're humans, they definitely should have a heart, right? They wouldn't just deal with us like that, they would look at the driver's track record. A machine doesn't care. Even if we perform well, one time [we make a mistake] then it's over."

As a driver, Guntur said he feels left in the dark with how the system works. For him, the only way to figure out the mechanism is through trial and error with fellow drivers in the local online drivers community, of which he is a member. There is constant oscillation between how dynamically compelling and how inscrutable digital data is.

V.
PRELIMINARY CONCLUSIONS AND RECOMMENDATIONS

"Data is the new oil". This adage has resonated among policymakers in Indonesia and the Philippines. In Indonesia, President Jokowi, and the other Indonesian policymakers we have spoken to, have reiterated this many times when explaining the importance of Indonesia's transformative journey toward a digital economy. In the Philippines, President Rodrigo Duterte too insists Filipinos to be "responsible stewards of data", recognising the entanglement of daily lives with data and its value in shaping society. But little is known about how the government plans to monetise the abundance of data and, more importantly, how that monetisation will be used to benefit the common good. Our findings show that digital transformation so far does not mirror the lived experiences, hopes, and dreams of the subjects in this digital world. To achieve digital transformation, these diverse stakeholders have to negotiate and reconcile individual and collective anxieties.

It has also become increasingly clear that what is thought of as digital progress, enacted hurriedly, without first putting into place an effective regulatory framework, creates new sets of problems and fails to deliver on its promise. The process is not as simple

as "opening up" and keeping pace with the rest of the world. The problem manifests in a familiar pattern: technologies that should be considered *means* to improvement are taken to embody progress in and of themselves; their superiority to older technology considered self-evident, their efficacy and suitability to local conditions and priorities left conveniently under-examined,[77] and their impact on the public interest is invisible or, at times, detrimental.

Digital transformation in the Global South provides an ideal opportunity to better appreciate how globalisation compels a certain kind and understanding of "development" and how its pressures and fissures manifest in practice. Even if the forces gestured to by our informants mean that the Global South must ultimately digitise, the ways in which it does so can make a significant difference: if attention is paid to determining whether digital technology is a costly but useless obligation or a stepping-stone to further economic development; whether it reinforces or mitigates inequality; whether its uses help societies become less democratic or more.

Below are some non-negotiable values related to data justice that many of our informants believe belong in planning for future digitisation strategies[78]:

- Transparency. It is important to promote transparency in data when tackling data justice, which includes clear and understandable protocols for data processing, sharing, and disposal.
- Data-owner dignity. In order to define and productively discuss data justice, the dignity of ordinary and marginalised people should be at the heart of the discussion.
- Integrity and fidelity to the truth. Understanding data integrity and accuracy of use and interpretation are also necessary for defining a robust approach to data justice.
- Accessibility. Ordinary people should have access to information and data that affect them.
- Accountability. There must be accountability measures for actors violating data justice norms.
- Community-centrism. Grounding work in the realities of communities and grassroots voices will help avoid an elitist approach to data justice. Existing frameworks and

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77   Yonathan, Anonymous interview.
78   EngageMedia, "ADJRP Workshop on Data Justice - Philippines."

mechanisms that reinforce marginalisation and discrimination should be consciously identified and avoided.

- Recourse. People experiencing data injustices should be able to seek and achieve concrete remedies.

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